जल शक्ति मंत्रालय
MINISTRY OF
JAL SHAKTI
सत्यमेव जयते

MC MEHTA vs. UNION OF INDIA

OA. NO. 200 OF 2014

IN COMPLIANCE OF THE NGT ORDER DATED 16.04.2024

DISTRICT GANGA COMMITTEE REPORT

Submitted by

STATE OF UTTAR PRADESH

IN THE HON'BLE NATIONAL GREEN TRIBUNAL

PRINCIPAL BENCH, NEW DELHI

ORIGINAL APPLICATION NO. 200 OF 2014

MC MEHTA …APPLICANT

VERSUS

UNION OF INDIA …RESPONDENT

UTTAR PRADESH

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THROUGH

PRIYANKA SWAMI

ADVOCATE

Standing Counsel for State of Uttar Pradesh

F-13, Jangpura, New Delhi – 110014

Date: 29.07.2024

35132

No.: Ad-17/1/2023-HR NMCG
भारत सरकार/ **Government of India**
जल शक्ति मंत्रालय/ **Ministry of Jal Shakti**
जल संसाधन नदी विकास और गंगा संरक्षण विभाग
Department of Water Resources, River Development and Ganga Rejuvenation
राष्ट्रीय स्वच्छ गंगा मिशन/ **National Mission for Clean Ganga**
*****

1st Floor, Major Dhyanchand National Stadium,
India Gate, New Delhi - 110002
Dated: 13-06-2024

To

The District Magistrate / The Chairperson
District Ganga Committee
(as per list)

Subject: Inception workshop for District Ganga Plans (DGPs) training and handholding on 4th July 2024.

Sir/Madam,

As per the NMCG Authority notification, 2016, the District Ganga Committees (DGCs) are mandated to prepare its plan and take measures for protection of river Ganga and its tributaries and their river-bed abutting the specified District. In this regard, comprehensive District Ganga Plans (DGPs) based upon River Basin Management approach have been prepared in four pilot districts. The DGPs of Udham Singh Nagar (Uttarakhand) and Shahjahanpur (Uttar Pradesh) have been developed with technical support under the Indo-German bilateral cooperation project, Support to Ganga Rejuvenation (SGR-II) being implemented by GIZ. DGPs for Bareilly and Moradabad (Uttar Pradesh) have been developed with support of WWF India. A DGP handbook has also been developed and approved by NMCG as a guidance document for upscaling the development of DGPs by other DGCs. Basic orientation on the application of the District Ganga Planning Handbook has also been organised for the officials from 40 DGCs to upscale the development of DGPs across Ganga Basin.

2. Further, it is planned to upscale the development of District Ganga Plans by respective DGCs. In this connection, an Inception workshop is scheduled to be organised by NMCG/SMCG (UP & UK) in cooperation with GIZ-SGR **on 4th July 2024 at TBD Hotel, Lucknow.** The objective is to have an exchange with DGCs and plan the modular training and handholding programme for 40 DGCs in UP and UK towards their DGP preparation. (*Concept Note and Agenda enclosed, **Annex. 1***).

3. In this regard, it is requested to nominate 2 members from each DGC including DFOs/Member Secretary (*List of DGCs enclosed, **Annex. 2***) to participate in the above

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Inception workshop. Participation from SMCG UP and SMCG UK along with line departments is also envisaged. Confirmation of the nominated participants along with contact information may be communicated to SMCG/GIZ by 25th June 2024. Boarding and lodging for one day for DGC participants from remote locations may be considered by GIZ on a need basis while TA/DA will be met by respective departments.

Following are the contacts for any further information and coordination:

- For Uttarakhand: Mr. Merajuddin Ahmad, Technical Advisor, GIZ-SGR, Phone 9675205351 Email: merajuddin.ahmad@giz.de
- For Uttar Pradesh: Dr. Anjana Pant, Technical Advisor, GIZ-SGR, Phone 9818241750, Email: anjana.pant@giz.de

Yours faithfully,

Signed by
Kanchan B Hamza
Date: 13-06-2024 13:03:48

(Kanchan Bala Hamza)
Deputy Secretary (Admin)

Copy to:

1. The Director General, National Mission for Clean Ganga, New Delhi
2. The Program Director, SMCG-Uttar Pradesh, Lucknow
3. The Program Director, SMCG-Uttarakhand, Dehradun
4. Ms Laura Sustersic, Project Head, SGR-III, GIZ -India, New Delhi.

Annexure 1

Inception Workshop for District Ganga Plans

Date: 4th July 2024 **Location: Lucknow (venue: Hotel TBD)**

Background:

As per the NMCG Authority Notification of 2016, the DGCs are mandated to plan and take measures for protection, control, and abatement of environmental pollution in the river Ganga and its tributaries, and their river catchment areas within the specified district. In this regard, comprehensive District Ganga Plans (DGPs) based upon River Basin Management approach have been prepared in four pilot districts. The DGPs of Udham Singh Nagar (Uttarakhand) and Shahjahanpur (Uttar Pradesh) have been developed with technical support under the Indo German bilateral cooperation project, Support to Ganga Rejuvenation (SGR-II) being implemented by GIZ. DGPs for Bareilly and Moradabad (Uttar Pradesh) have been developed with support of WWF India. A DGP handbook has also been developed and approved by NMCG as a guidance document for upscaling the development of DGPs by other DGCs. Basic orientation on the application of the District Ganga Planning Handbook was also done for the officials from 40 DGCs to upscale the development of DGPs across Ganga Basin.

Context:

To take this forward, it is planned to support the development of District Ganga Plans by 40 DGCs in Uttarakhand and Uttar Pradesh. These plans will be based on the principles of Integrated River Basin Management in accordance with the DGP Handbook. These plans will be built upon the experiences in development of the model District Ganga Plans earlier prepared but specific to the respective district. Following actions shall be taken up under the SGR project towards this.

1. Capacity Building of officials from 40 DGCs and resource pool from NMCG/SMCGs for preparation of District Ganga Plans by the DGCs
2. Handholding support to DGCs during the course of preparation of District Ganga Plans.
3. Preparation of contents for development of e-module based learning material in accordance with the DGP Handbook

Workshop Objectives:

A one-day Inception workshop is being organized by GIZ together with NMCG on 4th July 2024 in close cooperation with SMCGs and DGCs. The specific **objectives** of this Inception workshop are:

- Sharing updates and collecting inputs to plan the training of 40 DGCs in UP and UK and also support and handhold the DGCs in the process of their DGP preparation.
- Exchange on the experience of development of District Ganga Plans
- Initiating DGP preparation- Working Group formation by DGCs; Listing of important issues for the districts

Target Audience

- Officials from SMCG UP and SMCG UK
- Representatives from 40 District Ganga Committees (as per list) and officials from SMCG UP, UK and line departments
- Indian Institute of Public Administration (IIPA)

Agenda

Time	Actions	Facilitation
9:30-10:00	Networking and Registration	GIZ
10:00-10:20	Welcome address and opening remarks	Ms. Laura Sustersic, Project Director, SGR III, GIZ
10:20-10:30	Inaugural address	NMCG
10:30-10:45	Opening Remarks	SMCG UP
11:45-11:00	Opening Remarks	SMCG UK
11:00-11:20	Tea break	
11:22-11:30	Audiovisual: Snapshot on DGP preparation	
11:30-11:45	Key components under SGR III and RBM planning	Dr. Sumit Kumar Gautam, GIZ
11:45-12:15	Progress on DGP – setting the context and next steps	Dr. Anjana Pant, GIZ and Mr. Merajuddin Ahmad, GIZ
12:15-13:00	Experience sharing by pilot DGCs	GIZ and WWF India
13:00-14:00	Networking Lunch	
14:00-15:00	*Group Exercise on identification and listing of priority issues by DGCs and summarising results*	All participants facilitated by GIZ team
15:00-15:20	Next steps and way forward on District Ganga Plan	SMCGs, GIZ
15:20-15:30	Vote of thanks and Closing remarks	Mr. Aviral Saxena, GIZ

Annexure 2

List of DGCs for participation in the DGP inception meeting at Lucknow on 04th July 2024

DGCs in Uttar Pradesh and Uttarakhand			
Uttarakhand	DGC, Almora	**Uttar Pradesh**	DGC, Budaun
Uttarakhand	DGC, Bageshwar	**Uttar Pradesh**	DGC, Farrukhabad
Uttarakhand	DGC, Chamoli	**Uttar Pradesh**	DGC, Hardoi
Uttarakhand	DGC, Champavat	**Uttar Pradesh**	DGC, Kannauj
Uttarakhand	DGC, Nainital	**Uttar Pradesh**	DGC, Kheri
Uttarakhand	DGC, Garhwal	**Uttar Pradesh**	DGC, Moradabad
Uttarakhand	DGC, Udham Singh Nagar	**Uttar Pradesh**	DGC, Pilibhit
Uttarakhand	DGC Dehradun	**Uttar Pradesh**	DGC, Rampur
Uttarakhand	DGC Haridwar	**Uttar Pradesh**	DGC, Sambhal
Uttarakhand	DGC Rudraprayag	**Uttar Pradesh**	DGC, Shahjahanpur
Uttarakhand	DGC Tehri	**Uttar Pradesh**	DGC Fatehpur
Uttarakhand	DGC Pithoragarh	**Uttar Pradesh**	DGC Ghazipur
Uttarakhand	DGC Uttarkashi	**Uttar Pradesh**	DGC Mirzapur
Uttar Pradesh	DGC, Amroha	**Uttar Pradesh**	DGC Meerut
Uttar Pradesh	DGC, Bijnor	**Uttar Pradesh**	DGC Sant Kabirnagar
Uttar Pradesh	DGC, Bareilly	**Uttar Pradesh**	DGC Raebareilly
Uttar Pradesh	DGC Unnao	**Uttar Pradesh**	DGC Pratapgarh
Uttar Pradesh	DGC Kanpur	**Uttar Pradesh**	DGC Bulandshahar
Uttar Pradesh	DGC Varanasi	**Uttar Pradesh**	DGC Prayagraj
Uttar Pradesh	DGC Aligarh	**Uttar Pradesh**	DGC Ballia
Uttar Pradesh	DGC Hapur		

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DISTRICT GANGA REPORT

arnagar

DISTRICT BANDA

Submitted To

In compliance of Hon'ble NGT order dated 05.02.2024 in O.A. 200/2024

MC Mehta Vs UOI and Ors

Submitted

By

DISTRICT GANGA COMMITTEE, BANDA

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Untitled Map
Write a description for your map.
Legend
Ken River, Banda
KARYA NALA BANDA (25°29'40.52"N, 80°18'52.62"E)
25.4792916, 80.3135666
Ken River, Banda25.47929167, 80.31356667
NIMNI NALA BANDA (25°28'32.37"N, 80°18'54.63"E)
FSTP 32 KLD HAI ETIPURWA BANDA (25°26'20.28"N, 80°19'39.76"E)
Google Earth
4 km
N

1. **Sewage**

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Drain (city/town)	Total drain capacity(Approx.)	Generation/ day	PH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride etc)	Nitrates	DO	TC	FC	Outlet flow and geo code/ sample point	Colour/ odour	Discharged Into
Kariya Nala Before Bio Remediation Drain, NPP Banda. /Sample Date 26.02.2024	9.09 MLD	6.06 MLD	7.53	84.0	172.48	113.0	1032.0	Total Chromium-0.0130mg/l, Copper-0.0089 mg/l, Cadmium-ND, Lead-ND, Iron- 0.5211mg/l, Nickel-ND, Zinc-0.0621mg/l, Manganese-0.2686mg/l, Arsenic-ND, Mercury-ND	*	0	160000	920000	25.486768, 80.331168	Turbid	River Ken
Kariya Nala After Bio remediation Drain, NPP Banda. /Sample Date 26.02.2024			7.58	78.0	156.8	102.0	968	Total Chromium-0.0130mg/l, Copper-0.0089 mg/l, Cadmium-ND, Lead-ND, Iron- 0.7192mg/l, Nickel-ND, Zinc-0.0642mg/l, Manganese-0.2899mg/l, Arsenic-ND, Mercury-ND	*	0	130000	790000	25.486768, 80.331168	Turbid	River Ken
Nimni Nala Before Bio remediation Drain, NPP Banda. /Sample Date 26.02.2024	15.66 MLD	10.44 MLD	7.7.68	68.00	148.96	98.0	826.0	Total Chromium-0.0130mg/l, Copper-0.0089 mg/l, Cadmium-ND, Lead-ND, Iron- 0.4310mg/l, Nickel-ND, Zinc-0.0271mg/l, Manganese-0.2544mg/l, Arsenic-ND, Mercury-ND	*	0	170000	940000	25.475673, 80.324420	Turbid	River Ken
Nimni Nala After Bio remediation Drain, NPP Banda. /Sample Date 26.02.2024			7.51	52.00	141.12	87.0	811.0	Total Chromium-0.0130mg/l, Copper-ND, Cadmium-ND, Lead-ND, Iron- 0.3590mg/l, Nickel-ND, Zinc-0.0398mg/l, Manganese-0.2828mg/l, Arsenic-ND, Mercury-ND	*	0	1400000	780000	25.475673, 80.324420	Turbid	River Ken

* Collected Sample sent to central lab Lucknow for analysis.

The above information is to be submitted on the basis of end point sample analysis of the concerned drain

2. STP for treating the sewage of the drains ultimately flowing to river ganga or its tributaries

Existing STP (location & capacity)	Capacity (operational)	Inlet/ Outlet water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point	Proposed/ under construction STP With completion date
Presently STP is not installed	Not Applicable	Not Applicable	0	(100%)	Not Applicable	• STP proposed in all 08 ULB • Oxidation pond of 4.0 MLD is installed for treatment of NPP Banda sewage at village Kanwara, District- Banda and operated by U.P. Jal Nigam (Nagriya), Construction Division, Banda. Design Life of plant completed. DPR is sent to Urban Development Department for allocation of funds regarding maintenance and modification of Oxidation Pond. • Fecal STP (FSTP) of 32.0 KLD is installed for treatment of NPP Banda sewage at village- Hatetipurwa, District- Banda under Amrit Karyakram by U.P. Jal Nigam, Banda. FSTP is operated under trial period. Rest 07 ULBs of district Banda contracted with NPP Banda for disposal of Fecal Sludge from FSTP Banda. • Bio-remediation is being done for treatment of BOD on untapped drains on both drains of NPP, Banda before meeting the river Ken.

2.1 STP ADDITIONAL INFORMATION

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NAME OF DRAIN	POSITION OF STP WITH CAPACITY	GEO/COORDINATES	DISCHARGE QUANTITY FROM THE STP IN THE DRAIN	TOTAL PER DAY DISCHARGE FROM THE DRAIN INTO THE RIVER
Kariya Nala Drain, NPP Banda.	Not Installed (Treated by Bio remediation process and Phytoremediation tender under process)	25.486768, 80.331168	STP Not Installed	6.06 MLD
Nimni Nala Drain, NPP Banda.	Not Installed (Treated by Bio remediation process and Phytoremediation tender under process)	25.475673, 80.324420	STP Not Installed	10.44 MLD

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Proposed STP (location & capacity)	Capacity (operational)	Inlet/Outlet quality& quantity	Number of tapped drains (quantity of discharge	Gap in treatment	Final discharge point Geo code/ sampling point	Proposed/under construction STP with completion date
NPP, Banda STP 34 MLD	Not Applicable	Not Applicable	Nil	100%	Not Applicable	Proposed STP 34 MLD*
NPP, Atarra - Banda STP 5MLD	Not Applicable	Not Applicable	Nil	100%	Not Applicable	5MLD STP with Co-treatment of 8 KLD Faecal sludge Treatment Plant is proposed.
Nagar Panchayat Mataundh, Banda	Not Applicable	Not Applicable	Nil	100%	Not Applicable	2.0 MLD Capacity STP with Co-treatment of 4 KLD Faecal sludge Treatment Plant is proposed.
Nagar Panchayat Tindwari, Banda	Not Applicable	Not Applicable	Nil	100%	Not Applicable	2.0 MLD Capacity STP with Co-treatment of 3 KLD Faecal sludge Treatment Plant is proposed.
Nagar Panchayat Baberu, Banda	Not Applicable	Not Applicable	Nil	100%	Not Applicable	3.5 MLD Capacity STP with Co-treatment of 5 KLD Faecal sludge Treatment Plant is proposed.
Nagar Panchayat Naraini, Banda	Not Applicable	Not Applicable	Nil	100%	Not Applicable	2.0 MLD Capacity STP with Co-treatment of 3 KLD Faecal sludge Treatment Plant is proposed.
Nagar Panchayat Oran, Banda	Not Applicable	Not Applicable	Nil	100%	Not Applicable	1.0 MLD Capacity STP with Co-treatment of 1 KLD Faecal sludge Treatment Plant is proposed.
Nagar Panchayat Bisanda, Banda	Not Applicable	Not Applicable	Nil	100%	Not Applicable	3.0 MLD Capacity STP with Co-treatment of 5 KLD Faecal sludge Treatment Plant is proposed.

***** District Banda proposed STP Plan. Hence, the Inlet/Outlet quality& quantity and Final discharge point Geo code/ sampling point is not applicable

3. Hotels/ Ashrams/Dharmshalas/residential complexes abutting river Ganga or its tributaries

Number of Hotels/ ashrams/ dharamshalas	Consent to establish/ operate	STP	Discharge point	Action taken
17 (List Attached)	17 (Consent to operate) Present Consent Status	• Soakpit/Septic Tank • Fecal STP (FSTP) of 32.0 KLD is installed for treatment of NPP Banda sewage at village- Hatetipurwa, District- Banda under Amrit Karyakram by U.P. Jal Nigam, Banda. FSTP is operated under trial period. Rest 07 ULBs of district Banda contracted with NPP Banda for disposal of Fecal Sludge from FSTP Banda. • Bio-remediation is being done for treatment of BOD on untapped drains on both drains of NPP, Banda before meeting the river Ken.	Soak pit/Septic Tank/ Drain	Notice sent vide letter dated 30.12.2023 and 14.03.2024 for comply the provision of Water (Pollution Prevention and Control) Act 1974 and its amended and Air (Pollution Prevention and Control) Act 1981 and its amended.
Bharat Imperial Chavni Chauraha Banda	Not Granted			
Hotel Gurudev Palace, Civil Line, Banda	Granted			
Hotel Comfort In (COMFORT CARE HOTEL AND RESORT PRIVET LIMITED) Station Road Banda	Granted			
Hotel Sarang Intercontinantal (Shree Raghuram Grih Pvt. Ltd.) Balkhandi Naka, Padmakar Chauraha, Banda	Granted			
Hotel Shradhha, Plot No. 258, Goolar Naka, Chavni Banda	Granted			
Hotel Shree Kanth Basu Restrorent Swaraj Collony Gali No. 1 Civil Line Banda	Not Granted			
Hotel Tulsi Peeli Kothi Banda	Granted			

Hotel Tulsi Suaroop, Chhoti Bazar, Chhavani, Banda	Granted	35144		
Hotel Atithi, Station Road, Banda	Granted			
Kumar Lodge Station Road Banda	Not Granted			
Modi Lodge Station Road Banda	Not Granted			
S.S. Resedency, Civil Line, Near Bus Stand, Banda	Granted			
Vamdev Vishram Grah Station Road Banda	Not Granted			
Raja Palace, Naraini Road, Banda	Granted			
Basera Lodge Station Road Banda	Not Granted			
Rajgrah Station Road Banda	Not Granted			
Goodluck Lodge Station Road Banda	Not Granted			

4. IV. Industrial Effluent discharge by industries whose effluent is ultimately flowing to river Ganga or its tributaries

35145

Total number of Industries	Daily effluent discharge	Treatment available (cetp/ petp/ etp operational capacity)	Effluent quality analysis (outlet of treatment plants Geo code sampling point)	GAP	Proposed/ under construction treatment project (with timeline)	Number of defaulting units- Action taken	Industrial solid waste generated/ day	Manner of disposal (Industrial solid waste)
0	0	No Any	Not Applicable	0	Not Applicable	0	0	Not Applicable

5. Regulation of Flood Plain Zone:

Area- cities/ towns	Notification of flood plain zone	Demarcation		Encroachment & direct discharge Geo Code/ Sampling point	Encroachment removal status	Timeline for completion
		No development zone pillars	Regulatory zone pillars			
For the demarcation of flood plains working plan is being prepared.	Not Publish Yet	Not Started Yet.	Not Started Yet.	• Kariya Nala 25.486768, 80.331168 • Nimni Nala 25.475673, 80.324420	There is no any encroachment in ken river, Banda.	For the demarcation of flood plains working plan is being prepared. After the preparation of working plan, the working plan will be presented to the head office for the budget allocation. After the budget allocated, flood Plain Zone demarcation process will be carried out.

6. Afforestation/ Plantation along the bank of River Ganga and its tributaries and their flood plain zones

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Area- cities/ towns	Total plantation Geo Code/ Sampling Point	Proposed project	Timeline
Banda (1637.73 Hectares Planted Area)	2400346 Plants in year 2023-2024 with in 5 to 10 Km of main river (River Yamuna, Ken, Bagian)	2551500 Plants in 1595 Hectares of land in year 2024-2025	July 2024

Geo-tag location for plantations

S.N.	Divison	Yojna Ka Naam	Range Ka Naam	River	name of planted area	Area (Hectare)	GPS Reading of Plants	
							latitude	longitude
1	2					7	8	9
1	Banda	Samajik Vaniki Samany	Tindwari	Ken River	Pailani Pashchim Van Block	10	25^0 44' 43.0"	80^0 25' 1.00"
2	Banda	Samajik Vaniki Samany	Tindwari	Ken River	Kukuwapa Van Block	20	25^0 43' 44.0"	80^0 24' 57.00"
3	Banda	Samajik Vaniki Samany	Tindwari	Ken River	Pailani Purvi Van Block	20	25^0 45' 3.0"	80^0 25' 27.00"
4	Banda	Samajik Vaniki Samany	Tindwari	Yamuna River	Benda Van Block	10	25^0 42' 29.04"	80^0 36' 2.91"
5	Banda	Samajik Vaniki Samany	Tindwari	Yamuna River	Badera Van Block	9	25^0 37' 7.12"	80^0 28' 47.67"
6	Banda	Samajik Vaniki Samany	Tindwari	Ken River	Kukuwapa Van Block Pratham	15	25^0 43' 32.0"	80^0 24' 40.0"
7	Banda	Samajik Vaniki Samany	Tindwari	Ken River	Kukuwapa Van Block Second	10	25^0 43' 38.0"	80^0 24' 49.0"
8	Banda	Samajik Vaniki Samany	Tindwari	Ken River	Nari Van Block Pratham	15	25^0 44' 11.0"	80^0 26' 52.0"
9	Banda	Samajik Vaniki Samany	Tindwari	Ken River	Nari Van Block Second	15	25^0 44' 27.0"	80^0 26' 53.0"
10	Banda	Samajik Vaniki Samany	Tindwari	Yamuna River	Macha Van Block Pratham	15	25^0 40' 14.70"	80^0 38' 35.46"

11	Banda	Samajik Vaniki Samany	Tindwari	Yamuna River	Mancha Van Block Second	10	25^0 40' 17.09"	80^0 38' 41.23"
12	Banda	Samajik Vaniki Samany	Tindwari	Ken River	Khairai Van Block Pratham	20	25^0 40' 28.0"	80^0 19' 45.0"
13	Banda	Samajik Vaniki Samany	Tindwari	Ken River	Khairai Van Block Second	20	25^0 40' 40.0"	80^0 19' 53.0"
14	Banda	Samajik Vaniki Samany	Tindwari	Ken River	Khairai Van Block Third	15	25^0 41' 7.0"	80^0 20' 14.0"
15	Banda	Samajik Vaniki Samany	Tindwari	Ken River	Khairai Van Block Fourth	10	25^0 40' 59.0"	80^0 20' 26.0"
16	Banda	Samajik Vaniki Samany	Tindwari	Ken River	Khairai Van Block Fifth	15	25^0 41' 7.0"	80^0 20' 21.0"
17	Banda	Samajik Vaniki Samany	Tindwari	Ken River	Pailani Van Block Pratham	15	25^0 45' 15.0"	80^0 25' 5.0"
18	Banda	Samajik Vaniki Samany	Tindwari	Ken River	Pailani Van Block Second	10	25^0 45' 25.0"	80^0 25' 4.0"
19	Banda	Samajik Vaniki Samany	Tindwari	Ken River	Pailani Van Block Third	11	25^0 45' 22.0"	80^0 25' 14.0"
20	Banda	Samajik Vaniki Samany	Tindwari	Ken River	Pailani Pashchimi Van Block 2nd	10	25^0 44' 39.0"	80^0 25' 23.0"
21	Banda	Samajik Vaniki Samany	Tindwari	Ken River	khaptiha kala krishi parikshetra	15	25^0 41' 22.0"	80^0 22' 35.0"
22	Banda	Samajik Vaniki Samany	Tindwari	Ken River	khaptiha kala gram samaj pratham	20	25^0 40' 8.0"	80^0 21' 5.0"
23	Banda	Samajik Vaniki Samany	Tindwari	Ken River	khaptiha kala gram samaj second	20	25^0 40' 7.0"	80^0 21' 18.0"
24	Banda	Samajik Vaniki Samany	Tindwari	Ken River	khaptiha kala gram samaj third	20	25^0 40' 3.0"	80^0 21' 31.0"
25	Banda	Samajik Vaniki Samany	Tindwari	Ken River	khaptiha kala gram samaj fourth	10	25^0 39' 55.0"	80^0 21' 47.0"
26	Banda	Samajik Vaniki Samany	Tindwari	Ken River	khaptiha kala gram samaj fifth	20	25^0 40' 17.0"	80^0 21' 35.0"
27	Banda	Samajik Vaniki Samany	Tindwari	Ken River	khaptiha kala gram samaj sixth	20	25^0 40' 14.0"	80^0 21' 57.0"
28	Banda	Samajik Vaniki Samany	Tindwari	Yamuna River	jauharpur gram samaj first	15	25^0 42' 34.31"	80^0 35' 42.42"
29	Banda	Samajik Vaniki Samany	Tindwari	Yamuna River	jauharpur gram samaj second	15	25^0 42' 38.72"	80^0 35' 22.37"
30	Banda	Samajik Vaniki Samany	Tindwari	Yamuna River	mancha gram samaj	20	25^0 39' 46.55"	80^0 39' 1.32"

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31	Banda	Samajik Vaniki Samany	Tindwari	Ken River	[illegible]ari gram samaj	20	25^0 44' 37.0"	80^0 29' 3.0"
32	Banda	Samajik Vaniki Samany	Tindwari	Ken River	alona gram samaj second	20	25^0 40' 23.0"	80^0 19' 35.0"
33	Banda	Samajik Vaniki Samany	Tindwari	Ken River	alona gram samaj third	20	25^0 40' 31.0"	80^0 19' 21.0"
34	Banda	Samajik Vaniki Samany	Tindwari	Ken River	alona gram samaj fourth	17	25^0 40' 14.0"	80^0 19' 42.0"
35	Banda	Samajik Vaniki Samany	Tindwari	Ken River	alona gram samaj fifth	8	25^0 40' 20.0"	80^0 19' 10.0"
36	Banda	Samajik Vaniki Special	Tindwari	Ken River	alona gram samaj first	8.36	25^0 40' 10.0"	80^0 19' 35.0"
					Total	**543.36**		
37	Banda	Samajik Vaniki Samany	Banda	Bagin River	diveli van block	15	25^0 11' 4.0"	80^0 34' 23.0"
38	Banda	Samajik Vaniki Samany	Banda	Bagin River	mahui van block	10	25^0 10' 33.0"	80^0 34' 10.0"
39	Banda	Samajik Vaniki Samany	Banda	Ken River	ganksha van block 1st	11	25^0 24' 16.0"	80^0 18' 45.0"
40	Banda	Samajik Vaniki Samany	Banda	Bagin River	pathra van block 1st	10	25^0 11' 37.93"	80^0 35' 13.53"
41	Banda	Samajik Vaniki Samany	Banda	Bagin River	navganv van block 1st	10	25^0 9' 58.0"	80^0 32' 52.0"
42	Banda	Samajik Vaniki Samany	Banda	Bagin River	kulsaari van block	10	25^0 9' 40.74"	80^0 34' 57.04"
43	Banda	Samajik Vaniki Samany	Banda	Ken River	gadha van block	10	25^0 11' 42.0"	80^0 25' 37.0"
44	Banda	Samajik Vaniki Samany	Banda	Bagin River	rampur murdi van block	10	25^0 10' 42.0"	80^0 31' 14.0"
45	Banda	Samajik Vaniki Samany	Banda	Bagin River	lamakotla van block 1st	10	25^0 9' 41.0"	80^0 33' 56.0"
46	Banda	Samajik Vaniki Samany	Banda	Bagin River	lamakotla van block 2nd	10	25^0 9' 3.0"	80^0 34' 8.0"
47	Banda	Samajik Vaniki Samany	Banda	Ken River	marauli van block 1st	20	25^0 33' 57.0"	80^0 15' 46.0"
48	Banda	Samajik Vaniki Samany	Banda	Ken River	marauli van block 2nd	10	25^0 33' 57.0"	80^0 15' 54.0"
49	Banda	Samajik Vaniki Samany	Banda	Bagin River	kharaich van block 1st	10	25^0 10' 36.0"	80^0 30' 57.0"

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50	Banda	Samajik Vaniki Samany	Banda	Ken River	gadha van block 2nd	10	25^0 11' 25.0"	80^0 25' 50.0"
51	Banda	Samajik Vaniki Samany	Banda	Bagin River	mahui van block 2nd	10	25^0 11' 2.0"	80^0 34' 40.0"
52	Banda	Samajik Vaniki Samany	Banda	Bagin River	mahui van block 3rd	10	25^0 11' 4.0"	80^0 34' 23.0"
53	Banda	Samajik Vaniki Samany	Banda	Bagin River	naugava van block 2nd	10	25^0 9' 33.0"	80^0 33' 4.0"
54	Banda	Samajik Vaniki Samany	Banda	Bagin River	naugava van block 3rd	10	25^0 9' 51.0"	80^0 32' 52.0"
55	Banda	Samajik Vaniki Samany	Banda	Bagin River	diveli van block 2nd	15	25^0 10' 33.0"	80^0 33' 45.0"
56	Banda	Samajik Vaniki Samany	Banda	Bagin River	diveli van block 3rd	15	25^0 10' 30.0"	80^0 33' 55.0"
57	Banda	Samajik Vaniki Samany	Banda	Bagin River	diveli van block 4rth	10	25^0 10' 23.0"	80^0 34' 4.0"
58	Banda	Samajik Vaniki Samany	Banda	Bagin River	diveli van block 5fth	10	25^0 10' 40.0"	80^0 34' 0.0"
59	Banda	Samajik Vaniki Samany	Banda	Ken River	ragauli bhatpura gam samaj 1st	10	25^0 0' 30.0"	80^0 18' 35.0"
60	Banda	Samajik Vaniki Samany	Banda	Ken River	ragauli bhatpura gam samaj 2nd	10	25^0 0' 49.0"	80^0 18' 40.0"
61	Banda	Samajik Vaniki Samany	Banda	Ken River	ragauli bhatpura gam samaj 3rd	10	25^0 1' 7.0"	80^0 19' 58.0"
62	Banda	Samajik Vaniki Samany	Banda	Ken River	ganksha van block 2nd	20	25^0 23' 58.0"	80^0 18' 42.0"
63	Banda	Samajik Vaniki Samany	Banda	Ken River	ganksha van block 3rd	10	25^0 24' 15.0"	80^0 18' 48.0"
64	Banda	Samajik Vaniki Samany	Banda	Bagin River	pathra van block 2nd	10	25^0 11' 4.0"	80^0 34' 58.0"
65	Banda	Samajik Vaniki Samany	Banda	Bagin River	kulsari van block 2nd	10	25^0 9' 28.0"	80^0 34' 26.0"
66	Banda	Samajik Vaniki Samany	Banda	Ken River	bilharka van block	10	25^0 1' 23.0"	80^0 19' 15.0"
67	Banda	Samajik Vaniki Samany	Banda	Bagin River	rampur murdi van block 2nd	10	25^0 11' 21.0"	80^0 31' 36.0"
68	Banda	Samajik Vaniki Samany	Banda	Ken River	chamraha van block 1st	10	25^0 22' 46.88"	80^0 11' 29.14"
69	Banda	Samajik Vaniki Samany	Banda	Ken River	chatgan van block	20	25^0 34' 53.0"	80^0 18' 17.0"
70	Banda	Samajik Vaniki	Banda	Ken River	gaurshivpur van block 1st	10	25^0 12' 31.0"	80^0 25' 14.0"

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71	Banda	Samajik Vaniki Samany	Banda	Ken River	gaurshivpur van block 2nd	20	25^0 12' 48.0"	80^0 25' 8.0"
72	Banda	Samajik Vaniki Samany	Banda	Ken River	chamraha van block 2nd	20	25^0 23' 02.98"	80^0 10' 51.34"
73	Banda	Samajik Vaniki Samany	Banda	Ken River	basairi gram samaj	5	25^0 22' 38.0"	80^0 8' 9.0"
74	Banda	Samajik Vaniki Samany	Banda	Ken River	bhasraun gram samaj 1st	10	25^0 20' 54.0"	80^0 18' 49.0"
75	Banda	Samajik Vaniki Samany	Banda	Ken River	bhasraun gram samaj 2nd	10	25^0 21' 37.0"	80^0 19' 53.0"
76	Banda	Samajik Vaniki Samany	Banda	Ken River	ujrehta gram samaj	20	25^0 33' 40.0"	80^0 16' 0.0"
77	Banda	Samajik Vaniki Samany	Banda	Bagin River	katra kalinger gram samaj 1st	15	25^0 59' 56.0"	80^0 28' 16.0"
78	Banda	Samajik Vaniki Samany	Banda	Bagin River	katra kalinger gram samaj 2nd	15	25^0 59' 30.0"	80^0 28' 26.0"
79	Banda	Samajik Vaniki Samany	Banda	Bagin River	katra kalinger gram samaj 3rd	15	25^0 59' 2.0"	80^0 28' 44.0"
80	Banda	Samajik Vaniki Samany	Banda	Bagin River	katra kaliger van block	15	25^0 58' 37.0"	80^0 28' 46.0"
81	Banda	Samajik Vaniki Samany	Banda	Ken River	manpur van block	15	25^0 15' 43.0"	80^0 23' 33.0"
82	Banda	Campa C.A	Banda	Bagin River	kharaunch van block	0.37	25^0 10' 30.0"	80^0 30' 39.0"
					Total	**546.37**		
83	Banda	Samajik Vaniki Samany	Pailani	Ken River	gadariya gram samaj 1st	7	25^0 45' 50"	80^0 18' 51"
84	Banda	Samajik Vaniki Samany	Pailani	Ken River	gadariya gram samaj 2nd	8	25^0 45' 55"	80^0 18' 58"
85	Banda	Samajik Vaniki Samany	Pailani	Yamuna River	narayan gram samaj	5	25^0 53' 18"	80^0 21' 35"
86	Banda	Samajik Vaniki Samany	Pailani	Ken River	lashada se adari marg dai patri	2.5	25^0 47' 20"	80^0 28' 2"
87	Banda	Samajik Vaniki Samany	Pailani	Ken River	lashada se adari marg bai patri	2.5	25^0 47' 25"	80^0 28' 3"
88	Banda	Samajik Vaniki Samany	Pailani	Ken River	pailani se lashada marg dai patri	2.5	25^0 46' 44"	80^0 26' 32"
89	Banda	Samajik Vaniki Samany	Pailani	Ken River	pailani se lashada marg bai patri	2.5	25^0 46' 45"	80^0 26' 33"

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90	Banda	Samajik Vaniki Samany (A.N.R)	Pailani	Ken River	amara van block	50	25^0 45' 38"	80^0 21' 51"
91	Banda	Samajik Vaniki Samany (A.N.R)	Pailani	Ken River	nadadev van block	15	25^0 47' 05"	80^0 23' 10"
92	Banda	Samajik Vaniki Samany (Green Belt)	Pailani	Ken River	pailani dera se sumerpur marg pratham dai patri	1.248	25^0 47 31.0"	80^0 24' 22"
93	Banda	Samajik Vaniki Samany (Green Belt)	Pailani	Ken River	pailani dera se sumerpur marg pratham bai patri	1.248	25^0 47 33.0"	80^0 24' 23"
94	Banda	Samajik Vaniki Samany (Green Belt)	Pailani	Ken River	pailani dera se sumerpur marg dwiteey dai patri	1.248	25^0 47 57.0"	80^0 23' 47"
95	Banda	Samajik Vaniki Samany (Green Belt)	Pailani	Ken River	pailani dera se sumerpur marg dwiteey bai patri	1.256	25^0 47 58.0"	80^0 23' 48"
96	Banda	Samajik Vaniki Samany (Green Belt)	Pailani	Ken River	pailani dera se sumerpur marg trateey dai patri	1.5	25^0 49' 12"	80^0 21' 28"
97	Banda	Samajik Vaniki Samany (Green Belt)	Pailani	Ken River	pailani dera se sumerpur marg trateey bai patri	1.5	25^0 49' 14"	80^0 21' 30"
98	Banda	Samajik Vaniki Samany	Pailani	Ken River	narauli chauraha se badaganv sampark marg dai patri	5	25^0 51' 38"	80^0 27' 6"
99	Banda	Samajik Vaniki Samany	Pailani	Ken River	narauli chauraha se badaganv sampark marg bai patri	5	25^0 51' 40"	80^0 27' 6"
100	Banda	Samajik Vaniki Samany	Pailani	Ken River	gadariya se raipura marg dai patri	5	25^0 47' 43"	80^0 17' 29"
101	Banda	Samajik Vaniki Samany	Pailani	Ken River	gadariya se raipura marg bai patri	5	25^0 47' 41"	80^0 17' 27"
					Total	**123.00**		
102	Banda	Samajik Vaniki Samany	Baberu	Bagin River	utarvan dakshin purv van block	20	25^0 19' 12"	80^0 48' 42.01"
103	Banda	Samajik Vaniki Samany (A.N.R)	Baberu	Bagin River	utarvan uttari van block	15	25^0 21' 5.02"	80^0 48' 52.4"
104	Banda	Samajik Vaniki Samany (A.N.R)	Baberu	Yamuna River	jalalpur van block	20	25^0 39' 12.00"	80^0 41' 18.00"
105	Banda	Samajik Vaniki Samany (A.N.R)	Baberu	Bagin River	utarvan purvi van block	20	25^0 20' 09.0"	80^0 49' 05.0"

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106	Banda	Samajik Vaniki Samany (A.N.R)	Baberu	Bagin River	utarvan pashchimi van block	15	25^0 20' 58.0"	80^0 48' 44.1"
107	Banda	Samajik Vaniki Samany (A.N.R)	Baberu	Bagin River	utarvan dakshini van block	10	25^0 19' 37.0"	80^0 48' 35.1"
108	Banda	Samajik Vaniki Samany	Baberu	Bagin River	utarvan uttari dakshini van block	15	25^0 21' 22.01"	80^0 48' 47.02"
109	Banda	Samajik Vaniki Samany	Baberu	Bagin River	utarvan pashchimi uttari van block	15	25^0 21' 13.00"	80^0 48' 46.01"
110	Banda	Samajik Vaniki Samany	Baberu	Yamuna River	baberu banda marg	4	25^0 31' 18.00"	80^0 35' 4.00"
111	Banda	Samajik Vaniki Samany	Baberu	Yamuna River	baberu marka marg	10	25^0 34' 28.80"	80^0 43' 20.31"
					Total	**144.00**		
					Grand Total	**1356.73**		

7. Mining and Stone Crushing in river bed and flood plain zone of River Ganga and its tributaries:

Area of mining	FIR/ case registered/ year	Vehicles/ mineral seized	Action taken status	Cases pending in Court	Enforcement of EMGSM 2020 and Sustainable sand mining management guidelines 2016
16 area (274.541 Hectare) (Sand)	26	1620	Regular surprise inspection for control the illegal mining/ transportation/ overloading/ storage has been carried out. During the visit 1620 vehicle are seized and 1071 vehicles are compounded. Rs. 105630736/- has been recovered. 277 complaint is filed in hon'ble court and FIR lodged against in 26 matters.	-	-

1. The Tribunal has already directed for furnishing following information by order dated 24.11.2023:-

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(1) District Ganga Protection Plan at city/ town level

District Ganga Protection Committee (DGPC) is required to formulate the action plan for each city and town located on main stem of river Ganga and its tributary and such Action Plan has to be prepared in accordance with the River Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016 (para 6 and 55).

(2) Contents of the Action Plan (Consolidated District Wise Action Plan including each City and Town abutting river Ganga and its Tributary)

2.1 Sewage Management

(i) Sewage generation (for entire District and individual town wise):

District Banda – Total Sewage Generation – 50.04 MLD

(ii) Existing Sewage Treatment Capacities :

- **Under the Proposal**
  - **34 MLD, NPP, Banda**
  - **5MLD STP with Co-treatment of 8 KLD Faecal sludge Treatment Plant is proposed NPP Atarra,**
  - **2.0 MLD Capacity STP with Co-treatment of 4 KLD Faecal sludge Treatment Plant is proposed NP Mataundh, Banda**
  - **2.0 MLD Capacity STP with Co-treatment of 3 KLD Faecal sludge Treatment Plant is proposed NP Tindwari, Banda**
  - **3.5 MLD Capacity STP with Co-treatment of 5 KLD Faecal sludge Treatment Plant is proposed NP Baberu, Banda**
  - **2.0 MLD Capacity STP with Co-treatment of 3 KLD Faecal sludge Treatment Plant is proposed NP Naraini, Banda**
  - **1.0 MLD Capacity STP with Co-treatment of 1 KLD Faecal sludge Treatment Plant is proposed NP Oran, Banda**
  - **3.0 MLD Capacity STP with Co-treatment of 5 KLD Faecal sludge Treatment Plant is proposed NP Bisanda, Banda**

(iii) Quantity of sewage is being treated (utilization capacity) :

16.5 MLD drain of Kariya Nala and Nimni Nala is being treated by bio remediation process and phytoremediation process tender is under process.

(iv) Performance of STPs particularly for FC :

STP is not installed but 32KLD FSTP installed and working.

(v) Where treated sewage is being discharged (to Ganga or tributaries) :

Treated sewage from FSTP is used for agriculture, gardening and plantation purpose.

(vi) Reasons for Under-utilization of STPs (Connectivity of Households/ laying of sewer lines) :

Not Applicable

(vii) Current Gap in sewage treatment :

100% Gap in sewage treatment.

(viii) Time bound plan for bridging the gap and tying up with financial arrangements and not delaying Tendering and identifying executing agencies or having any other issues :

Not Applicable

(ix) Where untreated sewage (when there is no STP) is discharged (Ganga /Tributaries):

Bio-remediation and FSTP.

2.2 Drains joining Ganga and Tributary

(i) Number of drains carrying sewage- sullage or industrial waste water joining Ganga/ tributaries with their Quantity and Quality:

Not Applicable

(ii) Drains joining outside city and town limits but, either joining in village or nearby town:

Not Applicable

(iii) Inclusion of sewage flowing in drains into total sewage generation figures of each city and town and their interception and diversion to STPs:

Drain (city/town)	Total drain capacity(Approx.)	Generation/ day	PH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride etc)	Nitrates	DO	TC	FC	Outlet flow and geo code/ sample point	Colour/ odour	Discharged Into
Kariya Nala Before Bio Remediation Drain, NPP Banda. /Sample Date 26.02.2024	9.09 MLD	6.06 MLD	7.53	84.0	172.48	113.0	1032.0	Total Chromium-0.0130mg/l, Copper-0.0089 mg/l, Cadmium-ND, Lead-ND, Iron- 0.5211mg/l, Nickel-ND, Zinc-0.0621mg/l, Manganese-0.2686mg/l, Arsenic-ND, Mercury-ND	*	0	160000	920000	25.486768, 80.331168	Turbid	River Ken
Kariya Nala After Bio			7.58	78.0	156.8	102.0	968	Total Chromium-0.0130mg/l, Copper-0.0089	*	0	130000	790000	25.486768,	Turbid	River Ken

remediation Drain, NPP Banda. /Sample Date 26.02.2024								mg/l, Cadmium-ND, Lead-ND, Iron- 0.7192mg/l, Nickel-ND, Zinc-0.0642mg/l, Manganese-0.2899mg/l, Arsenic-ND, Mercury-ND					80.331168		
Nimni Nala Before Bio remediation Drain, NPP Banda. /Sample Date 26.02.2024	15.66 MLD	10.44 MLD	7.7.68	68.00	148.96	98.0	826.0	Total Chromium-0.0130mg/l, Copper-0.0089 mg/l, Cadmium-ND, Lead-ND, Iron- 0.4310mg/l, Nickel-ND, Zinc-0.0271mg/l, Manganese-0.2544mg/l, Arsenic-ND, Mercury-ND	*	0	170000	940000	25.475673, 80.324420	Turbid	River Ken
Nimni Nala After Bio remediation Drain, NPP Banda. /Sample Date 26.02.2024			7.51	52.00	141.12	87.0	811.0	Total Chromium-0.0130mg/l, Copper-ND, Cadmium-ND, Lead-ND, Iron- 0.3590mg/l, Nickel-ND, Zinc-0.0398mg/l, Manganese-0.2828mg/l, Arsenic-ND, Mercury-ND	*	0	1400000	780000	25.475673, 80.324420	Turbid	River Ken

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* Collected Sample sent to central lab Lucknow for analysis.

2.3 Septage management (In case of no STP)

(i) Status of Septage management (with reference to FSTP/STP):

Fecal STP (FSTP) of 32.0 KLD is installed for treatment of NPP Banda sewage at village-Hatetipurwa, District- Banda under Amrit Karyakram by U.P. Jal Nigam, Banda. FSTP is operated under trial period. Rest 07 ULBs of district Banda contracted with NPP Banda for disposal of Fecal Sludge from FSTP Banda.

(ii) Management of Grey water and its disposal:

Bio-remediation is being done for treatment of grey water and their disposal.

2.4 Industrial Pollution Control

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(i) Attach the list on no. of industries generating trade effluents, their place of disposal and compliance including CETPs (town wise):

There is no water polluting industries installed.

(3) Water quality status

Provide water quality status of Ganga and its tributaries in the District and city/ town in terms of its fitness for Bathing water quality that is, FC and FS:

U/S of Ken River, Banda on dated 26.02.2024

Parameter	Unit	Results	Detection Range
Conductivity, APHA 24th Ed. 2510B :2023	µS/cm	8.47	0.1-10000 µS/cm
Suspended Solids , APHA 24th Ed. 2540 D Total Suspended Solids dried at 103-105 °C 2023	mg/l	26.00	5.0 -10000 mg/l
Dissolved Solids, APHA 24th Ed. 2540 °C Total Dissolved Solids dried at 180 °C 2023	mg/l	280.00	5.0 -10000 mg/l
Total Solids, APHA24th Ed2540B: 2023	mg/l	306.00	5.0 -15000 mg/l
Hardness, APHA 24th Ed. 2340 °C EDTA Titrimetric Method 2023	mg/l	142.0	10.0 -5000 mg/l
Calcium, APHA 24th Ed. 3500Ca-B:2023	mg/l	78.0	10.0 -1000 mg/l
Magnesium, APHA 24th Ed 3500Mg B: 2023	mg/l	64.0	10-1000 mg/l
Chloride, APHA24th Ed 4500-Cl- B: 2023	mg/l	25.0	3.0 - 500 mg/l
Alkalinity, APHA 24th Ed. 2320:2023	mg/l	65.0	20-5000 mg/l
BOD, APHA 24th Ed. 3 day 27 °C IS 3025 (Part 44): 1993 Bio 2023	mg/l	3.3	1.0 -1000 mg/l
COD, APHA 24th Ed. 5220 B Open Reflux Method 2023	mg/l	10.56	4.0 -1000 mg/l
D.O. , APHA 24th Ed. 4500-OB Iodometric Method 2023	mg/l	6.56	0.2-14.0 mg/l

Date of Sample 16.03.2024

Parameter	Unit	Results	Detection Range
Total Chromium, APHA24th Ed.3111-B: 2023	mg/l	0.0130	0.05-1000 mg/l

Copper, APHA 24th Ed. 3111-B: 2023	mg/l	ND	0.01-1000 mg/l
Cadmium, APHA 24th Ed.3111-B: 2023	mg/l	ND	0.01-1000 mg/l
Lead, APHA 24th Ed 3111B: 2023	mg/l	ND	0.09-1000 mg/l
Iron, APHA 24th Ed 3111B: 2023	mg/l	0.2149	0.05-1000 mg/l
Nickel, APHA 24th Ed 3111B: 2023	mg/l	ND	0.04-1000 mg/l
Zinc, APHA 24th Ed.3111-B: 2023	mg/l	0.0366	0.01-1000mg/l
*Manganese, APHA 24th Ed. 3500-Mg B Calculation Method 2023	mg/l	0.1694	-
*Arsenic, APHA 24th Ed. 3114-Hydride Generation AAS Method 2023	mg/l	ND	-
*Mercury , APHA 24th Ed. 3112B-Cold Vapour AAS Method 2023	mg/l	ND	-

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D/S of Ken River, Banda on dated 26.02.2024

Parameter	Unit	Results	Detection Range
pH, APHA24th Ed.4500-B: 2023	-	8.58	02-12
Colour, APHA 24th Ed. 2120B: 2023	Hazen	10	5-10000 Hazen
Conductivity, APHA 24th Ed. 2510B :2023	µS/cm	372	0.1-10000 µS/cm
Suspended Solids , APHA 24th Ed. 2540 D Total Suspended Solids dried at 103-105 °C 2023	mg/l	28.00	5.0 -10000 mg/l
Dissolved Solids, APHA 24th Ed. 2540 °C Total Dissolved Solids dried at 180 °C 2023	mg/l	286.00	5.0 -10000 mg/l
Total Solids, APHA24th Ed2540B: 2023	mg/l	314.00	5.0 -15000 mg/l
Hardness, APHA 24th Ed. 2340 °C EDTA Titrimetric Method 2023	mg/l	204.0	10.0 -5000 mg/l
Calcium, APHA 24th Ed. 3500Ca-B:2023	mg/l	58.0	10.0 -1000 mg/l
Magnesium, APHA 24th Ed 3500Mg B: 2023	mg/l	146.0	10-1000 mg/l
Chloride, APHA24th Ed 4500-Cl- B: 2023	mg/l	35.0	3.0 - 500 mg/l
Alkalinity, APHA 24th Ed. 2320:2023	mg/l	70.0	20-5000 mg/l
BOD, APHA 24th Ed. 3 day 27 °C IS 3025 (Part 44): 1993 Bio 2023	mg/l	3.4	1.0 -1000 mg/l
COD, APHA 24th Ed. 5220 B Open Reflux Method 2023	mg/l	11.52	4.0 -1000 mg/l
D.O. , APHA 24th Ed. 4500-OB Iodometric Method 2023	mg/l	6.37	0.2-14.0 mg/l

Date of Sample 16.03.2024

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Parameter	Unit	Results	Detection Range
Total Chromium, APHA24th Ed.3111-B: 2023	mg/l	0.0130	0.05-1000 mg/l
Cadmium, APHA 24th Ed.3111-B: 2023	mg/l	ND	0.01-1000 mg/l
Lead, APHA 24th Ed 3111B: 2023	mg/l	ND	0.09-1000 mg/l
Iron, APHA 24th Ed 3111B: 2023	mg/l	0.6832	0.05-1000 mg/l
Nickel, APHA 24th Ed 3111B: 2023	mg/l	ND	0.04-1000 mg/l
Zinc, APHA 24th Ed.3111-B: 2023	mg/l	0.0271	0.01-1000mg/l
*Manganese, APHA 24th Ed. 3500-Mg B Calculation Method 2023	mg/l	0.2403	-
*Arsenic, APHA 24th Ed. 3114-Hydride Generation AAS Method 2023	mg/l	ND	-
*Mercury , APHA 24th Ed. 3112B-Cold Vapour AAS Method 2023	mg/l	ND	-

(4) Notification of **Flood Plain Zones**:

Area- cities/ towns	Notification of flood plain zone	Demarcation		Encroachment & direct discharge Geo Code/ Sampling point	Encroachment removal status	Timeline for completion
		No development zone pillars	Regulatory zone pillars			
For the demarcation of flood plains working plan is being prepared.	Not Publish Yet	Not Started Yet.	Not Started Yet.	• Kariya Nala 25.486768, 80.331168 • Nimni Nala 25.475673, 80.324420	There is no any encroachment in ken river, Banda.	For the demarcation of flood plains working plan is being prepared. After the preparation of working plan, the working plan will be presented to the head office for the budget allocation. After the budget allocated, flood Plain Zone demarcation process will be carried out.

(5) Issues relating to **Environmental Flow**:

The Environmental Flow is maintained in Ken river.

2. Therefore, for each of the district/city/town under consideration, the desired information be submitted in the above format.

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Best Practices

1. Fecal STP (FSTP) of 32.0 KLD is installed for treatment of NPP Banda sewage at village- Hatetipurwa, District- Banda under Amrit Karyakram by U.P. Jal Nigam, Banda. FSTP is operated under trial period. Rest 07 ULBs of district Banda contracted with NPP Banda for disposal of Fecal Sludge from FSTP Banda.
2. Mass awareness through Ken Aarti at Bhuraghadh, Banda.
3. Awareness programme organized by district ganga committee at school level and village level.
4. Door to Door waste collection by ULBs at district- Banda and disposed by MRF centre.
5. A dedicated vehicle namely “Gau Roti Bank and Pooja Samagri Sangrah Vahan” is allotted by NPP, Banda for collection of generated waste from Pooja Sthal (Mandir) and Roti from households. Collected waste from Pooja Sthal is composed. Collected Roti from household is sent to GauShala’s.
6. On site community composting and composting at parks going on.

सत्यमेव जयते
जल शक्ति मंत्रालय
MINISTRY OF
JAL SHAKTI

COMPLIANCE OF HON'BLE NGT ORDER

DATED 05.02.2024 IN O.A.

200/2014 MC MEHTA VS UOI AND ORS.

Submitted By:

DISTRICT GANGA COMMITTEE

District –Sitapur (U.P.)

1. Sewage

ULBs Name	Drain name	Total flow of drain per day (MLD)	PH	BOD	COD	TSS	TDS	Heavy Metal	TC	FC	Outlet flow	Cl	Colour/ odour	Discharged Into
Sitapur	Nala Near Tadaknath Mandir Sahasapur	**0.47**	7.63	52	184	80	1242	Cr-BDL Cu-0.049 Hg-BDL Ar-0.005 Fe-0.75 Zn-0.141 Pb-BDL Mg-0.17	33000	2300000	**0.47**	---	40	Sarayan River
Sitapur	LoniyanPurwaPurwiWard Nala Kenehipur, Lachimanpur	**0.23**	7.01	46	172	62	708	Cr-BDL Cu-0.049 Hg-BDL Ar-0.005 Fe-0.75 Zn-0.141 Pb-BDL Mg-0.17	170000	79000	**0.23**	--	40	Sarayan River
Sitapur	AlamnagarWard Nala Near Fatktapur	**0.22**	6.87	52	218	84	886	Cr-BDL Cu-0.033 Hg-BDL Ar-0.003 Fe-0.21 Zn-BDL Pb-BDL Mg-0.15	270000	1700000	**0.22**	--	40	Sarayan River
Sitapur	GodiyanaNala, Godiyana Ward, -1	**0.03**	6.98	42	174	86	574	Cr-BDL Cu-0.057 Hg-BDL Ar-0.002 Fe-0.935 Zn-0.40 Pb-BDL Mg-0.09	130000	79000	**0.03**	--	40	Sarayan River

Sitapur	Godiyana Nala -2	**0.08**	7.04	46	192	90	702	Cr-BDL Cu-0.049 Hg-BDL Ar-0.003 Fe-0.989 Zn-1.04 Pb-BDL Mg-0.102	11000	4900	**0.08**	--	40	Sarayan River
Sitapur	Godiyana Nala -3	**0.15**	7.08	50	210	96	714	Cr-BDL Cu-0.098 Hg-BDL Ar-0.004 Fe-0.296 Zn-0.005 Pb-BDL Mg-0.085	26000	13000	**0.08**	--	40	Sarayan River
Sitapur	Batsganj Ward Nala 1 Nai Basti	**0.13**	7.04	22	128	76	826	Cr-0.002 Cu-0.033 Hg-BDL Ar- BDL Fe-BDL Zn- BDL Pb-BDL Mg-0.08	130000	790000	**0.13**	--	50	Sarayan River
Sitapur	Civil lines Nala Near BSA office Prem Nagar	**1.17**	7.17	37.9	148	68	762	Cr-BDL Cu- BDL Hg-BDL Ar- BDL Fe- BDL Zn- BDL Pb-BDL Mg-0.279	260000	170000	**1.17**	--	60	Sarayan River
Sitapur	LoharbaghWard Nala vijay Laxmi Nagar Roti Godam	**1.92**	7.82	74	288	148	930	Cr-BDL Cu-0.049 Hg-BDL Ar-0.005 Fe-0.75 Zn-0.141 Pb-BDL Mg-0.17 Mn- BDL	4600000	1300000	**1.92**	--	60	Sarayan River
MishrikhNaimisharanya	NeemsarDham Nala	**0.62**	7.82	18.6	128	58	746	Cr-BDL Cu-0.049 Hg-BDL Ar-0.005 Fe-0.75 Zn-0.141	220000	94000	**0.62**	--	40	Gomti River

								Pb-BDL Mg-0.17 Mn- BDL						

***BDL- Below Detection Limit**

2. STP (Sewage Treatment Plant)-

Existing STP (location & Capacity	Capacity (operational)	Inlet/outlet water quality & quantity	Number of Tapped Drains (quantity of discharge)	Total Sewage generated	Total sewage treated by STPs	Gap (in treatment)	Final discharges point	Proposed/ Under Construction STP with Completion date
At present, No STP is established in the district to treat the sewage that is being generated in Sitapur District				**64.38 MLD**	**0**	**100%**	The sewage generated from Sitapur &MishrikhNagarPalika area is being discharged into riversSarain& Gomti and in other municipality area (by digging trench and Pond)	A detailed PFR regarding STP construction, Pipeline house construction and tapping of drain has been uploaded on AMRUT 2.0 Portal for sanction but still pending.

2.1 STP Additional Information-

Name of Drain	Position of STP with Capacity	GEO/Coordinates	Discharge Quantity from the STP in the Drain	Total per day discharge from the Drain into the River
At present, No STP is established in the district to treat the sewage that is being generated in Sitapur District				

2.2 Proposed STP

Proposed STP (location & Capacity	Capacity (operational)	Inlet/outlet water quality &	Number of Tapped Drains	Total Sewage generated	Total sewage treated by	Gap (in treatment)	Final discharges point	Proposed/ Under Construction STP with Completion

		quantity	**(quantity of discharge)**		**STPs**			**date**
Sitapur Nagar Palika Prishad (2.76 MLD)	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Proposed Under AMRUT 2.0
Mishrikh-Naimisarayn Nagar Palika Prishad (2.06 MLD)	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Proposed Under SBM 2.0
Mahmudabad Nagar Palika Prishad(5.25 MLD)	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Proposed Under SBM 2.0
Laharpur Nagar Palika Prishad(6.40 MLD)	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Proposed Under SBM 2.0
Biswa Nagar Palika Prishad (5.77 MLD)	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Proposed Under SBM 2.0
Khairabad Nagar Palika Prishad (5.01 MLD)	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Proposed Under SBM 2.0
Sidhauli Nagar Palika Prishad (2.58 MLD)	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Proposed Under SBM 2.0
Maholi Nagar Palika Prishad (3.13 MLD)	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Proposed Under SBM 2.0
Hargaon Nagar Palika Prishad	Currently not	Currently not	Currently not	Currently not	Currently not	Currently not	Currently not	Proposed Under SBM 2.0

(2.23 MLD)	operational	operational	operational	operational	operational	operational	operational	
Paintepur Nagar Palika Prishad (1.44 MLD)	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Proposed Under SBM 2.0
Tambour Ahmadabad Nagar Palika Prishad (2.70 MLD)	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Currently not operational	Proposed Under SBM 2.0

2. Hotels/ Asharam

Nagar Palika/Nagar Panchat Name	Number Hotel	Consent to establish/operate	STP	Discharge point	Action taken
Sitapur	Rjdhani Hotel	Yes	No	Drain	----------
	Hotel Sanjay Palace	Yes	No	Drain	----------
	Gagan Hotel	Yes	No	Drain	----------
	Sopan Hotel	Yes	No	Drain	----------
	Ranjeet Hotel	Yes	No	Drain	----------
	Nimisha Hotel	Yes	No	Drain	----------
	Pojan Hotel	Yes	No	Drain	----------
	Hotel Aman In	Yes	No	Drain	----------
	Landmark Hotel	Yes	No	Drain	----------
	Anwar Jamal Hotel	Yes	No	Drain	--------

Mishrikh Naimisharanya	**0**	0	0	0	There are no any hotels/ashrams and dharmsalas
Maholi	**0**	0	0	0	There are no any hotels/ashrams and dharmsalas
khairabad	**0**	0	0	0	There are no any hotels/ashrams and dharmsalas
Tambaur	**0**	0	0	0	There are no any hotels/ashrams and dharmsalas
Laharpur	**0**	0	0	0	There are no any hotels/ashrams and dharmsalas
Hargaon	**0**	0	0	0	There are no any hotels/ashrams and dharmsalas
Mahmoodabad	**0**	0	0	0	There are no any hotels/ashrams and dharmsalas
Biswa	**0**	0	0	0	There are no any hotels/ashrams and dharmsalas
Sidhauli	**0**	0	0	0	There are no any hotels/ashrams and dharmsalas
Paitepur	**0**	0	0	0	There are no any hotels/ashrams and dharmsalas

3. Industrial Effluent discharges

Total No. of Industries	Daily Effluent Discharge	Treatment available (CETP/PEPT/ETP operational capacity)	Effluent Quality Analysis (outlet of treatment plant)	GAP	Proposed/under construction treatment project (with timeline)	No of defaulting unit action taken	Industrial solid waste generated /day	Mannerof disposal (industrial solid waste)
13	8.18 MLD	8.18 MLD	As per CPCB Guideline	NO	00 (No any proposed/under construction treatment project)	-	-	Through TSDF& authorized recycler

4. Regulation of Flood Plain Zone

Area- cities/ towns Notification of flood plain zone	**Demarcation**		**Variable flow (per day)**	**Encroachment /Encroachment removal Status**	**Timeline for completion**	**Biarage/ Cross-regulator**
	No development zone pillars	**Regulatory zone pillars**				
Notification of Flood Plain zone for Gomti river has been done	No development zone pillars have not been installed	No regulatory zone pillars have not been installed	No measuring Barrage/ regular is constructed in district Sitapur So Measurement of Flow is not being done.	No development zone/ regulatory pillars have not been installed. Hence encroachment has not been demarcated	No development zone / regulatory pillars have not been installed. Hence encroachment has not been demarcated.	No barrage / regulator is constructed in the stretch of river within district

5. AFFORESTATION/ PLANTATION

Area- cities/ towns	Total plantation	Proposed project	Time line
Sitapur	Achieved 71,93,580 no of Plantation in the year 2023-24	Plantation for the year 2024-25 will be proposed for 71,93, 580 plant and completed in month of July/August 2024 as per order received by the higher officers.	Month July/ august 2024

6.1 Afforestation/plantation along the bank of River Ganga and its tributaries and their flood plain zone

S.No.	River name	Place Name (0-10 km)		Number of plant	Remark
1.	Sarayan Nadi	Akoiya Gram Samaj	--------	7500	Plantation for the year 2024-25 will be proposed for 71,93, 580 plant and completed in month of July/August 2024 as per order
2.	Ghaghra Nadi	Gevda Gram Samaj	N 27.2685 E 81.1377	12500	
3.	Ghaghra Nadi	bhartha Gram Samaj	N 27.5656 E 81.15477	7500	
4.	Gon Nadi	Dobha Gram Samaj	---------	12500	
5.	Gon Nadi	Phoolpur Gram Samaj	----------	10000	
6.	Gomti Nadi	Dhakiya kala Gram Samaj-I	N27.3025 E 80.2109	12800	
7.	Gomti Nadi	Dhakiya kala Gram Samaj-	N 27.3031E80.2118	12800	

		II			received by the higher officers
8.	Gon Nadi	Harihar Pur Gram Samaj	---------	12500	
9.	Sharda Nadi	Meetapur Gram Samaj	----------	8000	
10.	Gomti Nadi	Dhakiya kala Gram Samaj-III	N27.2946 E 80.2151	12800	
11.	Gomti Nadi	Tavinda Nagar Gram Samaj	----------	12800	
12.	Gomti Nadi	Pendari Gram Samaj	----------	8000	
13.	Gomti Nadi	Amraiya Gram Samaj	----------	12800	
14.	Sarayan Nadi	Resoara Gram Samaj	N27.535430 E 80.657622	8000	
15.	Sharda nadi	Badriya Gram Samaj	N 27.4658 E 81.0711	12800	
16.	Gomti Nadi	Kapsa Gram Samaj	---------	12800	
17.	Ghaghra Nadi	Karsa bharsa-II	N 27.3432 E 81.1511	10000	
18.	Gomti Nadi	Narsidhauli -II	N 27.2427 E 80.3230	12500	
19.	Gon Nadi	Daudpur van khand	--------	12500	
20.	Sarayan Nadi	Ddevra gram samaj	N 27.2929 E 80.3643	8000	
21.	Gomti Nadi	Tersava van khand	N 27.2436 E 80.3643	3200	
22.	Sarayan Nadi	Sisendi van khand	N 27.239 E 80.4216	12500	
23.	Gomti Nadi	Tatroi Gram Samaj	N 27.1731 E 80.3137	11200	
24.	Sarayan Nadi	Gagoy Gram Samaj	N 27.1943 E 80.4558	12500	
25.	Sarayan Nadi	Apipur Gram Samaj	-------	12500	
26.	Gomti Nadi	Stnapur Gram Samaj	N 27.313624 E80.2537	9600	
27.	Sarayan Nadi	Kusauli Gram Samaj	N27.2141 E 80.4027	7500	
28.	Ghaghra Nadi	Krsa Gram Samaj	N 27.3432 E 81.1511	12800	

29.	Gomti Nadi	Allipur Gram Samaj	N27.1415 E 80.4554	8000	
30.	Sarayn Nadi	Madhavpur Gram Samaj	N27.2243 E 80.4238	8000	
31.	Sarayn Nadi	Ktiya Gram Samaj	N27.3017 E80.3858	12500	
32.	Sarayn Nadi	Kanva kheda Gram Samaj	---------	9600	
33.	Gomti Nadi	Ddhna mau Gram Samaj	N 27.27514356 E 80.3460596	5000	
34.	Gomti Nadi	Kutub Nagar	N 27.29220406 E 80.26199682	66500	
35.	Gomti Nadi	Khiri branch	---------	8000	

7. Mining

So. No.	District Name	Sand Mining 2023-2024	FIR/Case Registered/ Year 2023-24	Vehicles/mineral seized	Cases Pending in Court	Enforcement of EMGSM 2020 and Sustainable sand mining management guidelines 2016
1	**Sitapur**	**0**	**24**	**Seized and Penalty recovered**	**0**	• Regularly checking and monitoring of illegal sand mining activities in river basin with the surprise visit taken by mining department • Effective enforcement with the importance of implementing the regulatory provisions of " sustainable sand Management Guidelines (SSMG) 2016 & Enforcement & Monitoring guidelines for sand mining 2020.

The tribunal has already directed for furnishing following information by order date 24.11.2023

1. **District Ganga Protection Plan at city/Town level**
   District Ganga Protection Committee (DGPC) required to formulated the action plan for each city and town located on main stem of river Ganga and its tributary and such action plan has to be prepared in accordance with the river Ganga (rejuvenation, Protection and Management) Authorities order , 2016(para 6 and 55)

2. **Contents of the Action Plan (including each city and town abutting river Ganga and its Tributary)**

   2.1. Sewage Management

   i. Sewage generation (For entire District and Individual town wise)

Name of District	Name of ULB	Total Population in ULB	Total Sewage Generation (MLD)	Treatment of Sewage	Final Disposal of Sewage	Remark
Sitapur	Sitapur	**177224**(2011)	**21.574**	**0**	**Water body (Sarayan River)**	Phyto –remediation /STP work is in progress for sewage disposal
Sitapur	Paitepur	**13251**(2011)	**1.76**	**0**	**0**	Phyto –remediation work is in progress for sewage disposal
Sitapur	Mishrikh Naimisharanya	**18388**(2011)	**2.82**	**0**	**Water body(River Gomti)**	Phyto –remediation work is in progress for sewage disposal
Sitapur	Maholi	**21274**(2011)	**2.42**	**0**	**0**	-------
Sitapur	khairabad	**48490** (2011)	**6.56**	**0**	**0**	-----
Sitapur	Tambaur	**26052**(2011)	**3.25**	**0**	**0**	Phyto –remediation work is in progress for sewage disposal

Sitapur	Laharpur	**61990**(2011)	**6.43**	**0**	**0**	---
Sitapur	Hargaon	**26694**(2011)	**2.88**	**0.84**	**0.84**	0.84 MLD treatment is done by Phyto – remediation
Sitapur	Mahmoodabad	**50789**(2011)	**8.33**	**0**	**0**	Phyto –remediation work is in progress for sewage disposal
Sitapur	Biswa	**55780**(2011)	**4.91**	**0**	**0**	Phyto –remediation work is in progress for sewage disposal
Sitapur	Sidhauli	**24976**(2011)	**3.45**	**0**	**0**	Phyto –remediation work is in progress for sewage disposal

ii. Existing Sewage Treatment Capacities:

Due to the absence of sewage treatment plants (STPs) Sitapur district is currently completely dependent on phytoremediation techniques for the management of waste water in some drains, work is pending towards establishment of more comprehensive sewage treatment infrastructure. Here is a tailored plan focusing on phytoremediation and further steps to overcome the shortfall of STPs: Accordingly, a proposal for setting up STPs at some locations has been sent under the AMRUT 2.0 scheme.Sewage treatment using phytoremediation technology can only handle 0.84 MLD of wastewater.

iii. Quantity of Sewage is being Treated

Currently, the district is using phytoremediation technology to treat only 0.84 MLD of sewage.

iv. Performance of STPs Particularly for FC:

At present, **No STP is established** in the district to treat the sewage that is being generated in Sitapur District.

v. Where treated sewage is being discharged (to river Ganga or its tributaries):

No STP is established in the district

vi. Reasons for Under-utilization of STPs (Connectivity of Households/laying of sewer lines):

No STP is established in the district

vii. Current Gap in sewage Treatment by STP:

100% GAP

viii. Time bound plan for bridging the gap and tying up with financial arrangements and not delaying Tendering and identifying executing agencies or having any other issues:

Since there are no existing sewage treatment plants (STPs) in Sitapur District, and the proposal for setting up STPs under the AMRUT 2.0 scheme is pending, the timeline for implementation is not yet established.

ix. Where untreated sewage (when there is no STP) is discharged (Ganga/Tributaries):

Name of ULB	Name of Drain District	Discharge Point			Remark
		River	Pond/Drain/Soak Pit	Geo Tag Pic	
Sitapur	Nala Near Tadaknath Mandir Sahasapur	Sarayan River	------		
	LoniyanPurwa Ward Nala Kenehipur, Lachimanpur	Sarayan River	------		
	Godiyana Nala, GodiyanaWard, Near Shikan	Sarayan River	-------		

	Godiyana Ward Nala Near Valmaki Nagar Mandir	Sarayan River	--------		
	Batsganj Ward Nala 1 Nai Basti	Sarayan River	--------		
	Civil lines Nala Near BSA office Prem Nagar	Sarayan River	--------		
	Loharbagh Ward Nala vijay Laxmi Nagar Roti Godam	Sarayan River	--------		

	Alamnagar Ward Nala Near Fatktapur	Sarayan River	---------		
Mishrikh Naimisharanya	Naimisharanya Nala	Gomti river	----------		

2.2. Drains joining Ganga and Tributary

(i) Number of drains carrying sewage-sullage or industrial waste water joining Ganga/tributaries with their Quantity and Quality:

There are 09 drains in the district carrying untreated sewage into river systems, with no sewage treatment plants (STP) in the district. All of these drains are being physically filtered by installing iron mesh, and in some, phytoremediation techniques are being used. Apart from this, ETP is installed in all the industries of the district. The intermediate discharge point of all the industries is local drain. (Quantity- 23.82 MLD, Quality- fair).

(ii) Drains joining outside city and town limits but, either joining in village or nearby town:

No drains.

(iii) Inclusion of sewage flowing in drains into total sewage generation figures of each city and town and their interception and diversion to STPs:

Action plan is proposed for interception and diversion of drains to STP under SBM 2.0.

3 Septage management (In case of no STP)

(i) Status of Septage management (with reference to FSTP/STP):

➢ 32 KLD FSTP for treatment of sludge.

(ii) Management of Grey water and its disposal:

➢ Action Plan is proposed for interception & diversion of drains to STP under SBM 2.0.

2.4 Industrial Pollution Control

(i) Attach the list of industries generating trade effluents, their place of disposal and compliance including CETPs (town wise):

S.No.	Name and Address of unit	District	Production Sector	ETP Status	Intermediate Discharge Point	Final discharge Point	Status OCEMS	Status PTZ camera
1	The Seksaria Biswa Sugar Factory,Ldt (Distillery unit)	Sitapur	Distillery	Installed	ZLD	Kevani	Installed	Installed
2	The Seksaria Biswa Sugar Factory,	Sitapur	Sugar	Installed	Bargadiya Nala	Kevani	Installed	Installed
3	The Kisan Sakhari chini mill Ldt. Mahmoodabad	Sitapur	Sugar	Installed	Local Drain	Ujani Minar	Installed	Installed
4	Singhaniya Milk	Sitapur	Dairy	Installed	Local Drain	Sarayn	Installed	Installed

	product Pvt Ltd. Ramnagar							
5	Oudh Sugar mill Hargaon	Sitapur	Sugar	Installed	Goan Drain	Gomti	Installed	Installed
6	Oudh Sugar mill Hargaon Distillery unit)	Sitapur	Distillery	Installed	ZLD		Installed	Installed
7	Mohd Aafaq Mohd Ashfaq Laherpur	Sitapur	Textile	Installed	Local Drain	Gomti	Installed	------
8	Madhu India deco Ltd. Atariya	Sitapur	Textile	Installed	Local Drain	Gomti	Installed	Installed
9	JB daruka paper Ltd. Adbaniya Sitapur	Sitapur	Pulp & paper	Installed	Sarayan	Gomti	Installed	Installed
10	Dalmia Chini mill Ramkoat	Sitapur	Distillery	Installed	ZLD	Gomti	Installed	Installed
11	Dalmia Chini mill Ramkoat (Sugar)	Sitapur	Sugar	Installed	Behta Drain	Gomti	Installed	Installed

(3) Water quality status Provide water quality status of Ganga and its tributaries in the district and city/town in terms of its fitness for Bathing water quality that is, FC and FS:

Water quality status of all the rivers is better which is suitable for bathing in reference with FC and FS.

Water Quality of Gomti River- Neemsar, Sitapur

S.No.	Parameter	Result	Unit
1.	pH	8.45	
2.	Turbidity	7.0	NTU
3.	Colour	10	Hazen
4.	Conductivity	340.5	uS/cm
5.	Suspended Solid	32	mg/l

6.	Dissolved Solid	216	mg/l
7.	Hardness	162	mg/l
8.	Calcium	70	mg/l
9.	Magnesium	92	mg/l
10.	Sodium	15.9	mg/l
11.	Potassium	6.90	mg/l
12.	Fluoride	0.14	mg/l
13.	Total Coliform	2000	MPN/100 ml
14.	Fecal Coliform	780	MPN/100 ml
15.	BOD	2.3	Mg/l

Water Quality of Sarayan River- Sitapur

S.No.	Parameter	Result	Unit
1.	pH	8.09	------
2.	Colour	20	Hazen
3.	Suspended Solid	32	mg/l
4.	Dissolved Solid	354	mg/l
5.	Total Solid	386.0	mg/l
6.	Total Coliform	3300	MPN/100 ml

7.	Fecal Coliform	1300	MPN/100 ml
8.	BOD	4.2	mg/l
9.	COD	20.8	mg/l
10.	DO	5.8	mg/l

(4) Notification of Flood Plain Zones: ➢

Sitapur (Notification- Yes)

(5) Issues relating to Environmental Flow:

There is no any issue related to Environmental Flow in District Sitapur.

Best practices performed in the district

In Sitapur district, like many regions in India, river conservation is paramount due to the critical role rivers play in sustaining ecosystems and providing water resources for communities. Here are some best practices that have been implemented in Sitapur district for river conservation:

1. Community Engagement and Awareness

1.1. Involvement of Ganga Prahri

The term "Ganga Prahri" could be understood as "Guardians of the Ganges" or individuals tasked with monitoring and safeguarding the river. These could be volunteers or appointed personnel working under various government schemes or NGOs dedicated to Ganges conservation. Involvement of about 250 “Ganga Praharis through “District Ganga Gram Samiti” for Public awareness campaign and river conservation in Sitapur district is an excellent approach.Here's how this collaboration has been leveraged for effective river conservation efforts.

1.1.1. Joint Awareness Campaigns: The District Ganga Committee can collaborate with Ganga Prahri to organize joint awareness campaigns targeting villages along the rivers in Sitapur district. These campaigns include activities such as workshops, street plays, and rallies to educate local residents about theimportance of river conservation and practical steps they can take to protect the rivers.

1.1.2. Clean-up Drives: Ganga Prahari members joined the District Ganga Committee volunteers and members in the clean-up effort along the riverbanks. These campaigns provide an opportunity to interact with the community and spread awareness of the value of maintaining clean rivers in addition to aiding in the removal of litter and other debris.

1.1.3. Community Meeting: Organize regular community meetings where members of the District Ganga Committee and Ganga Prahri interact directly with local residents to discuss conservation challenges, share information about ongoing initiatives, and solicit feedback and suggestions from the community.

1.2. Ganga Arti:

Ganga Arti, a religious ritual of worshiping the Ganges River, can also serve as a powerful tool for community engagement and raising awareness about river conservation in Sitapur district. Here's how Ganga Arti can play a role in these efforts:

1.2.1. Public Gatherings: Ganga Arti ceremonies often attract large gatherings of devotees and tourists. These gatherings present an opportunity to disseminate messages about river conservation to a broad audience. Information booths or displays can be set up near the Ganga Arti sites to provide educational materials and engage attendees in conversations about the importance of preserving the Ganges.

2. Regular plantation drives

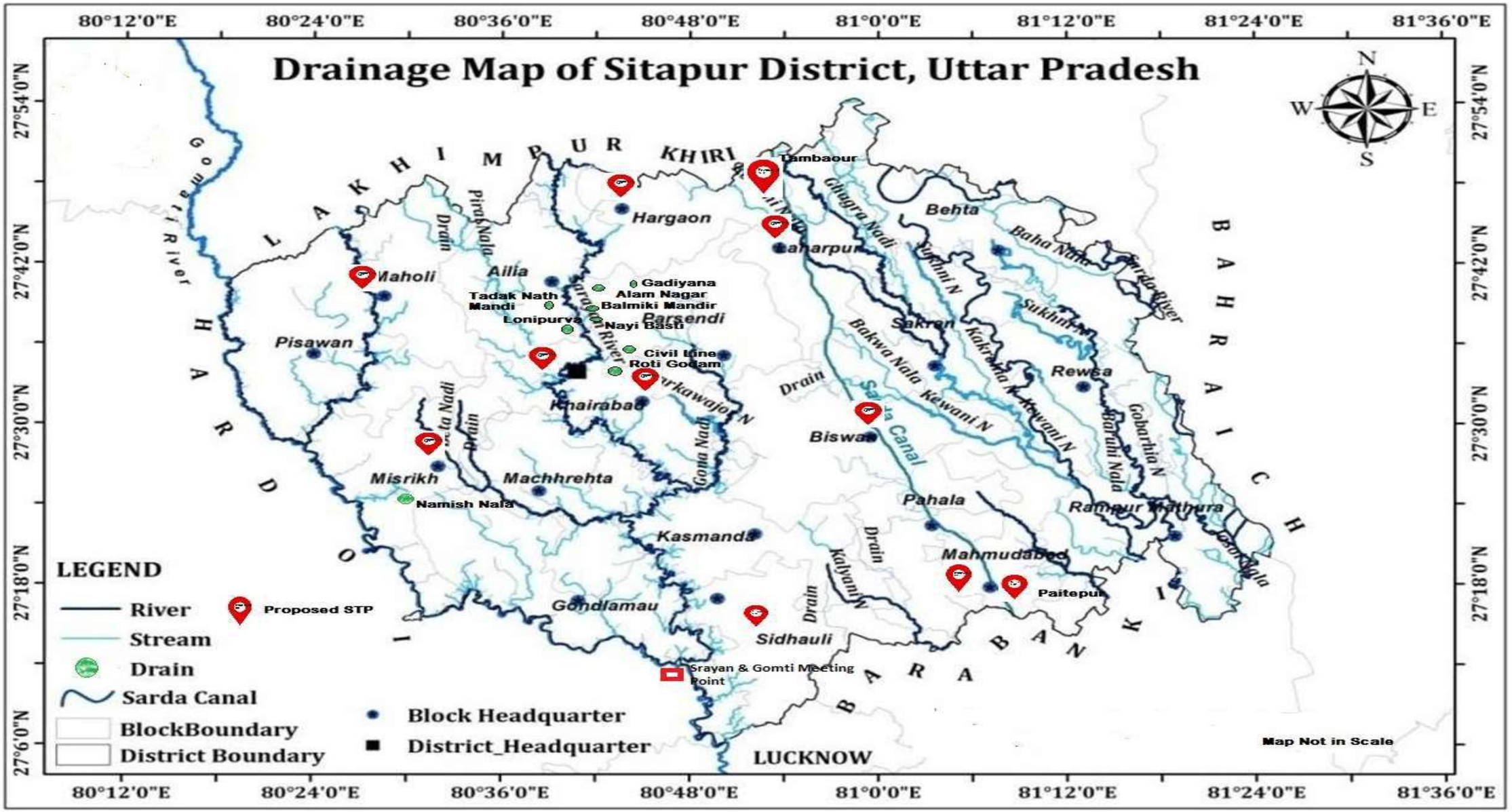
In Sitapur district, the Forest Department plays a crucial role in afforestation and riparian zone protection along the rivers. Here's how the Forest Department in Sitapur can contribute to these efforts:

2.1. Afforestation Program: The Forest Department can initiate and oversee afforestation programs along the riverbanks and in nearby areas. This involves planting native tree species that are suitable for the local ecosystem, such as neem, peepal, banyan, and bamboo, to prevent soil erosion, stabilize riverbanks, and improve biodiversity.

2.2. Nursery Development: Establishing nurseries for propagating native tree saplings is essential for ensuring a sustainable supply of plants for afforestation projects. The Forest Department can manage these nurseries and distribute saplings to local communities, schools, and other stakeholders for plantation activities.

2.3. Riparian Zone Protection: The Forest Department can work to protect riparian zones along the rivers by implementing buffer strips and conservation easements. These zones act as natural filters, absorbing pollutants, preventing sedimentation, and providing habitats for wildlife. Strict enforcement of laws against encroachment and illegal activities in riparian areas is also necessary.

3. **Rejuvenation of water bodies**: All the concerned departments regularly work for the rejuvenation of rivers, wetlands, and ponds throughout the district.
4. **Reuse of treated wastewater in agricultural irrigation:** Where treated wastewater discharged into drains, the nearby farmers reuse this treated wastewater for their crop irrigation which could be increase their crop production and decrease the fertilizer use.
5. **District Ganga Committee (DGC) Meetings**: The District Ganga Committee (DGC) meetings were held in every month for the abatement of pollution and encroachment, water quality improvement, beautification of Ghats, and betterment of aquatic biodiversity in all the tributaries of river ganga.


Drainage Map of Sitapur District, Uttar Pradesh
80°12'0"E
80°24'0"E
80°36'0"E
80°48'0"E
81°0'0"E
81°12'0"E
81°24'0"E
81°36'0"E
27°54'0"N
27°42'0"N
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N
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LAKHIMPUR KHIRI
HARDOI
BAHRAICH
BARABANKI
LUCKNOW
Gomati River
Hargaon
Tambaour
Maholi
Ailia
Gadiyana
Alam Nagar
Balmiki Mandir
Tadak Nath Mandi
Lonipurva
Nayi Basti
Parsendi
Pisawan
Civil Line
Roti Godam
Khairabad
Misrikh
Machhrehta
Namish Nala
Kasmanda
Gondlamau
Sidhauli
Srayan & Gomti Meeting Point
Biswan
Sakran
Behta
Rewsa
Pahala
Mahmudabad
Paitepur
Rampur Mathura
Sarda Canal
Drain
Ghugra Nadi
Baha Nala
Sukhni N
Kewani N
Bakwa Nala
Gobarhia N
Kalyani N
Goria Nadi
Piraj Nala
LEGEND
River
Stream
Drain
Sarda Canal
BlockBoundary
District Boundary
Proposed STP
Block Headquarter
District_Headquarter
Map Not in Scale

2024

35186

A Brief Report Submitted in Compliance of Hon'ble NGT Order dated 05 Feburary,2024 in O.A. 200/2014 MC Mehta Vs UOI and Ors.

District Ganga Protection Committee,Ghaziabad (Uttar Pradesh)

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1. Sewage
2. STP for treating the sewage of the drains ultimately flowing to river ganga or its tributaries:
   2.1 STP Additional Information
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4. Industrial Effluent discharge by industries whose effluent is ultimately flowing to river Ganga upto border and its tributaries Hindon/Yamuna
5. Regulation of Flood Plain Zone Afforestation/ Plantation along the bank of River Ganga upto border and its tributaries and its tributaries Hindon/Yamuna and their flood plain zones .
6. Afforestation/ Plantation along the bank of River Ganga upto border and its tributaries and its tributaries Hindon/Yamuna and their flood plain zones.
7. Mining and Stone Crushing in river bed and flood plain zone of River Ganga and its tributaries:

Compliance of Hon'ble NGT order Dt 24.11.2023 in O.A. 200/2014 MC Mehta Vs UOI and ors.

1. District Ganga Protection Plan at city/ town level
2. Contents of the Action Plan (Consolidated District Wise Action Plan including each City and Town abutting river Ganga and its Tributary)

2.1 **Sewage Management:-**

(i) Sewage Generation
(ii) Existing Sewage Treatment Capacities
(iii) Quantity of sewage being treated (Utilization Capacity)
(iv) Performance of STPs particularly for FC.
(v) Where treated sewage is being discharged (to Hindon /Yamuna)
(vi) Reasons for Under-utilization of STPs (Connectivity of Households/laying of sewer lines)
(vii) Current gap in sewage treatment
(viii) Time bound plan for bridging the gap and tying up with financial arrangements and not delaying Tendering and identifying executing

agencies or having any other issues:

(ix) Where untreated sewage (when there is no STP) is discharged (Hindon/Yamuna Tributaries):

2.2 Drains joining Ganga and Tributary: -

(i) Number of drains carrying sewage- sullage or industrial waste water joining Hindon/Yamuna tributaries with their Quantity and Quality:

(ii) Drains joining outside city and town limits but, either joining in village or nearby town

(iii) Inclusion of sewage flowing in drains into total sewage generation figures of each city and town and their interception and diversion to STPs

2.3 Septage management (In case of no STP)

(i) Status of Septage management (with reference to FSTP/STP)

(ii) Management of Grey water and its disposal

2.4 Industrial Pollution Control

(i) List on no. of industries generating trade effluents,their place of disposal and compliance including CETPs (town wise)

3. Water Quality Status

4. Notification of Flood Plain Zones

5. Issues related to E-Flow:

APPENDIX: Layout Map of the District Ghaziabad showing river Hindon (A tributary of River Yamuna) including STP locations, Proposed STP Locations and drains with Geo Tag location

1-Sewage

Drain (city/ town)	Total flow of drain per day	pH	BOD (mg/L)	COD (mg/ L)	TSS (mg/ L)	Heavy metals (mg/L)				DO (mg/L)	TC (MPN/100 mL)	FC (MPN/100 mL)	Outlet flow and geo code/ sample point	Color / odour	Discharged Into
						Cu	Ni	Fe	Pb						
Arthala (Ghaziabad)	0.263 MLD	7.22	36.0	140.0	122.0	ND	ND	1.25	ND	Nil	$15X10^4$	$12X10^4$	Lat-28.664616 Long-77.394623	Turbid/Faint	Hindon River
Dasna (Ghaziabad)	50.697 MLD	6.76	60.0	118.0	134.0	ND	ND	2.12	ND	Nil	$27X10^5$	$22X10^5$	Lat-28.626222 Long-77.427633	Turbid/Faint	Hindon River
Jawali (Ghaziabad)	2.42 MLD	7.24	40.0	102.0	72.0	ND	ND	ND	ND	Nil	$20X10^4$	$17X10^4$	Lat-28.743915 Long-77.381878	Turbid/Faint	Hindon River
Hindon vihar (Ghaziabad)	7.0 MLD	7.28	65.0	180.0	144.0	ND	ND	ND	ND	Nil	$43X10^5$	$23X10^5$	Lat- 28.68637 Long-77.404979	Turbid/Faint	Hindon River
Pratap Vihar (Ghaziabad)	40 MLD	6.88	38.0	126.0	106.0	ND	ND	ND	ND	Nil	$26X10^4$	$17X10^4$	Lat-28.636705 Long-77.39466	Turbid/Faint	Hindon River
Kaila bhatta (Ghaziabad)	17.933 MLD	6.84	33.0	130.0	118.0	ND	ND	1.78	ND	Nil	$25X10^4$	$14X10^4$	Lat-28.667298 Long-77.401684	Turbid/Faint	Hindon River

2. STP for treating the sewage of the drains ultimately flowing to river Ganga or its tributaries:

Existing STP (location & capacity)	Capacity (operational)	Inlet/ Outlet water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point/Geo Code/Sampling Point	Proposed/ under construction STP With completion date
74 MLD SBR STP, Shakti Khand-4, Indirapuram, Ghaziabad	Operational	BOD - 30 mg/l TSS - 50 mg/l FC – 1000 MPN/100 ml	01 (Sahibabad Drain) 74 MLD	No Gap	Hindon River Lat-28.671866 Long-77.401096	NIL
56 MLD UASB STP, Shakti Khand-4, Indirapuram, Ghaziabad	Operational	BOD - 30 mg/l TSS - 50 mg/l FC – 1000 MPN/100 ml	01(Sahibabad Drain) 16 MLD	No Gap	Hindon River Lat-28.671866 Long-77.401096	NIL
56 MLD STP SBR STP Shakti Khand-4, Indirapuram, Ghaziabad	Operational	BOD - 30 mg/l TSS - 50 mg/l FC – 1000 MPN/100 ml	Nil	No Gap	Hindon River Lat-28.671866 Long-77.401096	NIL
56 MLD SBR STP Dudahaida, Vijay Nagar, Gzb	Operational	BOD - 30 mg/l TSS - 50 mg/l FC – 1000 MPN/100 ml	Nil	No Gap	Hindon River Lat-28.671866 Long-77.401096	NIL
70 MLD UASB STP, Dudahaida, Vijay Nagar, Ghaziabad	Operational	BOD - 30 mg/l TSS - 50 mg/l FC – 1000 MPN/100 ml	Nil	No Gap	Hindon River Lat-28.671866 Long-77.401096	NIL
56 MLD SBR STP Govindpuram, Ghaziabad	Operational	BOD - 30 mg/l TSS - 50 mg/l FC – 1000 MPN/100 ml	Nil	No Gap	Hindon River Lat-28.671866 Long-77.401096	NIL

2.1. STP Additional Information

S.no	Name of The Drain	Position of STP With Capacity	Geo-Coordinates	Discharge Quantity From The STP In The Drain	Total Per Day Discharge From The Drain Into The River
1.	Dasna	56 MLD STP SBR Govindpuram, 56 MLD STP SBR Bapudham, 56 MLD SBR Vijay Nagar, 70 MLD UASB Vijay Nagar	Lat-28.626222 Long-77.427633	142 MLD	142 MLD
2.	Indirapuram	74 MLD SBR Indirapuram, 56 MLD SBR Indirapuram, 56 MLD UASB Indirapuram	Lat-28.635285 Long-77.390176	168 MLD	168 MLD

Proposed STP (location & capacity)	Capacity (operational)	Inlet/Outlet quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge code/ sampling point	Proposed/under Construction STP with Completion date
1.68 MLD STP Karhera,Ghaziabad 2.66 MLD STP KhodaMakanpur	510 MLD	344 MLD	01 (Sahibabad Drain)	No Gap	Hindon River/Yamuna River	1.68 MLD STP will be completed by 26.06.2026 2.66 MLD STP will be completed by 31.12.2026

3. Hotels/ Ashrams/Dharmshalas/residential complexes abutting river Ganga or its tributaries

Number of Hotels/ Ashrams/ Dharamshalas	Consent to establish/ operate	STP	Discharge point	Action taken
111 Hotels	43	Installed /Sewar line	Sewar Line	• show cause notice issued: **06** Hotels. • Show cause notice under process. **30**

Sr. No.	Name of Hotels
1	Mahagun Sarovar Portico Suites-A Sarovar Hotel VC3 sector 3, Mahagun Metro Mall, Vaishali, Ghaziabad-201010
2	Fortune INN Grazia Ghaziabad Plot No.1 Sanjay Nagar Distt. Centre, Sector 23, Ghaziabad-201002
3	Hotel Krishna Sagar NH24, A-1/1, Udyog Kunj, Near Ryan International School, Ghaziabad-201009
4	OYO 1299 Hotel Mukut Regency CC-1 Sector 13, Vasundhara, Ghaziabad-201012
5	OYO 1391 Hotel Pushpa Vilas, Plot No. 584, Near Pushpanjali Crosslay hospital, Sector 1, Vaishali, Ghaziabad-201010
6	Hotel Krishna Sagar C-48, RDC, Raj Nagar, Ghaziabad-201001
7	Hotel Kohinoor Palace SK No.41-8, Site-IV, Link Road, Sahibabad, Ghaziabad-201010
8	Oyo 8349 Hotel crown Palace Plot No. 1358-5, Vasundhara Sector 5, Ghaziabad-201012
9	Country Inn and Suites by Radisson, Sahibabad 64/6, Site IV, Sahibabad Industrial Area Ghaziabad-201010
10	Royal Park Hotels & Resorts Shakti Khand -1/209, Indirapuram, Ghaziabad-201010
11	The Tarang, 23, SDC, Sector-23 Main ALT Road, Ghaziabad-201002
12	The Rurban Village, 36 K.M. From Akshardham, N.H. 58,Delhi Meerut Road, Upper Ganga Canal Road, Gangnahar, Village Badka Arifpur, Muradnagar, Ghaziabad-201206
13	M/s. KW Delhi-6, NH-58, Bypass Raj Nagar Extension, Ghaziabad
14	Red Carpet Grand,Plot No. 544, adjacent to G.D. Goenka Public School, Sehani Khurd, Raj Nagar Extension, Ghaziabad
15	CH BHEEM SINGH FARM HOUSE (B S FARAM HOUSE) KH.NO. 75, 100 FUTTA ROAD, NAND GRAM ROAD, NEAR RAATE MANDI, GHAZIABAD,GHAZIABAD
16	Bikanervala Foods Pvt. Ltd. Shop No. 1 & 2, KSN Square, Sector-3, Vasundhara, Ghaziabad Nagar Nigam Zone-5, Ghaziabad, Uttar Pradesh - 201012
17	TAKSHILA FOODS PVT LTD, Plot No.12, Sector-5 Rajender Nagar Ghaziabad, Ghaziabad Nagar Nigam Zone-6, Ghaziabad, Uttar Pradesh - 201005
18	Haldiram Ethnic Foods Pvt Ltd, Plot No. CP-04, Sector 11, Vasundhara, Ghaziabad Tahsil, Ghaziabad, Uttar Pradesh - 201011
19	Haldiram Ethnic Foods Pvt Ltd, D-12&D-12A RDC, Raj Nagar, Ghaziabad, Ghaziabad Nagar Nigam Zone-14, Ghaziabad, Uttar Pradesh - 201002

20	Burgerking India Pvt. Ltd., GF and FF, Plot No. 10, Rajender Nagar, Sector-5, G.T. Road, Ghaziabad-201005., Ghaziabad, Uttar Pradesh - 201005
21	BIKANERVALA FOODS PVT.LTD., Khasra No-575,Village Sikri Kalan, Delhi Meerut Road Modinagar, Ghaziabad (UP), Ghaziabad, Uttar Pradesh - 201204
22	Burger King India Private Ltd, Unit No-D-31,Raj Nagar District Center, Ghaziabad,, Ghaziabad, Uttar Pradesh - 201001
23	M/s. Gaur Mall, A-1 to A-4, RDC,,Opp. HDFC Bank, Raj Nagar, Ghaziabad.
24	Le Crescent, Plot no-14a, Mall road, Near DPS school, old building, Ahinsa khand-2, Indirapuram, OPOSIT CLOUD 9, Ghaziabad
25	Hotel Frank INN 13, Railway Road, Bazaria, Ghaziabad-201001
26	Hotel Parth INN C-1, Govindpuram, Hapur road, Ghaziabad-201013
27	Hotel 12807 Amaira Hotel and Banquets 1, Plot No. 1, Village Praladhgari, Vasundhra Ghaziabad-201012
28	OYO 9301 Hotel RedBury Kalka Garhi Chowk, Ghaziabad-201001
29	OYO 13576 Hotel Residency 7171 Gupta colony, GT road, Near Ramte Ram Road, Ghaziabad-201001
30	OYO 13758 XS Residency E3Dr Bhabha Marg, HIG Flats, Chander Nagar, Surya Nagar, Ghaziabad-201011
31	OYO 11452 Golden Castle Lodge 11, KH No. 1/11, Indirapuram, Niti Khand I, Ghaziabad-201014
32	OYO 12833 Century Grand 6, Wazirabad Road, Near Bhopura Chowk Petrol Pump, Sahibabad, Ghaziabad-201005
33	OYO 1391 Hotel Pushpa Vilas Plot No. 584, Near Pushpanjali Crosslay hospital, Sector 1, Vaishali, Ghaziabad-201010
34	OYO 9178 Hotel New Central Park Plot No. D-36, Kaushambi, Behind Kaushambi Metro Station, Ghaziabad- 201010
35	OYO 947 Hotel Palazzo Di Lara Plot No 11-12, Sector-3, Near gate No.1 of Mahagun Metro Mall, Vaishali, Ghaziabad-201010

36	Hotel Minar 12/13 Chhoti Bazaria, Railway Road, Ghaziabad-201001
37	Hotel Shri Drona 160, Main NH-24, Khora Colony, Adarsh Nagar, Opp. Indirapuram, Ghaziabad-201014
38	West View Hotel 106, Modeltown, G.T. Road, Near Navrang Cinema, Model Town, Ghaziabad-201001
39	Hotel Supreme 126.127 Railway Road, Bazaria, Ghaziabad-201001
40	Hotel Heaven Near Truck Union, GT Road, Ghaziabad-201001
41	Hotel Embassy 166 Railway Road, Bazaria, Ghaziabad-201001
42	Bharat Guest House 6-1, Surya Nagar, Near Raghunath Mandir, Ghaziabad-201011
43	Hotel Aashiyana 160 Rahmed Ali Compound Railway Road, Ghaziabad-201001
44	City Lodge 198, Kallupura, Maliwara Chowk, Ghaziabad-201001
45	Hotel Quizz @ railway station (1 Min Walking distance) 16 Railway Road, Bazaria, (Near Ghaziabad Railway Station) Ghaziabad-201001
46	OYO 13602 Hotel The Town House B-21-22, RDC Rajnagar, Ghaziabad-201001
47	Yash Guest House Ghaziabad R-115, Vakil Colony, Pratap Vihar, Ghaziabad-201001
48	Heritage inn Ghaziabad D-2, Rampuri, Near Surya Nagar, (Near B Block Rampuri Park) Ghaziabad-201011

49	BLACK STONE HOTEL Plot No 378 Main Link Road, Vasundhara Sector 16, Opposite Reliance Euro Park Ghaziabad-201012
50	CITY HOTELS & BANQUETS II M-68, Nehru Nagar, Opp. Nehru Yuva Kendra, Ambedkar Road, Near Old Bus Stand, Ghaziabad-201001
51	Aggarwal Lodge Shop No-159 Ehsan Ali Compound Railway Road, Bazaria Ghaziabad-201001
52	Hotel shiva Khasra No.161, G.T. Road, Lal Kuan, Chipyana, Ghaziabad-201001
53	Hotel Metro 4 A-1, Gaurav Enclave, Dasna, Ghaziabad-201012
54	Rousha INN D-81, Kaushambi, Near metro station, Kaushambi, Ghaziabad-201010
55	Hotel Samrat Kaushambi D24 Kaushambi, Ghaziabad-212207
56	OYO 12764 Grand INN 4/353, Behind Rawal Pindi Jewellers, Main Market Sector 4, Vaishali, Ghaziabad-201014
57	AT Residency D-75, Kaushambi, Opp. Pacific Mal, Near Anand Vihar Metro Station, Ghaziabad-201010
58	OYO 421 One Hotel 653/1, Shakti Khand, 3rd, Nehar Road, Ghaziabad-201010
59	OYO 10591 Hotel Parktel 583, Vijay laxmi Pandit Marg, Near Omaxe Plaza, Shakti Khand 2, Ghaziabad-201010
60	OYO 11407 Hotel Royal King 171, 14D, 132, Ehsaan Ali, Bazaria, Ghaziabad-201001
61	Hotel Taru INN 306-307, Railway Road, Bazaria, Ghaziabad-201001
62	Maiden Residency 344/1, Pandav Nagar, Near Hospital Columbia Asia, Ghaziabad-201002

63	Le Crescent Plot no-14a, Mall road, Near DPS school, old building, Ahinsa khand-2, Indirapuram, OPOSIT CLOUD 9, Ghaziabad
64	Hotel Grand Tushar Chaudhary More, GT Road, Ghaziabad-201001
65	Hotel Raghav 343-A, Railway Road, Bazaria, Ghaziabad-201001
66	Hotel Prithvi Palace 2 E 221, Nehru Nagar, Ambedkar Road, Ghaziabad-201001
67	Hotel Imperial 171, Railway Road, Opp. Police Chowk, Bazaria, Ghaziabad-201001
68	Rajpath Residency D-31, Kaushambi, EDM Mall road, Opp. Anand vihar rail Station, Ghaziabad-201001
69	Hotel Parth Paradise B-18, Surya Nagar, Opp. Vivek Vihar, Delhi NCR, Ghaziabad-201010
70	Redbury Hotel B3Ambedkar Road, Ghaziabad-201001
71	Hotel Blue Stone Plot No. 5, Sec-14, Near Seemant Vihar, Kaushambi, Ghaziabad-201010
72	Hotel Tushar Elegant KM-35, Kavi Nagar, Ghaziabad-201002
73	Madhu Regency I1-M-69, Nehru Nagar Society, Ambedkar Road, Ghaziabad-201001
74	Hotel Shubham City.20, Railway Road, Bazaria, Ghaziabad-201001
75	Hotel Sharda Ghaziabad 21 Old Munsfi Road, Navyug Market, Naya Ganj, Ghaziabad-201001
76	Darshan Hotel Plot No. 240, Adarsh Nagar, Khora Colony, Opp Indirapuram, Ghaziabad-201014
77	Swiss Hotel, GT Road Near Opulent Mal Ghaziabad-201001

78	Ace Manor Hotel 28/1/5-6, Sahibabad Industrial Area Site 4, Ghaziabad-201010
79	Hotel Elite Ghanta Ghar, Railway Road, Plot No 343 Ghaziabad-201001
80	OYO 9750 Hotel Atithi 156/157, Ahasan Ali Compound, Railway Road, Bazaria, Ghaziabad-200101
81	Hotel Marina 162, Railway Road, Bazaria, Ghaziabad-201001
82	OY0 12123 Hotel Sweet Dreams 01, National Highway 24, Lal Kuan, Near Radha Krishna Public School, Lal Kuan, Ghaziabad-201009
83	Hotel Golden Tulip C-5, Sector – 18, Vasundhara
84	M/s Silver Spoon C-7, Sector – 18, Ghaziabad
85	Hotel R.K. Residency, 2159, opp. Awas Vikas Complex, Sector 16A, Vasundhara, Ghaziabad
86	M/s Hollywood Dreams, Sector – 4, Vaishali, Ghaziabad
87	M/s Hotel Banana Tree (ANGEL PROMOTERS PRIVATE LIMITED), 14/2 14/2A 14/18 14/19 And 14/19 Site IV Sahibabad ,GHAZIABAD.
88	M/s Signature Global Mall, Plot No. -6, Sector – 3, Vaishali, Ghaziabad
89	Hotel Mukut Regency, CC-1, Sector – 13, Vasundhara, Ghaziabad
90	Mahagun Metro mall plot – 1, VC-3, Sector 3F, Gautam Palvi Road, Vaishali Ghaziabad
91	Hotel Vintage Banquet, CP-5, Sector – 9, Vasundhara, Ghaziabad
92	Galaxy mall, 64/5, Site – 4 Sahibabad, Ghaziabad
93	Eros Mall, Shakti Khand – 2 Indirapuram Ghaziabad
94	Hotel Sunshine Park, D-1, Chander Nagar Ghaziabad
95	M/s Clarks Inn, 41, Kaushambi, Ghaziabad
96	Vaishali Inn, 339A, Sector – 4, Vaishali, Ghaziabad
97	M/s EDM mall, plot – 1, Kaushambi, Ghaziabad
98	Hotel crystal palace 2163, sector 16A, Vasundhara, Ghaziabad
99	Jaipuria Mall Ahinsa khand – 1, Indirapuram, Ghaziabad
100	Shoprixx Mall, Plot -1, Kaling Marg, Sector -5, Vaishali, Ghaziabad
101	Ansal Plaza, Sector-1, Vaishali, Ghaziabad
102	Hotel Clarks Inn by apple tree, C-2, RDC, Ghaziabad
103	Aditya Mall, Aggarwal Associates & Promoters Ltd, (Aditya Mall), CGH-3, Vaishav Khand Indirapuram Ghaziabad
104	M/s Rosellia Suites & Benquet Hall , Plot No.-Cp-04, Sec-11, Vasundra, Ghaziabad

105	M/s Mangalam Banquet Hall , Plot No.-10-D, Sector-10, Vasundra, Ghaziabad Mob-9118221012
106	M/s Elara Banquet hall , INS-9, Sector-4, Vasundra, Ghaziabad Mob-8490009000
107	M/s Welcome Om Green Fous, Village Sikandarpur, Opp. Hindon Airport, Ghaziabad Mob-9910834000
108	M/s Raj Farms, Khasra No. 293, Village Sikandarpur, Opp. Hindon Airport, Ghaziabad Mob-9319311881
109	M/s Royal farmhouse, Khasra No. 124/293, Village Sikandarpur, Opp. Hindon Airport, Ghaziabad Mob-8800555279
110	M/s Signature Farms, Khasra No. 122/293, Village Sikandarpur, Opp. Hindon Airport, Ghaziabad Mob-9971831151
111	M/s Ram Vatika Community Center, Village Sikandarpur, Opp. Hindon Airport, Ghaziabad Mob-8588012310

4. Industrial Effluent discharge by industries whose effluent is ultimately flowing to river Ganga upto border and its tributaries

Total number of Industries	Daily effluent discharge	Treatment available (CETP/ PETP/ ETP operational capacity)	Effluent quality analysis (outlet of treatment plants Geo code sampling point)	GAP	Proposed/ under construction treatment project (with timeline)	Number of defaulting units- Action taken	Industrial solid waste generated/ day	Manner of disposal (Industrial solid waste)
403	16.4067 MLD	CETP/ETP/PETP Installed each individual industries of adequate capacity.	As per schedule analysis done by Regional Office Ghaziabad	NIL	-	-	22 MTD	Through TSDF/ Authorized Recyclers

5. Regulation of Flood Plain Zone:

Area-cities/towns Notification of flood plain zone	River	Demarcation		Variable flow (Per day)	Encroachment/Encroachment removal status	Timeline for completion	Barrage/ Cross regulator
NGT has given direction in case 275/2023 and 569/2023 dated 27/07/2023 for flood plain zone demarcation which shall be done by refering notification dated 07 october 2016 "River Ganga (Rejuvenation ,Protection and Management) Authorities order , 2016 and office Memorandum dated 14th February 2022 on Guidelines for siting industries which are in close proximity with the river	Hindon	No development zone pillars	Regulatory zone pillars	2000 Cusec	Flood plain zone of River Hindon comes under notified area of Ghaziabad Development Authority hence removal of encroachment activity is related to concerned authority.	9-10 months	Hindon Barrage
		In O.A. no 275/2023 with569/2023 NGT has taken reference of notification dated 07 october 2016 .Therefore the HFL has to be demarcated for 100 year return period.For accurate Flood plain zone demarcation of 100 year return period Flood modelling technique must be used so for this task ICD Ghaziabad hascontacted to NIH Roorkee.					

6. Afforestation/ Plantation along the bank of River Ganga upto border and its tributaries and its tributaries Hindon/Yamuna and their flood plain zones.

Total Plantation along the bank of River Harnandi (Hindan) till 2023: 55300 plants in 19.00 Ha				
S.No	**Area- cities/ towns**	**Total Plantation Geo Code/ Sampling Point**	**Proposed project**	**Timeline**
1.	MEWLA AGRI	**Total Plantation:** **10,000** Plants in **1.00** Ha **Geo Code/ Sampling Point** (N-28 °42'16;030″,E 077'23'43.456″)		
2.	VILLAGE ATOR	**Total Plantation:** **300** Plants in **3.00** Ha **Geo Code/ Sampling Point** (N-28 ·721405,E 77.400560)		
3.	ASALATPUR FARUKHNAGAR	**Total Plantation:** **32,00** Plants in **2.00** Ha **Geo Code/ Sampling Point** (N-28 °719.166 ″,E 077 ° 384.046)		

4.	VILLAGE KARHEDA	**Total Plantation:** **500** Plants in **5.00** Ha **Geo Code/ Sampling Point** (N-28 °41.85.403, E 077 ° 23.43)	U.P.GOVT 's 'PED LAGAO PED BACHAO JAN ABHIYAAN - 2024'' (37500 Plants in 7.00 Ha Proposed)	**July, 2024**
5.	UPSIDC,PRATAPVIHAR	**Total Plantation:** **500** Plants in **5.00** Ha **Geo Code/ Sampling Point** (N-28 °39.403, E 077 ° 24.581)		
6.	VILLAGE ARTHLA,KANAWANI, HINDAN RIVER	**Total Plantation:** **20,000** Plants in **2.00** Ha **Geo Code/ Sampling Point** (N-28 °39.211, E 077 ° 23.737)		
7.	MOHD. AAMAD BAGHPAT MATOAR	**Total Plantation:** **11250** PLANTS IN **4.50** Ha **Geo Code/ Sampling Point** (N-28 °53'32.846., E 77 ° 27'56.576)		
8.	SUTHARI SAMPARK MARG	**Total Plantation:** **50** Plants in **0.50** Ha **Geo Code/ Sampling Point** (N-28 °50'43.858., E 77 ° 25'5.556)		

7. Mining and Stone Crushing in river bed and flood plain zone of River Ganga and its tributaries Hindon/Yamuna :

Area of mining	FIR/ case registered/ year	Vehicles/ mineral seized	Action taken status	Cases pending in Court	Enforcement of EMGSM 2020 and Sustainable sand mining management guidelines 2016
03 Site (1 Active)	2022-23 and 2023-24	156	Recovered Penalty Amount Rs.66.20 Lakh	-	CTO/CTE obtained for both sites.

35204

Compliance of Hon'ble NGT order Dt 24.11.2023 in O.A. 200/2014 MC Mehta Vs UOI and ors.

1. **District Ganga Protection Plan at city/ town level**

2. Contents of the Action Plan

2.1-Sewage Management:-

(i) Sewage Generation

Sl.No.	Towns/ULB	Sewage Generation (MLD)
1.	Ghaziabad (Municipal Corporations)	415
2.	KhodaMakanpur (Municipality)	40
3.	Loni (Municipality)	90
4.	Modinagar (Municipality)	23.31
5.	Muradnagar (Municipality)	18.30
6.	Dasna (Town Panchayat)	6.24
7.	Faridnagar (Town Panchayat)	2.29
8.	Niwari (Town Panchayat)	1.65
9.	Patla (Town Panchayat)	1.70

(ii) Existing Sewage Treatment Capacities

- 74 MLD S.B.R., Indirapuram, Ghaziabad
- 56 MLD S.B.R., Indirapuram, Ghaziabad
- 56 MLD U.A.S.B Trans Hindon, Indirapuram, Ghaziabad
- 56 MLD S.B.R., Dudahaida Vijay Nagar, Ghaziabad

- 70 MLD U.A.S.B., Dudahaida Vijay Nagar, Ghaziabad
- 56 MLD S.B.R.,Govindpuram, Ghaziabad
- 56 MLD S.B.R., Bapudham, Ghaziabad
- 56 MLD S.B.R., Morty, Ghaziabad
- 30 MLD M.B.B.R Sadullabad, Loni, Ghaziabad

Under Commissioning stage/Trial Run: -01 STP (21.5 MLD STP at Sidhdharth Vihar, Ghaziabad)

(iii) Quantity of sewage being treated (Utilization Capacity)

At present –376 MLD out of total sewage of 545 MLD
Gap – 169MLD

(iv) Performance of STPs particularly for FC.

STP	Technology	Operational Status	Capacity (operational)	Inlet/Outlet Water quality&quantity	Number of tapped drains (quantity ofdischarge)	GAP (in treatment)	Final discharge point Geo code/sampling point	Proposed/ under construction STP With completion date
74 MLD S.B.R., Indirapuram	Sequential Batch Reactor (S.B.R)	Operational	74 MLD	BOD - 30 mg/l COD-250 mg/l TSS - 100 mg/l FC - 1000 mg/l	01 Sahibabad Drain	-	Hindon River	-
56 MLD S.B.R., Indirapuram	S.B.R	Operational	56 MLD	BOD - 30 mg/l COD-250 mg/l TSS - 100	-	-	Hindon River	-

				mg/l FC - 1000 mg/l				
56 MLD U.A.S.B Trans Hindon, Indirapuram	UASB (Up flow anaerobic sludge blanket technology) followed by extended aeration	Operational	56 MLD	BOD - 30 mg/l COD-250 mg/l TSS - 100 mg/l FC - 1000 mg/l	-	-	Hindon River	-
56 MLD S.B.R., Dudahaida Vijay Nagar	S.B.R	Operational	56 MLD	BOD - 30 mg/l COD-250 mg/l TSS - 100 mg/l FC - 1000 mg/l	-	-	Hindon River	-
70 MLD U.A.S.B., Dudahaida Vijay Nagar	UASB followed by extended aeration	Operational	70 MLD	BOD - 30 mg/l COD-250 mg/l TSS - 100 mg/l FC - 1000 mg/l	-	-	Hindon River	-
56 MLD S.B.R.,Govindpuram	S.B.R	Operational	56 MLD	BOD - 30 mg/l COD-250 mg/l TSS - 100 mg/l FC - 1000 mg/l	-	-	Hindon River	-

56 MLD S.B.R., Bapudham	S.B.R	Operational	56 MLD	BOD - 30 mg/l COD-250 mg/l TSS - 100 mg/l FC - 1000 mg/l	-	-	Hindon River	-
56 MLD S.B.R., Morty	S.B.R	Operational	56 MLD	BOD - 30 mg/l COD-250 mg/l TSS - 100 mg/l FC - 1000 mg/l	-	-	Hindon River	-
30 MLD MBBR STP Sadullabad Loni, Ghaziabad	M.B.B.R (Moving bed biofilm reactor)	Operational	30 MLD	BOD - 30 mg/l COD-250 mg/l TSS - 100 mg/l FC - 1000 mg/l	-	-	Yamuna River	-

(v) Where treated sewage is being discharged (to Ganga or tributories) : -

Total sewage generated is being discharge to River Hindon/Yamuna.

(vi) Reasons for Under-utilization of STPs (Connectivity of Households/laying of sewer lines)

STP	Operational Status	STP capacity utilization	Reason for under utilization
74 MLD S.B.R., Indirapuram, Ghaziabad	Operational	100%	-
56 MLD S.B.R., Indirapuram, Ghaziabad	Operational	67.85%	Connectivity of House hold/Sewar connection.
56 MLD U.A.S.B Trans Hindon, Indirapuram, Ghaziabad	Operational	100%	-
56 MLD S.B.R., Dudahaida Vijay	Operational	100%	-

Nagar, Ghaziabad			
70 MLD U.A.S.B., Dudahaida Vijay Nagar, Ghaziabad	Operational	100%	-
56 MLD S.B.R.,Govindpuram, Ghaziabad	Operational	25%	Connectivity of House hold/Sewar connection.
56 MLD S.B.R., Bapudham, Ghaziabad	Operational	3.57%	Connectivity of House hold/Sewar connection.
56 MLD S.B.R., Morty, Ghaziabad	Operational	44.64%	Connectivity of House hold/Sewar connection.
30 MLD MBBR STP Sadullabad Loni, Ghaziabad	Operational	40%	Connectivity of House hold/Sewar connection.

(vii) Current gap in sewage treatment

- Total Sewage generation – 545 MLD
- Sewage treatment at present- 376 MLD
- Gap – 169
- For filling the GAP two nos. STP - (68 MLD STP Karhera and 66 MLD Khora)
- Sewage Treatment After operation of all STPs on capacity – 582

(viii) Time bound plan for bridging the gap and tying up with financial arrangements and not delaying Tendering and identifying executing agencies or having any other issues:

Sewage Treatment After operation of all STPs on full capacity, only 510 MLD

(ix) Where untreated sewage (when there is no STP) is discharged (Ganga/Tributaries): -

Untreated Sewage is discharged in River Ganga and its Tributary River Kali & Hindon where there is no STP.

2.2 Drains joining Ganga and Tributary: -

(i) Number of drains carrying sewage- sullage or industrial waste water joining Hindon/Yamuna tributaries with their Quantity and Quality:

S.No.	Drain	Domestic/ Industrial/ Mixed	Flow	Quality Discharge Parameters
1.	Arthala (Ghaziabad)	Mixed	0.263 MLD	pH-7.22 DO-Nil BOD- 36.0 mg/l COD- 140.0mg/l TSS- 122.0mg/l
2.	Dasna (Ghaziabad)	Mixed	50.697 MLD	pH- 6.76 DO- Nil BOD- 60.0mg/l COD- 118.0mg/l TSS- 134.0mg/l
3.	Jawali (Ghaziabad)	Mixed	2.42 MLD	pH- 7.24

				DO- Nil BOD- 40.0mg/l COD- 102.0mg/l TSS- 72.0mg/l
4.	Hindon vihar (Ghaziabad)	Domestic	7.0 MLD	pH- 7.28 DO- Nil BOD- 65.0mg/l COD- 180.0mg/l TSS- 144.0mg/l
5.	PratapVihar (Ghaziabad)	Domestic	40 MLD	pH- 6.88 DO- Nil BOD- 38.0mg/l COD- 126.0mg/l TSS- 106.0mg/l
6.	Kaila bhatta (Ghaziabad)	Mixed	17.933 MLD	pH- 6.84 DO- Nil BOD- 33.0mg/l COD- 130.0mg/l TSS- 118.0mg/l
7.	Karheda (Ghaziabad)	Mixed	3.657 MLD	pH- 6.94 DO- Nil BOD- 36.0mg/l COD-

				138.0mg/l TSS- 142.0mg/l
8.	Indirapuram (Ghaziabad)	Mixed	112 MLD	pH- 6.92 DO- Nil BOD- 53.0mg/l COD- 124.0mg/l TSS- 138.0mg/l
9.	Indirapuri (Ghaziabad)	Mixed	35 MLD	pH-6.96 DO- Nil BOD- 64.0mg/l COD- 152.0mg/l TSS- 134.0mg/l
10.	Sahibabad (Ghaziabad)	Mixed	65.797 MLD	pH- 7.06 DO- Nil BOD- 82.0mg/l COD- 238.0mg/l TSS- 214.0mg/l

(ii) Drains joining outside city and town limits but, either joining in village or nearby town :NA

(iii) Inclusion of sewage flowing in drains into total sewage generation figures of each city and town and their interception and diversion to STPs:

Name of STP	Total Sewage Generation (Inlet)	Treatment of sewage (Outlet)	GAP (in treatment)
74 MLD S.B.R., Indirapuram, Ghaziabad Maintain by UP Jal Nigam(Urban)	74	74	No GAP
56 MLD UASB., Indirapuram, Ghaziabad Maintain by UP Jal Nigam(Urban)	56	56	No GAP
56 MLD S.B.R., Indirapuram, Ghaziabad Maintain by Nagar Nigam, Ghaziabad	38	38	No GAP
56 MLD S.B.R., Dudahaida, Ghaziabad Maintain by UP Jal Nigam(Urban)	56	56	No GAP
70 MLD U.A.S.B., Dudahaida, Ghaziabad Maintain by UP Jal Nigam(Urban)	70	70	No GAP
56 MLD S.B.R.,Govindpuram, Ghaziabad Maintain by GDA	15	15	No GAP
56 MLD S.B.R., Bapudham, Ghaziabad Maintain by GDA	1.5	1.5	No GAP
56 MLD S.B.R., Morty, Ghaziabad Maintain by Nagar Nigam, Ghaziabad	26	26	No GAP
30 MLD MBBR STP SadullabadLoni, Ghaziabad Maintain by UP Jal Nigam(Urban)	22	22	No GAP
20 MLDSBR STP Modinagar, Ghaziabad Maintain by UP Jal Nigam(Urban)	20	20	No GAP

2.3. Septage management (In case of no STP) : -

(i) Status of Septage management (with reference to FSTP/STP):

50 KLD (Co treatment FSTP) installed in Ghaziabad Nagar Nigam and 32 KLD FSTP in Loni

(ii) Management of Grey water and its disposal:

Through Septic tank/Soak pit. After treatment, waste water discharge into nearby drain.

2.4. Industrial Pollution Control

Details of industries discharging their effluent ultimately into River Hindon as per the GPI Inventory, 2022-23

S. No	Name & Address of Unit	District	Sector (Distillery/ Sugar/ Pulp Paper/ Textile/ Tannery/ Others	Whether Connected to CETP	Name of CETP	Basin name (Ganga/ Yamuna/ Hindon)	Route to reach river Ganga/ Yamuna/ Hindon	Recipient Drain	Effluent Generation (KLD)	Installed Treatment Capactiy (KLD)	Bio-composting/ Incinerator	Operational Status (Operational/ Closed)	Prosecution against defaulter	Environmental Compensation (EC) in ₹
1.	Mohan Meakin Ltd. Mohan Nagar Ghaziabad	Ghaziabad	Distillery	No	No	Hindon	Hindon	Arthala Drain	25	ETP		Operational		
2.	Balaji wire Pvt .Ltd., 139-A, Anand Ind. Estate, Mohan Nagar, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	Arthala Drain	40	ETP		Operational		
3.	Jai Durge Metalizing, 67, anand Ind. Estate Mohan Nagar Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	Arthala Drain	Self closed	-	-	Self Closed	-	-
4.	Shri Ganga paper Mills Pvt.Ltd., Hapur Road Dasna	Ghaziabad	Pulp & Paper	No	No	Hindon	Hindon	Bhoorgarhi Drain/Dasna Drain	320	ETP		Operational		
5.	Amko Export, A-1, B.S.Road Ind. Area Ghaziabad	Ghaziabad	Dyeing & Textile	No	No	Hindon	Hindon	UPSIDC Drain - Dasna Drain	175	ETP		Operational		
6.	Batik India, D-13, Udyog kunj. Dasna, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	UPSIDC Drain - Dasna Drain	20	ETP		Operational		**690,000**
7.	Indian Textiles company, E-49, B.S.Road Ind. Area, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	UPSIDC Drain - Dasna Drain	42	ETP		Operational		
8.	N.G. Tex Prints P.Ltd., E-13/2, Kavi Nagar Ind. Area, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	UPSIDC Drain - Dasna Drain	22	ETP		Operational		**215000**
9.	Exclusive Leather, khasra no.2751, Vill.Bhurgari, Dasna	Ghaziabad	Tannery	No	No	Hindon	Hindon	Bhoorgarhi Drain/Dasna Drain		ETP		Operational		
10.	Triyash Enterprises, khasra no.2751, vill.Bhoor Gari, Dasna	Ghaziabad	Tannery	No	No	Hindon	Hindon	Bhoorgarhi Drain/Dasna Drain	84	ETP		Operational		**465000**
11.	A.B. Cycle Parts Pvt.Ltd., S-24, S.S.of G.T.Road Ind. Area, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	UPSIDC Drain - Dasna Drain	1.5	ETP		Operational		
12.	A.C.E.Hardware, B-5, B.S.Road Ind. Area, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	UPSIDC Drain - Dasna Drain	0.6	ETP		Operational		
13.	A.S.T. Pipes, B-33, B.S.Road Ind. Area, Ghaziabad.	Ghaziabad	Other	No	No	Hindon	Hindon	UPSIDC Drain - Dasna Drain	0.6	ETP		Operational		
14.	Balaji Engineering works, 351, Pandav Nagar, Mehrauli, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	UPSIDC Drain - Dasna Drain	5	ETP		Operational		
15.	Balaji Enterprises, B-22/1/15, B.S.Road Ind. Area, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	UPSIDC Drain - Dasna Drain	1.5	ETP		Operational		
16.	Continental Carbon India Ltd., A-14, S.S. of G.T. Road	Ghaziabad	Other	No	No	Hindon	Hindon	UPSIDC Drain - Dasna Drain	500	ETP		Not Operational		
17.	Cosmos Engine. Component P Ltd., A-7, Electro Steel Compound, S.S. of G.T. Road, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	UPSIDC Drain - Dasna Drain	Wet process closed unit switch over dry process	-		Operational		
18.	Futuro Components Pvt. Ltd. Dasna Hapur Road Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	Bhoorgarhi Drain/Dasna Drain	50	ETP		Operational		
19.	J.D.M.Enterprises, C-223/1, B.S.Road Ind.area Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	UPSIDC Drain - Dasna Drain	Self closed	-		Self Closed		

20.	Malik Niddles & allide products, C-108, B.S.Road Ind. Area Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	UPSIDC Drain - Dasna Drain	4	-		Self Closed		
21.	Manav Beverage P Ltd, C-128, BSR Ind.area	Ghaziabad	Beverage	No	No	Hindon	Hindon	UPSIDC Drain - Dasna Drain	90	ETP		Operational		
22.	Northern India cyco Parts, E-2, S.S. of G.T.Road, Ind. Area, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	UPSIDC Drain - Dasna Drain	25	ETP		Operational		
23.	S.D. Industries (Old Name is S.D. Enterprises), E-124, B.S. Road Ind. Area, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	UPSIDC Drain - Dasna Drain	Dismantled	-		Dismantled		
24.	S.S. Enterprises, 363, Pandav Nagar, B.S. Road Maharauli, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	UPSIDC Drain - Dasna Drain	Dismantled	-		Dismantled		
25.	Sakshi Metal Works, D-1/A, Kavi Nagar Ind. Area, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	UPSIDC Drain - Dasna Drain	Self closed	-		Self Closed		
26.	Sara Exports, 35, S.S. of G.T. Road Ind. Area, Ghazizabad	Ghaziabad	Hydrocyanic acid	No	No	Hindon	Hindon	UPSIDC Drain - Dasna Drain	40	ETP		Operational		
27.	Shanti Nath Manufactures, A-2/14, Kavi Nagar Ind. Area Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	UPSIDC Drain - Dasna Drain	0.4	ETP		Operational		
28.	Shital Industries, S-40, S.S. of G.T.Road Ind. Area, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	UPSIDC Drain - Dasna Drain	Dismantled	-		Dismantled		
29.	Shivam Engineering, 282, S.S. of G.T. Road Industrial Area, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	UPSIDC Drain - Dasna Drain	8	-		Operational		
30.	Shivam Fab Tech P Ltd., 22/9, S.S. of G.T. Road Ind. Area, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	UPSIDC Drain - Dasna Drain	16	ETP		Operational		
31.	Shri Balaji Metal, E-17, Kavi Nagar Ind. Area, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	UPSIDC Drain - Dasna Drain	Self closed	-		Self Closed		
32.	Usha Cycle, S.S. of G.T. Road Ind.Area, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	UPSIDC Drain - Dasna Drain	18	ETP		Operational		
33.	Al Naseer Export Pvt.Ltd., 2761, Bhoor Gari, Dasna, Ghaziabad.	Ghaziabad	Slaughter House	No	No	Hindon	Hindon	Bhoorgarhi Drain/Dasna Drain	Closed	-		Not Operational		
34.	International Agro Food, Vill. Bhoor gari, Dasna Ghaziabad.	Ghaziabad	Slaughter House	No	No	Hindon	Hindon	Bhoorgarhi Drain/Dasna Drain	550	ETP		Operational		
35.	Karan Frozen Food, Bhoor gari, Dasna, Ghaziabad. (W/o Rendering Plant)	Ghaziabad	Slaughter House and Meat Processing	No	No	Hindon	Hindon	Bhoorgarhi Drain/Dasna Drain	40	ETP		Operational		
36.	Al Nafees Frozen Foods Exports, Hapur Road Dasna Gzb. (Integrated Meat Unit)	Ghaziabad		No	No	Hindon	Hindon	Bhoorgarhi Drain/Dasna Drain	Self closed	-		Not Operational		
37.	M.D.Frozen Food Exports, Khasra No-2689, Bhoor gari Road, Dasna, Ghaziabad.	Ghaziabad		No	No	Hindon	Hindon	Bhoorgarhi Drain/Dasna Drain	Self closed	-		Self Closed		
38.	Amit textiles, S-32,S.S. 0f G.T.Road Ind. Area, Ghaziabad.	Ghaziabad		No	No	Hindon	Hindon	Dasna Drain	Closed	-		Not Operational		
39.	Suruchi Dyeing, 37, S.S.of G.T.Road Ind. Area, Ghaziabad.	Ghaziabad		No	No	Hindon	Hindon	Dasna Drain	-	-		Closed		
40.	Eagle Continental Foods Pvt Ltd, Kallugarhi Dansa, Ghaziabad	Ghaziabad		No	No	Hindon	Hindon	Dasna Drain	Closed	-		Not Operational		

41.	Silbrite Spokes P Ltd., S-28, Industries, S.S. of G.T. Road Ind.Area, Ghaziabad.	Ghaziabad		No	No	Hindon	Hindon	Dasna Drain	Self closed	-		Self Closed		
42.	Karam Chandra Rubber Pvt. Ltd., C-230, B.S.Road Ind. Area Ghaziabad.	Ghaziabad		No	No	Hindon	Hindon	Dasna Drain	-	-		Not Operational		
43.	Nip Man Fastners India Pvt. Ltd., C-197, B.S. Road Ind. Area, Ghaziabad.	Ghaziabad		No	No	Hindon	Hindon	Dasna Drain	Self closed	-		Self Closed		
44.	Lion Cycle & Riksha Industries, E-10, B.S.Road Ind. Area, Ghaziabad.	Ghaziabad	plating	No	No	Hindon	Hindon	Dasna Drain	-	-	-	Closed	-	-
45.	J.B.S. Processors, G-104, Apparel Park, Sector D-1 (P3), Tronica City, Loni	Ghaziabad	Textile Dyeing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	14	PETP installed		Operational		
46.	Ajay Veer Siroha, K-23, Apparel Park, Sector D-1 (P3), Tronica City, Loni	Ghaziabad	Textile Dyeing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	15	PETP installed		Operational		
47.	Apex Udyog, I-4, Sec D-1, Apparel Park, Tronica City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	15	PETP installed		Operational		
48.	Chacha Enterprises, J-4 Appral Park, tronca city, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	10	PETP installed		Operational		
49.	D.K. Jain, G-262, Sector D-1(P), Aparels Park, Tronica City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	20	PETP installed		Operational		
50.	Denim Matching, G-141, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	18	PETP installed		Operational		
51.	Ekansh Textile, K-36, Sec D-1, Apparel Park, Tronica City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	50	PETP installed		Operational		
52.	Excellents Apparels Pvt. Ltd., K-52, Sec D-1(P3), Tronica City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	25	PETP installed		Operational		
53.	Ghan Shyam Textiles, K-19, Sector D-1(P), Aparels Park, Tronica City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	23	PETP installed		Operational		
54.	Galaxi Garments, K-22, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	22	PETP installed		Operational		
55.	Gulshan Rai Jain, G-82, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	18	PETP installed		Operational		
56.	Gyan Chand & Sons, G-87, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	18	PETP installed		Closed		
57.	Jai Mata Di Dyers, I-9, Sec D-1(P3), Tronica City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	20	PETP installed		Operational		
58.	Jai Shri Dying, I-21, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	17	PETP installed		Closed		
59.	Krish Garments (Old Name Sanjeev Kumar), G-109, Sec D-1(P3), Apparel Park, Tronica City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	18	PETP installed		Operational		

60.	Laxmi Bleach (New Name Mani Bhadra Processors), G-102, Sec D-1(P3), Apparel Park, Tronica City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	18	PETP installed		Operational		
61.	Laxmi Processors, K-16, sect-D-1, pocket-3, Appral Park, Tronica city, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	23	PETP installed		Operational		
62.	Om Prakash Sharma, J-11, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Ghaziabad	Textile Dyeing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	87	PETP installed		Operational		
63.	Pooja Pahawa, K-11, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	23	PETP installed		Operational		
64.	Puran Munjal,(New Name Adhunik Dyeing), H-12, Sector D-1(P), Aparels Park, Tronica City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	55	PETP installed		Operational		
65.	Quadri Processors, I-8, Sec D-1(P3),.Apparel Park, Tronika City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	10	PETP installed		Operational		
66.	R.R. Impex, G-261, Sector D-1(P),Aparels Park, Tronica City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	9	PETP installed		Operational		
67.	Rachita Processors, K-33 & K-34, Sec D-1, Apparel Park, Tronica City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	150	PETP installed		Operational		
68.	Rajeev Kumar, G-64, Sec D-1(P3), Apparel Park, Tronica City, Loni,Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	19	PETP installed		Operational		
69.	Robest Infra Tech P Ltd., J-13, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	18	PETP installed		Operational		
70.	Roop Trading Company, E-14,sect-D-1, pocket-3, Appral Park, Tronica city, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	40	PETP installed		Operational		
71.	Roop Trading Company, K-9, sect-D-1, pocket-3, Appral Park, Tronica city, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	Dry Process	NA		Operational		
72.	S.D. Garments, I-2, Sector-D-1, pocket-3, Appral Park, Tronica city, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	15	PETP installed		Operational		
73.	S.S. Hosiery (Old Name is National Industries), G-264, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Ghaziabad	Textile Dyeing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	16	PETP installed		Operational		
74.	S.T. Traders, J-5, Appral Park, Tronca city, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	8	PETP installed		Operational		
75.	S.V.S. Fashion, J-22, Apparel Park,Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	16	PETP installed		Operational		
76.	Sai Saran Garment,(New Name Lotus Knit Processing House), G-108, Apparel Park, Sector D-1(P3), Tronica City, Loni,Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	50	PETP installed		Operational		

77.	Sandeep Tyagi, G-271, Sec D-1(P3), Apparel Park, Tronica City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	25	PETP installed		Operational		
78.	Sanjeev kumar (Shyam Washing), G-81, Apparel Park, Sector D-1 (P3), Tronica City, Loni	Ghaziabad	Textile Dyeing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	25	PETP installed		Operational		
79.	Sara International, G-265-266,Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Ghaziabad	Textile Dyeing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	80	PETP installed		Operational		
80.	Shafali Dyeing, G-84, Sector D-1(P), Aparels Park, Tronica City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	10.5	PETP installed		Closed		
81.	Shri Paras coloration (U.B. Dyeing), G-117, Sector D-1(P), Aparels Park, Tronica City, Loni,Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	18	PETP installed		Operational		
82.	Siddhi Vinyak, G-103, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Ghaziabad	Textile Dyeing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	80	PETP installed		Operational		
83.	Supreme Industries, J-2, Appral Park, Tronca City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	40	PETP installed		Operational		
84.	Tiwari Feb, G-255, Apparel Park, Sector D-1(P3), Tronica City, Loni,Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	50	PETP installed		Operational		
85.	Tusar Garments (Spectrum Dye Studio), J-3, Sector D-1(P), Aparels Park, Tronica City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	15	PETP installed		Operational		
86.	Vaishali Hosiery, I-17, Sec D-1,Apparel Park, Tronica City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	15	PETP installed		Closed		
87.	Vedanta Estate, I-11, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	18	PETP installed		Operational		
88.	Vedanta Estate, (New Name A.N. Processors), I-12, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	18	PETP installed		Operational		
89.	Sumer Mal (R.K. Export & Import), H-13, Apparel Park, Sector D- 1(P3), Tronica City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	23	PETP installed		Not Operational		
90.	Sun Dyers, I-19, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	19	PETP installed		Not Operational		
91.	Sunil Kumar, G-85, Apparel Park, Sector D-1 (P3), Tronica City, Loni	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	50	PETP installed		Not Operational		
92.	Vedanta Estate, J-12, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	20	PETP installed		Not Operational		
93.	Siddhi Vinyak Texile P Ltd., H-11, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	25	PETP installed		Not Operational		

94.	Sudhir Kumar Jain, G-80, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	18	PETP installed		Not Operational		
95.	Colorise (Old Name Deepak Gambhir), E-12 Apparel Park, Sector D-1(P3), Tronica City, Loni.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	55	PETP installed		Not Operational		
96.	Durgeshwari Garments Pvt.Ltd., E-13, sect-13-1, Appral Park, tronca city, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	150	PETP installed		Not Operational		
97.	Krishna Kumar Agarwal, G-129, Apparel Park, Sector D-1 (P3), Tronica City, Loni	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	15	PETP installed		Not Operational		
98.	M.S. Trading, E-15, Sector D-1(P), Aparels Park, Tronica City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	18	PETP installed		Not Operational		
99.	Nandi Enterprises, J-15, Sec D-1(P3), Apparel Park, Tronica City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	19	PETP installed		Not Operational		
100.	Nandi Enterprises, K-14, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	19	PETP installed		Not Operational		
101.	U-Like Industry, G-110, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	20	PETP installed		Not Operational		
102.	Royal Techno Dyers, K-47, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	40	PETP installed		Not Operational		
103.	Pradeep kumar, G-92, Apparel Park, Sector D-1 (P3), Tronica City, Loni	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	Self closed			Self Closed		
104.	Ragging Sons, I-13, Sec D-1(P3), Tronica City, Loni, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	Yes	CETP Tronica City, Loni	Hindon	Hindon	Jawali Drain	15	PETP installed		Not Operational		
105.	Ashoka Pulp & Paper Pvt. Ltd., 11, Loni Road Ind. Area, Mohan Nagar, GZB.	Ghaziabad	Pulp & Paper	No	No	Hindon	Hindon	Karheda Drain	ZLD	ETP		Operational		
106.	Laxmi Dyeing & Printing works Pvt.Ltd., S-81, Loni Road I.A., Mohan Nagar, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Karheda Drain	30	ETP		Operational		
107.	Shahi Exports P Ltd., 30-Site-2,Loni Road Ind.area Mohan Nagar, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Kardheda Drain	850	ETP		Operational		
108.	A & A, S-50, Site-2, Loni Road Ind.area, Mohan Nagar, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Karedha Drain	10	ETP		Operational		
109.	A.N. Fabric Dyers, 5/6, Site-2, Loni Road Mohan Nagar, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Karedha Drain	24	ETP		Operational		
110.	N.G. Textiles., 13A/10, Site-2, Loni Road I.A., Mohan NGR, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Karedha Drain	20	ETP		Operational		
111.	Non Stop Colour, S-3, Site-2, Loni Road I.A., Mohan Nagar, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Karedha Drain	65	ETP		Operational		
112.	Sai Processing, 7/37, Site-2, Loni Road Ind. Area, Mohan Nagar, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Karedha Drain	22	ETP		Operational		

113.	Sunny Prints, 5/7, Site-2, Loni Road, Ind.area, Mohan Nagar, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Karedha Drain	10	ETP		Operational		
114.	Shivam Cotage P Ltd., S-110/1Site-2, Loni Road Ind. Area, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	Karedha Drain	10	ETP		Operational		
115.	ASR Enterprises, S-124, Site-2, Loni Road Mohan Nagar, Ghaziabad.	Ghaziabad		No	No	Hindon	Hindon	Karedha Drain	closed	ETP		Not Operational		
116.	Shri Bala Ji Processors, S-134, Site-2, Loni Road Ind.area, Ghaziabad.	Ghaziabad		No	No	Hindon	Hindon	Karedha Drain	closed	ETP		Not Operational		
117.	Ashok Yadav & Rajesh Yadav, S-126, Site-2, Loni Road, Ghaziabad.	Ghaziabad		No	No	Hindon	Hindon	Karedha Drain	closed	ETP		Not Operational		
118.	Asha Prints, A-5/4, , Loni Road Mohan Nagar, Ghaziabad.	Ghaziabad		No	No	Hindon	Hindon	Karedha Drain	closed	ETP		Not Operational		
119.	S.S. Concept (Old Name Asha Tanu Prints), A-5/3, , Loni Road Mohan Nagar, Ghaziabad.	Ghaziabad		No	No	Hindon	Hindon	Karedha Drain	closed	ETP		Not Operational		
120.	Ambika Gartex P Ltd., 42-B Rajinder Nagar Industrial Area, Mohan Nagar, Ghaziabad.	Ghaziabad		No	No	Hindon	Hindon	Karedha Drain	closed	ETP		Not Operational		
121.	Vaishno Dyeing, 192, Rajineder Nagar Ind. Area, Mohan Nagar, Ghaziabad.	Ghaziabad		No	No	Hindon	Hindon	Karedha Drain	closed	ETP		Not Operational		
122.	Dev Tara Industries Ltd., Meerut Road Duhai, muradnagr	Ghaziabad	Dyeing & Textile	No	No	Hindon	Hindon	Meerut Road Drain/Kaila Bhatta Drain	725	ETP		Operational		
123.	JKG, Kathuria Brothers, Leather section, A-12 Meerut Road Ind.area	Ghaziabad	Tannery	No	No	Hindon	Hindon	Meerut Road Drain/Kaila Bhatta Drain	75	ETP		Operational		
124.	Agrawal Galvenizing, A-8/6, Sect.22 Meerut Road Ind. Area, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	Meerut Road Drain/Kaila Bhatta Drain	2	ETP		Operational		
125.	Albert David Ltd., B-12/13, Meerut Road	Ghaziabad	Pharma (Formulation)	No	No	Hindon	Hindon	Meerut Road Drain/Kaila Bhatta Drain	100	ETP		Operational		
126.	Chemo Pulp Tissues Pvt Ltd, A-4, sect-22, Meerut Road, Ind.area	Ghaziabad	Other	No	No	Hindon	Hindon	Meerut Road Drain/Kaila Bhatta Drain	Dry Process	NA		Operational		
127.	Cosmos Auto India, 21 mainapur Meerut Road Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	Meerut Road Drain/Kaila Bhatta Drain	2	ETP		Operational		
128.	Hamdard (Wakf) Laborateries, (1 &2) B-2 & 3, Meerut Road	Ghaziabad	Pharma (Unani)	No	No	Hindon	Hindon	Meerut Road Drain/Kaila Bhatta Drain	120	ETP		Operational		
129.	Kathuria Brothers (Cycle section), A-12, Meerut Road Ind. Area. Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	Meerut Road Drain/Kaila Bhatta Drain	20	ETP		Operational		
130.	Manohar Lal Hira Lal Ltd., 28 KM Stone Meerut Road, Duhai, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	Meerut Road Drain/Kaila Bhatta Drain	50	ETP		Operational		
131.	North Land Cycle co. D-21, Meerut Road Ind. Area, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	Meerut Road Drain/Kaila Bhatta Drain	2	ETP		Operational		

132.	Ramsons Enterprises, D-21Meerut Road Ind. Area, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	Meerut Road Drain/Kaila Bhatta Drain	2	ETP		Operational		
133.	Shri Ram Piston & Rings Ltd., Meerut Road Ind.area Gzb.	Ghaziabad	Engineering	No	No	Hindon	Hindon	Meerut Road Drain/Kaila Bhatta Drain	450	ETP		Operational		
134.	Techno Enterprises, A-13/12, Meerut Road Ind. Area, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	Meerut Road Drain/Kaila Bhatta Drain	4	ETP		Operational		
135.	Ultra Electropletores, 46 Meerut Road Ind. Area Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	Meerut Road Drain/Kaila Bhatta Drain	1.5	ETP		Operational		**298281**
136.	Unichem Laborateries, C-31, Meerut Road Ind. Area	Ghaziabad	Pharma	No	No	Hindon	Hindon	Meerut Road Drain/Kaila Bhatta Drain	180	ETP		Operational		
137.	Sukriti Vidyut Udyog Pvt. Ltd., D-39, Meerut Road Ind. Area, Ghaziabad.	Ghaziabad		No	No	Hindon	Hindon	Meerut Road Drain/Kaila Bhatta Drain	Self closed	ETP		Not Operational		
138.	Marshal Cycles, B-17/18, Meerut Road Ind. Area, Ghaziabad.	Ghaziabad		No	No	Hindon	Hindon	Meerut Road Drain/Kaila Bhatta Drain	Self closed	ETP		Not Operational		
139.	Shree Balaji Processors, (Old Name Hanuman Textiles), 1, Rajinder Nagar Ind. Area, Mohan Nagar, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	15	ETP		Operational		
140.	Krishana Washing Service, 72/14, Rajinder Nagar Ind. Area, Mohan Nagar, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	20	ETP		Operational		
141.	Prem Processors, 52 Rajinder Nagar Ind. Area, Mohan Nagar, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	30	ETP		Closed		**15000 per day till compliance**
142.	R.B. Enterpirses, 180/2 & 180/4, Rajiender Nagar Ind. Area, Mohan Nagar, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	30	ETP		Operational		
143.	Right Wash Udyog, 72/19, Rajinder Nagar Ind. Area, Mohan Nagar, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	28	ETP		Operational		
144.	Krishna Enterprises (Old Name Vidhi Ventuer), Rajinder Nagar Ind. Area, Mohan Nagar, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	30	ETP		Operational		
145.	Vardhman Engg. Works, 72/10-B,Gali No-6, Rajinder Ind. Area, Mohan Nagar, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	Sahibabad Drain	1.8	ETP		Operational		
146.	Magnum Ventures Ltd, 18/41,Site-4 Sahibabad	Ghaziabad	Pulp & Paper	No	No	Hindon	Hindon	Sahibabad Drain	2400	ETP		Operational		
147.	Aiden Jeans, B-49/5, Site-4 Ind. Area, Sahibabad, , Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	20	ETP		Operational		
148.	Balaji Industry, Plot No. 7, Gali No. 1, Rajinder Nagar Ind. Area, Mohan NGR., Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	20	ETP		Operational		
149.	Beauty Art Prints India Pvt.Ltd.,54/4, Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	160	ETP		Closed		
150.	Colour Tuch, 56/28, Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	48	ETP		Closed		**735000**

151.	G.S. Dass Apprarals Pvt.Ltd., 4/44, Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	70	ETP		Operational		
152.	Ganga Processors, 18/11, Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	65	ETP		Operational		
153.	Ganpati Creation, C-19/1, Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	50	ETP		Operational		
154.	Global Industries, A-38/1/9, Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	50	ETP		Operational		
155.	Goyal Canvas Pvt.Ltd., 18/43, Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	8	ETP		Operational		
156.	Goyal Processors, 42/50, Site-4, Ind. Area, Sahibabad, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	18	ETP		Operational		
157.	Jyoti Dyeing, 18/8, Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	70	ETP		Operational		
158.	K.K. Industries, 7/5, Site-4, Ind Area, Sahibabad, Ghaziabad.	Ghaziabad	Textile Dyeing	No	No	Hindon	Hindon	Sahibabad Drain	25	ETP		Closed		
159.	Krishna Print Pvt. Ltd., A-47, Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	20	ETP		Closed		**165000**
160.	M.A. Garments, 20/6/21, Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	25	ETP		Operational		**15000 per day till compliance**
161.	M.J. Allied Enterprises, E-4, Site-4 Ind. Area, Sahibabad, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	12	ETP		Operational		
162.	M.Y. Garments, 20/6/14, Site-4, Sahibabad, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	26	ETP		Operational		
163.	Maha Shakti Threads mills, 56/12, Site-4 Sahibabad Ind. Area. Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	19	ETP		Operational		
164.	Mahalaxmi Dyers, 49/24, Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	23	ETP		Operational		
165.	Shri Mahaveer Enterprises, 28/1/15, Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	35	ETP		Operational		**15000 per day till comliance**
166.	Nandni Processors, 4/27, Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	10	ETP		Operational		
167.	Neelam Tex Prints Pvt.Ltd., 41/1, Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	70	ETP		Operational		
168.	Pal Nit Fab, 54/14, Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	90	ETP		Operational		**135000**
169.	Pooja Processors, 62/2/3, Site-4,Sahibabad Ind. Area, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	80	ETP		Operational		**225000**
170.	Ratan Garments, 56/29, Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	35	ETP		Operational		

171.	Ritika Enterprises, 18/32, Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	45	ETP		Operational		
172.	S.B. Feb Tech P Ltd., 28/1/24,Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	36	ETP		Operational		
173.	S.S. Prints, 56/14-15, Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	22	ETP		Operational		
174.	Sahibabad Printers, 182/3, G.T.Road, Mohan Nagar,Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	50	ETP		Operational		
175.	Shiv Kumar Pawan Kumar,57/1/13, Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	40	ETP		Operational		
176.	Shiva Processors, 18/6, Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	80	ETP		Operational		
177.	Singhal Paulings Industries, 56/32, Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	2	ETP		Operational		
178.	SPD RAINBOW(Lavya Udyog), 56/17, Site-4, Sahibabd Ind. Area,Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	48	ETP		Operational		
179.	Tanzeem Dyeing 261, Rajaendra Nagar Ind. Area Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	20	ETP		Closed		
180.	V.S. Garments, 20/6/10, Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	25	ETP		Operational		
181.	Vaishno Garments, 20/6/3, Site-4, Ind Area, Sahibabad, Ghaziabad.	Ghaziabad	Textile Dyeing	No	No	Hindon	Hindon	Sahibabad Drain	18	ETP		Operational		
182.	Ventkesh Enterprises, 48/1/7, Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	45	ETP		Operational		
183.	Versha Washing, 49/25, Site-4, Ind. Area, Sahibabad, , Ghaziabad.	Ghaziabad	Yarn/Textile Processing	No	No	Hindon	Hindon	Sahibabad Drain	18	ETP		Operational		
184.	Advance Steel Tube Ltd. 45/3, Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	Sahibabad Drain	20	ETP		Operational		
185.	Ajay Industrial Corporation, 20/11, Site-4, Ind. Area, Sahibabad, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	Sahibabad Drain	2.5	ETP		Operational		
186.	Anuradha Fabricators, 42/10, Site-4 , Sahibabad, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	Sahibabad Drain	1.5	ETP		Operational		
187.	Bharat Electronics Ltd., Bharat Nagar, Sahibabad Industrial Area, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	Sahibabad Drain	100	ETP		Operational		
188.	Tata Steel Ltd., 23, Site-4, Sbd. Gzb.	Ghaziabad	Engineering	No	No	Hindon	Hindon	Sahibabad Drain	800	ETP		Operational		
189.	Dabur India Ltd, P-22, Site 4 Sahibabad	Ghaziabad	Pharma (Aurvedic)	No	No	Hindon	Hindon	Sahibabad Drain	200	ETP		Operational		
190.	Dream Bath, 28/1/21, Site-4, Sahibabad Industrial Area, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	Sahibabad Drain	5	ETP		Operational		

191.	Empire Fastners, 48/1/22, Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	Sahibabad Drain	3.5	ETP		Operational		
192.	Ipsa Business India Pvt.Ltd., 57/1/17-18, Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	Sahibabad Drain	8	ETP		Operational		
193.	Machino Tech, 48/1/1-A, Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	Sahibabad Drain	3.5	ETP		Operational		
194.	National Engg. Works (Old Name Mange Ram), 115, Prakash Ind. Area, Sahibabad, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	Sahibabad Drain	Dry Process	NA		Operational		
195.	Paharpur-3 P, Plot No 19, Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	Sahibabad Drain	16	ETP		Operational		
196.	Rachna Metal Industries Pvt. Ltd., 18/42, Site-4, Sahibabad Ind.Area, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	Sahibabad Drain	4	ETP		Operational		
197.	Rama Steel Tube Ltd., B-21, & B-3,Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	Sahibabad Drain	24	ETP		Operational		
198.	Regency Cycles P Ltd., 16/1-B-3&4, Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	Sahibabad Drain	8	ETP		Operational		
199.	Sage Metal Ltd., B-7, Site-4, Shaibabad Ind. Area, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	Sahibabad Drain	10	ETP		Operational		
200.	Shri Giri Raj Enterprises, 24-25,Prakash Ind. Estate, Sahibabad, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	Sahibabad Drain	4.5	ETP		Operational		
201.	Singla Engrayours Pvt.Ltd., 7/26, Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	Sahibabad Drain	8.5	ETP		Operational		
202.	Sona Industry, Plot No- 56/7, Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	Sahibabad Drain	0.5	ETP		Operational		
203.	Spark Electrose P Ltd., A-48/9,Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	Sahibabad Drain	6.5	ETP		Operational		
204.	United Polygenious Pvt.Ltd., B-13/1, Site-4 Sahibabad Ind. Area,Ghaziabad.	Ghaziabad	Metal Surface Treatment	No	No	Hindon	Hindon	Sahibabad Drain	4	ETP		Operational		
205.	V.R.S. Food Ltd., (Vedram & Sons), Unit-1, B-56, Site-4 , Sbd.Gzb.	Ghaziabad	Dairy	No	No	Hindon	Hindon	Sahibabad Drain	150	ETP		Operational		
206.	V.R.S. Food Ltd. (Vedram & sons),Unit-2, B-33, Site-4 , Sbd. Gzb.	Ghaziabad	Dairy	No	No	Hindon	Hindon	Sahibabad Drain	930	ETP		Operational		
207.	Al-Aali Exports (P) Ltd., B-37, Site- 4, Ind. Area, Sahibabad, Ghaziabad.	Ghaziabad	Slaughter House and Meat Processing	No	No	Hindon	Hindon	Sahibabad Drain	34	ETP		Operational		
208.	Arshiya Export Pvt. Ltd.) B-67, Site-4, Sahibabad, Ghaziabad. (W/o Rendering Plant)	Ghaziabad	Slaughter House and Meat Processing	No	No	Hindon	Hindon	Sahibabad Drain	20	ETP		Operational		

209.	Fair Export (India) Pvt. Ltd., 20/1, Site-4 Ind. Area, Sahibabad, Ghaziabad. (W/o Rendering Plant)	Ghaziabad	Slaughter House and Meat Processing	No	No	Hindon	Hindon	Sahibabad Drain	60	ETP		Closed		
210.	Firgo Riffico Alana Ltd., A-15, Site- 4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad	Slaughter House and Meat Processing	No	No	Hindon	Hindon	Sahibabad Drain	50	ETP		Operational		
211.	Frigo Rifico Alana Ltd., Unit-2, A-14/1, Site-4, Sahibabad Ind. Area, Ghaziabad. (Only Rendering)	Ghaziabad	Slaughter House and Meat Processing	No	No	Hindon	Hindon	Sahibabad Drain	8	ETP		Operational		
212.	Mirha Export Pvt.Ltd., B-36, Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad	Slaughter House and Meat Processing	No	No	Hindon	Hindon	Sahibabad Drain	35	ETP		Closed		
213.	Moon Brewaries Ltd., Unit-1, A-32, Site-4, Sahibabad GZB.	Ghaziabad		No	No	Hindon	Hindon	Sahibabad Drain	Self closed	ETP		Not Operational		
214.	M.K. Overcease Pvt. Ltd., B-63, 64, Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad		No	No	Hindon	Hindon	Sahibabad Drain	closed	ETP		Not Operational		
215.	Ajanta Gartex Processors, Unit-2,18/24, Site-4, Sahibabad, Ghaziabad.	Ghaziabad		No	No	Hindon	Hindon	Sahibabad Drain	closed	ETP		Not Operational		
216.	Kanhiya Enterprises, A-48/11, Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad		No	No	Hindon	Hindon	Sahibabad Drain	closed	ETP		Not Operational		
217.	Hind Industries Ltd., Plot No. B-42, Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad		No	No	Hindon	Hindon	Sahibabad Drain	closed	ETP		Not Operational		
218.	Siddhi Vinayak (Jivo Gartex), 48/1/18, Site-4, Sahibabad Ind. Area, Ghaziabad.	Ghaziabad		No	No	Hindon	Hindon	Sahibabad Drain	50	ETP		Not Operational		
219.	Anna Associate Pvt. Ltd., 108, Site- 4 Ind. Area, Sahibabad, Ghaziabad. (W/o Rendering Plant)	Ghaziabad		No	No	Hindon	Hindon	Sahibabad Drain	15	ETP		Not Operational		
220.	Parle Agro Pvt Ltd., Meerut Road Industrial Area, Ghaziabad	Ghaziabad		No	No	Hindon	Hindon	Meerut Road Drain/Kaila Bhatta Drain	212	ETP		Operational		

Appendix

Layout Map of the District Ghaziabad showing river Hindon (A tributary of River Yamuna) including STP locations, Proposed STP Locations and drains with Geo Tag location

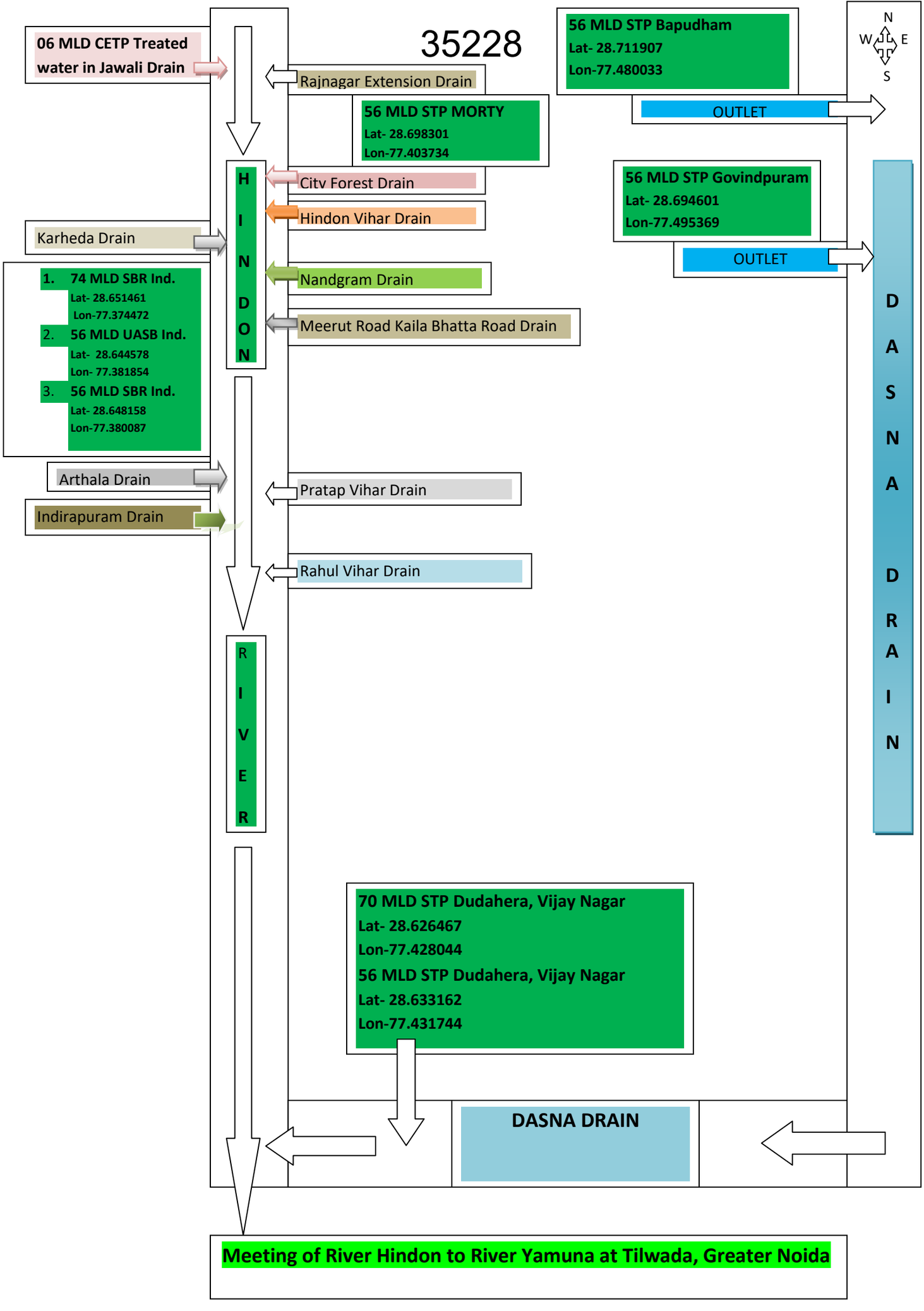


Fig. Layout Map of River Hindon with linked STPs, CETP & Drains of district Ghaziabad

3. Water Quality Status:

S.No	Sampling Point	Date	pH	Colour (Hz)/ Appearance	DO (mg/L)	BOD (mg/L)	COD (mg/L)	TSS (mg/L)	TC (MPN/ 100ml)	FC (MPN/ 100ml)	Water Quality Status
1.	Hindon Road Bridge, Ghaziabad	07.02.24	7.6	Turbid	1.19	26.0	86.0	96.0	$24X10^4$	$17X10^4$	Class E
2.	Hindon Karheda, Ghaziabad	07.02.24	7.6	Turbid	1.43	24.0	75.0	86.0	$26X10^4$	$21X10^4$	Class E
3.	Hindon Chhijarshi, Ghaziabad	07.02.24	7.5	Turbid	3.17	19.0	65.0	100.0	$32X10^4$	$22X10^4$	Class E
4.	Hindon Kuleshra, Ghaziabad	05.02.24	7.4	Turbid	Nil	34.0	242.0	194.0	$33X10^4$	$22X10^4$	Class E

4. Notification of Flood Plain Zones:

NGT has given direction in case 275/2023 and 569/2023 dated 27/07/2023 for flood plain zone demarcation which shall be done by refering notification dated 07 october 2016 "River Ganga (Rejuvenation ,Protection and Management) Authorities order , 2016 and office Memorandum dated 14th February 2022 on Guidelines for siting industries which are in close proximity with the river

5. Issues related to E-Flow:

Regarding the maintenance of e-flow of Hindon River ,it is to be informed that Hindon River is a non perennial river (rainy river) ,in which only rain water flows. During the remaining time the flow in this river remains negligible.Therefore,it is not possible to maintain e-flow (Ecological flow/Environmental flow) in Hindon River

(Isha Tiwari)
Divisional Forest Officer
/Member Secretory,District Ganga
Committee,Ghaziabad

(Abhinav Gopal)
Chief Development Officer/Nodal Officer
District Ganga Committee,
Ghaziabad

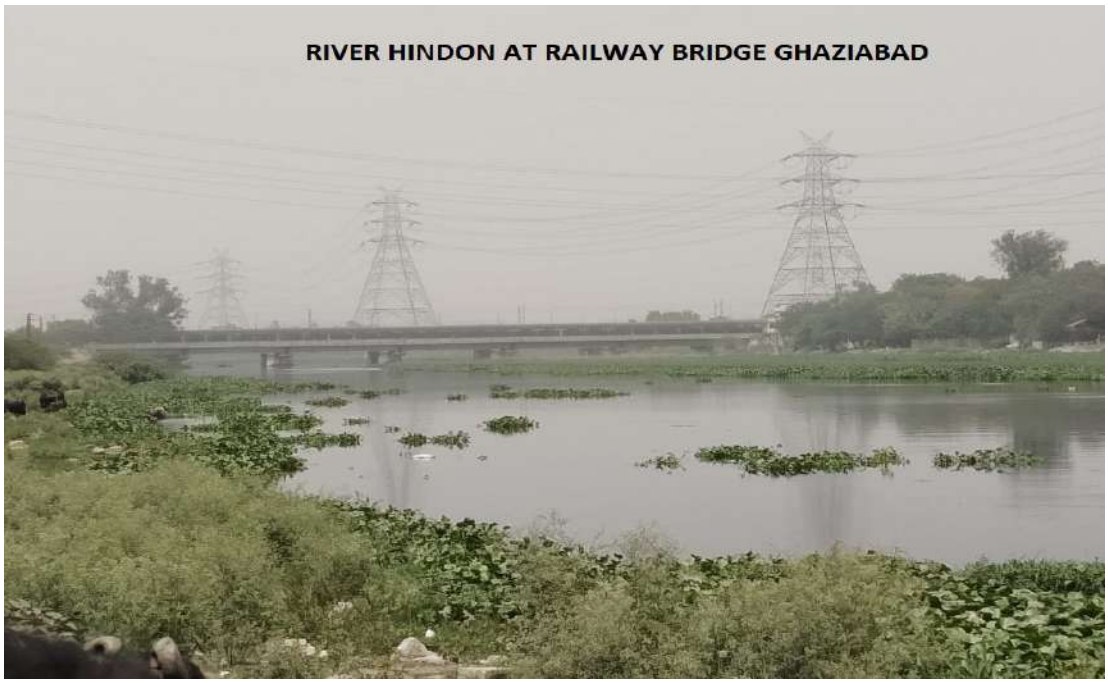
(Indra Vikram Singh)
District Magistrate
Chairperson, District Ganga
Committee,Ghaziabad

ACTION PLAN
FOR
RESTORATION OF POLLUTED STRETCH
OF
RIVER HINDON
FROM

DISTRICT SAHARANPUR

TO

DISTRICT GHAZIABAD



UTTAR PRADESH POLLUTION CONTROL BOARD

TC – 12V, VIBHUTI KHAND, GOMTINAGAR,

LUCKNOW (UP)

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1. INTRODUCTION

Hindon River originates from lower Shivalik ranges in District Saharanpur of Uttar Pradesh and is primarily a rain fed river. The basin area falls in the districts of Saharanpur, Muzaffarnagar, Shamil, Meerut, Bagpat, Ghaziabad and Gautambudh Nagar in Western Uttar Pradesh and covers a distance of about 300 Km before joining the river Yamuna downstream of Delhi. It leaves District Saharanpur at Village- Chhinau and flows into District Muzaffarnagar. Hindon river enters District Muzaffarnagar at Village- Budha khedi and leaves the District for Meerut near Village- Atali. River Hindon enters District Meerut at Village- Baparsi and the river flows in between District Meerut and Bagpat and it leaves at Village Rasoolpur Dhaulari of District Meerut and Village Baleni of District Bagpat before entering District Ghaziabad.

The river Hindon is one of the important rivers in Western Uttar Pradesh (India) having a basin area of about 7000 km2 . The catchment area of the river lies between latitude 28o 30’ 27” to 30o15’ 22” N and longitude 770 20’18” to 770 50’ 16”E. The Hindon River has been a major source of water to the highly populated and predominantly rural population of Western Uttar Pradesh.

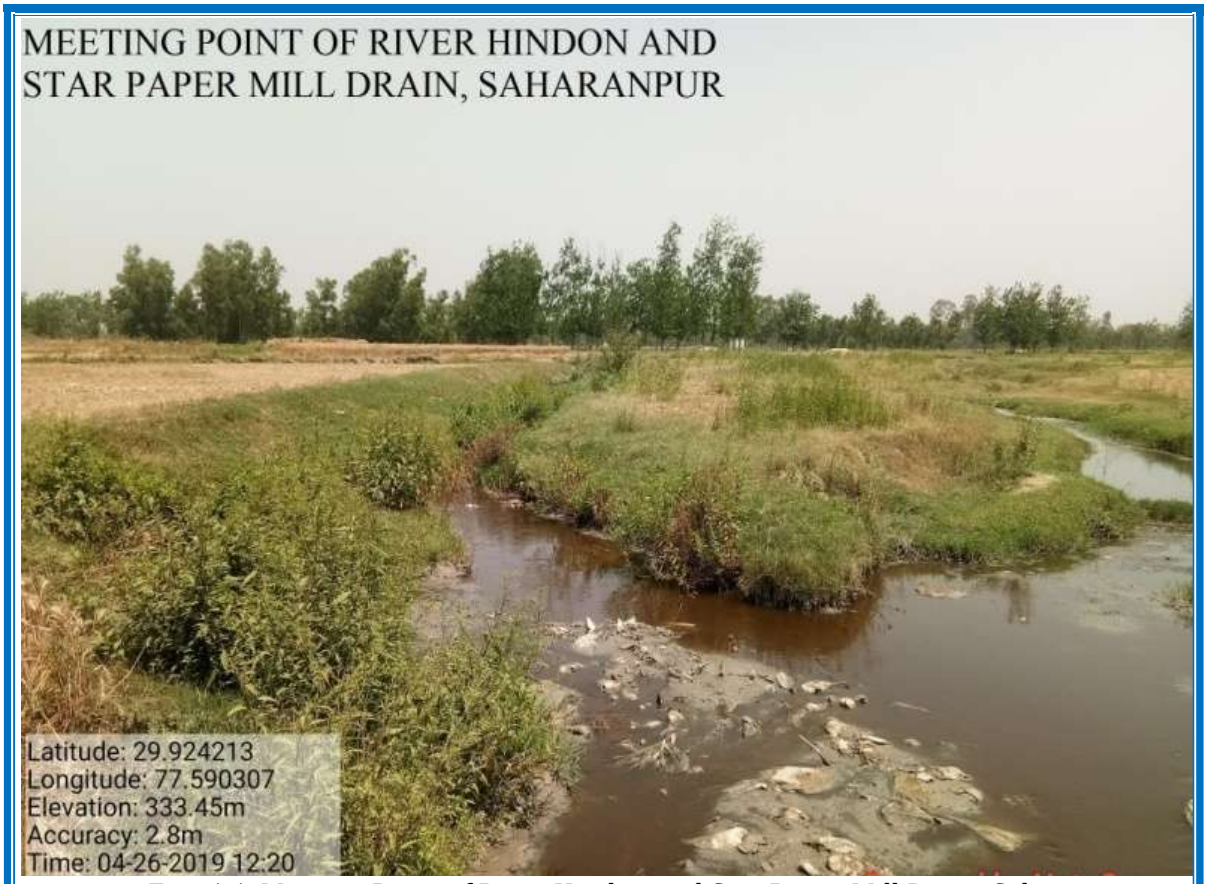


Fig : 1.1, Meeting Point of River Hindon and Star Paper Mill Drain, Saharanpur.

During non-monsoon, the river is dry on upstream of Saharanpur and carries no water in it. Flow in the river starts with discharge of municipal sewage and trade effluents from Saharanpur onwards. The River Kali (West) and River Krishni are the main tributaries of River Hindon. River got e-flow only during monsoon season through rainwater and groundwater recharge. Presently, groundwater recharge is minimal and now mostly it gets water through industrial & domestic wastewater discharge into river Hindon system.

The river receives considerable amount of waste water every day from the industries and sewage system flow from municipal areas of Saharanpur, Muzaffarnagar, Shamli, Meerut, Baghpat and Ghaziabad which leads to deterioration of its water quality.

As per the monitoring of river water quality in the identified polluted stretch of river Hindon, water is neither fit for Drinking nor for Outdoor bathing and Fish Culture etc. It can only be used for irrigation, industrial cooling or controlled waste disposal (Class – E, specified as per IS – 2296-1982).

It is an important aspect for revival of river Hindon in context of its utility as it is non-perennial River. The ultimate goal for beneficial use of river will determine the level of actions to be taken for maintaining the water quality. Under the present circumstances, it appears that river Hindon may serve the purpose of irrigation and for this objective, generated municipal sewage should be treated to meet the irrigation standards.

The climate of the area is characterized by a moderate type of subtropical monsoon. The average annual rainfall in the area is about 1000 mm, out of which the main part is received during the monsoon period. The major land use is agriculture and there is no significant forest cover. The soil of the area is loam to silty loam and is free of carbonates.

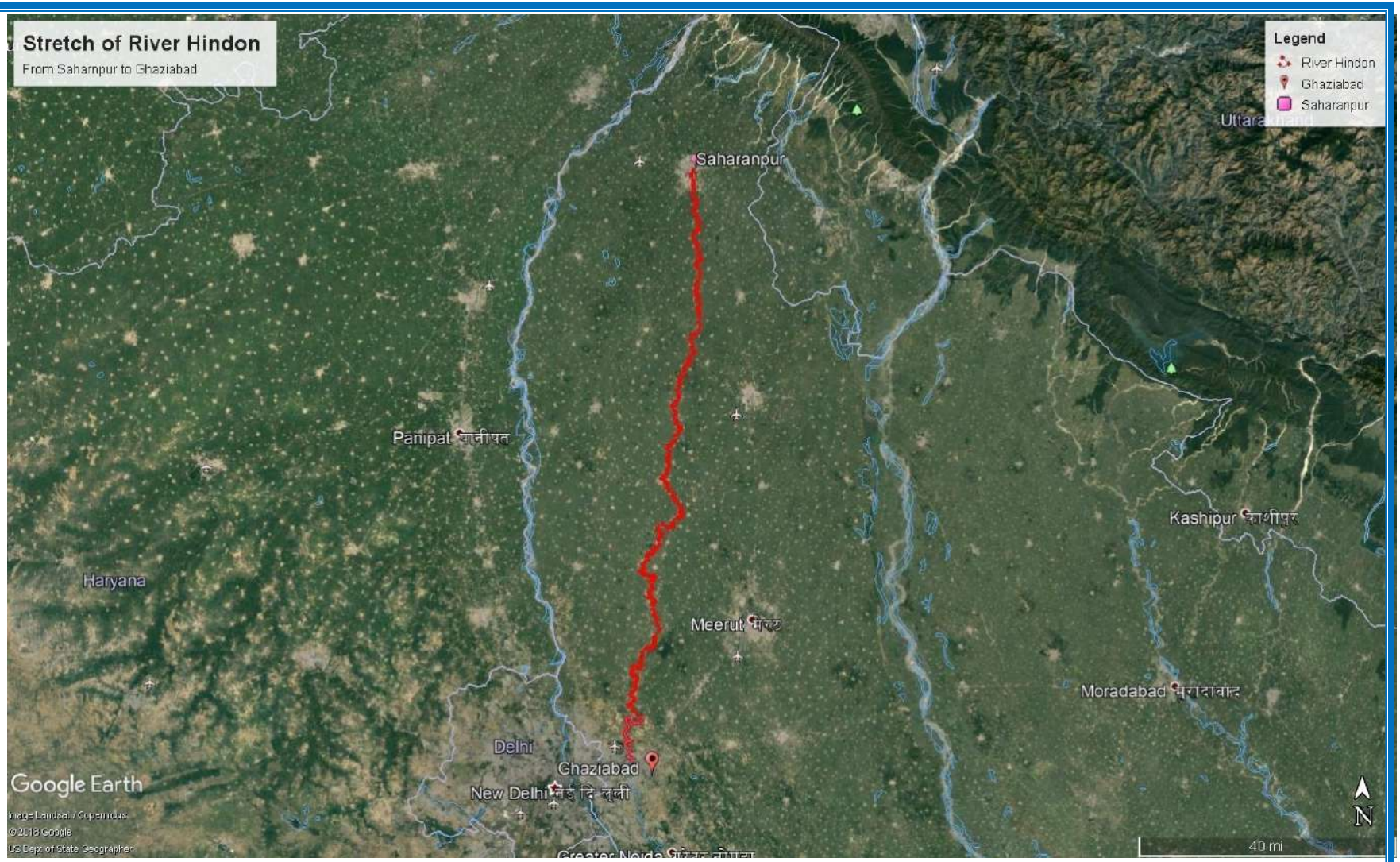


Fig:1.2: Google Earth image showing stretch of River Hindon from Saharanpur to Ghaziabad

-- 4 --

1.1 POLLUTED STRETCH OF HINDON FROM SAHARANPUR TO GHAZIABAD

Hindon River originates from lower Shivalik ranges in District Saharanpur of Uttar Pradesh and is primarily a rain fed river. The basin area falls in the districts of Saharanpur, Muzaffarnagar, Shamil, Meerut, Bagpat, Ghaziabad and Gautambudh Nagar in Western Uttar Pradesh and covers a distance of about 300 Km before joining the river Yamuna downstream of Delhi. It leaves District Saharanpur at Village- Chhinau and flows into District Muzaffarnagar. Hindon river enters District Muzaffarnagar at Village- Budha khedi and leaves the District for Meerut near Village- Atali. River Hindon enters District Meerut at Village- Baparsi and the river flows in between District Meerut and Bagpat and it leaves at Village Rasoolpur Dhaulari of District Meerut and Village Baleni of District Bagpat before entering District Ghaziabad.

There are 90 villages located on the banks of this Priority-1 polluted stretch of River Hindon from Saharanpur to Ghaziabad. The total population of these villages is 3,80,155 which generate 41.057 MLD of sewage. **Appendix-2**

There are 453 water polluting industries and 01 CETP for textile units located in the catchment area of the present stretch of Hindon river **Appendix -3.** Out of 453 industries 55 textile/dyeing industries are attached with the CETP situated at UPSIDC Industrial Area, Tronica City, Loni, Ghaziabad. Other 398 industries have their own effluent treatment plants and treated effluent is discharged through 22 drains, of which 07 are entirely industrial drains and remaining 15 drains are mixed drains where treated industrial effluent is mixed with the sewage. The industries are grossly polluting in nature which includes Sugar, Pulp & Paper, Distillery, Textile, Slaughter House, Tannery etc.

Out of 453 industries, 318 units are complying the norms, 77 units are non-complying. Out of these non complying units, 28 units (27 member units of CETP Tronica City and 01 Slaughter House M/s Al Nafees Frozen Foods Pvt. Ltd.) have been closed by NGT and 49 units closed by UPPCB and an environmental compensation of Rs 28 lakh has been imposed on 56 units. 08 units have shut their wet process and the remaining 50 units lying closed itself due to own reasons.

Prosecution has also been initiated against 89 non-complying industries (Ghaziabad-66, Muzaffarnagar-12, Saharanpur-09, Meerut-01 and Baghpat-01) under the provisions of Water (Prevention and Control of Pollution) Act, 1974 in the Court of Special Judicial Magistrate (Pollution/CBI), Lucknow.

There is a textile industrial cluster in Tronica City, Loni. CETP Tronica City, Loni, Ghaziabad which was installed by UPSIDC for treatment of industrial effluent of 55 textile units situated in Apparel Park, Tronica City, Loni, Ghaziabad. Since this CETP was not functioning properly so the Board has issued closure order against this CETP and its 28 functional member units. The State Board has issued the consent to operate under Water and Air Act to a new 06 MLD CETP which has resently been commissioned at Apparel Park, Tronica City, Loni, Ghaziabad. The new 06 MLD CETP is still under stabilization.

2. OBJECTIVE OF THE ACTION PLAN

The objective of the Action Plans is to restore the quality of this priority - 1 polluted stretch of (Hindon river from Saharanpur to Ghaziabad) to be fit for at least bathing purposes within 06 months from the date of action plan as directed by Hon'ble National Green Tribunal vide its order dated 20th September 2018 passed in the original Application No 673/2018 in

the matter of NEWS ITEM PUBLISHED IN 'THE HINDU' AUTHORED BY SHRI JACOB KOSHY titled " More river stretches are now critically polluted: CPCB.

3. POLLUTION INVENTORY

3.1 DETAILS OF DRAINS POLLUTING RIVER HINDON

In the polluted stretch under question of river Hindon and its tributaries, total discharge of 674.033 MLD is estimated in the form of sewage and industrial effluent through 31 drains and direct discharge in the river. As per desk inventory, about 595.643 MLD of sewage and **78.39** MLD of industrial effluent are currently being discharged into the river. Industrial effluent **78.39** MLD from 453 industries situated in 06 Districts directly discharged into river Hindon and its tributaries (Kali-west & Krishni) after treatment. The treatment of sewage is a major area of concern as out of total estimated sewage discharge of 595.643 MLD, only 224 MLD of sewage is treated. The estimates of industrial effluent are based upon the consented discharge quantity from the units but actual industrial effluent may be more than the estimates owing to over discharge by consented industries and discharge from illegal units operating in non-conforming areas.

A detailed drain wise data regarding sewage, industrial effluent, number of industries discharging into drain, status of tapping and status of installing of bar meshes etc. is given in **Appendix – 1.**

Summary of drains polluting River Hindon

Summary of Drains (Hindon river from Saharanpur to Ghaziabad)

S .No.	District	No. of Drains	Type of Drains			Status of Drains			Industries		Sewage Discharge (MLD)			Total Discharge in the River (MLD)
			Domestic	Industrial	Mixed	Tapped	Untapped	Partially Tapped	Number	Treated Effluent (MLD)	Treated	Un-treated	Total	
1.	Sahranpur	07	0	4	3	-	7	-	45*	17.89	38	82.00	120.0	137.89
2.	Muzaffar- nagar	10	07	00	03	-	10	-	45**	37.30	0	73.84	73.84	111.14
3.	Shamli	02	-	-	02	-	02	-	05***	2.35	0	10.5	10.5	12.85
4.	Meerut	02	-	01	01	-	02	-	04	1.86	0	10	10	11.86
5.	Baghpat	01	-	0	01	-	01	-	01	0.5	0	0.1	0.1	0.6
6.	Ghaziabad	09	02	02	05	-	07	02	353	18.49	186	195.203	381.203	399.693
	Total	**31**	**09**	**07**	**15**	**00**	**29**	**02**	**453**	**78.39**	**224**	**371.643**	**595.643**	**674.033**

Source :*Joint committee Report submitted in Hon'ble NGT Committee in OA No. 231/2014 & 66/2015 and desk inventory of UPPCB*

Note:- Three industries namely M/s A.L.M. Industries (Meat Processing Unit) Haroda, Saharanpur, A.L.M. Industries (Slaughter House) Haroda, Saharanpur& M/s U.P. Co-Oprative Co. Ltd. Tapri, Saharanpur(Distillery only bottling) are discharging their treated effluent on land for irrigation & in case of emergency effluent may be discharged into River Hindon directaly as all the industries are situated at the adjacent of the River Hindon.*

*** The effluent of 01 Industry namely M/s Bajaj Hindustan Sugar Ltd., Thana Bhawan is used for irrigation & in case of emergency effluent may be discharged into River Krishni through pipeline to directly.*

**** The effluent of 01 Industry namely M/s Bajaj Hindustan Sugar Ltd., Baisana, Shamli is used for irrigation & in case of emergency effluent may be discharged into River Hindon directaly as all the industries are situated at the adjacent of the River Hindon*

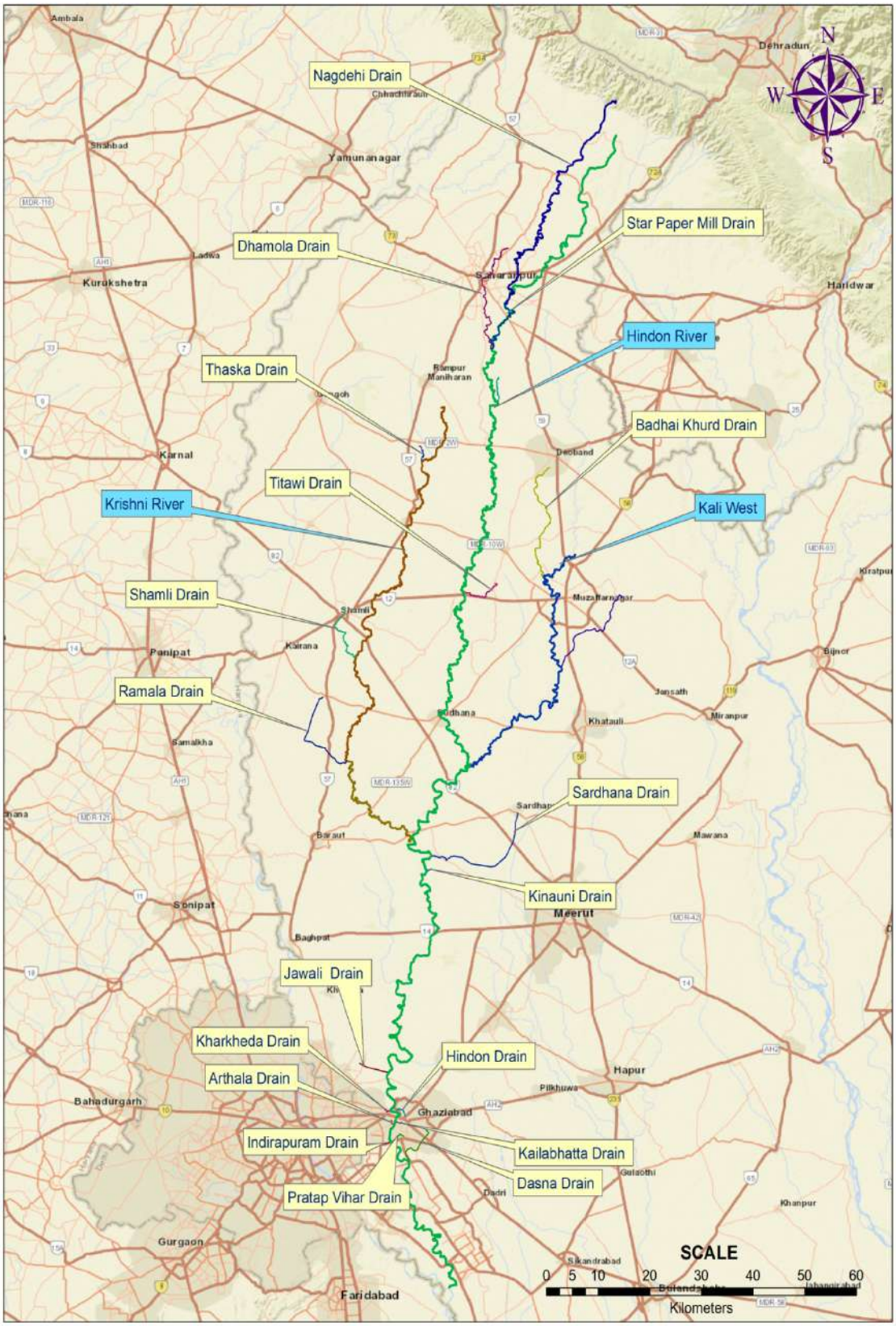


Fig : 3.1, GIS Map of Hindon River Polluted Stretch with Drains

A. Dhamola Drain (Saharanpur)

a. Origin

Dhamola Drain origins from Gokalpur village in Saharanpur, Uttar Pradesh. Coordinates of its origin point are Latitude: 30°0'34.36"N & longitude: 77°35'49.65"E.

b. Length Covered

Dhamola drain origins from Gokalpur village to its meeting point to Hindon river in Jandhari and it traverses approx.: 17.1 km.

c. End Point

Dhamola drain meets Hindon River at Village Jandhari. Coordinates of its end point are Latitude: 29°54'35.07"N & Longitude: 77°33'19.50"E.

d. Details of Industries & discharge of their effluent to the drain

Dhamola Drain carries domestic wastewater from habitation located in its vicinity, as well as treated effluent from 32 industries. Out of these 32 industries, 16 are Yarn & Textiles dyeing, 15 are Pulp & Paper, 01 Slaughter House. Out of total 32 industries at present 12 are self closed. Total treated effluent Discharge from Dhamola Drain to Hindon river is 0.561 MLD and is treated by individual ETP installed at each industry.

WATER QUALITY OF CONFLUENCE POINT OF DHAMOLA DRAIN/RIVER			
	Lat	Long	
Starting Point	30° 0'34.36"N	77°35'49.65"E	
Final meeting point	29°54'35.07"N	77°33'19.50"E	
Length of drain	17.1 km		
Nature of drain	Mixed		
Parameters	Results		
pH	6.9		
BOD (mg/l)	48.0		
COD (mg/L)	232		
TSS (mg/L)	520		
T Coli (MPN /100ml)	23000		

B. Star Paper Mill Drain (Saharanpur)

a. Origin

Star Paper Mill Drain originates from Dabki Junardar village. Coordinates of its origin point are Latitude: 29°55'47.28"N & longitude:77°35'36.50"E

b. Length Covered

Star Paper Mill Drain covers distance of approx.: 15.0 km. from its origin.

c. End Point

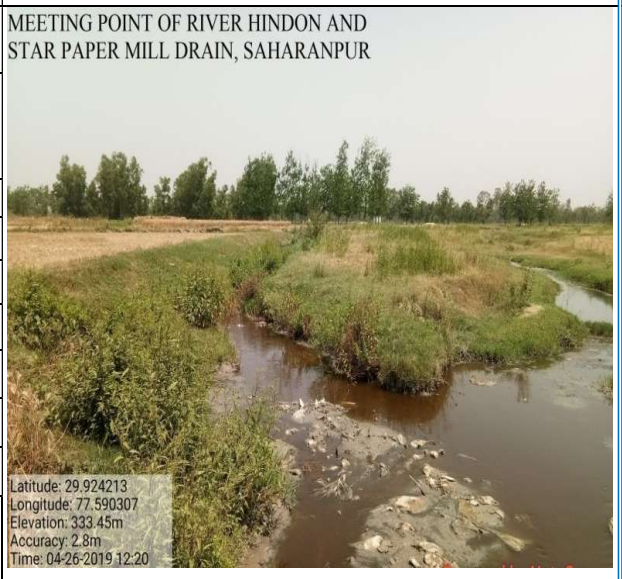
Star Paper mill drain meets Hindon River in village Sahauli Hariya Masat and the coordinates of its end point are Latitude: 29°51'18.65"N & Longitude: 77°34'3.07"E.

d. Details of Industries & discharge of their effluent to the drain

Star Paper Mill Drain carries industrial waste water from M/s Star Paper mill. Total Effluent Discharge from Star Paper Mill Drain to Hindon river is 12.0 MLD and is treated by ETP installed at M/s Star Paper Mill.

WATER QUALITY AT MEETING POINT OF STAR PAPER MILL DRAIN

	Lat	Long
Starting Point	29°55' 47.28"N	77°35' 36.50"E
Final meeting point	29°51' 18.65"N	77°34' 3.07"E
Length of drain	15.0 km	
Nature of drain	Industrial	
Parameters	Results	
pH	6.7	
BOD (mg/l)	45.0	
COD (mg/L)	192.0	
TSS (mg/L)	116.0	
T Coli (MPN /100ml)	2800	



C. Bajaj Sugar Drain (Saharanpur)

a. Origin

Bajaj Sugar Drain originates from Shitala Khera Ahatmali village. Coordinates of its origin point are Latitude: 29°48'41.95"N & longitude: 77°34'50.03"E.

b. Length Covered

Bajaj Sugar Drain covers distance of approx.: 5.75 km from its origin to the point meeting in Hindon river.

c. End Point

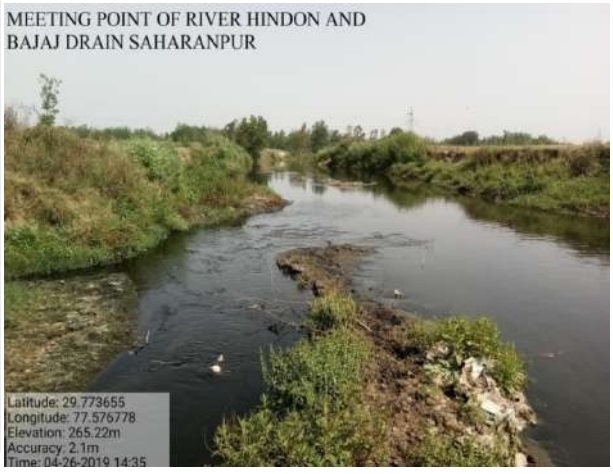
Bajaj Sugar Drain meets Hindon River in village Ambehta Chand Ahatmali. Coordinates of the endpoint of Bajaj Sugar Drain are Latitude: 29°46'25.24"N & Longitude: 77°34'36.37"E.

d. Detail of Industry & Discharge of their effluent to the drain

Bajaj Sugar Drain carries domestic wastewater as well as treated industrial effluent from two units of M/s Bajaj Hindustan Sugar Mill (1-Sugar Unit & Distillery Unit each). Total Effluent Discharge from Bajaj Sugar Drain to Hindon river is 1.0 MLD and is treated by ETP installed at M/s Bajaj Hindustan Sugar Mill (Sugar & Distillery units).

WATER QUALITY AT MEETING POINT OF **BAJAJ SUGAR DRAIN**

	Lat	Long
Starting Point	29°48'41.95 "N	77°34'50.03 "E
Final meeting point	29°46'25.24 "N	77°34'36.37 "E
Length of drain	5.75 km	
Nature of drain	Mixed	
Parameters	Results	
pH	6.9	
BOD (mg/l)	52.0	
COD (mg/L)	240.0	
TSS (mg/L)	614.	
T Coli (MPN /100ml)	31000	



D. Daya Sugar Drain (Saharanpur)

a. Origin

Daya Sugar Drain originates from Deenarpur Ahatmali village. Coordinates of its origin point are Latitude: 29°57'55.25"N & Longitude: 77°39'22.04"E.

b. Length Covered

Daya Sugar Drain covers distance of approx.: 0.29 km from its origin to the point meeting in Hindon river.

c. End Point

Daya Sugar Drain meets Hindon River in village Fatehpur Khurd. Coordinates of end point are Latitude: 29°57'58.38"N & Longitude: 77°39'12.47"E.

d. Detail of Industry & Discharge of their effluent to the drain

Daya Sugar Drain carries treated industrial effluent only from M/s Daya Sugar Mill Pvt. Ltd and total effluent discharge from Daya Sugar Drain to Hindon river is 0.50 MLD and is treated by ETP installed at Daya Sugar Mill Pvt. Ltd. Since the industry is seasonal and at the time of sampling on 04-05-2019 the industry was closed and there was no effluent in the drain.

WATER QUALITY AT MEETING POINT OF DAYA SUGAR DRAIN			
Starting Point	Lat	Long	
Final meeting point	29°57'55.25" N	77°39'22.04"E	
Length of drain	29°57'58.38" N	77°39'12.47"E	
Nature of drain	0.29 km		
Parameters	Industrial		

E. Thaska Drain (Saharanpur)

a. Origin

Thaska Drain originates from Nanauta village in Saharanpur. Coordinates of its origin point are Latitude: 29°42'18.50"N & longitude: 77°26'26.68"E.

b. Length Covered

Thaska Drain covers distance of approx.: 3.83 km km from its origin to the point meeting in Krishni river.

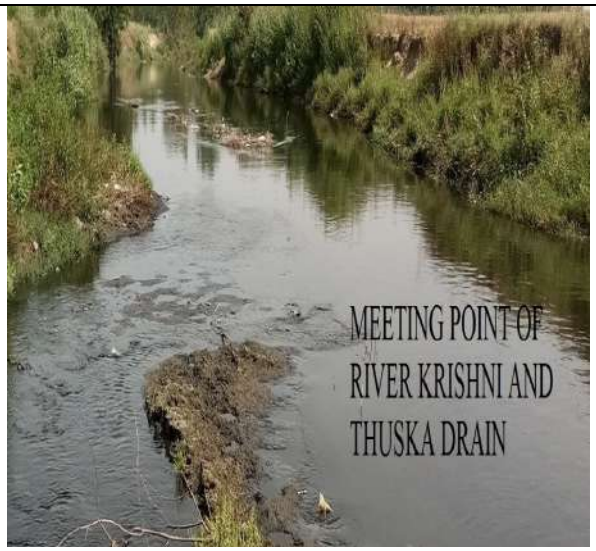
c. End Point

Thaska Drain meets Krishni River in village Bhanera Khemchand. Coordinates of end point are Latitude: 29°40'54.48"N & Longitude: 77°26'46.82"E.

d. Details of industry & their effluent discharge in to the drain

Thaska Drain carries treated industrial effluent from 3 industries, M/s The Kisan Sahakari Chini Mill (Distillery unit), M/s S.M.C. Foods Ltd.(other) & M/s U.P. Co-Oprative Sugar Factory(Sugar unit). Total treated effluent discharge from Thaska Drain to Hindon river is 1.90MLD.

WATER QUALITY AT MEETING POINT OF THASKA DRAIN		
	Lat	Long
Starting Point	29°42' 18.50"N	77°26' 26.68"E
Final meeting point	29°40' 54.48"N	77°26' 46.82"E
Length of drain	3.83 km	
Nature of drain	Industrial	
Parameters	Results	
pH	8.5	
BOD (mg/l)	50	
COD (mg/L)	232	
TSS (mg/L)	412	
T Coli (MPN /100ml)	38000	



F. Nagdehi Drain (Saharanpur)

a. Origin

Nagdehi Drain originates from Bahlolpur, Uttar Pradesh. Coordinates of its origin point are Latitude: 30°14'10.8"N & longitude: 77°47'02.2"E.

b. Length Covered

Nagdehi Drain covers distance of approx.: 59.50 km from its origin to the point meeting in River Hindon.

c. End Point

Nagdehi Drain meets River Hindon in village Dudhli Bukhara Must., Uttar Pradesh. Coordinates of end point are Latitude: 29°56'34.3"N & Longitude: 77°36'17.3"E.

d. Detail of Industries & Discharge of their effluent to the drain

Nagdehi Drain carries domestic wastewater from nearby habitations as well as treated industrial effluent from two industry M/s Pashupati Dairy (P) Ltd. & M/s Rainbow Board Mill, Saharanpur which is lyeing closed since long . Total Effluent Discharge from Nagdehi Drain to River Hindon is 0.27 MLD. At the time of sampling on 04-05-2019 the industry was closed and there was no effluent/sewage in the drain and the drain was dry.

G. Badhai Khurd Drain (Saharanpur)

a. Origin

Badhai Khurd Drain originates from Isharpur village. Coordinates of its origin point are Latitude: 29°40'19.94"N & Longitude: 77°40'6.61"E.

b. Length Covered

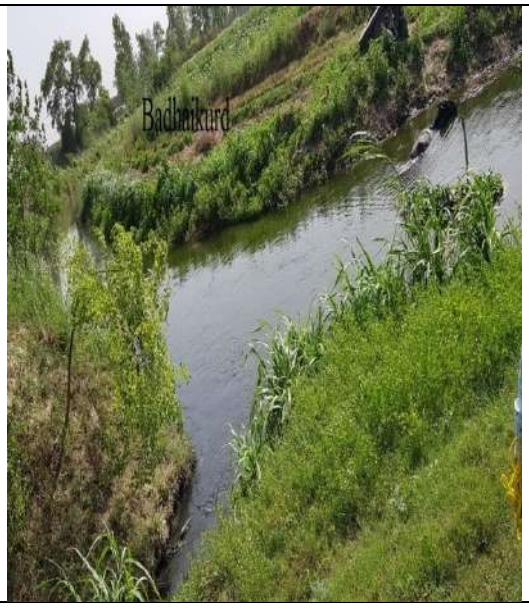
Badhai Khurd Drain covers distance of approx.: 30.0 km from its origin to the point meeting in River Kali west.

c. End Point

Badhai Khurd Drain meets River Kali west in village Mahmood Pura Lakarsandha. Coordinates of end point are Latitude: 29°30'14.6"N & Longitude: 77°39'31.6"E.

d. Detail of Industry & discharge of their effluent to the drain

Badhai Khurd Drain carries domestic wastewater from nearby habitations as well as treated industrial effluent from one industry M/s Triveni Engg. & Industries Ltd, Deoband. Total effluent discharge from Badhai Khurd Drain to River Kali west is 1.368 MLD.

WATER QUALITY AT MEETING POINT OF BADHAI KHURD DRAIN			
	Lat	Long	
Starting Point	29°40'19.94" N	77°40'6.61"E	
Final meeting point	29°30'14.6"N	77°39'31.6"E	
Length of drain	30.0 km		
Nature of drain	Mixed		
Parameters	Results		
pH	8.2		
BOD (mg/l)	80		
COD (mg/L)	320		
TSS (mg/L)	482		
T Coli (MPN /100ml)	38000		

H. Shamli Road Drain (Muzaffarnagar)

a. Origin

Shamli Road Drain originates from Gaushala Mohalla Muzaffarnagar. Coordinates of its origin point are Latitude: 29°28'26.1"N & Longitude: 77°40'59.5"E.

b. Length covered

Shamli Road Drain covers distance of approx.: 2.35 km from its origin at Gaushala Mohalla Muzaffarnagar.

c. End Point

Shamli Road Drain meets River Kali West near Shamli Road Bridge, Muzaffarnagar. Coordinate of the end point of the Shamli Road drain is Latitude: 29°28'21.4"N & Longitude: 77°40'50.3"E.

d. Detail of industries & their effluent discharge in to the drain

There is no industrial effluent discharge in the Shamli Road Drain. Shamli Road Drain carries 1.47 MLD domestic discharge only.

WATER QUALITY AT MEETING POINT OF SHAMLI ROAD DRAIN			
	Lat	Long	
Starting Point	29°28'26.1"N	77°40'59.5"E.	
Final meeting point	29°28'21.4"N	77°40'50.3"E.	
Length of drain	2.35 km		
Nature of drain	Domestic		
Parameters	Results		
pH	7.2		
BOD (mg/l)	222		
COD (mg/L)	656		
TSS (mg/L)	220		
T Coli (MPN /100ml)	1.6×10^6		

I. Nyajupura Road Drain (Muzaffarnagar)

a. Origin

Nyajupura Drain originates from Helmet of Nyajupura, Muzaffarnagar. Coordinates of its origin point are Latitude: 29°28'56.9"N & Longitude: 77°41'05.9"E.

b. Length covered

Nyajupura Drain covers distance of approx.: 2 km from its origin at Village Nyajupura, Muzaffarnagar.

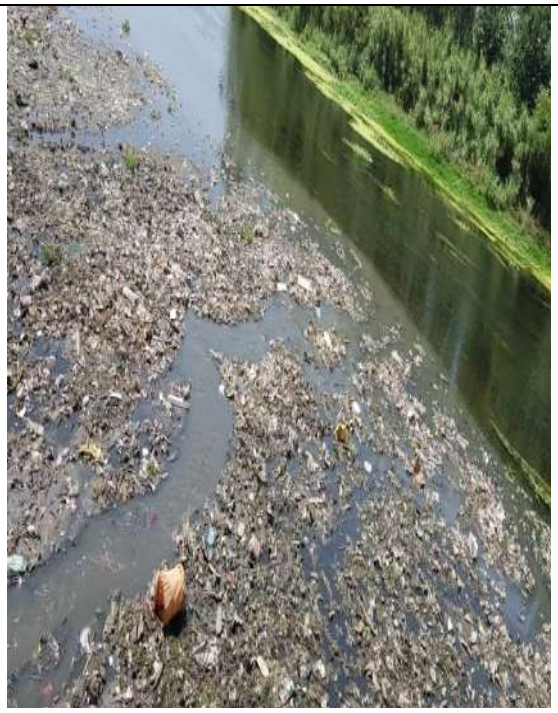
c. End Point

Nyajupura Drain meets River Kali West near Orchid Farms, Kali Devi Temple, Muzaffarnagar. Coordinate of the end point of the Nyajupura Drain is Latitude: 29°28'38.9"N & Longitude: 77°41'10.8"E.

d. Detail of industries & their effluent discharge in to the drain

There is no industrial effluent discharge in the Nyajupura Drain. Nyajupura Drain carries 3.16 MLD domestic discharge only.

WATER QUALITY AT MEETING POINT OF NYAJUPURA DRAIN		
	Lat	Long
Starting Point	29°28'56.9"N	77°41'05.9"E.
Final meeting point	29°28'38.9"N	77°41'10.8"E.
Length of drain	2.0 km	
Nature of drain	Domestic	
Parameters	Results	
pH	7.1	
BOD (mg/l)	251	
COD (mg/L)	816	
TSS (mg/L)	252	
T Coli (MPN /100ml)	9.2×10^5	



J. Suzru Village Drain (Muzaffarnagar)

a. Origin

Suzru Village Drain originates from mainly Village Suzru, Muzaffarnagar. Coordinates of its origin point are Latitude: 29°26'54.9"N & Longitude: 77°41'24.8"E.

b. Length covered

Suzru Village Drain covers distance of approx.: 1.1 km from its origin at Village Suzru, Muzaffarnagar.

c. End Point

Suzru Village Drain meets River Kali West near Nai Basti Road, Village Suzru, Muzaffarnagar. Coordinate of the end point of the Suzru Village Drain is Latitude: 29°27'03.2"N & Longitude: 77°40'36.1"E.

d. Detail of industries & their effluent discharge in to the drain

There is no industrial effluent discharge in the Suzru Village Drain. Suzru Village Drain carries 2.08 MLD domestic discharge only.

WATER QUALITY AT MEETING POINT OF SUZRU VILLAGE DRAIN			
	Lat	Long	
Starting Point	29°26'54.9"N	77°41'24.8"E.	
Final meeting point	29°27'03.2"N	77°40'36.1"E	
Length of drain	1.1 km		
Nature of drain	Domestic		
Parameters	Results		
pH	7.2		
BOD (mg/l)	200		
COD (mg/L)	688		
TSS (mg/L)	215		
T Coli (MPN /100ml)	2.6×10^6		

K. Nai Basti - Khalapar Drain (Muzaffarnagar)

a. Origin

Nai Basti - Khalapar Drain originates from Mohalla Kidwai Nagar, Muzaffarnagar. Coordinates of its origin point are Latitude: 29°27'29.0"N & Longitude: 77°41'12.8"E.

b. Length covered

Nai Basti - Khalapar Drain covers distance of approx.: 1.9 km from its origin at Mohalla Kidwai Nagar, Muzaffarnagar.

c. End Point

Nai Basti - Khalapar Drain meets River Kali West near Suzru Road, Village Suzru, Muzaffarnagar. Coordinate of the end point of the Nai Basti - Khalapar Drain is Latitude: 29°27'06.1"N & Longitude: 77°40'37.0"E.

d. Detail of industries & their effluent discharge in to the drain

There is no industrial effluent discharge in the Nai Basti - Khalapar Drain. It carries 1.71 MLD domestic discharge only.

WATER QUALITY AT MEETING POINT OF NAI BASTI – KHALAPAR DRAIN			
	Lat	Long	
Starting Point	29°27'29.0"N	77°41'12.8"E.	
Final meeting point	29°27'06.1"N	77°40'37.0"E.	
Length of drain	1.9 km		
Nature of drain	Domestic		
Parameters	Results		
pH	7.3		
BOD (mg/l)	216		
COD (mg/L)	672		
TSS (mg/L)	242		
T Coli (MPN /100ml)	2.2×10^7		

L. Laddawala Drain (Muzaffarnagar)

a. Origin

Laddawala Drain originates from Mohalla Rampuri and Janakpuri, Muzaffarnagar. Coordinates of its origin point are Latitude: 29°28'41.7"N & Longitude: 77°41'27.7"E.

b. Length covered

Laddawala Drain covers distance of approx.: 1.5 km from its origin at Mohalla Rampuri, Muzaffarnagar.

c. End Point

Laddawala Drain meets River Kali West near I.P.S.-1, downside of Orchid Farms Muzaffarnagar. Coordinate of the end point of the Laddawala Drain is Latitude: 29°28'33.1"N & Longitude: 77°41'09.5"E.

d. Detail of industries & their effluent discharge in to the drain

There is no industrial effluent discharge in the Laddawala Drain. It carries 20.43 MLD domestic discharge only.

WATER QUALITY AT MEETING POINT OF LADDAWALA DRAIN

	Lat	Long
Starting Point	29°28'41.7"N	77°41'27.7"E.
Final meeting	29°28'33.1"N	77°41'09.5"E.
Length of drain	1.5 km	
Nature of drain	Domestic	
Parameters	Results	
pH	7.1	
BOD (mg/l)	218	
COD (mg/L)	624	
TSS (mg/L)	210	
T Coli (MPN /100ml)	5.4×10^5	

M. Krishnapuri Drain (Muzaffarnagar)

a. Origin

Krishnapuri Drain originates from Town Hall Road Muzaffarnagar. Coordinates of its origin point are Latitude: 29°28'02.8"N & Longitude: 77°40'54.6"E.

b. Length covered

Krishnapuri Drain covers distance of approx.: 1.3 km from its origin at Town Hall Road, Muzaffarnagar.

c. End Point

Laddawala Drain meets River Kali West near Krishnapuri (West), Muzaffarnagar. Coordinate of the end point of the Krishnapuri Drain is Latitude: 29°28'06.5"N & Longitude: 77°40'51.6"E.

d. Detail of industries & their effluent discharge in to the drain

There is no industrial effluent discharge in the Krishnapuri Drain. It carries 16.83 MLD domestic discharge only. This drain carries the domestic discharge of Town Hall Road, Mahavir Chowk, Prakash Chowk, Shiv Chowk etc. through underground sewer line.

WATER QUALITY AT MEETING POINT OF KRISHNAPURI DRAIN

	Lat	Long
Starting Point	29°28'02.8"N	77°40'54.6"E.
Final meeting point	29°28'06.5"N	77°40'51.6"E.
Length of drain	1.3 km	
Nature of drain	Domestic	
Parameters	Results	
pH	7.1	
BOD (mg/l)	261	
COD (mg/L)	664	
TSS (mg/L)	212	
T Coli (MPN /100ml)	2.8×10^6	

N. Khadarwala Drain (Muzaffarnagar)

a. Origin

Khadarwala Drain originates from mainly Mohalla Khadarwala, Muzaffarnagar. Coordinates of its origin point are Latitude: 29°28'06.4"N & Longitude: 77°40'56.2"E.

b. Length covered

Khadarwala Drain covers distance of approx.: 0.5 km from its origin at Mohalla Khadarwala, Muzaffarnagar.

c. End Point

Khadarwala Drain meets River Kali West near Krishnapuri (West), Muzaffarnagar. Coordinate of the end point of the Khadarwala Drain is Latitude: 29°28'06.8"N & Longitude: 77°40'51.7"E.

d. Details of industries & their effluent discharge in to the drain

There is no industrial effluent discharge in the Khadarwala Drain. It carries 5.41 MLD domestic discharge only.

WATER QUALITY AT MEETING POINT OF KHADARWALA DRAIN

	Lat	Long
Starting Point	29°28'06.4"N	77°40'56.2"E.
Final meeting point	29°28'06.8"N	77°40'51.7"E.
Length of drain	0.5 km	
Nature of drain	Domestic	
Parameters	Results	
pH	6.9	
BOD (mg/l)	232	
COD (mg/L)	798	
TSS (mg/L)	218	
T Coli (MPN /100ml)	1.9×10^6	

O. Begrajpur/Dhandhera Drain (Muzaffarnagar)

a. Origin

Begrajpur/Dhandhera Drain originates from Bhopa Road near Bindals Papers Mills Ltd., Muzaffarnagar. Coordinates of its origin point are Latitude: 29°28'34.3"N & Longitude: 77°47'25.0"E.

b. Length covered

Begrajpur/Dhandhera Drain covers distance of approx.: 22 km from its origin at Bhopa Road near Bindals Papers Mills Ltd., Muzaffarnagar.

c. End Point

Begrajpur/Dhandhera Drain meets River Kali West near Village Begrajpur, Muzaffarnagar. Coordinate of the end point of the Begrajpur/Dhandhera Drain is Latitude: 29°21'53.4"N & Longitude: 77°41'20.0"E.

d. Detail of industries & their effluent discharge in to the drain

This is a Mixed drain. Treated industrial effluent 34.45 MLD is discharge into Drain from 41 industries . It also carries 22.25 MLD untreated domestic discharge. Total discharge in this drain is 56.7 MLD.

WATER QUALITY AT MEETING POINT OF BEGRAJPUR/DHANDHERA DRAIN

	Lat	Long
Starting Point	29°28' 34.3"N	77°47' 25.0"E.
Final meeting point	29°21' 53.4"N	77°41' 20.0"E.
Length of drain	22 km	
Nature of drain	Mixed	
Parameters	Results	
pH	6.9	
BOD (mg/l)	561	
COD (mg/L)	2486	
TSS (mg/L)	415	
T Coli (MPN /100ml)	1.1×10^5	

P. Mansurpur Drain (Muzaffarnagar)

a. Origin

Mansurpur Drain originates from Village Mansurpur, Muzaffarnagar. Coordinates of its origin point are Latitude: 29°21'17.6"N & Longitude: 77°43'06.6"E.

b. Length covered

Mansurpur Drain covers distance of approx.: 10 km from its origin at Village Mansurpur, Muzaffarnagar.

c. End Point

Mansurpur Drain meets River Kali West near Village Bopara, Muzaffarnagar. Coordinate of the end point of the Mansurpur Drain is Latitude: 29°21'32.7"N & Longitude: 77°41'16.8"E.

d. Detail of industries & their effluent discharge in to the drain

There are 02 industries in the catchment area of Mansurpur Drain. It carries 0.7 MLD treated industrial effluent. It also carries 0.2 MLD domestic discharge.

WATER QUALITY AT MEETING POINT OF MANSURPUR DRAIN			
	Lat	Long	
Starting Point	29°21'17.6"N	77°43'06.6"E.	
Final meeting point	29°21'32.7"N	77°41'16.8"E.	
Length of drain	10 km		
Nature of drain	Mixed		
Parameters	Results		
pH	7.0		
BOD (mg/l)	330		
COD (mg/L)	1387		
TSS (mg/L)	840		
T Coli (MPN /100ml)	1.0×10^5		

Q. Shamli Drain (Shamli)

a. Origin

Shamli Drain originates from City Shamli. Coordinates of its origin point are Latitude: 29°25'49.9"N & Longitude: 77°17'40.0"E.

b. Length covered

Shamli Drain covers distance of approx.: 12 km from its origin at City Shamli.

c. End Point

Shamli Drain meets River Krishni near Village Salpha, Shamli. Coordinate of the end point of the Shamli Drain is Latitude: 29°22'59.0"N & Longitude: 77°19'53.6"E.

d. Detail of industries & their effluent discharge in to the drain

There are 03 industries in the catchment area of Shamli Drain. It carries 2.35 MLD treated industrial effluent. It also carries 10 MLD untreated domestic discharge. Total discharge in to the Drain is 12.35 MLD.

WATER QUALITY AT MEETING POINT OF SHAMLI DRAIN			
	Lat	Long	
Starting Point	29°25'49.9"N	77°17'40.0"E.	
Final meeting point	29°22'59.0"N	77°19'53.6"E.	
Length of drain	12 km		
Nature of drain	Mixed		
Parameters	Results		
pH	7.4		
BOD (mg/l)	198		
COD (mg/L)	960		
TSS (mg/L)	837		
T Coli (MPN /100ml)	4.5×10^5		

R. Sikka Drain (Shamli)

a. Origin

Sikka Drain originates from mainly Village Sikka. Coordinates of its origin point are Latitude: 29°30'14.4"N & Longitude: 77°21'50.6"E.

b. Length covered

Sikka Drain covers distance of approx.: 5.5 km from its origin at Village Sikka, Shamli.

c. End Point

Sikka Drain meets River Krishni near Village Samaspur, Shamli. Coordinate of the end point of the Sikka Drain is Latitude: 29°28'37.0"N & Longitude: 77°22'00.9"E.

d. Detail of industries & their effluent discharge in to the drain

There is 01 industry namely M/s Maruti Papers Ltd., Village Sikka, Shamli in the catchment area of Sikka Drain, which is operated on ZLD. The Sikka drain carries approx. 0.5 MLD domestic discharge.

WATER QUALITY AT MEETING POINT OF SIKKA DRAIN			
	Lat	Long	
Starting Point	29°30'14.4"N	77°21'50.6"E.	
Final meeting point	29°28'37.0"N	77°22'00.9"E.	
Length of drain	5.5 km		
Nature of drain	Mixed		
Parameters	Results		
pH	7.1		
BOD (mg/l)	202		
COD (mg/L)	1040		
TSS (mg/L)	492		
T Coli (MPN /100ml)	3.0×10^5		

S. Titawi Drain (Muzaffarnagar)

a. Origin

Titawi Drain originates from Village Titawi. Coordinates of its origin point are Latitude: 29°28'37.8"N & Longitude: 77°31'49.0"E.

b. Length covered

Titawi drain covers distance of approx.: 3.5 km from its origin at Village Titawi, Muzaffarnagar.

c. End Point

Titawi drain meets River Hindon near Village Titawi, Muzaffarnagar. Coordinate of the end point of the Titawi Drain is Latitude: 29°28'49.3"N & Longitude: 77°31'13.3"E.

d. Detail of industries & their effluent discharge in to the drain

There is 01 industry in the catchment area of Titawi Drain. It carries 0.8 MLD treated industrial effluent. It also carries approx. 0.3 MLD domestic discharge. Total discharge in to the Drain is 1.1 MLD.

WATER QUALITY AT MEETING POINT OF TITAWI DRAIN			
	Lat	Long	
Starting Point	29°28'37.8"N	77°31'49.0"E.	
Final meeting point	29°28'49.3"N	77°31'13.3"E.	
Length of drain	3.5 km		
Nature of drain	Mixed		
Parameters	Results		
pH	7.1		
BOD (mg/l)	147		
COD (mg/L)	1160		
TSS (mg/L)	1320		
T Coli (MPN /100ml)	1.2×10^5		

T. Ramala Drain (Baghpat)

a. Originate

Ramala Drain originates from Kandhla, Uttar Pradesh. Coordinates of its origin point are Latitude: 29°19'9.42"N & longitude: 77°16'24.62"E.

b. Length covered

Ramala Drain covers distance of approx.: 17.10 km from its origin at Kandhla, Uttar Pradesh.

c. End Point

Ramala Drain meets to the Hindon River near Gopalpur Khadana, Baghpat, Uttar Pradesh. Coordinate of the end point of the Ramala drain is Latitude: 29°13'16.36"N & Longitude: 77°19'0.56"E.

d. Details of Industry & Discharge their effluent to the drain

Only 01 Sugar industry M/s Ramala Sahkari Chini Mill, Ramala Baghpat discharges its effluent into the Ramala Drain. Total industrial effluent discharge from Ramala drain to River Krishni is 0.50 MLD.

WATER QUALITY OF RAMALA DRAIN

	Lat	Long
Starting Point	29°19' 9.42"N	77°16' 24.62"E
Final meeting point	29°13' 16.36"N	77°19' 0.56"E
Length of drain	17.10 km	
Nature of drain	Industrial	
Parameters	Results	
pH	7.3	
BOD (mg/l)	38	
COD (mg/L)	280	
TSS (mg/L)	84000	

U. Sardhana Drain (Meerut)

a. Origin

Sardhana Drain originates from Meerut Road, Sardhana, Uttar Pradesh. Coordinates of its origin point are Latitude: 29°8'26.97"N & longitude: 77°36'48.22"E.

b. Length covered

Sardhana drain covers distance of approx.: 22.5 km from its origin at Meerut Road, Sardhana, Uttar Pradesh.

c. End Point

Sardhana Drain meets Hindon River near Hasanpur, Razapur, Uttar Pradesh. Coordinate of the end point of the Sardhana drain is Latitude: 29°4'28.32"N & Longitude: 77°22'44.22"E.

d. Details of Industry & discharge of their effluent to the drain

Total 02 industries discharge their effluent into the Sardhana Drain . Sardhana Drain carries mixed effluent. Total industrial effluent discharge from Sardhana drain to River Hindon is 1.26 MLD. Total 10 MLD untreated domestic effluent is being discharge into River Hindon without any treatment.

WATER QUALITY AT MEETING POINT OF SARDHANA DRAIN

	Lat	Long
Starting Point	29° 8'26.97"N	77°36'48.22"E
Final meeting point	29° 4'28.32"N	77°27'44.22"E
Length of drain	22.5 km	
Nature of drain	Mixed	
Parameters	Results	
pH	7.8	
BOD (mg/l)	86	
COD (mg/L)	372	
TSS (mg/L)	210000	

V. Kinauni Drain (Meerut)

a. Origin

Kinoni Drain originates from Kinauni, Uttar Pradesh. Coordinates of its origin point are Latitude: 29°3'20.42"N & longitude: 77°27'43.73"E.

b. Length Covered

Kinoni Drain covers distance of approx.: 1.0 km from its origin at Kinauni, Uttar Pradesh.

c. End Point

Kinoni Drain meets Hindon River near Jainuddin, Chirchiya, Uttar Pradesh. Coordinate of the end point of the Kinoni Drain is Latitude: 29°3'7.44"N & Longitude: 77°27'17.09"E.

d. Details of Industry & discharge of their effluent to the drain

02 industries discharge their effluent into the Kinoni Drain namely- Bajaj Hindustan Ltd, (Sugar Unit & Distillery unit). Kinoni Drain carries industrial effluent. Total industrial effluent discharge from Kinoni Drain to Hindon River is 1.2 MLD. Industrial effluent is being treated before discharging into the Hindon River.

WATER QUALITY AT MEETING POINT OF KINONI DRAIN

	Lat	Long
Starting Point	29° 3'20.42"N	77°27'43.73"E
Starting Point	29° 3'7.44"N	77°27'17.09"E
Final meeting point	1.0 km	
Length of drain	Industrial	
Nature of drain	Results	
Parameters	7.3	
pH	38	
BOD (mg/l)	280	
COD (mg/L)	690	
TSS (mg/L)	84000	

W. Jawali Drain (Ghaziabad)

a. Origin

Jawali Drain originates from Sharfuddin Javli, Uttar Pradesh. Coordinates of its origin point are Latitude: 28°45'23.97"N & longitude: 77°20'15.90"E.

b. Length covered

Jawali Drain covers distance of approx.: 5.37 km from its origin at Sharfuddin Javli, Uttar Pradesh.

c. End Point

Jawali Drain meets Hindon River near Mahmoodpur, Ghaziabad. Coordinate of the end point of the Jawali Drain are Latitude: 28°44'25.43"N & Longitude: 77°23'15.33"E.

d. Details of Industries & discharge their effluent to the drain

152 industries discharge their effluent into the Jawali Drain. Out of 152 industries, 141 are Textiles , 01 Slaughter House and 10 are miscellaneous industries. Jawali Drain carries mixed effluent. Total industrial effluent discharge from Jawali Drain to Hindon River is 2.422 MLD. Industrial effluent is being treated before discharging into the Hindon River.

WATER QUALITY AT MEETING POINT OF JAWALI DRAIN			
	Lat	Long	
Starting Point	28°45' 23.97"N	77°20' 15.90"E	
Final meeting point	28°44' 25.43"N	77°23' 15.33"E	
Length of drain	5.37 km		
Nature of drain	Industrial		
Parameters	Results		
pH	7.9		
BOD (mg/l)	50.0		
COD (mg/L)	113.0		
TSS (mg/L)	160.0		
T Coli (MPN /100ml)	1.6×10^6		

X. Hindon Vihar Drain (Ghaziabad)

a. Origin

Hindonvihar Drain originates from Hindon Vihar, Ghaziabad. Coordinates of its origin point are Latitude: 28°40'31.09"N & longitude: 77°25'2.30"E.

b. Length covered

Hindonvihar Drain covers distance of approx.: 2.73 km from its origin at Hindon Vihar, Ghaziabad.

c. End Point

Hindonvihar Drain meets Hindon River near Raj Nagar Extension, Ghaziabad. Coordinates of the end point of the Hindonvihar drain are Latitude: 28°40'55.37"N & Longitude: 77°24'1.74"E.

d. Details of Industries & discharge their effluent to the drain

Hindonvihar Drain carries domestic wastewater. Total domestic wastewater discharge into Hindonvihar drain is 7.0 MLD. Domestic effluent is being discharged into Hindon River without any treatment.

WATER QUALITY AT MEETING POINT OF HINDON VIHAR DRAIN

	Lat	Long
Starting Point	28°40'31.09"N	77°25'2.30"E
Final meeting point	28°40'55.37"N	77°24'1.74"E
Length of drain	2.73 km	
Nature of drain	Domestic	
Parameters	Results	
pH	7.8	
BOD (mg/l)	120.0	
COD (mg/L)	384.0	
TSS (mg/L)	343.0	
T Coli (MPN /100ml)	2.1×10^5	

Y. Meerut Road Kaila Bhatta Road Drain (Ghaziabad)

a. Origin

Meerut road kailabhatta road drain originates from Madhopura, Ghaziabad. Coordinates of its origin point are Latitude: 28°39'57.56"N & longitude: 77°24'37.63"E.

b. Length covered

Meerut road kailabhatta road drain covers distance of approx.: 1 km from its origin at Madhopura, Ghaziabad.

c. End Point

Meerut road kailabhatta road drain Drain meets Hindon River near Madhopura, Ghaziabad. Coordinate of the end point of the Meerut road kailabhatta road drain is Latitude: 28°40'1.27"N & Longitude: 77°24'5.77"E.

d. Detail of Industries & Discharge of their effluent to the drain

21 industries discharge their effluent into the Meerut road kailabhatta road drain. Out of 21 industries, textile-02, slaughter house-03, Pulp & Paper and Tannery- 01 each, metal surface treatment-10 and 04 are miscellaneous industries. Meerut road kailabhatta road drain carries mixed effluent. Total industrial effluent discharge from Meerut road kailabhatta road drain to Hindon River is 1.933 MLD. Industrial effluent is being treated before discharging into the Hindon River. 16 MLD untreated sewage is being discharged in to the drain.

WATER QUALITY AT MEETING POINT OF MEERUT ROAD KAILABHATTA ROAD DRAIN

	Lat	Long
Starting Point	28°39' 57.56"N	77°24' 37.63"E
Final meeting point	28°40' 1.27"N	77°24' 5.77"E
Length of drain	1 km	
Nature of drain	Mixed	
Parameters	Results	
pH	6.1	
BOD (mg/l)	142.0	
COD (mg/L)	287.0	
TSS (mg/L)	280.0	
T Coli (MPN /100ml)	2.2×10^6	

Z. Arthala Drain (Ghaziabad)

a. Origin

Arthala Drain originates from Vasundhara, Ghaziabad. Coordinates of its origin point are Latitude: 28°40'6.17"N & longitude: 77°23'29.91"E.

b. Length covered

Arthala Drain covers distance of approx.: 1.12 km from its origin at Vasundhara, Ghaziabad.

c. End Point

Arthala Drain meets Hindon River near Kinauni village, Indirapuram, Ghaziabad. Coordinates of the end point of the Arthala drain are Latitude: 28°39'44.18"N & Longitude: 77°23'52.35"E.

d. Details of Industries & Discharge their effluent to the drain

02 industries (01 Bottling plant and 01 Metal Surface Treatment) discharge their effluent into the Arthala Drain. Arthala Drain carries mixed effluent. Total industrial effluent discharge from Arthala Drain to Hindon River is 0.263 MLD. Industrial effluent is being treated before discharging into the Hindon River.

WATER QUALITY AT MEETING POINT OF ARTHALA DRAIN			
	Lat	Long	
Starting Point	28°40'6.17"N	77°23'29.91"E	
Final meeting	8°39'44.18"N	77°23'52.35"E	
Length of drain	1.12 km		
Nature of drain	Industrial		
Parameters	Results		
pH	7.2		
BOD (mg/l)	162.0		
COD (mg/L)	223.0		
TSS (mg/L)	170.0		
T Coli (MPN /100ml)	4.3×10^7		

AA. Indirapuram Drain (Ghaziabad)

a. Origin

Indirapuram Drain originates from Model Town Underpass, Ghaziabad. Coordinates of its origin point are Latitude: 28°37'58.02"N & longitude: 77°22'25.91"E.

b. Length covered

Indirapuram Drain covers distance of approx.: 1.89 km from its origin at Model Town Underpass, Ghaziabad.

c. End Point

Indirapuram Drain meets Hindon River near Indirapuram, Ghaziabad. Coordinate of the end point of the Indirapuram drain is Latitude: 28°38'10.50"N & Longitude: 77°23'32.85"E.

d. Details of Industries & Discharge of the effluent to the drain

Indirapuram Drain carries domestic wastewater. Total mixed effluent discharge from Indirapuram Drain to Hindon River is 112 MLD. Domestic effluent is being treated in 2 STPs having capacity of 56 MLD each.

WATER QUALITY AT MEETING POINT OF INDIRAPURAM DRAIN

	Lat	Long
Starting Point	28°37' 58.02"N	77°22' 25.91"E
Final meeting point	28°38' 10.50"N	77°23' 32.85"E
Length of drain	1.89 km	
Nature of drain	Mixed	
Parameters	Results	
pH	7.2	
BOD (mg/l)	70.0	
COD (mg/L)	150.0	
TSS (mg/L)	250.0	
T Coli (MPN /100ml)	1.6×10^7	

BB. Pratap Vihar Drain (Ghaziabad)

a. Originate

Pratap Vihar Drain originates from Advocate Colony, Pratap Vihar, Ghaziabad. Coordinates of its origin point are Latitude: 28°38'39.32"N & longitude: 77°24'55.05"E.

b. Length covered

Pratap Vihar Drain covers distance of approx.: 2.9 km from its origin at Advocate Colony, Pratap Vihar, Ghaziabad.

c. End Point

Pratap Vihar Drain meets Hindon River near Budh Vihar, Behrampur, Ghaziabad. Coordinate of the end point of the Pratap Vihar drain are Latitude: 28°38'8.29"N & Longitude: 77°23'43.39"E.

d. Detail of Discharge of wastewater to the drain

Pratap Vihar Drain carries domestic wastewater only. Total domestic wastewater discharge from Pratap Vihar Drain to Hindon River is 40.0 MLD. Domestic effluent is being discharged into Hindon River without any treatment.

WATER QUALITY AT MEETING POINT OF PRATAP VIHAR DRAIN			
	Lat	Long	
Starting Point	8°38' 39.32"N	77°24' 55.05"E	
Final meeting point	28°38' 8.29"N	77°23' 43.39"E	
Length of drain	2.9 km		
Nature of drain	Domestic		
Parameters	Results		
pH	7.9		
BOD (mg/l)	100.0		
COD (mg/L)	165.0		
TSS (mg/L)	300.0		
T Coli (MPN /100ml)	3.5×10^6		

CC. Dasna Drain (Ghaziabad)

a. Origin

Dasna Drain originates from Kavi Nagar Industrial Area, Ghaziabad. Coordinates of its origin point are Latitude: 28°39'21.70"N & longitude: 77°27'7.10"E.

b. Length covered

Dasna Drain covers distance of approx.: 8.83 km from its origin at Kavi Nagar Industrial Area, Ghaziabad.

c. End Point

Dasna Drain meets Hindon River near Yusufpur, Nai Basti Dundahera, Ghaziabad. Coordinate of the end point of the Dasna drain is Latitude: 28°36'24.34"N & Longitude: 77°25'18.74"E.

d. Detail of industries & their effluent discharge in to the drain

45 industries (Textile-06, Slaughter House-06, Meat Processing-03, Tannery-02, Pulp & Paper-01, Metal SurfaceTreatement-23, Others-04) discharge their effluent into the Dasna Drain. Total industrial effluent discharge from Dasna Drain to Hindon River is 3.697 MLD. Industrial effluent is being treated before discharging into the Hindon River. 47 MLD Domestic effluent is being discharged into Hindon River without any treatment.

WATER QUALITY AT MEETING POINT OF DASNA DRAIN			
	Lat	Long	
Starting Point	28°39'21.70"N	77°27'7.10"E	
Final meeting point	28°36'24.34"N	77°25'18.74"E	
Length of drain	8.83 km		
Nature of drain	Mixed		
Parameters	Results		
pH	7.6		
BOD (mg/l)	299.0		
COD (mg/L)	152.0		
TSS (mg/L)	210.0		
T Coli (MPN /100ml)	9.2×10^6		

DD. Karedha Drain (Ghaziabad)

a. Origin

Karedha Drain originates from Loni Industrial Area, Ghaziabad. Coordinates of its origin point are Latitude: 28°41'3.43"N & longitude: 77°22'53.33"E.

b. Length covered

Karedha Drain covers distance of approx.: 0.85 km from its origin at Loni Nagar Industrial Area, Ghaziabad.

c. End Point

Karedha Drain meets Hindon River near Loni Bypass Road, Ghaziabad. Coordinate of the end point of the Karedha drain is Latitude: 28°41'6.72"N & Longitude: 77°23'29.46"E.

d. Detail of Industry & Discharge of their effluent to the drain

19 industries (Textile-15, Metal Surface Treatment-03, Pulp & Paper-01) discharge their effluent into the Karedha Drain. Karedha Drain carries treated industrial effluent. Total industrial effluent discharge from Karedha Drain to Hindon River is 1.657 MLD. Industrial effluent is being treated before discharging into the Hindon River. 02 MLD Domestic effluent is being discharged into Hindon River without any treatment.

WATER QUALITY AT MEETING POINT OF KAREDHA DRAIN

	Lat	Long
Starting Point	28°41' 3.43"N	77°22' 53.33"E
Final meeting point	28°41' 6.72"N	77°23' 29.46"E
Length of drain	0.85 km	
Nature of drain	Mixed	
Parameters	Results	
pH	7.3	
BOD (mg/l)	225.0	
COD (mg/L)	464.0	
TSS (mg/L)	160.0	
T Coli (MPN /100ml)	X 10^6	

EE. Sahibabad Drain (Note – It meets Yamuna River via Shahdara Drain at Okhla)

a. Origin

Sahibabad Drain originates from Tulsi Niketan (Near Delhi border), Ghaziabad.

b. Length covered

Sahibabad Drain covers distance of approx.: 16 km from its origin at Tulsi Niketan (Near Delhi border).

c. End Point

Sahibabad Drain meets Shahdara Drain at Gazipur Shamshan Ghat and finally it meets Yamuna River at Okhla.

d. Detail of industries & their effluent discharge in to the drain

114 industries (Textile-74, Meat Processing-09, Metal Surface Treatement-24, Pulp & Paper-01, Others-06) discharge their effluent into the Sahibabad Drain. Sahibabad Drain carries treated industrial effluent. Total industrial effluent discharge from Sahibabad Drain to Yamuna River is 8.797 MLD and domestic discharge around 157.203 MLD. This drain is partially tapped, 74 MLD mixed effluent is pumped to STP Indirapuram (capacity 74 MLD) which ultimately meets river Hindon, remaining 92 MLD mixed effluent is being discharged in to Shadara Drain which ultimately finds its way to River Yamuna.

WATER QUALITY AT MEETING POINT OF SHAIBABAD DRAIN

	Lat	Long
28°41' 53"N	77°19' 29"E	
28°69' 86"N	77°32' 45"E	
Length of drain	16 Km	
Nature of drain	Mixed	
Parameters		
pH	7.8	
BOD (mg/l)	250.0	
COD (mg/L)	380.0	
TSS (mg/L)	350.0	
T Coli (MPN /100ml)	1.7 x106	

(at partial tapping point)

3.2 DETAILS OF SEWAGE POLLUTION SOURCES

As mentioned above total sewage discharged into Hindon river including its tributaries Kali (West) and Krishni thorough 31 major drains (domestic and mixed) is approximately 674.033 MLD. There are 06 districts namely Saharanpur, Muzaffarnagar, Shamli, Meerut , Baghpat and Ghaziabad are located in the catchment area of the designated stretch of River Hindon from Saharanpur to Ghaziabad **(Appendix – 2).** The sewage and other effluent generated from these cities contribute to the organic load of the river. As mentioned earlier the treatment of sewage is a major issue of concern as the total installed capacity of the 10 Sewage Treatment Plants (STP) is 524.5 MLD out of which only 224 MLD is utilized for treatment of sewage. This indicates that the treatment facility available is only about 45% which is not fully utilized owing to incomplete household sewer connections and connectivity of conveyance channel to the Sewage Treatment Plants. The details of Sewage Treatment Plants along with installed capacity, utilized capacity, operating agency and discharge point is given in the table below:-

Details of Plan for treatment of sewage gap in river Hindon and it tributaries priority stretch from Saharanpur to Ghaziabad.

Sl. No.	District	Name of Drain (City)	Details of STPs proposed		Details of DPR				Expected date of completion
			Name	Capacity (in MLD)	Status (under preparation / prepared)	Amount of DPR (Rs. in crore)	Status of approval (submitted /approved)	Funding Agency	
1	Saharanpur	Saharanpur	-	93.65	Under preparation by WEPCOS	-	-	-	-
2	Budhana	Budhana	-	10	-	48.76	Approved	NMCG	-
3	Muzaffar nagar	Muzaffar nagar	-	22+32.5 (additional to existing 32.5 MLD)	-	231.79	Approved	NMCG	24 months from date of sanctioned (date of sanction is 21.01.2019)

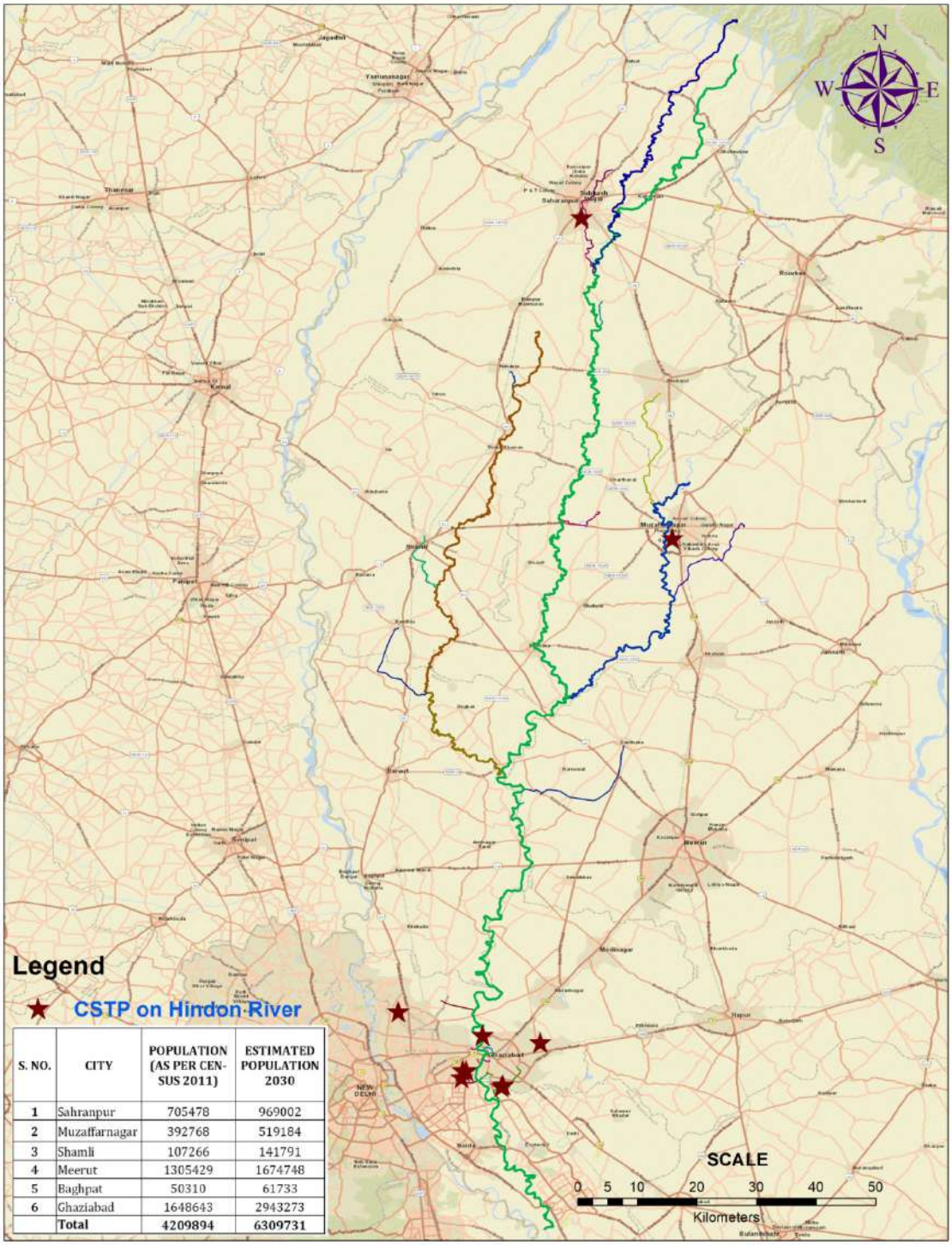
Source :SMCG.

3.3 Details of STPs

S.No.	District	Name of STP	Location		Installed Capacity (MLD)	Utilized Capacity (MLD)	Capacity Utilized (%)	Operating Govt. Agency	Discharge Drain
			Latitude	Longitude					
1	Sahranpur	01 (Mahilpur Road, Saharanpur)	29°56’18.13”N	77°32’57.58”E	38	38	100%	Nagar Nigam	Dhamola River
2	Muzaffarnagar	S.T.P. Nagar Palika Parishad	29°27'25.7"N	77°41'06.5"E	32.5	0	0%	Nagar Palika	River Kali West
3	Ghaziabad	74MLD, Indirapuram, Ghaziabad	28°38'25.78"N	77°22'7.31"E	74	46	62.0%	Jal Nigam	Indrapuram drain
4	Ghaziabad	56 MLD, Trans Hin Indirapuram, Ghaziabad	28°39'02.1"N	77°22'32.2"E	56	30	53%	Nagar Nigam	Indrapuram drain
5	Ghaziabad	56 MLD, Indirapuram, Ghaziabad	28°39'04.2"N	77°2215.1"E	56	35	62.5%	G	Indrapuram drain
6	Ghaziabad	56 MLD, Dudahaida Vijay Nagar Ghaziabad	28°37'37.4"N	77°26'16.0"E	56	10	18%	Nagar Nigam	Dasna drain
7	Ghaziabad	70 MLD Dudahaida Vijay Nagar Ghaziabad	28°37'26.8"N	77°26'10.1"E	70	35	50%	Nagar Nigam	Dasna drain

8	Ghaziabad	56 MLD, Govindpuram, Ghaziabad	28°41'35.6"N	77°29'11.1"E	56	12	21%	GDA	Dasna Drain
9	Ghaziabad	56 MLD, , Morty, Ghaziabad	28°42'15.8"N	77°24'01.7"E	56	14	25%	GDA	Hindon River at Raj Nagar Ext.
10	Ghaziabad	30 MLD Sadullabad, Loni	28°44'54.9"N	77°16'19.5"E	30	4	13%	Jal Nigam	Bazirabad outlet drain
					524.5	**224**	**43%**		

Source : Desk Inventory of UPPCB.



S. NO.	CITY	POPULATION (AS PER CENSUS 2011)	ESTIMATED POPULATION 2030
1	Sahranpur	705478	969002
2	Muzaffarnagar	392768	519184
3	Shamli	107266	141791
4	Meerut	1305429	1674748
5	Baghpat	50310	61733
6	Ghaziabad	1648643	2943273
	Total	4209894	6309731

Fig : 3.2, GIS map showing STPs and drain

Analysis of gap generated in Sewage Treatment based on projection of Population for Year 2030 in the catchment of River Hindon

Hindon

S. NO.	CITY	POPULATION (AS PER CENSUS 2011)	ESTIMATED POPULATION 2030	WATER CONSUMPTION (MLD) (@135 LPCD)	SEWAGE GENERATION (MLD)	INSTALLED CAPACITY OF EXISTING STP (MLD)	PROPOSED STP CAPACITY (MLD)	GAP IN STP CAPACITY UTILIZATION (MLD)
1	Sahranpur	705478	969002	130.82	104.65	38	93.65	N/A
2	Muzaffarnagar	392768	519184	70.09	56.07	32.5	32	N/A
3	Shamli	107266	141791	19.14	15.31	N/A	N/A	15.31
4	Sardhana * (Meerut)	58252	74732	10.09	8.07	N/A	N/A	8.07
5	Baghpat	50310	61733	8.33	6.67	N/A	N/A	6.67
6	Ghaziabad	1648643	2943273	397.34	317.87	454	N/A	N/A
	Total	**2962717**	**4709715**	**635.81**	**508.65**	**524.5**	**125.65**	**30.05**

There are 6 Cities and Towns situated in the catchment area of Polluted Stretch of River Hindon. Estimated Sewer Generation on the basis of Census 2030 is 508.65 MLD. The installed capacity of existing STPs is 524.5 MLD and 125.65 MLD capacity STPs are proposed to be installed in Saharanpur & Muzaffarnagar but there is a gap in the treatment of Sewage Generated is 30.05 MLD and STPs to be installed at Shamli, Sardhana (Meerut) and Baghpat.

* Hindon river is far away from Meerut town and most of the drains carrying sewage are meeting river Kali (East) hence only for Sardhana town population wise gap analysis of sewage has been included above table.

3.4 DETAILS OF WASTE MANAGEMENT

3.4 (a) Municipal Solid Waste

There are 06 district areas namely Saharanpur, Muzaffarnagar, Shamli, Meerut , Baghpat and Ghaziabad are located in the catchment area of the river, Total 2255.1 TPD Solid Waste is generated.There is only 01 Solid Waste Treatment & Disposal Facility is operating at Muzaffarnagar having treatment capacity of 120 TPD. All these Cities/ULBs except Baghpat have been declared ODF by QCI and the Cities/ ULBS are practising door to door collection to a large extent for collection of waste , however lack of Municipal Solid Waste Treatment & Disposal Facility is a major area of concern for maintaining the water quality of the river stretch under consideration. The details of city wise municipal solid waste generation are given below:

S. No.	District	Waste generated (TPD)	Waste Collected (TPD)	Treatment Capacity (TPD)	Gap between waste generated & treatment capacity available (TPD)	Remarks
1	Sahranpur	371.1	371.1	-	371.1	As of now the msw processing facility is not established /functional in the ULBs. For city of Merrut/Gaziabad and Muzzafarnagar, the department has issued a LoA for setting up of WtE plants, however, it is required to work on decentralized processing of waste till the WtE plants are established
2	Muzaffarnagar	230.8	230.8	120	110.8	
3	Shamli	135.2	135.2	-	135.2	
4	Meerut (Only Sardhana)	22.82	22.82	-	22.82	
5	Baghpat	19	19	-	19	
6	Ghaziabad	1000	1000	-	1000	
	Total	**1778.92**	**1778.92**	**120**	**1658.92**	

There is no open dumping site has been identified by the Board with in 500 Meters from the edge of the River. There are 90 villages located on the banks of this Priority-1 polluted stretch of river River Hindon from Saharanpur to Ghaziabad.The total population of these villages is 3,80,155 which generate 86.504 TPD of un-segregated solid waste. This un-segregated solid waste is dumped in open plots or ponds/low lying areas in the villages which contribute air and ground water pollution. Details of villages, their location, population etc. is given in **Appendix –4.** The details of existing wetlands are given in **Appendix – 5**.

Gap Analysis of Municipal Solid Waste Treatment based on Year 2030 Population in the catchment of River Hindon

S. NO.	CITY	POPULATION (AS PER CENSUS 2011)	ESTIMATED POPULATION 2030	ESTIMATED MSW GENERATION YEAR 2030 (TPD)	AVAILABLE PROCESSING FACILITY (TPD)	GAP (TPD)	PRAPOSED PROCESSING FACILITY & TIMELINE
1	Sahranpur	705478	969002	339.15	NO	339.15	1 YEAR AS PER APENDIX-8
2	Muzaffarnagar	392768	519184	181.71	120	61.71	
3	Shamli	107266	141791	49.63	NO	49.63	
4	Sardhana (Meerut)	58252	74732	26.16	NO	26.16	
5	Baghpat	50310	61733	21.61	NO	21.61	
6	Ghaziabad	1648643	2972718	1040.45	NO	1040.45	
	Total	**2962717**	**4739160**	**1658.71**	**120**	**1538.70**	

There are 6 Cities and Towns situated at the catchment area of Polluted Stretch of Hindon and its tributaries. Estimated MSW Generation on the basis of Estimated population in year 2030 is 1658.71 TPD. At present there is only 01 MSW processing facility available in Muzaffarnagar. Therefore, gap of 1538.70 TPD exists in the catchment area of polluted River Stretch.

3.4 (b) Bio-Medical Waste

There are 08 district areas namely Saharanpur, Muzaffarnagar, Shamli, Meerut , Baghpat Ghaziabad are located in the catchment area of the river , there are 2544 Health Care Facilities which generate 3593 Kg/Day of Bio-Medical Waste. . All the Health Care Facilities have valid agreements with 02 Common Bio-Medical Waste Treatment Facilities situated in Meerut and Ghaziabad for collection, transportation and disposal of Bio-Medical Waste.

The segregation of Bio-Medical Waste and disposal in the CBWTFs as per the provisions of Bio-Medical Waste Management Rules, 2016 is a major area of concern. The mixing of Bio-Medical Waste with Municipal Solid Waste is also observed which also needs to be addressed.

The details of Bio-Medical Waste generated in the Cities/Towns and details of Common Bio-Medical Waste Treatment Facilities are given below:

S. No.	District	Total No. of H.C.Fs	Bio Medical Waste generated (Kg/Day)	Bio Medical Waste Treated (Kg/Day)	No. of HCFs attached with CBWTF	No. of HCFs having captive treatment facility	Gap between waste generated & treatment capacity available (Kg/Day)	Remarks
1.	Saharanpur	174	301	301	174	Nil	Nil	All the HCFs are Members of CBWTF
2.	Muzaffarnagar	157	26	26	157	Nil	Nil	All the HCFs are Members of CBWTF
3.	Shamli	46	89	89	46	Nil	Nil	All the HCFs are Members of CBWTF
4.	Meerut	440	764	764	440	Nil	Nil	All the HCFs are Members of CBWTF
5.	Baghpat	66	52	52	66	Nil	Nil	All the HCFs are Members of CBWTF
6.	Ghaziabad	1661	2361	2361	1661	Nil	Nil	All the HCFs are Members of CBWTF
	Total	2544	3593	3593	2544	Nil	Nil	

Source: *Desk Inventory of UPPCB*

Details of Bio-Medical Waste Treatment Facilities

S.N.	Name of the CBWTF 52perator connect No. & Address	Total No. Of HCFs Being Covered	Coverd District	Treatment facility available			BMW Treatment capacity Kg/day	Number of Vehicles	Status of On Line Continuous Emission Monitoring System & Connectivity	Validity of issued Authorization
				Incinerator	Auto Clave	Shredder				
1	2	3	4	5	6	7	8	9	10	11
1	M/s Semb Remky. Environmental Management Pvt. Ltd. C-21 Phas-1 Masuri Gulowthi Road, UPSIDC, Ghaziabad, Phone no.-91203250674, Fax no-0120 2678917	875	Gaziabad, Noida Hapur, Moradabad, Meerut, J.P. Nagar, Chandausi, Sambhal	150 kg/hr	430 ltr/shift	50 kg/hr	4500	13 (GPS in 13 vehicles)	Installed & Connected	31.12.2023
2	M/s Synergy Waste Management (p) Ltd. 011-26933371 Subharti Medical College, Subharti Puram, Meerut	1537	G.B. Nagar Gaziabad Hapur Bulandshaher Bijnor Meerut Shamli Bagpat Muzaffarnagar Saharanpur	300 kg/hr	300 kg/batch	300 kg/hr	4000	20 with GPS & hologram	Installed & Connected	31.12.2019

Source: Desk Inventory of UPPCB

3.4 (c) Hazardous Waste

The total hazardous waste generation in the catchment area of the stretch from Saharanpur to Ghaziabad 608 industrial units is generating approximately 63,982.615 Ton/Annum which is collected, treated and disposed by 02 Common Facilities located near Kanpur Dehat. The details of Hazardous Waste generated and the treatment facilities are given below.

S.No.	District	Total No. of Hazardous Waste Generating Units	Hazardous Waste Generated (TPA)				Facility for Treatment & Disposal of Hazardous Waste	Gap between waste generated & treatment capacity available (TPA)	Remarks
			Incinerable	Landfillable	Recyclable	Total			
1.	Saharanpur	30	21.375	6155.995	00	6177.37	The Incinerable & Landfillable Hazardous waste is disposed to authorized TSDFs 1- U.P. Waste Management Project, Kanpur Dehat. 2- Bharat Oil & Waste Management, Kanpur Dehat		
2.	Muzaffarnagar	80	22.50	3281.25	3.50	3307.25		There is no Gap between generation & disposal of Hazardous Waste	
3.	Shamli	10	00	399	00	399			
4.	Meerut	96	358.781	19,35.809	1057.50	3352.09			
5.	Baghpat	35	00	28.54	00	28.54			
6.	Ghaziabad	357	3934.90	7120.504	39,662.961	50718.365			
	Total	608	43,37.556	18,921.098	40,723.961	63982.615			

3.4 (d) E-Waste

In the State, total 43 Common E- Waste Disposal Facilities are operational. Out of these, 10 units are collection center, 16 have the facility of collection & dismantling whereas remaining 17 are collection, dismantling and recycling centers. The cumulative capacity of these plants- 2,48,000/annum. The quantum of E-Waste generated in the State is approximately 86,000 TPA. Hence, there is no gap in the generation and treatment infrastructure for safe E-Waste handling as per the provisions of E-Waste Rules, 2016. The status report of E-Waste disposal facilities in the State is enclosed at **Appendix–6.**

4. DETAILS OF INDUSTRIAL POLLUTION SOURCES

There are 453 water polluting industries located in the catchment area of the present stretch of Hindon river including its tributaries Kali (West) and Krishni **Appendix -3.** These industries have effluent treatment plants and their treated effluent is discharged through 31 drains, out of which 07 are entirely industrial drain and 15 drains are mixed drains where treated industrial effluent is mixed with the sewage and remaining 09 drains are purely sewage carrying drains. The industries are grossly polluting in nature which mainly belongs to Sugar, Pulp & Paper, Distillery, Textile, Slaughter House etc.

There is a textile industrial cluster in Tronica City, Loni. CETP Tronica City, Loni, Ghaziabad which was installed by UPSIDC for treatment of industrial effluent of 55 textile units situated in Apparel Park, Tronica City, Loni, Ghaziabad. Since this CETP was not functioning properly so the Board has issued closure order against this CETP and its 28 functional member units. The State Board has issued the consent to operate under Water and Air Act to a new 06 MLD CETP which has resently been commissioned at Apparel Park, Tronica City, Loni, Ghaziabad. The new 06 MLD CETP is still under stabilization.

The drain wise and sector wise distribution of industries and their GIS Mapping is shown below in Fig 4.1,4.2,4.3,4.4 estimated treated effluent discharge and details of CETP is given in the tables below:

The drain wise and sector wise distribution of industries and their estimated treated effluent discharge and details of CETP is given in the tables below:-

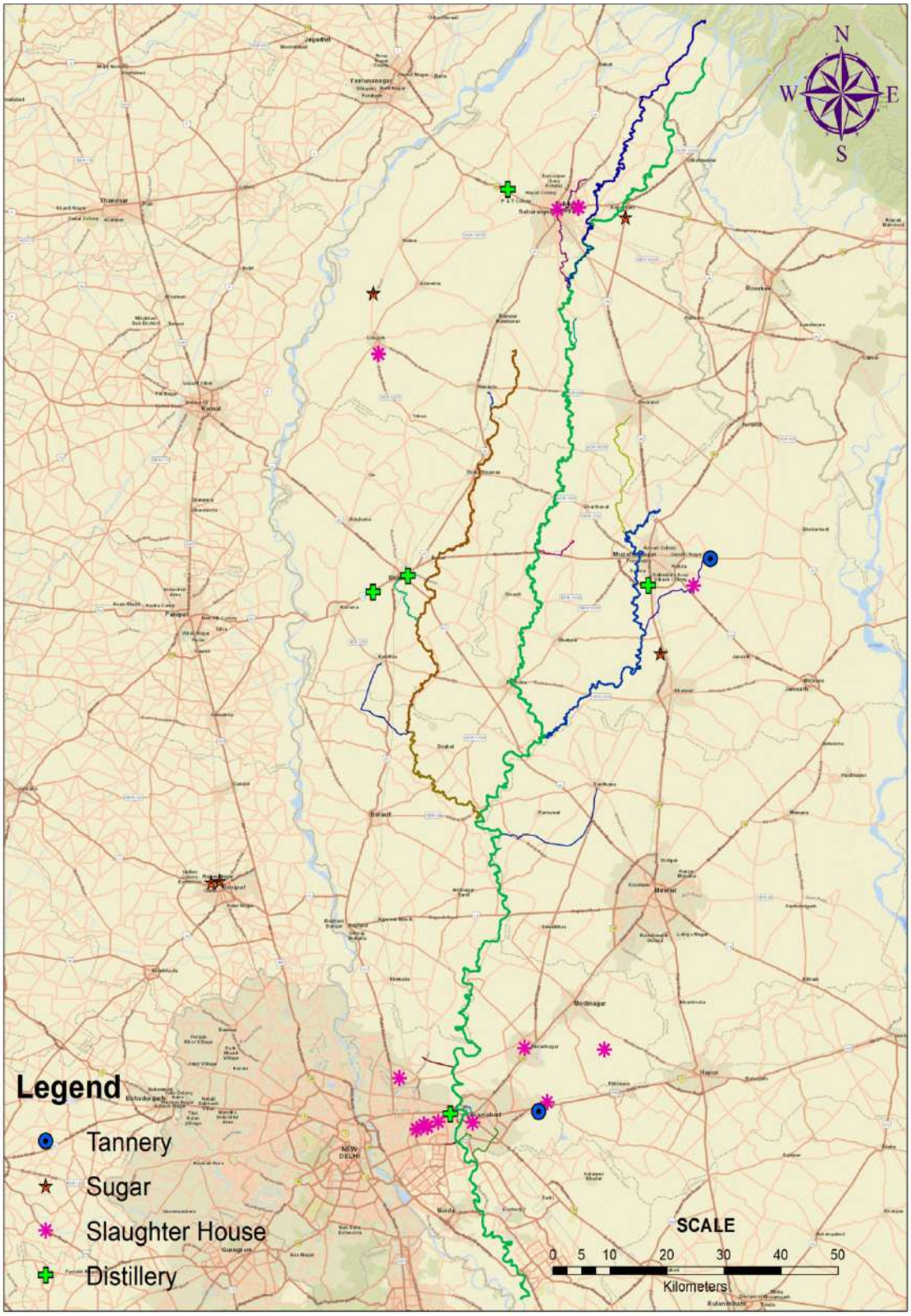


Fig : 4.1: GIS map showing Tannery, Distillery, Sugar & Slaughter House industries and drains

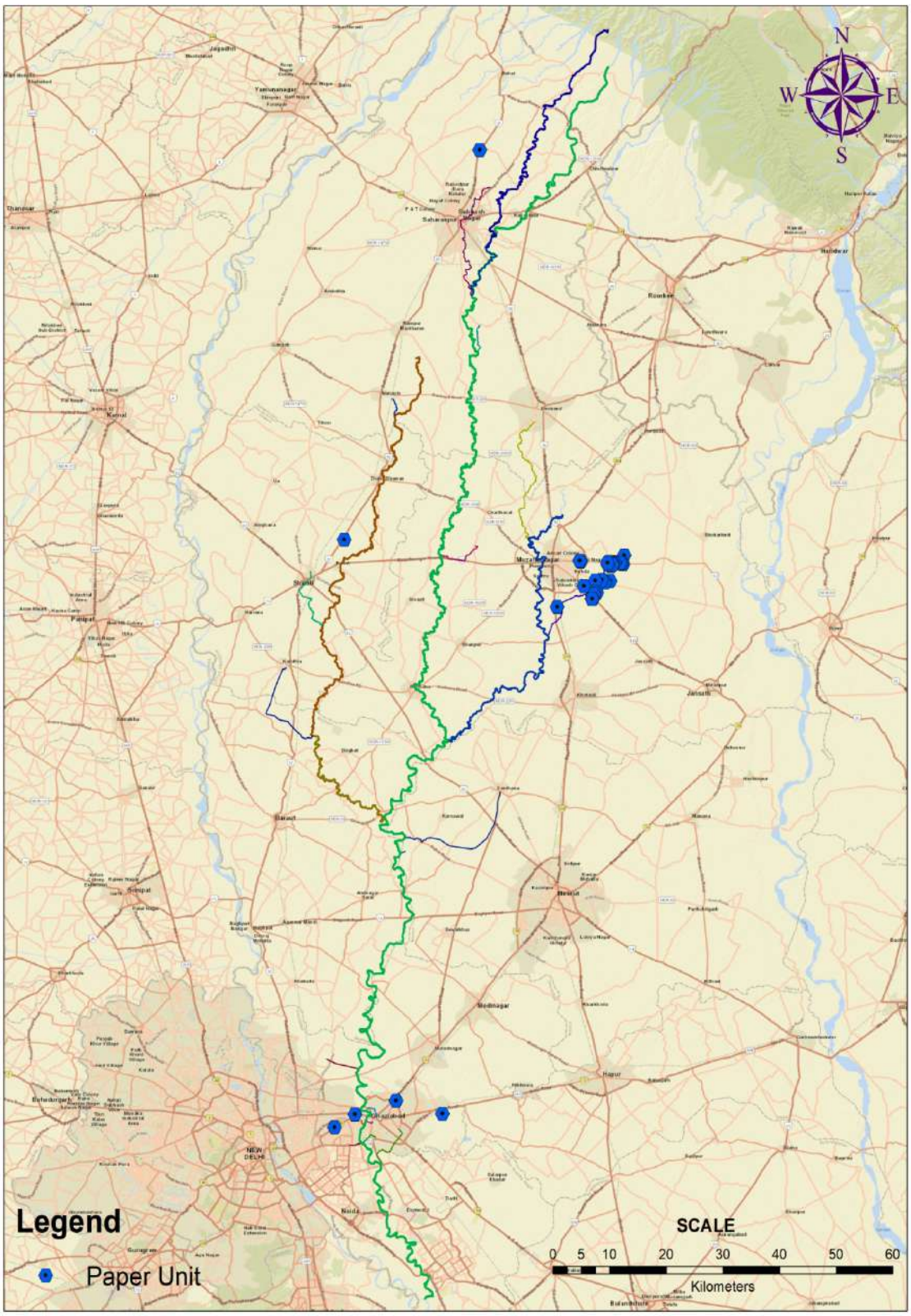


Fig : 4.2: GIS map showing Paper Industries and drains

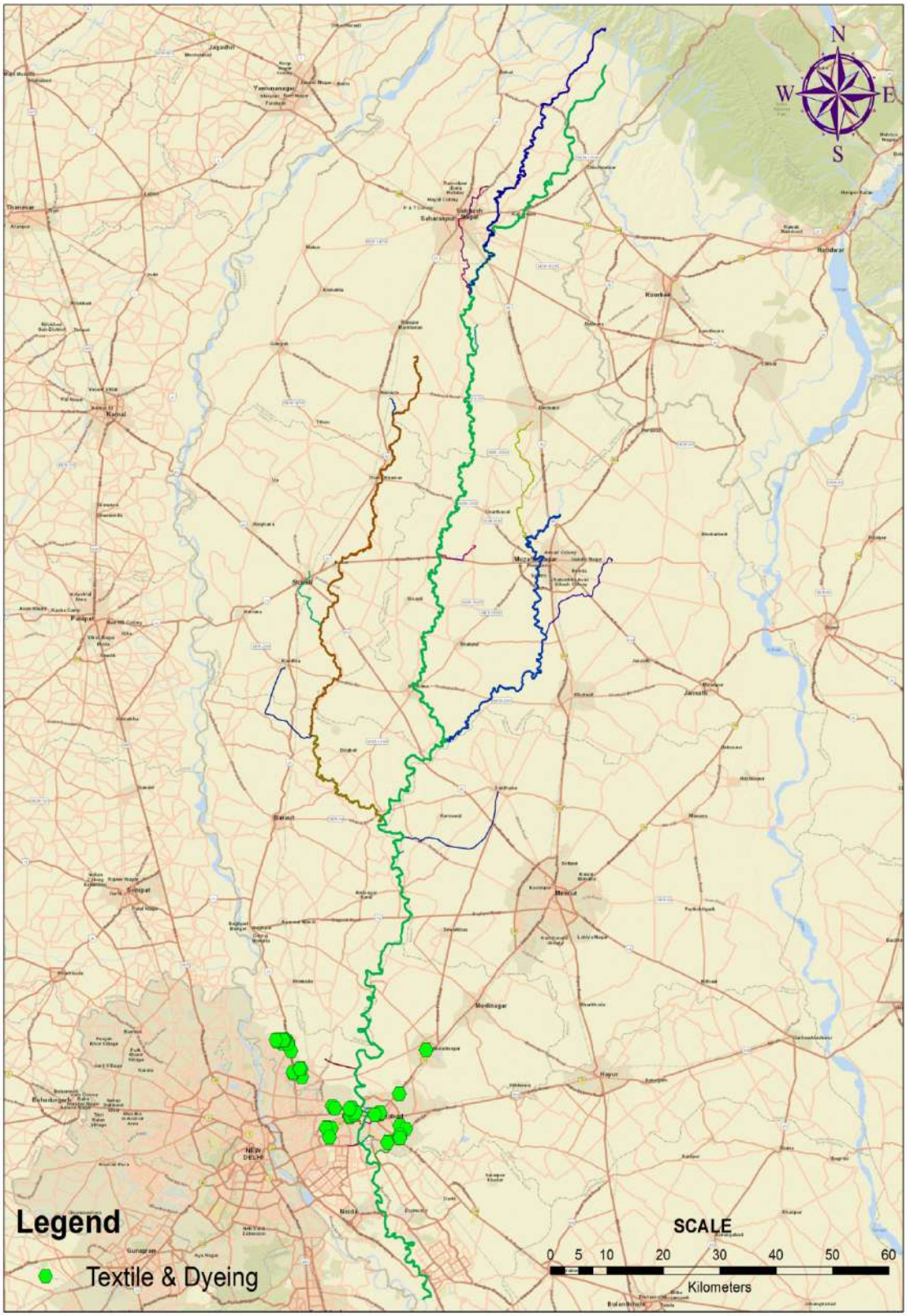


Fig : 4.3: GIS map showing Textile & Dyeing Industries and drains

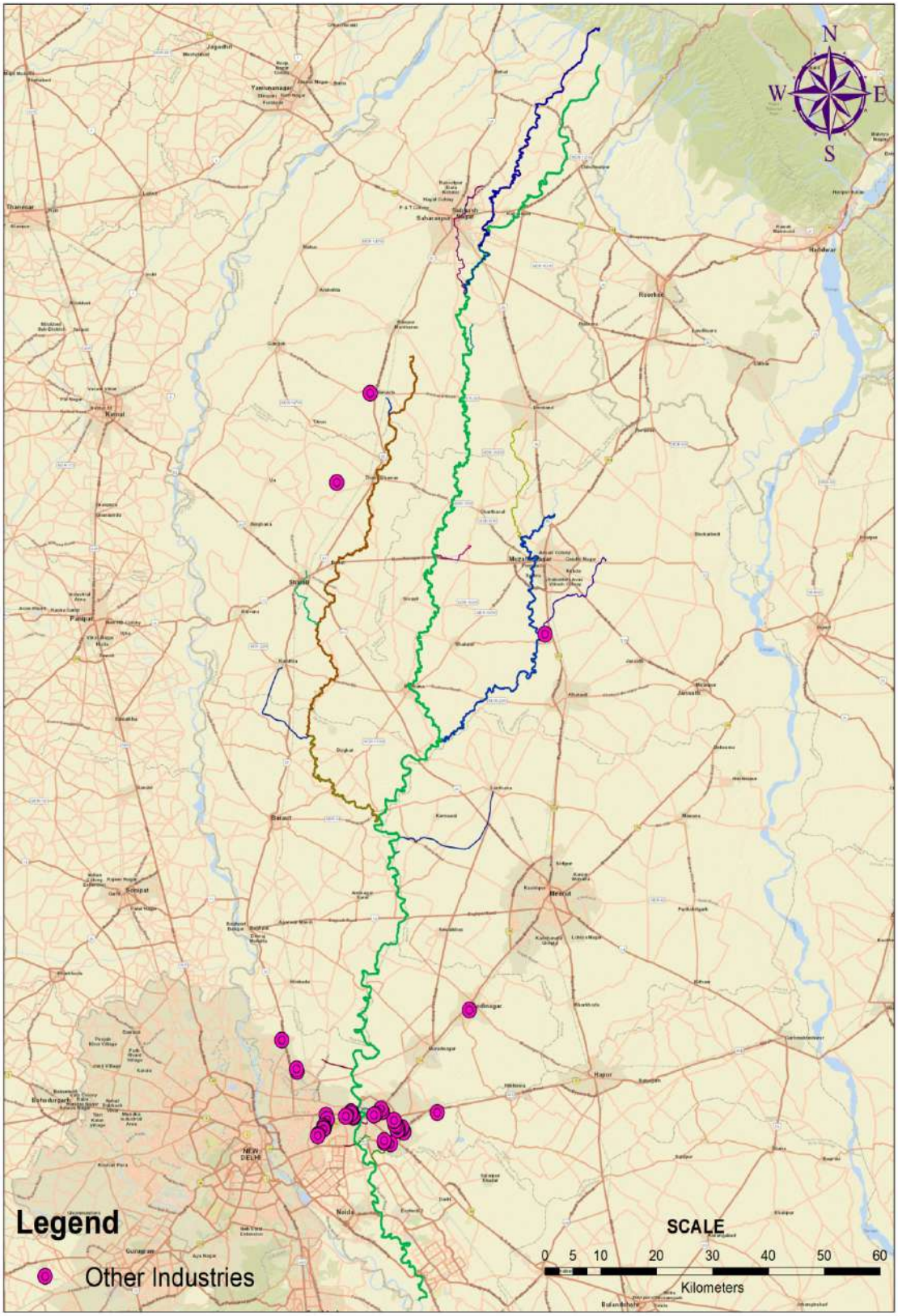


Fig : 4.4: GIS map showing Other industries and drain

4.1 DETAILS OF INDUSTRIAL UNITS

The drain wise and sector wise distribution of industries and their discharge & the details of CETP, Tronica City, Loni, Ghaziabad is also given in the tables below:

Summary of Drains carrying Industrial effluent only with categorywise Units

S. No.	District	Drain	Type of Industry (may be changed as per local conditions)								Total Effluent Discharge (MLD)
			Sugar	Pulp & Paper	Distillery	Textile	Slaughter House	Tannery	Others	Total	
1	Sahranpur (Self Closed-5, Onland -6, ZLD-1)	Dhamola	00	15	00	16	01	0	00	32	0.561
		Star Paper Mill Drain	00	01	00	00	00	00	00	01	12.00
		Bajaj Sugar Drain	01	00	01	00	00	00	00	02	1.0
		Daya Sugar Drain	01	00	00	00	00	0	00	01	0.5
		Naagdehi Drain	00	01	00	00	00	00	01	02	0.27
		Thaska Drain	01	00	01	00	00	00	01	03	1.9
		Badhai Khurd	01	00	00	00	00	00	00	01	1.368
2	Muzaffar nagar	Dhandhera Drain	00	36	01	00	01	02	01	41	34.45
		Mansurpur Drain	01	00	01	00	00	00	00	02	0.70
		Titawi Drain	01	00	00	00	00	00	00	01	0.80
3	Shamli	Sikka Drain	00	01	00	00	00	00	00	01	00
		Shamli Drain	01	01	01	00	00	00	00	03	2.35
4	Meerut	Sardhana Drain	00	01	00	00	00	00	01	02	1.26
		Kinauni	01	00	00	00	00	00	01	02	1.20
5	Baghpat	Ramala Drain	01	00	00	00	00	00	00	01	0.5
6	Ghaziabad	Arthla Drain	00	00	00	00	00	00	02	02	0.263
		Karedha Drain	00	00	00	15	0	0	04	19	1.657
		Dasna Drain	00	01	00	06	06	02	30	45	3.697
		Meerut Road Kaila Bhatta Drain	00	01	00	02	03	01	14	21	1.933
		Sahibabad Drain	00	01	00	74	00	0	39	114	8.79
		Jawli Drain	00	0	00	141	01	0	10	152	2.4
	Total		**9***	**59**	**6**	**254**	**12****	**5**	**104**	**448**	**78.39**

Note:- 02 Sugar Indusry namely M/s Bajaj Hindustan Sugar Ltd., Thana Bhawan & M/s Bajaj Hindustan Sugar Ltd., Baisana, Shamli are used their treated effluent for irrigation & in case of emergency effluent may be discharged into River Krishni & Hindon directaly, as all the industries are situated at the adjacent of the River Krishni & Hindon. Total Sugar Industries are 11.*

*** 01 Slaughter House namely A.L.M. Industries (Slaughter House) Haroda, Saharanpur is discharging their treated effluent on land for irrigation & in case of emergency effluent may be discharged into River Hindon directaly as all the industries are situated at the adjacent of the River Hindon. Total Slaughter Houses are 13.*

Details of CETP

There is a textile industrial cluster in Tronica City, Loni. CETP Tronica City, Loni, Ghaziabad which was installed by UPSIDC for treatment of industrial effluent of 55 textile units situated in Apparel Park, Tronica City, Loni, Ghaziabad. Since this CETP was not functioning properly so the Board has issued closure order against this CETP and its 28 functional member units. The State Board has issued the consent to operate under Water and Air Act to a new 06 MLD CETP which has resently been commissioned at Apparel Park, Tronica City, Loni, Ghaziabad. The new 06 MLD CETP is still under stabilization.

S. No.	District	Name of CETP	Location		Installed Capacity (MLD)	Utilized Capacity (MLD)	Operating Govt. Agency/SPV	Discharge Drain
			Latitude	Longitude				
1	Ghaziabad	Apparal Park Tronica City CETP, Loni, Gzb	28.4700	77.1640	1.8*	00	SPV Association	Jawli drain
2	Ghaziabad	Apparal Park Tronica City CETP, Loni, Gzb	28.4700	77.1640	06**	00	SPV Association	Jawli drain

* The old CETP has been shut down.
**The new CETP is under stabilization.

4.2 GAP ANALYSIS OF INDUSTRIES SITUATED IN THE CATCHMENT OF RIVER HINDON

Presently polluted stretch of River Hindon receives approximately **78.39 MLD** treated industrial effluent. The industries situated in the catchment of the polluted river stretch utilize ground water needed for their processes. Total estimated water extraction by the industries is approximately 121.78 MLD against the discharge of **78.39 MLD** by the industries. This indicates that about 35 per cent of the treated effluent is recycled in the processes and rest accounts for the evaporation losses and consumption in the products.

Sector wise Gap analysis is given below: -

I. **Sugar:-** There are 11 Sugar industries in the catchment of polluted river stretch which consume 24.41 MLD groundwater and 10.69 MLD treated effluent is discharged. Sugar industries as mentioned at **S.No. 184-194** of **Appendix -3A** have gaps related to improvement of ETPs and utilization of treated effluent in irrigation. The detail gap analysis may be referred to in **Appendix 3A**. These gaps are to be fulfilled within 06 months. This will help in reducing the water consumption, improving the quality of treated effluent and reuse of water in irrigation.

II. **Paper:**- There are 59 Paper industries in the catchment of polluted river stretch which consume 50.57 MLD groundwater and 34.65 MLD treated effluent is discharged mentioned from Sr.no. 112 – 170 of Appendix- 3A. Paper industries as mentioned at **S.No. 135 & 160** of **Appendix -3A** are Agro Based paper manufacturing units and it requires tertiary treatment/physico chemical Treatment for colour removal from effluent as detailed in **Appendix -3A** are to be fulfilled within 06 months. It will help in improving the quality of treated effluent of Paper industries. Units mentioned at **Sr.no. 114, 140, 142,**

147, 168 are maintaining ZLD for effluent discharge. At present 19 paper units are closed.

III. **Slaughter House :-** There are 13 slaughter houses in the catchment of polluted river stretch mentioned from Sr.no. 171 – 183 of **Appendix-3A**, which consume 3.34 MLD of groundwater & 2.68 MLD treated effluent is discharged. For reduction of water consumption & strengthening of Pollution control system as per guidelines of CPCB have to be taken up and as per the action points prescribed with time line given in **Appendix –3B.** . At present 8 Slaughter House units are closed.

IV. **Textile :** There are 254 textile/yarn dyeing industries in the catchment of polluted river stretch as mentioned Sr.no. 200 – 453 of Appendix- 3A, which consume 9.15 MLD groundwater & 7.78 MLD treated effluent is discharged. For reduction of water consumption & strengthening of Pollution control system as per charter prepared by CPCB, the action points with timeline are given in **Appendix –3C.**

V. **Electroplating:-** There are 70 Electroplating industries in the catchment of polluted river stretch as mentioned Sr.no. 30 – 99 of Appendix- 3A, which consume 0.72 KLD ground water & 0.59 KLD treated effluent is discharged. For reduction of water consumption & strengthening of Pollution control system as per guidelines of CPCB, the action points with time line are given in **Appendix –3D.**

VI. **Distillery** :- There are 06 distillery units in the catchment of polluted river stretch as mentioned Sr.no. 3 – 8 of **Appendix- 3A**, which consume 7.9 MLD ground water. Although, all the distilleries are maintaining zero liquid discharge (ZLD) but improvements are required with respect to establishment of Condensate Polishing Units and safe storage of Molasses as per CPCB guidelines. Action points with time line are given in **Appendix –3E**. Industries mentioned at Sr.no. 3,

4, 5 & 7 requires Condensate Polishing unit to be installed for further strengthening of ZLD system within a year.

VII. **Tannery** :- There are 05 tannery units in the catchment of polluted river stretch as mentioned Sr.no. 195 – 199 of **Appendix- 3A**, which consume 0.38 MLD ground water & 0.34 KLD treated effluent is discharged. For Water Consumption to be reduced & adoption of cleaner technology with time line are given in **Appendix –3F.**

VIII. Remaining 35 industries are Milk Processing, Pharmaceutical formulation units, Meat Processing units, Engineering and Beverages etc. All these units are having adequate ETPs & regular monitoring is done by U.P. Pollution Control Board.

IX. **CETP, Tronica City:-** This CETP was installed by UPSIDC for treatment of industrial effluent of 55 textile units situated in Apparel Park, Tronica City, Loni, Ghaziabad since this CETP was not functioning properly so the Board has issued closure order against this CETP and its 28 functional member units. The summery of monitoring reports of this CETP are enclosed in **Appendix –3G**. The State Board has issued the consent to operate under Water and Air Act to a new 06 MLD CETP situated in Apparel Park, Tronica City, Loni, Ghaziabad. The CETP is under stabilization.

5. STATUS OF GROUND WATER

The Priority-1 polluted stretch of River Hindon, Stretch from Saranpur to Ghaziabad lies in Doab region of Ganga and Yamuna rivers. The river flows through 13 Development Blocks in 06 Districts of Saharanpur, Muzaffarnagar, Shamli, Meerut, Bagpat & Ghaziabad. The status of Groundwater in these blocks is given below:

River Hindon, Stretch from Saranpur to Ghaziabad:
Ground Water Status

S. N.	Name of District	Name of Block	Pre Monsoon / Post Monsoon water level (Meters)				Status of Exploitation
			May-15	Aug-15	Nov-15	Jan-16	
1	Saharanpur	Nanauta	5.73	3.76	4.7	4.9	Over Exploited
2		Deoband	5.35	4.9	3.46	3.55	Over Exploited
3		Rampur	7.12	5.75	6.65	7.93	Over Exploited
4	Muzaffar nagar	Budhana*	10.97				safe
5		Charthawal	9.33	8.35	8.35	3.71	safe
6		Kukra-Sadar	12.42	11.25	12.3	14.5	safe
7	Shamli	Shamli	19.19		20.05	19.6	Critical
8		Thana Bhawan	11.93	10.13	11	10.7	Critical
9	Meerut	Sardhana*	7.38				
10	Baghpat	Pilana*	25.47				over Exploited
11	Ghaziabad	Bhojpur	8.45	8.25	8.25	6.54	safe
12		Muradnagar	4.82	4.4	4	4.4	safe
13		**Loni***	16.16				Semi Critical

Source- http://cgwb.gov.in/District_Profile/UP/MuzzafarNagar.pdf
http://cgwb.gov.in/District_Profile/UP/Ghaziabad.pdf
* :Pre Mansoon Data 2014

Location-wise Ground Water Not complying to IS10500-2012 w.r.to Drinking Water Specifications (acceptable limits)

S. No.	Name of the location	District	Date of sample collection	Weather GW samples taken Industry Premises	Source of GW	GPS Coordinates	Depth of Ground water belowground level	Sulfate (mg/l)	Fluoride (mg/l)	Cd (mg/l)	Cu (mg/l)	Pb (mg/l)	Fe (mg/l)	Ni (mg/l)	Zn (mg/l)	Mn (mg/l)	Hg (µg/l)	O & G (mg/l)	Total Cr (mg/l)	Compliance
	Drinking Water Specifications as per IS:10500-2012 (Acceptable Limits) in mg/l							**200**	**1**	**0.003**	**0.05**	**0.01**	**0.3**	**0.02**	**5**	**0.1**	**0.001**	**-**	**0.05**	
1.	Village Mandhiyai, Meerut Main Road	Meerut	05.03.2018	No	Hand Pump	29.127228 N, 77.608529 E	83 m	-	1.1	<0.002	<0.003	<0.013	-	<0.003	0.11	-	<1	-	-	Non Complying
2.	Hand Pump Near M/s Ramala Sahkari Chini Mills Ltd, Ramala, Bagpat	Baghpat	07.03.2018	No	Hand Pump	29.235139 N, 77.284237 E	16 m	-	1.1	<0.002	<0.003	<0.013	-	<0.003	1.16	-	<1	-	-	Non Complying
3.	Inside Parmedical College Premises, Village Bagra	Muzaffarnagar	07.03.2018	No	Hand Pump	29°28'61.91"N 77°55'58"E	44 m	-	0.3	0.74	<0.003	0.28	-	<0.003	2.95	-	<1	-	-	Non Complying
4.	Near M/s Bajaj Hindustan Ltd. Bhaisana, Muzaffarnagar	Muzaffarnagar	07.03.2018	No	Hand Pump	29.294250, 77.493759	50 m	-		0.12	<0.003	<0.013	-	<0.003	1.96	-	1.52	-	-	Non Complying
5.	Main road, Mansurpur village	Muzaffarnagar	06.03.2018	No	Hand Pump	29°21'18.8" N, 77°42'50.1" E	50 m	52	0.3	<0.002	<0.003	<0.013	-	<0.003	0.15	-	1.3	2	-	Non Complying
6.	Tehsil Katauli	Muzaffarnagar	03-06-2018	No	Hand Pump	29°16'44.4"N, 77°44'19.4"E	50 m	14	0.3	<0.002	<0.003	<0.013	-	<0.003	0.09	-	1.3	2	-	Non Complying
7.	Mansurpur NH 58 on road	Muzaffarnagar	06.03.2018	No	Hand Pump	-	50 m	76	0.3	<0.002	<0.003	<0.013	-	<0.003	9.12	-	1.26	2	-	Non Complying
8.	Tube Well near of M/s Silvertone Paper Ltd(Init1) Bhopa Road, Muzaffarnagar	Muzaffarnagar	16.04.2018	No	Tube Well	29°28' 00.15"N, 77°47'05.60" E	18.29 m	208	0.3	<0.002	<0.003	<0.013	-	<0.003	<0.002	-	<1	-	-	Non Complying
9.	Industry premises of M/S Tehri Pulp & Papers Ltd. (Unit-I), 9th Km Stone, Bhopa Road, Muzaffarnagar	Muzaffarnagar	12.04.2018	Yes	Bore Well	29.471 N, 77.796 E	40 m	4	0.5	<0.002	<0.003	<0.013	-	<0.003	0.05	-	1.26	-	-	Non Complying
10.	M/S Suyash Craft & Papers Ltd. Village-Velhana, Meerut Roadf, Muzaffarnagar	Muzaffarnagar	13-04-2018	Yes	Bore Well	29.426 N, 77.692 E	40 m	11	0.3	<0.002	<0.003	<0.013	-	<0.003	0.14	-	1.01	-	-	Non Complying
11.	Industry premises of M/S Shri Bhageshwari Paper Mills (P)	Muzaffarnagar	12.04.2018	Yes	Bore Well	29.472 N, 77.491 E	45 m	6	0.3	<0.002	<0.003	<0.013	-	<0.003	0.01	-	1.52	-	-	Non Complying
12.	Near M/s. Arihant Pulp & Papers Ltd., opposite cement godwon, musabilaspur	Muzaffarnagar	08.03.2018	No	Hand Pump	29.437478 N, 77.745673 E	13 m	41	0.3	<0.002	<0.003	<0.013	10.42	<0.003	1.9	0.09	<1	-	<0.002	Non Complying
13.	Near M/s Siddeshwari industries Pvt. Ltd., 8.6Km Jansath Road, Muzaffarnagar	Muzaffarnagar	08.03.2018	No	Hand Pump	29°25'8"N, 77°45'36"E	61 m	30	0.1	<0.002	<0.003	<0.013	0.17	<0.003	<0.002	0.87	-	-	<0.002	Non Complying
14.	M/s K.K. Duplex & Paper mill Pvt. Ltd., 8.5 Km Stone, Jansath Road, Muzaffarnagar	Muzaffarnagar	08.03.2018	Yes	Bore Well	29°42'37.38"N, 77°75'87.43"E	46 m	43	0.1	<0.002	<0.003	<0.013	0.09	<0.003	<0.002	0.23	-	-	<0.002	Non Complying
15.	M/s Silver Tone Pulp & Paper, 9th Km Stone, Bhopa Road, Muzaffarnagar.	Muzaffarnagar	08.03.2018	Yes	Bore Well	29°27'59.8"N, 77°47'17"E	70 m	25	0.5	<0.002	<0.003	<0.013	0.01	<0.003	<0.002	0.27	-	-	<0.002	Non Complying
16.	Near M/s. Ravi Organics Ltd., Begrajpur, Muzaffarnagar	Muzaffarnagar	13.04.2018	No	Hand Pump	-	-	20	0.2	<0.002	<0.003	<0.013	-	<0.003	0.89	-	1.26	2	-	Non Complying
17.	M/s. H.J. Tannery, 9th Km, Jansath Road, Muzaffarnagar	Muzaffarnagar	13.04.2018	Yes	Tube Well	-	-	41	0.2	<0.002	<0.003	<0.013	-	<0.003	<0.002	-	1.01	-	-	Non Complying

18.	Meerut Karnal road, Near Bypass Shamli	Shamli	06.04.2018	No	Hand Pump	29.442825 N, 77.314561 E	60 m	32	0.8	<0.002	<0.003	<0.013	-	<0.003	0.66	-	1.33	-	-	Non Complying
19.	50 m away from M/s Bajaj Hindustan Ltd., Thanabhawan, Muzaffarnagar	Shamli	07.04.2018	No	Hand Pump	29.5693 N, 77.408405 E	-	2	0.4	<0.002	<0.003	<0.013	-	<0.003	0.24	-	1.16	-	-	Non Complying
20.	Near M/s. Shamli Distillery & Chem. Work, Shamli	Shamli	06.04.2018	No	Hand Pump	29.442825 N, 77.314561 E	60 m	32	0.8	<0.002	<0.003	<0.013	-	<0.003	0.66	-	1.33	-	-	Non Complying
21.	Outside M/s Co-operative Co. Ltd., Tapri, Saharanpur	Saharanpur	09.04.2018	No	Hand Pump	29554'57.3"N, 77°35'40.0"E	35 m	122	0.2	<0.002	<0.003	<0.013	-	<0.003	6.63	-	<1	-	-	Non Complying
22.	Asheram Nirwad S/o Badlu Singh, H.No.-512 Village-Karheda, Near Mohan Nagar Loni Road Ghaziabad	Ghaziabad	03.04.2018	No	Borewell	28.686965, 77.385494	49m	31	2	<0.002	<0.003	<0.013	0.02	<0.003	0.01	-	1.66	-	<0.002	Non Complying
23.	Outside Star Paper Mill Saharanpur	Saharanpur	06.03.2018	No	Hand Pump	-	-	62	0.2	<0.002	<0.003	<0.013	1.43	<0.003	1.3	-	<1	2	-	Non Complying
24.	Near Plaza Paper P.Ltd. Village Maheswari Khurd	Saharanpur	06.03.2018	No	Hand Pump	-	-	65	0.2	<0.002	<0.003	<0.013	1.5	<0.003	<0.002	-	<1	2	-	Non Complying
25.	Near Rainbow Board Mill, (Unit Kraft Paper), Near naugara Peer, Saharanpur	Saharanpur	06.03.2018	No	Hand Pump	-	-	30	0.2	<0.002	<0.003	<0.013	0.62	<0.003	0.12	-	<1	2	-	Non Complying
26.	Near Swaroop Paper (P) Ltd., Near Janta Road, Saharanpur	Saharanpur	06.03.2018	No	Hand Pump	-	-	27	0.3	<0.002	<0.003	<0.013	0.22	<0.003	0.04	-	2	2	-	Non Complying
27.	Hand pump near Nagar Nigam Pashuvadhshala, kamela colony, Saharanpur	Saharanpur	06.03.2018	No	Hand Pump	-	40 m	33	0.7	<0.002	<0.003	<0.013	2.16	<0.003	0.04	-	<1	2	-	Non Complying
28.	Near M/s Atul Textile Industried Ltd., Shakumabari Vihar, Behat Road, Saharanpur	Saharanpur	07.03.2018	No	Hand Pump	29.985548 N, 77.568758 E	55 m	11	0.3	<0.002	<0.003	<0.013	-	<0.003	1.76	-	1.01	2	-	Non Complying
29.	Near M/s Shalimar Cotton Dyeing, Saharanpur Behat Road, Rasulpur, Saharanpur	Saharanpur	07.03.2018	No	Hand Pump	29.996889 N, 77.566726 E	55 m	220	0.3	<0.002	<0.003	<0.013	-	<0.003	<0.002	-	1.51	2	-	Non Complying
30.	Near M/s S.M.C. Foods Ltd. Nnauta, Saharanpur	Saharanpur	07.03.2018	No	Hand Pump	28°54'11.5"N, 77°50'54.5"E	15.2 m	33	0.3	<0.002	<0.003	<0.013	-	<0.003	0.57	-	1.51	2	-	Non Complying
31.	M/s Pashupati Dairy (P) Ltd. Village Kumharhera, Dehradun Road, Saharanpur	Saharanpur	17.04.2018	Yes	Bore Well	-	60 m	27	0.3	<0.002	<0.003	<0.013	<0.002	<0.003	<0.002	0.29	-	-	<0.002	Non Complying
32.	Near M/s Jayna Gramodyaog Sansthan, Gagalheri	Saharanpur	04.04.2018	No	Hand Pump	29.983602 N, 77.665811 E	35 m	19	0.1	<0.002	<0.003	<0.013	-	<0.003	6.07	-	<1	2	-	Non Complying
33.	Gagalheri, Dehradun, Saharanpur	Saharanpur	05.03.2018	No	Hand Pump	29.979749 N, 77.668548 E	44 m	5	0.6	<0.002	0.15	0.09	-	<0.003	1.05	-	<1	-	-	Non Complying
34.	M/s Balaji Wire Pvt. Ltd., 139-A, Anand Industrial Estate Mohan Nagar, Gzb.	Ghaziabad	07.03.2018	Yes	Hand Pump	28.674894 N, 77.388494 E	45 m	89	0.5	<0.002	<0.003	<0.013	0.12	<0.003	0.39	-	1.72	-	<0.002	Non Complying
35.	Mohan Meakins Ltd., Mohan Nagar, Ghaziabad	Ghaziabad	08.03.2018	Yes	Bore Well	28°40'17.5"N 77°23'01.0"E	25 m	96	0.8	<0.002	0.01	0.04	<0.002	<0.003	<0.002	-	1.01	-	<0.002	Non Complying
36.	Near M/s AB Cycle Parts Pvt. Ltd. at Ispat Nagar, Bulandsahar Road Industrial Area, Ghaziabad.	Ghaziabad	08.03.2018	No	Hand Pump	28°38'23.6"N 77°26'37.6"E	40 m	71	0.5	<0.002	<0.003	0.08	6.28	<0.003	1.24	-	<1	2	0.02	Non Complying
37.	Near Balaji Enterprises, B-22/1/15, B.S.Road Ind. Area Gzb.	Ghaziabad	13.03.2018	No	Hand Pump	28.6484380 N, 77.4594966 E	-	135	0.4	<0.002	0<.003	<0.013	0.72	<0.003	0.27	-	-	2	<0.002	Non Complying
38.	Near Indian Textiles Co., E-49, B.S. Road, Gzb.	Ghaziabad	09.03.2018	No	Hand Pump	28.6484381 N, 77.4594767 E	-	330	0.8	<0.002	0.01	<0.013	1.47	<0.003	0.11	-	<1	-	-	Non Complying
39.	Near M/s Lion Cycle & Rikshaw Industries, E-I0, B.S. Road Ind. Area Gzb.	Ghaziabad	12.03.2018	No	Hand Pump	28.6424919 N, 77.4609803 E	-	109	0.7	<0.002	<0.003	<0.013	<0.002	<0.003	<0.002	-	1.01	-	-	Non Complying
40.	Near Progressive Tools & Component Pvt. Ltd. C-222, B.S. Road Ind. Area, Gzb	Ghaziabad	03.04.2018	No	Handpump	28.642382 77.460819	46 m	203	0.6	<0.002	<0.003	<0.013	0.72	<0.003	0.27	-	<1	-	-	Non Complying

41.	From tube well situated in premises of Masjid, besides the road towards the unit M/s Shivam Engineering and Fabrication	Ghaziabad	11.04.2018	No	Hand pump	28.639554 N, 77.446274 E	-	35	0.5	<0.002	<0.003	<0.013	-	<0.003	0.02	-	1.83	2	<0.002	Non Complying
42.	Near M/s Tarun International C-15, SS of GT road, Ghaziabad	Ghaziabad	05.04.2018	No	Bore well	28.6377376 N, 77.44111755 E	-	44	0.4	<0.002	<0.003	<0.013	0.13	<0.003	<0.002	0.21	1.16	2	<0.002	Non Complying
43.	M/s Al Nafees Frozen Foods Export, Hapur Rd. Dasna Ghaziabad	Ghaziabad	06.04.2018	Yes	Hand Pump	28.685079 N, 77.540928 E	13 m	56	1	<0.002	<0.003	<0.013	-	<0.003	0.65	-	1.66	2	-	Non Complying
44.	M/s International agro Foods (Integrated slaughter House) Plot no. 2764-2766, Bhurgardi, Dasna, Distt. Ghaziabad Uttar Pradesh	Ghaziabad	08.03.2018	Yes	Borewell	-	29 m	30	1.3	<0.002	<0.003	<0.013	0.1	<0.003	0.24	-	-	-	<0.002	Non Complying
45.	Dasna Village	Ghaziabad	08.03.2018	No	Borewell	-	-	40	0.6	<0.002	<0.003	0.02	1.77	<0.003	0.04	--	-	-	<0.002	Non Complying
46.	Bhurgadi Village (Private)	Ghaziabad	08.03.2018	No	Borewell	-	-	136	2.5	<0.002	<0.003	<0.013	1.56	<0.003	1.56	--	-	-	0.05	Non Complying
47.	Bhurgadi Village(Government)	Ghaziabad	08.03.2018	No	Borewell	-	-	41	0.7	<0.002	<0.003	<0.013	1.84	<0.003	0.21	-	-	-	0.26	Non Complying
48.	Rajeev Colony, adjectto M/s Ambica Steels Ltd., Mohan Nagar Ghaziabad	Ghaziabad	08.03.2018	No	Hand Pump	28.682150 N, 77.381735 E	33 m	26	2.4	<0.002	<0.003	<0.013	<0.002	<0.003	1.09	-	<1	-	<0.002	Non Complying
49.	M/s Bansal Wire Industries Ltd, B-3, Loni road, Mohan Nagar, Ghaziabad, U.P.	Ghaziabad	07-03-2018	No	Hand Pump	Ghaziabad	-	95	0.5	<0.002	0.05	<0.013	1.33	0.02	8.58	-	<1	-	<0.002	Non Complying
50.	The Kisan Sahakari Chini Mill, Nanouta, sahranpur UP	Saharanpur	11-04-2018	Yes	Hand Pump	29.4237N, 77.2644E	50 m	19	0.4	<0.002	<0.003	0.07	11.26	<0.003	4.15	0.16	-	-	<0.002	Non Complying
51.	Daya Sugar Gagalheri, Saharanpur, U.P	Saharanpur	10-04-2018	Yes	Hand Pump	29.5749N, 77.3934E	30 m	2	0.2	<0.002	<0.003	<0.013	9.9	<0.003	1.79	0.05	-	-	<0.002	Non Complying
52.	Triveni Engg.&Industires Ltd., Deoband, saharanpur, U.P	Saharanpur	10-04-2018	Yes	Hand Pump	29.4020N, 77.4099E	30 m	176	0.5	<0.002	<0.003	<0.013	8.83	<0.003	1.34	0.21	-	-	<0.002	Non Complying
53.	Bajaj Hindustan Sugar Ltd., Gangoli Saharanpur, U.P	Saharanpur	10-04-2018	Yes	Hand Pump	29.4835N, 77.3258E	30 m	16	0.1	<0.002	<0.003	<0.013	2.77	<0.003	1.1	0.17	-	-	<0.002	Non Complying
54.	Vaishali Hosiery, 1-17, Sector D-1, Apparel Park, Tronica City, Loni, Gzb.	Ghaziabad	19.04.2018	Yes	Borewell	-	30 m	49	0.4	<0.002	1.25	<0.013	<0.002	0.02	0.3	-	<1	-	-	Non Complying
55.	Sunny Prints, 5/7, Site-II Industrial Area, Loni Road, GZB.	Ghaziabad	09-03-2018	Yes	Bore Well	28,41,10 N 77,22,53E	35 m	122	0.8	<0.002	<0.003	<0.013	-	<0.003	<0.002	-	1.01	10	-	Non Complying
56.	Albert David Ltd., B-13, Meerut Road industrial Area Ghaziabad.	Ghaziabad	08-03-2018	Yes	Bore Well	28,41,05N 77,26,10E	30 m	33	0.5	<0.002	<0.003	<0.013	-	<0.003	<0.002	-	1.52	-	-	Non Complying
57.	Parle Agro PLtd. A-7, Sector-22 Meerut Road, Ind. Area, Gzb.	Ghaziabad	09-03-2018	Yes	Bore Well	-	50 m	34	0.5	<0.002	-	<0.013	-	-	0.02	-	1.01	-	<0.002	Non Complying
58.	E.C.E. Ltd., A-20, Meerut Road Ind. Area Gzb.	Ghaziabad	13.03.2018	Yes	Bore Well	-	50 m	49	0.6	<0.002	-	<0.013	0.05	<0.003	0.07	-	<1	2	0.07	Non Complying
59.	Near boundry well of M/s ML Batra enterprisis	Ghaziabad	05-03-2018	No	Hand Pump	28.686521, 77.438617	-	23	0.6	0.04	-	0.1	-	<0.003	0.41	-	1.3	-	<0.002	Non Complying
60.	Marshal Cycles, B-17/18, Meerut Road Industrial Area Gzb.	Ghaziabad	05-03-2018	Yes	Bore Well	28.689877, 77.441113	60 m	24	0.8	<0.002	-	0.07	-	<0.003	<0.002	-	2.16	-	<0.002	Non Complying
61.	North Land Cycle Co. Ltd., D-21, meerut Road Industrial Area Ghaziabad	Ghaziabad	07-03-2018	Yes	Bore Well	28.685197, 77.438298	50 m	17	0.4	<0.002	-	<0.013	-	<0.003	0.01	-	1.48	-	0.02	Non Complying
62.	Industrial area hand pump meerut road ghaziabad	Ghaziabad	9.3.2018	no	Handpump	-	-	27	0.5	<0.002	<0.003	<0.013	0.69	<0.003	0.04	-	<1	2	0.2	Non Complying
63.	Sukrati Viddut Udyog Pvt.Ltd., D-39, Meerut Road Gzb.	Ghaziabad	5.3.2018	Yes	Borewell	-	-	36	0.4	0.03	0.15	0.09	0.04	<0.003	0.05	-	<1	2	<0.002	Non Complying
64.	DPS gate Railway crossing	Ghaziabad	8.3.2018	No	Handpump	22.684 N, 77.434 E	66 m	15	0.3	<0.002	<0.003	<0.013	21.81	<0.003	2.21	0.1	<1	2	0.02	Non Complying

65.	Karhoda village	Ghaziabad	7.3.2018	No	Handpump	28.686512 N, 77.387415 E	66 m	15	1.8	<0.002	<0.003	<0.013	0.48	<0.003	0.22	<0.002	1.12	2	<0.002	Non Complying
66.	Doondaheda village, SSof GT road, Gzb	Ghaziabad	06.03.2018	No	Hand Pump	28.63 N, 77.44 E	40 m	64	0.6	<0.002	<0.003	<0.013	2.14	0<.003	1.04	-	<1	-	<0.002	Non Complying
67.	SainVihar,nearSarthakpublicschool, NH-24, Ghaziabad	Ghaziabad	05.03.2018	No	Hand Pump	-	40 m	26	0.8	<0.002	<0.003	<0.013	0.73	<0.003	0.06	-	<1	-	-	Non Complying
68.	Slum Area Kavi Nagar B.S. Road Ghaziabad	Ghaziabad	07.03.2018	No	Hand Pump	28.65741 N, 77.46966 E	-	25	0.5	<0.002	<0.003	<0.013	2.19	<0.003	0.06	-	<1	-	0.26	Non Complying
69.	Shastri Nagar Ghaziabad	Ghaziabad	07.03.2018	No	Hand Pump	28.664233 N, 77.458378 E	-	21	0.4	<0.002	<0.003	<0.013	2.57	<0.003	1.06	-	<1	-	0.03	Non Complying
70.	Durgawati Loni, Ghaziabad	Ghaziabad	04.04.2018	No	Hand Pump	-	-	51	0.5	<0.002	<0.003	<0.013	0.51	<0.003	0.22	0.11	<1	-	<0.002	Non Complying
71.	Handpump near Edgah, Ansal, Loni, Ghaziabad	Ghaziabad	04.04.2018	No	Hand Pump	-	-	88	0.6	<0.002	<0.003	<0.013	1.13	<0.003	<0.002	0.08	<1	-	<0.002	Non Complying
72.	Handpump Near Agrola Village	Ghaziabad	08.03.2018	No	Hand Pump	28.78906 N , 77.286497 E	-	103	0.3	<0.002	<0.003	1.74	4.66	<0.003	0.19	-	1.76	2	<0.002	Non Complying
73.	Agrola Village, Near Balaji Temple	Ghaziabad	09.03.2018	No	Hand Pump	28.720358 N, 77.287163 E	-	139	0.5	<0.002	<0.003	<0.013	3.94	<0.003	0.03	-	1.26	2	<0.002	Non Complying
74.	HandPump,NeartoHanumanmandir, Village-Agraula , Tronica City, Loni	Ghaziabad	06-03-2018	No	Hand Pump	28.7894 N, 77.2868 E	24 m	109	0.4	<0.002	<0.003	<0.013	10.69	<0.003	0.37	-	1.66	-	-	Non Complying
75.	Hand pump near to mohd. Yameen, Om SaiCity, VillAgraula, Tronicacity, Loni	Ghaziabad	06-03-2018	No	Hand Pump	28.789 N 77.284 E	36 m	47	0.5	<0.002	<0.003	<0.013	0.43	<0.003	0.12	-	1.12	2	-	Non Complying
76.	Handpump,villagepakhisadakpur,1 km, Tronica city	Ghaziabad	07-03-2018	No	Hand Pump	-	43 m	21	0.6	<0.002	<0.003	<0.013	0.42	<0.003	0.24	-	-	2	<0.002	Non Complying
77.	Village Agraula Tronika City Loni Ghaziabad	Ghaziabad	06-03-2018	No	Handpump	29° 47' 17.6"N 77° 17' 41.2"E	67 m	41	0.5	<0.002	<0.003	<0.013	0.01	<0.003	<0.002	-	1.52	-	-	Non Complying
78.	Road Side Hand Pump Near Tronica City	Ghaziabad	07.03.2018	No	Borwell	28.763003 N 77.283391 E	26 m	65	0.2	0.03	<0.003	0.03	-	<0.003	0.12	-	1.52	2	-	Non Complying
79.	Village Bhoorgarhi, Dasna, Gzb	Ghaziabad	26.04.2018	No	Hand Pump	28.676 N, 77.37726 E	40 m	136	1.8	<0.002	0.03	<0.013	0.14	<0.003	<0.002	0.19	<1	2	0.03	Non Complying

Source :*Joint committee Report submitted in Hon'ble NGT Committee in OA No. 231/2014 & 66/2015 by CPCB.*

Ground water quality- compliance status

To assess the ground water sampling locations suitability for drinking water purpose, the analysis results of the ground water samples are compared with the Bureau of Indian Standard Drinking Water Specifications (second revision) IS10500-2012 w.r.to the acceptable limits. The analysis results of the ground water samples collected from the study area reveals that

- There is no contamination at 75 out of 168 ground water sampling locations (i.e. 38 locations within industry premises and 37 outside industry premises) whereas 93 groundwater sampling locations (including 14 location of District G.B. Nagar) are contaminated with one or more parameters such as sulphate, fluoride, heavy metals such as cadmium, copper, lead, iron, nickel, zinc, mercury, Total chromium and manganese.
- Sulphate content in ground water samples is exceeding the acceptable limit (200 mg/l) of Bureau of Indian Standard drinking water specifications (second revision) IS10500-2012 at 5 locations (i.e., in G.Noida (01), Muzaffarnagar (01), Saharanpur (01) and Ghaziabad (2 locations). Fluoride content in groundwater samples is exceeding the limit of 1.0 mg/l at 11 locations (Bagpat (01), G.Noida (02), Meerut (01) and Ghaziabad (07), and O & G is exceeding only at one location Ghaziabad (i.e., ≥ BDL i.e., 2 mg/l).
- Heavy metals such as cadmium, copper, lead, iron, nickel, zinc, mercury and manganese are exceeding the Bureau of Indian Standard drinking water specifications (second revision) IS10500-2012 w.r.to the acceptable limits at 4, 5, 14, 33, nil, 04, 39 and 13 locations respectively.

Source :*Joint committee Report submitted in Hon'ble NGT Committee in OA No. 231/2014 & 66/2015 by CPCB.*

Supply of safe drinking water to the affected villages situated in the stretch of River Hindon

U.P. Pollution Control Board has requested Managing Director, U.P. Jal Nigam, U.P. vide letter dated 03-12-2018 to implement the instructions of the Monitoring Committee headed by Justice Shri. S.U. Khan (Retd. High Court Judge) constituted by Hon'ble NGT regarding the supply of potable drinking water to the affected villages of stressed area.

As per information available from U.P. Jal Nigam all functional 8782 hand pumps tested in stressed area. Out of these only 1088 hand pumps were found giving contaminated water.

866 out of 1088 hand pumps (Saharanpur-15, Meerut-78, Shamli-137, Baghpat-425, Muzaffarnagar-201 & Ghaziabad-10) have been uprooted/dismantled. Rest 222 (Baghpat-130 & Shamli-92) could not be uprooted as local people assured they would not use water for drinking purposes. In Baghpat disstrict 31 hand pumps have been re-bored. As per U.P. Jal Nigam potable water is sufficiently available, however a comprehensive action plan for piped water supply has been submitted for administrative and financial approval of the Government.

Contaminated ground water giving hand pumps/tubewells located within the industrial premises have been dismantled.

6. MONITORING OF POLLUTION SOURCES

6.1 MONITORING OF DRAINS

All the 31 drains will be monitored on weekly basis and the sampling points are selected near the confluence of the drains with the Hindon river , Kali (west) and Krishni. Care has been taken that there is no back water effect of the river at the sampling point and no source of pollution joins the drain after the sampling point. The details of drain sampling points are given below:

Drain Sampling Points

S. No.	District	Monitoring Point	Monitoring Frequency			Controlling Regional Office	Controlling Regional Office
			Place	Latitude	Longitude		
1	Saharanpur	Dhamola	Kapil Vihar	29°57'07.2"N	77°33'08.7"E	Weekly	Saharanpur
2	Saharanpur	Star Paper Mill Drain	Village Paragpur	29°55'27.47"N	77°35'25.66"E	Weekly	Saharanpur
3	Saharanpur	Bajaj Sugar Drain	Village Ashrakheri	29°47'34.6"N	77°34'39.4"E	Weekly	Saharanpur
4	Saharanpur	Daya Sugar Drain	Gagalheri	29°57'58.53"N	77°39'12.60"E	Weekly	Saharanpur
5	Saharanpur	Naagdehi Drain	Near Nau Gaja Peer Dehradun road	29°58'23.2"N	77°36'47.0"E	Weekly	Saharanpur
6	Saharanpur	Thaska Drain	Village Bhanera Khemchand	29°40'58.0"N	77°26'44.7"E	Weekly	Saharanpur
7	Saharanpur	Badhai Khurd	Village Rankhandi	29°36'53.3"N	77°39'32.9"E	Weekly	Saharanpur
8	Muzaffar Nagar	River Hindon	Titawi Drain	29º28'49.40"N	77º31'13.41"E	Weekly	Muzaffarnaga
9	Muzaffar Nagar	River Kali West	Nyajipur Drain (Ramlila Tilla Drain)	29º28'39.53"N	77º41'11.08"E	Weekly	Muzaffarnaga
10	Muzaffar Nagar	River Kali West	Laddawala Drain	29º47'74.04"N	77º68'78.37"E	Weekly	Muzaffarnaga
11	Muzaffar Nagar	River Kali West	Shamli Road Drain	29°28'21.44"N	77°40'50.30"E	Weekly	Muzaffarnaga
12	Muzaffar Nagar	River Kali West	Khadarwala Drain	29°28'6.79"N	77°40'51.22"E	Weekly	Muzaffarnaga
13	Muzaffar Nagar	River Kali West	Krishnapuri Drain	29°28'6.53"N	77°40'51.26"E	Weekly	Muzaffarnaga

S. No.	District	Monitoring Point	Monitoring Frequency			Controlling Regional Office	Controlling Regional Office
			Place	Latitude	Longitude		
14	Muzaffar Nagar	River Kali West	Suzru Village Drain	29°27'3.15"N	77°40'37.74"E	Weekly	Muzaffarnaga
15	Muzaffar Nagar	River Kali West	Nai Basti Khalapar Drain	29°27'3.46"N	77°40'35.88"E	Weekly	Muzaffarnaga
16	Muzaffar Nagar	River Kali West	Dhandhera Drain	29°21'53.15"N	77°41'19.55"E	Weekly	Muzaffarnaga
17	Muzaffar Nagar	River Kali West	Mansurpur Drain	29°21'32.58"N	77°41'16.75"E	Weekly	Muzaffarnaga
18	Shamli	River Krishni	Sikka Drain	29°28'36.85"N	77°22'0.92"E	Weekly	Muzaffarnaga
19	Shamli	River Krishni	Shamli Drain	29°22'59.06"N	77°19'53.70"E	Weekly	Muzaffarnaga
20	Meerut	Sardhana Drain	Meerut- Sardhana Road at the D/s of Sardhana	29°04'28.33"N	77°27'44.43"E	Weekly	Meerut
21	Meerut	Kinono Drain	Kinoni Drain Meerut	29°03'07.44"N	77°27'17.09"E	Weekly	Meerut
22	Baghpat	Ramala Drain	Village Budhpur	29°13'34.2"N	77°17'32.4"E	Weekly	Meerut
23	Ghaziabad	Jawali drain	Jawali drain	28º44’37”N	77º22’55”E	Weekly	Ghaziabad
24	Ghaziabad	Karheda drain	Karheda drain	28º41’00”N	77º23’21”E	Weekly	Ghaziabad
25	Ghaziabad	Hindonvihar drain	Hindonvihar drain	28º41’14”N	77º24’25”E	Weekly	Ghaziabad
26	Ghaziabad	Meerut road kailabhatta road drain	Meerut road kailabhatta road drain	28º40’01”N	77º24’05”E	Weekly	Ghaziabad
27	Ghaziabad	Arthala drain	Arthala drain	28º39’39”N	77º23’35”E	Weekly	Ghaziabad
28	Ghaziabad	Indirapuram drain	Indirapuram drain	28º38’39”N	77º22’43”E	Weekly	Ghaziabad
29	Ghaziabad	Pratapvihar drain	Pratapvihar drain	28º39’11”N	77º23’37”E	Weekly	Ghaziabad
30	Ghaziabad	Dasna drain	Dasna drain	28º36’33”N	77º25’23”E	Weekly	Ghaziabad
31	Ghaziabad	Sahibabad Drain	Sahibabad	28° 38' 56"N	77° 19' 54"E	Weekly	Ghaziabad

6.2 MONITORING OF RIVER

The priority-1 polluted stretch of river Hindon and its tributaries will be monitored at 16 places so as to ascertain adverse effect of pollution by various sources in the river. The details of sampling points are given below

River Sampling Points

S.No.	District	Monitoring Point			Monitoring Frequency	Controlling Regional Office
		Place	Latitude	Longitude		
1	Saharanpur	Village Maheshpur(Hindon)	29°42'18.6"N	77°33'41.6"E	Weekly	Saharanpur
2	Saharanpur	Sanpala Road, Deoband(Kali West)	29°40'45.8"N	77°43'34.2"E	Fortnightly	Saharanpur
3	Saharanpur	Villlage Bhandeda Khemchand(Krishni)	29°40'51.2"N	77°26'44.5"E	Monthly	Saharanpur
4	Muzaffarnagar	River Hindon U/s at Police Station Thanabhawan Road Muzaffarnagar	29°33'17.99"N	77°32'50.92"E	Monthly	Muzaffarnagar
5	Muzaffarnagar	River Hindon D/s at Vill. Chandheri, Muzaffarnagar	29°16'9.68"N	77°29'29.09"E	Monthly	Muzaffarnagar
6	Muzaffarnagar	River Kali West U/s after meeting Deoband Drain	29°28'32.73"N	77°40'15.33"E	Monthly	Muzaffarnagar
7	Muzaffarnagar	River Kali West D/s at Ratanpuri, Muzaffarnagar	29°16'23.83"N	77°36'1.21"E	Monthly	Muzaffarnagar
8	Shamli	River Krishni U/s at Thanabhawan	29°35'19.81"N	77°25'42.56"E	Monthly	Muzaffarnagar
9	Shamli	River Krishni D/s at Vill. Bhabhisa	29°18'1.21"N	77°21'3.08"E	Monthly	Muzaffarnagar
10	Meerut	Kali (West) Vill.-Baparsi	29°11'07"N	77°29'28"E	Fortnightly	Meerut
11	Meerut	Kali (West) Mrt Baghpat Road	28°57'32"N	77°28'14"E	Fortnightly	Meerut
12	Ghaziabad (Hindon River)	Karedha	28°24'38.88"N	77°13'59.88"E	Monthly	Ghaziabad
13		Road bridge	28°24'9.36"N	77°14'27.24"E	Monthly	Ghaziabad
14		Chhijarshi	28°22'51.24"N	77°13'58.44"E	Monthly	Ghaziabad

The monitoring data for the last three years is available at **Appendix–7**

6.3 MONITORING OF WATER POLLUTING INDUSTRIES

All the water polluting industries will be monitored regularly by 03 agencies namely UPPCB, District Ganga Committee/Zila Paryavaran Samiti and Third Party Institutions of repute. GPIs will be monitored quarterly and other industries will be monitored randomly by District Ganga Committee/Zila Paryavaran Samiti. Third Party Institutions shall also be entrusted with the responsibility of comprehensive monitoring by CPCB and NMCG. Besides this the drive for identification and closure of illegal industries operating in non-conforming areas shall also be carried out by District Ganga Committees/Zila Paryavaran Samitis with appropriate Magisterial and Police support.

6.4 ESTABLISHMENT OF RIVER HINDON POLLUTION CONTROL ROOM

A Control Room for monitoring and centralized reporting of various pollution sources shall be established in Ghaziabad with appropriate infrastructure and human resource. This control room will be under overall supervision of DM, Ghaziabad and will be run by UP Pollution Control Board with the help of District Ganga Committees/Zila Paryavaran Samitis. For monitoring purpose, District Ganga Committees/Zila Paryavaran Samitis will be employing JRFs/Monitoring Assistants on contractual basis with the financial support of District Ganga Committees/Zila Paryavaran Samitis. Educational/Technical Institutions and Colleges will also be identified for taking their help in monitoring and remediation of pollution sources. Capacity building for monitoring of pollution sources of the students of such identified institutions and colleges will also be done by Pollution Control Board.

For monitoring exercise the Control Room with adequate infrastructure viz. LED Monitor, Desktop, Printer, Wi-Fi facility, Room rent including electricity charges etc. shall be established by UP Pollution Control Board with financial support from National Mission for Clean Ganga (NMCG). The

monitoring will be done from the Control Room with the help of Web Portal on which monitoring data from field shall be uploaded.

The Web Portal will be developed by UP Pollution Control Board and login ID and Password will be provided to District Ganga Committees/Zila Paryavaran Samitis for access to the portal and uploading of monitoring data of various pollution sources

7. POLLUTED RIVER STRETCH REJUVENATION ACTION PLAN

S. No.	Action Point	Timeline	Implementing Department/Agency	Remark
A. SEWAGE MANAGEMENT				
	(a) Short Term Action Point			
1	Estimation of total sewage generation from City/Towns where sewage treatment facility does not exist and preparation of DPR for treatment of sewage	02 Months	U.P. Jal Nigam & Concerned ULBs	
2	Measurement of flow & load of all the drains contributing pollution load in River Hindon, Krishni & Kali (West)	02 Months	U.P. Jal Nigam & Concerned ULBs	
3	Installation of Bar-meshes in the drains & regular cleaning & disposal of Solid Waste from them	03 Months	Concerned ULBs	The ULBs will ensure compliance in the prescribed time line as informed by Urban Development Department.
4	Untapped drains to be provided with modular treatment facilities/ In-Situ bio-remediation or Phytorid-SWAB (CSIR-NEERI) based treatment	06 Months	U.P. Jal Nigam & Concerned ULBs	The ULBs/Urban Development Department will ensure compliance in the prescribed time line as informed by Urban Development Department.
5	Formulation of Action Plan for long term use of treated water discharged from STPs	03 Months	U.P. Jal Nigam, Irrigation & Concerned ULBs in consultation with UPPCB/CPCB	
6	Installation of Web Cams & OCEEMS in STPs	03 Month	U.P. Jal Nigam/ Operating Govt. Agencies	

S. No.	Action Point	Timeline	Implementing Department/Agency	Remark
7	Formulation of Action Plan for income generation of STPs including installation of Solar Power Plants, Energy Plantation & sale of sludge and treated water, bio-composting etc.	03 Months	U.P. Jal Nigam & ULBs	
8	Obtaining Consent to Operate/Establish and Hazardous Authorization from UPPCB	02 Months	U.P. Jal Nigam/ Operating Govt. Agencies	
9	Preparation of DPR for channelization including diversion of sewage generated from household / township / villages to sewer lines and interception of all drains (excluding drains carrying industrial wastewater) for ensuring proper treatment through upcoming STPs.	Within 3 Months	Jal Nigam / Nagar Nigam, Concerned Districts	
10	Septage Management in the areas where sewerage network does not exist	Within 6 Months	ULBs/Jal Nigam	The ULBs will ensure compliance in the prescribed time line as informed by Urban Development Department.
(b). Long Term Action Point				
1	Laying of Sewerage Network & Connection of households to the sewer line in order to utilize the installed capacity of existing STPs	24Months from sanction of DPR	U.P. Jal Nigam & Concerned ULBs	

S. No.	Action Point	Timeline	Implementing Department/Agency	Remark
2	Establishment of Sewage Treatment Plants of adequate capacity	24 to 30 Months from sanction of DPR	U.P. Jal Nigam & Concerned ULBs	Detailed plan alongwith details of status of DPR, source of funding etc. Is given in para-3.2 as informed by Urban Development Department, U.P.
3	Tapping & diversion of the drains having high sewage load to STPs to be constructed on I&D model	24 to 30 Months from sanction of DPR	U.P. Jal Nigam & Concerned ULBs	Detailed plan alongwith details of status of DPR, source of funding etc. Is given in para-3.2 as informed by Urban Development Department, U.P.
4	Infrastructure Development in Irrigation/Horticulture/ Sprinkling/Industrial use etc. And ensuring use of treated water	24 to 30 Months from sanction of DPR	U.P. Jal Nigam & Concerned ULBs	Detailed plan alongwith details of status of DPR, source of funding etc. Is given in para-3.2 as informed by Urban Development Department, U.P.
5	Installation of Solar Power Plant & Energy Plantations in the vacant land of STPs	12 Months from sanction of DPR	U.P. Jal Nigam/ Operating Govt. Agencies	
6	Installation of supplementary/tertiary treatment system in existing STPs which are not able to achieve discharge norms in the present system	12 Months from sanction of DPR	U.P. Jal Nigam & Concerned ULBs	
7	Treatment of waste water in Rural areas flowing into the river by Bio-remediation/Phyto-remediation/Oxidation Pond etc.	12 Months	Gram Panchayat, Panchayati Raj, Rural Development Departments, Rastriya Swachta Mission-Gramin	The financial resources may be arranged from MNREGA/Swachh Bharat Mission – Gramin

S. No.	Action Point	Timeline	Implementing Department/Agency	Remark
8	Ensuring ODF in all the villages situated along the river	12 Months	Gram Panchayat, Panchayati Raj, Rural Development Departments, Rastriya Swachta Mission-Gramin	
B.	**INDUSTRIAL WASTE MANAGEMENT**			
	(a) Short Term Action Point			
1	Re-inventorisation of Water Polluting Industries in the catchment area of the drains and their status with respect to consent, installation of ETP, adequacy of ETP and final discharge point	03 Months	UPPCB, UPSIDC, ULBs & Department of Industries	
2	Monitoring of water polluting industries and ensuring closure of industries which are operating without consent or non-compliant	Quarterly	UPPCB & CPCB	
3	Installation of OCEEMS, Flow Meter & Web Cams in large and medium category of GPIs with connectivity to the server of CPCB and UPPCB	03 Months	UPPCB	
4	Closure and legal action against the illegal water polluting industries operating in non-confirming /residential areas	Regular activity	District Level Inter-Departmental Enforcement Committee having representatives of Administration,	

S. No.	Action Point	Timeline	Implementing Department/Agency	Remark
			Police, UPPCB, ULBs, Development Authority, Power Corporation, Department of Industries etc.	
	(b) Long Term Action Point			
1	Adoption of cleaner technologies by water polluting industrial sectors having major impact on water quality of the river. For eg. – Electroplating, Dyeing, Pulp & Paper industries etc.	24 Months	UPPCB, CPCB & Department of Industries	
2	Imposing stringent norms in Distillery, Pulp & Paper, Slaughter House & Tannery sectors	24 Months	Departments of Environment, Industries, Excise & UPPCB	
3	Reducing abstraction of ground water by reuse/recycle of treated effluent by installation of additional treatment facilities & process improvement	12 Months	CGWA, CPCB, Department of Industries & UPPCB	
4	Use of treated effluent from CETPs for industrial and irrigation purposes	12 Months	Department of Industries, SPVs, Operating Agencies, UPPCB & CPCB	

S. No.	Action Point	Timeline	Implementing Department/Agency	Remark
5	Actions related to improvement of ETPs and reduction of use of ground water by the industries as per the prescriptions given in Appendices 3A, 3B, 3C, 3D, 3E & 3F.	6 to 24 Months	Department of Industries, UPPCB & CPCB	
C. SOLID WASTE & FLOOD PRONE ZONE MANAGEMENT				
	(a) Short Term Action Point			
1	Strictly ensuring prohibition of dumping of solid & other waste within 500 Meters of the banks of the river	Immediate	ULBs, Gram Panchayat Development Authorities & Urban Development Department	
2	Collection & Segregation of Solid Waste as per the provision of SWM Rules, 2016	Immediate	ULBs, Gram Panchayat Development Authorities & Urban Development Department	The ULBs will ensure compliance as per timeline given according to the Action Plan **(Appendix-8)** as informed by Urban Development Department, UP. Panchayati Raj Department, UP will ensure compliance in Rural Areas.
3	Disposal of Recyclable waste through registered recyclers	Immediate	ULBs, Gram Panchayat, Development Authorities & Urban Development Department	The ULBs will ensure compliance as per timeline given according to the Action Plan **(Appendix-8)** as informed by Urban Development Department, UP. Panchayati Raj Department, UP will ensure compliance in Rural Areas.

S. No.	Action Point	Timeline	Implementing Department/Agency	Remark
4	Compliance of SWM Rules, 2016 by bulk generators (onsite bio-composting, disposal of recyclable waste through registered recyclers)	02 Months	ULBs, Development Authorities, Railways, Transport Corporation, Mandi Parishad, Cantonment Board, Educational Institution, RWAs & Urban Development Department etc.	The ULBs will ensure compliance as per timeline given according to the Action Plan **(Appendix-8)** as informed by Urban Development Department, UP. Panchayati Raj Department, UP will ensure compliance in Rural Areas.
5	Upgradation & operation of existing non-operational & non-complying Solid Waste Treatment Facilities as per prescribed norms	06 Months	ULBs, Development Authorities & Urban Development Department	The ULBs will ensure compliance as per timeline given according to the Action Plan **(Appendix-8)** as informed by Urban Development Department, UP. Development Authorities will also ensure compliance in concerned areas.
6	Compliance of C&D Waste Management Rules, 2016 & prohibition of illegal dumping of C&D waste	Immediate	ULBs, Development Authorities & Urban Development Department	
7	Installation of Web Cams in Solid Waste & C&D Waste Treatment & Disposal Facilities with open access to UPPCB & CPCB server connectivity	03 Month of functioning of the processing plants	ULBs, Development Authorities & Urban Development Department	

S. No.	Action Point	Timeline	Implementing Department/Agency	Remark
8	Formulation of Action Plan for income generation of Solid Waste & C&D Waste Treatment & Disposal Facilities including installation of Solar Power Plants, Energy Plantation & sale of RDF, compost etc.	02 Months	ULBs, Development Authorities & Urban Development Department	The ULBs will ensure compliance as per timeline given according to the Action Plan **(Appendix-8)** as informed by Urban Development Department, UP. Development Authorities will also ensure compliance in concerned areas.
9	Obtaining Consent to Operate/Establish and Authorization from UPPCB	02 Months	ULBs, Development Authorities, Urban Development Department & UPPCB & CPCB	
10	Ensuring idol immersion in environmental friendly manner by creation of artificial ponds with proper lining & proper disposal of sludge & effluent	Immediate	ULBs, Development Authorities &District Administration	
11	Ensure strict prohibition of encroachments & illegal constructions in FPZ	06 Months	Development Authorities, District Administration &Police and Irrigation Department	
12	Removal of solid waste & algal growth disposed in the river by use of low cost innovative techniques with involvement of	06 Months	ULBs, Gram Panchayat, Development	The boats with improvised low cost trash skimming attachments may be tried along the length of the River for

S. No.	Action Point	Timeline	Implementing Department/Agency	Remark
	local community		Authorities &Irrigation Department	removal of floating solid waste with the help of local community.
(b)	**Long Term Action Point**			
1	Establishment of new solid waste & C&D treatment & disposal facilities against the gap with respect to generation of solid waste	24 Months after sanction of DPR	ULBs, Development Authorities & Urban Development Department	The ULBs will ensure compliance as per timeline given according to the Action Plan **(Appendix-8)** as informed by Urban Development Department, UP. Development Authorities will also ensure compliance in concerned areas.
2	Treatment & disposal of legacy waste dumped within 500 meters of the bank of the River	24 Months after sanction of DPR	ULBs, Development Authorities & Urban Development Department	The ULBs will ensure compliance as per timeline given according to the Action Plan **(Appendix-8)** as informed by Urban Development Department, UP. Development Authorities will also ensure compliance in concerned areas.
3	Construction of electric/fuel efficient crematorium to stop disposal of unburnt/ semi burnt corpses in the river	24 Months	ULBs, Development Authorities & Urban Development Department	The ULBs will ensure compliance as per timeline given as informed by Urban Development Department, UP. Development Authorities will also ensure compliance in concerned areas.

S. No.	Action Point	Timeline	Implementing Department/Agency	Remark
4	Demarcation & notification of FPZ by introducing Pillars at suitable locations in river flood plain and preventing encroachment in river bed.	24 Months	Irrigation Department	Only after sanctioning of DPR & its other formalities including sanctioning of budget under NMCG.
5	Removal of illegal encroachments & constructions from FPZ	24 Months	District Level Committee headed by D.M, with representative from concerned Departments.	
D. ECOLOGICAL FLOW & GROUND WATER MANAGEMENT				
	(a) Short Term Action Point			
1	Identification, inventorization & geo referencing of wetlands/water bodies including their zone of influence & catchment areas within 2 Km of the river	03 Months	State Wetland Authority, Forest & Wildlife, Panchayati Raj, Revenue Department, ULBs & Gram Panchayats	
2	Identification & geo referencing of vacant lands in the vicinity of the river for development of bio-diversity parks & forest areas	03 Months	Forest & Wildlife, Panchayati Raj, Revenue Department, ULBs & Gram Panchayats	

S. No.	Action Point	Timeline	Implementing Department/Agency	Remark
3	Identification of external water sources like canal escapes etc. for addition of water in the river for dilution purposes	03 Months	Irrigation Department	Only surplus water after fulfilling irrigation demands will be provided to near by rivers through canal escapes.
4	Prohibition of illegal mining & diversion of river stream	Regular Activity	District Administration, Mining Department & Irrigation Departmen	Only diversion of river stream would be reported to District authorities in non mansoon period by concerned district irrigation officers.
5	Ensuring rain water harvesting/recharging structures/rainer wells on river banks & construction of water harvesting structures	Regular Activity	Mining, Rural Development & Minor Irrigation Department	Possible funding may be arranged through MNREGA and Central assistance by NMCG.
(b)	**Long Term Action Point**			
1	Notification of E-flow of the River	12 Months	Irrigation Department, MoWR (CWC)	Notification of E-flow of the River will be done by MOWR (CWC).
2	Ecological restoration of the wetlands including plantation in the catchment area & development of community based eco-tourism in the wetland	24 Months from sanction of DPR	State Wetland Authority, Forest & Wildlife Department Tourism Department & National Mission for Clean Ganga	Possible source of funding may be from Centrally Sponsored Scheme for Development of Wetlands and from NMCG.
3	Development of Bio-diversity Parks and Riverine Forests by plantation & re-generation of native species of trees, grasses & herbs and establishment of new nurseries	24 Months from sanction of DPR	State Wetland Authority, Forest & Wildlife Department & National Mission for Clean Ganga	Funds may be arranged from NMCG.

S. No.	Action Point	Timeline	Implementing Department/Agency	Remark
4	Adoption of good irrigation/Agriculture practices, suitable crop selection, use of sprinkler/drip irrigation to minimize the water consumption through awareness & support to the farmers	12 Months	Agriculture Department, Rural Development, Minor Irrigation Department	
5	Removal of encroachment from wetlands, ponds & their restoration	24 Months	Revenue, Administration, Panchayati Raj Department, ULBs & Gram Panchayats	
6	Allowing flow of fresh surplus water source like canal for restoration of E-flow	18 Months	Irrigation Department	Only surplus water after fulfilling irrigation demands will be provided to near by rivers through canal escapes.
7	Recharge of dry Wells and Ponds	24 Months	Panchayati Raj Department, ULBs & Gram Panchayats	
E. MONITORING & EVALUATION				
(a) Short Term Action Point				
1	Daily Monitoring of river water quality at the upstream & downstream of cities & meeting points of the major drains	Regular Activity	UPPCB, District Ganga Committee/ District Environment Committee	
2	Weekly monitoring of drains, STPs &	Regular	UPPCB, District	

S. No.	Action Point	Timeline	Implementing Department/Agency	Remark
	CETPs	Activity	Ganga Committee/ District Environment Committee	
3	Monitoring of water polluting industries	Quarterly	UPPCB, District Ganga Committee/ District Environment Committee	
4	Monitoring of ground water quality within 500 meters of the rivers & drains	Quarterly	UPPCB, CGWA, CPCB & District Ganga Committee/ District Environment Committee	
5	Pre-monsoon & post-monsoon monitoring of ground water level	Regular Activity	CGWA & Directorate of Ground Water	
6	Measurement of River flow as per the protocol	Regular	Irrigation Department & District Ganga Committee/ District Environment Committee	Annual flow discharge data of river .
7	Project formulation & funding including recurring expenses for employment of JRFs/Monitoring Assistants/Field Assistants, purchase of kits & equipments, vehicle on rental basis, development of Web Portal &	02 Months	UPPCB, District Ganga Committee/ District Environment Committee, SMCG &	

S. No.	Action Point	Timeline	Implementing Department/Agency	Remark
	establishment of Control Room, purchase of desktop computers, printers/ LED Monitor etc.		NMCG	
8	Development of Web Portal for reporting & centralized monitoring of water quality of the river & drains and action points with access to all concern stakeholders departments/agencies responsible for implementation of the action plan	Regular	UPPCB, NMCG & CPCB	
9	Establishment of Regional Control Rooms at District/ Division Level for monitoring & uploading of data related to monitoring of water quality & compliance of action points with its integration to the State Level Control Room	04 Months	UPPCB, District Ganga Committee/ District Environment Committee	

APPENDICES

Appendix-1

Pollution Source Mapping of River Hindon from Sahranpur to Ghaziabad

S. No.	District	Name of Drain	Meeting Point of Drain		Domestic/ Industrial/ Mixed	Tapped/ Untapped / Partially Tapped	Industries		Sewage Discharge (MLD)			Status of Bar-mesh
			Latitude	Longitude			Number	Treated Effluent (MLD)	Treated	Untreated	Total	
1.	Sahranpur	Dhamola Drain	29°54'35.07"N	77°33'19.50"E	Mixed	Untapped	32	0.561	38	81	119	No
2.		Star Paper Mill Drain	29°51'18.65"N	77°34'3.07"E	Industrial	Untapped	1	12	0	0	0	No
3.		Bajaj Sugar Drain	29°46'25.24"N	77°34'36.37"E	Industrial	Untapped	2	1.0	0	0	0	No
4.		Daya Sugar Drain	29°57'58.38"N	77°39'12.47"E	Industrial	Untapped	1	0.5	0	0	0	Yes
5.		Thaska Drain	29°40'54.48"N	77°26'46.82"E	Mixed	Untapped	3	1.9	0	0.5	0.5	No
6.		Nagdehi Drain	29°56'34.3"N	77°36'17.3"E	Industrial	Untapped	2	0.27	0	0	0	No
7.		Badhai Khurd Drain	29°30'14.6"N	77°39'31.6"E	Mixed	Untapped	1	1.368	0	0.5	0.5	No
Total							**42**	**17.599***	**38.0**	**82**	**120.0**	

Note:- Three industries namely M/s A.L.M. Industries (Meat Processing Unit) Haroda (Discharge-0.095 MLD), Saharanpur, A.L.M. Industries (Slaughter House) Haroda, Saharanpur (Discharges- 0.1 MLD) & M/s U.P. Co-Oprative Co. Ltd. Tapri, Saharanpur(Distillery only bottling) (Discharges- 0.1 MLD) are discharging their treated effluent on land for irrigation & in case of emergency effluent may be discharged into River Hindon directaly as all the industries are situated at the adjacent of the River Hindon.*

S. No.	District	Name of Drain	Meeting Point of Drain		Domestic/ Industrial/ Mixed	Tapped/ Untapped / Partially Tapped	Industries		Sewage Discharge (MLD)			Status of Bar-mesh
			Latitude	Longitude			Number	Treated Effluent (MLD)	Treated	Untreated	Total	
8.	Muzaffarnagar	Titawi Drain	29°28'49.3"N	77°31'13.3"E.	Mixed	Untapped	1	0.8	0	0.3	0.3	No
9.		Dhandhera Drain	29°21'53.4"N	77°41'20.0"E.	Mixed	Untapped	41	34.45	0	22.25	22.25	No
10.		Mansurpur Drain	29°21'32.7"N	77°41'16.8"E.	Mixed	Untapped	2	0.7	0	0.2	0.2	No
11.		Nyajipur Drain	29°28'38.9"N	77°41'10.8"E.	Domestic	Untapped	0	0	0	3.16	3.16	No
12.		Laddawala Drain	29°28'33.1"N	77°41'09.5"E.	Domestic	Partially Tapped	0	0	0	20.43	20.43	No
13.		Shamli Road Drain	29°28'21.4"N	77°40'50.3"E.	Domestic	Untapped	0	0	0	1.47	1.47	No
14.		Khadarwala Drain	29°28'06.8"N	77°40'51.7"E.	Domestic	Untapped	0	0	0	5.41	5.41	No
15.		Krishnapuri Drain	29°28'06.5"N	77°40'51.6"E.	Domestic	Untapped	0	0	0	16.83	16.83	No
16.		Suzru Village Drain	29°27'03.2"N	77°40'36.1"E	Domestic	Untapped	0	0	0	2.08	2.08	No
17.		Nai Basti Khalapar Drain	29°27'06.1"N	77°40'37.0"E.	Domestic	Untapped	0	0	0	1.71	1.71	No
Total							**44**	**35.95****	**0**	**73.84**	**73.84**	

Note:- *** The treated effluent of 01 MLD of M/s Bajaj Hindustan Sugar Ltd., Thana Bhawan is used for ferti-irigation and in case of emergency effluent may be discharged into River Krishni directly.*

S. No.	District	Name of Drain	Meeting Point of Drain		Domestic/ Industrial/ Mixed	Tapped/ Untapped / Partially Tapped	Industries		Sewage Discharge (MLD)			Status of Bar-mesh
			Latitude	Longitude			Number	Treated Effluent (MLD)	Treated	Untreated	Total	
18.	Shamli	Shamli Drain	29°22'59.06"N	77°19'53.70"E	Mixed	Untapped	03	2.35	0	10	10	No
19.		Sikka Drain	29°28'36.85"N	77°22'0.92"E	Mixed	Untapped	01	0	0	0.5	0.5	No
Total							**04**	**2.35*** **	**0**	**10.5**	**10.5**	
20.	Ghaziabad	Jawali Drain	28°44'25.43"N	77°23'15.33"E	Industrial	Untapped	152	2.422	0	0	0	NO
21.		Hindonvihar Drain	28°40'55.37"N	77°24'1.74"E	Domestic	Untapped	0	0	0	7	7	NO
22.		kailabhatta road drain	28°40'1.27"N	77°24'5.77"E	Mixed	Untapped	21	1.933	0	16	16	NO
23.		Arthala Drain	28°39'44.18"N	77°23'52.35"E	Industrial	Untapped	02	0.263	0	0	0	NO
24.		Indirapuram Drain	28°38'10.50"N	77°23'32.85"E	Mixed	Untapped	0	0	112	0	112	NO
25.		PratapVihar Drain	28°38'8.29"N	77°23'43.39"E	Domestic	Untapped	0	0	0	40	40	NO
26.		Dasna Drain	28°36'24.34"N	77°25'18.74"E	Mixed	Untapped	45	3.697	0	47	47	NO
27.		Karedha Drain	28°41'6.72"N	77°23'29.46"E	Mixed	Untapped	19	1.657	0	2	2	NO
28.		Sahibabad Drain	28°66'2.87"N	77°34'3.40"E	Mixed	Partially Tapped	114	8.797	74	83.203	157.203	No
Total							**353**	**18.769**	**186**	**195.203**	**381.203**	

S. No.	District	Name of Drain	Meeting Point of Drain		Domestic/ Industrial/ Mixed	Tapped/ Untapped / Partially Tapped	Industries		Sewage Discharge (MLD)			Status of Bar-mesh
			Latitude	Longitude			Number	Treated Effluent (MLD)	Treated	Untreated	Total	
29.	Meerut	Sardhana Drain	29° 4'28.32"N	77°27'44.22"E	Mixed	Untapped	02	1.26	0	10	10	NO
30.		Kinauni Drain	29° 3'7.44"N	77°27'17.09"E	Industrial	Untapped	02	1.20	0	0	0	NO
Total							**04**	**2.46**	**0**	**10**	**10**	
31.	Baghpat	Ramala Drain	29°13'16.36"N	77°19'0.56"E	Industrial	Untapped	01	0.50	0	0.1	0.1	No
Total							**01**	**0.50**	**0**	**0.1**	**0.1**	

Note:- .

**** The effluent of 01 Industry namely M/s Bajaj Hindustan Sugar Ltd., Baisana, Shamli is used for ferti irrigation & in case of emergency effluent may be discharged into River Hindon directaly as all the industries are situated at the adjacent of the River Hindon.*

Appendix-2

Details of Cities & Towns

S.No.	District	Name of City/ Town	Type of ULB	Population (Lakh) Census - 2011	Estimated Population (Lakh) Year - 2019	Sewage Generation (MLD)	Estimated MSW (Kg/Day)
1	Saharanpur	Saharanpur	Nagar Nigam	7.62	8.82	95.24	190500
2	Muzaffarnagar	Muzaffarnagar (Other than Khatoli)	Nagar Palika Parishad	4.18	4.75	51.26	104500
3	Shamli	Shamli	Nagar Palika Parishad	1.13	1.28	13.86	28250
4	Meerut	Meerut	Nagar Nigam & Cantonment Board	13.86	15.51	167.52	346500
5	Baghpat	Baghpat	Nagar Palika Parishad	0.55	0.60	6.508	13750
6	Ghaziabad	Ghaziabad except Modi Nagar	Nagar Nigam GZ|B	19.34	25.88	279.5	483500
	Total			**46.68**	**56.84**	**613.88**	**1167000**

Appendix-3

Details of Industries

District : Sararanpur

S. No.	Name and Address	Location		Type	Treatment Mechanism (ETP/ CETP)	Effluent Discharge (KLD)	Effluent Discharge Drain	Remarks
		Latitude	Longitude					
1.	A.L.M. Industries (Meat Processing Unit) Haroda, Saharanpur	29°58'9.36"N	77°35'9.51"E	Meat Processing	ETP	-	On Land (100 KLD)	–
2.	A.L.M. Industries (Slaghter House Unit) Haroda, Saharanpur	29.969267° N	77.585975° E	Slaughter House	ETP	-	On Land (475 KLD)	–
3.	Arora Hoiesery, Janta Road, Saharanpur	29°58'24.6"N	77°34'29.6"E	Yarn/Textile Processing	ETP	18.0	Dhamola /Hindon	–
4.	Atul Textile, Behat Road, Saharanpur	29°59'10.7"N	77°34'14.3"E	Yarn/Textile Processing	ETP	19.5	Dhamola /Hindon	–
5.	Bajaj Hindustan Ltd. Distillary Unit, Gagnoli. Saharanpur	29°48'34.2"N	77°35'13.3"E	Distillery	ETP	ZLD	Bajaj Drain/ Hindon	–
6.	Bajaj Hindustan Ltd. Sugar Unit, Gagnoli, Saharanpur	29°48'34.2"N	77°35'13.3"E	Sugar	ETP	100	Bajaj Drain/ Hindon	–
7.	Deep Industries, I.E. Delhi Road, Saharanpur	29°55'45.2"N	77°31'42.2"E	Yarn/Textile Processing	ETP	20.0	Dhamola /Hindon	–
8.	Durga Textile, Janta Road, Saharanpur	29°58'15.6"N	77°34'44.2"E	Yarn/Textile Processing	ETP	21.5	Dhamola /Hindon	–
9.	Garg Dyeing, Janta Road, Saharanpur	29°58'19.3"N	77°34'44.7"E	Yarn/Textile Processing	ETP	150.0	Dhamola /Hindon	–
10.	J.J. Textile, Janta Road, Saharanpur	29°58'14.7"N	77°34'43.5"E	Yarn/Textile Processing	ETP	18.5	Dhamola /Hindon	–
11.	Nagar Nigam, Pashubadhshala, Saharanpur	29°58'22.2"N	77°31'53.3"E	Slaughter House	ETP	150.0	Dhamola /Hindon	–
12.	Pashupati Dairy (P) Ltd. Dehradun Road, Saharanpur	29°58'07.2"N	77°36'57.2"E	Milk Processing	ETP	270.0	Naagdehi Nala/Hindon	–
13.	Plaza Paper P.Ltd. Saharanpur.	30° 3'50.50"N	77°34'53.16"E	Pulp & Paper	ETP	-	-	Self Closed
14.	Rainbow Board Mill, (Unit Kraft Paper) Saharanpur	29°58'20.76"N	77°34'53.16"E	Pulp & Paper	ETP	–	-	Self Closed
15.	S.M.C. Foods Ltd. Nanauta, Saharanpur	29°42'17.5"N	77°25'55.5"E	Milk Processing	ETP	700.0	Thaska Drain/ Krishni	–

16.	Saharanpur Wools Ltd. Dehli Road, Saharanpur	29°55'42.7"N	77.287481 ° E	Yarn/Textile Processing	ETP	45.0	Dhamola /Hindon	–
17.	Shalimar Cotton Dyeing, Saharanpur	30° 0'27.36"N	30° 0'27.36"N	Yarn/Textile Processing	ETP	20.0	Dhamola /Hindon	-
18.	Siddharth Textile, Chilkana Road, Saharanpur	29°59'23.5"N	77°32'17.9"E	Yarn/Textile Processing	ETP	20.0	Dhamola /Hindon	-
19.	Star Paper Mill Saharanpur.	29°56'20.9"N	77°34'03.9"E	Paper	ETP	12000.0	Star Paper Mill Nala/Hindon	–
20.	Swaroop Paper (P) Ltd. Saharanpur	30.003037 ° N	77.503153° E	Pulp & Paper	ETP	-	-	Self Closed
21.	The Kisan Sahakari Chini Mill, Nanouta, Saharanpur	29.708211 ° N	77.447573 ° E	Sugar	ETP	700.00	Thaska Drain/ Krishni	–
22.	Triveni Engg. & Industries Ltd, Deoband, Saharanpur	29.4039° N	77.3941 ° E	Sugar	ETP	1400.00	Badhai Khurd drain/Kali West	–
23.	U.P. Co-Oprative Co. Ltd. Tapri, Saharanpur	29.5452 ° N	77.354749° E	Distillery	ETP	100	-	Only Bottling
24.	U.P. Co-Oprative Sugar Factory Nanauta, Saharanpur	29.777661° N	77.445567 ° E	Distillery	ETP	ZLD	Thaska Drain/ Krishni	Self Closed
25.	Daya Sugar(A unit of B.K. Investment) Naya Bans, Gagalheri, Saharnapur	29°57'53.2"N	77°39'26.2"E	Sugar	ETP	500	Daya Sugar Drain/ Hindon	-
26.	Ekta Textile, Janta Road, Saharanpur	29°58'17.75"N	77°33'56.49"E	Yarn/Textile Processing	ETP	20	Dhamola /Hindon	-
27.	Anmol Textile, Janta Road, Saharanpur	29°58'15.61"N	77°33'54.35"E	Yarn/Textile Processing	ETP	29	Dhamola /Hindon	-
28.	Super Textile, Village Tiparpur, Janta Road, Saharnapur	29°59'44.83"N	77°35'38.03"E	Yarn/Textile Processing	ETP	24	Dhamola /Hindon	-
29.	Shah Industries, 18 Medanta Complex, Janta Road, Saharnapur	29°58'21.46"N	77°34'36.23"E	Yarn/Textile Processing	ETP	24	Dhamola /Hindon	-
30.	Ganpati Textile, Janta Road, Saharanpur	29°58'19.29"N	77°34'56.56"E	Yarn/Textile Processing	ETP	20	Dhamola /Hindon	-
31.	Bombay Hoseiry, Chajjpura, Dehradun Road, Saharanpur	29°58'15.88"N	77°35'4.98"E	Yarn/Textile Processing	ETP	12	Dhamola /Hindon	-
32.	Hindon Filter (P) Ltd. Unit 2 Village Kolki Kalan Saharanpur	29°56'2.07"N	77°39'19.76"E	Pulp & Paper	ETP	200.0	Dhamola /Hindon	
33.	Shree Krishna Board Mill, Gagadhedi, Saharanpur	29°59'8.94"N	77°40'10.55"E	Pulp & Paper	ETP	-	Dhamola /Hindon	–
34.	Mahaveer Hand Made Paper & Board Mill	30° 3'50.50"N	77°34'53.16"E	Pulp & Paper	ETP	-	Dhamola /Hindon	Self Closed

35.	Shankar Board Mill, Saharanpur			Pulp & Paper	ETP	-	Dhamola /Hindon	Self Closed
36.	Parmar Paper Ltd., Saharanpur	29°58'20.76"N	29°58'20.76"N	Pulp & Paper	ETP	-	Dhamola /Hindon	Self Closed
37.	Saharanpur Paper Board Mill, Vill- Majri Dehradun Road, Saharanpur	29°58'37.17"N	77°38'54.12"E	Pulp & Paper	ETP	-	Dhamola /Hindon	Self Closed
38.	Majri Gramudyog Sansthan, Vill- Majri Dehradun Road, Saharanpur	29°58'16.89"N	77°34'46.46"E	Pulp & Paper	ETP	-	Dhamola /Hindon	Self Closed
39.	Jagdamba Gramodyog Sansthan, Dehradun Road, Saharanpur	29°58'18.14"N	77°35'4.90"E	Pulp & Paper	ETP	-	Dhamola /Hindon	Self Closed
40.	Jayna Grmodyog Sansthan, Gagalheri	29°59'0.90"N	77°39'56.92"E	Pulp & Paper	ETP	-	Dhamola /Hindon	Self Closed
41.	Tiwaya File Board Mill, Nawada Road, Saharanpur	29°59'59.00"N	77°38'34.32"E	Pulp & Paper	ETP	-	Dhamola /Hindon	Self Closed
42.	Star Gramodyog Sansthan, Manakmau	29°57'2.54"N	77°30'27.24"E	Pulp & Paper	ETP	-	Dhamola /Hindon	Self Closed
43.	Janhit Gramodyog Sansthan, Dehradun Road, Saharanpur	29°40'31.0"N	77°40'12.0"E	Pulp & Paper	ETP	-	Dhamola /Hindon	Self Closed
44.	Sufi Pulp & Paper Gramodyog Sansthan, Gagalheri, Saharanpur	29°58'31.50"N	77°39'43.15"E	Pulp & Paper	ETP	-	Dhamola /Hindon	Self Closed
45.	Mak Hoseiry, Tiparpur, Janta Road, Saharanpur	29°59'47.66"N	77°33'53.74"E	Yarn/Textile Processing	ETP	24	Dhamola /Hindon	-

District: Muzaffarnagar & Shamli

S.No.	Name and Address	Location		Type	Treatment Mechanism (ETP/CETP)	Effluent Discharge (KLD)	Name of Drain	Name of River
		Latitude	Longitude					
1.	Aggarwal Duplex & Board Mills Ltd. Bhopa Road Muzaffarnagar	29°28'24.59"N	77°44'23.70"E	Pulp & Paper	ETP	960.0	Kukra Drain	Kali West
2.	Ahrihant Pulp & Papers (P) Ltd. Jansath Road, Muzaffarnagar	29°26'15.28"N	77°44'45.87"E	Pulp & Paper	ETP	-	Dhandhera	Kali West
3.	Al Noor Export, Jansath road Muzaffarnagar	29°25'55.98"N	77°45'53.72"E	Slaughter House and Meat Processing	ETP	480.0	Dhandhera	Kali West
4.	Aristo Craft Paper Mills Pvt. Ltd. Meerut Road, Muzaffarnagar	29°24'27.94"N	77°42'12.17"E	Pulp & Paper	ETP	300.0	Dhandhera	Kali West

5.	Bindal Papers Ltd. Bhopa Road, Muzaffarnagar.	29°28'18.17"N	77°47'9.50"E	Pulp & Paper	ETP	9860.0	Dhandhera	Kali West
6.	Bindalas Duplex Ltd, Bhopa Road (Unit-1), Muzaffarnagar	29°28'12.25"N	77°48'23.3"E	Pulp & Paper	ETP	900.0	Dhandhera	Kali West
7.	Bindalas Duplex Ltd, Bhopa Road (Unit-2) Muzaffarnagar	29°28'12"N	77°48'14.8"E	Pulp & Paper	ETP	900.0	Dhandhera	Kali West
8.	D.L.S. Papers Pvt. Ltd., 10Km Meerut Road, Dhaulapul, Begrajpur, Muzaffarnagar	29º.22'50.14N	77º.41'8.21E	Pulp & Paper	ETP	500.0	Dhandhera	Kali West
9.	D.S.M. Sugar Mansurpur, Meerut Road. Muzaffarnagar	29º.21'11.48N	77º.43'6.93E	Sugar	ETP	700.0	Mansurpur Drain	Kali West
10.	Disha paper Industris, Jolly road, Muzaffarnagar	29°26'39.42"N	77°47'17.59"E	Pulp & Paper	ETP	2000.0	Jat Mujhera/ Bhandura Drain	Kali West
11.	Galaxy Papers pvt.ltd. Jolly Road, Muzaffarnagar	29°26'44.53"N	77°46'28.47"E	Pulp & Paper	ETP	ZLD	Dhandhera	Hindon
12.	Garg Duplex & Paper Mills (P) Ltd. Bhopa Road, Muzaffarnagar	29°28'4.10"N	77°47'3.88"E	Pulp & Paper	ETP	1800.0	Dhandhera	Kali West
13.	H.J. Tannery Pvt. Ltd. Jolly Road muzaffarnagar	29º.25'58N	77º.46'2.8E	Tannery	ETP	100.0	Dhandhera	Kali West
14.	I.P.L. (Formerly Titawi Sugar Complex), Titawi, Muzaffarnagar.	29º.28'20.63N	77º.32'47.46E	Sugar	ETP	800.0	Titawi Drain	Hindon
15.	K.K. Duplex Pvt. Ltd., Jansath road, Muzaffarnagar	29°25'33.46"N	77°41'29.79"E	Pulp & Paper	ETP	ZLD	Dhandhera	Kali West
16.	Magma Industries, Muzaffarnagar	29°22'18.4"N	77°41'49.92"E	Basic Chemicals & Derivatives	ETP	35.0	Begrajpur Industrial Drain	Hindon
17.	Mahalaxmi Craft & Tissues Bhopa Road, Jansath Muzaffarnagar.	29°25'17.10"N	29°25'17.10"N	Pulp & Paper	ETP	1100.0	Dhandhera	Kali West
18.	Meenu Papers (P) Ltd. Bhopa Road Muzaffarnagar	29°28'1.83"N	77°47'27.88"E	Pulp & Paper	ETP	900.0	Dhandhera	Kali West
19.	Orient Board & Paper Mill Pvt. Ltd. Jansath Road, Muzaffarnagar	29.428649	77.762413	Pulp & Paper	ETP	90.0	Kukra Drain	Kali West
20.	Parijat Paper Mills, Ltd., Bhopa Road, Muzaffarnagar	29°28'8.82"N	77°48'28.08"E	Pulp & Paper	ETP	600.0	Dhandhera	Kali West
21.	Krishnanchal Pulp & Papers Pvt. Ltd. (Formerly Prime Papers) Jolly Road, Muzaffarnagar	29°26'42.01"N	77°45'53.40"E	Pulp & Paper	ETP	ZLD	Dhandhera	Kali West
22.	Rana Papers (New Name N.S. Papers Ltd.) Jansath Road (Unit-2), Muzaffarnagar	29°25'31.84"N	77°45'37.48"E	Pulp & Paper	ETP	-	Dhandhera	Kali West
23.	Rana Papers (New Name N.S. Papers Ltd.) Jansath Road (Unit-3), Muzaffarnagar	29°25'31.84"N	77°45'37.48"E	Pulp & Paper	ETP	600.0	Sugar Mill Drain	Kali West

24.	Rana Papers (New Name N.S. Papers Ltd.) Jansath Road (Unit-1) Muzaffarnagar	29°25'31.84"N	77°45'37.48"E	Pulp & Paper	ETP	300.0	Dhandhera	Kali West
25.	Royal Paper Mills Ltd Jansath Road muzaffarnagar	29°25'30.23"N	77°45'42.50"E	Pulp & Paper	ETP	-	Dhandhera	Kali West
26.	Shakti Craft & Tissues, Jansath road, Muzaffarnagar	29°25'7.24"N	77°45'33.59"E	Pulp & Paper	ETP	900.0	Mansurpur Drain	Kali West
27.	Shakumbari Pulp & Paper Bhopa Road, Muzaffarnagar	29°28'21.00"N	77°44'26.96"E	Pulp & Paper	ETP	420.0	Jat Mujhera/ Bhandura Drain	Kali West
28.	Shalimar Paper Pvt. Ltd., Jansath Road, Muzaffarnagar	29º.24'57.40N	77º.45'37.5E	Pulp & Paper	ETP	-	Dhandhera	Kali West
29.	Shri Bhageshwari Paper Mills (P) Ltd., Bhopa Road Unit-1 Muzaffarnagar	29°28'14.68"N	77°47'29.43"E	Pulp & Paper	ETP	600.0	Dhandhera	Kali West
30.	Shri Bhageshwari Paper Mills (P) Ltd., Bhopa Road Unit-2 Muzaffarnagar	29°28'14.68"N	77°47'29.43"E	Pulp & Paper	ETP	600.0	Dhandhera	Kali West
31.	Siddheshwary Ind. Pvt. Ltd., Jansath Road, Muzaffarnagar	29°25'6.90"N	77°45'36.70"E	Pulp & Paper	ETP	1200.0	Titawi Drain	Kali West
32.	Sidhbali Papers mills Ltd,)Bhop Road, Muzaffarnagar	29°28'13.48"N	77°47'0.49"E	Pulp & Paper	ETP	1500.0	Sugar Mill Drain	Kali West
33.	Silver Tone Pulp & Paper, Bhopa Road, Muzaffarnagar.	29°27'59.96"N	77°47'18.26"E	Pulp & Paper	ETP	1200.0	Dhandhera	Kali West
34.	Silvertoan Paper Ltd. (Unit-1) Bhopa Road, Muzaffarnagar	29°28'7.72"N	77°47'10.68"E	Pulp & Paper	ETP	1500.0	No Drain	Kali West
35.	Silvertoan Paper Ltd. (Unit-2) 16Bhopa Road, Muzaffarnagar	29°27'59.96"N	77°47'18.26"E	Pulp & Paper	ETP	900.0	Begrajpur Industrial Drain	Hindon
36.	Sir Shadi Lal Distillery & Chemical Works, Mansoorpur Muzaffarnagar	29º.21'1.40N	77º.43'8.16E	Distillery	ETP	ZLD	Dhandhera	Kali West
37.	Sita Paper Mill, Bhopa Road, Muzaffarnagar	29°28'53.36"N	77°48'37.27"E	Pulp & Paper	ETP	-	Dhandhera	Kali West
38.	Suyash craft & papers ltd., Velhana, Muzaffarnagar	29°25'43.14"N	77°41'51.35"E	Pulp & Paper	ETP	900.0	-	Kali West
39.	Taj Paper Mills Pvt. Ltd., Jansath road, Muzaffarnagar	29°26'28.85"N	77°46'42.16"E	Pulp & Paper	ETP	-	Drain	Kali West
40.	Tasmiya Tannery Udyog, Vill. Moosa Shernnagar, Jansath Road, Muzaffarnagar	29°25'39.42"N	77°45'56.23"E	Tannery	ETP	-	Drain	Kali West
41.	Tehri Pulp & Papers Ltd. Bhopa Road (Unit-1) Muzaffarnagar	29°28'17.06"N	77°47'39.10"E	Pulp & Paper	ETP	1500.0	Kukra Drain	Kali West
42.	Tehri Pulp & Papers Ltd. Bhopa Road (Unit-2) Muzaffarnagar	29°28'14.12"N	77°47'39.44"E	Pulp & Paper	ETP	1200.0	Dhandhera	Kali West
43.	Tirupati Balaji Fibres Ltd. Bhopa Road, Muzaffarnagar	29°28'12.94"N	77°47'16.04"E	Pulp & Paper	ETP	600.0	Dhandhera	Kali West

44.	Triveni Engg. Industries Ltd. Bilaspur, Jolly Road, Muzaffarnagar.	29º.25'49.96N	77º.46'33E	Distillery	ETP	ZLD	Dhandhera	Kali West
45.	Bajaj Hindusthan Sugar Ltd., Bhaisana, Budhana, Muzaffarnagar	29º17'25N	77º29'38.96E	Sugar	Bar Screen, Oil & Grease Trap, Chemical Mixing Tank, Equalisation Tank, Primary Clarifier, Aeration Tank, Secondary Clarifier, Sand Filter, Activated Carbon Filter, SDBs	1000	Sugar mill drain	Hindon
46.	Bajaj Hindusthan Sugar Ltd., Thanabhawan, Shamli	29º24'7.2N	77º24'22.9E	Sugar	Bar Screen, Oil & Grease Trap, Chemical Mixing Tank, Equalisation Tank, Primary Clarifier, Aeration Tank, Secondary Clarifier, Sand Filter, Activated Carbon Filter, SDBs	1000	Thana Bhawan Drain	Krishni
47.	Maruti Papers (P) Ltd. Vill - Sikka Shamli	29º30'33.08"N	77º22'2.77"E	Pulp & Paper	ETP	00	Sikka Drain	Krishni /Hindon
48.	Nikita Papers (P) Ltd. Ind. Estate Shamli	29º25'12.91"N	77º15'40.35"E	Pulp & Paper	ETP	750.0	Titawi Drain	Krishni/ Hindon
49.	Shamli Distillery & Chem. Works. Shamli	29º.450137	77º.312206	Distillery	ETP	ZLD	Sugar Mill Drain	Krishni/ Hindon
50.	Upper Doab Sugar Mill, Shamli	29º.450137	77º.312206	Sugar	ETP	1600.0	No Drain	Krishni/ Hindon

District: Meerut & Baghpat

S. No.	Name and Address	Location		Type	Treatment Mechanism (ETP/CETP)	Effluent Discharge (KLD)
		Latitude	longitude			
1	M/s Saradhna Paper, Saradhna Meerut road,Meerut	29°07'36" N	77°36'29" E	Paper	ETP	1100.0
2.	M/s Shri Babubali Trader, Village Madiyai Saradhna Meerut road,Meerut	29°06'50" N	77°36'28" E	Textile	ETP	160.0
3.	M/s Bajaj Hindustan Ltd, (Sugar Unit) Village Kinauni,Meerut	29°02'59" N	77°28'06" E	Sugar Unit	ETP	1200.0
4	M/s Bajaj Hindustan Ltd, (Distillery Unit) Village Kinauni,Meerut	29°02'59" N	77°28'06" E	Sugar (Distillery)	ETP	ZLD
5.	M/s Ramala Sahkari Chini Mill, Ramala Baghpat	29°13'55" N	77°17'12"" E	Sugar	ETP	480.0

District: Ghaziabad

S. No.	Name and Address	Location		Type	Treatment Mechanism (ETP/CETP)	Effluent Discharge (KLD)
		Latitude	longitude			
1.	A & A, S-50, Site-2, Loni Road Ind.area, Mohan Nagar, Ghaziabad.	N 28°41'12.2964"	E 77°22'38.1756''	Yarn/Textile Processing	ETP	75.0
2.	A.B. Cycle Parts Pvt.Ltd., S-24, S.S.of G.T.Road Ind. Area, Ghaziabad.	N 28°38'19.2228"	E 77°26'17.3688''	Metal Surface Treatment	ETP	8.0
3.	A.C.E.Hardware, B-5, B.S.Road Ind. Area, Ghaziabad.	N 28°39'29.9844"	E 77°27'59.4144''	Metal Surface Treatment	ETP	2.0
4.	A.N. Fabric Dyers, 5/6, Site-2, Loni Road Mohan Nagar, Ghaziabad.	N 28°40'45.1596"	E 77°23'0.2796''	Yarn/Textile Processing	ETP	15.0
5.	A.R. Supreme, 26-27, Rural Ind. Area, Loni, Ghaziabad.	N 28°40'51.1968"	E 77°23'7.998''	Yarn/Textile Processing	ETP	15.0

6.	A.S. Enterprises, Arya Nagar Industrial Area, Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	10.0
7.	A.S.T. Pipes, B-33, B.S.Road Ind. Area, Ghaziabad.	N 28°39'29.9844"	E 77°27'59.4144''	Other	ETP	0.0
8.	Advance Steel Tube Ltd. 45/3, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Metal Surface Treatment	ETP	14.0
9.	Agrawal Galvenizing, A-8/6, Sect.22 Meerut Road Ind. Area, Ghaziabad.	N 28°38'37.752"	E 77°13'41.8296''	Metal Surface Treatment	ETP	2.0
10.	Aiden Jeans, B-49/5, Site-4 Ind. Area, Sahibabad, , Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	20.0
11.	Airtech Pvt.Ltd., 20/7, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Metal Surface Treatment	ETP	6.0
12.	Ajanta Gartex Processors, Unit-2,18/24, Site-4, Sahibabad, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	48.0
13.	Ajay Industrial Corporation, 20/11, Site-4, Ind. Area, Sahibabad, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Metal Surface Treatment	ETP	2.0
14.	Ajay Industrial corporation, 42, Rural Ind.area, Loni, Ghaziabad.	N 28°40'51.1968"	E 77°23'7.998''	Metal Surface Treatment	ETP	2.0
15.	Ajay Veer Siroha, K-23, Apparel Park, Sector D-1 (P3), Tronica City, Loni	N 28°46'16.8672"	E 77°16'59.4444''	Textile Dyeing	CETP	15
16.	Ajay Washing, S-62 Loni Road Ind.area, Mohan Nagar, Ghaziabad.	N 28°40'45.1596"	E 77°23'0.2796''	Yarn/Textile Processing	ETP	-
17.	Akash Glass Industries, S-50, Site-4,Sahibabad, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Metal Surface Treatment	ETP	0.0
18.	Al Nafees Frozen Foods Exports, Hapur Road Dasna Gzb. (Integrated Meat Unit)	N 28°40'50.7"	E 77°31'18.5268''	Slaughter House	ETP	600.0
19.	Al Naseer Export Pvt.Ltd., 2761, Bhoor Gari, Dasna, Ghaziabad.	N 28°40'50.7"	E 77°31'18.5268''	Slaughter House	ETP	200.0
20.	Al-Aali Exports (P) Ltd., B-37, Site-4, Ind. Area, Sahibabad, Ghaziabad.	N 28°39'14.526"	E 77°19'44.67''	Slaughter House and Meat Processing	ETP	34.0

21.	Albert David Ltd., B-12/13, Meerut Road	N 28°38'37.752"	E 77°13'41.8296''	Pharma (Formulation)	ETP	100.0
22.	Aleena Washing, Arya Nagar, Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	10.0
23.	International Agro Foods, (Processing Unit), Khasra No. 2764, Vill. Bhoor gari, Dasna Ghaziabad.	N 28°40'50.7"	E 77°31'18.5268''	Slaughter House and Meat Processing	ETP	40.0
24.	Ambika Gartex P Ltd., 42-B Rajinder Nagar Industrial Area, Mohan Nagar, Ghaziabad.	N 28°40'31.2744"	E 77°22'37.3872''	Yarn/Textile Processing	ETP	30.0
25.	Amit textiles, S-32,S.S. 0f G.T.Road Ind. Area, Ghaziabad.	N 28°38'19.2228"	E 77°26'17.3688''	Yarn/Textile Processing	ETP	2.0
26.	Amko Export, A-1, B.S.Road Ind. Area Ghaziabad	N 28°39'33.066"	E 77°27'58.41''	Dyeing & Textile	ETP	275.0
27.	Umar Garments, 83-B, Arya Nagar Ind. Area, Loni, Ghaziabad	N 28°40'42.636"	E 77°25'27.11136''	Dyeing & Textile	ETP	14.0
28.	Anish wasing works, 96/3, Arya Nagar, Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	18.0
29.	Anita Dyeing Processing, 12/21, Arya Nagar Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	15.0
30.	Anna Associate Pvt. Ltd., 108, Site-4 Ind. Area, Sahibabad, Ghaziabad. (W/o Rendering Plant)	N 28°39'13.5576"	E 77°19'44.3388''	Slaughter House and Meat Processing	ETP	20.0
31.	Anuradha Fabricators, 42/10, Site-4 , Sahibabad, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Metal Surface Treatment	ETP	1.5
32.	Apex Udyog, I-4, Sec D-1, Apparel Park, Tronica City, Loni, Ghaziabad.	N 28°41'20.922"	E 77°20'57.7644''	Yarn/Textile Processing	CETP	15.0
33.	Arihant Dyeing (Sai Denim), 20/2/13, Site-4, Sahibabad, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	50.0
34.	Arihant Stationary, Arya Nagar Ind.area Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Metal Surface Treatment	ETP	2.0
35.	Arihant Textile, 53-54, Rural Ind.area Loni	N 28°40'51.1968"	E 77°23'7.998''	Yarn/Textile Processing	ETP	30.0
36.	Arshiya Export Pvt. Ltd.) B-67, Site-4, Sahibabad, Ghaziabad. (W/o Rendering Plant)	N 28°39'14.526"	E 77°19'44.67''	Slaughter House and Meat Processing	ETP	35.0

37.	Arun Industries, Gali no.1 Arya Nagar Ind. Area, Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Metal Surface Treatment	ETP	2.0
38.	Arvind Dyeing, Plot No.-14, Arya Nagar, naipura Road, Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	12.0
39.	Asha Prints, A-5/4, , Loni Road Mohan Nagar, Ghaziabad.	N 28°40'45.1596"	E 77°23'0.2796''	Yarn/Textile Processing	ETP	10.0
40.	S.S. Concept (Old Name Asha Tanu Prints), A-5/3, , Loni Road Mohan Nagar, Ghaziabad.	N 28°40'45.1596"	E 77°23'0.2796''	Yarn/Textile Processing	ETP	10.0
41.	Asif Industries, C-21, Roop Nagar Ind.area Loni, Ghaziabad.	N 28°44'37.5756"	E 77°17'52.5048''	Metal Surface Treatment	ETP	2.0
42.	Ashok Yadav & Rajesh Yadav, S-126, Site-2, Loni Road, Ghaziabad.	N 28°40'45.1596"	E 77°23'0.2796''	Metal Surface Treatment	ETP	2.0
43.	Ashoka Pulp & Paper Pvt. Ltd., 11, Loni Road Ind. Area, Mohan Nagar, GZB.	N 28°40'45.1596"	E 77°23'0.2796''	Pulp & Paper	ETP	500.0
44.	ASR Enterprises, S-124, Site-2, Loni Road Mohan Nagar, Ghaziabad.	N 28°40'45.1596"	E 77°23'0.2796''	Yarn/Textile Processing	ETP	-
45.	Atlas Cycle (Haryana) Ltd.,55, Site-4, Sahibabad GZB.	N 28°39'39.3516"	E 77°20'26.916''	Engineering	ETP	370.0
46.	Balaji Engineering works, 351, Pandav Nagar, Mehrauli, Ghaziabad.	N 28°39'18.5328"	E 77°27'37.638''	Metal Surface Treatment	ETP	2.0
47.	Balaji Enterprises, B-22/1/15, B.S.Road Ind. Area, Ghaziabad.	N 28°39'29.9844"	E 77°27'59.4144''	Metal Surface Treatment	ETP	1.5
48.	Balaji Industry, 37, Rural Ind. Area, Loni, Ghaziabad.	N 28°40'51.1968"	E 77°23'7.998''	Yarn/Textile Processing	ETP	10.0
49.	Balaji Industry, Plot No. 7, Gali No. 1, Rajinder Nagar Ind. Area, Mohan NGR., Ghaziabad.	N 28°40'31.2744"	E 77°22'37.3872''	Yarn/Textile Processing	ETP	20.0
50.	Balaji Udyog, B-80, Roop Nagar Ind. Area, Loni, Ghaziabad.	N 28°44'37.5756"	E 77°17'52.5048''	Yarn/Textile Processing	ETP	10.0
51.	Balaji wire Pvt .Ltd., 139-A, Anand Ind. Estate, Mohan Nagar, Ghaziabad.	N 28°40'30.5544"	E 77°23'17.6208''	Metal Surface Treatment	ETP	40.0
52.	Batik India, D-13, Udyog kunj. Dasna, Ghaziabad.	N 28°38'24.081"	E 77°27'25.92''	Yarn/Textile Processing	ETP	30.0

53.	Beauty Art Prints India Pvt.Ltd.,54/4, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	160.0
54.	Bhagwati Colour Impax, A-36, Roop Nagar Ind. Area, Loni, Ghaziabad.	N 28°44'37.5756"	E 77°17'52.5048''	Yarn/Textile Processing	ETP	15.0
55.	Bhagwati Dyeing, 84, Arya Nagar, Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	15.0
56.	Bharat Electronics Ltd., Bharat Nagar, Sahibabad Industrial Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Metal Surface Treatment	ETP	100.0
57.	Bhushan Steel Ltd., 23, Site-4, Sbd. Gzb.	N 28°38'56.0004"	E 77°19'54.0012''	Engineering	ETP	800.0
58.	Bright Wash Dyeing, C- 21, Roop Nagar I.A, Loni, Ghaziabad.	N 28°44'37.5756"	E 77°17'52.5048''	Yarn/Textile Processing	ETP	-
59.	Chacha Enterprises, J-4 Appral Park, tronca city, Loni, Ghaziabad.	N 28°41'20.922"	E 77°20'57.7644''	Yarn/Textile Processing	ETP	10.0
60.	Charbi Apparels, 101/2, Arya Nagar Ind. Area, Loni, Ghaziabad.	N 28°47'6.4392"	E 77°15'38.268''	Yarn/Textile Processing	ETP	8.0
61.	Chemo Pulp Tissues Pvt Ltd, A-4, sect-22, Meerut Road, Ind.area	N 28°41'56.094"	E 77°26'54.384''	Pulp & Paper	ETP	0.0
62.	Colour Tuch, 56/28, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	48.0
63.	Continental Carbon India Ltd., A-14, S.S. of G.T. Road	N 28°38'9.9384"	E 77°26'54.6612''	Other	ETP	500.0
64.	Cosmos Auto India, 21 mainapur Meerut Road Ghaziabad.	N 28°49'53.8716"	E 77°34'40.6524''	Metal Surface Treatment	ETP	2.0
65.	Cosmos Engine. Component P Ltd., A-7, Electro Steel Compound, S.S. of G.T. Road, Ghaziabad.	N 28°38'19.2228"	E 77°26'17.3688''	Metal Surface Treatment	ETP	0.0
66.	D.K. Jain, G-262, Sector D-1(P), Aparels Park, Tronica City, Loni, Ghaziabad.	N 28°47'5.7228"	E 77°16'24.816''	Yarn/Textile Processing	CETP	20.0
67.	Dabur India Ltd, P-22, Site 4 Sahibabad	N 28°38'51.0216"	E 77°19'52.2408''	Pharma (Aurvedic)	ETP	275.0
68.	Colorise (Old Name Deepak Gambhir), E-12 Apparel Park, Sector D-1(P3), Tronica City, Loni.	N 28°41'20.922"	E 77°20'57.7644''	Yarn/Textile Processing	CETP	55.0

69.	Delhi Textiles, B-91, Roop Nagar Ind. Area, Loni, Ghaziabad.	N 28°44'37.5756"	E 77°17'52.5048''	Yarn/Textile Processing	ETP	12.0
70.	Denim Matching, G-141, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	N 28°47'5.7228"	E 77°16'24.816''	Yarn/Textile Processing	CETP	18.0
71.	Dev Tara Industries Ltd., Meerut Road Duhai, muradnagr	N 28°42'34.164"	E 77°27'19.1556''	Dyeing & Textile	ETP	725.0
72.	Dilip Dyeing & Washing, Arya Nagar Ind. Area, Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	2.0
73.	Dream Bath, 28/1/21, Site-4, Sahibabad Industrial Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Metal Surface Treatment	ETP	5.0
74.	Durgeshwari Garments Pvt.Ltd., E-13, sect-13-1, Appral Park, tronca city, Loni, Ghaziabad.	N 28°41'20.922"	E 77°20'57.7644''	Yarn/Textile Processing	ETP	150.0
75.	Eagle Continental Foods P Ltd., Kallua Garhi Road, Dasna, Ghaziabad.	N 28°41'38.67216"	E 77°32'2.38668''	Slaughter House	ETP	400.0
76.	Ekansh Textile, K-36, Sec D-1, Apparel Park, Tronica City, Loni, Ghaziabad.	N 28°46'54.5016"	E 77°16'38.9244''	Yarn/Textile Processing	CETP	50.0
77.	Ekta Washing, A-40, Roop Nagar Ind. Area, Loni, Ghaziabad.	N 28°44'37.5756"	E 77°17'52.5048''	Yarn/Textile Processing	ETP	10.0
78.	Em Kay Industries, 101/2, Arya Nagar Ind.area Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Metal Surface Treatment	ETP	2.0
79.	Empire Fastners, 48/1/22, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Metal Surface Treatment	ETP	10.0
80.	Excellents Apparels Pvt. Ltd., K-52, Sec D-1(P3), Tronica City, Loni, Ghaziabad.	N 28°46'54.5016"	E 77°16'38.9244''	Yarn/Textile Processing	CETP	25.0
81.	Exclusive Leather, khasra no.2751, Vill.Bhurgari, Dasna	N 28°40'50.7"	E 77°31'18.5268''	Tannery	ETP	85.0
82.	Fab Care, 79/1, Rajinder Nagar Ind.area, Mohan Nagar, Ghaziabad.	N 28°40'31.2744"	E 77°22'37.3872''	Yarn/Textile Processing	ETP	30.0
83.	Fair Export (India) Pvt. Ltd., 20/1, Site-4 Ind. Area, Sahibabad, Ghaziabad. (W/o Rendering Plant)	N 28°39'39.3012"	E 77°20'27.8052''	Slaughter House and Meat Processing	ETP	60.0

84.	Fancy Dyeing & Washing, 83-B, Arya Nagar Ind. Area, Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	18.5
85.	Fine Wash, Plot No. 40, Rural Ind. State Loni, Loni, Ghaziabad	N 28°40'51.1968"	E 77°23'7.998''	Yarn/Textile Processing	ETP	20.0
86.	Firgo Riffico Alana Ltd., A-15, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°40'1.9956"	E 77°21'50.7492''	Slaughter House and Meat Processing	ETP	50.0
87.	Frigo Rifico Alana Ltd., Unit-2, A-14/1, Site-4, Sahibabad Ind. Area, Ghaziabad. (Only Rendering)	N 28°40'1.9956"	E 77°21'50.7492''	Slaughter House and Meat Processing	ETP	25.0
88.	Fusion Fashion, B-61, Roop Nagar Ind. Area, Loni, Ghaziabad.	N 28°44'37.5756"	E 77°17'52.5048''	Yarn/Textile Processing	ETP	15.0
89.	Futuro Components Pvt. Ltd. Dasna Hapur Road Ghaziabad.	N 28°40'50.7"	E 77°31'18.5268''	Metal Surface Treatment	ETP	50.0
90.	G.S.Das Apprarals Pvt.Ltd., 4/44, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	70.0
91.	Ganesh Enterprises, 18/14/1, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	0.0
92.	Ganga Processors, 18/11, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	65.0
93.	Ganpati Creation, C-19/1, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	50.0
94.	Gazi Dyeing (Old name Ajay Auto Bulb Corpn.), 45, Rural Ind. Area, Ngr, Loni, Ghaziabad.	N 28°40'51.1968"	E 77°23'7.998''	Yarn/Textile Processing	ETP	10.0
95.	Ghan Shyam Textiles, K-19, Sector D-1(P), Aparels Park, Tronica City, Loni, Ghaziabad.	N 28°41'20.922"	E 77°20'57.7644''	Yarn/Textile Processing	CETP	23.0
96.	Glaxi Garments, K-22, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	N 28°46'54.5016"	E 77°16'38.9244''	Yarn/Textile Processing	CETP	22.0
97.	Global Industries, A-38/1/9, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	30.0
98.	Gourang Products Pvt. Ltd, GT Road, Industrial Area Ghaziabad	N 28°39'29.9844"	E 77°27'59.4144''	Metal finisihing	ETP	12.0

99.	Goyal Canvas Pvt.Ltd., 18/43, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	0.8
100.	Goyal Processors, 42/50, Site-4, Ind. Area, Sahibabad, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	25.0
101.	Gulshan Rai Jain, G-82, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	N 28°47'5.7228"	E 77°16'24.816''	Yarn/Textile Processing	CETP	20.0
102.	Gungun Enterprises, 38/2/24, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	45.0
103.	Gyan Chand & Sons, G-87, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	N 28°47'5.7228"	E 77°16'24.816''	Yarn/Textile Processing	CETP	-
104.	H.B. Dyeing, A-35, Roop Nagar Ind. Area, Loni, Ghaziabad.	N 28°44'37.5756"	E 77°17'52.5048''	Yarn/Textile Processing	ETP	10.0
105.	Hamdard (Wakf) Laborateries, (1 &2) B-2 & 3, Meerut Road	N 28°38'37.752"	E 77°13'41.8296''	Pharma (Unani)	ETP	120.0
106.	Hanuman Textiles, 1, Rajinder Nagar Ind. Area, Mohan Nagar, Ghaziabad.	N 28°40'31.2744"	E 77°22'37.3872''	Yarn/Textile Processing	ETP	15.0
107.	Hard Man Jeans, B-32, Roop Nagar Ind. Area, Loni, Ghaziabad.	N 28°44'37.5756"	E 77°17'52.5048''	Yarn/Textile Processing	ETP	10.0
108.	Hasan Textile, 84, Arya Nagar Ind. Area, Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	10.0
109.	Himax Wash (old name Tajjumal Jeans Dyeing), Arya Nagar, naipura Road Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	12.0
110.	Hind Industries Ltd., Plot No. B-42, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'30.4884"	E 77°20'45.8268''	Slaughter House and Meat Processing	ETP	50.0
111.	Indian Textiles company, E-49, B.S.Road Ind. Area, Ghaziabad.	N 28°38'56.3892"	E 77°27'25.0344''	Yarn/Textile Processing	ETP	42.0
112.	International Agro Food, Vill. Bhoor gari, Dasna Ghaziabad.	N 28°40'50.7"	E 77°31'18.5268''	Slaughter House	ETP	750.0
113.	Ipsa Business India Pvt.Ltd., 57/1/17-18, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Metal Surface Treatment	ETP	6.0

114.	J.B.S. Processors, G-104, Apparel Park, Sector D-1 (P3), Tronica City, Loni	N 28°47'5.7228"	E 77°16'24.816''	Textile Dyeing	CETP	14
115.	J.D.M.Enterprises, C-223/1, B.S.Road Ind.area Ghaziabad.	N 28°40'8.8716"	E 77°27'13.7376''	Metal Surface Treatment	ETP	4.0
116.	Jai Ambey Dyeing, 58,59, Roop Nagar Ind. Area, Loni, Ghaziabad.	N 28°44'37.5756"	E 77°17'52.5048''	Yarn/Textile Processing	ETP	20.0
117.	Jai B.P. & Socket Industries, 142, Prakash Ind. Area, Sahibabad, Ghaziabad.	N 28°40'31.2744"	E 77°22'37.3872''	Metal Surface Treatment	ETP	2.0
118.	Jai Durge Metalizing, 67, anand Ind. Estate Mohan Nagar Ghaziabad.	N 28°40'30.5544"	E 77°23'17.6208''	Metal Surface Treatment	ETP	0.8
119.	Jai Mata Di Dyers, I-9, Sec D-1(P3), Tronica City, Loni, Ghaziabad.	N 28°47'5.7228"	E 77°16'24.816''	Yarn/Textile Processing	CETP	22.0
120.	Jai Santoshi Enterprises, 50, Shyam Ind. Area Loni, Ghaziabad.	N 28°40'51.1968"	E 77°23'7.998''	Yarn/Textile Processing	ETP	8.0
121.	Jai Shri Dying, I-21, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	N 28°47'5.7228"	E 77°16'24.816''	Yarn/Textile Processing	CETP	8.0
122.	Jyoti Dyeing, 18/8, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	38.0
123.	K.K. Dyeing, 42/40, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	15.0
124.	K.K. Industries, 7/5, Site-4, Ind Area, Sahibabad, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Textile Dyeing	ETP	15
125.	K.M. Processors, 72/3, Gali No.-5, Rajinder Nagar Ind. Area, Mohan Nagar, Ghaziabad.	N 28°40'31.2744"	E 77°22'37.3872''	Yarn/Textile Processing	ETP	13.0
126.	K.R. Washing, Arya Nagar Ind. Area, Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	20.0
127.	Kanhiya Enterprises, A-48/11, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	30.0
128.	Karam Chandra Rubber Pvt. Ltd., C-230, B.S.Road Ind. Area Ghaziabad.	N 28°39'9.2088"	E 77°28'12.8748''	Metal Surface Treatment	ETP	50.0

129.	Karan Frozen Food, Bhoor gari, Dasna, Ghaziabad. (W/o Rendering Plant)	N 28°40'50.7"	E 77°31'18.5268''	Slaughter House and Meat Processing	ETP	25.0
130.	Kartik Fabrics Pvt.Ltd., khasra no.184-185-186, Pawanpuri, Murad Nagar, Ghaziabad.	N 28°46'13.35072"	E 77°29'55.95108''	Yarn/Textile Processing	ETP	180.0
131.	Kathuria Brothers (Cycle section), A-12, Meerut Road Ind. Area. Ghaziabad.	N 28°41'33.4356"	E 28°41'33.4356''	Metal Surface Treatment	ETP	20.0
132.	Kathuria Brothers,A-12 Meerut Road Ind.area	N 28°41'33.4356"	E 28°41'33.4356''	Tannery	ETP	75.0
133.	Krish Garments (Old Name Sanjeev Kumar), G-109, Sec D-1(P3), Apparel Park, Tronica City, Loni, Ghaziabad.	N 28°47'5.7228"	E 77°16'24.816''	Yarn/Textile Processing	CETP	18.0
134.	Krishana Washing Service), 72/14, Rajinder Nagar Ind. Area, Mohan Nagar, Ghaziabad.	N 28°40'31.2744"	E 77°22'37.3872''	Yarn/Textile Processing	ETP	20.0
135.	Krishna Kumar Agarwal, G-129, Apparel Park, Sector D-1 (P3), Tronica City, Loni	N 28°47'5.7228"	E 77°16'24.816''	Textile Dyeing	CETP	15
136.	Krishna Print Pvt. Ltd., A-47, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	20.0
137.	L.K. Industry (Washing), 10/2, Arya Nagar, Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	12.0
138.	Latex Wash, Arya Nagar, Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	15.0
139.	Laxmi Bleach (New Name Mani Bhadra Processors), G-102, Sec D-1(P3), Apparel Park, Tronica City, Loni, Ghaziabad.	N 28°46'54.5016"	E 77°16'38.9244''	Yarn/Textile Processing	CETP	18.0
140.	Laxmi Dyeing & Printing works Pvt.Ltd., S-81, Loni Road I.A., Mohan Nagar, Ghaziabad.	N 28°40'45.1596"	E 77°23'0.2796''	Yarn/Textile Processing	ETP	35.0
141.	Laxmi Dyeing, A-13, Roop Nagar Ind. Area, Loni, Ghaziabad.	N 28°44'37.5756"	E 77°17'52.5048''	Yarn/Textile Processing	ETP	12.0
142.	Laxmi Metal, A-43, Roop Nagar Ind. Area, Loni, Ghaziabad.	N 28°44'37.5756"	E 77°17'52.5048''	Metal Surface Treatment	ETP	5.0

143.	Laxmi Processors, K-16, sect-D-1, pocket-3, Appral Park, Tronica city, Loni, Ghaziabad.	N 28°47'5.7228"	E 77°16'24.816''	Yarn/Textile Processing	CETP	23.0
144.	Lion Cycle & Riksha Industries, E-10, B.S.Road Ind. Area, Ghaziabad.	N 28°39'29.9844"	E 77°27'59.4144''	Metal Surface Treatment	ETP	0.5
145.	Li-Vinit Acessaries, 54/6, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Metal Surface Treatment	ETP	1.5
146.	M.A. Garment, A-9, Roop Nagar Ind. Area, Loni, Ghaziabad.	N 28°44'37.5756"	E 77°17'52.5048''	Yarn/Textile Processing	ETP	10.0
147.	M.A. Garments, 20/6/21, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	25.0
148.	M.D.Frozen Food Exports, Khasra No-2689, Bhoor gari Road, Dasna, Ghaziabad.	N 28°40'50.7"	E 77°31'18.5268''	Slaughter House and Meat Processing	ETP	40.0
149.	M.J. Allied Enterprises, E-4, Site-4 Ind. Area, Sahibabad, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	15.0
150.	M.K. Overcease Pvt. Ltd., B-63, 64, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'30.4884"	E 77°20'45.8268''	Slaughter House and Meat Processing	ETP	80.0
151.	M.K.wasing & Dyeing, B-74, Roop Nagar Ind. Area, Loni, Ghaziabad.	N 28°44'37.5756"	E 77°17'52.5048''	Yarn/Textile Processing	ETP	28.0
152.	M.R. Dyeing, B-80, Arya Nagar, Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	10.0
153.	M.R. Industry, B-84/3, Roop Nagar, Loni, Ghaziabad.	N 28°44'37.5756"	E 77°17'52.5048''	Yarn/Textile Processing	ETP	10.0
154.	M.S. Dyeing, A-29, Roop Nagar Ind. Area, Loni, Ghaziabad.	N 28°44'37.5756"	E 77°17'52.5048''	Yarn/Textile Processing	ETP	10.0
155.	M.S. Trading, E-15, Sector D-1(P), Aparels Park, Tronica City, Loni, Ghaziabad.	N 28°46'54.5016"	E 77°16'38.9244''	Yarn/Textile Processing	CETP	18.0
156.	M.S.D.Dytex Pvt. Ltd., 5/2, Loni Road Ind. Area, Mohan Nagar, Ghaziabad.	N 28°40'45.1596"	E 77°23'0.2796''	Yarn/Textile Processing	ETP	16.0
157.	M.Y. Garments, 20/6/14, Site-4, Sahibabad, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	30.0
158.	Ma Shakti Silk Creation, 72/5, Rajinder Nagar Ind. Area, Mohan Nagar, Ghaziabad.	N 28°40'31.2744"	E 77°22'37.3872''	Yarn/Textile Processing	ETP	6.0

159.	Machino Tech, 48/1/1-A, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Metal Surface Treatment	ETP	3.0
160.	Madni Textiles, 72/37, Rajinder Nagar Ind. Area, Mohan Nagar, Ghaziabad.	N 28°40'31.2744"	E 77°22'37.3872''	Yarn/Textile Processing	ETP	80.0
161.	Magnum Ventures Ltd, 18/41,Site-4 Sahibabad	N 28°39'37.5912"	E 77°21'10.9656''	Pulp & Paper	ETP	2400.0
162.	Maha Shakti Threads mills, 56/12, Site-4 Sahibabad Ind. Area. Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	25.0
163.	Mahalaxmi Dyers, 49/24, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	23.0
164.	Shri Mahaveer Enterprises, 28/1/15, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	35.0
165.	Malik Dyeing, Gali No.-2, Arya Nagar, Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	20.0
166.	Malik Niddles & allide products, C-108, B.S.Road Ind. Area Ghaziabad.	N 28°39'9.2088"	E 77°28'12.8748''	Metal Surface Treatment	ETP	3.2
167.	Malik Washing, 101/2, Arya Nagar Ind. Area, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	8.0
168.	Manav Beverage P Ltd, C-128, BSR Ind.area	N 28°39'9.2088"	E 77°28'12.8748''	Beverage	ETP	0.0
169.	Manohar Lal Hira Lal Ltd., 28 KM Stone Meerut Road, Duhai, Ghaziabad.	N 28°40'58.4544"	E 77°26'5.4168''	Metal Surface Treatment	ETP	50.0
170.	Marshal Cycles, B-17/18, Meerut Road Ind. Area, Ghaziabad.	N 28°40'58.4544"	E 77°26'5.4168''	Metal Surface Treatment	ETP	40.0
171.	Micro Gartex Insustries, C-2, Loni Road Ind.area, Mohan Nagar, Ghaziabad.	N 28°40'45.1596"	E 77°23'0.2796''	Yarn/Textile Processing	ETP	-
172.	Mirha Export Pvt.Ltd., B-36, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'30.4884"	E 77°20'45.8268''	Slaughter House and Meat Processing	ETP	35.0
173.	Mohan Meakin Ltd. Mohan Nagar Ghaziabad	N 28°40'45.1596"	E 77°23'0.2796''	Distillery	ETP	900 (Only Bottling)

174.	Monica Hosiery, 28/1/16, site-IV, Industrial Area Sahibabad, Ghaziabad	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	0.0
175.	Moon Brewaries Ltd., Unit-1, A-32, Site-4, Sahibabad GZB.	N 28°40'12.2736"	E 77°20'49.7868''	Other	ETP	650.0
176.	N.G. Tex Prints P.Ltd., E-13/2, Kavi Nagar Ind. Area, Ghaziabad.	N 28°39'42.5304"	E 77°27'26.244''	Yarn/Textile Processing	ETP	25.0
177.	N.G. Textiles., 13A/10, Site-2, Loni Road I.A., Mohan NGR, Ghaziabad.	N 28°40'45.1596"	E 77°23'0.2796''	Yarn/Textile Processing	ETP	25.0
178.	Nagpal Industry, A-23, Roop Nagar Ind. Area, Loni, Ghaziabad.	N 28°44'37.5756"	E 77°17'52.5048''	Yarn/Textile Processing	ETP	18.0
179.	Nandi Enterprises, J-15, Sec D-1(P3), Apparel Park, Tronica City, Loni, Ghaziabad.	N 28°46'54.5016"	E 77°16'38.9244''	Yarn/Textile Processing	CETP	19.0
180.	Nandi Enterprises, K-14, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	N 28°41'20.922"	E 77°20'57.7644''	Textile Dyeing	CETP	19.0
181.	Nandni Processors, 4/27, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	10.0
182.	National Engg. Works (Old Name Mange Ram), 115, Prakash Ind. Area, Sahibabad, Ghaziabad.	N 28°40'31.2744"	E 77°22'37.3872''	Metal Surface Treatment	ETP	0.0
183.	Neelam Tex Prints Pvt.Ltd., 41/1, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	40.0
184.	Neerat Enterprises, 72-D, Gali No-6, Rajinder Nagar Ind. Area, Mohan Nagar, Ghaziabad.	N 28°40'31.2744"	E 77°22'37.3872''	Yarn/Textile Processing	ETP	30.0
185.	Neha Colour Concept, 261, Rajinder Nagar Ind. Area, Mohan Nagar, Ghaziabad.	N 28°40'31.2744"	E 77°22'37.3872''	Yarn/Textile Processing	ETP	28.0
186.	New Era Garment, 89, Rural Ind.area, Loni Ghaziabad.	N 28°40'51.1968"	E 77°23'7.998''	Yarn/Textile Processing	ETP	10.0
187.	Nip Man Fastners India Pvt. Ltd., C-197, B.S. Road Ind. Area, Ghaziabad.	N 28°39'9.2088"	E 77°28'12.8748''	Metal Surface Treatment	ETP	65.0
188.	Nirdosh Dyeing & Washing, Khasra No. 72/2, Gali No.7, Arya Nagar Ind. Area, Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	18.0

189.	Non Stop Colour, S-3, Site-2, Loni Road I.A., Mohan Nagar, Ghaziabad.	N 28°40'45.1596"	E 77°23'0.2796''	Yarn/Textile Processing	ETP	100.0
190.	North Land Cycle co. D-21, Meerut Road Ind. Area, Ghaziabad.	N 28°40'58.4544"	E 77°26'5.4168''	Metal Surface Treatment	ETP	2.0
191.	North Wings Processors, 61/7, Site-4, Ind. Area Sahibabad, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	30.0
192.	Northern India cyco Parts, E-2, S.S. of G.T.Road, Ind. Area, Ghaziabad.	N 28°38'19.2228"	E 77°26'17.3688''	Metal Surface Treatment	ETP	5.0
193.	Om Prakash Sharma, J-11, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	N 28°46'54.5016"	E 77°16'38.9244''	Textile Dyeing	CETP	35.0
194.	Paharpur-3 P, Plot No 19, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Metal Surface Treatment	ETP	0.0
195.	Pal Nit Fab, 54/14, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	90.0
196.	Paras Dyeing Industries, 72/18, Rajinder Nagar Ind. Area, Mohan Nagar, Ghaziabad.	N 28°40'31.2744"	E 77°22'37.3872''	Yarn/Textile Processing	ETP	25.0
197.	Parasnath Electropleters, Naresh Ind.Area, Loni, Ghaziabad.	N 28°40'51.1968"	E 77°23'7.998''	Metal Surface Treatment	ETP	2.0
198.	Pawan Garment, A-29, Roop NGR I.A., Loni, Ghaziabad.	N 28°44'37.5756"	E 77°17'52.5048''	Yarn/Textile Processing	ETP	15.0
199.	Pooja Dyeing, A-41, Roop Nagar Ind. Area, Loni, Ghaziabad.	N 28°44'37.5756"	E 77°17'52.5048''	Yarn/Textile Processing	ETP	18.0
200.	Pooja Pahawa, K-11, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	N 28°41'20.922"	E 77°20'57.7644''	Yarn/Textile Processing	CETP	25.0
201.	Pooja Processors, 62/2/3, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	80.0
202.	Pradeep kumar, G-92, Apparel Park, Sector D-1 (P3), Tronica City, Loni	N 28°47'5.7228"	E 77°16'24.816''	Textile Dyeing	CETP	25
203.	Prem Processors, 52 Rajinder Nagar Ind. Area, Mohan Nagar, Ghaziabad.	N 28°40'31.2744"	E 77°22'37.3872''	Yarn/Textile Processing	ETP	30.0

204.	Prince Dyeing, Arya Nagar Industrial Area, Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	10.0
205.	Puran Munjal,(New Name Adhunik Dyeing), H-12, Sector D-1(P), Aparels Park, Tronica City, Loni, Ghaziabad.	N 28°41'20.922"	E 77°20'57.7644''	Yarn/Textile Processing	CETP	55.0
206.	Quadri Processors, I-8, Sec D-1(P3),.Apparel Park, Tronika City, Loni, Ghaziabad.	N 28°47'5.7228"	E 77°16'24.816''	Yarn/Textile Processing	ETP	8.0
207.	R.B. Enterpirses, 180/2 & 180/4, Rajiender Nagar Ind. Area, Mohan Nagar, Ghaziabad.	N 28°40'31.2744"	E 77°22'37.3872''	Yarn/Textile Processing	ETP	30.0
208.	R.R. Dyeing, Arya Nagar Ind. Area, Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	10.0
209.	R.R. Impex, G-261, Sector D-1(P), Aparels Park, Tronica City, Loni, Ghaziabad.	N 28°47'5.7228"	E 77°16'24.816''	Yarn/Textile Processing	CETP	22.0
210.	Rachita Processors, K-33 & K-34, Sec D-1, Apparel Park, Tronica City, Loni, Ghaziabad.	N 28°46'54.5016"	E 77°16'38.9244''	Yarn/Textile Processing	CETP	70.0
211.	Rachna Metal Industries Pvt. Ltd., 18/42, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Metal Surface Treatment	ETP	4.0
212.	Radhey Raman Dyeing& Washing, 4, Arya Nagar Ind. Area, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	2.0
213.	Ragging Sons, I-13, Sec D-1(P3), Tronica City, Loni, Ghaziabad.	N 28°41'20.922"	E 77°20'57.7644''	Yarn/Textile Processing	CETP	15.0
214.	Raish Enterprises, 96/2, Arya Nagar Ind. Area, Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	5.0
215.	Rajeev Kumar, G-64, Sec D-1(P3), Apparel Park, Tronica City, Loni, Ghaziabad.	N 28°47'5.7228"	E 77°16'24.816''	Yarn/Textile Processing	CETP	25.0
216.	Rama Steel Tube Ltd., B-21, & B-3, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Metal Surface Treatment	ETP	180.0
217.	Ramesh Dyeing & Washing, Plot No- 17, Arya Nagar Ind. Area, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	2.0

218.	Ramsons Enterprises, D-21 Meerut Road Ind. Area, Ghaziabad.	N 28°40'58.4544"	E 77°26'5.4168''	Metal Surface Treatment	ETP	2.0
219.	Rastogi Garments, A-32, Roop Nagar Ind. Area, Loni, Ghaziabad.	N 28°44'37.5756"	E 77°17'52.5048''	Yarn/Textile Processing	ETP	10.0
220.	Ratan Garments, 56/29, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	35.0
221.	Regency Cycles P Ltd., 16/1-B-3&4, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Metal Surface Treatment	ETP	8.0
222.	Right Wash Udyog, 72/19, Rajinder Nagar Ind. Area, Mohan Nagar, Ghaziabad.	N 28°40'31.2744"	E 77°22'37.3872''	Yarn/Textile Processing	ETP	28.0
223.	Ritika Enterprises, 18/32, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	25.0
224.	Robest Infra Tech P Ltd., J-13, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	N 28°41'20.922"	E 77°20'57.7644''	Yarn/Textile Processing	CETP	18.0
225.	Roop Trading Company, E-14, sect-D-1, pocket-3, Appral Park, Tronica city, Loni, Ghaziabad.	N 28°41'20.922"	E 77°20'57.7644''	Yarn/Textile Processing	CETP	40.0
226.	Roop Trading Company, K-9, sect-D-1, pocket-3, Appral Park, Tronica city, Loni, Ghaziabad.	N 28°47'5.7228"	E 77°16'24.816''	Yarn/Textile Processing	CETP	0.0
227.	Roshan Lal (ex. Name Shine Wash) 15/18, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	18.0
228.	Roxcy Enterprises, Gali No. 1, 72/2, Arya Nagar Ind. Area, Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	10.0
229.	Royal Techno Dyers, K-47, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	N 28°47'5.7228"	E 77°16'24.816''	Yarn/Textile Processing	CETP	36.0
230.	Ruchika Prints, A-35, Rajinder Nagar Ind. Area Mohan Nagar, Ghaziabad.	N 28°40'31.2744"	E 77°22'37.3872''	Yarn/Textile Processing	ETP	8.0

231.	M/s. Dhrube Enterprises old name Rupal Washing, A-36/2, Roop Nagar Ind. Area, Loni, Ghaziabad.	N 28°41'14.32464"	E 77°22'48.8982''	Yarn/Textile Processing	ETP	12.0
232.	S.A.K. Dyeing & Processors, 76, Arya Nagar Ind. Area, Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	2.0
233.	S.B. Feb Tech P Ltd., 28/1/24, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	50.0
234.	S.D. Industries (Old Name is S.D. Enterprises), E-124, B.S. Road Ind. Area, Ghaziabad.	N 28°39'29.9844"	E 77°27'59.4144''	Metal Surface Treatment	ETP	2.0
235.	S.D. Garments, I-2, Sector-D-1, pocket-3, Appral Park, Tronica city, Loni, Ghaziabad.	N 28°41'20.922"	E 77°20'57.7644''	Yarn/Textile Processing	CETP	15.0
236.	S.G. Rubber Industry, A-77, Roop Nagar Ind. Area, Loni, Ghaziabad.	N 28°44'37.5756"	E 77°17'52.5048''	Yarn/Textile Processing	ETP	10.0
237.	S.K. Dyeing, B-80, Arya Nagar Ind. Area, Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	5.0
238.	S.M. Electropleters, 61-A, Roop Nagar, Ind. Area, Ghaziabad.	N 28°44'37.5756"	E 77°17'52.5048''	Metal Surface Treatment	ETP	0.9
239.	S.R. Electro Plating works, A-69, Roop Nagar Ind. Area, Loni Ghaziabad.	N 28°44'37.5756"	E 77°17'52.5048''	Metal Surface Treatment	ETP	2.0
240.	S.S. Dyeing, Gali No. 2, Arya Nagar Ind. Area, Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	10.0
241.	S.S. Enterprises, 363, Pandav Nagar, B.S. Road Maharauli, Ghaziabad.	N 28°39'18.5328"	E 77°27'37.638''	Metal Surface Treatment	ETP	0.9
242.	S.S. Hosiery (Old Name is National Industries), G-264, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	N 28°47'5.7228"	E 77°16'24.816''	Textile Dyeing	CETP	16.0
243.	S.S. Prints, 56/14-15, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	30.0
244.	S. Star Enterprises, A-50/2, Roop Nagar Ind.area, Loni, Ghaziabad.	N 28°44'37.5756"	E 77°17'52.5048''	Yarn/Textile Processing	ETP	15.0

245.	S.T. Traders, J-5, Appral Park, Tronca city, Loni, Ghaziabad.	N 28°41'20.922"	E 77°20'57.7644''	Yarn/Textile Processing	ETP	8.0
246.	S.V.S. Fashion, J-22, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	N 28°47'5.7228"	E 77°16'24.816''	Yarn/Textile Processing	CETP	8.5
247.	Sage Metal Ltd., B-7, Site-4, Shaibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Metal Surface Treatment	ETP	10.0
248.	Sahibabad Printers, 182/3, G.T.Road, Mohan Nagar, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	50.0
249.	Sai Processing, 7/37, Site-2, Loni Road Ind. Area, Mohan Nagar, Ghaziabad.	N 28°40'45.1596"	E 77°23'0.2796''	Yarn/Textile Processing	ETP	35.0
250.	Sai Saran Garment,(New Name Lotus Knit Processing House), G-108, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	N 28°47'6.4392"	E 77°15'38.268''	Yarn/Textile Processing	CETP	18.0
251.	Sakshi Metal Works, D-1/A, Kavi Nagar Ind. Area, Ghaziabad.	N 28°39'42.5304"	E 77°27'26.244''	Metal Surface Treatment	ETP	0.2
252.	Sandeep Tyagi, G-271, Sec D-1(P3), Apparel Park, Tronica City, Loni, Ghaziabad.	N 28°47'6.4392"	E 77°15'38.268''	Yarn/Textile Processing	CETP	25.0
253.	Sanjay Jain Jeans Dyeing, S-30, UPSIDC Ind. Area, Loni, Ghaziabad.	N 28°41'14.32464"	E 77°22'48.8982''	Yarn/Textile Processing	ETP	10.0
254.	Sanjeev kumar (Shyam Washing), G-81, Apparel Park, Sector D-1 (P3), Tronica City, Loni	N 28°46'54.5016"	E 77°16'38.9244''	Textile Dyeing	CETP	25
255.	Sanju Processors, Arya Nagar Ind. Area, Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	12.0
256.	Sara Exports, 35, S.S. of G.T. Road Ind. Area, Ghazizabad	N 28°38'19.2228"	E 77°26'17.3688''	Hydrocyanic acid	ETP	40.0
257.	Sara International, G-265-266, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	N 28°47'5.7228"	E 77°16'24.816''	Textile Dyeing	CETP	19.0
258.	Shafali Dyeing, G-84, Sector D-1(P), Aparels Park, Tronica City, Loni, Ghaziabad.	N 28°46'54.5016"	E 77°16'38.9244''	Yarn/Textile Processing	CETP	18.0

259.	Shahi Exports P Ltd., 30-Site-2, Loni Road Ind.area Mohan Nagar, Ghaziabad.	N 28°40'45.1596"	E 77°23'0.2796''	Yarn/Textile Processing	ETP	800.0
260.	Shahnaj Washing, 87, Arya Nagar Ind. Area, Naipura, Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	12.0
261.	Shanti Dyeing & Finshing Mills, A-48/16, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	78.0
262.	Shanti Nath Manufactures, A-2/14, Kavi Nagar Ind. Area Ghaziabad.	N 28°39'42.5304"	E 77°27'26.244''	Metal Surface Treatment	ETP	0.8
263.	Sharda Dyeing, Plot No. 6, Gali No. 1, Rajinder Nagar Ind. Area, Mohan Nagar, GzB.	N 28°40'31.2744"	E 77°22'37.3872''	Yarn/Textile Processing	ETP	15.0
264.	Sharda Fabrics (Old Name Kartikey Processors),42/36, Site-4 Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	40.0
265.	Sharma Washing Works, Khasra No. 92, Arya Nagar, Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	15.0
266.	Shashi Washing Work, A-60, Roop Nagar I.A Loni, Ghaziabad.	N 28°44'37.5756"	E 77°17'52.5048''	Yarn/Textile Processing	ETP	-
267.	Sheela Enterprises, 27, Shyam Ind. Area Loni, Ghaziabad.	N 28°44'15.6768"	E 77°17'14.4888''	Yarn/Textile Processing	ETP	8.0
268.	Shital Industries, S-40, S.S. of G.T.Road Ind. Area, Ghaziabad.	N 28°38'19.2228"	E 77°26'17.3688''	Metal Surface Treatment	ETP	10.0
269.	Shiv Kumar Pawan Kumar, 57/1/13, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	30.0
270.	Shiva Processors, 18/6, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	80.0
271.	Shivam Cotage P Ltd., S-110/1 Site-2, Loni Road Ind. Area, Ghaziabad.	N 28°40'45.1596"	E 77°23'0.2796''	Metal Surface Treatment	ETP	5.0
272.	Shivam Engineering, 282, S.S. of G.T. Road Industrial Area, Ghaziabad.	N 28°38'19.2228"	E 77°26'17.3688''	Metal Surface Treatment	ETP	3.0

273.	Shivam Fab Tech P Ltd., 22/9, S.S. of G.T. Road Ind. Area, Ghaziabad.	N 28°38'19.2228"	E 77°26'17.3688''	Metal Surface Treatment	ETP	10.0
274.	Shivani Dyeing, Arya Nagar, Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	10.0
275.	Shri Bala Ji Processors, S-134, Site-2, Loni Road Ind.area, Ghaziabad.	N 28°40'45.1596"	E 77°23'0.2796''	Yarn/Textile Processing	ETP	20.0
276.	Shri Balaji Metal, E-17, Kavi Nagar Ind. Area, Ghaziabad.	N 28°39'42.5304"	E 77°27'26.244''	Metal Surface Treatment	ETP	2.0
277.	Shri Ganga paper Mills Pvt.Ltd., Hapur Road Dasna	N 28°40'50.7"	E 77°31'18.5268''	Pulp & Paper	ETP	300.0
278.	Shri Giri Raj Enterprises, 24-25, Prakash Ind. Estate, Sahibabad, Ghaziabad.	N 28°40'33.06"	E 77°20'36.8484''	Metal Surface Treatment	ETP	5.0
279.	Himgiri Textiles, 15/11, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	40.0
280.	Shri Krishna Arts & Dyeing, A-72, Roop Nagar Ind. Area, Loni, Ghaziabad.	N 28°44'37.5756"	E 77°17'52.5048''	Yarn/Textile Processing	ETP	12.0
281.	Shri Krishna Textiles, 18/19, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	35.0
282.	Shri Paras coloration (U.B. Dyeing), G-117, Sector D-1(P), Aparels Park, Tronica City, Loni, Ghaziabad.	N 28°47'5.7228"	E 77°16'24.816''	Yarn/Textile Processing	CETP	18.0
283.	Shri Ram Piston & Rings Ltd., Meerut Road Ind.area Gzb.	N 28°41'8.4948"	E 77°25'57.4968''	Engineering	ETP	450.0
284.	Shri Shyam Industries, 56/56, Site-4 Ind. Area, Sahibabad, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	30.0
285.	Shyam Industry, 50, Shyam Ind. Area, Loni, Ghaziabad.	N 28°44'15.6768"	E 77°17'14.4888''	Yarn/Textile Processing	ETP	12.0
286.	Siddhi Vinyak Texile P Ltd., H-11, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	N 28°41'20.922"	E 77°20'57.7644''	Textile Dyeing	CETP	25.0
287.	Siddhi Vinyak, G-103, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	N 28°47'5.7228"	E 77°16'24.816''	Textile Dyeing	CETP	80.0

288.	Sidhi Vinayak, 48/1/18, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	16.0
289.	Sidra Washing, Arya Nagar Industrial Area, Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	12.0
290.	Silver Wash, 20/6, Gali No.-3, Rajinder Nagar Ind. Area, Mohan Nagar, Ghaziabad.	N 28°40'31.2744"	E 77°22'37.3872''	Yarn/Textile Processing	ETP	30.0
291.	Silbrite Spokes P Ltd., S-28, Industries, S.S. of G.T. Road Ind. Area, Ghaziabad.	N 28°38'19.2228"	E 77°26'17.3688''	Metal Surface Treatment	ETP	2.0
292.	Simple Dyeing & Washing, 7, Khara No. 357, Arya Nagar Ind. Area, Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	2.0
293.	Singhal Paulings Industries, 56/32, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	2.0
294.	Singla Engrayours Pvt.Ltd., 7/26, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Metal Surface Treatment	ETP	3.0
295.	Slaughter House of Loni Nagar Palika Parishad, Loni, Ghaziabad.	N 28°43'53.9184"	E 77°18'3.0636''	Slaughter House	ETP	0.0
296.	Slaughter House of Municipal Board, Murad Nagar, Ghaziabad.	N 28°46'13.35"	E 77°29'55.95''	Slaughter House	ETP	0.0
297.	Slaughter House of Nagar Nigam, Kaila Bhatta, Ghaziabad.	N 28°39'54.8784"	E 77°25'4.7532''	Slaughter House	ETP	0.0
298.	Slaughter House of Nagar Panchayat, Farid Nagar, Ghaziabad.	N 28°46'14.304"	E 77°37'29.9028''	Slaughter House	ETP	0.0
299.	Slaughter House of Town Area Committee, Dasna, Ghaziabad.	N 28°40'50.7"	E 77°31'18.5268''	Slaughter House	ETP	0.0
300.	Slaughter House of Zila Parishad, Masoorie, Ghaziabad.	N 28°40'50.7"	E 77°31'18.5268''	Slaughter House	ETP	0.0
301.	Solanky Dyeing, B-9, Roop Nagar Ind. Area, Loni, Ghaziabad.	N 28°44'37.5756"	E 77°17'52.5048''	Yarn/Textile Processing	ETP	10.0
302.	Sona Industry, Plot No- 56/7, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Metal Surface Treatment	ETP	1.5
303.	Soni Spring, Plot No. Roop Nagar Ind. Area, Loni, Ghaziabad.	N 28°44'37.5756"	E 77°17'52.5048''	Metal Surface Treatment	ETP	5.0

304.	Spak India, 56/23, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	30.0
305.	Spark Electrose P Ltd., A-48/9, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Metal Surface Treatment	ETP	10.0
306.	SPD RAINBOW(Lavya Udyog), 56/17, Site-4, Sahibabd Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	20.0
307.	Sudhir Kumar Jain, G-80, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	N 28°47'5.7228"	E 77°16'24.816''	Yarn/Textile Processing	CETP	8.0
308.	Sukriti Vidyut Udyog Pvt. Ltd., D-39, Meerut Road Ind. Area, Ghaziabad.	N 28°40'39.5616"	E 77°25'15.9312''	Metal Surface Treatment	ETP	0.3
309.	Sumer Mal (R.K. Export & Import), H-13, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	N 28°41'20.922"	E 77°20'57.7644''	Yarn/Textile Processing	CETP	23.0
310.	Sun Dyers, I-19, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	N 28°41'20.922"	E 77°20'57.7644''	Yarn/Textile Processing	CETP	18.0
311.	Sun Shine Dyeing & Washing, 75-76, Rural Ind. Area, Arya Nagar, Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	-
312.	Sunil Kumar, G-85, Apparel Park, Sector D-1 (P3), Tronica City, Loni	N 28°47'5.7228"	E 77°16'24.816''	Textile Dyeing	CETP	25
313.	Sunny Prints, 5/7, Site-2, Loni Road, Ind.area, Mohan Nagar, Ghaziabad.	N 28°40'45.1596"	E 77°23'0.2796''	Yarn/Textile Processing	ETP	9.0
314.	Super Fine Wash, 71, Arya Nagar Ind.area, Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	15.0
315.	Super Hosiery, Banthla, Loni, Ghaziabad.	N 28°43'53.9184"	E 77°18'3.0636''	Yarn/Textile Processing	ETP	12.0
316.	Super Industry, Gali No. 2, Arya Nagar, Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	10.0
317.	Supreme Industries, J-2, Appral Park, Tronca City, Loni, Ghaziabad.	N 28°41'20.922"	E 77°20'57.7644''	Yarn/Textile Processing	ETP	40.0

318.	Surendra Processors, 57/1/12, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	30.0
319.	Suruchi Dyeing, 37, S.S.of G.T.Road Ind. Area, Ghaziabad.	N 28°38'19.2228"	E 77°26'17.3688''	Yarn/Textile Processing	ETP	15.0
320.	Swastik Washing, A-37, Roop Nagar Ind. Area, Loni, Ghaziabad.	N 28°44'37.5756"	E 77°17'52.5048''	Yarn/Textile Processing	ETP	10.0
321.	Tanzeem Dyeing 261, Rajaendra Nagar Ind. Area Ghaziabad.	N 28°40'31.2744"	E 77°22'37.3872''	Yarn/Textile Processing	ETP	15.0
322.	Techno Enterprises, A-13/12, Meerut Road Ind. Area, Ghaziabad.	N 28°40'58.4544"	E 77°26'5.4168''	Metal Surface Treatment	ETP	4.0
323.	Tina Dyeing, B-53, Roop Nagar Ind. Area, Loni, Ghaziabad.	N 28°44'37.5756"	E 77°17'52.5048''	Yarn/Textile Processing	ETP	10.0
324.	Tiwari Feb, G-255, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	N 28°47'5.7228"	E 77°16'24.816''	Yarn/Textile Processing	CETP	50.0
325.	Triyash Enterprises, khasra no.2751, vill.Bhoor Gari, Dasna	N 28°40'50.7"	E 77°31'18.5268''	Tannery		84.0
326.	Tusar Garments (Spectrum Dye Studio), J-3, Sector D-1(P), Aparels Park, Tronica City, Loni, Ghaziabad.	N 28°41'20.922"	E 77°20'57.7644''	Yarn/Textile Processing	CETP	15.0
327.	U-Like Industry, G-110, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	N 28°47'5.7228"	E 77°16'24.816''	Metal Surface Treatment	CETP	2.0
328.	Ultra Electropletores, 46 Meerut Road Ind. Area Ghaziabad.	N 28°40'58.4544"	E 77°26'5.4168''	Metal Surface Treatment	ETP	1.5
329.	Unichem Laborateries, C-31, Meerut Road Ind. Area	N 28°40'58.4544"	E 77°26'5.4168''	Pharma	ETP	180.0
330.	United Polygenious Pvt.Ltd., B-13/1, Site-4 Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Metal Surface Treatment	ETP	4.5
331.	Usha Cycle, S.S. of G.T. Road Ind. Area, Ghaziabad.	N 28°38'19.2228"	E 77°26'17.3688''	Metal Surface Treatment	ETP	10.0
332.	V.S. Dyeing, Plot No.-15, Arya Nagar, naipura Road, Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	12.0

333.	V.S. Garments, 20/6/10, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	20.0
334.	Vaishali Hosiery, I-17, Sec D-1, Apparel Park, Tronica City, Loni, Ghaziabad.	N 28°46'50.16"	E 77°15'58.77''	Yarn/Textile Processing	CETP	15.0
335.	Vaishno Dyeing, 192, Rajineder Nagar Ind. Area, Mohan Nagar, Ghaziabad.	N 28°40'31.2744"	E 77°22'37.3872''	Yarn/Textile Processing	ETP	18.0
336.	Vaishno Garments, 20/6/3, Site-4, Ind Area, Sahibabad, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Textile Dyeing	ETP	18
337.	Vanishika Dyeing, B-68, Roop Nagar Ind. Area, Loni, Ghaziabad.	N 28°44'37.5756"	E 77°17'52.5048''	Yarn/Textile Processing	ETP	14.0
338.	Vardhman Engg. Works, 72/10-B, Gali No-6, Rajinder Ind. Area, Mohan Nagar, Ghaziabad.	N 28°40'31.2744"	E 77°22'37.3872''	Metal Surface Treatment	ETP	1.8
339.	Vedanta Estate, I-11, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	N 28°41'20.922"	E 77°20'57.7644''	Yarn/Textile Processing	CETP	18.0
340.	Vedanta Estate, (New Name A.N. Processors), I-12, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	N 28°41'20.922"	E 77°20'57.7644''	Yarn/Textile Processing	CETP	18.0
341.	Vedanta Estate, J-12, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	N 28°41'20.922"	E 77°20'57.7644''	Yarn/Textile Processing	CETP	18.0
342.	V.R.S. Food Ltd., (Vedram & Sons), Unit-1, B-56, Site-4 , Sbd.Gzb.	N 28°39'27.6912"	E 77°20'26.9556''	Dairy	ETP	150.0
343.	V.R.S. Food Ltd. (Vedram & sons), Unit-2, B-33, Site-4 , Sbd. Gzb.	N 28°39'27.6912"	E 77°20'26.9556''	Dairy	ETP	930.0
344.	Ventkesh Enterprises, 48/1/7, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	50.0
345.	Versha Washing, 49/25, Site-4, Ind. Area, Sahibabad, , Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	25.0
346.	Vidhi Ventuer, Rajinder Nagar Ind. Area, Mohan Nagar, Ghaziabad.	N 28°40'31.2744"	E 77°22'37.3872''	Yarn/Textile Processing	ETP	30.0
347.	Vinay Dyeing & Washing, 3, 96/3, Arya Nagar Ind. Area, Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	8.0

348.	Vivek Dyeing, Main Road, A-7, Main Road, Roop Nagar Ind. Area, Loni, Ghaziabad.	N 28°44'37.5756"	E 77°17'52.5048''	Yarn/Textile Processing	ETP	8.0
349.	Voice India Udyog, 203, Laxmi Ind. Enclave, Arya Nagar Ind.area, Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	0.0
350.	Walia Textile Prints, A-4/6, Site-4, Sahibabad Ind. Area, Ghaziabad.	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	4.0
351.	Warsi Brothers, (Nikhil Trading), B-59, Roop Nagar I.A Loni, Ghaziabad.	N 28°44'37.5756"	E 77°17'52.5048''	Yarn/Textile Processing	ETP	-
352.	Yash Udhyog, E-14, site-IV, Industrial Area Sahibabad, Ghaziabad	N 28°39'29.2752"	E 77°20'31.1244''	Yarn/Textile Processing	ETP	65.0
353.	Z.A. Washing, Unit-II, Arya Nagar, Loni, Ghaziabad.	N 28°40'42.636"	E 77°25'27.11136''	Yarn/Textile Processing	ETP	10.0

Appendix 3 A

Sr. no.	District	Name of Industry	Sector	Water Consumption (KLD)	Effluent Discharge (KLD)	Details of ETP	Gap Analysis	Remark	Status
1.	Muzaffar nagar	Magma Industries, Muzaffarnagar	Basic Chemicals & Derivatives	30	20	Oil & Grease Trap, Equalization Tank, Primary Clarifier, Aeration Tank., Secondary Clarifier, SDBs	No Gap	-	Complying
2.	Ghaziabad	Manav Beverage P Ltd, C-128, BSR Ind.area	Beverage	0	0	-	No Gap	Closed	Unit lying closed
3.	Saharanpur	Bajaj Hindustan Ltd. Distillery Unit, Gagnoli. Saharanpur	Distillery	2400	ZLD	MEE, Bio Composting	Condensate Polishing unit to be installed	-	Complying
4.	Saharanpur	U.P. Co-Operative Sugar Factory Nanauta, Saharanpur	Distillery	450	ZLD	MEE ,Bio Composting	Condensate Polishing unit to be installed	-	Complying
5.	Muzaffar nagar	Sir Shadi Lal Distillery & Chemical Works, Mansoorpur Muzaffarnagar	Distillery	1000	ZLD	R.O., MEE, Bio Composting	Condensate Polishing unit to be installed	-	Complying
6.	Muzaffar nagar	Triveni Engg. Industries Ltd. Bilaspur, Jolly Road, Muzaffarnagar.	Distillery	2500	ZLD	R.O., MEE & Bio Composting	No Gap	-	Complying
7.	Shamli	Shamli Distillery & Chem. Works. Shamli	Distillery	560	ZLD	RO Plant, Bio Composting, MEE	Condensate Polishing unit to be installed	-	Complying
8.	Meerut	M/s Bajaj Hindustan Ltd, (Distillery Unit) Village Kinauni,Meerut	Distillery	1000	ZLD	Raw Spent Wash collection lagoon, Bio-methanization, Digested spent wash storage lagoon, Multi Effect Evaporator, Spent Wash Storage lagoon, RO Plant, Bio Composting Yard.	No Gap	-	Complying

9.	Ghaziabad	Mohan Meakin Ltd. Mohan Nagar Ghaziabad	Distillery (Only Bottling)	439	257	Equalization Tank, Lagoon-1, Lagoon-2, Lagoon-3, Polishing Plant, Aeration tank, Secondary Clarifier-1, Aeration tank-2, Secondary Clarifier-2, Collection tank, over head tank.	No Gap	-	Complying
10.	Saharanpur	U.P. Co-Operative Co. Ltd. Tapri, Saharanpur	Distillery (Only Bottling)	210	100	Settling Tank, Carbon Filter & Treated water Storage Tank	No gap	-	Complying
11.	Ghaziabad	Atlas Cycle (Haryana) Ltd.,55, Site-4, Sahibabad GZB.	Engineering	463	370	Oil & Grease Trap, Equalization Tank, Reaction Tank (Chemical Mixing), Aeration Tank, Clarifier, Sludge Drying Beds.	No Gap	-	Complying
12.	Ghaziabad	Bhushan Steel Ltd., 23, Site-4, Sbd. Gzb.	Engineering	800	800	Equalization cum Aeration Tank, Neutralization Tank, REACTON TANK, Clarifier, Filter Press & Acid Re-Generation Plant	No Gap	-	Complying
13.	Ghaziabad	Shri Ram Piston & Rings Ltd., Meerut Road Ind.area Gzb.	Engineering	563	450	Chrome Treatment Plant (Equalization Tank, Reaction Tank, Settling Tank, Filter Pres) Final ETP (Oil & Grease Trap, Equalization Tank, Reaction Tank, Primary settling tank, Aeration tank, Secondary settling tank, Centrifuge	No Gap	-	Complying
14.	Ghaziabad	Advance Steel Tube Ltd. 45/3, Site-4, Sahibabad Ind. Area, Ghaziabad.	Galvanizing	18	14	Equalization Tank, Primary Settling Tank, Reaction tank, ube Settler, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
15.	Ghaziabad	Rama Steel Tube Ltd., B-21, & B-3, Site-4, Sahibabad Ind. Area, Ghaziabad.	Galvanizing	180	180	Equalization Tank, Reaction Tank (Chemical Mixing Tank), Tube Settler, Settling Tank, Sludge Drying Beds	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
16.	Ghaziabad	Sara Exports, 35, S.S. of G.T. Road Ind. Area, Ghazizabad	Hydrocyanic acid	40	40	Holding Tank, Primary Settling Tank, REACTON TANK, Tube Settler, Sludge Drying Beds.	No Gap	-	Complying

17.	Ghaziabad	Al-Aali Exports (P) Ltd., B-37, Site-4, Ind. Area, Sahibabad, Ghaziabad.	Meat Processing	43	34	Equalization tank, Reaction tank, Settling tank, Aearation tank, Clarifier tank, ACF, MGF, SDB	No Gap	-	Complying
18.	Ghaziabad	International Agro Foods, (Processing Unit), Khasra No. 2764, Vill. Bhoor gari, Dasna Ghaziabad.	Meat Processing	40	40	Rotary Fiber Screen, Equalization Tank, Holding Tank, Flash Mixing Tank, Primary Clarifier, Aeration Tank-1, Secondary Clarifier-1, Aeration Tank-2, Secondary Clarifier-II, Polishing Tank, Sand Filter, Activated Carbon Filter & Sludge drying beds.	No Gap	-	Complying
19.	Ghaziabad	Anna Associate Pvt. Ltd., 108, Site-4 Ind. Area, Sahibabad, Ghaziabad. (W/o Rendering Plant)	Meat Processing	20	20	Equalization Tank, Neutralization Tank, Flocculation Tank, Primary settling tank, Aeration Tank, Secondary settling tank, Sludge Drying Beds.	No Gap	-	-
20.	Ghaziabad	Arshiya Export Pvt. Ltd.) B-67, Site-4, Sahibabad, Ghaziabad. (W/o Rendering Plant)	Meat Processing	44	35	Oil & Grease Trap, Equalization Tank, Reaction Tank, Primary Settling Tank, Aeration Tank, Secondary Settling Tank, Sludge Drying Beds.	No Gap	-	-
21.	Ghaziabad	Hind Industries Ltd., Plot No. B-42, Site-4, Sahibabad Ind. Area, Ghaziabad.	Meat Processing	63	50	Equalization tank, Reaction tank, Settling tank, Aearation tank, Clarifier tank, ACF, MGF, SDB	-	Closed	-
22.	Ghaziabad	M.D.Frozen Food Exports, Khasra No-2689, Bhoor gari Road, Dasna, Ghaziabad.	Meat Processing	40	40	Bar Screen, Oil & Grease Trap, Equalization Tank, Flash Mixing Tank, Flocculation tank, Primary Clarifier, Aeration Tank-1, Secondary Clarifier-1, Aeration Tank-2, Secondary Clarifier-II, Polishing Tank, Sand Filter, Activated Carbon Filter & Sludge drying beds.	No Gap	-	Unit lying closed

23.	Ghaziabad	M.K. Overcease Pvt. Ltd., B-63, 64, Site-4, Sahibabad Ind. Area, Ghaziabad.	Meat Processing	80	80	Equalization Tank, Neutralization Tank, Flocculation Tank, Aeration Tank, Settling Tank, Sludge Drying Beds.	No Gap	-	Complying
24.	Ghaziabad	Mirha Export Pvt.Ltd., B-36, Site-4, Sahibabad Ind. Area, Ghaziabad.	Meat Processing	44	35	Oil & Grease Trap, Equalization Tank, Reaction Tank, Primary Settling Tank, Aeration Tank, Secondary Settling Tank, Sludge Drying Beds.	No Gap	-	-
25.	Saharanpur	A.L.M. Industries (Meat Processing Unit) Haroda, Saharanpur	Meat Processing	100	95	Bar Screen, Collection Tank, Equalization Tank, Primary Clarifier, Aeration Tank, Secondary Clarifier & SDBs	No Gap	-	
26.	Ghaziabad	Fair Export (India) Pvt. Ltd., 20/1, Site-4 Ind. Area, Sahibabad, Ghaziabad. (W/o Rendering Plant)	Meat Processing	60	60	Equalization tank, Reaction tank, Settling tank, Aearation tank, Clarifier tank, ACF, MGF, SDB	No Gap	-	-
27.	Ghaziabad	Firgo Riffico Alana Ltd., A-15, Site-4, Sahibabad Ind. Area, Ghaziabad.	Meat Processing	63	50	Oil & Grease Trap, Equalization Tank, Reaction Tank, Flocculator tank, Primary Settling Tank, Aeration Tank, Secondary Settling Tank, Sludge Drying Beds.	No Gap	-	Complying
28.	Ghaziabad	Frigo Rifico Alana Ltd., Unit-2, A-14/1, Site-4, Sahibabad Ind. Area, Ghaziabad. (Only Rendering)	Meat Processing	32	25	Oil & Grease Trap, Equalization Tank, Reaction Tank, Flocculator tank, Primary Settling Tank, Aeration Tank, Secondary Settling Tank, Sludge Drying Beds.	No Gap	-	Complying

29.	Ghaziabad	Karan Frozen Food, Bhoor gari, Dasna, Ghaziabad. (W/o Rendering Plant)	Meat Processing	32	25	Oil & Grease Trap, Equalization Tank, Holding Tank, Flash Mixing Tank, Primary Clarifier, Aeration Tank-1, Secondary Clarifier-1, Aeration Tank-2, Secondary Clarifier-II, Polishing Tank, Sand Filter, Activated Carbon Filter & Sludge drying beds.	No Gap	-	Unit lying closed
30.	Ghaziabad	A.B. Cycle Parts Pvt.Ltd., S-24, S.S.of G.T.Road Ind. Area, Ghaziabad.	Metal Surface Treatment	12	8	Collection/Equalization Tank, Neutralization Tank, Reaction Tank, Settling Tank, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
31.	Ghaziabad	A.C.E.Hardware, B-5, B.S.Road Ind. Area, Ghaziabad.	Metal Surface Treatment	3	2	Bar Screen, Equalization Tank, REACTON TANK No-2, Settling Tank No-2, Dual media filter, Filter Press.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
32.	Ghaziabad	Agrawal Galvenizing, A-8/6, Sect.22 Meerut Road Ind. Area, Ghaziabad.	Metal Surface Treatment	3	2	Equalization Tank, Reaction Tank (Chemical Dosing tank), Settling Tank, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
33.	Ghaziabad	Airtech Pvt.Ltd., 20/7, Site-4, Sahibabad Ind. Area, Ghaziabad.	Metal Surface Treatment	8	6	Equalization Tank, Reaction Tank, Settling Tank, Storage Tank, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Closed
34.	Ghaziabad	Ajay Industrial Corporation, 20/11, Site-4, Ind. Area, Sahibabad, Ghaziabad.	Metal Surface Treatment	3	2	Equalization Tank, Reaction Tank (Chemical Mixing Tank), Settling Tank, Activated Carbon Filter, Carbon Filter and Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying

35.	Ghaziabad	Ajay Industrial corporation, 42, Rural Ind.area, Loni, Ghaziabad.	Metal Surface Treatment	3	2	Equalization Tank, Reaction Tank (Chemical Mixing Tank), Settling Tank, Activated Carbon Filter, Carbon Filter and Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
36.	Ghaziabad	Akash Glass Industries, S-50, Site-4,Sahibabad, Ghaziabad.	Metal Surface Treatment	0	0	Equalization Tank, Reaction Tank, Settling Tank, Carbon Filter and Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Wet Process closed
37.	Ghaziabad	Anuradha Fabricators, 42/10, Site-4 , Sahibabad, Ghaziabad.	Metal Surface Treatment	2	1.5	Equalization Tank, Holding Tank, Reaction Tank, Settling Tank, Chemical Dosing Tank, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Not Complying
38.	Ghaziabad	Arihant Stationary, Arya Nagar Ind.area Loni, Ghaziabad.	Metal Surface Treatment	3	2	ETP not required	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	Dry Process	Wet Process closed
39.	Ghaziabad	Arun Industries, Gali no.1 Arya Nagar Ind. Area, Loni, Ghaziabad.	Metal Surface Treatment	3	2	Equalization tank, Reaction tank, Chemical Dosing tank, Settling tank, SDB	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
40.	Ghaziabad	Asif Industries, C-21, Roop Nagar Ind.area Loni, Ghaziabad.	Metal Surface Treatment	3	2	Equalization tank, Reaction tank, Chemical Dosing tank, Settling tank, Treated water tank, SDB	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
41.	Ghaziabad	Ashok Yadav & Rajesh Yadav, S-126, Site-2, Loni Road, Ghaziabad.	Metal Surface Treatment	3	2	Equalization Tank, Reaction Tank (Chemical Dosing Tank), Settling Tank, , Tube Settler, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying

42.	Ghaziabad	Balaji Engineering works, 351, Pandav Nagar, Mehrauli, Ghaziabad.	Metal Surface Treatment	3	2	Equalization Tank, REACTON TANK (Chemical Dosing tank), Settling Tank, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
43.	Ghaziabad	Balaji Enterprises, B-22/1/15, B.S.Road Ind. Area, Ghaziabad.	Metal Surface Treatment	2	1.5	Equalization Tank, REACTON TANK (Chemical Dosing), Settling Tank, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
44.	Ghaziabad	Balaji wire Pvt .Ltd., 139-A, Anand Ind. Estate, Mohan Nagar, Ghaziabad.	Metal Surface Treatment	6	6	Equalization Tank-2, REACTON TANK-2 (Chemical Dosing tank), Tube settler, Dual Media Filter, Storage tank, filter press.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
45.	Ghaziabad	Bharat Electronics Ltd., Bharat Nagar, Sahibabad Industrial Area, Ghaziabad.	Metal Surface Treatment	100	100	Neutralization Pit, Reaction Tank (Chemical dosing Tank), Clarifier, Treated Water Tank, R.O., Sludge Drying Beds	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
46.	Ghaziabad	Cosmos Auto India, 21 mainapur Meerut Road Ghaziabad.	Metal Surface Treatment	3	2	Collection Tank, REACTON TANK (Chemical Dosing), Settling Tank, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
47.	Ghaziabad	Cosmos Engine. Component P Ltd., A-7, Electro Steel Compound, S.S. of G.T. Road, Ghaziabad.	Metal Surface Treatment	0	0	Collection/Equalization Tank, Neutralization Tank, Reaction Tank, Settling Tank, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
48.	Ghaziabad	Dream Bath, 28/1/21, Site-4, Sahibabad Industrial Area, Ghaziabad.	Metal Surface Treatment	7	5	Equalization Tank, Reaction Tank, Settling Tank, Chemical Dosing Tank, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying

49.	Ghaziabad	Em Kay Industries, 101/2, Arya Nagar Ind.area Loni, Ghaziabad.	Metal Surface Treatment	3	2	Collection/Equalization Tank, Neutralization Tank, Reaction Tank, Settling Tank, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
50.	Ghaziabad	Empire Fastners, 48/1/22, Site-4, Sahibabad Ind. Area, Ghaziabad.	Metal Surface Treatment	13	10	Equalization Tank, Neutralization Tank, Reaction Tank, Clarifier, Filter Press & Acid Re-Generation Plant.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
51.	Ghaziabad	Futuro Components Pvt. Ltd. Dasna Hapur Road Ghaziabad.	Metal Surface Treatment	63	50	Equalization Tank, REACTON TANK (Chemical Dosing), Settling Tank, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
52.	Ghaziabad	Gourang Products Pvt. Ltd, GT Road, Industrial Area Ghaziabad	Metal Surface Treatment	12	12	Collection/Equalization Tank, REACTON TANK (Chemical Dosing tank), Tube settler, Filter Press, Activated Carbon filter, Micro filter.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
53.	Ghaziabad	Ipsa Business India Pvt.Ltd., 57/1/17-18, Site-4, Sahibabad Ind. Area, Ghaziabad.	Metal Surface Treatment	8	6	Equalization Tank, Reaction Tank, Settling tank, Sludge Dyeing Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
54.	Ghaziabad	J.D.M.Enterprises, C-223/1, B.S.Road Ind.area Ghaziabad.	Metal Surface Treatment	4	4	Equalization Tank, REACTON TANK (Chemical Dosing), Settling Tank, Treated water tank, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
55.	Ghaziabad	Jai B.P. & Socket Industries, 142, Prakash Ind. Area, Sahibabad, Ghaziabad.	Metal Surface Treatment	3	2	Collection/Equalization Tank, Neutralization Tank, Reaction Tank, Settling Tank, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	Unit closed	-

56.	Ghaziabad	Jai Durge Metalizing, 67, anand Ind. Estate Mohan Nagar Ghaziabad.	Metal Surface Treatment	0.8	0.8	Collection tank, Chorme Nutrilization tank, Tube Settler, SDB, Buffer Tank.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	Closed	-
57.	Ghaziabad	Karam Chandra Rubber Pvt. Ltd., C-230, B.S.Road Ind. Area Ghaziabad.	Metal Surface Treatment	63	50	Equalization Tank, REACTON TANK (Chemical Dosing tank), Settling Tank, Sand filter, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
58.	Ghaziabad	Kathuria Brothers (Cycle section), A-12, Meerut Road Ind. Area. Ghaziabad.	Metal Surface Treatment	20	20	Equalization tank, Bleaching tank, Cum settling tank, sludge drying beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
59.	Ghaziabad	Laxmi Metal, A-45, Roop Nagar Ind. Area, Loni, Ghaziabad.	Metal Surface Treatment	7	5	Equalization tank, collection tank, Reaction tank, Settling tank, Chemical Dosing Tank, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
60.	Ghaziabad	Lion Cycle & Riksha Industries, E-10, B.S.Road Ind. Area, Ghaziabad.	Metal Surface Treatment	1	0.5	Equalization tank, Reaction tank, Settling tank, Chemical Dosing Tank, Sludge Drying Beds, dual Media Filter	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
61.	Ghaziabad	Li-Vinit Acessaries, 54/6, Site-4, Sahibabad Ind. Area, Ghaziabad.	Metal Surface Treatment	2	1.5	Equalization Tank, Reaction Tank (Chemical Dosing tank) Settling Tank, Activated Carbon Filter, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	-
62.	Ghaziabad	Machino Tech, 48/1/1-A, Site-4, Sahibabad Ind. Area, Ghaziabad.	Metal Surface Treatment	4	3	Equalization Tank No-2, Reaction Tank No-2, Settling Tank No-2, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying

63.	Ghaziabad	Malik Niddles & allide products, C-108, B.S.Road Ind. Area Ghaziabad.	Metal Surface Treatment	3.2	3.2	Equalization Tank, REACTON TANK (Chemical Dosing), Settling Tank, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
64.	Ghaziabad	Manohar Lal Hira Lal Ltd., 28 KM Stone Meerut Road, Duhai, Ghaziabad.	Metal Surface Treatment	63	50	Collection Tank, REACTON TANK (Chemical Dosing), Settling Tank, Tube Settler, Holding tank, Duel Media Filter, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
65.	Ghaziabad	Marshal Cycles, B-17/18, Meerut Road Ind. Area, Ghaziabad.	Metal Surface Treatment	40	40	Equalization Tank, Reduction Tank, Reaction Tank, Settling Tank, Sludge Drying Beds	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
66.	Ghaziabad	National Engg. Works (Old Name Mange Ram), 115, Prakash Ind. Area, Sahibabad, Ghaziabad.	Metal Surface Treatment	0	0	Collection/Equalization Tank, Neutralization Tank, Reaction Tank, Settling Tank, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	-
67.	Ghaziabad	Nip Man Fastners India Pvt. Ltd., C-197, B.S. Road Ind. Area, Ghaziabad.	Metal Surface Treatment	82	65	Equalization Tank-2, REACTON TANK-2, Settling Tank-2, Tube Settler, Filter Press, R.O.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
68.	Ghaziabad	North Land Cycle co. D-21, Meerut Road Ind. Area, Ghaziabad.	Metal Surface Treatment	3	2	Holding Cum Settling Tank, REACTON TANK, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
69.	Ghaziabad	Northern India cyco Parts, E-2, S.S. of G.T.Road, Ind. Area, Ghaziabad.	Metal Surface Treatment	7	5	Equalization Tank, REACTON TANK (Chemical Dosing), Settling Tank, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying

70.	Ghaziabad	Paharpur-3 P, Plot No 19, Site-4, Sahibabad Ind. Area, Ghaziabad.	Metal Surface Treatment	0	0	Equalization cum collection Tank, Reaction Tank (Chemical Mixing), Settling Tank, Sludge Holding tank, Filter Press, Dual Media Filter.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
71.	Ghaziabad	Parasnath Electropleters, Naresh Ind.Area, Loni, Ghaziabad.	Metal Surface Treatment	3	2	Collection/Equalization Tank, Neutralization Tank, Reaction Tank, Settling Tank, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
72.	Ghaziabad	Rachna Metal Industries Pvt. Ltd., 18/42, Site-4, Sahibabad Ind. Area, Ghaziabad.	Metal Surface Treatment	4	4	Equalization cum Holding Tank, Reaction Tank, Tube Settler, Settling Tank, Sludge Drying Beds	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Not Complying
73.	Ghaziabad	Ramsons Enterprises, D-21 Meerut Road Ind. Area, Ghaziabad.	Metal Surface Treatment	3	2	Holding Tank, REACTON TANK, Chemical Mixing tank, Settling Tank, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
74.	Ghaziabad	Regency Cycles P Ltd., 16/1-B-3&4, Site-4, Sahibabad Ind. Area, Ghaziabad.	Metal Surface Treatment	8	8	Equalization cum Holding (2 Nos) Tank, Reaction-Settling Tank (2 Nos), Sludge Drying Beds	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Not Complying
75.	Ghaziabad	S.D. Industries (Old Name is S.D. Enterprises), E-124, B.S. Road Ind. Area, Ghaziabad.	Metal Surface Treatment	3	2	Equalization Tank, REACTON TANK (Chemical Dosing), Settling Tank, Treated water tank, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
76.	Ghaziabad	S.M. Electropleters, 61-A, Roop Nagar, Ind. Area, Ghaziabad.	Metal Surface Treatment	2	0.9	Equalization tank, Reaction tank, Settling tank, Chemical Dosing Tank, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying

77.	Ghaziabad	S.R. Electro Plating works, A-69, Roop Nagar Ind. Area, Loni Ghaziabad.	Metal Surface Treatment	3	2	Nikle treatment-Equalization tank, Reaction tank, Settling tank,Chemical Dosing Tank, Chrome treatment-Reaction cum settling tank, Comman Carbon filter, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
78.	Ghaziabad	S.S. Enterprises, 363, Pandav Nagar, B.S. Road Maharauli, Ghaziabad.	Metal Surface Treatment	2	0.9	Equalization Tank, REACTON TANK (Chemical Dosing tank), Settling Tank, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
79.	Ghaziabad	Sage Metal Ltd., B-7, Site-4, Shaibabad Ind. Area, Ghaziabad.	Metal Surface Treatment	13	10	Equalization cum Holding Tank, Reaction Tank, Settling Tank, Sludge Drying Beds	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	complying
80.	Ghaziabad	Sakshi Metal Works, D-1/A, Kavi Nagar Ind. Area, Ghaziabad.	Metal Surface Treatment	1	0.2	Equalization Tank-2, REACTON TANK-2 (Chemical Dosing tank), Settling Tank-2, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
81.	Ghaziabad	Shanti Nath Manufactures, A-2/14, Kavi Nagar Ind. Area Ghaziabad.	Metal Surface Treatment	0.8	0.8	Equalization Tank, REACTON TANK (Chemical Dosing tank), Settling Tank, Activated Carbon filter, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	complying
82.	Ghaziabad	Shital Industries, S-40, S.S. of G.T.Road Ind. Area, Ghaziabad.	Metal Surface Treatment	13	10	Equalization Tank-2, REACTON TANK-2 (Chemical Dosing tank), Settling Tank-2, Sludge Drying Beds-2.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
83.	Ghaziabad	Shivam Cotage P Ltd., S-110/1 Site-2, Loni Road Ind. Area, Ghaziabad.	Metal Surface Treatment	7	5	Equalization Tank, REACTON TANK (Chemical Dosing), Settling Tank, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying

84.	Ghaziabad	Shivam Engineering, 282, S.S. of G.T. Road Industrial Area, Ghaziabad.	Metal Surface Treatment	4	3	Equalization Tank, REACTON TANK (Chemical Dosing), Settling Tank, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
85.	Ghaziabad	Shivam Fab Tech P Ltd., 22/9, S.S. of G.T. Road Ind. Area, Ghaziabad.	Metal Surface Treatment	13	10	Equalization Tank, REACTON TANK (Chemical Dosing), Settling Tank, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
86.	Ghaziabad	Shri Balaji Metal, E-17, Kavi Nagar Ind. Area, Ghaziabad.	Metal Surface Treatment	3	2	Equalization Tank, REACTON TANK (Chemical Dosing tank), Settling Tank, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
87.	Ghaziabad	Shri Giri Raj Enterprises, 24-25, Prakash Ind. Estate, Sahibabad, Ghaziabad.	Metal Surface Treatment	7	5	Equalization Tank, Reaction Tank, Naturalization tank, Activated Carbon filter, Settling Tank, Sludge Drying Beds	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
88.	Ghaziabad	Silbrite Spokes P Ltd., S-28, Industries, S.S. of G.T. Road Ind. Area, Ghaziabad.	Metal Surface Treatment	3	2	Equalization cum Holding Tank, Reaction Tank (Chemical Dosing), Settling Tank, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
89.	Ghaziabad	Singla Engrayours Pvt.Ltd., 7/26, Site-4, Sahibabad Ind. Area, Ghaziabad.	Metal Surface Treatment	4	3	Equalization Tank, Reaction Tank (Chemical Dosing tank) Settling Tank, Activated Carbon Filter, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Not Complying
90.	Ghaziabad	Sona Industry, Plot No- 56/7, Site-4, Sahibabad Ind. Area, Ghaziabad.	Metal Surface Treatment	2	1.5	Equalization Tank, Reaction Tank (Chemical Dosing tank) Settling Tank, Clear Water Tank, Activated Carbon Filter, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Not Complying

91.	Ghaziabad	Soni Spring, Plot No. Roop Nagar Ind. Area, Loni, Ghaziabad.	Metal Surface Treatment	7	5	Collection/Equalization Tank, Neutralization Tank, Reaction Tank, Settling Tank, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
92.	Ghaziabad	Spark Electrose P Ltd., A-48/9, Site-4, Sahibabad Ind. Area, Ghaziabad.	Metal Surface Treatment	13	10	Equalization Tank, Reaction Tank (Chemical Dosing tank) Settling Tank, Activated Carbon Filter, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
93.	Ghaziabad	Sukriti Vidyut Udyog Pvt. Ltd., D-39, Meerut Road Ind. Area, Ghaziabad.	Metal Surface Treatment	1	0.3	Equalization Cum Settling Tank, REACTON TANK (Chemical Dosing), Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
94.	Ghaziabad	Techno Enterprises, A-13/12, Meerut Road Ind. Area, Ghaziabad.	Metal Surface Treatment	4	4	Screen Chamber, Equalization Tank, Reaction Cum Settling Tank, Chemical Dosing, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Complying
95.	Ghaziabad	U-Like Industry, G-110, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Metal Surface Treatment	3	2	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	Unit closed in compliance of NGT Order
96.	Ghaziabad	Ultra Electropletores, 46 Meerut Road Ind. Area Ghaziabad.	Metal Surface Treatment	2	1.5	Equalization Tank, REACTON TANK (Chemical Dosing), Settling Tank, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	complying
97.	Ghaziabad	United Polygenious Pvt.Ltd., B-13/1, Site-4 Sahibabad Ind. Area, Ghaziabad.	Metal Surface Treatment	6	4.5	Equalization Tank (2 Nos), Reaction Tank (2 Nos), Settling Tank (2 Nos), Sludge Drying Beds	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	complying

98.	Ghaziabad	Usha Cycle, S.S. of G.T. Road Ind. Area, Ghaziabad.	Metal Surface Treatment	13	10	Equalization Tank, REACTON TANK (Chemical Dosing), Settling Tank, Sludge Drying Beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	complying
99.	Ghaziabad	Vardhman Engg. Works, 72/10-B, Gali No-6, Rajinder Ind. Area, Mohan Nagar, Ghaziabad.	Metal Surface Treatment	3	1.8	Equalization Tank No-2, Reaction Tank No-2, Tube Settler, Sludge Drying Beds	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix - 3 D	-	complying
100.	Ghaziabad	V.R.S. Food Ltd., (Vedram & Sons), Unit-1, B-56, Site-4 , Sbd.Gzb.	Milk Processing	188	150	Bar Screen, Oil & Grease Traps, Equalization Tank, UASB, Aeration Tank, Clarifier, Sludge Drying Beds	No Gap	-	Complying
101.	Ghaziabad	V.R.S. Food Ltd. (Vedram & sons), Unit-2, B-33, Site-4 , Sbd. Gzb.	Milk Processing	1163	930	Bar Screen, Oil & Grease Traps, Equalization Tank, UASB, Aeration Tank, Clarifier, Sludge Drying Beds	No Gap	-	Complying
102.	Saharanpur	Pashupati Dairy (P) Ltd. Dehradun Road, Saharanpur	Milk Processing	300	270	Bar Screen, Pre Aeration Tank, Oil & Grease Trap, Equalization Tank, Recycling Filter, Aeration Tank, Secondary Clarifier & SDBs	No Gap	-	
103.	Saharanpur	S.M.C. Foods Ltd. Nanauta, Saharanpur	Milk Processing	1000	900	Bar Screen, Oil & Grease Trap, Equalization Tank, UASB, Aeration Tank, Clarifier, SDBs	No Gap		
104.	Ghaziabad	A.S.T. Pipes, B-33, B.S.Road Ind. Area, Ghaziabad.	Other	0	0	Holding Tank, Primary Settling Tank, REACTON TANK, Tube Settler, Sludge Drying Beds.	No Gap	-	Complying
105.	Ghaziabad	Chemo Pulp Tissues Pvt Ltd, A-4, sect-22, Meerut Road, Ind.area	Other	0	0	-	No Gap	Polluting porcess closed	Polluting porcess closed
106.	Ghaziabad	Continental Carbon India Ltd., A-14, S.S. of G.T. Road	Other	500	500	Oil & Grease Trap, Collection tank, Flash mixing tank (Chemical Dosing), Flocculation tank, Primary Clarifier, DAF unit, Aeration tank,	No Gap	-	Not Complying

						Secondary clarifier, Dual Media filter, R.O. Plant, Centri fuse			
107.	Ghaziabad	Moon Brewaries Ltd., Unit-1, A-32, Site-4, Sahibabad GZB.	Other	813	650	Equalization Tank, Reaction Tank, Aeration tank, Clarifier, dual media filter, Sludge Drying Beds, filter press,	No Gap	-	Complying
108.	Ghaziabad	Unichem Laborateries, C-31, Meerut Road Ind. Area	Pharma	180	180	Equalization/Holding Tank, Chemical mixing Tank, Primary Settling Tank, Aeration Tank, Secondary Settling Tank, and Sludge Drying Beds, Activated Carbon Filter.	No Gap	-	Complying
109.	Ghaziabad	Dabur India Ltd, P-22, Site 4 Sahibabad	Pharma (Aurvedic)	344	275	Bar Screen, Equalization Tank, Neutralization Tank, Primary Clarifier, Anaerobic High Brid Reactor, Aeration Tank, Secondary Clarifier, Sludge Holding Tank, Filter Press, M.O.F. & A.C.F., R.O., U.F.	No Gap	-	Not Complying
110.	Ghaziabad	Albert David Ltd., B-12/13, Meerut Road	Pharma (Formulation)	100	100	Oil & Grease Trap, Collection tank, PST, Aeration tank, SST, Chemical dosing, ACF & Sludge Drying Beds.	No Gap	-	Complying
111.	Ghaziabad	Hamdard (Wakf) Laborateries, (1 &2) B-2 & 3, Meerut Road	Pharma (Unani)		120	Oil & Grease trap, Collection tank, Equlization tank, Flash Mixing tank, Chemical Dosing tank, Primary clarifier, Aeration tank, Sr. Clarifier, Carbon Filter, SDB.	No Gap	-	Complying
112.	Ghaziabad	Ashoka Pulp & Paper Pvt. Ltd., 11, Loni Road Ind. Area, Mohan Nagar, GZB.	Pulp & Paper	500	500	Collection Tank, Sedi Cell, Holding Tank, Aeration Tank, Secondary Clarifier, Filter Press & Sludge Drying Beds	No Gap	(Closed by Board) Water comsumption and discharge quantity of effluent to be reduce as per CPCB Charter.	Unit closed by Board U/s 33-A of Water Act.

113.	Ghaziabad	Magnum Ventures Ltd, 18/41,Site-4 Sahibabad	Pulp & Paper	2400	2400	Equalization Tank, Neutralization Tank, Primary Clarifier, Aeration Tank, Secondary Clarifier, Sludge Drying Beds.	No Gap	Water comsumption and discharge quantity of effluent to be reduce as per CPCB Charter.	Complying
114.	Ghaziabad	Shri Ganga paper Mills Pvt.Ltd., Hapur Road Dasna	Pulp & Paper	300	0	Collection Tank, Screens, Primary Clarifier, Aeration Tank, Secondary Clarifier, Dual Media Filter, Vibrator screen, Sludge Drying Beds	No Gap	Unit operates on ZLD basis.	Complying
115.	Saharanpur	Plaza Paper P.Ltd. Saharanpur.	Pulp & Paper	-	-	ETP installed	No Gap	Self Closed	-
116.	Saharanpur	Rainbow Board Mill, (Unit Kraft Paper) Saharanpur	Pulp & Paper	-	-	ETP installed	No Gap	Self Closed	-
117.	Saharanpur	Star Paper Mill Saharanpur.	Pulp & Paper	12743	12000	Bar Screen, Oil & Grease Trap, Equalization Tank, Primary Clarifier, Aeration Tank, Secondary Clarifier, Sludge dewatering Machine	No Gap	Water comsumption and discharge quantity of effluent to be reduce as per CPCB Charter.	
118.	Saharanpur	Swaroop Paper (P) Ltd. Saharanpur	Pulp & Paper	-	-	ETP installed	No Gap	Self Closed	-
119.	Saharanpur	Hindon Filter (P) Ltd. Unit 2 Village Kolki Kalan Saharanpur	Pulp & Paper	75	50	Bar Screen, Oil Grease Trap, Equalization tank, Primary Clarifier, Aeration tank, Secondary Clarifier, Sludge Drying bads,	No Gap	Water comsumption and discharge quantity of effluent to be reduce as per CPCB Charter.	
120.	Saharanpur	Shri Krishna Board Mill, Gagalhedi, Saharanpur	Pulp & Paper	7	6	Settling Tank,	No gap	Water comsumption and discharge quantity of	

								effluent to be reduce as per CPCB Charter.	
121.	Saharanpur	Mahaveer Hand Made Paper & Board Mill	Pulp & Paper	-	-	ETP installed	No Gap	Self Closed	-
122.	Saharanpur	Shankar Board Mill, Saharanpur	Pulp & Paper	-	-	ETP installed	No Gap	Self Closed	-
123.	Saharanpur	Parmar Paper Ltd., Saharanpur	Pulp & Paper	-	-	ETP installed	No Gap	Self Closed	-
124.	Saharanpur	Saharanpur Paper Board Mill, Vill-Majri Dehradun Road, Saharanpur	Pulp & Paper	75	25	Sand Trap, Bar Screen, Primary Settling Tank, Aeration Tank, Secondary Settling Tank, SDBs	No Gap	Water comsumption and discharge quantity of effluent to be reduce as per CPCB Charter.	
125.	Saharanpur	Majri Gramudyog Sansthan, Vill- Majri Dehradun Road, Saharanpur	Pulp & Paper	-	-	ETP installed	No Gap	Self Closed	-
126.	Saharanpur	Jagdamba Gramodyog Sansthan, Dehradun Road, Saharanpur	Pulp & Paper	-	-	ETP installed	No Gap	Self Closed	-
127.	Saharanpur	Jayna Grmodyog Sansthan, Gagalheri	Pulp & Paper	-	-	ETP installed	No Gap	Self Closed	-
128.	Saharanpur	Tiwaya File Board Mill, Nawada Road, Saharanpur	Pulp & Paper	-	-	ETP installed	No Gap	Self Closed	-
129.	Saharanpur	Star Gramodyog Sansthan, Manakmau	Pulp & Paper	-	-	ETP installed	No Gap	Self Closed	-

130.	Saharanpur	Janhit Gramodyog Sansthan, Dehradun Road, Saharanpur	Pulp & Paper	-	-	ETP installed	No Gap	Self Closed	-
131.	Saharanpur	Sufi Pulp & Paper Gramodyog Sansthan, Gagalheri, Saharanpur	Pulp & Paper	-	-	ETP installed	No Gap	Self Closed	-
132.	Muzaffar nagar	Aggarwal Duplex & Board Mills Ltd. Bhopa Road Muzaffarnagar	Pulp & Paper	1200	800	Equalization Tank, Sandy cell, Primary Clarifier, Aeration Tank, Secondary Clarifier, Sand Filter , Activated Carbon Filter & SDBs	No Gap	Water comsumption and discharge quantity of effluent to be reduce as per CPCB Charter.	
133.	Muzaffar nagar	Arihant Pulp & Papers (P) Ltd. Jansath Road, Muzaffarnagar	Pulp & Paper		-	ETP installed	No Gap	Self Closed	-
134.	Muzaffar nagar	Aristo Craft Paper Mills Pvt. Ltd. Meerut Road, Muzaffarnagar	Pulp & Paper	800	600	Equalization Tank, Sandy cell, Primary Clarifier, Aeration Tank, Secondary Clarifier, SDBs & Belt Press,	No Gap	Water comsumption and discharge quantity of effluent to be reduce as per CPCB Charter.	
135.	Muzaffar nagar	Bindal Papers Ltd. Bhopa Road, Muzaffarnagar.	Pulp & Paper	12150	9860	Equalization Tank, Primary Clarifier, Aeration Tank, Secondary Clarifier, Sand Filter, DAF, DMF & SDBs, Chemical Recovery Plant	Tertiary treatment/physico chemical Treatment for colour removal from effluent.	Water comsumption and discharge quantity of effluent to be reduce as per CPCB Charter.	

136.	Muzaffar nagar	Bindalas Duplex Ltd, Bhopa Road (Unit-1), Muzaffarnagar	Pulp & Paper	2000	1400	Equalization Tank, Sandy cell, Primary Clarifier, Aeration Tank, Secondary Clarifier, Pressure Sand Filter & SDBs,	No Gap	Water comsumption and discharge quantity of effluent to be reduce as per CPCB Charter.	
137.	Muzaffar nagar	Bindalas Duplex Ltd, Bhopa Road (Unit-2) Muzaffarnagar	Pulp & Paper	1000	700	Equalization Tank, Hill Screen, Primary Clarifier, Aeration Tank, Secondary Clarifier, Pressure Sand Filter & SDBs	No Gap	Water comsumption and discharge quantity of effluent to be reduce as per CPCB Charter.	
138.	Muzaffar nagar	D.L.S. Papers Pvt. Ltd., 10Km Meerut Road, Dhaulapul, Begrajpur, Muzaffarnagar	Pulp & Paper	160	50	Equalization Tank, Save all, Primary Clarifier, Aeration Tank, Secondary Clarifier, Dual media Filter & SDBs	No Gap	Water comsumption and discharge quantity of effluent to be reduce as per CPCB Charter.	
139.	Muzaffar nagar	Disha paper Industries, Jolly road, Muzaffarnagar	Pulp & Paper	2200	1800	Equalization Tank, Sandy cell, Clarifier, Aeration Tank, Secondary Clarifier, Sand Filter, SDBs	No Gap	Water comsumption and discharge quantity of effluent to be reduce as per CPCB Charter.	
140.	Muzaffar nagar	Galaxy Papers pvt.ltd. Jolly Road, Muzaffarnagar	Pulp & Paper	300	0	Equalization Tank, Hill Screen , Clarifier, Sand Filter & SDBs	No Gap	Unit operates on ZLD basis.	
141.	Muzaffar nagar	Garg Duplex & Paper Mills (P) Ltd. Bhopa Road, Muzaffarnagar	Pulp & Paper	2500	1800	Equalization Tank, Sandy Cell, Primary Clarifier, Aeration Tank, Secondary Clarifier , Tube Settler, Sand Filter, Activated Carbon Filter, Filter Press, Mould Press	No Gap	Water comsumption and discharge quantity of effluent to be	

								reduce as per CPCB Charter.	
142.	Muzaffar nagar	K.K. Duplex Pvt. Ltd., Jansath road, Muzaffarnagar	Pulp & Paper	350	0	Equalisation Tank, Sandy Cell, Tube Settler -1 & 2, Aeration Tank, Secondary Clarifier, Multi Grade Filter, SDBs	No Gap	Unit operates on ZLD basis.	
143.	Muzaffar nagar	Mahalaxmi Craft & Tissues Bhopa Road, Jansath Muzaffarnagar.	Pulp & Paper	2000	1200	Equalization tank, Save oil, Primary Clarifier, Aeration Tank, Secondary Clarifier, Sand Filter, SDBs.	No Gap	Water comsumption and discharge quantity of effluent to be reduce as per CPCB Charter.	
144.	Muzaffar nagar	Meenu Papers (P) Ltd. Bhopa Road Muzaffarnagar	Pulp & Paper	1000	900	Equalization tank, Sandy Cell, Primary Clarifier, Aeration Tank, Secondary Clarifier, Sand Filter, Decanter.	No Gap	Water comsumption and discharge quantity of effluent to be reduce as per CPCB Charter.	
145.	Muzaffar nagar	Orient Board & Paper Mill Pvt. Ltd. Jansath Road, Muzaffarnagar	Pulp & Paper	660	90	Equalization Tank, Sandy cell, Primary Clarifier, Aeration Tank, Secondary Clarifier & SDBs	No Gap	Water comsumption and discharge quantity of effluent to be reduce as per CPCB Charter.	
146.	Muzaffar nagar	Parijat Paper Mills Ltd., Bhopa Road, Muzaffarnagar	Pulp & Paper	1500	600	Equalization Tank, Sandy cell, Primary Clarifier, Aeration Tank, Secondary Clarifier, Dual Media Filter, Belt Press & SDBs	No Gap	Water comsumption and discharge quantity of effluent to be reduce as per CPCB Charter.	
147.	Muzaffar nagar	Krishnanchal Pulp & Papers Pvt. Ltd.	Pulp & Paper	50	0	Hill Screen, Equalisation Tank, Sandy Cell, Primary Clarifier,	No Gap	Unit operates on ZLD basis.	

		(Formerly Prime Papers) Jolly Road, Muzaffarnagar				Aeration Tank, Secondary Clarifier, SDBs			
148.	Muzaffar nagar	Rana Papers (New Name N.S. Papers Ltd.) Jansath Road (Unit-2), Muzaffarnagar	Pulp & Paper	-	-	Save all, Hill Screen, Equalization Tank, Primary Clarifier, Aeration Tank, Secondary Clarifier, Sand Filter, Activated Carbon Filter, SDBs	No Gap	Self Closed	-
149.	Muzaffar nagar	Rana Papers (New Name N.S. Papers Ltd.) Jansath Road (Unit-3), Muzaffarnagar	Pulp & Paper	700	300	Save all, Hill Screen, Equalization Tank, Primary Clarifier, Aeration Tank, Secondary Clarifier, Sand Filter, Activated Carbon Filter & SDBs	No Gap	Water comsumption and discharge quantity of effluent to be reduce as per CPCB Charter.	
150.	Muzaffar nagar	Rana Papers (New Name N.S. Papers Ltd.) Jansath Road (Unit-1) Muzaffarnagar	Pulp & Paper	450	200	Save all, Hill Screen, Equalization Tank, Primary Clarifier, Aeration Tank, Secondary Clarifier, Sand Filter, Activated Carbon Filter & SDBs	No Gap	Water comsumption and discharge quantity of effluent to be reduce as per CPCB Charter.	
151.	Muzaffar nagar	Royal Paper Mills Ltd Jansath Road muzaffarnagar	Pulp & Paper	-	-	Equalisation tank, Primary Clarifier, Aeration Tank, Secondary Clarifier, SDBs	No Gap	Self Closed	-
152.	Muzaffar nagar	Shakti Craft & Tissues, Jansath road, Muzaffarnagar	Pulp & Paper	600	480	Bar Screen, Equalization Tank, Sandy Cell, Chemical Dosing Tank, Primary Clarifier, Aeration Tank, Secondary Clarifier, Sand Filter & SDBs	No Gap	Water comsumption and discharge quantity of effluent to be reduce as per CPCB Charter.	
153.	Muzaffar nagar	Shakumbari Pulp & Paper Bhopa Road, Muzaffarnagar	Pulp & Paper	900	420	Equalisation tank, Sandy cell, Primary Clarifier, Aeration Tank, Secondary Clarifier, Sand Filter, SDBs	No Gap	Water comsumption and discharge quantity of	

								effluent to be reduce as per CPCB Charter.	
154.	Muzaffar nagar	Shalimar Paper Pvt. Ltd., Jansath Road, Muzaffarnagar	Pulp & Paper	-	-	Equalization Tank, Primary Clarifier, Aeration Tank, Secondary Clarifier, SDBs	No Gap	Closer order issued by UPPCB letter dated 01-04-2015	
155.	Muzaffar nagar	Shri Bhageshwari Paper Mills (P) Ltd., Bhopa Road Unit-1 Muzaffarnagar	Pulp & Paper	800	600	Equalization tank, Sandy cell, Primary Clarifier, Aeration Tank, Secondary Clarifier, Multi Grade Filter & SDBs	No Gap	Water comsumption and discharge quantity of effluent to be reduce as per CPCB Charter.	
156.	Muzaffar nagar	Shri Bhageshwari Paper Mills (P) Ltd., Bhopa Road Unit-2 Muzaffarnagar	Pulp & Paper	1000	600	Equalization tank, Primary Clarifier, Aeration Tank, Secondary Clarifier, Multi Grade Filter & SDBs	No Gap	Water comsumption and discharge quantity of effluent to be reduce as per CPCB Charter.	
157.	Muzaffar nagar	Siddheshwary Ind. Pvt. Ltd., Jansath Road, Muzaffarnagar	Pulp & Paper	1400	900	Equalization Tank, Hill Screen, Primary Clarifier, Aeration Tank, Secondary Clarifier, Spray Filter, Mould Press.	No Gap	Water comsumption and discharge quantity of effluent to be reduce as per CPCB Charter.	
158.	Muzaffar nagar	Sidhbali Papers mills Ltd,)Bhopa Road, Muzaffarnagar	Pulp & Paper	2200	1500	Equalization Tank, Hill Screen, Sedicell, Primary Clarifier, Aeration Tank, Secondary Clarifier, Tube settler, Multigrade filter, Activated Carbon Filter	No Gap	Water comsumption and discharge quantity of effluent to be reduce as per CPCB Charter.	

159.	Muzaffar nagar	Silverton Pulp & Paper, Bhopa Road, Muzaffarnagar.	Pulp & Paper	2000	1500	Equalization Tank, Sandy Cell, Primary Clarifier, Aeration Tank, Secondary Clarifier, Multigrade Filter, Activate Carbon Filter, Decanter	No Gap	Water comsumption and discharge quantity of effluent to be reduce as per CPCB Charter.	
160.	Muzaffar nagar	Silverton Paper Ltd. (Unit-1) Bhopa Road, Muzaffarnagar	Pulp & Paper	2150	1800	Equalization tank, Primary Clarifier, Aeration Tank, Secondary Clarifier, Tube Settler, Activate Carbon Filter, SDBs.	Tertiary treatment/physico chemical Treatment for colour removal from effluent.	Water comsumption and discharge quantity of effluent to be reduce as per CPCB Charter.	
161.	Muzaffar nagar	Silverton Paper Ltd. (Unit-2) 16Bhopa Road, Muzaffarnagar	Pulp & Paper	1900	900	Equalization tank, Primary Clarifier, Aeration Tank, Secondary Clarifier, Tube Settler, Activated Carbon Filter, Sludge Dyeing Beds.	No Gap	Water comsumption and discharge quantity of effluent to be reduce as per CPCB Charter.	
162.	Muzaffar nagar	Sita Paper Mill, Bhopa Road, Muzaffarnagar	Pulp & Paper	-	-	Hill Screen, Settling Tank, Primary Clarifier, Aeration Tank, SDBs	No Gap	Self Closed	-
163.	Muzaffar nagar	Suyash craft & papers ltd., Velhana, Muzaffarnagar	Pulp & Paper	1000	600	Equalisation tank, Hill Screen, Sandy Cell, Primary Clarifier, Aeration Tank , Secondary Clarifier, Multigrade Filter, SDBs	No Gap	Water comsumption and discharge quantity of effluent to be reduce as per CPCB Charter.	
164.	Muzaffar nagar	Taj Paper Mills Pvt. Ltd., Jansath road, Muzaffarnagar	Pulp & Paper	-	-	ETP installed	No Gap	Self closed	-
165.	Muzaffar nagar	Tehri Pulp & Papers Ltd. Bhopa Road	Pulp & Paper	3000	2500	Equalization Tank, , Hill Screen, Sandy Cell, Primary Clarifier,	No Gap	Water comsumption	

		(Unit-1) Muzaffarnagar				Aeration Tank, Secondary Clarifier, Tube Settler, Dual Media Filter, cell, Belt Press.		and discharge quantity of effluent to be reduce as per CPCB Charter.	
166.	Muzaffar nagar	Tehri Pulp & Papers Ltd. Bhopa Road (Unit-2) Muzaffarnagar	Pulp & Paper	2000	1500	Equalization Tank, Primary Clarifier, Aeration Tank, Secondary Clarifier, Sandy cell, Tertiary & SDBs	No Gap	Water comsumption and discharge quantity of effluent to be reduce as per CPCB Charter.	
167.	Muzaffar nagar	Tirupati Balaji Fibres Ltd. Bhopa Road, Muzaffarnagar	Pulp & Paper	1400	600	Equalization Tank, Primary Clarifier, Aeration Tank , Secondary Clarifier, PDF & SDBs	No Gap	Water comsumption and discharge quantity of effluent to be reduce as per CPCB Charter.	
168.	Shamli	Maruti Papers (P) Ltd. Vill - Sikka Shamli	Pulp & Paper	600	0	Equalization Tank, Primary Clarifier, Sandy cell, Aeration Tank , Secondary Clarifier, Tertiary, SDBs & Filter Press	No Gap	Unit operates on ZLD basis.	
169.	Shamli	Nikita Papers (P) Ltd. Ind. Estate Shamli	Pulp & Paper	1100	750	Equalization Tank, Hill Screen, Sandy cell, Primary Clarifier, Aeration Tank – 1, Secondary Clarifier-1, Aeration Tank – 2, Secondary Clarifier – 2, Multigrade Filter	No Gap	Water comsumption and discharge quantity of effluent to be reduce as per CPCB Charter.	
170.	Meerut	M/s Saradhna Paper, Saradhna Meerut road, Meerut	Pulp & Paper	700	500	Bar Screen , Equalisation tank, Primary Clarifier, Aeration Tank, secondary Clarifier, SDBs, Carbon / Sand Filter & Treated water storage tank.	NO Gap	Water comsumption and discharge quantity of effluent to be reduce as per	

								CPCB Charter.	
171.	Ghaziabad	Al Nafees Frozen Foods Exports, Hapur Road Dasna Gzb. (Integrated Meat Unit)	Slaughter House	600	600	Bar Screen, Oil & Grease Trap, Equalization Tank, Chemical Dosing Tank, Tube Settler, Dual Media Filter, Aeration Tank-I, Secondary Clarifier-1, Aeration Tank-2, Secondary Clarifier-II, Dual Media Filter-II, Activated Carbon Filter & Filter Press	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix – 3 B	Closed by Hon'ble NGT	-
172.	Saharanpur	Nagar Nigam, Pashubadhshala, Saharanpur	Slaughter House	180	150	Bar Screen, Catch pit, Oil & Grease Trap, Equalization Tank, Flush mixing Tank, Primary Clarifier, Aeration Tank-I & II, Secondary Clarifier & SDBs	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix – 3 B	The existing gap with reference to discharge of effluent, effluent treatment infrastructure, solid waste management as per the norms laid down in CPCB document.	
173.	Ghaziabad	Eagle Continental Foods P Ltd., Kallua Garhi Road, Dasna, Ghaziabad.	Slaughter House	400	400	Rotary Fiber Screen, Equalization Tank, Holding Tank, Flash Mixing Tank, Primary Clarifier, Aeration Tank-1, Secondary Clarifier-1, Aeration Tank-2, Secondary Clarifier-II, Polishing Tank, Sand Filter, Activated Carbon Filter & Sludge drying beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix – 3 B	Closed by Board/District Administration	-
174.	Ghaziabad	International Agro Food, Vill. Bhoor gari, Dasna Ghaziabad.	Slaughter House	938	750	Rotary Fiber Screen, Equalization Tank, Holding Tank, Flash Mixing Tank, Primary Clarifier, Aeration Tank-1, Secondary Clarifier-1, Aeration Tank-2, Secondary	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix – 3 B	The existing gap with reference to discharge of effluent,	complying

						Clarifier-II, Polishing Tank, Sand Filter, Activated Carbon Filter & Sludge drying beds.		effluent treatment infrastructure, solid waste management as per the norms laid down in CPCB document.	
175.	Ghaziabad	Slaughter House of Loni Nagar Palika Parishad, Loni, Ghaziabad.	Slaughter House	0	0	-	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix – 3 B	Closed	-
176.	Ghaziabad	Slaughter House of Municipal Board, Murad Nagar, Ghaziabad.	Slaughter House	0	0	-	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix – 3 B	Closed	-
177.	Ghaziabad	Slaughter House of Nagar Nigam, Kaila Bhatta, Ghaziabad.	Slaughter House	0	0	-	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix – 3 B	Closed	-
178.	Ghaziabad	Slaughter House of Nagar Panchayat, Farid Nagar, Ghaziabad.	Slaughter House	0	0	-	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix – 3 B	Closed	-
179.	Saharanpur	A.L.M. Industries (Slaughter House Unit) Haroda, Saharanpur	Slaughter House	425	100	Bar Screen, Collection Tank, Equalization Tank, Primary Clarifier, Aeration Tank, Secondary Clarifier & SDBs	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix – 3 B	The existing gap with reference to discharge of effluent, effluent treatment	-

								infrastructure, solid waste management as per the norms laid down in CPCB document.	
180.	Ghaziabad	Al Naseer Export Pvt.Ltd., 2761, Bhoor Gari, Dasna, Ghaziabad.	Slaughter House	200	200	Rotary Fiber Screen, Equalization Tank, Holding Tank, Flash Mixing Tank, Primary Clarifier, Aeration Tank-1, Secondary Clarifier-1, Aeration Tank-2, Secondary Clarifier-II, Polishing Tank, Sand Filter, Activated Carbon Filter & Sludge drying beds.	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix – 3 B	The existing gap with reference to discharge of effluent, effluent treatment infrastructure, solid waste management as per the norms laid down in CPCB document.	complying
181.	Ghaziabad	Slaughter House of Town Area Committee, Dasna, Ghaziabad.	Slaughter House	0	0	-	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix – 3 B	Closed	-
182.	Ghaziabad	Slaughter House of Zila Parishad, Masoorie, Ghaziabad.	Slaughter House	0	0	-	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix – 3 B	Closed	-
183.	Muzaffarnagar	Al Noor Export, Jansath road Muzaffarnagar	Slaughter House and Meat Processing	600	480	Oil & Grease Trap, Collection Tank, Equalization Tank, Dissolve Air Flotation, Tube Settler, Aeration Tank-I, II & III, Secondary Clarifier, Pressure Sand Filter, Activated	Phase wise Reduction of Fresh Water Consumption & other action points as Appendix – 3 B	The existing gap with reference to discharge of effluent,	

						Carbon Filter, SDBs		effluent treatment infrastructure, solid waste management as per the norms laid down in CPCB document.	
184.	Saharanpur	Bajaj Hindustan Ltd. Sugar Unit, Gagnoli, Saharanpur	Sugar	2000	1000	Equalization Tank, Primary Clarifier, Aeration Tank, Secondary Clarifier, MDF, SDBs	No gap	-	Complying
185.	Saharanpur	The Kisan Sahakari Chini Mill, Nanouta, Saharanpur	Sugar	3000	1000	Bar Screen, Oil & Grease Trap, Equalization Tank, Primary Clarifier, Aeration Tank-I & II, Secondary Clarifier-I & II, SDBs	Irrigation Management Plan to be submitted & implemented	-	Complying
186.	Saharanpur	Triveni Engg. & Industries Ltd, Deoband, Saharanpur	Sugar	4200	1368	Bar Screen, Oil & Grease Trap, Collection Sump Primary Clarifier, Aerated Lagoon-4, Aeration Tank , Secondary Clarifier, Clear Water Tank, Activated Carbon Filter	Irrigation Management Plan to be submitted & implemented	-	Complying
187.	Saharanpur	Daya Sugar(A unit of B.K. Investment) Naya Bans, Gagalheri, Saharnapur	Sugar	700	500	Oil & Grease Trap Tank, Equalization Tank, Primary Clarifier, Aeration Tank, Secondary Clarifier, SDBs	Irrigation Management Plan to be submitted & implemented	-	Complying
188.	Muzaffarnagar	D.S.M. Sugar Mansurpur, Meerut Road. Muzaffarnagar	Sugar	2000	700	Bar Screen, Oil & Grease Trap, Chemical Mixing Tank, Equalisation Tank, Primary Clarifier, Aeration Tank, Secondary Clarifier , Dual Media Filter, Activated Carbon Filter, SDBs	Irrigation Management Plan to be submitted & implemented	-	Complying
189.	Muzaffarnagar	I.P.L. (Formerly Titawi Sugar Complex), Titawi,	Sugar	1500	800	Oil & Grease Trap, Chemical mixing Tank, Equalization Tank, Tube Settler, Aeration Tank, Secondary	No Gap	-	Complying

		Muzaffarnagar.				Clarifier, Sand Filter, Activated Carbon Filter, SDBs			
190.	Muzaffarnagar	Bajaj Hindusthan Sugar Ltd., Bhaisana, Budhana, Muzaffarnagar	Sugar	2000	1000	Bar Screen, Oil & Grease Trap, Chemical Mixing Tank, Equalisation Tank, Primary Clarifier, Aeration Tank, Secondary Clarifier, Sand Filter, Activated Carbon Filter, SDBs	No Gap	-	Complying
191.	Shamli	Bajaj Hindusthan Sugar Ltd., Thanabhawan, Shamli	Sugar	2000	1000	Bar Screen, Oil & Grease Trap, Chemical Mixing Tank, Equalisation Tank, Primary Clarifier, Aeration Tank, Secondary Clarifier, Sand Filter, Activated Carbon Filter, SDBs	No Gap	-	Complying
192.	Shamli	Upper Doab Sugar Mill, Shamli	Sugar	3000	1600	Oil & Grease trap, Aeration Tank, Secondary Clarifier, Settling tank & SDBs	No Gap	-	Complying
193.	Baghpat	M/s Ramala Sahkari Chini Mill, Ramala Baghpat	Sugar	2010	500	Bar Screen, Oil Grease trap & Oil Screamer, Lime dosing tank, Equalisation tank, Primary Clarifier, Aeration Tank-1, Secondary Clarifier, Extended Aeration. Clarifier, Sand Filter & Carbon Filter & Chlorination, SDBs, Storage lagoon.	Irrigation Plan submitted & Implemented	-	Complying
194.	Meerut	M/s Bajaj Hindustan Ltd, (Sugar Unit) Village Kinauni,Meerut	Sugar	2000	1200	Bar Screen, Oil Grease trap & Oil Screaming Machine, Flash Mixer, Equalisation tank, Primary Clarifier, Aeration Tank, Secondary Clarifier, Sand Filter & Carbon Filter, SDBs	Irrigation Plan submitted & Implemented	-	Complying
195.	Ghaziabad	Exclusive Leather, khasra no.2751, Vill.Bhurgari, Dasna	Tannery	107	85	Screen Chambers, Equalization Tank, Chemical dosing & mixing tank, Primary Settling Tank, Aeration Tank-1, Aeration Tank-2, Secondary Settling Tank, V-notch chamber, Sludge Drying Beds.	Water Consumption to be reduced & adoption of cleaner technology. As per Appendix - 3 F	-	complying
196.	Ghaziabad	Kathuria Brothers,A-12 Meerut Road	Tannery	94	75	Screen Chambers, Equalization Tank, Chemical dosing & mixing tank, Primary Settling Tank,	Water Consumption to be reduced & adoption of cleaner technology. As	-	complying

		Ind.area				Aeration Tank-1, Aeration Tank-2, Secondary Settling Tank, V-notch chamber, Sludge Drying Beds. Chrome Recovery Plant- Collection tank, Reaction cum settling tank, Recovered Sludge chrome Drying Beds.	per Appendix - 3 F		
197.	Ghaziabad	Triyash Enterprises, khasra no.2751, vill.Bhoor Gari, Dasna	Tannery	84	84	Screen Chambers, Oil & Grease trap, Equalization Tank, Chemical dosing & mixing tank, Aeration Tank-1, Primary Settling Tank, Aeration Tank-2, Secondary Settling Tank, V-notch chamber, Sludge Drying Beds. Chrome Recovery Plant- Collection tank, Reaction cum settling tank, Recovered Sludge chrome Drying Beds.	Water Consumption to be reduced & adoption of cleaner technology. As per Appendix - 3 F	-	complying
198.	Muzaffarnagar	H.J. Tannery Pvt. Ltd. Jolly Road muzaffarnagar	Tannery	100	100	Equalization Tank, Chrome precipitator, Reaction Tank, Primary Clarifier, Aeration Tank, Secondary Clarifier & SDBs	Water Consumption to be reduced & adoption of cleaner technology. As per Appendix - 3 F	-	Complying
199.	Muzaffarnagar	Tasmiya Tannery Udyog, Vill. Moosa Shernnagar, Jansath Road, Muzaffarnagar	Tannery	-	-	ETP installed	Water Consumption to be reduced & adoption of cleaner technology. As per Appendix - 3 F	Self closed	-
200.	Ghaziabad	A & A, S-50, Site-2, Loni Road Ind.area, Mohan Nagar, Ghaziabad.	Yarn/ Textile Dyeing	75	75	Equalization Tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying

201.	Ghaziabad	A.N. Fabric Dyers, 5/6, Site-2, Loni Road Mohan Nagar, Ghaziabad.	Yarn/ Textile Dyeing	18	15	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
202.	Ghaziabad	A.R. Supreme, 26-27, Rural Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	18	15	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
203.	Ghaziabad	A.S. Enterprises, Arya Nagar Industrial Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	13	10	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
204.	Ghaziabad	Aiden Jeans, B-49/5, Site-4 Ind. Area, Sahibabad, , Ghaziabad.	Yarn/ Textile Dyeing	20	20	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
205.	Ghaziabad	Ajanta Gartex Processors, Unit-2,18/24, Site-4, Sahibabad, Ghaziabad.	Yarn/ Textile Dyeing	48	48	Equalization Tank, Reaction Tank (Chemical Mixing Tank), Tube Settler, Settling tank, Dual Media Filter, Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
206.	Ghaziabad	Ajay Veer Siroha, K-23, Apparel Park, Sector D-1 (P3), Tronica City, Loni	Yarn/ Textile Dyeing	19	15	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order

207.	Ghaziabad	Ajay Washing, S-62 Loni Road Ind.area, Mohan Nagar, Ghaziabad.	Yarn/ Textile Dyeing	-	-	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
208.	Ghaziabad	Aleena Washing, Arya Nagar, Loni, Ghaziabad.	Yarn/ Textile Dyeing	13	10	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
209.	Ghaziabad	Ambika Gartex P Ltd., 42-B Rajinder Nagar Industrial Area, Mohan Nagar, Ghaziabad.	Yarn/ Textile Dyeing	38	30	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
210.	Ghaziabad	Amit textiles, S-32,S.S. 0f G.T.Road Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	3	2	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
211.	Ghaziabad	Amko Export, A-1, B.S.Road Ind. Area Ghaziabad	Yarn/ Textile Dyeing	344	275	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
212.	Ghaziabad	Umar Garments, 83-B, Arya Nagar Ind. Area, Loni, Ghaziabad	Yarn/ Textile Dyeing	18	14	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying

213.	Ghaziabad	Anish wasing works, 96/3, Arya Nagar, Loni, Ghaziabad.	Yarn/ Textile Dyeing	23	18	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
214.	Ghaziabad	Anita Dyeing Processing, 12/21, Arya Nagar Loni, Ghaziabad.	Yarn/ Textile Dyeing	19	15	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
215.	Ghaziabad	Apex Udyog, I-4, Sec D-1, Apparel Park, Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	19	15	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
216.	Ghaziabad	Arihant Dyeing (Sai Denim), 20/2/13, Site-4, Sahibabad, Ghaziabad.	Yarn/ Textile Dyeing	63	50	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
217.	Ghaziabad	Arihant Textile, 53-54, Rural Ind.area Loni	Yarn/ Textile Dyeing	38	30	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
218.	Ghaziabad	Arvind Dyeing, Plot No.-14, Arya Nagar, naipura Road, Loni, Ghaziabad.	Yarn/ Textile Dyeing	12	12	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying

219.	Ghaziabad	Asha Prints, A-5/4, , Loni Road Mohan Nagar, Ghaziabad.	Yarn/ Textile Dyeing	13	10	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
220.	Ghaziabad	S.S. Concept (Old Name Asha Tanu Prints), A-5/3, , Loni Road Mohan Nagar, Ghaziabad.	Yarn/ Textile Dyeing	13	10	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
221.	Ghaziabad	ASR Enterprises, S-124, Site-2, Loni Road Mohan Nagar, Ghaziabad.	Yarn/ Textile Dyeing	0	-	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
222.	Ghaziabad	Balaji Industry, 37, Rural Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	13	10	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
223.	Ghaziabad	Balaji Industry, Plot No. 7, Gali No. 1, Rajinder Nagar Ind. Area, Mohan NGR., Ghaziabad.	Yarn/ Textile Dyeing	20	20	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
224.	Ghaziabad	Balaji Udyog, B-80, Roop Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	13	10	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying

225.	Ghaziabad	Batik India, D-13, Udyog kunj. Dasna, Ghaziabad.	Yarn/ Textile Dyeing	38	30	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
226.	Ghaziabad	Beauty Art Prints India Pvt.Ltd.,54/4, Site-4, Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	160	160	Equalization Tank, Reaction Tank, Tube Settler, Settling tank, Dual Media Filter, Sludge Drying Beds, Filter Press.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
227.	Ghaziabad	Bhagwati Colour Impax, A-36, Roop Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	19	15	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
228.	Ghaziabad	Bhagwati Dyeing, 84, Arya Nagar, Loni, Ghaziabad.	Yarn/ Textile Dyeing	19	15	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
229.	Ghaziabad	Bright Wash Dyeing, C- 21, Roop Nagar I.A, Loni, Ghaziabad.	Yarn/ Textile Dyeing	0	-	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
230.	Ghaziabad	Chacha Enterprises, J-4 Appral Park, tronca city, Loni, Ghaziabad.	Yarn/ Textile Dyeing	13	10	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order

231.	Ghaziabad	Charbi Apparels, 101/2, Arya Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	8	8	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
232.	Ghaziabad	Colour Tuch, 56/28, Site-4, Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	48	48	Equalization Tank, Reaction Tank, Tube settler, Settling Tank, Dual Media Filter, Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
233.	Ghaziabad	D.K. Jain, G-262, Sector D-1(P), Aparels Park, Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	20	20	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
234.	Ghaziabad	Colorise (Old Name Deepak Gambhir), E-12 Apparel Park, Sector D-1(P3), Tronica City, Loni.	Yarn/ Textile Dyeing	69	55	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
235.	Ghaziabad	Delhi Textiles, B-91, Roop Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	12	12	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
236.	Ghaziabad	Denim Matching, G-141, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	23	18	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order

237.	Ghaziabad	Dev Tara Industries Ltd., Meerut Road Duhai, muradnagr	Yarn/ Textile Dyeing	907	725	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
238.	Ghaziabad	Dilip Dyeing & Washing, Arya Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	3	2	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
239.	Ghaziabad	Durgeshwari Garments Pvt.Ltd., E-13, sect-13-1, Appral Park, tronca city, Loni, Ghaziabad.	Yarn/ Textile Dyeing	188	150	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
240.	Ghaziabad	Ekansh Textile, K-36, Sec D-1, Apparel Park, Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	63	50	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
241.	Ghaziabad	Ekta Washing, A-40, Roop Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	63	10	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
242.	Ghaziabad	Excellents Apparels Pvt. Ltd., K-52, Sec D-1(P3), Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	32	25	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order

243.	Ghaziabad	Fab Care, 79/1, Rajinder Nagar Ind.area, Mohan Nagar, Ghaziabad.	Yarn/ Textile Dyeing	38	30	Chrome Recovery Plant- Collection tank, Reaction cum settling tank, Recovered Sludge chrome Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Not Complying
244.	Ghaziabad	Fancy Dyeing & Washing, 83-B, Arya Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	24	18.5	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
245.	Ghaziabad	Fine Wash, Plot No. 40, Rural Ind. State Loni, Loni, Ghaziabad	Yarn/ Textile Dyeing	20	20	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
246.	Ghaziabad	Fusion Fashion, B-61, Roop Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	19	15	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
247.	Ghaziabad	G.S.Das Apprarals Pvt.Ltd., 4/44, Site-4, Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	88	70	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Not Complying
248.	Ghaziabad	Ganesh Enterprises, 18/14/1, Site-4, Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	0	0	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying

249.	Ghaziabad	Ganga Processors, 18/11, Site-4, Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	82	65	Equalization Tank, Reaction Tank (Chemical Mixing Tank), Tube Settler, Settling tank, Dual Media Filter, Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
250.	Ghaziabad	Ganpati Creation, C-19/1, Site-4, Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	63	50	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
251.	Ghaziabad	Gazi Dyeing (Old name Ajay Auto Bulb Corpn.), 45, Rural Ind. Area, Ngr, Loni, Ghaziabad.	Yarn/ Textile Dyeing	13	10	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Complying
252.	Ghaziabad	Ghan Shyam Textiles, K-19, Sector D-1(P), Aparels Park, Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	23	23	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
253.	Ghaziabad	Glaxi Garments, K-22, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	28	22	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
254.	Ghaziabad	Global Industries, A-38/1/9, Site-4, Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	38	30	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying

255.	Ghaziabad	Goyal Canvas Pvt.Ltd., 18/43, Site-4, Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	0.8	0.8	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
256.	Ghaziabad	Goyal Processors, 42/50, Site-4, Ind. Area, Sahibabad, Ghaziabad.	Yarn/ Textile Dyeing	32	25	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Not Complying
257.	Ghaziabad	Gulshan Rai Jain, G-82, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	20	20	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
258.	Ghaziabad	Gungun Enterprises, 38/2/24, Site-4, Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	57	45	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
259.	Ghaziabad	Gyan Chand & Sons, G-87, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	0	-	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
260.	Ghaziabad	H.B. Dyeing, A-35, Roop Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	13	10	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying

261.	Ghaziabad	Hanuman Textiles, 1, Rajinder Nagar Ind. Area, Mohan Nagar, Ghaziabad.	Yarn/ Textile Dyeing	19	15	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
262.	Ghaziabad	Hard Man Jeans, B-32, Roop Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	13	10	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
263.	Ghaziabad	Hasan Textile, 84, Arya Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	13	10	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
264.	Ghaziabad	Himax Wash (old name Tajjumal Jeans Dyeing), Arya Nagar, naipura Road Loni, Ghaziabad.	Yarn/ Textile Dyeing	12	12	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
265.	Ghaziabad	Indian Textiles company, E-49, B.S.Road Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	53	42	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
266.	Ghaziabad	J.B.S. Processors, G-104, Apparel Park, Sector D-1 (P3), Tronica City, Loni	Yarn/ Textile Dyeing	18	14	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order

267.	Ghaziabad	Jai Ambey Dyeing, 58,59, Roop Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	20	20	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
268.	Ghaziabad	Jai Mata Di Dyers, I-9, Sec D-1(P3), Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	28	22	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
269.	Ghaziabad	Jai Santoshi Enterprises, 50, Shyam Ind. Area Loni, Ghaziabad.	Yarn/ Textile Dyeing	8	8	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
270.	Ghaziabad	Jai Shri Dying, I-21, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	8	8	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
271.	Ghaziabad	Jyoti Dyeing, 18/8, Site-4, Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	48	38	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
272.	Ghaziabad	K.K. Dyeing, 42/40, Site-4, Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	19	15	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit lying closed

273.	Ghaziabad	K.K. Industries, 7/5, Site-4, Ind Area, Sahibabad, Ghaziabad.	Yarn/ Textile Dyeing	19	15	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
274.	Ghaziabad	K.M. Processors, 72/3, Gali No.-5, Rajinder Nagar Ind. Area, Mohan Nagar, Ghaziabad.	Yarn/ Textile Dyeing	17	13	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Not Complying
275.	Ghaziabad	K.R. Washing, Arya Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	20	20	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
276.	Ghaziabad	Kanhiya Enterprises, A-48/11, Site-4, Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	38	30	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
277.	Ghaziabad	Kartik Fabrics Pvt.Ltd., khasra no.184-185-186, Pawanpuri, Murad Nagar, Ghaziabad.	Yarn/ Textile Dyeing	180	180	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
278.	Ghaziabad	Krish Garments (Old Name Sanjeev Kumar), G-109, Sec D-1(P3), Apparel Park, Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	18	18	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order

279.	Ghaziabad	Krishana Washing Service), 72/14, Rajinder Nagar Ind. Area, Mohan Nagar, Ghaziabad.	Yarn/ Textile Dyeing	20	20	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
280.	Ghaziabad	Krishna Kumar Agarwal, G-129, Apparel Park, Sector D-1 (P3), Tronica City, Loni	Yarn/ Textile Dyeing	19	15	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
281.	Ghaziabad	Krishna Print Pvt. Ltd., A-47, Site-4, Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	20	20	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Not Complying
282.	Ghaziabad	L.K. Industry (Washing), 10/2, Arya Nagar, Loni, Ghaziabad.	Yarn/ Textile Dyeing	12	12	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
283.	Ghaziabad	Latex Wash, Arya Nagar, Loni, Ghaziabad.	Yarn/ Textile Dyeing	19	15	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
284.	Ghaziabad	Laxmi Bleach (New Name Mani Bhadra Processors), G-102, Sec D-1(P3), Apparel Park, Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	23	18	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order

285.	Ghaziabad	Laxmi Dyeing & Printing works Pvt.Ltd., S-81, Loni Road I.A., Mohan Nagar, Ghaziabad.	Yarn/ Textile Dyeing	44	35	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
286.	Ghaziabad	Laxmi Dyeing, A-13, Roop Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	12	12	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
287.	Ghaziabad	Laxmi Processors, K-16, sect-D-1, pocket-3, Appral Park, Tronica city, Loni, Ghaziabad.	Yarn/ Textile Dyeing	29	23	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
288.	Ghaziabad	M.A. Garment, A-9, Roop Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	13	10	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
289.	Ghaziabad	M.A. Garments, 20/6/21, Site-4, Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	32	25	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
290.	Ghaziabad	M.J. Allied Enterprises, E-4, Site-4 Ind. Area, Sahibabad, Ghaziabad.	Yarn/ Textile Dyeing	19	15	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying

291.	Ghaziabad	M.K.wasing & Dyeing, B-74, Roop Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	28	28	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
292.	Ghaziabad	M.R. Dyeing, B-80, Arya Nagar, Loni, Ghaziabad.	Yarn/ Textile Dyeing	13	10	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
293.	Ghaziabad	M.R. Industry, B-84/3, Roop Nagar, Loni, Ghaziabad.	Yarn/ Textile Dyeing	13	10	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
294.	Ghaziabad	M.S. Dyeing, A-29, Roop Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	13	10	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
295.	Ghaziabad	M.S. Trading, E-15, Sector D-1(P), Aparels Park, Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	23	18	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
296.	Ghaziabad	M.S.D.Dytex Pvt. Ltd., 5/2, Loni Road Ind. Area, Mohan Nagar, Ghaziabad.	Yarn/ Textile Dyeing	16	16	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Wet Process closed

297.	Ghaziabad	M.Y. Garments, 20/6/14, Site-4, Sahibabad, Ghaziabad.	Yarn/ Textile Dyeing	38	30	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed by Board U/s 33-A of Water Act.
298.	Ghaziabad	Ma Shakti Silk Creation, 72/5, Rajinder Nagar Ind. Area, Mohan Nagar, Ghaziabad.	Yarn/ Textile Dyeing	8	6	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit dismantled
299.	Ghaziabad	Madni Textiles, 72/37, Rajinder Nagar Ind. Area, Mohan Nagar, Ghaziabad.	Yarn/ Textile Dyeing	80	80	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit lying closed
300.	Ghaziabad	Maha Shakti Threads mills, 56/12, Site-4 Sahibabad Ind. Area. Ghaziabad.	Yarn/ Textile Dyeing	32	25	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
301.	Ghaziabad	Mahalaxmi Dyers, 49/24, Site-4, Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	29	23	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Complying
302.	Ghaziabad	Shri Mahaveer Enterprises, 28/1/15, Site-4, Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	44	35	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Not Complying

303.	Ghaziabad	Malik Dyeing, Gali No.-2, Arya Nagar, Loni, Ghaziabad.	Yarn/ Textile Dyeing	20	20	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
304.	Ghaziabad	Malik Washing, 101/2, Arya Nagar Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	8	8	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
305.	Ghaziabad	Micro Gartex Insustries, C-2, Loni Road Ind.area, Mohan Nagar, Ghaziabad.	Yarn/ Textile Dyeing	0	-	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Wet Process closed
306.	Ghaziabad	Monica Hosiery, 28/1/16, site-IV, Industrial Area Sahibabad, Ghaziabad	Yarn/ Textile Dyeing	0	0	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit lying closed
307.	Ghaziabad	N.G. Tex Prints P.Ltd., E-13/2, Kavi Nagar Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	32	25	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
308.	Ghaziabad	N.G. Textiles., 13A/10, Site-2, Loni Road I.A., Mohan NGR, Ghaziabad.	Yarn/ Textile Dyeing	32	25	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying

309.	Ghaziabad	Nagpal Industry, A-23, Roop Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	23	18	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
310.	Ghaziabad	Nandi Enterprises, J-15, Sec D-1(P3), Apparel Park, Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	24	19	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
311.	Ghaziabad	Nandi Enterprises, K-14, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	24	19	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
312.	Ghaziabad	Nandni Processors, 4/27, Site-4, Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	13	10	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
313.	Ghaziabad	Neelam Tex Prints Pvt.Ltd., 41/1, Site-4, Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	40	40	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
314.	Ghaziabad	Neerat Enterprises, 72-D, Gali No-6, Rajinder Nagar Ind. Area, Mohan Nagar, Ghaziabad.	Yarn/ Textile Dyeing	38	30	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying

315.	Ghaziabad	Neha Colour Concept, 261, Rajinder Nagar Ind. Area, Mohan Nagar, Ghaziabad.	Yarn/ Textile Dyeing	28	28	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
316.	Ghaziabad	New Era Garment, 89, Rural Ind.area, Loni Ghaziabad.	Yarn/ Textile Dyeing	13	10	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
317.	Ghaziabad	Nirdosh Dyeing & Washing, Khasra No. 72/2, Gali No.7, Arya Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	23	18	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
318.	Ghaziabad	Non Stop Colour, S-3, Site-2, Loni Road I.A., Mohan Nagar, Ghaziabad.	Yarn/ Textile Dyeing	100	100	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
319.	Ghaziabad	North Wings Processors, 61/7, Site-4, Ind. Area Sahibabad, Ghaziabad.	Yarn/ Textile Dyeing	38	30	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit lying closed
320.	Ghaziabad	Om Prakash Sharma, J-11, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	44	35	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order

321.	Ghaziabad	Pal Nit Fab, 54/14, Site-4, Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	113	90	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
322.	Ghaziabad	Paras Dyeing Industries, 72/18, Rajinder Nagar Ind. Area, Mohan Nagar, Ghaziabad.	Yarn/ Textile Dyeing	32	25	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
323.	Ghaziabad	Pawan Garment, A-29, Roop NGR I.A., Loni, Ghaziabad.	Yarn/ Textile Dyeing	19	15	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
324.	Ghaziabad	Pooja Dyeing, A-41, Roop Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	23	18	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
325.	Ghaziabad	Pooja Pahawa, K-11, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	32	25	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
326.	Ghaziabad	Pooja Processors, 62/2/3, Site-4, Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	80	80	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying

327.	Ghaziabad	Pradeep kumar, G-92, Apparel Park, Sector D-1 (P3), Tronica City, Loni	Yarn/ Textile Dyeing	32	25	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
328.	Ghaziabad	Prem Processors, 52 Rajinder Nagar Ind. Area, Mohan Nagar, Ghaziabad.	Yarn/ Textile Dyeing	38	30	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
329.	Ghaziabad	Prince Dyeing, Arya Nagar Industrial Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	13	10	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
330.	Ghaziabad	Puran Munjal,(New Name Adhunik Dyeing), H-12, Sector D-1(P), Aparels Park, Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	69	55	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
331.	Ghaziabad	Quadri Processors, I-8, Sec D-1(P3),.Apparel Park, Tronika City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	8	8	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
332.	Ghaziabad	R.B. Enterpirses, 180/2 & 180/4, Rajiender Nagar Ind. Area, Mohan Nagar, Ghaziabad.	Yarn/ Textile Dyeing	38	30	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Not Complying

333.	Ghaziabad	R.R. Dyeing, Arya Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	13	10	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
334.	Ghaziabad	R.R. Impex, G-261, Sector D-1(P), Aparels Park, Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	28	22	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
335.	Ghaziabad	Rachita Processors, K-33 & K-34, Sec D-1, Apparel Park, Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	88	70	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
336.	Ghaziabad	Radhey Raman Dyeing& Washing, 4, Arya Nagar Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	3	2	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
337.	Ghaziabad	Ragging Sons, I-13, Sec D-1(P3), Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	19	15	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
338.	Ghaziabad	Raish Enterprises, 96/2, Arya Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	7	5	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying

339.	Ghaziabad	Rajeev Kumar, G-64, Sec D-1(P3), Apparel Park, Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	32	25	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
340.	Ghaziabad	Ramesh Dyeing & Washing, Plot No-17, Arya Nagar Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	3	2	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
341.	Ghaziabad	Rastogi Garments, A-32, Roop Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	13	10	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
342.	Ghaziabad	Ratan Garments, 56/29, Site-4, Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	44	35	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
343.	Ghaziabad	Right Wash Udyog, 72/19, Rajinder Nagar Ind. Area, Mohan Nagar, Ghaziabad.	Yarn/ Textile Dyeing	28	28	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
344.	Ghaziabad	Ritika Enterprises, 18/32, Site-4, Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	32	25	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying

345.	Ghaziabad	Robest Infra Tech P Ltd., J-13, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	23	18	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
346.	Ghaziabad	Roop Trading Company, E-14, sect-D-1, pocket-3, Appral Park, Tronica city, Loni, Ghaziabad.	Yarn/ Textile Dyeing	40	40	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Wet Process closed
347.	Ghaziabad	Roop Trading Company, K-9, sect-D-1, pocket-3, Appral Park, Tronica city, Loni, Ghaziabad.	Yarn/ Textile Dyeing	0	0	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Wet Process closed
348.	Ghaziabad	Roshan Lal (ex. Name Shine Wash) 15/18, Site-4, Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	23	18	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
349.	Ghaziabad	Roxcy Enterprises, Gali No. 1, 72/2, Arya Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	13	10	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
350.	Ghaziabad	Royal Techno Dyers, K-47, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	36	36	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order

351.	Ghaziabad	Ruchika Prints, A-35, Rajinder Nagar Ind. Area Mohan Nagar, Ghaziabad.	Yarn/ Textile Dyeing	8	8	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Complying
352.	Ghaziabad	M/s. Dhrube Enterprises old name Rupal Washing, A-36/2, Roop Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	12	12	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
353.	Ghaziabad	S.A.K. Dyeing & Processors, 76, Arya Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	3	2	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
354.	Ghaziabad	S.B. Feb Tech P Ltd., 28/1/24, Site-4, Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	63	50	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
355.	Ghaziabad	S.D. Garments, I-2, Sector-D-1, pocket-3, Appral Park, Tronica city, Loni, Ghaziabad.	Yarn/ Textile Dyeing	19	15	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
356.	Ghaziabad	S.G. Rubber Industry, A-77, Roop Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	13	10	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying

357.	Ghaziabad	S.K. Dyeing, B-80, Arya Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	7	5	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
358.	Ghaziabad	S.S. Dyeing, Gali No. 2, Arya Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	13	10	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
359.	Ghaziabad	S.S. Hosiery (Old Name is National Industries), G-264, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	16	16	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
360.	Ghaziabad	S.S. Prints, 56/14-15, Site-4, Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	38	30	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
361.	Ghaziabad	S. Star Enterprises, A-50/2, Roop Nagar Ind.area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	19	15	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
362.	Ghaziabad	S.T. Traders, J-5, Appral Park, Tronca city, Loni, Ghaziabad.	Yarn/ Textile Dyeing	8	8	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order

363.	Ghaziabad	S.V.S. Fashion, J-22, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	11	8.5	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
364.	Ghaziabad	Sahibabad Printers, 182/3, G.T.Road, Mohan Nagar, Ghaziabad.	Yarn/ Textile Dyeing	63	50	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
365.	Ghaziabad	Sai Processing, 7/37, Site-2, Loni Road Ind. Area, Mohan Nagar, Ghaziabad.	Yarn/ Textile Dyeing	64	35	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
366.	Ghaziabad	Sai Saran Garment,(New Name Lotus Knit Processing House), G-108, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	23	18	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
367.	Ghaziabad	Sandeep Tyagi, G-271, Sec D-1(P3), Apparel Park, Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	32	25	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
368.	Ghaziabad	Sanjay Jain Jeans Dyeing, S-30, UPSIDC Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	13	10	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying

369.	Ghaziabad	Sanjeev kumar (Shyam Washing), G-81, Apparel Park, Sector D-1 (P3), Tronica City, Loni	Yarn/ Textile Dyeing	32	25	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
370.	Ghaziabad	Sanju Processors, Arya Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	12	12	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
371.	Ghaziabad	Sara International, G-265-266, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	24	19	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
372.	Ghaziabad	Shafali Dyeing, G-84, Sector D-1(P), Aparels Park, Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	23	18	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
373.	Ghaziabad	Shahi Exports P Ltd., 30-Site-2, Loni Road Ind.area Mohan Nagar, Ghaziabad.	Yarn/ Textile Dyeing	800	800	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
374.	Ghaziabad	Shahnaj Washing, 87, Arya Nagar Ind. Area, Naipura, Loni, Ghaziabad.	Yarn/ Textile Dyeing	12	12	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying

375.	Ghaziabad	Shanti Dyeing & Finshing Mills, A-48/16, Site-4, Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	98	78	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
376.	Ghaziabad	Sharda Dyeing, Plot No. 6, Gali No. 1, Rajinder Nagar Ind. Area, Mohan Nagar, GzB.	Yarn/ Textile Dyeing	19	15	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit lying closed
377.	Ghaziabad	Sharda Fabrics (Old Name Kartikey Processors),42/36, Site-4 Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	40	40	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
378.	Ghaziabad	Sharma Washing Works, Khasra No. 92, Arya Nagar, Loni, Ghaziabad.	Yarn/ Textile Dyeing	19	15	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
379.	Ghaziabad	Shashi Washing Work, A-60, Roop Nagar I.A Loni, Ghaziabad.	Yarn/ Textile Dyeing	0	-	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
380.	Ghaziabad	Sheela Enterprises, 27, Shyam Ind. Area Loni, Ghaziabad.	Yarn/ Textile Dyeing	8	8	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying

381.	Ghaziabad	Shiv Kumar Pawan Kumar, 57/1/13, Site-4, Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	38	30	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
382.	Ghaziabad	Shiva Processors, 18/6, Site-4, Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	80	80	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
383.	Ghaziabad	Shivani Dyeing, Arya Nagar, Loni, Ghaziabad.	Yarn/ Textile Dyeing	13	10	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
384.	Ghaziabad	Shri Bala Ji Processors, S-134, Site-2, Loni Road Ind.area, Ghaziabad.	Yarn/ Textile Dyeing	20	20	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
385.	Ghaziabad	Himgiri Textiles, 15/11, Site-4, Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	40	40	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
386.	Ghaziabad	Shri Krishna Arts & Dyeing, A-72, Roop Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	12	12	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying

387.	Ghaziabad	Shri Krishna Textiles, 18/19, Site-4, Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	44	35	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
388.	Ghaziabad	Shri Paras coloration (U.B. Dyeing), G-117, Sector D-1(P), Aparels Park, Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	23	18	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
389.	Ghaziabad	Shri Shyam Industries, 56/56, Site-4 Ind. Area, Sahibabad, Ghaziabad.	Yarn/ Textile Dyeing	38	30	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
390.	Ghaziabad	Shyam Industry, 50, Shyam Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	12	12	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
391.	Ghaziabad	Siddhi Vinyak Texile P Ltd., H-11, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	32	25	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
392.	Ghaziabad	Siddhi Vinyak, G-103, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	80	80	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for	Unit closed in compliance of NGT Order

								textile industry.	
393.	Ghaziabad	Sidhi Vinayak, 48/1/18, Site-4, Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	16	16	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
394.	Ghaziabad	Sidra Washing, Arya Nagar Industrial Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	12	12	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
395.	Ghaziabad	Silver Wash, 20/6, Gali No.-3, Rajinder Nagar Ind. Area, Mohan Nagar, Ghaziabad.	Yarn/ Textile Dyeing	38	30	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
396.	Ghaziabad	Simple Dyeing & Washing, 7, Khara No. 357, Arya Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	3	2	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
397.	Ghaziabad	Singhal Paulings Industries, 56/32, Site-4, Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	3	2	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
398.	Ghaziabad	Solanky Dyeing, B-9, Roop Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	13	10	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying

399.	Ghaziabad	Spak India, 56/23, Site-4, Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	38	30	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
400.	Ghaziabad	SPD RAINBOW(Lavya Udyog), 56/17, Site-4, Sahibabd Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	20	20	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
401.	Ghaziabad	Sudhir Kumar Jain, G-80, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	8	8	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
402.	Ghaziabad	Sumer Mal (R.K. Export & Import), H-13, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	29	23	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
403.	Ghaziabad	Sun Dyers, I-19, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	23	18	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
404.	Ghaziabad	Sun Shine Dyeing & Washing, 75-76, Rural Ind. Area, Arya Nagar, Loni, Ghaziabad.	Yarn/ Textile Dyeing	0	-	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying

405.	Ghaziabad	Sunil Kumar, G-85, Apparel Park, Sector D-1 (P3), Tronica City, Loni	Yarn/ Textile Dyeing	32	25	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
406.	Ghaziabad	Sunny Prints, 5/7, Site-2, Loni Road, Ind.area, Mohan Nagar, Ghaziabad.	Yarn/ Textile Dyeing	12	9	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
407.	Ghaziabad	Super Fine Wash, 71, Arya Nagar Ind.area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	19	15	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
408.	Ghaziabad	Super Hosiery, Banthla, Loni, Ghaziabad.	Yarn/ Textile Dyeing	12	12	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
409.	Ghaziabad	Super Industry, Gali No. 2, Arya Nagar, Loni, Ghaziabad.	Yarn/ Textile Dyeing	13	10	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
410.	Ghaziabad	Supreme Industries, J-2, Appral Park, Tronca City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	40	40	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order

411.	Ghaziabad	Surendra Processors, 57/1/12, Site-4, Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	38	30	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Wet Process closed
412.	Ghaziabad	Suruchi Dyeing, 37, S.S.of G.T.Road Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	19	15	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit lying closed
413.	Ghaziabad	Swastik Washing, A-37, Roop Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	13	10	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
414.	Ghaziabad	Tanzeem Dyeing 261, Rajaendra Nagar Ind. Area Ghaziabad.	Yarn/ Textile Dyeing	19	15	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
415.	Ghaziabad	Tina Dyeing, B-53, Roop Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	13	10	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
416.	Ghaziabad	Tiwari Feb, G-255, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	63	50	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order

417.	Ghaziabad	Tusar Garments (Spectrum Dye Studio), J-3, Sector D-1(P), Aparels Park, Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	19	15	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
418.	Ghaziabad	V.S. Dyeing, Plot No.-15, Arya Nagar, naipura Road, Loni, Ghaziabad.	Yarn/ Textile Dyeing	12	12	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
419.	Ghaziabad	V.S. Garments, 20/6/10, Site-4, Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	20	20	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
420.	Ghaziabad	Vaishali Hosiery, I-17, Sec D-1, Apparel Park, Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	19	15	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
421.	Ghaziabad	Vaishno Dyeing, 192, Rajineder Nagar Ind. Area, Mohan Nagar, Ghaziabad.	Yarn/ Textile Dyeing	23	18	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit lying closed
422.	Ghaziabad	Vaishno Garments, 20/6/3, Site-4, Ind Area, Sahibabad, Ghaziabad.	Yarn/ Textile Dyeing	23	18	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying

423.	Ghaziabad	Vanishika Dyeing, B-68, Roop Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	18	14	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
424.	Ghaziabad	Vedanta Estate, I-11, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	23	18	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
425.	Ghaziabad	Vedanta Estate, (New Name A.N. Processors), I-12, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	23	18	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
426.	Ghaziabad	Vedanta Estate, J-12, Apparel Park, Sector D-1(P3), Tronica City, Loni, Ghaziabad.	Yarn/ Textile Dyeing	23	18	PETP-Equalization tank, Reaction tank, Chemical Dosing, Tube Settler, Buffer tank, Sand filter, Activated carbon filter, SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit closed in compliance of NGT Order
427.	Ghaziabad	Ventkesh Enterprises, 48/1/7, Site-4, Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	63	50	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
428.	Ghaziabad	Versha Washing, 49/25, Site-4, Ind. Area, Sahibabad, , Ghaziabad.	Yarn/ Textile Dyeing	32	25	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying

429.	Ghaziabad	Vidhi Ventuer, Rajinder Nagar Ind. Area, Mohan Nagar, Ghaziabad.	Yarn/ Textile Dyeing	38	30	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
430.	Ghaziabad	Vinay Dyeing & Washing, 3, 96/3, Arya Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	8	8	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
431.	Ghaziabad	Vivek Dyeing, Main Road, A-7, Main Road, Roop Nagar Ind. Area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	8	8	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
432.	Ghaziabad	Voice India Udyog, 203, Laxmi Ind. Enclave, Arya Nagar Ind.area, Loni, Ghaziabad.	Yarn/ Textile Dyeing	0	0	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
433.	Ghaziabad	Walia Textile Prints, A-4/6, Site-4, Sahibabad Ind. Area, Ghaziabad.	Yarn/ Textile Dyeing	4	4	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit lying closed
434.	Ghaziabad	Warsi Brothers, (Nikhil Trading), B-59, Roop Nagar I.A Loni, Ghaziabad.	Yarn/ Textile Dyeing	0	-	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying

435.	Ghaziabad	Yash Udhyog, E-14, site-IV, Industrial Area Sahibabad, Ghaziabad	Yarn/ Textile Dyeing	82	65	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Unit lying closed
436.	Ghaziabad	Z.A. Washing, Unit-II, Arya Nagar, Loni, Ghaziabad.	Yarn/ Textile Dyeing	13	10	Equalization Tank, Aeration tank, Chemical Dosing Tank, Tube Settler, Activated Carbon Filter and Sludge Drying Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	complying
437.	Saharanpur	Arora Hosiery, Janta Road, Saharanpur	Yarn/ Textile Dyeing	20	16	Collection Tank, Dosing Tank, Aeration Tank, Filters 2 No., SDBs	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Complying
438.	Saharanpur	Atul Textile, Behat Road, Saharanpur	Yarn/ Textile Dyeing	21	19.5	Oil & Grease Trap, Chemical Dosing Tank, Equalization Tank, Reaction Tank, Diffused Aeration Tank, Secondary Clarifier, Multigrade Filter, Activated Carbon Filter & SDB	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Complying
439.	Saharanpur	Deep Industries, I.E. Delhi Road, Saharanpur	Yarn/ Textile Dyeing	22	20	Bar Screen, Storage Tank, Flocculator-Aeration Tank, Tube Settler, Pre-Filteration Tank, Sand Filter, Activated Carbon Filter, SDBs	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Complying
440.	Saharanpur	Durga Textile, Janta Road, Saharanpur	Yarn/ Textile Dyeing	23	21.5	Bar Screen, Primary Settling Tank, Aeration Tank, Defused Secondary Clarifier, SDBs.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Complying

441.	Saharanpur	Garg Dyeing, Janta Road, Saharanpur	Yarn/ Textile Dyeing	20	19	Bar Screen, Equalisation Tank, Clarifier Tank, Settling Tank, Filters – 2, SDBs.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Complying
442.	Saharanpur	J.J. Textile, Janta Road, Saharanpur	Yarn/ Textile Dyeing	22	20	Bar Screen, Primary Settling Tank, Secondary Settling Tank & SDBs	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Complying
443.	Saharanpur	Saharanpur Wools Ltd. Dehli Road, Saharanpur	Yarn/ Textile Dyeing	23.5	21	Equalization Tank , Neutralization Tank, Aeration Tank, Settling Tank, Clarifier 2 No., SDBs	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Complying
444.	Saharanpur	Shalimar Cotton Dyeing, Saharanpur	Yarn/ Textile Dyeing	22	20	Bar Screen, Equalization Tank , Neutralization Tank, Primary Settling Tank, Aeration Tank, Secondary Settling Tank, SDBs	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Complying
445.	Saharanpur	Siddharth Textile, Chilkana Road, Saharanpur	Yarn/ Textile Dyeing	22	20	Bar Screen, Equalization Tank cum Aeration Tank, Tube Settler Tank, MBR Tank, SDBs	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Complying
446.	Saharanpur	Ekta Textile, Janta Road, Saharanpur	Yarn/ Textile Dyeing	18	16	Oil & Grease Trap, Chemical Dosing Tank, Equalization Tank, Reactive Tank, Diffused Aeration Tank, Secondary Clarifier, Lamella Clarifier, Multigrade Filter Activated Carbon Filter, SDBs	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Complying

447.	Saharanpur	Anmol Textile, Janta Road, Saharanpur	Yarn/ Textile Dyeing	26	24	Equalization tank, reaction tank-1, primary clarifier, reaction tank-2, secondary clarifier, defused aeration tank, tursari clarifier, chlorine contact tank, MGF, ACF and sludge drying beds	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Complying
448.	Saharanpur	Super Textile, Village Tiparpur, Janta Road, Saharnapur	Yarn/ Textile Dyeing	29	24	Equalization Tank, Flash mixer, Primary Tube Settler, Aeration Tank, Secondary Tube Settler, Activated Carbon Filter, SDBs	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Complying
449.	Saharanpur	Shah Industries, 18 Medanta Complex, Janta Road, Saharnapur	Yarn/ Textile Dyeing	26	24	Equalization Tank, Flash mixer, Primary Tube Settler, Aeration Tank, Secondary Tube Settler, Activated Carbon Filter, SDBs	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Complying
450.	Saharanpur	Ganpati Textile, Janta Road, Saharanpur	Yarn/ Textile Dyeing	34	20	Equalization Tank, Flash mixer, Primary Tube Settler, Aeration Tank, Secondary Tube Settler, Activated Carbon Filter, SDBs	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Complying
451.	Saharanpur	Bombay Hosiery, Chajjpura, Dehradun Road, Saharanpur	Yarn/ Textile Dyeing	24	21.5	Equalization tank, Reaction Tank, Settling Tank Tube settler, Sand Filter, Carbon Filter, Sludge Drying Beds, Treated Water Storage Tank	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Complying
452.	Saharanpur	Mak Hoseiry, Tiparpur, Janta Road, Saharanpur	Yarn/ Textile Dyeing	26	24	Equalization Tank, Reaction Tank - 1& 2, , Primary Clarifier, Secondary Clarifier, Defused Aeration Tank, Tertiary Clarifier, Chlorine, Contact Tank, MCF, EGF & Sludge Dyeing Beds.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Complying

453.	Meerut	M/s Shri Babubali Trader, Village Madiyai Saradhna Meerut road,Meerut	Yarn/ Textile Dyeing	170	160	Bar Screen , Collection tank, Flash Mixer, Tube Settler – 1, aeration Tank – 1 & 2, Tube Settling, Activated Carbon Filter, Multigrade filter, SDBs.	Water Consumption to be reduced & charter of CPCB to be followed. As per Appendix - 3 C	As per CPCB charter for water recycling and pollution prevention for textile industry.	Complying
			Total	**121778.1**	**79395.7**				

Appendix 3B

Action Points for Slaughter Houses

The Slaughter House unit shall take time bound steps as detailed below for fulfilling the existing gaps with reference to discharge of effluent, effluent treatment infrastructure, solid waste management as per the norms laid down in CPCB document :

1. The Water consumption and effluent discharge in the unit shall be restricted as below :

Animal	Specific water consumption M3/TLWK			Timeline
	Large Category	Medium Category	Small Category	
	(More than 200 Large animal i.e. bovines per day, or more than 1000 small animal i.e. goat and sheep per day)	(50 to 200 Large animal i.e. bovines per day, or 300 to 1000 small animal i.e. goat and sheep per day)	(Less than 50 Large animal i.e. bovines per day, or less than 300 small animal i.e. goat and sheep per day)	
Buffalo	0.30 - 0.50	0.1-0.25	0.05 - 0.25	06 Months
Goat/ Sheep	1.2 - 2.1	1.3 - 2.5	0.8 - 1.7	06 Months

*. **M^3/TLWK - Cubic Meter per Ton of Live Weight killed.**

Source : Central Pollution Control Board vide its office memorandom dated 23-11-2017 has released a document titled "Revised Comprehensive Industry Document on Slaughter Houses".

2. Action Points with timeline for upgrading the Effluent Treatment Plant and its monitoring-

S.No.	Action Point	Timeline
1	ETP must be provided with tertiary treatment units like Pressure Sand Filter, Activated Carbon Filter, Ultra Filtration	03 Months
2	Calibration of Online Continuous Effluent Monitoring System as per CPCB protocol and ensure continuous linkage with server of CPCB.	01 Month
3	Installation of High Definition Open to Network Web Camera ón ETP, final outlet point, final discharge point and its connectivity with UPPCB.	01 Month.
4	Ensuring Zero Liquid Discharge by way of recycling of treated effluent in process or utilization of effluent treated as per norms for irrigation on land.	06 Months.
5	Ìnstallation of sealed flow metering system along with running hours at the inlet water source (Borewell or other sources) and outlet and at inlet pipeline of different process operation and outlet of ETP	30-06-2019
6	Colour Coding of Pipelines carrying recycled process water and fresh process water.	06 Months
7	Segregation of salt bearing stream and installation of salt recovery/evaopration system.	06 Months

Appendix 3C

Action Points for Textile Industries

Central Pollution Control Board has released a document titled "Charter for Water Recycling & Pollution Prevention For Textile Industry".

The Textile unit shall take timebound steps as detailed below for fulfilling the existing gaps with reference to water consumption & discharge of effluent, effluent treatment infrastructure etc. as below with timeline for upgrading the Effluent Treatment Plant –

S.No.	Objective	Action Point	Timeline
1.	Water Consumption	Reduce Water consumption by 20 % per kg of product by Completing upgradation of ETP.	31-12-2019
2.	Water Consumption	Reduce Water consumption by 15 % in addition to last years 20 % per kg of product by Completing upgradation of ETP by adding tertiary treatment units.	31-12-2020
3.	Water Consumption	Confirmation of 30 % Water Recycle against total input (in other words water consumption per kg should be reduced by 30 % minimum)	Beyond 31-12-2020
4.	Monitoring of Water Consumption	Installation of sealed flow meter and running hours meter on bore wells and inlet pipeline of different process section.	01 Month
5.	Colour coding of pipe lines	Colour coding of pipe lines carrying recycled process water and fresh process water	06 Months
6.	Self-Assessment of ETP adequacy	Preperation of ETP adequacy assessment report	01 Month
7.	Ìnstallation of sealed flow metering system	Ìnstallation of sealed flow metering system along with running hours at the inlet water source (Borewell or other sources) and outlet and at inlet pipeline of different process operation and outlet of ETP	30-06-2019
8.	Setting up of Online Effluent Monitoring System	Setting up of Online Effluent Monitoring System to Monitor final outlet discharge, units connected to CETPs can have Common System Installed at CETP discharge	06 Months

Appendix 3 D

Action Points for Electroplating Industries

The Electroplating units shall take timebound steps as detailed below for fulfilling the existing gaps with reference to adoption of cleaner technology, water consumption & discharge of effluent-

S.N	Gap	Action Point	Timeline
1	Adoption of cleaner technology	Usage of cyanide in electroplating should be phased out. Non-Cyanide Plating Processes should be adopted	31-12-2019
2	Proper segregation of metal bearing effluent streams	Different metal bearing streams shall be segregated by way of dedicated marked lines, to segregate waste water according to its charactarstics	03 Months
3	Reducing Water Consumption	Unit shall achieve the target of 50% reduction in water consumption by adopting cleaner technologies such as: Introduction of rinse water recirculation, Using of countercurrent rinsing systems; recycling rinse waters to the process after treatment. Regenerate and recycle process baths and rinse water after treatment.	31-12-2019
4	Reducing waste water discharge	Unit shall reduce the waste water discharge upto 50% by adopting cleaner technologies such as: Controlling spillages by using troughs between tanks and avoiding haphazard rinsing and washing Recycling of treated effluent for rinsing.	31-12-2019
5	Upgardation of ETP	ETP must be provided with tertiary treatment units like Reverse Osmosis Plant, Ultra Filtration, Ion Exchange etc, to enable recycling of treated effluent in the process	31-12-2019
6	Self-Assessment of ETP adequacy	Preparation of ETP adequacy assessment report	01 Month

7	Ìnstallation of sealed flow metering system	Ìnstallation of sealed flow metering system along with running hours at the inlet water source (Borewell or other sources) and outlet and at inlet pipeline of different process operation and outlet of ETP.	03 Months
8	Setting up of Online Effluent Monitoring System	Setting up of Online Effluent Monitoring System to Monitor final outlet discharge.	06 Months
9	Colour Coding of Pipelines	Colour Coding of Pipelines carrying recycled process water and fresh process water.	06 Months
10	Monitoring of pollution control systems	Installation of High Definition Open to Network Web Camera ón ETP, final outlet point, final discharge point and its connectivity with UPPCB.	01 Month.

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Appendix 3E

Action Plan for Distillery & Fermentation Sector for Mitigation of Pollution to ensure ZLD

Sr.no.	GAP	Action Point	Time Line
1.	MEE condensate management	MEE condensate management through CPU	12 Months
2.	Mass flow meter at inlet & outlet	Installation of online mass flow meter at inlet & outlet of MEE & its connectivity to CPCB/UPPCB server	03 Months
3.	Restriction on spentwash storage capacity	Restriction on Spentwash storage capacity I. 01 Month in case of Bio-compost II. 01 Week in case of incineration	03 Months
4.	Installation of web cam	Installation of PTZ cameras and connectivity	01 Month
5.	Ground water monitoring	Setting up of adequate no. of bore well and pizometers around the bio compost area for Ground water monitoring.	03 Months
6.	OCEMS on boilers.	Installation of OCEMS on boilers.	06 Months
7.	Implementation of notification regarding compost	Registration from Agriculture Department as per notification of compost & sale of bio-compost in bag packing	Immediate
8.	Safe storage of Molasses	Safe storage of Molasses as per CPCB guidelines.	Immediate

Appendix 3F

Action Points for Tannery Sectors

Individual Tannery Units

S.No.	Gap	Action Point	Timeline
1	Tannery units to adopt cleaner technology	Adoption of proven cleaner technology	6 months
2	Proper salt recovery	Arrangement to be made for salt recovery	6 months
3	Segregation of soak liquor, chrome liquor and other stream	Arrangement to be made for segregation and proper treatment. Soak liquor should be 100% thermal evaporated.	6 months
4	ETP should be upgraded as per latest technology	Upgradation of ETP	6 months
5	Installation of OCEMS and web camera	Installation of OCEMS and PTZ web camera with web connectivity to UPPCB	2 months

Appendix 3G

Treated effluent quality of CETP Tronica City, Loni, Ghaizabad Capacity- 1.8 MLD						
S.No.	Date	Parameters				Status
		pH	BOD(mg/L)	COD(mg/L)	TSS(mg/L)	Complaince (Y/N)
1	19/03/2019	Non operational				
1	26/03/2019	7.5	36	101	79	NO
2	02/04/2019	7.4	39	151	115	NO
3	09/04/2019	8.3	98	245	213	NO

Note:-

1. This CETP was installed by UPSIDC for treatment of industrial effluent of 55 textile units situated Apparel Park, Tronica City, Loni, Ghaziabad. Since this CETP was not functioning properly so the Board has issued closure order against this CETP and its 28 functional member units.
2. The State Board has issued the consent to operate under Water and Air Act to a new 06 MLD CETP situated in Apparel Park, Tronica City, Loni, Ghaziabad. The CETP is yet to stabilize.

Appendix-4

Details of Gram Panchayats & Revenue Villages on the banks of River

VILLAGE SITUATED ALONG THE RIVER HINDON RIVER RIGHT BANK										
S.No.	**Distrcit**	**Name of village**	**LAT**	**LONG**	**Distance (Km)**	**Population (2011)**	**Decadal growth rate (%)**	**Estimated population (2019)**	**Sewage Generation (MLD)**	**Estimated MSW (Kg/day)**
1	**Saharanpur**	Meaheshpur saharanpur	29°42'27.55"N	77°33'26.51"E	0.36	4059	19.66	4697	0.507	1014.75
2		Shimlana Mu	29°41'0.15"N	77°33'38.43"E	0.1	7711	19.66	8924	0.964	1927.75
3		Chirao Mu	29°40'16.86"N	77°33'47.53"E	0.2	3277	19.66	3792	0.410	819.25
4		Ratan Heri Must.	29°39'37.09"N	77°33'51.11"E	260	760	19.66	880	0.095	190.00
5		Nankhera Khurd Must	29°38'5.16"N	7°33'59.46"E	0.1	1081	19.66	1251	0.135	270.25
6	**Muzaffarnagar**	Buddhakheda	9°37'26.82"N	77°34'6.09"E	0.29	1884	16.94	2139	0.231	471.00
7		Nyamu	29°35'9.15"N	7°32'56.06"E	0.3	4752	16.94	5396	0.583	1188.00
8		Sikanarpur	29°34'1.30"N	7°32'58.37"E	0.24	2472	16.94	2807	0.303	618.00
9		Budina kalan	9°27'29.94"N	77°30'0.60"E	0.26	6125	16.94	6955	0.751	1531.25
10		Atali	9°26'36.34"N	77°30'11.46"E	0.15	1931	16.94	2193	0.237	482.75
11		Mazra	9°23'35.22"N	7°30'44.74"E	0.1	1353	16.94	1536	0.166	338.25
12		Shikarpur	29°22'7.04"N	7°29'27.35"E	0.15	5840	16.94	6631	0.716	1460.00
13		KHANPUR	9°20'33.47"N	7°29'16.16"E	0.1	1249	16.94	1418	0.153	312.25
14		Bawana	9°19'27.01"N	7°29'26.79"E	0.3	3243	16.94	3682	0.398	810.75
15		Budhana	29°17'11.45"N	7°28'17.23"E	0.1	2510	16.94	2850	0.308	627.50
16		Chanderi	29°15'38.53"N	7°29'44.45"E	0.21	2384	16.94	2707	0.292	596.00

17		Lilon	9°13'57.71"N	77°30'54.20"E	0.25	9785	16.94	11111	1.200	2446.25
18		Datana	9°13'57.71"N	77°31'6.81"E	0.15	7639	16.94	8674	0.937	1909.75
19		Kutubpur	9°12'48.40"N	7°31'11.56"E	0.1	5134	16.94	5830	0.630	1283.50
20		Nagwa	9°12'14.60"N	77°30'4.23"E	0.15	2828	16.94	3211	0.347	707.00
21		Sarora	9°11'20.90"N	7°29'58.11"E	0.1	461	16.94	523	0.057	115.25
22	**Baghpat**	Khaprana	29° 9'14.47"N	77°28'2.54"E	0.15	1429	11.95	1566	0.169	357.25
23		Shahpur Bnganga	29° 8'11.94"N	7°26'59.94"E	0.3	1799	11.95	1971	0.213	449.75
24		Barwana	29° 6'55.98"N	7°25'42.26"E	0.3	8482	11.95	9293	1.004	2120.50
25		Shekhpura	29° 5'42.57"N	77°25'3.25"E	0.3	2127	11.95	2330	0.252	531.75
26		Galheta	29° 4'42.90"N	77°26'1.48"E	0.15	2297	11.95	2517	0.272	574.25
27		Jainuddinpur Chirchiya	29° 2'54.76"N	7°26'18.71"E	0.3	3153	11.95	3454	0.373	788.25
28		Mawi Kalan	29° 1'34.98"N	7°26'38.67"E	0.2	4997	11.95	5475	0.591	1249.25
29		Mavi Khurd	29° 0'41.67"N	7°26'51.62"E	0.3	1187	11.95	1300	0.140	296.75
30		Pura	29° 0'0.25"N	7°27'15.30"E	0.2	3018	11.95	3307	0.357	754.50
31	**Meerut**	Baleni	8°57'11.73"N	7°27'13.11"E	0.3	2293	14.89	2566	0.277	573.25
32		Dolcha	28°56'4.75"N	77°27'8.57"E	0.2	5639	14.89	6311	0.682	1409.75
33		Ghatauli	8°55'24.34"N	77°26'3.26"E	0.1	1705	14.89	1908	0.206	426.25
34		Mukari	8°54'28.32"N	77°25'21.99"E	0.2	4039	14.89	4520	0.488	1009.75
35	**Baghpat**	Harsia	28°53'7.67"N	7°24'12.89"E	0.15	418	11.95	458	0.049	104.50
36		Sharfabad	28°49'2.12"N	7°23'48.92"E	0.1	2085	11.95	2284	0.247	521.25
37		Navaada	8°47'43.19"N	7°23'14.26"E	0.05	2339	11.95	2563	0.277	584.75
38		Garhi kalanjari	8°47'16.01"N	7°23'35.80"E	0.3	4301	11.95	4712	0.509	1075.25
39	**Ghaziabad**	Sirora Salempur	28°46'42.17"N	7°24'27.83"E	0.3	2666	42.27	3568	0.385	666.50

		kharak 1								
40		Bhoopkheri	28°46'3.05"N	77°23'3.69"E	0.05	1836	42.27	2457	0.265	459.00
41		Bhenara Khurd	28°44'4.51"N	7°22'48.55"E	0.27	1333	42.27	1784	0.193	333.25
42		Kinauni Village	28°39'11.91"N	7°23'12.21"E	0.1	5038	42.27	6742	0.728	1259.50
Total						**138659**		**158294**	**17.096**	**34664.75**

VILLAGE SITUATED ALONG THE RIVER HINDON RIVER LEFT BANK

S.No.	Distrcit	Name of village	LAT	LONG	Distance (Km)	Population (2011)	Decadal growth rate (%)	Estimated population (2019)	Sewage Generation (MLD)	Estimated MSW (Kg/day)
1	**Muzaffarnagar**	Kasoli	29°36'15.74"N	77°34'12.66"E	0.3	5155	16.94	5854	0.632	1288.75
2		Nasirpur	29°29'34.78"N	77°31'44.98"E	0.28	2277	16.94	2586	0.279	569.25
3		Titavi	29°28'20.70"N	77°31'41.72"E	0.29	5969	16.94	6778	0.732	1492.25
4		Lakhaan	29°27'49.89"N	77°31'33.56"E	0.27	4879	16.94	5540	0.598	1219.75
5		Dhindhawali	29°25'15.53"N	77°31'31.81"E	0.32	5777	16.94	6560	0.708	1444.25
6		Kutbi Kutba	29°24'12.69"N	77°31'57.79"E	0.28	4830	16.94	5485	0.592	1207.50
7		Kamalpur	29°22'36.93"N	77°31'8.47"E	0.23	1244	16.94	1413	0.153	311.00

8		Palri	29°21'55.45"N	77°30'29.22"E	0.29	1923	16.94	2184	0.236	480.75
9		Budhana Khadar	29°16'37.30"N	77°29'46.42"E	0.2	133	16.94	151	0.016	33.25
10	**Meerut**	Baparasi	29°10'54.00"N	77°29'58.24"E	0.16	3454	14.89	3865	0.417	863.50
11		Kheri Nizd Kalina	29° 4'39.09"N	77°28'20.43"E	0.33	68	14.89	76	0.008	17.00
12		Kinauni	29° 2'32.81"N	77°27'52.77"E	0.331	5038	14.89	5638	0.609	1259.50
13		Rasulpur Zahid	29° 1'46.46"N	77°28'3.99"E	0.332	2382	14.89	2666	0.288	595.50
14		Daluhera	28°57'40.95"N	77°28'41.28"E	0.333	3043	14.89	3405	0.368	760.75
15	**Ghaziabad**	Mataur	28°55'14.06"N	77°27'11.93"E	0.334	1218	42.27	1630	0.176	304.50
16		Kunhaida	28°52'46.93"N	77°25'49.44"E	0.335	1981	42.27	2651	0.286	495.25
17		Surana	28°51'34.80"N	77°25'14.93"E	0.336	8435	42.27	11287	1.219	2108.75
18		Suthari	28°50'34.41"N	77°25'10.27"E	0.337	2158	42.27	2888	0.312	539.50
19		Nekpur	28°49'31.01"N	77°24'41.43"E	0.338	6404	42.27	8570	0.926	1601.00
20		Bhadoli	28°46'19.35"N	77°25'44.11"E	0.33	1716	42.27	2296	0.248	429.00
21		Makraida	28°45'31.06"N	77°25'38.62"E	0.34	1437	42.27	1923	0.208	359.25
22		Bahadurpur	28°45'16.76"N	77°25'5.36"E	0.3	1669	42.27	2233	0.241	417.25
		Total				**71190**		**85678**	**9.253**	**17797.50**

VILLAGE SITUATED ALONG THE RIVER KRISHNA/KRISHNI LEFT BANK									
SR NO	**DISTRICT**	**NAME OF VILLAGE / REVENUE VILL**	**LAT, LONG**	**Distance (Km)**	**DECADAL POPULATION (2011)**	**GROWTH RATE (%)**	**ESTIMATED POPULATION (2019)**	**SEWAGE GENERATION (MLD)**	**ESTIMATED SOLID WASTE (Kg/day)**
1	Muzaffar nagar	Bantikhera	29°29'4.45"N 77°24'3.68"E	0.03	11075	16.94	12,576	1.358	3143.971
2		Kabraut	29°24'9.69"N 77°20'50.00"E	0.36	2575	16.94	2,924	0.316	730.991
3		butradi	29°23'21.36"N 77°20'34.40"E	0.24	3067	16.94	3,483	0.376	870.660
Total					**16717**		**18982**	**2.050**	**4745.622**

VILLAGE SITUATED ALONG THE RIVER KRISHNA/KRISHNI RIGHT BANK									
SR NO	**DISTRICT**	**NAME OF VILLAGE / REVENUE VILL**	**LAT, LONG**	**Distance (Km)**	**DECADAL POPULATION (2011)**	**GROWTH RATE (%)**	**ESTIMATED POPULATION (2019)**	**SEWAGE GENERATION (MLD)**	**ESTIMATED SOLID WASTE (Kg/day)**
1	Saharanpur	Gudumb	29°43'43.5"N 77°29'07.8"E	0.3	2808	19.66	3,250	0.351	812.411
2		Thaska	29°42'04.0"N 77°28'09.9"E	0.21	5,848	19.66	6,768	0.731	1691.943
3		Bhojpur	29°41'10.49"N 77°27'56.57"E	0.08	723	19.66	837	0.090	209.178
4	Muzaffar nagar	Bhanera	29°40'54.98"N 77°26'40.39"E	0.5	2,598	16.94	2,950	0.319	737.520
5		Chandonamal,	29°39'26.51"N 77°27'6.04"E	0.3	3,128	16.94	3,552	0.384	887.977

6		Sonta Rasulpur	29°32'0.28"N 77°24'39.72"E	0.3	8,134	16.94	9,236	0.998	2309.080
7		Ladonazri	29°30'5.21"N 77°24'11.79"E	0.42	566	16.94	643	0.069	160.676
8		Kiwana	29°21'30.17"N 77°19'47.08"E	0.3	3,740	16.94	4,247	0.459	1061.711
9		Sunna	29°19'26.40"N 77°21'7.93"E	0.05	5658	16.94	6,425	0.694	1606.193
10	Bagpat	Ashrafabad thal	29°11'4.34"N 77°19'26.25"E	0.16	5235	11.95	5,735	0.619	1433.867
11		kandera	29° 9'39.15"N 77°19'28.21"E	0.06	5463	11.95	5,985	0.646	1496.316
12		Bamnauli	29° 8'44.03"N 77°20'56.33"E	0.02	10737	11.95	11,763	1.270	2940.864
13		Ranchhar	29° 7'30.96"N 77°22'12.08"E	0.3	7,897	11.95	8,652	0.934	2162.988
Total					**62535**		**70043**	**7.565**	**17510.724**

VILLAGE SITUATED ALONG THE RIVER KALI WEST RIGHT BANK

SR NO	DISTRICT	NAME OF VILLAGE / REVENUE VILL	LAT, LONG	Distance (Km)	DECADAL POPULATION (2011)	GROWTH RATE (%)	ESTIMATED POPULATION (2019)	SEWAGE GENERATION(MLD)	ESTIMATED SOLID WASTE (Kg/day)
1	Muzaffarnagar	Saidpur	29°33'4.13"N, 77°42'36.08"E	0.18	3,081	16.94	3,499	0.378	874.634
2		Maleera	29°32'13.46"N, 77°41'59.25"E	0.13	4,568	16.94	5,187	0.560	1296.764
3		Didaheri	29°31'2.62"N, 77°40'49.78"E	0.14	3,650	16.94	4,145	0.448	1036.162
4		Morkukka	29°18'17.28"N 77°39'2.65"E	0.14	1909	16.94	2,168	0.234	541.927
5		Dabal	29°17'27.15"N, 77°38'6.24"E	0.05	1643	16.94	1,866	0.201	466.415
Total					**14851**		**16864**	**1.821**	**4215.902**

VILLAGE SITUATED ALONG THE RIVER KALI WEST LEFT BANK

SR NO	DISTRICT	NAME OF VILLAGE / REVENUE VILL	LAT, LONG	Distance (Km)	DECADAL POPULATION (2011)	GROWTH RATE (%)	ESTIMATED POPULATION (2019)	SEWAGE GENERATION(MLD)	ESTIMATED SOLID WASTE (Kg/day)
1	Muzaffarnagar	Mimlana	29°30'9.78"N 77°40'15.66"E	0.15	4,569	16.94	5,188	0.560	1297.048
2		Lechhera	29°24'23.09"N, 77°39'57.59"E	0.25	6,183	16.94	7,021	0.758	1755.230
3		Ambarpur	29°18'6.23"N 77°40'13.92"E	0.22	1540	16.94	1,749	0.189	437.175
4		Ratanpuri	29°16'22.83"N 77°36'13.86"E	0.25	5,147	16.94	5,845	0.631	1461.130
5	Meerut	Pithlokar	29°12'55.03"N 77°32'39.48"E	0.07	9375	14.89	10,492	1.133	2622.938
Total					**26814**		**30294**	**3.272**	**7573.521**

VILLAGE SITUATED ALONG THE RIVER KALI RIVER RIGHT BANK

S. No.	District	NAME OF VILLAGE	LAT	LONG	DISTANCE	POPULATION	Decadal growth rate	Estimated population (2019)	Sewage Generation (MLD)	Estimated MSW (Kg/day)
20	Muzaffar Nagar	Khokni	29°15'40.30"N	77°47'40.23"E	0.3	2722	16.94	3091	0.334	772.72
21	Muzaffar Nagar	Galibpur	29°14'45.65"N	77°47'47.84"E	0.3	4220	16.94	4792	0.518	1197.97
22	Muzaffar Nagar	Sikandar pur	29°12'43.75"N	77°47'40.91"E	0.4	1796	16.94	2039	0.220	509.85

23	Meerut	Mamuri	29° 9'35.76"N	77°44'53.02"E	0.6	789	14.89	883	0.095	220.75
24	Meerut	Samoli Salempur	29° 8'12.47"N	77°44'30.55"E	0.55	3699	14.89	4140	0.447	1034.91
25	Meerut	Mamurpur	29° 5'15.18"N	77°45'14.16"E	0.13	2570	14.89	2876	0.311	719.03
25	Meerut	Kaul	28°51'30.17"N	77°47'40.46"E	0.121	2937	14.89	3287	0.355	821.71
27	Meerut	Atrara	28°48'35.31"N	77°48'30.18"E	0.3	7432	14.89	8317	0.898	2079.32
28	Ghaziabad	Muradpur	28°47'48.88"N	77°51'13.07"E	0.2	3422	42.27	4579	0.495	1144.80
Total						**29587**		**34004**	**3.672**	**8501.07**
Grand Total						**80837**		**93126**	**10.057**	**23281.51**

Appendix-5

WET LANDS / WATER BODIES
WET LANDS / WATER BODIES ALONG THE RIVER HINDON

Primary list of Wetlands of Hindon River from Maheshpur ,Saharanpur to Chhajarsi Colony, Ghaziabad (to be updated during implementation of action plan)

S.No.	NAME OF DISTRICT	NAME OF NEARBY VILLAGE	LATITUDE	LONGITUDE	DISTANCE FROM RIVER (KM)	LOCATION OF WETLAND	
						LEFT BANK	RIGHT BANK
1	Saharanpur	Shimalana mu 1	29°41'15.74"N	77°33'33.14"E	0.73	Y	
2		Shimalana mu 2	29°41'19.20"N	77°33'36.36"E	0.73	Y	
3		Shimlana Aht	29°41'19.88"N	77°35'31.10"E	1.9		Y
4		Bahera mu 1	29°39'45.82"N	77°33'17.15"E	1.2	Y	
5		Bahera mu Pond 2	29°39'43.93"N	77°33'15.36"E	1.2	Y	
6		Badhedi Majbata	29°40'39.49"N	77°35'44.34"E	1.9		Y
7		Nanhera Kalan mu. Pond 1	29°38'36.76"N	77°33'41.49"E	1.06	Y	
8		Lukadari	29°38'47.38"N	77°32'58.88"E	2.3	Y	
9		Mushkipur	29°38'24.92"N	77°32'36.79"E	2.4	Y	
10	Muzaffarnagar	Budhakhera	29°37'28.48"N	77°33'56.68"E	0.7	Y	
11		Chhamau	29°36'49.66"N	77°33'30.99"E	0.14	Y	
12		Dudhli 1	29°36'26.94"N	77°32'12.43"E	1.5	Y	
13		Dudhli 2	29°36'7.42"N	77°32'10.82"E	1.5	Y	
14		Chokra	29°35'18.99"N	77°34'58.74"E	2.3		Y
15		Akbargarh	29°33'52.33"N	77°32'26.07"E	0.83	Y	
16		Nagla rai	29°33'14.85"N	77°34'3.54"E	1.96		Y
17		Mahabalipur	29°32'29.48"N	77°34'11.26"E	1.9		Y
18		Khuledi	29°31'56.08"N	77°33'6.35"E	2.2	Y	
19		Pipalshah	29°32'25.51"N	77°31'28.54"E	2	Y	

S.No.	NAME OF DISTRICT	NAME OF NEARBY VILLAGE	LATITUDE	LONGITUDE	DISTANCE FROM RIVER (KM)	LOCATION OF WETLAND	
						LEFT BANK	RIGHT BANK
20		Gujarheri	29°30'35.78"N	77°30'43.13"E	1.68	Y	
21		Nasirpur	29°29'36.37"N	77°31'58.84"E	2.1		Y
22		Titavi	29°28'20.51"N	77°31'36.12"E	1.1		Y
23		Dholra	29°28'8.28"N	77°30'40.24"E	1.57	Y	
24		Lakhaan Pond	29°27'55.00"N	77°31'19.91"E	0.6		Y
25		Budiana Kalan	29°27'37.54"N	77°30'18.33"E	0.56	Y	
26		Noona Khera	29°25'43.17"N	77°31'19.01"E	2.2		Y
27		Kutba Kutbi	29°14'25.77"N	77°30'11.14"E	0.6		Y
28		Mazra	29°23'31.20"N	77°30'54.26"E	0.2	Y	
29		Shikarpur	29°22'4.72"N	77°29'21.04"E	1.2	Y	
30		Bawana	29°19'29.90"N	77°29'3.38"E	1.9	Y	
31		Sultanpiur	29°19'22.67"N	77°30'20.46"E	1.5		Y
32		Budhana	29°17'37.68"N	77°28'2.67"E	1.79	Y	
33		Ukoli Pond	29°14'25.77"N	77°30'11.14"E	2.1	Y	
34		Nasirpur 1	29°14'35.37"N	77°31'28.15"E	1.6		Y
35		nasirpur 2	29°14'27.37"N	77°31'27.79"E	1.2		Y
36	**Meerut**	Baparasi	29°10'49.93"N	77°29'53.16"E	1.36		Y
45		Rasoolpur Dholi 2	28°55'24.04"N	77°28'48.13"E	2		Y
46		GhataulLI	28°55'28.63"N	77°26'8.75"E	0.33	Y	
37	**Baghpat**	Shahpur Bnganga	29° 8'8.93"N	77°26'58.21"E	1.3	Y	
38		Barnawa	29° 6'46.70"N	77°25'50.64"E	1.2	Y	
39		Ukhleena	28°59'19.91"N	77°28'12.34"E	0.3		Y
40		Habibipur	28°56'55.92"N	77°26'58.38"E	2.3	Y	
41		Amirpur Baleni	28°57'18.02"N	77°26'57.09"E	2.2	Y	
42	**Ghaziabad**	Mataur 1	28°55'11.23"N	77°27'44.40"E	1.3		Y
43		Mataur 2	28°54'59.10"N	77°27'40.43"E	0.87		Y

S.No.	NAME OF DISTRICT	NAME OF NEARBY VILLAGE	LATITUDE	LONGITUDE	DISTANCE FROM RIVER (KM)	LOCATION OF WETLAND	
						LEFT BANK	RIGHT BANK
44	**Meerut**	Rasoolpur Dholi 1	28°55'38.98"N	77°28'51.69"E	2.1		Y
47	**Ghaziabad**	Mohammadpur Amad Baghpat 1	28°54'39.53"N	77°26'22.82"E	0.76		Y
48		Mohammadpur Amad Baghpat 2	28°54'11.87"N	77°26'23.78"E	1.27		Y
49		Mohammadpur Amad Baghpat 3	28°53'48.36"N	77°25'48.77"E	0.34		Y
50		Mohammadpur Amad Baghpat 4	28°53'48.25"N	77°26'24.40"E	1.34		Y
51		Mohammadpur Amad Baghpat 5	28°53'52.09"N	77°26'54.20"E	2.2		Y
52	**Meerut**	Dattanagar	28°55'3.33"N	77°24'13.87"E	2.2	Y	
53		Mukari 1	28°54'35.02"N	77°25'16.28"E	0.7	Y	
54	**Ghaziabad**	Jhalawa	28°53'34.86"N	77°27'0.14"E	2.2	Y	
55	**Baghpat**	Lalyana	28°51'34.40"N	77°23'44.89"E	0.74		Y
56		Shahbanpur	28°50'58.22"N	77°24'28.91"E	0.56	Y	
57	**Ghaziabad**	Ravli	28°50'13.00"N	77°26'31.43"E	2.2		Y
58		Raoli Kalan	28°49'51.97"N	77°26'20.30"E	2		Y
59		Raoli 1	28°49'46.23"N	77°26'14.60"E	2		Y
60		Raoli 2	28°50'8.75"N	77°26'9.52"E	1.5		Y
61		Suthari	28°50'34.18"N	77°24'25.64"E	0.2		Y
62		Vihang	28°48'35.47"N	77°24'38.23"E	1.5		Y
63		Phulera 1	28°48'35.56"N	77°23'17.64"E	1.5	Y	
64		Phulera 2	28°48'34.00"N	77°23'29.10"E	1.5	Y	
65		Nekpur	28°48'53.71"N	77°24'59.06"E	0.66		Y
66		Rewari Rewra	28°47'25.87"N	77°24'43.81"E	0.7		Y

S.No.	NAME OF DISTRICT	NAME OF NEARBY VILLAGE	LATITUDE	LONGITUDE	DISTANCE FROM RIVER (KM)	LOCATION OF WETLAND	
						LEFT BANK	RIGHT BANK
67		Bhadoli	28°46'32.83"N	77°25'40.18"E	0.5		Y
68		Lalpur	28°46'7.11"N	77°25'35.81"E	0.08	Y	
69		Bahadurpur	28°45'6.99"N	77°25'1.58"E	0.81		Y
70		Mathurapur	28°44'52.24"N	77°24'32.67"E	1.14		Y
71		Bhenera Khurd	28°44'9.52"N	77°22'58.97"E	0.1	Y	
72		Farukh Nagar 1	28°43'22.91"N	77°22'56.61"E	0.68	Y	
73		Farukh Nagar 2	28°43'22.13"N	77°22'34.28"E	1.53	Y	
74		Nangla Feroj Mohanpur	28°43'37.41"N	77°23'56.37"E	1.66		Y
75		Indira Kunj	28°40'17.49"N	77°23'50.86"E	0.05	Y	
76	**Ghaziabad**	Nai Basti Dundahera	28°37'53.29"N	77°24'34.76"E	1.02		Y
77		Nai Basti Dundahera,	28°37'46.56"N	77°24'37.58"E	1.2		Y
78		Chhajarsi Colony	28°37'12.62"N	77°24'6.15"E	0.9	Y	
River:- KRISHNA/KRISHNI							
1	**Saharanpur**	Tipra	29°46'58.06"N	77°27'55.77"E	1.05	Y	
2		Sambalheri	29°44'56.46"N	77°28'28.62"E	0.54		Y
3		Gudumb	29°43'54.49"N	77°29'9.65"E	0.3		Y
4		Thaska	29°42'4.52"N	77°28'11.40"E	0.21		Y
5	**Muzaffarnagar**	Chandonamal	29°39'26.51"N	77°27'6.04"E	0.5		Y
6		Chandonamal	29°38'22.52"N	77°26'23.38"E	0.6		Y
7		Jalalabad	29°37'16.49"N	77°26'39.23"E	0.32		Y
8		Maisani Ismailpur	29°33'12.65"N	77°25'3.23"E	0.78	Y	
9		Maisani Ismailpur	29°32'50.56"N	77°25'12.72"E	0.8	Y	
10		RAYPUR	29°31'56.06"N	77°25'9.32"E	0.33		Y
11		RAYPUR	29°31'51.23"N	77°25'3.27"E	0.39		Y
12		Ladonazri	29°30'5.21"N	77°24'11.79"E	0.42	Y	

S.No.	NAME OF DISTRICT	NAME OF NEARBY VILLAGE	LATITUDE	LONGITUDE	DISTANCE FROM RIVER (KM)	LOCATION OF WETLAND	
						LEFT BANK	RIGHT BANK
13		Banat	29°27'41.19"N	77°21'1.19"E	0.5		Y
14		Hasanpur	29°22'4.03"N	77°20'36.25"E	1.36	Y	
15		Shamli	29°21'32.54"N	77°19'35.02"E	0.36		Y
River:- KALI (WEST)							
1	Saharanpur	Manki	29°41'48.80"N	77°43'18.88"E	1.01		Y
2		Sanpla Bakkal	29°40'29.09"N	77°44'2.15"E	0.85	Y	
3	Muzaffarnagar	Rohana Khurd	29°35'20.93"N	77°41'53.55"E	1.06		Y
4		Rohana Khurd 1	29°35'42.22"N	77°42'6.30"E	1.18		Y
5		Badhiwala	29°34'14.82"N	77°43'20.37"E	0.84	Y	
7	Muzaffarnagar	Didaheri	29°31'11.79"N	77°40'36.15"E	0.51		Y
9	Muzaffarnagar	Rukanpur	29°28'31.66"N	77°39'34.21"E	1.11		Y
10		Khanjahanpur	29°28'9.33"N	77°40'36.07"E	0.42		Y
11		amba Vihar, Muzaffarnagar	29°26'43.46"N	77°41'43.30"E	1.99	Y	
12		Jarouda	29°24'14.31"N	77°41'25.48"E	1.42	Y	
16	Muzaffarnagar	Chandsina	29°17'31.59"N	77°40'11.88"E	1.66	Y	
17		Mandaeali Bangar	29°16'8.84"N	77°35'11.29"E	0.05		Y

Appendix-6

Status of E-Waste Management

Status of E-waste Recycling / Collection / Generation Units in the State of U.P. (As on 09.10.2018)

S. No.	Name & Address of Unit	Regional Office	Status of Authorisation	Status of Registration & Validity	Type	Capacity (T/Annum)
1	M/s Auctus -E Recycling Solutions Pvt. Ltd., F-637, M.G. Road, Industrial Area, Ghaziabad.	Ghaziabad	Grant	Registered 30.08.2019	Collection, Dismantle	1800
2	M/s Mahaluxmi Metal Alloys (India) Pvt. Ltd., Modinagar, Ghaziabad.	Ghaziabad	Grant	Registered 22.05.2023	Collection, Dismantle, Recyclers	30000
3	M/s N.K. Products, 58-59, M.G. Road, Ghaziabad.	Ghaziabad	Refused	Registered 22.06.2016	Collection, Dismental	9000
4	M/s Bharat Oil Co., E-18, Site-IV, Sahibabad, Industrial Area, Ghaziabad.	Ghaziabad	Grant	Registered 16-05-18	Collection, Dismental	4000
5	M/s Planet Green Recycling Pvt. Ltd., G-129, Phase -1, M.G. Road, Ghaziabad.	Ghaziabad	Grant	Registered 23.08.2018	Collection, Dismental, Recyclers	1500
6	M/s Rocket Sales, Plot No. 1-12, I/A, M.G. Raod, Hapur.	Ghaziabad	Grant	Registered 27.08.2019	Collection,, Dismental	300
7	M/s Arsh Recycling Pvt. Ltd., Plot No. 203, UPSDIC, I/A, M.G. Road, Ghaziabad.	Ghaziabad	Grant	Registered 20.06.2023	Collection, Dismental, Recycling,	15000
8	M/s Auctus Recycling Solutions Pvt. Ltd.Habibpur, Greater Noida.	Greater Noida	Grant	Registered 06.12.2021	Dismental, Callection	19500
9	M/s Khan Traders, B-5, site4, Panki Industrial Area, Kanpur.	Kanpur	Grant	Registered 15-11-2020	Collection, Dismental	7190

10	M/s Green Tech Rcycling, Khasra No.-645, Acchraunds, Bahdaurpur Road, Partapur, Meerut .	Meerut	Grant	Registered 12.01.2022	Collection, Dismental	1800
11	M/s Narora Atomic Power Station, Narora, Bulandshahar.	Bulandshahar	Not Applied	_	Collection' Dismantaling & Recycling	10
12	M/s Metal Alloys, E-46, Industrial Area, Ramnagar, Varanasi	Varanasi	Grant	Registered 31-05-2019	Collection	1825
13	M/s Comwen Information Technologies Pvt.Ltd., 127/35B, ChakRagunath, Naini, Allahabad.	Allahabad	Grant	Registered 11-08-2017	Collection	300
14	M/s Dasia ECo E-Waste Recyclers E-160 Industrial area, Khalilabad, SantKabairnagar.	Basti	Grant	Registered 31-12-2017	Collection, Dismantaling	720
15	M/s Sims Recycling Solutions Plot no.1 Udyog KendraII Ecotech-III Greater Noida.	Greater Noida	Grant	Registered 31.12.2019	Collection, Dismental, Recycling	1250
16	M/s J.A.O. E-Waste Recycling Co, Vill-Jaitpur,Distt-Moradabad.	Moradabad	Grant	Registered 23.11.2020	Collection	3001
17	M/s HIN Green E-waste Recycling (P) Ltd, B-19/1, Summer Garden Colony, Meerut.	Meerut	Grant	Registered 12.04.2018	Collection, Dismental,	750
18	M/s S.R. Metcast India (P) Ltd 11.8 Km.Agra Mathura Road, Agra.	Agra	Grant	Registered 02.08.2022	Collection	600
19	M/s K.M. Metals Suppliers 9/270,271,Mathura Agra.	Agra	Not Applied	_	Collection	5000
20	M/s Prakash Metal House 39/223, Karwan Lohamandi,Agra.	Agra	Grant	Registered 02.05.2023	Collection	1500
21	M/s Shree MahaveerJi Trading Company, 30/127, Chippitala, Agra.	Agra	Not Applied	Reject	Collection	4500
22	M/s E-Waste Recyclers India E-50, UPSIDC Industrial area, NH-2 Kosikalan, Mahura.	Mathura	Grant	Registered 01.03.2022	Collection, Dismantle	6000
23	M/s Supar Trading Company, Plot No.-3 Govt. Industrial Estate, Talkatora Road, Lucknow.	Lucknow	Not Applied	Registered 03.04.2016	Collection	365

24	M/s V.R. Techno Enviro Services pvt. ltd. khasra No. 440, indira Priyedarshni ward, jarhra Indira Nagar, Lucknow.	Lucknow	Not Applied	Registered 09.04.2016	Collection, Dismantle	365
25	M/s Sachin enterprises,84/1,Plot no.34-35 Fazalganj, Kanpur.	Kanpur	Grant	Registered One Time	Collection	5000 Pieces Per **Annum**
26	M/s Gandhi Traders, 91/103, Dalelpurwa, Kanpur.	Kanpur	Grant	Registered 04.06.2018	Collection	5000 Pieces Per **Annum**
27	M/s Greezon Recycling Pvt. Ltd., R 30, UPSIDC, Industrial Area, Sikandrabad, Bulandshahar.	Bulandshaha	Grant	Registered 27.08.2022	Collection Dismental, Recycling	16.5
28	M/s Sachin Enterprises, 123/751, block-T 74 pratapganj Gadariyan Purwa, Fazalgang, Kanpur.	Kanpur	Grant	Registered 16.11.2022	Collection, Dismentling, Refurbishing	2500
29	M/s Greeniva Recycler Pvt. Ltd., Plot No. G-284, M.G. Road, Industrial Area, Hapur.	Hapur	Grant	Registered 18.06.2019	Collection, Dismentling, Recycling.	1500
30	M/s S. Malik Traders, Plot No.-93, 94 Vill-Budhera Jahidpur, Meerut.	Meerut	Grant	Registered 12.01.2022	Collection, Dismentling	365
31	M/s Royal Faiz Recycling (p) Ltd. , I-22, I.A. M.G. Road, Hapur.	Ghaziabad	Grant	Registered 29.01.2023	Collection, Dismental, Recycling	12000
32	M/s 3 C Recycler, F-326, I/A, M.G. Road, Hapur.	Ghaziabad	Grant	Registered 31.12.2022	Collection, Dismental, Recycling	9000
33	M/s Life E- Recycling (P) Ltd., F- 435, UPSIDC I/A, M.G. Road, Hapur.	Ghaziabad	Grant	Registered 05.06.2023	Collection, Dismental,	9000
34	M/s Hind Recycling (P) Ltd., Plot No. F-203, M.G. Road, Hapur.	Ghaziabad	Grant	Registered 01.03.2022	Collection, Dismental,	9000
35	M/s Hayat Recycler, F-53, 54, I/A, M.G. Road, Hapur.	Ghaziabad	Grant	Registered 21.06.2023	Collection, Dismental, Recycling	15000

36	M/s B.R.P. Infotech Private Limited, F-394, Phase-I, M.G.Road, Industrial Area, Hapur	Hapur	Grant	Registered 28.06.2023	Recycling, Dismentling, Segregation, Collection	9000 MT/Year
37	M/s Sky Green Waste Recycling Managememt , Khasra No.- 174, Alipur Jijmana, Meerut, U.P.	Meerut	Grant	Registered 20.12.2023	Dismentling, Recycling	5475 MT/Y 4500 MT/A
38	M/s Swachh Bharat Recycling Company, Gali-N0-4, 2083, Saipuram Insutrial Area, Delhi Road, Meerut, U.P.	Meerut	Grant	Registered 08.05.2023	Recycling	4800 MT/A
39	M/s Rudra Interprises, Plot No. A- 96, Sector-A-4, Tronica City, Loni, Ghaziabad	Ghaziabad	Grant	Registered 03.05.2023	Disposal & Dismantling	500 MT/Month
40	M/s Avgree Recycling Pvt. Ltd. KH No. 549, Vill.-Tiyala, Meerut- Bulandshahar Road, Hapur Bypass, Hapur	Ghaziabad	Grant	Registered 10.09.2023	Dismantling & Segregation	11000 MT/A
41	M/s Faiz Recycling, G-235, MG Road, Industrial Area, Hapur	Ghaziabad	Grant	Registered 13.02.2024	Dismantling & Segregation	36.67 MT/Day
42	M/s Horizon Recycling Pvt. Ltd., Khasra no.-35, Kumarhera, 7th km Dehradun Road, Saharanpur, U.P.	Saharanpur	Grant	Registered 02.08.2022	Recycling, Dismentling, Segregation, Collection	12000 MT/A
43	M/s Golden Ewaste Recyclers Pvt. Ltd., Plot No.-12A, Gagol Road, Behind Sophia School Udyog Puram, Partapur, Meerut	Meerut	Grant	Registered 01.04.2024	Transporttion, Refurbishing, Dismentling, Segregation, Storage, Disposal	9600 MT/A

Appendix-7

Details of Water quality monitoring of river Hindon and iits tributeries Kali (west and Krishni)

Water Quality of River Hindon

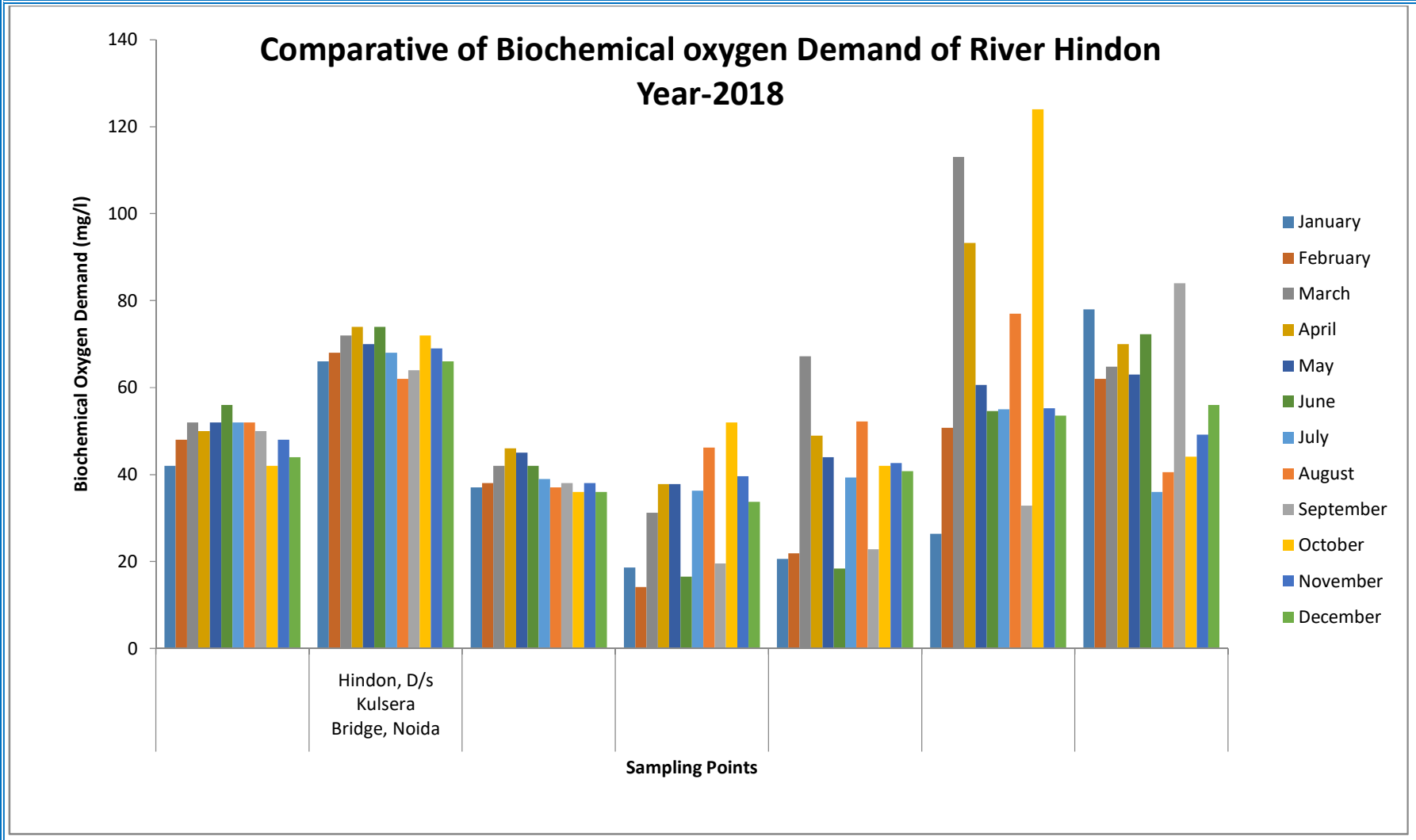
Year- 2018

River Hindon originates from the Shivalik hills in Saharanpur district and flows through Meerut, Ghaziabad, Noida and finally meets to river Yamuna in Gautam Buddha Nagar. The disposal of Domestic as well as Industrial waste of Saharanpur, Meerut, Ghaziabad and Noida districts are the main sources of Pollution in this river.

Uttar Pradesh Pollution Control Board has been continuously conducting water monitoring of River Hindon at 02 sampling points under NWMP Project, at 03 sampling points under NRCP Project and at 02 by Boards own sources. These sampling points are located at Saharanpur, Meerut, Ghaziabad and Noida distirct.

Average data of Dissolved Oxygen (D.O.), Biochemical Oxygen Demand (B.O.D.) and Total Coliform (T.Coli.) obtained from water quality monitoring during 2018 indicates that :-

All the above districts have problem of pollution and water is not suitable for Category A to D. It may be used restrictly only under category E. (for irrigation purpose)

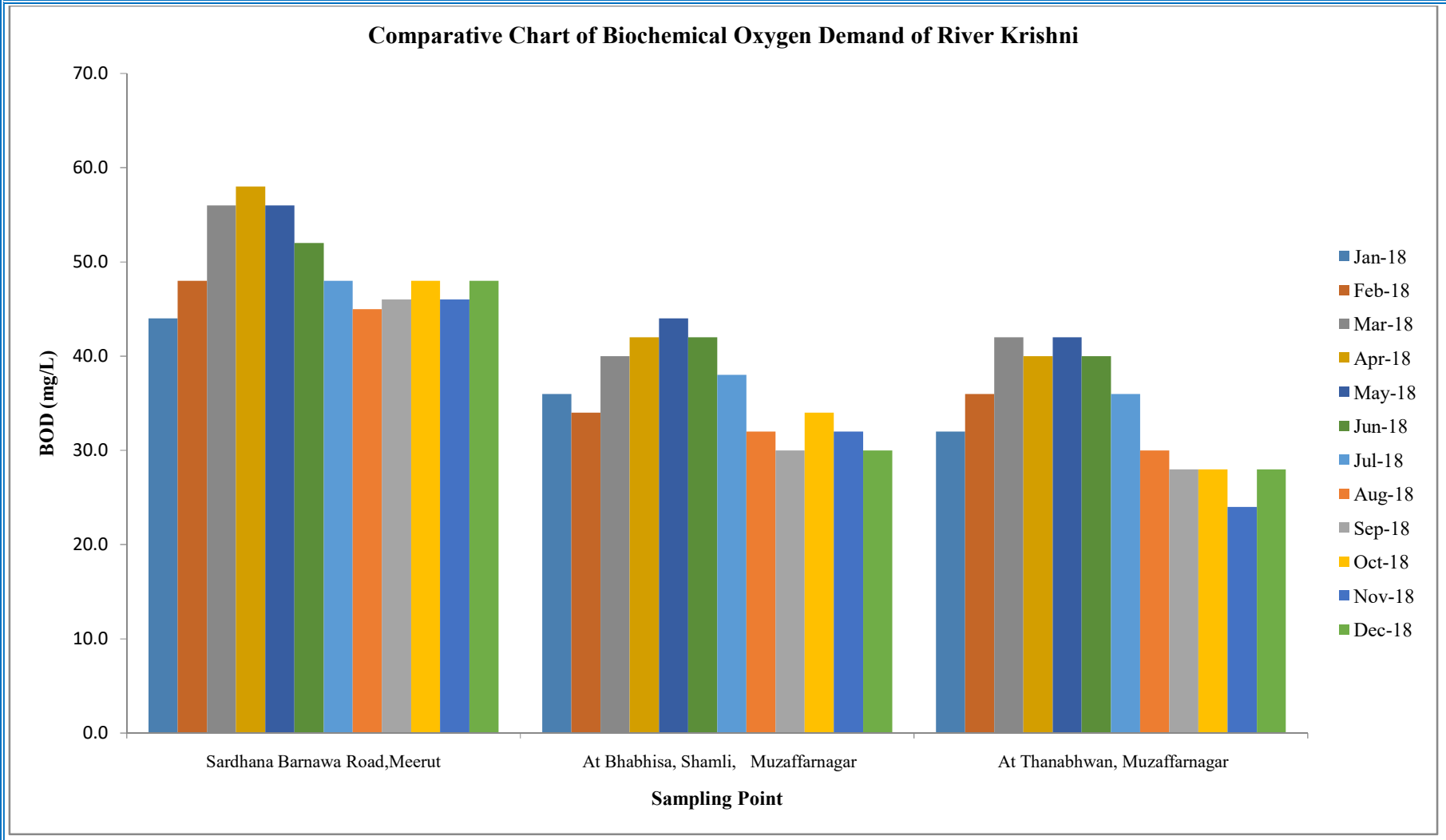

Comparative of Biochemical oxygen Demand of River Hindon
Year-2018
Biochemical Oxygen Demand (mg/l)
140
120
100
80
60
40
20
0
Hindon, D/s
Kulsera
Bridge, Noida
Sampling Points
January
February
March
April
May
June
July
August
September
October
November
December

Water Quality of River Krishni in Uttar Pradesh

Year 2018

Krishni river originates from district Saharanpur near village krishni. It flows through Muzaffarnagar and meets river Hindon at Baghpat district Meerut.The total stretch of river krishni is approx. 78 Km.

- Krishni River is a seasonal river and presently it has no natural flow.
- Untreated sewage & domestic water of nagar panchayat of Nanouta, effluents of M/s kisaan sahkari chini mill Nanouta &M/s SMC foods limited Nanouta are discharge into river krishni.
- UP Pollution Control Board has been regularly monitoring 03 sampling station monthly. These sampling stations are located at Meerut & Muzaffarnagar.
- Average data of 2018 indicates that river is polluted. River falls under category E (Irrigation, Industrial Cooling, Controlled waste disposal).


Comparative Chart of Biochemical Oxygen Demand of River Krishni
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
BOD (mg/L)
Jan-18
Feb-18
Mar-18
Apr-18
May-18
Jun-18
Jul-18
Aug-18
Sep-18
Oct-18
Nov-18
Dec-18
Sardhana Barnawa Road,Meerut
At Bhabhisa, Shamli, Muzaffarnagar
At Thanabhwan, Muzaffarnagar
Sampling Point

Water quality of River Kali (West) in UP

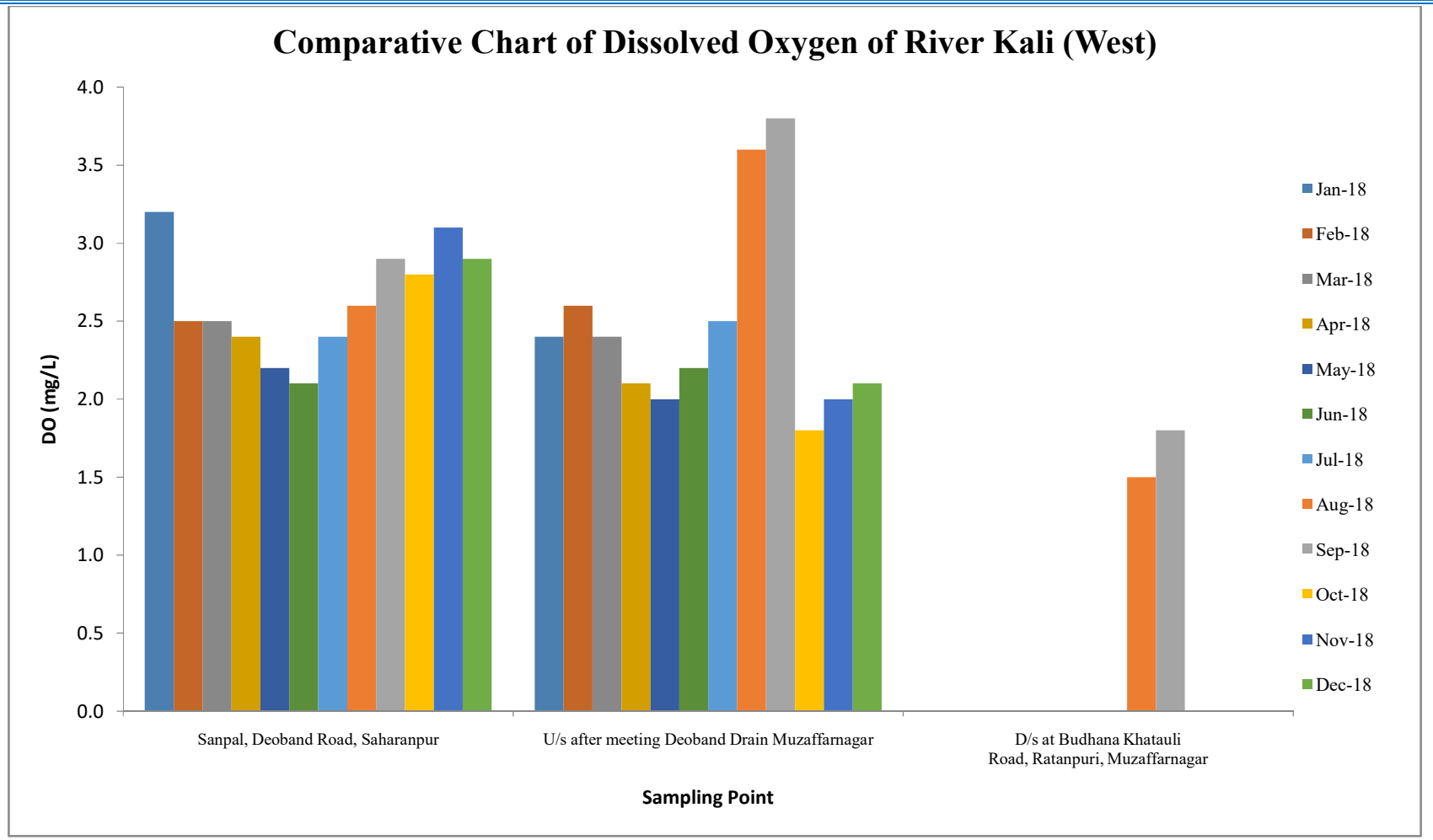
Year - 2018

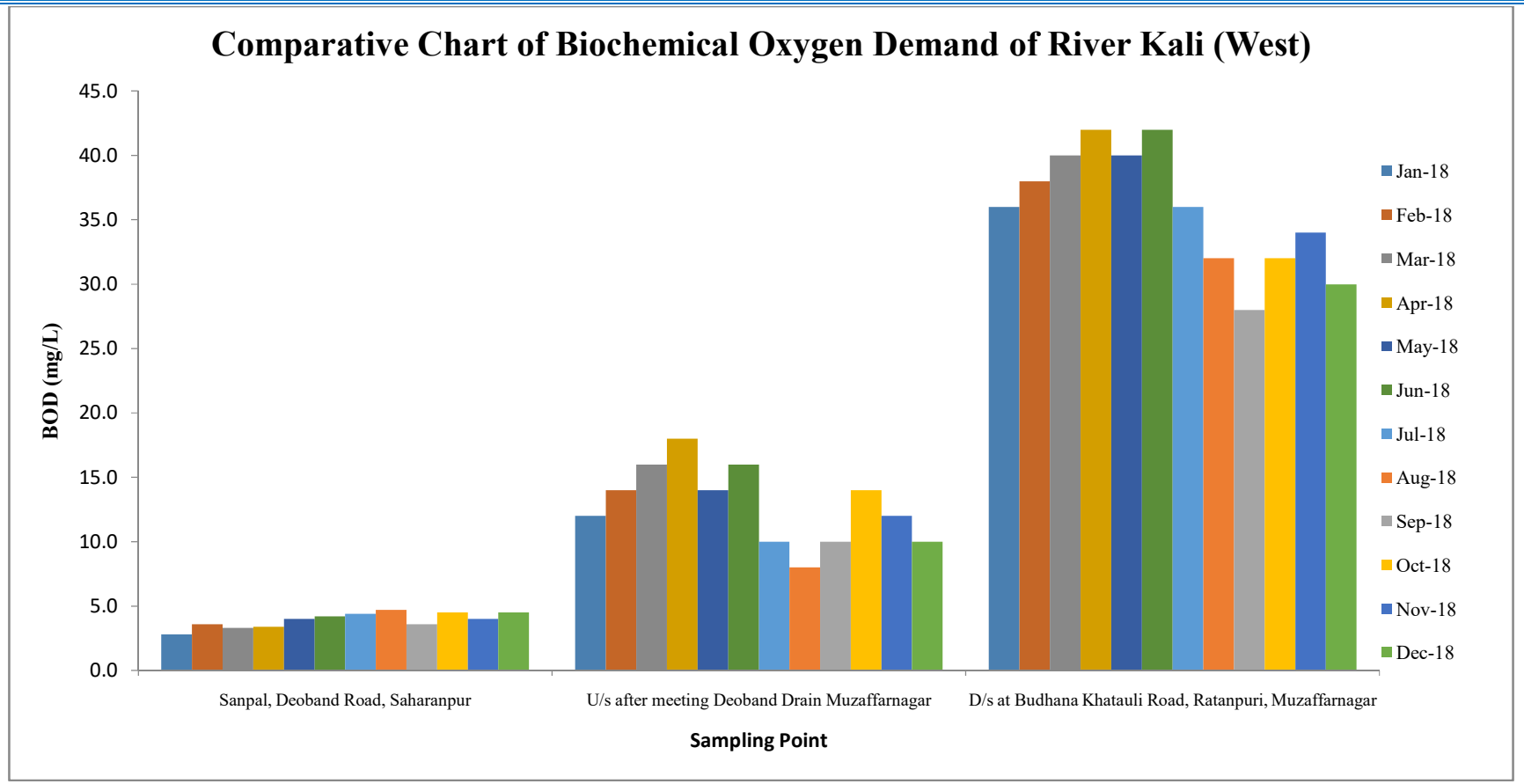
The river originates from Iqbalpur village of district Haridwar and meets river Hindon at Atali village, Muzaffarnagar. During its course domestic, sewage waste and industrial effluent from Muzaffarnagar, Mansurpur and Behrajpur distrct is discharged into river.

- U.P. Pollution Control Board is monitoring water quality through board resources at 03 stations of Kali river (West) on monthly basis.
- These monitoring stations are located in Saharanpur and Muzaffarnagar district.
- Average data of Dissolved Oxygen (D.O.), Biochemical Oxygen Demand (B.O.D.) and Total Coliform (T.C.) values obtained from water quality monitoring during year 2018 indicates that :-

e. Water quality of River Kali degraded at Sanpal, Deoband Road, Saharanpur from category C (Drinking Water Source with conventional treatment and after disinfection) to category E (Irrigation purposes).

f. At U/s Kali (West) after meeting Deoband Drain and D/s Kali (West) at Budhana-Khatauli Road, Ratanpuri, Muzaffarnagar due to low values of DO (below 4mg/l) water quality is suitable for irrigation purposes i.e. Category-E.


Comparative Chart of Dissolved Oxygen of River Kali (West)
DO (mg/L)
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Jan-18
Feb-18
Mar-18
Apr-18
May-18
Jun-18
Jul-18
Aug-18
Sep-18
Oct-18
Nov-18
Dec-18
Sanpal, Deoband Road, Saharanpur
U/s after meeting Deoband Drain Muzaffarnagar
D/s at Budhana Khatauli Road, Ratanpuri, Muzaffarnagar
Sampling Point


Comparative Chart of Biochemical Oxygen Demand of River Kali (West)
BOD (mg/L)
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
Jan-18
Feb-18
Mar-18
Apr-18
May-18
Jun-18
Jul-18
Aug-18
Sep-18
Oct-18
Nov-18
Dec-18
Sanpal, Deoband Road, Saharanpur
U/s after meeting Deoband Drain Muzaffarnagar
D/s at Budhana Khatauli Road, Ratanpuri, Muzaffarnagar
Sampling Point

CLASS OF WATER AS PER IS:2296

Classification	TYPE OF USE
ClassA	Drinking watersourcewithoutconventional treatmentbut afterdisinfection
ClassB	Outdoorbathing
ClassC	Drinking watersourcewith conventional treatment followed bydisinfection.
ClassD	Fish culture and wild life propagation
ClassE	Irrigation,industrial cooling orcontrolled waste disposal

TOLERANCE LIMITS

TABLE-1: TOLERANCE LIMITS FOR INLAND SURFACE WATERS, CLASS – A

S. No.	Characteristic	Tolerance
(1)	(2)	(3)
(i)	pH	6.5 to 8.5
(ii)	Dissolved Oxygen, mg/l,	6.0
(iii)	Bio-chemical Oxygen Demand	2.0
(iv)	Total Coliform Organisms, MPN/100 ml, Max	50
(v)	Colour, Hazen units, Max	10
(vi)	Odour	unobjectionable
(vii)	Taste	Agreeable taste
(viii)	Total Dissolved Solids, mg/l, Max	500
(ix)	Total Hardness (as $CaCO_3$), mg/l ,Max	300
(x)	Calcium Hardness (as $CaCO_3$), mg/l, Max	200
(xi)	Magnesium (as $CaCO_3$), mg/1,Max	100
(xii)	Copper (as Cu), mg/l, Max	1.5
(xiii)	Iron (as Fe), mg/l,Max	0.3
(xiv)	Manganese (as Mn), mg/1,Max	0.5
(xv)	Chlorides (as Cl), mg/l,Max	250
(xvi)	Sulphate (as SO_4), mg/l ,Max	400
(xvii)	Nitrates (as NO_2), mg/1,Max	20
(xviii)	Fluorides (as F,) mg/l,Max	1.5
(xix)	Phenolic compounds(as C_6H_5OH), mg/l,Max	0.002
(xx)	Mercury (as Hg), mg/l ,Max	0.001
(xxi)	Cadmium (as Cd), mg/1,Max	0.01
(xxii)	Selenium (as Se), mg/l ,Max	0.01
(xxiii)	Arsenic (as As), mg/1,Max	0.05
(xxiv)	Cyanides (as CN), mg/l, Max	0.05
(xxv)	Lead (as Pb), mg/l, Max	0.1
(xxvi)	Zinc (as Zn), mg/l, Max	15
(xxvii)	Chromium (as Cr^{6+}), mg/l,Max	0.05
(xxviii)	Anionic detergents, (as MBAS), mg/l ,Max .	0.2
(xxix)	Poly-nuclear aromatic hydrocarbons (PAH),	0.2
(xxx)	Mineral oil, mg/l ,Max	0.01
(xxxi)	Barium (as Ba), mg/l ,Max	1.0
(xxxii)	Silver (as Ag), mg/l Max	0.05
(xxxiii)	Pesticides	Absent
(xxxiv)	Alpha emitters, µc/ml, Max	10^{-9}
(xxxv)	Beta emitters, µc/ml, Max	10^{-8}

TABLE- 2: TOLERANCE LIMITS FOR INLAND SURFACE WATERS, CLASS – B

S. No.	Characteristic	Tolerance Limit
(1)	(2)	(3)
(i)	pH Value	6.5 to 8.5
(ii)	Dissolved Oxygen, mg/1,Max	5.0
(iii)	Biochemical Oxygen Demand (5 days at 20 °C), Max	3.0
(iv)	Total Coliform Organisms, MPN/100 ml, Max	500
(v)	Fluorides (as F)<mg/l, Max	1.5
(vi)	Colour, Hazen units, Max	300
(vii)	Cyanides (as CN), mg/l, Max	0.05
(viii)	Arsenic (as As), mg/l, Max	0.2
(ix)	Phenolic Compounds (as C_6H_5OH) mg/l, Max	0.005
(x)	Chromium (as Cr^{6+}), mg/l, Max	1.0
(xi)	Anionic detergents (as MBAS), mg/l, Max	1.0
(xii)	Alpha emitters, µc/ml, Max	10^{-8}

TABLE - 3: TOLERANCE LIMITS FOR INLAND SURFACE WATERS, CLASS – C

S.No.	Characteristic	Tolerance Limit
(1)	(2)	(3)
(i)	pH Value	6.5 to 8.5
(ii)	Dissolved Oxygen, mg/l Minimum	4.0
(iii)	Biochemical Oxygen Demand	3.0
(iv)	Total coliform organisms, MPN/100 ml, Max	5000
(v)	Colour, Hazen units, Max	300
(vi)	Fluorides (as F), mg/l ,Max	1.5
(vii)	Cadmium (as Cd), mg/l, Max	0.01
(viii)	Chlorides (as Cl), mg/l, Max	600
(ix)	Chromium (as Cr^{6+}), mg/l, Max	0.05
(x)	Cyanides (as CN), mg/l, Max	0.05
(xi)	Total Dissolved Solids, mg/l, Max	1500
(xii)	Selenium (as Se), mg/l, Max	0.05
(xiii)	Sulphates (as SO_4), mg/l, Max	400
(xiv)	Lead (as Pb), mg/l, Max	0.1
(xv)	Copper (as Cu),mg/l,Max	1.5
(xvi)	Arsenic (as As), mg/l, Max	0.2
(xvii)	Iron (as Fe), mg/l, Max	50
(xviii)	Phenolic compounds (as C_6H_5OH), mg/l, Max	0.005
(xix)	Zinc (as Zn), mg/l, Max	15
(xx)	Insecticides, mg/l, Max	Absent
(xxi)	Anionic detergents (as MBAS), mg/l, Max	1.0
(xxii)	Oils and grease, mg/l, Max	0.1
(xxiii)	Nitrates (as NO_3), mg/1,Max	50
(xxiv)	Alpha emititers, µc/mg, Max	10^{-9}
(xxv)	Beta emitters, µc/ml, Max	10^{-8}

TABLE- 4: TEOLERANCE LIMITS FOR INLAND SURFACE WATERS, CALSS – D

S.No.	Characteristic	Tolerance Limit
(1)	(2)	(3)
(i)	pH value	6.5 to 8.5
(ii)	Dissolved Oxygen, mg/l, Min.	4.0
(iii)	Free Ammonia (as N), mg/l, Max.	1.2
(iv)	Electrical Conductance at 25 °C, µS, Max	1000
(v)	Free Carbon Dioxide (as $C0_2$),mg/1, Max	6.0
(vi)	Oils and Grease, mg/l, Max	0.1
(vii)	Alpha emitters, µc/ml, Max	10^{-9}
(viii)	Beta emitters, µc/ml, Max	10^{-8}

TABLE- 5: TOLERANCE LIMITS FOR INLAND SURFACE WATERS, CLASS – E

S.No.	Characteristic	Tolerance Limit
(1)	(2)	(3)
(i)	pH value	6.0 to 8.5
(ii)	Electrical Conductance at 25°C, µS, Max	2250
(iii)	Sodium Adsorption Ratio, Max	26
(iv)	Boron (as B), mg/l, Max	2.0
(v)	Total Dissolved Solids, (inorganic), mg/l, Max	2100
(vi)	Sulphates (as SO_4), mg/l, Max	1000
(vii)	Chlorides (as Cl), Mg/l, Max	600
(viii)	Sodium Percentage, Max	60
(ix)	Alpha emitters, µc/ml, Max	10^{-9}
(x)	Beta emitters, µc/ml, Max	10^{-8}

Appendix-8

MSW improvement action plan time-line for the ULBs of Department of Urban Development, UP

MSW disposal facility to be developed in Saharanpur, Meerut, Baghpat&Ghaziabad along with similar facilities in Nagar Palika Parishad, Nagar Panchayat etc. situated in Catchment area of river Hindon and its tributeries river Kali west, Krishni so that Pollution arising out of dumping of MSW can be effectively controlled. The timeline for key performance indicators with timeline for improvement of MSW as per SWM rules 2016 is as following:

MSW improvement action plan time-line for the ULBs shall be followed as per following details:

S.N.	Key Activities	Timeline (In Months)								
		1	2	3	4	5	6	7	8	9
1	Policy Framework adoption (During the period the ULBs are required to adopt various rules /regulation in terms of bylaws for effective implementation of SWM rules)									
2	With adoption action plan the ULBs along the river will formulate IEC campaign (Specifically designing of promotional materials related to not only just for better waste management in the area but also making common people/institutions aware and sensitise about river pollution and its control measure for making an effective behaviour change. The first 2 months will be needed for preparing the material and widely spreading the message and then it's going to be a continuous effort for a sustained drive to make perceptible change among stakeholders.)									

3	Detail Gap Analysis of existing resources in terms of human resource/equipment/vehicles that are presently deployed and further required for full compliance of SWM rules. During the period each ULB shall prepare a detail micro plan(ward –wise) in sync with the action plan for effective implementation.									
4	Procurement of Required Material / Services after Gap Analysis									
5	Capacity Building. All the key stakeholders from senior officials to the level of safaikarmi is required to be sensitise and trained for the effective compliance of SWM rules and during the period intensive capacity building programmes shall be conducted.									
6	Identification of Land/ Building for waste processing shall be completed for all ULBs within 2 months(decentralised composting/MRF).									
7	Construction /Setting up of decentralised processing facility (composting for wet waste and MRF for dry waste) in all ULBs.									
8	Bulk waste Generators Identification and consultation/capacity building foronsite Waste Management.									
9	Identification and integration of Informal Rag Pickers									
10	Segregation/ collection / transport / processing (10 percent) (by 4th month of Action Plan adoption)									

11	Segregation/ collection / transport / processing (20 percent)									
12	Segregation/ collection / transport / processing (35 percent)									
15	Segregation/ collection / transport / processing (50 percent)									
16	Segregation/ collection / transport / processing (65 percent)									
17	Segregation/ collection / transport / processing (80percent)									
18	Segregation/ collection / transport / processing (100) percent) Within 12 months.									

Source:- Urban Development Deptt. Uttar Pradesh.

Appendix-9

Other Relevant Information

1. **Address of Enviroment Monitoring Portal-** http://upecp.in/
2. **Link for Resource Persons, Weblink for Central Ground Water Board (CGWB) & Miyawaki Forestry.**

S.No.	Institution	Address	Website Link
1	Akhil Bhartiya Sewa Sasthan, Chitrakoot- Gopal Bhai	Akhil Bhartiya Samaj Sewa Sansthan Bharat Janani Parisar Village: Ranipur Bhatt Post: Sitapur District: Chitrakoot Uttar Pradesh India PIN: 210 204	http://absss.in/
2	Muskan jyoti samiti – Mewa Lalji	Chaudhary Purwa, Old Kechwa Farm,Madiyawa Village, Kursi Road, Lucknow-226021Madiyawa Village, Kursi Road, Lucknow-226021	http://www.muskanjyoti.org/
3	Nirmal Kuteya Seechewal- Sant Balveer Singh Ji Seechewal	Post Office Chak Chella, Tehsil Shahkot, Distt Jalandhar, Punjab 144701, INDIA	http://www.nirmalkuteya.com/portal/
4	Central Ground Water Authority	Central Ground Water Board, Northern Region, Bhujal Bhavan, Sector-B. Sitapur Road Yojna, Ram Ram Bank Chauraha, Lucknow - 226021.	http://cgwb.gov.in/aboutcgwb.html
5	Miyawaki, saytrees		https://saytrees.org/miyawaki.html

3. Re-constitution of District Environment Committee by Chief Secretary, Govt. of Uttar Pradesh vide Office Order No- 13/2019/NGT-257/55-Parya-2-2019-44(Writ)/2016 dated 14 June, 2019 is as follows.

1	District Magistrate	Chairman
2	C.D.O.	Member
3	S.S.P.	Member
4	Nominee of CEO, Industrial Development Authority	Member
5	ADM/Incharge, Local Bodies	Member
6	V.C., Development Authority	Member
7	Municipal Commissioner	Member
8	All Executive Officer, Nagar Palika/Panchayat	Member
9	District Supply Officer	Member
10	C.M.O.	Member
11	Ex. En., Irrigation Department,	Member
12	Ex. En., PWD	Member
13	Ex. En., UPPCL	Member
14	R.T.O.	Member
15	G.M., DIC	Member
16	R.M., UPSIDC	Member

17	D.P.R.O.	Member
18	District Agriculture Officer	Member
19	District Horticulture Officer	Member
20	D.E.S.T.O	Member
21	District Information Science Officer	Member
22	Representatives of all Oil & Gas Companies	Member
23	All City Gas Network Companies	Member
24	Regional Officer, U.P. Pollution Control Board.	Member
25	02 NGOs (Environment), nominated by District Magistrate	Member
26	Other Officers/Representatives of Cantonment Board, Jila Panchayat, Jal Nigam, Railways, Ground Water, Industrial Association, Common Bio-Medical Waste Facility, Educational institutions, Specialist etc. nominated by District Magistrate	Member
27	District Forest Officer	Member Convenor

District - Lucknow

Report in compliance to Hon'ble NGT
Order dated 5th February, 2024 & 16th April, 2024 in the matter of
MC Mehta Vs. Union of India & Ors., OA No. 200 / 2014

Submitted by-
District Ganga Committee-Lucknow

1.Sewage

S. N.	NAME OF DRAINS	DATE OF SAMPLE COLLECTION	PARAMETERS																
			PH	COLOUR (HAZEN)	BOD (mg/l)	COD (mg/l)	TSS (mg/l)	TDS (mg/l)	TS (mg/l)	TC (MPN/ 100 ml)	FC (MPN/ 100 ml)	DO (mg/l)	T. Chromium (mg/l)	Copper (mg/l)	Lead (mg/l)	Iron (mg/l)	Zinc (mg/l)	Magnese (mg/l)	Arsenic (mg/l)	Mercury(mg/l)
1	BAIRIKALA NALA	4/6/2024	6.02	50	52	178	92	684	776	2400000	1300000	1.12	ND	0.2457	0.284	2.3349	0.4187	0.1302	0.004	ND
2	GHAILA NALA	4/6/2024	7.02	40	56	198	118	826	944	2300000	1300000	1.02	ND	0.2375	0.3457	2.0903	0.3769	0.1247	0.002	ND
3	NAGARIYA DRAIN	4/6/2024	6.99	50	68	256	88	892	980	2600000	1400000	0.78	ND	0.2375	0.284	2.1718	0.3117	0.1302	0.004	ND
4	GAUGHAT DRAIN	4/6/2024	7.34	40	48	212	84	586	670	1300000	790000	1.82	ND	0.0085	0.0988	0.704	0.024	0.1579	0.002	ND
5	SARKATA NALA	4/6/2024	7.39	50	72	312	92	704	796	1700000	790000	0.96	ND	0.2293	0.284	2.1311	0.3586	0.1302	0.003	ND
6	FAIZULLAGANJ U/S NALA	4/6/2024	7.34	50	58	224	118	754	872	2200000	1100000	1.86	ND	0.2212	0.0988	3.3135	0.2802	0.2299	0.005	ND
7	FAIZULLAGANJ D/S NALA	4/6/2024	6.99	50	56	198	110	744	854	2700000	1400000	NIL	ND	0.2048	0.0988	1.9272	0.3717	0.1136	0.003	ND

8	PATA NALA	4/6/2024	6.94	60	68	216	114	792	906	2400000	1200000	NIL	ND	0.1803	0.1605	2.2806	0.4553	0.1191	0.003	ND
9	MAHESH GANJ DRAIN	4/6/2024	6.95	50	72	210	118	776	894	2800000	1700000	NIL	ND	0.2048	0.2222	2.1175	0.4213	0.1191	0.004	ND
10	RUPPUR KHADRA DRAIN	4/6/2024	6.92	60	80	232	126	782	908	2000000	1100000	NIL	ND	0.2375	0.16	2.199	0.3586	0.1191	0.004	ND
11	MOHAN MEAKINS DRAIN	4/6/2024	7.13	50	46	162	104	812	916	2700000	1300000	NIL	ND	0.3193	0.4691	3.9251	0.5102	0.1468	0.005	ND
12	NER U/S DRAIN	4/6/2024	DRY			DRY			DRY			DRY		DRY			DRY			DRY
13	NER D/S DRAIN	4/6/2024	7.04	50	87	296	118	668	786	2400000	1300000	0.41	ND	0.2048	0.3457	2.0495	0.2619	0.1357	0.002	ND
14	WAZIRGANJ DRAIN	4/6/2024	6.99	50	92	412	122	802	924	2800000	1400000	0.23	ND	0.1803	0.2222	2.3893	0.2985	0.1413	0.002	ND
15	GHASIYARI MANDI DRAIN	4/6/2024	7.01	50	64	198	78	626	704	2600000	1300000	0.89	ND	0.0166	0.1605	1.4787	0.0476	0.1911	0.003	ND
16	CHINA BAZAR DRAIN	4/6/2024	6.88	50	68	196	90	898	988	1600000	920000	1.06	ND	0.0166	0.1605	0.7855	0.0267	0.0748	ND	ND

17	JOPLING ROAD / PARAG DAIRY NALA	4/6/2024	6.95	40	52	208	106	768	874	2700000	1400000	1.92	ND	0.0166	0.1605	1.0845	0.0188	0.1634	0.002	ND
18	LA-PLACE DRAIN	4/6/2024	7.28	50	87	276	92	870	962	3200000	1700000	NIL	ND	0.0166	0.1605	1.5195	0.0606	0.1745	0.003	ND
19	DALIGANJ 1 NALA	4/6/2024	7.24	50	84	258	89	604	693	2400000	1700000	NIL	ND	0.0166	ND	2.0223	0.0293	0.169	0.002	ND
20	DALIGANJ 2 NALA	4/6/2024	7.26	50	65	212	77	586	663	2800000	1400000	–	ND	0.0248	ND	1.3564	0.0397	0.2078	0.002	ND
21	ARTS COLLAGE NALA	4/6/2024	7.37	50	76	238	82	601	683	1700000	1100000	NIL	ND	0.0166	ND	0.6496	0.0162	0.241	0.004	ND
22	HANUMAN SETU NALA	4/6/2024	6.92	40	42	164	70	580	650	1700000	1100000	1.76	ND	ND	ND	0.8127	0.0476	0.1247	0.002	ND
23	TRANS GOMTI NALA	4/6/2024	7.05	40	52	237.6	74	584	658	2600000	1300000	0.86	ND	ND	ND	0.7855	0.1364	0.1357	0.004	ND
24	KEDAR NATH NALA	4/6/2024	7.03	40	44	169.6	68	560	528	2800000	1400000	1.6	ND	ND	ND	1.3156	0.0737	0.1856	0.004	ND
25	MAHANAGAR NISHATG	4/6/2024	7.02	40	42	165.6	72	576	648	2000000	1100000	1.68	ND	ND	ND	3.1232	0.0423	0.1911	0.003	ND

	ANJ NALA																		
26	BABA KA PURVA NALA	4/6/2024	7.06	40	48	192	78	594	672	2300000	1300000	0.92	–	ND	0.037	1.6554	0.0084	0.169	0.002	ND
27	G H CANAL NALA	4/6/2024	7.09	40	40	168	72	570	642	2100000	1100000	1.28	ND	ND	ND	1.6146	ND	0.169	0.002	ND
28	KUKRAIL NALA+SEWAR	4/6/2024	7.56	40	54	192	79	898	977	2200000	1100000	NIL	ND	0.033	ND	2.1718	0.0554	0.1357	0.004	ND
29	JIYAMAU NALA	4/6/2024	6.9	50	48	172	106	798	904	1100000	790000	NIL	ND	ND	ND	0.7448	0.0267	0.1524	0.002	ND
30	LA-MARTINIER NALA	4/6/2024	7.04	50	45	164	96	892	988	2000000	1100000	NIL	ND	ND	ND	2.2126	0.0058	0.1634	0.002	ND
31	SAHARA SHAHAR NALA	4/6/2024	6.97	40	38	134	82	696	778	2300000	1300000	0.95	ND	ND	ND	8.2336	0.0371	0.2133	0.006	ND
32	GOMTI NAGAR NALA	4/6/2024	6.88	50	40	142	90	736	826	2600000	1300000	NIL	ND	ND	ND	7.6356	0.045	0.3795	0.007	ND
33	GOMTI NAGAR VISTAR NALA	4/6/2024	6.95	40	38	140	76	718	794	2100000	1100000	0.84	ND	ND	ND	6.7385	0.0267	0.518	0.006	ND

34	KILA MOHAM MADI NALA	4/6/2024	7.05	40	42	160	88	764	852	920000	450000	NIL	ND	ND	ND	0.5545	ND	0.1136	0.002	ND

2-STP for treating the sewage of the drains ultimately flowing to river Ganga or its tributaries

S.No.	Existing STP location & Capacity	capacity operational	Inlet /Outlet water quality & Quantity	Number of Tapped drain (quantity of discharge)	GAP (in treatment)	Final Discharge point	Propsed /under Construcrtion STP with comletion date
1	345 MLD STP Bharwara, Lucknow	345 MLD	–	7 Partially Tapped & 15 Tapped, drains	NO	Gomti River	Under Construction -19 MLD STP CG CITY, 1.5 MLD STP, Hathi Park, 120 MLD STP G H Canal, 3.5 MLD STP Bairikala, 39 MLD STP Daulatganj

2	56 MLD STP , Daulatganj, Lucknow	56 MLD	–	4 Partially Tapped Drains	No	Gomti River	
3	37.5 MLD STP, Vrindavan Yojna -2 Lucknow	37.5 MLD	–	–	No	Gomti River	Proposed- 50 MLD STP Loniapurwa, 100 MLD STP Bijnaur, 75 MLD STP Bharwra, 120 MLD STP At Basantkunj
4	6.5 MLD STP, Vrindavan Yojna -2 Lucknow	6.5 MLD	–	–	No	Gomti River	

2.1 STP ADDITIONAL INFORMATION

SL. No	Name of Drain	Position of STP With Capacity	GEO/Co-Ordinate	Discharge Quantity from the STP in The Drain	Total Per Day Discharge from the Drain into the River
1	NAGARIYA DRAIN	56 MLD STP DAULATGANJ	26.885794,80.892001	56 MLD	58.56 MLD
2	GAUGHAT DRAIN	56 MLD STP DAULATGANJ	26.884405,80.895366		
3	SARKATA NALA	56 MLD STP DAULATGANJ	26.884280,80.902882		
4	PATA NALA	56 MLD STP DAULATGANJ	26.871869,80.910610		
5	RUPUR KHADRA DRAIN	345 MLD STP BHARWARA	26.884262,80.915762	345 MLD	276 MLD
6	MOHAN MEAKINS DRAIN	345 MLD STP BHARWARA	26.874381,80.915890		
7	NER U/S DRAIN	345 MLD STP BHARWARA	26.866784,80.921983		
8	MAHESHGANJ DRAIN	345 MLD STP BHARWARA	26.874521,80.915861		
9	NER D/S DRAIN	345 MLD STP BHARWARA	26.868492,80.920868		
10	WAZIRGANJ DRAIN	345MLD STP DAULATGANJ	26.865115,80.924867		
11	GHASIYARI MANDI DRAIN	345 MLD STP BHARWARA	26.862170,80.928736		
12	TRANS GOMTI NALA	345 MLD STP BHARWARA	26.860684,80.938388		
13	CHINA BAZAR DRAIN	345 MLD STP BHARWARA	26.862210,80.928686		
14	JOPLING ROAD / PARAG DAIRY NALA	345 MLD STP BHARWARA	26.861697,80.962066		

15	LAPLACE DRAIN	345 MLD STP BHARWARA	26.860275,80.962650		
16	DALIGANJ 1 NALA	345 MLD STP BHARWARA	26.869502,80.925543		
17	JIYAMAU NALA	345 MLD STP BHARWARA	26.840728,80.964010		
18	LA-MARTINIER NALA	345 MLD STP BHARWARA	26.833940,80.962785		
19	MAHANAGAR NISHATGANJ NALA	345 MLD STP BHARWARA	26.863649,80.972005		
20	G H CANAL NALA	345 MLD STP BHARWARA	26.853637,80.968559		
21	DALIGANJ 2 NALA	345 MLD STP BHARWARA	26.868732,80.926688		
22	ARTS COLLAGE NALA	345 MLD STP BHARWARA	26.864747,80.930865		
23	HANUMAN SETU NALA	345 MLD STP BHARWARA	26.861124,80.938664		
24	KEDAR NATH NALA	345 MLD STP BHARWARA	26.862842,80.948699		
25	BABA KA PURVA NALA	345 MLD STP BHARWARA	26.865144,80.961083		
26	KUKRAIL NALA + SEWAR	345 MLD STP BHARWARA	26.867337,80.965990		

STP ADDITIONAL INFORMATION

S.No.	Proposed STP (Location & Capacity)	capacity (operational)	Inlet /Outlet water quality & Quantity	Number of Tapped drain (quantity of discharge)	GAP (intreatment)	Final Discharge point	Proposed /under Construction STP with completion date
1	50 MLD STP Loniapurwa	–	–	–	–	–	Proposed
2	100 MLD STP Bijnaur	_	_	_	_	_	Proposed
3	120 MLD STP At Basantkunj	_	_	_	_	_	Proposed
4	75 MLD STP Bharawra	_	_	_	_	_	Proposed

3. Hotels/ Ashrams/ Dharamshalas/ residential complexes abutting river Ganga or its tributaries

Number of hotel/Ashram/ dharamsala	consent to estabilsed /Operated	STP	discharge point	Action taken
No of hotels - 177	consent to Operate - 27 hotels	STP installed in 27 hotel	municipal drain	show cause issued 150 hotels by state board

Hotel List

S NO	Name	Address	STP Installed Status	Consent Status/Show Cause
1	B D Guest House	A-993 Block-A, Indira nagar, Lucknow	No	Show cause Notice Issued
2	New Sharma Hotel	19 new Market, Charbagh, Lucknow	No	Show cause Notice Issued
3	(Paying Guest) Deluxe Guest House	1 HIG Vikas Khand, Gomti Nagar, Lucknow	No	Show cause Notice Issued
4	Amit Lodge	Krishna building, malvia palli, charbagh Lucknow	No	Show cause Notice Issued
5	Arora Guest House	Arora Guest House (Now 'New Arora Restaurant & Banquet Hall') Sector -E, Rupam Tailor Chauraha, Rajajipuram, Lucknow - 226017 26.8409640o N : 80.8794240o E Owner - Sh. Ankit Arora (Mob. 9838153655)	No	Show cause Notice Issued
6	Arora Palace	3-4 Maniganj saraswatipuram, Near PGI	No	Show cause Notice Issued
7	Awadh Palace	Guest House 367, Mohibullapur, Sitapur Road, Lucknow	No	Show cause Notice Issued
8	Baba Tourist Lodge	85, Kanpur Road Charbag, Lucknow 26.8330030o N : 80.9186280o E	No	Show cause Notice Issued

9	Bakshi Palace	29-A, Krishna Nagar, Lucknow	No	Show cause Notice Issued
10	Carlton Hotel	Shahjanaf Road, Lucknow	No	Show cause Notice Issued
11	Central Hotel	Opposite Nagar Nigam Parking, Aminabad, Lucknow	No	Show cause Notice Issued
12	Chandra Guest House	Snehanagar, Alambagh, Lucknow	No	Show cause Notice Issued
13	Hotel Triveni (old name Chandra Guest House)	3/186 A Vivek Khand, Gomti Nagar, Lucknow	No	Show cause Notice Issued
14	Chandra Guset House	K-61/1, D Block, Rajajipuram, Lucknow	No	Show cause Notice Issued
15	Charan Guest House	C-60, Nirala Nagar, Lucknow	No	Show cause Notice Issued
16	Chaurasia International Hotel	13 APN Road, Lucknow	No	Show cause Notice Issued
17	Chhabra Guest House (hotel Passific Inn)	Krishna Nagar Kanpur Road, Lucknow	No	Show cause Notice Issued
18	City Hotel	126/12/1 BN Road, Lalbagh, Lucknow	No	Show cause Notice Issued
19	City Marriage Hall	295/377 Deendayal Road, ValdaAsharfabad, Lucknow	No	Show cause Notice Issued
20	Classic Guest House	92/196 V/2 Gautam Buddha Marg, basmandi, Lucknow	No	Show cause Notice Issued
21	Danish Lodge	204/2 City Station Hamid Road, Lucknow	No	Show cause Notice Issued
22	Dayal Paradise	C-F 1 & 2 Vipul Khand-5 Gomti Nagar Lucknow	Yes	Consent Grant

23	Deep Hotel	5, Vidhan Sabha Marg, Lucknow 26.8399590o N : 80.9358140o E Ph. 0522-2636441; E-mail: deep.hotel @yahoo.in Representative : Sh. Rajendra Jaiswal (Mob. 7398532022)	No	Show cause Notice Issued
24	Delux Guest House	A 1/1 Vikash Khand, Gomti Nagar, Lucknow	No	Show cause Notice Issued
25	Diamond palace Banquetes ,	Faizabad Road , Lucknow	No	Show cause Notice Issued
26	Elora Guest House	24 B-N- Road, Lucknow	No	Show cause Notice Issued
27	Elora Hotel	3, Lalbagh, Lucknow	No	Show cause Notice Issued
28	Executive Guest House	13 Madan Mohan Malviya Marg	No	Show cause Notice Issued
29	Farm Fresh Houses	Village Pursaini, Gopal Kheda Mohanlalganj, Lucknow	No	Show cause Notice Issued
30	Ganpati Guest House (P. S. International)	183, Gautam Buddha Marg, Lucknow	No	Show cause Notice Issued
31	Gemini Continental Pvt- Ltd-Unit off-2	Vibhuti Khand, Gomti Nagar, Lucknow	Yes	Consent Grant
32	Ghai Guest House	562/36 Ramgarh Colony Kanpur Road Lucknow	No	Show cause Notice Issued
33	Ghanshyam Guest House	12-13, new market , Charbagh , Lucknow	No	Show cause Notice Issued
34	Gitanjali Guest House	73/1 Lokmanganj Charbag, Lucknow	No	Show cause Notice Issued

35	Gomti Hotel,	06 Sapru Marg, Lucknow	No	Show cause Notice Issued
36	Gyan Guest House	Charbagh Lucknow	No	Show cause Notice Issued
37	Hari Grih Guest House	Kursi Road Vikasnagar, Lucknow	No	Show cause Notice Issued
38	Harishchand Guest House	Beside Sunny Toyota, Chhillavan, Kanpur Road, Amusi Airport, Lucknow	No	Show cause Notice Issued
39	Hotel Amber	Naka Hindola, lucknow	No	Show cause Notice Issued
40	Hotel Anant	16 VidhanSabha Marg, Lucknow	No	Show cause Notice Issued
41	Hotel Arif Castle	4 RanaPratap Marg, Lucknow	No	Show cause Notice Issued
42	Hotel Asha	191 Gautam Buddha Marg	No	Show cause Notice Issued
43	Hotel Ashish	Gurudwara road near Naka Hindola police station , Naka	No	Show cause Notice Issued
44	Hotel Bagga Palace	82/5 Guru Govind Marg, Lucknow	No	Show cause Notice Issued
45	Hotel Bandhan	B-11, Faizabad Road, Lucknow	No	Show cause Notice Issued
46	Hotel Charan International	16, Vidhan Sabha Marg, Lucknow	No	Show cause Notice Issued
47	Hotel Comfort Inn	T-C 75 Vibhuti Khand, Gomti Nagar Lucknow	Yes	Consent Grant
48	Hotel Dayal	Gurudwara Road, Naka Hindola, Lucknow	No	Show cause Notice Issued
49	Hotel Deep Awadh	Aminabad Road, Lucknow	No	Show cause Notice Issued
50	Hotel Deep International	18 Station Road, Lucknow	No	Show cause Notice Issued

51	Hotel Deep Palace	12/47, Cant Road, Lucknow	No	Show cause Notice Issued
52	Hotel Dileep	42 Vidhan Sabha Marg, Lucknow	No	Show cause Notice Issued
53	Hotel Europe Palace	R-08, Charbagh, Lucknow	No	Show cause Notice Issued
54	Hotel Galaxy International,	Naka Hindola Crossing, Charbagh, Lucknow	No	Show cause Notice Issued
55	Hotel Ganga Mayya	62/9 Station Road, Lucknow	Yes	Consent Grant
56	Hotel Gemini Continental Pvt-Ltd,	10 Rani Lakshmi Bai Marg, Lucknow	No	Show cause Notice Issued
57	Hotel Good luck	45 Gautam Buddha Marg, Lucknow	No	Show cause Notice Issued
58	Hotel Gulmarg	Aminabad, Lucknow	No	Show cause Notice Issued
59	Hotel Hilton Garden Inn A-Unit of AmritWatlers Pvt- Ltd	Vibhuti Khand Gomti Nagar Lucknow	Yes	Consent Grant
60	Hotel Hindustan (Now Surya Darshan Inn) Subhash Marg, Charbag, Lucknow - 1 26.8333530^{o} N : 80.9212920^{o} E Rep. : Sk. Ahmed (Mob. 8756611433)	Charbagh, Lucknow	No	Show cause Notice Issued
61	Hotel Jwala	41 Cantt Road, Lucknow	No	Show cause Notice Issued
62	Hotel Kohinoor	Station Road, Lucknow	No	Show cause Notice Issued
63	Hotel Madhurima Messrs Narayan Das and Sons	Vibhuti Khand Gomti Nagar, Lucknow	Yes	Consent Grant
64	Hotel Mangalam	92 Gautam Buddha Marg	No	Show cause Notice Issued

65	Hotel Manisha	96/48 Grain Market, Ganeshganj, Lucknow	No	Show cause Notice Issued
66	Hotel Maple Leaf (A-Unit of Commercial Ltd)	located-2 China Bazar Gate Hazratganj, Lucknow	Yes	Consent Grant
67	Hotel Mayur	Charbagh Lucknow	No	Show cause Notice Issued
68	Hotel Meet	Opposite post office Pandariba, Charbagh Lucknow	No	Show cause Notice Issued
69	Hotel Mehrab Logistic and Aviation Ltd	C-P- 74 VirajKhand,Gomti Nagar Lucknow	Yes	Consent Grant
70	Hotel Mera Mann Hotels, Pvt-Ltd	Station Road, Lucknow (MaharanaMahal)	No	Show cause Notice Issued
71	Hotel Midoz Inn	7/84 , Vijay Khand, Lucknow	No	Show cause Notice Issued
72	Hotel Mohit	3rd Floor Shobhit Complex Aminabad, Lucknow	No	Show cause Notice Issued
73	Hotel Naresh (New name Hotel Savitri)	39/79 Narhi Bazar, Lucknow	No	Show cause Notice Issued
74	Hotel Pal Avadh	Hussainganj, VidhanSabha Marg, Lucknow	No	Show cause Notice Issued
75	Hotel Park Awadh,	40 A- Hussainganj, VidhanSabha Marg, Lucknow	No	Show cause Notice Issued
76	Hotel Presidency Inn	Sapru Marg, Hazratganj, Lucknow	No	Show cause Notice Issued
77	Hotel Ramkrishna Gold	43/5 Nawal kishore Road, Hazratganj, Lucknow	No	Show cause Notice Issued
78	Hotel Rangoli	92/220 GB Marg, Lucknow	No	Show cause Notice Issued

79	Hotel Redisson City Centre	29 Cantt- Road Lucknow	No	Show cause Notice Issued
80	Hotel Routes Cooperation A-Unit of Adhaar Wildcan Pvt-Ltd	Bhukhand No-C.P- VirajKhandGomti Nagar Lucknow	Yes	Consent Grant
81	Hotel Royal Inn Jagatyani Hotels Properties Ltd	Shahnajaf Road Lucknow	Yes	Consent Grant
82	Hotel Safari	103/11 Sundar bagh, Lucknow	No	Show cause Notice Issued
83	Hotel Samrat	Charbagh, Lucknow	No	Show cause Notice Issued
84	Hotel Sangam	Charbagh Lucknow	No	Show cause Notice Issued
85	Hotel Seema Palace	19-20, Ismailganj, Lucknow	No	Show cause Notice Issued
86	Hotel Setu Sharma	19 new market, Charbagh, Lucknow	No	Show cause Notice Issued
87	Hotel Sham-e-Awadh	105/300 Fool BaghLucknow	No	Show cause Notice Issued
88	Hotel Shiva	92/172 Gautam Buddha Marg Lucknow	No	Show cause Notice Issued
89	Hotel Shubham	25 VidhanSabha Marg, Lucknow	No	Show cause Notice Issued
90	Hotel Silver Palace	(Located on Munney Lal Dharmashala Road, Pandariba Subji Mandi, Charbag), Saltan Buff Building, Sriram Road, Lucknow; 26.8343340o N: 80.9222480o E; Sh. Becha Lal (Mob. 9532017063), Owner	No	Show cause Notice Issued
91	Hotel SR Grand	Plot No- 65-215/45511-6 Subhash Marg	Yes	Consent Grant

92	Hotel Sumitra	Ganjeshganj, Lucknow	No	Show cause Notice Issued
93	Hotel Sunrise Inn	CP-1/2 Vikas Khand, Gomti Nagar, Lucknow	Yes	Consent Grant
94	Hotel Tulsi	Pandariba, Lucknow	No	Show cause Notice Issued
95	Hotel Udayraj	215/ 216, Moti Nagar, Aishbagh Road, Lucknow	No	Show cause Notice Issued
96	Hotel Vijay Paradise	10 C-P- 05/18 Main Ring Road, Vikas Nagar Lucknow	No	Show cause Notice Issued
97	Hotel Vishwanath	Subhash Marg , Charbagh, Lucknow	No	Show cause Notice Issued
98	Hotel Vrindavan	Charbagh	No	Show cause Notice Issued
99	Hotel Yashoda	Charbagh , Lucknow	No	Show cause Notice Issued
100	Hotel Yatri	7 Vijay Nagar, Lucknow	No	Show cause Notice Issued
101	Jalsa Resort (India) Pvt- Ltd	Gram bakkas, Sultanpur Road, Lucknow	Yes	Consent Grant
102	JK Marriage Hall	273 Tikaitrai TalabBagh, Shitlaji, Rajajipuram, Lucknow	Yes	Consent Grant
103	Kapoor Hotel	52, Hazratganj, Lucknow	No	Show cause Notice Issued
104	Kaveri Hotel	Charbagh , Lucknow	No	Show cause Notice Issued

105	Kiran Lodge	Murli Ngar, Cant Road Lucknow	No	Show cause Notice Issued
106	Kumar Marriage Palace & Hotel	Oppo- Ambedkar Bus Stand, Sujain Pura Alambagh	No	Show cause Notice Issued
107	Kushboo Lodge	60/61, Raza Manzil Basirat Ganj	No	Show cause Notice Issued
108	Leela Hotel	Cantt- Road, Lucknow	No	Show cause Notice Issued
109	Lemontree Hotel	Near Transport Nagar Metro Station Behta, Kanpur Road Alambagh, Lucknow	Yes	Consent Grant
110	Life Styles Hotels Pvt- Ltd	BTC House, 25, Daroga Kheda, Kanpur Road, Lucknow	No	Show cause Notice Issued
111	LLP Hostel	20 Maiji Ki Bagiya, Bada Chandganj, lucknow	No	Show cause Notice Issued
112	Aalmaas Marriage Hall	Napier Road, Near Jama Masjid, Hussainabad, Lucknow	No	Show cause Notice Issued
113	M/s Hotel Jawahar International-Hotel India Awadh	36/18-4 Saprumarg, Lucknow	No	Show cause Notice Issued
114	Madhuban Guest house	531/1, Bada Chandganj, Aliganj, Lucknow	No	Show cause Notice Issued
115	Madhuban Hotel	56/1, Hewatt Road, Lucknow	No	Show cause Notice Issued
116	Maharaja Hotel	Gautam Buddha Marg	Yes	Consent Grant
117	Malti Lodge-Boys Hostel	Shayama Chauraha, Narhi	No	Show cause Notice Issued
118	Mehfil Marriage Hall and Star Guest House	Ganga Prasad Road, Mauliviganj , Lucknow	No	Show cause Notice Issued

119	Metro Guest House	A-4, Sindhunagar, Kanpur Road, Lucknow	No	Show cause Notice Issued
120	Mohan Hotel	Charbagh , Lucknow	No	Show cause Notice Issued
121	Natraj Hotel	Gole Darwaja Chauk, Lucknow	No	Show cause Notice Issued
122	Neera Guest House	E4030, Rajajipuram	No	Show cause Notice Issued
123	New Kundan Leela Palace	Adjacent to Arya Samaj Mandir Chandar Nagar Alambagh	No	Show cause Notice Issued
124	New Ram Krishna	17/2, Ashok Marg, Lucknow	No	Show cause Notice Issued
125	Nilansh Theme Park Resort & Water Park	Village- Badiya, Mall, Malihabad,Lucknow	Yes	Consent Grant
126	Paal Paradise	41/169-180, Ramteerth Marg, Narhi, Lucknow	No	Show cause Notice Issued
127	Pathik Luxury Hotel	7 A ShyamKunj II, Saraswatipuram, Raebareli Road, Near SGPGI	No	Show cause Notice Issued
128	Pawar Guest House	Charbagh, Lucknow	No	Show cause Notice Issued
129	Popular Calcutta Hotel	Pandariba Road, Charbagh, Lucknow	No	Show cause Notice Issued
130	Premier Guest House	120/96 B Veldari Lane, Lalgabh, Lucknow	No	Show cause Notice Issued
131	Purwanchal Lodge	1 A Saraswatipuram, Shyamkunj 2, Near SGPGI	No	Show cause Notice Issued

132	Raj Awadh Hotel	Chowk Mandi Choraha	No	Show cause Notice Issued
133	Raj Darpan Community centre and Club	A Block South city Raebareli Road	No	Show cause Notice Issued
134	Raj Hotel	Vidhan SabhaChauraha, Lucknow	No	Show cause Notice Issued
135	Raj Park View Hotel	Aminabad,, Lucknow	No	Show cause Notice Issued
136	Rajdhani Guest House Marriage Hall	119/01 Suja Road Near Odean Cinema, Lucknow	No	Show cause Notice Issued
137	Ram Krishna Guest House	4 A Park Road, Lucknow	No	Show cause Notice Issued
138	Rohiya Banquet Marriage Hall	446-Pirbukhara, Hardoi Road, Chowk, Lucknow	No	Show cause Notice Issued
139	R-R- Developers (Hotel Levana)	located 99 P- Triloki Nath Road 75 Hazratganj Lucknow	Yes	Consent Grant
140	Rukmani Lodge	50/21, Jai Narayan Road, Husainganj, Lucknow	No	Show cause Notice Issued
141	Sahara Guest House	Near Sabji mandi, Munnilal Dharmasala Road, Lucknow	No	Show cause Notice Issued
142	Saket Regency	3A 8,9A Old RTO Compound, Lucknow	No	Show cause Notice Issued
143	Sapna Clark Inn Located	11/C-P-, 3-Vikas Nagar Lucknow	No	Show cause Notice Issued
144	Sara Marriage Centre	105/38 Golaganj, Lucknow	No	Show cause Notice Issued
145	Saubhagyam Guest House	5/34 Vishal Khand, Gomti Nagar, Lucknow	No	Show cause Notice Issued
146	Saxena Marriage Hall	2CP 204, 205 Rajajipuram, Lucknow	No	Show cause Notice Issued

147	Shanti Lodge	252/149 Rakabganj, Lucknow	No	Show cause Notice Issued
148	Sharma Hotel	19, new Market Charbagh, Lucknow	No	Show cause Notice Issued
149	Shimla Hotel & Resort	332 S, Ahimamau, Sultanpur Road, Lucknow	No	Show cause Notice Issued
150	Shiv Garh Resort Country Club	Kankaha, Raibairailly Road, Mohanlalganj, Lucknow	No	Show cause Notice Issued
151	Shri Sanjay Hotel	Ramteerth Marg Narhi	No	Show cause Notice Issued
152	M/s Anahita Hospitality LLP	Pocket-7, Sector-C, Sushant Golf City, Lucknow, Shri Sarvesh Kumar Goyal,	Yes	Consent Grant
153	Sitaram Atithi Grih	371/22 Badshah Nagar, Lucknow (Correct Address-511/40, R.B.L. Road, New Hyderabad, Near Indira Bridge, Nishatganj, Lucknow– 07 26.87058o N : 80.949952o E Rep. - Sh. Ashwani Kr. Agarwal	No	Show cause Notice Issued
154	S J R Hotels and Properties Ltd	C-P- 73 Viraj Khand Gomti Nagar Lucknow	Yes	Consent Grant
155	Sri K-K- Palace	9/13 Vikas Nagar, Lucknow	No	Show cause Notice Issued
156	Sri Ram Krishna Guest House	4-A Park Road, Hazratganj, Lucknow	No	Show cause Notice Issued
157	Srikar Hotels, La Plas park	34/31K, K/1K2, Shahnajaf Road, Lucknow	Yes	Consent Grant

158	Star Palace	118/145 Cant Road, Ghasiyari Mandi, Lucknow	No	Show cause Notice Issued
159	Suman Lata Hospitality Services Pvt- Ltd (Hotel Ranbir)	C-P-125, Viraj Khand Gomti Nagar, Lucknow	Yes	Consent Grant
160	Sumitra Hotel	Latous Road, Lucknow	No	Show cause Notice Issued
161	Syona Residency	Charbagh , behind bus stand, Lucknow	No	Show cause Notice Issued
162	The Classic Marriage Center	Gol Market Marriage hall, Mahanagar, Lucknow	No	Show cause Notice Issued
163	The Continental, A unit of Group of Hotels	82/1 , Guru Govind Singh Marg, Bans Mandi Chauraha , Lucknow	No	Show cause Notice Issued
164	The Shimla Inn	92/140 Gautam Buddha Marg Lucknow	No	Show cause Notice Issued
165	Thikana Guest House (Now Hotel Di Wine Inn)	B-373/371, Indra Nagar, Near Shalimar Chouraha, Lucknow; 26.876720o N : 80.979840o E; Rep. - Sh. Ashish Joshi, Manager (Mob. 9335723386)	No	Show cause Notice Issued
166	Tikarees Inn	17/3 Ashok Marg, Lucknow	No	Show cause Notice Issued
167	Tulsi Ganga Mandap Bhawan	No- 959, Sector-A, Mahanagar, Lucknow	No	Show cause Notice Issued
168	Tulsi Theatre Community Hall	12, Rani Laxmi Bai Marg, Marriage Centre, Lucknow	No	Show cause Notice Issued
169	Vaishali Hotel	Shri Ram Road, Lucknow	No	Show cause Notice Issued

170	Hotel Tribhuvan	Naka Hindola road Lokman ganj Charbagh	No	Show cause Notice Issued
171	Chartered Hotel Pvt. Ltd. (Now Hyatt Regency)	Plot no. T.C. 13 V, 1st & 2nd, Vibhuti Khand, Gomti Nagar, Lucknow	Yes	Consent Grant
172	Hotel Clark Awadh	8, Mahatma Gandhi Marg, Lucknow	Yes	Consent Grant
173	Hotel Taj Mahal	Vipin Khand, Gomti Nagar, Lucknow - 226010 26.8521840o N : 80.9743420o E Rep. - Sh. Suresh Rana (Mob. 7275077715)	Yes	Consent Grant
174	The Piccadily	Kanpur Road, Lucknow	Yes	Consent Grant
175	D.R. Hotels Pvt. Ltd.	Vipin Khand, Gomti Nagar, Lucknow	Yes	Consent Grant
176	Laxmi Guest house	5 Shahnajaf Road, Lucknow	No	Show cause Notice Issued
177	Laxmi Guest House	560/96, Krishna Nagar Market, Kanpur Road, Lucknow	No	Show cause Notice Issued

4. IV. Industry Effluent discharge by industries whose effluent is ultimately flowing to river Ganga or its tributaries

S.No.	Total no. of industries	Daily effluent discharge	Treatment available (CETP/PETP/ETP operational capacity	Effluent quality analysis (outlet of treatment plants Geo code sampling point)	GAP	Proposed /under construction treatment project (with timeline)	Number of defaulting units Action taken	industrial solid waste generated /day	Manner of Disposal (Industrial solid waste)
1	5	4.36 MLD	ETP Installed in each Industry	Effluent discharge quality As per CPCB guidlines	No	–	–	–	As per CPCB guidelines

List of Industries: GPI Industries Situated In the Catchment Area of River Gomti

Sr.No.	District	Name Of Industry	Operational Status	Sector	Water Consumption (KLD)	Effluent Discharge (KLD)	Details Of ETP	Consent Status	Effluent Discharge Through Drain / Tributory of Gomti river	Whether Achieving Standards or Not
1	Lucknow	Scooter India Ltd, Sarojini Nagar Lucknow	Closed	Automobile	NA	NA	NA	Industry Closed	Industry Closed	Industry Closed
2	Lucknow	Banaskantha Cooperative Milk Products Union Ltd CG City Lucknow	Operational	Milk Processing	1010	1000	Collection tank screen chamber, fat removal tank, primary clarifier, intermittent sump, USB Reactor, Aeration Tank, Secondary Clarifier Intermittent Sump, Treated Water Storage Tank, Anaerobic Sludge Digester Sludge Sump Gas Holder	Granted	Municipal Drain to Gomti river	yes
3	Lucknow	HAL Ltd, Faizabad Road, Lucknow	Operational	Heavy Engineering	4688	1766	Chemical Dosing Tank, Acid/Alkali Mixer, Reaction Tank, SDB	Granted	Municipal Drain to Gomti river	yes

4	Lucknow	Eveready Industries Ltd, Aishbagh, Lucknow	Operational	Metal Surface Treatment	318	170	Reaction Tank Chemical Dosing Tank Holding/Precipitation Tank, Settling Tank, ETP	Granted	G.H. Canal to Gomti river	yes
5	Lucknow	C.P. Milk & food product, Pvt. Ltd. Kursi Road, Lucknow	Operational	Milk Processing	1000	900	Screen Chamber, Collection/Equalization Tank, Primary Clarifier, Aeration Tank, Secondary Clarifier,SDB ETC.	Granted	Kukrail drain to Gomti river	yes
6	Lucknow	Lucknow Producer Cooperative Milk Union Ltd. C G City Lucknow	Operational	Milk Processing	340	300	Holding Cump,Equalization tank, Aeration tank, secondary clarifier, SDB	Granted	Municipal Drain to Gomti river	yes

5. Regulation of Flood Plain Zone

Area-Cities/Towns	Notification of Flood plain zone	Demarcation		Encroachment and Direct Discharge GeoCode/Sampling Point	Encroachment Removal Status	Timeline for Completion
		No Development Zone Pillars	Regulatory Zone Pillars			
1	2	3	4	5	6	7
Gomti River (Demarcation from District Pilibhit to Varanasi)	Office of the Chief Engineer (Sharda Assistant), Irrigation and Water Resources Department, Uttar Pradesh, Lucknow, letter no. 1950 / S.S.A. (U.P.C.O.) / NGT, dated: 05.08. By 2023, the said area has been designated as flood plain zone to stop any kind of construction, encroachment, commercial activity, auction, polluting activities and all other activities up to 100 meters from both the banks of Gomati river from Pilibhit district to Varanasi.	0	0	-	Not Applicable	Not Applicable

6. Afforestation/Plantation along the bank of River Ganga and its tributaries and their flood zones

S. No.	Area-Cities/Towns	Total plantation Geo Code/Sampling Point					Proposed project	Timeline
		Name of the Area	G.P.S Co-ordinates		Area(in hectares)	Plantation(in quantity)		
			Latitude	Longitude				
1	2	3					4	5
1	Lucknow/Urban Area	La Martiniere School Campus	N-26º50'36.522"	E-080º57'50.844"	2.5	2063	Namami Gange(Natural Land)	From October 2020 till March 2025
2	Lucknow/Urban Area	Lok Seva Aayog Campus,Aliganj	N-26º53'34.1"	E-080º56'28.3"	2.5	2062	Namami Gange(Natural Land)	
3	Lucknow/Rural Area	Vanshigadhi Van Block-2	N-26º56'59.586"	E-080º48'4.46"	10	8250	Namami Gange(Natural Land)	
4	Lucknow/Rural Area	Vanshigadhi Van Block	N-26º56'53.298"	E-080º48'44.478"	3	2475	Namami Gange(Natural Land)	
5	Lucknow/Rural Area	Vanshigadhi Van Block-1	N-26º56'53.298"	E-080º48'44.478"	1	825	Namami Gange(Natural Land)	
6	Lucknow/Rural Area	Kolwa Van Block	N-27.0154795	E-080.8073484	5	4125	Namami Gange(Natural Land)	
7	Lucknow/Rural Area	Khakra Van Block	N-26.9988972	E-080.8191456	5	4125	Namami Gange(Natural Land)	
8	Lucknow/Rural Area	Sifatnagar Pashuchar	N-26º44'49"	E-081º10'45"	4	3300	Namami Gange(Natural Land)	

		Bhumi(Rahmannagar)						
9	Lucknow/Rural Area	Ghuskar purani bannd Gomti	N-26º46'39"	E-081º11'10"	6	4950	Namami Gange(Natural Land)	
10	Lucknow/Rural Area	Nehrunagar Bahrauli School	N-26.695831	E-81.173638	4	3300	Namami Gange(Natural Land)	
11	Lucknow/Rural Area	Salempur Gangaganj Stadium	N-26º44'09"	E-081º10'35"	1	825	Namami Gange(Natural Land)	From October 2020 till March 2025
12	Lucknow/Rural Area	Rasoolpur Gau Ashram Kendra	N-26º43'21"	E-081º10'26"	6	4950	Namami Gange(Natural Land)	
				Total-	**50**	**41250**		
13	Lucknow/Rural Area	Akadriyakala	N 27°04'13.1"	E 80°49'59.4"	2.6	390	Namami Gange (Agricultural Land-Plantation by Farmers)	
14	Lucknow/Rural Area	Baurumau	N 26°56'43.8"	E 80°50'33.7"	0.5	75	Namami Gange (Agricultural Land-Plantation by Farmers)	From April 2021 till March 2026
15	Lucknow/Rural Area	Gopramau	N 26°58'30.3"	E 80°50'55.1"	2	300	Namami Gange (Agricultural Land-Plantation by Farmers)	
16	Lucknow/Rural Area	Kodri Bhauli	N 26°57'15.1"	E 80°52'05.2"	15.03	2255	Namami Gange (Agricultural Land-Plantation by Farmers)	

17	Lucknow/Rural Area	Raitha	N 26°59'22.4"	E 80°50'19.5"	5.33	800	Namami Gange (Agricultural Land-Plantation by Farmers)	From April 2021 till March 2026
18	Lucknow/Rural Area	Ghaila	N 26°54'20.8"	E 80°53'18.2"	10.74	1610	Namami Gange (Agricultural Land-Plantation by Farmers)	
19	Lucknow/Rural Area	Ghobaila	N 26°54'01.5"	E 80°53'18.4"	6.83	1025	Namami Gange (Agricultural Land-Plantation by Farmers)	
20	Lucknow/Rural Area	Dugwar	N 26°57'24.1"	E 80°49'33.0"	1.37	205	Namami Gange (Agricultural Land-Plantation by Farmers)	
21	Lucknow/Rural Area	Kathwara	N 27°01'14.5"	E 80°50'36.0"	18.8	2820	Namami Gange (Agricultural Land-Plantation by Farmers)	
22	Lucknow/Rural Area	Jamkhanwa	N 27°06'06.7"	E 80°50'33.6"	1.8	270	Namami Gange (Agricultural Land-Plantation by Farmers)	
23	Lucknow/Rural Area	Barauna	N 26°46.33"	E 81°0'20"	5	750	Namami Gange (Agricultural Land-Plantation by Farmers)	
24	Lucknow/Rural Area	Ataria	N 26°58'21.1"	E 80°50'23.9"	5	750	Namami Gange (Agricultural Land-Plantation by Farmers)	
25	Lucknow/Rural Area	Aaumau	N 27°01'21.5"	E 80°48'10.7"	5	750	Namami Gange (Agricultural Land-Plantation by Farmers)	

26	Lucknow/Rural Area	Aadampur	N 27°00'05.3"	E 80°48'26.2"	5	750	Namami Gange (Agricultural Land-Plantation by Farmers)	From April 2021 till March 2026
27	Lucknow/Rural Area	Bhanaura	N 27°00'14.0"	E 80°48'54.7"	5	750	Namami Gange (Agricultural Land-Plantation by Farmers)	
28	Lucknow/Rural Area	Bahraura	N 27°04'12.0"	E 80°49'31.5"	8	1200	Namami Gange (Agricultural Land-Plantation by Farmers)	
29	Lucknow/Rural Area	Basahri	N 27.059737°	E 80.838283°	5	750	Namami Gange (Agricultural Land-Plantation by Farmers)	
30	Lucknow/Rural Area	Raniamau	N 27°02'35.9"	E 80°50'26.8"	5	750	Namami Gange (Agricultural Land-Plantation by Farmers)	
31	Lucknow/Rural Area	Khakra	N 27°00'40.4"	E 80°46'33.3"	6	900	Namami Gange (Agricultural Land-Plantation by Farmers)	
32	Lucknow/Rural Area	Nikrojpur	N 27°02'16.8"	E 80°50'23.4"	5	750	Namami Gange (Agricultural Land-Plantation by Farmers)	
33	Lucknow/Rural Area	Bhagolwa	N 27°04'11.9"	E 80°49'31.7"	5	750	Namami Gange (Agricultural Land-Plantation by Farmers)	
34	Lucknow/Rural Area	Kolwa	N 27°00'37.5"	E 80°49'22.6"	5	750	Namami Gange (Agricultural Land-Plantation by Farmers)	

35	Lucknow/Rural Area	Tehtana	N 27°00'53.4"	E 80°50'24.7"	5	750	Namami Gange (Agricultural Land-Plantation by Farmers)	From April 2021 till March 2026
36	Lucknow/Rural Area	Majhauwa	N 27°01'24.9"	E 80°49'20.1"	5	750	Namami Gange (Agricultural Land-Plantation by Farmers)	
37	Lucknow/Rural Area	Manjhi	N 27°01'46.7"	E 80°50'05.2"	5	750	Namami Gange (Agricultural Land-Plantation by Farmers)	
38	Lucknow/Rural Area	Madwana	N 27°23'06.2"	E 80°49'07.1"	5	750	Namami Gange (Agricultural Land-Plantation by Farmers)	
39	Lucknow/Rural Area	Gopramau	N 26°58'40.1"	E 80°50'21.5"	18.03	2704	Namami Gange (Agricultural Land-Plantation by Farmers)	
40	Lucknow/Rural Area	Vanshigadhi	N 27°57'3.9"	E 80°49'8.6"	18.61	2791	Namami Gange (Agricultural Land-Plantation by Farmers)	
41	Lucknow/Rural Area	Jehta	N 26°55'15.14"	E 80°50'30.83"	9.37	1405	Namami Gange (Agricultural Land-Plantation by Farmers)	
42	Lucknow/Rural Area	Kakrabaad	N 26°56'36.48"	E 80°49'44.88"	8	1200	Namami Gange (Agricultural Land-Plantation by Farmers)	
43	Lucknow/Rural Area	Devaria	N 26.851908°	E 81.077708°	3	450	Namami Gange (Agricultural Land-Plantation by Farmers)	

44	Lucknow/Rural Area	Sikanderpur	N 26°50'40.49124"	E 81°4'43.06944"	10	1500	Namami Gange (Agricultural Land-Plantation by Farmers)	From April 2021 till March 2026
45	Lucknow/Rural Area	Ghuskar	N 26°45'51.6"	E 81°11'0.7"	8	1200	Namami Gange (Agricultural Land-Plantation by Farmers)	
46	Lucknow/Rural Area	Sifatnagar	N 26°44'8.58"	E 81°11'06.6"	4	600	Namami Gange (Agricultural Land-Plantation by Farmers)	
47	Lucknow/Rural Area	Rahmatnagar	N 26°44'42.7"	E 81°10'4.1"	2	300	Namami Gange (Agricultural Land-Plantation by Farmers)	
48	Lucknow/Rural Area	Madaarpur	N 26°44'41.8"	E 81°11'24.4"	1.33	200	Namami Gange (Agricultural Land-Plantation by Farmers)	
49	Lucknow/Rural Area	Vibipur	N 26°49'57.8"	E 81°6'31.7"	4	600	Namami Gange (Agricultural Land-Plantation by Farmers)	
50	Lucknow/Rural Area	Dawdamau	N 26°50'9.5"	E 81°5'42.6"	4	600	Namami Gange (Agricultural Land-Plantation by Farmers)	
51	Lucknow/Rural Area	Jalaudinagar	N 26°44'09"	E 81°11'55"	7	1050	Namami Gange (Agricultural Land-Plantation by Farmers)	
52	Lucknow/Rural Area	Jaisana	N 26°42'58.9"	E 81°12'36.3"	1.33	200	Namami Gange (Agricultural Land-Plantation by Farmers)	

53	Lucknow/Rural Area	Sallahimau	N 26°49'37.2"	E 81°4'40.8"	4	600	Namami Gange (Agricultural Land-Plantation by Farmers)	From April 2021 till March 2026
54	Lucknow/Rural Area	Dhaurhara	N 26°47'29.1"	E 81°9'26.7"	2	300	Namami Gange (Agricultural Land-Plantation by Farmers)	
55	Lucknow/Rural Area	Shaikhnaghat	N 26°48'31.0"	E 81°02'51.8"	1	150	Namami Gange (Agricultural Land-Plantation by Farmers)	
56	Lucknow/Rural Area	Mastemau	N 26°48'41.9"	E 81°1'33.4"	2	300	Namami Gange (Agricultural Land-Plantation by Farmers)	
57	Lucknow/Rural Area	Shahji Ka Purwa	N 26°49'45.3"	E 81°7'36.4	10	1500	Namami Gange (Agricultural Land-Plantation by Farmers)	
58	Lucknow/Rural Area	Chuharia	N 26°48'58"	E 81°3'55.8"	2	300	Namami Gange (Agricultural Land-Plantation by Farmers)	
59	Lucknow/Rural Area	Chaurasi	N 26°49'0.3"	E 81°3'19.2"	8	1200	Namami Gange (Agricultural Land-Plantation by Farmers)	
60	Lucknow/Rural Area	Shutukharna	N 26°45'21"	E 81°9'36.4"	1.33	200	Namami Gange (Agricultural Land-Plantation by Farmers)	
61	Lucknow/Rural Area	Gauriakala	N 26°48'47.7"	E 81°09'53"	2	300	Namami Gange (Agricultural Land-Plantation by Farmers)	

62	Lucknow/Rural Area	Halimabaad	N 26°48'21"	E 81°3'19.2"	12	1800	Namami Gange (Agricultural Land-Plantation by Farmers)	From April 2021 till March 2026
63	Lucknow/Rural Area	Runmau	N 26°47'34.4"	E 81°09'20"	2	300	Namami Gange (Agricultural Land-Plantation by Farmers)	
64	Lucknow/Rural Area	Koryani	N 26°48'53.3"	E 81°7'37.8"	7	1050	Namami Gange (Agricultural Land-Plantation by Farmers)	
65	Lucknow/Rural Area	Aliamau	N 26°49'4.1"	E 81°7'42.9"	7	1050	Namami Gange (Agricultural Land-Plantation by Farmers)	
66	Lucknow/Rural Area	Kashiram Purwa	N 26°46'53.2"	E 81°10'56.8"	8	1200	Namami Gange (Agricultural Land-Plantation by Farmers)	
				Total	**316**	**47400**		

Afforestation/Plantation along the bank of River Ganga and its tributaries and their flood zones										
District-Lucknow (MGNREGA)										
S. No.	Area-Cities/ Towns	Block Name	GP Name	Place of Project	GPS Co-ordinates		Area (Hect)	No. Of Plants	Proposed project	Time line
					Latitude	Longitude				
1	2	3	4		6	7	8	9	10	11
FY- 2023-24										
1	Rural	Chinhat	Raitha	Amrit Sarowar and various Place me plantation	26.98690	80.85814	1.43	2508		
2	Rural	Chinhat	Dugwar	Amrit Sarowar and various Place me plantation	26.95206	80.95206	1.47	2539		
3	Rural	Chinhat	Sarora	Gram Samaj ke various Place me plantation	26.93894	80.85871	1.35	2507		
4	Rural	Chinhat	Dhubela	Gram Samaj ke various Place me plantation	26.94930	80.85753	1.25	2505		
5	Rural	Chinhat	Boreymau	Gram Samaj ke various Place me plantation	26.96262	80.84509	1.37	2504		
FY-2023-24										
1	Rural	Gosaiganj	Bakkas	Rajesh Ke khet se Gomti Nadi Ke Kinare Vricharopan	26.818	81.036	1.85	1500	-	
2	Rural	Gosaiganj	Bakkas	Nala se Shekhnaghat tak Nadi Ke Kinare Vricharopan	26.816	81.04	1.3	2500	-	
3	Rural	Gosaiganj	Baruwa	Vricharopan ka Kary Nadi Talab v Road ke Kinare	26.811	81.14	1.23	3000	-	
4	Rural	Gosaiganj	Churahiya	Chaurasi rani mandir gata no 119 Vricharopan	26.817	81.055	1.1	1500	-	
5	Rural	Gosaiganj	Dhaurahra	Basra talab ki Chauhadi Shesh bhumi par Vricharopan	26.776	81.149	1.79	3000	-	
6	Rural	Gosaiganj	Fareedpur	Gata no 613 Vricharopan	26.448	81.14	1.12	1300	-	
7	Rural	Gosaiganj	Fareedpur	Gomti Nadi Ke Kinare Vricharopan	26.669	81.124	1.87	2000	-	

8	Rural	Gosaiganj	Gauriya Kala	Vricharopan Kabristan par Gap Filling	26.81	81.14	0.86	900	-	
9	Rural	Gosaiganj	Gauriya Kala	Vricharopan Gomti Nadi Ke Kinare	26.811	81.149	2.023	4000	-	
10	Rural	Gosaiganj	Ghuskar	Gomti Nadi ke Kinare Vricharopan	26.779	81.188	2.1	3500	-	
11	Rural	Gosaiganj	Mohammdabad	Gomti Nadi ke Kinare Gram Samaj ki bhumi par Vricharopan	26.775	81.259	2.26	4000	-	
12	Rural	Gosaiganj	Noorpur Behta	Vricharopan Gata No 497 v 498 par Gap Filling	26.82	81.072	2.1	2500	-	
13	Rural	Gosaiganj	Rahmat Nagar	Charagah me Gap Filling Vricharopan	26.739	81.169	1.3	3500	-	
14	Rural	Gosaiganj	Salempur	Gata no 26 v 27 Banjar Bhumi par Gap Filling Vricharopan	26.749	81.194	1	1000	-	
15	Rural	Gosaiganj	Salempur	Turki Talab v Rushi Talab par Vricharopan	26.744	81.201	1.78	2550	-	
16	Rural	Gosaiganj	Suriya Mau	Sati Chaura talab Vricharopan	26.811	81.142	1.2	1200	-	
17	Rural	Gosaiganj	Suriya Mau	Panchayat Bhawan me Vricharopan	26.81	81.141	1.3	1500	-	
18	Rural	Gosaiganj	Suriya Mau	Pashuchar me Vricharopan	26.809	81.141	0.75	800	-	

FY- 2023-24

1	Rural	Kakori	Kakori	Gata no 571 charagah me plantation	26.94429	80.829442	3.21	2600		
2	Rural	Kakori	Gopramau	Ambedkar park mushikheda me	26.99165	80.811477	0.5	2300		
				Munshikhed gaon se damar road ke dono taraf	26.98784	80.803533	0.08			
				raniyamau talab per plantaiton	26.994353	80.813859	0.25			
				Hadhi talab per	26.988988	80.811095	0.25			
3	Rural	Kakori	Banshigarhi	Mahagada gram samaj ki jameen per	26.953172	80.816601	0.5	2300		
				shamshanghat per	26.957204	80.814421	0.25			
				Khel maidan per	26.94105	80.801615	0.25			

FY- 2023-24										
1	Rural	Mall	Bahraura	2023-24 Me Khalihan Bhumi Par Plantation	27.066101	80.830906	0.5	2350		
				2023-24 Me Shanti Niketan Vidhya Mandir Parisar Me Plantation	27.071134	80.822127	0.25			
				2023-24 Me Talab Par Plantation	27.073526	80.830169	0.25			
				2023-24 Me Nala Kinare Plantation	27.070056	80.823314	1.75			
2	Rural	Mall	Sahpur Godva	Khel Maidan Per Plantation	27.004896	80.08369	0.25	2600		
				Jheel Ke Kinare Plantation	27.32092	80.32871	1.5			
3	Rural	Mall	Tikrikala	Budhe Baba Mandir Sthal Per	27.0873516	80.848383	1	2500		
				Pachayat Bhawan	27.083955	80.82243	0.25			
				Gomti Nadi Ke Kinare	27.0814366	80.8317	2.5			
4	Rural	Mall	Badaiyan	Brahm Dev Sthan Per	27.089792	80.825615	0.995	3718		
				Pashu Ashraye Kendra Per	27.089307	80.825267	1.24			
				Khel Maidan Bhawani Kheda	27.089792	80.525614	0.53			
				Badaiya Khalihan 1	27.089792	80.523321	0.25			
				Bhawani Kheda Talab Per	27.089792	80.829615	0.21			
5	Rural	Mall	Madvana	Gaushala	27.04053	80.817175	1	2000		
				Gadha Talab Per	27.063531	80.83536	0.5			
				Adarsh Talab Per	27.058497	80.821225	0.5			
				Gomti Nadi Ke Kinare	27.06434	80.8358	2.5			
6	Rural	Mall	Manjhi Nikrojpur	Khalihan Ki Bhumi Per	27.033873	80.833013	1	2500		
				Mangleshwar Mandir Per	27.027066	80.834184	1.5			
				Gomti Nadi Ke Kinare	27.025802	80.830231	3			
7	Rural	Mall	Kolva Bhanaura	Gomti Nadi Ke Kinare	27.018397	80.841065	2	1500		
8	Rural	Mall	Manjhauva	Khel Maidan Per Plantation	27.5261	80.12463	0.5	2600		
				Gomti Nadi Ke Kinare	27.89621	80.00468	1.5			
				Total			**64.568**	**79781**		

7. Mining and stone crushing in river bed and flood plain zone of River Ganga and its tributaries

Area of Mining	FIR/Case registered/per year	Vehicles/Mineral seized	Action taken status	Cases pending in court	Enforcement of EMGSM 2020 and Sustainable sand mining management guidelines 2016
Nil	Nil	Nil	Nil	Nil	Nil

1. The Tribunal has already directed for furnishing following information by order dated 24.11.2023:-

(1) District Ganga Protection Plan at city/ town level District Ganga Protection Committee (DGPC) is required to formulate the action plan for each city and town located on main stem of river Ganga and its tributary and such Action Plan has to be prepared in accordance with the River Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016 (para 6 and 55)- Model District Ganga Protection Plans for Shahjahanpur, Bareilly, Moradabad and Udham Singh Nagar (Uttarakhand) have been prepared by supporting agencies GIZ & WWF-India. On the basis of the model District Ganga Protection Plan, the District Ganga Protection Plan for Lucknow will be also be prepared as and when the technical sessions and workshops will be conducted by the supporting agencies.

(2) Contents of the Action Plan (Consolidated District Wise Action Plan including each City and Town abutting river Ganga and its Tributary)

Zero waste Action Plan for Solid Waste, Legacy Waste, Construction & Demolition Waste, E-Waste and Biomedical Waste

Daily Solid Waste Generation & Treatment Details (FRESH WASTE)															
Names of ULB	**Waste generation (in TPD)**	**Break up of Waste Generated (in TPD)**		**Method of Treatment in the City (in TPD)**				**Final Destination of Each of components**	**Fraction of Waste Utilization**				**Action Plan to Process 100% waste**		
		Urban Areas	**Rural Areas**	**Organic Material (Wet Waste)**	**Inerts**	**RDF**	**other**		**Bio compost units**	**Used in Cement Units**	**Land Fill Sited**	**Other Uses of inerts**	**Time lines**	**Budget outlay**	**Proposal**
Lucknow	2000	2000		1100	300	400	200	As per CPCB Norms	690 TPD Windrow Composting and 235 TPD using Bio-composting.	190 TPD	300TPD	200 TPD	Dec-25	100 Cr.	Tender is under process.

Legacy Waste										
Names of ULB	Legacy waste site	Area covered by the legacy waste	Quantity of the waste (In MT) in each site	Composition of the Waste				Process adopted to remediate at each site	Final destination of the componets at	Action plan to remediate and recover the sites at (In sq km) with earmarked Budget
				Inerts (%) (Construction Waste, Wood, Glass, etc)	Compst (%) organic	RDF (%) Plastic	If any other material (%)			
Lucknow	Shivri	30 Ha	18.5 Lac MT	20%	56%	20%	4%	Bioremediation	Cement Industry and Low land area	Total 106.18 Cr was approved by the State Government but has not been received yet.

Construction & Demolition Waste Status										
Names of ULB	Waste generatoin (in TPD)	C&D waste processing site	C&D waste processing site area	C&D waste processing plant capacity	Byproducts of C&D Waste			C&D waste secondary collection points	Final Constructed Products	Action Plan to Process 100% waste	
					Dust	10 mm Aggregate	40 mm Aggregate			Time lines	Budget
Lucknow	265	Harikansh Garhi	2.5 Ha	100TPD operational and under upgradation upto 300 TPD	50%	20%	30%	08 No.	Boundary wall panels and columns, Flower Pots, Concrete Blocks and Zig Zag bricks	30.09.2024	5Cr.

E-Waste Status												
Names of ULB	**Waste generatoin (in TPD)**	**E-Waste Storage Center (in no.)**	**E-Waste Plant**	**Glass**	**Byproducts of E-Waste**							**Collection of E-waste From Feb to June 2024 in Ton**
					Metal						**Plastic**	
					33%							
					Iron	**Zinc**	**Copper**	**Aluminium**	**Lead**	**Other**		
Lucknow	2	1	E- waste Treated by Karoshambhav Recycling plant is in Modinagar, Ghaziabad	**37%**	**52%**	**3%**	**18%**	**12%**	**3%**	**12%**	**30%**	**16.241**

Biomedical Waste:

No. of Government hospitals						**No. of private hospitals**		
DH	CHC	BMC	UPHC	PHC	Total	Nursing Home	Diagnostic pathology	Total
10	11	08	52	30	111	747	639	1386

Situation of daily generated waste in government hospitals	Around 550kg/per day
State of refinement	within 24-28 hours
Situation of daily generated waste in private hospitals	Around 3000-3500 Kg/day
State of refinement	within 24-28 hours

It is also respectfully informed that, compliance with the Biomedical Waste Rules 2016 as per the order of Hon'ble NGT regarding not mixing the waste generated from all the private hospitals and government hospitals of the city with other waste and arrangement for disposal of biomedical waste in the city. Everyone concerned has been directed to do so. In medical units, the action taken by the bio-medical waste service provider firms for disposal of waste is regularly inspected by the in-charge of the medical unit.

2.1 Sewage Management

S.No.	Action Points	Parameters	Required Information
1	Surface Water Contamination (Through Drains)	Sewage Generation (MLD)	779.373
2		Existing Sewage Treatment Capacity (MLD)	480.5
3		Current Level of Sewage Treatment (MLD)	480.5
4		Gap In Sewage Treatment (MLD)	298.871
5		Status of Tapping of Drains and Timeline	231.294 MLD is tapped

6		Details of STP's (Installed, Under Construction, Proposed, Timeline)	Existing:- 345MLD Bharwara (Mrach-24), 3.50 MLD Barikula (July 24), 39 MLD & 56 MLD Daulataganj (March 24), 37.5+1.5 MLD Vikas Nagar. Proposed:- 50 MLD Loni Purva, 120 MLD & &5 MLD- Bharwara, 100 MLD- Qila Mohamadi Drain.
7		Details of other Treatment Arrangement like- Oxidation Pond, FSTP, Construction, Proposed, Timeline)	-
8		Status of Compliance of existing treatment capacity	-
9	Treated discharge from STP/CETP	Present use of Treated water discharge from STP/CETP and proposed action plan for reuse of treated water with timeline	This information will be given by jal Sansthan/ Jalnigam
10	Odour/smell ouisance from all drains and some rivers at well	Identification as stretches of drains and rivers were odour/smell is detached and steps taken for the control of same	Stretches of drains and rivers in the jurisdiction of municipal corporation is being monitored regularly for the detection of any odour/smell, if found then treated accordingly mostly odour/smell is found near STP which is being sanitised regularly to remove odour/smell.

2.2 Drains joining Ganga and Tributary- As mentioned in above **Table (1)**

2.3 Septage management (In case of no STP)

(i) Status of Septage management (with reference toFSTP/STP):----
(ii) Management of Grey water and its disposal:----

2.4 Industrial Pollution Control

(i) Attach the list on no. of industries generating trade effluents, their place of disposal and compliance including CETPs (town wise): As mentioned in above **Table (4)**

(3)Water quality status

Provide water quality status of Ganga and its tributaries in the District and city/ town in terms of its fitness for Bathing waterquality that is, FC and FS:

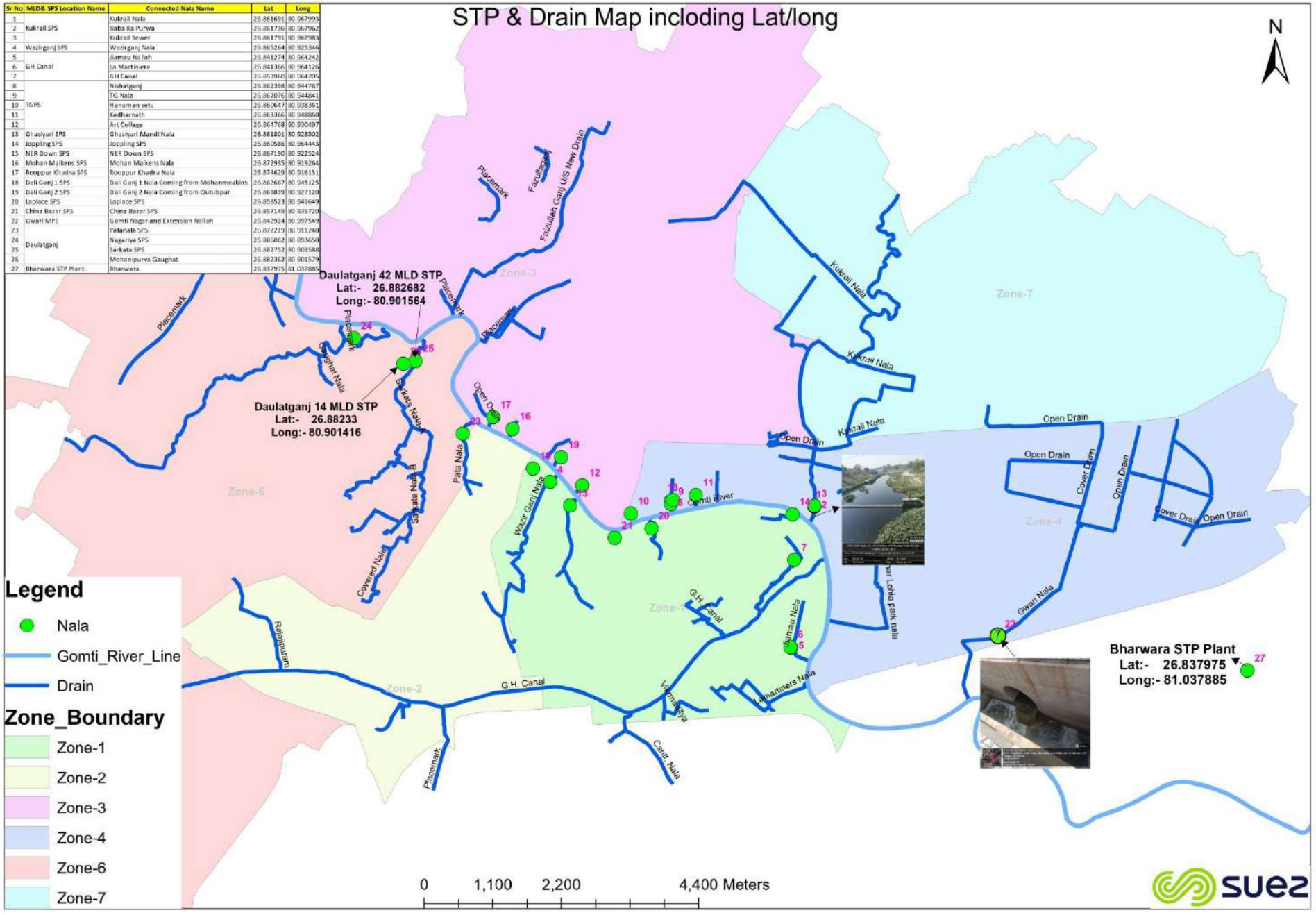
S.N.	NAME OF SAMPLING POINT	DATE OF SAMPLE COLLECTION	PH	COLOUR (HAZEN)	BOD (mg/l)	COD (mg/l)	TSS (mg/l)	TDS (mg/l)	TS (mg/l)	DO (mg/l)	TC (MPN/100ml)	FC (MPN/100ml)	Remark
1	GHAILA GHAT, GOMTI RIVER	10-08-23	7.52	30	3.2	15.2	40	162	202	5.12	5400	2400	
2	U/S GAU GHAT, GOMTI RIVER	10-08-23	7.43	30	3.8	18.4	42	172	214	4.23	7000	3300	
3	D/S GOMTI RIVER NEAR BAIRAJ	10-08-23	7.18	30	9.5	39.2	55	204	259	2.14	160000	92000	
4	D/S GOMTI RIVER NEAR EKANA STADIUM	10-08-23	7.13	30	10.8	43.6	58	216	274	1.87	200000	110000	

(4) Notification of **Flood Plain Zones**: As mentioned in above **Table (5)**

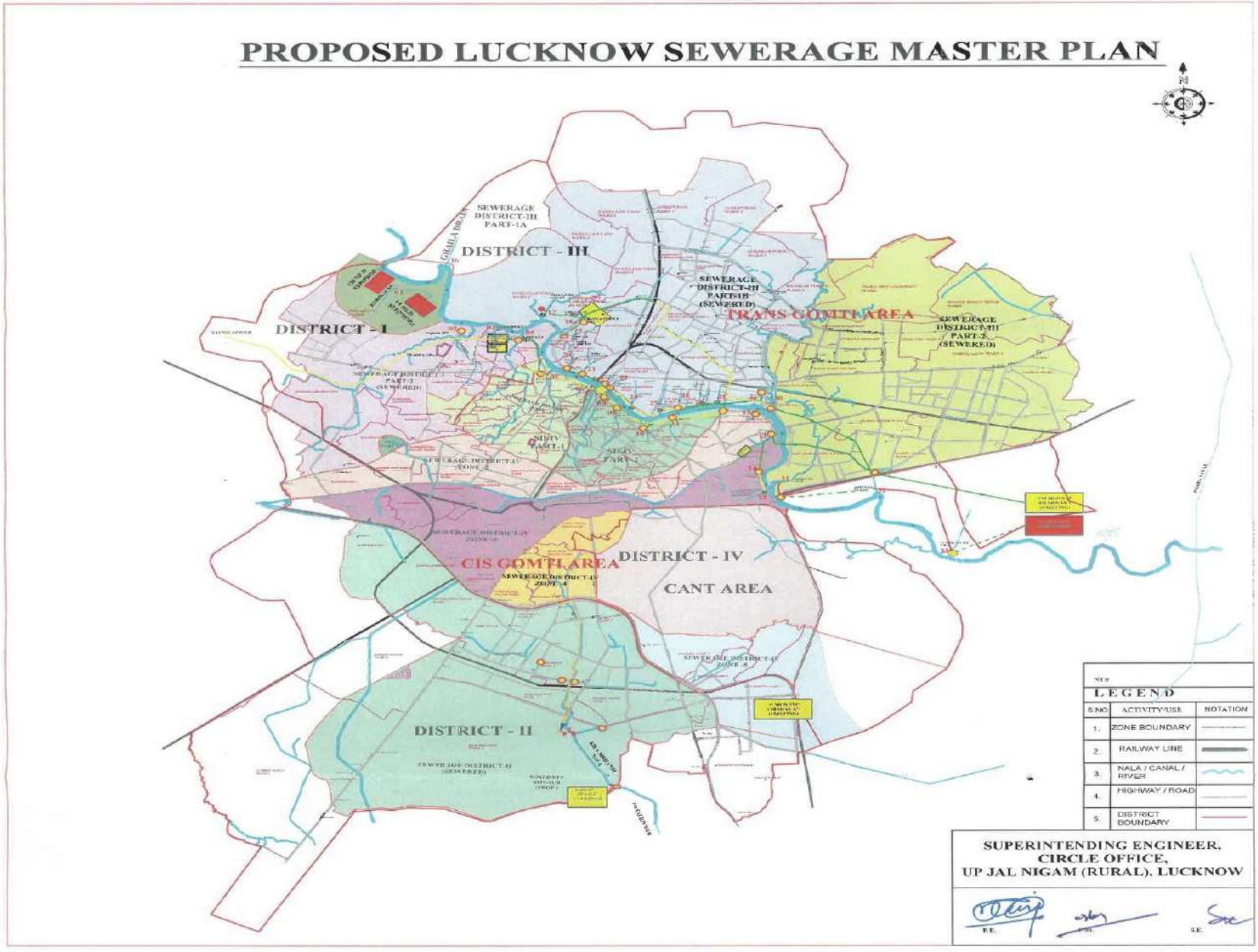
(5) Issues relating to **Environmental Flow**: In order to keep the Gomti and other rivers environment friendly in Lucknow district, continuity of water flow is maintained as per the available water. Also, to maintain proper water level and flow, additional water supply is done through Mahdaiya/ Atriya Scape. Cleaning of aquatic vegetation growing in the water flow area of the river is done as per requirement. During monsoon, the gates of the barrage etc. built in the flow area of the river are opened due to which the rain water flows into the entire river. To preserve the aquatic animals in the river, in case of water shortage, necessary water is taken through canals. So that necessary arrangements can be made for the availability of water for animals and birds and human livelihood in the river area. Perforated diaphragm wall has been constructed to maintain the river course of Gomti river under Lucknow city. Apart from this, in the past, silt and dirt was removed from the foothills of the Gomti river flowing in Lucknow city. In view of the floods that have occurred in the past, dams have also been constructed on the Gomti River at appropriate levels to ensure that human livelihoods are not affected. From time to time, action is also taken to remove encroachments at the demarcation points of the river. In compliance with the instructions given from time to time by the Uttar Pradesh Government, efforts are also being made for the revival/revival of most of the dead rivers.

Best practices adopted in the district Lucknow- Works undertaken under Namami Gange program in the district by various departments especially UPJN (R/U), UPPCB, State Forest Department (Afforestation/Wetlands/Conservation), Enforcement activities, Livelihood generation, General and mass awareness through IEC School Outreach program. In Lucknow District, 5230 ha of area is under use of bio-pesticides. Several outreach and awareness activities are been held in the district by Forest Department and District Ganga Committee, Lucknow to make the people aware about their responsibilities and for a sustainable future. As a part of 'Jan Ganga'(people-river connect),Ganga Artis are been conducted as a part of Namami Ganga Programme at various places to celebrate 'Ganga-Utsav' and other cultural programmes.

Sr No	MLD& SPS Location Name	Connected Nala Name	Lat	Long
1	Kukrail SPS	Kukrail Nala	26.861691	80.967993
2		Baba Ka Purwa	26.861736	80.967962
3		Kukrail Sewer	26.861791	80.967983
4	Wazirganj SPS	Wazirganj Nala	26.865264	80.925346
5	GH Canal	Jiamau Nallah	26.841274	80.964242
6		La Martiniere	26.841366	80.964126
7		G H Canal	26.853960	80.964705
8	TGPS	Nishatganj	26.862398	80.944767
9		TG Nala	26.862076	80.944841
10		Hanuman setu	26.860647	80.938361
11		Kedharnath	26.863366	80.948860
12		Art College	26.864768	80.930497
13	Ghasiyari SPS	Ghasiyari Mandi Nala	26.861801	80.928502
14	Joppling SPS	Joppling SPS	26.860586	80.964443
15	NER Down SPS	NER Down SPS	26.867190	80.922524
16	Mohan Malkens SPS	Mohan Malkens Nala	26.872935	80.919264
17	Rooppur Khadra SPS	Rooppur Khadra Nala	26.874629	80.916131
18	Dali Ganj 1 SPS	Dali Ganj 1 Nala Coming from Mohanmeakins	26.862667	80.945125
19	Dali Ganj 2 SPS	Dali Ganj 2 Nala Coming from Qutubpur	26.868839	80.927120
20	Laplace SPS	Laplace SPS	26.858523	80.941649
21	China Bazar SPS	China Bazar SPS	26.857149	80.935720
22	Gwari MPS	Gomti Nagar and Extension Nallah	26.842924	80.997549
23	Daulatganj	Patanala SPS	26.872219	80.911240
24		Nagariya SPS	26.886062	80.893650
25		Sarkata SPS	26.882752	80.903588
26		Mohanipurva Gaughat	26.882362	80.901579
27	Bharwara STP Plant	Bharwara	26.837975	81.037885



PROPOSED LUCKNOW SEWERAGE MASTER PLAN



कार्यालय जिलाधिकारी, लखनऊ।

पत्रांक 8461 / 29–1 (जिला गंगा समिति) लखनऊ, दिनांक 05 अप्रैल, 2024।

सेवा मे,

सुश्री प्रियंका स्वामी,
स्टैंडिंग काउंसेल ऑफ स्टेट ऑफ उ०प्र० फॉर एनजीटी,
एफ–13, जंगपुरा विस्तार, जंगपुरा,
नई दिल्ली– 110014।

विषयः– मा0 राष्ट्रीय हरित अधिकरण, नई दिल्ली द्वारा Original Application No. 200/2014 (C.W.P No.3727/1985) (I.A. No. 340/2022) M.C. Mehta Versus Union of India & Ors. में पारित आदेशों के अनुपालन के सम्बन्ध में।

सन्दर्भः– उ0प्र0 शासन लखनऊ के पत्र संख्या–एन.जी.टी.–208 / 81–7–2024–43(पर्या) / 2014 टी.सी.–3 दिनांक–26.03.2024

उपरोक्त विषयक संदर्भित अनुक्रम में मा० राष्ट्रीय हरित अभिकरण, नई दिल्ली द्वारा ओ०ए० संख्या–200 / 2014 एम०सी० मेहता बनाम यूनियन ऑफ इण्डिया व अन्य के अन्तर्गत पारित आदेश दिनांक 05 / 02 / 24 के अनुपालन में जिला गंगा समिति,लखनऊ द्वारा जनपद के विभागवार तैयार की गयी आख्या की बुकलेट की सॉफ्ट एवं हार्ड कॉपी संलग्न कर सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित है ।

संलग्नक–उपरोक्तानुसार ।

6/4/24

(सूर्य पाल गंगवार)
जिलाधिकारी / अध्यक्ष,
जिला गंगा समिति,लखनऊ।

पत्रांक / 29–1 (जिला गंगा समिति) दिनांकित।

1–प्रतिलिपि सचिव, पर्यावरण, वन एवं जलवायु परिवर्तन विभाग, उ०प्र० शासन को आपके पत्र संख्या–एन.जी.टी. –208 / 81–7–2024–43(पर्या) / 2014 टी.सी.–3 दिनांक–26.03.2024 के क्रम में सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित ।

2–प्रतिलिपि सदस्य सचिव उ०प्र० प्रदूषण नियंत्रण बोर्ड, लखनऊ को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

(सूर्य पाल गंगवार)
जिलाधिकारी / अध्यक्ष,
जिला गंगा समिति,लखनऊ।

Compliance report of Hon'ble NGT order dated 24.01.2024 in O.A. No. 200/ 2014 MC Mehta Vs UoI and Ors.

Submitted by:-
District Ganga Committee, Deoria

1. Sewage

information is to be submitted on the basis of end point sample analysis of the concerned drain

Drain(city/ town)	Total drain capacity	Generation/ day	PH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride etc)	Nitrates	DO	TC	FC	Outlet flow and geo code/ sample point	Color/ odour	Discharged Into
Dosing Point 4- Near Sabzi Mandi, (NPP) Doeria	13 MLD	13	7.58	26	96	52.6	980	Fe-0.67, Cr-BDL, PB- BDL, Ar-BDL, Mn- BDL, CU-BDL, Zn-0.26, Hg- BDL, Fl-0.46	4.6	< 2.0	1600	920	26.507476^{o}/83.77806^{o}	Light blackish	Ghaghra River
Patel Nagar Pul Drain (NPP Barhaj)	3 MLD	3 MLD	7.2	28.5	127	72	940	As-0.09; Cd-BDL; Hg- BDL;Pb-BDL; cr-.06;Zn-0.19;	8.5	4.7	1400	820	26.2747;83.724	Light Black	Ghaghara River
Sant Ravidas Ghat Drain (NPP Barhaj)	1 MLD	1 MLD	7.45	24.5	118	84	856	As-0.09; cd-BDL; Hg-BDL;pb-BDL; Cr-o.07;Zn-0.29;FRC-BDL	7.5	4.7	1640	780	26.2719;83.721	Light Black	Ghaghara River
Dorachi nala (NP Bariyarpur)	2	2	7.2	24	132	45	840	Fe-0.74, Cr.-0.08, Pb.- BDL, As.-0.06, Mn.- BDL, Cu.- BDL, Zn.-0.28, Hg.BDL.	56	4.9	1640	830	26.48349/83.868347	Light Blackrish	Doranchi Nala
Near Gadhdha (NP Baitalpur)	2	2	7.5	27	119	75	830	Fe-0.72, Cr.-0.07, Pb.- BDL, As.-0.08, Mn.- BDL, Cu.- BDL, Zn.-0.34, Hg.BDL.	6.8	4.5	1450	850	26.44358/83.88427	Light Blackrish	Gadhdha
1-Petrol Pump se Bandhe tak 2-BNIC se Bandhe tak(NP Majhauliraj)	-	1- 1-25 MDL 2- 3.75 MDL	7.23	24	126	94	-	-	-	-	68	65	-	-	Discharge into oxidation pond for Horticulture

Ashok Nagar Wartno-15 (NP Tarkulwal)	1 MLD	0.90 MLD	7.4	27	110	90	-	-	-	-	42	62	-	-	ERIGATION / HO RTICULTRURE
Hairya lala nala (NP Salempur)	2 MLD	1.90 MLD	7.6	29	120	92	-	-	-	-	45	65	-	-	ERIGATION / HO RTICULTRURE
1-Purvi Kabristan Nala 2- Main Bazar Nala (NP Lar)	-	1- 1.25 MLD 2- 3.75 MLD	7.23	24	126	94	-	-	-	-	68	65	-	-	Discharge into oxidation pond for Horticulture

Note (B.D.L. Below Detection Linits, D.L. Delection Limits. N.D- Not Detacted)

2. STP for treating the sewage of the drains ultimately flowing to river ganga or its tributaries

Existing STP (location & capacity)	Capacity (operational)	Inlet/ Outlet water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point	Proposed/ under construction STP With completion date
N/A	N/A	N/A	N/A	N/A	N/A	N/A

Note :- 17 STP proposals have been sent for approval by UP JN (Urban), Derioa. Out of 17, 3 Proposals have been approved but no budget have been processed till date

2.1 STP ADDITIONAL INFORMATION

NAME OF DRAIN	POSITION OF STP WITH CAPACITY	GEO/COORDINATES	DISCHARGE QUANTITY FROM THE STP IN THE DRAIN	TOTAL PER DAY DISCHARGE FROM THE DRAIN INTO THE RIVER
N/A	**N/A**	**N/A**	**N/A**	**N/A**

Note :- 17 STP proposals have been sent for approval by UP JN (Urban), Derioa. Out of 17, 3 Proposals have been approved but no budget have been processed till date

3.Hotels /Ashrams/Dharmshalas/residential complexes abutting river Ganga or its tributaries

name of Hotels/ ashrams/ dharamshalas	Consent to establish/ operate	STP	Discharge point	Action taken
Gagan restaurant	Only provided Sanitation Certificate	N/A	NPP. Drain	Notice issued
Jaiswal hotel	Only provided Sanitation Certificate	N/A	NPP. Drain	Notice issued
Geetanjali hotel, station road deoria	Only provided Sanitation Certificate	N/A	NPP. Drain	Notice issued
Deepali hotel station road deoria	Only provided Sanitation Certificate	N/A	NPP. Drain	Notice issued
Raj hotel ,deoria	Only provided Sanitation Certificate	N/A	NPP. Drain	Notice issued
Apsara hotel abubakar nagar, deoria	Only provided Sanitation Certificate	N/A	NPP. Drain	Notice issued
Prahalad guest house,deoria	Only provided Sanitation Certificate	N/A	NPP. Drain	Notice issued
National guest house,abubakar nagar ,deoria	Only provided Sanitation Certificate	N/A	NPP. Drain	Notice issued
Indian guest house,abubakar nagar ,deoria	Only provided Sanitation Certificate	N/A	NPP. Drain	Notice issued
Vaishnawi guest house,bus station,deoria	Only provided Sanitation Certificate	N/A	NPP. Drain	Notice issued
Guest house kasaya dhala,deoria	Only provided Sanitation Certificate	N/A	NPP. Drain	Notice issued
Roya hotel,deoria	Only provided Sanitation Certificate	N/A	NPP. Drain	Notice issued
Jaiswal hotel,heaven station road deoria	Only provided Sanitation Certificate	N/A	NPP. Drain	Notice issued
Hotel dream city ,station road deoria	Only provided Sanitation Certificate	N/A	NPP. Drain	Notice issued
Metro hotel,railway staion ke samne,deoria	Only provided Sanitation Certificate	N/A	NPP. Drain	Notice issued

Rajshree hotel,barhaj road ,deoria	Only provided Sanitation Certificate	N/A	NPP. Drain	Notice issued
Baranwal hotel radhaw nagar ,deoria	Only provided Sanitation Certificate	N/A	NPP. Drain	Notice issued
Gulabkunj hotel,deoria	Only provided Sanitation Certificate	N/A	NPP. Drain	Notice issued
Samridhi hotel,van bibhag ke samne ,deoria	Only provided Sanitation Certificate	N/A	NPP. Drain	Notice issued
Sambhu hotel,deoria	Only provided Sanitation Certificate	N/A	NPP. Drain	Notice issued
Vujaya guest house,roadways,deoria	Only provided Sanitation Certificate	N/A	NPP. Drain	Notice issued
Tiger palace hotel,shobhnath nagar deoria	Only provided Sanitation Certificate	N/A	NPP. Drain	Notice issued
Shiv residency guest house,eoria	Only provided Sanitation Certificate	N/A	NPP. Drain	Notice issued
Hotel kailash ,raghaw nagar ,deoria	Only provided Sanitation Certificate	N/A	NPP. Drain	Notice issued
Hotel amran,abu bakar nagar deoria	Only provided Sanitation Certificate	N/A	NPP. Drain	Notice issued
Hotel parth,kasya road ,deoria	Only provided Sanitation Certificate	N/A	NPP. Drain	Notice issued
Hotel ashirbad,civil line road ,deoria	Only provided Sanitation Certificate	N/A	NPP. Drain	Notice issued
Haweli guest house,station road ,deoria	Only provided Sanitation Certificate	N/A	NPP. Drain	Notice issued

4. IV. Industrial Effluent discharge by industries whose effluent is ultimately flowing to river Ganga or its tributaries

Total number of Industries	Daily effluent discharge	Treatment available (cetp/ petp/ etp operational capacity)	Effluent quality analysis (outlet of treatment plants Geo code sampling point)	GAP	Proposed/ under construction treatment project (with timeline)	Number of defaulting units- Action taken	Industrial solid waste generated / day	Manner of disposal (Industrial solid waste)
02	1400 KLD	Yes 1400 KLD	Effluent quality Outlet of ETP Bajaj Hindusthan LTD. (Sugar Unit), Pratoppur, District-Deoria Date 06.02.2024 Ph-7.62 TSS-25 Mg/l BOD-26 Mg/l COD-116 Mg/l M/s Deoria Paper Mills LTD. Hata Road, Narayanpur , Deoria Date 15.02.2024 Industry based on Zero Liquid Discharge (ZLD)	0 %	Not Applicable	O No action taken	398.6 MT (Hazar Dous Waste)	TSDF site M/S Bharat Oil Waste Management Co. Kanpur Dehat

5. Regulation of Flood Plain Zone:

Area- cities/ towns	Notification of flood plain zone	Demarcation		Encroachment & direct discharge Geo Code / Sampling point	Encroachment removal status	Timeline for completion
		No development zone pillars	Regulatory zone pillars			
Deoria	No such notification has been issued.	-	-	No encroachment in the flood plain zone.	-	-

6. Afforestation/ Plantation along the bank of River Ganga and its tributaries and their flood plain zones

Area- cities/ towns	Total plantation Geo Code/ Sampling Point	Proposed project	Timeline
Deoria	31, 48,860.00	District Plantation	2023-24

Area – cities/ towns	Total plantation Geo Code/ Sampling point	Proposed project	Timeline
Bhagwan majha se parsiya bandh(190960164264118)- gorra nadi	8000 plants. Geo coordinates-N-26.2948,E-83.3233	SOCIAL FORESTRY	2023-24
Parsiya se tighara marg(190960164262624)-gurra nadi	5500 plants Geo coordinates-N-26.2919,E-83.3055		
Kaparwar bandh(190961163164122)-Ghaghara nadi	5500 plants Geo coordinates-N-26.2909,E-83.5947		
Kaparwar bandh(190961163164126) Ghaghara nadi	5500 plants Geo coordinates-N-26.2939,E-83.5858		
Sohgara chunki bandh(190962163964874) Chhoti gandak	8000 plants Geo coordinates-N-26.1449,E-83.5959		
Balpur gram samaj(190959164465789) Chhoti gandak	6400 plants Geo coordinates-N-26.3840,E-83.5323		
Sarora dhum nagar gram samaj patch 2(190959163666093) Chhoti gandak	6400 plants Geo coordinates-N-26.2846,E-83.5321		
Raibari se kerwania bandh(190963163401133) chhoti gandak	5500 plants Geo coordinates-N-26.2421,E-83.0112		
Mahen bandh mohra se samogar tak(190961163163557)-rapti nadi	4400 plants Geo coordinates-N-26.3256,E-83.5948		
Bhagalpur se reawali sampark marg(1909621633266127)-saryu nadi	5500plants Geo coordinates-N-26.1012,E-83.5415		

7. Mining and Stone Crushing in river bed and flood plain zone of River Ganga and its tributaries:

Area of mining	FIR/ case registered/ year	Vehicles/ mineral seized	Action taken status	Cases pending in Court	Enforcement of EMGSM 2020 and Sustainable sand mining management guidelines 2016
A/N	A/N	A/N	A/N	A/N	A/N

District Ganga Committee Deoria

1. The tribunal has already directed for furnishing following information by order dated 24.11.2023:-

(1) District Ganga Protection Plan at city/ town level

District Ganga Protection Committee (DGPC) is required to formulate the action plan for each city and town located on main stem of river Ganga and its tributary and such Action Plan has to be prepared in accordance with the River Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016 (para 6 and 55) District Level Ganga Samiti Constitute by DFO for monthly basis meeting on the chairmanship of District Magistrate.

(2) Contents of the Action Plan (Consolidated District Wise Action Plan including each City and Town abutting river Ganga and its Tributary)

2.1 Sewage Management

(1) Sewage Generation (MLD) (For entire District and individual Town wise):

S.l. No.	Name of ULB	Total Sewege Generation. (MLD)
1	Deoria (NPP)	13
2	Gaura Barhaz (NPP)	4
3	Rudrapur (NP)	4
4	Bhatani Bazar (NP)	1
5	Majhauli Raj (NP)	1.4
6	Salempur (NP)	1.5
7	Lar (NP)	3
8	Bhatparrani (NP)	1
9	Bariyarpur (NP)	1
Total Sewage of Entired Istrict		29.9

(i) Sewage generation (for entire District and individual town wise): **29.9 MLD**

(ii) Existing Sewage Treatment Capacities : **There is No STP in Deoria Town. Generated Sewage Treated by Bio/Phyto Remediation.**

(iii) Quantity of sewage is being treated (utilization capacity) : **13 MLD Sewage Treated by Bio/Phyto Remediation.**

(iv) Performance of STPs particularly for FC : **There Is No STP in Deoria Town. Generated Sewage Treated by Bio/Phyto Remediation.**

PH	BOD	COD	TSS	DO	TC	FC
7.58	26	96	52.6	<2.0	1600 MPN	920 MPN

(v) Where treated sewage is being discharged (to Ganga or tributaries) : **Ghaghar River**

(vi) Reasons for Under-utilization of STPs (Connectivity of Households/ laying of sewer lines) :**NA**

(vii) Current Gap in sewage treatment : **0.0 There Is No STP in Deoria Town. Generated Sewage Treated by Bio/Phyto Remediation.**

(viii) Time bound plan for bridging the gap and tying up with financial arrangements and not delaying Tendering and identifying executing agencies or having any other issues : **17 STP proposals have been sent for approval by UP JN (Urban), Derioa. Out of 17, 3 Proposals have been approved but no budget have been processed till date**

(ix) Where untreated sewage (when there is no STP) is discharged (Ganga /Tributaries): **Generated Sewage is treated by Bio/Phyto Remediation and falling in Kurna Nala River.**

2.2 Drains joining Ganga and Tributary

(i) Number of drains carrying sewage- sullage or industrial waste water joining Ganga/ tributaries with their Quantity and Quality: **Civil Line Drain Discharge Point of Drain Is Into Kurna Nala River.**

(ii) Drains joining outside city and town limits but, either joining in village or nearby town: **NA**

(iii) Inclusion of sewage flowing in drains into total sewage generation figures of each city and town and their interception and diversion to STPs:

2.3 Septage management (In case of no STP)

(i) Status of Septage management (with reference to FSTP/STP): Only One FSTP Jatmalpur Deoria (32 KLD)

(ii) Management of Grey water and its disposal: **There is No STP in Deoria Town. Generated Sewage Treated by Bio/Phyto Remediation.**

Industrial Pollution Control

(A) Attach the list on no. of industries generating trade effluents, their place of disposal and compliance including CETPs (town wise): **There is no any CETPs installed in District Deoria. Water Polluting Industries is Installed individual ETP.**

(3) Water quality status

Provide water quality status of Ganga and its tributaries in the District and city/ town in terms of its fitness for Bathing water quality that is, FC and FS:

S.No	Date	Sample Collection Point	Coluor (Hazen)	Odour	PH	DO (mg/l)	BOD	COD	TSS	TDS (mg/l)
1	27-01-2024	Near Sabzi Mandi, Deroia	Light Blackish	Odourless	7.58	<2.0	26	96	52.6	980
2	27.01.2024	Petel Nagar Pul Drain (Npp Barhaj)	Light Blackish	Odourless	7.2	4.7	28.5	127	72	940
3	06.03.2024	Kurna Nala Narayanpur Deoria	Light Blackish	Odourless	7.70	7.6	5.2	34	112	282
4	11.03.2024	Sant Ravidas Ghat Drain (NPP Barhaj)	Light Blackish	Odourless	7.45	4.7	24.5	118	84	856

5	11.03.2024	Dorchi nala (NP Bariyarpur)	Light Blackish	Odourless	7.2	4.9	24	132	45	840
6	13.03.2024	Near Gadhdha (NP Baitalpur)	Light Blackish	Odourless	7.5	4.5	27	119	75	830

(4) Notification of **Flood Plain Zones**: **Government of Uttar Pradesh has been issued of notification date 17.10.2018 regarding no construction/no development Zone under 100 meter of both bank river.**

(5) Issues relating to **Environmental Flow:**

1. **Consideration, the desired information be submitted in the above format.**
2. **Therefore, for each of the district/city/town under consideration, the desired information be submitted in the above format.**

Best Practices adopted in District for Sewage Treatment, Industrial Effluent Treatment, Waste Management or Eco friendly Novel ideas

- Training on organic Farming had been organized during 04.09.2023- 14.09.2023 in Gauri Bazar & pathardewa in 1000 hectares.
- 215 farmers have received training on Natural Farming until October 2023 in Desai Deoria, Tarkulwa, Pathardewa, Bhagalpur and Barhaz in 500 hectares area.
- Crop Machinery is being made available at 80% Discount. Solar pump is available at 70% subsidy Waste decomposers are free of cost.

- Kisan paathshala 7.0 is currently being organized in 2019 villages where farmers are made aware on various agricultural related topics/problems/issues during 2 Days per crop season. (Participation of farmers is usually around 50-60).
- No of FPO's in the District: 30
- Khet Talab Yojna: Promotion of agriculture in conjunction with Pisciculture.
- 39 Ganga Gram Sewa Samiti is constituted in district-Deoria.
- Ganga Aarti is organized on regular basis on Kalicharan Ghat.
- 4503 IEC activities were conducted in the district.
- Various programs are celebrated such Har Ghar Har Ghat, Swatchta Pakhwara are organized in the district (Schools, Ghats, etc.) through which people living near the ghats are sensitized on conservation & Preservation of

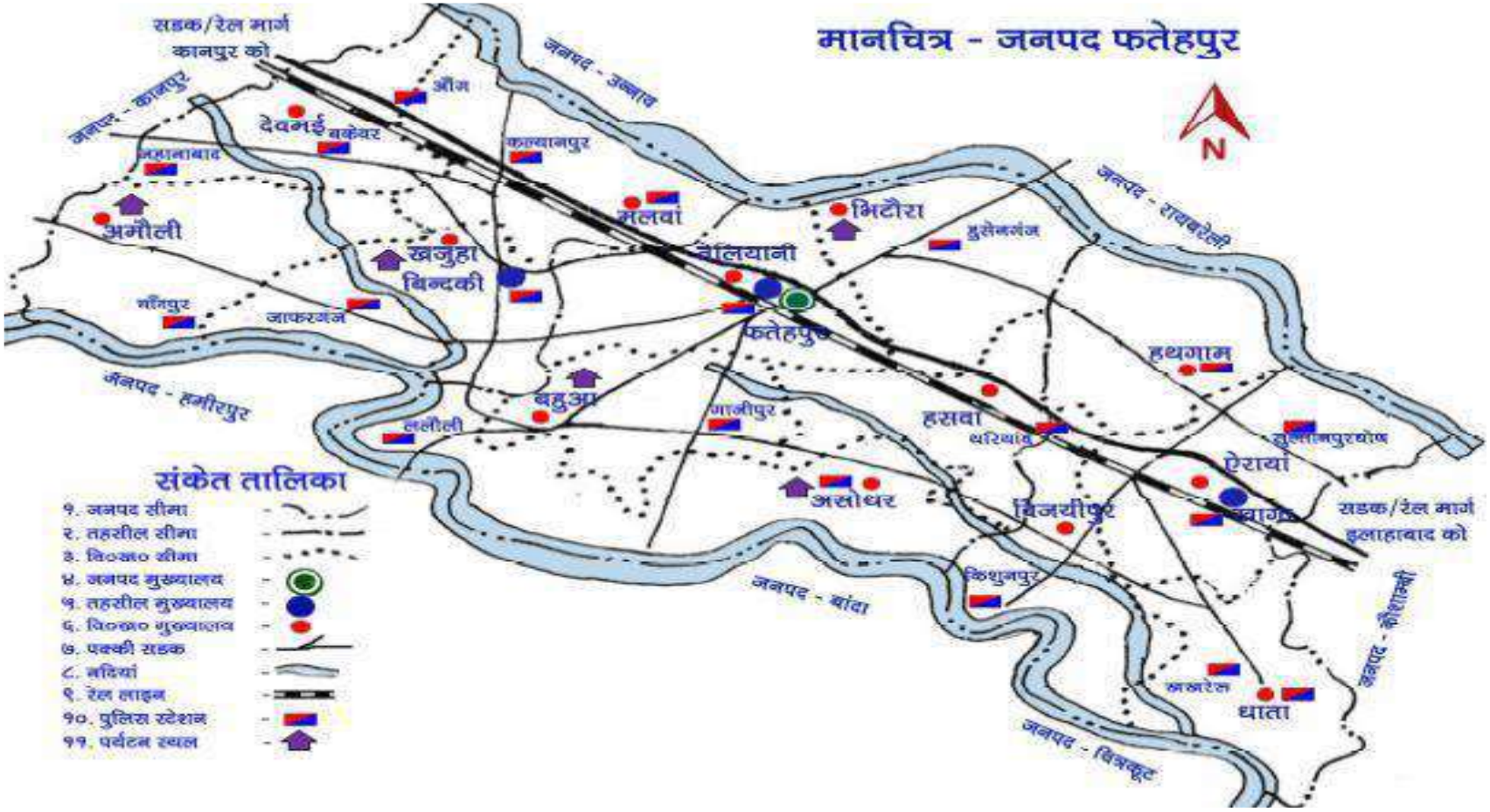
DISTRICT GANGA COMMITTEE REPORT

DISTRICT-FATEHPUR(U.P)

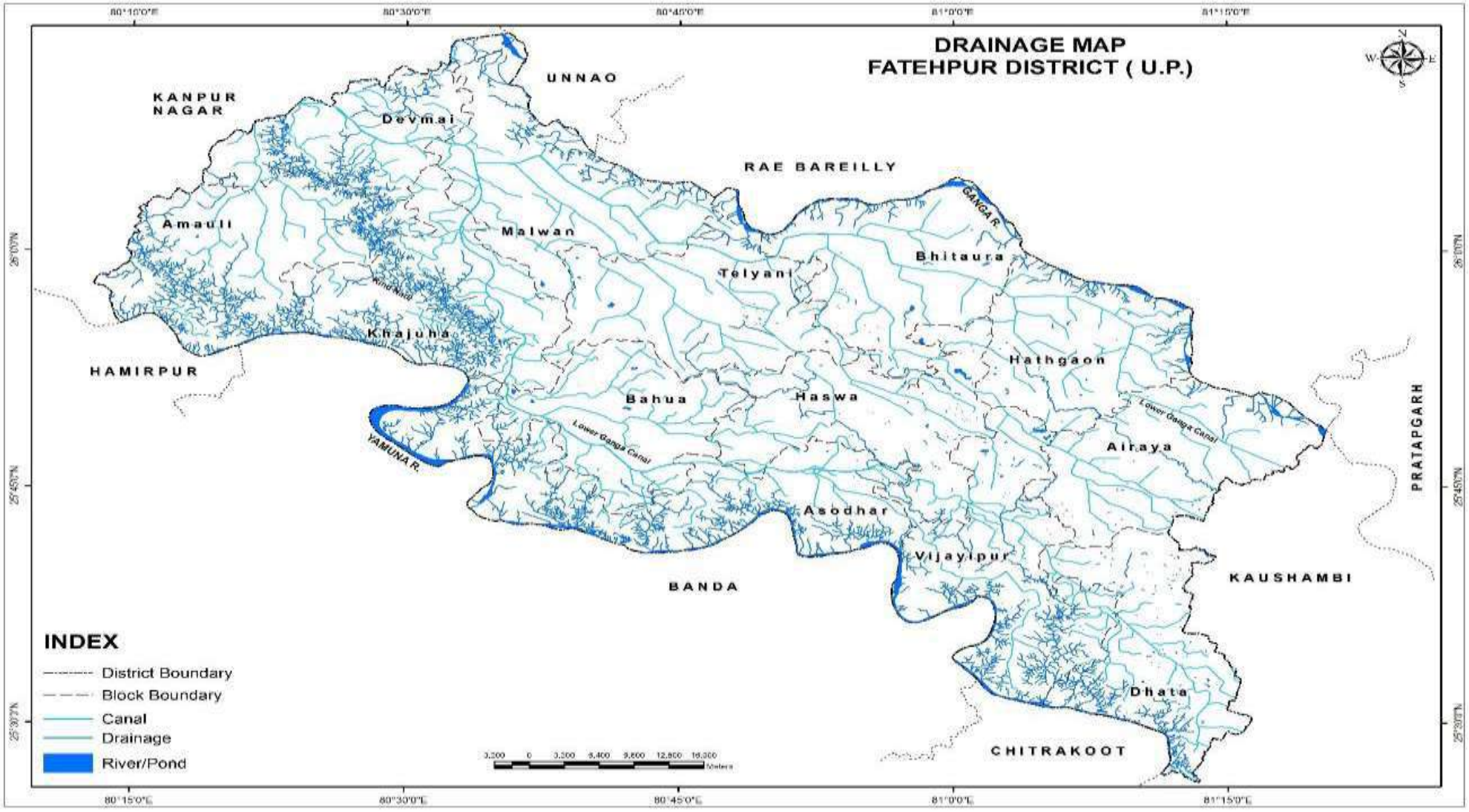
Submitted in Compliance of Hon'ble NGT Order
Dated: 16 April, 2024
in O.A 200/2014 M.C. Mehta versus UOI and Ors.

Submitted by: District Ganga Committee, Fatehpur(U.P.)

Map Of District Fatehpur, Uttar Pradesh



Drainage Map of Fatehpur District (U.P.)



1. Sewage

Drain (city/town)	Total drain capacity	Generation/ day	pH	BOD (mg/l)	COD (mg/l)	TSS (mg/l)	TDS (mg/l)	Heavy metal (Fe, Cr, Pb, Ar, Mn, Cu, Zn,Hg, Flouride etc.)	Nitrates (mg/l)	DO (mg/l)	TC (MPN/ 100ml)	FC (MPN/ 100ml)	Outlet flow & geo code/ sampling point	Colour/odour	Discharged into
Nagar Panchayat Khaga (5 nala) 25.774758 81.102407	15 MLD	15 MLD	7.69	26	116	83.0	Not analysed	Not analysed	Not analysed	Not analysed	Not analysed	Not analysed	**15 MLD (25.774758 81.102407)**	Slight Black/ Unpleasant	**Sasur Khaderi river**
FCI GODAM NALA (Nagar palika fatehpur) 25.945554 80.807756	27 MLD	27 MLD	7.22	12	42	23.8	Not analysed	Not analysed	Not analysed	Not analysed	Not analysed	Not analysed	**Madaripur Lat. 25.890265 Long. 80.849022**	Slight Black/ Unpleasant	**Sasur Khaderi river after bioremediation**
ITI nala (Nagar palika fatehpur) 25.922846 80.807746			7.20	14	45	19.9	Not analysed	Not analysed	Not analysed	Not analysed	Not analysed	Not analysed	**Verma chauraha Lat. 25.890265 Long. 80.849022**	Slight Black/ Unpleasant	**Sasur Khaderi river after bioremediation**
Beruihar nala (Nagar palika fatehpur) 25.925830 80.818970			7.19	13	40	21.7	Not analysed	Not analysed	Not analysed	Not analysed	Not analysed	Not analysed	**Jhaupur Lat. 25.890265 Long. 80.849022**	Slight Black/ Unpleasant	**Sasur Khaderi river after bioremediation**
Nagar palika parishad bindki (2nala)	64.10 MLD	64.10 MLD	**Not Analysed**												

The above information is to be submitted on the basis of end point sample analysis of the concerned drain.

2. STP for treating the sewage of the drains ultimately flowing to River Ganga or its tributaries.

Existing STP (location & capacity)	Capacity (operational)	Inlet/ Outlet water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point	Proposed/under construction STP with completion date
NO STP INSTALLED	NA	NA	NA	106.10 MLD	NA	STP OF 18 MLD PROPOSED at MADARIPUR KALAN UNDER AMRUT – 2, 123.40 km SEWER NETWORK (Completion date – 3 years)
FSTP, Madaripur Kalan Lat. 25.909357 Log. 80.848038	32 KLD	**Inlet -** pH-7.29, COD-7.12mg/l BOD-512mg/l COD-7.12mg/l TSS-5466mg/l TDS- 1920mg/l TS-17462mg/l Phosphate-91.6mg/l FC-2.3x10^6 MPN/100ml **Outlet-** pH-7.16, COD-41 mg/l BOD-8 mg/l COD-4.1mg/l TSS-21 mg/l TDS-18 mg/l TS-39 mg/l Phosphate -1.1 mg/l FC-51.6 MPN/100ml	NA	NIL	Sasur Khaderi River Lat. 25.909357 Log. 80.848038	Not required

2.1 STP additional Information

Name of drain	Position of STP with capacity	Geo/coordinate	Discharge quantity from the STP in the drain	Total per day discharge from the drain into the river
1-FCI GODAM NALA **2-ITI nala** **3-Beruihar nala** **4-Nagar Panchayat Khaga** **5-Nagar palika parishad bindki** All drains untapped due to no STP installed	No STP installed	NA	NA	106.10 MLD

Proposed STP (location & capacity)	Capacity (operational)	Inlet/ Outlet water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point geo code/sampling point	Proposed/under construction STP with completion date
STP OF 18 MLD PROPOSED at MADARIPUR KALAN UNDER AMRUT – 2, 123.40 km SEWER NETWORK	18 MLD PROPOSED (No STP installed)	NA	NA	After installation of 18 MLD STP. Gap is 88.10 MLD	Sasur Khaderi river	At Madaripur Kalan, COMPLETION DATE 3 years

3. HOTELS/ ASHRAMS/DHARMSHALAS/RESIDENTIAL COMPLEXES ABUTTING RIVER GANGA OR ITS TRIBUTARIES.

Number of Hotels/ ashrams/ dharamshalas	Consent to establish/ operate	STP	Discharge point	Action taken
1. Hotel Diplomat, near bus station 2. Hotel Akash, neat bus station 3. Hotel A-inn, Hariharganj 4. Hotel Maya shyam, Hariharganj 5. Hotel Shanti Ganga, Hariharganj 6. Hotel Vishesh, Old Tehsil, G.T.road 7. Hotel Shiv Palace, chowk 8. Hotel Bhoomi continental, Civil lines 9. Hotel S.S.Grand, Bhitaura near RTO 10. Hotel Mahendra continental, Krishna bihari nagar 11. Hotel Akash & restaurant, Shadipur chauraha 12. Hotel Green Valley, Nauwabagh 13. Hotel Sagar, Abu nagar 14. Hotel Nasheman,	No	Effluent discharged through Septic tank/ Soak pit	MUNICIPAL SEWER through Septic tank/ Soak pit	On receiving information from the Hotel/ Dharmshala located at the local body, the septic tank is emptied by the local body's suction machine and sent to the FSTP plant.

Narainpur chitaura 15. Hotel Ramadian, Abu nagar 16. Hotel Delhi Darbar, Nauwa bagh 17. Hotel Malti, Civil Lines 18. Hotel Bombay lodge, Baqarganj 19. Hotel OYO SN3, Hriharganj 20. Hotel Anupam, Rewari Bujurg 21. Hotel Utsav Palace, Civil lines 22. Hotel Krishna Garden, Gautam nagar				

4. Industrial Effluent discharge by industries whose effluent is ultimately flowing to River Ganga or its tributaries

Total number of Industries	Daily effluent discharge	Treatment available (cetp/petp/ etp operational capacity)	Effluent quality analysis (outlet of treatment plants Geo Code Sampling poiny)	GAP	Proposed/ under construction treatment project (with timeline)	Number of defaulting units- Action taken	Industrial solid waste generated/ day	Manner of disposal (Industrial solid waste)
M/s Raj rejeshwari technofab, gudhrauli, Fatehpur	40 KLD	ETP operational	As per Standard	No	Not required	Not Applicable	0.6 T/year	Through TSDF/Authorised Recycler
M/s JSR, chaudagra, fatehpur	34 KLD	ETP operational	As per Standard	No	Not required	Not Applicable	0.5 T/year	Through TSDF/Authorised Recycler
M/s Bhole Baba oroganic dairy milk pvt ltd. industrial area malwan, fatehpur	68 KLD	ETP operational	As per Standard	No	Not required	Not Applicable	1.0 T/year	Through TSDF/Authorised Recycler
M/s Raj milk product, darveshabad bindki fatehpur prayagraj	150 KLD	ETP operational	As per Standard	No	Not required	Not Applicable	1.5 T/year	Through TSDF/Authorised Recycler

5. Regulation of Flood Plain Zone:

Area- cities/ towns	Notification of Flood Plain Zone	Demarcation		Encroachment and direct discharge geo code /sampling point	Encroachment removal status	Timeline of completion
		No development zone pillars	Regulatory zone pillars			
NA	NA	NA	NA	NA	NA	NA

6. Aforestation/Plantation along the bank of River Ganga and its tributaries and their flood plain zones

Area- cities/ towns	Total plantation Geo Code/Sampling Point	Proposed project	Time line
Fatehpur	215200 Plants were planted in Asothar, Bahua and Bhitaura block along the bank of River Ganga and its tributaries on 89.5 Hectares of land in the year 2023-24	NA	NA

7. Mining and Stone Crushing in Riverbed and flood plain Zone of River Ganga and its tributaries.

Area of mining	FIR/ case registered/ year	Vehicles/ mineral seized	Action taken status	Cases pending in Court	Enforcement of EMGSM 2020 and Sustainable sand mining management guidelines 2016
10	2 FIR/ 2023-24	1381	Rs.63657180.00 deposit	0	According to above, action taken

DISTRICT GANGA COMMITTEE, FATEHPUR

1. District Ganga Protection Plan at city/ town level

District Ganga Protection Committee (DGPC) is required toformulate the action plan for each city and town located on main stem of river Ganga and its tributary and such Action Plan has to be prepared in accordance with the River Ganga (Rejuvenation, Protection and Management)Authorities Order, 2016 (para 6 and 55).

2. Contents of the Action Plan (Consolidated District Wise Action Plan including each City and Town abutting river Ganga and its Tributary)

2.1 Sewage Management

(i) Sewage generation (for entire District and individual town wise):

District Fatehpur – Total Sewage Generation – 106.10 MLD

TOWNS	TOTAL SEWAGE GENERATION (MLD)
NPP Fatehpur	27 MLD
NP Khaga	15 MLD
Nagar palika parishad bindki	64.10 MLD

(ii) Existing Sewage Treatment Capacities

- No STP installed in district Fatehpur

  - *Under the Proposal*

- 18 MLD, STP at Madaripur kalan

(iii) Quantity of sewage is being treated (Utilization Capacity)

- Utilisation at present – No STP installed. Utilization is Nil out of total sewage of 106.10 MLD
- Gap – 106.10 MLD (100%)

(iv) Performance of STPs particularly for FC

No STP installed in district Fatehpur hence not applicable.

(v) Where treated sewage is being discharged (to Ganga or tributaries)

- Total sewage generated is being discharged to River Sasur Khaderi.

(vi) Reasons for Under-utilization of STPs (Connectivity of Households/laying of sewer lines)

- ***No STP installed in district Fatehpur hence not applicable.***

(vii) Current gap in sewage treatment

Total sewage generation –106.10 MLD

Sewage Treatment through Bio-remediation – 27 MLD

Gap – 79.10 MLD

(viii) <u>Time-bound plan for bridging the gap and tying up with financial arrangements and not delaying Tenderingand identifying executing agencies or having any other issues:</u>

- There is a time-bound plan, a proposal to minimize the gap - one STP 18MLD capacity is proposed for treatmentof sewage.

(ix) <u>Where untreated sewage (when there is no STP) is discharged (Ganga /Tributaries):</u>

- At present sewage of 03 nalas is being treated through bioremediation and treated sewage going into River Sasur Khaderi.
- The untreated sewage (overflow of septic tanks, etc.) goes to River Sasur Khaderi .
- There are 01 STP (18MLD) proposed for the treatment of untreated sewage.
- Untreated sewage directly going into river Sasur Khaderi

2.2 Drains joining Ganga and Tributary

i. Number of drains carrying sewage- sullage or industrial wastewater joining Ganga/ tributaries with theirQuantity and Quality:

Drain (city/town)	Total drain capacity	Generation/ day	pH	BOD (mg/l)	COD (mg/l)	TSS (mg/l)	TDS (mg/l)	Heavy metal (Fe, Cr, Pb, Ar, Mn, Cu, Zn,Hg, Flouride etc.)	Nitrates (mg/l)	DO (mg/l)	TC (MPN/ 100ml)	FC (MPN/ 100ml)	Outlet flow & geo code/ sampling point	Colour/odour	Discharged into
Nagar Panchayat Khaga (5 nala) 25.774758 81.102407	15 MLD	15 MLD	7.69	26	116	83.0	Not analysed	Not analysed	Not analysed	Not analysed	Not analysed	Not analysed	**15 MLD (25.774758 81.102407)**	Slight Black/ Unpleasant	**Sasur Khaderi river**
FCI GODAM NALA (Nagar palika fatehpur) 25.945554 80.807756	27 MLD	27 MLD	7.22	12	42	23.8	Not analysed	Not analysed	Not analysed	Not analysed	Not analysed	Not analysed	**Madaripur Lat. 25.890265 Long. 80.849022**	Slight Black/ Unpleasant	**Sasur Khaderi river after bioremediation**
ITI nala (Nagar palika fatehpur) 25.922846 80.807746			7.20	14	45	19.9	Not analysed	Not analysed	Not analysed	Not analysed	Not analysed	Not analysed	**Verma chauraha Lat. 25.890265 Long. 80.849022**	Slight Black/ Unpleasant	**Sasur Khaderi river after bioremediation**
Beruihar nala (Nagar palika fatehpur) 25.925830 80.818970			7.19	13	40	21.7	Not analysed	Not analysed	Not analysed	Not analysed	Not analysed	Not analysed	**Jhaupur Lat. 25.890265 Long. 80.849022**	Slight Black/ Unpleasant	**Sasur Khaderi river after bioremediation**
Nagar palika parishad bindki (2nala)	64.10 MLD	64.10 MLD	**Not Analysed**												

1. Bioremediation is being done in all 03 major drains of the city namely FCI Godam Nala, ITI nala, and Beruihar nala.

ii. Drains joining outside city and town limits but, either joining in village or nearby town:

TOWNS	TOTAL SEWAGE GENERATION (MLD)
NPP Fatehpur	27 MLD
NP Khaga	15 MLD
Nagar palika parishad bindki	64.10 MLD

iii. Inclusion of sewage flowing in drains into total sewage generation figures of each city and town and their interception and diversion to STPs:

- There are 3 major drains namely FCI Godam Nala, ITI nala, and Beruihar nala , which carry treated and untreated sewage simultaneously. There is a time-bound plan and a proposal to minimize the gap - one STP 18MLD capacity is proposed for the treatment of sewage of drains by tapping to minimize the Gap.

2.3 Septage management (In case of no STP)

i. Status of Septage management (with reference to FSTP/STP):

- There are 75% of households dependent on septic tanks / soakpits.
- There is one co-treatment facility (FSTP) of capacity 32KLD for fecal sludge management & disposal of septage,installed at Madaripur, Fatehpur (GEO CODE 25.909357, 80.848038) .

ii. Management of Greywater and its disposal:

- All three major drains of the city carry greywater discharge through Septic tank/Soak pit. As stated above there is a proposal for tapping of all three drains in the near future.

2.4 Industrial Pollution Control

i. Attach the list of no. of industries generating trade effluents, their place of disposal and compliance including CETPs (town wise):

S.N.	Name of Industry	Production Sector- (Tannery, textile, Paper, Metal, Oil, Food, Other)	Presence of ETP (Effluent Treatment Plant in Industries)	Total Industrial Effluent Generation (KLD)	Total Capacity of Treatments facility and its utilization (KLD)	Final Discharging Points	Compliance status	Action taken
1	M/s Raj rejeshwari technofab, gudhrauli, Fatehpur	P.P. Woven Fabrics Sacks and Fusible Interlining fabrics	Yes	40 KLD	40 KLD	Irrigation/Reuse in plant	Yes	Not Required
	M/s JSR, chaudagra, fatehpur	Industrial glucose	Yes	34 KLD	34 KLD	Irrigation/ Reuse in plant	Yes	Not Required
	M/s Bhole Baba oroganic dairy milk pvt ltd. industrial area malwan, fatehpur	Milk processing	Yes	68 KLD	68 KLD	Irrigation/ Reuse in plant	Yes	Not Required
	M/s Raj milk product, darveshabad bindki fatehpur prayagraj	Milk processing	Yes	150 KLD	150 KLD	Irrigation/ Reuse in plant	Yes	Not Required

- **As there is no cluster of uniform nature industries hence there is no CETP in District Fatehpur**

3- Water quality status

Provide water quality status of Ganga and its tributaries in the District and city/ town in terms of its fitness for Bathing water quality that is, FC and FS:

River Name	Sampling Poin	Sample Date	Colour (Hazen)	Odour	pH	D.O. (mg/l)	B.O.D (mg/l)	C.O.D (mg/l)	Total Coliform (MPN/100ml)	Fecal Coliform (MPN/100ml)
Ganga	Devmai ghat, Fatehpur	06.03.2024	15	None	8.16	8.8	2.5	8	2000	680
Ganga	Om Ghat, Fatehpur	06.03.2024	15	None	8.09	8.9	2.4	6	1700	450

- NOTE-As per notification no. G.S.R. 742(E) dt. 25.09.2000 for Primary Water Quality Criteria for Bathing Waters. THE WATER QUALITY OF GANGA RIVER IS FIT FOR BATHING PURPOSE.

4. Notification of Flood Plain Zones:

- There are no flood plain zones in Distt. Fatehpur

5. Issues relating to Environmental Flow:

a. Steps taken for maintaining Ecological flow/ status of compliance of the E-flow notifications.

Ecological flow

- Water Levels of the river during the year (especially dry season)

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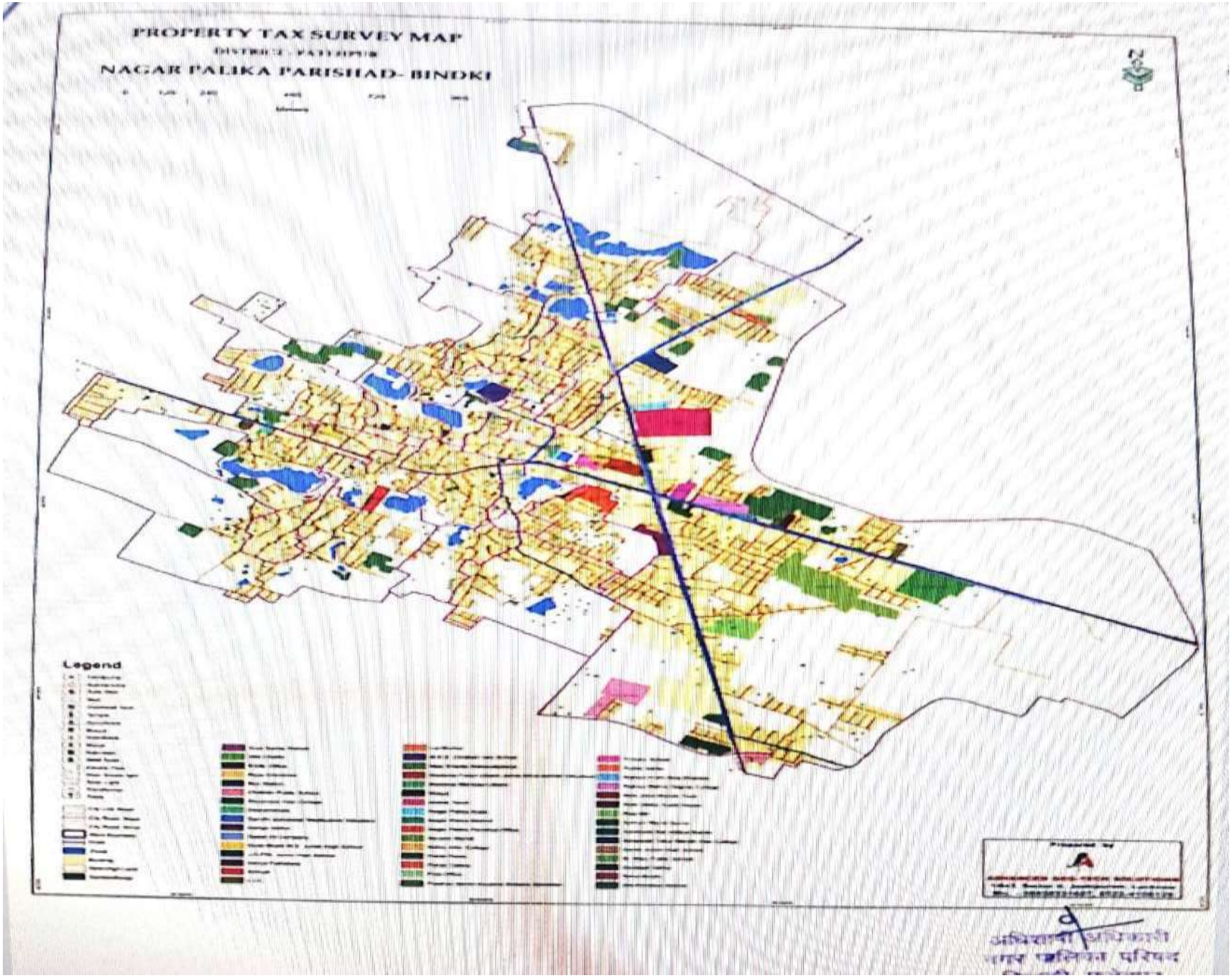
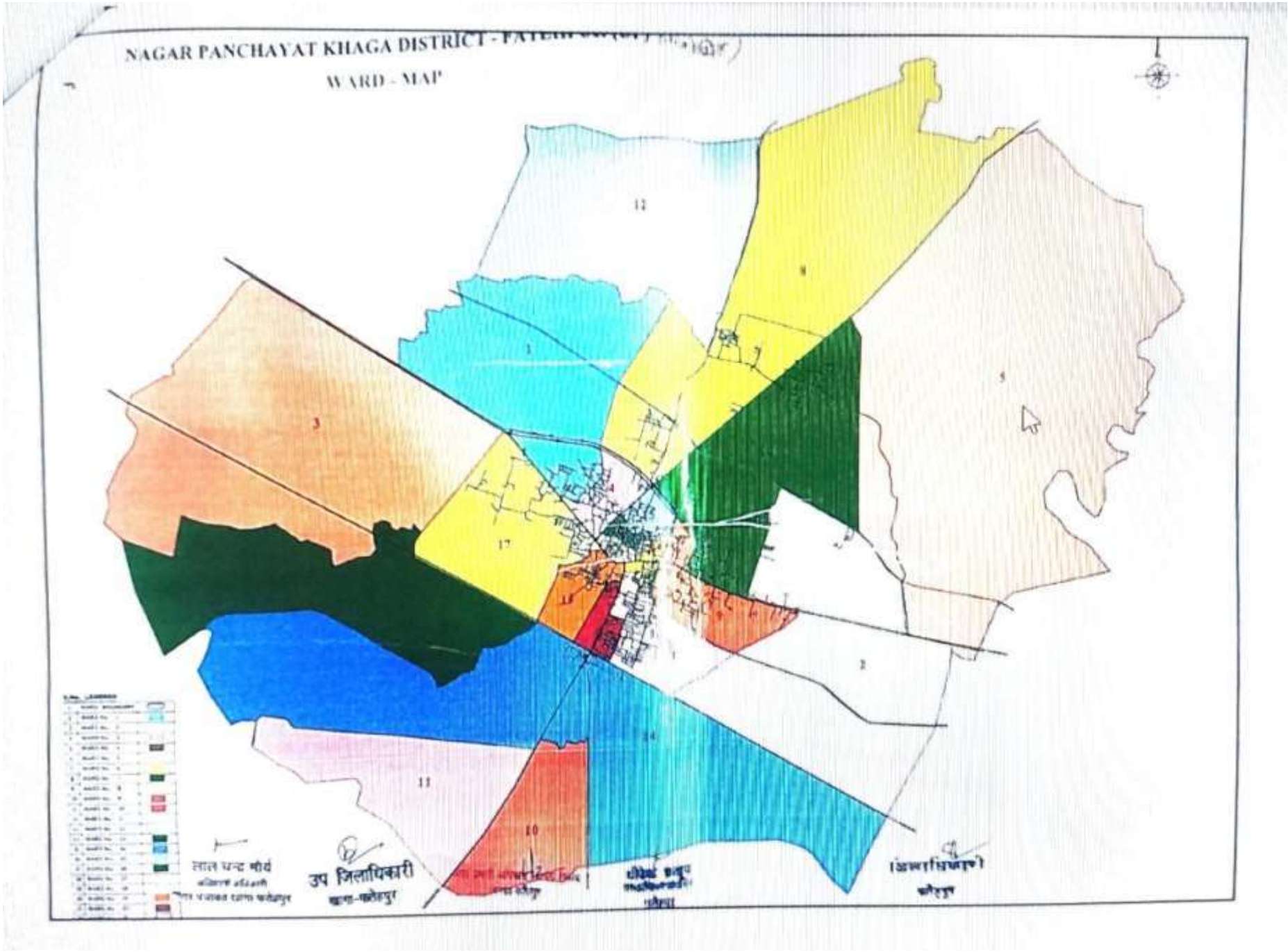
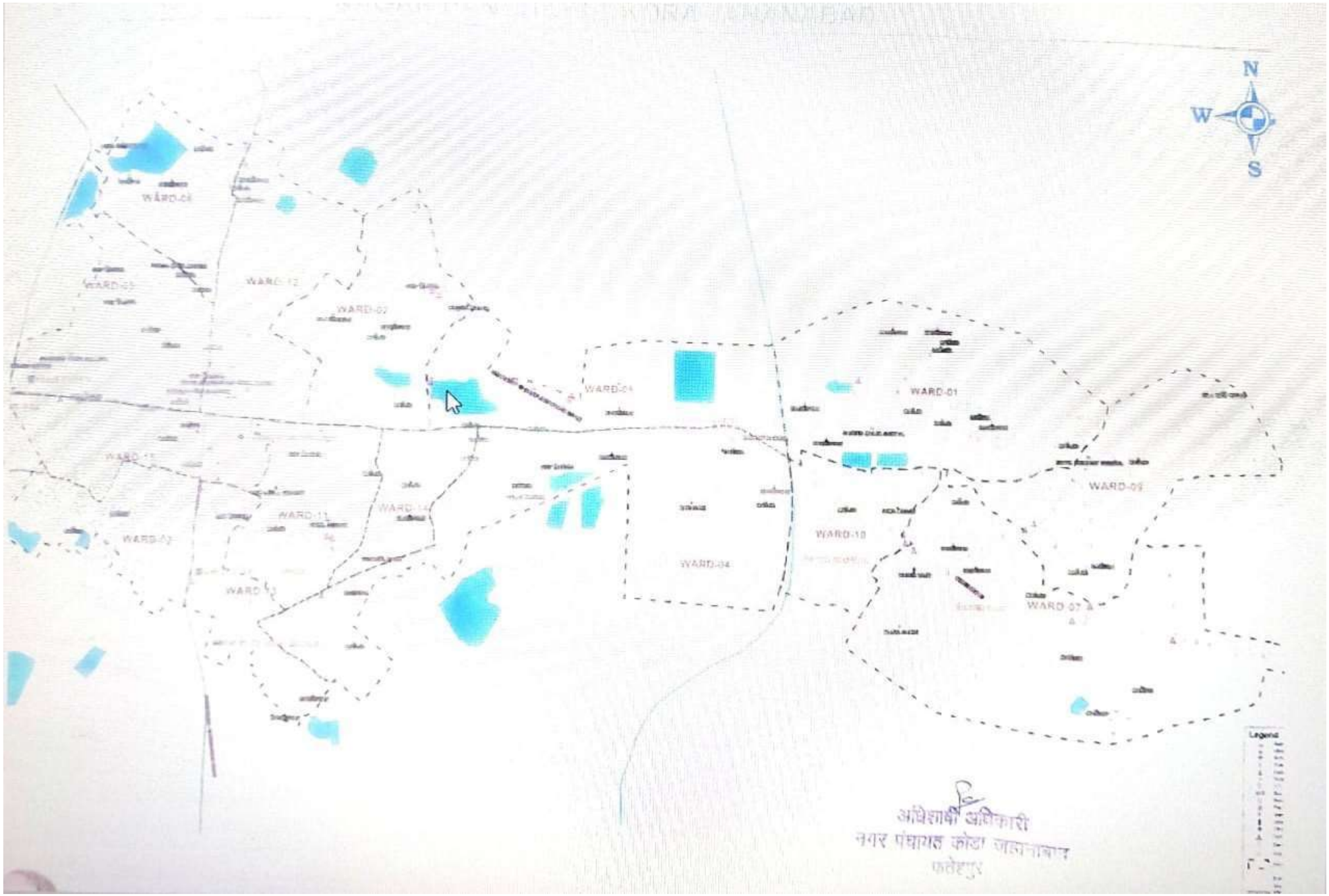

PROPERTY TAX SURVEY MAP
NAGAR PALIKA PARISHAD- BINDKI
Legend


NAGAR PANCHAYAT KHAGA DISTRICT -
WARD - MAP
उप जिलाधिकारी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अधिशाषी अधिकारी
नगर पंचायत कोटा जलालाबाद
फतेहपुर

Best practices

1. Every year, Ganga Scwachatta Pakwhada is held to raise awareness of the importance of maintaining a clean river and avoiding disposing of plastic and solid garbage in drains, rivers, and other bodies of water.
2. Every day, Ganga aartis are held in district headquarters and ganga grams close to the Ghat.
3. The purpose of River Aarti is to raise awareness among guests for the value of rivers.
4. Grossly Polluting Industries have installed OCEMS along with the link at the Central Pollution Control Board (CPCB) and Uttar Pradesh Pollution Control Board (UPPCB) Control Room Office for 24x7 surveillance.
5. All industries have achieved maximum utilization of treated water in Recycling in process/For use in Irrigation on agricultural land.
6. District Fatehpur is an ancient city that was mentioned in the puranic literature and has a historical place Bawan imli.
7. By the efforts of District Administration Fatehpur, all the Ganga Grams are declared ODF now.
8. The ghats of Bhitaura and Asani were described as sacred in the puranas. Bhitaura, the site of the sage Bhrigu, was an important source of learning.
9. Dhata is famous for its statue of Ravana.
10. The north boundary of the district is limited by the river Ganges and its southern boundary is the river Yamuna. In the Vedic era the region of this district was known as “Antardesh”, which means the fertile area between two big rivers.

(Dr. S.C. Shukla) **Regional Officer** **U.P.Pollution Control Board** **Prayagraj**	**(Ramanuj Tripathi)** **Divisional Forest Officer** **Member Convenor,** **District Ganga Committee,** **Forest Department** **Fatehpur**	**( )** **Chief Development Officer** **Nodal Officer** **District Ganga Committee,** **Fatehpur**	**(C. Indumati)** **District Magistrare** **Chairman,** **District Ganga Committee,** **Fatehpur**

35562

Compliance of Hon'ble NGT order dated 11.09.2023 in O.A. 200/2014MC Mehta Vs UOI and Ors.

DISTRICT FIROZABAD (U.P.)

District Collectorate: Firozabad District(U.P.)
District Office: Vikash Bhawan, Civil Lines Road, Dabri–283203(U.P.)
Email:dmfir@nic.in

1. Sewage

S. No.	Drain (city/town)	Total drain capacity (MLD)	Generation/ day (MLD)	PH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride etc)	Nitrates	DO	TC	FC	Outlet flow and Geo code sample point	Colour/ odour	Discharged Into	Concerned Department
1	02(Rehna, Malviynagar)	42	35	7.4-7.6	100-108	288-312	210-238	594 - 644	Fe-1.5901 T.Cr-1.4060, Pb-0.3397 Ni-ND	-	1.3-1.5	33.4 - 33.7	222-230	37.45-41.84 & La 27.118844° Long 78.37506°	Colourless /light	Sewer flow discharge into Yamuna river after treatment at STP	Nagar Nigam Firozabad
												In MPN/ 100 ML					
2	Girdhari College Drain, Koarara road, Sirsaganj	2.56	2.50	7.7	78	480	142	1120	F^--1.193 Zn-0.0159 Mn-0.0824 T.Cr,Cu,Pb,Fe,Ar, Hg-ND	0.642	-	1.7×10^5	4.9×10^4	Koarara Road, Sirsaganj	ight Yellowish / foul	After treatment (bioremediation/ phytoremediation) is released into Sirsa river	Npp Sirsaganj & RO PCB
3	Shamsan Ghat Drain Kaurara, Sirsaganj	2.75	2.60	7.6	76	440	109	988	F^--1.651 Zn-0.0129 Mn-0.0824 T.Cr,Cu,Pb,Fe,Ar, Hg-ND	0.659	-	2.2×10^5	7×10^4	Shamsan Ghat Drain Kaurara	slight Yellowish / foul		
4	Sirsakhas Drain, Surajpur Road, Sirsaganj	2.96	2.80	7.8	84	460	220	1110	F^--0.978 Cu-0.0056 Fe-2.8491 Zn-0.0791 Mn-0.1897 T.Cr,Pb,Ar, Hg-ND	1.078	-	2.4×10^5	5.8×10^4	Sirsakhas Drain, Surajpur Road, Sirsaganj	Light Blackish/ foul		
5	Drain at Kothi no 1,(RPF Barruck), Tundla,	7.8	5.4	7.7	76	580	123	2120	F^-3.11 Cu-0.0239 Fe-1.1166 Zn-0.2326 Mn-0.1964 T.Cr,Pb,Ar,Hg-ND	0.768	-	1.7×10^5	4.3×10^4	Drain at Kothi no 1,(RPF Barruck)	slight Yellowish / foul	After treatment chulhawali ki Puliya	NNP Tundla & RO PCB

6	Drain at Ghoda Ghat, Shikohabad	1	1	7.9	108	520	142	1196	F^--2.038 Zn-0.0129 Mn-0.0891 T.Cr,Cu,Pb, Fe,Ar, Hg-ND	0.156	-	2.2×10^5	5.8×10^4	Ghoda Ghat	slight blackish / foul	After treatment Sirsa river	NPP Shikohabad & RO PCB
7	Sambhu Nagar Drain Near Yadav Pathology, Shikohabad	0.5	0.5	7.7	86	560	113	1082	F^--1.569 Fe-3.9662 Zn-0.0520 Mn-0.1830 T.Cr,Cu,Pb,Ar, Hg-ND	0.248	-	1.7×10^5	4.8×10^4	Paliwal Tirah	slight yellowish / foul	After treatment Sirsa river	
8	Drain at Melawala, Bagh, Shikohabad	0.5	0.5	7.8	114	660	188	1142	F^--1.71 Fe-7.3340 Zn-0.4281 Mn-0.4578 T.Cr,Cu,Pb,Ar, Hg-ND	0.32	-	2.8×10^5	8.4×10^4	Servesh Yadav K Samne	Light blackish / foul	After treatment Sirsa river	
9	Drain at Subhash Park, Sirsa River Bridge, Shikohabad	1.75	1.75	8	96	540	154	1237	F^--0.782 Fe-1.3595 Zn-0.0671 Mn-0.2031 T.Cr,Cu,Pb,Ar, Hg-ND	0.248	-	2.1×10^5	6.3×10^4	Subhash Park	Yellowish / foul	After treatment Sirsa river	
10	Drain at Mehrab Bagh Vedanta Hospital, Shikohabad	0.25	0.25	7.6	78	480	105	1180	F^--1.40 Fe-0.5176 Zn-0.04 Mn-0.1629 T.Cr,Cu,Pb,Ar, Hg-ND	0.323	-	1.7×10^5	5.8×10^4	Vedanta Hospital	Light Yellowish / foul	After treatment Sirsa river	
11	Drain at Lebar Colony, Shikohabad	0.25	0.25	8	98	560	104	1116	F^--2.13 Fe-0.7119 Zn-0.0310 Mn-0.1696 T.Cr,Cu,Pb,Ar, Hg-ND	2.53	-	2.2×10^5	4.9×10^4	Lebar Colony	Yellowish / foul	After treatment Sirsa river	

12	Drain At State Bank, Jasrana	1.02	1.02	7.6	52	440	194	1120	F^--1.75 Cu- 0.0036 Fe-0.6633 Zn-0.0581 Mn-0.1830 T.Cr,Pb,Ar, Hg-ND	0.357	2.1	1.4×10^5	4.1×10^4	Near State Bank	Light Blackish/ foul	After treatment Awa river	NP Jasrana & RO PCB
13	Drain At Jivendra Pachauri Ki Dukan To Awa River, Jasrana	0.95	0.95	7.8	72	480	196	1038	F^--2.31 Cu- 0.0239 Fe-3.6586 Zn-0.2175 Mn-0.6253 T.Cr, Pb,Ar, Hg-ND	0.835	2.0	2.2×10^5	4.9×10^4	Near Munna Khan Shop	Blackish/ foul	After treatment Awa river	
14	Drain At Rabi Ki Dukan To Awa River, Jasrana	1.03	1.03	7.9	94	440	272	1054	F^--1.55 Cu- 0.0330 Fe-4.4368 Zn-0.20 85 Mn-0.2768 T.Cr, Pb,Ar, Hg-ND	1.02	1.7	2.4×10^5	6.3×10^4	Near Boby Gupta Shop	Yellowish /foul	After treatment Awa river	
15	Drain At Bijli Ghar To Prem Vatika Marrige Home, Jasrana	0.85	0.85	7.8	84	520	287	944	F^--1.10 Cu- 0.0147 Fe-3.8367 Zn-0.3228 Mn-0.2902 T.Cr, Pb,Ar, Hg-ND	1.72	1.8	2.1×10^5	4.7×10^4	Near Ranvir Shop	Light Blackish/ foul	After treatment Awa river	
16	Drain At Mohalla Gadiwan To Awa River, Jasrana	0.65	0.65	7.7	86	480	291	1304	F^--1.74 Cu- 0.0239 Fe-3.0757 Zn-0.1393 Mn-0.2701 T.Cr, Pb,Ar, Hg-ND	1.56	1.9	2.4×10^5	4.3×10^4	Near Chauhan Derry	Light Blackish/ foul	After treatment Awa river	

17	Drain At Sabji Mandi Thana Ke Samne, Fariha, Firozabad	0.42	0.42	7.8	76	600	268	2136	F^--1.623 Zn-0.019 Mn-0.0757 T.Cr,Cu,Pb, Fe, Ar,Hg-ND	0.088	-	2.4 x 10^5	5.8 x 10^4	Thana K Samne, Fariha	Light Blackish/ Foul	Talab, Fariha	NP Fariha & RO PCB
18	Drain At Maholla Chamaroura Kaleshwar Mandir, Fariha, Firozabad	0.58	0.58	7.7	78	560	198	1796	F^--1.322 Zn-0.0159 Mn-0.0824 T.Cr,Cu,Pb, Fe, Ar,Hg-ND	0.340	-	2.2 x 10^5	6.3 x 10^4	Maholla Chamaroura Kaleshwar	Light Blackish /foul	Talab, Fariha	
19	Drain At State Bank To Sabji Mandi Eka Firozabad	0.36	0.36	7.9	154	720	273	1354	F^--0.926 Zn-0.0129 Mn-0.0891 T.Cr,Cu,Pb, Fe, Ar,Hg-ND	1.397	-	2.8 x 10^5	8.4 x 10^4	Sabji Mandi K Pass	Light Blackish/ foul	After treatment Arhin river	NP Eka & RO PCB
20	Drain At Eta Chauraha To Arvind River Eka, Firozabad	0.64	0.64	8	148	660	315	1974	F^--2.345 Zn-0.0129 Mn-0.0891 T.Cr,Cu,Pb, Fe, Ar,Hg-ND	1.383	-	2.8 x 10^5	7 x 10^4	Etah Choraha To Arhind	Blackish/ foul	After treatment Arhin river	
21	Drain at Police Chawki Makkhanpur	2.32	1.7	7.7	170	700	282	1109	F^--0.31 Cu- 0.0239 Fe-3.58 Zn-0.1634 Mn-0.2768 T.Cr,Pb, Ar,Hg-ND	4.52	-	3.5 x 10^5	8.4 x 10^4	Police Chawki Makkhanpur	Light Blackish /foul	Jijauli Talab, Makkhanpur (work in for process for bioremediation / phytoremediation tender)	NP Makkhanpur & RO PCB
22	Drain at Jijaulitalab, Makkhanpur	2.29	1.3	7.8	82	560	130	1098	F^--2.65 Fe-1.2138 Zn-0.0310 Mn-0.2433 T.Cr, Cu,Pb,Ar, Hg-ND	2.85	-	2.2 x 10^5	7.9 x 10^4	Jijauli talab, Makkhanpur	Yellowish/ foul		

The above information is to be submitted on the basis of the sample analysis of the concerned drain

2. STP for treating the sewage of the drains ultimately flowing to river Ganga or its tributaries

S.No.	Existing STP (location & capacity)	Capacity (operational)	Inlet/ Outlet water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point	Proposed/ under construction STP with completion	Concerned Department
1	Sofipur (67 MLD)	100%	44.80/48.10 MLD	2 Nos (35 MLD)	NO	Yamuna River	NO	Nagar Nigam Firozabad
2	Dabrai (3 MLD)	100%	1.60/1.58 MLD	-		Irrigation	NO	

S.No.	Existing FSTP (location & capacity)	Capacity (operational)	Inlet/ Outlet water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point	Proposed/under constrction STP with completion	Concerned Department
1	Mustfabad Road Shikohabad	32 KLD	07 KLD	No drain	25 KLD	Wastage tank	Completion date 01.01.2023	NPP Shikohabad

2.1 STP additional information

S.No.	Name of drain	Position of STP with capacity	Geo/coordinates	Discharge quantity from the STP in the drain	Total per day discharge from the drain into the river	Concerned Department
1	Rehna, Malviy Nagar	Sofipur 67 MLD	La 27.118844° Long 78.37506°	Avg. 45 MLD/day	Avg. 45 MLD/day	Nagar Nigam Firozabad
	-	Dabrai 03 MLD	La 27.132877° Long 78.4619°	Avg. 1.6 MLD/day	Avg. 1.6 MLD/day	

Proposed STP (location & capacity)	Capacity (operational)	Inlet/ Outlet water Quality & quantity	Number of tapped drains (quantity of discharge)	GAP(in treatment)	Final discharge point Geo code/sampling point	Proposed/ under ConstructionSTP With completion date
Not Required in Nagar Nigam, Firozabad. Not proposed by any NPP & NP						

3. Hotels/ Ashrams/Dharmshalas/residential complexes abutting river Ganga or its tributaries

S.No.	Hotels/ ashrams/ dharmshalas name& address	Consent to establish/ operate	STP	Discharge point	Action taken	Concerned Department
No Hotels/ ashrams/ dharmshalas etc are established						RO PCB

4. Industrial Effluent discharge by industries whose effluent is ultimately flowing to river Ganga or its tributaries

S.No.	Industries name & address	Daily effluent discharge	Treatment available (cetp/ petp/ etp operational capacity)	Effluent quality analysis (outlet of treatment plants geo code sampling point)	GAP	Proposed/ under construction treatment project (with timeline)	Number of defaulting units- Action taken	Industrial solid waste generated/ day	Manner of disposal (Industrial solid waste)	Concerned department
1	DayalJee Board Ind Pvt Ltd A-35.37 Ind Estate, Firozabad	Zero liquid discharged	ETP	As per the norms	00	-	-	-	-	RO PCB
2	LalJee Board Ind Pvt Ltd A-34, Ind Estate, Firozabad		ETP	As per the norms	00	-	-	-	-	
3	S.R. Mittal Paper Mills Itd. Etah Road, Shikohabad, Firozabad		ETP	As per the norms	00	-	-	-	-	
4	ALP Milk product pvt.Itd. Etah Road, Shikohabad, Firozabad	Discharged on their own land for irrigation purpose	ETP	As per the norms	00	-	-	-	-	

5. Regulation of Flood Plain Zone:

S.No.	Area- cities/ towns Notification of flood plain zone	Demarcation		Encroachment & direct discharge GeoCode/ Sampling point	Encroachment removal status	Timeline for completion	Concerned Department
		No development zone pillars	Regulatory zone pillars				
1	No flood plain zone in the district Firozabad						Irrigation Department, Firozabad

6. Afforestation/ Plantation along the bank of River Ganga and its tributaries and their flood plain zones

S.No.	Area- cities/ towns	Area (in ha.)	Total plantation Geo Code/ Sampling Point		Proposed project	Timeline	Concern department
1	Atapur Forest Block I	10	26°58'6.56"N	78°33'53.11"E	Social forestry scheme (samany)	2023-24	**Social Forestry Division, Firozabad**
2	Atapur Forest Block II	10	26°58'16.09"N	78°34'2.12"E	Social forestry scheme (samany)		
3	Atapur Forest Block III	10	26°58'20.53"N	78°33'51.59"E	Social forestry scheme (samany)		
4	Hariya Forest Block I	10	26°58'16.23"N	78°30'4.55"E	Social forestry scheme (samany)		
5	Hariya Forest Block II	10	26°58'22.45"N	78°30'11.31"E	Social forestry scheme (samany)		
6	Hariya Forest Block III	10	26°58'29.13"N	78°29'22.57"	Social forestry scheme (samany)		
7	Asravali Forest Block	10	26°58'12.57"N	78°32'33.86"E	Social forestry scheme (samany)		
8	Atapur Forest Block	15	26°58'19.58"N	78°33'37.78"E	Social forestry scheme (samany)		
9	Hariya One Block	5	26°58'32.83"N	78°29'14.71"E	Social forestry scheme (samany)		
10	Urawar One Block	6	26°53'40.77"N	78°39'24.90"E	Social forestry scheme (samany)		
11	Swarooppur Forest Block I	10	26°55'40.06"N	78°44'23.12"E	Social forestry scheme (samany)		
12	Swaruppur Forest Block II	10	26°56'29.25"N	78°44'17.36"E	Social forestry scheme (samany)		
13	May Gadokhar Forest Block	10	26°55'28.28"N	78°44'43.20"E	Social forestry scheme (samany)		
14	Patnakarkha Forest Block I	10	26°57'1.00"N	78°37'23.94"E	Social forestry scheme (samany)		
15	Patnakarkha Forest Block II	10	78°37'23.94"E	78°37'39.44"E	Social forestry scheme (samany)		
16	Puniccha Forest Block First	10	26°54'6.03"N	78°38'9.38"E	Social forestry scheme (samany)		
17	Puniccha Forest Block II	10	26°55'37.69"N	78°38'54.89"E	Social forestry scheme (samany)		
18	Urawar One Block II	14	26°54'32.32"N	78°40'7.87"E	Social forestry scheme (samany)		
19	Puniccha Forest Block First	15	26°55'22.93"N	78°37'22.08"E	Social forestry scheme (samany)		
20	Badhaura Forest Block I	15	26°54'45.90"N	78°43'6.04"E	Social forestry scheme (samany)		

21	Pariyar One Block I	20	26°55'36.18"N	78°41'15.66"E	Social forestry scheme (samany)		
22	Uravar one block first	20	26°54'38.35"N	78°39'46.55"E	Social forestry scheme (samany)		
23	Patnakarkha Forest Block III	10	26°57'25.06"N	78°37'25.36"E	Social forestry scheme (samany)		
24	Urawar One Block III	10	26°54'34.57"N	78°39'12.40"E	Social forestry scheme (samany)		
25	Puniccha Forest Block III	10	26°55'58.35"N	78°38'39.03"E	Social forestry scheme (samany)		
26	Badhaura Forest Block	13.5	26°54'33.77"N	78°43'9.08"E	Social forestry scheme (samany)		
27	Mohammadpur Nadai One Block	10	26°58'4.92"N	78°36'21.46"E	Social forestry scheme (samany)		
28	Pariyar One Block	10	26°55'5.50"N	78°42'47.26"E	Social forestry scheme (samany)		
29	Swaruppur Forest Block III	10	26°55'17.32"N	78°43'40.57"E	Social forestry scheme (samany)		
30	Puniccha Forest Block II	15	26°56'54.56"N	78°37'41.06"E	Social forestry scheme (samany)		
31	Puniccha Forest Block IV	10	26°56'52.62"N	78°37'54.60"E	Social forestry scheme (samany)		
32	Faraul Nagaria Forest Block I	10	26°59'27.77"N	78°27'33.69"E	Social forestry scheme (samany)		
33	Faraul Nagaria Forest Block II	10	27° 0'19.83"N	78°28'11.69"E	Social forestry scheme (samany)		
34	Sikhara Hardaspur Forest Block	20	27° 0'45.62"N	78°27'26.44"E	Social forestry scheme (samany)		
35	Shankarpur Forest Block I	10	27° 5'1.44"N	78°21'49.70"E	Social forestry scheme (samany)		
36	Shankarpur Forest Block II	20	27° 5'20.40"N	78°21'53.37"E	Social forestry scheme (samany)		
37	Anandipur Karakouli Forest Block I	11	27° 4'1.64"N	78°26'13.55"E	Social forestry scheme (samany)		
38	AnandipurKarakouli Forest Block II	10	27° 4'7.06"N	78°24'48.02"E	Social forestry scheme (samany)		
39	Chandrawar Forest Block I	10	27° 6'34.74"N	78°22'27.34"E	Social forestry scheme (samany)		
40	Chandrawar Forest Block II	10	27° 6'12.57"N	78°23'58.25"E	Social forestry scheme (samany)		
41	Gudau Forest Block First	10	27° 7'47.39"N	78°19'50.94"E	Social forestry scheme (samany)		
42	Gudau Forest Block II	10	27° 7'56.72"N	78°20'3.98"E	Social forestry scheme (samany)		
43	Sikhara Hardaspur Forest Block	15	27° 1'6.37"N	78°27'21.61"E	Social forestry scheme (samany)		
44	Sikhara Hardaspur Forest Block	10	27° 1'18.05"N	78°26'49.08"E	Social forestry scheme (samany)		
45	Shankarpur Forest Block	15	27° 5'33.97"N	78°21'20.78"E	Social forestry scheme (samany)		
46	Kurrikupa Forest Block	10	27° 8'14.66"N	78°18'46.44"E	Social forestry scheme (samany)		
47	Jalalpur Forest Block	10	27° 2'52.20"N	78°26'29.25"E	Social forestry scheme (samany)		
48	Madua Forest Block	5	27° 4'27.94"N	78°22'34.10"E	Social forestry scheme (samany)		
49	Deori Faridpur Land Back Bhoomi	8	27°17'46.29"N	78°42'43.09"E	Social forestry scheme (samany)		
50	kadipur land back land	2	27°20'11.49"N	78°39'23.89"E	Social forestry scheme (samany)		
51	DeoriFaridpur Land Back Bhoomi II	5	27°17'29.98"N	78°42'14.20"E	Social forestry scheme (samany)		
52	Gadanpur Land Back Land	5	27°25'54.05"N	78°33'11.79"E	Social forestry scheme (samany)		
53	Pavrai Land Back Bhoomi	5	27°19'14.96"N	78°33'25.14"E	Social forestry scheme (samany)		
54	jahanpar land back land	5	27°19'30.16"N	78°36'42.05"E	Social forestry scheme (samany)		

55	kaurara elder land back land	5	27°11'39.25"N	78°43'1.34"E	Social forestry scheme (samany)		
56	Nagla Singh Land Back Bhoomi	5	27°27'21.04"N	78°33'14.81"E	Social forestry scheme (samany)		
57	Kushiari Dhimri Land Back Land	5	27°13'21.27"N	78°45'35.78"E	Social forestry scheme (samany)		
58	Nagla Ram Land Bank Land	6	27°18'28.56"N	78°41'40.73"E	Social forestry scheme (samany)		
59	Shikohabad-Eta road km 31 to 32 both tracks	4	27°21'38.31"N	78°41'28.67"E	Social forestry scheme (samany)		
60	Shikohabad-Eta road km 21 to 25 both tracks	6	27°17'0.87"N	78°39'37.47"E	Social forestry scheme (samany)		
61	Ninawali Land Bank Land	8	27°26'3.10"N	78°37'41.60"E	Social forestry scheme (samany)		
62	Nagla Gosha Land Bank Land	10	27°25'35"N	78°33'56"E	Social forestry scheme (samany)		
63	Kushiari Land Back Land	10	27°13'33"N	78°42'34"E	Social forestry scheme (samany)		
64	deep land bank land	9	27°20'57.08"N	78°34'28.19"E	Social forestry scheme (samany)		
65	Nagla Nathua Land Bank Land	2	27°14'49.82"N	78°40'49.43"E	Social forestry scheme (samany)		
66	NaglaWavan Land Bank Land	5	27°30'14.43"N	78°36'54.89"E	Social forestry scheme (samany)		
67	Pilkhtar Land Bank Land	10	27°20'22.64"N	78°33'28.11"E	Social forestry scheme (samany)		
68	Kheriyama Land Bank Land	10	27°25'10.56"N	78°33'16.43"E	Social forestry scheme (samany)		
69	Nagla Ram Land Bank Land	4	27°17'59.97"N	78°41'58.19"E	Social forestry scheme (samany)		
70	Chanari Land Bank Land	3	27°20'14.42"N	78°42'6.12"E	Social forestry scheme (samany)		
71	Kheriyama Land Bank Land	5	27°25'15.90"N	78°33'20.42"E	Social forestry scheme (samany)		
72	Jasrana-Mustafabad road km 1 to 4 both tracks	7	27°14'50.83"N	78°37'51.73"E	Social forestry scheme (samany)		
73	Kushiari Land Back Land II	2	27°13'5.32"N	78°45'20.26"E	Social forestry scheme (samany)		
74	Padham Land Bank Land	3	27°16'59.44"N	78°39'4.40"E	Social forestry scheme (samany)		
75	Deori Faridpur Land Bank Land	4	27.293658°N	78.716351°E	Social forestry scheme (samany)		
76	Surail Land Bank Land	4	27.297629°N	78.699602°E	Social forestry scheme (samany)		
77	NaglaWawan Land Bank Bhoomi II	4	27°30'34.66"N	78°36'20.62"E	Social forestry scheme (samany)		
78	Pilakhtar Land Bank Bhoomi II	5	27.334472°N	78.558493°E	Social forestry scheme (samany)		
79	Alipur Mohanipur Land Bank Land	5	27.286610°N	78.581819°E	Social forestry scheme (samany)		
80	Mustafabad Land Bank Land	5	27°17'56.97"N	78°33'46.30"E	Social forestry scheme (samany)		
81	sunav land bank land	5	27°20'34.61"N	78°30'51.22"E	Social forestry scheme (samany)		
82	Kushiari Land Bank Land IV	2	27.286610°N	78.581819°E	Social forestry scheme (samany)		
83	Nagla Gosha Land Bank Land II	5	27°26'8.24"N	78°33'34.02"E	Social forestry scheme (samany)		
84	Kushiyari Land Bank Land II	7	27°13'29.41"N	78°42'17.15"E	Social forestry scheme (samany)		
85	NaglaGosha Land Bank Bhoomi III	10	27°26'8.22"N	78°33'24.29"E	Social forestry scheme (samany)		
86	Nagla Real Land Bank Land	6	27°22'11.46"N	78°40'57.05"E	Social forestry scheme (samany)		
87	Nagla Singhi Forest Block Part-I	10	27° 7'2.25"N	78°15'22.40"E	Social forestry scheme (samany)		

88	Nagla Singhi Forest Block Part-II	10	27° 6'57.78"N	78°15'4.40"E	Social forestry scheme (samany)		
89	Nagla Singhi Forest Block	15	27° 6'50.53"N	78°14'54.72"E	Social forestry scheme (samany)		
90	Nagla Singhi Forest Block	6	27° 7'13.43"N	78°14'49.19"E	Social forestry scheme (samany)		
91	Gbarai Forest Block	10	27° 7'32.58"N	78°13'37.01"E	Social forestry scheme (samany)		
92	Gbarai Forest Block	8	27° 7'14.31"N	78°17'26.25"E	Social forestry scheme (samany)		
93	Niamatpur Forest Block	7.5	27° 5'59.39"N	78°16'4.66"E	Social forestry scheme (samany)		
94	Niamatpur Forest Block	5	27° 6'22.87"N	78°17'24.94"E	Social forestry scheme (samany)		
95	Niamatpur Forest Block	10	27° 5'46.33"N	78°16'18.78"E	Social forestry scheme (samany)		
96	Niamatpur Forest Block	7	27° 6'23.14"N	78°17'8.73"E	Social forestry scheme (samany)		
97	Dhirpura Forest Block	15	27° 8'42.62"N	78°17'56.02"E	Social forestry scheme (samany)		
98	Dhirpura Forest Block Part-I	10	27° 8'13.87"N	78°17'23.85"E	Social forestry scheme (samany)		
99	Dhirpura Forest Block	22	27° 8'0.74"N	78°17'20.52"E	Social forestry scheme (samany)		
100	Dhirpura Forest Block	5	27° 7'40.38"N	78°17'23.90"E	Social forestry scheme (samany)		
101	Dhirpura Forest Block	11	27° 9'43.27"N	78°17'43.45"E	Social forestry scheme (samany)		
102	Dhirpura Forest Block II	10	27° 7'34.97"N	78°17'40.47"E	Social forestry scheme (samany)		
103	Dhirpura Forest Block	6	27° 7'57.65"N	78°17'33.93"E	Social forestry scheme (samany)		
104	Dhirpura Forest Block	7	27° 8'51.90"N	78°17'20.36"E	Social forestry scheme (samany)		
105	Nyamatpur Forest Block II	10	27° 6'2.86"N	78°17'3.33"E	Social forestry scheme (samany)		
106	Nyamatpur Forest Block III	10	27° 6'5.46"N	78°16'4.18"E	Social forestry scheme (samany)		
107	Nyamatpur Forest Block	7	27° 6'14.25"N	78°17'17.92"E	Social forestry scheme (samany)		
108	Pariyar One Block	11	26°54'55.67"N	78°42'57.12"E	Social forestry scheme (S.C.P)		
109	Basai Mohammadpur Forest Block	11	27° 4'2.20"N	78°23'19.95"E	Social forestry scheme (S.C.P)		
110	barthara land bank land	5	27°20'3.38"N	78°30'29.83"E	Social forestry scheme (S.C.P)		
111	barthara land bank land	2.5	27°19'39.90"N	78°31'10.25"E	Social forestry scheme (S.C.P)		
112	Jarauli Land Bank Land	2.5	27° 9'32.12"N	78°29'53.58"E	Social forestry scheme (S.C.P)		
113	Mastpu rAkbarpur Land bank Bhoomi	3	27°14'56.78"N	78°34'34.80"E	Social forestry scheme (S.C.P)		
114	Dhirpura Forest Block Part	11	27° 7'14.31"N	78°17'26.25"E	Social forestry scheme (S.C.P)		
	Total	**1003**					

7. Mining and Stone Crushing in river bed and flood plain zone of River Ganga and its tributaries:

S. No.	Area of mining	FIR/ case registered/ year	Vehicles/ mineral seized	Action taken status	Cases pending in Court	Enforcement of EMGSM 2020 and Sustainable sand mining management guidelines 2016	Concerned Department
1	Yamuna River Area	No. Of FIR lodged till Feb2024 (FY23-24)-**07**	Total no. Of vehicles seized-**245**	No. Of FIR lodged till Feb2024 (FY23-24)-**07** No. of complaint lodged till Feb2024 (FY23-24)-**07** No. Of vehicles checked through m-check mobile app-**843** No. Of e-notices issued-**173** Total amount deposited against e-notices & illegal mining activities is (Feb 23-24)-**102.64 lakh rupees.**	01	-	Mining Department Firozabad

**The above compiled report is prepared as per the details provided by the concern departments.

1. The Tribunal has already directed for furnishing following information by order dated 24.11.2023:-

(1) District Ganga Protection Plan at city/ town level

District Ganga Protection Committee (DGPC) is required to formulate the action plan for each city and town located on main stem of river Ganga and its tributary and such Action Plan has to be prepared in accordance with the River Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016 (para 6 and 55).

(2) Contents of the Action Plan (Consolidated District Wise Action Plan including each City and Town abutting river Ganga and its Tributary)

2.1 Sewage Management

(i) Sewage generation (for entire District and individual town wise):

S.No	Name	Total Sewage Generation/ day (MLD)
1	Nagar Nigam, Firozabad	35
2	NPP Sirsaganj	7.90
3	NPP Tundla	5.4
4	NPP Shikohabad	3.75
5	NP Jasrana	4.50
6	NP Fariha	1
7	NP Eka	1
8	NP Makkanpur	3

(ii) Existing Sewage Treatment Capacities :

Total 02 STP 70 MLD capacity (Sofipur 67 MLD &Dabrai 03 MLD)in Firozabad district

(iii) Quantity of sewage is being treated (utilization capacity) :**both the STPs are 100 % used**

(iv) Performance of STPs particularly for FC :

STP	PH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride etc)	Nitrates	DO	TC	FC	Outlet flow and Geo code sample point	Colour/ odour	Discharged Into
Sofipur 67 MLD	7.4-7.6	100-108	288-312	210-238	594-644	T.Cr-1.4060,Pb-0.3397 Fe-1.5901 Ni-ND		1.3 - 1.5	33.4-33.7	222-230	La 27.118844° Long 78.37506°	Colourless /light	Sewer flow discharge into Yamuna river after treatment at STP

(v) Where treated sewage is being discharged (to Ganga or tributaries) :

After treatment some drains discharge into Yamuna river, some in Sirsa River, Awa River & Arhin River and rest drains discharge into ponds. Bioremediation/ phytoremediation process is used as treatment process in drains which discharge into Sirsa River. While some of the treated water used for irrigation purpose also.

(vi) Reason for under-utilization of STPs (connectivity of households/ laying of sewer lines):

(vii) Current gap in sewage treatment:

(viii) Time bound plan for bridging the gap and trying up with financial arrangement and not delaying tendering and identifying executing agencies or having any other issues**:**

(ix) Where untreated sewage (when there is no STP) is discharged (Ganga/tributries):

After treatment some drains discharge into Yamuna river, some in Sirsa River, Awa River &Arhin River and rest drains discharge into ponds. Bioremediation/ phytoremediation process is used as treatment process in drains which discharge into Sirsa River. While some of the treated water used for irrigation purpose also.

2.2 Drains joining Ganga and Tributary

(i) Number of drains carrying sewage- sullage or industrial waste water joining Ganga/ tributaries with their Quantity and Quality:

(ii) Drains joining outside city and town limits but, either joining in village or nearby town:

(iii) Inclusion of sewage flowing in drains into total sewage generation figures of each city and town and their interception and diversion to STPs:

S.No.	Drain (city/town)	Discharged Into
1	02(Rehna, Malviynagar)	Sewer flow discharge into Yamuna river after treatment at STP
2	Girdhari College Drain, Koarara road, Sirsaganj	After treatment (bioremediation/ phytoremediation) is released into Sirsa river
3	Shamsan Ghat Drain Kaurara, Sirsaganj	
4	Sirsakhas Drain, Surajpur Road, Sirsaganj	
5	Drain at Kothi no 1,(RPF Barruck), Tundla,	After treatment chulhawaliki Puliya
6	Drain at GhodaGhat, Shikohabad	After treatment Sirsa river
7	Sambhu Nagar Drain Near Yadav Pathology, Shikohabad	After treatment Sirsa river
8	Drain at Melawala, Bagh, Shikohabad	After treatment Sirsa river
9	Drain at Subhash Park, Sirsa River Bridge, Shikohabad	After treatment Sirsa river
10	Drain at MehrabBagh Vedanta Hospital, Shikohabad	After treatment Sirsa river
11	Drain at Lebar Colony, Shikohabad	After treatment Sirsa river
12	Drain At State Bank, Jasrana	After treatment Awa river
13	Drain At Jivendra Pachauri Ki Dukan To Awa River, Jasrana	After treatment Awa river
14	Drain At Rabi Ki Dukan To Awa River, Jasrana	After treatment Awa river
15	Drain At Bijli Ghar To PremVatikaMarrige Home, Jasrana	After treatment Awa river
16	Drain At Mahalla Gadiwan To Awa River, Jasrana	After treatment Awa river
17	Drain At Sabji Mandi Thana Ke Samne, Fariha, Firozabad	Talab, Fariha,
18	Drain At Maholla Chamaroura Kaleshwar Mandir, Fariha, Firozabad	Talab, Fariha,
19	Drain At State Bank To Sabji MandiEka Firozabad	After treatment Arhin river
20	Drain At Eta Chauraha To Arvind Rive Eka, Firozabad	After treatment Arhin river
21	Drain at Police ChawKi Makkhanpur	Jijauli Talab, Makkhanpur (work in for process for bioremediation/ phytoremediation tender)
22	Drain at Jijauli talab,Makkhanpur	

2.3 Septage management (In case of no STP)

(i) Status of Septage management (with reference to FSTP/STP):

Concerned Department	Existing FSTP (location & capacity)	Capacity (operational)	Inlet/ Outlet water quality & quantity	Number of tapped drains (quantity of discharge)	GAP(in treatment)	Final discharge point	Proposed/under constrction STP with completion
NPP Shikohabad	Mustfabad road shikohabad	32 KLD	07 KLD	No drain	25 KLD	Wastage tank	Completion date 01.01.2023

(ii) Management of Grey water and its disposal:

2.4 Industrial Pollution Control

(i) Attach the list on no. of industries generating trade effluents, their place of disposal and compliance including CETPs (town wise):

S. No.	Industries name & address	Product	Type	Treatment available (cetp/ petp/ etp operational capacity)	Effluent discharge (KLD)	Effluent discharge into	Consent		Concerned department
							Air	Water	
1	Dayal Jee Board Ind Pvt Ltd A-35.37 Ind Estate, Firozabad	Media craft paper	Pulp & Paper/ PU	ETP	-	ZLD	Granted	Granted	RO PCB
2	Lal Jee Board Ind Pvt Ltd A-34, Ind Estate, Firozabad	Media craft paper	Pulp & Paper/ PU	ETP	-	ZLD	Granted	Granted	
3	S.R. Mittal Paper Mills Itd. Etah Road, Shikohabad, Firozabad	Pulp & paper	Pulp & Paper/ PU	ETP	-	ZLD	Granted	Granted	
4	ALP Milk product pvt.Itd. Etah Road, Shikohabad, Firozabad	Dairy	Dairy / PU	ETP	1400	On their own land for irrigation purpose	Granted	Granted	
5	Hardayal Milk product pvt.Itd. Etah Road, Shikohabad, Firozabad	Dairy	Dairy / PU	ETP	1400	On their own land for irrigation purpose	Closed	Closed	

(3) **Water quality status**

Provide water quality status of Ganga and its tributaries in the District and city/ town in terms of its fitness for Bathing water quality that is, FC and FS:

River Yamuna	PH	BOD	COD	DO	TC (MPN/100)	FC (MPN/100)
U/S	7.6	13.2	36	6.7	43000	14000
D/S	7.7	15.6	42	6.5	92000	24000

(4) Notification of Flood Plain Zones: **Firozabad district is not under flood plain zone**

(5) Issues relating to Environmental Flow: **Not Applicable**

Member Convener/ Divisional Director
District Ganga Committee/ Social Forestry Division, Firozabad

District Magistrate/Chairman,
District Ganga Committee, Firozabad

35578

मानचित्र

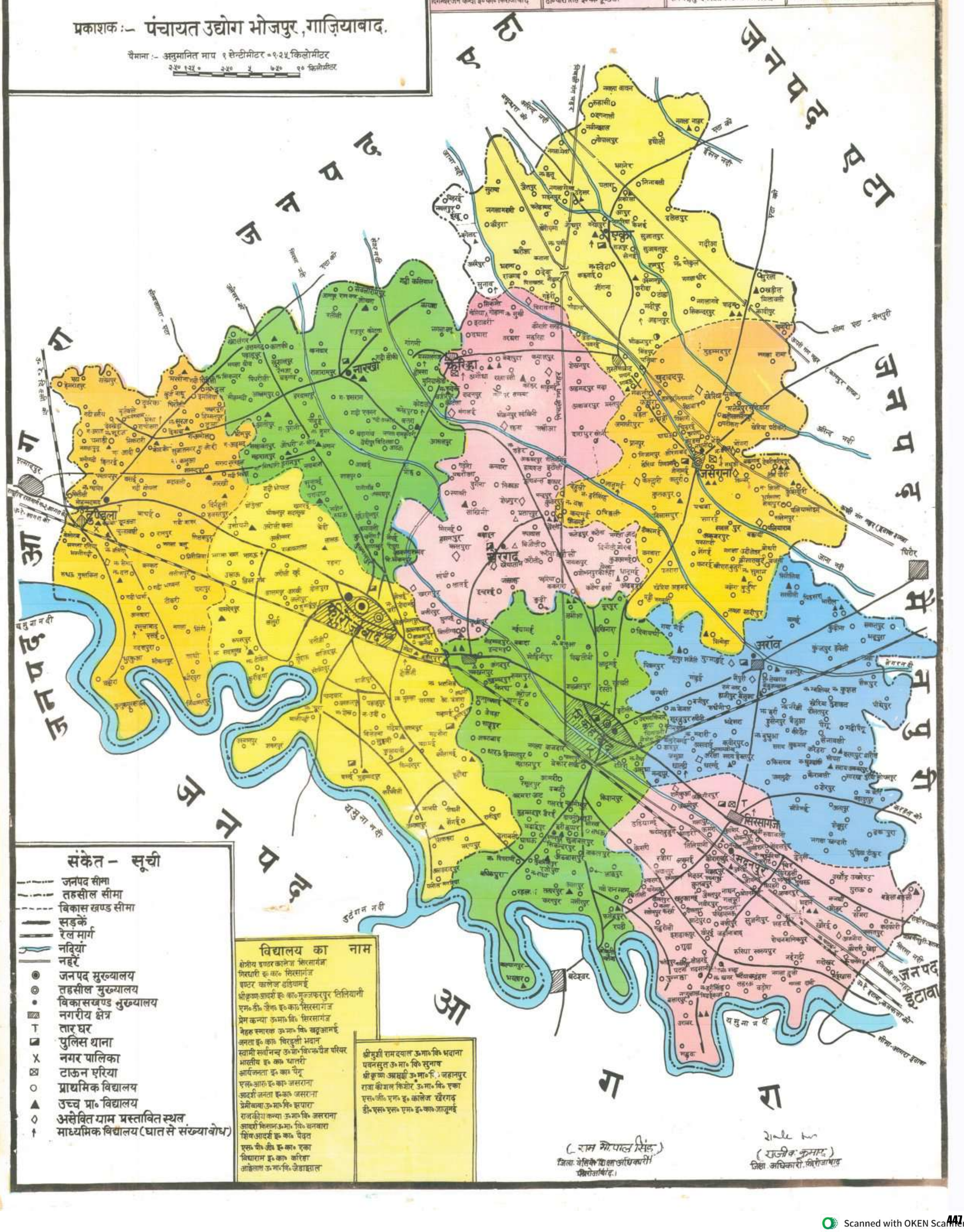
जनपद-फ़िरोज़ाबाद

प्रकाशक :– पंचायत उद्योग भोजपुर, गाज़ियाबाद.

पैमाना :– अनुमानित माप १ सेन्टीमीटर = १.२५ किलोमीटर

२.५० १.२५ ० २.५० ५ ७.५० १० किलोमीटर

विद्यालय	का	नाम
श्री गोपीनाथ इ॰का॰ फिरोजाबाद	रेवतीदेवी कन्या इ॰ का॰ फिरोजाबाद	एन॰आर॰ इ॰ का॰ टूण्डला
कस्तूरबा इ॰का॰ फिरोजाबाद	वाऊदयाल गर्ल्स इ॰का॰ फिरोजाबाद	राजकीय बालिका इ॰ का टूण्डला
इस्लामिया इ॰का॰ फिरोजाबाद	कमला नेहरू चन्द्रकुमारी जैन इ॰का॰ फिरोजाबाद	गिरधारीलाल उ॰मा॰वि॰ चुलहावली टूण्डला
पी॰डी॰जैन इ॰ का॰ फिरोजाबाद	मोतीलाल इ॰ का॰ न॰ विज्ञान फिरोजाबाद	कृषक उ॰मा॰ वि॰ पचोखरा
एस॰आर॰के॰ इ॰का॰ फिरोजाबाद	राष्ट्रीय श्रमिक उ॰मा॰वि॰ फिरोजाबाद	किसान उ॰मा॰वि॰ पलई, टूण्डला
तिलक इ॰का॰ फिरोजाबाद	दीन बन्धु इण्टर कालिज उसावनी	श्री आर॰के॰ इ॰ का॰ खोटला
डी॰ए॰वी॰इ॰का॰ फिरोजाबाद	गर्ग उ॰मा॰वि॰ इटौरा, फिरोजाबाद	आर॰आर॰एम॰ इ॰ का॰ अकुरगाव
जे॰पी॰ इ॰ का॰ अलीनगर कैजरा	वीर सावरकर इ॰ का॰ सरांवा दौकेली	स्वामी विद्यानानन्द गीता वि॰इ॰ का॰ गंजखागनी
महात्मा गांधी बालिका इ॰ का॰ फिरोजाबाद	आर्य कन्या उ॰मा॰वि॰ पुरानी मंडी, फिरोजाबाद	पूर्णानन्द उ॰मा॰ वि॰ नैपई
रामा कन्या इ॰ का॰ फिरोजाबाद	तुगरा बेगल कन्या उ॰मा॰वि॰ शीशगवां फिरोजाबाद	के॰पी॰ सिंह मैमोरियल उ॰मा॰वि॰ गढ़ी अफीम
दिगम्बर जैन कन्या इ॰ का॰ फिरोजाबाद	ठा॰ वीरी सिंह इ॰ का॰ टूण्डला	रामचन्द्र कुन्दन लाल क॰उ॰मा॰वि॰ कोटला
		राम [illegible] गीता उ॰मा॰वि॰ चनौरा
		पार्थ इ॰ का॰ शिकोहाबाद
		नारायन इ॰ का॰ शिकोहाबाद
		म॰ के॰ इण्टर कालेज शिकोहाबाद
		बी॰डी॰एम॰ ग॰ इ॰ का॰ शिकोहाबाद
		ठा॰ तारासिंह इ॰ का॰ नौशहरा शिकोहाबाद
		किसान उ॰मा॰वि॰ धाधकं
		आदर्श जनता उ॰मा॰वि॰ शिकोहाबाद
		महाराजा अग्रसेन उ॰मा॰वि॰ शिकोहाबाद
		जैन कन्या उ॰मा॰ वि॰ शिकोहाबाद
		श्रीमती भगवती देवी कन्या उ॰मा॰वि॰ शिकोहाबाद



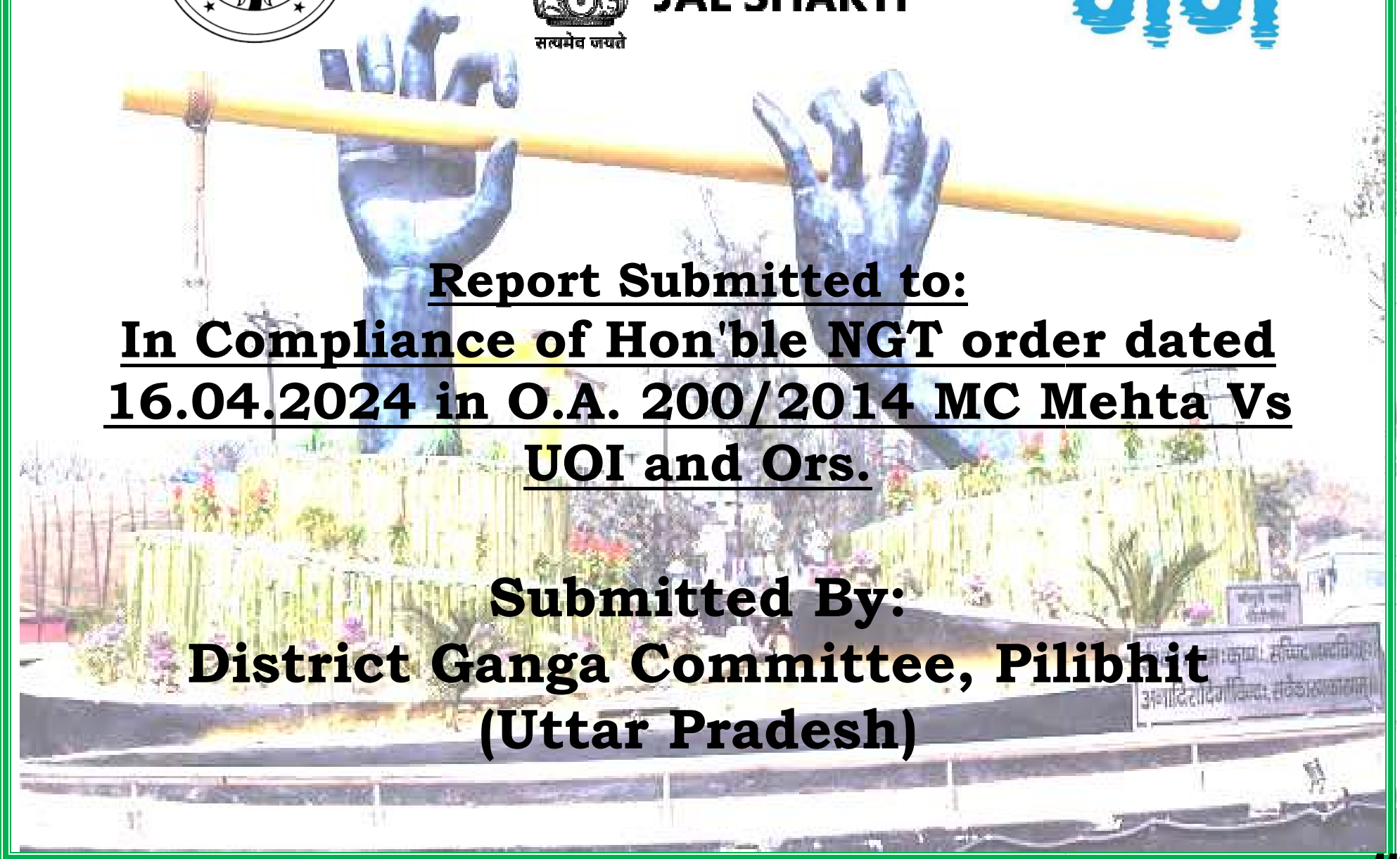
विद्यालय का नाम
क्षेत्रीय इण्टर कालेज सिरसागंज
गिरधारी इ॰का॰ सिरसागंज
इण्टर कालेज डडियामई
श्रीकृष्ण आदर्श इ॰ का॰ मुज्जफरपुर तिलियानी
एम॰डी॰ जैन॰ इ॰का॰ सिरसागंज
प्रेम कन्या उ॰मा॰वि॰ सिरसागंज
नेहरु स्मारक उ॰मा॰ वि॰ खतूआमई
जनता इ॰ का॰ विरहुली भदान
स्वामी सर्वानन्द उ॰मा॰वि॰ नं॰ पैज परियर
भारतीय इ॰ का॰ खातरी
आर्यजनता इ॰ का॰ पैगू
एल॰आर॰ इ॰का॰ जसराना
आदर्श जनता इ॰का॰ जसराना
प्रेमीबाबा उ॰मा॰वि॰ झपारा
राजकीय कन्या उ॰मा॰वि॰ जसराना
आदर्श किसान उ॰मा॰ वि॰ धनवारा
शिव आदर्श इ॰ का॰ पैवत
एस॰पी॰जी॰ इ॰का॰ एका
विद्याराम इ॰का॰ करिहा
आडेलाल उ॰मा॰वि॰ जेडाझाल
श्रीमुंशी रामदयाल उ॰मा॰वि॰ भदाना
पवनसुत उ॰मा॰ वि॰ सुनाव
श्रीकृष्ण अग्रसेन उ॰मा॰वि॰ जहानपुर
राजा कौशल किशोर उ॰मा॰वि॰ एका
एस॰जी॰ एम॰ इ॰ कालेज खैरगढ़
डी॰एस॰एस॰ एम॰ इ॰का॰ जाजूमई

(राम गोपाल सिंह)
जिला बेसिक शिक्षा अधिकारी
फिरोजाबाद।

(राजीव कुमार)
जिला अधिकारी, फिरोजाबाद

जल शक्ति मंत्रालय
MINISTRY OF
JAL SHAKTI

सत्यमेव जयते



Report Submitted to:
In Compliance of Hon'ble NGT order dated 16.04.2024 in O.A. 200/2014 MC Mehta Vs UOI and Ors.

Submitted By:
District Ganga Committee, Pilibhit (Uttar Pradesh)

1. Sewage The below information's are to be submitted on the basis of end point sample analysis of the concerned drain.

Nagar Palika Parishad Pilibhit	Drain (city/ town)	Total drain capacity	Generation/ day	pH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride etc)	Nitrates	DO	TC	FC	Outlet flow and geo code/ sample point	Color/ odour	Discharged Into
	Bankati Chauki Drain, Tanakpur Road, 28.645870, 79.822327	0.90	0.95	7.8	74.0	160.0	102	538	Cr-0.4915 Cu-0.0480 Pb-0.0769 Fe-0.8632 Zn-0.1290 Mn-0.1977 Ar-ND Hg-ND	17	1.9	9200000	6300000	0.95	Light Blackish	Khakra River
	PWD Guest House Drain 28.617817, 79.795699	1.20	1.22	8.0	62.0	240.0	98.0	292.0	Cr-0.2044 Cu-0.0382 Pb-0.1538 Fe-0.4670 Zn-0.2182 Mn-0.2332 Ar-ND Hg-ND	14	1.2	6300000	4800000	1.22	Light Blackish	Devha River

	Roadways Bus Stand Drain 28.621273, 79.796871	0.60	0.62	7.7	29.0	120.0	104.0	693.0	Cr-0.3001 Cu-0.0382 Pb-0.0769 Fe-0.6651 Zn-0.1131 Mn-0.1552 Ar-ND Hg-ND	12	2.3	9200000	840000	0.62	Light Blackish	Devha River
	Lakdi Mandi Drain, Bagh Gulsher Khan 28.624712, 79.798781	4.30	4.35	7.7	99.0	240.0	77.0	668.0	Cr-0.2522 Cu-0.0578 Pb-0.0769 Fe-0.3770 Zn-0.0748 Mn-0.2686 Ar-ND Hg-ND	18	1.4	14000000	840000	4.35	Light Blackish	Devha River
	Punjabiyan Puliya Drain 28.626854, 79.796960	1.05	1.07	7.7	59.0	160.0	88.0	737.0	Cr-0.2522 Cu-0.0382 Pb-ND Fe-0.8092 Zn-0.0494 Mn-0.2190 Ar-ND Hg-ND	15	1.4	9200000	790000	1.07	Light Blackish	Devha River

	Beni Chaudhary Drain,Makbool Ahmadki Puliya, Pakariya 28.632334, 79.794268	1.10	1.15	7.8	58.0	120.	112.0	734.0	Cr-0.2522 Cu-0.0382 Pb-0.1538 Fe-0.6832 Zn-0.5303 Mn-0.3820 Ar-ND Hg-ND	19	2.4	7900000	6300000	1.15	Light Blackish	Devha River
	Brahamchari Ghat Drain 28.637579, 79.795279	0.85	0.87	7.9	66.0	280.0	108.0	838.0	Cr-0.2044 Cu-0.0285 Pb-0.2308 Fe-1.3315 Zn-0.3901 Mn-0.2261 Ar-0.002 Hg-ND	21	1.7	8400000	6300000	0.87	Light Blackish	Devha River
	Khakra Police Chauki Drain 28.639155, 79.801850	1.20	1.22	7.7	87.0	240.0	204.0	740.0	Cr-0.2522 Cu-0.0382 Pb-0.1538 Fe-0.8813 Zn-0.2118 Mn-0.2686 Ar-ND Hg-ND	14	0.86	14000000	9200000	1.22	Light Brownish	Khakhra River

	Pakad Wala Kabristan, Mohalla - Bhure Khan, 28.639912, 79.806163	1.0	1.02	7.7	66.0	280.0	276.0	844.0	Cr-0.3001 Cu-0.0578 Pb-0.1538 Fe-0.6471 Zn-0.1736 Mn-0.3820 Ar-ND Hg-ND	12	2.14	16000000	9200000	1.02	Light Blackish	Khakhra River
	Balemiya Majar Drain 28.640704, 79.810199	3.20	3.25	7.8	57.0	280.0	86.0	585.0	Cr-0.1565 Cu-0.0089 Pb-0.0769 Fe-0.4130 Zn-0.0525 Mn-0.2261 Ar-ND Hg-ND	15	2.03	8400000	7900000	3.25	Light Blackish	Khakhra River
Nagar Palika Parishad Puranpur	of the drain near Singh Cycle Store 28.510253 80.14307	2.1	2.1	8	20	63	370	390	Cr-0.06, Pb-0.07, Fe-1.21, Zn-4.2, Mn-0.71, As-BLQ(.05), Hg-BLQ(.05), fluride-0.79	17	2	235000	6500	2.1	Turbid	Sidkua Pond
	Naresh grocery store drain 28.510232 80.143063	1	1	7	18	42	260	290	Cr-,0.07 Pb-0.06 ,Fe-0.89, Zn-2.8, Mn-0.29 ,As-BLQ(.05), Hg-BLQ(.05), fluride-0.62	22	2	180000	5000	1	Turbid	Sidkua Pond

Nagar Panchayat Gulariya Bhindara	Baburam Hotar to Gulariya Lake 28.815998 79.883362	0.5	0.5	7	22	58	220	220	Cr-0.05, Pb-0.08, Fe-1.43, Zn-3.5, Mn-0.56, As BLQ (.05), Hg-BLQ(.05), fluride-0.74	15	2	310000	7000	0.5	Turbid	Gulariya Lake
	From Vinod Garg's house to Chaudhary's house 28.818984 79.886466	0.3	0.3	7	25	67	390	450	Cr-0.06, Pb-0.05, Fe-0.77, Zn-4.1, Mn-0.84, As-BLQ(.05), Hg-BLQ(.05), fluride-0.53	28	2	250000	8000	0.3	Turbid	Pond
	From Alfa Hotel to Gularia Pond 28.818346 79.886772	0.9	0.9	8	27	48	180	300	Cr-0.07, Pb-0.09, Fe-1.65, Zn-3.2, Mn-0.37, As-BLQ(.05), Hg-BLQ(.05), fluride-0.87	12	3	295000	4000	0.9	Turbid	Gulariya Pond

	From Gurunam Singh's house to Afia's house 28.818984 79.886466	0.3	0.3	7	19	36	330	410	Cr-0.05, Pb-0.06, Fe-0.34, Zn-4.5, Mn-0.65, As-BLQ(.05), Hg-BLQ(.05), fluride-0.56	19	2	205000	3500	0.3	Turbid	Pond
Nagar Panchayat Jahanabad	Khandani via petrol pump 28.630776 79.71961	0.4	0.4	8	21	55	410	370	Cr-0.07, Pb-0.08, Fe-1.87, Zn-3.9, Mn-0.49, As-BLQ(.05), Hg-BLQ(.05), fluride-0.61	24	3	360000	6000	0.4	Turbid	Khandani Pond
	Ward No. 1 in front of Amjat 28.628139 79.720583	1	1	8	24	45	270	320	Cr-0.06, Pb-0.07, Fe-1.12, Zn-3.3, Mn-0.21, As-BLQ(.05), Hg-BLQ(.05), fluride-0.73	13	2	265000	5500	1	Turbid	Harnam Singh Pond

	Pond in front of Asfaq member's house from Reeksha Road 28.634819 79.712653	2.1	2.1	7	23	68	220	280	Cr-0.05, Pb-0.05, Fe-0.98, Zn-4.7, Mn-0.78, As-BLQ(.05), Hg-BLQ(.05), fluride-0.81	27	2	220000	4500	2.1	Turbid	Harnam Singh Pond
	Afsaria Canal via Saipan 28.632567 79.714315	0.9	0.9	8	26	50	350	420	Cr-0.07, Pb-0.09, Fe-0.67, Zn-2.5, Mn-0.42, As-BLQ(.05), Hg-BLQ(.05), fluride-0.57	16	2	330000	7500	0.9	Turbid	in Afsaria River
Nagar Palika Parishad Bisalpur	Bareilly Road drain joining Raptwa drain 28.282246 79.796288	2.8	2.8	7	17	37	290	380	Cr-0.06, Pb-0.08, Fe-1.55, Zn-4.4, Mn-0.63, As-BLQ(.05), Hg-BLQ(.05), fluride-0.93	20	2	270000	3000	2.8	Turbid	Pond

	Pilibhit Road Drain 28.302253 79.798591	3	3	8	28	65	380	430	Cr-0.05, Pb-0.05, Fe-1.79, Zn-2.9, Mn-0.71, As-BLQ(.05), Hg-BLQ(.05), fluride-0.66	14	3	240000	3500	3	Turbid	Pond
	sugar mill drain 28.283355 79.811913	2.4	2.4	7	16	31	170	220	Cr-0.05, Pb-0.07, Fe-0.52, Zn-4.6, Mn-0.36, As-BLQ(.05), Hg-BLQ(.05), fluride-0.52	23	2	300000	6500	2.4	Turbid	Pond
	Dubey Mohalla Asara Awas Nala 28.298875 79.803817	1.2	1.2	7	29	60	230	390	Cr-0.07, Pb-0.06, Fe-0.45, Zn-3.7, Mn-0.81, As-BLQ(.05), Hg-BLQ(.05), fluride-0.72	18	2	220000	4000	1.2	Turbid	Pond
Nagar Panchayat Naugaw pakariy	office road drain 28.601226 79.796694	1.4	1.4	7	20	52	420	470	Cr-0.06, Pb-0.09, Fe-1.32, Zn-4, Mn-0.27, As-BLQ(.05), Hg-BLQ(.05), fluride-0.89	29	3	280000	4500	1.4	Turbid	Pond

a	Puranpur Road Drain 28.603615 79.79653	1.8	1.8	8	18	40	200	220	Cr-0.05, Pb-0.05, Fe-,0.83 Zn-2.6, Mn-0.73, As-BLQ(.05), Hg-BLQ(.05), fluride-0.65	12	2	260000	5500	1.8	Turbid	Pond
Nagar Panchayat Barkhera	Drain No. 01 Ward No. 01 Bisalpur 28.452154 79.805331	0.8	0.8	7	22	69	280	430	Cr-0.06, Pb-0.07, Fe-0.26, Zn-3.8, Mn-0.59, As-BLQ(.05), Hg-BLQ(.05), fluride-0.56	26	2	210000	6000	0.8	Turbid	Pond
	Drain No. 02 Daulatpur Road 28.452154 79.805331	1.3	1.3	8	25	47	390	470	Cr-0.07, Pb-0.08, Fe-1.92, Zn-4.8, Mn-0.18, As-BLQ(.05), Hg-BLQ(.05), fluride-0.51	21	3	320000	7000	1.3	Turbid	Pond
Nagar Panchayat Bilsanad	Main Drain 01 Mo. Ghassuganj Ward 09 28.239936 79.952573	0.5	0.5	8	27	33	250	310	Cr-0.07, Pb-0.06, Fe-0.61, Zn-2.3, Mn-0.85, As-BLQ(.05), Hg-BLQ(.05), fluride-0.68	30	2	350000	8000	0.5	Turbid	Gopal Pond

	Main drain 02 Mo. Ghassuganj Ward 09 28.240703 79.951351	0.5	0.5	7	19	57	310	370	Cr-0.06, Pb-0.05, Fe-1.1, Zn-4.3, Mn-0.31, As-BLQ(.05), Hg-BLQ(.05), fluride-0.74	11	2	230000	4500	0.5	Turbid	Gopal Pond
Nagar Panchayat Kalinagar	Garela 28.626668 80.078112	0.8	0.8	7	21	66	360	420	Cr-0.05, Pb-0.09, Fe-1.78, Zn-2.7, Mn-0.76, As-BLQ(.05), Hg-BLQ(.05), fluride-0.55	25	2	290000	5500	0.8	Turbid	Dhuvia Pond
	Idgah 28.618055 80.082798	0.7	0.7	8	24	44	190	270	Cr-0.05, Pb-0.07, Fe-1.36, Zn-3.6, Mn-0.67, As-BLQ(.05), Hg-BLQ(.05), fluride-0.63	14	2	260000	5000	0.7	Turbid	Idgah Pond
Nagar Panchayat Nuriya Husain	Drain near Gulshane Fatma 28.738579 79.892043	0.3	0.3	7	23	38	400	470	Cr-0.07, Pb-0.06, Fe-1.64, Zn-4.9, Mn-0.89, As-BLQ(.05), Hg-BLQ(.05), fluride-0.91	17	3	200000	6500	0.3	Turbid	Pond

pur	Main Charahe Tigriwala Nala 28.736968 79.894556	0.1	0.1	7	26	51	240	340	Cr-0.07, Pb-0.08, Fe-0.93, Zn-3.1, Mn-0.52, As-BLQ(.05), Hg-BLQ(.05), fluride-0.57	19	2	270000	7000	0.1	Turbid	Pond
	Khabbapur drain near railway crossing 28.735221 79.892924	0.15	0.15	8	17	35	180	250	Cr-0.06, Pb-0.05, Fe-0.75, Zn-2.4, Mn-0.94, As-BLQ(.05), Hg-BLQ(.05), fluride-0.79	28	2	340000	3500	0.15	Turbid	Pond
	Drain near Abdul Rahim's house 28.734539 79.893541	0.4	0.4	8	28	59	330	410	Cr-0.06, Pb-0.09, Fe-1.45, Zn-4.2, Mn-0.48, As-BLQ(.05), Hg-BLQ(.05), fluride-0.68	16	3	300000	4500	0.4	Turbid	Pond

All Parameter units in mg/l except pH and colour

The above information is to be submitted on the basis of end point sample analysis of the concerned drain.

2. STP for treating the sewage of the drains ultimately flowing to river ganga or its tributaries

Existing STP (location & capacity)	Capacity (operational)	Inlet/ Outlet water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point	Proposed/ under construction STP With completion date
No STP, 01 FSTP, 32 KLD is operational in Nagar Palika Parishad Pilibhit (near Deoha river), Tehsil-Sadar, Pilibhit. **Geo Location- 28.610766, 79.786541**				00	Reuses	No

NOTE- 01 FSTP, 32 KLD is operational in Nagar Palika Parishad Pilibhit (near Deoha river), Tehsil- Sadar, Pilibhit. Geo Location- 28.610766, 79.786541

2.1 STP ADDITIONAL INFORMATION

NAME OF DRAIN	POSITION OF STP WITH CAPACITY	GEO/COORDINATES	DISCHARGE QUANTITY FROM THE STP IN THE DRAIN	TOTAL PER DAY DISCHARGE FROM THE DRAIN INTO THE RIVER
Nil (No STP)				

Proposed STP (location & capacity)	Capacity (operational)	Inlet/ Outlet water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point Geo code/ sampling point	Proposed/ under construction STP With completion date
No STP proposed in district Pilibhit yet.						

3. **Hotels/ Ashrams/Dharmshalas/residential complexes abutting river Ganga or its tributaries**

In district Pilibhit all Hotels/ Ashrams/Dharmshalas/residential complexes not abutting river Ganga or its tributaries.

S.No.	Number of Hotels/ ashrams/ dharamshalas	Consent to establish/ operate	STP	Discharge point	Action taken
1	Moti Mahal- Vikas Srivastava	No consent	No STP	Municipal Drain /Dispose via Soakpit/Septic Tank	After filling of sewage tank, make it empty after depositing of prescribed fee
2	MGS Hotel- Talvinder Pal Singh				
3	Rama Hotel- Mukul Agarwal				
4	Santosh Hotel- Sanjeev Jaiswal				
5	Nirmal Hotel- Amit Agrawal				
6	Sharda Hotel- Dr. Rajeev				
7	Silver leaf- Dr. Ashish Agrawal				
8	Solitearyar Hotel- Dr. Piyush				
9	JP Hotel- Amit Agrawal				
10	Hotal Ram- Suresh Agrawal				
11	Hotal Alok- Alok (Shiv pujan)				
12	Hotel Madhuvan- Sanjeev Yadav				
13	Rajani Guest House- Durga Das Rajani				

4. **Industrial Effluent discharge by industries whose effluent is ultimately flowing to river Ganga or its tributaries**

In district Pilibhit all Industrial effluent discharge by industries not abutting/flowing to river Ganga or its tributaries. List of Industries is as fallows--

Total number of Industries	Daily effluent discharge	Treatment available (cetp/ petp/ etp operational capacity)	Effluent quality analysis (outlet of treatment plants Geo code sampling point)	GAP	Proposed / under construction treatment project (with timeline)	Number of defaulting units-Action taken	Industrial solid waste generated/ day	Manner of disposal (Industrial solid waste)
06 GPI	3730 KLD	ETP installed	Details given in below table (Details of Grossly Polluting Industries of District Pilibhit)	NOGap	Not proposed, already installed	00	Ash-3624.95 MT/day Press Mud-825.00 MT/day	Boiler ash- Boiler ash generated from sugar unit disposed in low laying area and used in bio-fertilizer. Boiler ash generated from thermal power plant used in cement industry. Press Mud- Used as manure.

Details of Grossly Polluting Industries of District Pilibhit

S. N.	Name of Industry	sector	Production capacity	Daily effluent discharge (KLD)	Treatment available (cetp/ petp/ etp operational capacity)	Effluent quality analysis (outlet of treatment plants Geo code sampling point)	GAP	Proposed/ under construction treatment project (with timeline)	Number of defaulting units-Action taken	Industrial solid waste generated/ day	Manner of disposal (Industrial solid waste)
1	Bajaj Energy Ltd.Barkhera, Pilibhit	Thermal Power Plant	90	980	ETP Operational	pH-7.5 SS- 73.0, DS-1130.0 BOD-22.0, COD-136.0	No GAP	Installed	zero	Ash-640 MT/Day	**Ash-** Disposed in low lying area and used in Bio-

						DOS-20-01-2024					Fertilizer,
2	Bajaj Hindustan Ltd.(Sugar Unit) Barkhera, Pilibhit	Sugar	10000	1000	ETP Operational	pH-7.5 SS- 19.0, DS-1450.0 BOD-22.0, COD-176.0 DOS-20-01-2024	No GAP	Installed	zero	Ash--6.75 MTD, Press Mud -300 MTD	Ash- Disposed in low lying area and used in Bio-Fertilizer Press Mud - Used as Manure.
3	Bisalpur Kisan Sahkari Chini Mills Ltd Bisalpur, Pilibhit	Sugar	2500	500	ETP Operational	pH-7.3 SS- 21.0, DS-1520.0 BOD-20.0, COD-184.0 DOS-20-01-2024	No GAP	Installed	zero	Ash--6.75 MTD , Press Mud -75 MTD	Ash- Disposed in low lying area and used in Bio-Fertilizer Press Mud - Used as Manure.
4	Kisan sahkari chini mills ltd. Pooranpur, Pilibhit	Sugar	2500	500	ETP Operational	pH-7.7 SS- 23.0, DS-1610.0 BOD-24.0, COD-192.0 DOS-20-01-2024	No GAP	Installed	zero	Ash--6.75 MTD, Press Mud- 75 MTD	Ash- Disposed in low lying area and used in Bio-Fertilizer Press Mud - Used as Manure.
5	L.H. Sugar Factories Ltd. (Distillery Unit) Village-Jagrolipul, Pilibhit	Distillery	160	ZLD	ETP Operational	pH-7.4 SS- 61.0, DS-890.0 BOD-24.0, COD-192.0 DOS-03-12-2023	No GAP	Installed	zero	Ash--6.75 MTD	Ash- Disposed in low lying area and used in Bio-Fertilizer.

6	L.H. Sugar, Factory Ltd Pilibhit,.	Sugar	12500	2000	ETP Operational	pH-7.7 SS- 23.0, DS-1590.0 BOD-22.0, COD-184.0 DOS-06-12-2023	No GAP	Installed	zero	Ash--53.14 MTD Press Mud-375MTD	Ash-Disposed in low lying area and used in Bio-Fertilizer Press Mud - Used as Manure.

All Parameter units in mg/l except pH

5. Regulation of Flood Plain Zone:

Area-cities/ towns	**Notification of flood plain zone**	**Demarcation**		**Encroachment & direct discharge** **GeoCode/ Sampling point**	**Encroachment removal status**	**Timeline for completion**
		No development zone pillars	**Regulatory zone pillars**			
Pilibhit	For the demarcation of flood plans working plan not prepared.	Not Started yet	Not Started yet	-	There is no any encroachment on Gomti and Devha river.	-

6. Afforestation/ Plantation along the bank of River Ganga and its tributaries and their flood plain zones

Area- cities/ towns	**Total plantation Geo Code/ Sampling Point**	**Proposed project**	**Timeline**
Pilibhit	3841957 (2022-23) and 3789196 (2023-24)	3661700 plants in 2288.56 hectares for land in 2024-25	July, 2024

2023–24 में कराये गये वृक्षारोपण का विवरण

क्र0 सं0	साइड का नाम	क्षेत्रफल (हे0)	कुल पौधों की सं0	जियोलोकेशन
1	छितौलिया–मगरासा होते हुए जहानाबाद मार्ग तक दोनों पटरी गैप फिलिंग	5.00	8000	N-28°.63'16'67" E-79°75'13'89"
2	मुडलिया–फुलैया–बगनेरा मार्ग दोनों पटरी	5.00	8000	N-28°83'57'73" E-79°71'11'03"
3	अमरिया–ड्यूनीडाम मार्ग से जगत नगरिया कालोनी मार्ग दोनों पटरी	5.00	8000	N-28°76'15'74" E-79°76'30'56"
4	बघा–56 कम्पार्टमेंट–B भाग–1	8.00	12800	N-28°73'39'7'22" E-79°94'13'89"
5	बघा–56 कम्पार्टमेंट–B भाग–2	8.00	12800	N-28°74'44'7'22" E-79°93'97'22"
6	बघा–56 कम्पार्टमेंट–B भाग–3	8.00	12800	N-28°74'46'3'89" E-79°94'24'77'8"
7	बघा–56 कम्पार्टमेंट–B भाग–4	5.00	8000	N-28°44'20'00" E-79°56'36'00"
8	बघा–56 कम्पार्टमेंट–C भाग–1	8.00	12800	N-28.73'05'56" E-79.94'4'44"
9	बघा–56 कम्पार्टमेंट–C भाग–2	8.00	12800	N-28°72'41'67" E-79°94'66'67"
10	पीलीभीत–टनकपुर मार्ग किमी0 8–17 दोनों पटरी गैप फिल्रिग	5.00	8000	N-28°41'21'00" E-79°51'24'00"
11	सियाबाडी पट्टी स`मीरापुर लिंक मार्ग होते हुए सुन्दरपुर दोनों पटरी	5.00	8000	N-28°63'38'89" E-79°77'77'78"
12	पीलीभीत–बरेली मार्ग जे0एम0बी0 तिराहे से शिवपुरिया मोड बांयी पटरी	5.00	8000	N-28°60'98'74" E-79°76'59'75"
13	पीलीभीत–बरेली मार्ग शिवपुरिया मोड से जतीपुर बांयी पटरी	6.00	9600	N-28°60'83'33" E-79°74'44'44"
14	ग्राम सूरजपुर में नदी द्वारा छोडी गयी श्रेणी–5 भूमि भाग–1	5.00	8000	N-28.79'11'11" E-79°81'11'11"
15	ग्राम सूरजपुर में नदी द्वारा छोडी गयी श्रेणी–5 भूमि भाग–2	5.00	8000	N-28°79'11'11" E-79°81'11'12"
16	अहिरबाडा ग्राम समाज आराजी बसुईया P-1	5.00	8000	N-28°15'12" E-79°44'18"

17	अहिरबाडा ग्राम समाज आराजी बसुईया P-2	5.00	8000	N-28°14'14" E-79°44'32"
18	अहिरबाडा ग्राम समाज आराजी बसुईया P-3	5.00	8000	N-28°15'12" E-79°44'23"
19	अहिरबाडा ग्राम समाज आराजी बसुईया P-4	5.00	8000	N-28°15'10" E-79°44'27"
20	अहिरबाडा ग्राम समाज आराजी बसुईया P-5	5.00	8000	N-28°15'06" E-79°44'28"
21	अहिरबाडा ग्राम समाज आराजी बसुईया P-6	5.00	8000	N-28°15'02" E-79°44'23"
22	अहिरबाडा ग्राम समाज आराजी बसुईया P-7	5.00	8000	N-28°15'09" E-79°44'21"
23	मुड़िया विलहरा से भदेनकंजा नहर	5.00	8000	N-8°11'53.61" E79°54'36.108"
24	बमरोली से भदेनकंजा नहर	5.00	8000	N-28°11'26.88" E-79°56'18.43"
25	मन्निया मरैना से रम्पुरा बसन्त तक	5.00	8000	N-28°08'1.88" E-79°55'0.1"
26	करनपुर चक स`भरकनिया माइन तक	5.00	8000	N-28°14'15.1" E-79°50'45.01"
27	भीकमपुर से कनपरा माइनर तक	5.00	8000	N-28°15'49.54" E-79°54'0.654"
28	रूरिया से मीरपुर माइनर तक	5.00	8000	N-28°14'26.16" E-79°54'7.09"
29	नौगमा झाल से हरसेली माइनर तक	5.00	8000	N-8°13'59.306" E-9°52'32.551"
30	बरखेड़ा से मुसरहा तक नहर	5.00	8000	N-8°27'11.299" E-79°49'2.073"
31	बर्रामऊ से डडिया भगत ग्राम सड़क मार्ग	5.00	8000	N-28°26'56.40" E-79°50'97.10"
32	पूरनपुर–घुघचिहाई मार्ग किमी0 6 से 10 के मध्य दोनों पटरी	4.00	6400	N-28°27'22" E-79°05'49"
33	घुघचिहाई डूण्डा मार्ग किमी0 0 से 3 के मध्य दोनों पटरी	3.00	4800	N-28°25'55" E-79°04'41"
34	पूरनपुर–भगवन्तापुर मार्ग किमी0 0 से 5 के मध्य दानों पटरी	5.00	8000	N-28°22'01" E-79°10'09"
35	पुरनपुर–कलीनगर मार्ग किमी0 5 से 10 के मध्य दोनो पटरी	5.00	8000	N-28°33'46" E-79°07'00"

36	पुरनपुर–कलीनगर मार्ग किमी0 10 से 12.5 के मध्य दोनो पटरी	3.00	4800	N-28º35'58" E-79º05'43"

7. Mining and Stone Crushing in river bed and flood plain zone of River Ganga and its tributaries:

Area of mining	FIR/ case registered/ year	Vehicles/ mineral seized	Action taken status	Cases pending in Court	Enforcement of EMGSM 2020 and Sustainable sand mining management guidelines 2016
1 Area	3	229	67.04 Lakh penalty recovered	06	-

1. The Tribunal has already directed for furnishing following information by order dated 16.04.2024:-

(1) District Ganga Protection Plan at city/ town level

District Ganga Protection Committee (DGPC) is required to formulate the action plan for each city and town located on main stem of river Ganga and its tributary and such Action Plan has to be prepared in accordance with the River Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016 (para 6 and 55).

(2) Contents of the Action Plan (Consolidated District Wise Action Plan including each City and Town abutting river Ganga and its Tributary)

2.1 Sewage Management

I. Sewage generation (for entire District and individual town wise):

S.N.	Name of Town	Total Sewage Generation (in MLD)

1.	**Barkhera (NP)**	1.92
2.	**Bilsanda (NP)**	2.55
3.	**Bisalpur (NPP)**	11.84
4.	**Gulariya Bhindara (NP)**	0.78
5.	**Jahanabad (NP)**	2.22
6.	**Kalinagar (NP)**	1.94
7.	**Nyoria Husainpur (NP)**	3.22
8.	**Pilibhit (NPP)**	17.78
9.	**Puranpur (NPP)**	5.82
10.	**Pakariya Naugawan (NP)**	2.65
		Total= 50.72

II. Existing Sewage Treatment Capacities: **01 FSTP, 32 KLD is operational in Nagar Palika Parishad Pilibhit (near Deoha river), Tehsil-Sadar, Pilibhit. Geo Location- 28.610766, 79.786541**

III. Quantity of sewage is being treated (utilization capacity): **01 FSTP, 32 KLD .**

IV. Performance of STPs particularly for FC: **01 FSTP, 32 KLD is operational in Nagar Palika Parishad Pilibhit (near Deoha river), Tehsil-Sadar, Pilibhit. Geo Location- 28.610766, 79.786541**

V. Where treated sewage is being discharged (to Ganga or tributaries) : **NO, STP is not installed**

VI. Reasons for Under-utilization of STPs (Connectivity of Households/ laying of sewer lines) : **NO, STP is not installed**

VII. Current Gap in sewage treatment: **Yes, due to not installed STP in district Pilibhit.**

VIII. Time bound plan for bridging the gap and tying up with financial arrangements and not delaying Tendering and identifying executing agencies or having any other issues : **Proposition to have a future plan**

IX. Where untreated sewage (when there is no STP) is discharged (Ganga /Tributaries):

Yes, in river Devha having discharge of 17.78 MLD, meet ram Ganga River as a tributary of Ganga river**.**

2.2 Drains joining Ganga and Tributary

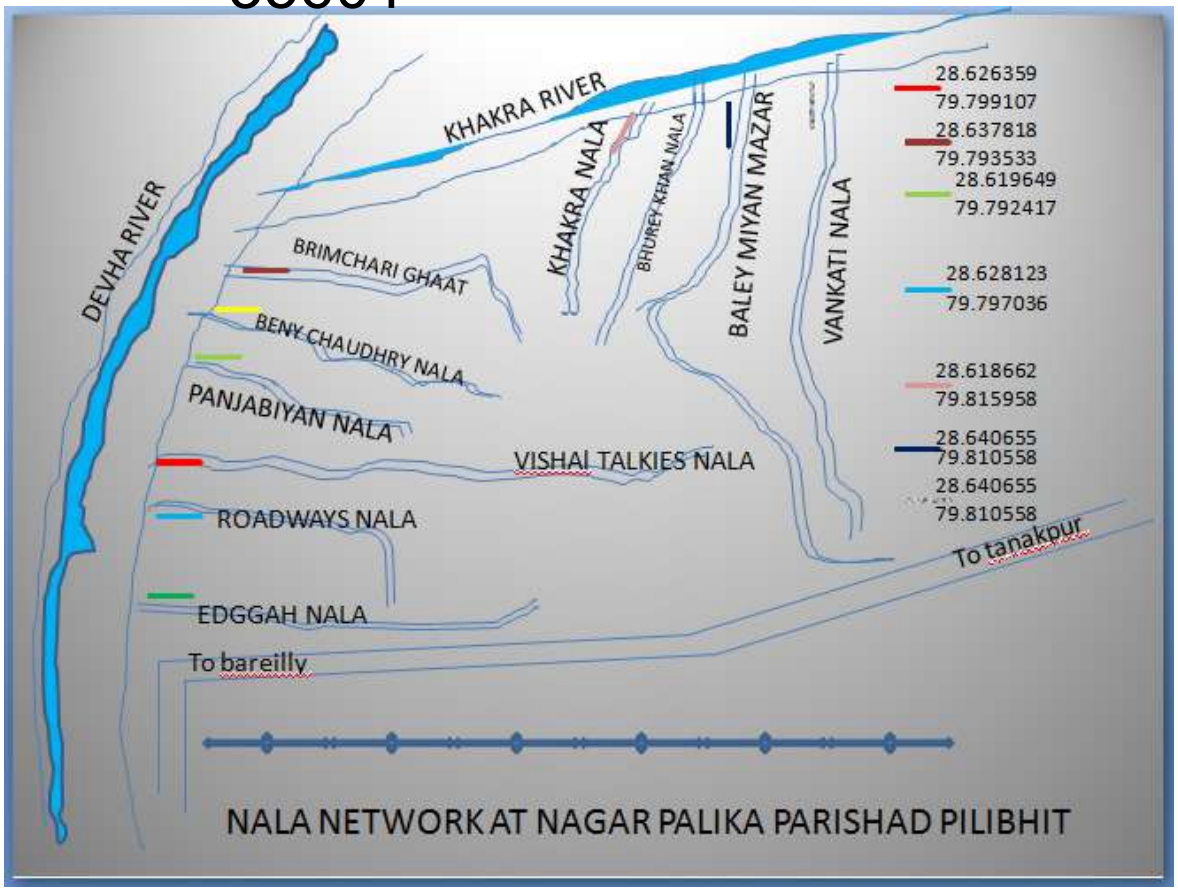
I. Number of drains carrying sewage- sullage or industrial waste water joining Ganga/ tributaries with their Quantity and Quality: 10 drains discharge Devha River and Khakra River 17.78 MLD

Quantity (As per report by UPPCB Bareilly):

There are 10 drains in nagar palika parishad pilibhit which meet Khakhra River and Devha river having discharge of 17.78 MLD, meet ram ganga river as a tributary of ganga river.

map1.xps

35601


KHAKRA RIVER
DEVHA RIVER
KHAKRA NALA
BHUREY KHAN NALA
BALEY MIYAN MAZAR
VANKATI NALA
BRIMCHARI GHAAT
BENY CHAUDHRY NALA
PANJABIYAN NALA
VISHAL TALKIES NALA
ROADWAYS NALA
EDGGAH NALA
To bareilly
To tanakpur
28.626359
79.799107
28.637818
79.793533
28.619649
79.792417
28.628123
79.797036
28.618662
79.815958
28.640655
79.810558
28.640655
79.810558
NALA NETWORK AT NAGAR PALIKA PARISHAD PILIBHIT

35602

Quality (As per report by UPPCB Bareilly):

Details of Drains															
Nagar Palika Parishad Pilibhit	**Drain (city/ town)**	**Total drain capacity**	**Generation/ day**	**pH**	**BOD**	**COD**	**TSS**	**TDS**	**Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride etc)**	**Nitrates**	**DO**	**TC**	**FC**	**Outlet flow and geo code/ sample point**	**Color/ odour**	**Discharged Into**
	Bankati Chauki Drain, Tanakpur Road, 28.645870, 79.822327	0.90	0.95	7.8	74.0	160.0	102	538	Cr-0.4915 Cu-0.0480 Pb-0.0769 Fe-0.8632 Zn-0.1290 Mn-0.1977 Ar-ND Hg-ND	17	1.9	9200000	6300000	0.95	Light Blackish	Khakra River
	PWD Guest House Drain 28.617817, 79.795699	1.20	1.22	8.0	62.0	240.0	98.0	292.0	Cr-0.2044 Cu-0.0382 Pb-0.1538 Fe-0.4670 Zn-0.2182 Mn-0.2332 Ar-ND Hg-ND	14	1.2	6300000	4800000	1.22	Light Blackish	Devha River

	Roadways Bus Stand Drain 28.621273, 79.796871	0.60	0.62	7.7	29.0	120.0	104.0	693.0	Cr-0.3001 Cu-0.0382 Pb-0.0769 Fe-0.6651 Zn-0.1131 Mn-0.1552 Ar-ND Hg-ND	12	2.3	9200000	840000	0.62	Light Blackish	Devha River
	Lakdi Mandi Drain, Bagh Gulsher Khan 28.624712, 79.798781	4.30	4.35	7.7	99.0	240.0	77.0	668.0	Cr-0.2522 Cu-0.0578 Pb-0.0769 Fe-0.3770 Zn-0.0748 Mn-0.2686 Ar-ND Hg-ND	18	1.4	14000000	840000	4.35	Light Blackish	Devha River
	Punjabiyan Puliya Drain 28.626854, 79.796960	1.05	1.07	7.7	59.0	160.0	88.0	737.0	Cr-0.2522 Cu-0.0382 Pb-ND Fe-0.8092 Zn-0.0494 Mn-0.2190 Ar-ND Hg-ND	15	1.4	9200000	790000	1.07	Light Blackish	Devha River

	Beni Chaudhary Drain,Makbool Ahmadki Puliya, Pakariya 28.632334, 79.794268	1.10	1.15	7.8	58.0	120.	112.0	734.0	Cr-0.2522 Cu-0.0382 Pb-0.1538 Fe-0.6832 Zn-0.5303 Mn-0.3820 Ar-ND Hg-ND	19	2.4	7900000	6300000	1.15	Light Blackish	Devha River
	Brahamchari Ghat Drain 28.637579, 79.795279	0.85	0.87	7.9	66.0	280.0	108.0	838.0	Cr-0.2044 Cu-0.0285 Pb-0.2308 Fe-1.3315 Zn-0.3901 Mn-0.2261 Ar-0.002 Hg-ND	21	1.7	8400000	6300000	0.87	Light Blackish	Devha River
	Khakra Police Chauki Drain 28.639155, 79.801850	1.20	1.22	7.7	87.0	240.0	204.0	740.0	Cr-0.2522 Cu-0.0382 Pb-0.1538 Fe-0.8813 Zn-0.2118 Mn-0.2686 Ar-ND Hg-ND	14	0.86	14000000	9200000	1.22	Light Brownish	Khakhra River

Pakad Wala Kabristan, Mohalla - Bhure Khan, 28.639912, 79.806163	1.0	1.02	7.7	66.0	280.0	276.0	844.0	Cr-0.3001 Cu-0.0578 Pb-0.1538 Fe-0.6471 Zn-0.1736 Mn-0.3820 Ar-ND Hg-ND	12	2.14	16000000	9200000	1.02	Light Blackish	Khakhra River
Balemiya Majar Drain 28.640704, 79.810199	3.20	3.25	7.8	57.0	280.0	86.0	585.0	Cr-0.1565 Cu-0.0089 Pb-0.0769 Fe-0.4130 Zn-0.0525 Mn-0.2261 Ar-ND Hg-ND	15	2.03	8400000	7900000	3.25	Light Blackish	Khakhra River

All Parameter units in mg/l

NOTE- . 01 FSTP, 32 KLD is operational in Nagar Palika Parishad Pilibhit (near Deoha river), Tehsil-Sadar, Pilibhit. Geo Location- 28.610766, 79.786541

II. Drains joining outside city and town limits but, either joining in village or nearby town: **10 drains joining out side city into Devha river tributaries of Ramganga.**

III. Inclusion of sewage flowing in drains into total sewage generation figures of each city and town and their interception and diversion to STPs: **There is no STP available within District.**

2.3 Septage management (In case of no STP)

I. Status of Septage management (with reference to FSTP/STP): **01 FSTP, 32 KLD is operational in Nagar Palika Parishad Pilibhit (near Deoha**

river), Tehsil-Sadar, Pilibhit. Geo Location- 28.610766, 79.786541

II. Management of Grey water and its disposal: **Through septic tank/Sock pit.**

2.4 Industrial Pollution Control

I. Attach the list on no. of industries generating trade effluents, their place of disposal and compliance including CETPs (town wise): **List of Industries is as bellow-**

Details of Grossly Polluting Industries of Distt-Pilbhit.

S. N.	Name of Industry	sector	Production capicity	Daily effluent discharge (KLD)	Treatment available (cetp/ petp/ etp operational capacity)	Effluent quality analysis (outlet of treatment plants Geo code sampling point)	GAP	Proposed/ under construction treatment project (with timeline)	Number of defaulting units- Action taken	Industrial solid waste generated/ day	Manner of disposal (Industrial solid waste)
1	Bajaj Energy Ltd.Barkhera, Pilibhit	Thermal Power Plant	90 MW	980	ETP Operational	pH-7.5 SS- 73.0, DS-1130.0 BOD-22.0, COD-136.0 DOS-20-01-2024	No GAP	Installed	zero	Ash-640 MT/Day	**Ash-** Disposed in low lying area and used in Bio-Fertilizer,
2	Bajaj Hindustan Ltd.(Sugar Unit) Barkhera, Pilibhit	Sugar	10000 TCD	1000	ETP Operational	pH-7.5 SS- 19.0, DS-1450.0 BOD-22.0, COD-176.0 DOS-20-01-2024	No GAP	Installed	zero	Ash--6.75 MTD, Press Mud -300 MTD	**Ash-** Disposed in low lying area and used in Bio-Fertilizer **Press Mud -** Used as Manure.

3	Bisalpur Kisan Sahkari Chini Mills Ltd Bisalpur, Pilibhit	Sugar	2500 TCD	500	ETP Operational	pH-7.3 SS- 21.0, DS-1520.0 BOD-20.0, COD-184.0 DOS-20-01-2024	No GAP	Installed	zero	Ash--6.75 MTD , Press Mud -75 MTD	**Ash-** Disposed in low lying area and used in Bio-Fertilizer **Press Mud -** Used as Manure.
4	Kisan sahkari chini mills ltd. Pooranpur, Pilibhit	Sugar	2500 TCD	500	ETP Operational	pH-7.7 SS- 23.0, DS-1610.0 BOD-24.0, COD-192.0 DOS-20-01-2024	No GAP	Installed	zero	Ash--6.75 MTD, Press Mud- 75 MTD	**Ash-** Disposed in low lying area and used in Bio-Fertilizer **Press Mud -** Used as Manure.
5	L.H. Sugar Factories Ltd. (Distillery Unit) Village-Jagrolipul, Pilibhit	Distillery	160 KLD	ZLD	ETP Operational	pH-7.4 SS- 61.0, DS-890.0 BOD-24.0, COD-192.0 DOS-03-12-2023	No GAP	Installed	zero	Ash--6.75 MTD	**Ash-** Disposed in low lying area and used in Bio-Fertilizer.
6	L.H. Sugar, Factory Ltd Pilibhit,.	Sugar	12500 TCD	2000	ETP Operational	pH-7.7 SS- 23.0, DS-1590.0 BOD-22.0, COD-184.0 DOS-06-12-2023	No GAP	Installed	zero	Ash--53.14 MTD Press Mud-375MTD	**Ash-** Disposed in low lying area and used in Bio-Fertilizer **Press Mud -** Used as Manure.

All Parameter units in mg/l except pH

(3) Water quality status

Provide water quality status of Ganga and its tributaries in the District and city/ town in terms of its fitness for bathing water quality that is, FC and FS: **Monitoring Report showed in below.**

SR. NO.	Name of River	Sampling Point	District	Dt. Of Sampling	Colour (Hazen/Apearance)	Odour	pH	B.O.D (mg/L)	C.O.D (mg/L)	Hardness as $CaCO_3$ (mg/L)	Calcium as Ca^{++} (mg/L)	Magnesium as Mg^{++} (mg/L)	Chloride as Cl^- (mg/L)	Alkalinity as $CaCO_3$ (mg/L)	TDS (mg/L)	TSS (mg/L)	TS (mg/L)	E.C. (µS/cm)	TURBIDITY (NTU)	Total Coliform (MPN/100ml)	Fecal Coliform (MPN/100ml)
1	Gomti River	U/S Pilibhit - Pooranpur road bridge	Pilibhit	15.02.2024	10	odourless	7.6	1.2	8	98	24.0	9.23	10	58	177	28	205	269	32	790	630
2	Gomti River	D/S Banjara ghat, vill-sikrahana, pooranpur	Pilibhit	15.02.2024	10	odourless	7.8	1.4	12	142	32.8	14.58	14	68	189	34	223	287	40	2200	1400
3	Deoha river	Pilibhit Road bridge	Pilibhit	15.02.2024	10	odourless	7.6	1.6	12	124	28.0	13.12	14	48	174	30	204	261	34	630	480

All Parameter units in mg/l except pH, colour, FC, TC, Ordour and turbidity

(4) Notification of Flood Plain Zones: A notice under section 61-B of Indian forest act 1927 has been issued to the concerned person for removal of encroachment. The proper action is under process with the help of forest department, police department and district administration, Pilibhit.

(5) Issues relating to Environmental Flow:

Notification of Ecological flow	Notification issued by Government of India dated 09.10.2028 for ecological flow of ganga and its tributary rivers. **Water levels of the river during the year (especially dry season)-** 1- Sharda River average 1.0m to 1.30m 2- Deoha River average 0.00 to 0.60m
Steps taken for maintaining Ecological flow/ status of compliance of the E-flow notifications	**List and status of dams, barrages, anicuts, embankments, small pond are as etc. And their design storage capacities-** Sharda sagar dam under going to working condition 454 M.C.M., Duni Barrage good working condition 2432 Qucec diversion capacity. 1- Dams - NIL 2- Barrage - NIL 3- Anicuts - NIL 4-embankments - i) Sanedi Tatbandh (Length 12.200 Km) under Sharda Sagar Division, Pilibhit ii) River Training bandh (Length 2.500 Km) iii) Marginal Tatbandh (Length 5.200 Km) is good Condition. **Manage e-flows in Pilibhit** 1-Banbasa Barrage (Under head Work Division, Bareilly) 2-Duni Barrage (under Sharda Sagar Division, Pilibhit)

Best practices: District Ganga Committee is constituted in the district to better moderate the activities and issue direction to the masses and the stakeholders involved in the restoration of the river. Ganga artis are being conducted in Gomti udgam sthal, Madho Tanda and Ganga grams in every day. Various awareness programs such as Yoga Day, Ganga Swachatta Pakhwada, Ganga cycle run, poster competitions and cleanliness drive to among local people etc, are being organized time to time for promote awareness about the need to keep the river clean and not throw plastic and solid waste in the drains/river/water bodies. Moreover, organic farming is being promoted among the farmers by the agriculture departments. A total of 16 village panchayats through which the

Gomti River flows in Pilibhit. Near the Gomti River, 4 ODF^{++} village panchayats of agricultural land have been under organic farming in the district.

Disclaimers: The final report is compiled by District Ganga Committee, Pilibhit. All the necessary information provided by the concerned Departments is given in the prescribed format.

भारत सरकार /
जल शक्ति मंत्रालय
GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI

Report In

Compliance of Hon'ble NGT Order

Dt.16.04.2024

O.A. 200/2014 M C Mehta Vs UOI and Ors

Report Submitted By-

DISTRICT GANGA COMMITTEE

DISTRICT UNNAO

Chapter 3 - Tabular Format Information

1. Sewage

The above information is to be submitted on the basis of end point sample analysis of the concerned drain

Source- as per report of Nagar Palika Unnao, letter No. 03/ स्वास्थ्य विभाग /2024–25/03 Dated 03-04-2024 and Pollution Control Board letter No 06 सा0-204@2024 Dated 01-04-2024

Drain (City/ Town)	Total Drain Capacity	Generation / Day	pH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, Pb, Ar, Mn, Cu, Zn, Hg, Fluoride etc.)	Nitrates	DO	TC	FC	Outlet Flow and Geocode / Sample Point)	Colour/ Odour	Discharge into
Ganga Vishnu Drain at Shukla Ganj, Unnao	2.80 MLD	0.1 MLD	8.50	60	240	62	664	Fe-1.1300, Cr-ND, Ar-0.002, Mn-0.6989, Cu-0.0073, Zn-0.1897, Hg-ND, Fluoride-2.784	7.602	00	$2.3x\ 10^6$	$14x\ 10^6$	Lat-26.47632 Long-80.372705	Light Grey	River Ganga at Shukla Ganj Unnao
Indra Nagar Drain at Shukla Ganj, Unnao	7.2 MLD	2.8 MLD	7.65	55	180	60	654	Fe-1.4565, Cr-ND, Pb-ND, Ar- 0.002, Mn-0.6823, CU-ND, Zn-0.21158, Hg-ND, Fluoride-2.483	1.437	00	$2.x\ 10^6$	$10x\ 10^6$	Lat-26.46949 Long-80.384386	Light Grey	River Ganga at Shukla Ganj Unnao
Taar Drain (Ravidas Nagar) at Shukla Ganj, Unnao	1.5MLD	1.3MLD	7.93	50	160	64	639	Fe-0.8034, Cr-ND, Ar-0.001, Mn-0.2562, Cu-ND, Zn-0.4561, Hg - ND, Fluoride-2,483	ND	00	$1.9x\ 10^6$	$1.1x\ 10^6$	Lat-26.477748 Long-80.392539	Light Grey	River Ganga at Shukla Ganj Unnao
City jail Drain at Unnao Shukla Ganj Road, Unnao	16.0	11.36 MLD	8.02	65	200	58	629	Fe-0.9340, Cr-ND, Pb- ND, Ar- 0.001, Mn-0.3448, Hg -ND, Fluoride-2.24	ND	00	$2.2x\ 10^6$	$1.2x\ 10^6$	Lat-26.536589 Long-80.470678	Light Grey	River Ganga at Majhara Unnao
Loni Drain Near Miza international at LKO-KNP Highway, Unnao	18.1MLD	7.22	7.98	60	180	70	800	Fe-0.9172, Cr-ND, Pb-ND, Ar-0.002, Mn-0.1192, Cu-ND, Zn-0.1142, Hg-ND, Fluoride-2.45	0.013	00	$1.8x\ 10^6$	$1.0x\ 10^6$	Lat-26.558211 Long-80.514430	20 Hazen	River Ganga at Bheethi Raebareli

Nana Mau Drain,	1.34 MLD	1.34	6.89	24	90	68	630	Fe-1.552 Cr-ND, Pb-ND, Ar-0.0003 Mn-0.694, CU-ND, Zn-0.3250, Hg-ND,	1.724	00	$2.7x\ 10^6$	$1.3x\ 10^6$	Lat-26.889281 Long-80.202163	Grey	Kolyani Nadi
Bhadeshwar purvaiya Drain, NPP Bangarmau	2.16 MLD	2.16	6.58	28	102	13	540	Fe-1.772 Cr-ND, Pb-ND, Ar-0.002 Mn-0.773, Cu-ND, Zn-0.2750, Hg- ND, Fluoride-1.892	1.614	00	$2.4x\ 10^6$	$1.6x\ 10^6$	Lat-26.894084 Long-80.207766	Grey	Kolyani Nadi
Degree college Drain, Nagar Palika Parishad, Bangarmau	2.98 MLD	2.98	7.01	26.2	112	11	570	Fe-1.672 Cr-ND, Pb-ND, Ar-ND, Mn-0.686, Cu-ND, Zn-0.370, Hg - ND, Fluoride-1.618	1.614	00	$2.4x\ 10^6$	$1.7x\ 10^6$	Lat-26.882473 Long-80.215546	Grey	Kolyani Nadi
Nagar Panchayat, Nawabganj	1.42 MLD	1.42	7.5	26	135	110	110	Fe-0.9162, Cr-ND, Mn-0.586, Cu-ND, Zn-0.678, Hg-ND, Fluoride-2.46	1.678	00	$2.7x\ 10^6$	$1.6x\ 10^6$	Lat-26.616349 Long-80.663313	Light Grey	Swamp in Ward Jhakhri
Bara nala Nagar Panchayat, Mohan	1.62 MLD	1.62	7.5	26.5	134	110	220	Fe-.8232, Cr-ND, Pb-ND, Ar-ND, Mn-0.624, Cu-ND, Zn-0.664, Hg- ND, Fluoride-2.043	2.833	00	$2.4x\ 10^6$	$1.4x\ 10^6$	Lat-26.775557 Long-80.675373	Light Grey	Sai River
Azad Nagar Bada Nala Nagar Panchayat, Nyotini	0.918 MLD	0.918	7.4	25	140	100	99.5	Fe-0.982 Cr-ND, Pb-ND, Ar - ND, Zn-0.2860, Hg-ND, Fluoride 2.837	1.688	00	$2.4x\ 10^6$	$1.3x\ 10^6$	-	Light Grey	Nyotini
Jawahar Nagar Nala Nagar Panchayat, Haidrabad	1.04 MLD	1.04	6.91	59	340	309	309	Fe.08270, Cr-ND, Mn-0.011, Cu-ND, Zn- 0.2852, Hg-ND, Zn- 0.2852, Hg-ND, Fluoride-2.443	1.255	00	$2.6x\ 10^6$	$1.7x\ 10^6$	Lat-26.818328 Long-80.501518	Light Grey	Barren land in Ward Gandhi Nagar
Ward no. 4 Chamraudha nala, Ward no 10 Murauna tola Nala Nagar Panchayat, Auras	1.34 MLD	1.34	7.5	26	135	110	108	Fe-1.673, Cr-ND, Pb-ND, Ar-ND, Mn-0.008, Cu-ND, Zn- 0.3762, Hg-ND, Fluoride-2.332	1.774	00	$2.8x\ 10^6$	$1.6x\ 10^6$	Lat-26.906202 Long-80.500472	Light Grey	Indan Gas Agency Auras

Nagar Panchayat, Safipur	3.05 MLD	3.05	7.5	26	135	110	110	Fe-0.01, Cr- BDL (<0.01), Pb- BDL (<0.005), Ar-ND, Mn-BDL (<0.01), Zn-0.84, Hg-BDL (<0.001), Fluoride 0.36	3.08	00	430	49	Lat-26.73494 Long-80.34629	Light Grey	Moh. Babar Ali Kheda, Safipur
Nagar Panchayat, Kursath	0.80 MLD	0.8	7.5	26.5	134	109	109	Fe-0.78 Cr- BDL (<0.01 0, Pb-BDL (<0.005), Ar - ND, Mn-BDL (0.05) Cu-BDL (<0.01), Zn-1.12 Hg- BDL (<0.001), Fluoride 0.44	3.58	00	1600	110	Lat-26.8666459 Log. 80.40807795	Light Grey	Moh. kasaita Kursat
Nagar Panchayat, Rasulabad	0.94 MLD	0.94	6.6	3	25	88	170	Fe-0.9163 Cr-ND, Pb-ND, Ar- ND Mn-0.584, Cu-ND, Zn-0.676, Hg-ND, Fluoride 2.44	1.583	00	$2.7x\ 10^6$	$1.5x\ 10^5$	-	Light Grey	Rasulabad
Nagar Panchayat, Ganj Muradabad	1.18 MLD	1.18	6.91	59	340	309	309	Fe-0.73, Cr-ND, Pb-ND, Ar-ND, Mn-0.08, 1.28, Hg-ND, Fluoride-0.17	3.74	00	$2.6x\ 10^6$	170	Lat 26.953706 Long 80.181873	Blackish	Barren land in Ward No3 Chamraud ha kachhiyana
Jawahar Lal Nehru Drain, Nagar Panchayat, Fatehpur 84	0.53 MLD	0.53	6.9	23	90	88	88	Fe-0.9162 Cr-ND, Pb-ND, Ar-ND Mn-0.586, Cu-ND, Zn-0.678, Hg-ND, Fluoride 2.46	1.587	00	$2.7x\ 10^6$	$1.5x\ 10^5$	Lat 26.78286 Long 80.264714	Light Grey	Khadehara Puliya
Nagar Panchayat, Ugu	0.84 MLD	0.84	7.5	26	135	110	110	Fe-1.072, Cr-ND, Pb-ND, Ar-0.002, Mn-0.497, Cu-ND, Zn-0.2864, Hg-ND, Fluoride-1.9262	1.833	00	$2.3x\ 10^6$	$1.4x\ 10^5$	Lat 26.79286 Long 80.318474	Light Grey	Bamba Puliya
Nagar Panchayat, Purwa	2.94 MLD	2.94	7.5	26.5	134	109	109	Fe-.3532, Cr-ND, Pb-ND, Ar-ND, Mn-0.454, Cu-ND, Zn-0.664, Hg- ND, Fluoride-1.043	1.546	00	ND	ND	-	Light Grey	-

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Nagar Panchayat, Maurawan	1.87 MLD	1.87	7.4	25	140	100	99.5	Fe-09164, Cr-ND, PB-ND, Ar-ND, Mn—0.576, Cu-ND, Zn-0.679, Hg-ND, Fluoride-2.44	1.667	00	2.7x 10^6	1.5x 10^5	Lat-26.4 299890 Long-80.819280	Light Grey	-
Nagar Panchayat, Bighapur	0.84 MLD	0.84	6.91	59	340	309	309	Fe.09271, Cr-ND, Mn-0.012, Cu-ND, Zn- 0.2152, Hg-ND, Zn- 0.2252, Hg-ND, Fluoride-2.003	1.587	00	2.1x 10^6	1.6x 10^5	-	Light Grey	-
Nagar Panchayat, Bhagwant Nagar	1.17MLD	1.17	6.9	23	90	88	88	Fe-1.272 Cr-ND, Pb-ND, Ar-ND, Mn-0.546, Cu-ND, Zn-0.380, Hg - ND, Fluoride-1.658	1.987	00	1.7x 10^6	1.1x 10^5	-	Light Grey	-
N.P Achal Ganj	2.35 MLD	2.35 MLD	7.5	25	132	110	0	Fe-0.7540, Cr-ND, Pb- ND, Ar- 0.001, Mn-0.4748, Hg -ND, Fluoride-2.04	1.547	00	1.8x 10^6	1.2x 10^5	-	Light Grey	-

The above information is to be submitted on the basis of end point sample analysis of the concerned drain

2. STP for treating the sewage of the drains ultimately following to river Ganga or its tributaries.

Source- Nagar Palika Parishad Unnao, letter No. 03/ स्वास्थ्य विभाग / 2024-25/03 Dated 03-04-2024

Sr.No.	Existing STP (Location & Capacity	Capacity (Operational)	lnIet/Outlet Water Quality & Quantity	Numbers of tapped Drains (Quantity of discharge	GAP (in Treatment)	Final Discharge Point	Proposed/Under Construction STP with Completion Date
1	15 MLD STP Village Dakari Unnao	15 MLD – Under Trial	8 MLD	1	7 MLD	Village Dakari Unnao City Jail Drain	STP Construction and Commissioning is Under Process
2	5 MLD STP Ganga Ghat Unnao	5 MLD - Non-Operational	Under Construction	No Drain tapped	5 MLD	River Ganga	Under Construction

2.1 STP Additional Information

Source- Nagar Palika Parishad Unnao, letter No. letter No. 03/ स्वास्थ्य विभाग /2024–25/03 Dated 03-04-2024

Sr.No.	NAME OF DRAIN	POSITION OF STP WITH CAPACITY	GEO/COORDINATES	DISCHARGE QUANTITY FROM THE STP IN THE DRAIN	TOTAL PER DAY DISCHARGE FROM THE DRAIN INTO THE RIVER
1	City Jail Drain (Functional)	Existing 15 MLD Dakari Unnao	Lat- 26.457479, Long- 80.45228	8 MLD	15 MLD
2	5 MLD STP Ganga Ghat Unnao	Proposed 5 MLD STP Ganga Ghat Unnao	Lat- 26.471122, Long- 80.388150	Under Construction	5 MLD

Sr.No.	Proposed STP (Location & Capacity	Capacity (Operational)	lnlet /Outlet Water Quality & Quantity	Numbers of tapped Drains (Quantity of Discharge)	GAP (in treatment)	Final Discharge Point Geocode/Sampling Point	Proposed/Under Construction STP with Completion Date
1	5 MLD STP Ganga Ghat Unnao (Proposed)	5 MLD - Non-Operational	5 MLD	Nil	5 MLD	No Drain Connected to Under Construction STP	Under Construction

Out of 27 district abutting river Ganga and its tributaries, collated information for five districts namely Meerut, Muzaffarnagar, Hapur, Bijnor and Amroha was taken note of in the order of Tribunal dated 5.2.2024 and subsequently, information was disclosed in report dated 12.4.2024 for Bulandshahar, Aligarh, Kasganj, Shahjahanpur, Hardoi Raebareli, Pratapgarh, Ghazipur, and Ballia. Therefore, information is yet to be provided for district of Badaun, Kannauj, Farrukhabad, Kanpur, Unnao, Fatehpur, Kaushambi, Prayagraj, Mirzapur, Varanasi, Chandauli, Bhadohi and Sambhal.

Sl. No.	District	ULBs NPP/NP	Sewage Generation in MLD	Existing Treatment Capacity (MLD)	Utilization Capacity (MLD)	GAP (MLD)	Disposal of Sewage to:	Water Quality of Receiving Water Body
1	2	3	4	5	6	7	8	9
1	Unnao	Unnao NPP	11.36	15	11.36	0	Ganga	STP 4-6 Hrs. operating daily receiving average discharge 4MLD from 07.11.2023 through temporary line. Gravity main sewer line de-silting work till date 2.885 km. sewer line has been cleaned out of total 3.2 km. Cleaning of 0.315 km sewer line is balance till date.
2	Unnao	Shukla Ganj NPP	11.96	5	4.66	7.3	Ganga	Total 7 drains are discharging into River Ganga in NPP Shukla Ganj out of which the discharge of 5 drains is 4.66 MLD has to be Intercepted & Diverted to under Construction 5 MLD STP Shukla Ganj are under Construction, expected to be completed by Aug 2024 and rest of the 02 drains of discharge 7.30 MLD has to be tapped & treated by U.P. J.N. (Urban) under SBM 2 programme.

3. Hotels/ Ashrams/Dharmshalas/residential complexes abutting river Ganga or its tributaries

Source- Nagar Palika Parishad Unnao, letter No. / 03/ स्वास्थ्य विभाग /2024/25/03 Dated 03-04-2024

Number of Hotels/ Ashrams/ Dharamshalas	Consent to Establishment / Operate	STP	Discharge point	Action taken
Unique Resort Guest House, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Shagun House, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Sunder Palace, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Restaurant and Gym, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Manoranjan Sweets and Ranisa Restaurant, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Manoranjan Sweets and Restaurant, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Chandralok Garden, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Royal Galaxy, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Rama Guest House, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Rangoli Lodge, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Deshmesh Guest House, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Alambagh Resort, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Royal Garden, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Churasiya Bhojnalay, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Rangoli Guest House, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
New Classic Bakery and Restaurant, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Ganesh Mandpam Guest House, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Utsav Lawn Guest House, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Aashirwad Guest House, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Hotel Samrat Inn, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued

Ram Guest House, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Park View Palace, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Shiva Inn Hotel, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Palm Grove Lawn, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Harsh Divine Palace, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
New Sanvariya Hotel and Restaurant, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Restaurant, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Yes Banquet Hall and Restaurant, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Restaurant, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Banquet Hall, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
SKI Hotel and Restaurant, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Amol Restaurant, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
JP Palace, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Kumar Guest House, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Shagun Sweet and Restaurant, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Classic Lawn and Guest House, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Pizza Hut, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Bhajan Hotel, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Priyadarshini Guest House, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Food Planet Restaurant, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Angle Guest House, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Gayatri Garden, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Property Lawn, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Novelty Guest House, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Paalki Guest House, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Restaurant, Hotel, Shop, Tower, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued

Hotel Vishal Palace and Restaurant, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Bhola Sudh Sakahari Bhojnalay, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Gupta Dosa Wala, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Shish Mahal Guest House, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Guest House, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
City Palace, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Sehenai Guest House, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Aashiyana Guest House, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
New Green Palace, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Katyan Guest House, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Manoranjan Restaurant, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Hotel, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Maya Inn Restaurant, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Restaurant, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Chandra Marriage Lawn, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Rameshwar Marrige Lawn, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Shankar Palace Guest House, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Milan Guest House, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Rama Guest House, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Muskan Palace, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
JK City Garden Marriage Lawn, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Radhe Radhe Palace, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Love Bite Restaurant, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued
Milan Marriage Lawn, Unnao	Not Applied	Not Installed	Road Side Drain	Notice Issued

4. Industrial Effluent discharge by industries whose effluent is ultimately flowing to river Ganga or its tributaries

Total Number of Industries	Daily Effluent Discharge	Treatment Available (CETP/ PETP/ ETP Operational Capacity	Effluent Quality Analysis (Outlet of Treatment Plants Geo Code Sampling Point)	GAP	Proposed/ Under Construction Treatment Project (With Timeline)	Number Of Defaulting Units- Action Taken	Industrial Solid Waste Generated/ Day	Manner of Disposal (Industrial Solid Waste)
80	7692.35	CETP/PETP/ETP	Within Norm's	No Gap	Upgradation of CETP Banthar is in Progress & CETP Unnao in Under Construction	No any defaulter	73.568 MT/Day	Sent to TSDF

Source- Pollution Control Board Unnao, letter No.06 सा0–204 / 2024 Dated 01-04-2024

5. Regulation of Flood Plain Zone:

Source- Irrigation Department, Unnao, letter No. 688/ उ0ख0शा0न0उ0 Dated 02.04.2024

Area- cities/ towns	Notification of flood plain zone	Demarcation		Encroachment & direct discharge Geo Code/ Sampling point	Encroachment removal status	Timeline for completion
		No Development zone Pillars	Regulatory zone Pillars			
Irrigation and Water Resources Section-3 Please take reference of UP Government Lucknow' Letter No.1149/18-27-cin03-52l/18 Dated 17/10/2018		No Development No Construction Zone was Notified.				
Unnao section Sharda Canal Unnao		302	413	List Attached	NA	Demarcation Pillar is installed
Irrigation Division Unnao		301	417	List Attached	NA	Demarcation Pillar is installed

6. A forestation/ Plantation along the bank of River Ganga and its tributaries and their flood plain zones

Note – Plantation Sites List attached

Area- cities/ towns	Total Plantation Geo Code/ Sampling Point	Proposed Project	Timeline
318.20 hectare (town)	518120	297500	July, 2024

7. Mining and Stone Crushing in river bed and flood plain zone of River Ganga and its tributaries:

Source- Mining Department Unnao, Dated 08-01-2024

Area of mining	FIR/case registered/ year	Vehicles/ mineral seized	Action taken status	Cases pending in Court	Enforcement of EMGSM 2020 and Sustainable sand mining management guidelines 2016
M/S Shyam Enterprises Leaseholder Shri Gopal Pandey Details of lease area- district Unnao Tehsil Sadar Village Katri Pariyar Gata Number-286 Area-26.0566 hectares	First information Report No-0163 Date 06.06.2023	07 Dredge / suti on Machine and 02 poclain	35,00,000/-Spent on 07 dredge/suction machines and 02 Afine of Rs,1,00,000/-has been imposed on the poclain machine.	1	By Suspending the approved mining lease, the mining lease has been canceled on 30.08.2023

Compliance of Hon'ble NGT order Dt. 16.04.2024

In

O.A 200/2014 MC Mehta Vs UOI and Ors District -Unnao

1- The Tribunal has already directed for furnishing following information by order Dated 24.11.2023:-

(1) District Ganga Protection plan at City/town level-

District Ganga Protection Plan of District Unnao is being made by intensive consultation from all relevant departments.

(2) Content of the action plan (consolidated District Action Plan including each city and town abutting river Ganga and its tributary)

District Ganga Protection Plan of District Unnao is being made by intensive consultation from all relevant departments.

2.1 Sewage Management

Source- Nagar Palika Parishad Unnao, letter No. 03/ स्वास्थ्य विभाग /2024–25/03 Dated 03-04-2024

(i)Sewage generation (for entire District and individual town wise):

S.No.	Name of ULB	Sewage Generation (MLD)
1	Dakari, Nagar Palika Parishad Unnao	19.18
2	Indra Nagar, Nagar Palika Parishad Ganga Ghat	12
3	Nagar Palika Parishad Bangarmau	6.48
4	Nagar Panchayat, Nawabganj	1.42
5	Nagar Panchayat, Mohan	1.62
6	Nagar Panchayat, Nyotini	0.918
7	Nagar Panchayat, Haidrabad	1.04
8	Nagar Panchayat, Auras	1.34
9	Nagar Panchayat, Safipur	3.05
10	Nagar Panchayat, Kursath	0.8
11	Nagar Panchayat, Rasulabad	0.94

12	Nagar Panchayat, Ganjmuradabad	1.18
13	Nagar Panchayat, Fatehpur 84	0.53
14	Nagar Panchayat, Ugu	0.84
15	Nagar Panchayat, Purwa	2.94
16	Nagar Panchayat, Maurawan	1.87
17	Nagar Panchayat, Bighapur	0.84
18	Nagar Panchayat, Bhagwant Nagar	1.17
19	Nagar Panchayat, Achal Ganj	2.35

(ii) Existing Sewage Treatment Capacities

Source- Uttar Pradesh Jal Nigam Gramin Unnao, letter No- 1193/W-S-97/47 Dated 28-03-2024

Existing STP (Location & Capacity)	Capacity (Operational)	Inlet/ Outlet Water Quantity	Number of tapped Drains (Quantity of Discharge)	GAP (in) Treatment (2-3)	Final Discharge Point	Proposed/Under Construction STP With Completion
1	2	3	4	5	6	7
15 MLD STP Village Dakari, Unnao	15 MLD	8 MLD	1	7	Village Dakari Unnao City	STP Completed –Trial Run Started With alternative drain interception and Diversion line. 7 Out of 8 Milestones Complete, desalting of remaining 811 m (out of 3200 m (out of 3200 m) of original diversion line alignment is in Progress. Expected to be completed by July'2024
5 MLD STP Shukla Ganj, Unnao	5 MLD	Under Construction	Untapped (Drain)	-	River Ganga	Under Construction, expected to be Completed by August'2024

(iii) Quantity of sewage is being treated (utilization capacity): **15 MLD STP Village Dakari installed at Nagar Palika Parishad Unnao, 5 MLD capacity STP is under construction at Shukla Ganj Unnao**

(iv) Performance of STPs particularly for FC**: - 15 MLD STP Unnao under Trial Run**

(v) Where treated sewage is being discharged: -**Treated sewage is discharging to Ganga via City Jail drain. (Source- Jal Nigam Gramin)**

(vi) Reasons for under utilization of STPs (Connectivity of Households/ laying of sewer lines) :

In relation to the above, it is to be informed that the construction work of STP (15 MLD) located at Village Dakari in Unnao district has been done by the Office of the Executive Engineer, Construction Division, Uttar Pradesh Jal Nigam (Rural), Unnao under the Namami Gange programme. The matter related to under utilization of STP is related to the said office.

(vii) Current Gap in sewage treatment**: (As per Source of Nagar Palika Parishad Unnao, 1. City Jail Drain- 7 MLD 2. Ganga Ghat- 0 MLD)**

(viii) Time bound plan for bridging the gap and tying up with financial arrangements and not delaying Tendering and identifying executing agencies or having any other issues:**(As per Source of Jal Nigam Urban Unnao)**

Under Municipal Council Unnao, 02 schemes (Unnao Sewerage Scheme Phase-I and Unnao Sewerage Scheme Phase-II) were approved for works related to sewerage, in which Unnao Sewerage Scheme Phase-II. (Under approved cost Rs. 3929.34 lakh), the said scheme has been transferred to Municipal Council Unnao after completing IPS-01 nos., rising main- 02 km, sewer line- 15.64 km, sewer house connection- 1100 nos. and related works. Unnao Sewerage Scheme Phase-II. (Approved cost Rs. 4353.40 lakh) Under this, MPS- 01 no., Rising man- 9.80 km, Inlet Chamber- 01 no. and related works have been completed, in which no work of laying sewer line was proposed. Apart from this, against the requirement of laying about 400 km of sewer lines in the total area of Municipal Council Unnao, till now only 15.64 km of sewer lines have been laid, which is about 4 percent of the total sewer lines. For laying sewer lines in the remaining Municipal Council Unnao area, the CSP has been filled on the AMRUT portal under the AMRUT 2.0 programme. In future, after the approval of CSAP, it will be possible to prepare the estimate and lay the sewer line only after the approval of the plan, the decision of which has to be taken at the government level.

(ix) Where untreated sewage (when there is no STP) is discharged (Ganga/Tributaries)**– Zero (As per Source of Nagar Palika Parishad Unnao, letter No. 03/ स्वास्थ्य विभाग /2024–25/03 Dated 03-04-2024**

2.2 Drains joining Ganga and Tributary

i. Number of drains carrying sewage or industrial waste water joining Ganga/ tributaries with their Quantity and Quality
Source- (As per Source of Nagar Palika Parishad Unnao, letter No. 03/ स्वास्थ्य विभाग /2024–25/03 Dated 03-04-2024

S.No.	Drain	Domestic/Industrial/Mixed	Flow (MLD)	Quality Discharge Parameters
1	City Jail Drain and Loni Drain NPP Unnao	Mixed	15.4 MLD	pH- 7.5 BOD- 27.1 mg/l COD- 148 mg/l TSS- 89.6 mg/l
2	Srinagar drain, Indra Nagar drain, Ganga Vishnu Dham drain, Ganga Nagar Drain Nagar Palika Parishad Ganga Ghat	Mixed	12 MLD	pH-7.5 BOD-26 mg/l COD-135 mg/l TSS-110 mg/l

(ii) Drains joining outside city and town limits but, either joining in village or nearby town:
Source- (As per Source of Irrigation Department Unnao, letter No.688 उ0ख0शा0न0उ0 Dated 02-04-2024)

a. **Village of Loni Drain: -** Magatkhera, Baigaon, Jamuka, Baraura/ City Jail Drain

b. **Village of City Jail Drain: -**Akrampur, Maswasi

(iii) Inclusion of sewage flowing in drains into total sewage generation figures of each city and town and their interception and diversion to STPs:

(As per Source of Irrigation Department Unnao, letter No.688/ उ0ख0शा0न0उ0 Dated 02-04-2024)

S. No.	Drain Name	From	To	Total Lenth (Km)
1	**2**	**3**	**4**	**5**
1	City Jail Drain	0.000	29.800	29.800
2	Loni Drain	0.000	85.000	85.000

2.3 Septage management (In case of No STP)

Source- As per report of Pollution Control Board Unnao letter No-06 / सा0–204 / 2024 Dated 01-04-2024

i	Status of Septage management (with reference to FSTP/STP):	FSTP 32KLD Two STP Installed NPP Unnao • 15 MLD STP Installed for City jail Drain Nagar Palika Parishad Unnao. • 5 MLD STP Under construction for NPP Ganga ghat Unnao.
ii	Management of Grey water and its disposal:	• After treatment trough FSTP and then using for Gardening • In River Ganga through drain.

2.4 Industrial Pollution Control

Source- As per report of Polluction Control Board Unnao letter No-06 / सा0–204 / 2024 Dated 01-04-2024

1	Attach the list on no. of industries generating trade effluents, their place of disposal and compliance including CETPs.	Industries list is attached. Industries have installed their individual ETP& PETP There is two CETP in District Unnao

Industrial Effluent discharge

S. No.	Total Number of Industries	Daily Effluent Discharge (KLD)	Treatment Available (CETP/PETP /ETP Operational capacity)	Effluent Quality Analysis (outlet of treatment plants)	GAP	Proposed/ Under Construction Treatment Project (with timeline)	Number of Defaulting Units- Action taken	Industrial Solid Waste Generated/ Day	Manner of Disposal (Industrial solid waste)
1	Saba Export (Old Name- A.S, Leather/ Kidco Leather Finishers Pvt Ltd plot no H-11, H-12 Site -2 Unnao	30	ETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
2	AKI India Pvt. Ltd. (A.N. Leather, 415/4, Kundan road, Akarampur, Unnao	24	ETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
3	Alig Tannery, A-25, UPSIDC, Leather Technology Park, Banthar, Unnao	150	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF

4	Allied Exims, A-36, Leather Technology Park, Banthar, Unnao	70	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
5	Allied Leather Finishers Pvt Ltd F-27,28,42, 43, Ind Area Site-2, Unnao	30	ETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
6	Allied Leather Finishers Pvt. Ltd. (unit-4), A-38, L.T.P. Banthar, Unnao	72	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
7	Alsuper frozen foods Pvt. Ltd, D-9, D-10, Industrial Area, site-2, Unnao	700	ETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
8	AOV Exports Pvt. Ltd., D-1, D-2, Site-1 Ind. Area Unnao	715	ETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
9	ATO Exim Pvt.Ltd., B-13,14 LTP Banthar, Unnao	72	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
10	Bajaj Kagaj Udyog, 112, Jamuka, Unnao	990	ETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
11	Balaji Industries 1582, Magarwara, Unnao	2	ETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
12	Banthar Industrial Pollution Control Co (CETP), Leather Technology Park, Banthar, Unnao	2700	CETP	As per the Norm's	No GAP	Upgradation of CETP Banthar is in progress & CETP Unnao upgradation is proposed	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
13	Brindavan Bottlers Pvt. Ltd., Makhdumpur, Nawabganj, Tehsil-Hasan Ganj Unnao	400	ETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF

14	Bengal leather works (Tannery Division), . A-45, LTP, Banthar, Unnao	15	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
15	Calico Impex, B-8, 9, Leather Technology Park Banthar, Unnao	80	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
16	Calico Trends (Unit-3), 15, Leather complex, site-2, Unnao	43.2	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
17	Calico Trends ,17-Leather Complex Site-2, Unnao	90	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
18	Calico Trends, A-34-35, Leather Technology Park Banthar, Unnao	216	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
19	Crescent Tanners PVT LTD (Unit-2), D-17, Ind Area, Site-2, Unnao	70	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
20	Crescent Tanners PVT LTD, (Unit-1), 16, Leather Complex Site-2, UPSIDC, Industrial area, Unnao	150	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
21	Calico trends (Unit-2), B-12, LTP, Banthar, Unnao	72	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
22	Everest Export (Tannery unit) {Everest Tannery Pvt Ltd, (Unit-2)} A-41, LTP Banthar, Unnao	90	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
23	Everest Tannery upholstery Division {Everest Tannery Pvt. Ltd. (Unit-3)}, B-11, L.T.P. Banthar, Unnao	90	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
24	Garima Industries, 1533, Akrampur, Magarwara, Unnao	2	ETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF

25	GBS Tanners, B-6, Site-2, Industrial Area, Unnao	85	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
26	Global Smelters Ltd. (Rimjhim Stainless steel Structure Division), Plot No. D-6, Site-1, Unnao	2	ETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
27	Handloom Bhandar, 1315, Kundan Road, Unnao	80	ETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
28	Homera Tanners Pvt. Ltd. A-4 LTP BantharUnnao	60	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
29	Indagro Foods Pvt. Ltd, B-1-5, Ind Area, Site-II, Unnao	1400	ETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
30	Iqbal Leather Ltd, Plot no. C-2, UPSIDC, Ind. Area, Site-2, Unnao	237	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
31	Islam Tanners, B-10, Leather Technology Park, Banthar, Unnao	36	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
32	J.S. Fabrics, Plot no.-658, 659, 660, Magarvara, Unnao	20	ETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
33	Jeet Dying (Unit -2), 1759,1761,Masawasi Road, Magarwara, Unnao	10	ETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
34	Agricom Foods Pvt.Ltd., (JS International Ltd), B-32-47, Leather,Technology Park, Banthar, Unnao	350	ETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
35	Kings International Ltd D-13, D-19, Site-2, Ind Area, Unnao	80	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF

36	Lari Textile and Dying Industry Pvt. Ltd., A-48, LTP, Banthar, Unnao	60	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
37	Leder Fabrics, D-16, Ind Area Site-2, Unnao	120	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
38	M.R. Proofing Industries, 307, Magarwara, Unnao	8	ETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
39	Mahavir Spin Fab, 1081, 1082, Magarwara, Unnao	360	ETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
40	Mash Agro Foods Ltd., Unit no.-1, Village-Bichpari, Tehsil-Hasan Ganj, Pargana- Ajgain, Unnao	300	ETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
41	Mirza International Ltd. (Tannery Division) Magarwara, Unnao	1260	ETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
42	Model Exim (Unit-II), A-32, Leather Technology Park BantharUnnao	65	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
43	Model Exim (Unit-I) (Old Name-Model Tanners (INDIA) Pvt Ltd), A-7/1, 8/3, UPSIDC Ind Area, Site-II, Unnao	60	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
44	Model Tanners (INDIA) Pvt. Ltd., unit-2, A,23,24, UPSIDC Ind Area, LTP, Banthar, Unnao	360	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
45	Mash international (P) ltd. A-31, LTP, Banthar, Unnao	72	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF

46	Shikhar Textiles (Old name-Nikhil India Cotton Industries), E-52, Industrial Area, Site-1, Unnao	8	ETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
47	Northern Exim (Northern Tannery), A-42, 43, LTP Banthar, Unnao	85	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
48	Omega International G-11 to 14 Site-II, Unnao	9	ETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
49	Oxford Tanners, A-10, 11, Leather Technology Park, Banthar, Unnao	100	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
50	Omega Tannery India Pvt. ltd. A-39, LTP, UPSIDC Industrial area, LTP Banthar, Unnao	120	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
51	Omega international (unit-3), G-7 to 10, site-2, Industrial area, Unnao	120	ETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
52	Pacific Export, A-33, Leather Technology Park Banthar, Unnao	108	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
53	R.B. Traders, G-16,17, Ind Area, Site-2, Unnao	9.1	ETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
54	Rahman Industries Ltd (Tannery division), Site-III, Industrial area, Akarampur-Chakarampur, Unnao	560	ETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
55	Rahman Industry Ltd. (Goat divi), (Old Name-Alladad Tannery), A-7, 8, 9 Leather Technology Park Banthar, Unnao	360	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF

56	Rimjhim Stainless Ltd., plot No-1, Akarampur, Unnao	40	ETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
57	Rohit Surfactant (Leyan Global Pvt. Ltd.), L.T.P., Plot no.- A-5, Banthar, Unnao	216	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
58	Ruksh Enterprises, B-5, Leather Technology Park Banthar, Unnao	27	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
59	Ruksh International leather ltd., B-6,7, Leather Technology Park Banthar, Unnao	90	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
60	Rustam Foods Pvt. Ltd., E-27, 28, 9/1, 9/2, F-17, 53, 62, Ind. Area, Site-1, Unnao	952.2	ETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
61	Saba Exports, B-2,3, L.T.P. Banthar, Unnao	102	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
62	MTI Fabritech Pvt Ltd (Old Name-Sadaf Dying & Froofing works), Masvasi road, Magarvara, Unnao	7	ETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
63	Sadaf Enterprises (P) Ltd, 13, Industrial Area, Kundan road, Akarampur, Unnao	350	ETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
64	Sultan Tanneries & Leather Products D-21, Site-II, Unnao	60	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
65	Sultan Tannery, 18, Leather Complex, Site-2, Industrial Area, Unnao	174	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF

66	Super House Ltd (Tannery no. 1) (Chrome Tanning Division) A-1, C-1, Industrial Area Site-2, Unnao	450	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
67	Super House Ltd (Tannery no. 3) (Shole Div), B-16, 17, Industrial Area, Site-2 Unnao	100	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
68	Super House Ltd (Tannery no. 2) (Goat Divi), B-15, Site-2, Ind Area, Unnao	165	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
69	Amin Tannery Ltd. (Super Tannery Ltd Unit-III), Plot -A-46,47, LTP, Banthar, Unnao	216	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
70	Shree Durga dying industry, Kundan Road, Unnao	1	ETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
71	Standard Frozen Foods Export (P) Ltd. Vill-Chandpur, Near E-20, Industrial Area, site-1, Unnao	500	ETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
72	Universal Yarn & Textile Pvt. Ltd., Village and Post-Sahjani, Magarwara, Unnao	10	ETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
73	Unnao Distillery and Beverages Ltd Sekhpur, Unnao	217	ETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
74	Unnao Tanneries Pollution Control Co (CETP), A-7, Industrial area, Site-II, Unnao	1800	CETP	As per the Norm's	No GAP	CETP Unnao upgradation is proposed	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
75	HMA leather Export Pvt Ltd (Old Name-Upper India Tannery) A-40 LTP Banthar, Unnao	54	PETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF

76	Mohan Gold Water & Beverages Ltd., 3B, Akrampur, Chakrampur, Unnao	707	ETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
77	Calico Impex (Unit - 2), kha no - 1534 -1539, Shekhpurnari, near LTP Banthar, Unnao	925	ETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
78	Meezan Processors, 1460-1462, Magarwara, Unnao	10	ETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
79	Haad Industry Pvt Ltd village - Sarauti, Govinda Parasandan, Tehsil – Hasan Ganj Distt -Unnao	1.5	ETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF
80	Model Exim India Pvt.Ltd (Unit-III), Khasra no. 1677, 1678, 1679, Village-Shekhpurnari, Pargana-Hadaha, Tehsil and District-Unnao	182	ETP	As per the Norm's	No GAP	Nil	No defaulter	Haz. Waste generated as per the authorization granted by UPPCB	Through TSDF

(3) Water Quality Status

Source- As per report of Polluction Control Board Unnao letter No-06 / सा0–204 / 2024 Dated 01-04-2024

Provide water quality status of Ganga and its tributaries in the District and city/ town in terms of its fitness for Bathing water quality that is, FC and FS:

1	Provide water quality status of Ganga and its tributaries in the district and city /town in terms of its fitness for Bathing water quality that is, FC and FS: **There is Ganga River and its tributaries Sai River.** • **Herewith attached Sai River report.**	As below

S.No.	Date	River/Tributary	D.O. mg/l	BOD mg/l	TC MPN/ 100ml	FC MPN/100ml
i	25.03.2024	Ganga River U/S Shukla Ganj Unnao	8.9	3.1	2400	1400
ii	25.03.2024	Ganga River D/S Shukla Ganj Unnao	8.8	3.2	23000	16000
iii	25.03.2024	Ganga River U/S Majhara Unnao	8.6	3.3	25000	15000
iv	25.03.2024	Ganga River D/S Majhara Unnao	8.5	3.4	28000	17000

(4) Notification of Flood Plain Zones:

Source- (As per Source of Irrigation Department Unnao, letter No.688/ उ0ख0शा0न0उ0 Dated 02-04-2024) Flood Plain Zone notification is attached.

(5) Issues relating to Environmental Flow:

- Notification issued by government of India date 09 October, 2018 for ecological flow in Ganga River maintained.
- Regulation of Flood Plain Zone: -

Area cities/towns Notification of Flood Plain Zone	**Demarcation**		**Variable flow (per day)**	**Encroachment/ Encroachment removal status**	**Timeline Completion**
सिंचाई एवंजलसंसाधन अनुभाग–3, उ0प्र0 शासन लखनऊ के पत्रांक–1149–18–27–सिं0–3–52एल/18 दिनांक 17.10.2018	**No Development Zone Pillars**	**Regulatory Zone Pillars**			
उन्नाव खण्ड शारदानहर, उन्नाव, सिंचाई खण्ड, उन्नाव	302	413	List Attached	NA	Demarcation Pillar is Installed
	301	417			
कुल योग :–	**603**	**830**			

Dr. A.K. Mathur
Regional Officer,
U P Pollution Control Board
Member
District Ganga Committee
Unnao

Arushi Mishra
Divisional Forest Officer
Member Convenor
District Ganga Committee
Unnao

Gaurang Rathi
District Magistrate
Chairman
District Ganga Committee
Unnao

Best Practices: -

1- Best practice adopted for Prevention and Control of Water Pollution:

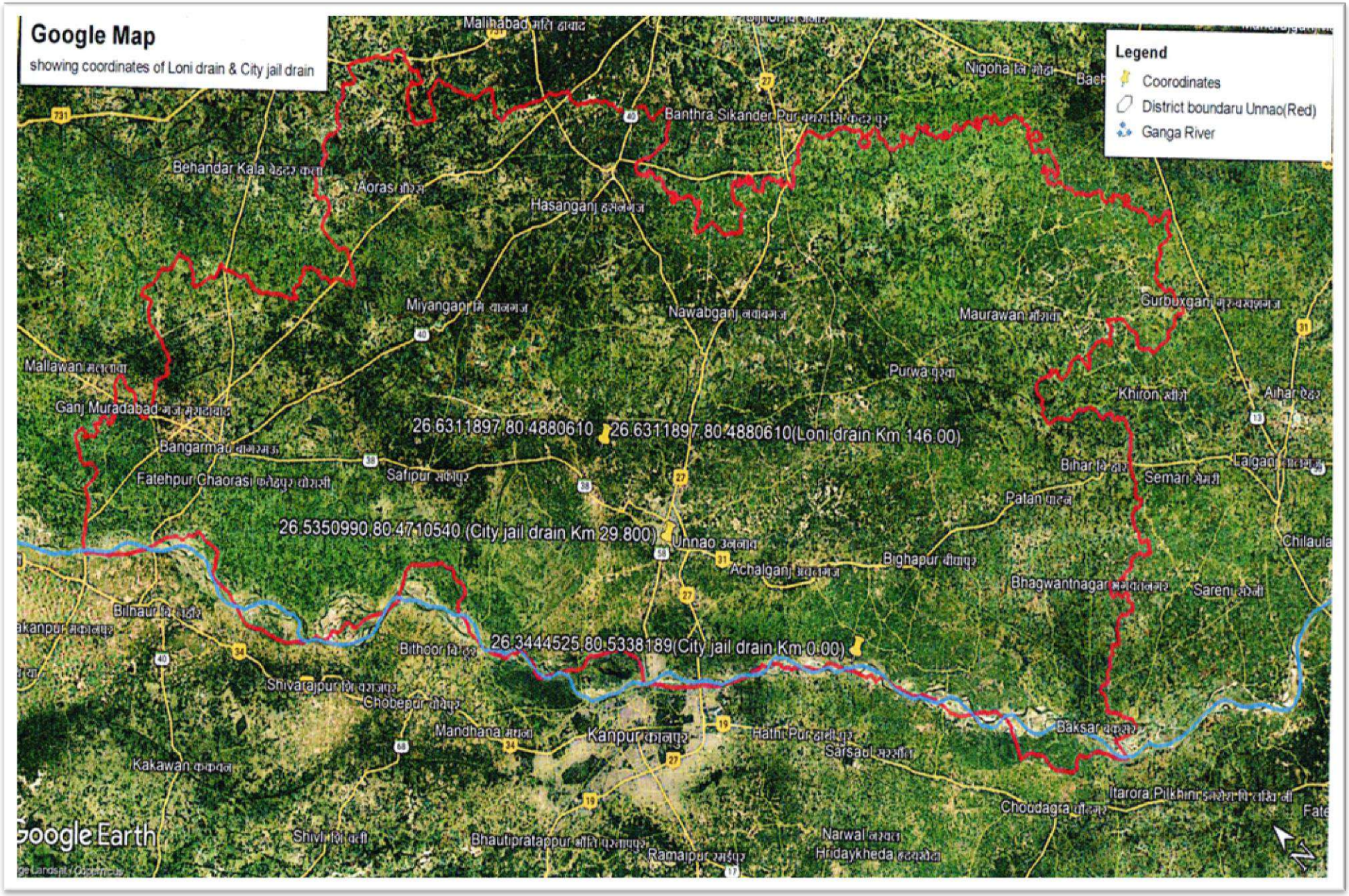
A- For 24X7 Surveillance of Continuous operation of Effluent Treatment Plants in major water polluting industries web Cameras and OCEMS, whose serves are Linked to the Pollution Control Room and Uttar Pradesh Pollution Control Room.

B- Miyawaki Afforestation done by the industries to maintain the Ecology and Environment.

C- For the purpose of sewage treatment and purifying the waste water of dirty drains of the district, Jal Nigam has done the Construction Work of STP in Unnao District.

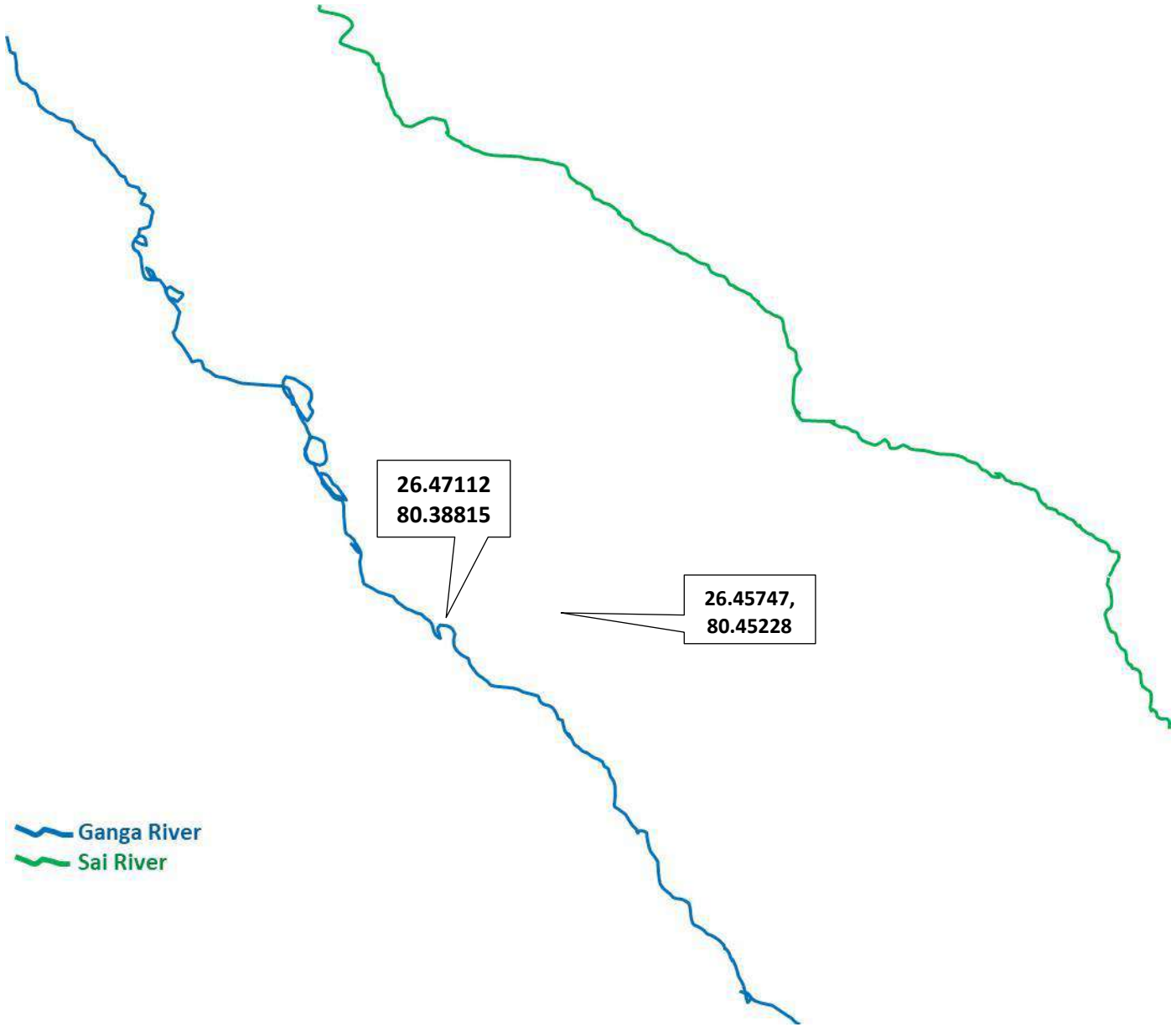
D- With the aim of making people aware about Ganga Conservation, Ganga Aarti Cultural Program is organized at Anand Ghat Shukla Ganj from time to time with the help of Forest Departments.

Source- Irrigation Department, Unnao



Unnao District River Map (Geo Location of STP)

Unnao District River Map (Geo Location of STP)



जल शक्ति मंत्रालय
MINISTRY OF
JAL SHAKTI
सत्यमेव जयते

Report in compliance of HON'BLE NATIONAL GREEN TRIBUNAL Order date 24 January 2024 in O.A. 200/2014 MC Mehta Vs. UOI & Ors

Submitted by : DISTRICT GANGA COMMITTEE

Bulandshahr (Uttar Pradesh)

DRAFT

MC MEHTA vs. UNION OF INDIA (OA. NO. 200 OF 2014)

ADDITIONAL INFORMATION, AS PER THE ORDER 05.02.2024

<table>
<tr><td>S.NO</td><td>ADDITIONAL INFORMATION</td><td>ANSWER</td></tr>
<tr><td>1.</td><td>That STPs installed, are underutilised and that treated effluents are discharged into the drains carrying untreated wastewater thereby defeating the very purpose of the efficacy of STPs.</td><td>Out of All the Seven STP’s Installed in District Bulandshahr Six STP’s are completely utilized and discharge only treated water only one STP is operating at 50% Capacity. It will operate at 100% Capacity in the second phase of Amrit Yojana.</td></tr>
<tr><td>2.</td><td>The quantification and estimation of sewage entering to each STP through sewer</td><td>
<table>
<tr><th>STP(location & capacity)</th><th>Capacity (operational)</th><th>Quantity of Sewage</th><th>Name of Drain</th></tr>
<tr><td>STP, Zone-A Anoopshahar, Bulandshahr</td><td>0.805 MLD</td><td>0.9 MLD</td><td>1. MansooriGhat, 2. Panditwali, 3. Peepalwali, JP Wali, 4. Toilet wale Road, 5. Aahara</td></tr>
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	network or through interception and diversion of drains.	
3.	the breakup of quantity of sewage fed to each STP through sewerage and drains,	

				Road Peepalwali, 6. LalMahadev IPS
STP, Zone-A Anoopshahar, Bulandshahr	1.5 MLD	1.4 MLD	Directly Connected with households
STP, Zone-B Anoopshahar, Bulandshahr	1.75 MLD	1.5 MLD	1. AahiroWali, 2. BavastaGanj, 3. Rani kiGardi, 4. MahalawaliGali, 5. BharorewaliGali, 6. KunjGhat
STP, Zone-A Anoopshahar, Bulandshahr	1 MLD	0.9 MLD	Directly Connected with households
STP, Zone-A Anoopshahar, Bulandshahr	4 MLD	2.4 MLD	1. Khecha Ashram 2. Ward No. 4 3. KaramDharam Ashram
STP, Zone-B Anoopshahar, Bulandshahr	2.25 MLD	1.7 MLD	Drains From the Narora Atomic Power Station Colony
STP, Zone-A Anoopshahar, Bulandshahr	40 MLD	21 MLD	Directly Connected with households

STP(location & capacity)	Capacity (operational)	water quality quantity Inlet	water quality quantity Outlet	Number of Tapped drains (quantity of discharge)	Final discharge point	Geo code/ sampling point	Discharge Quantity From the STP in the Drain

	indicating location of STP (with geo coordinates) and quality and quantity of discharged sewage and its disposal location.	STP, Zone-A Anoopshahar, Bulandshahr	0.805 MLD	pH–7.16 BOD- 90 mg/l COD- 296.0 mg/l TSS - 234.0 mg/l	pH–7.61 BOD- 16 mg/l COD- 104.0 mg/l TSS - 58.0 mg/l FC-400 MPN/100 ml	4	On Land (Used for Irrigation)	(28^0 22' 10.43" N & 78^0 15' 44.09" E)	0.7 MLD
		STP, Zone-A Anoopshahar, Bulandshahr	1.5 MLD	pH–7.24 BOD- 112 mg/l COD- 304.0 mg/l TSS - 211.0 mg/l	pH–7.67 BOD- 22 mg/l COD- 136.0 mg/l TSS - 64.0 mg/l FC-540 MPN/100 ml	None	On Land (Used for Irrigation)	(28^0 22' 11.5" N & 78^0 15' 47.3" E)	1.2 MLD
		STP, Zone-B Anoopshahar, Bulandshahr	1.75 MLD	pH–7.18 BOD- 96 mg/l COD- 312.0 mg/l TSS - 198.0 mg/l	pH–7.54 BOD- 20 mg/l COD- 92.0 mg/l TSS - 67.0 mg/l FC-780 MPN/100 ml	6	River	(28^0 20' 59.02" N & 78^0 16' 16.98" E)	1.2 MLD
		STP, Zone-A Anoopshahar, Bulandshahr	1 MLD	pH–7.32 BOD- 104 mg/l COD- 336.0 mg/l TSS - 225.0 mg/l	pH–7.73 BOD- 24 mg/l COD- 132.0 mg/l TSS - 53.0 mg/l FC-350 MPN/100 ml	None	River	(28^0 22' 10.43" N & 78^0 15' 44.09" E)	0.8 MLD
		STP, Zone-A Anoopshahar, Bulandshahr	4 MLD	pH–7.06 BOD- 88 mg/l COD- 328.0 mg/l TSS - 207.0 mg/l	pH–7.66 BOD- 12 mg/l COD- 52.0 mg/l TSS - 43.0 mg/l FC-130 MPN/100 ml	3	On Land (Used for Irrigation)	(28^0 22' 11.5" N & 78^0 15' 47.3" E)	2 MLD
		STP, Zone-B Anoopshahar, Bulandshahr	2.25 MLD	pH–7.17 BOD- 102 mg/l COD- 344.0 mg/l TSS - 186.0 mg/l	pH–7.71 BOD- 08 mg/l COD- 40.0 mg/l TSS - 36.0 mg/l FC-240 MPN/100 ml	None	On Land (Used for Irrigation)	(28^0 20' 59.02" N & 78^0 16' 16.98" E)	No Drains
		STP, Zone-A Anoopshahar,	40 MLD	pH–7.27 BOD- 94	pH–7.58 BOD- 14	(27917 Nos (53%) sewer	River	(28^0 22' 10.43" N &	

		Bulandshahr | | mg/l COD-368.0 mg/l TSS - 246.0 mg/l | mg/l COD-44.0 mg/l TSS - 21.0 mg/l FC-110 MPN/100 ml | house connections) | | 78^0 15' 44.09" E) | 19 MLD
4.	These identified industries should be imposed with the Consent conditions to adopt ZLD system or maximize recycling/ reuse of treated effluents ratherthan consenting them to discharge into drains with no burden on them.	

S.No.	Name and address ofindustry	Sector	DischargePoint	Environmental complyimg status(complying/non complying)
1	Chemenergy Biofuels Private Limited Plot No-35, Village Ban, PahasuChhtari Road, Tehsil shikarpur, Distt. - Bulandshahr	Biodiesel	As per the consent issued by State Board , the units are directed to reuse the treated effluent from the plant and the industries are reusing their maximum discharge.	Complying
2	Kwality Ltd. (Ramson Dairy) Vill. Mumrejpur, Tehsil Dibai, Bulandshahr	Dairy	As per the consent issued by State Board , the units are directed to reuse the treated effluent from the plant and the industries are reusing their maximum discharge.	Complying
3	VRS Foods Ltd. Unit 3 Near Old bus stand, Gulaothi, Bulandshahr	Dairy	As per the consent issued by State Board , the units are directed to reuse the treated effluent from the plant and the industries are reusing their maximum discharge.	Complying
4	VRS Foods Ltd. Unit 4 Near Old bus stand, Gulaothi, Bulandshahr	Dairy	As per the consent issued by State Board , the units are directed to reuse the treated effluent from the plant and the industries are reusing their maximum discharge.	Complying
5	Triveni Sugar Mills Pvt. Ltd. (Sugar Unit) SabitgarhKhurjaBulandshahr	Sugar	As per the consent issued by State Board , the units are directed to reuse the treated effluent from the plant and the industries are reusing their maximum discharge.	Complying
6	Triveni Sugar Mills Pvt. Ltd. (Distillery Unit)SabitgarhKhurjaBulandshahr	Distillery	ZLD	Complying
7	UP Cooperative Sugar Factories Federation Ltd, AnoopshahrJahangirabad, Bulandshahar (Distillery unit)	Distillery	ZLD	Complying
8	KisanSahkari Sugar Mills Jahangirabad, Anoopshahr, Bulandshahr	Sugar	As per the consent issued by State Board , the units are directed to reuse the treated effluent from the plant and the industries are reusing their maximum discharge.	Complying
9	Ananda Dairy Foods Pvt. Ltd. Garh Road , Siyana, Bsr	Dairy	As per the consent issued by State Board , the units are directed to reuse the treated effluent from the plant and the industries are reusing their maximum discharge.	Complying

5.	We are of the view that additional columns are to be included reflecting the drain, position of STP with capacity, their geo-coordinates, discharge quantity from the STP in the drain and total per day discharge from the drain into river.	

Name of Drain	Position of STP With Capacity	GEO/Coordinates	Discharge Quantity From the STP in the Drain	Total Per Day discharge from the drain into the River
1. MansooriGhat, 2. Panditwali, 3. Peepalwali, JP Wali, 4. Toilet wale Road, 5. Aahara Road Peepalwali, 6. LalMahadev IPS	0.805 MLD STP, Zone-A Anoopshahar, Bulandshahr	28°22'10.43"N, 78°15'44.09"E	0.7 MLD	0.7 MLD Collected in a pond, used for Irrigation
Directly Connected with households	1.5 MLD STP, Zone-A Anoopshahar, Bulandshahr	28°22'11.5"N, 78°15'47.3"E	1.2 MLD	1.2 MLD Collected in a pond, used for Irrigation
1. AahiroWali, 2. BavastaGanj, 3. Rani kiGardi, 4. MahalawaliGali, 5. BharorewaliGali, 6. KunjGhat	1.75 MLD STP, Zone-B Anoopshahar, Bulandshahr	28°20'59.02"N, 78°16'16.98"E	1.2 MLD	1.2 MLD Currently Discharging into River Ganga later they will use it for irrigation
Directly Connected with households	1 MLD STP, Zone-BAnoopshahar, Bulandshahr	28°21'03.6"N, 78°16'16.5"E	0.8 MLD	0.8 MLD Currently Discharging into River Ganga later they will use it for irrigation
1. Khecha Ashram 2. Ward No. 4	4.0 MLD, Narora (Nagar Panchayat)	28°12'41.3"N,	2 MLD	2 MLD Used for

		3. KaramDharam Ashram | | 78°22'40.0"E | | Irrigation Drains From the Narora Atomic Power Station Colony | 2.25 MLD, Narora (Atomic Energy) | 28°12'12.3"N, 78°22'50.2"E | No Drains | 1.2 MLD Used within the Colony for Irrigation & Other Purpose Directly Connected with households | 40 MLD, Bulandshahr | 28.392705, 77.859889 | 19 MLD | 19 MLD Currently they are discharging in River Kali East but later they will supply all the water to THDC as per the contract with THDC 1. MansooriGhat, 2. Panditwali, 3. Peepalwali, JP Wali, 4. Toilet wale Road, 5. Aahara Road Peepalwali, 6. LalMahadev IPS | 0.805 MLD STP, Zone-A Anoopshahar, Bulandshahr | 28°22'10.43"N, 78°15'44.09"E | 0.7 MLD | 0.7 MLD Collected in a pond, used for Irrigation
6.	mention heavy metals analysis in respect of discharge from each of the drain in the report.	**Drain(city/ town)** | **Heavy metals (Fe, Cr, PB,Ar, Mn ,Cu, Zn, Hg,Fluoride etc)** Adil Nagar - 1 | Fe- 0.94 Cu-1.4 Cr – 1.2 Ni-0.62 Pb- 2.8 Zn- 4.4

Behind ChamundaMandir	Fe- 0.88 Cu-2.0 Cr – 2.0 Ni-ND Pb- 5.6 Zn- 4.8
Behind ShanidevMandir	Fe- 0.12 Cu-ND Cr – ND Ni-ND Pb- ND Zn- 2.9
Chandbari Road	Fe- 0.60 Cu-3.5 Cr – 1.0 Ni-0.9 Pb- 1.9 Zn- 3.9
CheelGhat	Fe- 1.94 Cu-2.06 Cr – 0.94 Ni- ND Pb- 1.02
Devipura	Fe- 1.02 Cu-0.94 Cr – 0.82 Ni-0.23 Pb- 1.92 Zn- 2.44
Faislabad Road	Fe- 0.42 Cu-0.8 Cr – 1.0 Ni-0.06 Pb- 1.84 Zn- 3.8
Gulaothi Drain	Fe- 0.59 Cu-2.06 Cr – 1.2 Ni-0.33 Pb- 1.94 Zn- 4.66

		Kasai Bara: Fe- 0.10, Cu-ND, Cr – ND, Ni-ND, Pb-ND, Zn- 2.5 Maman Road: Fe- 0.69, Cu-1.09, Cr – 0.94, Ni-0.09, Pb- 1.08, Zn- 4.62 NarsalGhat: Fe-ND, Cu-ND, Cr –ND, Ni-ND, Pb- ND, Zn- ND Neem Drain: Fe- 0.55, Cu-2.76, Cr – 1.88, Ni-0.64, Pb- 0.99, Zn- 2.8

I. Sewage

Drain(city/town/	Total drainc apacity	Generation/day	PH	BOD	COD	TSS	TDS	Heavymetals (Fe, Cr,PB,Ar, Mn,Cu, Zn, Hg,Fluoride etc)	Nitrates	DO	TC	FC	Outlet flow and Geocode/ Sampling point	Colour /odour	Discharged Into
Adil Nagar - 1	Continuous Flow	11.336	7.7	80.0	264.0	125.0	605	Fe- 0.94 Cu-1.4 Cr – 1.2 Ni-0.62 Pb- 2.8 Zn- 4.4	2.62	0	$31*10^6$	$21*10^6$	F-11.336 28°23'46.8"N & 77°51'44.9"E	Greyish/foul	River Kali East
Behind ChamundaMandir	Continuous Flow	4.899	7.65	86.0	208.0	107.0	448	Fe- 0.88 Cu-2.0 Cr – 2.0 Ni-ND Pb- 5.6 Zn- 4.8	2.73	0	$35*10^6$	$17*10^6$	F-4.899 28°25'02.9"& 77°51'11.3"E	Greyish/foul	River Kali East
Behind ShanidevMandir	Continuous Flow	3.507	7.58	104.0	232.0	113.0	915	Fe- 0.12 Cu-ND Cr – ND Ni-ND Pb- ND Zn- 2.9	2.24	0	$63*10^7$	$46*10^7$	F-3.507 28°24'05.3"& 77°51'49.9"E	Greyish/foul	River Kali East
Chandbari Road	Continuous	3.085	7.67	148.0	388.0	157.0	906	Fe- 0.60	2.77	0	$49*10^7$	$33*10^7$	F-3.085	Greyish/foul	River Kali East

	Flow							Cu-3.5 Cr – 1.0 Ni-0.9 Pb- 1.9 Zn- 3.9					28°22'42.7"N& 77°07'52.4"E		
CheelGhat	Continuous Flow	5.002	7.71	76.0	208.0	103.0	802	Fe- 1.94 Cu-2.06 Cr – 0.94 Ni- ND Pb- 1.02 Zn- 3.6	3.1	0	$38*10^5$	$26*10^{5f}$	F-5.002 28°23'59.7"N& 77°52'02.2"E	Greyish/foul	River Kali East
Devipura	Continuous Flow	2.741	7.69	106.0	240.0	125.0	644	Fe- 1.02 Cu-0.94 Cr – 0.82 Ni-0.23 Pb- 1.92 Zn- 2.44	2.03	0	$58*10^7$	$31*10^7$	F-2.741 28°24'35.3"N& 77°51'38.5"E	Greyish/foul	River Kali East
Faislabad Road	Continuous Flow	12.678	7.73	112.0	272.0	163.0	878	Fe- 0.42 Cu-0.8 Cr – 1.0 Ni-0.06 Pb- 1.84 Zn- 3.8	3.06	0	$39*10^6$	$33*10^6$	F-12.678 28°24'29.9"N& 77°51'50.0"E	Greyish/foul	River Kali East
Gulaothi Drain	Continuous Flow	43.843	7.62	146.0	368.0	185.0	740	Fe- 0.59 Cu-2.06 Cr – 1.2 Ni-0.33 Pb- 1.94	2.81	0	$31*10^7$	$21*10^7$	F-43.843 28°35'28.4"N& 77°48'06.5"E	Greyish/foul	River Kali East

								Zn- 4.66							
Kasai Bara	Continuous Flow	8.276	7.68	96.0	240.0	117.0	967	Fe- 0.10 Cu-ND Cr – ND Ni-ND Pb-ND Zn- 2.5	2.34	0	$40*10^7$	$23*10^7$	F-8.276 28°24'25.6"N& 77°51'43.2"E	Greyish/foul	River Kali East
Maman Road	Continuous Flow	65.926	7.57	68.0	192.0	109.0	446	Fe- 0.69 Cu-1.09 Cr – 0.94 Ni-0.09 Pb- 1.08 Zn- 4.62	2.71	0	$49*10^5$	$33*10^5$	F-65.926 28°23'35.0"N& 77°51'38.5"	Greyish/foul	River Kali East
NarsalGhat	Continuous Flow	3.845	7.60	90.0	320.0	155.0	990	Fe-ND Cu-ND Cr –ND Ni-ND Pb- ND Zn- ND	2.85	0	$41*10^7$	$34*10^7$	F-3.845 28°24'17.8"N& 77°51'57.4"	Greyish/foul	River Kali East
Neem Drain	Continuous Flow	29.368	7.74	104.0	216.0	123.0	668	Fe- 0.55 Cu-2.76 Cr – 1.88 Ni-0.64 Pb- 0.99 Zn- 2.8	2.64	0	$58*10^5$	$31*10^5$	F-29.368 28°22'42.7"& 78°07'52.4"E	Greyish/foul	River Kali East

The above information is to be submitted on the basis of end point sample analysis of the concerned drain

2.STP for treating the sewage of the drains ultimately flowing to river ganga or its tributaries

Existing STP (location & capacity)	Capacity (operational)	Inlet/Outlet water quality & quantity		Number of Tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point Geo code/ sampling point	Proposed/ under construction STP With Completion date
		Inlet	Outlet				
STP, Zone-A Anoopshahar, Bulandshahr	0.805 MLD	pH–7.16 BOD-90 mg/l COD- 296.0 mg/l TSS -234.0 mg/l	pH–7.61 BOD- 16 mg/l COD-104.0 mg/l TSS - 58.0 mg/l FC-400 MPN/100 ml	7	NO Gap	On land (28^0 22' 10.43" N & 78^0 15' 44.09" E)	Mentioned in below table
STP, Zone-A Anoopshahar, Bulandshahr	1.5 MLD	pH–7.24 BOD- 112 mg/l COD- 304.0 mg/l TSS - 211.0 mg/l	pH–7.67 BOD- 22 mg/l COD-136.0 mg/l TSS - 64.0 mg/l FC-540 MPN/100 ml	Direct House Hold Connection	NO Gap	On land (28^0 22' 11.5" N & 78^0 15' 47.3" E)	Mentioned in below table
STP, Zone-B Anoopshahar, Bulandshahr	1.75 MLD	pH–7.18 BOD- 96 mg/l COD- 312.0 mg/l TSS - 198.0 mg/l	pH–7.54 BOD- 20 mg/l COD-92.0 mg/l TSS - 67.0 mg/l FC-780 MPN/100 ml	6	NO Gap	River (28^0 20' 59.02" N & 78^0 16' 16.98" E)	Mentioned in below table
STP, Zone-**B Anoopshahar**, Bulandshahr	1 MLD	pH–7.32 BOD- 104 mg/l COD- 336.0 mg/l TSS - 225.0 mg/l	pH–7.73 BOD- 24 mg/l COD-132.0 mg/l TSS - 53.0 mg/l FC-350 MPN/100 ml	Direct House Hold Connection	NO Gap	River (28^0 22' 10.43" N & 78^0 15' 44.09" E)	Mentioned in below table
Narora (Nagar Panchayat)	4 MLD	pH–7.06 BOD- 88 mg/l COD- 328.0 mg/l TSS - 207.0 mg/l	pH–7.66 BOD- 12 mg/l COD-52.0 mg/l TSS - 43.0 mg/l FC-130 MPN/100 ml	3	NO Gap	On land (28^0 22' 11.5" N & 78^0 15' 47.3" E)	Mentioned in below table
, Narora (Atomic Energy)	2.25 MLD	pH–7.17 BOD- 102 mg/l COD- 344.0 mg/l TSS - 186.0 mg/l	pH–7.71 BOD- 08 mg/l COD-40.0 mg/l TSS - 36.0 mg/l FC-240 MPN/100 ml	Drains from the Narora Atomic Power Station Colony	NO Gap	On land (28^0 20' 59.02" N & 78^0 16' 16.98" E)	Mentioned in below table
40 MLD, Bulandshahr	40 MLD	pH–7.27 BOD- 94 mg/l COD- 368.0 mg/l TSS - 246.0 mg/l	pH–7.58 BOD- 14 mg/l COD-44.0 mg/l TSS - 21.0 mg/l FC-110 MPN/100 ml	(27917 Nos (53%) sewer house connections)		River(28^0 22' 10.43" N & 78^0 15' 44.09" E)	Mentioned in below table

2.1 STP Additional Information

35655

Name of Drain	Position of STP With Capacity	GEO/Coordinates	Discharge Quantity From the STP in the Drain	Total Per Day discharge from the drain into the River
1. MansooriGhat, 2. Panditwali, 3. Peepalwali, JP Wali, 4. Toilet wale Road, 5. Aahara Road Peepalwali, 6. LalMahadev IPS	0.805 MLD STP, Zone-A Anoopshahar, Bulandshahr	28°22'10.43"N, 78°15'44.09"E	0.7 MLD	0.7 MLD Collected in a pond, used for Irrigation
Directly Connected with households	1.5 MLD STP, Zone-A Anoopshahar, Bulandshahr	28°22'11.5"N, 78°15'47.3"E	1.2 MLD	1.2 MLD Collected in a pond, used for Irrigation
1. AahiroWali, 2. BavastaGanj, 3. Rani kiGardi, 4. MahalawaliGali, 5. BharorewaliGali, 6. KunjGhat	1.75 MLD STP, Zone-B Anoopshahar, Bulandshahr	28°20'59.02"N, 78°16'16.98"E	1.2 MLD	1.2 MLD Currently Discharging into River Ganga later they will use it for irrigation
Directly Connected with households	1 MLD STP, Zone-BAnoopshahar, Bulandshahr	28°21'03.6"N, 78°16'16.5"E	0.8 MLD	0.8 MLD Currently Discharging into River Ganga later they will use it for irrigation
1. Khecha Ashram 2. Ward No. 4 3. KaramDharam Ashram	4.0 MLD, Narora (Nagar Panchayat)	28°12'41.3"N, 78°22'40.0"E	2 MLD	2 MLD Used for Irrigation
Drains From the Narora Atomic Power Station Colony	2.25 MLD, Narora (Atomic Energy)	28°12'12.3"N, 78°22'50.2"E	No Drains	1.2 MLD Used within the Colony for Irrigation & Other Purpose
Directly Connected with households	40 MLD, Bulandshahr	28.392705, 77.859889	19 MLD	19 MLD Currently they are discharging in River Kali East but later they will supply all the water to THDC as per the contract with THDC

Proposed STP (location & capacity)	Capacity (operational) Proposed	Inlet/ Outlet water qualityquantity	Number of CAP (in tappeddrains (quantity of discharge)	treatment)	Final discharge point Geo code/sampling point	Proposed/ under construction STP With completion date
NPP Siyana	4.50 MLD with Co-treatment (8.00 KLD)	Not Appliicable	Not Appliicable	Not Appliicable	Not Appliicable	Proposed
NPP Sikandrabad	8.40 MLD with Co-treatment (17.00 KLD)	Not Appliicable	Not Appliicable	Not Appliicable	Not Appliicable	Proposed
NPP Gulaothi	5.00 MLD with Co-treatment (9.00 KLD)	Not Appliicable	Not Appliicable	Not Appliicable	Not Appliicable	Proposed
NPP Dibai	3.80 MLD with Co-treatment (6.00 KLD)	Not Appliicable	Not Appliicable	Not Appliicable	Not Appliicable	Proposed
NPP Jahangirabd	6.00 MLD with Co-treatment (10 KLD)	Not Appliicable	Not Appliicable	Not Appliicable	Not Appliicable	Proposed
NP Aurangabad	2.82 MLD with Co-treatment (6.00 KLD)	Not Appliicable	Not Appliicable	Not Appliicable	Not Appliicable	Proposed
NP Bugrasi	1.50 MLD with Co-treatment (3.00 KLD)	Not Appliicable	Not Appliicable	Not Appliicable	Not Appliicable	Proposed
NP B.B Nagar	0.97 MLD with Co-treatment (3.00 KLD)	Not Appliicable	Not Appliicable	Not Appliicable	Not Appliicable	Proposed
NP Chhatari	1.20 MLD with Co-treatment (2.00 KLD)	Not Appliicable	Not Appliicable	Not Appliicable	Not Appliicable	Proposed
Note : Proposed STP's will be completed by Year 2025						

Hotels/Ashrams/Dharmshalas/residential complexes abutting river Ganga or its tributaries

Number of Hotels/ ashrams/ dharamshalas	Consent to establish/ to operate	STP	Discharge point Geo code/ Sampling point	Action taken
1. M/s Break Point, BhoorChauraha, Bulandshahr	No	NO	Through septic tank/soak pit	Notice issued
2. M/s Alka Motel, BhoorChauraha, Bulandshahr	No	NO	Through septic tank/soak pit	Notice issued
3. M/s Surya Lodge, Infront of Collectrate, Bulandshahr	No	NO	Through septic tank/soak pit	Notice issued
4. M/s Classic Hotel, Near Exhibition Ground, Bulandshahr	No	NO	Through septic tank/soak pit	Notice issued
5. M/s Shelton Hotel, BhoorChauraha, Bulandshahr	No	NO	Through septic tank/soak pit	Notice issued
6. M/s Shakunt Lodge, Railway Road, Bulandshahr	No	NO	Through septic tank/soak pit	Notice issued
7. M/s Amit Residency, DAV Tiraha, Bulandshahr	No	NO	Through septic tank/soak pit	Notice issued
8. M/s Subhash Hotel, Khurja Bus Stand, Bulandshahr	No	NO	Through septic tank/soak pit	Notice issued
9. M/s Shipra Hotel, Kala AamChauraha, Delhi Road, Bulandshahr	No	NO	Through septic tank/soak pit	Notice issued
10. M/s Taj Hotel, Satha Road, Bulandshahr	No	NO	Through septic tank/soak pit	Notice issued

11. M/s Rajdarbar Hotel, DM Road, Bulandshahr	No	NO	Through septic tank/soak pit	Notice issued
12. M/s Mybar Restaurant Motibagh, Bulandshahr	No	NO	Through septic tank/soak pit	Notice issued
13. M/s JS Restaurant Services Pvt Ltd., Akbarpur, Bulandshahr	CTE obtained by SPCB	NO	Through septic tank/soak pit	Notice issued
14. M/s Samrat Lodge, Near Exhibition Ground, Delhi Road, Bulandshahr	No	NO	Through septic tank/soak pit	Notice issued
15. M/s RR Hotel & Restaurant, DM Road, Bulandshahr	No	NO	Through septic tank/soak pit	Notice issued

IV. Industrial Effluent discharge by industries whose effluent is ultimately flowing to river Ganga or its tributaries

Total Number Of Industries	Daily effluent discharge	Treatment available (CETP/ PETP/ETP operational capacity)	Effluent quality Analysis(outlet of treatment plants) Geo code/ sampling point	GAP	Proposed/ under construction treatment project(with timeline)	Number Of defaulting units-Action taken	Industrial Solid waste generated/ Day	Manner of disposal (Industrial solid waste)
09	3.765 MLD	ETP installed	As per under EPA standard	None	None	02 (Show cause notice issued under water act) Penalty imposed of Rs 260000/- & Now industries are complying	30.51 Ton/Annum	Hazardous waste disposal through TSDF and organics waste used as manure in agriculture land

V. Regulation of Flood Plain Zone:

Area-cities/towns	Notification of flood plain zone	Demarcation	Encroachment & direct discharge Geocode/samplingpoint	Encroachment removal status	Timeline for completion
Narora,Bulandsahar	Yes	Yes	N.A.	Notice served(information is for NDLGC,Aligarh)	N.A.

VI. Afforestation/Plantation along the bank of River Ganga and its tributaries and their flood plain zone

Area-cities/towns	Total plantation Geocode/sampling point	Proposed project	Timeline
Bulandshahr	4054990	3567100 (Year 2024-2025)	July 2024

वर्षकाल 2023–24 में कराये गये विभागीय वृक्षारोपण का योजनावार, विकासखण्ड वार सूचना का विवरण

क्र0सं0	जनपद का नाम	रेंज का नाम	विकास खण्ड	योजना का नाम	वृक्षारोपण क्षेत्र का नाम	क्षेत्रफल (हे0)में	रोपित पौध (संख्या में)		
							पौध द्वारा (संख्या में)	बीज बुआन से प्राप्त पौध (संख्या में)	कुल रोपित पौध (संख्या में)
1	2	3	4	5	6	7	8	9	10
2			अनूपशहर	सा0वा0	मुनीशपुर वन ब्लॉक	6.00	9600	0	9600
3					सिरौरा वन ब्लॉक	6.00	9600	0	9600
4					रूढ बांगर – I	8.00	6664	6664	13328
5					रूढ बांगर – II	8.00	6664	6664	13328
6					रूढ बांगर – III	8.00	6664	6664	13328
7					रूढ बांगर – IV	8.00	12800	0	12800
8					रूढ बांगर – V	8.00	12800	0	12800
9					रूढ बांगर – VI	8.00	12800	0	12800
10					रूढ बांगर – VII	8.00	12800	0	12800
11					रूढ बांगर – VIII	8.00	12800	0	12800
12					रूढ बांगर – IX	8.00	12800	0	12800
13					रूढ बांगर – X	8.00	12800	0	12800
14					अहार वन ब्लॉक– I	8.00	6664	6664	13328
15					अहार वन ब्लॉक– II	8.00	6664	6664	13328
16					अहार वन ब्लॉक– III	8.00	12800	0	12800
17					अहार वन ब्लॉक– IV	8.00	12800	0	12800
18			ऊंचागांव		फरीदा वन ब्लॉक– प्रथम	8.00	6664	6664	13328
19					फरीदा वन ब्लॉक– द्वितीय	8.00	6664	6664	13328
20					मांडू हसनगढी– प्रथम	8.00	12800	0	12800
21					मांडू हसनगढी– द्वितीय	8.00	12800	0	12800
22					मांडू हसनगढी– तृतीय	8.00	12800	0	12800
23		बुलन्दशहर	बुलन्दशहर	सा0वा0	मेरठ–बदायूं मार्ग किमी0 68–72 बी0बी0	8.00	12800	0	12800
24					अपर गंगा नहर मील 131–133 आर0बी0	4.00	6400	0	6400
25					समानान्तर नहर मील 131–133 एल0बी	5.00	8000	0	8000
26			शिकारपुर		रिवाडा वन ब्लॉक	3.00	7500	0	7500
27					असावरी वन ब्लॉक	8.00	20000	0	20000
28					औरंगाबाद–चादौक ग्राम समाज प्रथम	6.00	9600	0	9600
29					औरंगाबाद–चादौक ग्राम समाज द्वितीय	10.00	16000	0	16000
30			लखावटी	02 स्पे0	लखावटी वन ब्लॉक	6.00	15000	0	15000
31		स्याना	गुलावठी	सा0वा0	मेरठ–बुलन्दशहर मार्ग किमी0 54–67 बी0बी0	3.90	6250	0	6250
32					कोटा वन भूमि	3.00	7500	0	7500
33			सिकन्दाबाद		सिकन्दराबाद देहात नया ग्राम समाज भूमि	6.67	16762		16762
34					बुटैना ग्राम समाज	5.50	13750	0	13750
35		खुर्जा	खुर्जा	सा0वा0	आजमाबाद वन ब्लॉक – प्रथम	5.00	12500	0	12500
36					आजमाबाद वन ब्लॉक – द्वितीय	5.00	12500	0	12500
37				कैम्पा (सी0ए)	खुर्जा जेवर मार्ग कि0मी0 5 पे। दोनों पटरी RCC	2.00	200		200
38			अनिर्या	वन जमा	THDC VI	4.000	10000	0	10000
39				सा0वा0	भोगपुर वन ब्लॉक	8.00	20000	0	20000
40						**257.07**	**414210**	**46648**	**460858**

प्रभागीय निदेशक
सामाजिक वानिकी प्रभाग
बुलन्दशहर

VII. Mining and Stone Crushing in river bed and flood plain zone of River Ganga and its tributaries:

Area of mining Geo code/ sampling point	FIR/ case registered/ year	Vehicles/ mineral seized	Action taken status	Cases Pending In Court	Enforcement of EMGSM 2020 and Sustainable Sand mining management Guidelines 2016
02	01	283	283	06	Strictly checking is done regularly by task force in the district.

2. The Tribunal has already directed for furnishing following information by order dated 24.11.2023:-

(1) **District Ganga Protection Planat city/town level**

District Ganga Protection Committee (DGPC) is required to formulate the action plan for each city and town located onmain stem of river Ganga and its tributary and such Action Plan has to be prepared in accordance with the River Ganga(Rejuvenation, Protection and Management) Authorities Order,2016(para6and55).

(2) **Contents of the Action Plan(Consolidated District Wise Action Plan including each City and Town abutting river Ganga and its Tributary)**

Sewage Management

S.NO		
1.	Sewage generation	
	For Entire District	78.82 MLD
	Town Wise	MLD
	NPP Bulandshahr	30
	NPP Anupshahr	3.8
	NPP Jahangirabad	9.0
	NPP Siana	4.8
	NPP Shikarpur	4.5
	NPP Dibai	4.3
	NPP Gualothi	6.2
	NP Aurangabad	3.3
	NP Khanpur	1.92
	NP Bugrasi	1.5
	NP Naraura	3.0
	NP B.B Nagar	1.2
	NP Pahasu	2.8
	NP Chhatari	1.3
	NP Kakod	1.2

(ii) **Existing Sewage Treatment Capacities :**

Total Seven STP's 51.305 MLD STP in Anoopshahr, Narora &Bulandshahr

(iii) **Quantity of sewage is being treated (utilization capacity**

Utilization at present – 27.9 MLD out of 78.82 MLD

GAP 50.99

Sewage Treatment After Operation of all STP's at full Capacity 51.305 MLD

(iv) Performance of STPs particularly for FC :

Monitroing of STP

Sr. No.	Sampling Point	Date	pH	Colour	BOD (mg/l)	COD (mg/l)	TSS (mg/l)	TC (MPN/100ML)	TC (MPN/100 ML)
1.	0.805 MLD, Aahara Road, (Zone A) Anoopshahr	19.02.2024	7.57	Colourless	18.0	96.0	54.0	1100.0	630.0
2.	1.5 MLD (ngrba) Aahara Road, Anoopshahr	19.02.2024	7.72	Colourless	20.0	108.0	77.0	1500.0	540.0
3.	1.75 MLD, Near Mastram, (Zone-B) Anoopshahr	19.02.2024	7.8	Colourless	16.0	80.0	53.0	920.0	380.0
4.	1.0 MLD (NGRBA) Near Mastram, Anoopshahr	19.02.2024	7.56	Colourless	24.0	128.0	79.0	1600.0	540.0
5.	2.25 MLD, Narora (Atomic Energy)	19.02.2024	7.77	Colourless	8.0	48.0	51.0	280.0	130.0
6.	4.0 MLD Narora (Nagar Panchayat)	19.02.2024	7.61	Colourless	16.0	84.0	66.0	540.0	240.0
7.	40 MLD Bulandshahr	19.02.2024	7.48	Colourless	10.0	44.0	38.0	430.0	280.0

(v) Where treated sewage is being discharged (to Ganga or tributaries) :

In Ganga ,In Kali East, In land for irrigation

(vi) Reasons for Under-utilization of STPs (Connectivity of Households/ laying of sewer lines) :

Connectivity of households

(vii) Current Gap in sewage treatment :

50.99 MLD

(viii) Time bound plan for bridging the gap and tying up with financial arrangements and not delaying Tendering and identifying executing agencies or having any other issues :

STP proposed of 26 MLD.(list mentioned under point 3 of Drains joining ganga and tributary)

All the drains carry domestic water (showering, cooking and washing) and rainwater, no toilet waste is discharged as all the households have septic tanks. All the ULBs are awarded with Individual Household latterine(IHHT) and ODF certificate**)**

(ix) Where untreated sewage (when there is no STP) is discharged (Ganga /Tributaries):

- No Untreated Sewage is directly going to River Ganga
- Untreated (overflow of septic tanks, etc.) goes to River Kali East

Drains Joining Ganga and Tributary

S.NO

1. Number of drains carrying sewage- sullage or industrial waste water joining Ganga/ tributaries with their Quantity and Quality:

12 Drains

Drain(city/ town)	Total drain capacity	Generation/day	pH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, PB,Ar, Mn ,Cu, Zn, Hg,Fluoride etc)	Nitrates	DO	TC	FC	Outlet flow and Geocode/ Sampling gpoint	Colour /odour	Discharge Into
Adil Nagar - 1	Continous Flow	11.336	7.7	80.0	264	125	605	Fe- 0.94 Cu-1.4 Cr – 1.2 Ni-0.62 Pb- 2.8 Zn- 4.4	2.62	0	$31*10^6$	$21*10^6$	F-11.336 28°23'46.8"N & 77°51'44.9"E	Greyish /foul	Kali River East
Behind ChamundaMandir	ContinousFlow	4.899	7.65	86.0	208	107	448	Fe- 0.88 Cu-2.0 Cr – 2.0 Ni-ND Pb- 5.6 Zn- 4.8	2.73	0	$35*10^6$	$17*10^6$	F-4.899 28°25'02.9"& 77°51'11.3"E	Greyish/foul	Kali River East
Behind ShanidevMandir	Continous Flow	3.507	7.58	104	232	113	915	Fe- 0.12 Cu-ND Cr – ND Ni-ND Pb- ND Zn- 2.9	2.24	0	$63*10^7$	$46*10^7$	F-3.507 28°24'05.3"& 77°51'49.9"E	Greyish/foul	Kali River East
Chandbari Road	ContinousFlow	3.085	7.67	148	388	157	906	Fe- 0.60 Cu-3.5 Cr – 1.0 Ni-0.9 Pb- 1.9 Zn- 3.9	2.77	0	$49*10^7$	$33*10^7$	F-3.085 28°22'42.7"N& 77°07'52.4"E	Greyish/foul	Kali River East
CheelGhat	ContinousFlow	5.002	7.71	76.0	208	103	802	Fe- 1.94 Cu-2.06 Cr – 0.94 Ni- ND	3.1	0	$38*10^5$	$26*10^{5f}$	F-5.002 28°23'59.7"N& 77°52'02.2"E	Greyish/foul	Kali River East

								Pb- 1.02							
Devipura	ContinousFlow	2.741	7.69	106.0	240.0	125.0	644	Fe- 1.02 Cu-0.94 Cr – 0.82 Ni-0.23 Pb- 1.92 Zn- 2.44	2.03	0	$58*10^7$	$31*10^7$	F-2.741 28°24'35.3"N& 77°51'38.5"E	Greyish/foul	Kali River East
Faislabad Road	ContinousFlow	12.678	7.73	112.0	272.0	163.0	878	Fe- 0.42 Cu-0.8 Cr – 1.0 Ni-0.06 Pb- 1.84 Zn- 3.8	3.06	0	$39*10^6$	$33*10^6$	F-12.678 28°24'29.9"N& 77°51'50.0"E	Greyish/foul	Kali River East
Gulaothi Drain	ContinousFlow	43.843	7.62	146.0	368.0	185.0	740	Fe- 0.59 Cu-2.06 Cr – 1.2 Ni-0.33 Pb- 1.94 Zn- 4.66	2.81	0	$31*10^7$	$21*10^7$	F-43.843 28°35'28.4"N& 77°48'06.5"E	Greyish/foul	Kali River East
Kasai Bara	ContinousFlow	8.276	7.68	96.0	240	117	967	Fe- 0.10 Cu-ND Cr – ND Ni-ND Pb-ND Zn- 2.5	2.34	0	$40*10^7$	$23*10^7$	F-8.276 28°24'25.6"N& 77°51'43.2"E	Greyish/foul	Kali River East
Maman Road	ContinousFlow	65.926	7.57	68.0	192.0	109.0	446	Fe- 0.69 Cu-1.09 Cr – 0.94 Ni-0.09 Pb- 1.08 Zn- 4.62	2.71	0	$49*10^5$	$33*10^5$	F-65.926 28°23'35.0"N& 77°51'38.5"	Greyish/foul	Kali River East
NarsalGhat	ContinousFlow	3.845	7.60	90.0	320.0	155.0	990	Fe-ND Cu-ND Cr –ND Ni-ND Pb- ND Zn- ND	2.85	0	$41*10^7$	$34*10^7$	F-3.845 28°24'17.8"N& 77°51'57.4"	Greyish/foul	Kali River East
Neem Drain	ContinousFlow	29.368	7.74	104.0	216.0	123.0	668	Fe- 0.55 Cu-2.76 Cr – 1.88 Ni-0.64 Pb- 0.99 Zn- 2.8	2.64	0	$58*10^5$	$31*10^5$	F-29.368 28°22'42.7"& 78°07'52.4"E	Greyish/foul	Kali River East

(All the drains carry domestic water (showering, cooking and washing) and rainwater, no toilet waste is discharged as all the households have septic tanks. All the ULBs are awarded with Individual Household latterine(IHHT) and ODF certificate**)**

2. Drains joining outside city and town limits but, either joining in village or nearby town:

No such drains are there

3. Inclusion of sewage flowing in drains into total sewage generation figures of each city and town and their interception and diversion to STPs:

Sr. No.	Ulb Name	Final Discharge Point	Sewage /Grey Water	STP Capacity	STP Proposed with Capacity
1	NPP Bulandshahr	Kali Nadi	Sewage (After Treatment)	40 MLD	Not Applicable
2	NPP Anoopshahr	In Ganga River	Sewage (After Treatment)	5.06 MLD	Not Applicable
3	NP Narora	In Ganga River	Sewage (After Treatment)	4 MLD	Not Applicable
4	NPP Siyana	NeemNadi	Only Grey Water	Not Applicable	4.50 MLD with Co-treatment (8.00 KLD)
5	NPP Gulaothi	NeemNadi	Only Grey Water	Not Applicable	5.00 MLD with Co-treatment (9.00 KLD)
6	NPP Dibai	ChoyiaNallah	Only Grey Water	Not Applicable	3.80 MLD with Co-treatment (6.00 KLD)
7	NPP Shikarpur	Kali Nadi	Only Grey	Not Applicable	..

			Water		
8	NPP Jahangirabd	NeemNadi	Only Grey Water	Not Applicable	6.00 MLD with Co-treatment (10 KLD)
9	NP Aurangabad	NeemNadi	Only Grey Water	Not Applicable	2.82 MLD with Co-treatment (6.00 KLD)
10	NP Bugrasi	In ULB Pond	Only Grey Water	Not Applicable	1.50 MLD with Co-treatment (3.00 KLD)
11	NP B.B Nagar	In ULB Pond	Only Grey Water	Not Applicable	0.97 MLD with Co-treatment (3.00 KLD)
12	NP Chhatari	In ULB Pond	Only Grey Water	Not Applicable	1.20 MLD with Co-treatment (2.00 KLD)
13	NP Kakod	In ULB Pond	Only Grey Water	Not Applicable	..
14	NP Pahasu	Kali Nadi	Only Grey Water	Not Applicable	..
15	NP Khanpur	In ULB Pond	Only Grey Water	Not Applicable	..
Note -All the drains carry domestic water (showering, cooking and washing) and rainwater, no toilet waste is discharged as all the households have septic tanks. All the ULBs are awarded with Individual Household latterine(IHHT) and ODF certificate					

Septage Management (In case of no STP)

S.NO		
1.	Status of Septage management (with reference to FSTP/STP):	**FSTP 35 KLD**
2.	Management of Grey water and its disposal:	**Used for Irrigation**

Industrial Pollution Control

S.NO		
1.	Attach the list on no. of industries generating trade effluents, their place of disposal and compliance including CETPs	**09 Industries**
	Town Wise	
	Shikarpur	**01**
	Debai	**01**
	Gualothi	**02**
	Khurja	**02**
	Anoopshahr	**02**
	Siyana	**01**

S.No.	Name and address of industry	Sector	Status of ETP (installed/not installed)	Final Discharge	Operational Status	Environmental complyimg status(complying/non complying)
1	Chemenergy Biofuels Private Limited Plot No-35, Village Ban, PahasuChhtari Road, Tehsil shikarpur, Distt. - Bulandshahr	Biodiesel	Installed	Kali River	Operational	Complying
2	Kwality Ltd. (Ramson Dairy)	Dairy	Installed	Kali River	Operational	Complying

	Vill. Mumrejpur, Tehsil Dibai, Bulandshahr					
3	VRS Foods Ltd. Unit 3 Near Old bus stand, Gulaothi, Bulandshahr	Dairy	Installed	Kali River	Operational	Complying
4	VRS Foods Ltd. Unit 4 Near Old bus stand, Gulaothi, Bulandshahr	Dairy	Installed	Kali River	Operational	Complying
5	Triveni Sugar Mills Pvt. Ltd. (Sugar Unit) SabitgarhKhurjaBulandshahr	Sugar	Installed	Kali River	Operational	Complying
6	Triveni Sugar Mills Pvt. Ltd. (Distillery Unit)SabitgarhKhurjaBulandshahr	Distillery	Installed	Kali River	Operational	Complying
7	UP Cooperative Sugar Factories Federation Ltd, AnoopshahrJahangirabad, Bulandshahar (Distillery unit)	Distillery	Installed	Kali River	Operational	Complying
8	KisanSahkari Sugar Mills Jahangirabad, Anoopshahr, Bulandshahr	Sugar	Installed	Kali River	Operational	Complying
9	Ananda Dairy Foods Pvt. Ltd. Garh Road , Siyana, Bsr	Dairy	Installed	Kali River	Operational	Complying

Water Quality Status

S.NO		
1.	**Provide water quality status of Ganga and its tributaries in the District and city/ town in terms of its fitness for Bathing water quality that is, FC and FS:**	

Sl. No.	Name of Sampling Point (Kali River East)	Date	Colour (Hz.)	pH	DO (mg/l)	BOD (mg/l)	COD (mg/l)	TC(MPN/ 100ml)	FC(MPN/ 100ml)
1	U/S Devipura, BSR	06.02.2024	30	7.74	Nil	46.0	136.0	3400000.0	2700000.0
2	D/s Mohan Kuteer, BSR	06.02.2024	30	7.63	Nil	40.0	120.0	3200000.0	2200000.0
3	U/S Devipura, BSR	13.02.2024	30	7.61	Nil	50.0	152.0	4300000.0	2800000.0
4	D/s Mohan Kuteer, BSR	13.02.2024	30	7.53	Nil	46.0	128.0	3300000.0	2100000.0
5	U/S Devipura, BSR	20.02.2024	30	7.86	Nil	62.0	168.0	3900000.0	3300000.0
6	D/s Mohan Kuteer, BSR	20.02.2024	30	7.74	Nil	56.0	152.0	3200000.0	2600000.0
7	U/S Devipura, BSR	27.02.2024	30	7.82	Nil	58.0	144.0	4900000.0	3400000.0
8	D/s Mohan Kuteer, BSR	27.02.2024	30	7.72	Nil	54.0	128.0	4700000.0	2800000.0

Sl. No.	Name of Sampling Point (Ganga River)	Date	Colour (Hz.)	pH	DO (mg/l)	BOD (mg/l)	COD (mg/l)	TC(MPN/ 100ml)	FC(MPN/ 100ml)
1	U/s Anoopshahr	06.02.2024	10	7.34	10.0	1.4	12.0	280.0	130.0
2	D/s Anoopshahr	06.02.2024	10	7.28	9.7	1.5	12.0	920.0	280.0
3	Rajghat, Narora	06.02.2024	10	7.25	9.6	1.6	12.0	1100.0	790.0
4	U/s Anoopshahr	13.02.2024	10	7.12	9.4	1.3	10.0	430.0	220.0
5	D/s Anoopshahr	13.02.2024	10	7.15	9.8	1.0	10.0	350.0	170.0
6	Rajghat, Narora	13.02.2024	10	7.17	9.2	1.1	12.0	430.0	280.0
7	U/s Anoopshahr	20.02.2024	10	7.31	9.4	1.2	8.0	170.0	110.0
8	D/s Anoopshahr	20.02.2024	10	7.29	9.1	1.4	12.0	350.0	210.0
9	Rajghat, Narora	20.02.2024	10	7.26	8.9	1.8	10.0	920.0	540.0
10	U/s Anoopshahr	27.02.2024	10	7.11	9.5	1.6	12.0	430.0	220.0
11	D/s Anoopshahr	27.02.2024	10	7.15	9.7	1.5	8.0	350.0	210.0
12	Rajghat, Narora	27.02.2024	10	7.18	9.3	1.8	10.0	1100.0	790.0

Designated-Best-Use	Class of water	Criteria
Drinking Water Source without conventional treatment but after disinfection	A	• Total Coliforms Organism MPN/100ml shall be 50 or less • pH between 6.5 and 8.5 • Dissolved Oxygen 6mg/l or more • Biochemical Oxygen Demand 5 days 20C 2mg/l or less
Outdoor bathing (Organised)	B	• Total Coliforms Organism MPN/100ml shall be 500 or less pH between 6.5 and 8.5 Dissolved Oxygen 5mg/l or more • Biochemical Oxygen Demand 5 days 20C 3mg/l or less
Drinking water source after conventional treatment and disinfection	C	• Total Coliforms Organism MPN/100ml shall be 5000 or less pH between 6 to 9 Dissolved Oxygen 4mg/l or more • Biochemical Oxygen Demand 5 days 20C 3mg/l or less
Propagation of Wild life and Fisheries	D	• pH between 6.5 to 8.5 Dissolved Oxygen 4mg/l or more • Free Ammonia (as N) 1.2 mg/l or less
Irrigation, Industrial Cooling, Controlled Waste disposal	E	• pH betwwn 6.0 to 8.5 • Electrical Conductivity at 25C micro mhos/cm Max.2250 • Sodium absorption Ratio Max. 26 • Boron Max. 2mg/l
	Below-E	Not Meeting A, B, C, D & E Criteria

- NOTE- THE WATER QUALITY OF GANGA RIVER PERTAINS TO CLASS B STANDARD, HENCE THE WATER IS FIT FOR BATHING
- KALI RIVER IS NOT FIT FOR BATHING

Notification of Flood Plain Zones

- UP State Government Order 17.10.2018 has been issued declaring no development /no construction within 100 meter of Ganga River on both sides from bijnore to Kanpur
- Total 244 Pillar consisting of regulatory and no construction pillar has been constructed with ensures demarcation of flood plain Zone

Issues Relating to Environmental Flow

- Notification issued by Government of India dated 09 Oct 2018 for ecological flow in Ganga River maintained as below :-
- Steps taken for maintaing Ecological flow/status of compliance of E-flow notifications.

Sr. No.	Location of Barrage	Minimum flow releasing downstream near to barrage (in Cumec) (October to May)	Minimum flow releasing downstream near to barrage (in Cumec) (June to September)
1	2	3	4
1	Bheem Gauda (Haridwar)	36	57
2	Bijnor	24	48

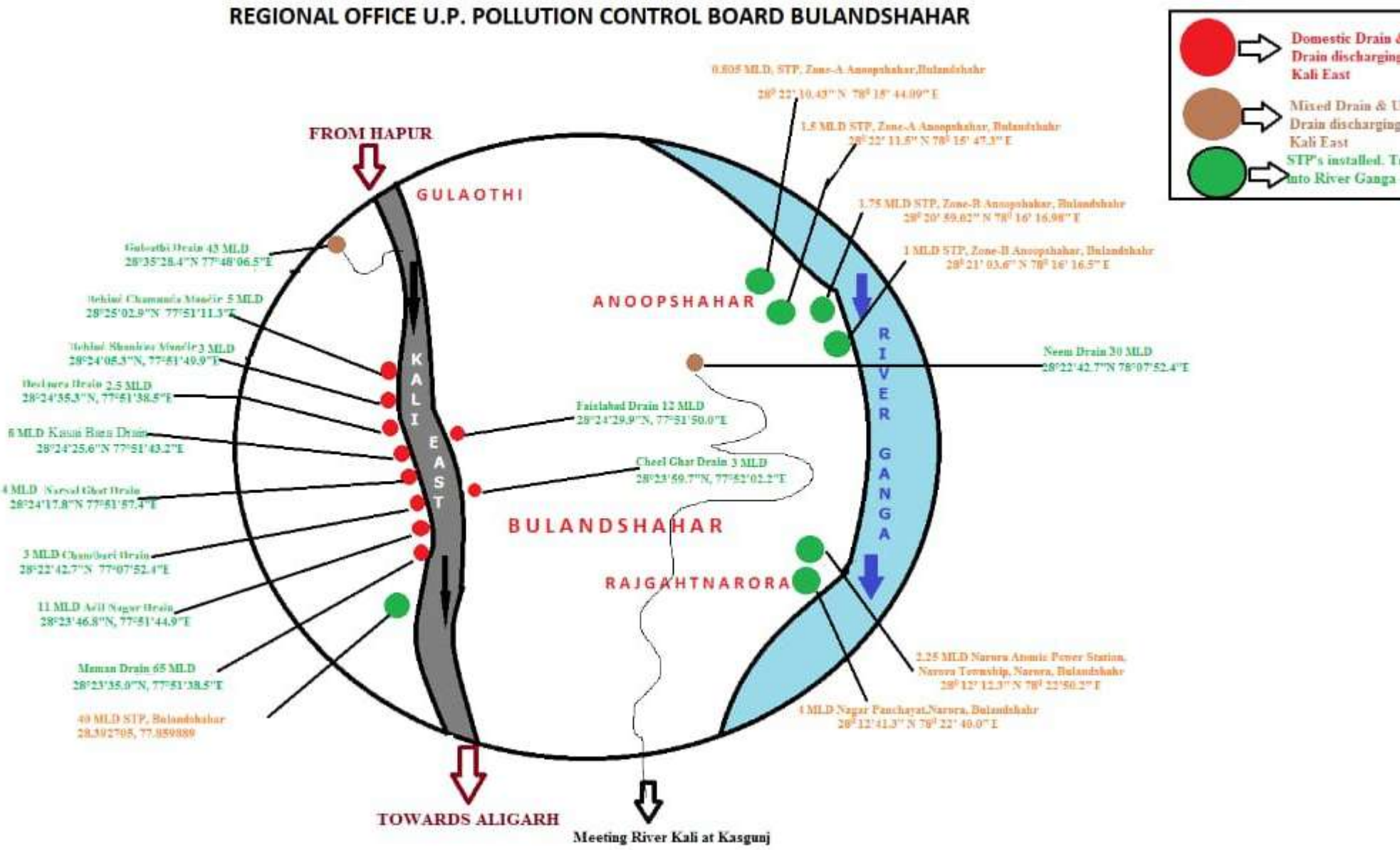
1. Compliance of E-flow notification by Northern Division Ganga Canal (NDGC) Roorkee at Bheem Gauda Barrage Haridwar U.K. in daily Gauge register.
2. 36 Cumec Water release from Bheem Gauda Barrage Haridwar U.K.
3. 24 Cumec Water release from Madhya Ganga Barrage Bijnor UP

Few Best Practices Adopted In District

- All the major polluting industries have online monitoring system for monitoring the water quality parameters of treated effluent discharge, which is continuously monitored by control room at Head Quarters UPPCB, Lucknow.
- At present all distillery units in Bulandshahr are Operating slop boilers for disposal of spent wash. All the distilleries are at ZLDs (Zero Liquid Discharge)
- All sugar Industries have achieved 100% utilization of treated water in Recycling processs/ for use in Irrigation on Agricultural Land.
- Turtle Conservation Program by Forest department in coordination with WWF-India
- Natural Farming/Organic farming are conducted along the bank of River Ganga, which prevents River Ganga from contamination of pesticides
- 32 Ganga Gram Sewa Samiti are formed by District Panchayat Raj Office to make people aware about the importance of River Ganga and to maintain the aesthetic value of River Ganga.
- All the ULBs in District are awarded with Individual Household latterine (IHHT) and ODF certificate. This reduces pollution load on our rivers.

01/4/24

Chandra Prakash Singh (IAS)
District Magistrate/Chairman
District Ganga, Committee, Bulandshahr(UP)


REGIONAL OFFICE U.P. POLLUTION CONTROL BOARD BULANDSHAHAR
Domestic Drain &
Drain discharging
Kali East
Mixed Drain & U
Drain discharging
Kali East
STP's installed. T
into River Ganga
0.805 MLD, STP, Zone-A Anoopshahar,Bulandshahr
28° 22' 10.43" N 78° 15' 44.09" E
1.5 MLD STP, Zone-A Anoopshahar, Bulandshahr
28° 22' 11.5" N 78° 15' 47.3" E
1.75 MLD STP, Zone-II Anoopshahar, Bulandshahr
28° 20' 59.02" N 78° 16' 16.98" E
1 MLD STP, Zone-II Anoopshahar, Bulandshahr
28° 21' 03.6" N 78° 16' 16.5" E
FROM HAPUR
GULAOTHI
Gulaothi Drain 43 MLD
28°35'28.4"N 77°48'06.5"E
Behind Chamunda Mandir 5 MLD
28°25'02.9"N 77°51'11.3"E
Behind Shanidev Mandir 3 MLD
28°24'05.3"N, 77°51'49.9"E
Beehives Drain 2.5 MLD
28°24'35.3"N, 77°51'38.5"E
6 MLD Kasai Bass Drain
28°24'25.6"N 77°51'43.2"E
4 MLD Nawal Ghat Drain
28°24'17.8"N 77°51'57.4"E
3 MLD Chamberi Drain
28°22'42.7"N 77°07'52.4"E
11 MLD Adil Nagar Drain
28°23'46.8"N, 77°51'44.9"E
Mewan Drain 65 MLD
28°23'35.0"N, 77°51'38.5"E
40 MLD STP, Bulandshahar
28.392705, 77.859889
KALI EAST
ANOOPSHAHAR
RIVER GANGA
Neem Drain 30 MLD
28°22'42.7"N 78°07'52.4"E
Faislahad Drain 12 MLD
28°24'29.9"N, 77°51'50.0"E
Cheel Ghat Drain 3 MLD
28°23'59.7"N, 77°52'02.2"E
BULANDSHAHAR
RAJGAHTNARORA
2.25 MLD Narora Atomic Power Station,
Narora Township, Narora, Bulandshahr
28° 12' 12.3" N 78° 22' 50.2" E
1 MLD Nagar Panchayat,Narora, Bulandshahr
28° 12' 41.3" N 78° 22' 40.0" E
TOWARDS ALIGARH
Meeting River Kali at Kasgunj

35676

Report in

Compliance of Hon'ble NGT order

dt. 24th January 2024 and 5th February 2024 in

O.A. 200/2014 MC Mehta Vs UOI and Ors.

Submitted By-

District Ganga Committee

District-Ballia,Uttar Pradesh

District-Ballia

MC MEHTA vs. UNION OF INDIA (OA. NO. 200 OF 2014)

ADDITIONAL INFORMATION, AS PER THE ORDER 05.02.2024

S.NO	ADDITIONAL INFORMATION	ANSWER
1.	That STPs installed, are under utilised and that treated effluents are discharged into the drains carrying untreated wastewater thereby defeating the very purpose of the efficacy of STPs.	20 MLD STP is under construction.
2.	The quantification and estimation of sewage entering to each STP through sewer network or through interception and diversion of drains.	At present, the STP with treatment capacity of 20 MLD is under construction.
3.	the breakup of quantity of sewage fed to each STP through sewerage and drains, indicating location of STP (with geo coordinates) and quality and quantity of discharged sewage and its disposal location.	Not applicable. The geo cordinates of under construction. STP are lat.25.79626, long. 84.15524
4.	These identified industries should be imposed with the Consent conditions to adopt ZLD system or maximize recycling/ reuse of treated effluents rather than consenting them to discharge into drains with no burden on them.	In Ballia there is only one industry named SHIVA AND SON'S AGRO PRODUCTS KHARUAON,RASRA,BALLIA-221712. Effluent Treatment Plant (ETP) has been established. Industry does not discharge any effluent in any drain. Industry utilizes/recycles total treated effluent in the industry premises.

5.	We are of the view that additional columns are to be included reflecting the drain, position of STP with capacity, their geo-coordinates, discharge quantity from the STP in the drain and total per day discharge from the drain into river.	At present, the STP with treatment capacity of 20 MLD is under construction.
6.	mention heavy metals analysis in respect of discharge from each of the drain in the report.	Katahal Drain heavy metal. Total Chromium-ND Copper-ND Lead-0.1070 mg/l Iron-13.0750 mg/l Zinc-0.0683 mg/l Total Fixed Solid-590 mg/l Manganese-0.5747 mg/l Arsenic-0.012 mg/l Mercury-ND

I. Sewage															
Drain (City/ town)	**Total Drain Capacity**	**Generation/day**	**PH**	**BOD**	**COD**	**TSS**	**TDS**	**Heavy metals (Fe, Cr, PB,Ar, Mn, Cu, Zn, Hg, Fluoride etc)**	**Nitrates**	**DO**	**TC**	**FC**	**Outlet flow**	**Colour/odour**	**discharged into**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Katahal Nala, Ballia	16.12 MLD	16.12 MLD	7.1	28.0 mg/L	116.0 mg/L	82.0 mg/L	788.0 mg/L	Chloride-170.0 mg/l Fluoride-0.79 mg/l Total Chromium-ND Copper-ND Lead-0.1070 mg/l Iron-13.0750 mg/l Zinc-0.0683 mg/l Total Fixed Solid-590 mg/l Manganese-0.5747 mg/l Arsenic-0.012 mg/l Mercury-ND	4.48 mg/L	Nil	1600000 MPN/100ml	920000 MPN/100 ml	16.12 MLD	30 Hazen	Ganga
Surha Tal Ballia	N.A.	N.A.	7.34	4.35 mg/L	23.2 mg/L	58.0 mg/L	284.0 mg/L	Chloride-62.0 mg/l Fluoride-0.639 mg/l Total Chromium-ND Copper-ND Lead-0.0306 mg/l Iron-1.0334 mg/l Zinc-0.0281 mg/l Total Fixed Solid-248.0 mg/l Manganese-0.4770 mg/l Arsenic-0.004 mg/l Mercury-ND	ND	5.78 mg/L	790000 MPN/100ml	490000 MPN/100 ml	N.A.	30 Hazen	Ganga
River Ganga at Mahaveer Ghat	N.A.	N.A.	7.52	3.72 mg/L	17.4 mg/L	36.0 mg/L	318.0 mg/L	Chloride-8.0 mg/l Fluoride-0.510 mg/l Total Chromium-ND Copper-ND Lead-ND Iron-0.8025 mg/l Zinc-0.0158 mg/l Total Fixed Solid-254.0 mg/l Manganese-0.1138 mg/l Arsenic-ND Mercury-ND	ND	6.20 mg/L	7800 MPN/100ml	4500 MPN/100 ml	N.A.	20 Hazen	Ganga
Baghar River near Raniganj, Bairia, Ballia	N.A.	N.A.	6.89	22.0 mg/L	110.0 mg/L	64.0 mg/L	832.0 mg/L	Chloride-74.0 mg/l Fluoride-0.539 mg/l Total Chromium-ND Copper-ND Lead-0.1834 mg/l Iron-14.4425 mg/l Zinc-0.7199 mg/l Total Fixed Solid-586.0 mg/l Manganese-0.8890 mg/l Arsenic-0.014mg/l Mercury-ND	0.149 mg/l	Nil	11000 MPN/100ml	4500 MPN/100 ml	N.A.	30 Hazen	Ghaghara/ Saryu

Saryu River Majhi Ghat, Ballia (Ghaghara & Saryu River is same)	N.A.	N.A.	7.12	2.4 mg/L	13.8 mg/L	42.0 mg/L	236.0 mg/L	Chloride-18.0 mg/l Fluoride-0.081 mg/l Total Chromium-ND Copper-ND Lead-ND Iron-1.4774 mg/l Zinc-0.0188 mg/l Total Fixed Solid-198.0 mg/l Manganese-0.1068 mg/l Arsenic-ND Mercury-ND	ND	7.37 mg/l	3200 MPN/100ml	780 MPN/100 ml	N.A.	20 Hazen	Ganga
Lakra River, Ballia	N.A.	N.A.	7.20	8.0 mg/l	36.8 mg/l	44.0 mg/l	294.0 mg/l	Chloride-22.0 mg/l Fluoride-0.446 mg/l Total Chromium-ND Copper-ND Lead-0.0306 mg/l Iron-1.5307 mg/l Zinc-0.0621 mg/l Total Fixed Solid-236.0 mg/l Manganese-0.5957 mg/l Arsenic-0.005 mg/l Mercury-ND	ND	6.47 mg/l	1400 MPN/100ml	450 MPN/100 ml	N.A.	30 Hazen	Ganga

2- STP for treating the sewage of the drains ultimately flowing to river ganga or its tributaries

Existing STP (location & capacity)	Capacity (operational)	Inlet/ Outlet water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point	Proposed/ under construction STP With completion date
1	2	3	4	5	6	8
At present there is no existing STP in district Ballia	Zero (Since there is no STP in Ballia.)	Zero (Since there is no STP in Ballia.)	No tapped drains	14.67 MLD	As there is no existing STP, there is no discharge point	A STP of treatment capacity 20 MLD (lat. 25.79626, long. 84.15524), marked as Rectangle in Red colour on map, is proposed to be constructed at Katahal Drain in Chhodhar Village. 0.948 hectare land has already been acquired for the construction of this proposed STP.The Sewage from house hold will be conveyed through these sewer lines at S.P.S (sewage pumping stations).There are two SPS under this project. the sewage collected at these SPSs will then be pumped to the STP for treatment .The timeline for the execution of works of STP construction and cleaning of previously laid sewer lines is prepared. The work is already begun and it is likely to be completed by 15th May 2025. As per the proposed timelines, the following milestones are/ are to be achieved. 1. Man power, tool and plant have been mobilised

						and soil testing and SBR designing is completed. 2. The existing sewer lines are being checked. 6.00 K.M. out of 57.00 kms has been desilted and all will be rehabilitated by the end of December 2024. 3. The construction work of STP with treatment capacity of 20 mld has started and will be completed by February 2025. 4. In the due course, the supply of the E&M equipment will be procured and the same will be installed by 15th of February 2025. 5. The plant will be commissioned and all components will be under trial run thereafter till 15th of May 2025. Against the proposed timeline, the work is already awarded to M/s R. K. Engineers Sales Ltd., Lucknow, U.P. JV Anand Construwell Pvt. Ltd.,Nasik, Maharashtra. The firm has mobilized the manpower and the site clearance work is Completed. The site survey for STP is done, the BEP (Basic Engineering Package) drawings have been approved and design of SBR basin is also completed and construction work is in progress. The timelines are being adhered to. As stated, previously laid 57.00 kms of sewer line will be rehabilitated under the sanctioned project (work in progress). This 57.00 kms of sewer line will cover around 14342 households, out of total present projected households i.e. 27171. Thus, from these connected households around 7.74 mld of sewage will be conveyed to and consequently treated at the STP after the construction of STP gets completed. For balance households, (around 12829) and balance sewerline (around 74 kms), the proposal (PFR) is being prepared and the works will be executed after the due approval. Till the time the saturation of sewerage system is attained by completing the balance housheols connections, the septage (faecal matter) from the balance households will be treated at the co-treatment facility that is being built (25 kld capacity) along with the 20 mld STP.

2.1 STP ADDITIONAL INFORMATION

NAME OF DRAIN	POSITION OF STP WITH CAPACITY	GEO/COOR DINATES	DISCHARGE QUANTITY FROM THE STP IN THE DRAIN	TOTAL PER DAY DISCHARGE FROM THE DRAIN INTO THE RIVER
1	2	3	4	5
1. Drain behind DM House(near Parmandapur puliya)	At present the construction of STP is under process which is executed by Jal Nigam Urban, Ballia. STP is likely to be completed by 15th May 2025.The bioremediation is under process, the coordinates of bioremediation plant is 25.765063° and 84.139689°	25.765063° 84.139689°	The construction of STP is under process which is being executed by Up Jal Nigam (Urban), Ballia.	This drain meets with katahal drain and its discharge is approx 2.74 MLD.
2. Drain near Baheri puliya	At present the construction of STP is under process which is executed by Jal Nigam Urban, Ballia. STP is likely to be completed by 15th May 2025. The Bioremediation is under process. the coordinates of bioremediation plant is25.757159°and 84.144956°	25.757159° 84.144956°	The construction of STP is under process which is being executed by Up Jal Nigam (Urban)	This drain meets with katahal drain and its discharge is approx 1.28 MLD.
3. Drain near Mansha Baba temple	At present the construction of STP is under process which is executed by Jal Nigam Urban, Ballia. STP is likely to be completed by 15th May 2025. The Bioremediation is under process. the coordinates of bioremediation plant is25.751323°and 84.144345°	25.751323° 84.144345°	The construction of STP is under process which is being executed by Up Jal Nigam (Urban)	This drain meets with katahal drain and its discharge is approx 0.95 MLD.
4. Drain near Vijayipur puliya	At present the construction of STP is under process which is executed by Jal Nigam Urban, Ballia. STP is likely to be completed by 15th May 2025. The Bioremediation is under process. the coordinates of bioremediation plant is 25.765063° and 84.139689°	25.747626° 84.145293°	The construction of STP is under process which is being executed by Up Jal Nigam (Urban)	This drain meets with katahal drain and its discharge is approx 0.45 MLD.
5. Bankata Drain	At present the construction of STP is under process which is executed by Jal Nigam Urban, Ballia. STP is likely to be completed by 15th May 2025. The Bioremediation is under process. the coordinates of bioremediation plant is 25.751470°and 84.151717°	25.751470° 84.151717°	The construction of STP is under process which is being executed by Up Jal Nigam (Urban)	This drain meets with katahal drain and its discharge is approx 0.86 MLD.

6. Dedua Drain	At present the construction of STP is under process which is executed by Jal Nigam Urban, Ballia. STP is likely to be completed by 15th May 2025. The Bioremediation is under process, the coordinates of bioremediation plant is 25.753243°and 84.157240°	25.753243° 84.157240°	The construction of STP is under process which is being executed by Up Jal Nigam (Urban)	This drain meets with katahal drain and its discharge is approx 8.75 MLD.

Proposed STP (location & capacity)	Capacity (operational)	Inlet/ Outlet water & quality quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point Geo code/ sampling point	Proposed/ under construction STP With completion date
1	2	3	4	5	6	7
A STP of treatment capacity 20 MLD (lat. 25.79626, long. 84.15524) is proposed to be constructed at Katahal Drain in Chhodhar Village..	As there is no existing STP	As there is no existing STP	As there is no existing STP	14.67 MLD	As there is no existing STP, there is no discharge point	A STP of treatment capacity 20 MLD (lat. 25.79626, long. 84.15524), marked as Rectangle in Red colour on map, is proposed to be constructed at Katahal Drain in Chhodhar Village. 0.948 hectare land has already been acquired for the construction of this proposed STP.The Sewage from house hold will be conveyed through these sewer lines at S.P.S (sewage pumping stations).There are two SPS under this project. the sewage collected at these SPSs will then be pumped to the STP for treatment .The timeline for the execution of works of STP construction and cleaning of previously laid sewer lines is prepared. The work is already begun and it is likely to be completed by 15th May 2025. As per the proposed timelines, the following milestones are/ are to be achieved. 1. Man power, tool and plant have been mobilised and soil testing and SBR designing is completed. 2. The existing sewer lines are being checked. 6.00 K.M. out of 57.00 kms has been desilted and all will be rehabilitated by the end of December 2024. 3. The construction work of STP with treatment capacity of 20 mld has started and will be completed by February 2025. 4. In the due course, the supply of the E&M equipment will be procured and the same will be installed by 15th of February 2025. 5. The plant will be commissioned and all components will be under trial run thereafter till 15th of May 2025. Against the proposed timeline, the work is already awarded to M/s R. K. Engineers Sales Ltd., Lucknow, U.P. JV Anand Construwell Pvt. Ltd.,Nasik, Maharashtra. The firm has mobilized the manpower and the site clearance work is Completed. The site survey for STP is done, the BEP (Basic Engineering Package) drawings have been

						approved and design of SBR basin is also completed and construction work is in progress. The timelines are being adhered to. As stated, previously laid 57.00 kms of sewer line will be rehabilitated under the sanctioned project (work in progress). This 57.00 kms of sewer line will cover around 14342 households, out of total present projected households i.e. 27171. Thus, from these connected households around 7.74 mld of sewage will be conveyed to and consequently treated at the STP after the construction of STP gets completed. For balance households, (around 12829) and balance sewerline (around 74 kms), the proposal (PFR) is being prepared and the works will be executed after the due approval. Till the time the saturation of sewerage system is attained by completing the balance housholds connections, the septage (faecal matter) from the balance households will be treated at the co-treatment facility that is being built (25 kld capacity) along with the 20 mld STP.

3. Hotels/ Ashrams/Dharmshalas/residential complexes abutting river Ganga or its tributaries

Number of Hotels/ ashrams/dharamshalas	Consent to establish/ operate	STP	Discharge point	Action taken
1	2	3	4	5
Hotel Aryan	District Administration (City Magistrate Ballia)	Under Construction By Jal Nigam Urban Ballia.Hotel to be tapped by the same STP	Through Septic tank/Soak pit	Notice Issued to hotel owner vide letter no.1365 dated 14/03/2024 by Executive officer Nagar Palika Parishad, Ballia and reply by hotel owner is awaited.
Hotel Utsav	District Administration (City Magistrate Ballia)	Under Construction By Jal Nigam Urban Ballia.Hotel to be tapped by the same STP	Through Septic tank/Soak pit	Do
Hotel Rayal	District Administration (City Magistrate Ballia)	Under Construction By Jal Nigam Urban Ballia.Hotel to be tapped by the same STP	Through Septic tank/Soak pit	Do
Pratap Hotel	District Administration (City Magistrate Ballia)	Under Construction By Jal Nigam Urban Ballia.Hotel to be tapped by the same STP	Through Septic tank/Soak pit	Do
Hotel R N G In	District Administration (City Magistrate Ballia)	Under Construction By Jal Nigam Urban Ballia.Hotel to be tapped by the same STP	Through Septic tank/Soak pit	Do
Hotel Siddharth	District Administration (City Magistrate Ballia)	Under Construction By Jal Nigam Urban Ballia.Hotel to be tapped by the same STP	Through Septic tank/Soak pit	Do
Vaishali Hotel	District Administration (City Magistrate Ballia)	Under Construction By Jal Nigam Urban Ballia.Hotel to be tapped by the same STP	Through Septic tank/Soak pit	Do
Hotel Singhaniya	District Administration (City Magistrate Ballia)	Under Construction By Jal Nigam Urban Ballia.Hotel to be tapped by the same STP	Through Septic tank/Soak pit	Do

Ashok Hotel Palace	District Administration (City Magistrate Ballia)	Under Construction By Jal Nigam Urban Ballia.Hotel to be tapped by the same STP	Through Septic tank/Soak pit	Notice Issued to hotel owner vide letter no.1365 dated 14/03/2024 by Executive officer Nagar Palika Parishad, Ballia and reply by hotel owner is awaited.
Maya Hotel	District Administration (City Magistrate Ballia)	Under Construction By Jal Nigam Urban Ballia.Hotel to be tapped by the same STP	Through Septic tank/Soak pit	Do
Hotel Chandrawali	District Administration (City Magistrate Ballia)	Under Construction By Jal Nigam Urban Ballia.Hotel to be tapped by the same STP	Through Septic tank/Soak pit	Do
Falak Hotel Kunwar Upwan	District Administration (City Magistrate Ballia)	Under Construction By Jal Nigam Urban Ballia.Hotel to be tapped by the same STP	Through Septic tank/Soak pit	Do
Bharat Hotel	District Administration (City Magistrate Ballia)	Under Construction By Jal Nigam Urban Ballia.Hotel to be tapped by the same STP	Through Septic tank/Soak pit	Do
Hotel Paradise	District Administration (City Magistrate Ballia)	Under Construction By Jal Nigam Urban Ballia.Hotel to be tapped by the same STP	Through Septic tank/Soak pit	Do
Hotel Aanandi In	District Administration (City Magistrate Ballia)	Under Construction By Jal Nigam Urban Ballia.Hotel to be tapped by the same STP	Through Septic tank/Soak pit	Do
Central Hotel	District Administration (City Magistrate Ballia)	Under Construction By Jal Nigam Urban Ballia.Hotel to be tapped by the same STP	Through Septic tank/Soak pit	Do
Kamla Hotel	District Administration (City Magistrate Ballia)	Under Construction By Jal Nigam Urban Ballia.Hotel to be tapped by the same STP	Through Septic tank/Soak pit	Do
Hotel Subham	District Administration (City Magistrate Ballia)	Under Construction By Jal Nigam Urban Ballia.Hotel to be tapped by the same STP	Through Septic tank/Soak pit	Do
Rudra Hotel	District Administration (City Magistrate Ballia)	Under Construction By Jal Nigam Urban Ballia.Hotel to be tapped by the same STP	Through Septic tank/Soak pit	Do
Hotel Singhaal	District Administration (City Magistrate Ballia)	Under Construction By Jal Nigam Urban Ballia.Hotel to be tapped by the same STP	Through Septic tank/Soak pit	Do
Hotel Romransh India	District Administration (City Magistrate Ballia)	Under Construction By Jal Nigam Urban Ballia.Hotel to be tapped by the same STP	Through Septic tank/Soak pit	Do
Hotel Vihan	District Administration (City Magistrate Ballia)	Under Construction By Jal Nigam Urban Ballia.Hotel to be tapped by the same STP	Through Septic tank/Soak pit	Do
Hotel Aarti In	District Administration (City Magistrate Ballia)	Under Construction By Jal Nigam Urban Ballia.Hotel to be tapped by the same STP	Through Septic tank/Soak pit	Do
Hotel Aryan	District Administration (City Magistrate Ballia)	Under Construction By Jal Nigam Urban Ballia.Hotel to be tapped by the same STP	Through Septic tank/Soak pit	Do

4. IV. Industrial Effluent discharge by industries whose effluent is ultimately flowing to river Ganga or its tributaries								
Total number of Industries	**Daily effluent discharge**	**Treatment available (cetp/ petp/ etp operational capacity)**	**Effluent quality analysis (outlet of treatment plants)**	**GAP**	**Proposed/ under construction treatment project (with timeline)**	**Number of defaulting units-Action taken**	**Industrial solid waste generated/ day**	**Manner of disposal (Industrial solid waste)**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
1	Plant name-Shiva and Sons Agro Products, Kharuaon, Rasra ,Ballia 221712 Type of Industry-Medium Kind of waste-Effluent produced Process per day curd 10000 kg Discharge of effluent-40000 ltr per day. Use of treated water- internal uses for cleaning and agriculture.	ETP	Parameter within limit	Zero (No Discharge)	There is no factory which is discharging effluent into River Ganga and its tributaries in Ballia district.	Zero	10 Kg	As manure

5. Regulation of Flood Plain Zone:						
Area-cities/ towns	**Notification of flood plain zone**	**Demarcation**		**Encroachment & direct discharge GeoCode/ Sampling point**	**Encroachment removal status**	**Timeline for completion**
		No development zone pillars	**Regulatory zone pillars**			
1	**2**	**3**	**4**	**5**	**6**	**7**
Approx area Ballia city 38.68 km^2	The Irrgation and water resources department,Govt of UP (letter no 622/CE/ISO/2023-24 Date 06-09-2023 has approached National Institute of Hydrology Roorkee Study will be completed in Dec 2024 Work will be done after the completion of study.	Work will be done by National Institute of Hydrology Roorkee	Work will be done by National Institute of Hydrology Roorkee	Model study is going on by National Institute of Hydrology Roorkee Work will be done after completion of study	Total length of River Ganga in District Ballia- 104 Km. Under this point, a monitoring committee has been nominated by District Magistrate Ballia vide Letter no. 1660/Dated-20-09-2021.The committee has reported that the Residents of 142 Villages are residing in between River Saryu & their Embankments.105 Villages are residing in between River Ganga and their Embankments & 72Villages are residing in between River Tonse and their embankments. ie Flood Plain zones since generations before construction of River Embankment. It is not proper to say that the residents of these area have encroached the Flood Plain zones. It does not come under the category of encroachment and there is no encroachment within 100 meter boundaries from edge of these rivers.	Work in progress by National Institute of Hydrology Roorkee (Time line for completion December,2024)

6. Afforestation/ Plantation along the bank of River Ganga and its tributaries and their flood plain zones										
Sr. No.	Area- cities/ towns		Total plantation Geo Code/ Sampling Point						Proposed Project	Time Line
	District	Forest Range	River Name	Name of the place (within 10 kilometers on either side of River Ganga and its tributaries	Latitude	Longitude	Area in Hectare	Plants/ Trees Planted		
1	2	3	4	5	6	7	8	9	10	11
1	Ballia	Ballia	Ganga River	Bhagwanpur To Khodipakkad &Other (193978149860124)	N25°.749903	E84°.115542	3.0	4800	**Plantation of approx 1.50 lacs saplings proposed in within 10 kilometers on either side of River Ganga and its tributaries in Year 2024-25 By Forest Deptt.Action plan of plantation by other various departments for year 2024-25 are being prepared**	**July to Aug 2024**
2		Ballia	Ganga River	Amdari To Nasirabad Kali Mandir (193978149860128)	N25°.759615	E84°.107478	3.0	4800		
3		Chhata	Ganga River	Bharkokha To Bharsoutta & Other (193978149360056)	N25°44'93"	E84°18'41"	5.0	8000		
4		Chhata	Ganga River	Janari Spha To Rampur & Other (193978149360058)	N25°75'2547"	E84°22'4515"	5.0	8000		
5		Chhata	Ganga River	Sher Godaam To Dudhipur & Other (193978149660060)	N25°47'57"	E84°14'56"	4.0	6400		
6		Chhata	Ganga River	Bind Ke Chapra To Boha & Other (193978149660063)	N25°47'20"	E84°14'23"	4.0	6400		
7		Chhata	Ganga River	Bind ke Chapra To Visunpura & Other (193978149660067)	N25°77'7625"	E84°22'3869"	4.0	6400		
8		Chhata	Ganga River	Dhudhipur To Sheriya & Aass Pass (193978149660069)	N25°79'6959"	E84°25'9554"	4.0	6400		
9		Chhata	Ganga River	Piperpati To Sahraspali & Other (193978149661734)	N25°77'5232"	E84°18'2661"	2.0	3200		
10		Maniar	Ghaghra River	Chakiya Bhagipur Bhikhariya Marg & Sampark Marg (193976149960110)	N25°.971976	E84°.137795	8.0	12800		
11		Maniar	Ghaghra River	Ajnera Se Pilue Nahar & Sampark Marg (193976149960111)	N25°.968972	E84°.113505	8.0	12800		
12		Maniar	Ghaghra River	Dhanouti Bhuradih Nahar & Anya Sampark Marg	N25°.990042	E84°.108353	8.0	12800		
13		Maniar	Ghaghra River	Balupur Kasmapur & Anya Sampark Marg(193976149962768)	N26°.000459	E84°.113933	8.0	12800		
14		Maniar	Ghaghra River	Letarha Baba Pool To Maniyar Tukara No 2 (193976149962769)	N26°.002573	E84°.143851	8.0	12800		
15		Bansdih	Ghaghra River	T S Bandha 64 To Bhopalpur Paschimi Tak & Any Marg(193979149260159)	N25°.900481	E84°.356034	8.0	12800		

16		Bansdih	Ghaghra River	Ritayard Ts Bandha Gamhari Tola Se Bhopalpur Tak (193979150560160)	N25°.900436	E84°.374682	8.0	12800		
17		Bansdih	Ghaghra River	Reoti Se Dataha Marg & Anya(193980150560162)	N25°.823994	84.382772	8.0	12800		
18		Bansdih	Ghaghra River	T S Bandha Rengaha To Kolkala Tak (193979149260633)	N25°.535	E84°.1829	8.0	12800		
19		Bansdih	Ghaghra River	T S Bandha Dataha To Dewpur Tak Left Side (193980150560634)	N25°.524	E84°.2451	8.0	12800		
20		Bansdih	Ghaghra River	T S Bandhan Dataha To Dewpur Tak Right Side (193979150560638)	N25°.5254	E84°.2355	8.0	12800		
21		Bairia	Ghaghra River	Chanddiyar Police Chowki To Nayi Basti Left Side (193980150060962)	N25°79'6639"	E84°56'4401"	5.0	8000		
22		Bairia	Ghaghra River	Chanddiyar Police Chowki To Nayi Basti Write Side (193980150060963)	N25°79'6647"	E84°56'4403"	5.0	8000		
23		Bairia	Ghaghra River	Majhi Ghat Baban Ke Dehra To Yadav Nagar (193980150061736)	N25°76'9532"	E84°59'7756"	5.0	8000		
24		Bairia	Ghaghra River	Shivan Tola To Fakru Tola & Other (193980150061737)	N25°.775989	E84°.556072	5.0	8000		
25		Bairia	Ganga River	Daya Chapra To Sughar Chapra Left Side (193980149160311)	N25°77'2537"	E84°43'3973"	5.0	8000		
26		Bairia	Ganga River	Tengari Dhala To Dubey Chapra Right Side (193980149160324)	N25°77'0683"	E84°44'8510"	5.0	8000		
27		Sikanderpur	Ghaghra River	Ranipaar (Rudervaar) To Jamui Nala & Ass Pass (193976150259944)	N26°07'55"	E84°02'17"	5.0	8000		
28		Sikanderpur	Ghaghra River	Jamui To Barhucha &Ass Pass (193976150259945)	N26°07'75"	E84°02'89"	5.0	8000		
29		Sikanderpur	Ghaghra River	Harnataar Police Chauki To Narayanpur Bandh Tak V Anya Sampark Marg (193976150260033)	N26°09'7969"	E83°94'5046"	5.0	8000		
30		Sikanderpur	Ghaghra River	Sisotaar To Basrikapur Bandha & Other (193976150260573)	N25°06'084"	E84°08'226"	5.0	8000		
31		Belthraroad	Ghaghra River	Karni Minor Narla To Karni Tak & Aas Pass (193975150660959)	N26°.4134	E84°.55'37	5.0	8000		
32		Belthraroad	Ghaghra River	Sonauli Ballia Marg Ubhao Thana Se Haldirampur Regulator Tak(193975150660077)	N26°.131551	E84°.868462	5.0	8000		

33		Belthraroad	Ghaghra River	Sonauli Ballia Marg Haldirampur Regulator To Range Border Tak (193975150660078)	N26°.104291	E84°.909377	5.0	8000		
34		Belthraroad	Ghaghra River	Telamajamaluddinpur To Dharahra Tak & Aas Pass (193975150660080)	N26°.534	E84°.5432	5.0	8000		
35		Belthraroad	Ghaghra River	Turtipar Ghaghara Pool To Khaira Tak & Aas Pass(193975150660092)	N26°.159043	E84°.86094	5.0	8000		
36		Belthraroad	Ghaghra River	Turtipaar Pump Canal Tirnai To Birbhanpur(193975150660960)	N26°.3'43"	E84°.52'0"	5.0	8000		
37		Phephana	Tons River	Nagwagai Kali Mandir To Chitbadagawn Pull Tak (193978150760706)	N25°.75212	E84°.975294	5.0	8000		
38		Phephana	Tons River	AkhtiyarPur To Mathi Pool & Bandha Ass Pass (193978150763064)	N25°759'716"	E83°970'350"	4.0	6400		
39		Phephana	Ganga River	I T Bandh To ShahPur Bhabnauli Marg & Other (193978150760118)	N25°685'239"	E83°635'112"	5.0	8000		
				total			**216.0**	**345600.0**		

7. Mining and Stone Crushing in river bed and flood plain zone of River Ganga and its tributaries:

Area of mining	**FIR/ case registered/ year**	**Vehicles/ mineral seized**	**Action taken status**	**Cases pending in Court**	**Enforcement of EMGSM 2020 and Sustainable sand mining management guidelines 2016**
1	**2**	**3**	**4**	**5**	**6**
03 sand Mining Area. (5+5+11.90=21.9 hect.)	0168/ Sikandarpur P.S/2023 0135/ Narhi P.S/2023	04-Tractors, 03-Trucks/ Sand-I	Complaint Case in CJM Ballia Court	Yes	According to the "Enforcement & Monitering Guidelines for Sand Mining" (EMGSM-2020) and Sustainable Sand Mining Management Guideline 2016. Three sand Mining area in the district and UP Minor Mineral (Concession) Rule 2021 and Up govt Order, The District Magistrate has constituted Task force at the district level and Instructed to Sub divisional Magistrates to take necessary action against illigal mining and transportation activities. 04 Tractors and 03 Trucks have been seized and Rs 1,89,670 have been realised as fine from offenders as so far.

The Tribunal has already directed for furnishing following information by order dated 24.11.2023:-

(1) District Ganga Protection Plan at city/ town level-

District Ganga Protection Committee (DGPC) is required to formulate the action plan for each city and town located on main stem of river Ganga and its tributary and such Action Plan has to be prepared in accordance with the River Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016 (para 6 and 55).

- Model District Ganga Protection Plans for Shahjahanpur,Bareilly,Moradabad and Udham Singh Nagar (UttaraKhand) have been prepared by NMCG,SMCG and Support Agencies (GIZ & WWF).On the basis of the model District Ganga Protection Plan,The District Ganga Protection Plan for Ballia will be also be prepared in next 6 to 8 Months

(2) Contents of the Action Plan (Consolidated District Wise Action Plan including each City and Town abutting river Ganga and its Tributary)

Sewage generation (for entire District and individual town wise):

2.1 Sewage Management-

(i) District Ballia- Total Sewage Generation- 42.21 MLD

Name of district	**Name of ULB**	**Total Population**	**Source Segregation (No of Wards)**	**HOUSE HOLD**	**TOTAL SEWAGE GENERATION (MLD)**	**Septic Tank/Soak Pit**	**Remark**
1	2	3	4		5	6	8
Ballia	Nagar Palika Parishad Ballia	104424	25	16700	14.67 MLD	16780	The septic tank/ soak pits are cleaned through sewer suction machines.
Ballia	Nagar Palika Rasra, Ballia	31675	25	4005	3.42 MLD	2810	The septic tank/ soak pits are cleaned through sewer suction machines.
Ballia	Nagar Panchayat Maniar, Ballia	19890	14	3315	2.15 MLD	2983	The septic tank/ soak pits are cleaned through sewer suction machines.
Ballia	Nagar Panchayat Bairia, Ballia	28343	16	4725	3.06 MLD	4158	The septic tank/ soak pits are cleaned through sewer suction machines.
Ballia	Nagar Panchayat Bansdih,Ballia	21221	15	3540	2.29 MLD	3186	The septic tank/ soak pits are cleaned through sewer suction machines.
Ballia	Nagar Panchayat Nagra,Ballia	20520	14	3420	2.22 MLD	3010	The septic tank/ soak pits are cleaned through sewer suction machines.

Ballia	Nagar Panchayat Ratsarkalan,Ballia	18042	14	3007	1.95 MLD	2586	The septic tank/ soak pits are cleaned through sewer suction machines.
Ballia	Nagar Panchayat Reoti,Ballia	26359	15	4390	2.85 MLD	3907	The septic tank/ soak pits are cleaned through sewer suction machines.
Ballia	Nagar Panchayat Sahatwar,Ballia	20612	14	3440	2.23 MLD	3061	The septic tank/ soak pits are cleaned through sewer suction machines.
Ballia	Nagar Panchayat Chitbaragaon,Ballia	21879	15	3650	2.36 MLD	3285	The septic tank/ soak pits are cleaned through sewer suction machines.
Ballia	Nagar Panchayat Sikanderpur, Ballia	23986	15	3990	2.59 MLD	3591	The septic tank/ soak pits are cleaned through sewer suction machines.
Ballia	Nagar Panchayat Belthra Road, Ballia	20404	13	3400	2.42 MLD	2992	The septic tank/ soak pits are cleaned through sewer suction machines.

(ii) Existing Sewage Treatment Capacities

- There is no STP in Ballia District.

Under the proposal

- A STP of treatment capacity 20 MLD is proposed to be constructed at Katahal Drain in Chhodhar Village.

(iii) Quantity of sewage is being treated (utilization capacity) :

- Zero (Since there is no STP in Ballia).

(iv) Performance of STPs particularly for FC :

- There is no STP in Ballia District.

(v) Where treated sewage is being discharged (to Ganga or tributaries) :

- There is no STP in Ballia District.

(vi) Reasons for Under-utilization of STPs (Connectivity of Households/ laying of sewer lines) :

- 20 MLD STP is Under Construction Taking into Account the Future Habitation.

(vii) Current Gap in sewage treatment :

- Total Sewage Generation-14.67 MLD (Nagar Palika Parishad Ballia).
- Sewage Treatment at Present-Zero
- GAP- 14.67 MLD (100%)

(viii) Time bound plan for bridging the gap and tying up with financial arrangements and not delaying Tendering and identifying executing agencies or having any other issues :

- A STP of treatment capacity 20 MLD is proposed to be constructed at Katahal Drain in Chhodhar Village. The timeline for the execution of works of STP construction and cleaning of previously laid sewer lines is prepared. The work is already begun and it is likely to be completed by 15th May 2025.

(ix) Where untreated sewage (when there is no STP) is discharged (Ganga /Tributaries):

- No untreated sewage directly going into river Ganga any sewage of sludge discharge in Katahal drain is being treated by bioremediation before the discharge.

2.1 Drains joining Ganga and Tributary.

(i) Number of drains carrying sewage- sullage or industrial waste water joining Ganga/ tributaries with their Quantity and Quality:

- **Quantity(As reported by UPPCB Azamgarh)**:-There are 6 drains in Municipality Ballia which meets with Katahal drain and finally Katahal drain having dishcharge of 16.12 MLD, meets River Ganga (as reported by UPPCB Azamgarh).
  Quality(As reported by UPPCB Azamgarh):-PH-7.26, BOD-25.0 mg/L, COD-104.8 mg/L, TSS-72.0 mg/L, TDS-984.0 mg/L, Heavy Metals(Fe-2.6127 mg/L, PB-0.5657 mg/L, Zn-0.1143 mg/L, Fluoride-1.251 mg/L), Nitrates-3.691 mg/L, DO-2.6 mg/L, TC-1400000 MPN/100 ml, FC-790000 MPN/100 ml, Colour-30 Hazen.

(ii) Drains joining outside city and town limits but, either joining in village or nearby town:

- Katahal Drain.

(iii) Inclusion of sewage flowing in drains into total sewage generation figures of each city and town and their interception and diversion to STPs:

- Total sewage generation in Ballia Municipality is 16.12 (Including sewage in drains) MLD. STP of 20 MLD capacity is under construction by UP Jal Nigam Urban, Ballia. It is to be completed by 15th May 2025.

2.2 Septage management (In case of no STP)

(i) Status of Septage management (with reference to FSTP/STP):

- In Municipality Ballia, STP is being constructed by Jal Nigam Urban Ballia which capacity is 20 MLD and is likely to be completed by 15th May 2025.
- There is a provision of 25 KLD co-treatment plant with 20 MLD STP that is being constructed.
- No separate FSTP is proposed in Ballia NPP.

(ii) Management of Grey water and its disposal:

- Management of Grey water is planned under STP which is likely to be used for agricultural purpose.

2.3 Industrial Pollution Control

(i) Attach the list on no. of industries generating trade effluents, their place of disposal and compliance including CETPs (town wise):
There is no industry which is generating trade effluents in district Ballia.

(3) Water quality status

Provide water quality status of Ganga and its tributaries in the District and city/ town in terms of its fitness for Bathing water quality that is, FC and FS:

pH-7.52	Colour-20 Hazen	TSS-36.0 mg/l
TDS-318.0 mg/l	Chloride-8.0 mg/l	Fluoride-0.510 mg/l
Nitrate-ND	Total Chromium-ND	Copper-ND
Lead-ND	Iron-0.8025 mg/l	Zinc-0.0158 mg/l
Total Coliform-7800 MPN/100 ml	Fecal Coliform-4500 MPN/100 ml	BOD-3.72 mg/l
COD-17.4 mg/l	DO-6.20 mg/l	Total Fixed Solid-254.0 mg/l
Manganese-0.1138 mg/l	Arsenic-ND	Mercury-ND

Note :- The water quality of Ganga river and Saryu River (Ghaghra River) pertains to Class B standard, hence the water is fit for bathing.

Kathal Nala,Surha Tal,Baghar River,lakra River is not fit for Bath.

(4) Notification of **Flood Plain Zones**:
The Irrgation and water resources department govt of up(letter no 622/CE/ISO/2023-24 Date 06-09-2023 has approached National Institute of Hydrology Roorkee study will be completed in Dec 2024 work will be done after the completion of study.

(5) Issues relating to **Environmental Flow**:
Determination of the magnitude of Ecological-Flow of Ganga river phase 2 Unnao to Ballia to be done by Ramganga organization of Irrigation Department of UP. Ecological-Flow not decided till date.

Best Practices-

1. Natural Farming/Organic farming is being promoted by Agriculture department.
2. Afforestation / Plantation along the bank (with in 10 kms) of River Ganga And its Tributaries by Forest department.
3. (i)Ganga Aarti program organized by Dist Ganga Committee Ballia with active collaboration of NYK on dated 15-09-2021 at Bharouli Ghat of Ganga and every year.Through this Aarti -eco friendly environment and clean Ganga awareness

   (ii)In compliance of direction of NMCG and SMCG. Recently of day of Full moon (24/03/2024) Ganga Maha Aarti,cultural activies and other miscellaneous activities have been organized at Maldepur Ghat of River Ganga by Distric Ganga Committee Ballia
4. Awareness activites are being done for rejuvenation protection and management of small river.
5. Workshop on training/skill-building sessions on Ganga Biodiversity conservation,Ecosystem Restoration and Climate Resilient Livelihood conducted by Prof S B Roy Founder Chairman of IBRAD (Institute of Bio - social Research and Development),Kolkata on 27 may 2023 and 28 May 2023 in the meeting hall of Van Vihar Jeerabasti, Ballia.
6. Yoga program organized by Distric Ganga Committee Ballia with active collaboration of NYK on the occasion of International Yoga Day 21 June 2022 under the theme of "Ghat par Yoga" at Maldepur ghat of Ganga.

Member Secretary District Ganga Committee /Divisional Director Ballia

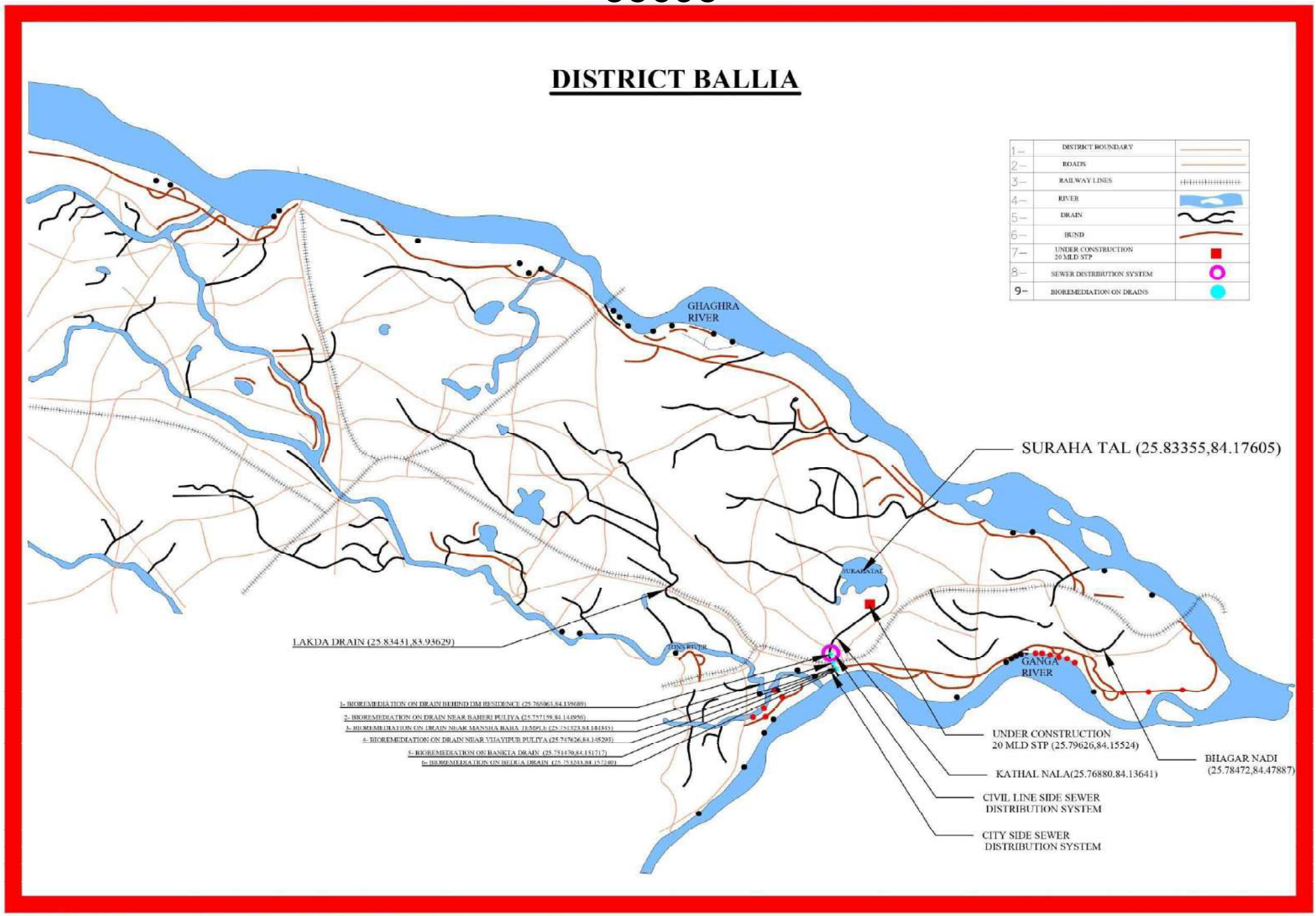
CDO/Nodal Officer Ballia

Chairman District Ganga Committee/ District Magistrate Ballia

ओ० एच० सिद्दीकी
सहायक वैज्ञानिक अधिकारी
उ०प्र० प्रदूषण नियंत्रण बोर्ड
आजमगढ़

अधिशासी अधिकारी
नगर पालिका परिषद, बलिया

Assistant Engineer
Construction Division
U.P. Jal Nigam (Urban)
Ballia


DISTRICT BALLIA
1– DISTRICT BOUNDARY
2– ROADS
3– RAILWAY LINES
4– RIVER
5– DRAIN
6– BUND
7– UNDER CONSTRUCTION 20 MLD STP
8– SEWER DISTRIBUTION SYSTEM
9– BIOREMEDIATION ON DRAINS
GHAGHRA RIVER
SURAHA TAL (25.83355,84.17605)
SURAHATAL
LAKDA DRAIN (25.83431,83.93629)
TONS RIVER
GANGA RIVER
1- BIOREMEDIATION ON DRAIN BEHIND DM RESIDENCE (25.765063,84.139689)
2- BIOREMEDIATION ON DRAIN NEAR BAHERI PULIYA (25.757159,84.144956)
3- BIOREMEDIATION ON DRAIN NEAR MANSHA BABA TEMPLE (25.751523,84.144351)
4- BIOREMEDIATION ON DRAIN NEAR VIJAYIPUR PULIYA (25.747626,84.145293)
5- BIOREMEDIATION ON BANKTA DRAIN (25.751470,84.151717)
6- BIOREMEDIATION ON BEHUA DRAIN (25.751233,84.157240)
UNDER CONSTRUCTION 20 MLD STP (25.79626,84.15524)
KATHAL NALA(25.76880.84.13641)
CIVIL LINE SIDE SEWER DISTRIBUTION SYSTEM
CITY SIDE SEWER DISTRIBUTION SYSTEM
BHAGAR NADI (25.78472,84.47887)

DISTRICT GANGA REPORT

Submitted in compliance of Hon'ble NGT order dated 11.09.2023 in O.A. 200/2014 MC Mehta Vs UOI and Ors.

MATHURA DISTRICT (U.P.)

SUBMITTED BY:

DISTRICT GANGA COMMITTEE

COLLECTORATE, MATHURA
OFFICE ADDRESS: Mathura Cantonment, Mathura
DISTRICT: MATHURA (U.P.)
E-MAIL: dmmat@nic.in

MC MEHTA vs. UNION OF INDIA (OA. NO. 200 OF 2014)

ADDITIONAL INFORMATION, AS PER THE ORDER 05.02.2024

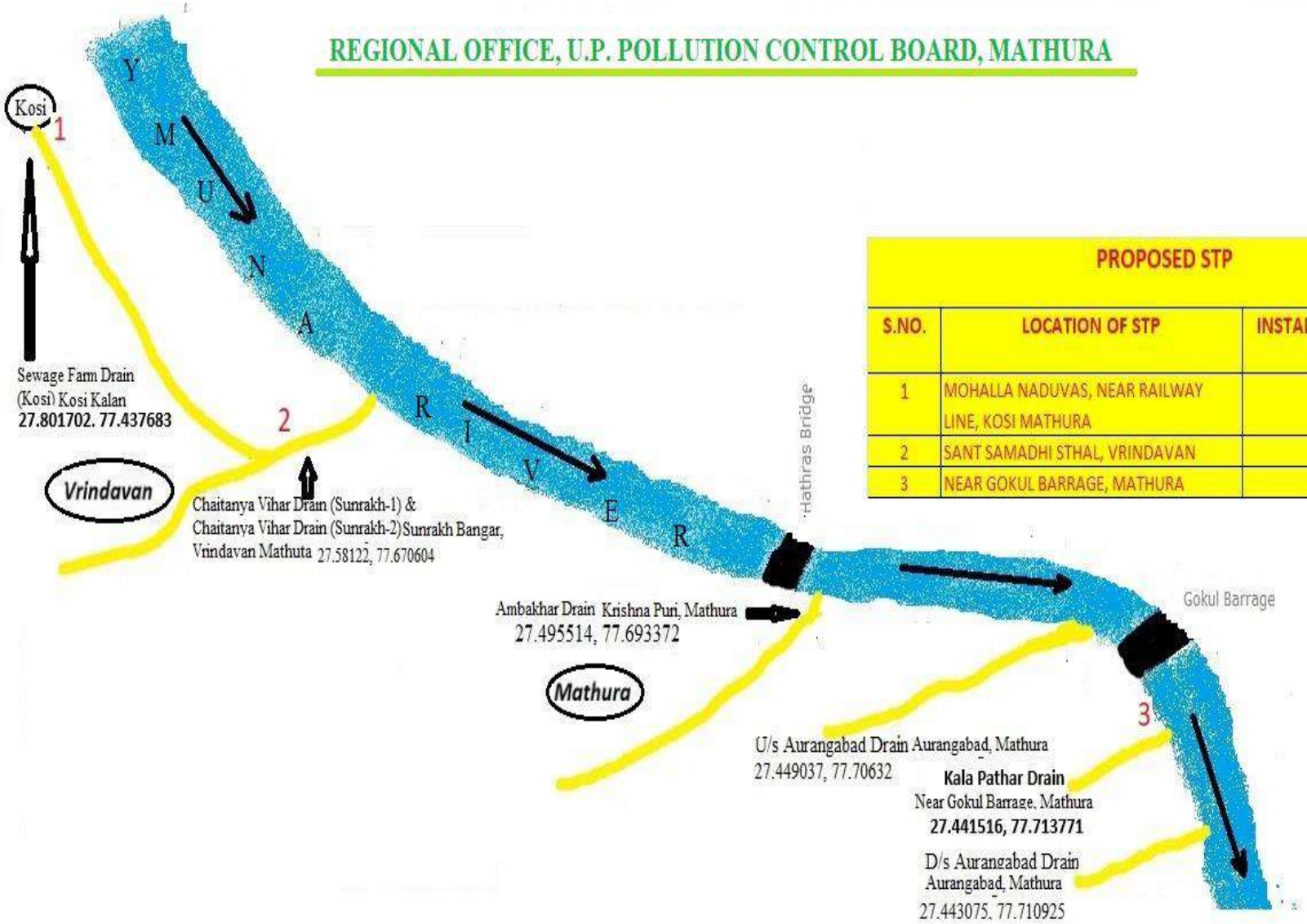
MATHURA

<table>
<tr><td>S.N</td><td>ADDITIONAL INFORMATION</td><td>ANSWER</td></tr>
<tr><td>1.</td><td>That STPs installed, are under utilised and that treated effluents are discharged into the drains carrying untreated wastewater thereby defeating the very purpose of the efficacy of STPs.</td><td>At present, STP is proposed in the district to treat the sewage that is being generated in Mathura district.</td></tr>
<tr><td>2.</td><td>The quantification and estimation of sewage entering to each STP through sewer network or through interception and diversion of drains.</td><td>At present, STP is proposed in the district to treat the sewage that is being generated in Mathura district.</td></tr>
<tr><td>3.</td><td>the breakup of quantity of sewage fed to each STP through sewerage and drains, indicating location of STP (with geo coordinates) and quality and quantity of discharged sewage and its disposal location.</td><td>At present, STP is proposed in the district to treat the sewage that is being generated in Mathura district.</td></tr>
<tr><td>4.</td><td>These identified industries should be imposed with the Consent conditions to adopt ZLD system or maximize recycling/ reuse of treated effluents rather than consenting them to discharge into drains with no burden on them.</td><td>There are no water-polluting industries present in Mathura district who is discharging their Effluent in Yamuna river</td></tr>
<tr><td>5.</td><td>We are of the view that additional columns are to be included reflecting the drain, position of STP with capacity, their geo-coordinates, discharge quantity from the STP in the drain and total per day discharge from the drain into river.</td><td>
<table>
<tr><th>NAME OF DRAIN</th><th>POSITION OF STP WITH CAPACITY</th><th>GEO/COORDINATES</th><th>DISCHARGE QUANTITY FROM THE STP IN THE DRAIN</th><th>TOTAL PER DAY DISCHARGE FROM THE DRAIN INTO THE RIVER</th></tr>
</table>
</td></tr>
</table>

		Kala Patthar drain	**Propesed 60MLD STP**	27.434335, 77.707658	7.64	7.64
		U/S Aurangabad drain		27.449037, 77.70632	1.98	1.98
		D/S Aurangabad drain		27.443075, 77.710925	1.46	1.46
		Chaitanya vihar drain (Sunrakh-1)	**Propesed 13MLD STP**	27.58122, 77.670604	3.34	3.34
		Chaitanya vihar drain (Sunrakh-2)		27.58122, 77.670604	0.56	0.56
		Sewage farm drain(kosi)	**Propesed 12MLD STP**	27.583133, 77.687146	5.64	5.64
		Ambakhar drain	**Propesed 16MLD STP**	27.495514, 77.693372	26.49	26.49

6.	mention heavy metals analysis in respect of discharge from each of the drain in the report.	

Drain (city/ town)	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride etc)	Discharged Into
Ambakhar drain	Fe-2.9479, Cr-ND, PBND, As-0.005 Mn0.1715, Cu-0.0053, Zn0.3383, Hg-ND, Fluoride-0.919	Yamuna river
Kala Patthar	Fe-2.4270, Cr-ND, PBND, As-0.006 Mn0.4350, Cu-0.0316, Zn0.3302, Hg-ND, Fluoride-1.262	Yamuna river
U/s Aurangabad Drain	Fe-1.5988, Cr-ND, PBND, As-0.003 Mn0.2108, Cu-0.0841, Zn0.2064, Hg-ND, Fluoride-0.941	Yamuna river
D/s Aurangabad Drain	Fe-1.8125, Cr-ND, PBND, As-0.007, Mn0.2612, Cu-0.0578, Zn0.5975, Hg-ND, Fluoride- 1.127	Yamuna river
Chaitanya Vihar Drain (Sunrakh-1)	Fe-3.5624, Cr-ND, PBND, As-0.007, Mn0.3285, Cu-0.2154, Zn0.4922, Hg-ND, Fluoride- 1.062	Yamuna river
Chaitanya Vihar Drain (Sunrakh-2)	Fe-3.2284, Cr-ND, PBND, As-0.002, Mn0.4182, Cu-ND, Zn0.0224, Hg-ND, Fluoride-1.141	Yamuna river
Sewage Farm Drain (Kosi)	Fe-2.1598, Cr-ND, PBND, As-0.004, Mn0.4294, Cu-0.1191, Zn0.0359, Hg-ND, Fluoride- 1.119	Yamuna river
Refinery Drain	T.cr- 0.12, Pb-ND, Cu-ND(DL-0.1), Zn- 2.9, Hg-ND(DL-0.005)	Yamuna river



PROPOSED STP

S.NO.	LOCATION OF STP	INSTALLED CAPACITY OF STP
1	MOHALLA NADUVAS, NEAR RAILWAY LINE, KOSI MATHURA	12 MLD
2	SANT SAMADHI STHAL, VRINDAVAN	13 MLD
3	NEAR GOKUL BARRAGE, MATHURA	60 MLD

1- **Sewage**

The above information is to be submitted on the basis of end point sample analysis of the concerned drain

Drain (city/ town)	Total drain capacity	Generation/ day	PH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, PB, As, Mn, Cu, Zn, Hg, Fluoride etc)	Nitrates	DO	TC	FC	Outlet flow and geo code/ sample point	Color/ odour	Discharged Into
Ambakhar drain	26.49	26.49	8.2	62	284	142	2216	Fe-2.9479, Cr-ND, PB-ND, As-0.005 Mn-0.1715, Cu-0.0053, Zn-0.3383, Hg-ND, Fluoride-0.919	4.164	0	84000	21000	26.49	Turbid	Yamuna river
Kala Patthar	7.64	7.64	8	44	168	124	1792	Fe-2.4270, Cr-ND, PB-ND, As-0.006 Mn-0.4350, Cu-0.0316, Zn-0.3302, Hg-ND, Fluoride-1.262	2.126	0	7900	2700	7.64	Slightly Turbid	Yamuna river
U/s Aurangabad Drain	1.98	1.98	7.9	40	152	110	1924	Fe-1.5988, Cr-ND, PB-ND, As-0.003 Mn-0.2108, Cu-0.0841, Zn-0.2064, Hg-ND, Fluoride-0.941	1.278	0	5800	2100	1.98	Turbid	Yamuna river
D/s Aurangabad Drain	1.46	1.46	8	42	176	84	1786	Fe-1.8125, Cr-ND, PB-ND, As-0.007, Mn-0.2612, Cu-0.0578, Zn-0.5975, Hg-ND, Fluoride- 1.127	1.399	0	6300	2600	1.46	Slightly Turbid	Yamuna river
Chaitanya Vihar Drain (Sunrakh-1)	3.34	3.34	8.1	60	216	158	2120	Fe-3.5624, Cr-ND, PB-ND, As-0.007, Mn-0.3285, Cu-0.2154, Zn-0.4922, Hg-ND, Fluoride- 1.062	0.618	0	21000	3800	3.34	Greyish	Yamuna river

Chaitanya Vihar Drain (Sunrakh-2)	0.56	0.56	7.7	54	184	118	1874	Fe-3.2284, Cr-ND, PB-ND, As-0.002, Mn-0.4182, Cu-ND, Zn-0.0224, Hg-ND, Fluoride-1.141	0.509	0	14000	3100	0.56	Slightly Greyish	Yamuna river
Sewage Farm Drain (Kosi)	5.64	5.64	8.3	110	304	164	2036	Fe-2.1598, Cr-ND, PB-ND, As-0.004, Mn-0.4294, Cu-0.1191, Zn-0.0359, Hg-ND, Fluoride- 1.119	0.598	0	110000	33000	5.64	Greyish	Yamuna river
Refinery Drain	Consented capacity 169 m3/hr	100-140m3/hr	6-8	9-14	90-120	10-19	2500 - 4000	T.cr- 0.12, Pb-ND, Cu-ND(DL-0.1), Zn- 2.9, Hg-ND(DL-0.005)	*	*	*	*	100-140m3/hr	Turbid	Yamuna river

Note-* These parameters are not tested by IOCL Refinery Mathura.

2- STP for treating the sewage of the drains ultimately flowing to river ganga or its tributaries.

Existing STP (location & capacity)	**Capacity (operational)**	**Inlet/ Outlet water quality & quantity**	**Number of tapped drains (quantity of discharge)**	**GAP (in treatment)**	**Final discharge point**	**Proposed/ under construction STP With completion date**
04 MLD STP, Vrindavan, Near Pagal baba mandir, Mathura	04 MLD	Inlet Parameter- pH-8.5 , BOD-195 , COD-416 , SS-288 , DS-1544 , TS- 1832 , TC-240000 , FC-34000 Outlet Parameter- pH- 8.2 , BOD-25 , COD-224 , SS- 80 , DS-1472 , TS- 1552 , TC-2700 , FC-930	**03 Nos. Drain/1.87 MLD** 1-Vanshi Vat Nala 2-Jagannath Ashram Nala 3-Kesi Ghat Na`la	0	Yamuna	STP in operational

08 MLD STP, Near 100 beded Hospital, Vrindavan Mant road, Mathura	08 MLD	Inlet Parameter- pH- 8.4 , BOD-185 , COD- 432 , SS- 268 , DS-1510 , TS-1778 , TC- 220000 , FC-33000 Outlet Parameter- pH-8.1 , BOD-24 , COD-168 , SS-60 , DS-1312 , TS- 1372 , TC-2400 , FC-830 .	**08 Nos. Drain/5.18 MLD** 1-Kalideh Drain 2-Bihar Ghat Drain 3-Cheer Ghat Drain 4-Bhaura Ghat Drain 5-Gora Nagar Nala 6-Rajpur Drain 7-Rang ji ka Bagicha 8-Ranapath Ghat		Yamuna	STP is Running
6.8 MLD STP, Masani, Mathura	6.8 MLD	Inlet Parameter- pH- 8.5 , BOD-180 , COD-400 , SS-308 , DS- 1518 , TS- 1826 , TC- 280000 , FC-43000 Outlet Parameter- pH-8.2 , BOD-25 , COD-200 , SS-72 , DS-1436 , TS- 1508 , TC-2400 , FC-920 .	**06 Nos. Drain/22.50 MLD** 1-Chaktirath Nala 2-Krishan Ganaga Nala 3-Octroi Post Nala 4-Jai Singhpura Nala 5-Sahaganj Nala 6-Masani Nala	0	Yamuna	STPs in operational
30 MLD STP, Masani, Mathura	30 MLD	Inlet Parameter- pH-8.5 , BOD- 180 , COD-400 , SS- 308 , DS- 1518 , TS-1826 , TC-280000 , FC-43000 Outlet Parameter- pH-7.9 , BOD-23 , COD-176 , SS-48 , DS-1356 , TS-1404 , TC-2500 , FC-910				

14.5 MLD STP, Trans-Yamuna, Jamunapar, Mathura	14.5 MLD	Inlet Parameter- pH-8.4 , BOD-200 , COD-432 , SS-328 , DS-1476 , TS-1804 , TC- 210000 , FC-38000 Outlet Parameter- pH-8.1 , BOD-26 , COD- 208 , SS-80 , DS- 1528 , TS-1608 , TC-3100 , FC-810 .	**08 Nos. Drain/3.37 MLD** 1-Ashkunda Ghat 2-Bangali Ghat 3-Chintaharan Nala 4-Daula Maula Nala 5-Gaughat Nala 6-Rani Ghat Nala 7-Swami Ghat Nala 8-Vishram Ghat Nala		Yamuna	STPs in operational
16 MLD STP, Trans Yamuna, Laxmi Nagar, Mathura	16 MLD	Inlet Parameter- pH- 8.5 , BOD-190 , COD-448 , SS-302 , DS- 1488 , TS- 1790 , TC-240000 , FC-33000 Outlet Parameter- pH-7.8 , BOD- 22 , COD-184 , SS-56 , DS-1426 , TS- 1482 , TC-2600 , FC-920 .	**06 Nos. Drain/24.09 MLD** 1-Dhruv Ghat Nala 2-Cantt Nala 3-Satrangi Nala 4-Mahadev Ghat Nala 5-Dairy farm Nala 6-Ambhakhar Nala (Partially Tapped)	8.09 MLD	Yamuna	01 drain which is partially tapped(Ambakhar drain) will be diverted to 60MLD STP is Proposed

2.76 MLD STP, Uddhav kund, Goverdhan, Mathura	2.76 MLD	Inlet Parameter- pH-8.6 , BOD-205 , COD-416 , SS- 388 , DS- 1556 , TS- 1944 , TC- 350000 , FC-47000 Outlet Parameter- pH-8.0 , BOD-25 , COD-160 , SS-74 , DS-1208 , TS- 1282 , TC-94000 , FC- 21000 .	01 Nos. drain 1.5MLD	0	Yamuna	STP in operational

2.1- STP ADDITIONAL INFORMATION

NAME OF DRAIN	POSITION OF STP WITH CAPACITY	GEO/COORDINATES	DISCHARGE QUANTITY FROM THE STP IN THE DRAIN	TOTAL PER DAY DISCHARGE FROM THE DRAIN INTO THE RIVER
Kala Patthar drain	**Propesed 60MLD STP**	27.434335, 77.707658	7.64	7.64
U/S Aurangabad drain		27.449037, 77.70632	1.98	1.98
D/S Aurangabad drain		27.443075, 77.710925	1.46	1.46
Chaitanya vihar drain (Sunrakh-1)	**Propesed 13MLD STP**	27.58122, 77.670604	3.34	3.34
Chaitanya vihar drain (Sunrakh-2)		27.58122, 77.670604	0.56	0.56
Sewage farm drain(kosi)	**Propesed 12MLD STP**	27.583133, 77.687146	5.64	5.64
Ambakhar drain	**Propesed 16MLD STP**	27.495514, 77.693372	26.49	26.49

Proposed STP (location & capacity)	Capacity (operational)	Inlet/ Outlet water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point Geo code/ sampling point	Proposed/ under construction STP With completion date
60 MLD STP at Gokul Barrage, Near water treatment Plant, Mathura	60 MLD	Inlet Parameter- BOD-350, COD-650, TSS-500, TN-50, TP-9, Outlet Parameter- BOD-<5, COD-<50, TSS-<5, TN-<10, TP-<1,	**3 nos. & 1 no. Partally tapped /60 MLD** 1-Aurangabad D/S Nala 2-Aurangabad U/S 3-Kala Patthar Nala 4-Ambahkahar Nala (Partially)	60 MLD	27°26'29"N 77°42'29"N	Proposed STP (Under Tendering)
13 MLD STP, Near Sant Samadhi Sthal, Vrindavan, Mathura.	13 MLD	Inlet Parameter- BOD-350, COD650, TSS-500, TS-50, TP-9, Outlet Parameter- BOD-<5, COD-<50, TSS-<5, TN-<10, TP-<1,	2nos./ 13 MLD 1-Chaitnay Bihar Nala 1 2-Chaitany Bihar Nala 2	13 MLD	27.580137 77.534804	Proposed STP (Under Tendering)
06 MLD STP at Kosi Kalan NPP	06 MLD	Inlet Parameter- BOD-350, COD650, TSS-500, TS-50, TP-9, Outlet Parameter- BOD-<5, COD-<50, TSS-<5, TN-<10, TP-<1,	14 nos./6 MLD 1-Shergarh Nala -1 2- Shergarh Nala -2 3-Bihari ji Nala 4-Bada Nala 5-Chuli Nagla Nala 6-Ambedkar Nagar Nala 7-Sigu Thok Raman Bagichi Nala 8-Amar Thok Nala -1 9-Hamir thok Nala -2 10-Nagla thok paigaon road-1 11-Nagla thok paigaon road-2 12-Nagla thok pul par Nala 13-Nagla Thok Pul Nala 14-Barsana Chok Nagar P Nala	06 MLD	27.691895 77.534804	Proposed STP (Under Tendering)

12 MLD STP, Sewage Farm, Mohalla Nadu Vas, Near Railway line, Kosi, Mathura	12 MLD	Inlet Parameter-BOD-350, COD650, TSS-500, TS-50, TP-9,` Outlet Parameter-BOD-<5, COD-<50, TSS-<5, TN-<10, TP-<1,	1 no./12 MLD Sewage Farm drain	12 MLD	27.801702 77.437683	Proposed STP (Under Tendering)

Note-1- All Drains of Kosikalan Nagar Palika Parishad, Chhata Nagar Panchayat and Vrindavan uptapped drains are finally disposed in kosi drains.

3- Hotels/ Ashrams/Dharmshalas/residential complexes abutting river Ganga or its tributaries

S.No	Name of the Hotel/Restaurant	Address	Consent to establish/ operate	STP	Discharge point	Action taken
1	M/s Hotel Duke Palace	Near Saraswati Kund, Masani Bye Pas Link Road, Mathura	No	Septik Tank/Soakpit	Gardening	Notice Sent
2	M/s Hotel Maan Sarovar	State Bank Crossing, Mathura	No	Septik Tank/Soakpit	Gardening	Notice Sent
3	M/s Hotel Goverdhan Palace	Agra Bye pass, Mathura	No	Septik Tank/Soakpit	Gardening	Notice Sent
4	M/s Hotel Abhinandan	NH-2, Goverdhan Charaha, Mathura	No	Septik Tank/Soakpit	Gardening	Notice Sent
5	M/s Hotel Radha Ashok Residency	Masani bye pass, Mathura	No	Septik Tank/Soakpit	Gardening	Notice Sent
6	M/s Hotel Mukund Palace	Junction Road, Mathura	No	Septik Tank/Soakpit	Gardening	Notice Sent

7	M/s Hotel Sheetal Residency	Masani, Mathura	No	Septik Tank/Soakpit	Gardening	Notice Sent
8	M/s Hotel Brijwasi Royal	State Bank Crossing, Mathura	No	Septik Tank/Soakpit	Gardening	Notice Sent
9	M/s Hotel Sheel Gopal	Dampier Nagar, Mathura	No	Septik Tank/Soakpit	Gardening	Notice Sent
10	M/s Hotel Vingston	Saraswati kund, Mathura	No	Septik Tank/Soakpit	Gardening	Notice Sent
11	M/s Hotel Clark's In Hospitality	Near Birla mandir, Police Choki, Vrindavan, Mathura	No	Septik Tank/Soakpit	Gardening	Notice Sent
12	M/s Hotel Basera Brij Bhoomi	Atalla chungi, Vrindavan, Mathura	Yes	Septik Tank/Soakpit	Nagar Nigam Drain	Notice Sent
13	M/s Hotel Krishnan	Vrindavan Bangar, Mathura	No	Septik Tank/Soakpit	Gardening	Notice Sent
14	M/s Hotel Hare Krishna Orchid	Sunrakh road, Vrindavan, Mathura	Yes	STP	Nagar Nigam Drain	-
15	M/s Hotel Shubham	Gandhi Road, Vrindavan, Mathura	No	Septik Tank/Soakpit	Gardening	Notice Sent
16	M/s Hotel Basera	Vrindavan, Mathura	No	Septik Tank/Soakpit	Gardening	Notice Sent
17	M/s Hotel Shubham Magestic	GANDHI MARG, VIDYA PEETH CROSSING, VRINDAVAN ,MATHUR	Yes	Septik Tank/Soakpit	Nagar Nigam Drain	-
18	M/s Hotel Vingston	Radha Kund Road, Goverdhan, Mathura	Yes	STP	Gardening	-

19	M/s Hotel Babylon Residency	Near Sri Krishna Janm Bhoomi, Mathura	Yes	Septik Tank/Soakpit	Gardening	Notice Sent
20	M/s Hotel Girraj In	GIRLS INTER COLLAGE KE BARABAR WALI GALI, DHANGHATI, GOVERDHAN, MATHURA	Yes	STP	Gardening	-
21	M/s Hotel Guru Kripa Grand	Khasra No.-2966, Mahul Baramad, Cantt, Mathura	Yes	STP	Nagar Nigam Drain	-
22	M/s. Geeta Govind Tourist Complex	Nandan Van, Ramnreti, Vrindavan	No	Septik Tank/Soakpit	Gardening	Notice Sent
23	M/s. Panswarwali Dharamshala	29, Bhattwali Gali, Atkhambha, Vrindavan, Mahtura	No	Septik Tank/Soakpit	Gardening	Notice Sent
24	M/s. Hotel Nepal	New Bus-stand, Bhuteswar, Mathura	No	Septik Tank/Soakpit	Gardening	Notice Sent
25	M/s. Lala Prabhu Dayal Dharamshala Tourist	60, Banke Vihari Colony, Vrindavan, Mathura	No	Septik Tank/Soakpit	Gardening	Notice Sent
26	M/s. Mangal Tourist Lodge	2057, Dempear Nagar, Mathura	No	Septik Tank/Soakpit	Gardening	Notice Sent
27	M/s. Mor Athiti Bhawan	Ahir Padha, Mathura	No	Septik Tank/Soakpit	Gardening	Notice Sent
28	M/s. Hotel Brij Bihar	Yamuna Market, Mathura	No	Septik Tank/Soakpit	Gardening	Notice Sent
29	M/s. Hotel Stayam	1205, Masani Road, Mathura	No	Septik Tank/Soakpit	Gardening	Notice Sent
30	M/s. Sharma Guest House	Arya Samaj Road, Mathura	No	Septik Tank/Soakpit	Gardening	Notice Sent

31	M/s. Shri Vittal Bhawan (Bardarwali Dharamshala)	Gokul, Mathura	No	Septik Tank/Soakpit	Gardening	Notice Sent
32	M/s. Shri Bharmchari Ashram Banktewar Osdhalaya Pranyas	165, Radha Niwash, Vrindavna, Mathura	No	Septik Tank/Soakpit	Gardening	Notice Sent
33	M/s. Hotel Agra	Bangali Ghat, Mathura	No	Septik Tank/Soakpit	Gardening	Notice Sent
34	M/s. Shri Vasney Dharamshala	Nogaja, Ambakhar, Mathura	No	Septik Tank/Soakpit	Gardening	Notice Sent
35	M/S BRENTWOODS INTERNATIONAL LIMITED (COUNTRY INN)	99tH, KM. STONE, DELHI-AGRA HIGHWAY, KOSI KALAN, MATHURA	No	Septik Tank/Soakpit	Gardening	Notice Sent
36	M/s. Hotel Sanjay Place	Arya Samaj Road, Mathura	No	Septik Tank/Soakpit	Gardening	Notice Sent
37	M/s. Hotel Meghraj	1843, Rashan Bazar, Tilkdwar, Mathura	No	Septik Tank/Soakpit	Gardening	Notice Sent
38	M/s. Hotel Mohan	Chhata Bazar, Mathura	No	Septik Tank/Soakpit	Gardening	Notice Sent
39	M/s. Jagdhamma Guest House	9A, Krishan Nagar, Mathura	No	Septik Tank/Soakpit	Gardening	Notice Sent
40	M/s. Morden Hotel, Restorent & Bar	Ambhakhar, Mathura	No	Septik Tank/Soakpit	Gardening	Notice Sent
41	M/s. Seth Ram Kishan Bhattar Amriti Bhawan	352, Kishore Pura, Vrindavan, Mathura	No	Septik Tank/Soakpit	Gardening	Notice Sent
42	M/s. Mukund Bihar Inn.	965/1, Masani Road, Mathura	No	Septik Tank/Soakpit	Gardening	Notice Sent

43	M/s. Rukmani Cottage	1451, Raja Dhiraj Bazar, Mathura	No	Septik Tank/Soakpit	Gardening	Notice Sent
44	M/s. Hotel Quality	Dampier Nagar, Mathura	No	Septik Tank/Soakpit	Gardening	Notice Sent
45	M/s. Dwapar Resort	Vill-Kurkanda, NH-2, Mathura	No	Septik Tank/Soakpit	Gardening	Notice Sent
46	M/S M R RESORTS PRIVATE LIMITED HOTEL WINGSTON BARSANA	OPPOSITE RANGEELI MAHAL, BARSANA ,MATHURA	Yes	STP	Gardening	-

4 IV. Industrial Effluent discharge by industries whose effluent is ultimately flowing to river Ganga or its tributaries

Total number of Industries	Daily effluent discharge	Treatment available (cetp/ petp/ etp operational capacity)	Effluent quality analysis (outlet of treatment plants Geo code sampling point)	GAP	Proposed/ under construction treatment project (with timeline)	Number of defaulting units- Action taken	Industrial hazardous waste generated/ year	Manner of disposal (Industrial solid waste)
1	2	3	4	5	6	7	8	9
101	43.44 MLD	43.44 MLD	As per analysis report within norms	0	-	23	66357.625 MT/A	Through TSDF & Agriculture

Total number of Industries	Daily effluent discharge	Treatment available (cetp/ petp/ etp operational capacity)	Effluent quality analysis (outlet of treatment plants Geo code sampling point)	GAP	Proposed/ under construction treatment project (with timeline)	Number of defaulting units- Action taken	Industrial hazardous waste generated/ year	Manner of disposal (Industrial solid waste)
1	2	3	4	5	6	7	8	9
A.N. LEATHER PVT. LTD.(PHOENIX IND) NH-2, FARAH, MTR	ZLD	ZLD	As per analysis report within norms	0	N/A	-	60 MT/A	Through TSDF
Brindavan Agro Industries Pvt. Ltd., Shergarh Road, Chhata, Mathura	1500 KLD	1500 KLD	As per analysis report within norms	0	N/A	-	40 MT/A	Through TSDF
INDIAN OIL CORPORATION LTD, MTR REFINERY, MTR	13.968 MLD	13.968 MLD	As per analysis report within norms	0	N/A	-	20140 MT/A	Through TSDF
S.P.S. Procesurs, Ind. Area, Kosi Kotvan, Mtr.	ZLD	ZLD	As per analysis report within norms	0	N/A	-	5010 MT/A	Through TSDF
SHRI BRIJRAJ CLOTH PRINTING CO., SHIVAJI NAGAR, MTR	500 KLD	500 KLD	As per analysis report within norms	0	N/A	-	60 MT/A	Through TSDF
Varun Beverages, Ltd., Dautana Chaata, Mtr.	1100 KLD	1100 KLD	As per analysis report within norms	0	N/A	-	3.652 MT/A	Through TSDF
VINAYAK FIBRES P. LTD., KOTWAN KOSI, MTR	ZLD	ZLD	As per analysis report within norms	0	N/A	-	65 MT/A	Through TSDF
Bhole Baba Milk Food Ind. Ltd., Dautana,	300 KLD	300 KLD	As per analysis report	0	N/A	-	50 MT/A	Used in

Chhata, Mtr.			within norms					Agriculture
Calpro Sepecelitis Pvt. Ltd. (Mahan Protein ltd.) Barhana, Nand Gaon Road, Kosi, Mathura	90 KLD	90 KLD	As per analysis report within norms	0	N/A	-	30 MT/A	Used in Agriculture
GINNI FILAMENTS LTD., CHHATA, MTR	1250 KLD	1250 KLD	As per analysis report within norms	0	N/A	-	65 MT/A	Through TSDF
BUDHSEN VASUDEV, SHIVAJI NAGAR, MTR	150 KLD	150 KLD	As per analysis report within norms	0	N/A	-	5 MT/A	Through TSDF
CUSPY METALICS, NH-2, GAUR KENDRA, MTR	1.5 KLD	1.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
ESS KAY METALIC INDUSTRIES, SAUNK ROAD, KRISHNA NAGAR, MTR	1.5 KLD	1.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
KUMAR METALS, SAONKH ROAD KRISHNA NAGAR, MTR	1.5 KLD	1.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
MAYUR INDUSTRIES, NH-2, GAUR KENDRA, MTR	1.5 KLD	1.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
RAMA METAL, SAUNK ROAD KRISHNA NAGAR, MTR	1.5 KLD	1.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
CHANCAL ELECTR. (PREM SINGH ELE.), SAUNKH ROAD, MTR	1.5 KLD	1.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF

RADHIKA SANITATION, E-86, IND. AREA, SITE A, MTR	1.5 KLD	1.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
AGRAWAL SILVER PLATERS, GAUR KENDRA, MATHURA.	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
BANKEY BIHARI NICKLE PLANT, GAUR KENDRA, MATHURA	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
BANKEY BIHARI VIBRATOR, GAUR UDYOG KENDRA, N.H.- 2, MATHURA	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
BRIJ POLISHERS, PLOT NO. E- 48, INDUSTRIAL AREA, SITE- A, MATHURA, MTR	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
BRIJWASI SILVER AND VIBRATOR, TRIVENI COMPLEX, MATHURA.	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
KAPIL ELECTROPLATERS, TRIVENI COMPLEX, MATHURA.	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
MAHESH NICKLE/VIBRATOR PLANT, GAUR KENDRA, MATHURA	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
MASTER SILVER PLATERS, BRIJWASI COMPLEX, INFRONT OF OM TEXTILE,SARASWA	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF

TI KUND, MATHURA.								
MATHURA SILVER PLATERS, GAUR KENDRA, MATHURA	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
NOORIE ELECTROPLATERS, GAUR KENDRA, MATHURA	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
PAVAN INDUSTRIES, GAUR KENDRA, MATHURA	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
RAJ INTERPRISES , KARSHNI COMPLEX MTR	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
ROYAL SANITATION PVT, GAUR KENDRA, MTR	1.5 KLD	1.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
SHRI KRISHNA PLUMBING, TRIVENI COMPLEX, MTR	1.5 KLD	1.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
STATUS SAINITECH PVT LTD, S-2, IND. AREA, SITE A, MTR	1.5 KLD	1.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
AGRAWAL & CO, Saraswati kund, MTR	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
GUDDU VERMA VIBRATOR, GAUR KENDRA, MATHURA GAUR KENDRA, MATHURA	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF

RAJU VIBRATOR, BRIJWASI GAUR KENDRA, MATHURA	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
TARUN ELECTROPLATERS, GAUR UDYOG KENDRA, PLOT NO.-23-31, OPP. GOKUL RESTAURANT, NH-2, MATHURA	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
GOYAL SILVER PLATERS (M.M.), GAUR KENDRA, MATHURA	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
GURU JI INDUSTRIES TRIVENI COMPLEX, MATHURA.	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
HARNAM MATELS, SANUK ROAD, KRISHNA NAGAR, MTR	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
Maha Gauri Electroplaters (Balaji Sanitation), E-60, Site-A, Mathura.	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
OM POLISHING WORKS, KARSHNI COMPLEX, GOVERDHAN RAOD, MTR	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
RADIKA PLUMBINGS (EVEREST METAL), E-50, IND. AREA, SITE A, MTR	1.5 KLD	1.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF

SHIVANGI VIBRATORS, GAUR KENDRA, MATHURA	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
SHRI BANKEY BIHARI ELECTROPLATERS, TRIVENI COMPLEX, MATHURA	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
SHRI JI ELECTROPLATERS, D-48, IND. AREA, SITE A, MTR	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
VERMA ELECTROPLATERS, GAUR KENDRA, MATHURA	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
VERMA SILVER WORKS, GAUR KENDRA, MATHURA	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
ANIL CLOTH STORE, C-64, IND.AREA, SITE A, MTR	300 KLD	300 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
ANURADHA TEXTILES,. GANESHRA ROADM MTR	150 KLD	150 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
BALAJI TEXTILE, SARASWATI KUND, MTR	150 KLD	150 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
BALAJI TEXTILES PRINTERS, E-70, IND. AREA, SITE A, MTR	300 KLD	300 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
BRIJ SAREE UDYOG, SHIVAJI NAGAR, MTR	300 KLD	300 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-

CHHAIL B. AGRAWAL SAREE KARKHANA, SARASWATI KUND, MTR	150 KLD	150 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
DAYAL PRINTS , SHIVAJI NAGAR, MTR	175 KLD	175 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
DILEEP SAREE CENTRE, SHIVAJI NAGAR, MTR	200 KLD	200 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
GANESH TEXTELS, SARSWATI KUND, MTR	200 KLD	200 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
GAURI PRINTS(G.S.DAS KAPREYWALA). E-84, IND. AREA, SITE A, MTR	300 KLD	300 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
GHANSHYAMDAS KAPDEWALA II, E-84, IND. AREA, SITE A, MTR	300 KLD	300 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
GOPI KISHAN SAREE HOUSE, G-62, IND. AREA, SITE A, MTR	300 KLD	300 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
HANUMAN TEXTILES, SARASWATI KUND, MTR	200 KLD	200 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
HAR PRASAD SAREE AJAMPUR SARSWATI KUND, MTR	200 KLD	200 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
KEDAR DYEING, SARSWATI KUND, MTR	200 KLD	200 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-

KRISHNA PRINTERS, SARSWATI KUND, MTR	300 KLD	300 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
MADAN MOHAN GOYAL, C-35, IND. AREA, SITE A, MTR	300 KLD	300 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
MAHESH PRINTS, SARSWATI KUND, MTR	300 KLD	300 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
MAHESH SAREE HOUSE, SARSWATI KUND, MTR	150 KLD	150 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
MANOJ TEXTILES, SARSWATI KUND, MTR	150 KLD	150 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
MATHURA TEXTILES, E-75, 76, IND. AREA, SITE A, MTR	300 KLD	300 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
MATHURA TRADING CO., E-68, IND. AREA, SITE A, MTR	300 KLD	300 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
MINI PRODUCTS (KRISHNA PRINTS), C-36.,IND. AREA, SITE A, MTR	300 KLD	300 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
NAINA ENTERPRISES(REKHA SAREE),.JAISINGHPURA BANGER, MTR	100 KLD	100 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
NATIONAL TEXTILES, C-37, IND. AREA, SITE A, MTR	300 KLD	300 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-

New Name Sri Ji Textils (UMESH SAREE CENTRE), SHIVAJI NAGAR, MTR	250 KLD	250 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
OM TEXTILE MILLS, SARSAWATI KUND, MTR	500 KLD	500 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
RADHA TEXTILES, GOVERDHAN ROAD, MATHURA	300 KLD	300 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
RADHIKA PRINTS, C-51, IND. AREA, SITE A, MTR	300 KLD	300 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
RAMESH CHAND AGRAWAL, C-48, IND. AREA, SITE A, MTR	300 KLD	300 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
RAMJI PRINTS, SARASWATI KUND, MTR	200 KLD	200 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
RAMRASIYA TEXTILES, DEVIPURA, MATHURA	300 KLD	300 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
SANJAY TEXTILES (ANCHAL SAREE), DEVIPURA, BYE-PASS, MATHURA	400 KLD	400 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
SATISH DYEING, SARSWATI KUND, MTR	150 KLD	150 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
SIDH VINAYAK IND., S-9, IND. AREA, SITE A, MTR	300 KLD	300 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
SUREKA PRINTS , DEVIPURA, NH-2, MTR	200 KLD	200 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF

UPMA SAREE CENTRE, SHIVAJI NAGAR, MTR	150 KLD	150 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
VRINDAVAN TEXTILES, SHIVAJI NAGAR, MTR	200 KLD	200 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
AQUA PLUMBING PVT.LTD., GAUR KENDRA, MTR	1.5 KLD	1.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
BHARAT METAL WORKS, D-63, IND. AREA, SITE A, MTR	1.5 KLD	1.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
CARTOON SANITAION, NH-2, GAUR KENDRA, MTR	1.5 KLD	1.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
GENERAL PLUMBING, TRIVENI COMPLEX, MTR	1.5 KLD	1.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
MATHURA AUDYOGIK CHHETRA "A" PRADUSHAN NIVARAN CO. (C.E.T.P.) SITE-A,MTR	6.25 MLD	6.25 MLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
New Name Aqua dynamic (METAL MAN INDIA), KRISHNA NAGAR, MTR	1.5 KLD	1.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
Om Sai Tex, Ind. Area, Kosi Kalan, Mtr.	200 KLD	200 KLD	As per analysis report within norms	0	N/A	-	33 MT/A	Through TSDF
SWARN TEX PRINTS , KOTWAN KOSI, MTR	500 KLD	500 KLD	As per analysis report within norms	0	N/A	-	60 MT/A	Through TSDF

M/s R.K. Export (Old Name-RAGHAV FABRICS/OM DYERS), E-56, IND.AREA, KOSI KOTWAN, MATHURA.	300 KLD	300 KLD	As per analysis report within norms	0	N/A	-	50 MT/A	Through TSDF
Garg Textiles, C-52, Ind. Area, Site-A, Mathura	300 KLD	300 KLD	As per analysis report within norms	0	N/A	-	38 MT/A	Through TSDF
Harish Print (Ghanshyam Print), E-77-79, Ind. Area, Site-A, Mathura	300 KLD	300 KLD	As per analysis report within norms	0	N/A	-	40 MT/A	Through TSDF
National Process/National Screen, E-83, Ind. Area, Site-A, Mathura	300 KLD	300 KLD	As per analysis report within norms	0	N/A	-	35 MT/A	Through TSDF
Riddhi Siddhi Print, D-73, Ind. Area, Site-A, Mathura	300 KLD	300 KLD	As per analysis report within norms	0	N/A	-	33 MT/A	Through TSDF
Calpro Sepecelitis Pvt. Ltd. (Mahan Protein ltd.) Barhana, Tumhera Road, Kosi Kalan, Mathura	5.8 MLD	5.8 MLD	As per analysis report within norms	0	N/A	-	200 MT/A	Through TSDF
Jain Cord Pvt. Ltd, Chhata, Mathura	300 KLD	300 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
Pepsico India Holding Pvt. Ltd, Q-1, Kosi Kotwan Ind. Area Exp.-II, Mathura	820 KLD	820 KLD	As per analysis report within norms	0	N/A	-	40259 MT/A	Through TSDF

5-Regulation of Flood Plain Zone:

Area-cities/ towns	Notification of flood plain zone	Demarcation		Encroachment & direct discharge GeoCode/ Sampling point	Encroachment removal status	Timeline for completion
		No development zone pillars	Regulatory zone pillars			
1	2	3	4	5	6	7
Mathura	For the demarcation of flood plain zone of Yamuna river, a committee has been constituted by the office memorandum file no.T-101036/3/2023-RC DTE dated 05.09.2023 of the Planning and Development Organization, Central Water Commission, Government of India. The report was to be submitted by the committee in 4 months. Guidelines for further action have not been received regarding the report of the committee. After receiving the guidelines, it will be possible to do terrestrial demarcation of the flood plain zone of Yamuna river.	100.00 Mtr	500.00 Mtr	. In order to remove encroachment from the flood plain zone, it is to be informed that in accordance with the instructions given in point no. 4 of Government Order No. 1149/19-27-Si-3-52 L/18/ dated October 17, 2018, Encroachment from the area will be removed by the Municipal Corporation.	At present there is no encroachment in rural areas under Mathura district.	Pending on CWC from dt. 05.09.2023

6. Afforestation/ Plantation along the bank of River Ganga and its tributaries and their flood plain zones

Area- cities/ towns	Total plantation Geo Code/ Sampling Point	Proposed project	Timeline
Mathura	Total no. of plants in the year 2023 within 10 Km of Yamuna river stretches – 120498 in 61.596hec.* *** Plantation done only by Forest department, Mathura** **All the sites are geotagged after plantation** **Shernagar van block N 27'51'19 E 77'32'37(Initial point)** **Madaur N 27'16'14 E 77'57'51(Ending point)**	Plantation is only done in July-August 2023-24.	2023-24

क्र0सं0	स्थानीय नाम	वानस्पतिक नाम अग्रेजी में
1	2	3
1	अर्जुन	**Terminalia arjuna, W. & A.**
2.	अमरूद	Psidium guajava, Linn.
3.	अर्रू, अजान	Ailanthus excelsa, Roxb.
4.	अशोक	Polyalthia longilfolia, Thw.
5.	आम	Mangifera indica, Linn.
6.	ऑवला	Embelica officinalis, Gaetrn.
7.	इमली	Tamarindus indica, Linn.
8.	कदम्ब	Anthocephalus cadamba, (mig)
9.	कंजी	Pongamia pinnata, (Linn.)

		Piers.
10.	कनेर (पीला)	Thavetia nerifolia, Juss.
11.	गूलर	Ficus glomerata, Roxb.
12.	गुलमोहर	Delonix regia, (Broj.) Raf.
13.	जंगल जलेबी	Pithececobium dulce, Benth.
14.	जामनु	Syzygium cumini, (Linn.)Skeels.
15.	नीबू	Citrus medica, Linn.
16.	मीठा नीबू	Citrus limmettioides, Tanaka.
17.	नीम	Azadirachta indica, A. Juss.
18.	पकड़ / पाकड़ी	Ficus lacor, Buch-Ham.
19.	पापड़ी / कंजू / चिलबिल	Holoptelea integrifolia, (Roxb.) Planch.
20.	पीपल	Ficus religiosa, Linn.
21.	बरगद / बड़	Ficus bengalensis, Linn.
22.	बहेड़ा	Terminalia bellerica, Roxb.
23.	शीशम	Dalbergia sissoo, Roxb.
24.	शहतूत	Morus alba, Linn.
25.	सहजन / सैंजना	Moringa oleifera, Lamk.

7. Mining and Stone Crushing in river bed and flood plain zone of River Ganga and its tributaries:

Area of mining	FIR/ case registered/ year	Vehicles/ mineral seized	Action taken status	Cases pending in Court	Enforcement of EMGSM 2020 and Sustainable sand mining management guidelines 2016
At present no sand mining area is approved in Mathura district.	From the year 2020-2021 till now, in 17 cases out of 24 cases of illegal transportation, as per the provisions of Uttar Pradesh Mineral Avoidance Rules 2021, a fine of Rs 5,16,560.00 and Rs 36,00,000.00 (thirty-six lakh) were deposited as environmental compensation, in 02 cases As per the order of the Honorable Court, the report was sent and the remaining 05 vehicle owners did not submit the application for releasing their vehicles. According to the provisions of UP Mineral Avoidance Rules 2021, in 03 cases out of 08 cases of illegal mining, a fine of Rs 10,22,160.00 was deposited, in 02 cases a fine of Rs 70,49,924.00 was imposed on illegal miners and in 03 cases a first information report was filed. In 13 cases of illegal storage, a complaint was filed in the Honorable Court against the illegal storekeepers	24 Vehicles	As per the provisions of Uttar Pradesh Mineral Avoidance Rules 2021, in 15 cases of illegal transportation, a fine of Rs 4,59,960.00 and Rs 36,00,000.00 (Thirty Six Lakhs) were deposited as environmental compensation, in 02 cases the report was sent as per the order of the Honorable Court and the remaining 05 Vehicle owners did not submit application for release of their vehicle. According to the provisions of Uttar Pradesh Mineral Avoidance Rules 2021, in 03 cases of illegal mining, a fine of Rs 10,22,160.00 was deposited, in 02 cases a fine of Rs 70,49,924.00 was imposed on the illegal miners and in 03 cases a first information report was filed. In 13 cases of illegal storage, a complaint was filed in the Honorable Court against the illegal storekeepers.	16	To effectively control illegal mining/ transportation, a district level task force has been constituted by the Geology and Mining Department, Uttar Pradesh Government, Government Order No. 616/86-2018- 371/2005 dated 20.03.2018. The above constituted task force investigates and takes action against illegal mining/transportation from time to time and to control illegal mining activity including overloading, Artificial Intelligence Software and C.I. C.T.V. Controlled check gate has been established, which is connected to the Directorate Lucknow Centralized Command Centre.

1 - The Tribunal has already directed for furnishing following information by order dated 24.11.2023:-

(1) District Ganga Protection Plan at city/ town level

District Ganga Protection Committee (DGPC) is required to formulate the action plan for each city and town located on main stem of river Ganga and its tributary and such Action Plan has to be prepared in accordance with the River Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016 (para 6 and 55).

(2) Contents of the Action Plan (Consolidated District Wise Action Plan including each City and Town abutting river Ganga and its Tributary)

2.1 Sewage Management

(i) Sewage generation (for entire District and individual town wise):

Name of Towns	Total Sewage Generation (MLD)
NP BAJANA	16.354
NP CHAUMUHA	20.65
NP CHHATA	36.906
NP GOVERDHAN	10.8
NP RADHA KUND	11.777
NP MAHAVAN	17.240
NP RAYA	33.467
NP BALDEO	18.543
NP GOKUL	7.708

NP SONKH	**18.816**
NP NANDGOAN	**1.50**
NP KOSIKALAN	**5.64**
NP FARAH	**16.326**
NP BARSANA	**10.20**

(ii) Existing Sewage Treatment Capacities :

- Total 07 STP 82.06 MLD CAPACITY within Mathura District

Under the Proposal

- 60 MLD Gokul Barrage
- 13 MLD Near Sant Samadhi
- 06 MLD NPP Kosi Kalan
- 12 MLD Sewage farm Near Railway line

(iii) Quantity of sewage is being treated (utilization capacity) :

Existing STP (location & capacity)	Capacity (operational)	Inlet/ Outlet water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point	Proposed/ under construction STP With completion date
04 MLD STP, Vrindavan, Near Pagal baba mandir, Mathura	04 MLD	Inlet Parameter- pH-8.5, BOD-195, COD-416, SS-288, DS-1544, TS-1832, TC-240000, FC-34000 Outlet Parameter- pH- 8.2 , BOD-25, COD-224, SS- 80, DS-1472, TS-1552, TC-2700 , FC-930	**03 Nos. Drain/1.87 MLD** 1-Vanshi Vat Nala 2-Jagannath Ashram Nala 3-Kesi Ghat Na`la	0	Yamuna	STP in operational

08 MLD STP, Near 100 beded Hospital, Vrindavan Mant road, Mathura	08 MLD	Inlet Parameter- pH- 8.4 , BOD-185 , COD- 432 , SS- 268 , DS-1510 , TS-1778 , TC- 220000 , FC-33000 Outlet Parameter- pH-8.1 , BOD-24 , COD-168 , SS-60 , DS-1312 , TS- 1372 , TC- 2400 , FC-830 .	**08 Nos. Drain/5.18 MLD** 1-Kalideh Drain 2-Bihar Ghat Drain 3-Cheer Ghat Drain 4-Bhaura Ghat Drain 5-Gora Nagar Nala 6-Rajpur Drain 7-Rang ji ka Bagicha 8-Ranapath Ghat		Yamuna	STP is Running
6.8 MLD STP, Masani, Mathura	6.8 MLD	Inlet Parameter- pH- 8.5 , BOD-180 , COD-400 , SS-308 , DS- 1518 , TS- 1826 , TC- 280000 , FC-43000 Outlet Parameter- pH-8.2 , BOD-25 , COD-200 , SS-72 , DS-1436 , TS- 1508 , TC-2400 , FC-920 .	**06 Nos. Drain/22.50 MLD** 1-Chaktirath Nala 2-Krishan Ganaga Nala 3-Octroi Post Nala 4-Jai Singhpura Nala 5-Sahaganj Nala 6-Masani Nala	0	Yamuna	STPs in operational
30 MLD STP, Masani, Mathura	30 MLD	Inlet Parameter- pH-8.5 , BOD- 180 , COD-400 , SS- 308 , DS- 1518 , TS-1826 , TC-280000 , FC-43000 Outlet Parameter- pH-7.9 , BOD-23 , COD-176 , SS-48 , DS-1356 , TS-1404 , TC-2500 , FC-910				

14.5 MLD STP, Trans-Yamuna, Jamunapar, Mathura	14.5 MLD	Inlet Parameter- pH-8.4 , BOD-200 , COD-432 , SS-328 , DS-1476 , TS-1804 , TC- 210000 , FC-38000 Outlet Parameter- pH-8.1 , BOD-26 , COD- 208 , SS-80 , DS-1528 , TS-1608 , TC- 3100 , FC-810 .	**08 Nos. Drain/3.37 MLD** 1-Ashkunda Ghat 2-Bangali Ghat 3-Chintaharan Nala 4-Daula Maula Nala 5-Gaughat Nala 6-Rani Ghat Nala 7-Swami Ghat Nala 8-Vishram Ghat Nala		Yamuna	STPs in operational
16 MLD STP, Trans Yamuna, Laxmi Nagar, Mathura	16 MLD	Inlet Parameter- pH- 8.5 , BOD-190 , COD-448 , SS-302 , DS- 1488 , TS- 1790 , TC-240000 , FC-33000 Outlet Parameter- pH-7.8 , BOD-22 , COD-184 , SS-56 , DS-1426 , TS- 1482 , TC- 2600 , FC-920 .	**06 Nos. Drain/24.09 MLD** 1-Dhruv Ghat Nala 2-Cantt Nala 3-Satrangi Nala 4-Mahadev Ghat Nala 5-Dairy farm Nala 6-Ambhakhar Nala (Partially Tapped)	8.09 MLD	Yamuna	01 drain which is partially tapped(Ambakhar drain) will be diverted to 60MLD STP is Proposed

2.76 MLD STP, Uddhav kund, Goverdhan, Mathura	2.76 MLD	Inlet Parameter- pH-8.6, BOD- 205, COD-416, SS- 388, DS- 1556, TS-1944, TC- 350000, FC-47000 Outlet Parameter- pH-8.0 , BOD-25, COD-160, SS-74, DS-1208, TS-1282, TC-94000, FC- 21000 .	01 Nos. drain 1.5MLD	0	Yamuna	STP in operational

(IV) Performance of STPs particularly for FC

Monitoring of STPs Installed for Revival of River Yamuna.

S.N.	Name of STP	Date of Sampling	Sampling Point	Colour (Hazen)	pH	BOD (mg/l)	COD (mg/l)	TSS (mg/l)	Total Coliform MPN/100 ml	Fecal Coliform MPN/100 ml
1	08 MLD STP, Near 100 beded Hospital, Vrindavan Mant road, Mathura	05.03.2024	Final Outlet of STP	Slightly Turbid	8.1	24	168	60	2400	830
2	6.8 MLD STP, Masani, Mathura	05.03.2024	Final Outlet of STP	Turbid	8.2	25	200	72	2400	920
3	30 MLD STP, Masani, Mathura	05.03.2024	Final Outlet of STP	Slightly Turbid	7.9	23	176	48	2500	910
4	04 MLD STP, Vrindavan, Near Pagal baba mandir, Mathura	05.03.2024	Final Outlet of STP	Turbid	8.2	25	224	80	2700	930
5	14.5 MLD STP, Trans-Yamuna, Jamunapar, Mathura	05.03.2024	Final Outlet of STP	Slightly Turbid	8.1	26	208	80	3100	810

6	16 MLD STP, Trans Yamuna, Laxmi Nagar, Mathura	05.03.2024	Final Outlet of STP	Slightly Turbid	7.8	22	184	56	2600	920
7	2.76 MLD STP, Goverdhan, Mathura	05.03.2024	Final Outlet of STP	Slightly Turbid	8.0	25	160	74	94000	21000

(V) Where treated sewage is being discharged (to Ganga or tributaries) :

- Total sewage generated is being discharged to River Yamuna.

(VI) Reasons for Under-utilization of STPs (Connectivity of Households/ laying of sewer lines) :

● THE STPs WERE CONSTRUCTED TAKING INTO ACCOUNT THE FUTURE HABITATION.
● AS THE HABITATION IS INCREASING THE UTILISATION IS ALSO INCREASING ACCORDINGLY

(VII) Current Gap in sewage treatment :

- Total sewage generation – 110 MLD (NAGAR NIGAM MATHURA VRINDAVAN)
- Sewage Treatment at present – 82.06 MLD
- Gap – 27.94 MLD (9.74 %)
- Sewage Treatment After the operation of all STPs on full capacity – 167.06 MLD

(VIII) Time bound plan for bridging the gap and tying up with financial arrangements and not delaying Tendering and identifying executing agencies or having any other issues :

● There is a time-bound plan, a proposal to minimize the gap - One STP 60 MLD capacity is proposed for treatment of sewage of Gokul Barrage, Near Water Treatment Plant, One STP 13 MLD, Near Sant Samadhi Sthal, Vrindavan, Mathura One STP 12 MLD, Mohalla Nadu Vas, Near Railway line, Kosi Mathura, One STP 06 MLD, Village Daddigarhi Chhata.

(IX) Where untreated sewage (when there is no STP) is discharged (Ganga /Tributaries):

● The untreated sewage either through untapped drains or partially tapped have been treated through the Bioremediation mechanism before is being discharged to the Yamuna river. Currently there are 6 drains namely; Aurangabad U/S , Aurangabad D/S, Kalapthar, Ambakhar, chaitanya vihaar-I & chaitanya vihaar-II (which are untapped and partially tapped to STP) are being treated through Bioremediation mechanism. The in-situ remediation process will continue until these drains are diverted to STPs.

2.2- Drains joining Ganga and Tributary

Number of drains carrying sewage- sullage or industrial waste water joining Ganga/ tributaries with their Quantity and Quality

Drain (city/ town)	Total drain capacity	Generation/ day	PH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride etc)	Nitrates	DO	TC	FC	Outlet flow and geo code/ sample point	Color/ odour	Discharged Into
Ambakhar drain	26.49	26.49	8.2	62	284	142	2216	Fe-2.9479, Cr-ND, PB-ND, As-0.005 Mn-0.1715, Cu-0.0053, Zn-0.3383, Hg-ND, Fluoride-0.919	4.164	0	84000	21000	26.49	Turbid	Yamuna river
Kala Patthar	7.64	7.64	8	44	168	124	1792	Fe-2.4270, Cr-ND, PB-ND, As-0.006 Mn-0.4350, Cu-0.0316, Zn-0.3302, Hg-ND, Fluoride-1.262	2.126	0	7900	2700	7.64	Slightly Turbid	Yamuna river
U/s Aurangabad Drain	1.98	1.98	7.9	40	152	110	1924	Fe-1.5988, Cr-ND, PB-ND, As-0.003 Mn-0.2108, Cu-0.0841, Zn-0.2064, Hg-ND, Fluoride-0.941	1.278	0	5800	2100	1.98	Turbid	Yamuna river
D/s Aurangabad Drain	1.46	1.46	8	42	176	84	1786	Fe-1.8125, Cr-ND, PB-ND, As-0.007, Mn-0.2612, Cu-0.0578, Zn-0.5975, Hg-ND, Fluoride-1.127	1.399	0	6300	2600	1.46	Slightly Turbid	Yamuna river
Chaitanya Vihar Drain (Sunrakh-1)	3.34	3.34	8.1	60	216	158	2120	Fe-3.5624, Cr-ND, PB-ND, As-0.007, Mn-0.3285, Cu-0.2154, Zn-0.4922, Hg-ND, Fluoride-1.062	0.618	0	21000	3800	3.34	Greyish	Yamuna river

Chaitanya Vihar Drain (Sunrakh-2)	0.56	0.56	7.7	54	184	118	1874	Fe-3.2284, Cr-ND, PB-ND, As-0.002, Mn-0.4182, Cu-ND, Zn-0.0224, Hg-ND, Fluoride-1.141	0.509	0	14000	3100	0.56	Slightly Greyish	Yamuna river
Sewage Farm Drain (Kosi)	5.64	5.64	8.3	110	304	164	2036	Fe-2.1598, Cr-ND, PB-ND, As-0.004, Mn-0.4294, Cu-0.1191, Zn-0.0359, Hg-ND, Fluoride-1.119	0.598	0	110000	33000	5.64	Greyish	Yamuna river
Refinery Drain	Consented capacity 169 m3/hr	100-140m3/hr	6-8	9-14	90-120	10-19	2500-4000	T.cr- 0.12, Pb-ND, Cu-ND(DL-0.1), Zn- 2.9, Hg-ND(DL-0.005)	*	*	*	*	100-140m3/hr	Turbid	Yamuna river

Note-* These parameters are not tested by IOCL Refinery Mathura.

(i) Drains joining outside city and town limits but, either joining in village or nearby town:

Name of Towns	Total Sewage Generation (MLD)
NP BAJANA	**16.354**
NP CHAUMUHA	**20.65**
NP CHHATA	**36.906**
NP GOVERDHAN	**10.8**
NP RADHA KUND	**11.777**
NP MAHAVAN	**17.240**

NP RAYA	**33.467**
NP BALDEO	**18.543**
NP GOKUL	**7.708**
NP SONKH	**18.816**
NP NANDGOAN	**1.50**
NP KOSIKALAN	**5.64**
NP FARAH	**16.326**
NP BARSANA	**10.20**

Inclusion of sewage flowing in drains into total sewage generation figures of each city and town and their interception and diversion to STPs: Already operational STP of 82.06 MLD is utilizing 100% capacity and all concerned drains have been Tapped. 04STPs are proposed of 60MLD, 13MLD, 12MLD, 06MLD.

2.3- Septage management (In case of no STP)

i. Status of Septage management (with reference to FSTP/STP):-

- Septage Management in the Nagar Nigam jurisdiction is carried out through Co-treatment plant. Co-treatment plant of capacity 25 KLD is operational at 14.5 MLF STP at Laxmi Nagar, where in addition to treating the domestic sewage transported through a sewerage network, treatment of faecal sludge and septage emptied from various Onsite Sanitation Systems prevalent in the city is carried out.

ii. Management of Greywater and its disposal: -.

- 30 out of 36 major drains in Mathura Vrindavan carrying grey water are tapped to STPs. Work of tapping remaining 6 drains by construction of STP is also underway, but as a remedial measures 6 drains namely; Aurangabad U/S , Aurangabad D/S, Kalapthar, Ambakhar, chaitanya vihaar-I & chaitanya vihaar-II (which are untapped and partially tapped to STP) are being treated through Bioremediation mechanism. The in-situ remediation process will continue until these drains are diverted to STPs.

2.4- Industrial Pollution Control

(I) Attach the list on no. of industries generating trade effluents, their place of disposal and compliance including CETPs (town wise):

Total number of Industries	Daily effluent discharge	Treatment available (cetp/ petp/ etp operational capacity)	Effluent quality analysis (outlet of treatment plants Geo code sampling point)	GAP	Proposed/ under construction treatment project (with timeline)	Number of defaulting units- Action taken	Industrial hazardous waste generated / year	Manner of disposal (Industrial solid waste)
1	2	3	4	5	6	7	8	9
A.N. LEATHER PVT. LTD.(PHOENIX IND) NH-2, FARAH, MTR	ZLD	ZLD	As per analysis report within norms	0	N/A	-	60 MT/A	Through TSDF
Brindavan Agro Industries Pvt. Ltd., Shergarh Road, Chhata, Mathura	1500 KLD	1500 KLD	As per analysis report within norms	0	N/A	-	40 MT/A	Through TSDF
INDIAN OIL CORPORATION LTD, MTR REFINERY, MTR	13.968 MLD	13.968 MLD	As per analysis report within norms	0	N/A	-	20140 MT/A	Through TSDF
S.P.S. Procesurs, Ind. Area, Kosi Kotvan, Mtr.	ZLD	ZLD	As per analysis report within norms	0	N/A	-	5010 MT/A	Through TSDF
SHRI BRIJRAJ CLOTH PRINTING CO., SHIVAJI NAGAR, MTR	500 KLD	500 KLD	As per analysis report within norms	0	N/A	-	60 MT/A	Through TSDF
Varun Beverages, Ltd., Dautana Chaata, Mtr.	1100 KLD	1100 KLD	As per analysis report within norms	0	N/A	-	3.652 MT/A	Through TSDF
VINAYAK FIBRES P. LTD., KOTWAN KOSI, MTR	ZLD	ZLD	As per analysis report within norms	0	N/A	-	65 MT/A	Through TSDF

Bhole Baba Milk Food Ind. Ltd., Dautana, Chhata, Mtr.	300 KLD	300 KLD	As per analysis report within norms	0	N/A	-	50 MT/A	Used in Agriculture
Calpro Sepecelitis Pvt. Ltd. (Mahan Protein ltd.) Barhana, Nand Gaon Road, Kosi, Mathura	90 KLD	90 KLD	As per analysis report within norms	0	N/A	-	30 MT/A	Used in Agriculture
GINNI FILAMENTS LTD., CHHATA, MTR	1250 KLD	1250 KLD	As per analysis report within norms	0	N/A	-	65 MT/A	Through TSDF
BUDHSEN VASUDEV, SHIVAJI NAGAR, MTR	150 KLD	150 KLD	As per analysis report within norms	0	N/A	-	5 MT/A	Through TSDF
CUSPY METALICS, NH-2, GAUR KENDRA, MTR	1.5 KLD	1.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
ESS KAY METALIC INDUSTRIES, SAUNK ROAD, KRISHNA NAGAR, MTR	1.5 KLD	1.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
KUMAR METALS, SAONKH ROAD KRISHNA NAGAR, MTR	1.5 KLD	1.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
MAYUR INDUSTRIES, NH-2, GAUR KENDRA, MTR	1.5 KLD	1.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
RAMA METAL, SAUNK ROAD KRISHNA NAGAR, MTR	1.5 KLD	1.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
CHANCAL ELECTR. (PREM SINGH ELE.), SAUNKH ROAD, MTR	1.5 KLD	1.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
RADHIKA SANITATION, E-86, IND. AREA, SITE A, MTR	1.5 KLD	1.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF

AGRAWAL SILVER PLATERS, GAUR KENDRA, MATHURA.	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
BANKEY BIHARI NICKLE PLANT, GAUR KENDRA, MATHURA	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
BANKEY BIHARI VIBRATOR, GAUR UDYOG KENDRA, N.H.- 2, MATHURA	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
BRIJ POLISHERS, PLOT NO. E- 48, INDUSTRIAL AREA, SITE- A, MATHURA, MTR	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
BRIJWASI SILVER AND VIBRATOR, TRIVENI COMPLEX, MATHURA.	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
KAPIL ELECTROPLATERS, TRIVENI COMPLEX, MATHURA.	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
MAHESH NICKLE/VIBRATOR PLANT, GAUR KENDRA, MATHURA	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
MASTER SILVER PLATERS, BRIJWASI COMPLEX, INFRONT OF OM TEXTILE,SARASWATI KUND, MATHURA.	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
MATHURA SILVER PLATERS, GAUR KENDRA, MATHURA	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF

NOORIE ELECTROPLATERS, GAUR KENDRA, MATHURA	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
PAVAN INDUSTRIES, GAUR KENDRA, MATHURA	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
RAJ INTERPRISES , KARSHNI COMPLEX MTR	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
ROYAL SANITATION PVT, GAUR KENDRA, MTR	1.5 KLD	1.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
SHRI KRISHNA PLUMBING, TRIVENI COMPLEX, MTR	1.5 KLD	1.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
STATUS SAINITECH PVT LTD, S-2, IND. AREA, SITE A, MTR	1.5 KLD	1.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
AGRAWAL & CO, Saraswati kund, MTR	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
GUDDU VERMA VIBRATOR, GAUR KENDRA, MATHURA GAUR KENDRA, MATHURA	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
RAJU VIBRATOR, BRIJWASI GAUR KENDRA, MATHURA	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
TARUN ELECTROPLATERS, GAUR UDYOG KENDRA, PLOT NO.-23-31, OPP. GOKUL RESTAURANT, NH-2, MATHURA	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
GOYAL SILVER PLATERS (M.M.), GAUR KENDRA, MATHURA	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF

GURU JI INDUSTRIES TRIVENI COMPLEX, MATHURA.	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
HARNAM MATELS, SANUK ROAD, KRISHNA NAGAR, MTR	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
Maha Gauri Electroplaters (Balaji Sanitation), E-60, Site-A, Mathura.	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
OM POLISHING WORKS, KARSHNI COMPLEX, GOVERDHAN RAOD, MTR	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
RADIKA PLUMBINGS (EVEREST METAL), E-50, IND. AREA, SITE A, MTR	1.5 KLD	1.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
SHIVANGI VIBRATORS, GAUR KENDRA,MATHURA	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
SHRI BANKEY BIHARI ELECTROPLATERS, TRIVENI COMPLEX, MATHURA	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
SHRI JI ELECTROPLATERS, D-48, IND. AREA, SITE A, MTR	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
VERMA ELECTROPLATERS, GAUR KENDRA, MATHURA	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF

VERMA SILVER WORKS, GAUR KENDRA,MATHURA	0.5 KLD	0.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
ANIL CLOTH STORE, C-64, IND.AREA, SITE A, MTR	300 KLD	300 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
ANURADHA TEXTILES,. GANESHRA ROADM MTR	150 KLD	150 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
BALAJI TEXTILE, SARASWATI KUND, MTR	150 KLD	150 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
BALAJI TEXTILES PRINTERS, E-70, IND. AREA, SITE A, MTR	300 KLD	300 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
BRIJ SAREE UDYOG, SHIVAJI NAGAR, MTR	300 KLD	300 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
CHHAIL B. AGRAWAL SAREE KARKHANA, SARASWATI KUND, MTR	150 KLD	150 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
DAYAL PRINTS , SHIVAJI NAGAR, MTR	175 KLD	175 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
DILEEP SAREE CENTRE, SHIVAJI NAGAR, MTR	200 KLD	200 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
GANESH TEXTELS, SARSWATI KUND, MTR	200 KLD	200 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
GAURI PRINTS (G.S.DASKAPREYWALA). E-84, IND. AREA, SITE A, MTR	300 KLD	300 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF

GHANSHYAMDAS KAPDEWALA II, E-84, IND. AREA, SITE A, MTR	300 KLD	300 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
GOPI KISHAN SAREE HOUSE, G-62, IND. AREA, SITE A, MTR	300 KLD	300 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
HANUMAN TEXTILES, SARASWATI KUND, MTR	200 KLD	200 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
HAR PRASAD SAREE AJAMPUR SARSWATI KUND, MTR	200 KLD	200 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
KEDAR DYEING, SARSWATI KUND, MTR	200 KLD	200 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
KRISHNA PRINTERS, SARSWATI KUND, MTR	300 KLD	300 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
MADAN MOHAN GOYAL, C-35, IND. AREA, SITE A, MTR	300 KLD	300 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
MAHESH PRINTS, SARSWATI KUND, MTR	300 KLD	300 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
MAHESH SAREE HOUSE, SARSWATI KUND, MTR	150 KLD	150 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
MANOJ TEXTILES, SARSWATI KUND, MTR	150 KLD	150 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
MATHURA TEXTILES, E-75, 76, IND. AREA, SITE A, MTR	300 KLD	300 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF

MATHURA TRADING CO., E-68, IND. AREA, SITE A, MTR	300 KLD	300 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
MINI PRODUCTS (KRISHNA PRINTS), C-36.,IND. AREA, SITE A, MTR	300 KLD	300 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
NAINA ENTERPRISES(REKHA SAREE),.JAISINGHPURA BANGER, MTR	100 KLD	100 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
NATIONAL TEXTILES, C-37, IND. AREA, SITE A, MTR	300 KLD	300 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
New Name Sri Ji Textils (UMESH SAREE CENTRE), SHIVAJI NAGAR, MTR	250 KLD	250 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
OM TEXTILE MILLS, SARSAWATI KUND, MTR	500 KLD	500 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
RADHA TEXTILES, GOVERDHAN ROAD, MATHURA	300 KLD	300 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
RADHIKA PRINTS, C-51, IND. AREA, SITE A, MTR	300 KLD	300 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
RAMESH CHAND AGRAWAL, C-48, IND. AREA, SITE A, MTR	300 KLD	300 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
RAMJI PRINTS, SARASWATI KUND, MTR	200 KLD	200 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-

RAMRASIYA TEXTILES, DEVIPURA, MATHURA	300 KLD	300 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
SANJAY TEXTILES (ANCHAL SAREE), DEVIPURA, BYE-PASS, MATHURA	400 KLD	400 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
SATISH DYEING, SARSWATI KUND, MTR	150 KLD	150 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
SIDH VINAYAK IND., S-9, IND. AREA, SITE A, MTR	300 KLD	300 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
SUREKA PRINTS , DEVIPURA, NH-2, MTR	200 KLD	200 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
UPMA SAREE CENTRE, SHIVAJI NAGAR, MTR	150 KLD	150 KLD	No	0	N/A	Clouser Order Issued By H.O.	1 MT/A	-
VRINDAVAN TEXTILES, SHIVAJI NAGAR, MTR	200 KLD	200 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
AQUA PLUMBING PVT.LTD., GAUR KENDRA, MTR	1.5 KLD	1.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
BHARAT METAL WORKS, D-63, IND. AREA, SITE A, MTR	1.5 KLD	1.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
CARTOON SANITAION, NH-2, GAUR KENDRA, MTR	1.5 KLD	1.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
GENERAL PLUMBING, TRIVENI COMPLEX, MTR	1.5 KLD	1.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF

MATHURA AUDYOGIK CHHETRA "A" PRADUSHAN NIVARAN CO. (C.E.T.P.) SITE-A, MTR	6.25 MLD	6.25 MLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
New Name Aqua dynamic (METAL MAN INDIA), KRISHNA NAGAR, MTR	1.5 KLD	1.5 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
Om Sai Tex, Ind. Area, Kosi Kalan, Mtr.	200 KLD	200 KLD	As per analysis report within norms	0	N/A	-	33 MT/A	Through TSDF
SWARN TEX PRINTS , KOTWAN KOSI, MTR	500 KLD	500 KLD	As per analysis report within norms	0	N/A	-	60 MT/A	Through TSDF
M/s R.K. Export (Old Name-RAGHAV FABRICS/OM DYERS), E-56, IND. AREA, KOSI KOTWAN,MATHURA.	300 KLD	300 KLD	As per analysis report within norms	0	N/A	-	50 MT/A	Through TSDF
Garg Textiles, C-52, Ind. Area, Site-A, Mathura	300 KLD	300 KLD	As per analysis report within norms	0	N/A	-	38 MT/A	Through TSDF
Harish Print (Ghanshyam Print), E-77-79, Ind. Area, Site-A, Mathura	300 KLD	300 KLD	As per analysis report within norms	0	N/A	-	40 MT/A	Through TSDF
National Process/National Screen, E-83, Ind. Area, Site-A, Mathura	300 KLD	300 KLD	As per analysis report within norms	0	N/A	-	35 MT/A	Through TSDF
Riddhi Siddhi Print, D-73, Ind. Area, Site-A, Mathura	300 KLD	300 KLD	As per analysis report within norms	0	N/A	-	33 MT/A	Through TSDF

Calpro Sepecelitis Pvt. Ltd. (Mahan Protein ltd.) Barhana, Tumhera Road, Kosi Kalan, Mathura	5.8 MLD	5.8 MLD	As per analysis report within norms	0	N/A	-	200 MT/A	Through TSDF
Jain Cord Pvt. Ltd, Chhata, Mathura	300 KLD	300 KLD	As per analysis report within norms	0	N/A	-	1 MT/A	Through TSDF
Pepsico India Holding Pvt. Ltd, Q-1, Kosi Kotwan Ind. Area Exp.-II, Mathura	820 KLD	820 KLD	As per analysis report within norms	0	N/A	-	40259 MT/A	Through TSDF

(3) Water quality status

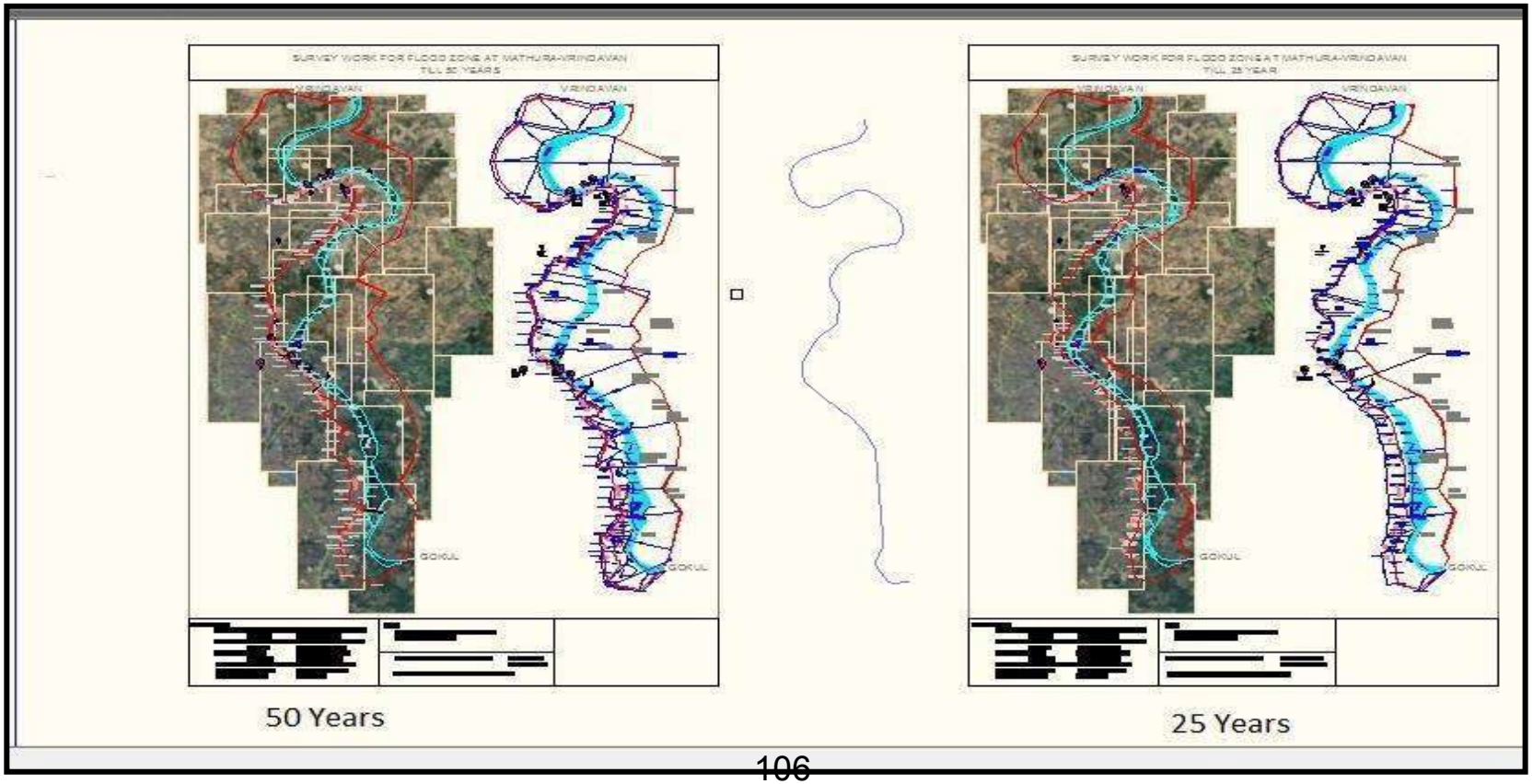
Provide water quality status of Ganga and its tributaries in the District and city/ town in terms of its fitness for Bathing water quality that is, FC and FS:

S.N.	River Name	Sampling Point	Sample Date	Colour (Hazen)	Odour	pH	Conductivity (µS/c)	TDS (mg/l)	DO (mg/l)	BOD (mg/l)	COD (mg/l)	Total Hardness (mg/l)	Ca Hardness (CaCO3) (mg/l)	Mg Hardness (CaCO3) (mg/l)	Chloride (mg/l)	Sulphate (mg/l)	Total Coliform
1	U/s Yamuna River Shahpur	Up Stream	19.02.2024	20	Odour Less	7.8	708	690	4.6	14.6	48	226	148	78	188	-	94000
2	D/s Yamuna River Shahpur	Down Stream	19.02.2024	20	Odour Less	7.9	728	716	4.2	15.4	56	238	166	72	206	-	110000
3	U/s Yamuna River Vrindavan	Up Stream	19.02.2024	20	Odour Less	7.7	588	546	6.0	9.0	32	180	112	68	178	-	49000
4	D/s Yamuna River Vrindavan (Kesi Ghat)	Down Stream	19.02.2024	20	Odour Less	7.4	694	680	5.2	10	44	172	108	64	194	-	70000
5	U/s Yamuna RiverMathura (Gau Ghat)	Up Stream	19.02.2024	20	Odour Less	7.6	662	636	5.0	10.8	48	226	160	66	176	-	79000

6	D/s Yamuna River Mathura (Dhruv Ghat)	Down Stream	19.02.2024	20	Odour Less	7.8	692	668	4.6	13.4	56	242	174	68	186	-	120000
7	Vishram Ghat	Mid Stream	19.02.2024	20	Odour Less	7.7	712	694	4.8	12.4	48	240	164	76	184	-	94000
8	U/s Gokul Barrage	Up Stream	19.02.2024	20	Odour Less	8.0	676	624	5.8	10.2	28	186	120	66	168	-	63000
9	D/s Gokul Barrage	Down Stream	19.02.2024	20	Odour Less	8.1	716	632	5.4	11.8	40	208	128	80	184	-	79000

(4) Notification of Flood Plain Zones:

In order to remove encroachment from the flood plain zone, it is to be informed that in accordance with the instructions given in point no. 4 of Government Order No. 1149/19-27-Si-3-52 L/18/ dated October 17, 2018, Encroachment from the area will be removed by the Municipal Corporation.



(5) Issues relating to Environmental Flow:

Si No.	Location of Barrage	Minimum flow releasing downstream near the barrage (in Cumec) (October to May)	Minimum flow releasing downstream near the barrage (in Cumec) (June to Sept)
1	2	3	4
1	Gokul Barrage (Mathura)	31	51

अधिशासी अधिकारी,
सीवर एवं ड्रेनेज
इकाई जल निगम,
मथुरा।

परियोजना प्रबंधक,
यमुना प्रदूषण नियंत्रण इकाई, उ0प्र0
जल निगम, आगरा।

अधिशासी अभियन्ता,
अपर आगरा कैनाल,
मथुरा

for

क्षेत्रीय अधिकारी,
उ0प्र0 प्रदूषण नियंत्रण बोर्ड,
मथुरा

B. BARUA

मुख्य प्रबंधक,
इंडियन ऑयल कॉर्पोरेशन लिमिटेड,
मथुरा, रिफाइनरी, मथुरा।

अधिशासी अभियन्ता
निर्माण खण्ड
उ0प्र0 जल निगम (शहरी)
मथुरा

जिला खनन अधिकारी,
मथुरा
खान अधिकारी
मथुरा

नगर आयुक्त,
नगर निगम, मथुरा–वृन्दावन, मथुरा

अपर जिलाधिकारी,
वित्त एवं राजस्व/प्रभारी अधिकारी स्थानीय निकाय,
मथुरा

प्रभागीय निदेशक/
सदस्य संयोजक, जिला गंगा समिति,
मथुरा

मुख्य विकास अधिकारी/
नोडल अधिकारी, जिला गंगा समिति,
मथुरा

जिलाधिकारी/अध्यक्ष
जिला गंगा समिति,
मथुरा

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Best practices

- Projects/ Benefits in the last 3 years (Namami/ Amrit 2.0):- Under the Namami Gange Project, UP Jal Nigam RURAL Mathura constructed 91 MLD sewage treatment Plant for the Treatment of Sewerage water. Through this 91 MLD STP, the untreated sewerage is stopped which directly flows into the River Yamuna, the tributary of River Ganga.

- Regular online continuous monitoring system of all the ETPs.

- Upgradation of CETP by NMCG.

- Forest department organizes awareness programs on regular basis like Wetland day, World Environment day, World Water day, Tree plantation day. The purpose of organizing to these programs is just to aware students and common people about importance of these days.

Government of India
Ministry of Jal Shakti
Department of Water Resources,
River Development & Ganga Rejuvenation

Report in Compliance of Hon'ble NGT order Dated 24.01.2024 in

O.A 200/2014 MC Mehta Vs UOI and Ors.

Report Submitted By :-

DISTRICT GANGA COMMITTEE

DISTRICT SAHARANPUR

MC MEHTA vs. UNION OF INDIA (OA. NO. 200 OF 2014)
ADDITIONAL INFORMATION, AS PER THE ORDER 05.02.2024

S.NO	ADDITIONAL INFORMATION	ANSWER
1.	That STPs installed, are underutilized and that treated effluents are discharged into the drains carrying untreated waste water thereby defeating the very purpose of the efficacy of STPs.	38 MLD working in Malhipur- Shahranpur 135 Purposed at Malhipur- Nearby old STP loction in Saharanpur.
2.	The quantification and estimation of sewage entering to each STP through sewer network or through interception and diversion of drains.	137.89 MLD
3.	the breakup of quantity of sewage fed to each STP through sewerage and drains, indicating location of STP (with geo coordinates) and quality and quantity of discharged sewage and its disposal location.	Running STP 38 MLD MALHIPUR GEO 29.93709, 77.55066. 138 MLD quanity Water quality - 25 Class-E Disposed in hindon river
4.	These identified industries should be imposed with the Consent conditions to adopt ZLD system or maximize recycling/ reuse of treated effluents rather than consenting them to discharge into drains with no burden on them.	Registered Industries is adopting ZLD system but many unauthroiszed industries are discharging untreated effulent without any treatment.
5.	We are of the view that additional columns are to be included reflecting the drain, position of STP	135 MLD STP PROPOSED, SITE GEO 29.93517, 77.55554

	with capacity, their geo-coordinates, discharge quantity from the STP in the drain and total per day discharge from the drain into river.	
6.	Mention heavy metals analysis in respect of discharge from each of the drain in the report.	heavy metals analysis report 1. Dhamola drain:-Total Chromium:-ND, Copper;- ND Lead:-ND, Iron;- ND , Zinc:- 0.0250, Manganese:-0.0757, Arsenic:-ND, Mercury:- ND 2. Star paper Mill drain;-Total Chromium:-ND, Copper;- ND Lead:-ND, Iron;- ND , Zinc:- 0.0250, Manganese:-0.0623, Arsenic:- ND, Mercury:- ND 3. Bajaj Sugar Drain:- Drain is Dry. 4. Nagdei Drain:-Total Chromium:-ND, Copper;- ND Lead:-ND, Iron;- ND , Zinc:- 0.0310, Manganese:-0.0690, Arsenic:- ND, Mercury:- ND 5. Thaska Drain:-Total Chromium:-ND, Copper;- ND Lead:-ND, Iron;-0.0642 , Zinc:- 0.0370, Manganese:-0.0891, Arsenic:-ND, Mercury:- ND. 6. Badjhai Khurd drain:-Total Chromium:-Not detected, Copper;-0.0330, Lead:-Not detected, Iron;-10.7179, Zinc:-0.2506, Manganese:-0.3908, Arsenic:-0.004, Mercury:-Not detected. 7. Daya sugar drain:- Dry Drain.

1. SEWAGE

Drain (city/town)	Total drain capacity	Generation/ day	PH	BOD	COD	TSS	TDS	Heavy metals(Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride etc) Nitrates	DO	TC	FC	Outlet flow and geo code/ sample point	Color / odour	Discharged Into
Dhamola Drain	6000	6	7.3	42	48	140	994	Total Chromium:-ND, Copper;- ND Lead:-ND, Iron;- ND , Zinc:- 0.0250, Manganese:-0.0757, Arsenic:- ND, Mercury:- ND	3.5	360000	490000	Latitude:- 29.952502, Longitude:- 77.552007	35 HZN	Hindon
Star Paper Mills Drain	9998.4	9.99	7.3	34	142	72	804	Total Chromium:-ND, Copper;- ND Lead:-ND, Iron;- ND , Zinc:- 0.0250, Manganese:-0.0623, Arsenic:- ND, Mercury:- ND	0	3900	3300	Latitude:- 29.931127 Longitude:- 77.590427	400 HZN	HIndon
Bajaj Sugar Drain	6998.4	6.99	6.8	36	184	88	1148	Dry Drain	0	40000	39000	Latitude:- 29.808171L ongitude- 77.577731	30 HZN	HIndon
Nagdei Drain	998.4	0.998	7.2	34	12	154	912	Total Chromium:-ND, Copper;- ND Lead:-ND, Iron;- ND , Zinc:- 0.0310, Manganese:-0.0690, Arsenic:- ND, Mercury:- ND	0	5500	4700	Latitude:- 29.973158 Longitude- 77.613103	50 HZN	Krishni
Thaska Drain	12000	12	7.5	34	240	382	1346	Total Chromium:-ND, Copper;- ND Lead:-ND, Iron;-0.0642 , Zinc:- 0.0370, Manganese:-0.0891, Arsenic:- ND, Mercury:- ND	0	550000	460000	Latitude:- 29.710753 Longitude- 77.447862	50 HZN	Kali (West)

Badhai Khurd Drain	7999.2	7.99	7.4	62	2016	338	1326	Total Chromium:-Not detected, Copper;-0.0330, Lead:-Not detected, Iron;-10.7179, Zinc:- 0.2506, Manganese:-0.3908, Arsenic:-0.004, Mercury:-Not detected.	0	440000	290000	Latitude:-29.618508 Longitude-77.653038		HIndon
Daya Sugar Drain	DRY													

2. STP for treating the sewage of the drains ultimately flowing to river ganga or its tributaries

Existing STP (location & capacity)	**Capacity (operational)**	**Inlet/ Outlet water quality & quantity**	**Number of tapped drains (quantity of discharge)**	**GAP (in treatment)**	**Final discharge point**	**Proposed/ under construction STP With completion date**
38 MLD STP jal Nigam, Malhipur Road, Saharanpur	38 MLD	Inlet ph-7.6 BOD 160, COD, 356, TSS 132, Outlet ph-7.4 BOD 25, COD, 180, TSS 44	1	99.89	Dhamola River	Proposed for 135 MLD

2.1 STP ADDITIONAL INFORMATION

NAME OF DRAIN	**POSITION OF STP WITH CAPACITY**	**GEO/COORDINATES**	**DISCHARGE QUANTITY FROM THE STP IN THE DRAIN**	**TOTAL PER DAY DISCHARGE FROM THE DRAIN INTO THE RIVER**
Dhamola Drain	38 MLD STP, Jal Nigam, Malhipur road, Saharanpur	2999.93615, 77.55228	38 MLD	135 MLD

Proposed STP (location & capacity)	Capacity (operational)	Inlet/Outlet water quality & quantity	Number of tapped drains(quantity of discharge)	GAP (in treatment)	Final discharge Point Geo code/ sampling point	Proposed/Under Construction STP With Completion Date
Malhipur Saharanpur city 135MLD	38MLD	Class c/38MLD	1 Partially tapped /38MLD	97 MLD	Dhamola drain	135 MLD STP budget passed by NMCG 2027 (approax)

- **Hotels/ Ashrams/Dharmshalas/residential complexes abutting river Ganga or its tributaries**

Number of Hotels/ ashrams/ dharamshalas	Consent to establish/ operate	STP	Discharge point	Action taken
Hotel The Oasis, Delhi Road, Saharanpur	Grant (07/2023)	Not Installed	Through Septic Tank / Soak pit	Notice sent
Hotel Lemon International, Ghantaghar Saharanpur	Grant (12/2018)	Not Installed	Through Septic Tank / Soak pit	Notice sent
Hotel Punjab, GPO Road, Saharanpur	Grant (07/2024)	Not Installed	Through Septic Tank / Soak pit	Notice sent
The Hotel Clark International, Dehradun Road, Saharanpur	Grant (07/2024)	Not Installed	Through Septic Tank / Soak pit	Notice sent
Royal Residency Ambala Road, Saharanpur	Grant (12/2020)	Not Installed	Through Septic Tank / Soak pit	Notice sent
Hotel Uttam Pvt. Ltd., Ambala Road, Saharanpur	Grant (12/2019)	Not Installed	Through Septic Tank / Soak pit	Notice sent
Hotel The Taj, Mission Compound, Saharanpur	Grant (12/2020)	Not Installed	Through Septic Tank / Soak pit	Notice sent
Hotel Skylark, Ambala Road, Saharanpur	Grant (03/2021)	Not Installed	Through Septic Tank / Soak pit	Notice sent
Silver Exocitca Hotel ltd, Ismailpur,ambala road, Saharanpur	Pending	Installed (50 KLD)		

4. IV. Industrial Effluent discharge by industries whose effluent is ultimately flowing to river Ganga or its tributaries

Total number of Industries	Daily effluent discharge	Treatment available (cetp/ petp/ etp operational capacity)	Effluent quality analysis (outlet of treatment plants Geo code sampling point)	GAP	Proposed/ under construction treatment project (with timeline)	Number of defaulting units- Action taken	Industrial solid waste generated/ day	Manner of disposal (Industrial solid waste)
A.L.M. Industries (Slaghter House Unit) Haroda, Saharanpur	150 KLD	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	--	Information not available in office record	Disposed by Nagar Nigam/Industrial Local Bodies
Anmol Textile, Janta Road, Saharanpur	24 KLD	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	Show Cause issue	Information not available in office record	Disposed by Nagar Nigam/Industrial Local Bodies
Arora Hoiesery, Janta Road, Saharanpur	16 KLD	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	Show Cause issue	Information not available in office record	Disposed by Nagar Nigam/Industrial Local Bodies
Atul Textile, Behat Road, Saharanpur	19.5 KLD	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	--	Information not available in office record	Disposed by Nagar Nigam/Industrial Local Bodies

Bajaj Hindustan Ltd. Distillary Unit, Gagnoli. Saharanpur	ZLD	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	--	Information not available in office record	Disposed by Local Bodies
Bajaj Hindustan Ltd. Sugar Unit, Gagnoli, Saharanpur	2000 KLD	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	--	Information not available in office record	Disposed by Local Bodies
Bombay Hoseiry, Chajjpura, Dehradun Road, Saharanpur	-	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	Closure Order issue by board	Information not available in office record	Disposed by Nagar Nigam/Industrial Local Bodies
Daya Sugar(A unit of B.K. Investment) Naya Bans, Gagalheri, Saharnapur	500 KLD	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	--	Information not available in office record	Disposed by Local Bodies
Deep Industries, I.E. Delhi Road, Saharanpur	20 KLD	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	--	Information not available in office record	Disposed by Nagar Nigam/Industrial Local Bodies
Durga Straw Board, Nonauta, Saharanpur	16 KLD	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	--	Information not available in office record	Disposed by Local Bodies
Durga Textile, Janta Road, Saharanpur	16 KLD	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	--	Information not available in office record	Disposed by Nagar Nigam/Industrial Local Bodies

Ekta Textile, Janta Road, Saharanpur	16 KLD	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	Show Cause issue	Information not available in office record	Disposed by Nagar Nigam/Industrial Local Bodies
Ganpati Textile, Janta Road, Saharanpur	33 KLD	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	--	Information not available in office record	Disposed by Nagar Nigam/Industrial Local Bodies
Garg Dyeing, Janta Road, Saharanpur	18 KLD	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	--	Information not available in office record	Disposed by Local Bodies
Hindon Filter (P) Ltd. Saharanpur		ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	--	Information not available in office record	Disposed by Local Bodies
Hindon Filter (P) Ltd. Unit 2 Village Kolki Kalan Saharanpur	50 KLD	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	--	Information not available in office record	Disposed by Local Bodies
J.J. Textile, Janta Road, Saharanpur	17 KLD	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	Show Cause issue	Information not available in office record	Disposed by Nagar Nigam/Industrial Local Bodies
Jila Panchayat, Pashubadhshala, Gangoh, Saharanpur	-	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	--	Information not available in office record	Disposed by Local Bodies

Kisan Co-Oprative Sugar Mills Ltd. Sarsawa, Saharanpur	-	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	--	Information not available in office record	Disposed by Local Bodies
Mak Housary, Tiperpur Janta Road, Saharanpur	24 KLD	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	--	Information not available in office record	Disposed by Nagar Nigam/Industrial Local Bodies
Nagar Nigam, Pashubadhshala, Saharanpur	25 KLD	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	Closure Order issue by board	Information not available in office record	Disposed by Nagar Nigam/Industrial Local Bodies
Nagar Palika Parishad, Pashubadhshala, Gangoh, Saharanpur	-	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	--	Information not available in office record	Disposed by Local Bodies
Pashupati Dairy (P) Ltd. Dehradun Road, Saharanpur	270 KLD	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	--	Information not available in office record	Disposed by Local Bodies
Pilakhni Distillary & chemical Works, Pilakhni, Saharanpur	-	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	--	Information not available in office record	Disposed by Local Bodies
Rainbow Board Mill, (Unit Kraft Paper) Saharanpur	-	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	Closed	Information not available in office record	Disposed by Local Bodies

S.M.C. Foods Ltd. Nanauta, Saharanpur	900 KLD	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	--	Information not available in office record	Disposed by Local Bodies
Saharanpur Textile, Janta Road, Saharanpur	10 KLD	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	--	Information not available in office record	Disposed by Nagar Nigam/Industrial Local Bodies
Saharanpur Wools Ltd. Dehli Road, Saharanpur	21 KLD	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	Show Cause issue	Information not available in office record	Disposed by Nagar Nigam/Industrial Local Bodies
Shah Industries, 18 Medanta Complex, Janta Road, Saharnapur	20 KLD	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	Show Cause issue	Information not available in office record	Disposed by Nagar Nigam/Industrial Local Bodies
Shakumbhri Sugar & Allied Industries Ltd. Toderrpur, Saharanpur	-	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	--	Information not available in office record	Disposed by Local Bodies
Shakumbhri Sugar & Alliede Industris Ltd. Distillary Unit, Saharanpur	-	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	--	Information not available in office record	Disposed by Local Bodies
Shalimar Cotton Dyeing, Saharanpur	20 KLD	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	Closure Order issue by board	Information not available in office record	Disposed by Local Bodies

Siddharth Textile, Chilkana Road, Saharanpur	20 KLD	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	Show Cause issue	Information not available in office record	Disposed by Nagar Nigam/Industrial Local Bodies
Star Paper Mill Saharanpur.	12000 KLD	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	Show Cause issue	Information not available in office record	Disposed by Nagar Nigam/Industrial Local Bodies
Super Textile, Village Tiparpur, Janta Road, Saharnapur	27 KLD	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	--	Information not available in office record	Disposed by Nagar Nigam/Industrial Local Bodies
The Kisan Sahakari Chini Mill, Nanouta, Saharanpur	1000 KLD	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	--	Information not available in office record	Disposed by Local Bodies
Triveni Engg. & Industries Ltd, Deoband, Saharanpur	1368 KLD	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	--	Information not available in office record	Disposed by Local Bodies
U.P. Co-Oprative Co. Ltd. Tapri, Saharanpur		ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	Closed	Information not available in office record	Disposed by Local Bodies
U.P. Co-Oprative Sugar Factory Nanauta, Saharanpur	-	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	--	Information not available in office record	Disposed by Local Bodies

Uttam Sugar Mills Ltd. Unit-4, Shermou Nakur, , Saharanpur	-	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	--	Information not available in office record	Disposed by Local Bodies
Wave Industries P.Ltd. Bidwi, Saharanpur		ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	--	Information not available in office record	Disposed by Local Bodies
Kamal Enterprises, Village Dhamola, Janta Road, Saharaapur	60 KLD	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	--	Information not available in office record	Disposed by Nagar Nigam/Industrial Local Bodies
General Textiles , Village Dhamola, Janta Road, Saharaapur	19 KLD	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	--	Information not available in office record	Disposed by Nagar Nigam/Industrial Local Bodies
Standard Engineering Works, Industrial Estate, Delhi Road, Saharanpur	22 KLD	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	--	Information not available in office record	Disposed by Nagar Nigam/Industrial Local Bodies
R.K. Textiles , Gagalheri, Dehradun Road, Saharanpur	20 KLD	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	Show Cause issue	Information not available in office record	Disposed by Nagar Nigam/Industrial Local Bodies
Bharat Enterprises, Rampur Manihara, Delhi Road, Saharanpur	-	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	--	Information not available in office record	Disposed by Local Bodies

B.S. Industries, Behind Bhagwan Motors, Delhi Road, Saharanpur	-	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	--	Information not available in office record	Disposed by Local Bodies
A.L.M. Industries (Slaghter House Unit) Haroda, Saharanpur	150 KLD	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	--	Information not available in office record	Disposed by Nagar Nigam/Industrial Local Bodies
Anmol Textile, Janta Road, Saharanpur	24 KLD	ETP Installed	ETP Installed and working satisfactorily	No Gap	Tertiary Treatment for M/s star paper mill proposed	Show Cause issue	Information not available in office record	Disposed by Nagar Nigam/Industrial Local Bodies

5. Regulation of Flood Plain Zone:

Area-cities/ towns	**Notification of flood plain zone**	**Demarcation**		**Encroachment & direct discharge** **GeoCode/ Sampling point**	**Encroachment removal status**	**Timeline for completion**
		No development zone pillars	**Regulatory zone pillars**			
District Saharanpur	There is no Notification regarding Flood Plain Zone of River Yamuna.	Process will be done after Notification	Process will be done after Notification	No Encroachment	Since there is no encroachment along the river bank	As of there is No development pillars and No regulatory zone pillars.

6. Afforestation/ Plantation along the bank of River Ganga and its tributaries and their flood plain zones

Area- cities/ towns	**Total plantation / Sampling Point**	**Proposed project**	**Timeline**
Saharanpur -(145 ha) near Hindon river. Plant Species:--*Moringa oleifera*. *Bamboo, Sisam, Kanji, peepal, Pilkhan, Shag, Guava, Amaltas, Aanal, Bel, Mangifera indica.*	31200 Plantation in year 2023-24 Geo Coordinates of plantation near Hindon bank from Initial to ending point:- Jajnar N-30°01'49.163"/E-77°43'11.111" To Paragpur N-29°55'45.533"/E-77°35'39.354"	Wildlife clearance under the annual operational plan of Uttar Pradesh for the year 2023-24	2023-24

- **Afforestation Plantation list:-**

AREA	**Plantation**	**In Hectares**
Papdaki Rasoulpur	**6400**	**4.0**
Raidi Ahtmal	**9600**	**6.0**
Haroda	**6400**	**4.0**
Jajnar	**2400**	**1.5**
Tashipur Ahtmal	**6400**	**4.0**
Grand Total	**2,922,00/-**	**19.5/-**

7. Mining and Stone Crushing in river bed and flood plain zone of River Ganga and its tributaries:

Sand Mining	FIR/ case registered/ year	Vehicles/ mineral seized	Action taken status	Cases pending in Court	Enforcement of EMGSM 2020 and Sustainable sand mining management guidelines 2016
District survey reports is prepared and it is also updated at regular intervals. At present 01 sand mining lease is operational in the district	In the month of December,2023 01 FIR has been reported.	In the month of December 2023 action has been taken on 86 cases. (RBM/Sand Mining)of illegal transportation.	Penalties 103.98 Lakh was imposed as per rules.	No Pending case.	-

Area of RBM Mining	Overloading illegal transport	Action Taken	Penalty imposed
District survey reports is prepared and it is also updated at regular intervals. At present 02(36.00+4.20= 40.20Hec.) RBM mining lease is operational in the district	In the month of December 2023 action has been taken on 86 cases. (RBM/Sand Mining)of illegal transportation.	Penalties was imposed as per rules (on 86 vehicles).	Penalties 103.98 Lakh was imposed as per rules.

Compliance of Hon'ble NGT order

Dated 24.01.2023

In

O.A 200/2014 MC Mehta Vs UOI and Ors

DISTRICT- SAHARANPUR

1. Sewage Management

i. **Sewage generation (for entire District and individual town wise:-** District Saharanpur– Total Sewage Generation –138 MLD

Sl no	Name of ULB	Sewage Generation (MLD)
1.	Nagar Nigam	137.89
Total		**137.89**

ii. **Existing Sewage Treatment Capacities :-** 38 MLD STP, Malhipur Road, Saharanpur.

iii. **Quantity of sewage is being treated (utilization capacity):-** At present – 38 MLD is being treated in STP out of total sewage of 137.89 MLD

iv. **Gap (Untreated Sewage at present)** – 99.89MLD (38.4%)

v. **Sewage Treatment after operation of all STPs on full capacity** – 38 MLD (No gap)

vi. **Performance of STPs particularly for FC :-**

Name of Drain	GEO/Coordinates
Dhamola Drain	Latitude :- 29.952502 Longitude :- 77.552007
Star Paper Mill Drain	Latitude :- 29.931127 Longitude :- 77.590427
Bajaj Sugar Drain	Latitude :- 29.808171 Longitude :- 77.577731
Nagdei Drain	Latitude :- 29.973158 Longitude :- 77.613103
Thaska Drain	Latitude :- 29.710753 Longitude :- 77.447862
Badhai Khurd	Latitude :- 29.618508 Longitude :- 77.653038

STP	Technology	Operational Status	Capacity (operational)	Inlet/Outlet Water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point Geo code/ Sampling point	Proposed/ under constructionSTP With completion date
38 MLD STP, Malhipur Road, Saharanpur	JASB	Operational	100%		A Partially tapped Drain	99.89	29.920523 77.550674	135D STP proposed.

vii. **Where treated sewage is being discharged (to Ganga or tributaries) :-** Total sewage generated is being discharged to Dhamola Drain and River Hindon.

viii. **Reasons for Under-utilization of STPs (Connectivity of Households/ laying of sewer lines) :-**

STP	Operational Status	STP capacity utilization	Reason for under utilization
38 MLD STP, Jal Nigam, Malhipur Road, Saharanpur	Operational	100%	-

ix. **Current Gap in sewage treatment :-**

Total sewage generation – 137.89 MLD
Sewage Treatment at present – 38/- MLD
Total Sewage Treatment quantity after operation of all STPs on full capacity – 99.89 MLD(Gap)

STP	Technology	Operational Status	Capacity (operational)	Inlet/Outlet Water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point Geo code/ sampling point	Proposed/ under construction STP With completion date
38 MLD STP, Jal Nigam, Malhipur Road, Saharanpur	UASB	Operational	100%		A Partially tapped Drain	99.89	29.936902, 77.553646	135 MLD

x. **Time bound plan for bridging the gap and tying up with financial arrangements and not delaying Tendering and identifying executing agencies or having any other issues :-** 02 STP has proposed in the juridiction of saharanpur yet timeline for proposed STPs provided by concerned authority.

xi. **Where untreated sewage (when there is no STP) is discharged (Ganga /Tributaries):** Dhamola Drain.

2. <u>Drains joining Ganga and Tributary</u>

i. Number of drains carrying sewage- sullage or industrial waste water joining Ganga/ tributaries with their Quantity and Quality:

S. No.	Drain	Domestic/Industrial/Mixed	Flow (MLD)	Quality Discharge Parameters
1	Dhamola Drain	Domestic	6	pH- 7.5, BOD-44, COD-144, TSS-106
2.	Star Paper Mill Drain	Industrial	9.99	pH- 7.3, BOD-34, COD-120, TSS-48
3.	Bajaj Sugar Drain	Industrial	6.99	pH- 6.6, BOD-34, COD-144, TSS-46
4.	Nagdei Drain	Domestic	0.998	pH- 7.5, BOD-35, COD-172, TSS-124
5.	Thaska Drain	Mixed	12	pH- 7.5, BOD-40, COD-144, TSS-260
6.	Badhai Khurd Drain	Mixed	7.99	pH- 7.6, BOD-64, COD-280, TSS-344

ii. **Drains joining outside city and town limits but, either joining in village or nearby town:** As per the above table.

iii. **Inclusion of sewage flowing in drains into total sewage generation figures of each city and town and their interception and diversion to STPs:** Already operational STP of 38 MLD is utilizing 100% capacity and all concerned drains have been tapped and 02 STPs are under construction.

3. <u>Septage management (In case of no STP)</u>

i. **Status of Septage management (with reference to FSTP/STP):-** 38 MLD STP working with septage in Malhipur Saharanpur.

ii. **Management of Grey water and its disposal:-** Pilot project bio-remediation oxygenation, ozonation and digestion. As per pollution control board Already operational STP of 38 MLD is utilizing 100% capacity.

iii. Industrial Pollution Control

Attach the list on no. of industries generating trade effluents, their place of disposal and compliance including CETPs (town wise):-

Sl. No.	River (Hindon/ Kali West/Krishni	Name of Industries Total no of Water Polluting Inudustres	Total Industrial discharge (MLD)	Treatment facility installed (Primary , secondary and tertiary treatment/ ZLD technology
1	Hindon	Textiles – 20 Paper Mill-01 Sugar – 02 Distillery -01	18.82	
2	Kali West	Sugar – 01	1.37	
3	Krishni	Milk-01, Sugar – 02,	1.85	

	Total	22.04	

	Hindon	**Textiles – 22**		
1		Anmol Textile, Janta Road, Saharanpur	0.02	ETP Installed
2		Arora Hoiesery, Janta Road, Saharanpur	0.02	ETP Installed
3		Atul Textile, Behat Road, Saharanpur	19.5	ETP Installed
4		Deep Industries, I.E. Delhi Road, Saharanpur	20	ETP Installed
5		Durga Textile, Janta Road, Saharanpur	16	ETP Installed
6		Ekta Textile, Janta Road, Saharanpur	16	ETP Installed
7		Ganpati Textile, Janta Road, Saharanpur	33	ETP Installed
8		Garg Dyeing, Janta Road, Saharanpur	18	ETP Installed
9		J.J. Textile, Janta Road, Saharanpur	17	ETP Installed
10		Saharanpur Textile, Janta Road, Saharanpur	10	ETP Installed
11		Saharanpur Wools Ltd. Dehli Road, Saharanpur	21	ETP Installed
12		Shah Industries, 18 Medanta Complex, Janta Road, Saharnapur	20	ETP Installed
13		Siddharth Textile, Chilkana Road, Saharanpur	20	ETP Installed
14		Super Textile, Village Tiparpur, Janta Road, Saharnapur	27	ETP Installed
15		Kamal Enterprises, Village Dhamola, Janta Road, Saharaapur	60	ETP Installed
16		General Textiles , Village Dhamola, Janta Road, Saharaapur	19	ETP Installed

17		Standard Engineering Works, Industrial Estate, Delhi Road, Saharanpur		ETP Installed
18		R.K. Textiles , Gagalheri, Dehradun Road, Saharanpur	25	ETP Installed
19		Ritika Gramodyog, 37, Village Manoharpur, Delhi Road, Saharnapur		ETP Installed
20		Shalimar Cotton Dyeing, Saharanpur	20	ETP Installed
1		**Paper Mill-01**		
		Star Paper Mill pvt ltd, Saharanpur	12	ETP Installed
1		**Sugar-02**		
		Daya Sugar (A unit of B.K. Investment) Naya Bans, Gagalheri, Saharnapur	0.5	ETP Installed
2		Bajaj Hindustan Ltd. Sugar Unit, Gagnoli, Saharanpur	2	ETP Installed
		Distillery -02		
1		Bajaj Hindustan Ltd. Distillery Unit, Gagnoli. Saharanpur	ZLD	ETP Installed
2		U.P. Co-operative Co. Ltd. Tapri, Saharanpur,	Closed	ETP Installed
	Kali (West)	**Sugar-01**		
1		Triveni Engg. & Industries Ltd, Deoband, Saharanpur	1.37	ETP Installed
	Krishni	**Milk Processing Unit -01**		
1		S.M.C. Foods Ltd. Nanauta, Saharanpur	0.9	ETP Installed
		Distillery Unit -01		
1		U.P. Co-Oprative Sugar Factory Nanauta, Saharanpur	-	ETP Installed
		Sugar Unit -01		
1		The Kisan Sahakari Chini Mill, Nanouta, Saharanpur	1	ETP Installed

4. Water quality status

i. Provide water quality status of Ganga and its tributaries in the District and city/ town in terms of its fitness for Bathing water quality that is, FC and FS:

River/Tributary	DO	BOD	TC	FC
Kali (West)	1.2	6.6	14000	7900
River Yamuna(U/S)	5.2	2.6	2100	920
River Yamuna(D/S)	5.0	2.4	49000	23000
River Krishni	0.2	26	70000	33000
River Muskara	4.6	2.8	79000	33000
River Hindon	Nil	36	92000	54000

Category flow :- Used for agriculture Purpose.

ii. **Notification of Flood Plain Zones:-** Government of Uttar Pradesh has issued notification dated 17.10.2018 regarding noconstruction/ no development zone under 100 meter of both bank river.

iii. **Issues relating to Environmental Flow:-** Notification has been issued by vide notification dated 09.10.2018. Yamuna river Ecological flow is 352 Cusec. Hindon river Ecological flow in district Saharanpur there is no flow during period in river hindon, flow is observed only during Monsoon season.

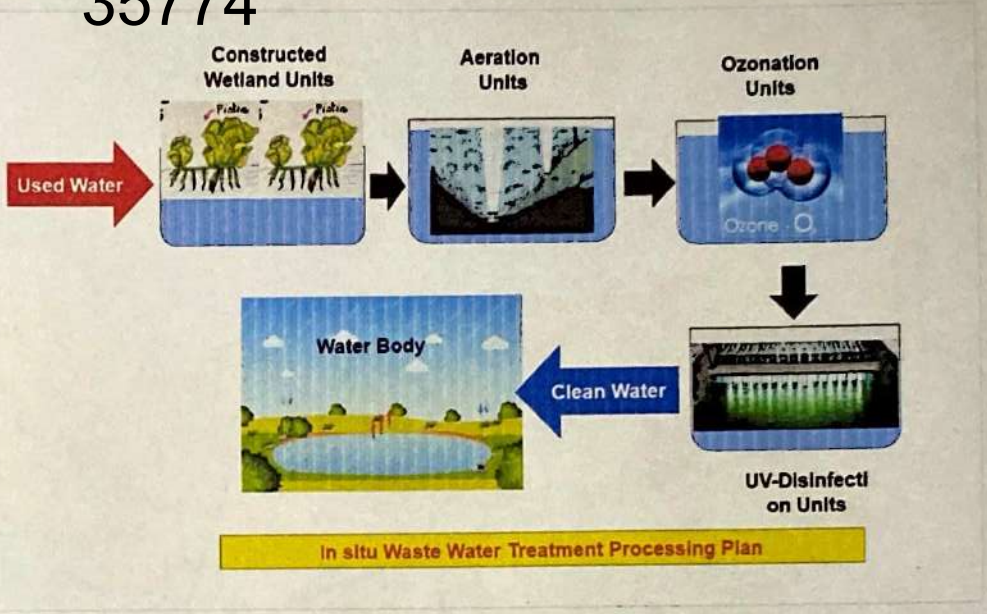
5. BEST PRACTICES OF THE DISTRICT REQUIRED

i. **Ganga Arti -** Ganga arti is organised by forest department on the ocassion of water day March ,2023 at kuvankheda, Gandhevda ghat, Rampur maniharan range.

ii. **Small River Rejuvenation:-** The Krishna River originates from the villages of Dara Ali and Chopra Fire Works Manakmau, located behind the Saharanpur Municipal Corporation, and passes through the development blocks of Baliyakheri, Rampur Maniharan, and Nanauta's gram panchayats in Saharanpur district, extending up to the Baghpat district in Uttar Pradesh. It is one of the tributaries of the Hindan River. Due to factors such as soil excavation, dense vegetation, encroachment, etc., the river has lost its natural form, resulting in a significant drop in water levels in villages nearby. An engineer has prioritized to excavation for soil removal, jungle clearance, and systematic widening of rivers.

A total of 31.43 kilometers of work has been completed across all three development blocks.
The revitalization work of the **Kali River** is currently underway and is expected to be completed soon.

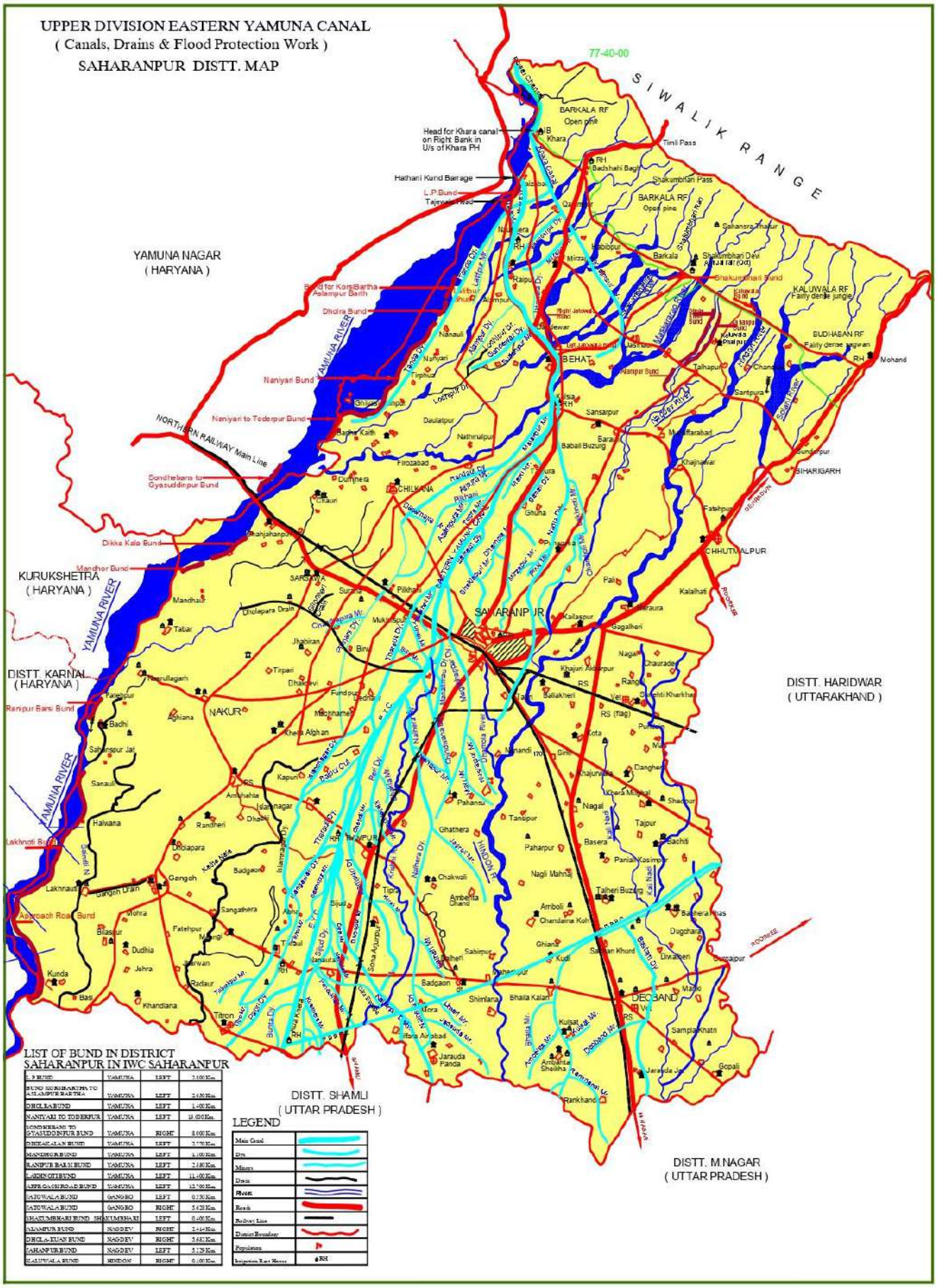
iii. **Natural Farming/Organic farming:-** Technology through which onsite ozone gas is produced by using reuse of treated water. This plant of KLD has been done with the help of Municipal corporation team Dawara centre for water Peace. For use of cleaning, toilet flushing, Agriculture and fish farming etc. Also all the wastes is being recycling and reuse.



iv. **IEC** --- Cleanliness and awareness programs are being conducted continuously on Ganga tributaries.

Divisional Forest Officer
Forest department
Saharanpur

District Magistrate,
Chairman, District Ganga Committee
Saharanpur


UPPER DIVISION EASTERN YAMUNA CANAL
(Canals, Drains & Flood Protection Work)
SAHARANPUR DISTT. MAP
77-40-00
SIWALIK RANGE
YAMUNA NAGAR
(HARYANA)
KURUKSHETRA
(HARYANA)
DISTT. KARNAL
(HARYANA)
DISTT. SHAMLI
(UTTAR PRADESH)
DISTT. HARIDWAR
(UTTARAKHAND)
DISTT. M.NAGAR
(UTTAR PRADESH)
YAMUNA RIVER
SAHARANPUR
NAKUR
BEHAT
CHILKANA
DEOBAND
BIHARIGARH
CHHUTMALPUR
BARKALA RF
KALUWALA RF
BUDHBAN RF
Head for Khara canal on Right Bank in U/s of Khara PH
Hathani Kund Barrage
Bund for Kora Sartha Aslampur Barth
Dholra Bund
Nanyari Bund
Nanyari to Toderpur Bund
Sondhebans to Gyasuddinpur Bund
Dikka Kala Bund
Mandhor Bund
Ranipur Bani Bund
Lakhnoti Bund
Approach Road Bund
NORTHERN RAILWAY Main Line
LIST OF BUND IN DISTRICT
SAHARANPUR IN IWC SAHARANPUR
LEGEND

In compliance of Hon'ble NGT order dated 11.09.2023 & 04.12.2023

In O.A. 200/2014 MC Mehta Vs UOI and Ors.

जल शक्ति मंत्रालय
जल संसाधन, नदी विकास और गंगा संरक्षण विभाग
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA REJUVENATION

District Ganga Committee Report

Submitted By:

District Ganga Committee, Lalitpur (U.P.)

MC MEHTA vs. UNION OF INDIA (OA. NO. 200 OF 2014)

ADDITIONAL INFORMATION, AS PER THE ORDER 05.02.2024

S.NO	ADDITIONAL INFORMATION	ANSWER
1.	That STPs installed, are underutilized and that treated effluents are discharged into the drains carrying untreated waste water thereby defeating the very purpose of the efficacy of STPs.	No STP installed in District
2.	The quantification and estimation of sewage entering to each STP through sewer network or through interception and diversion of drains.	No STP installed in District
3.	The breakup of quantity of sewage fed to each STP through sewerage and drains, indicating location of STP (with geo coordinates) and quality and quantity of discharged sewage and its disposal location.	No STP installed in District
4.	These identified industries should be imposed with the Consent conditions to adopt ZLD system or maximize recycling/ reuse of treated effluents rather than consenting them to discharge into drains with no burden on them.	1. Lalitpur Power Generation Company generates 8000-9000 metric ton ASH per day. 20 % used in low land fill and rest 80% utilized gainfully to Cement and Brick industry 2. Bharat Explosives Limited generates 1.63 Kld effluent per day which is disposed through 2 Solar evaporation tanks

5.	We are of the view that additional columns are to be included reflecting the drain, position of STP with capacity, their geo-coordinates, discharge quantity from the STP in the drain and total per day discharge from the drain into river.	No STP installed in District. Proposal for 32 MLD capacity STP is due for approval under AMRUT 2.0 CWAP
6.	Mention heavy metals analysis in respect of discharge from each of the drain in the report.	No heavy metal discharge flow in drains

1. Sewage

Following information is submitted on the basis of end point sample analysis of concerned drain.

Drain (city/ town)	Total drain capacity	Generation / day	PH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride etc)	Nitrates	DO	TC	FC	Outlet flow and geo code/ sample point	Color/ odour	Discharged Into
Sehjad Nala	50-60 MLD	5.5 MLD Approx	7.35	23 mg/l	34.96 mg/l	162 mg/l	384 mg/l	No industrial effluent flow	No traces of nitrates	4.9 mg/l	18000 MPN	8000 MPN	5.5 MLD **Sample Point** $24^0$41'17.2032"N $78^0$25'34.9896"E	15 Hazen / None	Sehjad River
Bayana Nala	40-50 MLD	9.0 MLD Approx	7.73	32 ml/l	89.28 mg/l	197 mg/l	402 mg/l			2.3 mg/l	14000 MPN	7000 MPN	9 MLD **Sample Point** $24^0$41'54"N $78^0$25'07"E	20 Hazen / Foul	Sehjad River

1. STP for treating the sewage of the drains ultimately flowing to river ganga or its tributaries

Existing STP (location & capacity)	Capacity (operational)	Inlet/ Outlet water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point	Proposed/ under construction STP With completion date
No existing STP in District	No existing STP in District	No existing STP in District	No existing STP in District	No existing STP in District	No existing STP in District	The proposal of STP is taken in Lalitpur Sewerage Scheme under AMRUT 2.0 CWAP(City Water Action Plan) of this scheme is filled on AMRUT 2.0 portal, approval is awaited

2.1 STP Additional Information

Name of Drain	Position of STP with Capacity	Geo/Coordinates	Discharge Quantity from the STP in the Drain	Total per day Discharge from the Drain into the River
Sehjad Nala	No existing STP in District	No existing STP in District	No existing STP in District	5.5 MLD Approx
Bayana Nala				9.0 MLD Approx

Proposed STP (Location & Capacity)	Capacity (Operational)	Inlet/ Outlet Water quality and quantity	Number of tapped drains (quantity of discharge)	GAP in treatment	Final discharge point Geo Code/ Sampling Point	Proposed/ Under Construction STP with Completion Date
Location will be finalised after approval	32 MLD	Will be finalised after setup of STP	No drains tapped. Proposal sent for tapping drains and sewer lines, approval awaited	Will be decided after STP is Established	Final Discharge Sehjad river 25°13′27″N 78°34′06″E	STP proposed under AMRUT 2.0 CWAP approval is awaited

Existing FSTP Information

<table>
<tr><th>Existing FSTP (location & capacity)</th><th>Capacity (operational)</th><th>Inlet/ Outlet water quality & quantity</th><th>Number of tapped drains (quantity of discharge)</th><th>GAP (in treatment)</th><th>Final discharge point</th></tr>
<tr><td>Village- Dailwara, Lalitpur

Location- 24^{0}46'11.394"N 78^{0}23'19.542"E

32 KLD</td><td>32 KLD</td><td>Water Quality
<table>
<tr><th>Parameter</th><th>Inlet</th><th>Outlet</th></tr>
<tr><td>pH</td><td>7.19</td><td>7.02</td></tr>
<tr><td>COD</td><td>639 mg/l</td><td>32 mg/l</td></tr>
<tr><td>Ammonical Nitrogen</td><td>11.9 mg/l</td><td>0.10 mg/l</td></tr>
<tr><td>BOD</td><td>42.9 mg/l</td><td>5 mg/l</td></tr>
<tr><td>TSS</td><td>5342 mg/l</td><td>28 mg/l</td></tr>
<tr><td>TDS</td><td>1902 mg/l</td><td>48 mg/l</td></tr>
<tr><td>Nitrogen</td><td>29 mg/l</td><td>2.3 mg/l</td></tr>
<tr><td>FC</td><td>2.3*10^6 MPN</td><td>54 MPN</td></tr>
<tr><td>Phosphate</td><td>84 mg/l</td><td>1.1 mg/l</td></tr>
<tr><td>Solid</td><td>16886 mg/l</td><td>76 mg/l</td></tr>
</table>
Quantity -
Inlet Quantity- 32 KLD
Outlet Quantity- Approx 80 kg Manure and 2400 Litre water</td><td>Not applicable in FSTP</td><td>All capacity treated</td><td>Irrigating plantations</td></tr>
</table>

3. Hotels/ Ashrams/Dharmshalas/residential complexes abutting river Ganga or its tributaries

Number of Hotels/ ashrams/ dharamshalas	Consent to establish/ operate	STP	Discharge point	Action taken
Hotels – 19 Ashrams- 05 Dharamshala- 06				
Hotels The Grand Siddhi Hotel Aryan Inn Shubh Heaven Saroj Palace Akash Hotel Anand Residency Golden Drive Amar Palace Ayan Inn Amar Palace Paras Hotel Bundelkhand Hotel Hotel Briwasi Radhika Hotel Shri Prakash Inn Hotel Preeti Hotel Good Luck Hotel Bundelkhand Hotel Sandeep	No Hotel is registered by ULB/UPPCB	No STP only Septic Tanks	Local Drain	No action taken
Ashrams Shri Anandpur Saras Dham Pt Deendayal Upadhayay Vraddhjan Ashram Shivoham Ashram Bhraham Kumari Ashram Mother Teresa anath Ashram	No Ashram is registered by ULB/UPPCB	No STP only septic Tanks	Local Drain	No action taken
Dharamshala Shri Jagdish Dharamshala Gurunank Dharamshala Shri Narshing Dharamshala Shri Khetrpal Pal Ji Mandir Sant Ravidas Dharamshala Swarankar Samaj Dharamshala	No Dharamshala is registered by ULB/UPPCB	No STP only septic Tanks	Local Drain	No action taken

4. Industrial Effluent discharge by industries whose effluent is ultimately flowing to river Ganga or its tributaries

<table>
<tr><th>Total number of Industries</th><th>Daily effluent discharge</th><th>Treatment available (cetp/ petp/ etp operational capacity)</th><th>Effluent quality analysis (outlet of treatment plants Geo code sampling point)</th><th>GAP</th><th>Proposed/ under construction treatment project (with timeline)</th><th>Number of defaulting units- Action taken</th><th>Industrial solid waste generated/ day</th><th>Manner of disposal (Industrial solid waste)</th></tr>
<tr><td>1. Lalitpur Power Generation Company</td><td>3700 KLD
No effluent discharge outside the premise</td><td>ETP- 6000 KLD
STP- 165 KLD</td><td>
<u>ETP Outlet</u>
<table>
<tr><th>Parameter</th><th>Result</th></tr>
<tr><td>pH</td><td>7.62</td></tr>
<tr><td>TSS</td><td>6.4</td></tr>
<tr><td>BOD</td><td>14</td></tr>
<tr><td>COD</td><td>60</td></tr>
<tr><td>Oil & Grease</td><td>BDL(DL-1.0)</td></tr>
<tr><td>Phosphate</td><td>2.1</td></tr>
<tr><td>NO3</td><td>1.9</td></tr>
<tr><td>Cu</td><td>BDL(DL-0.05)</td></tr>
<tr><td>Ni</td><td>BDL(DL-0.01)</td></tr>
<tr><td>Cr+6</td><td>BDL(DL-0.05)</td></tr>
<tr><td>Pb</td><td>BDL(DL-0.01)</td></tr>
<tr><td>Cd</td><td>BDL(DL-0.003)</td></tr>
<tr><td>Zn</td><td>BDL(DL-0.05)</td></tr>
<tr><td>Fe</td><td>0.22</td></tr>
<tr><td>Hg</td><td>BDL(DL-0.001)</td></tr>
<tr><td>SO4</td><td>43.8</td></tr>
<tr><td>H2S</td><td>BDL(DL-0.05)</td></tr>
<tr><td>Cl</td><td>84</td></tr>
<tr><td>Temperature</td><td>26.6</td></tr>
<tr><td>Total Nitrogen</td><td>1.3</td></tr>
</table>
<u>STP Outlet</u>
<table>
<tr><td>pH</td><td>7.65</td></tr>
<tr><td>TSS</td><td>5.6</td></tr>
<tr><td>BOD</td><td>7.0</td></tr>
<tr><td>COD</td><td>32</td></tr>
<tr><td>Feacal Coliform</td><td>70</td></tr>
<tr><td>Total Nitrogen</td><td>2.1</td></tr>
<tr><td>Ammonical Nitrogen</td><td>1.5</td></tr>
<tr><td>P</td><td>0.24</td></tr>
</table>
Geo Coordinates
ETP- 24.800656^0 78.650644^0
STP- 24.804418^0 78.633679^0
</td><td>No gap</td><td>No project proposed</td><td>No defaulting units</td><td>8000-9000 metric ton Ash generated</td><td>20 % used in low land fill and rest 80% utilized gainfully to Cement and Brick industry</td></tr>
</table>

2. Bharat Explosives Limited, Ltp-Jhs NH 44	1.63 KLD	No CETP/ PETP/ STP 2 Solar Evaporation Tank Tank 1 Size: 50*29 MTR Tank 2 Size: 25*28 MTR	**Potable Water Analysis** **Parameter** / **Result** pH: 6.53 Colour: <2 Hazen Odour: Agreeable TSS: 6.8 Chromium: Below Quantification Limit PAH: Below Quantification Limit Uranium: Below Quantification Limit F: <1 NO3: Below Quantification Limit Cu: Below Quantification Limit Ni: Below Quantification Limit CN: Below Quantification Limit Pb: Below Quantification Limit Cd: Below Quantification Limit Zn: Below Quantification Limit Fe: Below Quantification Limit Hg: Below Quantification Limit SO4: Below Quantification Limit DDT: Below Quantification Limit Cl: 1.48 CaCO3: 1.0 **Geo Coordinates** 24°46'50.3"N 78°25'55.9"E	No Gap	ETP Already Exist, no project proposed	No defaulting Units	No Solid waste generated	Disposal through Evaporation pit

5. Regulation of Flood Plain Zone:

Area- cities/ towns	Notification of flood plain zone	Demarcation		Encroachment & direct discharge Geo Code/ Sampling point	Encroachment removal status	Timeline for completion
		No development zone pillars	Regulatory zone pillars			
Lalitpur	No, Notification till date. Can be fixed after completion of demarcation	Will be done after allocation of fund		No Encroachment. Direct discharge of Betwa River is 11 Lac Cusecs Geo Code: 25°13′27″N 78°34′06″E	No Encroachment.	Can be decided after allocation of demarcation to agency

6. Afforestation / Plantation along the bank of River Ganga and its tributaries and their flood plain zones

Area- cities/ towns	Total plantation Geo Code/ Sampling Point	Proposed project	Timeline
Lalitpur District	Total Plantation 41,76,400 Plantation done in Forest Ranges:	40 Lac Plantation	July –August 24
Bar Range	1,31,200 /24^{0}54'13.37" 78^{0}35'12.81"		
Talbehat Range	2,31,500 / 24^{0}58'13.37" 78^{0}34'27.54"		
Mehrouni Range	89,000 / 24^{0}29'58.84" 78^{0}53'06.02"		
Madawara Range	3,51,000 / 24^{0}17'09.45" 78^{0}49'39.22" -		
Jakhoura Range	91,000 / 24^{0}54'35.33" 78^{0}25'18.02" -		
Matatila Range	93,000 / 24^0 55'07.89" 78^{0}23'51.56"		
Gauna Range	2,96,000 / 24^{0}22'06.93" 78^{0}23'29.43"		
Lalitpur Range	2,03,000 / 24^{0}44'36.11" 78^{0}22'31.45"		

7. Mining and Stone Crushing in river bed and flood plain zone of River Ganga and its tributaries:

Area of mining	FIR/ case registered/ year	Vehicles/ mineral seized	Action taken status	Cases pending in Court	Enforcement of EMGSM 2020 and Sustainable sand mining management guidelines 2016
Village-Nadanwara, Area- 7.179 Hect River- Sehjad Village- Pachouni, Area- 1.618 Hect River- Sehjad	No FIR or case registered	No vehicle Seized or Mineral recovered	No fine/penalty charged	No cases pending	All work done under said guidelines

The Tribunal has already directed for furnishing following information by order dated 24.11.2023:-

(1) District Ganga Protection Plan at city/ town level

District Ganga Protection Committee (DGPC) is required to formulate the action plan for each city and town located on main stem of river Ganga and its tributary and such Action Plan has to be prepared in accordance with the River Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016 (para 6 and 55).

(2) Contents of the Action Plan (Consolidated District Wise Action Plan including each City and Town abutting river Ganga and its Tributary)

2.1 Sewage Management

(i) Sewage generation (for entire District and individual town wise):

Total Sewage Generation – 18.7 MLD

Nagar Palika, Lalitpur	Nagar Panchayat, Mehrouni	Nagar Panchayat, Pali	Nagar Panchayat, Talbehat
14.50 MLD Approx	1.6 MLD Approx	1.2 MLD Approx	1.4 MLD Approx

(ii) Existing Sewage Treatment Capacities:

There is no sewage treatment plant in the district. STP is proposed under AMRUT 2.0 Approval is pending.

(iii) Quantity of sewage is being treated (utilization capacity): Performance of STPs particularly for FC :

No sewage treated, as there is no STP.

(iv) Where treated sewage is being discharged (to Ganga or tributaries):

Untreated sewage is drained in tributary.

Nagar Palika, Lalitpur	Nagar Panchayat, Mehrouni	Nagar Panchayat, Pali	Nagar Panchayat, Talbehat
Sehjad River	Soak Pit	Outside ULB boundary sewage dries into agricultural field	Drain reaches Betwa River only in rainy season

(v) Reasons for Under-utilization of STPs (Connectivity of Households/ laying of sewer lines):

No Under – utilization as there is no existing STP

(vi) Current Gap in sewage treatment:

At present the gap is 100%, but it will get minimized in future as STP will get established.

(vii) Time bound plan for bridging the gap and tying up with financial arrangements and not delaying Tendering and identifying executing agencies or having any other issues:

Approval under AMRUT 2.0 is awaited

(viii) Where untreated sewage (when there is no STP) is discharged (Ganga /Tributaries):

Untreated sewage from Lalitpur is discharged in Sehjad River and untreated sewage from Talbehat dries up in drain in summer and winter season. This drain reaches Betwa River near Kadesara Kala only in rainy season.

2.2 Drains joining Ganga and Tributary

(i) Number of drains carrying sewage- sullage or industrial waste water joining Ganga/ tributaries with their Quantity and Quality:

2 major drains from Lalitpur join Sehjad river and 1 drain from Talbehat joins betwa river only during rainy season .Quality of major drains is mentioned above in details under Sewage.

(ii) Drains joining outside city and town limits but, either joining in village or nearby town:

No such drain

(iii) Inclusion of sewage flowing in drains into total sewage generation figures of each city and town and their interception and diversion to STPs:

No existing STP in district

2.3 Septage management (In case of no STP)

(i) Status of Septage management (with reference to FSTP/STP):

Existing FSTP with capacity of 32 KLD

(ii) Management of Grey water and its disposal:

Used for irrigating plantation purposes

2.4 Industrial Pollution Control

(i) Attach the list on no. of industries generating trade effluents, their place of disposal and compliance including CETPs (town wise):

Total number of Industries	Daily effluent discharge	Treatment available (cetp/ petp/ etp operational capacity)	Industrial solid waste generated/ day	Manner of disposal (Industrial solid waste)
1. Lalitpur Power Generation Company	3700 KLD No effluent discharge outside the premise	ETP- 6000 KLD STP- 165 KLD	8000-9000 metric ton Ash generated	20 % used in low land fill and rest 80% utilized gainfully to Cement and Brick industry
2. Bharat Explosives Limited	1.63 KLD	No CETP/ PETP/ STP 2 Solar Evaporation Tank Tank 1 Size: 50*29 MTR Tank 2 Size: 25*28 MTR	No Solid waste generated	Disposal through Evaporation pit

(3) Water quality status

Provide water quality status of Ganga and its tributaries in the District and city/ town in terms of its fitness for Bathing water quality that is, FC and FS:

Water quality of tributary is fit for organized bathing (Class A). Drinking water source without conventional treatment but after disinfection is of class A

Water Sample Analysis- Betwa River

Parameter	Value
Colour	Turbid
Odour	Odourless
pH	7.5
Electrical Conductance	470
Dissolved Oxygen	6.6
Calcium Hardness	115
Mg Hardness	70.0
Total Hardness	185
Total Dissolved Solids	284
Chloride	30
BOD	2.80
COD	12

(4) Notification of Flood Plain Zones:

There is no notification of Flood Plain Zone till date. Demarcation of flood plain zone will be done after allocation of fund.

(5) Issues relating to Environmental Flow:

Ecological flow

Identifying critical components of the flow regime that govern the environmental conditions (e.g. dry and wet season base flows, and different-sized high flows and floods) is needed to be done. Water levels of the river during the dry season are monitored and river water quality during dry season is monitored as Good. Inventory of migratory birds has been done by forest department every year and illegal fishing is banned. Lists of 13 dams with total capacity and minimum water level have been attached.

Name of Dam	River	Design Capacity (MCM)	Minimum Water Capacity (MCM)
Sajnam	Sajnam	83.50	8.65
Jamni	Jamini	92.87	8.80
Sehjad	Sehjad	114.39	8.49
Rajghat	Betwa	2200.00	238.70
Govind Sagar	Shahjad	96.79	16.76
Kachnaudha	Sajnam and Vanai	69.00	8.05
Utaari	Utaari	15.09	2.47
Bhawani	Sajnam	27.00	5.00
Bandai	Bandai	12.59	1.49
Jamraar	Jamraar	16.45	0.42
Lower Rohini	Rohini	12.74	0.72
Rohini	Rohini	12.11	3.82
Matatila	Betwa	641.06	78.48

Best Practices In the District

1. River rejuvenation process of more than 8 rivers is carried out simultaneously to revive and restore the natural flow and health of river.

2. Incidents of crop residue burning are negligible. Regular monitoring at village level, spreading awareness through various programs such as camps and meetings are carried out to encourage in-situ crop residue management practices.

3. 211 Hectare of land under is utilized under organic farming in the district.

4. Adopting cluster based approach under government funded Gau- adharit prakratik kheti programme to motivate farmers to adopt Natural farming in Gram Ganga Sewa Samiti.

5. Government schemes such as Atal- Bhujal Yojna, Khet Talab Yojna, and Pandit Deen Dayal Upadhyay Kisan Samriddhi Yojna have been implemented for ground water conservation.

6. Large numbers of farmers are sensitized and trained at village as well as block and district level through different awareness campaigns such as kisanpathshalas, goshtis, kisan melas, booklets, pamplets, hoardings etc. to encourage the use of alternatives to chemical fertilizers such as biofertilizers, biopesticides which are made available to them at subsidized rates.

7. Small check dam/pakka dam/bandi is being made to restore water in different forest blocks by forest department.

8. Ecotourism activites have been promoted at Lakhanjar, Pandav Van, and Deogarh.

9. Fly ash generated from power plant is being reused in low land filling, cement factories and bricks formation.

10. All measures are taken into consideration for ecotourism and no FOL based motor boats are promoted in water bodies.

11. River bank cleanup activities is being done nagar palika and nagar panchyat on regular basis. Ghat of river betwa is being cleaned by respective gram Ganga sewa samiti regularly.

Source of Information

Information and data have been collection in prescribed format prepared in order to compliance of hon'ble NGT order. A District Ganga committee meeting was organized under the chairmanship of District magistrate and directions were given to related department to furnish information in prescribed format.

Disclaimers if any

This report is prepared from the data of concerning department. The data of this report is applicable only at present scenario. Data may vary with due course of time. Therefore, it is recommended that all its relevant aspects/data can be taken into consideration for compliance of Hon'ble NGT order dated 11.09.2023 in O.A. 200/2014 MC Mehta Vs UOI and Ors.

Concluding remarks

All possible efforts are being made in the direction of river conservation through related departments. As we all know that rives are one of the main driving factors of any economy. District has dense network of rivers, dam and ponds. All of the water bodies are regularly monitored to save and conserve our precious water resources. Report has been finalized on the basis of data from concerning departments.

Divisional Director- Social Forestry
Member Convener District Ganga Committee
Lalitpur

District Magistrate/Chairman
District Ganga Committee
Lalitpur

INDEX - MAP OF DISTT.-LALITPUR

N

Scale - 1" = 1 Mile

JHANSI

MADHYA PRADESH

BETWA RIVER

DHOKWAN DAM

BABINA

MATATILA DAM

MATATILA DAM

SHIVPURI

TEHSIL TALBEHAT

TALBEHAT

BLOCK-TALBEHAT

SHAHZAD DAM

JAKHAURA

KHARKARILAKE

RAJGHAT DAM

BLOCK-JAKHAURA

RAJGHAT DAM

LALITPUR

GOVIND SAGAR DAM

BIRDHA

BLOCK-BIRDHA

SAJNAM DAM

P.BHAWANI DAM

P.UTARI DAM

P.KACHNODA DAM

TIKAMGARH

P.BHORAT DAM

MAHRONI

P.JAMRAR DAM

BLOCK-MAHRONI

P.LOWER ROHNI DAM

JAMNI DAM

MADAWRA

ROHNI DAM

P.BANDAI DAM

BLOCK-MADAURA

SAGAR

MADHYA PRADESH

पूराविरधा तालाब

पवा तालाब

चुरावनी तालाब

बुधावनी तालाब

मऊ तालाब

कुआगांव तालाब

धैलवारा तालाब

चौरी सागर तालाब

REFERENCE'S

Major District Road	
National highway	
Branch (Canal)	
District Boundry	
Block Boundry	
Tehsil Boundry	
MainVillage & Town	
Drain	
River	
Talab	

Report in
Compliance of Hon'ble NGT order
Dated 24.01.2024 in O.A. No. 200/ 2014
MC Mehta Vs Union of India and Ors.

Submitted by

DISTRICT GANGA COMMITTEE, GONDA(U.P.)

MC MEHTA vs. UNION OF INDIA (OA. NO. 200 OF 2014)

ADDITIONAL INFORMATION, AS PER THE ORDER 05.02.2024

S.NO	ADDITIONAL INFORMATION	ANSWER
1.	That STPs installed, are under utilised and that treated effluents are discharged into the drains carrying untreated waste water thereby defeating the very purpose of the efficacy of STPs.	There is no STPs installed in district Gonda.
2.	The quantification and estimation of sewage entering to each STP through sewer network or through interception and diversion of drains.	There is no STPs installed in district Gonda.
3.	The breakup of quantity of sewage fed to each STP through sewerage and drains, indicating location of STP (with geo coordinates) and quality and quantity of discharged sewage and its disposal location.	There is no STPs installed in district Gonda.
4.	These identified industries should be imposed with the Consent conditions to adopt ZLD system or maximize recycling/ reuse of treated effluents rather than consenting	The Industries established in district Gonda have personal setup for industrial water treatment.The treated water used for Agriculture purpose and different Use.

	them to discharge into drains with no burden on them.	
5.	We are of the view that additional columns are to be included reflecting the drain, position of STP with capacity, their geo-coordinates, discharge quantity from the STP in the drain and total per day discharge from the drain into river.	There is no STP in District Gonda but one FSTP of 32 KLD installed in village Kalandarpur chaube, Block- Ghanghari District Gonda under geo-coordinates Lat 27.139174º N, Long 81.903514 ºE.
6	Mention heavy metals analysis in respect of discharge from each of the drain in the report.	Heavy metals Testing results are awaited.

1. Sewage

Drain (city/town)	Total drain capacity (MLD)	Generation/day (MLD)	PH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride etc)	Nitrates	DO	TC	FC	Outlet flow and geocode/ sample point	Colour / odour	Discharged Into
NPP-Colonelganj (Purani Sabji Mandi Nala)	06	1.70	7.16	22	122	82	-	Water Sample Testing is under progress.	-	-	-	-	Lat-27.125168 Long-81.698561	Turbid/ Faint	Bhagariya Nala
NP-Paraspur (Balpur Road Nala)	3.0	1.40	7.82	2.5	13.6	-	-	Water Sample Testing is under progress.	-	9.1	-	-	Lat-27.03603 Long-81.787828	Turbid/ Faint	Belai Nala
NPP- Gonda (Guddumal Nala)	8.0	2.30	7.95	13.5	79.54	-	-	Water Sample Testing is under progress.	-	7.3	-	-	Lat-27.132299 Long-81.965562	Turbid/ Faint	Near Tedhi River (It is away from 12 to 15 KM from ULB)
NP-Dhanepur (Swagat Gate Nala)	3	0.75	7.2	65.00	180.00	144.00	ND	Water Sample Testing is under progress.	ND	ND	43 X 10^5	23 X1 0^5	Lat-27.222366 Long-82.13683	Turbid/ Faint	Near Bisuhi River

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NP-Katra Bazar (Sammay mata Nala)	8.0	0.95	7.91	2.7	13.2	-	-	Water Sample Testing is under progress.	-	9.2	-	-	Lat-27.2095 Long-81.7924	Turbid/ Faint	Near Tedhi River
NP-Tarabganj (Bhayapurva Nala)	3.4	0.85	3.64	31.50	89.00	71.00	-	Water Sample Testing is under progress.	-	-	43X 10^5	23 X1 0^5	Lat-26.950521 Long81.980636	Turbid/ Faint	Near Tedhi River
NP-Khargupur (Gandhi Chauraha Nala)	1.60	0.75	7.8	2.6	12.8	-	-	Water Sample Testing is under progress.	-	9.4	-	-	Lat-27.3804 Long81.9897	Turbid/ Faint	through Jhalahiya talab near Saryu River
First two drains meet in dry state. It is also recorded that very low amount of sewage is generated in the district Gonda. Besides this soakpits and septic tank is utilized for sewage treatment. Above mentioned drains are mostly discharged into ponds where through phytoremediaton water is treated and through natural flow goes into respective rivers as mentioned above . There is no LAB established in District Gonda for Sewage Quality Analysis. Heavy metal and other physico-chemical parameters analysis of above mentioned drains are send for water sample testing in laboratory by respective Nagar Palikas and Nagar Panchayats.															

Note:-Above information is provided by all concerned ULBs of District Gonda and UPPCB,Ayodhya.

2. STP for treating the sewage of the drains ultimately flowing to river ganga or its tributaries

Existing STP (location & capacity)	Capacity (operational)	Inlet/ Outlet water quality & quantity	Number of tapped drains (quantity of discharge)	Gap (in treatment)	Final discharge point	Proposed /under construction STP with completion date
-	-	-	-	-	-	-
There are no sewer line in Urban Local Body (Nagar Palika/Nagar Panchayat) in District Gonda and there is no established sewage treatment plant (STP) in District Gonda. At present time, Septic Tank or Soakpits are used for Sewage Treatment in Urban Areas. Also, the discharge is very less or negligible. One FSTP plant of 32KLD capacity established in village Kalandharpur Chaube,Block- Jhanjhari, District-Gonda.						

Note:-Above information is provided by NPP Gonda.

2.1 STP ADDITIONAL INFORMATION

Name Of Drain	Position of STP With Capacity	Geo/Coordinates	Discharge Quantity From The STP in the drain	Total Per Day Discharge From The Drain into The River
-	-	-	-	-

Proposed STP (location & capacity)	Capacity (Operational)	Inlet/Outlet water quality & quantity	Number of tapped drains(quantity of discharge)	GAP (in treatment)	Final discharge point Geocode/sampling point	Proposed/under construction STP with completion date
BELSAR NP	2.85 MLD	-	3	100%	(1) 26.969034,81.904887 (2) 26.968741, 81.907526 (3) 26.963822, 81.911138	CSAP(City Sanitation Action Plan) Approved DPR(Detailed Project Report) under Preparation
COLONELGANJ NPP	2.97 MLD	-	12	100%	(1) 27.119055, 81.696802 (2) 27.131538, 81.705444 (3) 27.136472, 81.707408 (4) 27.136487, 81.705101 (5) 27.137225, 8170384 (6) 27.132714, 81.69195 (7) 27.1331, 81.691414 (8) 27.1331, 81.691466 (9) 27.12777, 81.691354 (10) 27.125194, 81.698558 (11) 27.130289, 81.699656 (12) 27.130904, 81.694834	CSAP(City Sanitation Action Plan) Approved DPR(Detailed Project Report) under Preparation
DHANEPUR NP	2.40 MLD	-	2	100%	(1) 27.228755, 82.150583 (2) 27.227819, 82.148649	CSAP(City Sanitation Action Plan) Approved DPR(Detailed Project Report) under Preparation
KATRA NP	0.84 MLD	-	4	100%	(1) 27.207215 , 81.791441 (2) 27.206453 , 81.785178 (3) 27.211468 , 81.793897 (4) 27.209573 , 81.792479	CSAP(City Sanitation Action Plan) Approved DPR(Detailed Project Report) under Preparation

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KHARGUPUR NP	1.06 MLD	-	2	100%	(1) 27.3783, 81.98888 (2) 27.38055, 81.98555	CSAP(City Sanitation Action Plan) Approved DPR(Detailed Project Report) under Preparation
MANKAPUR NP	0.93 MLD	-	1	100%	(1) 27.062161, 82.215408	CSAP(City Sanitation Action Plan) Approved DPR(Detailed Project Report) under Preparation
NAWABGANJ NPP	1.78 MLD	-	4	100%	(1) 26.863501 , 82.136152 (2) 26.857909 , 82.141602 (3) 26.866411 , 82.145145 (4) 26.861591 , 82.138721	CSAP(City Sanitation Action Plan) Approved DPR(Detailed Project Report) under Preparation
TARABGANJ NP	2.15 MLD	-	3	100%	(1) 26.952809 , 81.98913 (2) 26.953752 , 81.990726 (3) 26.953533 , 81.990879	CSAP(City Sanitation Action Plan) Approved DPR(Detailed Project Report) under Preparation
PARASPUR NP	2.16 MLD	-	0	100%	-	-

Note:-Above information is provided by Jal Nigam Department.

3. Hotels/Ashrams/Dharmshalas/residential complexes abutting river Ganga or its tributaries

Number of Hotels/ Ashrams/ Dharamshalas	Consent to establish/ operate	STP	Discharge point	Action taken
16 (As per office records)				
01. M/s Deep Hotel, near Roadways Bus Stop, Civil Lines, District-Gonda.	Not Applied	Not Installed	Through septic tank/soak pit	Notice Issued
02. M/s Sapphaire Hotel, near L.B.S. Chauraha, Lucknow road, Malviya Nagar, District-Gonda.	Not Applied	Not Installed	Through septic tank/soak pit	Notice Issued
03. M/s Gonard Hotel, PuranaGanna Office, Vishnupuri, Civil Lines, District-Gonda.	Not Applied	Not Installed	Through septic tank/soak pit	Notice Issued
04. M/s Baba Hotel, near Roadways Bus stop, Civil Lines, District-Gonda.	Not Applied	Not Installed	Through septic tank/soak pit	Notice Issued
05. M/s Baba AtithiGrah, near Roadways Bus Stop, Civil Lines, District-Gonda.	Not Applied	Not Installed	Through septic tank/soak pit	Notice Issued
06. M/s Sharma Hotel,near Roadways Bus Stop, Patel Nagar, District-Gonda.	Not Applied	Not Installed	Through septic tank/soak pit	Notice Issued
07. M/s Anand Hotel, Station Road, Sahabganj, District-Gonda.	Not Applied	Not Installed	Through septic tank/soak pit	Notice Issued
08. M/s Sankar Hotel, Rani Bazar, Badgaon, District-Gonda.	Not Applied	Not Installed	Through septic tank/soak pit	Notice Issued
09. M/s Suraj Hotel, Jankinagar, District-Gonda.	Not Applied	Not Installed	Through septic tank/soak pit	Notice Issued

10. M/s Tulsi Lodge near Roadways Bus Stop, Civil Lines, District-Gonda.	Not Applied	Not Installed	Through septic tank/soak pit	Notice Issued
11. M/s Mayur Guest House, Station road, Chedipurwa, District-Gonda.	Not Applied	Not Installed	Through septic tank/soak pit	Notice Issued
12. M/s National Lodge, Station road, Sahabganj, District-Gonda.	Not Applied	Not Installed	Through septic tank/soak pit	Notice Issued
13. M/s Shivam Guest House, Sahabganj, District-Gonda.	Not Applied	Not Installed	Through septic tank/soak pit	Notice Issued
14. M/s Samarth Vatika, Badgaon, Khairabad, District-Gonda.	Not Applied	Not Installed	Through septic tank/soak pit	Notice Issued
15. M/s Jayashree Marriage Hall, Jankinagar, near Kunwar Talkies, District-Gonda.	Not Applied	Not Installed	Through septic tank/soak pit	Notice Issued
16. M/s Vidya Guest House, ImiliyaGurdayal, Badgaon, district-Gonda.	Not Applied	Not Installed	Through septic tank/soak pit	Notice Issued

Note:-Above information is provided by UPPCB,Ayodhya.

4. Industrial Effluent discharge by industries whose effluent is ultimately flowing to river Ganga or its tributaries

Total number of Industries	Daily effluent discharge	Treatment available (cetp/ petp/ etp operational capacity)	Effluent quality analysis (outlet of treatment plants Geocode Sampling Point)	GAP	Proposed/ under construction treatment project (with timeline)	Number of defaulting units- Action taken	Industrial solid waste generated/ day	Manner of disposal (Industrial solid waste)
8 (As per office records)								

35804

M/s. BalrampurChini Mills Ltd.,(Sugar Division) Babhnan, District-Gonda.	1970 KLD	ETP – 2000 KLD	Effluent sample collection and analysis is done by State pollution control board.	-	-	-	Ash- 21 TPD (Approx)	Ash used in land filling on low land.
M/s. BalrampurChini Mills Ltd.,(Distillery Division) Babhnan, District-Gonda.	ZLD	CPU-1000 KLD	CPU Treated Effluent sample collection and analysis is done by State pollution control board.	-	-	-	Boiler Ash-20 TPD (Approx)	Ash used in land filling on low land.
M/s. BalrampurChini Mills Ltd.,(Sugar Division) Datauli, Mankapur, District-Gonda.	800 KLD	ETP – 1600 KLD	Effluent sample collection and analysis is done by State pollution control board.	-	-	-	Ash- 24.50 TPD (Approx) and ETP Sludge-30.69 TPD (Approx)	Ash and ETP sludge used in Granulation plant for production of Organic Manure.
M/s. BalrampurChini Mills Ltd.,(Distillery Division) Datauli, Mankapur, District-Gonda.	ZLD	CPU – 1392 KLD	Effluent sample collection and analysis is done by State pollution control board.	-	-	-	Ash- 60 TPD (Approx) and fermented Sludge-08 TPD (Approx)	Ash and fermented sludge used in Granulation plant for production of Organic Manure.
M/s. BalrampurChini Mills Ltd.,(Sugar Division) Maijapur, District-Gonda.	700 KLD	ETP-800 KLD	Effluent sample collection and analysis is done by State pollution control board.	-	-	-	Ash- 50 TPD (Approx) and ETP Sludge-2.05 TPD (Approx)	Ash and ETP sludge used in Granulation plant for production of Organic Manure.

35805

M/s. BalrampurChini Mills Ltd.,(Distillery Division) Maijapur, District-Gonda.	ZLD	CPU-6350 KLD	CPU- Treated Effluent sample collection and analysis is done by State pollution control board.	-	-	-	Ash- 15 TPD (Approx) and CPU Sludge- 02 TPD (Approx)	Ash and CPU sludge used in Granulation plant for production of Organic Manure.
M/s. Bajaj Hindustan Sugar Ltd.,(Sugar Division) Kundarkhi, District-Gonda.	1200 KLD	ETP-3000 KLD	Effluent sample collection and analysis is done by State pollution control board.	-	-	-	Ash- 23 TPD (Approx)	Ash used in land filling on low land.
M/s. Bajaj Energy Ltd. Kundarkhi, District-Gonda.	980 KLD	ETP-1000 KLD	Effluent sample collection and analysis is done by State pollution control board.	-	-	-	Fly Ash- 580 TPD (Approx) and Bottom Ash 100 TPD (Approx)	Fly ash and Bottom ash used in Cement Industries and also used in Road construction Projects.

Note:-Above information is provided by UPPCB, Ayodhya.

5. Regulation of Flood Plain Zone:

Area- cities/ towns	Notification of flood plain zone	Demarcation		Encroachment & direct discharge GeoCode/ Sampling point	Encroachment removal status	Timeline for completion
		No development zone pillars	Regulatory zone pillars			
District-Gonda	There in No Area of City/Town effected by flood, That's why no required notification for specified City/Town area.	No development zone pillars have been installed	No Regulatory zone pillars have been installed	Stretch of river don't fall in city/ town hence no Encroachment & no need o f removal of encroachment	No encroachment city/ town so no timeline is set for removal of encroachment	No encroachment in city/town so no timeline is set for removal of encroachment

Note:-Above information is related to Irrigation Department.

6. Afforestation/Plantation along the banks of River Ganga and its tributaries and their flood plain zones

Total Plantation along the bank of River Saryu till 2023:				
S.No.	Area Cities/Town	Total Plantation Geo Code/Sampling Point	Proposed Project	Timeline
1	Sakraura, Colonelganj	Total Plantation 1875 Plants in 3 Ha. Plantation Year-2021-22 Geo Code/Sampling Point N 27.121831 E 81.679739	-	July 2024
2	Sakraura, Colonelganj	Total Plantation 1250 Plants in 2 Ha. Plantation Year-2022-23 Geo Code/Sampling Point N 27.124282 E 81.684588		
3	Sakraura, Colonelganj	Total Plantation 2200 Plants in 2 Ha. Plantation Year-2022-23 Geo Code/Sampling Point N 27.1202 E 81.68022		
4	Basehiya, Colonelganj	Total Plantation 3200 Plants in 2 Ha. Plantation Year-2023-24 Geo Code/Sampling Point N 27.122763 E 81.66340		
5	Sakraura, Colonelganj	Total Plantation 8000 Plants in 5 Ha. Plantation Year-2023-24 Geo Code/Sampling Point N 27.121849 E 81.679928		

Note:-Above information is provided by Forest Department, Gonda.

7. Mining and Stone Crushing in river bed and flood plain zone of River Ganga and its tributaries:

.

Area of mining	FIR/ case registered/ year	Vehicles/ mineral seized	Action taken status	Cases pending in Court	Enforcement of EMGSM 2020 and Sustainable sand mining management guidelines 2016
00	02	310	Penalty, royalty & mineral value recovered Rs.14019000/-	00	—

Note:-Above information is related to Mining Department.

1. The Tribunal has already directed for furnishing following information by order dated 24.11.2023

<table>
<tr><td>01.</td><td colspan="2">District Ganga Protection Plan at city/ town level
District Ganga Protection Committee (DGPC) is required to formulate the action plan for each city and town located on main stem of river Ganga and its tributary and such Action Plan has to be prepared in accordance with the River Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016 (Para 6 and 55).</td><td>There are around 198 villages which come under the stream of River Ganga Tributary Saryu and its constituting small river. There are 35 Ganga Gram Sewa Samiti in such villages in District Gonda. The meeting of District Ganga committee is held on regular basis in every month under the Supervision of District magistrate Gonda.</td></tr>
<tr><td>02.</td><td colspan="3">Contents of the Action Plan (Consolidated District Wise Action Plan including each City and Town abutting river Ganga and its Tributary)</td></tr>
<tr><td></td><td colspan="3">2.1Sewage Management</td></tr>
<tr><td></td><td>(i)Sewage generation (for entire District and individual town wise):</td><td colspan="2">1- Sewage generation of Entire Gonda District-11.40 MLD
2- Sewage generation of individual town wise mentioned below. The data was obtained from EO, NPP Gonda (Nodal).
<table>
<tr><th>S.N.</th><th>Name of ULB/town</th><th>Sewage generation(MLD)</th></tr>
<tr><td>1.</td><td>NPP Gonda</td><td>2.3</td></tr>
<tr><td>2.</td><td>NPP Colonelganj</td><td>1.7</td></tr>
<tr><td>3.</td><td>NPP Nawabganj</td><td>1.3</td></tr>
<tr><td>4.</td><td>NP Paraspur</td><td>1.4</td></tr>
<tr><td>5.</td><td>NP Khargupur</td><td>0.75</td></tr>
<tr><td>6.</td><td>NP Mankapur</td><td>0.7</td></tr>
</table></td></tr>
</table>

		7.	NP Katra	0.95
		8.	NP Tarabganj	0.85
		9.	NP Dhanepur	0.75
		10.	NP Belsar	0.7
			TOTAL	**11.40**

	(ii)Existing Sewage Treatment Capacities	32 KLD FSTP Plant
	(iii)Quantity of sewage is being treated (utilization capacity):	32 KLD FSTP Plant
	(iv)Performance of STPs particularly for FC	Not Applicable
	(v)Where treated sewage is being discharged (to Ganga or tributaries)	FSTP Treated Water used for Agriculture and Gardening purposes Sewage is not being discharged in river of Ganga or its Tributaries.
	(vi)Reasons for Under-utilization of STPs (Connectivity of Households/ laying of sewer lines)	Not Applicable
	(vii)Current Gap in sewage treatment	NO Gap
	(viii)Time bound plan for bridging the gap and tying up with financial arrangements and not delaying Tendering and identifying executing agencies or having any other issues	Working as given by Govt. of UP and and Govt. of India and proceed all rules and regulations for financial arrangement and identify of executive agency.
	(ix)Where untreated sewage (when there is no STP) is discharged (Ganga /Tributaries)	No any untreated Sewage flowing in drains. It is send to FSTP Plant for Treatment.
	2.2 Drains joining Ganga and Tributary (i)Number of drains carrying sewage- sullage or industrial waste water joining Ganga/ tributaries with their Quantity and Quality	NO any drains carrying sewage-sludge. Only grey water flowing in drains. The letter is sent to concern department for sampling and testing of drain water.
	(ii)Drains joining outside city and town limits but, either joining in village or nearby town	Main drainages are connected to nearby villages
	(iii)Inclusion of sewage flowing in drains into total sewage generation figures of each city and town and their interception and diversion to STPs	Total district sewage generation is 11.40MLD.
	2.3 Septage management (In case of no STP) (i)Status of Septage management (with reference to FSTP/STP)	Presently FSTP is in operational mode. (32KLD capacity established in village Kalandharpur Chaube, Block- Jhanjhari, District-Gonda)
	(ii)Management of Grey water and its disposal	Grey water is used for agricultural purposes and gardening.
	2.4 Industrial Pollution Control (i)Attach the list on no. of industries generating trade effluents, their place of disposal and compliance including CETPs (town wise):	There are 8 industries established in District Gonda, and no industries established nearby river Ganga and its tributaries in the Gonda District **(List attached Table No.4)**. The wastes generated from industries are disposed properly. The industrial waste materials are not exposed in any river of Gonda District. The meetings of

<table>
<tr><td></td><td></td><td>DGC are continuously held with industries for industrial flow observations and certain directions are continuously given to industries for proper waste disposal.</td></tr>
<tr><td>03.</td><td>(3) Water quality status. Provide water quality status of Ganga and its tributaries in the District and city/ town in terms of its fitness for Bathing water quality that is, FC and FS:</td><td>Water quality status

Monitoring of Drains/STPs/Rivers (Monitoring parameters should include General parameter)
Surface water monitoring Parameter (In mg/l except pH)

<table>
<tr><th>Pollution Parameter</th><th colspan="2">River Bisuhi</th><th colspan="2">River Manorama</th></tr>
<tr><td>Monitoring Date</td><td colspan="2">15.02.2024</td><td colspan="2">16.01.2024</td></tr>
<tr><td>Sampling Point</td><td>U/S River Bisuhi at Datuli Gonda</td><td>D/S Bisuhi at Upadhiyapur Grant DatuliGonda</td><td>U/S River Manorama Near ITI Mankapur Gonda</td><td>D/S River Manorama Near ITI Mankapur Gonda</td></tr>
<tr><td>pH</td><td>7.70</td><td>7.82</td><td>7.78</td><td>7.94</td></tr>
<tr><td>DO</td><td>7.1</td><td>7.0</td><td>6.9</td><td>6.8</td></tr>
<tr><td>Colour</td><td>Clear</td><td>Clear</td><td>Clear</td><td>Clear</td></tr>
<tr><td>TDS</td><td>152.0</td><td>164.0</td><td>158.0</td><td>164.0</td></tr>
<tr><td>BOD</td><td>2.5</td><td>2.7</td><td>2.6</td><td>2.8</td></tr>
<tr><td>COD</td><td>11.60</td><td>12.40</td><td>12.40</td><td>13.20</td></tr>
<tr><td>Hardness</td><td>164.0</td><td>172.0</td><td>162.0</td><td>170.0</td></tr>
<tr><td>Conductivity</td><td>324.0</td><td>346.0</td><td>304.0</td><td>328.0</td></tr>
<tr><td>Chloride</td><td>15.62</td><td>18.46</td><td>12.78</td><td>14.20</td></tr>
</table>

As per given information by all concerned Department, The water samples have been sent ULBs of the District Gonda Water quality status of Ganga and its tributary in the District and city have been sent for the sample testing.</td></tr>
<tr><td>04.</td><td>(4)Notification of Flood Plain Zones:</td><td>There in No Area of City/Town affected by flood, That's why no required notification for specified City/Town area.</td></tr>
<tr><td>05.</td><td>(5)Issues relating to Environmental Flow</td><td>Notification has been issued by dated 09.10.2018. The report is being submitted by the District Ganga Committee/ Environment Committee.</td></tr>
</table>

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Best Practices in District-Gonda

A.Organic farming:-

As per office record 12-15% of total cultivable land has been covered under organic farming. Approximately new 600 Ha agricultural lands are converted into organic farming under PKVY (Paramparagat Krishi Vikas Yojana) and about 28500 Ha land are converted with traditional methods of organic farming. As regards the adoption of organic farming practices, the respective department has formed 30 clusters under PKVY scheme with an area of 50 acres in each cluster. The farmers of these clusters are practising farming activities totally based on organic means. The use of pesticides, herbicides & chemical fertilisers etc is highly restricted in these clusters to meet the norms of the scheme.

B. Irrigation:-

Ring, drip and Sprinkler irrigation practices are adopted by farmers to control unauthorised use of irrigation water, more over certain farmers also use solar pump for irrigation purposes.

C. Waste Management:–

(i) Feacal Sludge Management-

One FSTP plant of 32KLD capacity established in village Kalandharpur Chaube, Block-Jhanjhari, District-Gonda.

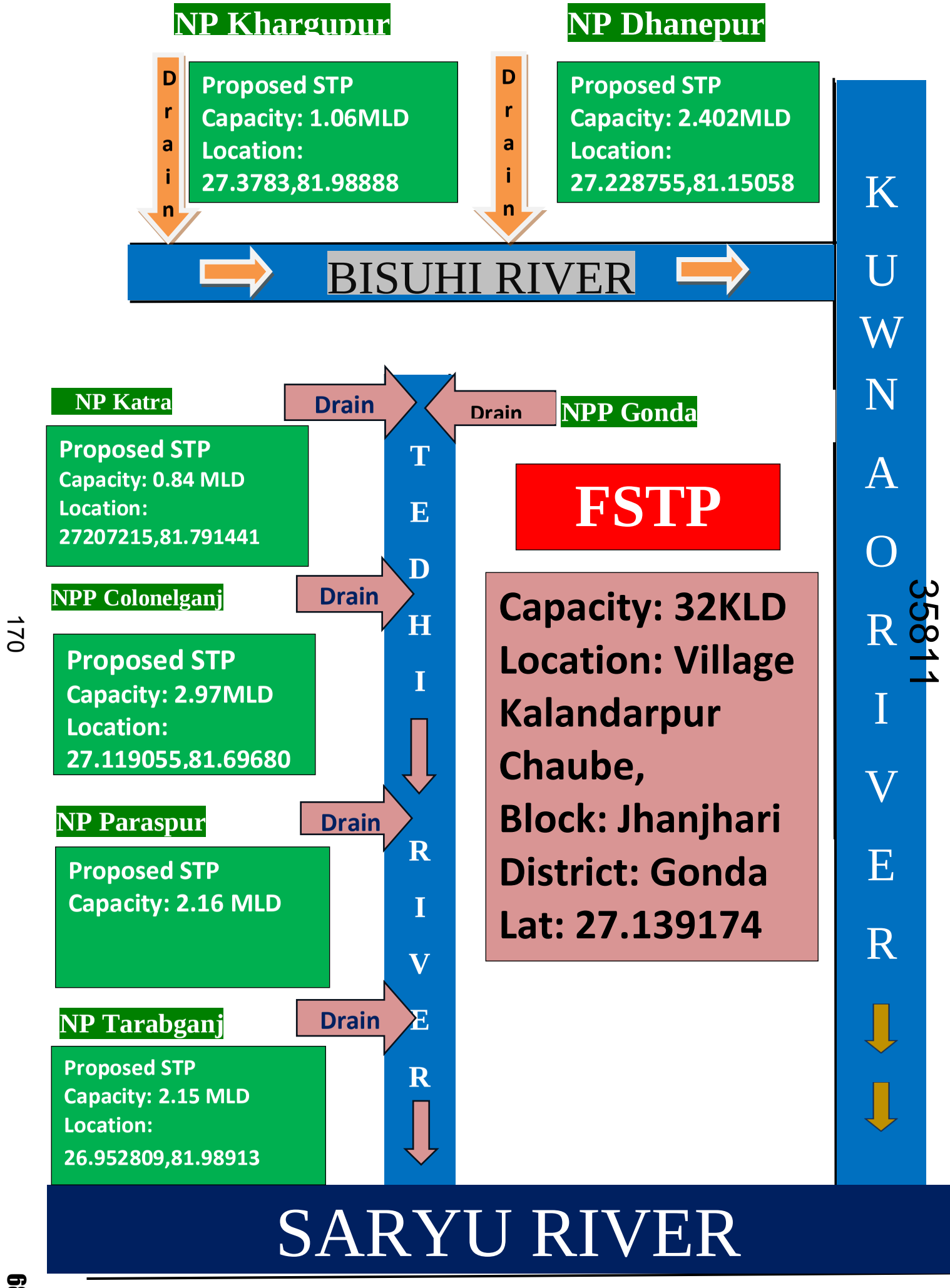
(ii)ODF+ Details -

In rural area 904 villages are selected for ODF+ Model villages and 301 villages are declared for ODF+ Model village rest village will be declared in financial year 2024-25.

D. Afforestation :–

In district Gonda total 4854070 plants has been planted during the financial year 2023-24.

*** All the above information have been compiled as per given by the respective Departments.



Layout map of River Saryu and its Tributaries with linked FSTP, proposed STP and drains of District Gonda

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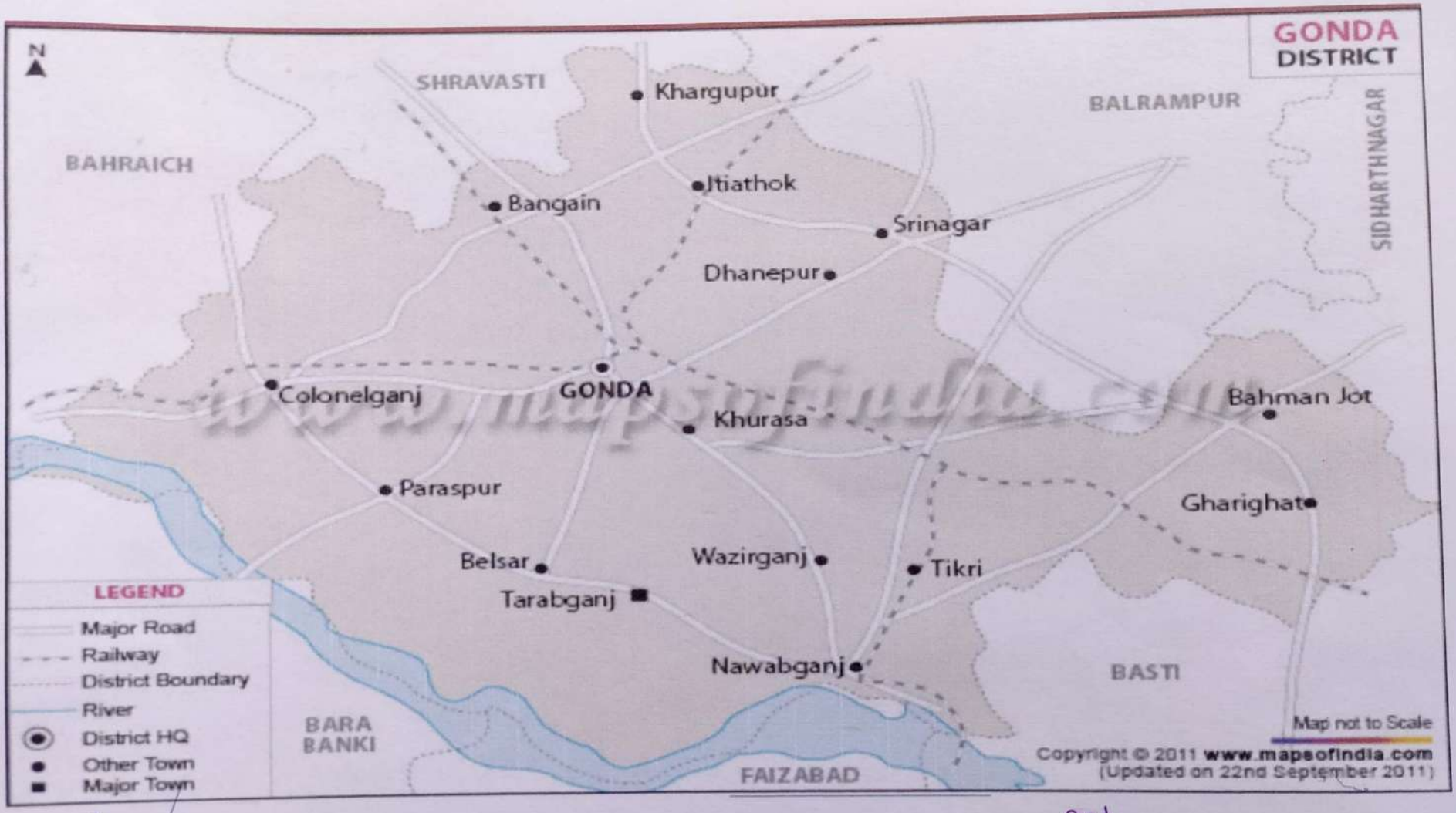
District Map



(P.K. Shukla)
Divisional Forest Officer/Secretary
DGC,Gonda

(Neha Sharma)
District Magistrate/Chairman
DGC,Gonda

Scanned with OKEN Scanner

Submitted in compliance of Hon’ble NGT order dated 05 February 2024 of the case number OA 200/2014 M.C. Mehta VS Union of India and others by the District Ganga Committee, Hamirpur (Uttar Pradesh)

MC MEHTA vs. UNION OF INDIA (OA. NO. 200 OF 2014)
ADDITIONAL INFORMATION, AS PER THE ORDER 05.02.2024
District: Hamirpur, Uttar Pradesh

<table>
<tr><th>S.NO</th><th>ADDITIONAL INFORMATION</th><th>ANSWER</th></tr>
<tr><td>1.</td><td>That STPs installed, are underutilised and that treated effluents are discharged into the drains carrying untreated wastewater thereby defeating the very purpose of the efficacy of STPs.</td><td>At Present, STP is proposed in the district to treat the sewage that is being generated in Hamirpur.</td></tr>
<tr><td>2.</td><td>The quantification and estimation of sewage entering to each STP through sewer network or through interception and diversion of drains.</td><td>At Present, STP is proposed in the district to treat the sewage that is being generated in Hamirpur.</td></tr>
<tr><td>3.</td><td>the breakup of quantity of sewage fed to each STP through sewerage and drains, indicating location of STP (with geo coordinates) and quality and quantity of discharged sewage and its disposal location.</td><td>At Present, STP is proposed in the district to treat the sewage that is being generated in Hamirpur.</td></tr>
<tr><td>4.</td><td>These identified industries should be imposed with the Consent conditions to adopt ZLD system or maximize recycling/ reuse of treated effluents rather than consenting them to discharge into drains with no burden on them.</td><td>There are no water-polluting industries present in Hamirpur district who is discharging their effluent in Yamuna and Betwa river.</td></tr>
<tr><td>5.</td><td>We are of the view that additional columns are to be included reflecting the drain, position of STP with capacity, their geo-coordinates, discharge quantity from the STP in the drain and total per day discharge from the drain into river.</td><td>At Present, STP is proposed in the district to treat the sewage that is being generated in Hamirpur.
Sewage water is directly discharge into river through drains.
The total per day discharge from drain to river is 7.53 MLD
<table>
<tr><th>Name of Drains</th><th>Position of STP with capacity</th><th>Geo co-ordinates of drains</th><th>Discharge quantity from the STP in the Drain</th><th>Total discha rge per</th></tr>
</table>
</td></tr>
</table>

					day
		Pataleshwar Drain, Hamirpur	At Present, STP is proposed in the district to treat the sewage that is being generated in Hamirpur. 2 STPs are proposed under SBM 2.0. All the drains have been installed with iron mesh at the meeting point with the river to prevent solid and plastic waste flowing into the river. NPP Hamirpur- STP of 5.75 MLD, I&D works (11 nos of drain to be tapped), 44.88 Km Sewer Network and 1 No Cesspool Tanker are proposed under SBM 2.0 programme. After approval of DPR work timeline will be given. NPP Rath- STP of 6.78 MLD, I&D works (11 nos of drain to be tapped), 52.56Km Sewer Network and 2 No Cesspool Tanker are proposed under SBM 2.0 program. After approval of DPR work timeline will be given.	Lat: 25 57'46.2312" N Long: 80 8'50.5572" E	At present STPs are proposed; therefore, no discharge from STP into the drains.	3.1 MLD
		Purana Yamuna Ghat Drain, Hamirpur		Lat: 25 57'58.6836" N Long: 80 8'29.2164" E		0.3 MLD
		Ramedi Nala Drain, Hamirpur		Lat: 25 56'49.6248" N Long:80 9'9.576" E		2.5 MLD
		Betwa Tat Bandh Nala, Gandhi Nagar Drain, Hamirpur		Lat:25 57'36.8496" N Long: 80 8'22.4448" E		0.20 MLD
		Purana Betwa Ghat Nala Drain, Hamirpur		Lat: 25 57'12.2868" N Long: 80 8'42.0648" E		1.20 MLD
		Diggi Ramedi Drain, Hamirpur		Lat:25 56'44.8872" N Long:80 9'27.756" E		0.23 MLD

6.	Mention heavy metals analysis in respect of discharge from each of the drain in the report.	

Drain (city/town/	**Heavy metals (Cr, Cu, Cd, Pb, Fe, Ni, Zn, Mn, As, Hg) (mg/L)**	**Discharged Into**
Pataleshwar Drain, Hamirpur	**Cr:**ND, **Cu:**ND, **Cd:**ND, **Pb:**ND, **Fe:**1.9238, **Ni:**ND, **Zn:**0.0286, **Mn:**0.2644, **As:** 0.004, **Hg:**ND	River Yamuna
Purana Yamuna Ghat Drain, Hamirpur	**Cr:**ND, **Cu:**ND, **Cd:**ND, **Pb:**ND, **Fe:**0.2568, **Ni:**ND, **Zn:**0.1608, **Mn:**0.2170, **As:**0.006, **Hg:**ND	River Yamuna
Ramedi Nala Drain, Hamirpur	**Cr:**ND, **Cu:**0.0052, **Cd:**ND, **Pb:**ND, **Fe:**0.4380, **Ni:**ND, **Zn:**0.3464, **Mn:**0.6971, **As:**0.002, **Hg:**ND	River Betwa
Betwa Tat Bandh Nala, Gandhi Nagar Drain, Hamirpur	**Cr:**ND, **Cu:**ND, **Cd:**ND, **Pb:**ND, **Fe:**0.5286, **Ni:**ND, **Zn:**0.1576, **Mn:**0.3861, **As:**0.007, **Hg:**ND	River Betwa
Purana Betwa Ghat Nala Drain, Hamirpur	**Cr:**ND, **Cu:**0.0052, **Cd:**ND, **Pb:**ND, **Fe:**1.1084, **Ni:**ND, **Zn:**0.0444, **Mn:**0.4604, **As:**0.007, **Hg:**ND	River Betwa
Diggi Ramedi Drain, Hamirpur	**Cr:**ND, **Cu:**ND, **Cd:**ND, **Pb:**ND, **Fe:**0.7098, **Ni:**ND, **Zn:**0.0381, **Mn:**0.3185, **As:** 0.005, **Hg:**ND	River Betwa

About the Hamirpur District

Hamirpur district is a part of Chitrakoot Dham Division of Uttar Pradesh state of India. Hamirpur town is the district headquarters. It consists of Four Tehsil namely Hamirpur, Maudaha, Rath, Sarila and Seven Blocks namely Gohand, Kurara, Maudaha, Muskara, Rath, Sarila, Sumerpur. Hamirpur district lies between Lattitude 25.7913° N and Longitude 80.0088° E. Hamirpur is bounded by districts Jalaun (Orai), Kanpur and Fatehpur in north, Banda in east, Mahoba in south and Districts of Jhansi and Jalaun on the West.

The district occupies an area of 4,121.9 km². The district has a population of 1,042,374 (2001 census). As of 2011 it is the third least populous district of Uttar Pradesh (out of 71), after Mahoba and Chitrakoot. Two major rivers Yamuna and Betwa meet here. On the banks of river Betwa lies the "Coarse sand" which is exported to many parts in Uttar Pradesh.

Languages Spoken

At the time of the 2011 Census of India, 66.43% of the population in the district spoke Hindi, 32.01% Bundeli and 1.36% Urdu as their first language. Tongues spoken in Hamirpur include Bundeli, which has a lexical similarity of 72 - 91% with Hindi (compared to 60% for German and English) and is spoken by about 7,800,000 people in Bundelkhand.

Demographics

As of the 2011 Census of India, Hamirpur NPP had a population of 35,475, of which 19,027 were males and 16,448 were females. The population in the age range of 0 – 6 years was 3,940 constituting 11.1% of the total population. The total number of literates were 26,121, which constituted 73.6% of the population with male literacy of 78.7% and female literacy of 67.6%. The effective literacy rate (of 7+ population) of Hamirpur NPP was 82.8%, of which male literacy rate was 88.5% and female literacy rate was 76.3%. Hamirpur had 6,802 households in 2011.

As of the 2001 Census of India, Hamirpur had a population of 32,035, of which 17,349 were males and 14,686 were females. The population in the age range of 0–6 years was 4,230, constituting 13.2% of the total population. The total number of literates were 22,592, which constituted 70.5% of the total population, with male literacy of 77.5% and female literacy of 62.3%. The effective literacy (of 7+ population) was 81.3%, of which male literacy rate was 89.1% and female literacy rate was 72.0%.

Drainage

The main river that flows through the district are Yamuna, Betwa, Dhasan, Chandrawal and Pandwahar. Besides, there are many minor streams. These streams for most part of the year are torrents which get swollen greatly during the rains but at other times quickly subside into narrow stream with a very small discharge. The river Yamuna enters the district from Jalaun, first touching the district near Misripur, flowing from west to east forming some portion of the northern boundary. The Betwa flows along the north-eastern boundary from the point where the Dhasan joins it to the village of Radhina in tahsil Rath. The Betwa,

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a tributary to Yamuna, is the longest river in the district. Dhasan, emanating from the Vindhyachal flows through Rath tahsil, forming the western boundary of the district. Ken, for some 22 kms. forms the boundary between tahsil Maudaha and district Banda. It also emanates from Vindhyachal and flows.

Climate

The intense heat and dryness especially in the north are the main climatic characteristics. The hot weather commences early in March and subsides only with the outbreak of the monsoon. If monsoon rains are delayed the heat becomes actually distinctly trying. The rocky terrain in the south adds to the blazing glare of the hot weather day. On the other hand, atmosphere is generally clear and free from the dust. The nights during cold weather are generally chilly and crisp. During the rains the climate becomes unhealthy. Indeed, rainy season gives notoriety to climate for unhealthiness. The district has the lowest rainfall among the districts of Jhansi division. The rainfall in the district is capricious and irregular. It is characterized by heavy falls causing floods somewhere with long breaks or widespread failure somewhere.

Forestry

Forestry does not play an important role in the economy of the district. Mainly firewood is produced in the forests. The northern portion of the district is particularly devoid of natural vegetation. The hardy Babool grows spontaneously, and in the riverine tracts where it is generally mixed Jungle of small and stunted types. The Babool is useful for the manufacture of plough and carts. Khais is a common tree, and the other trees include the Hingol, Karaunda and Karil. In the south, in tahsils Charkhari, Kulpahar and Mahoba, the hills as well as considerable level stretches are covered with forest. The tree that grows in the great profusion in these forests is Tendu. Other common species besides the Mahua are the Semal, Dadhi, Dhawa, Gurja, Dhak, Rionikhair and Kardhai. During the year 2008-09, the covered area under forest was 24,473 hectares out of total area of 390,865 Hectares (according to Statistical Diary 2010). This comes to 6.26 percent of the total area. The chief trees thus found in the forests of Maudaha and Rath tahsils are Babool, Dhak, Sahjan, Tendu, Teek, Semal, Neem, Jamun, Mahuwa and Mango. Among the wild animal’s tiger is a very rare visitant but leopard is fairly common in the rocky hills and forests of Mahoba and ulpahar. The bear is occasionally found. Wolves and hyenas are common animals to be found in hills and ravines throughout the district. Other animals commonly found in the district are jaickals, foxes, pigs, sambhar and deer. Hares are common only in south. Monkeys are uncommon. So far birds are concerned, peafowl, gray partridge, peacock, koil and ducks are most common. Of migratory waterfowls, various species of geese, duck and teal visit the area in cold weather. Numerous varieties of cranes, stocks sand other waders also congregate at the places of water.

Information Submitted in compliance of Hon'ble NGT order dated 05.02.2024 in O.A. 200/2014 MC Mehta Vs UOI and Ors. by District Ganga Committee, Hamirpur

I. Sewage

Drain (city/town/	**Total Drain Capacity**	**Generation/ day**	**PH**	**BOD**	**COD**	**TSS**	**TDS**	**Heavy metals (Cr, Cu, Cd, Pb, Fe, Ni, Zn, Mn, As, Hg) (mg/L)**	**DO**	**TC**	**FC**	**Outlet flow**	**Colour / odour**	**Discharged Into**
Pataleshwar Drain, Hamirpur	5.6 MLD	3.1 MLD	7.63	52	235.2	88	752	**Cr:**ND, **Cu:**ND, **Cd:**ND, **Pb:**ND, **Fe:**1.9238, **Ni:**ND, **Zn:**0.0286, **Mn:**0.2644, **As:** 0.004, **Hg:**ND	2.8	13 lakhs	7.8 lakhs	3.1 MLD	Muddy	River Yamuna
Purana Yamuna Ghat Drain, Hamirpur	4.8 MLD	0.3 MLD	7.56	56	244.8	114	842	**Cr:**ND, **Cu:**ND, **Cd:**ND, **Pb:**ND, **Fe:**0.2568, **Ni:**ND, **Zn:**0.1608, **Mn:**0.2170, **As:**0.006, **Hg:**ND	2.9	2.7 laks	1.1 lakhs	0.3 MLD	Muddy	River Yamuna
Ramedi Nala Drain, Hamirpur	4.5 MLD	2.5 MLD	7.6	102	297.6	144	837	**Cr:**ND, **Cu:**0.0052, **Cd:**ND, **Pb:**ND, **Fe:**0.4380, **Ni:**ND, **Zn:**0.3464, **Mn:**0.6971, **As:**0.002, **Hg:**ND	2.4	7 lakhs	3.3 lakhs	2.5 MLD	Yellowish	River Betwa
Betwa Tat Bandh Nala, Gandhi Nagar Drain, Hamirpur	3.8 MLD	0.20 MLD	7.45	76	268.8	119	794	**Cr:**ND, **Cu:**ND, **Cd:**ND, **Pb:**ND, **Fe:**0.5286, **Ni:**ND, **Zn:**0.1576,	1.4	9.3 lakhs	2 lakhs	0.20 MLD	Yellowish	River Betwa

								Mn:0.3861, **As:**0.007, **Hg:**ND						
Purana Betwa Ghat Nala Drain, Hamirpur	5.3 MLD	1.20 MLD	7.46	68	254.4	126	924	**Cr:**ND, **Cu:**0.0052, **Cd:**ND, **Pb:**ND, **Fe:**1.1084, **Ni:**ND, **Zn:**0.0444, **Mn:**0.4604, **As:**0.007, **Hg:**ND	2.6	11 thousand	7.9 thousand	1.20 MLD	Turbid	River Betwa
Diggi Ramedi Drain, Hamirpur	3.2 MLD	0.23 MLD	7.41	90	278.4	121	1012	**Cr:**ND, **Cu:**ND, **Cd:**ND, **Pb:**ND, **Fe:**0.7098, **Ni:**ND, **Zn:**0.0381, **Mn:**0.3185, **As:** 0.005, **Hg:**ND	3.4	22 lakhs	7 lakhs	0.23 MLD	Colourless	River Betwa

2. STP (SEWAGE TREATMENT PLANT)

Existing STP (location & capacity)	**Capacity (operational)**	**Inlet/ Outlet water quality & quantity**	**Number of tapped drains (quantity of discharge)**	**Final discharge point**	**Proposed/ Under construction STP with Completion date**
At Present, STP is proposed in the district to treat the	At present STP is proposed in	At present STP is proposed in Hamirpur district. The	A total of 11 no of drain are to be tapped in Hamirpur City and a	The sewage generated from Hamirpur Nagar Palika area is being discharged into rivers. (Yamuna and	NPP Hamirpur- STP of 5.75 MLD, I&D works (11 nos of drain to be tapped), 44.88 Km Sewer Network and 1 No Cesspool Tanker are proposed under SBM 2.0 programme. After approval of DPR work timeline will be given. NPP Rath- STP of 6.78 MLD, I&D works (11 nos of drain to be tapped), 52.56Km Sewer Network and 2 No Cesspool

sewage that is being generated in Hamirpur.	Hamirpur district.	proposed STP of Hamirpur and Rath will have a capacity of 5.75 MLD and 6.78 MLD.	total of 11 drains to be tapped in Rath city for sewage treatment.	Betwa).	Tanker are proposed under SBM 2.0 program. After approval of DPR work timeline will be given.

2.1 STP Additional Information:

NAME OF DRAIN	POSITION OF STP WITH CAPACITY	GEO/COORDINATES of the Drains	DISCHARGE QUANTITY FROM THE STP IN THE DRAIN	TOTAL PER DAY DISCHARGE FROM THE DRAIN INTO THE RIVER
Pataleshwar Drain, Hamirpur	At Present, STP is proposed in the district to treat the sewage that is being generated in Hamirpur. 2 STPs are proposed under SBM 2.0. All the drains have been installed with iron mesh at the meeting point with the river to prevent solid and plastic waste flowing into the river. NPP Hamirpur- STP of 5.75 MLD, I&D works (11 nos of drain to be tapped), 44.88 Km Sewer Network	Lat: 25 57'46.2312" N Long: 80 8'50.5572" E	At present STPs are proposed; therefore, no discharge from STP into the drains.	3.1 MLD
Purana Yamuna Ghat Drain, Hamirpur		Lat: 25 57'58.6836" N Long: 80 8'29.2164" E		0.3 MLD
Ramedi Nala Drain, Hamirpur		Lat: 25 56'49.6248" N Long:80 9'9.576" E		2.5 MLD
Betwa Tat Bandh Nala, Gandhi Nagar Drain, Hamirpur		Lat:25 57'36.8496" N Long: 80 8'22.4448" E		0.20 MLD

Purana Betwa Ghat Nala Drain, Hamirpur	and 1 No Cesspool Tanker are proposed under SBM 2.0 programme. After approval of DPR work timeline will be given. NPP Rath- STP of 6.78 MLD, I&D works (11 nos of drain to be tapped), 52.56Km Sewer Network and 2 No Cesspool Tanker are proposed under SBM 2.0 program. After approval of DPR work timeline will be given.	Lat: 25 57'12.2868" N Long: 80 8'42.0648" E		1.20 MLD
Diggi Ramedi Drain, Hamirpur		Lat:25 56'44.8872" N Long:80 9'27.756" E		0.23 MLD

Drainage Information:

Proposed STP (Location & capacity)	**Capacity (operational)**	**Inlet/Outlet water quality and quantity**	**Number of tapped drains (quantity of discharge)**	**Gap (in treatment)**	**Final discharge point, Geo code/ sampling point**	**Proposed/ under construction STP with completion date**
NPP Hamirpur- STP of 5.75 MLD, I&D works (11 nos of drain to be tapped), 44.88 Km Sewer Network and 1 No Cesspool Tanker are proposed under SBM 2.0 programme. After approval of DPR work timeline will be given.	5.75 MLD when operational	At Present, STP is porposed in the district to treat the sewage that is being generated in Hamirpur. (11 nos of drain to be tapped in Hamirpur and 11 nos of drains to be tapped in Rath)		STP Proposed	At Present, STP is proposed in the district to treat the sewage that is being generated in Hamirpur.	After approval of DPR work timeline will be given.
NPP Rath- STP of 6.78 MLD, I&D works (11 nos of drain to be tapped), 52.56Km Sewer Network and 2 No Cesspool Tanker are	6.78 MLD when operational					After approval of DPR work timeline will be given. NPP Rath does not discharge the

proposed under SBM 2.0 program. After approval of DPR work timeline will be given.					sewage generated from city in any tributary of River Ganga.

3. HOTELS/ ASHRAMS

Number of Hotels/ ashrams/ dharamshalas	Consent to establish/ operate	STP	Discharge point	Action taken
1. Hotel Pooja, Near Islamiya Inter College, Aman Saheed, Hamirpur	Not Applied	STP is proposed in Hamirpur, therefore the sewage is discharged into septic tanks/soak pits.	Through septic tanks/soak pits	Notice sent vide letter dated 30.12.2023 and 14.03.2024 for complying the provision of Water (Pollution, Prevention and Control) Act 1974 and its amendments and Air (Pollution, Prevention and Control) Act 1981 and its amendments.
2. Vedika Guest House King Road, Hamirpur	Not Applied	STP is proposed in Hamirpur, therefore the sewage is discharged into septic tanks/soak pits.	Through septic tanks/soak pits	Notice sent vide letter dated 30.12.2023 and 14.03.2024 for complying the provision of Water (Pollution, Prevention and Control) Act 1974 and its amendments and Air (Pollution, Prevention and Control) Act 1981 and its amendments.
3. Hotel Aashirvad Rahuniya Dharamshala, Hamirpur	Not Applied	STP is proposed in Hamirpur, therefore the sewage is discharged into septic tanks/soak pits.	Through septic tanks/soak pits	Notice sent vide letter dated 30.12.2023 and 14.03.2024 for complying the provision of Water (Pollution, Prevention and Control) Act 1974 and its amendments and Air (Pollution, Prevention and Control) Act 1981 and its amendments.
4. Kanha Dham Hotels Private Limited Meharpuri Jail Road, Hamirpur.	Not Applied	STP is proposed in Hamirpur, therefore the sewage is discharged into septic tanks/soak pits.	Through septic tanks/soak pits	Notice sent vide letter dated 30.12.2023 and 14.03.2024 for complying the provision of Water (Pollution, Prevention and Control) Act 1974 and its amendments and Air (Pollution, Prevention and Control) Act 1981 and its amendments.

4. Industrial Effluent discharge

Total number of Industries	Daily effluent discharge	Treatment available (cetp/ petp/ etp operational capacity)	Effluent quality analysis (outlet of treatment plants Geo code Sampling point)	GAP	Proposed/ under construction treatment project (with timeline)	Number of defaulting units- Action taken	Industrial solid waste generated/ day	Manner of disposal (Industrial solid waste)
There are no water-polluting industries present in Hamirpur district who is discharging their effluent in Yamuna and Betwa river.								

Name of the District	Name and Address of Unit	Operational Status(Operational/ Not Operational)	Status of Display Board (Installed/ Not installed)	Status of HW Authorisation	HW Units submitted annual returns (Yes/ No)	Authorized Quantity of Hazardous Waste (Metric Tonne)				Total Quantity	*Quantity of Hazardous Waste generated as per Annual Return within the State/UT (Metric Tonne)				Total Quantity	Details on Import and Export of Hazardous Waste			
						Landfillable	Incinerable	Recyclable	Utilizable		Landfillable	Incinerable	Recyclable	Utilizable		Quantity of HW imported during the year(MetricTonne)	Type of HW	Quantity of HW exported during the year (Metric Tonne)	Type of HW
					1	2	3	4	5		6	7	8	9		10	11	12	13
Hamirpur	Hindustan Unilever Limited (Unit-3) Plot no. A-1, UPSIDC Industrial Estate, Bharua Sumerpur,	Operational	Installed	Granted	YES	60	0	90	0	150	0	0	0	0	0	0	-	0	-

	Distt Hamirpur																	
Hamirpur	Hindustan Unilever Limited (Unit-1) Plot no. A-1, UPSIDC Industrial Estate, Bharua Sumerpur, Distt Hamirpur	Operational	Installed	Granted	YES	15	0	20	0	35	3	0	30	0	33.1	0	-	0	-
Hamirpur	Hindustan Unilever Limited (Unit-2) Plot no. A-1, UPSIDC Industrial Estate, Bharua Sumerpur, Distt Hamirpur	Operational	Installed	Granted	YES	50	0	60	0	110	1	0	19	0	20	0	-	0	-
Hamirpur	Unilever India Limited(Unit-4) Plot no. A-2, UPSIDC Industrial Estate, Bharua Sumerpur,	Operational	Installed	Granted	YES	60	0	90	0	150	1	0	16	0	17	0	-	0	-

	Distt Hamirpur																		
Hamirpur	Rimjhim Ispat Ltd, B-22, 23, Industrial Area, Bharua, Hamirpur	Operational	Installed	Granted	YES	90	0	0	0	90	17	0	0	0	17.5	0	-	0	-
Hamirpur	A. G. Trading Company E-4, Industrial Area, Bharua Sumerpur, Hamirpur	Operational	Installed	Granted	YES	0	0	70	0	70	0	0	0	0	0.11	0	-	0	-
Hamirpur	Amit Packaging, F 93 to F 96, UPSIDC Industrial Estate, Bharua Sumerpur, Distt Hamirpur	Operational	Installed	Granted	YES	0	0	2.64	0	2.6	0	0	0	0	0.02	0	-	0	-
Hamirpur	Jaykaycem Central Works , Village-Ingotha, Pargana-Sumerpur, Distric - Hamirpur	Operational	Installed	Granted	YES	1.3	0	7	0	8.3	0	0	0	0	0	0	-	0	-

5. Regulation of Flood Plain Zone:

Area- cities/ towns Notification of flood plain zone	Demarcation		Encroachment & direct discharge Geocode/Sampling Point	Encroachment removal status	Timeline for completion
	No development zone pillars	Regulatory zone pillars			
For the demarcation of the Flood Plain Zone, a DPR has been prepared by the office of Executive Engineer Maudaha Bandh and has been sent for fund allocation to the higher authorities by letter no: 2401 dated 22.12.2023 for approval. After the allocation of funds, the demarcation of the Flood Plain Zone will be carried out in the Hamirpur district.					

6. AFFORESTATION/ PLANTATION along the bank of River Ganga and its tributaries and their flood plain zones

Area- cities/ towns	Total plantation Geo Code/ Sampling Point	Proposed project	Timeline
Hamirpur	A total of 2700 Hectares of land has been planted in the year 2023-2024 within 10 Kms of main river to restore the floodplains and to increase green cover along with stabilizing the soil, increase water holding capacity of the soil and decrease soil erosion.	In the upcoming year 2024 - 2025, approximately 2000 Hectares of land is to be planted by the forest department.	Forest department is doing plantation and soil conservation work every year along the banks of the rivers, this year (2023-24) a total of 2700 hectares of land has been planted. The timeline for plantation of the proposed 2000 Hectares of land is to be completed by October 2024 - 25.

Geotag Location of Plantations along the river banks:

Sl. No	Name of forest department	Name of Plan	Name of Range	Name of River	Name of the place	Area in hectares	G.P.S. Coordinates	
							Latitude	Longitude
1	2	3	4	5	6	7	8	9

1	Hamirpur	Social Forestry general	Maudaha	Ken	Bhutsi Forest Block	10	N 25^0 40'22"	E 80^0 18'09"
2	Hamirpur	Social Forestry general	Maudaha	Birma	Bandur Khurd 1st Forest Block	25	N 25^0 49'07.61"	E 79^0 51'52.14"
3	Hamirpur	Social Forestry general	Maudaha	Birma	Bandur Khurd 2nd Forest Block	22	N 25^0 48'40.27"	E 79^0 52'13.28"
4	Hamirpur	Social Forestry general	Maudaha	Ken	Bejemau Forest Block	20	N $25^0$40'50"	E 80^0 18' 06"
					Total	**77**		
1	Hamirpur	Social Forestry general	Hamirpur	Betwa	Indrapuri Forest Block-1	20	N 25° 53' 30.15"	E 079° 55' 14.30"
2	Hamirpur	Social Forestry general	Hamirpur	Betwa	Indrapuri Forest Block-II	20	N 25° 53' 27.30"	E 079° 55' 16.92"
3	Hamirpur	Social Forestry general	Hamirpur	Betwa	Indrapuri Forest Block-II	20	N 25° 53' 18.27"	E 079° 55' 21.29"
4	Hamirpur	Social Forestry general	Hamirpur	Betwa	Bindpuri Forest Block I	20	N 25° 53' 30.74"	E 079° 55' 17.92"
5	Hamirpur	Social Forestry general	Hamirpur	Betwa	Bindpuri Forest Block II	20	N 25° 53' 57.82"	E 079° 56' 44.69"

6	Hamirpur	Social Forestry general	Hamirpur	Betwa	Bindpuri Forest Block III	20	N 25° 53' 45.14"	E 079° 56' 24.14"
7	Hamirpur	Social Forestry general	Hamirpur	Yamuna	Mishripur Forest Block- I	20	N 26° 05' 8.22"	E 079° 56' 16.32"
8	Hamirpur	Social Forestry general	Hamirpur	Yamuna	Mishripur Forest Block- II	20	N 26° 05' 31.44"	E 079° 56' 27.72"
9	Hamirpur	Social Forestry general	Hamirpur	Yamuna	Mishripur Forest Block- III	20	N 26° 05' 14.1"	E 079° 56' 7.92"
10	Hamirpur	Social Forestry general	Hamirpur	Yamuna	Mishripur Forest Block- IV	20	N 26° 05' 41.34"	E 079° 56' 27.12"
11	Hamirpur	Social Forestry general	Hamirpur	Yamuna	Mishripur Forest Block- V	20	N 26° 05' 53.16"	E 079° 56' 41.94"
12	Hamirpur	Social Forestry general	Hamirpur	Yamuna	Barua Forest Block I	20	N 26° 03' 35.1"	E 079° 58' 25.38"
13	Hamirpur	Social Forestry general	Hamirpur	Yamuna	Barua Forest Block II	20	N 26° 03' 31.32"	E 079° 58' 20.16"
14	Hamirpur	Social Forestry general	Hamirpur	Yamuna	Chandpur Forest Block I	20	N 25° 58' 25"	E 080° 07' .16"
15	Hamirpur	Social Forestry general	Hamirpur	Yamuna	Chandpur Forest Block II	20	N 25° 59' .22"	E 080° 06' .00"

16	Hamirpur	Social Forestry general	Hamirpur	Yamuna	Chandupur Forest Block III	20	N 25° 59' 13.2"	E 080° 05' 31.0"
17	Hamirpur	Social Forestry general	Hamirpur	Yamuna	Sikraudi Forest Block- I	20	N 25° 59' .40"	E 80° 04' 47.6"
18	Hamirpur	Social Forestry general	Hamirpur	Yamuna	Sikraudi Forest Block- II	20	N 26° 22' 07.0"	E 80° 04' 37.9"
19	Hamirpur	Social Forestry general	Hamirpur	Yamuna	Manjhupur Forest Block	20	N 25° 58' 33.4"	E 080° 06' 39.2"
20	Hamirpur	Social Forestry general	Hamirpur	Betwa	Badanpur Forest Block	20	N 25° 57' 7.76"	E 080° 06' 38.79"
21	Hamirpur	Social Forestry general	Hamirpur	Betwa	Kandaur Forest Block - I	20	N 25° 54' 46.63"	E 079° 58' 44.97"
22	Hamirpur	Social Forestry general	Hamirpur	Betwa	Kandaur Forest Block - II	20	N 25° 54' 34.93"	E 079° 58' 58.57"
23	Hamirpur	Social Forestry general	Hamirpur	Betwa	Kandaur Forest Block - III	10	N 25° 54' 29.22"	E 079° 59' 09.91"
24	Hamirpur	Social Forestry general	Hamirpur	Betwa	Naithi Forest Block	20	N 25° 55' 01.17"	E 080° 03' 43.94"
25	Hamirpur	Social Forestry general	Hamirpur	Betwa	Gimuha Forest Block	20	N 25° 56' 23.75"	E 080° 05' 05.02"

26	Hamirpur	Social Forestry general	Hamirpur	Betwa	Patara Forest Block	20	N 25° 54' 42.88"	E 080° 02' 51.13"
27	Hamirpur	Social Forestry general	Hamirpur	Betwa	Para Forest Block	20	N 25° 55' 07.07"	E 079° 58' 41.34"
28	Hamirpur	Social Forestry general	Hamirpur	Betwa	Magredi Forest Block	20	N 25° 54' 56.22"	E 079° 57' 59.92"
29	Hamirpur	Social Forestry general	Hamirpur	Yamuna	Bhauli Forest Block -I	20	N 26° 02' 52.9"	E 80° 03' 32.3"
30	Hamirpur	Social Forestry general	Hamirpur	Yamuna	Bhauli Forest Block -II	20	N 26° 02' 37.0"	E 80° 03' 22.3"
31	Hamirpur	Social Forestry general	Hamirpur	Betwa	Raniganj Forest Block	20	N 25° 54' 06.26"	E 079° 55' 21.36"
32	Hamirpur	Social Forestry general	Hamirpur	Yamuna	Umrahat Forest Block - I	20	N 26° 06' 22.2"	E 079° 57' 4.74"
33	Hamirpur	Social Forestry general	Hamirpur	Yamuna	Umrahat Forest Block - II	20	N 26° 06' 37.56"	E 079° 57' 17.94"
34	Hamirpur	Social Forestry general	Hamirpur	Betwa	Kanauta Forest Block	20	N 25° 57' 20.8"	E 080° 06' 04.0"
					Total	**670**		
1	Hamirpur	Social Forestry general	Rath	Dhasan	Ekthaura Forest Block-I	20	$25^0$40'33"	79^0 23' 48"

2	Hamirpur	Social Forestry general	Rath	Birma	Kaitha Forest Block-I	20	$25^0$30'35"	79^0 32' 48"
3	Hamirpur	Social Forestry general	Rath	Birma	Kaitha Forest Block-II	20	$25^0$30'31"	79^0 33' 3"
4	Hamirpur	Social Forestry general	Rath	Dhasan	Jhinnabira Forest Bock-I	20	$25^0$31'51"	79^0 24' 48"
5	Hamirpur	Social Forestry general	Rath	Dhasan	Kuchecha Forest Block-I	20	$25^0$32'59"	79^0 24' 51"
6	Hamirpur	Social Forestry general	Rath	Dhasan	Kuchecha Forest Block-III	25	$25^0$33'17"	79^0 26' 13"
7	Hamirpur	Social Forestry general	Rath	Dhasan	Kuchecha Forest Block-IV	5	$25^0$33'4"	79^0 25' 45"
8	Hamirpur	Social Forestry general	Rath	Dhasan	Jigni Forest Block-I	20	25^0 43'17"	79^0 23'44"
9	Hamirpur	Social Forestry general	Rath	Dhasan	Jigni Forest Block-II	10	25^0 42'59"	79^0 24'24"
10	Hamirpur	Social Forestry general	Rath	Dhasan	Jigni Forest Block-III	25	25^0 43'32"	79^0 24'5"
11	Hamirpur	Social Forestry general	Rath	Dhasan	Jigni Forest Block-IV	25	25^0 42'53"	79^0 24'12"
12	Hamirpur	Social Forestry general	Rath	Dhasan	Jigni Forest Block-V	25	25^0 43'9"	79^0 24'17"

13	Hamirpur	Social Forestry general	Rath	Dhasan	Jigni Forest Block-VI	25	25^0 43'36"	79^0 24'56"
14	Hamirpur	Social Forestry general	Rath	Dhasan	Jigni Forest Block-VII	25	25^0 43'41"	79^0 24'57"
15	Hamirpur	Social Forestry general	Rath	Dhasan	Jigni Forest Block-VIII	10	25^0 44'59"	79^0 24'21"
16	Hamirpur	Social Forestry general	Rath	Dhasan	Bilgaon Forest Block-I	20	25^0 45'50"	79^0 23'10"
17	Hamirpur	Social Forestry general	Rath	Dhasan	Bilgaon Forest Block-II	25	25^0 45'46"	79^0 23'1"
18	Hamirpur	Social Forestry general	Rath	Dhasan	Bilgaon Forest Block-III	25	25^0 46'8"	79^0 22'33"
19	Hamirpur	Social Forestry general	Rath	Dhasan	Majhgaon Forest Block -I	20	25^0 37'57"	79^0 24'23"
20	Hamirpur	Social Forestry general	Rath	Dhasan	Ramgarh Forest Block-I	20	25^0 38'29"	79^0 22'24"
21	Hamirpur	Social Forestry general	Rath	Dhasan	Ramgarh Forest Block-II	25	25^0 38'46"	79^0 22'12"
22	Hamirpur	Social Forestry general	Rath	Dhasan	Ramgarh Forest Block-III	25	25^0 38'47"	79^0 21'53"

23	Hamirpur	Social Forestry general	Rath	Dhasan	Gugrwar a Forest Block-II	25	25^0 31'20"	79^0 25'23"
24	Hamirpur	Social Forestry general	Rath	Dhasan	Gohani Panwari Forest Block	25	25^0 34'10"	79^0 25'59"
25	Hamirpur	Social Forestry general	Rath	Birma	Para Forest Block	25	25^0 32'40"	79^0 37'45"
26	Hamirpur	Social Forestry general	Rath	Betwa	Chandba ri Forest Block-I	25	25^0 47'43"	79^0 24'57"
27	Hamirpur	Social Forestry general	Rath	Betwa	Chandba ri Forest Block-II	25	25^0 47'40"	79^0 24'43"
28	Hamirpur	Social Forestry general	Rath	Dhasan	Lidhaura Forest Block I	25	25^0 35'58"	79^0 23'32"
29	Hamirpur	Social Forestry general	Rath	Dhasan	Lidhaura Forest Block II	25	25^0 35'32"	79^0 23'44"
30	Hamirpur	Social Forestry general	Rath	Dhasan	Gadhar Forest Block	25	25^0 43'22"	79^0 23'44"
31	Hamirpur	Social Forestry general	Rath	Dhasan	Tolakhan garan Forest Block-III	25	25^0 41'15"	79^0 24'19"
32	Hamirpur	Social Forestry general	Rath	Dhasan	Tolakhan garan Forest Block-IV	25	25^0 40'44"	79^0 23'50"

33	Hamirpur	Social Forestry general	Rath	Dhasan	Tolakhan garan Forest Block-V	25	25^0 40'56"	79^0 23'42"
34	Hamirpur	Social Forestry general	Rath	Dhasan	Ikthaura Forest Block III	25	25^0 39'59"	79^0 24'6"
35	Hamirpur	Social Forestry general	Rath	Dhasan	Majhgao n Forest Block III	25	25^0 37'39"	79^0 23'21"
36	Hamirpur	Social Forestry A.N.R	Rath	Dhasan	Ramgarh Forest Block	50	25^0 38'11.00"	79^0 23'25.00"
37	Hamirpur	Social Forestry Sp. Comp.	Rath	Dhasan	Ikthaura Forest Block II	20	25^0 40'18"	79^0 24'6"
38	Hamirpur	Social Forestry Sp. Comp.	Rath	Dhasan	Tolakhan garan Forest Block I	20	25^0 41'20"	79^0 24'15"
39	Hamirpur	Social Forestry Sp. Comp.	Rath	Dhasan	Tolakhan garan Forest Block II	20	25^0 40'45"	79^0 24'18"
40	Hamirpur	Social Forestry Sp. Comp.	Rath	Dhasan	Sargaon Forest block	20	25^0 39'37"	79^0 24'44"
41	Hamirpur	Social Forestry Sp. Comp.	Rath	Dhasan	Jhinnabir a Forest Block-II	20	25^0 30'55"	79^0 24'37"

42	Hamirpur	Social Forestry Sp. Comp.	Rath	Dhasan	Kuchech ha Forest Block-II	20	25^0 33'8"	79^0 25'34"
43	Hamirpur	Social Forestry Sp. Comp.	Rath	Dhasan	Gugurawara Forest Block-I	20	25^0 31'34"	79^0 25'35"
44	Hamirpur	Social Forestry Sp. Comp.	Rath	Dhasan	Majhgawan Forest Block-II	20	25^0 38'2"	79^0 24'10"
					Total	**990**		
1	Hamirpur	Social Forestry general	Sarila	Betwa	Bendadanda Forest Block I	25	25 51 49.85	79 51 50.54
2	Hamirpur	Social Forestry general	Sarila	Betwa	Bendadanda Forest Block II	25	25 51 50.54	79 35 19.38
3	Hamirpur	Social Forestry general	Sarila	Betwa	Bendadanda Forest Block III	25	25 51 52.73	79 35 02.75
4	Hamirpur	Social Forestry general	Sarila	Betwa	Bendadanda Forest Block IV	25	25 52 09.49	79 33 46.54
5	Hamirpur	Social Forestry general	Sarila	Betwa	Ichaura Forest Block	25	25 52 30.49	79 32 50.01

6	Hamirpur	Social Forestry general	Sarila	Betwa	Chikasi Forest Block-I	21	25 47 37.02	79 28 24.52
7	Hamirpur	Social Forestry general	Sarila	Betwa	Chikasi Forest Block-II	25	25 47 53.60	79 28 25.63
8	Hamirpur	Social Forestry general	Sarila	Betwa	Barenda maaf Forest Block-I	25	25 50 06.44	79 34 21.72
9	Hamirpur	Social Forestry general	Sarila	Betwa	Barenda maaf Forest Block-II	25	25 49 57.20	79 34 11.11
10	Hamirpur	Social Forestry general	Sarila	Betwa	Hardua Forest Block	25	25 49 35.56	79 30 04.53
11	Hamirpur	Social Forestry general	Sarila	Betwa	Barauli Forest Block	25	25 48 05.33	79 29 32.53
12	Hamirpur	Social Forestry general	Sarila	Betwa	Jitkiri Forest Block-I	25	25 53 24.62	79 37 34.36
13	Hamirpur	Social Forestry general	Sarila	Betwa	Jitkiri Forest Block-II	25	25 52 55.53	79 36 22.91
14	Hamirpur	Social Forestry general	Sarila	Betwa	Jitkiri Forest Block-III	25	25 52 48.16	79 36 24.03
15	Hamirpur	Social Forestry general	Sarila	Betwa	Jamaudi Forest Block-I	25	25 54 00.70	79 38 11.24

16	Hamirpur	Social Forestry general	Sarila	Betwa	Jamaudi Forest Block-II	25	25 54 16.76	79 37 39.40
17	Hamirpur	Social Forestry general	Sarila	Betwa	Jamaudi Forest Block-III	25	25 54 17.62	79 37 46.69
18	Hamirpur	Social Forestry general	Sarila	Betwa	Chandaut Forest Block-I	25	25 53 54.72	79 38 10.62
19	Hamirpur	Social Forestry general	Sarila	Betwa	Chandaut Forest Block-II	25	25° 54' 1.11	79° 38' 45.63
20	Hamirpur	Social Forestry general	Sarila	Betwa	Bhedi Danda Forest Block-I	25	25 50 23.08	79 49 30.08
21	Hamirpur	Social Forestry general	Sarila	Betwa	Bhedi Danda Forest Block-II	25	25 50 14.22	79 49 21.19
22	Hamirpur	Social Forestry general	Sarila	Birma	Uprehka Forest Block-I	25	25 43 30.95	79 45 58.52
23	Hamirpur	Social Forestry general	Sarila	Birma	Uprehka Forest Block-II	25	25 43 31.85	79 40 02.33
24	Hamirpur	Social Forestry general	Sarila	Birma	Uprehka Forest Block-III	25	25 42 45.20	79 45 47.90
25	Hamirpur	Social Forestry general	Sarila	Betwa	Basriya Forest Block-I	25	25° 53' 38.50	79° 42' 15.62

26	Hamirpur	Social Forestry general	Sarila	Betwa	Basriya Forest Block-II	25	25° 53' 35.21	79° 42' 33.15
27	Hamirpur	Social Forestry general	Sarila	Betwa	Harsundi Forest Block-I	25	25° 51' 22.04	79° 44' 53.42
28	Hamirpur	Social Forestry general	Sarila	Betwa	Harsundi Forest Block-II	25	25° 51' 31.30	79° 45' 8.26
29	Hamirpur	Social Forestry general	Sarila	Betwa	Ismailpur Forest Block-I	25	25 48 15.60	79 33 02.98
30	Hamirpur	Social Forestry general	Sarila	Betwa	Ismailpur Forest Block-II	25	25 48 36.22	79 32 53.13
31	Hamirpur	Social Forestry general	Sarila	Birma	Muhmadpur Forest Block	25	25° 43' 59.7"	79° 45' 53.94
32	Hamirpur	Social Forestry general	Sarila	Betwa	Khandaut Forest Block	25	25° 51' 20.77	79° 46' 56.23
33	Hamirpur	Social Forestry general	Sarila	Betwa	Kupra Forest Block	25	25 51 27.84	79 52 23.66
34	Hamirpur	Social Forestry general	Sarila	Birma	Rajamau Forest Block	25	25 48 04.07	79 50 48.91
					Total	**846**		
1	Hamirpur	Social Forestry general	Sumerpur	Birma	Kupra Forest Block-I	20	N 25° 51' 06"	E 079° 53' 37"

2	Hamirpur	Social Forestry general	Sumerpur	Birma	Kupra Forest Block-II	20	N 25° 51' 34"	E 079° 53' 30"
3	Hamirpur	Social Forestry general	Sumerpur	Birma	Kupra Forest Block-III	20	N 25° 51' 24"	E 079° 53' 40"
4	Hamirpur	Social Forestry general	Sumerpur	Betwa	Bajehta Forst Block-I	10	N 25° 51' 50"	E 079° 57' 02"
5	Hamirpur	Social Forestry general	Sumerpur	Betwa	Bajehta Forst Block-II	20	N 25° 52' 07"	E 079° 56' 02"
6	Hamirpur	Social Forestry general	Sumerpur	Yamuna	Surauli Forest Block-I	20	N 25° 53' 48"	E 080° 15' 19"
7	Hamirpur	Social Forestry general	Sumerpur	Yamuna	Surauli Forest Block-II	10	N 25° 53' 14"	E 080° 17' 40"
8	Hamirpur	Social Forestry general	Sumerpur	Yamuna	Badgaon Forest Block	10	N 25° 54' 51"	E 080° 12' 59"
					Total	**130**		
					Grand Total	**2713**		

7. Mining:

Area of Mining	FIR/ case registered/ year	Vehicles/ mineral seized	Action taken status	Cases pending in Court	Enforcement of EMGSM 2020 and Sustainable sand mining management guidelines 2016
No of lease granted:24 Total area: 631.97Hac Morram mining is being carried out in Hamirpur district.	04 cases have been registered.	07 vehicles have been seized.	Investigation is in process.	None	Yamuna, Betwa, Ken and Dhasan rivers flow in Hamirpur district. To curb illegal mining in the district, Geology and Mining Department of Uttar Pradesh by G.O. 616/86-2018-371/2005 dated 20.03.2018 had ordered to constitute a district level task force for monitoring of Illegal mining, in compliance of the G.O. a district level task force has been constituted by Mining Office Hamirpur Order number- 1387/Mining-MMC-30-Missellaneous (2017-18) Dated 24.03.2018. From time to time, the above-constituted task force investigates and takes action against illegal mining transportation. All mining areas under the district have been installed with PTZ cameras, CCTV cameras, and RFID scanners, the cameras are being monitored from the head office in Lucknow and the district command center at Hamirpur. Apart from this, a check gate has been established at the district headquarters between Lakshmi-bai Cross road and Yamuna Bridge, through which vehicles transporting/carrying illegal mining materials are being issued online challans.

1. The Tribunal has already directed for furnishing following information by order dated 24.11.2023:-

(1) District Ganga Protection Plan at city/ town level

District Ganga Protection Committee (DGPC) is required to formulate the action plan for each city and town located on main stem of river Ganga and its tributary and such Action Plan has to be prepared in accordance with the River Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016 (para 6 and 55).

(2) Contents of the Action Plan (Consolidated District Wise Action Plan including each City and Town abutting river Ganga and its Tributary)

2.1 Sewage Management

(i) Sewage generation (for entire District and individual town-wise): Following is the town-wise information about sewage and municipal waste generation:

Sewage Information

Name of District	Name of ULB	Total Population in ULB	Total Sewage Generation (MLD)	Treatment of Sewage (MLD)	Final Disposal of sewage (MLD)	Remark
Hamirpur	Hamirpur	54830 (as per 2011 census)	7.53	0	Water Body (River Yamuna and Betwa)	STP of 5.75 MLD, I&D works (11 no's of drain to be tapped), 44.88 Km Sewer Network, and 1 No Cesspool Tanker are proposed under SBM 2.0 programme. After approval of DPR work timeline will be given.
	Rath	67683 (as per 2011 census)	9.30	0	In Municipality area (by digging trench)	STP of 6.78 MLD, I&D works (11 no's of drain to be tapped), 52.56Km Sewer Network and 2 No Cesspool Tanker are proposed under SBM 2.0 program. After approval of DPR work timeline will be given.

	Maudaha	49501(as per 2011 census)	6.80	0	In Municipality area (by digging trench)	NP Maudaha, NP Kurara, NP Sumerpur, NP Gohand, NP Sarila's Proposal- Under SBM 2.0 Annexure 3B are to be approved after that detailed DPR will be proposed.
	Sumerpur	39486 (as per 2011 census)	5.30	0	In Municipality area (by digging trench)	
	Kurara	13408 (as per 2011 census)	1.84	0	In Municipality area (by digging trench)	
	Sarila	9270 (as per 2011 census)	1.27	0	In Municipality area (by digging trench)	
	Gohand	7526 (as per 2011 census)	1.03	0	In Municipality area (by digging trench)	

(ii) **Existing Sewage Treatment Capacities:** STP is proposed in Hamirpur district. However, sewage from the household is being discharged into septic tanks, soak pits, drains and sewerage lines. These sewerage lines merge with the major drains and, major drains release the wastewater to the Yamuna and Betwa rivers.

(iii) **Quantity of sewage is being treated (utilization capacity):** The quality of sewage is expectedly improved through the anaerobic digestion of the sewage in the septic tanks.

(iv) **Performance of STPs particularly for FC:** STP is proposed in the district Hamirpur.

(v) **Where treated sewage is being discharged (to Ganga or tributaries):** The sewage from the household is being discharged into septic tanks, soak pits, drains and sewerage lines.

(vi) **Reasons for Under-utilization of STPs (Connectivity of Households/ laying of sewer lines):** STP is proposed in the district Hamirpur.

(vii) **Current Gap in sewage treatment:** STP is proposed in the district Hamirpur.

(viii) **Time bound plan for bridging the gap and tying up with financial arrangements and not delaying Tendering and identifying executing agencies or having any other issues:** To fulfil the gaps, a proposal for the development of STP is being prepared by Jal Nigam (Urban) Hamirpur for NPP Hamirpur and NPP

Rath. Detailed information of the same is mentioned below.

2. STP (SEWAGE TREATMENT PLANT)

Existing STP (location & capacity)	**Capacity (operational)**	**Inlet/ Outlet water quality & quantity**	**Number of tapped drains (quantity of discharge)**	**Final discharge point**	**Proposed/ Under construction STP with Completion date**
At Present, STP is proposed in the district to treat the sewage that is being generated in Hamirpur.	At present STP is proposed in Hamirpur district.	At present STP is proposed in Hamirpur district. The proposed STP of Hamirpur and Rath will have a capacity of 5.75 MLD and 6.78 MLD.	A total of 11 no of drain are to be tapped in Hamirpur City and a total of 11 drains to be tapped in Rath city for sewage treatment.	The sewage generated from Hamirpur Nagar Palika area is being discharged into rivers. (Yamuna and Betwa).	NPP Hamirpur- STP of 5.75 MLD, I&D works (11 nos of drain to be tapped), 44.88 Km Sewer Network and 1 No Cesspool Tanker are proposed under SBM 2.0 programme. After approval of DPR work timeline will be given. NPP Rath- STP of 6.78 MLD, I&D works (11 nos of drain to be tapped), 52.56Km Sewer Network and 2 No Cesspool Tanker are proposed under SBM 2.0 program. After approval of DPR work timeline will be given.

(ix) **Where untreated sewage (when there is no STP) is discharged (Ganga /Tributaries):** The sewage from the household is being discharged into septic tanks, soak pits, drains and sewerage lines. These sewerage lines merge with the major drains and, major drains release the wastewater to the Yamuna and Betwa rivers.

2.2 Drains joining Ganga and Tributary

(i) Number of drains carrying sewage- sullage joining Ganga/ tributaries with their Quantity and Quality: There are a total of six drains present in Hamirpur, discharging the waste into Yamuna and Betwa (tributary of Ganga) rivers.

NAME OF DRAIN	POSITION OF STP WITH CAPACITY	GEO/COORDINATES	DISCHARGE QUANTITY FROM THE STP IN THE DRAIN	TOTAL PER DAY DISCHARGE FROM THE DRAIN INTO THE RIVER
Pataleshwar Drain, Hamirpur	At Present, STP is proposed in the district to treat the sewage that is being generated in Hamirpur.			3.1 MLD
Purana Yamuna Ghat Drain, Hamirpur				0.3 MLD
Ramedi Nala Drain, Hamirpur				2.5 MLD
Betwa Tat Bandh Nala, Gandhi Nagar Drain, Hamirpur				0.20 MLD
Purana Betwa Ghat Nala Drain, Hamirpur				1.20 MLD
Diggi Ramedi Drain, Hamirpur				0.23 MLD

(ii) **Drains joining outside city and town limits but, either joining in village or nearby town:** None of the drains join outside the city and towns.

(iii) **Inclusion of sewage flowing in drains into total sewage generation figures of each city and town and their interception and diversion to STPs:** Six major drains are present in Hamirpur, having the total MLD capacity of ~7.53. These drains are directly discharging into Yamuna and Betwa rivers without any treatment due to the absence of STP.

2.3 Septage management (In case of no STP)

(i) **Status of Septage management (with reference to FSTP/STP):** STPs are proposed in the Hamirpur district.

(ii) **Management of Grey water and its disposal:** STPs are proposed in the Hamirpur district.

2.4 Industrial Pollution Control

(i) Attach the list on no. of industries generating trade effluents, their place of disposal and compliance including CETPs (town wise): There are no water-polluting industries present in Hamirpur district who is discharging their effluent in Yamuna and Betwa river, hence there is no discharge, and no treatment is required.

(3) Water quality status

Provide water quality status of Ganga and its tributaries in the district and city/ town in terms of its fitness for Bathing water quality that is, FC and FS:

The water quality parameters are as follow:

Surface water monitoring Parameter (In mg/l except colour, pH and conductivity)

Pollution Parameter	**River Yamuna**			**River Betwa**
Monitoring Date	02.03.2024		02.03.2024	
Sampling Point	U/S River Yamuna at Hamirpur	D/S River Yamuna at Hamirpur	River Yamuna before confluence River Betwa at Hamirpur	River Betwa before confluence River Yamuna at Hamirpur
pH	7.89	7.86	7.41	7.88
Turbidity	12	18	15	14
Colour	5 Hazen	10 Hazen	20 Hazen	5 Hazen
Conductivity	1862	1857	1834	1829
SS	32.00	34.00	38.0	21.00
DS	497.00	501.00	311.00	283.00
TS	529.00	535.00	349.00	304.00
Hardness	146.00	166.00	184.0	248.0
Calcium	84.00	138.00	98.0	164.0

Magnesium	62.00	28.00	86.0	84.00
Chloride	62.00	65.00	82.0	38.00
Alkalinity	70.00	72.00	74.00	78.00
BOD	4.6	5.4	3.2	3.6
COD	17.28	18.24	13.52	11.52
DO	6.8	6.6	6.74	6.98
Class of Water	D	D	D	D

(4) **Notification of Flood Plain Zones**: For the demarcation of the Flood Plain Zone, a DPR has been prepared by the office of Executive Engineer Maudaha Bandh and has been sent for fund allocation to the higher authorities by letter no: 2401 dated 22.12.2023 for approval. After the allocation of funds, the demarcation of the Flood Plain Zone will be carried out in the Hamirpur district.

(5) **Issues relating to Environmental Flow**:

a) Notification of Ecological flow

Government of India, vide Notification dated 9th October 2018, has notified minimum environmental flows to be maintained in river Ganga from its origin to Unnao in Uttar Pradesh. The notified environmental flow regime is monitored and supervised by the Central Water Commission. With regards to the monitoring of the e-flow releases, the regional offices of MoEF & CC and the Central Pollution Control Board (CPCB) along with the State Pollution Control Boards concerned have been mandated for monitoring of all the environmental aspects of the Hydro Power Projects.

The ecological flow of river Yamuna and Betwa in Hamirpur District is maintained.

b) Steps taken for maintaining Ecological flow/ status of compliance of the E- flow notifications

Regular meetings of District Ganga Committee and District Environment Committee is being held to monitor the compliance of E-flow Notification. A wide range of measures for cleaning and revitalizing the Ganga has been undertaken as part of the Namami Gange Programme. These include sewage treatment (Proposed STP), industrial effluent management (No industrial water pollution from Hamirpur), ghat and river surface cleaning, riverfront development, rural sanitation, aviral dhara, afforestation, biodiversity conservation, and community involvement.

In Hamirpur district there are a total of 6 drains that discharge waste into the river Yamuna and Betwa. Presently,

there is no treatment as there is no STP present in the district. The proposal for STP has been put forward for approval.

The water level of river Betwa in Hamirpur fluctuates between 8.7mt (Pre-monsoon) to 6.9mt (Post monsoon). The surface water quality falls in category D "Propagation of wildlife and fisheries"

6. Best Practices

Ganga Swachatta Pakhwada, observed annually from March 16th to 31st, plays a pivotal role in raising awareness about the importance of maintaining the cleanliness of the river and preventing the dumping of plastic and solid waste into its waters. To oversee and coordinate these efforts, District Ganga Committees have been established to provide guidance and directives to the community and stakeholders involved in the river's rejuvenation. Additionally, the daily conduct of Ganga aartis in Ganga grams and district headquarters near the Yamuna Ghat not only adds to the spiritual significance of the river but also underscores the community's commitment to its preservation. Furthermore, the promotion of organic farming among local farmers, with 10,600 hectares of agricultural land now under organic cultivation, demonstrates a sustainable approach to agriculture that reduces harmful impacts on the river. The Forest Department's annual plantation and soil conservation efforts along the riverbanks, amounting to 2700 hectares of land this year (2023-24), further contribute to the overall health and vitality of the river ecosystem. These concerted efforts underscore a multi-faceted approach to preserving the Yamuna and Betwa (major tributaries of river Ganga), highlighting the importance of community engagement, sustainable practices, and environmental stewardship.

The information is compiled by District Ganga Committee, Hamirpur after receiving the information from all the concerned departments

Divisional Forest Officer
Member Convenor,
District Ganga Committee,
Hamirpur

Chief Development Officer,
Nodal Officer
District Ganga Committee,
Hamirpur

District Magistrate,
Chairman,
District Ganga Committee,
Hamirpur

Picture: Map of the major drains at Hamirpur

35850

जल शक्ति मंत्रालय
MINISTRY OF
JAL SHAKTI

In compliance of Hon'ble NGT order

In O.A. 200/2014 MC Mehta *Vs* UOI and Ors.

District Ganga Committee Report

NAMAMI GANGE

Submitted by

DISTRICT GANGA COMMITTEE, ALIGARH, UTTAR PRADESH

MC MEHTA vs. UNION OF INDIA (OA. NO. 200 OF 2014)

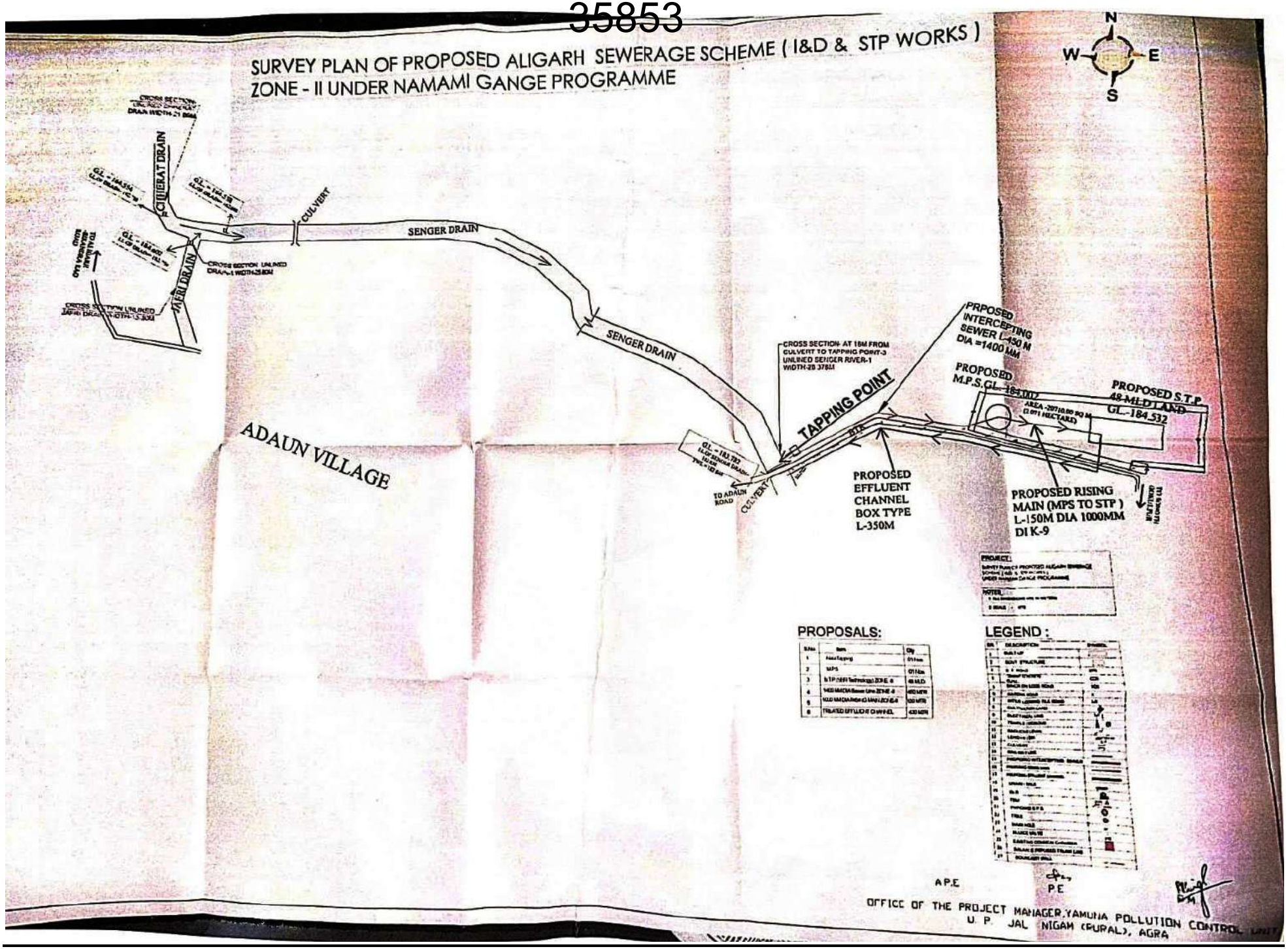
ADDITIONAL INFORMATION, AS PER THE ORDER 05.02.2024

District-Aligarh

S.NO	ADDITIONAL INFORMATION	ANSWER
1.	That STPs installed, are underutilised and that treated effluents are discharged into the drains carrying untreated wastewater thereby defeating the very purpose of the efficacy of STPs.	Presently the Treated effluent generated from STP is being disposed in Mathura Bypass Drain. According to the information given by Jal Nigam, Aligarh, the capacity of STP is 45 MLD. The treated effluent comes through sewer pipeline at the inlet of STP. At present only 11 MLD domestic effluent is being received in the inlet. The Treated effluent generated from STP is proposed to be sent through pipeline to Harduaganj Thermal Power Plant, Kasimpur, Aligarh district for use. It is proposed to start the process of laying the pipeline as soon as possible in connection with the use of purified effluent in the power generation unit.
2.	The quantification and estimation of sewage entering to each STP through sewer network or through interception and diversion of drains.	11 MLD through Sewage Network
3.	the breakup of quantity of sewage fed to each STP through sewerage and drains, indicating location of STP (with geo coordinates) and quality and quantity of discharged sewage and its disposal location.	11 MLD through Sewage in 45 MLD Capacity STP Geo coordinates 27.863861, 78.065456
4.	These identified industries should be imposed with the Consent conditions to adopt ZLD system or maximize recycling/ reuse of treated effluents rather than consenting them to discharge into drains with no burden on them.	ZLD conditions imposed in M/s 1x660 MW Harduaganj Thermal Power Project, Aligarh.
5.	We are of the view that additional columns are to be included reflecting the drain, position of STP with capacity, their geo-coordinates, discharge quantity from the STP in the drain and total per day discharge from the drain into river.	At present, an STP of 45 MLD capacity is installed near A to Z Plant, Mathura Road, District-Aligarh, whose geo coordinate is 27.863861 78.065456. **Inlet** pH-7.69, BOD-236 mg/l, COD-465 mg/l, TSS-446 mg/l, FECAL COLIFORM-6.3X10^5 **Outlet** pH-7.23, BOD-23 mg/l, COD-118 mg/l, TSS-512 mg/l
6.	mention heavy metals analysis in respect of discharge from each of the drain in the report.	**Aligarh Drain:** Total Chromium-1.9216 mg/l ,Copper-0.02606 mg/l, lead-0.3919 mg/l, lron-1.6180 mg/l, Zinc-2.4795 mg/l, Maganese-0.3738 mg/l, arsenic-ND, Mercury-ND **Chherrat Drain:** Chromium-1.9787 mg/l,Copper-1.1821 mg/l, lead-0.0356 mg/l, lron-15.6025 mg/l, Zinc-4.2540 mg/l, Maganese-0.8649 mg/l, arsenic-ND, Mercury-ND

SURVEY PLAN OF PROPOSED ALIGARH SEWERAGE SCHEME
(I&D & STP WORKS) ZONE - I
UNDER NAMAMI GANGE PROGRAMME
NAGAR NIGAM
S.T.P.-45.MLD
TO ALIGARH CITY
ALIGARH DRAIN
CULVERT
TO MATHURA
TO AGRA-ALIGARH ROAD
PETROL PUMP
BTR
CULVERT
PETROL PUMP
L- 140 METERE
RAILWAY FLYOVER BRIDGE
ALIGARH BYPASS ROAD
FLYOVER
ALIGARH BYPASS ROAD
TO SADIQ GATE
MATHURA ROAD DRAIN - II
MATHURA ROAD DRAIN - I
O.L.= 183.171
I.L.OF DRAIN= 181.180
N
S
W
E
LEGEND :
NOTES :
PROJECT :
A.E.E.
P.E.

SURVEY PLAN OF PROPOSED ALIGARH SEWERAGE SCHEME (I&D & STP WORKS)
ZONE - II UNDER NAMAMI GANGE PROGRAMME



1. Sewage

Drain (city/ town)	Total drain capacity	Generation/ day	PH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride etc)	DO	TC	FC	Outlet flow and geo code/ sample point	Color/ odour	Discharged Into
Aligarh Drain	606.5 cusec	60.81 MLD	7.19	144	392	480	1180	Total Chromium-1.9216 mg/l ,Copper-0.02606 mg/l, lead-0.3919 mg/l, Iron-1.6180 mg/l, Zinc-2.4795 mg/l, Maganese-0.3738 mg/l, arsenic-ND, Mercury-ND	00	Sample has been collected for analysis. Report is awaited.		60.81 MLD 27.863861 78.065456	Blackish / Unpleasent	Yamuna River approxe-80 K.M
Cheerrat/Lahtoi Drain	969.33 cusec	39.50 MLD	7.13	146	392	432	1260	Chromium-1.9787 mg/l,Copper-1.1821 mg/l, lead-0.0356 mg/l, Iron-15.6025 mg/l, Zinc-4.2540 mg/l, Maganese-0.8649 mg/l, arsenic-ND, Mercury-ND	00			39.50 MLD	Blackish / unpleasent	Yamuna River approxe-80 K.M

The above information is to be submitted on the basis of end point sample analysis of the concerned drain

2. STP for treating the sewage of the drains ultimately flowing to river ganga or its

Existing STP (location & capacity)	Capacity (operational)	Inlet/ Outlet water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point	Proposed/ under construction STP With completion date
Mathura Road, Behind mahakal mandir, Near A2Z Plant, Aligarh- 45 MLD	11 MLD Operational	**Inlet** pH-7.69 BOD-236 mg/l COD-465 mg/l TSS-446 mg/l FECAL COLIFORM-6.3X10^5 **Outlet** pH-7.23 BOD-23 mg/l COD-118 mg/l TSS-512 mg/l FECAL COLIFORM-223 **Online Monitoring System Detail:-** pH-7.75 BOD-13 mg/l COD-86.6 mg/l TSS-24.5 mg/l	01 Mathura iglas Drain, Aligarh	34 MLD	Aligarh Drain	65 MLD & 48 MLD (Aligarh Drain, Jafri/Chherat Drain), Iglas Road &sonoth

2.1 STP ADDITIONAL INFORMATION

NAME OF DRAIN	POSITION OF STP WITH CAPACITY	GEO/ COORDINATES	DISCHARGE QUANTITY FROM THE STP IN THE DRAIN	TOTAL PER DAY DISCHARGE FROM THE DRAIN INTO THE RIVER
Mathura Road, Drain	SBL 45 MLD Iglas Road, Pumping Station, Aligarh	27.863861 78.065456	11 MLD	This drain is meet to Aligarh drain approx-3 KM in than Aligarh drain meet into karvan river &karvan River Meet to River Yamuna approx-90 km in District-Agra

Proposed STP (location & capacity)	Capacity (operational)	Inlet/ Outlet water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point Geo code/ sampling point	Proposed/ under construction STP With completion date
65 MLD & 48 MLD (Aligarh Drain, Jafri/Chherat Drain), Iglas Road &sonoth	Proposed	Proposed	Proposed	Proposed	Proposed	DPR under review by NMCG.

3. Hotels/ Ashrams/Dharmshalas/residential complexes abutting river Ganga or its tributaries

Number of Hotels	Consent to establish/ operate	STP	Discharge point	Action taken
M/s Hotel Ruby, 13/7, G.T. Road, Aligarh	31.07.2024	Yes	Treated Effluent Discharge into Local Drain	NA
M/s Merrit Hotel & resturent (Melrose Inn), Hemchand, Merris Road, Aligarh	31.07.2025	Yes	Treated Effluent Discharge into Local Drain	NA
M/s Raj Prem Assosiciate Pvt Ltd. (Hotel Lemon Tree), Merris Road, Aligarh	31.07.2028	Yes	Treated Effluent Discharge into Local Drain	NA
M/s Hotel Orchid Blue (A Unit of M.M. Builders) Janakpuri, Ramghat Road, Aligarh	31.07.2025	Yes	Treated Effluent Discharge into Local Drain	NA
M/s Sudharaj Hospitality, Near Agrawal Sewa Sadan, G.T. Road, Aligarh	31.07.2024	Yes	Treated Effluent Discharge into Local Drain	NA
M/s Palm Tree Hotel & Resturent, Merris Road, Aligarh	31.03.2024	Yes	Treated Effluent Discharge into Local Drain	NA
M/s Silver Park Residency (Hotel Ramada), Village-Bhikampur, G.T. Road, Aligarh	31.07.2027	Yes	Treated Effluent Discharge into Local Drain	NA
M/s Hotel Gold Inn Leaf (A unit of M/s Arsha International), 18/207, Durgapuri, Agra Road, Aligarh	31.07.2028	Yes	Treated Effluent Discharge into Local Drain	NA
M/s U.P. 81 Suits (A Unit of Aashar Infratech), Near Banna Devi, G.T. Road, Aligarh	31.07.2028	Yes	Treated Effluent Discharge into Local Drain	NA

4. IV. Industrial Effluent discharge by industries whose effluent is ultimately flowing to river Ganga or its tributaries

Total number of Industries	Daily effluent discharge	Treatment available (cetp/ petp/ etp operational capacity)	Effluent quality analysis (outlet of treatment plants Geo code sampling point)	GAP	Proposed/ under construction treatment project (with timeline)	Number of defaulting units-Action taken	Industrial solid waste generated/ day	Manner of disposal (Industrial solid waste)
M/s The Kisan Sehkari Chini Mill Ltd. Satha, Aligarh	500 KLD	ETP Installed Capacity-600 KLD	pH-7.6, BOD-360 Mg/l, COD-984 Mg/l, TSS-236 Mg/l	Nil	Nil	Nil	Not Applied	Notice issued
M/s Zydus Wellnes Products Ltd (Old Name-Heinz India Pvt. Ltd) Anoopshahar Road, Aligarh	630 KLD	ETP Installed Capacity-700 KLD	pH-7.3, BOD-24 Mg/l, COD-240 Mg/l, TSS-70 Mg/l	Nil	Nil	Nil	Waste Oil-3200 Ltr/Year & Oil and grease skimming residue-400 kg/Year	There wastes are disposed by TSDF
M/s Hind Agro Industries Ltd. Cherat, Anoopshahar Road, Aligarh	1500 KLD	ETP Installed Capacity-1500 KLD	pH-8.5, BOD-28 Mg/l, COD-232 Mg/l, TSS-46 Mg/l	Nil	Nil	Nil	D.G. Sets used lube oil-0.6 ton/Year, Used oil Filters-12 nos/ Year	There waste are disposed by TSDF
M/s Al Hamd Agro Foods Pvt. Ltd. (Unit-2) Elyaspur, Aligarh	500 KLD	ETP Installed Capacity-500 KLD	pH-7.29, BOD-23 Mg/l, COD-208 Mg/l, TSS-46 Mg/l	Nil	Nil	Nil	Used lube oil, used oil filters-4 KLD, Oily Cloths-0.05 Ton/Day	There wastes are disposed by TSDF
M/s Al- Hasan Agro Food Pvt. Ltd. Amarpur Kondla, Aligarh	500 KLD	ETP Installed Capacity-500 KLD	pH-7.40, BOD-26 Mg/l, COD-242 Mg/l, TSS-46 Mg/l	Nil	Nil	Nil	Used or sepent oil-1 kl/year, Process wastes, residue and sludge-0.1 ton/ year	There wastes are disposed by TSDF

M/s Al-Tabarak, Frozen Foods Pvt. Ltd. Mullapada, Bhujpura, Aligarh	300 KLD	ETP Installed Capacity-300 KLD	pH-7.42, BOD-26.7 Mg/l, COD-224 Mg/l, TSS-46 Mg/l	Nil	Nil	Nil	Not Applied	Notice issued
M/s Figario Canzarva Allana Ltd. Village-Talaspur Khurd, Mathura-Bye Pass Road, Tehshil-Koil, Aligarh	1200 KLD	ETP Installed Capacity-2000 KLD	pH-7.36, BOD-20 Mg/l, COD-118 Mg/l, TSS-90 Mg/l	Nil	Nil	Nil	Used or spent oil-4 Kl/Year, Process wastes, residue and sludge-0.4 ton/ year	There wastes are disposed by TSDF
M/s Figario Kanzarva Allana Ltd. (Unit-2) Village-Talaspur Khurd, Mathura-Bye Pass Road, Tehshil-Koil, Aligarh	435 KLD		pH-7.38, BOD-24 Mg/l, COD-246 Mg/l, TSS-42 Mg/l	Nil	Nil	Nil	Used or spent oil-6 Kl/Year, Process wastes, residue and sludge-0.1 ton/ year	There wastes are disposed by TSDF
M/s H.M.A. Egro Industries Ltd. Village-Talaspur Khurd, Mathura Bye Pass Road, Tehshil-Koil, Aligarh	500 KLD	ETP Installed Capacity-500 KLD	pH-7.42, BOD-26 Mg/l, COD-246 Mg/l, TSS-46 Mg/l	Nil	Nil	Nil	Waste or residues containing oil-200 ltr/Year	There waste are disposed by TSDF
M/s Al-Dua Foods Pvt. Ltd. Village-Amarpur Kondla, Tehshil-Koil, Aligarh	1200 KLD	ETP Installed Capacity-1200 KLD	pH-7.81, BOD-22 Mg/l, COD-196 Mg/l, TSS-40 Mg/l	Nil	Nil	Nil	Used or spent oil-5 Kl/year, wastes or residue containing oil-0.005 Ton/Year	There wastes are disposed by TSDF

M/s Al- Ammar Frozen Foods Pvt. Ltd. (Slaughter House) Amarpur Kondla, Tehshil-Koil, Aligarh	500 KLD	ETP Installed Capacity-500 KLD	pH-7.4, BOD-26 Mg/l, COD-246 Mg/l, TSS-42 Mg/l	Nil	Nil	Nil	Used Oil-MT/Year, Empty barrels cotton rags or other cleaning material-50 Kg/day, Empty Containers below-200 ltrs-10 kg/year, filter (air/oil), 5 nos. Ewaste-200 kg/year	There wastes are disposed by TSDF
M/s Faire Export India Pvt Ltd (Old Name-Al- Halal International Pvt. Ltd). Gata No. 28,72,117 & 118, Mauza-	200 KLD	ETP Installed Capacity-1000 KLD	pH-7.38, BOD-26 Mg/l, COD-246 Mg/l, TSS-46 Mg/l	Nil	Nil	Nil	Used lube oil-200 ltr/Year	There waste are disposed by TSDF
M/s Juberi Fibers Pvt. Ltd. U.P.S.I.D.C. Cherat Industrial Area, Aligarh	1100 KLD	ETP Installed Capacity-1500 KLD	pH-7.36, BOD-60 Mg/l, COD-364 Mg/l, TSS-122 Mg/l	Nil	Nil	Notice issued	Oil grease skimming-2.8 ton/ year	There waste are disposed by TSDF
M/s Bhole Baba Dairy Ltd. Kherashwar Dham, Khair Road, Aligarh	655 KLD	ETP Installed Capacity-700 KLD	pH-7.3, BOD-22 Mg/l, COD-240 Mg/l, TSS-80 Mg/l	Nil	Nil	Nil	Not Applied	Notice issued
M/s Wave Distlery & Waveries Ltd (Distlery), Village, Ahmadpura, Tehsil- Atrauli-Aligarh	ZLD							

M/s Wave Distlery & Waveries Ltd, (Breweries) Village, Ahmadpura, Tehsil- Atrauli-Aligarh	1400 KLD	ETP Installed Capacity-1500 KLD	pH-7.4, BOD-26 Mg/l, COD-240 Mg/l, TSS-88 Mg/l	Nil	Nil	Nil	Used or Spent Oil-1.5 to 2.0 Ton/Year	There waste are disposed by TSDF
M/s R.M. Dairy , Iglas-Gonda Road, Iglas, Aligarh	400 KLD	ETP Installed Capacity-500 KLD	pH-7.4, BOD-34 Mg/l, COD-268 Mg/l, TSS-72 Mg/l	Nil	Nil	Notice Issued	Used lubricant oil-0.7 Ton/Year	There waste are disposed by TSDF
M/s M.I. Industries (India) Pvt. Ltd. Village-Jamunka, Pargana-Chandaus, Tehshil-Gabhana, Aligarh	1250 KLD	ETP Installed Capacity-1500 KLD	pH-7.28, BOD-34 Mg/l, COD-248 Mg/l,	Nil	Nil	Nil	ETP Sludge-1092 Ton/Year	There waste are disposed by TSDF
M/s Ray-Internation Tala Nagar, Industrial Area, Aligarh	10 KLD	ETP Installed Capacity-10 KLD	pH-1.7, BOD-08 Mg/l, COD-408 Mg/l, TSS-110 Mg/l	Nil	Nil	Notice Issued	ETP Sludge-0.6 Ton/Year	There waste are disposed by TSDF
M/s Ambika Metal Works, B-20 Industrial Estate, Aligarh	3 KLD	ETP Installed Capacity-5 KLD	pH-4.2, BOD-12 Mg/l, COD-396 Mg/l, TSS-110 Mg/l	Nil	Nil	Notice issued	ETP Sludge-0.2 Ton/Year	There waste are disposed by TSDF
M/s Prashant Enterprises, Village- Baraula Jafrabad, Tehshil- Koil, Aligarh	8 KLD	ETP Installed Capacity-10 KLD	pH-7.28, BOD-12 Mg/l, COD-242 Mg/l, TSS-86 Mg/l	Nil	Nil	Nil	ETP Sludge-60 Kg/Year	There waste are disposed by TSDF
M/s Home Fit Export, A-9, Industrial Estate, Aligarh	4 KLD	ETP Installed Capacity-6 KLD	pH-6.8, BOD-10 Mg/l, COD-248 Mg/l, TSS-80 Mg/l	Nil	Nil	Nil	Plating Metal Sludge-0.6 Ton/Year	There waste are disposed by TSDF

M/s Rajeev Metal Industries, Industrial Area, Tala Nagar, Aligarh	3 KLD	ETP Installed Capacity-3 KLD	pH-6.98, BOD-08 Mg/l, COD-270 Mg/l, TSS-110 Mg/l	Nil	Nil	Notice issued	ETP Sludge-65 Kg/Year	There waste are disposed by TSDF
M/s Sigma Engeeniring Works, Anoopshahar Road, Aligarh	4 KLD	ETP Installed Capacity-5 KLD	pH-2.8, BOD-12 Mg/l, COD-464 Mg/l, TSS-118 Mg/l	Nil	Nil	Notice issued	ETP Sludge-63 Kg/ Year	There waste are disposed by TSDF
M/s Parfect Product, Industrial Estate, Aligarh	8 KLD	ETP Installed Capacity-10 KLD	pH-7.08, BOD-10 Mg/l, COD-260 Mg/l, TSS-90 Mg/l	Nil	Nil	Nil	ETP Sludge-2.0 Ton/Year	There waste are disposed by TSDF
M/s Creative & Craft Industries India Pvt Ltd, Mauza Sarsol Bahar Chungi, Near Phal Mandi, G.T. Road, Aligarh	2 KLD	ETP Installed Capacity-5 KLD	pH-7.0, BOD-12 Mg/l, COD-246 Mg/l, TSS-72 Mg/l	Nil	Nil	Nil	ETP Sludge-1.2 Ton/year, used lube oil-0.2 KL/Year, Oil Filter & Cloth-0.06 Ton/Year	There wastes are disposed by TSDF
M/s Spider Metal Product Pvt. Ltd. A-54, 57, Industrial Area, Tala Nagari, Aligarh	7 KLD	ETP Installed Capacity-7 KLD	pH-7.3, BOD-12 Mg/l, COD-246 Mg/l, TSS-86 Mg/l	Nil	Nil	Nil	ETP Sludge-200 kg/ Year, Lube Oil-40 Ltr/ Year	There waste are disposed by TSDF
M/s Mascot Metal Manufectures, A-2, Industrial Estate, Aligarh	5 KLD	ETP Installed Capacity-5 KLD	pH-6.7, BOD-10 Mg/l, COD-246 Mg/l, TSS-82 Mg/l	Nil	Nil	Nil	Dried sludge from ETP-0.36 Ton/ Year	There waste are disposed by TSDF
M/s Mascot Metal Manufectures Barola Jafrabad, I.T.I. Road, Aligarh	3 KLD	ETP Installed Capacity-5 KLD	pH-7.8, BOD-10 Mg/l, COD-172 Mg/l, TSS-68 Mg/l	Nil	Nil	Nil	Dried sludge from ETP-0.2 Ton/ Year	There waste are disposed by TSDF

M/s Bajaj Hardware, D-74, Industrial Estate, Aligarh	4 KLD	ETP Installed Capacity-5 KLD	pH-7.13, BOD-12 Mg/l, COD-260 Mg/l, TSS-90 Mg/l	Nil	Nil	Notice issued	ETP Sludge-82 Kg/Year	There waste are disposed by TSDF
M/s Kurana Backels Pvt Ltd, C-73, Sector-1, Talanagri, Aligarh	5 KLD	ETP Installed Capacity-10 KLD	pH-7.0, BOD-8 Mg/l, COD-260 Mg/l, TSS-88 Mg/l	Nil	Nil	Notice issued	ETP Sludge-0.3 Ton/Year	ETP Sludge is used as a manure
M/s Cent Metal Industries, B-12, 13, Industrial Estate, Aligarh	4 KLD	ETP Installed Capacity-10 KLD	pH-7.18, BOD-10 Mg/l, COD-262 Mg/l, TSS-96 Mg/l	Nil	Nil	Notice issued	ETP Sludge-110 kg/Year	There waste are disposed by TSDF
M/s Sagar Bakkel Pvt Ltd, D-149, Sector-1, Talanagri, Aligarh	8 KLD	ETP Installed Capacity-10 KLD	pH-6.9, BOD-10 Mg/l, COD-262 Mg/l, TSS-90 Mg/l	Nil	Nil	Notice issued	ETP Sludge-0.036 ton/Year	There waste are disposed by TSDF
M/s Sadani Overseas, Marthari, G.T. Road, Aligarh	10 KLD	ETP Installed Capacity-10 KLD	pH-7.6, BOD-12 Mg/l, COD-240 Mg/l, TSS-68 Mg/l	Nil	Nil	Nil	Oil Filter-20 Pieces/Year, Used lube oil-60 Ltr/ Year, ETP Sludge-200 Kg/ Year, Empty Chemcal container-100 Pieces/ year	There wastes are disposed by TSDF
M/S R S Metal Products Plot No 4,5,6,7, Sharda Industrial Complex Barola Bye Pass Aligarh Aligarh	4 KLD	ETP Installed Capacity-5 KLD	pH-6.7, BOD-12 Mg/l, COD-248 Mg/l, TSS-86 Mg/l	Nil	Nil	Nil	ETP Sludge-0.2 Ton/Year	ETP Sludge is used as a manure
M/s Vartax Exports, C-1241, 242, Sector-2, Industrial Area, Talanagari, Aligarh	3 KLD	ETP Installed Capacity-5 KLD	pH-2.6, BOD-12 Mg/l, COD-360 Mg/l, TSS-120 Mg/l	Nil	Nil	Notice issued	ETP Sludge-0.05 Ton/ Year	There wasteare disposed by TSDF

M/s Anil Lock, A-38, Sector-2, Industrial Area, Talanagri, Aligarh	5 KLD	ETP Installed Capacity-6 KLD	pH-7.1, BOD-12 Mg/l, COD-242 Mg/l, TSS-72 Mg/l	Nil	Nil	Notice issued	ETP Sludge-0.5 Ton/Year	There waste are disposed by TSDF
M/s Castle Hardware, A-3, Indusrial Estate, Aligarh	2 KLD	ETP Installed Capacity-5 KLD	pH-7.2, BOD-10 Mg/l, COD-148 Mg/l, TSS-40 Mg/l	Nil	Nil	Nil	ETP Sludge-0.2 Ton/Year	ETP Sludge is used as a manure
M/s Unique International, D-13, Sector-1, Industrial Area, Aligarh	3 KLD	ETP Installed Capacity-5 KLD	pH-7.1, BOD-10 Mg/l, COD-266 Mg/l, TSS-86 Mg/l	Nil	Nil	Notice issued	Electroplating Waste & ETP Sludge -0.2 Ton/Year	There wastes are disposed by TSDF
M/s Jitendra Udhyog, C-272, 287, Sector-2, Talanagri, Indusrial Area, Aligarh	3 KLD	ETP Installed Capacity-5 KLD	pH-7.5, BOD-12 Mg/l, COD-172 Mg/l, TSS-45 Mg/l	Nil	Nil	Nil	Used lube oil-100 Ltr/ Year, ETP Sludge-50 kg/ Year	There wastes are disposed by TSDF
Allen And Alvan Pvt Ltd, B-22, Sector-1, Upsidc, Talanagri, Ramghat Road, Aligarh	4 KLD	ETP Installed Capacity-5 KLD	pH-7.2, BOD-14 Mg/l, COD-128 Mg/l, TSS-48 Mg/l	Nil	Nil	Nil	ETP Sludge-0.2 Ton/Year	ETP Sludge is used as a manure
Extream Exports, E-54, E-74, Sector-2, Upsidc, Talanagri, Aligarh	3 KLD	ETP Installed Capacity-5 KLD	pH-7.0, BOD-12 Mg/l, COD-240 Mg/l, TSS-68 Mg/l	Nil	Nil	Nil	Used oil-180 ltr/year, ETP Sludge-350 Kg/year	There wastes are disposed by TSDF
M/s Metal Masters, A-34, Sector-2, Upsidc, Ind. Area, Tala Nagri, Aligarh,Aligarh,	8 KLD	ETP Installed Capacity-10 KLD	pH-7.40, BOD-10 Mg/l, COD-246 Mg/l, TSS-70 Mg/l	Nil	Nil	Nil	ETP Sludge-123 Kg/Year	There waste are disposed by TSDF

M/s Royal Chemical, Vill. Utasani. Cole, Distt. Aligarh,Aligarh,	3 KLD	ETP Installed Capacity-3 KLD	pH-7.05, BOD-10 Mg/l, COD-340 Mg/l, TSS-628 Mg/l	Nil	Nil	Notice Issued	ETP Sludge-0.4 Ton/Year	ETP Sludge is used as a manure
M/S Shri Krishna Enterprises, Vill. Bhavain, Tahsil Koil, Distt. Aligarh	5 KLD	ETP Installed Capacity-20 KLD	pH-2.1, BOD-10 Mg/l, COD-560 Mg/l, TSS-136 Mg/l	Nil	Nil	Notice issued	Empty chemical can-20kg/month, oil containing filter-10 nos/Month, Broketn tube light-20 kg/ month, oil soaked cloth-50 kg/ month, ETP Sludge-1 MT/ Month, D.G. set used oil-16 ltr/ month	There waste are disposed by TSDF
R B Enterprises, 9th. Km. Aligarh Delhi Road, Vill. Bhankri Khas, Near Pavna Zadi Factory, G.T.Road, Aligarh	10 KLD	ETP Installed Capacity-10 KLD	pH-7.0, BOD-10 Mg/l, COD-268 Mg/l, TSS-96 Mg/l	Nil	Nil	Notice issued	ETP Sludge-0.4 Ton/ Year	There waste are disposed by TSDF
M/S S.D. Overseas, Plot No. 78-79, Sharda Industrial Complex, Barula Bye Pass Road, Aligarh	3 KLD	ETP Installed Capacity-3 KLD	pH-6.6, BOD-10 Mg/l, COD-248 Mg/l, TSS-92 Mg/l	Nil	Nil	Notice issued	ETP Sludge-0.2 Ton/ Year	ETP Sludge is used as a manure
Aura Industries Mehrawal, G.T. Road, Aligarh,Aligarh, Aligarh	8 KLD	ETP Installed Capacity-10 KLD	pH-7.46, BOD-18.4 Mg/l, COD-130 Mg/l, TSS-63.8 Mg/l	Nil	Nil	Nil	ETP Sludge-0.6 Ton/ Year	ETP Sludge is used as a manure
M/s Prachi Enterprises, Village-Sikarna, Koil, Aligarh	2 KLD	ETP Installed Capacity-5 KLD	pH-3.2, BOD-18 Mg/l, COD-496 Mg/l, TSS-148 Mg/l	Nil	Nil	Notice issued	ETP Sludge-0.3 Ton/ Year	ETP Sludge is used as a manure

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M/s Maa Vaishno Saltpeter, Sadhu Ashram, Koil, Aligarh	5 KLD	ETP Installed Capacity-5 KLD	pH-7.24, BOD-Nil 45.2 Mg/l, COD-225 Mg/l, TSS-164.2 Mg/l	Nil	Nil	Notice issued	ETP Sludge-0.4 Ton/ Year	ETP Sludge is used as a manure
M/s Shri Krishna Enterprises, Bhaben, koil, Aligarh	5 KLD	ETP Installed Capacity-7 KLD	pH-2.1, BOD-10 Mg/l, COD-560 Mg/l, TSS-136 Mg/l	Nil	Nil	Notice issued	Emply Chemical can-1 Mt/Year, Oil containing Filter-20 kg/month, broken tubelight-10 nos/month, oil soaked cloth-20 kg/month, ETP Sludge-1 MT/Month, Used Oil-16 Ltr/month	There wastes are disposed by TSDF
M/s Vidhi Export 106, Mandir Ka Nagla, Agra Road, Aliarh	2 KLD	ETP Installed Capacity-10 KLD	pH-7.9, BOD-20 Mg/l, COD-78 Mg/l, TSS-34 Mg/l	Nil	Nil	Nil	Plating metal sludge-0.022 ton/year, waste and residues-0.101 ton/year	There wastes are disposed by TSDF

5. Regulation of Flood Plain Zone:

Area- cities/ towns	Notification of flood plain zone	Demarcation		Encroachment & direct discharge GeoCode/ Sampling point	Encroachment removal status	Timeline for completion
		No development zone pillars	Regulatory zone pillars			
Aligarh	NA	56	60	NA	-	NA

6. Afforestation/ Plantation along the bank of River Ganga and its tributaries and their flood plain zones

Area- cities/ towns	Total plantation Geo Code/ Sampling Point	Proposed project	Timeline
Atrauli , Aligarh	7000	Social Forestry Scheme	2023-24

7. Mining and Stone Crushing in river bed and flood plain zone of River Ganga and its tributaries:

Area of mining	FIR/ case registered/ year	Vehicles/ mineral seized	Action taken status	Cases pending in Court	Enforcement of EMGSM 2020 and Sustainable sand mining management guidelines 2016
NA	0	168	Penalty has been imposed for violation	0	NA

1. The Tribunal has already directed for furnishing following information by order dated 24.11.2023:-

(1) District Ganga Protection Plan at city/ town level

District Ganga Protection Committee (DGPC) is required to formulate the action plan for each city and town located on main stem of river Ganga and its tributary and such Action Plan has to be prepared in accordance with the River Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016 (para 6 and 55)- **District Level ganga samiti constitute by District magistrate on dated 06.10.2021. month basis review meeting is organize under chairmanship district magistrate.**

(2) Contents of the Action Plan (Consolidated District Wise Action Plan including each City and Town abutting river Ganga and its Tributary)

2.1 Sewage Management

(i) Sewage generation (for entire District and individual town wise):**100.31 MLD**

(ii) Existing Sewage Treatment Capacities :**45 MLD**

(iii) Quantity of sewage is being treated (utilization capacity) :**100.31 MLD.**

(iv) Performance of STPs particularly for FC :**sample has been collected, report is awaited**

(v) Where treated sewage is being discharged (to Ganga or tributaries) :approxe-**100 km goes to Yamuna River**

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(vi) Reasons for Under-utilization of STPs (Connectivity of Households/ laying of sewer lines) :**NA**

(vii) Current Gap in sewage treatment :**113 MLD**

(viii) Time bound plan for bridging the gap and tying up with financial arrangements and not delaying Tendering and identifying executing agencies or having any other issues :**NA**

(ix) Where untreated sewage (when there is no STP) is discharged (Ganga /Tributaries):**55.31 MLD**

2.2 Drains joining Ganga and Tributary

(i) Number of drains carrying sewage- sullage or industrial waste water joining Ganga/ tributaries with their Quantity and Quality: - **01 Iglas-Mathura Road, Drain.**

(ii) Drains joining outside city and town limits but, either joining in village or nearby town:**NA**

(iii) Inclusion of sewage flowing in drains into total sewage generation figures of each city and town and their interception and diversion to STPs:**NA**

2.3 Septage management (In case of no STP)

(i) Status of Septage management (with reference to FSTP/STP):**NA**

(ii) Management of Grey water and its disposal:**NA**

2.4 Industrial Pollution Control

(i) Attach the list on no. of industries generating trade effluents, their place of disposal and compliance including CETPs (town wise):**there is no any CETPs installed in District Aligarh. Water Polluting Industries is installed individual ETP.**

(3) Water quality status

Provide water quality status of Ganga and its tributaries in the District and city/ town in terms of its fitness for Bathing water quality that is, FC and FS:

S.no	Date	Sample collection Point	Coluor (hazen)	smal	pH	DO (mg/l)	BOD (mg/l)	COD (mg/l)	DS(mg/l)
1	01.01.2024	U/S Kali River, Aligarh	30	Odourless	7.36	2.1	36	104	790
2	01.01.2024	D/S Kali River, Aligarh	30	Odourless	7.38	2.4	34	102	784
3	08.01.2024	U/S Kali River, Aligarh	30	Odourless	7.36	1.7	40	122	912
4	08.01.2024	D/S Kali River, Aligarh	30	Odourless	7.38	1.8	38	118	838
5	15.01.2024	U/S Kali River, Aligarh	30	Odourless	7.34	1.8	40	124	912
6	15.01.2024	D/S Kali River, Aligarh	30	Odourless	7.36	2.0	38	116	842
7	22.01.2024	U/S Kali River, Aligarh	30	Odourless	7.32	2.1	36	112	882
8	22.01.2024	D/S Kali River, Aligarh	30	Odourless	7.34	2.2	36	116	898
9	29.01.2024	U/S Kali River, Aligarh	30	Odourless	7.36	2.0	36	108	904
10	29.01.2024	D/S Kali River, Aligarh	30	Odourless	7.38	2.2	34	104	790

(4) Notification of **Flood Plain Zones**:

(5) Issues relating to **Environmental Flow**:

2. Therefore, for each of the district/city/town under consideration, the desired information be submitted in the above format.

Best Practices:

1. Online Continuous Effluent Quality Monitoring Stations are operated for continuous monitoring of the quality of effluent in milk processing units and textile units, Slaughter house, Braverage Unit which are connected to the Central Pollution Control Board and Uttar Pradesh Pollution Control Board.
2. Treated effluent from Slaughter House units is used for irrigation on develop karnal technology.
3. Inspections of water polluting industries are done at regular intervals by the Regional Office, Uttar Pradesh Pollution Control Board, Aligarh.
4. Water samples of Aligarh Drain, chherrat drain, Jafri drain, Kali River under District aligarh are collected weekly. The collected samples are tested in the laboratory of the Regional Office, Aligarh.
5. Action is taken against the units found defaulter as per rules.
6. At village level, grey water management entails construction of drainage system funded by finance commission directing water into ponds with filter chamber and installing soak pits in areas lacking drainage infrastructure.
7. Each year district achieves its plantation targets with the collaborative efforts of the district departments resulting in a very satisfactory survival percentage of the same.
8. Inspection of Red category water polluting industry carried by CPCB on third party basis.
9. To maintain the water quality of rivers/drains located in Aligarh district and for their development and maintenance, District Level Ganga Committee has been constituted under the chairmanship of District Magistrate, Aligarh. The meeting of the said committee is being held every month.

मा0 राष्ट्रीय हरितअधिकरण,नई दिल्ली द्वारा

Original Application No. 200/2014(C.W.P.No. 3727/1985) (I.A No. 340/2022) M.C Mehta Versus Union Of India &Ors.

में पारित आदेश दिनांक 28.02.2024 के अनुपालन के सम्बन्ध में सूचनाएं

जिला गंगा समिति,बरेली

MC MEHTA vs. UNION OF INDIA (OA. NO. 200 OF 2014)

ADDITIONAL INFORMATION, AS PER THE ORDER 05.02.2024

S.NO	ADDITIONAL INFORMATION	ANSWER
1.	That STPs installed, are underutilised and that treated effluents are discharged into the drains carrying untreated wastewater thereby defeating the very purpose of the efficacy of STPs.	The STP installed in Saray Talfi, Bareilly (Capacity 35 MLD) is running at 22 MLD capacity (Base year 2023 capacity – 26 MLD). The treated effluents are discharged in Qila river through pipe. Other 3 STP (42 MLD, 20 MLD & 1 MLD) are under construction which completion date is August, 2024.
2.	The quantification and estimation of sewage entering to each STP through sewer network or through interception and diversion of drains.	At 35 MLD STP sewage entered through sewer network and at other 3 STP sewage will entered through interception & diversion of drains.
3.	the breakup of quantity of sewage fed to each STP through sewerage and drains, indicating location of STP (with geo coordinates) and quality and quantity of discharged sewage and its disposal location.	1. 35 MLD STP Saray Talif – 22 MLD 2. 42 MLD STP Haru Nagla – Under construction 3. 20 MLD STP Bari Nagla – Under construction 4. 1 MLD STP Girdharipur – Under construction
4.	These identified industries should be imposed with the Consent conditions to adopt ZLD system or maximize recycling/ reuse of treated effluents rather than consenting them to discharge into drains with no burden on them.	there are 13 gpi industries in Bareilly out of which 5 numbers sugar, 2 numbers slaughter house, 3 numbers are distillery, 1 number paper, 1 number camphor and 1 number is edible oil industry. sugar and distillery are zero liquid discharge (ZLD), Slaughter House and Other industries are recycling all Treated Effluent in process and Horticulture.

5.	We are of the view that additional columns are to be included reflecting the drain, position of STP with capacity, their geo-coordinates, discharge quantity from the STP in the drain and total per day discharge from the drain into river.	Geo-Coordinates of drain and STP Location is already shared on page no.02 to 06. Electronic Flow meter are installed for measure of discharge through STP into drain. Contact – P.K. Verma (Mob No. 9473942257)
6.	mention heavy metals analysis in respect of discharge from each of the drain in the report.	Heavy metal of 13 Drain and Deoraniy , Nakatiya, Chaubari drain on page no 2-5.

1. **Sewage:Theaboveinformationistobesubmittedonthebasisofendpointsampleanalysisoftheconcerneddrain.**

S.N.	Drain (city/ town)	Total drain capacity	Generation/ day	PH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride etc)	Nitrates	DO	TC	FC	Outlet flow and geo code/ sample point	Color/ odour	Discharged Into
1.	Deoraniya	128.0	102.28	7.2	32.0	240.0	84.0	553.0	Cr-0.2522 Cu-0.0382 Pb-ND Fe-0.5751 Zn-0.0812 Mn-0.2757 Ar-ND Hg-ND	ND	0.0	7900000	6300000	28.346178, 79.370461	Light Blackish	Ramganga River
2.	Nakatiya	30.0	24.13	7.4	40.0	280.0	96.0	596.0	Cr-0.1565 Cu-0.0187 Pb-0.0769 Fe-0.629 Zn-0.1576 Mn-0.3040 Ar-ND Hg-ND	ND	0.0	8400000	7900000	28.359454, 79.469518	Light Blackish	Ramganga River
3.	Chaubari	63.0	50.47	7.3	24.0	200	87.0	762.0	Cr-0.5393 Cu-0.0382 Pb-0.2308 Fe-2.5742 Zn-0.5080 Mn-0.3040 Ar-0.003 Hg-ND	ND	0.0	1200000	1100000	28.286925, 79.405402	Light Blackish	Ramganga River

Details of Drains Joining River Deoraniya, River Nakatiya and Chaubari Drain

S.N.	Drain (city/ town)	Total drain capacity	Generation/ day	PH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride etc)	DO	TC	FC	Outlet flow and geo code/ sample point	Color/ odour	Discharged Into
1.	Dhurrera Maffi barrier Drain	0.27	0.21	7.5	22.0	144.0	89.0	634.0	Cr-0.2522 Cu-0.0480 Pb-0.769 Fe-3.8529 Zn-0.2150 Mn-0.3466 Ar-0.003 Hg-ND	0.00	**79000**	63000	28.401041, 79.467934	Light Blackish/ Sewage Like	Nakatiya River
2.	100 foota road Nala	11.83	9.46	8.1	22.0	160.0	87.0	598.0	Cu-0.0382 Pb-0.1538 Fe-12.0653 Zn-0.2850 Mg-0.4366 Ar-0.016 Hg-ND	0.00	84000-	79000	28.386976, 79.454192	Light Blackish/ Sewage Like	Nakatiya River
3.	Jagatpur police chauki to nakatiya river	26.26	21.01	8.0	28.0-	176.0	97.0	674.0	Cr-0.1565 Cu-0.0187 Pb-0.1538 Fe-0.6291 Zn-0.0844 Mn-0.2119 Ar-ND Hg-ND	0.00	63000	48000	28.363063, 79.446598	Light Blackish/ Sewage Like	Nakatiya River
4.	Biharipur Drain	0.06	0.05	7.4	28	160	88.0	744.0	Cr-0.1565 Cu-0.0285 Pb-0.2308 Fe-1.7277 Zn-0.3869 Mn-0.4424 Ar-0.002 Hg-ND	0.00	94000	84000	28.361644, 79.398725	Light Blackish/ Sewage Like	Chaubari Drain
5.	GP Tola Drain	20.04	16.03	8.0	22	144	84.0	778.0	Cr-0.2044 Cu-0.0382 Pb-0.0769 Fe-4.1590 Zn-0.2691 Mn-0.4103 Ar-0.005 Hg-ND	0.00	63000	48000	28.369781, 79.403018	Light Blackish/ Sewage Like	Chaubari Drain
6.	Shahu Gopinath Drain	13.59	10.87	7.4	26	192	86.0	685.0	Cr-0.2522 Cu-0.0480 Pb-0.0769	0.00	70000	63000	28.370011, 79.402850	Light Blackish/	Chaubari Drain

									Fe-0.7012 Zn-0.1035 Mn-0.2970 Ar-ND Hg-ND -					Sewage Like	
7.	Qila Bridge Drain	1.78	1.43	7.8	28.0	192.0	96.0	784.0	Cr-0.2044 Cu-0.0285 Pb-ND Fe-1.1874 Zn-0.0653 Mn-0.3466 Ar-0.002 Hg-ND	0.00	84000	79000	28.370847, 79.398549	Light Blackish/ Sewage Like	Nakatiya River
8.	Krishna Hospital 1&2 Drain	14.69	11.75	7.8	26.0	176.0	87.0	689.0	Cr-0.1565 Cu-0.0285 Pb-0.0769 Fe-2.7903 Zn-0.2723 Mn-0.7434 Ar-0.004 Hg-ND	0.00	79000	63000	28.369728, 79.405601	Light Blackish/ Sewage Like	Deoraniya River
9.	Chauki Asraf Khan & Gulab Nagar Drain	20.7	16.56	7.4	28.0	192.0	84.0	742.0	Cr-0.4915 Cu-0.0578 Pb-2308 Fe-1.3855 Zn-0.4793 Mn-0.3678 Ar-0.002 Hg-ND	0.00	84000	79000	28.239424, 79.414558	Light Blackish/ Sewage Like	Deoraniya River
10.	Haru nagla& Green Park Nala-02	0.74	0.59	8.2	22.0	144.0	96.0	738.0	Cr-0.1565 Cu-0.0187 Pb-0.0769 Fe-2.9704 Zn-0.2946 Mn-0.4103 Ar-0.006 Hg-ND	0.00	92000	84000	28.361309, 79.455817	Light Blackish/ Sewage Like	Nakatiya River
11.	Satellite Bus stand Drain	11.99	9.59	7.8	6.0-	192.0	94.0	698.0	Cr-0.3001 Cu-0.0480 Pb-ND Fe-0.5211 Zn-0.1927 Mn-0.2828 Ar-ND Hg-ND	0.00	94000	84000	28.349041, 79.441158	Light Blackish/ Sewage Like	Nakatiya River
12.	Chaubari Drain	23.52	18.82	7.8	24.0	176.0	96.0	784.0	Cr-0.2044 Cu-0.0285 Pb-ND Fe-2.8623 Zn-0.1768 Mn-0.4103	0.00	920000	840000	28.3340633, 79.4047369	Light Blackish/ Sewage Like	Chaubari Drain

									Ar-0.003 Hg-ND -						
13.	Airforce Nala	1.08	0.87	7.8	28.0	192.0	78.0	688.0	Cr-0.2044 Cu-0.0382 Pb-0.1538 Fe-0.7912 Zn-0.0557 Mn-0.3324 Ar-0.ND Hg-ND	0.00	63000	48000	28.416409, 79.428054	Light Blackish/ Sewage Like	Devranya River

NOTE-

1. **Treatment of Total Coliform and Fecal Coliform will be done through STP, for this purpose Ultra Violet Line is installed in STP. After treatment Total Coliform and Fecal Coliform will be within standard.**
2. **All The 13 Drain Joins with Deoraniya River/Nakatiya River/ Chaubari Drain and Treatment of Total Coliform and Fecal Coliform will be done through STP, for this purpose Ultra Violet Line is either installed or Proposed for installation in STP. After treatment Total Coliform and Fecal Coliform will be within standard**
3. **Nitrate analysis facility is not available**

2. STP for treating the sewage of the drains ultimately flowing to river ganga or its tributaries :

Existing STP (location & capacity)	**Capacity (operational) MLD**	**Inlet/ Outlet water quality & quantity**	**Number of tapped drains (quantity of discharge)**	**GAP (in treatment) MLD**	**Final discharge point**	**Proposed/ under construction STP With completion date**
Sarai talfi	35	pH-7.9, SS-6.4.0 BOD-08.0 COD-20.0 TC-170 FC-84 DOS-07/02/2024	13 TAPPED	32	Ramganga River	STP in Operation
Trishul airbase at tatarpur village **(Lat-28.4192, Long.-79.4168)**	01	under construction STP	Not Tapped		Devraniya River→Ramganga River	under construction STP
Harunnagla(**Lat-28.359155 Long-79.468955)**	42	under construction STP	Not Tapped		Nakatiya River → Ramganga River	under construction STP
Chaubari(**Lat-28.2867 Long.-79.4050)**	20	under construction STP	Not Tapped		Chaubari→ Ramganga River	under construction STP

2.1 STP ADDITIONAL INFORMATION

NAME OF DRAIN	POSITION OF STP WITH CAPACITY	GEO/COORDINATES	DISCHARGE QUANTITY FROM THE STP IN THE DRAIN	TOTAL PER DAY DISCHARGE FROM THE DRAIN INTO THE RIVER
DEORANIYA	1. Sarai talfi- 35 MLD 2. Trishul airbase at TatarpurVillage- 01 MLD	28.356111, 79.391666 28.419217, 79.416864	21 MLD	36 MLD(35 MLD +01 MLD)
NAKATIYA	Haru Nagla -42 MLD	28.359454, 79.469518	Under Construction	42 MLD
CHAUBARI	Chaubari- 20 MLD	28.286925, 79.405402	Under Construction	20 MLD

Proposed STP (location & capacity)	Capacity (operational)	Inlet/ Outlet water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point Geo code/ sampling point	Proposed/ under construction STP With completion date
THEREISNOANOTHERSTPISPROPOSEDINDISTRICTBareilly						

3. Hotels/ Ashrams/Dharmshalas/residential complexes abutting river Ganga or its tributaries

Number of Hotels/ ashrams/ dharamshalas	Consent to establish/ operate	STP	Discharge point	Action taken
54	**54 CTO**	**STP INSTALLED IN 24 HOTELS REMAINING 30 HOTELS INSTALLED WITH OIL & Grease trap and Discharge into Nagar Nigam Sever Line**	**Nagar Nigam Drain**	**Not Required**

List of Hotels/ ashrams/ dharamshalas

S.N.	Number of Hotels/ ashrams/ dharamshalas	Consent to establish/ operate	STP	Discharge point	Action taken
1.	ARIF HOTEL NAVADA SHEKHAN PILIBHIT BYEPASS ROAD BAREILLY UTTAR PRADESH	Consent To Establish	Installed	Nagar Nigam Drain	Not Required
2.	ARYANDEEP INFRACITY PRIVATE LIMITED	CTO	Installed	Nagar Nigam Drain	Not Required
3.	ASHANI HOTELS LLP	Consent To Establish	Installed	Nagar Nigam Drain	Not Required
4.	AVADH HOTEL & BANQUETS (A UNIT OF MANISH PROMOTERS PRIVATE LIMITED)	CTO		Nagar Nigam Drain	Not Required
5.	BAREILLY HOTEL	CTO		Nagar Nigam Drain	Not Required
6.	BAREILLY LODGE AND DORMITORY	CTO		Nagar Nigam Drain	Not Required
7.	CIVIL & MILITARY HOTEL	CTO		Nagar Nigam Drain	Not Required
8.	EAST LITE HOTEL	CTO		Nagar Nigam Drain	Not Required
9.	HOTEL	Consent To Establish		Nagar Nigam Drain	Not Required
10.	HOTEL ARAHAN	CTO		Nagar Nigam Drain	Not Required
11.	HOTEL C.L. HERITAGE	CTO		Nagar Nigam Drain	Not Required
12.	HOTEL CARLTON	CTO		Nagar Nigam Drain	Not Required
13.	HOTEL COMFORT INN B.L. (A UNIT OF B.L. HOTELS & HOSPITALITY)	CTO	Installed	Nagar Nigam Drain	Not Required
14.	HOTEL FAMILY CHOICE	CTO		Nagar Nigam Drain	Not Required
15.	HOTEL GALAXY INN	CTO		Nagar Nigam Drain	Not Required
16.	HOTEL MANSAROVER	CTO		Nagar Nigam Drain	Not Required
17.	HOTEL MOTI MAHAL	CTO		Nagar Nigam Drain	Not Required
18.	HOTEL NEELAM	CTO	Installed	Nagar Nigam Drain	Not Required
19.	HOTEL PANCHAM CONTINENTAL	CTO	Installed	Nagar Nigam Drain	Not Required
20.	HOTEL PLAZA	CTO		Nagar Nigam Drain	Not Required
21.	HOTEL RAJMAHAL	CTO		Nagar Nigam Drain	Not Required
22.	HOTEL REGENCY INN	CTO		Nagar Nigam Drain	Not Required
23.	HOTEL ROYAL CLASSIC	CTO		Nagar Nigam Drain	Not Required
24.	HOTEL SAPPHIRE	CTO		Nagar Nigam Drain	Not Required

25.	HOTEL SHREE RAJ KAMAL	CTO		Nagar Nigam Drain	Not Required
26.	HOTEL SHRI BHASKAR	CTO	Installed	Nagar Nigam Drain	Not Required
27.	HOTEL SITA KIRAN	CTO		Nagar Nigam Drain	Not Required
28.	HOTEL SWARN TOWERS	CTO	Installed	Nagar Nigam Drain	Not Required
29.	HOTEL THE MANOR BAREILLY (A UNIT OF R.R. ENTERPRISES)	CTO		Nagar Nigam Drain	Not Required
30.	HOTEL UBEROI ANAND	CTO		Nagar Nigam Drain	Not Required
31.	HOTEL YATRIK ENTERPRISES	CTO		Nagar Nigam Drain	Not Required
32.	JASORIA HOTEL A UNIT OF M/S JASORIA BROTHERS	Consent To Establish	Installed	Nagar Nigam Drain	Not Required
33.	JUHI SONS (EXPANSION OF 38 ROOM)	Consent To Establish	Installed	Nagar Nigam Drain	Not Required
34.	K.M.C. TOWER	Consent To Establish	Installed	Nagar Nigam Drain	Not Required
35.	KING'S HERITAGE & BANQUETS PRIVATE LIMITED	CTO	Installed	Nagar Nigam Drain	Not Required
36.	KRISHNA RESIDENCY	CTO		Nagar Nigam Drain	Not Required
37.	LE PARC HOTELS AND BANQUETS	Consent To Establish	Installed	Nagar Nigam Drain	Not Required
38.	MORNI FODDS LLP	CTO	Installed	Nagar Nigam Drain	Not Required
39.	NAVEEN GUEST HOUSE	CTO		Nagar Nigam Drain	Not Required
40.	NEW R.K. GUEST HOUSE	CTO		Nagar Nigam Drain	Not Required
41.	NIRMAL GARDEN (Hotel & Banquet Hall)	Consent To Establish	Installed	Nagar Nigam Drain	Not Required
42.	Nirmal Resorts Banquet Hall	CTO	Installed	Nagar Nigam Drain	Not Required
43.	PARAS HOTEL	CTO		Nagar Nigam Drain	Not Required
44.	RMS HOTELS & RESORTS INDIA PRIVATE LIMITED	CTO	Installed	Nagar Nigam Drain	Not Required
45.	SAI GUEST HOUSE	CTO	Installed	Nagar Nigam Drain	Not Required
46.	SHEKHAR SAXENA (HOTEL)	Consent To Establish	Installed	Nagar Nigam Drain	Not Required
47.	SHREE SHYAM RESORT	Consent To Establish		Nagar Nigam Drain	Not Required
48.	SUDHA KUMARI GUPTA	CTO	Installed	Nagar Nigam Drain	Not Required
49.	THE CITY SIDE HOTEL	CTO		Nagar Nigam Drain	Not Required
50.	THE EMERALD ORCHID	Consent To Establish	Installed	Nagar Nigam Drain	Not Required
51.	THE GRAND NIRVANA HOTEL AND RESORT (A UNIT OF CHHABRA ASSOCIATES)	CTO	Installed	Nagar Nigam Drain	Not Required
52.	TIROSE HOTEL	CTO		Nagar Nigam Drain	Not Required
53.	VINAYAK HOTEL AND RESORT	Consent To Establish	Installed	Nagar Nigam Drain	Not Required
54.	JM Vistara	CTO	Installed	Nagar Nigam Drain	Not Required

4. Industrial Effluent discharge by industries whose effluent is ultimately flowing to river Ganga or its tributaries

Total number of Industries	**Daily effluent discharge (KLD)**	**Treatment available (cetp/ petp/ etp operational capacity)**	**Effluent quality analysis (outlet of treatment plants Geo code sampling point)**	**GAP**	**Proposed/ under construction treatment project (with timeline)**	**Number of defaulting units- Action taken**	**Industrial solid waste generated/ day**	**Manner of disposal (Industrial solid waste)**
13 (Identified as water Polluting industries	195.50	ETP Operational	Achieving Standards	No Gap	No **Proposed/ under construction**	**defaulting units**	***Ash-***140.728 MT, **Press Mud -**780 MT	***Ash-***Disposed in low lying area and used in Bio-Fertilizer, **Press Mud -**Used as Manure

DetailsofGPICategoriesIndustries,Bareilly

S.N.	Name of Industries	Daily effluent discharge	Treatment available (cetp/ petp/ etp operational capacity)	Effluent quality analysis (outlet of treatment plants Geo code sampling point)	GAP	Proposed/ under construction treatment project (with timeline)	Number of defaulting units- Action taken	Industrial solid waste generated/ day	Manner of disposal (Industrial solid waste)
1.	Rehbar foods Pvt. Ltd., Mohanpur, Shahjahanpur Road, Bareilly	27.70	ETP operational	pH-7.2, O&G-3.8, SS-22.0 DS-1468.0 BOD-24.0 COD-192.0 DOS-15/02/2024	No GAP	Installed	zero	Ash- 0.2 MTD	***Ash-***Disposed in low lying area and used in Bio-Fertilizer
2.	Nagar Nigam Slaughter Houe, MohanpurThiriya, Bareilly	8.10	ETP operational	pH-7.3, SS-24.0 DS-1548.0 BOD-22.0 COD-200.0 DOS-15/02/2024	No GAP	Installed	zero	Ash- 0.2 MTD	***Ash-***Disposed in low lying area and used in Bio-Fertilizer
3.	Oriental Aomatics Ltd. C.B.ganj, Bareilly	9.60	ETP operational	pH-7.2, O&G-3.8, SS-20.0 DS-1528.0 BOD-22.0 COD-184.0 DOS-12/02/2024	No GAP	Installed	zero	Ash- 1.0 MTD	***Ash-***Disposed in low lying area and used in Bio-Fertilizer

4.	Superior Industries Ltd. (Distillery) C.B. Gang, Bareilly.	0.00	ETP operational	ZLD	No GAP	Installed	zero	Ash- 15.68 MTD	***Ash-***Disposed in low lying area and used in Bio-Fertilizer
5.	B.L. Agro Oils Ltd. Jauharpur, C.B.Ganj, Bareilly	17.40	ETP operational	pH-7.9, O&G-4.8, SS-22.0 DS-1580.0 BOD-22.0 COD-176.0 DOS-12/02/2024	No GAP	Installed	zero	Ash- 3.36 MTD	***Ash-***Disposed in low lying area and used in Bio-Fertilizer
6.	Rama Shyama Paper Ltd., Faridpur, Bareilly	0.00	ETP operational	pH-7.2, O&G-2.4, SS-26.0 DS-1548.0 BOD-24.0 COD-128.0 DOS-15/02/2024	No GAP	Installed	zero	ASH -0.198 MTD	***Ash-***Disposed in low lying area and used in Bio-Fertilizer
7.	Dwarikesh Sugar Industries Ltd. (Distillery Division), Faridpur, Bareilly	0.00	ETP operational	ZLD	No GAP	Installed	zero	Ash- 1.8 MTD	***Ash-***Disposed in low lying area and used in Bio-Fertilizer
8.	Dwarikesh Sugar Industries Ltd. Faridpur, Bareilly	47.0	ETP operational	pH-7.4, O&G-4.8, SS-23.0 DS-1640.0 BOD-24.0 COD-200.0 DOS-26/02/2024	No GAP	Installed	zero	Ash- 29.30 MTD, Press Mud-225 MTD	***Ash-***Disposed in low lying area and used in Bio-Fertilizer **Press Mud -**Used as Manure
9.	Kisan Sahkari Chini Mills Ltd. Semikhera, Bareilly	18.5	ETP operational	pH-7.6, O&G-3.2, SS-20.0 DS-1425.0 BOD-19.0 COD-147.0 DOS-05/02/2024	No GAP	Installed	zero	Ash-12.09 MTD, Press Mud-75 MTD	***Ash-***Disposed in low lying area and used in Bio-Fertilizer **Press Mud -**Used as Manure
10.	Kesar Enterprises Ltd. (Distillery Unit), Baheri, Bareilly	0.00	ETP operational	ZLD	No GAP	Installed	zero	Ash- 4.43 MTD	***Ash-***Disposed in low lying area and used in Bio-Fertilizer
11.	Kesar Enterprises Ltd. (Sugar Unit), Baheri, Bareilly	40.7	ETP operational	pH-7.1, O&G-4.0, SS-26.0 DS-1610.0 BOD-18.0 COD-168.0 DOS-28/02/2024	No GAP	Installed	zero	Ash- 34.02, Press Mud-195 MTD	***Ash-***Disposed in low lying area and used in Bio-Fertilizer **Press Mud -**Used as Manure
12.	Dhampur Bio-Organics Ltd., (Sugar Division), Meerganj, Bareilly	42.8	ETP operational	pH-7.6, SS-22.0 DS-1420.0 BOD-24.0 COD-184.0	No GAP	Installed	zero	Ash- 23.33 MTD. Press Mud-150 MTD	***Ash-***Disposed in low lying area and used in Bio-Fertilizer, **Press Mud -**Used as Manure

				DOS-07/02/2024					
13.	Oswal Overseas Ltd. (Sugar Unit) Nawabganj, Bareilly	11.40	ETP operational	pH-7.3, O&G-3.5, SS-20.0 DS-1640.0 BOD-26.0 COD-176.0 DOS-13/02/2024	No GAP	Installed	zero	Ash-15.12 MTD, Press Mud-135 MTD	***Ash-***Disposed in low lying area and used in Bio-Fertilizer, **Press Mud -**Used as Manure
14.	**Total**	**195.50**	**ETP operational**		No GAP	**Installed**	**zero**	**Ash-140.728 MTD** **Press Mud -780 MTD**	

5. Regulation of Flood Plain Zone:

Area- cities/ towns	Notification of flood plain zone	Demarcation		Encroachment & direct discharge GeoCode/ Sampling point	Encroachment removal status	Timeline for completion
		No development zone pillars	Regulatory zone pillars			
रामगंगानदीकेलिएNo Development Zoneतथा No Construction Zoneकेनिर्धारणहेतु (बिजनौरसेकन्नौजतक) अधिशासीअभियन्ता, बाढ़खण्ड, मुरादाबादद्वाराकियाजारहाहै। कार्यकीवस्तुस्थितिसेअवगतकरानेहेतुअधिशासीअभियन्ता, बाढ़खण्ड, मुरादाबादकोपत्रभीलिखाजाचुकाहै। सुलभसंदर्भहेतुछायाप्रतिसंलग्नहै।						

6. Afforestation/ Plantation along the bank of River Ganga and its tributaries and their flood plain zones

Area- cities/ towns	Total plantation Geo Code/ Sampling Point	Proposed project	Timeline
Bareilly	बहरोली से गोरापुलतकमार्ग–4800 N-28º28'21.13" E-79º12'18.75"	8000 plants	September 2024
	खल्लपुरवन खण्ड–1–16000 N-28º08'56.86"E-79º27'30.40"		
	खल्लपुरवन खण्ड–2–16000 N-28º09'02.40"E-79º27'08.62"		
	Total Plants- 36800 Plants have been planted in the year 2023-24		

7. Mining and Stone Crushing in river bed and flood plain zone of River Ganga and its tributaries:

Area of mining	FIR/ case registered/ year	Vehicles/ mineral seized	Action taken status	Cases pending in Court	Enforcement of EMGSM 2020 and Sustainable sand mining management guidelines 2016
0	01	530	Penalityimaposed and Rs.2,05,04,135/-	0	As per EMGSM 2020 and Sustainable sand mining management guidelines 2016 Enforcement is carried out.

1. The Tribunal has already directed for furnishing following information by order dated 24.11.2023:-

(1) District Ganga Protection Plan at city/ town level

District Ganga Protection Committee (DGPC) is required to formulate the action plan for each city and town located on main stem of river Ganga and its tributary and such Action Plan has to be prepared in accordance with the River Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016 (para 6 and 55).

- The District Ganga Plan for Bareilly (UP) has been developed as a Model District GangaPlan in a joint effort with the members of the District Ganga Committee Bareilly, NMCG,SMCG and GIZ experts. A planning cycle of 5 years is foreseen, which started in 2022 with thepreparation of the DGP. The progress is monitored and evaluated during the implementationwhichthenleadstotheselectionofKWMlsforthenext5-Yearplanningcycleandtheelaborationofnewinterventions,specifictargetsandconcreteactionplan.DGPBareillyhassubmittedtoStateMission forCleanGangaforApproval.

(2) Contents of the Action Plan (Consolidated District Wise Action Plan including each City and Town abutting river Ganga and its Tributary)

2.1 Sewage Management

(i) Sewage generation (MLD) (for entire District and individual town wise):

Sl.No.	NameofULB	TotalSewageGeneration(MLD)
1.	**Aonla (NPP)**	9.05
2.	**Baheri (NPP)**	11.09
3.	**Bareilly Nagar Nigam**	130
4.	**Bisharatganj (NP)**	1.72
5.	**Deoranian (NP)**	3.26
6.	**Dhaura Tanda (NP)**	6.08
7.	**Faridpur (NP)**	1.18
8.	**Faridpur (NPP)**	13.5
9.	**FatehganjPashchimi (NP)**	3.44
10.	**Fatehganj Purvi (NP)**	1.62
11.	**Mirganj (NP)**	2.99
12.	**Nawabganj (NPP)**	5.47
13.	**Richha (NP)**	3.22
14.	**Rithora (NP)**	2.77
15.	**Sainthal (NP)**	2.43
16.	**Shahi (NP)**	2.63
17.	**Shergarh (NP)**	2.73
18.	**Shishgarh (NP)**	4.24
19.	**Sirauli (NP)**	3.88
20.	**ThiriyaNizawat Khan (NP)**	3.65
	TOTALSEWAGEOFENTIREDISTRICT	**214.95**

(ii) Existing Sewage Treatment Capacities :**35 MLD Sarai TalfiDeoraniya Drain**

(iii) QuantityofsewageisbeingtreatedutilizationcapacityPerformanceofSTPsparticularlyforFC:

- **UtilizationatPresent–21MLDduetounderConstruction)**
- **GapinsewageTreatment–14.0MLD**
- **SewageTreatmentafteroperationofSTPatfullcapacity–35MLD**

(iv) Performance of STPs particularly for FC :**35 MLD STP is operational at saraitalfi, details are as fallows-**

Existing STP (location & capacity)	**Capacity (operational) MLD**	**Inlet/ Outlet water quality & quantity**	**Number of tapped drains (quantity of discharge)**	**GAP (in treatment) MLD**	**Final discharge point**	**Proposed/ under construction STP With completion date**
Sarai talfi	35	pH-7.9, SS-6.4.0 BOD-08.0 COD-20.0 TC-170 FC-84 DOS-07/02/2024	13 TAPPED	32	Ramganga River	STP in Operation
Trishul airbase at tatarpur village (**Lat-28.4192, Long.-79.4168)**	01	under construction STP	Not Tapped		Devraniya River→Ramganga River	under construction STP
Harunnagla(**Lat-28.359155 Long-79.468955)**	42	under construction STP	Not Tapped		Nakatiya River → Ramganga River	under construction STP
Chaubari(**Lat-28.2867 Long.-79.4050)**	20	under construction STP	Not Tapped		Chaubari→ Ramganga River	under construction STP

(v) Where treated sewage is being discharged (to Ganga or tributaries) :**Treated sewage is being discharged into Deoraniya River which joins to Ramganga River.Other 3 STP are under construction, details are as above table in point no.2.1 (iv).**

(vi) Reasons for Under-utilization of STPs (Connectivity of Households/ laying of sewer lines) :**All Drain are not Tapped and STP is under establisation.**

(vii) Current Gap in sewage treatment :**32 MLD**

(viii) Time bound plan for bridging the gap and tying up with financial arrangements and not delaying Tendering and identifying executing agencies or having any other issues :**NO, 35 MLD is operational and under stabilisation.**

(ix) Where untreated sewage (when there is no STP) is discharged (Ganga /Tributaries):**Ramganga River**

2.2 Drains joining Ganga and Tributary

(i) Number of drains carrying sewage- sullage or industrial waste water joining Ganga/ tributaries with their Quantity and Quality:**3 Drain/ Tributary joining River Ramganga and Ramganga is tributary of River Ganga.**

And thereisnountreatedsewagedirectlygoingintoRiverGanga.

2.2DrainsjoiningGangaandTributary

i)Number of drains carrying sewage–sullageorindustrialwastewaterjoiningGanga/Tributarieswiththeirquantityandquality

S.N.	Drain (city/ town)	Total drain capacity	Generation/ day	PH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride etc)	Nitrates	DO	TC	FC	Outlet flow and geo code/ sample point	Color/ odour	Discharged Into
1.	Deoraniya	128.0	102.28	7.2	32.0	240.0	84.0	553.0	Cr-0.2522 Cu-0.0382 Pb-ND Fe-0.5751 Zn-0.0812 Mn-0.2757 Ar-ND Hg-ND	ND	0.0	7900000	6300000	28.346178, 79.370461	Light Blackish	Ramganga River
2.	Nakatiya	30.0	24.13	7.4	40.0	280.0	96.0	596.0	Cr-0.1565 Cu-0.0187 Pb-0.0769 Fe-0.629 Zn-0.1576 Mn-0.3040 Ar-ND Hg-ND	ND	0.0	8400000	7900000	28.359454, 79.469518	Light Blackish	Ramganga River
3.	Chaubari	63.0	50.47	7.3	24.0	200	87.0	762.0	Cr-0.5393 Cu-0.0382 Pb-0.2308 Fe-2.5742 Zn-0.5080 Mn-0.3040 Ar-0.003 Hg-ND	ND	0.0	1200000	1100000	28.286925, 79.405402	Light Blackish	Ramganga River

Details of Drain Joining Deoraniya River/ Nakatiya River and Chaubari drain

S.N.	Drain (city/ town)	Total drain capacity	Generation/ day	PH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride etc)	DO	TC	FC	Outlet flow and geo code/ sample point	Color/ odour	Discharged Into
1	Dhurrera Maffi barrier Drain	0.27	0.21	7.5	22.0	144.0	89.0	634.0	Cr-0.2522 Cu-0.0480 Pb-0.769 Fe-3.8529 Zn-0.2150 Mn-0.3466 Ar-0.003 Hg-ND	0.00	**79000**	63000	28.401041, 79.467934	Light Blackish/ Sewage Like	Nakatiya River
2	100 foota road Nala	11.83	9.46	8.1	22.0	160.0	87.0	598.0	Cu-0.0382 Pb-0.1538 Fe-12.0653 Zn-0.2850 Mg-0.4366 Ar-0.016 Hg-ND	0.00	84000-	79000	28.386976, 79.454192	Light Blackish/ Sewage Like	Nakatiya River
3	Jagatpur police chauki to nakatiya river	26.26	21.01	8.0	28.0-	176.0	97.0	674.0	Cr-0.1565 Cu-0.0187 Pb-0.1538 Fe-0.6291 Zn-0.0844 Mn-0.2119 Ar-ND Hg-ND	0.00	63000	48000	28.363063, 79.446598	Light Blackish/ Sewage Like	Nakatiya River
4	Biharipur Drain	0.06	0.05	7.4	28	160	88.0	744.0	Cr-0.1565 Cu-0.0285 Pb-0.2308 Fe-1.7277 Zn-0.3869 Mn-0.4424 Ar-0.002 Hg-ND	0.00	94000	84000	28.361644, 79.398725	Light Blackish/ Sewage Like	Chaubari Drain
5	GP Tola Drain	20.04	16.03	8.0	22	144	84.0	778.0	Cr-0.2044 Cu-0.0382 Pb-0.0769 Fe-4.1590 Zn-0.2691 Mn-0.4103 Ar-0.005 Hg-ND	0.00	63000	48000	28.369781, 79.403018	Light Blackish/ Sewage Like	Chaubari Drain
6	Shahu Gopinath Drain	13.59	10.87	7.4	26	192	86.0	685.0	Cr-0.2522 Cu-0.0480 Pb-0.0769	0.00	70000	63000	28.370011, 79.402850	Light Blackish/	Chaubari Drain

									Fe-0.7012 Zn-0.1035 Mn-0.2970 Ar-ND Hg-ND -					Sewage Like	
7	Qila Bridge Drain	1.78	1.43	7.8	28.0	192.0	96.0	784.0	Cr-0.2044 Cu-0.0285 Pb-ND Fe-1.1874 Zn-0.0653 Mn-0.3466 Ar-0.002 Hg-ND	0.00	84000	79000	28.370847, 79.398549	Light Blackish/ Sewage Like	Nakatiya River
8	Krishna Hospital 1&2 Drain	14.69	11.75	7.8	26.0	176.0	87.0	689.0	Cr-0.1565 Cu-0.0285 Pb-0.0769 Fe-2.7903 Zn-0.2723 Mn-0.7434 Ar-0.004 Hg-ND	0.00	79000	63000	28.369728, 79.405601	Light Blackish/ Sewage Like	Deoraniya River
9	Chauki Asraf Khan & Gulab Nagar Drain	20.7	16.56	7.4	28.0	192.0	84.0	742.0	Cr-0.4915 Cu-0.0578 Pb-2308 Fe-1.3855 Zn-0.4793 Mn-0.3678 Ar-0.002 Hg-ND	0.00	84000	79000	28.239424, 79.414558	Light Blackish/ Sewage Like	Deoraniya River
10	Haru nagla& Green Park Nala-02	0.74	0.59	8.2	22.0	144.0	96.0	738.0	Cr-0.1565 Cu-0.0187 Pb-0.0769 Fe-2.9704 Zn-0.2946 Mn-0.4103 Ar-0.006 Hg-ND	0.00	92000	84000	28.361309, 79.455817	Light Blackish/ Sewage Like	Nakatiya River
11	Satellite Bus stand Drain	11.99	9.59	7.8	6.0-	192.0	94.0	698.0	Cr-0.3001 Cu-0.0480 Pb-ND Fe-0.5211 Zn-0.1927 Mn-0.2828 Ar-ND Hg-ND	0.00	94000	84000	28.349041, 79.441158	Light Blackish/ Sewage Like	Nakatiya River
12	Chaubari Drain	23.52	18.82	7.8	24.0	176.0	96.0	784.0	Cr-0.2044 Cu-0.0285 Pb-ND Fe-2.8623 Zn-0.1768 Mn-0.4103	0.00	920000	840000	28.3340633, 79.4047369	Light Blackish/ Sewage Like	Chaubari Drain

									Ar-0.003 Hg-ND -						
13	Airforce Nala	1.08	0.87	7.8	28.0	192.0	78.0	688.0	Cr-0.2044 Cu-0.0382 Pb-0.1538 Fe-0.7912 Zn-0.0557 Mn-0.3324 Ar-0.ND Hg-ND	0.00	63000	48000	28.416409, 79.428054	Light Blackish/ Sewage Like	Devranya River

NOTE-

1. Treatment of Total Coliform and Fecal Coliform will be done through STP, for this purpose Ultra Violet Line is installed in STP. After treatment Total Coliform and Fecal Coliform will be within standard.
2. All The 13 Drain Joins with Deoraniya River/Nakatiya River/ Chaubari Drain and Treatment of Total Coliform and Fecal Coliform will be done through STP, for this purpose Ultra Violet Line is either installed or Proposed for installation in STP. After treatment Total Coliform and Fecal Coliform will be within standard
3. **Nitrate analysis facility is not available**

(ii) Drains joining outside city and town limits but, either joining in village or nearby town:**NoDrains joining outside city and town**

(iii) Inclusion of sewage flowing in drains into total sewage generation figures of each city and town and their interception and diversion to STPs:,

- **03STPisunderconstructionatTatarpur ,Capacity–01MLD,**
- **Chaubari capacity – 20 MLD.**
- **Nakatiya Capacity – 42 MLD.**

2.3 Septage management (In case of no STP)

(i) Status of Septage management (with reference to FSTP/STP):**35 MLDSTP INSTALLED**

(ii) Management of Grey water and its disposal:

- **35 MLDSTP INSTALLEDand Other STP are under construction**

2.4 Industrial Pollution Control

(i) Attach the list on no. of industries generating trade effluents, their place of disposal and compliance including CETPs (town wise):**List is as below.**

DetailsofGPICategoriesIndustries,Bareilly

S.N.	Name of Industries	Daily effluent discharge	Treatment available (cetp/ petp/ etp operational capacity)	Effluent quality analysis (Outlet of treatment plants Geo code sampling point)	GAP	Proposed/ under construction treatment project (with timeline)	Number of defaulting units- Action taken	Industrial solid waste generated/ day	Manner of disposal (Industrial solid waste)
1.	Rehbar foods Pvt. Ltd., Mohanpur, Shahjahanpur Road, Bareilly	27.70	ETP operational	pH-7.2, O&G-3.8, SS-22.0 DS-1468.0 BOD-24.0 COD-192.0 DOS-15/02/2024	No GAP	Installed	zero	Ash- 0.2 MTD	***Ash-***Disposed in low lying area and used in Bio-Fertilizer
2.	Nagar Nigam Slaughter Houe, Mohanpur Thiriya, Bareilly	8.10	ETP operational	pH-7.3, SS-24.0 DS-1548.0 BOD-22.0 COD-200.0 DOS-15/02/2024	No GAP	Installed	zero	Ash- 0.2 MTD	***Ash-***Disposed in low lying area and used in Bio-Fertilizer
3.	Oriental Aomatics Ltd. C.B.ganj, Bareilly	9.60	ETP operational	pH-7.2, O&G-3.8, SS-20.0 DS-1528.0 BOD-22.0 COD-184.0 DOS-12/02/2024	No GAP	Installed	zero	Ash- 1.0 MTD	***Ash-***Disposed in low lying area and used in Bio-Fertilizer
4.	Superior Industries Ltd. (Distillery) C.B. Gang, Bareilly.	0.00	ETP operational	ZLD	No GAP	Installed	zero	Ash- 15.68 MTD	***Ash-***Disposed in low lying area and used in Bio-Fertilizer
5.	B.L. Argo Oils Ltd. Jauharpur, C.B.Ganj, Bareilly	17.40	ETP operational	pH-7.9, O&G-4.8, SS-22.0 DS-1580.0 BOD-22.0 COD-176.0 DOS-12/02/2024	No GAP	Installed	zero	Ash- 3.36 MTD	***Ash-***Disposed in low lying area and used in Bio-Fertilizer
6.	Rama Shyama Paper Ltd., Faridpur, Bareilly	0.00	ETP operational	pH-7.2, O&G-2.4, SS-26.0 DS-1548.0 BOD-24.0 COD-128.0 DOS-15/02/2024	No GAP	Installed	zero	ASH -0.198 MTD	***Ash-***Disposed in low lying area and used in Bio-Fertilizer

7.	Dwarikesh Sugar Industries Ltd. (Distillery Division), Faridpur, Bareilly	0.00	ETP operational	ZLD	No GAP	Installed	zero	Ash- 1.8 MTD	***Ash-***Disposed in low lying area and used in Bio-Fertilizer
8.	Dwarikesh Sugar Industries Ltd. Faridpur, Bareilly	47.0	ETP operational	pH-7.4, O&G-4.8, SS-23.0 DS-1640.0 BOD-24.0 COD-200.0 DOS-26/02/2024	No GAP	Installed	zero	Ash- 29.30 MTD, Press Mud-225 MTD	***Ash-***Disposed in low lying area and used in Bio-Fertilizer **Press Mud -**Used as Manure
9.	Kisan Sahkari Chini Mills Ltd. Semikhera, Bareilly	18.5	ETP operational	pH-7.6, O&G-3.2, SS-20.0 DS-1425.0 BOD-19.0 COD-147.0 DOS-05/02/2024	No GAP	Installed	zero	Ash-12.09 MTD, Press Mud-75 MTD	***Ash-***Disposed in low lying area and used in Bio-Fertilizer **Press Mud -**Used as Manure
10.	Kesar Enterprises Ltd. (Distillery Unit), Baheri, Bareilly	0.00	ETP operational	ZLD	No GAP	Installed	zero	Ash- 4.43 MTD	***Ash-***Disposed in low lying area and used in Bio-Fertilizer
11.	Kesar Enterprises Ltd. (Sugar Unit), Baheri, Bareilly	40.7	ETP operational	pH-7.1, O&G-4.0, SS-26.0 DS-1610.0 BOD-18.0 COD-168.0 DOS-28/02/2024	No GAP	Installed	zero	Ash- 34.02, Press Mud-195 MTD	***Ash-***Disposed in low lying area and used in Bio-Fertilizer **Press Mud -**Used as Manure
12.	Dhampur Bio-Organics Ltd., (Sugar Division), Meerganj, Bareilly	42.8	ETP operational	pH-7.6, SS-22.0 DS-1420.0 BOD-24.0 COD-184.0 DOS-07/02/2024	No GAP	Installed	zero	Ash- 23.33 MTD. Press Mud-150 MTD	***Ash-***Disposed in low lying area and used in Bio-Fertilizer, **Press Mud -**Used as Manure
13.	Oswal Overseas Ltd. (Sugar Unit) Nawabganj, Bareilly	11.40	ETP operational	pH-7.3, O&G-3.5, SS-20.0 DS-1640.0 BOD-26.0 COD-176.0 DOS-13/02/2024	No GAP	Installed	zero	Ash-15.12 MTD, Press Mud-135 MTD	***Ash-***Disposed in low lying area and used in Bio-Fertilizer, **Press Mud -**Used as Manure
14.	**Total**	**195.50**	**ETP operational**		No GAP	**Installed**	**zero**	**140.728**	

(3) Water quality status

Provide water quality status of Ganga and its tributaries in the District and city/ town in terms of its fitness for Bathing water quality that is, FC and FS:**Water Quality Status of River Ganga and its tributaries is as Below**

RIVER WATER SAMPLING FEBURARY-2024

SR. NO.	Name of River	Sampling Point	District	Dt. Of Sampling	Colour (Hazen/Apearance)	Odour	pH	D.O (mg/L)	B.O.D (mg/L)	C.O.D (mg/L)	Hardness as $CaCO_3$ (mg/L)	Calcium as Ca^{++} (mg/L)	Magnesium as Mg^{++} (mg/L)	Chloride as Cl^- (mg/L)	Alkalinity as $CaCO_3$ (mg/L)	TDS (mg/L)	TSS (mg/L)	TS (mg/L)	E.C. (µS/cm)	TURBIDITY (NTU)	Total Coliform (MPN/100ml)	Fecal Coliform (MPN/100ml)
1	Ramganga	U/S Kapoorpur village ,meerganj bareilly	Bareilly	02.02.2024	15	odourless	8.0	8.7	2.5	28	134	30.4	14.09	12	36	298	46	344	447	38	4600	2600
2	Ramganga	D/S Ahirgautiya village, Faridpur road	Bareilly	02.02.2024	20	odourless	7.8	8.4	2.7	36	156	32.0	18.46	22	44	350	58	408	529	44	8400	7900
3	Ganga river	Badaun road,kacla ghat	Badaun	02.02.2024	10	odourless	7.8	10.5	1.4	16	126	27.2	14.09	10	30	128	30	158	196	26	480	260
4	Ramganga	U/S Kapoorpur village ,meerganj bareilly	Bareilly	06.02.2024	15	odourless	7.8	8.8	2.4	24	130	32.0	12.15	14	32	299	40	339	454	34	4800	3500
5	Ramganga	D/S Ahirgautiya village, Faridpur road	Bareilly	06.02.2024	20	odourless	8.0	8.4	2.5	28	152	31.2	17.98	20	46	354	52	406	539	46	7900	6300
6	Ganga river	Badaun road,kacla ghat	Badaun	06.02.2024	10	odourless	7.7	10.4	1.2	12	120	26.4	13.12	12	28	124	26	150	188	28	400	210
7	Ramganga	U/S Kapoorpur village ,meerganj bareilly	Bareilly	09.02.2024	15	odourless	7.8	8.8	2.5	24	132	30.4	13.60	14	34	289	44	333	434	36	4800	3500
8	Ramganga	D/S Ahirgautiya village, Faridpur road	Bareilly	09.02.2024	20	odourless	8.0	8.4	2.6	32	158	32.8	18.46	22	44	322	54	376	488	48	7900	6300
9	Ganga river	Badaun road,kacla ghat	Badaun	09.02.2024	10	odourless	7.6	10.1	1.4	16	126	27.2	14.09	14	32	124	28	152	189	22	400	210
10	Aril river	Bareilly-Aonla road bridge, Near IFFCO	Bareilly	09.02.2024	25	odourless	8.0	7.7	3.5	36	184	45.6	17.01	22	82	393	76	469	595	56	14000	11000
11	West Behgul	Bareilly-Rampur road bridge meerganj	Bareilly	10.02.2024	25	odourless	8.0	8.7	2.5	32	178	36.0	21.38	18	60	395	60	455	598	50	1400	9200

12	Bhakhara river	bareilly-rampur road bridge	Bareilly	10.02.2024	10	odourless	7.8	9.0	1.6	214	158	32.8	18.46	12	50	217	38	255	329	30	4800	3500
13	PEELA KHAR RIVER	VILLAGE JAUNE, MEERGANJ	Bareilly	10.02.2024	25	odourless	8.0	7.5	3.3	32	178	38.4	19.92	22	72	389	66	455	588	48	17000	12000
14	East bhegul	Bareilly-Shahjahanpur road bridge, Fatehganj (East)	Bareilly	12.02.2024	10	odourless	7.8	8.9	1.4	16	130	27.2	15.06	12	30	183	40	223	279	28	630	460
15	Ramganga	U/S Kapoorpur village ,meerganj bareilly	Bareilly	13.02.2024	15	odourless	7.8	8.6	2.3	28	136	32.8	13.12	12	54	288	40	328	432	36	4600	2700
16	Ramganga	D/S Ahirgautiya village, Faridpur road	Bareilly	13.02.2024	20	odourless	8.2	8.3	2.7	36	166	36.8	17.98	16	60	317	42	359	479	38	6300	4800
17	Ganga river	Badaun road,kacla ghat	Badaun	13.02.2024	10	odourless	7.6	10.8	1.3	16	112	23.2	13.12	10	38	129	26	155	197	30	480	350
18	kicha river	Narayan nagla bridge ,Baheri	Bareilly	14.02.2024	25	odourless	7.8	7.9	3.1	36	164	35.2	18.46	18	64	369	62	431	558	52	14000	9200
19	Ramganga	U/S Kapoorpur village ,meerganj bareilly	Bareilly	16.02.2024	15	odourless	7.8	9.9	2.5	24	128	34.4	12.63	14	52	292	43	335	439	38	4600	2700
20	Ramganga	D/S Ahirgautiya village, Faridpur road	Bareilly	16.02.2024	20	odourless	8.2	8.7	2.6	32	164	35.2	12.46	18	64	326	46	372	489	40	6300	4800
21	Ganga river	Badaun road,kacla ghat	Badaun	16.02.2024	10	odourless	7.7	10.9	1.4	16	114	26.4	11.66	10	36	123	24	147	187	28	480	350
22	Ramganga	U/S Kapoorpur village ,meerganj bareilly	Bareilly	20.02.2024	15	odourless	7.8	8.9	2.4	24	140	33.6	13.60	14	48	318	40	358	479	28	4100	3300
23	Ramganga	D/S Ahirgautiya village, Faridpur road	Bareilly	20.02.2024	20	odourless	8.0	8.7	2.5	28	166	36.8	36.80	16	52	366	52	418	418	38	4800	3500
24	Ganga river	Badaun road,kacla ghat	Badaun	23.02.2024	10	odourless	7.7	10.8	1.2	12	118	24.8	24.80	8	32	126	28	154	154	29	400	330
25	Ramganga	U/S Kapoorpur village ,meerganj bareilly	Bareilly	23.02.2024	15	odourless	7.6	8.7	2.5	24	138	32.2	14.58	12	52	273	38	311	415	30	4100	3300
26	Ramganga	D/S Ahirgautiya village, Faridpur road	Bareilly	23.02.2024	20	odourless	8.0	8.2	2.6	32	164	38.4	16.52	14	58	299	36	335	454	32	4800	3500
27	Ganga river	Badaun road,kacla ghat	Badaun	23.02.2024	10	odourless	7.5	10.1	1.1	8	122	26.4	13.60	10	28	131	26	157	199	22	400	330
28	West Behgul	Bareilly-Rampur road bridge meerganj	Bareilly	24.02.2024	25	odourless	7.8	8.6	2.6	28	160	35.2	17.49	16	62	390	58	448	585	48	12000	8400
29	Bhakhara river	bareilly-rampur road bridge	Bareilly	24.02.2024	15	odourless	8.0	8.8	1.5	20	142	31.2	15.55	12	46	220	36	256	334	32	6300	4600

30	PEELA KHAR RIVER	VILLAGE JAUNE, MEERGANJ	Bareilly	24.02.2024	25	odourless	8.0	7.6	3.2	36	180	42.4	17.98	24	76	378	60	438	569	44	9200	7900
31	East bhegul	Bareilly-Shahjahanpur road bridge, Fatehganj (East)	Bareilly	26.02.2024	10	odourless	8.0	8.8	1.3	12	126	28.8	13.12	10	34	172	32	204	258	28	790	480

(4) Notification of **Flood Plain Zones**:

रामगंगा नदी के लिएNo Development ZoneतथाNo Construction Zoneके निर्धारण हेतु (बिजनौर से कन्नौजतक) अधिशासी अभियन्ता,बाढ़खण्ड,मुरादाबाद द्वारा किया जा रहा है। कार्य की वस्तु स्थिति से अवगत कराने हेतु अधिशासी अभियन्ता,बाढ़खण्ड,मुरादाबाद को पत्र भी लिखा जा चुका है। सुलभ संदर्भ हेतु छाया प्रति संलग्न है।

(5) Issues relating to **Environmental Flow**:

- **There is no any issue related to Environmental Flowin District Bareilly**

- **Fallowing location on river Ramganga and its tributaries where joint E- Flow monitoring , Sample collection and water Quality Analysis is being done regularly-**

S.N.	Name of River	Sampling Points	District	Sampling Frequency
1	**Aril River**	Bareilly-Aonla road bridge, Near IFFCO	Bareilly	FOURT NIGHTLY
2	Bhakhara river	bareilly-rampur road bridge	Bareilly	FOURT NIGHTLY
3	Deraniya	U/S Near vIll- AspurPeetamray-byepass road Bridge	Bareilly	FOURT NIGHTLY
4	Deraniya	D/S Village - Sarai -Talfi	Bareilly	FOURT NIGHTLY
5	Kichha	Narayan nagla bridge	Bareilly	WEEKLY
6	Nakatiya	U/S bareilly-PBT Road Bridge, Vill- Aspura	Bareilly	FOURT NIGHTLY
7	Nakatiya	D/S Bareilly- Faridpur Road Village ManpurChikitiya,	Bareilly	FOURT NIGHTLY
8	Ramganga	U/S Vill-Kapoorpur, Meerganj	Bareilly	WEEKLY
9	Ramganga	D/S Ahir Gautiya, Fareedpur	Bareilly	WEEKLY
10	West Behgul	Bareilly-Rampur road bridge	Bareilly	FOURT NIGHTLY

BESTPRACTICE

- ***UPOCMMS(UPOnlineConsentManagement&MonitoringSystem)***

Background:

CentralPollutionControlBoard(CPCB)playsroleinabatementandcontrolofpollutioninthecountrybygeneratingrelevantdata,providingscientificinformation,renderingtechnicalinputsfor formationofnationalpoliciesandprograms, trainingandddevelopment of manpower and organizing activities for promoting awareness at different levels of the Government and public.CentralPollutionControlBoardhasplannedtodevelopOnlineConsentManagementandMonitoringSystem(OCMMS)foreachstatewithhelp of National Informatics Centre (NIC) in all over India.In the year 7102, the Online Consent Management andMonitoring System(OCMMS)wasimplementedinUttarPradeshbytheCentralPollutionControlBoard,itspurposetofacilitateIndustriestoapplyandObtainon line for Consent to Establishment(CTE), Consent to Operate Water and Air (CTO Water & Air), Hazardous Waste Authorization, Bio-Medical Waste Authorization, Authorization under Plastic Waste Management Rule 7102, Authorization under Solid Waste ManagementRussia7102, Authorization under E-waste Management Rules7102, Authorizationunder CNDRules7102.

Intervention:

To implement this process, Central Pollution Control Board organised Training programme & provided OCMMS software to Uttar PradeshPollution Control Board, site for this software is *upocmms.nic.in*. By using upocmms.nic.in one can apply for above said certificate fromanywhere and can monitor his application, to whom it is pending and how long it was pending in some once account. At present*upocmms.nic.in*under SingleWindow Systemit isavailable through “NIVESHMITRA (niveshmitra.nic.in)”

Impactonpublic:

It had such a good impact on the public that there is no need to approach or call UPPCB office. Monitoring of application is very easy in allsteps.Afterapproval Certificate canbedownloaded from niveshmitrasiteor fromupocmms.nic.in.

KeyOutcome:

1. As all the applications are online, the status of Granted, Reject and Pending applications also remains online. Therefore, the status ofapplications

available to everyone at all time. Result of this is all application are disposed within time or before time prescribed byUPPCB,HOand no pendencyof application duringthemeetingof District UdyogBandhuorDivisional UdyogBandhu.

2. Industries have got the biggest benefit that the industrialist can monitor the application from his mobile or computer from wherever heis,atwhatstagehisapplicationispendingorifanyqueryorapproved.Incaseofqueryraisedbyuppcbemailissendtoregisteredemail-id byNivesh Mitra.
3. The certificate issued by the *upocmms*can be downloaded online, from its site or from Nivesh Mitra. for Need not to come to UPPCBoffice.
4. In the disposal of the application, the application is disposed of at several levels and finally the certificate is digitally signed by thecompetentauthority,inthisprocessitisknownatwhatleveltheapplicationhasbeenpendingforhowlongtime.RegionalOfficerisCompetentofficers,keepmonitoringcontinuously,iftheapplicationispendingwithanyofficerafterthe prescribedperiod,thentheyorder itforquick disposal.
5. GeneratedCertificateisavailableofallpreviousyearonsiteandifrequiredcanbeverifiedordownloadatanytimebyanypersonlikeBankofficials, RevenueDepartment officials etc.

Summary

1. Ithasbecomeveryconvenienttoeachandeverypersonifheforget/misplaced/damagecertificatethenneednottoworry,certificatecouldbedownloadedfrom site at anytime.
2. Verification ofcertificate, whichis produced bytheanypersonconcern, itisveryeasyto verifythecertificate byputting application idin OCMMS site.

LessonLearnt:

Online systems are veryconvenientfor publicaswell asDepartment. Weare about to useandadopt on line CTO,CTE,Hazardouswasteand for otherapplication On LineReportingSystem. ByUsingon linereportingsystem disposal offapplication willbeveryfast.

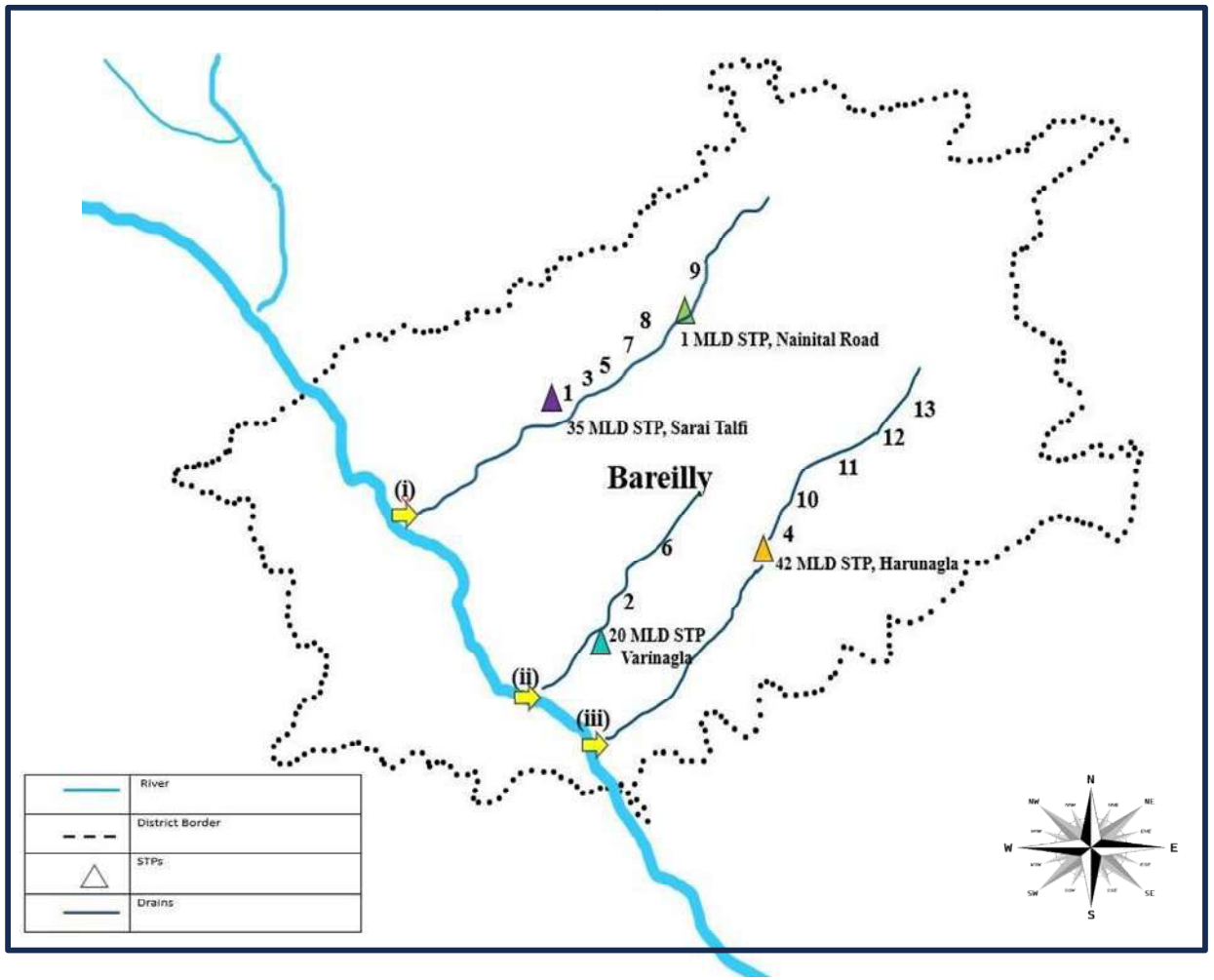
- AllGangaVillage(NearGangaRiver& Its Tributaries)hasdeclaredasODF+.
- District Administration and NagarNigamBareillyTakenagreatinitiativenamely Arti of Ramganga riverbyco-ordinationwithNGO's.

Above report is compiled on the basis of reports/figures submitted by concerned departments.

DISTRICTGANGACOMMITTEEBAREILLY

Bareilly:28.3670°N,79.4304°E

Area:City 106 Km²41Sq Km. No. of ULB – 21
No.ofBlock –15



(i) **DeoraniyaDrain**28°20'58"N79°22'42"E
(ii) ChaubariDrain28°17'41"N79°23'33"
(iii) **NakatiyaDrain**28°15'01"N79°26'10"E

1MLDSTP,NainitalRoad28°25'09"N79°25'0(
42MLDSTP,Harunagla28°21'34"N 79°28'10"E
35MlDSaraiTalfi28°21'22"N79°23'31"E
20MLDVarinagla28°17'12"N79°24'19"E

1) **ChaukiAshrafKhan,GulabNagarDrain**28.379424, 79.414558
2) **SahuGopinathDrain**28.370011,79.40285
3) **KilaDrain**28.370847A79.398549
4) **100Futa Drain**28.386976,79.454192
5) **KrishnaHospitalDrain**28.369728,79.405601
6) **Chaubari Drain**28.3340633, 79.404736666
7) **Biharipurdrain**28.361644, 79.398725
8) **GPTola Drain**28.369781,79.403018
9) **Air ForceDrain**28.416409,79.428054
10) **Jagatpur Police Chauki Drain** 28.363063, 79.44659
11) **Harungla and Green Park Drain** 28.361309, 79.455817
12) **Dhaurera Maafi Barrier Drain** 28.401041, 79.467934
13) **SatelliteBusStandDrain**28.354581,79.435432

जल शक्ति मंत्रालय
MINISTRY OF
JAL SHAKTI

In compliance of Hon'ble NGT order

In O.A. 200/2014 MC Mehta *Vs* UOI and Ors.

District Ganga Committee Report

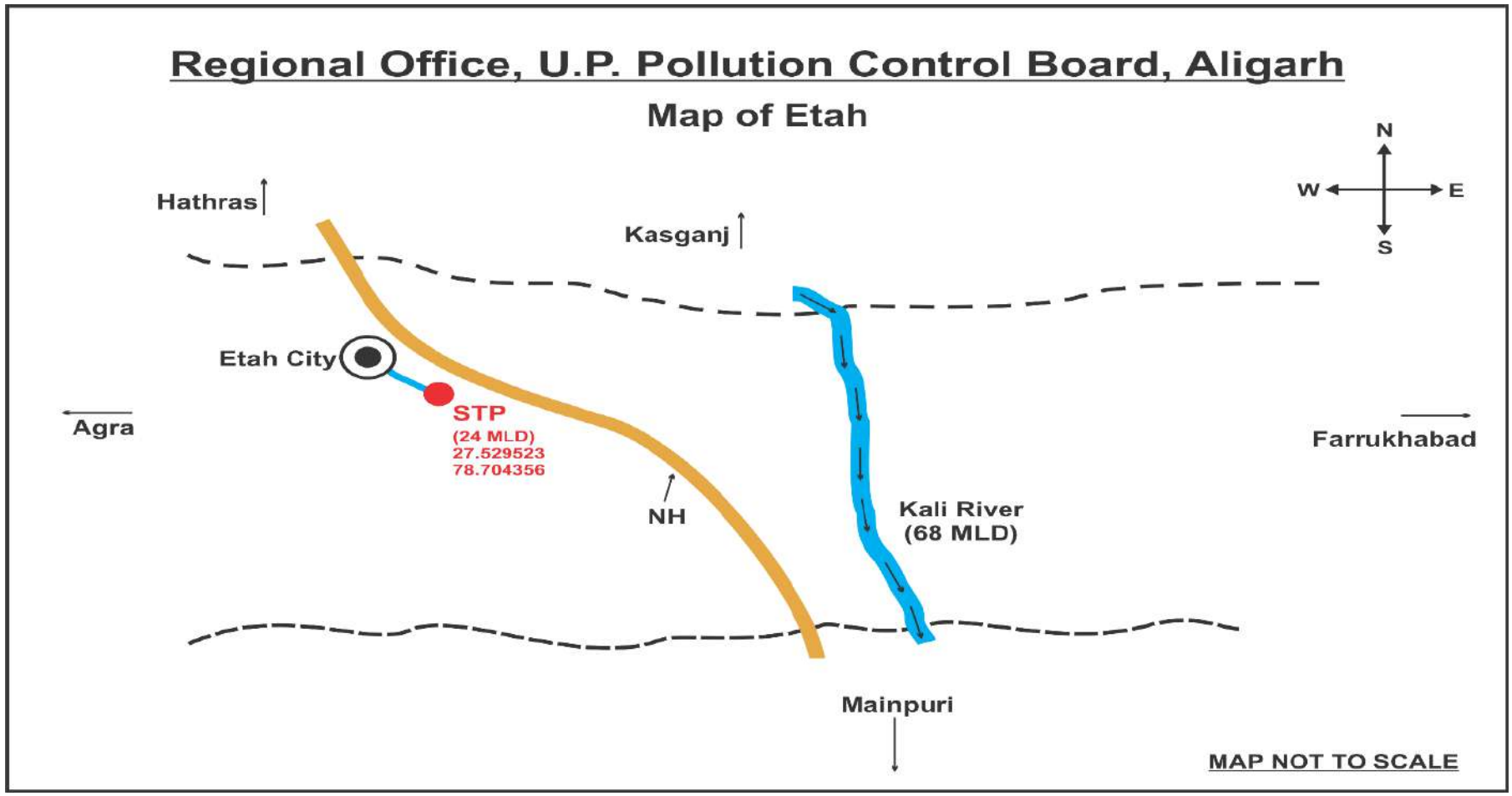
Submitted by

DISTRICT GANGA COMMITTEE, ETAH, UTTAR PRADESH

MC MEHTA vs. UNION OF INDIA (OA. NO. 200 OF 2014)
ADDITIONAL INFORMATION, AS PER THE ORDER 05.02.2024
District-Etah

S.NO	ADDITIONAL INFORMATION	ANSWER
1.	That STPs installed, are underutilised and that treated effluents are discharged into the drains carrying untreated wastewater thereby defeating the very purpose of the efficacy of STPs.	STP of 24 MLD capacity is operated for Etah city. Approx . 12 MLD sewage is generated from Etah city, which is treated through STP and used for land irrigation.
2.	The quantification and estimation of sewage entering to each STP through sewer network or through interception and diversion of drains.	Approx. 12 MLD sewage from Etah city is brought to STP through sewer network.
3.	the breakup of quantity of sewage fed to each STP through sewerage and drains, indicating location of STP (with geo coordinates) and quality and quantity of discharged sewage and its disposal location.	STP is established in Village-Manpur, Tehsil-Sadar, District-Eta, whose latitude is 27.529523 and longitude is 78.704356. According to the analysis test report of the effluent discharged from STP, pH-7.41, BOD-24 mg/l, COD-108 mg/l, SS-88 mg/l have been found. The quantity of effluent discharged from STP is approximately 12 MLD. The treated effluent from STP is used for land irrigation.
4.	These identified industries should be imposed with the Consent conditions to adopt ZLD system or maximize recycling/ reuse of treated effluents rather than consenting them to discharge into drains with no burden on them.	Consent (water/air) is given by the Regional Office, Uttar Pradesh Pollution Control Board, Aligarh with the conditions of reusing the maximum purified effluent in the industrial process and for using it in land irrigation. Instructions are issued from time to time to operate zero liquid disposal system in the industry.
5.	We are of the view that additional columns are to be included reflecting the drain, position of STP with capacity, their geo-coordinates, discharge quantity from the STP in the drain and total per day discharge from the drain into river.	STP is established in Village-Manpur, Tehsil-Sadar, District-Eta, whose latitude is 27.529523 and longitude is 78.704356. According to the analysis test report of the effluent discharged from STP, pH-7.41, BOD-24 mg/l, COD-108 mg/l, SS-88 mg/l have been found. The quantity of effluent discharged from STP is approximately 12 MLD. The treated effluent from STP is used for land irrigation.
6.	mention heavy metals analysis in respect of discharge from each of the drain in the report.	Sample collection of water samples of Etah Drain under Regional Office, Uttar Pradesh Pollution Control Board, Aligarh was done on 10/01/2024. According to the analysis test reports received, Parameters are give below :-

Sr. No.	Drain	Heavy Metal
1	Local Drain, Manpur G.T. Road, Etah	Total Chromium-1.2933 mg/l ,Copper-0.8569 mg/l, lead-0.1247 mg/l, lron-9.6946 mg/l, Zinc-5.9288mg/l, Maganese-0.3968 mg/l, arsenic-ND, Mercury-ND
2	Local Drain, Agra Chungi Agra Road, Etah	Total Chromium-0.2081 mg/l ,Copper-0.2606 mg/l, lead-0.0356 mg/l, lron-3.7603 mg/l, Zinc-0.8955 mg/l, Maganese-0.3277 mg/l, arsenic-ND, Mercury-ND
3	Local Drain, Near Christian Agricultural Inter College, Etah	Total Chromium-0.0939 mg/l ,Copper-0.1955 mg/l, lead-0.0356 mg/l, lron-4.2745 mg/l, Zinc-0.5973 mg/l, Maganese-0.1819 mg/l, arsenic-ND, Mercury-ND


Regional Office, U.P. Pollution Control Board, Aligarh
Map of Etah
N
W
E
S
Hathras
Kasganj
Etah City
STP
(24 MLD)
27.529523
78.704356
Agra
Farrukhabad
NH
Kali River
(68 MLD)
Mainpuri
MAP NOT TO SCALE

1. Sewage

Drain (city/town)	Total drain capacity	Generation/ day	pH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride etc)	DO	TC	FC	Outlet flow and geo code/ sample point	Color/ odour	Discharged Into
Local Drain, Manpur G.T. Road, Eta	4 MLD	4 MLD	7.86	56	128	124	590	Total Chromium-1.2933 mg/l ,Copper-0.8569 mg/l, lead-0.1247 mg/l, lron-9.6946 mg/l, Zinc-5.9288mg/l, Maganese-0.3968 mg/l, arsenic-ND, Mercury-ND	0	460000	34 00 00	4.0 MLD	Blackish/ Unpleasent	STP approxe-5 K.M
Local Drain, Agra Chungi Agra Road, Etah	2 MLD	2 MLD	7.84	52	125	120	580	Total Chromium-0.2081 mg/l ,Copper-0.2606 mg/l, lead-0.0356 mg/l, lron-3.7603 mg/l, Zinc-0.8955 mg/l, Maganese-0.3277 mg/l, arsenic-ND, Mercury-ND	0	460000	34 00 00	2.0 MLD	Blackish/ Unpleasent	STP approxe-5 K.M
Local Drain, Near Christian Agricultural Inter College, Etah	2 MLD	2 MLD	7.8	53	124	122	570	Total Chromium-0.0939 mg/l ,Copper-0.1955 mg/l, lead-0.0356 mg/l, lron-4.2745 mg/l, Zinc-0.5973 mg/l, Maganese-0.1819 mg/l, arsenic-ND, Mercury-ND	0	6300000	49 00 00 0	2.0 MLD	Blackish/ Unpleasent	STP approxe-5 K.M

The above information is to be submitted on the basis of end point sample analysis of the concerned drain

2. STP for treating the sewage of the drains ultimately flowing to river ganga or its

Existing STP (location & capacity)	Capacity (operational)	Inlet/ Outlet water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point	Proposed/ under construction STP With completion date
STP MANPUR, ETAH, (Latitude-27.529523 Longitute-78.704356) 24 MLD	24 MLD	Outlet water quality-pH-7.41, BOD-24 mg/l, COD-108 mg/l, SS-88 mg/l. dated 19.12.2023, Quantity 12 MLD	03 Nos. Drains, Quantity of discharged 12 MLD	STP alreadty Installed	Local Drain for Irrigation	STP alreadty Installed

2.1 STP ADDITIONAL INFORMATION

NAME OF DRAIN	POSITION OF STP WITH CAPACITY	GEO/ COORDINATES	DISCHARGE QUANTITY FROM THE STP IN THE DRAIN	TOTAL PER DAY DISCHARGE FROM THE DRAIN INTO THE RIVER
1. Etah Drain Near-Shiv Mandir, Etah	Village-Manpur, Tehsil & District-Etah 24 MLD	Latitude-27.529523 Longitute-78.704356	12 MLD	12 MLD treated effluent discharge in local drain for irrigation
2. Local Drain, Agra Chungi Agra Road, Etah				
3. Local Drain, Near Christian Agricultural Inter College, Etah				

Proposed STP (location & capacity)	Capacity (operational)	Inlet/ Outlet water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point Geo code/ sampling point	Proposed/under construction STP With completion date
24 MLD STP installed for Etah city. No STP installed for other city of district Etah.	24 MLD	Outlet water quality-pH-7.41, BOD-24 mg/l, COD-108 mg/l, SS-88 mg/l. dated 19.12.2023, Quantity 12 MLD	03 Nos. Drains, Quantity of discharged 12 MLD	24 MLD STP installed for Etah city. No STP installed for other city of district Etah.	Local Drain	24 MLD STP installed for Etah city. No STP installed for other city of district Etah.

3. Hotels/ Ashrams/Dharmshalas/residential complexes abutting river Ganga or its tributaries

Number of Hotels	Consent to establish/ operate	STP	Discharge point	Action taken
1.M/s S.P,.S. Resort, Mainpur Road, AliganjBaharChungi, Aliganj, Etah	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
2. M/s President Hotel GT Road Etah	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
3.M/s Taj Hotel , GT Road Etah	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
4. M/s Quality Hotel , GT Road Etah	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
5. M/s Radheshyam Hotel , GT Road Etah	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
6. M/s Hotel Ganga , GT Road Etah	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
7. M/s Rameshwaram Hotel Restaurant , GT Road Etah	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
8. M/s Hotel Maya Palace , GT Road Etah	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
9. M/s Hotel Gupta Palace Restaurant/Priya Restaurant , Agra Road Etah	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
10. M/s Janta Hotel , Nidhauli Road Etah	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
11. M/s Hotel SJD Restaurant, Agra Road Etah	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
12. M/s Indraprastha Hotel, Railway Road Etah	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
13. M/s Satkar Hotel, GT Road Etah	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
14. M/s Shikhar Hotel, Agra Road Etah	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
15. M/s Shree Ji Hotel, Agra Road Etah	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
16. M/s Neelkanth Hotel, Bus Stand, GT Road Etah Near	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
17. M/s 7th Heaven , Agra Road Etah	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
18. M/s Dev Residency , Agra Road Etah	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
19. M/s Hotel Grand Spice , Agra Road	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued

4. IV. Industrial Effluent discharge by industries whose effluent is ultimately flowing to river Ganga or its tributaries

Total number of Industries	Daily effluent discharge	Treatment available (cetp/ petp/ etp operational capacity)	Effluent quality analysis (outlet of treatment plants Geo code sampling point)	GAP	Proposed/ under construction treatment project (with timeline)	Number of defaulting units- Action taken	Industrial solid waste generated/ day	Manner of disposal (Industrial solid waste)
1. M/s JawaharVidhyut Utpadan Nigam Limited, Malawan, Etah	9000 KLD (Unit is under trial)	ETP-Installed Capacity-10000 KLD	Unit is under trial	Nil	Nil	Nil	Bottom ash 2500 Ton/Day	Bottom ash is used by cement Industries
2. M/s SagarSaltpeter Village-Nagla Harju, Jasrathpur, Aliganj, Hathras	4 KLD	ETP-Installed Capacity-10 KLD	BOD-16.5 mg/Ltr, COD-102.0 mg/ltr, SS-42.0 mg/ltr& pH-7.17	Nil	Nil	Nil	ETP Sludge-0.5 Kg/Day	These wastes are disposed by TSDF
3. M/s Maa Kaila Devi Saltpeter, Village-Dhumri, Tehsil-Aliganj, District-Etah	3 KLD	ETP-Installed Capacity-10 KLD	BOD-25.0 mg/Ltr, COD-230.0 mg/ltr, TSS-80. mg/ltr& pH-7.3	Nil	Nil	Nil	ETP Sludge-0.5 Kg/Day	These wastes are disposed by TSDF

4. M/s Bansal Chem, New Brick Field, Gata No.-290, Khata No-12, Mauza-Sakra, District-Etah	8 KLD	ETP-Installed Capacity-10 KLD	BOD-10.20 mg/Ltr, COD-210.0 mg/ltr, Oil & Grease-1.50 mg/ltr, SS-18.0 mg/ltr& pH-6.9	Nil	Nil	Nil	ETP Sludge-0.5 Kg/Day	ETP Sludge is used as a manure
5. M/s Jagannath Prasad Ram Prasad, Dargah Road, Jalesar, District-Etah.	4 KLD	ETP-Installed Capacity-10 KLD	BOD-12.0 mg/Ltr, COD-240.0 mg/ltr, SS-15.0 mg/ltr& pH-6.81	Nil	Nil	Nil	ETP Sludge-1.2 KL/Year, Used/Black Oil-30 Ltr/Year & Tube light/Bulb-2 Kg/Year	These wastes are disposed by TSDF
6. M/s PawanEneterprises, Bankey, Mauza-Palra, Sauhar, Etah.	6.0	ETP-Installed Capacity-10 KLD	BOD-19.0 mg/Ltr, COD-76.0 mg/ltr, TSS-16.0 mg/ltr& pH-7.58	Nil	Nil	Nil	ETP Sludge-0.5 Kg/Day	ETP Sludge is used as a manure

7. M/s Unilever India Export Ltd, Instant Tea Factory, Kasganj Road, Etah.	150 KLD	ETP-Installed Capacity-200 KLD	BOD-24.0 mg/Ltr, COD-240.0 mg/ltr, TSS-86.0 mg/ltr& pH-7.16	Nil	Nil	Nil	1. Used or Spent Oil-2 Kl/Year 2. Sludge and Filter - 0.5 Ton/Year 3. Empty Barrels/Container-3.0 Ton/Year 4. Contaminated Cotton Rags-0.5 Ton/Year, 5. Spent Solvent- 0.4 Ton/Year	These wastes are disposed by TSDF

5. Regulation of Flood Plain Zone:

Area-cities/ towns	Notification of flood plain zone	Demarcation		Encroachment & direct discharge GeoCode/ Sampling point	Encroachment removal status	Timeline for completion
		No development zone pillars	Regulatory zone pillars			
Etah	Flood free area	-	-	-	-	-

6. Afforestation/ Plantation along the bank of River Ganga and its tributaries and their flood plain zones

Area- cities/ towns	Total plantation Geo Code/ Sampling Point	Proposed project	Timeline
Etah	632000	Plantation Year 2024-25	July, 2024

(Areawise plantation report enclosed)

7. Mining and Stone Crushing in river bed and flood plain zone of River Ganga and its tributaries:

Area of mining	FIR/ case registered/ year	Vehicles/ mineral seized	Action taken status	Cases pending in Court	Enforcement of EMGSM 2020 and Sustainable sand mining management guidelines 2016
Mining & stone crushing activities is not done in District-Etah	0	0	0	0	0

1. The Tribunal has already directed for furnishing following information by order dated 24.11.2023:-

(1) District Ganga Protection Plan at city/ town level

District Ganga Protection Committee (DGPC) is required to formulate the action plan for each city and town located on main stem of river Ganga and its tributary and such Action Plan has to be prepared in accordance with the River Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016 (para 6 and 55)- in district ganga committee meeting held on 27/02/2024 all of the concerned DGC member were urged to provide their work report regarding ganga action plan in accordance with River Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016

(2) Contents of the Action Plan (Consolidated District Wise Action Plan including each City and Town abutting river Ganga and its Tributary)

2.1 Sewage Management

District Etah-Total Sewage Generation-

Nameof Towns	TotalSewage Generation (MLD)
Aliganj (NPP)	3
Awagarh (NP)	1.2
Etah (NPP)	12
Jaithara (NP)	1.3
Jalesar (NPP)	4.2
Marehra (NPP)	2.7
Nidhauli Kalan (NP)	0.9
Raja Ka Rampur (NP)	1.3
Sakit (NP)	0.9
Total	**27.5**

(i) Existing Sewage Treatment Capacities :
STP is installed in district- Etahof 24 MLDcapacity.

(ii) Quantity of sewage is being treated (utilization capacity) :
12 MLD sewage is treated by STP Performance of STPs particularly for FC :
STP is capable of FC.

Parameter/Method Name	Unit	Results	Standard	Detection Range
Total Coliform, APHA 9221 24th Ed. : 2023	MPN/100 ml	1600	-	<1.8 MPN/100 ml 1600
Fecal Coliform, 9221 E Fecal Coliform Procedure	MPN/100 ml	540	<1000MPN/ 100ml	<1.8 MPN/100 ml 1600

(iii) Where treated sewage is being discharged (to Ganga or tributaries) :approxe-**No**
The treated effluent from STP is used for land irrigation through local drain.

(iv) Reasons for Under-utilization of STPs (Connectivity of Households/ laying of sewer lines) :
Nil.

(v) Current Gap in sewage treatment :**15.5 MLD**

(vi) Time bound plan for bridging the gap and tying up with financial arrangements and not delaying Tendering and identifying executing agencies or having any other issues :

STP not insatlled in other town (Aliganj (NPP), Awagarh (NP), Jaithara (NP), Jalesar (NPP),Marehra (NPP),Nidhauli Kalan (NP), Raja Ka Rampur (NP), Sakit (NP) of district- Etah.

(vii) Where untreated sewage (when there is no STP) is discharged (Ganga /Tributaries):**15.5 MLD**

Name of Town	Total Sewage Generation (in MLD)	STP Installed/ Not Installesd	Name of Drain / River
Aliganj (NPP)	3	STP Not Installed	LOCAL DRAIN, ALIGANJ
Awagarh (NP)	1.2	STP Not Installed	LOCAL DRAIN, AWAGARH
Jaithara (NP)	1.3	STP Not Installed	LOCAL DRAIN, JAITHRA
Jalesar (NPP)	4.2	STP Not Installed	LOCAL DRAIN, JALESAR
Marehra (NPP)	2.7	STP Not Installed	LOCAL DRAIN, MAREHRA
Nidhauli Kalan (NP)	0.9	STP Not Installed	LOCAL DRAIN, NIDHAULIKALAN
Raja Ka Rampur (NP)	1.3	STP Not Installed	LOCAL DRAIN, RAJA KA RAMPUR
Sakit (NP)	0.9	STP Not Installed	LOCAL DRAIN, SAKIT

2.2 Drains joining Ganga and Tributary

(i) Number of drains carrying sewage- sullage or industrial waste water joining Ganga/ tributaries with their Quantity and Quality:

S.No.	Drain	Domestic/Industrial/Mixed	Flow (MLD)	Quality Discharge Parameters
1	Kali River, Dhoomri, Etah	Mixed	68	pH-7.36, Colour-20, BOD-12.0 mg/ltr, COD-36.0 mg/ltr, TDS-1090 mg/ltr, TSS-480 mg/ltr, D.O.-6.4 mg/ltr

.

(ii) Drains joining outside city and town limits but, either joining in village or nearby town:**NA**

(iii) Inclusion of sewage flowing in drains into total sewage generation figures of each city and town and their interception and diversion to STPs:

STP not insatlled in other town (Aliganj (NPP), Awagarh (NP), Jaithara (NP), Jalesar (NPP),Marehra (NPP),Nidhauli Kalan (NP), Raja Ka Rampur (NP), Sakit (NP) of district- Etah.

2.3 Septage management (In case of no STP)

(i) Status of Septage management (with reference to FSTP/STP):
No FSTP installed in distrcit-Etah

(ii) Management of Grey water and its disposal:
Drains carrying greywater discharge in city and at village level. In the context of gram panchayat, an advance approach to managing grey water involves the construction of drainage system funded by both 15th finance commission and the 5th finance commission .these system guide grey water into designated ponds, aided by filter chamber installed at the end of drains through the swachhbharat mission(rural) phase-2 and finance commission funds. Additionaly soak pits are installed in hand pumps , schools, and household lacking drainage infrastructure further contributing to effective grey water management.

2.4 Industrial Pollution Control

(i) Attach the list on no. of industries generating trade effluents, their place of disposal and compliance including CETPs (town wise):**there is no any CETPs installed in District Etah. Water Polluting Industries is installed individual ETP.**

S.N.	Name of Industry	Production Sector- (Tannery, textile, Paper Metal, Oil, Food, Other)	Presence of ETP (Effluent Treatment Plant in Industries)	Type of Industry	Total Industrial Effluent Generation (KLD)	Total Capacity of Treatments facility and its utilization (KLD)	Final Discharging Points	Compliance status	Action Taken
1	M/s JawaharVidhyutUtpadan Nigam Limited, Malawan, Etah	Power Plant Unit	Yes	GPI	9000 KLD (Unit is under trial)	ETP- Installed Capacity-10000 KLD	Irrigation	**Yes**	**No**
2	M/s SagarSaltpeter Village-Nagla Harju, Jasrathpur, Aliganj, Hathras	Saltpeter Unit	Yes	GPI	4 KLD	ETP- Installed Capacity-10 KLD	Irrigation	**Yes**	**No**
3	M/s Maa Kaila Devi Saltpeter, Village-Dhumri, Tehsil-Aliganj, District-Etah	Saltpeter Unit	Yes	GPI	3 KLD	ETP- Installed Capacity-10 KLD	Irrigation	**Yes**	**No**
4	M/s Bansal Chem, New Brick Field, Gata No.-290, Khata No-12, Mauza-Sakra, District-Etah	Saltpeter Unit	Yes	GPI	8 KLD	ETP- Installed Capacity-10 KLD	Irrigation	**Yes**	**No**
5	M/s Jagannath Prasad Ram Prasad, Dargah Road, Jalesar, District-Etah.	SaltpeterRifining Unit	Yes	No GPI	4 KLD	ETP- Installed Capacity-10 KLD	Local Drain, Jalesar	**Yes**	**No**
6	M/s PawanEneterprises, Bankey, Mauza-Palra, Sauhar, Etah.	Saltpeter Unit	Yes	GPI	6.0	ETP- Installed Capacity-10 KLD	Irrigation	**Yes**	**No**
7	M/s Unilever India Export Ltd, Instant Tea Factory, Kasganj Road, Etah.	Tea Unit	Yes	GPI	150 KLD	ETP- Installed Capacity-200 KLD	Irrigation	**Yes**	**No**

(3) Water quality status

Provide water quality status of Ganga and its tributaries in the District and city/ town in terms of its fitness for Bathing water quality that is, FC and FS:

S.no	Name of River/Tributary	DO (mg/ltr)	B.O.D	TC (MPN/ 100ml)	FC (MPN/ 100ml)
1	Kali River	6.4 mg/ltr	12.0 mg/ltr	4700000	3400000

(4) Notification of Flood Plain Zones:

The rivers passing through district Etah are mainly of plain nature, in which there is generally not much water flow. The areas around the rivers are flat. Under district Etah, the tributary of river Ganga is Kali River, which flows through districts Muzaffarnagar, Meerut, Bulandshahr, Aligarh, Kasganj, Etah, Farrukhabad, and Mainpuri and falls into river Ganga at MehndiGhat in Kannauj. The length of the river in Etah district is 35.00 km. The flow of water of Kali River is very less. Due to which problem like FLOOD does not arise in Kali River. In Etah district, rain water is collected on the Beaver Barrage built on the Kali River and is used for irrigation to the farmers through Beaver Feeder. District Etah is not a flood affected district.

(5) Issues relating to Environmental Flow:

In Etah district, water for irrigation is provided through canals. Irrigation department Etah does not discharge any type of waste/solid/water waste into the rivers. There is no such factory/etc. on the banks of rivers in the district, due to which large quantities of chemicals are released into the rivers, due to which there is no problem like environmental flow.

Best Practices :

1. Online Continuous Effluent Quality Monitoring Stationis operated for continuous monitoring of the quality of effluent in Tea Unit, which is connected to the Central Pollution Control Board and Uttar Pradesh Pollution Control Board.
2. Treated effluent from units is used for irrigation.
3. Inspections of water polluting industries are done at regular intervals by the Regional Office, Uttar Pradesh Pollution Control Board, Aligarh.
4. Water samples of Kali River under District Etahare collected weekly. The collected samples are tested in the laboratory of the Regional Office, Aligarh.
5. Action is taken against the units found defaulter as per rules.
6. At village level, grey water management entails construction of drainage system funded by finance commission directing water into ponds with filter chamber and installing soak pits in areas lacking drainage infrastructure.
7. Each year district achieves its plantation targets with the collaborative efforts of the district departments resulting in a very satisfactory survival percentage of the same.

जल शक्ति मंत्रालय
MINISTRY OF
JAL SHAKTI

सत्यमेव जयते

IncomplianceofHon'ble NGT order

InO.A.200/2014MCMehta*Vs*UOIandOrs.

District Ganga Committee Report

NAMAMI GANGE

Submitted by

DISTRICT GANGA COMMITTEE, HATHRAS, UTTAR PRADESH

MC MEHTA vs. UNION OF INDIA (OA. NO. 200 OF 2014)

ADDITIONAL INFORMATION, AS PER THE ORDER 05.02.2024

District- Hathras

S.NO	ADDITIONAL INFORMATION	ANSWER
1.	That STPs installed, are underutilised and that treated effluents are discharged into the drains carrying untreated wastewater thereby defeating the very purpose of the efficacy of STPs.	In Hathras district, there are currently no Sewage Treatment Plants (STPs) installed. However, alternative measures have been implemented, including the proposal for a 24 MLD STP in Hathras City and the installation of a 32 FSTP (Faecal Sludge Treatment Plant) at Jalesar Road. These measures are intended to address wastewater treatment needs and mitigate the discharge of untreated effluents into drains, thus aligning with the goal of ensuring effective wastewater management.
2.	The quantification and estimation of sewage entering to each STP through sewer network or through interception and diversion of drains.	As there are currently no Sewage Treatment Plants (STPs) installed in Hathras district, the quantification and estimation of sewage entering each STP through the sewer network or via interception and diversion of drains are not applicable. However, alternative measures such as proposed STPs and Faecal Sludge Treatment Plants (FSTPs) are being considered to address wastewater management needs in the district. These measures will involve assessing the volume and flow of sewage once the STPs are operational, ensuring effective treatment and management of sewage in the future
3.	the breakup of quantity of sewage fed to each STP through sewerage and drains, indicating location of STP (with geo coordinates) and quality and quantity of discharged sewage and its disposal location.	Currently, in Hathras district, there are no Sewage Treatment Plants (STPs) installed. Therefore, there is no breakup of the quantity of sewage fed to each STP through sewerage and drains, nor any indication of STP locations with geo-coordinates. Additionally, information regarding the quality and quantity of discharged sewage and its disposal location is not applicable. However, proposed STPs and Faecal Sludge Treatment Plants (FSTPs) in the district will undergo detailed planning, including considerations for quantifying sewage inputs, monitoring sewage quality, and identifying appropriate disposal locations once operational.
4.	These identified industries should be imposed with the Consent conditions to adopt ZLD system or maximize recycling/ reuse of treated effluents rather than consenting them to discharge into drains with no burden on them.	Consent (water/air) is given by the Regional Office, Uttar Pradesh Pollution Control Board, Aligarh with the conditions of reusing the maximum purified effluent in the industrial process and for using it in land irrigation. Instructions are issued from time to time to operate zero liquid disposal system in the industry.
5.	We are of the view that additional columns are to be included reflecting the drain, position of STP with capacity, their geo-coordinates, discharge quantity from the STP in the drain and total per day discharge from the drain into river.	We agree that additional columns reflecting the drain, position of Sewage Treatment Plants (STPs) with their capacities, geo-coordinates, discharge quantities from the STPs into the drain, and total daily discharge from the drain into the river should be included. However, as there are currently no STPs installed in Hathras district, this information is not applicable at present. Once STPs are established, these details will be crucial for monitoring and managing sewage treatment processes effectively.
6.	mention heavy metals analysis in respect of discharge from each of the drain in the report.	Sample collection of water samples of Hathras Drain under Regional Office, Uttar Pradesh Pollution Control Board, Aligarh was done on 10/01/2024. According to the analysis test report received, Total Chromium-0.4366 mg/l, Copper-0.2822 mg/l, lead-0.2137 mg/l, iron-4.5530 mg/l, Zinc-0.9817 mg/l, Maganese-0.2817 mg/l, arsenic- ND, Mercury-ND were found.

1. Sewage

Drain (city/ town)	Total drain capacity	Generation/ day	pH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride etc)	DO	TC	FC	Outlet flow and geo code/ sample point	Color/ odour	Discharged Into
Hathras Drain, Hathras	42.12 MLD	42.12 MLD	7.27	60	250	640	1460	Total Chromium-0.4366 mg/l ,Copper-0.2822 mg/l, lead-0.2137 mg/l, lron-4.5530 mg/l, Zinc-0.9817 mg/l, Maganese-0.2817 mg/l, arsenic-ND, Mercury-ND	00	4300000	3100000	42.81 MLD (Latitude-27.438989, Logitude 78.074851	Blackish/ Unpleasent	Yamuna River approxe-45 K.M

The above information is to be submitted on the basis of end point sample analysis of the concerned drain.

2. STP for treating the sewage of the drains ultimately flowing to river ganga or its tributary.

Existing STP (location & capacity)	Capacity (operational)	Inlet/ Outlet water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point	Proposed/ under construction STP With completion date
STP Not Installed	STP Not Installed	STP Not Installed	STP Not Installed	STP Not Installed	STP Not Installed	24 MLD STP is proposed at Hathras City

2.1 STP ADDITIONAL INFORMATION

NAME OF DRAIN	**POSITION OF STP WITH CAPACITY**	**GEO/ COORDINATES**	**DISCHARGE QUANTITY FROM THE STP IN THE DRAIN**	**TOTAL PER DAY DISCHARGE FROM THE DRAIN INTO THE RIVER**
Hathras Drain, Hathras	STP Not Installed	STP Not Installed	STP Not Installed	17.96 MLD

Proposed STP (location & capacity)	**Capacity (operational)**	**Inlet/ Outlet water quality & quantity**	**Number of tapped drains (quantity of discharge)**	**GAP (in treatment)**	**Final discharge point Geo code/ sampling point**	**Proposed/ under construction STP With completion date**
24 MLD Location-(Latitude : 27.580743 Logitude : 78.072804), Jalesar Road Hathras	Proposed	Proposed	Proposed	Proposed	Proposed	DPR under review by NMCG.

3. Hotels/ Ashrams/Dharmshalas/residential complexes abutting river Ganga or its tributaries

Number of Hotels	Consent to establish/ operate	STP	Discharge point	Action taken
1. M/s Gupta Hotel, G.T. Road, NaglaLala, Sikandrarao, Hathras	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
2. M/s Ganga Restaurant, PethChauraha, NaglaShishghar, Sikandrarao, Hathras	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
3.Pahlban hotel, Bus Stand agra road, Hathras	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
4.M/s Ma Veshno Hotel, Bus Stand agra road, Hathras	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
5.M/s Sharma Hotel, Bus Stand agra road, Hathras	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
6. M/s Galaxy Hotel, Agra road, Hathras	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
7. M/s Shilpa guest house, aligarh road, Hathras	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
8. M/s Jantarestoaurant, kamla bazar, Hathras	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
9. M/s Shri Ji Hotel, kamla bazar, Hathras	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
10. M/s Golden zone, Restoarant Agra road, Hathras	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
11. M/s Ramoji Resort, aligarh road hathras	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
12. M/s Royal Rich, aligarh road hathras	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
13. M/s Dwarikarestorant, Mendu road, Hathras	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued

4. IV. Industrial Effluent discharge by industries whose effluent is ultimately flowing to river Ganga or its tributaries.

Total number of Industries	Daily effluent discharge	Treatment available (cetp/ petp/ etp operational capacity)	Effluent quality analysis (outlet of treatment plants Geo code sampling point)	GAP	Proposed/ under construction treatment project (with timeline)	Number of defaulting units- Action taken	Industrial solid waste generated/ day	Manner of disposal (Industrial solid waste)
1. M/s Alfa Milk Food Pvt. Ltd. A-1 to 7 UPSIDC Industrial Area, Salempur- Hathras	400 KLD	ETP-Installed Capacity-500 KLD	BOD-26.0 mg/Ltr, COD-242.0 mg/ltr, TSS-66. mg/ltr& pH-7.38	Nil	Nil	Nil	1. Use Oil-0.25 KL/Day, 2. Oil Filter – 15 Nos/Year, 3. Oily Soaked Cloths- 15 Nos/Year, 4. Air Filter-15 Nos/Year & 5 ETP Sludge-500 Kg/Year	These wastes are disposed by TSDF
2. M/s Mahan Milk Food Pvt. Ltd. Industrial Area, Salempur, Hathras	300 KLD	ETP-Installed Capacity-500 KLD	BOD-28.0 mg/Ltr, COD-246.0 mg/ltr, SS-90.0 mg/ltr& pH-7.42	Nil	Nil	Nil	Waste Used Oil-400 Ltr/Year, Oil Filter-8 Numbers & Oily Cloths-300 Kg/Year	These wastes are disposed by TSDF
3. M/s S.N. Milk Products Pvt. Ltd. Sasni, Hathras	160 KLD	ETP-Installed Capacity-200 KLD	BOD-26.0 mg/Ltr, COD-246.0 mg/ltr, SS-90. mg/ltr& pH-7.42	Nil	Nil	Nil	Used Lubricant Oil – 30 KL/Year, Oil & Grease & Skimming & Residue – 40 MT/Year	These wastes are disposed by TSDF
4. M/s S.N. Dairy Foods Pvt. Ltd. Ajroi Road, Sasni, Hathras	300 KLD	ETP-Installed Capacity-500 KLD	BOD-24.0 mg/Ltr, COD-240.0 mg/ltr, SS-86. mg/ltr& pH-7.4	Nil	Nil	Nil	Used Lubricant Oil – 25 KL/Year, Oil & Grease & Skimming & Residue – 12 MT/Year	These wastes are disposed by TSDF
5. M/s Anuj Carpet, Village-Kakrawali, Mathura Road, Mursan, District-Hathras.	20 KLD	ETP-Installed Capacity-50 KLD	BOD-27.1 mg/Ltr, COD-198.0 mg/ltr, Oil & Grease-4.5 mg/ltr, SS-72.0 mg/ltr& pH-7.61	Nil	Nil	Nil	ETP Sludge-2 Kg/Day	ETP Sludge is used as a manure

6. M/s Krishna Sales Corporation, B-3, 4, 5, Industrial Estate, District-Hathras.	120 KLD	ETP-Installed Capacity-200 KLD	BOD-26.0 mg/Ltr, COD-246.0 mg/ltr, SS-92.0 mg/ltr& pH-7.48	Nil	Nil	Nil	ETP Sludge-1.2 KL/Year, Used/Black Oil-30 Ltr/Year & Tube light/Bulb-2 Kg/Year	These wastes are disposed by TSDF
7. M/s Om International, D-1, Industrial Estate, District-Hathras.	20.0	ETP-Installed Capacity-50 KLD	BOD-20.0 mg/Ltr, COD-91.7 mg/ltr, SS-44.0 mg/ltr& pH-7.21	Nil	Nil	Nil	ETP Sludge-2 Kg/Day	ETP Sludge is used as a manure
8. M/s Taxfab Industries, A-16, Industrial Estate, District-Hathras.	10 KLD	ETP-Installed Capacity-20 KLD	BOD-20.8 mg/Ltr, COD-128.0 mg/ltr, TSS-54.2 mg/ltr Oil & Grease-4.5 mg/Ltr& pH-7.65	Nil	Nil	Nil	ETP Sludge-2 Kg/Day	ETP Sludge is used as a manure
9. M/s Bansal Overseas, Village-Dayanatpur, Aligarh Road, hathras	15 KLD	ETP-Installed Capacity-50 KLD	BOD-26.0 mg/Ltr, COD-122.0 mg/ltr, Oil & Grease-3.5 mg/ltr, TDS-1296 mg/ltr, TSS-42.5 mg/ltr& pH-7.8	Nil	Nil	Nil	1. Spent solvent ink waste, cotton waste, Plastic waste, Oil soaked cotton, Paper, Rubber waste, Hand gloves, Oily-Paint sludge, Chemicals, waste expired medicine etc-50 Kg/Year 2. Air oil filters – 2 Pcs/Year 3. (E-waste &Landilable) Printers cartage, Mouse, Keyboard, CPU, Chargers-10 Kg/Year 4. ETP Sludge-250 Kg/Year 5. Discarded Containers Below 200 Leters-20 Kg/Years	These wastes are disposed by TSDF

10. M/s Kamakhya Enterprises, Kanau, Hathras	4 KLD	ETP-Installed Capacity-10 KLD	BOD-22.0 mg/Ltr, COD-112.0 mg/ltr, TSS-68.0 mg/ltr, Oil & Grease-6.0 mg/Ltr& pH-7.34	Nil	Nil	Nil	ETP Sludge-0.5 Kg/Day	ETP Sludge is used as a manure
11. M/s Kailash Group Of Industries, Station Road, Sasni , , Hathras	1.5 KLD	ETP-Installed Capacity-5 KLD	BOD-21.0 mg/Ltr, COD-112.0 mg/ltr, Oil & Grease-BDL, TSS-23.0 mg/ltr& pH-7.26	Nil	Nil	Nil	ETP Sludge-0.5 Kg/Day	ETP Sludge is used as a manure
12. M/S BapuGramodhyogSevaSansthan, MayurVihar, Agra Road, BambaPul, Hathras	4 KLD	ETP-Installed Capacity-5 KLD	BOD-30.0 mg/Ltr, COD-256.0 mg/ltr, SS-128.0 mg/ltr& pH-7.34	Nil	Nil	Notice issued	ETP Sludge-0.5 Kg/Day	ETP Sludge is used as a manure
13. M/S Grts Foods Pvt. Ltd., National Highway-93, Near ChaupalSagar, Aligarh Road, Tehsil-Sasni, Distt. Hathras	38 KLD	ETP-Installed Capacity-50 KLD	BOD-23.0 mg/Ltr, COD-154.0 mg/ltr, Oil & Grease-<2.0 mg/ltr, SS-82.0 mg/ltr& pH-7.02	Nil	Nil	Nil	ETP Sludge-1 Kg/Day	ETP Sludge is used as a manure
14. M/s Hanuman Food Products, Chawar Gate, Hathras,Hathras,204101	3 KLD	ETP-Installed Capacity-5 KLD	BOD-14.0 mg/Ltr, COD-80.0 mg/ltr, TSS-46.0 mg/ltr, Oil & Grease-8.0 Mg/Ltr, Colour-<5.0 mg/Ltr& pH-7.42	Nil	Nil	Nil	ETP Sludge-0.5 Kg/Day	ETP Sludge is used as a manure

15. M/s Mehra Agro Foods, Part Of 123ka, 123ba, Vill. Kalwari, Tahsil&Distt. Hathras	6 KLD	ETP-Installed Capacity-10 KLD	BOD-24.0 mg/Ltr, COD-208.0 mg/ltr, SS-84.0 mg/ltr& pH-6.8	Nil	Nil	Nil	ETP Sludge-0.5 Kg/Day	ETP Sludge is used as a manure
16. M/sMehra Foods, Vill. Ajroi, TahsilSasni, Distt. Hathras,Hathras,	6 KLD	ETP-Installed Capacity-10 KLD	BOD-22.5 mg/Ltr, COD-203.17 mg/ltr, TSS-32.6 mg/ltr, TDS-382.0 mg/ltr& pH-7.21	Nil	Nil	Nil	ETP Sludge-0.5 Kg/Day	ETP Sludge is used as a manure
17. M/s Shree Ram Food Product, Jalesar Road, Sasni, Hathras,Hathras,	3 KLD	ETP-Installed Capacity-5 KLD	BOD-15.0 mg/Ltr, COD-110.4 mg/ltr, TSS-28.0 mg/ltr, Oil & Grease-2.1 Mg/Ltr& pH-7.26	Nil	Nil	Nil	ETP Sludge-0.5 Kg/Day	ETP Sludge is used as a manure
18. M/S Shri Girraj Food Products, NaglaChaube, Dhakpura Road, Hathras	3 KLD	ETP-Installed Capacity-5 KLD	BOD-20.0 mg/Ltr, COD-126.0 mg/ltr, SS-29.4 mg/ltr, Oil & Grease- <5.0 mg/ltr& pH-7.35	Nil	Nil	Nil	ETP Sludge-0.5 Kg/Day	ETP Sludge is used as a manure
19. M/S Shri RadhePetha Store, Khasra No-213/1, Khata No-141, Mauza-SasniDehat, Tehsil-Sasni, Hathras,Hathras,	5 KLD	ETP-Installed Capacity-10 KLD	BOD-26.0 mg/Ltr, COD-246.0 mg/ltr, SS-88.0 mg/ltr& pH-7.34	Nil	Nil	Nil	ETP Sludge-1 Kg/Day	ETP Sludge is used as a manure
20. M/s Tapovan Foods Pvt. Ltd. Rahana Road, Ruheri, Hathras	10 KLD	ETP-Installed Capacity-15 KLD	BOD-40.0 mg/Ltr, COD-260.0 mg/ltr, SS-240.0 mg/ltr& pH-7.30	Nil	Nil	Notice issued	ETP Sludge-2 Kg/Day	ETP Sludge is used as a manure

21. M/s Natraj Energy Pvt. Ltd. (Old Name-Apex Power), Village-Ruheri Road, Hathras	20 KLD	ETP-Installed Capacity-30 KLD	BOD-8.0 mg/Ltr, COD-240.0 mg/ltr, SS-46. mg/ltr& pH-7.42	Nil	Nil	Nil	ETP Sludge-2 Kg/Day	ETP Sludge is used as a manure
22. M/s AsthLaxmiAgrotechPvt. Ltd. Mehmoodpur, Barse, SasniHathras	10 KLD	ETP-Installed Capacity-15 KLD	BOD-72.0 mg/Ltr, COD-270.0 mg/ltr, SS-464.0 mg/ltr& pH-7.26	Nil	Nil	Notice issued	ETP Sludge-2 Kg/Day	ETP Sludge is used as a manure
23. M/s Shree Speciality Col Chem, Ajroi Road, Tehshil- Sasni, District-Hathras	4 KLD	ETP-Installed Capacity-10 KLD	BOD-18.0 mg/Ltr, COD-74.0 mg/ltr, Oil & Grease-2.6 mg/ltr, TSS-36. mg/ltr& pH-7.63	Nil	Nil	Nil	ETP Sludge-5 Kg/Day	ETP Sludge is used as a manure
24. M/s Bharat Petrolium Corporation Ltd. L.P.G. Batling Plant, Indusrial Estate, Salempur, Hathras	5 KLD	ETP-Installed Capacity-10 KLD	BOD-28.0 mg/Ltr, COD-246.0 mg/ltr, TSS-90.0 mg/ltr& pH-7.32	Nil	Nil	Nil	ETP Sludge-1 Ton/Year	This waste is disposed by TSDF
25. M/s MatrumalDhanna Mal Oil Mill (Unit-2) 03th Km. Stone Sasni, Iglas Road, NaglaGadhu, Sasni, Hathras	20 KLD	ETP-Installed Capacity-30 KLD	BOD-26.0 mg/Ltr, COD-246.0 mg/ltr, SS-92.0 mg/ltr& pH-7.48	Nil	Nil	Nil	ETP Sludge-0.5 Kg/Day	ETP Sludge is used as a manure
26. M/s Excel PhosphatPvt.Ltd.,Plot No.B-16 to 17, UPSIDC, Industrial Area-Salempur, Hathras	16 KLD	ETP-Installed Capacity-20 KLD		Nil	Nil	Nil	ETP Sludge-0.5 Kg/Day	ETP Sludge is used as a manure

27. M/s G.M. Food Prodcut, Plot No-B-18, Salempur Industrial Area, Hathras	8 KLD	ETP-Installed Capacity-10 KLD	BOD-60.0 mg/Ltr, COD-330.0 mg/ltr, SS-484.0 mg/ltr& pH-7.30	Nil	Nil	Notice issued	ETP Sludge-0.5 Kg/Day	ETP Sludge is used as a manure
28. M/s AnanadManohar Food Product Pvt. Ltd. D-7, Industrial Area, Salempur, Tehsil-Sasni, Hathras	1 KLD	ETP-Installed Capacity-5 KLD	BOD-80.0 mg/Ltr, COD-310.0 mg/ltr, SS-496.0 mg/ltr& pH-7.21	Nil	Nil	Notice issued	ETP Sludge-0.5 Kg/Day	ETP Sludge is used as a manure
29. M/s A.K. Agro Foods, Village-Chintapur, Behind MandiSamiti, Hathras	3 KLD	ETP-Installed Capacity-5 KLD	BOD-28.0 mg/Ltr, COD-246.0 mg/ltr, SS-82.0 mg/ltr& pH-7.38	Nil	Nil	Nil	ETP Sludge-0.5 Kg/Day	ETP Sludge is used as a manure

5. Regulation of Flood Plain Zone:

Area-cities/ towns	Notification of flood plain zone	Demarcation		Encroachment & direct discharge GeoCode/ Sampling point	Encroachment removal status	Timeline for completion
		No development zone pillars	Regulatory zone pillars			
Hathras	Hathras district is free fromFlood	-	-	-	-	-

In its order dated July 13,July 2017, the NGT directed the identification and demarcation of the floodplains of the river ganga in segment B of phase 1 on a 25 year cycle. In a recent letter issued by chief engineer research & planning letter No. 152/CPR/ANIBAM/u-7/2024 officer of the chief engineer irrigation & water resource department Lucknow, dated 10/03/2024 in this letter, the hathras district is not listed as a sensitive and very sensitive area with respect to flooding. Therefore, the marking of flood lines through piller demarcation has not been carried out.

6. Afforestation/ Plantation along the bank of River Ganga and its tributaries and their flood plain zones Plantation along the river bank in past three year and their survival percentage

Area- cities/ towns	Total plantation Geo Code/ Sampling Point	Proposed project	Timeline
Whole district hathras 2023	2417870	2417870	July-august 2023
Whole district hathras2024	Tentative and will be done with the involvement of various departments	2374760	July-august 2024

Year	**District name**	**River name**	**Number of plants planted**	**Survived plants**	**Survival percentage**
2021-2022	**hathras**	**---**	**---**	**--**	**--**
2022-2023		**Karvan river**	**10000**	**9600**	**96**
2022-2023		**From senger river to nurpur**	**10000**	**9600**	**96**
2023-2024		**Karvan river**	**12500**	**12125**	**97**
2023-2024		**Sengar river**	**12500**	**12125**	**97**

7. Mining and Stone Crushing in river bed and flood plain zone of River Ganga and its tributaries:

Area of mining	FIR/ case registered/ year	Vehicles/ mineral seized	Action taken status	Cases pending in Court	Enforcement of EMGSM 2020 and Sustainable sand mining management guidelines 2016
Mining & stone crushing activities is not done in District-Hathras	0	0	0	0	0

1. The Tribunal has already directed for furnishing following information by order dated 24.11.2023:-

(1) District Ganga Protection Plan at city/ town level

District Ganga Protection Committee (DGPC) is required to formulate the action plan for each city and town located on main stem of river Ganga and its tributary and such Action Plan has to be prepared in accordance with the River Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016 (para 6 and 55)- in district ganga committee meeting held on 20/02/2024 all of the concerned DGC member were urged to provide their work report regarding ganga action plan in accordance with River Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016

(2) Contents of the Action Plan (Consolidated District Wise Action Plan including each City and Town abutting river Ganga and its Tributary)

2.1 Sewage Management

District Hathras-Total Sewage Generation-

Nameof Towns	TotalSewage Generation (MLD)
NPP Hathras	17.96
NPP SikandraRao	3.00
NP Hasayan	0.43
NP Sahpau	0.58
NP Purdilnagar	1.42
NP Mursan	0.89
NP Sadabad	2.67
NP SASNI	0.87
NP Mendu	0.94
Total	**28.76**

I. Existing Sewage Treatment Capacities : STP not insatlled in district- Hathras. 24 MLD STP is proposed at Hathras city.

II. Quantity of sewage is being treated (utilization capacity) :STP not insatlled in district- Hathras. 24 MLD STP is proposed at Hathras city.

III. Performance of STPs particularly for FC :STP not insatlled in district- Hathras. 24 MLD STP is proposed at Hathras city.

IV. Where treated sewage is being discharged (to Ganga or tributaries) :approxe-No STP not insatlled in district- Hathras. 24 MLD STP is proposed at Hathras city.

V. Reasons for Under-utilization of STPs (Connectivity of Households/ laying of sewer lines) : STP not insatlled in district- Hathras. 24 MLD STP is proposed at Hathras city.

VI. Current Gap in sewage treatment :28.76 MLD

VII. Time bound plan for bridging the gap and tying up with financial arrangements and not delaying Tendering and identifying executing agencies or having any other issues : STP not insatlled in district- Hathras. 24 MLD STP is proposed at Hathras city.DPR is under review by NMCG.

VIII. Where untreated sewage (when there is no STP) is discharged (Ganga /Tributaries):28.76 MLD

Name of Town	Total Sewage Generation (in MLD)	STP Installed/ Not Installesd	Name of Drain / River
Hathras (NPP)	17.56	STP Not Installed	HATHRAS DRAIN HATHRAS Karvan River Yamuna River
Mendu (NP)	0.94	STP Not Installed	LOCAL DRAIN, MENDU
Mursan (NP)	0.89	STP Not Installed	LOCAL DRAIN, MURSAN Karvan River Yamuna River
Purdilnagar (NP)	1.42	STP Not Installed	LOCAL DRAIN, PURDILNAGAR
Sadabad (NP)	2.67	STP Not Installed	LOCAL DRAIN, SADABAD Karvan River Yamuna River
Sahpau (NP)	0.58	STP Not Installed	LOCAL DRAIN, SAHPAU Karvan River Yamuna River
Sasni (NP)	0.87	STP Not Installed	LOCAL DRAIN, SASNI Hathras Drain Karvan River Yamuna River
Sikandrarao (NPP)	3	STP Not Installed	LOCAL DRAIN, SIKANDRARAU

2.1 Drains joining Ganga and Tributary

(i) Number of drains carrying sewage- sullage or industrial waste water joining Ganga/ tributaries with their Quantity and Quality:

S.No.	Drain	Domestic/Industrial/Mixed	Flow (MLD)	Quality Discharge Parameters
1	Hathras Drain, Hathras	Mixed	42.12	pH-7.27, BOD-60.0 mg/ltr, COD-25.0 mg/ltr, TSS-640 mg/ltr, TDS-1460 mg/ltr

.

(ii) Drains joining outside city and town limits but, either joining in village or nearby town:**NA**

(iii) Inclusion of sewage flowing in drains into total sewage generation figures of each city and town and their interception and diversion to STPs:
STP not insatlled in district- Hathras. 24 MLD STP is proposed at Hathras city.DPR is under review by NMCG.

2.2 Septage management (In case of no STP)

(i) Status of Septage management (with reference to FSTP/STP):**32 MLD FSTP installed at Jalesar Road, Hathras**

(ii) Management of Grey water and its disposal:
Drains carrying greywater discharge in city and at village level. In the context of gram panchayat, an advance approach to managing grey water involves the construction of drainage system funded by both 15th finance commission and the 5th finance commission .these system guide grey water into designated ponds, aided by filter chamber installed at the end of drains through the swachhbharat mission(rural) phase-2 and finance commission funds. Additionaly soak pits are installed in hand pumps , schools, and household lacking drainage infrastructure further contributing to effective grey water management.

2.3 Industrial Pollution Control

(i) Attach the list on no. of industries generating trade effluents, their place of disposal and compliance including CETPs (town wise):
There is no any CETPs installed in District Hathras. Water Polluting Industries is installed individual ETP.

S. N.	Name of Industry	Production Sector- (Tannery, textile, Paper Metal, Oil, Food, Other)	Presence of ETP (Effluent Treatment Plant in Industries)	Type of Industry	Total Industrial Effluent Generation (KLD)	Total Capacity of Treatments facility and its utilization (KLD)	Final Discharging Points	Compliance status	Action Taken
1	M/s Alfa Milk Food Pvt. Ltd. A-1 to 7 UPSIDC Industrial Area, Salempur-Hathras	Milk Processing Unit	Yes	GPI	400 KLD	ETP-Installed Capacity-500 KLD	Irrigation	Yes	**No**
2	M/s Mahan Milk Food Pvt. Ltd. Industrial Area, Salempur, Hathras	Milk Processing Unit	Yes	GPI	300 KLD	ETP-Installed Capacity-500 KLD	Irrigation	**Yes**	**No**
3	M/s S.N. Milk Products Pvt. Ltd. Sasni, Hathras	Milk Processing Unit	Yes	GPI	160 KLD	ETP-Installed Capacity-200 KLD	Irrigation	**Yes**	**No**
4	M/s S.N. Dairy Foods Pvt. Ltd. Ajroi Road, Sasni, Hathras	Milk Processing Unit	Yes	GPI	300 KLD	ETP-Installed Capacity-500 KLD	Irrigation	**Yes**	**No**
5	M/s Anuj Carpet, Village-Kakrawali, Mathura Road, Mursan, District-Hathras.	Textile Unit	Yes	GPI	20 KLD	ETP-Installed Capacity-50 KLD	Local Drain Karvan River Yamuna River	**Yes**	**No**

6	M/s Krishna Sales Corporation, B-3, 4, 5, Industrial Estate, District-Hathras.	Textile Unit	Yes	GPI	120 KLD	ETP-Installed Capacity-200 KLD	HathrasDrain Karvan River Yamuna Rive	**Yes**	**No**
7	M/s Om International, D-1, Industrial Estate, District-Hathras.	Textile Unit	Yes	GPI	20.0	ETP-Installed Capacity-50 KLD	HathrasDrain Karvan River Yamuna Rive	**Yes**	**No**
8	M/s Taxfab Industries, A-16, Industrial Estate, District-Hathras.	Textile Unit	Yes	GPI	10 KLD	ETP-Installed Capacity-20 KLD	HathrasDrain Karvan River Yamuna Rive	**Yes**	**No**
9	M/s Bansal Overseas, Village-Dayanatpur, Aligarh Road, hathras	Textile Unit	Yes	GPI	15 KLD	ETP-Installed Capacity-50 KLD	HathrasDrain Karvan River Yamuna Rive	**Yes**	**No**
10	M/s Kamakhya Enterprises, Kanau, Hathras	Saltpeter Unit	Yes	GPI	4 KLD	ETP-Installed Capacity-10 KLD	Irrigation	**Yes**	**No**
11	M/s Kailash Group Of Industries, Station Road, Sasni ,Hathras	Saltpeter Refining Unit	Yes	Not GPI	1.5 KLD	ETP-Installed Capacity-5 KLD	SasniDrain HathrasDrain Karvan River Yamuna Rive	**Yes**	**No**
12	M/S BapuGramodhyogSevaSansthan, MayurVihar, Agra Road, BambaPul, Hathras	Food Product Unit	Yes	Not GPI	4 KLD	ETP-Installed Capacity-5 KLD	HathrasDrain Karvan River Yamuna Rive	**No**	Notice issued
13	M/S GRTS Foods Pvt. Ltd., National Highway-93, Near ChaupalSagar, Aligarh	Food Product Unit	Yes	Not GPI	38 KLD	ETP-Installed Capacity-50 KLD	Irrigation	**Yes**	**No**

	Road, Tehsil-Sasni, Distt. Hathras								
14	M/S Hanuman Food Products, Chawar Gate, Hathras,Hathras,204101	Food Product Unit	Yes	Not GPI	3 KLD	ETP-Installed Capacity-5 KLD	HathrasDrain Karvan River Yamuna Rive	**Yes**	**No**
15	M/S Mehra Agro Foods, Part Of 123ka, 123ba, Vill. Kalwari, Tahsil&Distt. Hathras	Food Product Unit	Yes	Not GPI	6 KLD	ETP-Installed Capacity-10 KLD	HathrasDrain Karvan River Yamuna Rive	**Yes**	**No**
16	M/S Mehra Foods, Vill. Ajroi, Tehsil Sasni, Distt. Hathras,Hathras,	Food Product Unit	Yes	Not GPI	6 KLD	ETP-Installed Capacity-10 KLD	Irrigation	**Yes**	**No**
17	M/S Shree Ram Food Product, Jalesar Road, Sasni, Hathras,Hathras,	Food Product Unit	Yes	Not GPI	3 KLD	ETP-Installed Capacity-5 KLD	SasniDrain HathrasDrain Karvan River Yamuna Rive	**Yes**	**No**
18	M/S Shri Girraj Food Products, NaglaChaube, Dhakpura Road, Hathras	Food Product Unit	Yes	Not GPI	3 KLD	ETP-Installed Capacity-5 KLD	HathrasDrain Karvan River Yamuna Rive	**Yes**	**No**
19	M/S Shri RadhePetha Store, Khasra No-213/1, Khata No-141, Mauza-SasniDehat, Tehsil-Sasni, Hathras,Hathras,	Food Product Unit	Yes	Not GPI	5 KLD	ETP-Installed Capacity-10 KLD	SasniDrain HathrasDrain Karvan River Yamuna Rive	**Yes**	**No**
20	M/S Tapovan Foods Pvt. Ltd. Rahana Road, Ruheri, Hathras	Food Product Unit	Yes	Not GPI	10 KLD	ETP-Installed Capacity-15 KLD	Irrigation	**No**	Notice issued

21	M/S Natraj Energy Pvt. Ltd. (Old Name-Apex Power), Village- Ruheri Road, Hathras	Battery Unit	Yes	Not GPI	20 KLD	ETP-Installed Capacity-30 KLD	Irrigation	**Yes**	**No**
22	M/S AsthLaxmiAgrotechPvt. Ltd. Mehmoodpur, Barse, SasniHathras	Rice Mill	Yes	Not GPI	10 KLD	ETP-Installed Capacity-15 KLD	Irrigation	**No**	Notice issued
23	M/S Shree Speciality Col Chem, Ajroi Road, Tehshil-Sasni, District- Hathras	Chemical Unit	Yes	Not GPI	4 KLD	ETP-Installed Capacity-10 KLD	Irrigation	**Yes**	**No**
24	M/S Bharat Petrolium Corporation Ltd. L.P.G. Batling Plant, Indusrial Estate, Salempur, Hathras	LPG Storage Unit	Yes	Not GPI	5 KLD	ETP-Installed Capacity-10 KLD	Irrigation	**Yes**	**No**
25	M/S MatrumalDhanna Mal Oil Mill (Unit-2) 03th Km. Stone Sasni, Iglas Road, NaglaGadhu, Sasni, Hathras	Solvent Extraction Unit	Yes	Not GPI	20 KLD	ETP-Installed Capacity-30 KLD	Irrigation	**Yes**	**No**
26	M/S Excel PhosphatPvt.Ltd.,Plot No.B-16 To 17, UPSIDC, Industrial Area-Salempur, Hathras	Chemical Unit	Yes	Not GPI	16 KLD	ETP-Installed Capacity-20 KLD	Irrigation	**Yes**	**No**
27	M/S G.M. Food Prodcut, Plot No-B-18, Salempur Industrial Area, Hathras	Food Product Unit	Yes	Not GPI	8 KLD	ETP-Installed Capacity-10 KLD	Irrigation	**No**	Notice issued

28	M/S AnanadManohar Food Product Pvt. Ltd. D-7, Industrial Area, Salempur, Tehsil-Sasni, Hathras	Food Product Unit	Yes	Not GPI	1 KLD	ETP-Installed Capacity-5 KLD	Irrigation	**No**	Notice issued
29	M/s A.K. Agro Foods, Village-Chintapur, Behind MandiSamiti, Hathras	Food Product Unit	Yes	Not GPI	3 KLD	ETP-Installed Capacity-5 KLD	HathrasDrain Karvan River Yamuna Rive	**Yes**	**No**

(3) Water quality status

Provide water quality status of Ganga and its tributaries in the District and city/ town in terms of its fitness for Bathing water quality that is, FC and FS:

S.no	Name of River/Tributary	DO (mg/ltr)	B.O.D	TC (MPN/ 100ml)	FC (MPN/ 100ml)
1	Karvan River	3.6 mg/ltr	54.0 mg/ltr	5800000.0	4000000.0

(4) Notification of Flood Plain Zones: - In its order dated July 13,July 2017, the NGT directed the identification and demarcation of the floodplains of the river ganga in segment B of phase 1 on a 25 year cycle. In a recent letter issued by chief engineer research & planning letter No. 152/CPR/ANIBAM/u-7/2024 officer of the chief engineer irrigation & water resource department Lucknow, dated 10/03/2024 in this letter, the hathras district is not listed as a sensitive and very sensitive area with respect to flooding. Therefore, the marking of flood lines through piller demarcation has not been carried out.

(5) Issues relating to **Environmental Flow**:-since hathras district does not face flooding, the concept of ecological flow is not applicable in this region

Best Practices:

1. Online Continuous Effluent Quality Monitoring Stations are operated for continuous monitoring of the quality of effluent in milk processing units and textile units, which are connected to the Central Pollution Control Board and Uttar Pradesh Pollution Control Board.
2. Treated effluent from milk processing units is used for irrigation.
3. Inspections of water polluting industries are done at regular intervals by the Regional Office, Uttar Pradesh Pollution Control Board, Aligarh.
4. Water samples of Karvan River, Sasni Drain, Hathras Drain under District Hathras are collected weekly. The collected samples are tested in the laboratory of the Regional Office, Aligarh.
5. Action is taken against the units found defaulter as per rules.
6. At village level, grey water management entails construction of drainage system funded by finance commission directing water into ponds with filter chamber and installing soak pits in areas lacking drainage infrastructure.
7. Each year district achieves its plantation targets with the collaborative efforts of the district departments resulting in a very satisfactory survival percentage of the same.

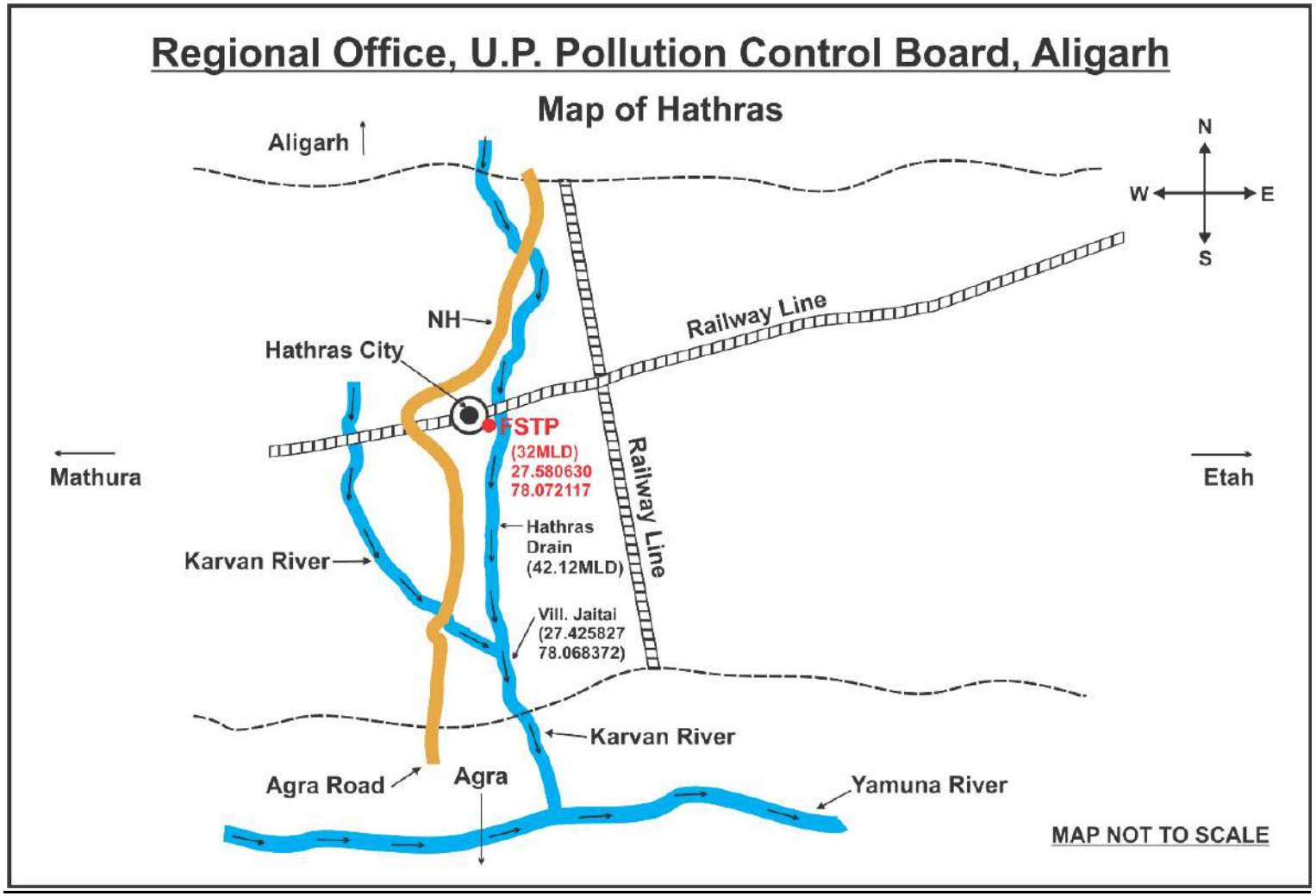
The information is compiled by District Ganga Committee, Hathras after receiving the information from all the concerned departments.

Divisional Forest Officer
Member Convenor
District Ganga Committee,
Hathras.

Chief Development Officer,
Nodal Officer,
District Ganga Committee,
Hathras.

District Magistrate,
Chairman,
District Ganga Committee,
Hathras.

Hathras District Map



In compliance of Hon'ble NGT order dated24.01.2024

In O.A.200/2014 MC Mehta *Vs* UOI and Ors.

सत्यमेव जयते

जल शक्ति मंत्रालय
MINISTRY OF
JAL SHAKTI

नमामि गंगे

District Ganga Committee Report

(New Format)

Submitted By:

DISTRICT GANGA COMMITTEE, JALAUN, UTTAR PRADESH

MC MEHTA *vs.* UNION OF INDIA (OA. NO. 200 OF 2014)

ADDITIONAL INFORMATION, AS PER THE ORDER 05.02.2024

S.NO	ADDITIONAL INFORMATION	ANSWER
1.	**That STPs installed, are underutilized and that treated effluents are discharged into the drains carrying untreated wastewater thereby defeating the very purpose of the efficacy of STPs.**	No such activities are being practiced. STPs have been proposed to treat sewage water that is being generated in Jalaun.
2.	**The quantification and estimation of sewage entering to each STP through sewer network or through interception and diversion of drains.**	STPs have been Proposed to treat sewage water that is being generated in Jalaun.
3.	**the breakup of quantity of sewage fed to each STP through sewerage and drains, indicating location of STP (with geo coordinates) and quality and quantity of discharged sewage and its disposal location.**	STPs have been Proposed to treat sewage water that is being generated in Jalaun.

<table>
<tr><td>4.</td><td>These identified industries should be imposed with the Consent conditions to adopt ZLD system or maximize recycling/ reuse of treated effluents rather than consenting them to discharge into drains with no burden on them.</td><td>There is no water-polluting industry based in Jalaun that discharges its effluent in the River Yamuna, Betwa, or Pahuj. ZLD systems need to be adopted by industries in the near future.</td></tr>
<tr><td>5.</td><td>We are of the view that additional columns are to be included reflecting the drain, position of STP with capacity, their geocoordinates, discharge quantity from the STP in the drain and total per day discharge from the drain into river.</td><td>
<table>
<tr><th>Drain (city/town)</th><th>Proposed STP Location and capacity</th><th>Outlet flow and geo code/ sample point</th><th>total per day discharge from the drain into river</th></tr>
<tr><td>1</td><td>2</td><td>3</td><td>4</td></tr>
<tr><td>Khatkiyana Drain, Orai Road, Jalaun</td><td>Village Pratappura Jalaun
Capacity 6.0 MLD</td><td>Lat 26.162743°
Long 79.326998°</td><td rowspan="9">Approx 20-25 MLD including all Drains of district Jalaun.
(Drain discharge may vary season to season)</td></tr>
<tr><td>Beri Road Drains Kadaura</td><td>GIC Inter College Kadaura
Capacity 1.60 MLD</td><td>Lat 25.982258°
Long 79.834553°</td></tr>
<tr><td>Bhaisa Nala, Tehsil Road, Kalpi</td><td>Rayad Road Taribulda Kalpi
Capacity 5.0 MLD</td><td>Lat : 26.110164°
Long 79.763681°</td></tr>
<tr><td>Gurasarai Road Drain, Kotra</td><td>Ward No. 04 Chhotimata Kotra
Capacity 0.80 MLD</td><td>Lat :25.802847°
Long :79.305789°</td></tr>
<tr><td>Malviya Nagar Drain, Madhogarh</td><td>Migani Madhogarh
Capacity 1.30 MLD</td><td>Lat :26.301341°
Long :79.151041°</td></tr>
<tr><td>Konch Road, Nadigaon</td><td>Nadigaon town near the bus stand
Capacity 0.80 MLD</td><td>Lat :26.009422°
Long :79.171691°</td></tr>
<tr><td>Bagura Drain, Orai</td><td>Location not finalized yet
Capacity 16.47 MLD</td><td>25°59'48.43"N
79°27'14.10"E</td></tr>
<tr><td>Rampura Drain, Rampura</td><td>Rampura Drain, Near Bhairav Puliya
Capacity 1.30 MLD</td><td>Lat :26.351025°
Long :79.176788°</td></tr>
</table>
</td></tr>
</table>

		Ganda Nala Near Gaushal, Umari	Bahrai Umari Capacity 1.0 MLD	Lat :26.351025° Long :79.176788°	
		Badal Drain, Mukhiya GhardenKonch Road, Ait	Next to MRF Ait Capacity 1.5 MLD	Lat :25.896958° Long :79.242172°	
		Malanga Nala, Madhogarh Road, Konch,	Village Pachipura Bujurg Konch Capacity 6.0 MLD	Lat :26.009422° Long :79.171691°	

6.	**Mention heavy metals analysis in respect of discharge from each of the drain in the report.**	**Drain (city/town)**	**Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride etc)**							
			Zn	**Fe**	**Pb**	**Cn**	**Cr**	**Mn**	**As**	**Hg**
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
		Khatkiyana Drain, Orai Road, Jalaun	0.0572	1.3697	0.713	0.4097	ND	0.1967	0.003	ND
		Beri Road Drains Kadaura	0.2	3.9283	0.0713	1.021	ND	0.2472	0.005	ND
		Bhaisa Nala, Tehsil Road, Kalpi	0.2022	5.2076	0.1307	0.315	ND	0.2752	0.006	ND
		Gurasarai Road Drain, Kotra	0.0679	0.8757	0.1307	0.1084	ND	0.1967	0.004	ND
		Malviya Nagar Drain, Madhogarh	0.465	1.0024	0.0713	0.0826	ND	0.1911	0.002	ND
		Konch Road, Nadigaon	0.1	1.395	0.0713	0.4614	ND	0.1911	0.003	ND
		Bagura Drain, Orai	0.0679	1.3444	0.713	0.1687	ND	0.2416	0.007	ND
		Rampura Drain, Rampura	0.3418	8.3995	0.1902	0.9263	ND	0.7461	0.006	ND
		Ganda Nala Near	0.0653	1.1417	0.0713	0.6508	ND	0.1855	0.003	ND

		Gaushal, Umari								
		Badal Drain, Mukhiya GhardenKonch Road, Ait	0.0438	1.205	0.0119	0.3839	ND	0.2472	0.004	ND
		Malanga Nala, Madhogarh Road, Konch,	0.1378	0.635	0.0119	0.229	ND	0.1687	0.004	ND

Divisional Forest Officer
Member Convener
District Ganga Committee, Jalaun

1- Sewage

Drain (city/town)	Total drain capacity	pH	BOD (mg/l)	COD (mg/l)	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride etc)								DO	TC	FC	Outlet flow and geo code/ sample point	Color/ odour	Discharged Into
					Zn	Fe	Pb	Cn	Cr	Mn	As	Hg						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Khatkiyana Drain, Orai Road, Jalaun	6 MLD Approx	7.44	102.5	361	0.0572	1.3697	0.7130	0.4097	ND	0.1967	0.0030	ND	0.82	79000	33000	Lat 26.162743° Long 79.326998°	Yellowish (Foul)	Throughout the year only Bhaisa Nala, Tehsil Road, Kalpi and Malanga Nala, Madhogarh Road, Konch discharged into River Yamuna.
Beri Road Drains Kadaura	1.6 MLD Approx	7.75	65	228	0.2000	3.9283	0.0713	1.0210	ND	0.2472	0.0050	ND	2.4	790000	330000	Lat 25.982258° Long 79.834553°	Black (Foul)	
Bhaisa Nala, Tehsil Road, Kalpi	5.0 MLD Approx	7.71	122.5	437	0.2022	5.2076	0.1307	0.3150	ND	0.2752	0.0060	ND	0	49000	23000	Lat : 26.110164° Long 79.763681°	Black (Foul)	
Gurasarai Road Drain, Kotra	0.8 MLD Approx	8.23	90	323	0.0679	0.8757	0.1307	0.1084	ND	0.1967	0.0040	ND	1.28	130000	79000	Lat :25.802847° Long :79.305789°	Black (Foul)	
Malviya Nagar Drain, Madhogarh	1.30 MLD Approx	7.71	85	304	0.4650	1.0024	0.0713	0.0826	ND	0.1911	0.0020	ND	1.1	170000	79000	Lat :26.301341° Long :79.151041°	Black (Foul)	
Konch Road, Nadigaon	0.80 MLD Approx	7.75	95	342	0.1000	1.3950	0.0713	0.4614	ND	0.1911	0.0030	ND	1.2	79000	33000	Lat :26.009422° Long :79.171691°	Yellowish (Foul)	
Bagura Drain, Orai	6.0 MLD Approx	7.66	112.5	339	0.0679	1.3444	0.7130	0.1687	ND	0.2416	0.0070	ND	1.93	130000	790000	25°59'48.43"N 79°27'14.10"E	Black (Foul)	
Rampura Drain, Rampura	1.30 MLD Approx	7.45	102.5	361	0.3418	8.3995	0.1902	0.9263	ND	0.7461	0.0060	ND	1.65	70000	49000	Lat :26.351025° Long :79.176788°	Yellowish (Foul)	
Ganda Nala Near Gaushal, Umari	1.0 MLD Approx	7.64	107.5	380	0.0653	1.1417	0.0713	0.6508	ND	0.1855	0.0030	ND	1.47	170000	78000	Lat :26.351025° Long :79.176788°	Black (Foul)	
Badal Drain, Mukhiya Gharden Konch Road, Ait	1.50 MLD Approx	7.77	117.5	418	0.0438	1.2050	0.0119	0.3839	ND	0.2472	0.0040	ND	0	490000	230000	Lat :25.896958° Long :79.242172°	Grey (Foul)	

Drain (city/town)	Total drain capacity	pH	BOD (mg/l)	COD (mg/l)	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride etc)								DO	TC	FC	Outlet flow and geo code/ sample point	Color/ odour	Discharged Into
					Zn	Fe	Pb	Cn	Cr	Mn	As	Hg						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Malanga Nala, Madhogarh Road, Konch	6.0 MLD Approx	7.67	285	80	0.1378	0.6350	0.0119	0.2290	ND	0.1687	0.0040	ND	1.4	17000	79000	Lat :26.009422° Long :79.171691°	Grey (Foul)	

Note: Sewage analysis data is provided by Regional Office, UP Pollution Control Board, Jhansi. Date of sample inspection is 27.03.2024. ND = Not Detected.

2. STP for treating the sewage of the drains ultimately flowing to river ganga or its tributaries

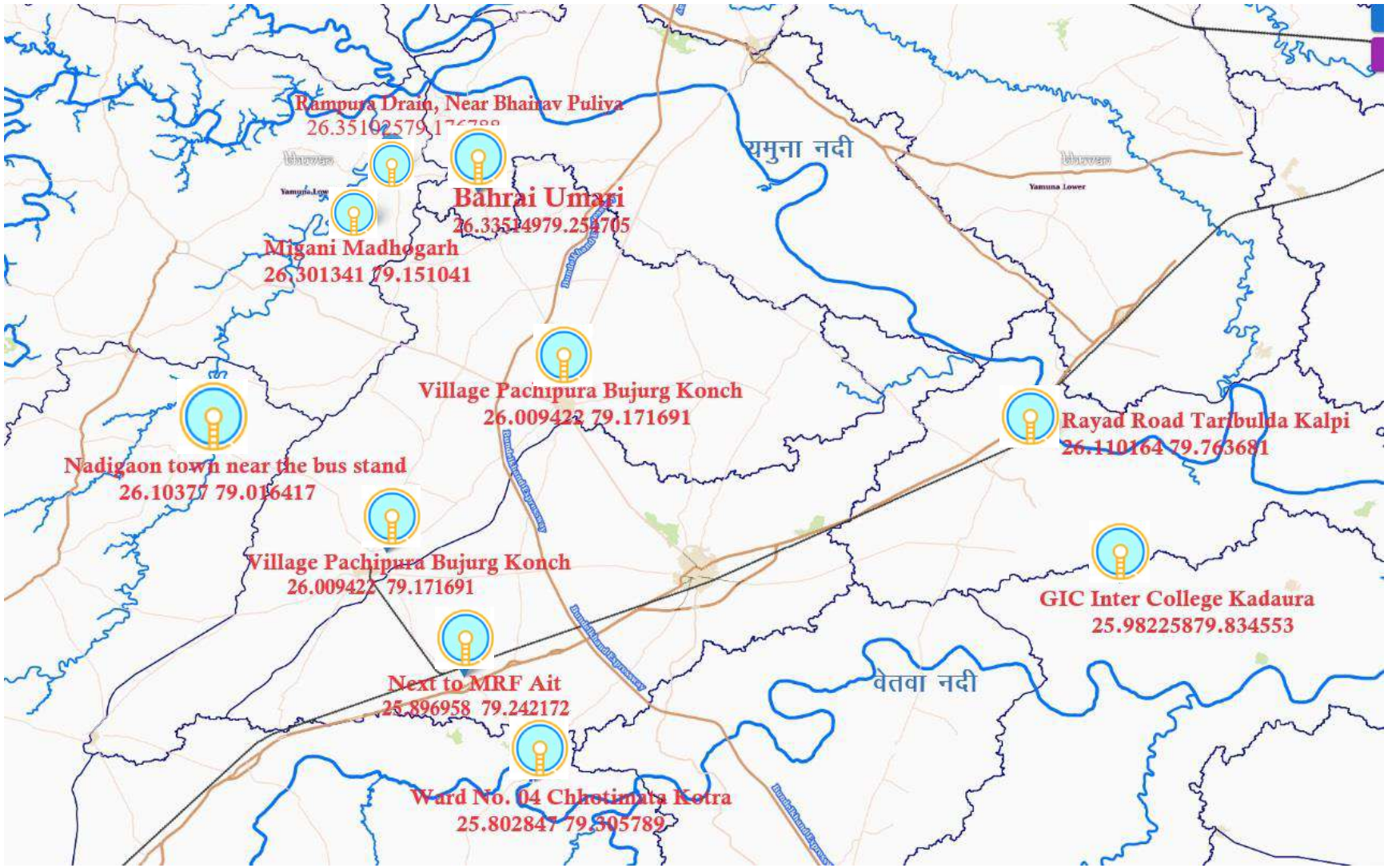
Existing STP (location & capacity)	Capacity (operational)	Inlet/ Outlet water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point	Proposed/ under construction STP With completion date
Note: No STP installed or commissioned in District Jalaun. STPs are proposed under AMRUT 2.0 and Swachch Bharat Mission 2.0. Approval is awaited.						

2.1 STP ADDITIONAL INFORMATION

NAME OF DRAIN	POSITION OF STP WITH CAPACITY	GEO/COORDINATES	DISCHARGE QUANTITY FROM THE STP IN THE DRAIN	TOTAL PER DAY DISCHARGE FROM THE DRAIN INTO THE RIVER
Note: No STP installed or Commissioned in the District Jalaun. STPs are proposed under AMRUT 2.0 and Swachch Bharat Mission 2.0. Approval is awaited.				

Proposed STP (location & capacity)	Capacity (operational)	Inlet/ Outlet Water & quality quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point Geo code/ sampling point	Proposed/ under construction STP With completion date	Remark
Rayad Road Taribulda (Under NPP Kalpi)	5.0 MLD	After installation of facility	1 drain to be tapped	After installation of facility, No Gap	Lat : 26.110164° Long :79.763681°	2026	The estimate is sent to SBM Directorate.
Village Pratap pura(Under NPP Jalaun)	6.0 MLD	After installation of facility	1 drain to be tapped	After installation of facility, No Gap	Lat :26.162743° Long :79.326998°	2026	Detailed estimation variance work in progress
Village Pachipura Bujurg (Under NPP Konch)	6.0 MLD	After installation of facility	1 drain to be tapped	After installation of facility, No Gap	Lat :26.009422° Long :79.171691°	2026	The estimate is sent to SBM Directorate.
Near GIC Inter College (Under NP Kadaura)	1.60 MLD	After installation of facility	1 drain to be tapped	After installation of facility, No Gap	Lat :25.982258° Long :79.834553°	2026	The estimate has been sent to Jal Nigam Headquarters
Next to MRF (Materials Recovery Facility) (Under NP Ait)	1.50 MLD	After installation of facility	1 drain to be tapped	After installation of facility, No Gap	Lat :25.896958° Long :79.242172°	2026	Detailed estimation variance work in progress
Ward No. 04 Chhotimata (Under NP Kotra)	0.80 MLD	After installation of facility	1 drain to be tapped	After installation of facility, No Gap	Lat :25.802847° Long :79.305789°	2026	The estimate has been sent to Jal Nigam Headquarters.
Rampura Drain, Near BhairavPuliya (Under NP Rampura)	1.30 MLD	After installation of facility	1 drain to be tapped	After installation of facility, No Gap	Lat :26.351025° Long :79.176788°	2026	Detailed estimation variance work in progress.

Proposed STP (location & capacity)	Capacity (operational)	Inlet/ Outlet Water & quality quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point Geo code/ sampling point	Proposed/ under construction STP With completion date	Remark
Migani (Under NP Madhaugarh)	1.30 MLD	After installation of facility	1 drain to be tapped	After installation of facility, No Gap	Lat :26.301341° Long :79.151041°	2026	Detailed estimation variance work in progress
Bahrai (Under NP Umari)	1.0 MLD	After installation of facility	1 drain to be tapped	After installation of facility, No Gap	Lat :26.335149° Long :79.254705°	2026	Detailed estimation variance work in progress
Nadigaon town near the bus stand (Under NP Nadigaon)	0.80 MLD	After installation of facility	1 drain to be tapped	After installation of facility, No Gap	Lat :26.10377° Long :79.016417°	2026	Detailed estimation variance work in progress
Location not finalized yet (Under NPP Orai)	40 MLD	40 MLD STP Project DPR submitted under AMRUT 2.0 by NPP Orai.				2026	Approval is awaited.



Proposed STP Locations: Hydrological Map (Bhuvan App)

3. Hotels/ Ashrams/Dharmshalas/residential complexes abutting river Ganga or its tributaries

Number of Hotels/ ashrams/ dharamshalas	Consent to establish/ operate	STP	Discharge point	Action taken
02 1- Shyama Sarovar Portiko, Jhansi Road, Orai 2- Hotel Jaiswal Tower, Orai	CTO-01	1	Drain	01 Notice Issue

4. Industrial Effluent discharge by industries whose effluent is ultimately flowing to river Ganga or its tributaries

Total number of Industries	Daily effluent discharge	Treatment available (cetp/ petp/ etp operational capacity)	Effluent quality analysis(outlet of treatment plants Geo code sampling point)	GAP	Proposed/ under construction treatment project (with timeline)	Number of defaulting units- Action taken	Industrial solid waste generated/ day	Manner of disposal (Industrial solid waste)
Hindustan Unilever Ltd, A-1, UPSIDC Industrial Area Orai, Lat-26.011869 & Long-79.487384	Approx 10.0 KLD	ETP	Within Norms	No Gap	ETP Already Exist, no project proposed	No defaulting Units	Not Accessed	No TSDF Available
Nafsul Traders, Bypass Road, Kalpi Lat-26.12057 & Long-79.74703	Approx 2.0 KLD	ETP	Within Norms	No Gap	ETP Already Exist, no project proposed	No defaulting Units	Not Accessed	No TSDF Available

Agrawal Waste Paper Merchant,126, Village- Rahaiya, Tehsil- Orai Lat-26.010888 & Long-79.492136	Approx 200.0 Liter	ETP	Within Norms	No Gap	ETP Already Exist, no project proposed	No defaulting Units	Not Accessed	No TSDF Available
Urvashi Synthetic processor Pvt Ltd, A-4 UPSIDC Industrial Area, Orai Lat-26.0083682 & Long-79.4856320	Approx 100.0 KLD	ETP	Within Norms	No Gap	ETP Already Exist, no project proposed	No defaulting Units	Not Accessed	No TSDF Available
Kashiram Medical College Orai Lat-26.053900 & Long-79.472030	Approx 597.0 KLD	ETP	Within Norms	No Gap	ETP Already Exist, no project proposed	No defaulting Units	Not Accessed	No TSDF Available

Note: None of the above industries of district Jalaun discharging their Effluent into river Ganga or its tributaries.

5. Regulation of Flood Plain Zone:

Area-cities/ towns	Notification of flood plain zone	Demarcation		Encroachment & direct discharge Geo Code/ Sampling point	Encroachment removal status	Timeline for completion
		No development zone pillars	Regulatory zone pillars			
A committee is formed under the order of Chief Engineer Betwa letter No. 4938 C.E.B./N.G.T/ Dated. 11/09/2023 2676 & C.E.B./Environment dated 24 july 2021 for the preparation and execution of project of regulatory pillars and No development pillars along the river. In the above order of chief engineer betwa flood plain zoon has been decided 100 M from the river edge on both side ofriver. After sanction of fund on the above mentioned project construction of no development zone pillar and regulatory pillar will be started.					As Per order of Chief Engineer Betwa letter No-2676 & C.E.B./Environment dated. 01.03.2021 flood plain zone has been decided as follow– (a) Area between the marginal bund if there is already marginal Bund available . (b) if no marginal bund is available then area between edge of river and 100 m from the edge of river.	

6. Afforestation/ Plantation along the bank of River Ganga and its tributaries and their flood plain zones

Area- cities/ towns	Total plantation Geo Code/ Sampling Point			Proposed project	Timeline
District-Jalaun	Total Plantation- **5156050**			Completed	July –August 23
	Plantation done in Forest Ranges:				
Jalaun Range	**448300,**	26° 07.845	79°35.120		
Madhogarh Range	**488150,**	26° 24.849	79°07.715		
Ait Range	**847200,**	25° 47.520	79°20.210		
Konch Range	**853950,**	26° 02.40.7	78°59.20.9		
Kadaura Range	**580000,**	26° 04.498	79°46.050		
Kalpi Range	**815150,**	26° 07.899	79°43.252		
Niyamatpur Range	**339300,**	26°19.761	79°31.691		
Orai Range	**784000,**	25° 55.438	79°31.218		

7. Mining and Stone Crushing in river bed and flood plain zone of River Ganga and its tributaries:

Area of mining	FIR/ case registered/ year	Vehicles/ mineral seized	Action taken status	Cases pending in Court	Enforcement of EMGSM 2020 and Sustainable sand mining management guidelines 2016
Active 15	6	1349 (E- Challan)	60548510	0	When cases of illegal mining, mining from water levels, and damage to the environment come to light, action is taken as per the rules under the Uttar Pradesh Sub-Mineral Avoidance Rules 2021.

Compliance of Hon'ble NGT order
Date 24-01-2024
In
O.A. 200/2014 MC Mehta *Vs* UOI and Ors

1. District Ganga Protection Plan at City/ Town Level, Jalaun

District Ganga Protection Committee (DGPC) is required to formulate the action plan for each city and town located on main stem of river Ganga and its tributary and such Action Plan has to be prepared in accordance with the River Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016 (Para 6 and 55).

2. Contents of the Action Plan
(Consolidated District Wise Action Plan including each City and Town abutting river Ganga and its Tributary)

2.1 Sewage Management

(i) Total Sewage generation (for entire District and individual town wise): **67.95 MLD**

Name of ULB	Total Sewage Generation (MLD)
Nagar Palika Parishad, Jalaun	6.23
Nagar Palika Parishad, Orai	40.0
Nagar Palika Parishad, Kalpi	7.12
Nagar Palika Parishad, Konch	6.47
Nagar Panchyat, Kotra	1.5
Nagar Panchyat, Umari	1.03
Nagar Panchyat, Kadaura	1.60
Nagar Panchyat, Ait	2.0
Nagar Panchyat, Madhaugarh	2 .0
Nagar Panchyat, Rampura	1.30
Nagar Panchyat, Nadigaon	1.03

(ii) **Existing Sewage Treatment Capacities :**

No STP installed or Commissioned in the District Jalaun. STP proposed under AMRUT 2.0 and Swachch Bharat Mission 2.0. Approval is awaited.

(iii) **Quantity of sewage is being treated (utilization capacity):**

No sewage treated, as there is no STP.

(iv) **Performance of STPs particularly for FC :**

After Commissioning facility, STPs performance will be checked for FC.

(v) **Where treated sewage is being discharged (to Ganga or tributaries) :**

River Yamuna, Betwa and Pahuj

(vi) **Reasons for Under-utilization of STPs (Connectivity of Households/ laying of sewer lines) :**

Septic Tank are being utilized

(vii) **Current Gap in sewage treatment:**

100% Gap

(viii) **Time bound plan for bridging the gap and tying up with financial arrangements and not delaying Tendering and identifying executing agencies or having any other issues :**

STP proposed under AMRUT 2.0 and Swachch Bharat Mission 2.0. Approval is awaited. Tentative time bound plan is as follows-

Plan	Tentative Timeline
STPs Proposal	2023
STPs consideration/ financial arrangements	2024-2025
STPs installation/ Commissioning/ Operational	2026-2027

(ix) Where untreated sewage (when there is no STP) is discharged (Ganga /Tributaries): Drains joining Ganga and Tributary

Most of the drains do not join district rivers as discharge in open ravines of this Bundelkhand region and dried up with due course of times. Remaining drains where STP is in proposal stage discharged untreated sewage in River Yamuna, Betwa & River Pahuj.

2.2 Drains Joining Ganga and Its Tributary

(i) Number of drains carrying sewage- sullage or industrial waste water joining Ganga/ tributaries with their Quantity and Quality:

Drain	Domestic/Industrial /Mixed	Flow	Quality Discharge Parameters
Bhaisa Nala, Tehsil Road, Kalpi Jalaun Lat : 26.110164° Long 79.763681°	Domestic	4.66 MLD	pH- 7.81 BOD- 84.0, COD -350.4 TSS –122.0
Malanga Nala, Madhogarh Road, Konch, Jalaun Lat :26.009422° Long :79.171691°	Domestic	5.80 MLD	pH- 7.71 BOD- 78.0, COD -259.2 TSS – 91.0

(ii) Drains joining outside city and town limits but, either joining in village or nearby town:

No such Drains

(iii) Inclusion of sewage flowing in drains into total sewage generation figures of each city and town and their interception and diversion to STPs:

All drains are tapped. Once STPs installed there will be no gap in Sewage treatment

2.3 Septage management (In case of no STP)

(i) Status of Septage management (with reference to FSTP/STP

32 KLD FSTP installed & operational in Nagar Pallika Parishad, Orai. Septic Tank & Soak pits utilized in households. Nagar Palika Parishad Jalaun, Konch, Kalpi, Ait, Kadaura have contract with Nagar Pallika Parishad, Orai for Fecal Sludge Treatment. Deep Row Entrenchment (DRE) Used in NP Rampura Umari Madhaugarh,Kotra,Nadigaon for Septage Management.

(ii) Management of Grey water and its disposal:

All major drains of the city carry greywater discharge. Most of such drains are tapped and tapping work is in progress.

2.4 Industrial Pollution Control

(i) Attach the list on no. of industries generating trade effluents, their place of disposal and compliance including CETPs (town wise):

Total number of Industries	Production Sector (Tannery, Textile, Metal, Oil, Food, Other)	Daily effluent discharge	Treatment available (cetp/ petp/ etp operational capacity)	Effluent quality analysis (outlet of treatment plants Geo code sampling point)	Final Discharge Point	Complience Status
Hindustan Unilever Ltd, A-1, UPSIDC Industrial Area Orai,	Soap & Detergents	Approx 10.0 KLD	ETP	Within Norms	Use in land for Gardening	Yes
Nafsul Traders, Bypass Road, Kalpi	Traders	Approx 2.0 KLD	ETP	Within Norms	Recycling	Yes
Agrawal Waste Paper Merchant,126, Village- Rahaiya, Tehsil- Orai	Traders	Approx 200.0 Liter	ETP	Within Norms	Recycling	Yes
Urvashi Synthetic processor Pvt Ltd, A-4 UPSIDC Industrial Area, Orai	Dying Unit	Approx 100.0 KLD	ETP	Within Norms	Industrial Drain	Yes

(3) Water quality status

Provide water quality status of Ganga and its tributaries in the District and city/ town in terms of its fitness for Bathing water quality that is, FC and FS:

Name of the River **: River Yamuna** Site of Sample Collection**: Kalpi**			
		Upper Stream (U/S)	**Down Steam (D/S)**
S.N.	**Parameter's**	**Value**	**Value**
1.	Color	Colorless	Colorless
2.	Odour	Odorless	Odorless
3.	pH	7.50	7.80
4.	Electrical Conductance	739.00	743
5.	Dissolved Oxygen	6.50	6.50
6.	Ca Hardness ($CaCO_3$)	210.0	235.0
7.	Mg Hardness ($CaCO_3$)	95.0	95.0
8.	Total Hardness ($CaCO_3$)	305.0	330.0
9.	Total Dissolved Solids	519.00	535.00
10.	Chloride	75.00	75.00
11.	Biochemical Oxygen Demand	4.20	4.60
12.	Chemical Oxygen Demand	22.00	30.00

4. Notification of Flood Plain Zones: A notice under section 61-B of Indian Forest Act 1927 has been issued to the concerned person for removal of encroachment. The proper action is under process with the help of Forest Department, Police Department and District Administration, Jalaun.

5. Issues relating to Environmental Flow: Identifying Critical Components of the Flow regime that govern the environmental Conditions (e.g. Dry and wet season base flows, and different sized high flows and floods) is needed to be done. Water levels of the river during the dry season monitored and river water quality during dry season is monitored as Good. Lists of 02 dams with total capacity and minimum water level have been attached.

S.No.	NAME OF DAM	RIVER	DESIGN CAPACITY (MCM)	MINIMUM WATER LEVEL (MCM)
1	Matatila	Betwa	641.06	78.48
2	Parichha	Betwa	78.76	60.00

Best Practices

- 70 Ganga Gram Sewa Samiti were formed at near river bank villages.
- River Yamuna and Betwa Aarti being performed weekly
- Noon rejuvenation has been a great success in river rejuvenation by the efforts made by district administration, Jalaun.

  Small check dams/Pakka dams/Bandis are being constructed to restore soil moisture in by the District Forest Department, Jalaun.
- Ecotourism activities have been promoted at sala ghat, kila ghat &pachnada ghat.
- Ganga Swachchta Pakhwada, Har Ghar Har Ghat Tirnga, Ganga Aarti by nearby village, Plastic aggregation and Mass sensitization for Pollution abatement.
- Phyto-remediation of 2 drains has been installed for treatment of BOD before meeting the rivers in NP Kotra.
- Swachhta Pakhwada is being organized to promote awareness about the need to keep the drains clean and not throw plastic and solid waste in the drains /water bodies.
- Yellow spot cleanness drives, Swachchta Ke Liye Shramdan &Mahasafai Abhiyan have been organized.
- To imbibe the cultural and religious connection with rivers, Kila Ghats Kalpi at River Yamuna and Sala Ghat, Ait at River Betwa have been best place for celebration of local activities and festivals. In Jalaun, Town Kalpi has deep religious connect with River Yamuna. Kalpi is considered by some as the birth place of Ved Vyas, the author of Mahabharata.Kalpi is also famous for Hand Made Paper (GI Tagged).
- To stop irregular and illegal mining, the following action is being taken from the district level-

  1- Geo-tagging of approved/executed mining lease has been done.

  2- PTZ camera has been installed at the mining lease site to monitor the operation of the mining lease.

  3- Without obtaining environmental sanitation certificate, Permission to carry out mining work is not granted.

  4- A task force team has been formed for effective action and prevention of illegal mining/transport, through which the mining areas are inspected regularly
- The total forest covered area of Jalaun is 25693.35 hectare (ha), out of which reserved forest and unclassified forest is 18530.73 ha and 7108.62 ha respectively.

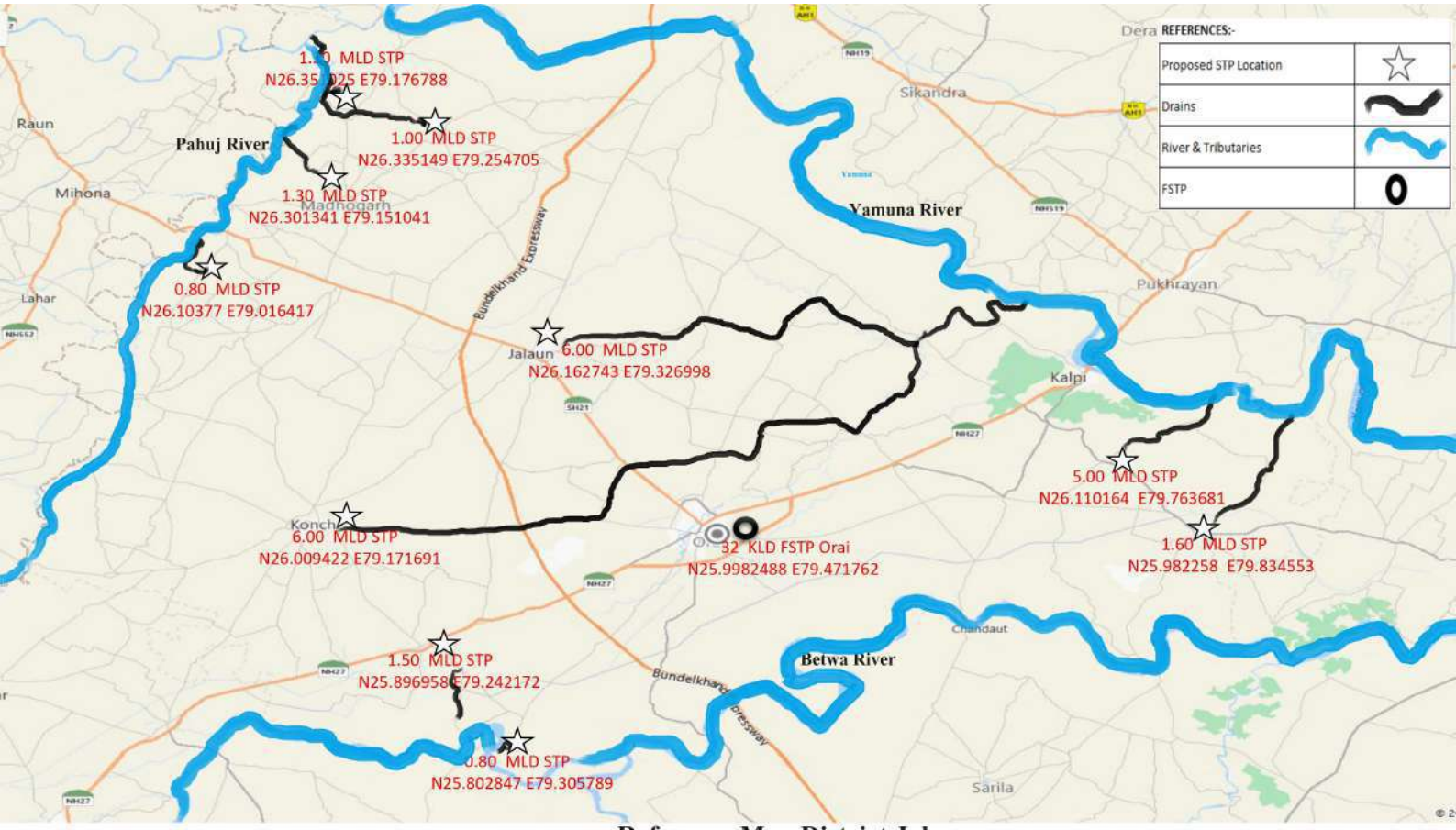
Source of Information: Information and data have been collection in prescribed format in order to comply with hon'ble NGT order. For that matter, District Ganga Committee meeting was organized on 27-02-2024 under the chairmanship of District magistrate and directions were given to related department to furnishing formation in prescribed format.

Disclaimer: The data used in this report was collected from related departments and final report is compiled by Dr. Neeraj K Verma JRF, District Environment Committee Jalaun. The data is applicable only at present scenario. Data may vary with due course of time. Therefore, it is recommended that all its relevant aspects can be taken into consideration to comply Hon'ble NGT order dated 11.09.2023 in O.A. 200/2014 MC Mehta Vs UOI and Ors.

Concluding remarks: Rives are one of the main driving forces of any economy; their rejuvenation and regular monitoring are essentially important. The conservation of our precious water resources is need of the hour.

Divisional Forest Officer
Member Convener
District Ganga Committee, Jalaun

District Magistrate
Chairperson
District Ganga Committee, Jalaun



Reference Map District Jalaun

जल शक्ति मंत्रालय
MINISTRY OF
JAL SHAKTI

In compliance of Hon'ble NGT order

In O.A. 200/2014 MC Mehta *Vs* UOI and Ors.

District Ganga Committee Report

NAMAMI GANGE

Submitted by

DISTRICT GANGA COMMITTEE, KASGANJ, UTTAR PRADESH

MC MEHTA vs. UNION OF INDIA (OA. NO. 200 OF 2014)

ADDITIONAL INFORMATION, AS PER THE ORDER 05.02.2024

District-Kasganj

S.NO	ADDITIONAL INFORMATION	ANSWER
1.	That STPs installed, are underutilised and that treated effluents are discharged into the drains carrying untreated wastewater thereby defeating the very purpose of the efficacy of STPs.	STP of 15 MLD capacity is operated for Kasganj city. Approx . 12.76 MLD sewage is generated from Kasganj city, which is treated through STP and used for land irrigation.
2.	The quantification and estimation of sewage entering to each STP through sewer network or through interception and diversion of drains.	12.76 MLD through Sewage Network
3.	the breakup of quantity of sewage fed to each STP through sewerage and drains, indicating location of STP (with geo coordinates) and quality and quantity of discharged sewage and its disposal location.	12.76 MLD through Sewage in 15 MLD Capacity STP Geo coordinates 27.791187, 78.638125
4.	These identified industries should be imposed with the Consent conditions to adopt ZLD system or maximize recycling/ reuse of treated effluents rather than consenting them to discharge into drains with no burden on them.	Consent (water/air) is given by the U.P. Pollution Control Board, Lucknow with the condition of M/s Sterling Agro Industries Ltd, Kasganj- **The unit shall recycle/reused the treated effluent into the process/other uses such as gardening etc. upto maximum and action plan submitted within one month.** M/s Shervani Sugar Syndicate Limited Neoli Sugar Factory, Manpur Nagariya , Post Neoli Kasganj- **Industry shall ensure proper maintenance and effective continuous operation of ETP and the treated effluent shall be used only for irrigation purpose**
5.	We are of the view that additional columns are to be included reflecting the drain, position of STP with capacity, their geo-coordinates, discharge quantity from the STP in the drain and total per day discharge from the drain into river.	12.76 MLD Treated effluent discharge into river kali through Sewage in 15 MLD Capacity STP Geo coordinates 27.791187, 78.638125 **Outlet** pH-7.38, BOD-20 mg/l, COD-110 mg/l, TSS-80 mg/l
6.	mention heavy metals analysis in respect of discharge from each of the drain in the report.	**Kasganj/Amapur/Nadrai Drain:** Total Chromium-1.0077 mg/l ,Copper-0.6400 mg/l, lead-0.2137 mg/l, lron-10.1445 mg/l, Zinc-5.4692 mg/l, Maganese-0.4692 mg/l, arsenic-ND, Mercury-ND **Salai/Hanauti Drain:** Total Chromium-0.2081 mg/l ,Copper-0.0871 mg/l, lead-ND, lron-1.5323 mg/l, Zinc-0.7698 mg/l, Maganese-0.1589 mg/l, arsenic-ND, Mercury-ND

1. Sewage

Drain (city/ town)	Total drain capacity	Generation / day	PH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride etc)	DO Raw siver	TC	FC	Outlet flow and geo code/ sample point	Color/ odour	Discharged Into
Kasganj/Amapur Drain/ Nadrai Gate Drain	12.76 MLD	12.76 MLD	7.88	190	382	400	-	Total Chromium-1.0077 mg/l ,Copper-0.6400 mg/l, lead-0.2137 mg/l, Iron-10.1445 mg/l, Zinc-5.4692 mg/l, Maganese-0.4692 mg/l, arsenic-ND, Mercury-ND	00	Sample has been collected for analysis report is awaited		12.76 MLD 27.788625, 78.640229	Blackish/Unpleasent	STP to Kali river
Salai Drain/ Hanauti Drain	2.0 MLD	0.77 MLD	7.31	128	296	400	7.31	Total Chromium-0.2081 mg/l ,Copper-0.0871 mg/l, lead-ND, Iron-1.5323 mg/l, Zinc-0.7698 mg/l, Maganese-0.1589 mg/l, arsenic-ND, Mercury-ND	0.0			0.77 MLD	Blackish/Unpleasent	Untraped

The above information is to be submitted on the basis of end point sample analysis of the concerned drain

2. STP for treating the sewage of the drains ultimately flowing to river ganga or its tributaries

Existing STP (location & capacity)	Capacity (operational)	Inlet/ Outlet water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point	Proposed/ under construction STP With completion date
STP Bankner Kasganj	15 MLD	As per NMCG/NGT 12.76MLD	02 (12.76 MLD)	0.00	STP to Kali river	Presently there is no any proposal for new STP in district-Kasganj

2.1 STP ADDITIONAL INFORMATION

NAME OF DRAIN	POSITION OF STP WITH CAPACITY	GEO/COORDINATES	DISCHARGE QUANTITY FROM THE STP IN THE DRAIN	TOTAL PER DAY DISCHARGE FROM THE DRAIN INTO THE RIVER
Nadri	15 MLD	27.791008, 78.638281	12.76	12.76 MLD into Kali River
Amanpur		27.80068, 78.652148		

3. Hotels/ Ashrams/Dharmshalas/residential complexes abutting river Ganga or its tributaries

Number of Hotels	Consent to establish/ operate	STP	Discharge point	Action taken
M/s Taj Marriage Home, Kasganj	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
M/s Krishna Palace, Kasganj	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
M/s S.S Green, Kasganj	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
M/s Munnlal Sarin, Kasganj	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
M/s Prabhat Lodge, Kasganj	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
M/s Harikamal Palace, Kasganj	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
M/s Shriram Guest House, Kasganj	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
M/s Ganga Palace, Kasganj	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
M/s Kanhaiyalal Marriage Home, Kasganj	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
M/s Agarwal Sadan, Kasganj	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
M/s Marwari Dharamshala, Kasganj	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
M/s Pannalal Kasare, Kasganj	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
M/s Hotel Fort View, Kasganj	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
M/s Golden Garden, Kasganj	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
M/s Girraj Paisel, Kasganj	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
M/s UK Garden, Kasganj	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
M/s Siddvinayak Marriage Home, Kasganj	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued
M/s hospitality hotel, Kasganj	No CTE/ CTO issued	Not Installed	Local Drain	Notice issued

4. IV. Industrial Effluent discharge by industries whose effluent is ultimately flowing to river Ganga or its tributaries

Total number of Industries	Daily effluent discharge	Treatment available (cetp/ petp/ etp operational capacity)	Effluent quality analysis (outlet of treatment plants Geo code sampling point)	GAP	Proposed/ under construction treatment project (with timeline)	Number of defaulting units- Action taken	Industrial solid waste generated/ day	Manner of disposal (Industrial solid waste)
M/s Sarvani Sugar Ltd (old Name- Neoli Sugar Industriy, Neoli, Kasganj	500 KLD	ETP-Installed Capacity-500 KLD	BOD-28.0 mg/Ltr, COD-240.0 mg/ltr, TSS-48. mg/ltr & pH-7.9	Nil	Nil	Nil	Used lubricant oi-0.22 Ton/Year, empty barrels/containers /liners Contaminated with hazardous chemicals/wastes-0.03 Ton/day, waste or residues containing oil-0.03 Ton/Year, spent ion exchange resin containing toxic metals-0.03 Ton/Year	These wastes are disposed by TSDF
M/s Sterling agro Industrties ltd, Village-Bihauna, Kasganj	500 KLD	ETP-Installed Capacity-1000 KLD	BOD-25.0 mg/Ltr, COD-132.0 mg/ltr, TSS-43. mg/ltr & pH-7.46	Nil	Nil	Nil	Not Applied	Notice issued

5. Regulation of Flood Plain Zone:

Area- cities/ towns	Notification of flood plain zone	Demarcation		Encroachment & direct discharge GeoCode/ Sampling point	Encroachment removal status	Timeline for completion
		No development zone pillars	Regulatory zone pillars			
Kasganj	--	421	512	Na	Na	Na

6. Afforestation/ Plantation

Area- cities/ towns	Total plantation	Proposed project	Timeline
Kasganj	Total target 585000 plant	ASW/Nursery Plantation	July-Aug-2024

7. Mining and Stone Crushing in river bed and flood plain zone of River Ganga and its tributaries:

Area of mining	FIR/ case registered/ year	Vehicles/ mineral seized	Action taken status	Cases pending in Court	Enforcement of EMGSM 2020 and Sustainable sand mining management guidelines 2016
Nil	09	104	31.67	00	Implement

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Complience of Honble NGT Order

Dated 24.11.2023

In

OA 200/2014 MC Mehta Vs UOI and Ors

District- kashganj

1. The Tribunal has already directed for furnishing following information by order dated 24.11.2023:-

(1) District Ganga Protection Plan at city/ town level

District Ganga Protection Committee (DGPC) is required to formulate the action plan for each city and town located on main stem of river Ganga and its tributary and such Action Plan has to be prepared in accordance with the River Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016 (para 6 and 55).District level Ganga Samiti Consititute by DFO for Montly basis meeting on the chairmainship of District Magistrate.

(2) Contents of the Action Plan (Consolidated District Wise Action Plan including each City and Town abutting river Ganga and its Tributary)

2.1 Sewage Management

(i) Sewage generation (for entire District and individual town wise): Amanpur/kasganj, Nadri drains- 12.76 MLD

(ii) Existing Sewage Treatment Capacities : 15 MLD STP

(iii) Quantity of sewage is being treated (utilization capacity) : 12.76 MLD Average.

(iv) Performance of STPs particularly for FC : STP 15MLD (Bakner)

PH	BOD	COD	TSS	DO	TC	FC
7.41	22.0 mg/l	108.0 mg/l	87.0 mg/l	4.5 mg/l	1600.0 mpn	920.0 mpn

(v) Where treated sewage is being discharged (to Ganga or tributaries) : Ganga River.

(vi) Reasons for Under-utilization of STPs (Connectivity of Households/ laying of sewer lines) : NA

(vii) Current Gap in sewage treatment : 0.0

(viii) Time bound plan for bridging the gap and tying up with financial arrangements and not delaying Tendering and identifying executing agencies or having any other issues : NA

(ix) Where untreated sewage (when there is no STP) is discharged (Ganga /Tributaries): there is no any ganga tributary near NP, NPP. Untreated sewage use in irrigation purpose by local peoples.

2.2 Drains joining Ganga and Tributary

(i) Number of drains carrying sewage- sullage or industrial waste water joining Ganga/ tributaries with their Quantity and Quality: Kasganj/Amapur Drain/ Nadrai Gate Drain, both are the mixed drain discharge point of both the drain is into kali river.

(ii) Drains joining outside city and town limits but, either joining in village or nearby town: NA

(iii) Inclusion of sewage flowing in drains into total sewage generation figures of each city and town and their interception and diversion to STPs:

2.3 Septage management (In case of no STP)

(i) Status of Septage management (with reference to FSTP/STP): No proposal

(ii) Management of Grey water and its disposal:

2.4 Industrial Pollution Control

(i) Attach the list on no. of industries generating trade effluents, their place of disposal and compliance including CETPs (town wise): **there is no any CETPs installed in District Kasganj. Water Polluting Industries is installed individual ETP**

(3) Water quality status

Provide water quality status of Ganga and its tributaries in the District and city/ town in terms of its fitness for Bathing water quality that is, FC and FS:

S.no	Date	Sample collection Point	Coluor (hazen)	smal	pH	DO (mg/l)	BOD (mg/l)	COD (mg/l)	DS(mg/l)
1	01.01.2024	Kall River, Nadrai Gate, kasganj	30	Odourless	7.46	6.4	12	40	770
2	08.01.2024	Kall River, Nadrai Gate, kasganj	20	Odourless	7.44	6.0	16	54	798
3	15.01.2024	Kall River, Nadrai Gate, kasganj	20	Odourless	7.42	6.2	14	50	802
4	22.01.2024	Kall River, Nadrai Gate, kasganj	20	Odourless	7.52	6.4	12	42	772
5	29.01.2024	Kall River, Nadrai Gate, kasganj	20	Odourless	7.36	6.3	12	44	798

(4) Notification of **Flood Plain Zones**: government of uttar Pradesh has isu of notification date 17.10.2018 regarding no construction/no development zone under 100 mtr of both bank river.

(5) Issues relating to **Environmental Flow**:

1. consideration, the desired information be submitted in the above format.

2. Therefore, for each of the district/city/town under consideration, the desired information be submitted in the above format.

S.No	Action Points	Required Information		Remark
1	Surface water contamination (through Drains)	a)	Sewage Generation (MLD)	Total no. of drains 02 and their total discharge is 12.76 MLD
		b)	Existing Sewage Treatment Capacity (MLD)	Total 01 no. of STPs is currently operation in Bankner Kasganj City under Namami Gange Programme by Vibhor Vaibhav Infra Pvt. Ltd under supervision of UPIN (R) total treatment capacity 15 MLD Sewage.
		c)	Current level of Sewage Treatement (MLD)	12.76 MLD
		d)	Gap in Sewage Treatement (MLD)	-
		e)	Status of tapping of Drains and timeline	Total Drains in Kasganj City are 02 nos. Fully Tapped Drains are 02 nos.
		f)	Details of STPs (installed, Under Construction, Proposed, timeline)	Installed (1) Bankner kasganj STP (SBR) 15 MLD
		g)	Details of other Tretment Arrangeme like- Oxydation Pond, FSTP, Constructed wetland etc. ((installed, Under Construction, Proposed, timeline)	-
		h)	Status of Compliance of existing treatiment capacity.	Existing 01 No. STPs is compllant
6	Treated discharge from STP/CETP		Present use of Treated water discharge from STP/CETP and proposed action plan for use of treated water with timeline.	Treated efflunt is pratially reused for irrigation and rest is rest is drained in a river.

Best Practices:

1. Online Continuous Effluent Quality Monitoring Stations are operated for continuous monitoring of the quality of effluent in milk processing units and suger Unit which are connected to the Central Pollution Control Board and Uttar Pradesh Pollution Control Board.
2. Treated effluent from suger units is used for irrigation.
3. Inspections of water polluting industries are done at regular intervals by the Regional Office, Uttar Pradesh Pollution Control Board, Aligarh.
4. Water samples of Kasganj/Amapur Drain/ Nadrai Gate Drain, Salai Drain/Hanauti Drain under District Kasganj are collected weekly. The collected samples are tested in the laboratory of the Regional Office, Aligarh.
5. Action is taken against the units found defaulter as per rules.
6. At village level, grey water management entails construction of drainage system funded by finance commission directing water into ponds with filter chamber and installing soak pits in areas lacking drainage infrastructure.
7. Each year district achieves its plantation targets with the collaborative efforts of the district departments resulting in a very satisfactory survival percentage of the same.
8. Inspection of Red category water polluting industry carried by CPCB on third party basis.
9. To maintain the water quality of rivers/drains located in Aligarh district and for their development and maintenance, District Level Ganga Committee has been constituted under the chairmanship of District Magistrate, Kasganj. The meeting of the said committee is being held every month.

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District Ganga Committee Report

District-Mau (U.P)

Submitted in Compliance of Honble NGT Order dated 05.02.2024 O.A 200/2014

MC Mehta Vs UOI and Ors.

Submitted by-

District Ganga Committee, Mau (U.P

MC MEHTA vs. UNION OF INDIA (OA. NO. 200 OF 2014) MAU

ADDITIONAL INFORMATION, AS PER THE ORDER 05.02.2024

S.NO	ADDITIONAL INFORMATION	ANSWER
1.	That STPs installed, are under utilized and that treated effluents are discharged into the drains carrying untreated wastewater thereby defeating the very purpose of the efficacy of STPs.	At present STP is proposed with capacity of 56 MLD.I district MAU to treat the sewage that is being generated in MAU. The total per day discharge from drain to river tamsa is 46.5 MLD.
2.	The quantification and estimation of sewage entering to	At present STP is proposed with capacity of 56 MLD.I district MAU to treat the sewage that is being generated in MAU The total per day discharge from drain to river tamsa is 46.5 MLD.

	each STP through sewer network or through interception and diversion of drains.	
3.	the breakup of quantity of sewage fed to each STP through sewerage and drains, indicating location of STP (with geo coordinates) and quality and quantity of discharged sewage and its disposal location.	At present STP is proposed with capacity of 56 MLD.I district MAU to treat the sewage that is being generated in MAU The total per day discharge from drain to river tamsa is 46.5 MLD.
4.	These identified industries should be imposed with the Consent conditions to adopt ZLD system or	At present no water polluting industries in district mau.

	maximize recycling/ reuse of treated effluents rather than consenting them to discharge into drains with no burden on them.	
5.	We are of the view that additional columns are to be included reflecting the drain, position of STP with capacity, their geo-coordinates, discharge quantity from the STP in the drain and total per day discharge from the drain into river.	At present STP is proposed with capacity of 56 MLD.I district MAU to treat the sewage that is being generated in MAU. The total per day discharge from drain to river tamsa is 46.5 MLD.

6.	mention heavy metals analysis in respect of discharge from each of the drain in the report.		Drain (city/town/	Hg	F	Cr	Pd	Fe	Zn	As	Dicharge
			Pathan Tola	ND	1.11	ND	0.18	1.64	0.35	0.006	TAMSA RIVER
			Ghoda Dalal Ki Bari	ND	1.03	ND	0.11	0.75	0.07	ND	TAMSA RIVER
			Khedu Pura	ND	0.05	ND	0.18	0.61	0.04	ND	TAMSA RIVER
			Dhekuliya Ghat	ND	0.74	ND	0.18	0.55	0.05	ND	TAMSA RIVER
			Railway Bridge	ND	0.45	11.83	0.11	1.37	0.04	0.015	TAMSA RIVER
			Belwa Ghat	ND	0.70	ND	0.11	0.93	0.6	ND	TAMSA RIVER
			Bam Ghat	ND	0.61	ND	0.11	1.02	0.09	0.003	TAMSA RIVER

S.no	Drain (city/town/	Total flow of drain per day MLD	PH	BOD	COD	TSS	TDS	Heavy metals (mg/l)							Nitrates	DO	TC	FC	Outlet flow (MLD)	Cl	Colour/ odour	Discharged Into
								Hg	F	Cr	Pd	Fe	Zn	As								
1	Pathan Tola	1.93	7.21	34	154	72	714	ND	1.11	ND	0.18	1.64	0.35	0.006	0.68	Nil	1300000	490000	1.93	75	50	Tamsa River
2	Ghoda Dalal Ki Bari	5.66	7.18	75	196	108	806	ND	1.03	ND	0.11	0.75	0.07	ND	0.18	Nil	1400000	790000	5.66	98	60	Tamsa River
3	Khedu Pura	1.41	7.31	34	136	68	724	ND	0.05	ND	0.18	0.61	0.04	ND	1.66	Nil	1300000	780000	1.41	80	50	Tamsa River
4	Dhekuliya Ghat	0.84	7.06	48	227.4	82	752	ND	0.74	ND	0.18	0.55	0.05	ND	0.49	Nil	9200000	280000	0.84	49	40	Tamsa River
5	Railway Bridge	0.90	7.15	66	255.2	90	724	ND	0.45	11.83	0.11	1.37	0.04	0.015	0.23	Nil	1700	780000	0.90	68	40	Tamsa River

																000				
6	Belwa Ghat	1.22	7.12	50	218.4	80	664	ND	0.70	ND	0.11	0.93	0.6	ND	0.61	Nil	54000000	170000	1.22	48	40	Tamsa River
7	Bam Ghat	7.8	7.16	62	244	88	760	ND	0.61	ND	0.11	1.02	0.09	0.003	0.23	Nil	16000000	920000	7.8	56	40	Tamsa River

Note-

1. **Bioremediation is being done in all drains.**
2. **The proposed STP capacity is 56 MLD, and its effectiveness will be evaluated based on TDS, TC, and FC levels. Ensuring proper treatment and compliance with environmental standards is essential for maintaining water quality and public health**

2. STP (SEWAGE TREATMENT PLANT) for treating the sewage of the drains ultimately flowing to river ganga or its tributaries.

Existing STP (location & capacity)	Capacity (non-operational)	Inlet/ Outlet water quality & quantity	Number of tapped drains (quantity of discharge)	Final discharge point	Gap(in treatment)	Proposed/under construction STP with completion date
STP , Maunath Bhanjan	**56 MLD**	**-**	**7**	**Tamsa river**	**100%**	Survey work is on progress, Land not Available yet.

Note-

1. **Survey work is on progress, land not available yet.**
2. **ETP proposed for small textile industries in MAU district.**

2.1 STP ADDITIONAL INFORMATION

Name of district	Name of ULB	Total Population in ULB	Total Sewage Generation (MLD)	Treatment of Sewage (MLD)	Final Disposal of sewage (MLD)	Remark
Mau	Nagar Palika Parishad, Mau.	344553	44	0	44	-

3. HOTELS/ ASHRAMS/DHARMSHALAS/RESIDENTIAL complexes abutting river Ganga or its tributaries.

Number of Hotels/ ashrams/ dharamshalas	Consent to establish/ operate	STP	Discharge point	Action taken
12	No consent Notice sent	Proposed	Nagar Palika Drain finally into Tamsa river. after bioremediation at **25°56'51"N 83°34'15"E**	Notice Isssued to defaulters

S. No.	Number of Hotels/ashrams/dharmshalas	Consent to establish/operate	STP	Discharge point	Action taken
	12	0	0	Drain	Notice Issued to defaulters
1	M/s Tathagat Watika & Marriage Hall, Bhujwati, Mau	No	Not Installed	Drain	Notice Issued
2	M/s Madhwa Marrige Hall, Civil Lines, Chandbhanpur, Mau	No	Not Installed	Drain	Notice Issued
3	M/s Ind Prastha Hotal, Purani Thaseal, Mau	No	Not Installed	Drain	Notice Issued
4	M/s Shanti Marrige Hall, Fatima Chauraha, Mau	No	Not Installed	Drain	Notice Issued
5	M/s Vasudev, Ghazipur Tiraha, Mau	No	Not Installed	Drain	Notice Issued
6	M/s S.R. Plase, Civil Lines, Bhujwati, Muhamadpur Sharoj, Mau	No	Not Installed	Drain	Notice Issued
7	M/s Radha Krishna, near Roadways, Mau	No	Not Installed	Drain	Notice Issued
8	M/s Hotel Purostam, Sahadatpura, near Roadways, Mau	No	Not Installed	Drain	Notice Issued
9	M/s Grean Land Residency, Bhiti Chauk, Mau	No	Not Installed	Drain	Notice Issued
10	M/s BNB Restaurant, Galibpur, Bhiti Chauk, Mau	No	Not Installed	Drain	Notice Issued
11	M/s DI. R.S. Palase, Purani Tehseal, Mau	No	Not Installed	Drain	Notice Issued
12	M/s Grihast Plasa & Marrige Hall, Ghazipur Tiraha, Mau	No	Not Installed	Drain	Notice Issued

4. Industrial Effluent discharged by industries whose effluent is ultimately flowing to river Ganga or its tributaries

S.no	Total number of Industries	Daily effluent discharge	Treatment available (cetp/ petp/ etp operational capacity)	Effluent quality analysis (outlet of treatment plants)	GAP	Proposed/ under construction treatment project (with timeline)	Number of defaulting units- Action taken	Industrial solid waste generated/ day	Manner of disposal (Industrial solid waste)
1	M/s The Kisan Sahkari Chini Mills Ltd.(Sugar Unit), Ghosi, Mau	500 KLD	ETP 500 KLD	Parameter within limit	Zero	Not required	Zero	12000 Kg/day	Land filling Industry Premises
2	M/s The Kisan Sahkari Chini Mills Ltd.(Distillary Unit), Ghosi, Mau	ZLD	CPU/ETP	Parameter within limit	Zero	Not required	Zero	60000 Kg/day	Bio Composting with Press Mud
3	M/s Pramod Zari Pvt. Ltd. C-12 Industrial Estate, Narai Bandh, Mau	08 KLD	ETP 10 KLD	Parameter within limit	Zero	Not required	Zero	10 Kg/day	filling Within the Premises in low Lying Areas

4	M/s Palki Industry Pvt. Ltd. C-1, C-2, C-3 Industrial Estate, Tajopur, Mau	80 KLD	ETP 100 KLD	Parameter within limit	Zero	Not required	Zero	15 Kg/day	Member of TSDF

5. Regulation of Flood Plain Zone:

Area- cities/ towns Notification of flood plain zone	Demarcation		Variable flow (per day)	Encroachment /Encroachment removal status	Timeline for completion	Biarage/ Cross-regulator
	No development zone pillars	Regulatory zone pillars				
Maduban and Dohrighat District Mau	Demarcation was done from Bibipur to Laxman Mandirdham on Google Earth Pro.	Embankments have been built on the right bank of Saryu river from Bibipur to Laxman Mandirdham and from Surajpur to Hahanala.	-	-	-	There are 3 regulator gates installed on Bibipur Belauli Dam, 8 HahaNala Dam and 4 regulator gates on HahaNala Dam

6.AFFORESTATION/ PLANTATION Along the bank of River Ganga and its tributaries and their flood plain zone

Area- cities/ towns	Total plantation Geo Code/Sample Point		Proposed project	Time line
Ghosi range ,Mau(38hec)	60800	26°00'54"N 83°41'06"E	Plantation 2023-24	July -August 2023
Mau range ,Mau(20hec)	32000	25°35'31"N 83°00'50"E	Plantation 2023-24	July -August 2023
Dohrighat range ,Mau(21hec)	33600	26°14'14"N 83°34'06"E	Plantation 2023-24	July -August 2023
Mohammadabad range,Mau (15hec)	24000	25°57'23"N 83°25'15"E	Plantation 2023-24	July -August 2023
District MAU (130 hec)	208000	25°56'51"N 83°34'15"E	Tentative 2024-25	July -August 2024

7. Mining and Stone crushing in river bed and flood plain zone of River Ganga and its tributaries;

a.

Area of mining	FIR/ case registered/ year	Vehicles/ mineral seized	Action taken status	Cases pending in Court	Enforcement of EMGSM 2020 and Sustainable sand mining management guidelines 2016
Nil	Nil	Nil	Nil	Nil	Nil

b.

Area of RBM Mining	Overloading Illegal Transport	Action Taken	Penalty Imposed/Recovered
Nil	294	Penalty Imposed by online challan	105.92 lac

DISTRICT GANGA COMMITTEE, MAU

(1) District Ganga Protection Plan at city/ town level

District Ganga Protection Committee (DGPC) is required to formulate the action plan for each city and town located on main stem of river Ganga and its tributary and such Action Plan has to be prepared in accordance with the River Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016 (para 6 and 55).

(2) Contents of the Action Plan (Consolidated District Wise Action Plan including each City and Town abutting river Ganga and its Tributary)

2.1 Sewage Management

TOWNS	TOTAL SEWAGE GENERATION (MLD)
NPP, MAUNATH BHANJAN	21.41
NP, ADARI	0.40
NP, AMILA	0.16
NP, CHIRAIYAKOT	0.69
NP, DOHRIGHAT	2.5

NP, GHOSI	8
NP, KOPAGANJ	1.11
NP, MADUBAN	0.64
NP, MUHMMADABAD	6.4
NP, WALIDPUR	2.77
NP,KURTIJAFARPUR	0.61

(i) District MAU – Total Sewage Generation = 46.5 MLD

(ii) Existing Sewage Treatment Capacities :
STP (56 MLD) Maunath bhanjan – Survey work is under progress Land not Available yet.

(iii) Quantity of sewage is being treated (utilization capacity) :

STP land acquisition under process in District MAU and Gap 100% .

(iv) Performance of STPs particularly for FC :

FSTP Proposed in village Kandheri, Mau (Lat- 25.903986, Long- 83.594317) with capacity of 32 KLD(Under construction 80% work is completed now.

(v) Where treated sewage is being discharged (to Ganga or tributaries) :
Into Tamsa River.

(vi) Reasons for Under-utilization of STPs (Connectivity of Households/ laying of sewer lines) :
proposed STP with capacity 56MLD

(vii) Current Gap in sewage treatment : 100%

(viii) Time bound plan for bridging the gap and tying up with financial arrangements and not delaying Tendering and identifying executing agencies or having any other issues :

There is time bound plan a proposal to minimize the gap one STP Proposed With capacity of 44 MLD.

(ix) Where untreated sewage (when there is no STP) is discharged (Ganga /Tributaries):

Into Tamsa River.

2.2 Drains joining Ganga and Tributary

(i) **Number of drains carrying sewage- sullage or industrial waste water joining Ganga/ tributaries with their Quantity and Quality: 7 Major drains of district Mau and discharged into Tamsa river.**

(ii) Drains joining outside city and town limits but, either joining in village or nearby town: NO

TOWNS	TOTAL SEWAGE GENERATION (MLD)
NPP, MAUNATH BHANJAN	21.41
NP, ADARI	0.40
NP, AMILA	0.16
NP, CHIRAIYAKOT	0.69
NP, DOHRIGHAT	2.5
NP, GHOSI	8

NP, KOPAGANJ	1.11
NP, MADUBAN	0.64
NP, MUHMMADABAD	6.4
NP, WALIDPUR	2.77
NP,KURTIJAFARPUR	0.61

(iii) Inclusion of sewage flowing in drains into total sewage generation figures of each city and town

And their interception and diversion to STPs:

2.3 Septage management (In case of no STP)

(i) Status of Septage management (with reference to FSTP/STP):

FSTP Proposed in village Kandheri, Mau with capacity of 32 KLD (Under construction 80% work is completed now.

(ii) Management of Grey water and its disposal: Into the Tamsa River.

2.4 Industrial Pollution Control

(i) Attach the list on no. of industries generating trade effluents, their place of disposal and compliance including CETPs (town wise):

S.no	Total number of Industries	Daily effluent discharge	Treatment available (CETP/ PETP/ ETP operational capacity)	Effluent quality analysis (outlet of treatment plants)	Disposal point
1	M/s The Kisan Sahkari Chini Mills Ltd.(Sugar Unit), Ghosi, Mau	500 KLD	ETP 500 KLD	Parameter within limit	Tamsa River
2	M/s The Kisan Sahkari Chini Mills Ltd.(Distillary Unit), Ghosi, Mau	ZLD	CPU/ETP	Parameter within limit	Tamsa River
3	M/s Pramod Zari Pvt. Ltd. C-12 Industrial	08 KLD	ETP 10 KLD	Parameter within limit	Tamsa River

	Estate, Narai Bandh, Mau					
4	M/s Palki Industry Pvt. Ltd. C-1, C-2, C-3 Industrial Estate, Tajopur, Mau	80 KLD	ETP	100 KLD	Parameter within limit	Tamsa River

(3) Water quality status

Provide water quality status of Ganga and its tributaries in the District and city/ town in terms of its fitness for bathing water quality that is, FC and FS:

Water quality of district Mau comes under class C.

(4) Notification of Flood Plain Zones:

UP State govt. order dated 17.10.2018 has been issued declaring no development /no construction zone within 100m 0f the Ganga River and its tributaries.

(5) Issues relating to Environmental Flow:

a. Notification issued by Govt. of India dated 09..10.2018 for ecological flow in Ganga river maintained as below:-

b. Steps taken for maintaining Ecological flow/status of compliance of the E-flow notification.

BEST PRACTICES:

1. All Sugar and Textile industries have own installed effluent treatment unit.
2. All sugar industries have achieved 100% utilization of treated water in recycling process/ for use in Irrigation on horticulture land.
3. All Ganga Gram are declared 100% ODF now.
4. Under Namami Gange project, UP Jal Nigam URBAN MAU proposed 44 MLD STP for treatment of sewage water. Through this the untreated sewerage is stopped which directly flow into river Tamsa.

कार्यालय प्रभागीय वनाधिकारी, वन प्रभाग, अम्बेडकरनगर

पत्रांक–2556 /29–1 अम्बेडकनगर दिनांक 04/04/2024

सेवा में

1. सुश्री गरिमा प्रसाद, अपर महाधिवक्ता, उ0प्र0।
2. सुश्री प्रियंका स्वामी, स्थायी अधिवक्ता, मा0 एन0जी0टी0, नई दिल्ली।

विषय– माननीय राष्ट्रीय हरित अधिकरण नई दिल्ली द्वारा ओ0ए0 संख्या 200/2014/(सी0डब्ल्यू0पी0 न0 3727/1985) (आई0 ए0 न0 340/2022) में पारित आदेश दिनांक 05.02.2024 के अनुपालन के संबंध में

संदर्भः– सचिव उत्तर प्रदेश शाशन पर्यावरण वन एवं जलवायु परिवर्तन अनुभाग–7 के पत्र संख्या 208/81–7–2024–43(पर्या)/2014 टी सी– 3 दिनांक 26–03–2024

महोदय

उपरोक्त विषयक सन्दर्भित पत्र के क्रम में माननीय राष्ट्रीय हरित अधिकरण नई दिल्ली के ओ0ए0 संख्या 200/2014/(सी0डब्ल्यू0पी0 न0 3727/1985) (आई0 ए0 न0 340/2022) में दिए गए निर्देशों के अनुसार निर्धारित प्रारूप में सूचना संलग्न कर आपकी सेवा में सादर प्रेषित है।

(डा0 उमेश तिवारी)
प्रभागीय वनाधिकारी/ सदस्य
संयोजक जिला गंगा संरक्षण समिति,
अम्बेडकरनगर

पत्रांक– 2556 /उक्तदिनांकित।

प्रतिलिपि– निम्नलिखित को सादर सूचनार्थ प्रेषित–

1. सचिव पर्यावरण जल एवं जलवायु परिवर्तन विभाग उ0प्र0।
2. सदस्य सचिव ,उ0प्र0 प्रदूषण नियंत्रण बोर्ड, लखनऊ।

(डा0 उमेश तिवारी)
प्रभागीय वनाधिकारी/ सदस्य
संयोजक जिला गंगा संरक्षण समिति,
अम्बेडकरनगर

पत्रांक– 2556 /उक्तदिनांकित।

प्रतिलिपि– निम्नलिखित को सादर सूचनार्थ प्रेषित–

1. जिलाधिकारी/अध्यक्ष जिला गंगा समिति अम्बेडकरनगर।
2. मुख्य विकास अधिकारी अम्बेडकरनगर।

(डा0 उमेश तिवारी)
प्रभागीय वनाधिकारी/ सदस्य
संयोजक जिला गंगा संरक्षण समिति,
अम्बेडकरनगर

o/c

Compliance report of Hon'ble NGT order dated 04.12.2023 in O.A. No. 200/ 2014

MC Mehta Vs UoI and Ors.

DISTRICT - AMBEDKARNAGAR (U.P.)

(Dr. Umesh Tiwari)
Divisional Forest Officer/
Member Secretary District Ganga Committee,
Ambedkarnagar

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Introduction of the District

1. District Profile

Akbarpur, the district headquarters of Ambedkar Nagar, came into existence on September 29, 1995,after being separated from Ayodhya(Faizabad). The city is located at an altitude of 133 meters (436 feet) above sea level and 26.431 degrees north, latitude and 82.540 degrees east longitude. The total area of the Ambedkar Nagar district, divided into five tehsils and ten blocks, is 2350 sq km . As per 2011 census of India, Ambedkar Nagar has a population of 2,397,888 in 2011 out of which 1,212,410 are male and 1,185,478 are femal. There are a total of 1750 revenue villages in the district. In total, 930 gram panchayats, three municipalities and four Nagar Panchayats are formed.

2. Geography and Demography

Drainage & Soil :-

Ghaghra river, flowing in southeasterly direction drains the northern part of the district, forming its northern boundary. It is one of the largest and perennial rivers of Uttar Pradesh having width more than 5 kms at places. The banks on either side are fairly steep along its entire course. Another main drainage system is that of the Tons river, the name given to the combined water of Marha and Biswi Nalas after their confluence about 7-8 km west of Akbarpur. The river runs almost parallel to Ghaghra and flows into Azamgarh district. Together, the Marha Nala and Tons river (after junction) divide the district into almost equal halves.

The Soil Map of UP published by National Bureau of Soil Sciences and Land Use Planning (NBSS & LUP, 2004) shows that in almost entire district, the soil is mainly deep, well or moderately well drained and fine loamy, with loamy surface. In the narrow belt along Ghaghra, the coarse loamy soil (Balua) is also present along with soil of the above nature. In west-central parts, however, the soil is moderately well or poorly drained, exhibiting calcareous nature and is slightly saline and sodic. In a small portion in eastern fringes the soil is poorly drained, fine loamy and calcareous and is associated with slightly saline and sodic soils. At places, poorly drained, calcareous and/ or fine silty soils are also present in minor proportion along with main type of soil. Soil in the central parts, i.e around Tons river system shows signs of slight erosion. In broader terms, Varanasi Plain has Older Alluvial Soil (Alfisols), while Terrace Alluvium has Newer Alluvial Soil (Entisols) (GSI, 2001).

Geomorphology :-

Ambedkar Nagar district forms part of Central Ganga Plains, having monotonous topography, with elevations ranging between 83-92 mamsl and gentle southeasterly slope. Geomorphologically, the terrain can be differentiated into upland and lowland (GSI, 2001). The upland known as Varanasi Plain, lying in Ganga-Ghaghra interfluves is the oldest geomorphic unit and occupies major part of the district. The ground of Varanasi Plain is silty toclayey, slopes gently towards southeast, and has scars of relict fluvial features in the form of *tals* and palaeochannels. The lowland lies along Ghaghra river and is divisible into Older Flood Plain (Terrace Plain) and Active Flood Plain (Channel Plain). The Terrace Plain is of depositional type and preserves the sediments deposited by the river during its process of incision. Active Flood Plain is restricted to the present day banklines of the river in the form of point/ channel/ lateral bars and is wide and sandy.

Geology: -

The district exposes Quaternary sediments (GSI, *op. cit.*), which can be differentiated into Older Alluvium (OA) and Newer Alluvium (NA). The OA consists of oxidized, brown-, yellow- and khaki-colored sediments whereas the NA comprises unoxidsed, grey- and khaki-coloured sediments. The OA,

designated as Varanasi Alluvium (Middle to Late Pliestocene age), contains polycyclic sequence of silt and clay with kankar layers and subordinate beds/ lenses of micaceous sand, deposited over inferred basement of Bundelkhand Granite/ Vindhyans as components of 'Faizabad Ridge' (Khan *et al.*, 1992). It is dominantly argillaceous in the upper part and arenaceous in the lower levels (Khanna *et al.*, 1990). Central Ground Water Board has drilled exploratory wells only down to 305m in the southern part of the district. However, the boreholes drilled by CGWB down to 752m at Ranipur Gharwal in adjoining Faizabad district to the west and down to 755m at Paendapur in Azamgarh district to the south did not encounter basement, indicating that OA is more than 700m thick in this part. Thin interbeds of calcareous sandstones and compacted kankar beds, punctuating the stratigraphic column at various levels, represent minor breaks in sedimentation and suggest locally pulsating palaeoclimatic conditions from warm humid to warm arid at times (Khan et al., *op.cit.*). The NA (Holocene age) occupies lowland and is divisible into Terrace Alluvium and Channel Alluvium. The Terrace Alluvium consists of interbedded sequence of grey to khaki, micaceous, fine to coarse grained, immature sand, silt and clay and is well developed along Ghaghra river. The Channel Alluvium includes loose sand (grey, micaceous, fine to medium grained) of point/ channel bars and mud flats of flood plain of Ghaghra river. Thin layers of mud occupying tals/ palaeochannels are considered as homotaxial to Newer Alluvium.

Land-use pattern

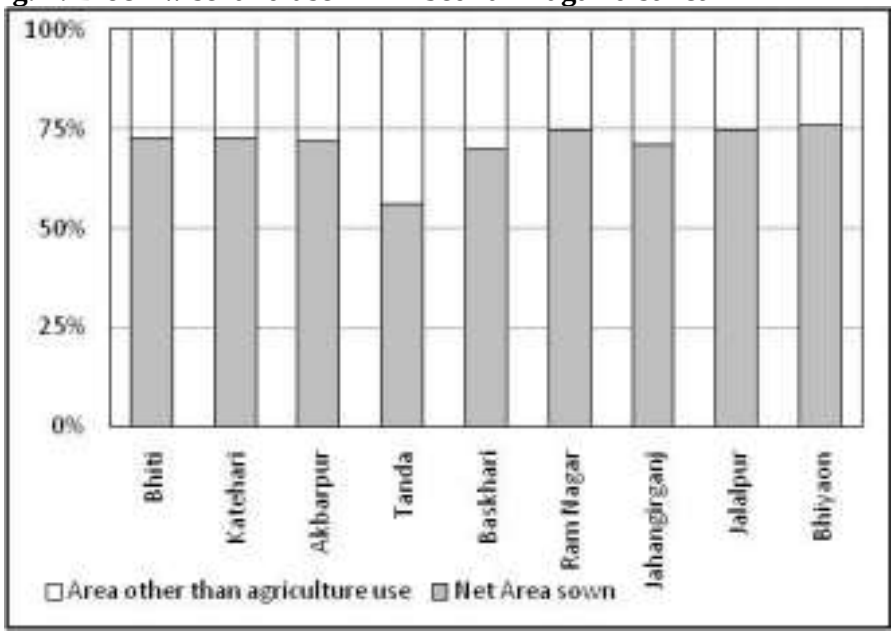
Agriculture: About 71% area of the district is under agricultural use. Net sown area ranges from 56.22% in Tanda to 75.84% in Bhiyaon block (**Table-1; Fig. 1**). However, except Tanda block, net sown area in rest of the block's ranges around 70 to 75%. Net irrigated area is 158041 ha, which forms about 95% of the net sown area (166756 ha). Gross irrigated area is 269265 ha against gross sown area of 280837 ha.

Table-1: Block-wise Land Use in Ambedkar Nagar District, UP (All Areas in ha)

Block	Total area	Area other than agriculture use*	Net Area sown	% Net Area Sown	Net Area Irrigated	% Net Irrigated to net sown
Bhiti	20974	5717	15257	72.74	14582	95.58
Katehari	25330	6928	18402	72.65	17829	96.89
Akbarpur	35801	10054	25747	71.92	24624	95.64
Tanda	31269	13690	17579	56.22	16568	94.25
Baskhari	20454	6199	14255	69.69	13395	93.97
Ram Nagar	22801	5761	17040	74.73	16602	97.43
Jahangirganj	21991	6420	15571	70.81	15215	97.71
Jalalpur	29866	7620	22246	74.49	20954	94.19
Bhiyaon	21186	5119	16067	75.84	14066	87.55
Total Rural	***229672***	***67508***	***162164***	***70.61***	***153835***	***94.86***
Total Urban	***6531***	***1939***	***4592***	***70.31***	***4206***	***91.59***
Total District	***236203***	***69447***	***166756***	***70.60***	***158041***	***94.77***

*includes area of forest, barren cultivable waste, present fallow land, other fallow land, barren uncultivable land, land put to non-agriculture use, pastures and area under bush, forest & garden

Fig.1 : Block-wise land use in Ambedkar Nagar district



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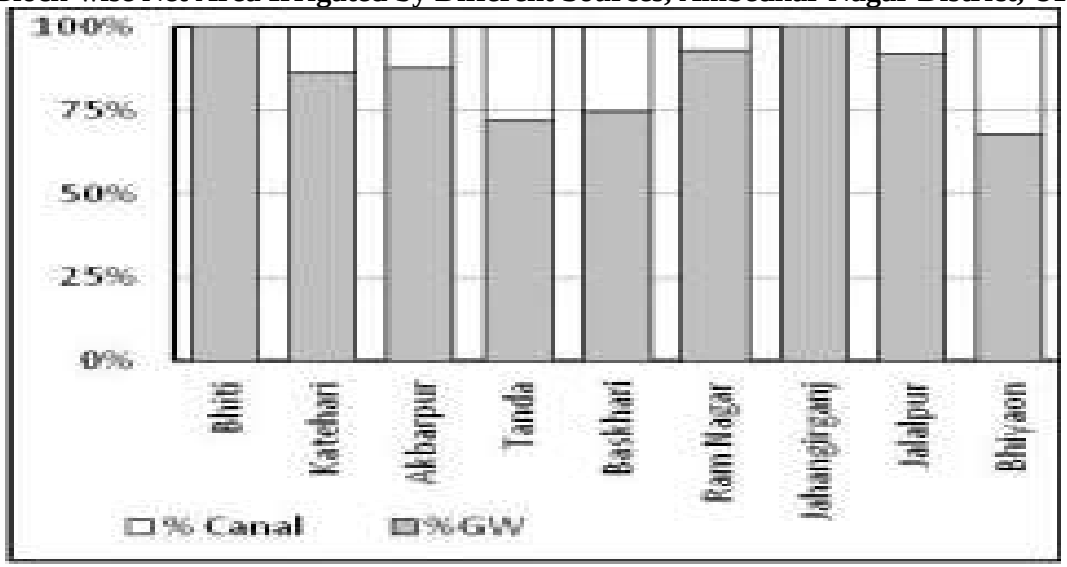
Irrigation :- Contributing about 87% of the net irrigated area, ground water is the major source of irrigation in the district, ranging from 67.61% in Bhiyaon block to 100% in Bhiti and Jahangirganj blocks (**Table-2; Fig.2**). The canal network runs through 721 km in the district, irrigating 21280 ha area, mainly in Bhiyaon, Tanda, Baskhari, Katehari and Akbarpur blocks.

Table 2 : Block-wise Net Area Irrigated by different sources in Ambedkar Nagar District, UP

Block	Net irrigated area (Ha)	Different Irrigation Source (Net Irrigated Area in Ha)					% Area irrigated by GW	% Area irrigated by Canal
		Canal	Tubewell		Wells	Total GW		
			Public TW	Private TW				
Bhiti	14582	0	1376	13206	0	14582	100.00	0.00
Katehari	17829	2484	1565	13780	0	15345	86.07	13.93
Akbarpur	24624	3074	2571	18979	0	21550	87.52	12.48
Tanda	16568	4681	142	11745	0	11887	71.75	28.25
Baskhari	13395	3418	81	9896	0	9977	74.48	25.52
Ram Nagar	16602	1199	20	15383	0	15403	92.78	7.22
Jahangirganj	15215	0	356	14859	0	15215	100.00	0.00
Jalalpur	20954	1762	1838	17354	0	19192	91.59	8.41
Bhiyaon	14066	4556	323	9187	0	9510	67.61	32.39
Total Rural	***153835***	***21174***	***8272***	***124389***	***0***	***132661***	***86.24***	***13.76***
Total Urban	***4206***	***106***	***610***	***3490***	***0***	***4100***	***97.48***	***2.52***
Total District	***158041***	***21280***	***8882***	***127879***	***0***	***136761***	***86.54***	***13.46***

Source: website updes.up.nic.in (Statistical Diary-2012, Table-18; Figures for 2010-11)

Fig.3 : Block-wise Net Area Irrigated by Different Sources, Ambedkar Nagar District, UP



Total length of canals in the district is 721 Km. There are four main canal network systems in the district – Tanda Pump Canal, Tanda Main Canal, Tanda Parallel Canal and Faizabad Branch and their distributaries – Pausara, Jahangirganj, Hanswar and Kathargarh. Salient features about these are given in **Table-3**.

Table 3 : Salient Features of Canal Network System in Ambedkar Nagar District, UP

Canal	Length	CCA (ha)	Area covered
Chaudhary Charan SinghTanda Pump Canal	41.92 km (including minors)	5287	Starts from right bank of Ghaghra river in Tanda block, covers parts of Akbarpur and Tanda blocks through associated minors
Tanda Main Canal	103.37 km (including minors)	9346	Originates from Tanda Pump Canal near Nasirpur in Tanda block; irrigates parts of Tanda, Akbarpur, Baskhari and Bhiyaon blocks through associated network of minors and passes into Azamgarh district
Tanda Parallel Canal	116.05 km (including minors)	11702	Runs parallel to Tanda Main Canal to the left side; irrigates parts of Jalalpur and Bhiyaon blocks through associated network of minors and passes into Azamgarh district
Jahangirganj, Hanswar and Kathargarh distributaries	249.59 km (including minors)	33701	Jahnagirganj Distributary takes off from Tanda Main Canal very near the latter's origin; irrigates parts of Akbarpur, Tanda, Baskhari, Ramnagar and Jahangirganj blocks through Hanswar and Katargarh distributaries and associated minors.
Faizabad Branch Canal	29.80 km	4694	Originates in Faizabad distric; covers parts of Tanda, Katehari and Akbarpur blocks
Pausara Distributary	18.50 km	1675	parts of Tanda blocks

45 Minors associated with Faizabad Br and Pausara Dy Sysytem	162.40 km	17156	parts of Tanda, Katehari and Akbarpur blocks

Source: Executive Engineer, Irrigation,, Tanda Division & Faizabad Division

Crops : - Wheat is grown in the maximum area of the district (~42% of gross sown area), followed by rice (~41% of gross sown area). Principal crop during Kharif is paddy and that during Rabi, wheat. Millet, maize and jwar are also sown in small areas during Kharif, and pulses and oil seeds during Rabi. Other crops of minor importance are sugarcane, potato etc. Cropping pattern is given in Table-4.

Table 4: Cropping Pattern in District Ambedkar Nagar, UP (2010-11)

Crop	Area (Ha)	% of Gross Sown Area	Irrigated (% of sown Area)
Wheat	118112	~42%	100%
Rice	115483	~41%	~100%
Pulses	10478	3.7%	~66%
Sugarcane	11157	~4%	100%
Potato	4263	~1.5%	100%
Oil Seeds	3601	~1.3%	~100%
Other Vegetables	6764	2.4%	~97%

Source: *website updes.up.nic.in (Statistical Diary-2012, Table-19; Figures for 2010-11)*

3. Water Resources

Ghaghra river, flowing in southeasterly direction drains the northern part of the district, forming its northern boundary. It is one of the largest and perennial rivers of Uttar Pradesh having width more than 5 kms at places. The banks on either side are fairly steep along its entire course. Another main drainage system is that of the Tons river, the name given to the combined water of Marha and Biswi Nalas after their confluence about 7-8 km west of Akbarpur. The river runs almost parallel to Ghaghra and flows into Azamgarh district. Together, the Marha Nala and Tons river (after junction) divide the district into almost equal halves.

There are some lakes(Darvan,Bhadauna,Punthar,Nimitini) are also situated in the district that collect habitat for many species of aquatic plants,animals and it is also the town for many birds.

The Soil Map of UP published by National Bureau of Soil Sciences and Land Use Planning (NBSS & LUP, 2004) shows that in almost entire district, the soil is mainly deep, well or moderately well drained and fine loamy, with loamy surface. In the narrow belt along Ghaghra, the coarse loamy soil (Balua) is also present along with soil of the above nature. In west-central parts, however, the soil is moderately well or poorly drained, exhibiting calcareous nature and is slightly saline and sodic. In a small portion in eastern fringes the soil is poorly drained, fine loamy and calcareous and is associated with slightly saline and sodic soils. At places, poorly drained, calcareous and/ or fine silty soils are also present in minor proportion along with main type of soil. Soil in the central parts, i.e around Tons river system shows signs of slight erosion.

4. Special culture and religious connects to river-:

Akbarpur is located at 26.431°N 82.540°E.It has an average elevation of 133 metres (436 feet). Akbarpur, is situated at river Tamsa. According to Ramayana, it is the place where King Dashratha shot Shravan Kumar. The ashram of the sage Shringi Rishi was also situated here. The Sarayu (also Sarju; Dev. सरयु saráyu- f., later Dev. सरयू sarayū-) is a river that flows through the Indian states of Uttarakhand and Uttar Pradesh. This river is of ancient significance, finding mentions in the Vedas and the Ramayana. The Sarayu forms at the confluence of the Karnali (or Ghaghara) and Mahakali (or Sharda) in Bahraich District. The Mahakali or Sharda forms the Indian-Nepalese border. Ayodhya is situated on the banks of river Sarayu. On Ram Navami, the festival that celebrates the birthday of Lord Rama, thousands of people take a dip in the Sarayu River at Ayodhya.

Touring towards the Ghats of River Ghaghara is very popular; tourists should not miss it while in Ambedkar Nagar. Boating and swimming are very famous and a joyful activity at the Ghats. Apart from River Ghaghara the district is blessed with many small river channels and lakes namely River Tons, River Saryu, Lake Devhat, Lake Hanswar, Lake Darvan and many more which are also famous for swimming. Holy dip in these streams on special and

auspicious occasions is also popular in the district; the holy dip is meant for purification. Many shrines are also sited very close to these river streams. The Balua Ghat and Kamhariya Ghat in Rajesultanpur are also very famous.

The district is also popular for fairs and melas. As per Ramayana, the district is the home town of Shravan who was mistakenly killed by King Dasharatha. During Magh Purnima which falls on a full moon day in the month of February an annual fair is conducted on Shravan Kshetra that is attended by numerous people from in and out of Ambedkar Nagar. The mela of Kichaucha Shareef in Baskhari is also very popular in the district which falls on the 27th of Moharam. This mela is celebrated on remembrance of the great Sufi saint, Hazrat Makhdoom Sultan Syed Ashraf Jahangir Semnani. The other popular events that are celebrated at grand scale in the district are the Muharram Azadari and Amari. Govind Sahab Mela also.

5. Climate

The climate of this district is similar to that of eastern Uttar Pradesh. It is characterized by seasonal rhythms produced by the southwest and northeast monsoons. Wind direction reversals occur twice a year. The region's climate can be classified into three distinct seasons. Cold season (November to February) Hot season (March to mid-June) Rainy season (mid-June to October) and cold season lasts from November to February. In November, a high pressure band stretches out of northwestern India and covers the entire state of Uttar Pradesh. Temperatures are starting to drop, with a high of 32.15 °C and a low of 8.95 °C (89.87 °F, 48.11 °F) for the month. The prevailing winds blow from west to east and are influenced by the pressure distribution and patterns of the Himalayas.

Best practices in the District Ambedkarnagar

1. To aware people about the minor river like Tamsa there is a good initiative taken by the Nagar palika parishad Akbarpur.They started organizing Arti at Shivala ghat of river Tamsa.
2. A nanadan van has been established by the Nagar palika parishad Akbarpur in the sadarpur.This is grown in 3.149Ha area with total 500 plant . This may help to improve the Air quality of the area and may work as carbon sink.
3. Every year, a campaign is run by the Irrigation Department to clean the minor canal between 15 October and 15 December. This work is done by JCB and laborers. Irrigation through minor canal reduces the pressure on ground water; it is a good step towards water conservation.

4. District Ambedkarnagar have five prominent wetlands namely bhadauna anf darvan which is situated in akbarpur range ,Pikia is situated in Baskhari range, Bagaha in Tanda range amd Nimitini is situated in Jalalpur range. The DPR of all these wetlands has been sent to the higher authority for their conservation.
5. To promote more awareness among schoolchildren, the boundary walls of some government schools have been painted with educational and environmental quotes related to afforestation, maintenance of hygiene and sanitation, river conservation, and the preservation and protection of aquatic animals
6. At the ghats of the river Ghaghara, segregated dustbins have been placed to improve the cleanliness of the ghats. Hoardings have been placed at ghat of Ghaghara to increase awareness of river conservation among people.
7. **Sustainable Environmental Practices at NTPC Tanda**

Bio-methanation Plant

Bio-methanation Plant of 500 kg per day capacity has been installed for converting biodegradable waste into Biogas and nutrient rich fertilizers. The Bio-methanation plant is based on TERI's Enhanced Acidification and Methanation (TEAM) process. The main facilities of the plant are waste shredding machine, acidification reactors, Up-flow Anaerobic Sludge Blanket (UASB) reactor, leachate recirculation/transfer pumps, and biogas holder. Biodegradable waste is generated from residential quarters, guest house canteen, fruit and vegetable shop located inside NTPC Tanda colony. The biodegradable waste and non-biodegradable wastes are segregated at source itself. The segregated wastes are shifted to waste processing center whereby nonbiodegradable wastes are stored in different compartments. Biodegradable waste mainly comprising food waste is provided to Bio-methanation plant for further treatment.

Project cost	26.85 lakhs
Intangible Benefits	Hygienic environment, sustainable operations
Tangible benefits	LPG consumption reduced, Green House gas emission avoided, compost fertilizer and treated wastewater for reuse/recycling.
Saving(in MoU)	5.40 Tons of CO2 emissions avoided
Saving (INR Lakh)	5.75 lakhs per year
Pay back(years)	4.6 years

Windrow & Vermi-Composting Facility-

This is an aerobic composting technique which is very fast compared to other conventional techniques. Ash bricks manufactured in-house has been used for preparing the windrow structure. Shredder has been installed for converting bigger size horticulture waste into small pieces. Main activities in windrow composting are inoculant dosing for microbial culture development, water spraying for maintaining required moisture, blending, and turning for temperature control and homogeneous conditions. Horticulture nursery waste is composted in Vermi-compost facility which uses earth worms to decompose the organic material into nutrient rich manure. Horticulture waste is effectively converted to manure by windrow composting and vermi-composting. This manure is consumed in parks, gardens, and horticulture management. The manure is also given free of cost to the colony residents for managing the kitchen gardens developed individually.

Paper Recycling Facility-

Paper consumption in NTPC has gradually reduced with the launch of PRADIP (PRo-Active and Digital Initiatives to become Paperless) initiative. However, various activities like maintenance work permits, operational parameter records, logbooks, monitoring and measurement records, important circulars/orders/notifications, material procurement packaging waste, stores issue documents, manuals, gate passes etc. are

still inevitably required in a large scale industry. After minimum retention period, all such documents are required to be disposed of. All these waste papers are brought to the Wastepaper Recycling facility. The raw paper waste is first of all fed into the pulper machine where water is mixed. The pulp water mixture is washed thoroughly for removal of dirt and color. The mixture is then passed through fabric filter which removes water. The raw sheets are screw pressed for uniform shape and removal of residual water. Finally, the paper sheets are given shape in calendaring machine. Different color sheets are made as per requirement. These sheets are cut and shaped into beautiful paper bags which can be used for carrying gifts, light shopping needs etc. Various kinds of paper covers are also made which are used in hospital for carrying x-ray films, medicines etc. Paper recycling facility also makes various size paper bags for usage in Community Shopping Centre where plastic carry bags are totally banned. The project has been setup with the motive of sustainable waste management model. It is run by differently abled 'Divyaang' people under the NTPC Foundation NILD Disability Rehabilitation Centers (NFNDRC). NTPC in collaboration with National Institute for Locomotor Disabilities (Divyangjan) works for vision to serve and empower the physically challenged and economically weaker sections of the society. NFNDRC is providing rehabilitation of Persons with Disability (PwDs) through its Disability Rehabilitation Centers. This project plays very important role in maintaining 'Sustainable Living' within the NTPC Tanda colony premises.

Project cost	7.46 lakhs
Intangible Benefits	Clean and litter free environment, recycling of waste, support plastic free Township campaign.
Tangible benefits	Conservation of natural resource, employment to differently abled people, reduction in fresh packaging material procurement.
Saving(in MoU)	Provides a sustainable alternative for recycling paper waste which in general goes to Municipal Solid waste landfills.
Saving (INR Lakh)	Approx. 1.0 lakhs per year from selling of recycled paper bags, reduction in purchase of polythene bags & gift bags, reduction of waste disposal cost
Pay back(years)	7.46 years

Biomass Pellet Machine-

NTPC Tanda has taken a significant stride in addressing the ecological challenges posed by stubble burning and meeting CTO requirements by investing in a biomass pellet machine with a capacity of 250 kg/hr. This strategic move aims to efficiently manage forest waste, converting it into pellets and utilize it as a co-firing agent alongside coal.

Project cost	8.5 lakhs
Intangible Benefits	Hygienic environment, sustainable operations
Tangible benefits	Green House gas emission reduction
Saving(in MoU)	94 Tons of CO2 emissions avoided/annum
Saving (INR Lakh)	51 lakhs per year
Pay back(years)	less than 2 months

Ash Brick Manufacturing Units:

NTPC Tanda excels in environmentally responsible practices, primarily focusing on ash management. To effectively manage fly ash, it is repurposed for cement production, as well as in the manufacturing of ash bricks and paver blocks, reducing waste and promoting sustainability. In addition, bottom ash plays a crucial role in supporting infra-project backfilling needs, specifically for highways. The installation of two ash brick manufacturing units, each with a capacity of 20,000 bricks per day, totalling 40,000 bricks daily, serves as a practical solution to address the ash management challenge.

Drain (city/town)	Total flow of drain per day	PH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride etc)	Nitrates	DO	TC	FC	Outlet flow and Geo code	Colour/ odour	Discharged Into
UDAYAN VIBHAG KE PASS	1.54	7.5	23	125	42		Testing is in progress reports are awaited from NPP Akabarpur				119	26.425476 82.538748	light muddy	Tamsa
CHUNA BHATATI KE PASS	3.041	7.1	29.5	110	52						200	26.417469 82.542596	light muddy	Tamsa
SHIVALY KE PASS	5.047	7.2	28.5	98	52						175	26.435032 82.550226	light muddy	Tamsa
TAMSHA PUL KE PASS	1.5	7.31	29	120	54						177	26.431248 82.533796	light muddy	Tamsa
GADAYNA	1.79	7.2	29	108.2	56						250	26.423721 82.535916	light muddy	Tamsa
MEHROTRA PETROL PUMP KE PASS	6.49	7.3	30	96	48						141	26.432596 82.523437	light muddy	Tamsa
AZRA DRAIN	2.134	7.4	25	102	65.0	850	As-0.06 Hg-BDL Pb-BDL Cr-0.06 Zn-0.23 Fe-0.63 Mn-BDL Cu-BDL	6.7	4.6	1550	840	26.546736 82.652256	--	Ghaghra/Saryu
SBI DRAIN	1.972	7.62	23	115	73	910	As-0.05 Hg-BDL Pb-BDL Cr-0.05 Zn-0.26	7.2	4.8	1600	860	26.552194 82.662965	--	Ghaghra/Saryu

							Fe-0.6 Mn-BDL Cu-BDL							
GHASIYARI TOLA DRAIN	1.197	7.5	27	119	75	830	As-0.08 Hg-BDL Pb-BDL Cr-0.07 Zn-0.34 Fe-0.72 Mn-BDL Cu-BDL	6.8	4.5	1450	850	26.552194 82.662965	--	Ghaghra/Saryu
MACHHARIYAON DRAIN	1.515	7.0	24	132	45	840	As-0.06 Hg-BDL Pb-BDL Cr-0.08 Zn-0.28 Fe-0.74 Mn-BDL Cu-BDL	5.6	4.9	1640	830	26.552194 82.660810	--	Ghaghra/Saryu
MISHRA JI DRAIN	1.52	7.4	26	128	83	920	As-0.04 Hg-BDL Pb-BDL Cr-0.09 Zn-0.21 Fe-0.68 Mn-BDL Cu-BDL	7.5	4.8	1550	910	26.541329 82.693269	--	Ghaghra/Saryu
GOLA GHAT DRAIN	0.272	7.3	25	127	76	930	As-0.03 Hg-BDL Pb-BDL Cr-0.05 Zn-0.29 Fe-0.67 Mn-BDL Cu-BDL	8.2	5.1	1600	930	26.540552 82.686651	--	Ghaghra/Saryu

PRIMARY DRAIN	2.134	7.1	28	142	55	860	As-0.05 Hg-BDL Pb-BDL Cr-0.08 Zn-0.27 Fe-0.71 Mn-BDL Cu-BDL	7.4	4.7	1480	940	26.538898 82.690043	--	Ghaghra/Saryu
--CHINTAURA DRAIN	0.170	7.5	27	131	62	830	As-0.06 Hg-BDL Pb-BDL Cr-0.09 Zn-0.32 Fe-0.64 Mn-BDL Cu-BDL	6.5	4.3	1520	860	26.552194 82.662965	--	Ghaghra/Saryu
BABD SHAH FAREED KE PASS	0.8571	7.61	28	102	65.0	850	As-0.06 Hg-BDL Pb-BDL Cr-0.06 Zn-0.23 Fe-0.63 Mn-BDL Cu-BDL	6.7	4.6	1550	840	26.316073 82.735525	light muddy	Tamsa
PASCHIM TARAF SAHRAUWA KE PASS	0.8571	7.62	23	115	73	910	As-0.05 Hg-BDL Pb-BDL Cr-0.05 Zn-0.26 Fe-0.6 Mn-BDL Cu-BDL	7.2	4.8	1600	860	26.315745 82.736394	light muddy	Tamsa
PAKKA GHAT KE PASS	0.8571	7.5	27	119	75	830	As-0.08 Hg-BDL Pb-BDL Cr-0.07	6.8	4.5	1450	850	26.314517 82.745711	light muddy	Tamsa

							Zn-0.34 Fe-0.72 Mn-BDL Cu-BDL							
PASCHIM TARAF	0.8571	7.0	24	132	45	840	As-0.06 Hg-BDL Pb-BDL Cr-0.08 Zn-0.28 Fe-0.74 Mn-BDL Cu-BDL	5.6	4.9	1640	830	26.318116 82.734745	light muddy	Tamsa
QAZIPURA WALA NALLA	0.8571	7.4	26	128	83	920	As-0.04 Hg-BDL Pb-BDL Cr-0.09 Zn-0.21 Fe-0.68 Mn-BDL Cu-BDL	7.5	4.8	1550	910	26.316642 82.743209	light muddy	Tamsa
URDU BAZAR PURVI NALLA	0.8571	7.3	25	127	76	930	As-0.03 Hg-BDL Pb-BDL Cr-0.05 Zn-0.29 Fe-0.67 Mn-BDL Cu-BDL	8.2	5.1	1600	930	26.316088 82.740485	light muddy	Tamsa
URDU BAZAR PASCHIMI NALLA	0.8571	7.1	28	142	55	860	As-0.05 Hg-BDL Pb-BDL Cr-0.08 Zn-0.27 Fe-0.71 Mn-BDL Cu-BDL	7.4	4.7	1480	940	26.315923 82.740280	light muddy	Tamsa

AZADNAGAR NALLA	3.5	7.24	12.00	48.00	36.50	-	Cr-70 Fe-0.68 Zn-0.21 As-0.04 Hg-BDL Pb-BDL Mn-BDL Cu-BDL O&G-BDL	7.5	-	0.09	-	26.363133 82.559318	light muddy	Ghaghra/Saryu

I. Sewage

STP (SEWAGE TREATMENT PLANT)

Existing STP (location & capacity)	Capacity (operational)	Inlet/ Outlet water quality & quantity	Number of tapped drains (quantity of discharge)	Final discharge point	Gap	Proposal for minimising the gap
NPP TANDA (Nehru Nagar 100KLD)	100KLD	**0.1MLD/0.1MLD**	1	1	--	--

a. STP Additional information

Name of drain	Position of STP with capacity	Geo/coordinates	Discharge quantity from the STP in the drain	Total per day discharge from the drain into the river
GHASIYARI TOLA DRAIN	100KLD - RUNNING	26.552194 82.662965	0.1 MLD	0.1 MLD

Proposed capacity (location & capacity)	Capacity (Operational)	Inlet/Outlet water quality & quantity	Number of tapped drains quantity of discharge	GAP (in treatment)	Final discharge point Geo code/ Sampling point	Proposed/ under construction STP with completion date
						No current Proposed STP under consideration

HOTELS/ ASHRAMS

Number of Hotels/ ashrams/ dharamshalas	Consent to establish/ operate	STP	Discharge point	Action taken
(As per office records) 01. M/s Hotel Gomit in, Near Railway Crossing Muradabad, Akbarpur, District- Ambedkar Nagar.	Not Applied	Not Installed	Effluent Discharged in municipal drain.	Notice Issued
02. M/s Hotel Swapnil, Near Tamsa bridge, Akbarpur, District- Ambedkar Nagar.	Not Applied	Not Installed	Effluent Discharged in municipal drain.	Notice Issued
03. M/s Hotel Sai Plaza, Near Railway Station, Akbarpur, District- Ambedkar Nagar.	Not Applied	Not Installed	Effluent Discharged in municipal drain.	Notice Issued
04. M/s Hotel Geeta Palace, Near Railway Crossing, Muradabad, Akbarpur, District- Ambedkar Nagar.	Not Applied	Not Installed	Effluent Discharged in municipal drain.	Notice Issued
05. M/s Hotel Khajuraho**,** Baskhari Road Patel Nagar, Akbarpur, District- Ambedkar Nagar.	Not Applied	Not Installed	Effluent Discharged in municipal drain.	Notice Issued
06. M/s Hotel Shanti Palace, Shahjadpur road, Akbarpur, District- Ambedkar Nagar.	Not Applied	Not Installed	Effluent Discharged in municipal drain.	Notice Issued
07. M/s Hotel Aviral, Near roadways, Tanda road, District- Ambedkar Nagar				

IV. Industrial Effluent discharge

Total number of Industries	Daily effluent discharge	Treatment available (CETP / PETP / ETP Operational capacity)	Effluent quality analysis /GeoCode (Outlet of treatment plants)	GAP	Proposed/ under construction treatment project (with timeline)	Number of defaulting units- Action taken	Industrial solid waste generated/ day	Manner of disposal (Industrial solid waste)
03 (As per office records) 01. M/s. Balrampur Chini Mills Limited, Unit Akbarpur (Sugar Division), Vill- Harepur, jagdishpur, post-Mijhaura, District- Ambedkar nagar.	1400 KLD (Used in irrigation)	ETP – 1500 KLD	Effluent sample collection and analysis is done by State pollution control board. **26.472968** **82.417810**	NA	Nil	Nil	Ash- 21TPD (Approx)	Used in land filling on low land.
02. M/s. Ultratech Cement Limited (Unit Tanda Cement Works), at Village-kanhaura, Post Office-Hussainpur Sudhana, District- Ambedkar nagar.	No industrial effluent generation	NA	NA	NA	Nil	Nil	Nil	NA
03. M/s. NTPC Ltd, Tanda, P.O.- Vidhyut Nagar, District- Ambedkar Nagar.	8400 KLD (ZLD)	ETP – 9600 KLD	Effluent sample collection and analysis is done by State pollution control board. **26.590787** **82.599154**	NA	Nil	Nil	Fly Ash- 6900TPD (Approx) Bottom Ash- 1700 TPD (Approx)	Fly ash used in cement industries and road construction projects and bottom ash used in land filling on low land.

V. Regulation of Flood Plain Zone:

Area- cities/ towns Notification of flood plain zone	Demarcation		Encroachment & direct discharge Geocode/ sampling point	/Encroachment removal status	Timeline for completion
	No development zone pillars	Regulatory zone pillars			
Under Process	Demarcation of HFL out Ambedkar Nagar District has been done which is situated at right bank of River Saryu in year 2023.				

AFFORESTATION/ PLANTATION

Area- cities/ towns	Total plantation	Proposed project	Time line
Ambedkar Nagar	Total Riverside Plantation is 47.23 Ha in which 118075 plants	Social Forestry plan	2023-2024

VII. Mining:

a.

Sand mining	FIR/ case registered/ year	Vehicles/ mineral seized	Action taken status	Cases pending in Court	Enforcement of EMGSM 2020 and Sustainable sand mining management guidelines 2016
2023-24	1 case registered	02	Vehicle seized and Pending in Court	1	As per EMGSM 2020 and sustainable sand mining management guidelines enforcement is carried out.

1. The Tribunal has already directed for furnishing following information:

(1) District Ganga Protection Plan at city/ town level

District Ganga Protection Committee (DGPC) is required to formulate the action plan for each city and town located on main stem of river Ganga and its tributary and such Action Plan has to be prepared in accordance with the River Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016 (para 6 and 55).

(2) Contents of the Action Plan (Consolidated District Wise Action Plan including each City and Town abutting river Ganga and its Tributary)

2.1 Sewage Management

(i) Sewage generation (for entire District and individual town wise): 51.08 MLD Including city area

(ii) Existing Sewage Treatment Capacities: 100KLD

(iii) Quantity of sewage is being treated (utilization capacity) : 100KLD

(iv) Performance of STPs particularly for FC: Chlorination System Installed

(v) Where treated sewage is being discharged (to Ganga or tributaries) : River Ghaghra/Saryu

(vi) Reasons for Under-utilization of STPs (Connectivity of Households/ laying of sewer lines) : No

(vii) Current Gap in sewage treatment: 50.98

(viii) Time bound plan for bridging the gap and tying up with financial arrangements and not delaying Tendering and identifying executing agencies or having any other issues: --

(ix) Where untreated sewage (when there is no STP) is discharged (Ganga /Tributaries): After Bio remediation processs all Drains discharged into River Ghaghra/Saryu and River Tamsa

2.2 Drains joining Ganga and Tributary

(i) Number of drains carrying sewage- sullage or industrial waste water joining Ganga/ tributaries with their Quantity and Quality: Same as mentioned Above

(ii) Drains joining outside city and town limits but, either joining in village or nearby town: Nill

(iii) Inclusion of sewage flowing in drains into total sewage generation figures of each city and town and their interception and diversion to STPs: Included

2.3 Septage management (In case of no STP)

(i) Status of Septage management (with reference to FSTP/STP): 32 KLD FSTP at Akbarpur

(ii) Management of Grey water and its disposal: 32 KLD FSTP at Akbarpur dried part is use as the compost and liquid part is used as irrigation and sprinkling on the road for dust management

2.4 Industrial Pollution Control

(i) Attach the list on no. of industries generating trade effluents, their place of disposal and compliance including CETPs (town wise):

(3) Water quality status

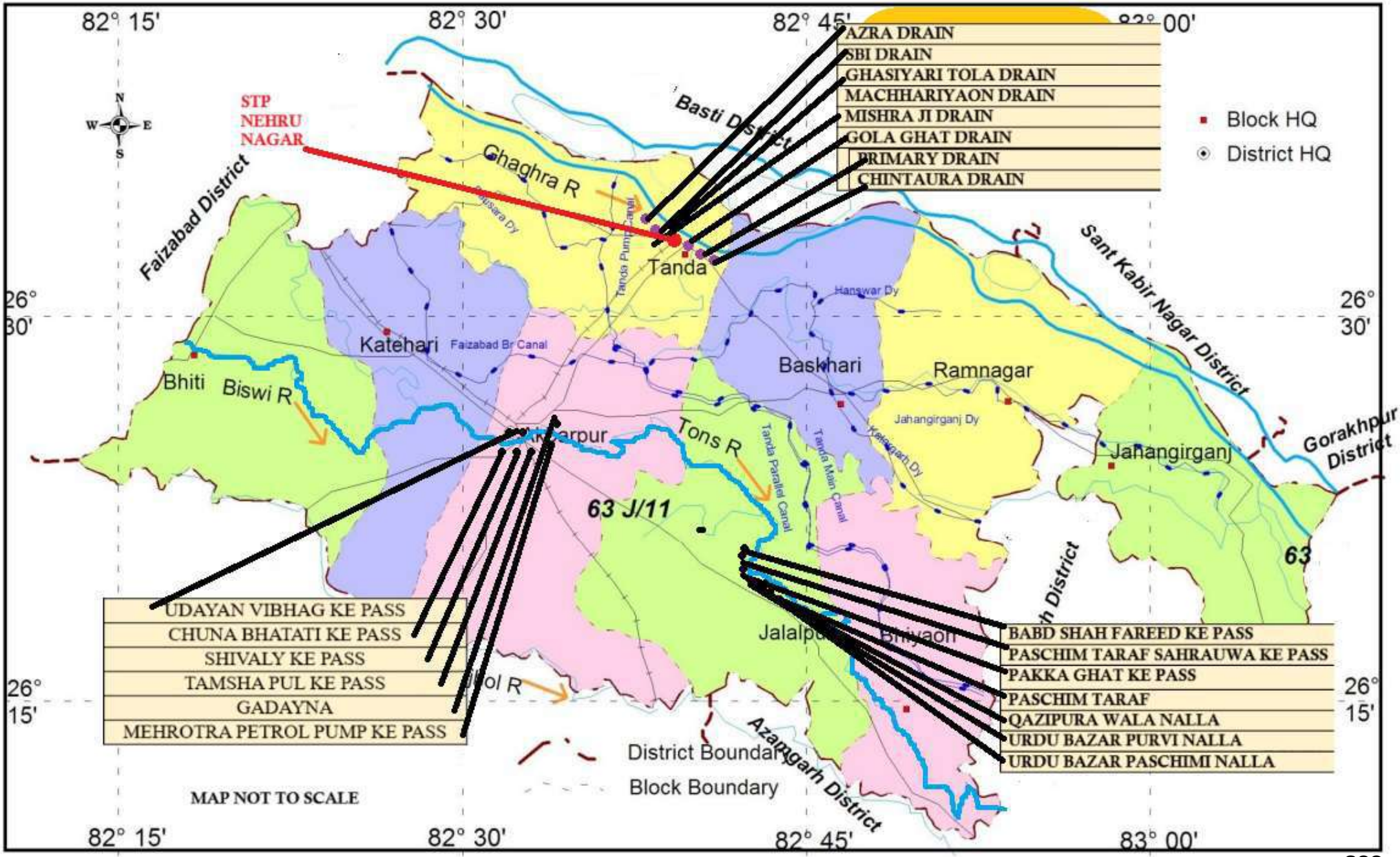
Provide water quality status of Ganga and its tributaries in the District and city/ town in terms of its fitness for Bathing water quality that is, FC and FS:

(4) Notification of **Flood Plain Zones**: Nill

(5) Issues relating to **Environmental Flow**: No such issues

(सदस्य सचिव/संयोजक)
जिला गंगा संरक्षण समिति/
प्रभागीय वनाधिकारी, अम्बेडकरनगर

Map of Ambedkar Nagar District, UP



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कार्यालय नगर पालिका परिषद जलालपुर अम्बेडकरनगर

पत्रांक – 69 /न0पा0परि0ज0/एन0जी0टी0/2024–25 दिनांक – 04/04/2024

सेवा में,

प्रभागीय वनाधिकारी/सदस्य,
संयोजक जिला गंगा संरक्षण समिति,
अम्बेडकर नगर।

विषयः– **मा0 राष्ट्रीय हरित अभिकरण, नई दिल्ली ओ0ए0 संख्या–200/2014 एम0सी0 मेहता बनाम यूनियन ऑफ इण्डिया व अन्य पारित आदेश दिनांक– 05.02.2024 के अनुपालन सम्बन्ध में।**

महोदय,

कृपया उपर्युक्त विषयक आपके कार्यालय के पत्र सं0–2547/29–1 अम्बेडकर नगर दिनांक 12.01.2024 का संदर्भ ग्रहण करने का कष्ट करें, जिसके क्रम में सूचना निर्धारित प्रारूप पर उपलब्ध कराये जाने के निर्देश दिये गये है, उक्त के क्रम में अवगत कराना है कि नगर पालिका परिषद जलालपुर अम्बेडकरनगर की आद्यतन सूचना निर्धारित प्रारूप पर तैयार कर महोदय की सेवा में सादर प्रेषित है।

अधिशाषी अधिकारी
नगर पालिका परिषद जलालपुर
अम्बेडकरनगर

Drain (city/town)	Total flow of drain per day	PH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride etc)	Nitrates	DO	TC	FC	Outlet flow and Geo code	Colour/ odour	Discharged Into
BABD SHAH FAREED KE PASS	0.8571	7.61	28	102	65.0	850	As-0.06 Hg-BDL Pb-BDL Cr-0.06 Zn-0.23 Fe-0.63 Mn-BDL Cu-BDL	6.7	4.6	1550	840	26.316073 82.735525	light muddy	Tamsa
PASCHIM TARAF SAHRAUWA KE PASS	0.8571	7.62	23	115	73	910	As-0.05 Hg-BDL Pb-BDL Cr-0.05 Zn-0.26 Fe-0.6 Mn-BDL Cu-BDL	7.2	4.8	1600	860	26.315745 82.736394	light muddy	Tamsa
PAKKA GHAT KE PASS	0.8571	7.5	27	119	75	830	As-0.08 Hg-BDL Pb-BDL Cr-0.07	6.8	4.5	1450	850	26.314517 82.745711	light muddy	Tamsa

अधिशासी अधिकारी
नगर पालिका परिषद अम्बेडकर नगर

							Zn-0.34 Fe-0.72 Mn-BDL Cu-BDL							
PASCHIM TARAF	0.8571	7.0	24	132	45	840	As-0.06 Hg-BDL Pb-BDL Cr-0.08 Zn-0.28 Fe-0.74 Mn-BDL Cu-BDL	5.6	4.9	1640	830	26.318116 82.734745	light muddy	Tamsa
QAZIPURA WALA NALLA	0.8571	7.4	26	128	83	920	As-0.04 Hg-BDL Pb-BDL Cr-0.09 Zn-0.21 Fe-0.68 Mn-BDL Cu-BDL	7.5	4.8	1550	910	26.316642 82.743209	light muddy	Tamsa
URDU BAZAR PURVI NALLA	0.8571	7.3	25	127	76	930	As-0.03 Hg-BDL Pb-BDL	8.2	5.1	1600	930	26.316088 82.740485	light muddy	Tamsa

अधिशासी अधिकारी
नगर पालिका परिषद [illegible]

							Cr-0.05 Zn-0.29 Fe-0.67 Mn-BDL Cu-BDL							
URDU BAZAR PASCHIMI NALLA	0.8571	7.1	28	142	55	860	As-0.05 Hg-BDL Pb-BDL Cr-0.08 Zn-0.27 Fe-0.71 Mn-BDL Cu-BDL	7.4	4.7	1480	940	26.315923 82.740280	light muddy	Tamsa

अधिशासी अधिकारी
नगर पालिका परिषद अकबरपुर
अम्बेडकर नगर

कार्यालय नगर पालिका परिषद अकबरपुर–अम्बेडकरनगर

पत्रांक 52 / न0पा0परि0अक0 / NGT / 2023–2024 दिनांक– 09.04.2024

सेवा में

प्रभागीय वनाधिकारी / सदस्य संयोजक,
जिला गंगा संरक्षण समिति,
अम्बेडकरनगर।

विषयः– **मा0 राष्ट्रीय हरित अधिकरण, नई दिल्ली द्वारा ओ0ए0 संख्या 200 / 2014 एम0सी0 मेहता बनाम यूनियन आफ इंडिया व अन्य मे पारित आदेश दिनांक 05.02.2024 के अनुपालन के सम्बन्ध में।**

महोदय,

कृपया उपर्युक्त विषयक आपके कार्यालय पत्र संख्या–2547 / 29–1 अम्बेडकरनगर दिनांक 02.04.2024 का सन्दर्भ ग्रहण करनें का कष्ट करें के कम में वांछित सूचना निर्धारित प्रारूप भरकर सादर सेवा में प्रेषित है।

संलग्नक– प्रारूप।

S.N.	Drain (city/town)	Total drain capacity	Generation/ day	PH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride etc)	Nitrates	DO	TC	FC	Outlet flow and geo code/ sample point	Color/ odour	Discharged into
1	TAMSA DRAIN NEAR TAMSA BRIDGE	-	1.5	7.5	23	125	42	-	-	-	-	-	119	26.425476 82.538748	-	-
2	SHVALA GHAT DARIN NEAR SHIVALA	-	5.047	7.1	29.5	110	52	-	-	-	-	-	200	26.417469 82.542596	-	-
3	GADAYA	-	1.79	7.2	28.5	98	52	-	-	-	-	-	175	26.435032 82.550226	-	-
4	NEAR MALHORTA PETROL PUMP	-	6.49	7.31	29	120	54	-	-	-	-	-	177	26.431248 82.533796	-	-
5	DRAIN NEAER CHUBHATTI	-	3.041	7.2	29	108.2	56	-	-	-	-	-	250	26.423721 82.535916	-	-
6	DRAIN NEAR UDYAN DEPT	-	1.54	7.3	30	96	48	-	-	-	-	-	141	26.432596 82.523437	-	-

नोटः– निकाय में स्थित 06 सिवरेज नाले की जल गुणवत्ता सूचकांक **(BOD, COD, Colour, Nitrate, Heavy metals)** आदि के परिक्षण, विश्लेषण हेतु सैंम्पल **(IITR-Indian Institute of Toxicology Research)** लखनऊ को भेजी गयी है, सैंम्पल रिपोर्ट प्राप्त होते ही वांछित सूचना निर्धारित प्रारूप पर भरकर सादर सेवा में प्रेषित कर दी जायेगी।

अधिशाषी अधिकारी
नगर पालिका परिषद
अकबरपुर अम्बेडकरनगर

1. The Tribunal has already directed for furnishing following information:

(1) District Ganga Protection Plan at city/ town level

District Ganga Protection Committee (DGPC) is required to formulate the action plan for each city and town located on main stem of river Ganga and its tributary and such Action Plan has to be prepared in accordance with the River Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016 (para 6 and 55).

(2) Contents of the Action Plan (Consolidated District Wise Action Plan including each City and Town abutting river Ganga and its Tributary)

Sewage Management

(i) Sewage generation (for entire District and individual town wise): 51.08 MLD Including city area

(ii) Existing Sewage Treatment Capacities: 100KLD

(iii) Quantity of sewage is being treated (utilization capacity) : 100KLD

(iv) Performance of STPs particularly for FC: Chlorination System Installed

(v) Where treated sewage is being discharged (to Ganga or tributaries) : River Ghaghra/Saryu

(vi) Reasons for Under-utilization of STPs (Connectivity of Households/ laying of sewer lines) : No

(vii) Current Gap in sewage treatment: 50.98

(viii) Time bound plan for bridging the gap and tying up with financial arrangements and not delaying Tendering and identifying executing agencies or having any other issues: --

(ix) Where untreated sewage (when there is no STP) is discharged (Ganga /Tributaries): After Bio remediation processs all Drains discharged into River Ghaghra/Saryu and River Tamsa

Drains joining Ganga and Tributary

(i) Number of drains carrying sewage- sullage or industrial waste water joining Ganga/ tributaries with their Quantity and Quality: Same as mentioned Above

(ii) Drains joining outside city and town limits but, either joining in village or nearby town: Nill

(iii) Inclusion of sewage flowing in drains into total sewage generation figures of each city and town and their interception and diversion to STPs: Included

Septage management (In case of no STP)

(i) Status of Septage management (with reference to FSTP/STP): 32 KLD FSTP at Akbarpur

(ii) Management of Grey water and its disposal: 32 KLD FSTP at Akbarpur dried part is use as the compost and liquid part is used as irrigation and sprinkling on the road for dust management

Industrial Pollution Control

(i) Attach the list on no. of industries generating trade effluents, their place of disposal and compliance including CETPs (town wise):

(3) Water quality status

Provide water quality status of Ganga and its tributaries in the District and city/ town in terms of its fitness for Bathing water quality that is, FC and FS:

(4) Notification of **Flood Plain Zones**: Nill

(5) Issues relating to **Environmental Flow**: No such issue

अधिशाषी अधिकारी
नगर पालिका परिषद
अकबरपुर-अम्बेडकरनगर

नगर पालिका परिषद टाण्डा अम्बेडकरनगर

पत्रांक 08 /न0पा0प0टा0/एन0जी0टी0/2024–25 दिनांक 03 अप्रैल 2024

सेवा में,

प्रभागीय वनाधिकारी/सदस्य,
संयोजक जिला गंगा संरक्षण समिति,
अम्बेडकरनगर।

विषयः–मा0 राष्ट्रीय हरित अभिकरण, नई दिल्ली ओ0ए0 संख्या–200/2014 एम0सी0 मेहता वनाम यूनियन आफ इण्डिया व अन्य पारित आदेश दिनांक–05.02.2024 के अनुपालन के सम्बन्ध में।

महोदय,

कृपया उपर्युक्त विषयक अपने कार्यलय पत्र संख्या–2547/29–1 अम्बेडकरनगर दिनांक–02.04.2024 का संदर्भ ग्रहण करने का कष्ट करें, जिसके क्रम में सूचना निर्धारित प्रारूप पर तैयार कर उपलब्ध कराये जाने के निर्देश दिये गये है। उक्त के क्रम में अवगत कराना है कि नगर पालिका परिषद टाण्डा जनपद अम्बेडकरनगर से सम्बन्धि वांछित सूचना निर्धारित प्रारूप पर तैयार कर सादर सेवा में प्रेषित है।

भवदीय

अधिशाषी अधिकारी
नगर पालिका परिषद टाण्डा
अम्बेडकरनगर

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Drain (city/ town)	Total drain capa city	Gener ation/ day	PH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluorid e etc)	Nitrates	DO	TC	FC	Outlet flow and geo code/ sample point	Col or/ odo ur	Dischar ged Into
Azra Drain	-	2.134	7.4	25	102	65.0	850	As-0.06 Hg-BDL Pb-BDL Cr-0.06 Zn-0.23 Fe-0.63 Mn-BDL Cu-BDL	6.7	4.6	1550	840	26.66648 82.655400	-	-

Drain (city/ town)	Total drain capa city	Gener ation/ day	PH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluorid e etc)	Nitrates	DO	TC	FC	Outlet flow and geo code/ sample point	Col or/ odo ur	Dischar ged Into
SBI Drain	-	2.134	7.62	23	115	73	910	As-0.05 Hg-BDL Pb-BDL Cr-0.05 Zn-0.26 Fe-0.6 Mn-BDL Cu-BDL	7.2	4.8	1600	860	26.66648 82.655400	-	-

अधिशाषी अधिकारी
नगर पालिका परिषद टाण्डा
अम्बेडकर नगर

Drain (city/ town)	Total drain capa city	Gener ation/ day	PH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluorid e etc)	Nitrates	DO	TC	FC	Outlet flow and geo code/ sample point	Col or/ odo ur	Dischar ged Into
Primary School Drain	-	2.134	7.1	28	142	55	860	As-0.05 Hg-BDL Pb-BDL Cr-0.08 Zn-0.27 Fe-0.71 Mn-BDL Cu-BDL	7.4	4.7	1480	940	26.66648 82.655400	-	-

Drain (city/ town)	Total drain capa city	Gener ation/ day	PH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluorid e etc)	Nitrates	DO	TC	FC	Outlet flow and geo code/ sample point	Col or/ odo ur	Dischar ged Into
Chintaura Drain	-	2.134	7.5	27	131	62	830	As-0.06 Hg-BDL Pb-BDL Cr-0.09 Zn-0.32 Fe-0.64 Mn-BDL Cu-BDL	6.5	4.3	1520	860	26.66648 82.655400	-	-

अधिशाषी अधिकारी
नगर पालिका परिषद टाण्डा
अम्बेडकर नगर

Drain (city/ town)	Total drain capa city	Gener ation/ day	PH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluorid e etc)	Nitrates	DO	TC	FC	Outlet flow and geo code/ sample point	Col or/ odo ur	Dischar ged Into
Ghasiyari Tola Drain	-	2.134	7.5	27	119	75	830	As-0.08 Hg-BDL Pb-BDL Cr-0.07 Zn-0.34 Fe-0.72 Mn-BDL Cu-BDL	6.8	4.5	1450	850	26.66648 82.655400	-	-

Drain (city/ town)	Total drain capa city	Gener ation/ day	PH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluorid e etc)	Nitrates	DO	TC	FC	Outlet flow and geo code/ sample point	Col or/ odo ur	Dischar ged Into
Machharly awa Drain	-	2.134	7.0	24	132	45	840	As-0.06 Hg-BDL Pb-BDL Cr-0.08 Zn-0.28 Fe-0.74 Mn-BDL Cu-BDL	5.6	4.9	1640	830	26.66648 82.655400	-	-

अधिशाषी अधिकारी
नगर पालिका परिषद टाण्डा
अम्बेडकर नगर

Drain (city/ town)	Total drain capa city	Gener ation/ day	PH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluorid e etc)	Nitrates	DO	TC	FC	Outlet flow and geo code/ sample point	Col or/ odo ur	Dischar ged Into
Mishraji Drain	-	2.134	7.4	26	128	83	920	As-0.04 Hg-BDL Pb-BDL Cr-0.09 Zn-0.21 Fe-0.68 Mn-BDL Cu-BDL	7.5	4.8	1550	910	26.66648 82.655400	-	-

Drain (city/ town)	Total drain capa city	Gener ation/ day	PH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluorid e etc)	Nitrates	DO	TC	FC	Outlet flow and geo code/ sample point	Col or/ odo ur	Dischar ged Into
Gola Ghat Drain	-	2.134	7.3	25	127	76	930	As-0.03 Hg-BDL Pb-BDL Cr-0.05 Zn-0.29 Fe-0.67 Mn-BDL Cu-BDL	8.2	5.1	1600	930	26.66648 82.655400	-	-

अधिशाषी अधिकारी
नगर पालिका परिषद टाण्डा
अम्बेडकर नगर

कार्यालय–नगर पंचायत इल्तिफातगंज– अम्बेडकरनगर

पत्र सं0.....10...../ I/ न0पं0इल्ति0/एन0जी0टी0–सूचना/2024–25 दिनाँक– 02/04/2024

सेवा में,

प्रभागीय वनाधिकारी/ सदस्य,
संयोजक जिला गंगा संरक्षण समिति,
जनपद, अम्बेडकरनगर।

विषयः–मा0 राष्ट्रीय हरित अभिकरण, नई दिल्ली ओ0ए0 संख्या–200/2014 एम0सी0 मेहता बनाम यूनियन आफ इण्डिया व अन्य में पारित आदेश दिनाँक–05.02.2024 के अनुपालन के सम्बन्ध में।

संदर्भः– उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड, अयोध्या के पत्र संख्या–1107/F& 01/O-A-NO&200/2014/2024 दिनाँक–19.03.2024 एवं इस कार्यालय के पत्र संख्या 2404/29–1 दिनाँकित 21.03.2024 के संदर्भ में।

महोदय,

उपरोक्त विषयक आपके कार्यालय पत्र संख्या–2547/29–1 अम्बेडकरनगर दिनांक–02.04.2024 के सन्दर्भ में मांगी गयी सूचना निम्न निर्धारित प्रारूप पर तैयार कर संलग्न सेवा में सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित है।

Drain (city/ town)	Total drain capacity	Generation/ day	PH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride etc)	Nitrates	DO	TC	FC	Outlet flow and geo code/ sample point	Color/ odour	Discharged Into
Azad nagar Drain	3.5	02-04-2024	7.24	12.00	48.00	36.50	-	Cr – 70.00 Fe – 0.68 Zn – 0.21 As – 0.04 Hg – BDL Pb – BDL Mn – BDL Cu – BDL O&G- BDL	7.5	-	0.09	-	26.608749 82.559318	Light Muddy	Saryu/ Ghaghra

भवदीय

अधिशाषी अधिकारी
नगर पंचायत इल्तिफातगंज
अम्बेडकरनगर

CamScanner

तार : पर्यावरण
Gram : PARYAVARAN

क्षेत्रीय कार्यालय
Regional Office

फोन एवं फैक्स : 05278–245411
Tele & Fax : 05278–245411
Email Id - roayodhya@uppcb.in

उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड, अयोध्या
UTTAR PRADESH POLLUTION CONTROL BOARD, AYODHYA

संदर्भ संख्या : Ref. No. : 1069/NGT/OA No. 200/2014/2024

दिनांक : Dated : 04.3.2024

सेवा में,

प्रभागीय वनाधिकारी/संयोजक सदस्य
जिला गंगा संरक्षण समिति,
जनपद– अम्बेडकर नगर।

विषय– Information required in compliance of Hon'ble NGT order dated 05.02.2024 in O.A. No. 200/2014 MC Mehta Vs UOI and Ors.

महोदय,

कृपया उपरोक्त विषयक आपके पत्रांक– 2150/29–1/अम्बेडकरनगर दिनांक 28.02.2024 का संदर्भ ग्रहण करना चाहें। उक्त के संबंध में मा0 एन0जी0टी0 में योजित ओ0ए0 नं0–200/2014 एम0सी0मेहता बनाम यू0ओ0आई0 एण्ड अन्य के संबंध में आप द्वारा मांगी गयी वांछित सूचनायें संलग्न प्रारूप में परिपूरित कर आपके अवलोकनार्थ एवं अग्रिम आवश्यक कार्यवाही हेतु सादर प्रेषित।

भवदीय

04/03/2024

(डा0 टी0एन0 सिह)
क्षेत्रीय अधिकारी

प्रतिलिपिः निम्नलिखित को सूचनार्थ सादर प्रेषित।

1. जिलाधिकारी महोदय, अम्बेडकर नगर।
2. मुख्य विकास अधिकारी महोदय, अम्बेडकर नगर।

क्षेत्रीय अधिकारी

1. **Sewage**

Drain (city/ town)	Total drain capacity	Generation / day	PH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride etc)	Nitrates	DO	TC	FC	Outlet flow and geo code/ sample point	Color/ odour	Discharged into

The above information is to be submitted on the basis of end point sample analysis of the concerned drain

2. STP for treating the sewage of the drains ultimately flowing to river ganga or its tributaries

; STP ın & y)	Capacity (operational)	Inlet/ Outlet water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point	Proposed/ under construction STP With completion date

2.1 STP ADDITIONAL INFORMATION

NAME OF DRAIN	POSITION OF STP WITH CAPACITY	GEO/COORDINATES	DISCHARGE QUANTITY FROM THE STP IN THE DRAIN	TOTAL PER DAY DISCHARGE FROM THE DRAIN INTO THE RIVER

Proposed STP (location & capacity)	Capacity (operational)	Inlet/ Outlet water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point Geo code/ sampling point	Proposed/ under construction STP With completion date

3. Hotels/ Ashrams/Dharmshalas/residential complexes abutting river Ganga or its tributaries

Number of Hotels/ ashrams/ dharamshalas	Consent to establish/ operate	STP	Discharge point	Action taken
M/s Hotel Gomit in, Near Railway Crossing Muradabad, Akbarpur, District-Ambedkar Nagar.	Not Applied	Not Installed	Effluent Discharged in municipal drain.	Notice Issued
M/s Hotel Swapnil, Near Tamsa bridge, Akbarpur, District-Ambedkar Nagar.	Not Applied	Not Installed	Effluent Discharged in municipal drain.	Notice Issued

M/s Hotel Sai Plaza, Near Railway Station, Akbarpur, District-Ambedkar Nagar.	Not Applied	Not Installed	Effluent Discharged in municipal drain.	Notice Issued
M/s Hotel Geeta Palace, Near Railway Crossing, Muradabad, Akbarpur, District-Ambedkar Nagar.	Not Applied	Not Installed	Effluent Discharged in municipal drain.	Notice Issued
M/s Hotel Khajuraho, Baskhari Road Patel Nagar, Akbarpur, District-Ambedkar Nagar.	Not Applied	Not Installed	Effluent Discharged in municipal drain.	Notice Issued
M/s Hotel Shanti Palace, Shahjadpur road, Akbarpur, District- Ambedkar Nagar.	Not Applied	Not Installed	Effluent Discharged in municipal drain.	Notice Issued
M/s Hotel Aviral, Near roadways, Tanda road, District- Ambedkar Nagar	Not Applied	Not Installed	Effluent Discharged in municipal drain.	Notice Issued

4. IV. Industrial Effluent discharge by industries whose effluent is ultimately flowing to river Ganga or its tributaries

Total number of Industries	Daily effluent discharge	Treatment available (cetp/ petp/ etp operational capacity)	Effluent quality analysis (outlet of treatment plants Geo code sampling point)	GAP	Proposed/ under construction treatment project (with timeline)	Number of defaulting units-Action taken	Industrial solid waste generated / day	Manner of disposal (Industrial solid waste)

M/s. Balrampur Chini Mills Limited. Unit Akbarpur (Sugar Division). Vill-Harepur, jagdishpur, post-Mijhaura, District-Ambedkar nagar.	1400 KLD (Used in irrigation)	ETP – 1500 KLD	Effluent sample collection and analysis is done by State pollution control board. Lat-26.472968 Long-82.41781	NA	Nil	Nil	Ash- 21TPD (Approx)	Used in land filling on low land.
M/s. Ultratech Cement Limited (Unit Tanda Cement Works), at Village-kanhaura, Post Office-Hussainpur Sudhana, District-Ambedkar nagar.	No industrial effluent generation	NA	NA	NA	NA	NIL	NIL	NA
M/s. NTPC Ltd, Tanda, P.O.-Vidhyut Nagar, District-Ambedkar Nagar.	8400 KLD (ZLD)	ETP – 9600 KLD	Effluent sample collection and analysis is done by State pollution control board. Lat-26.590787 Long-82.599154	NA	NIL	NIL	Fly Ash-6900TPD (Approx) Bottom Ash- 1700 TPD (Approx)	Fly ash used in cement industries and road construction projects and bottom ash used in land filling on low land.

5. Regulation of Flood Plain Zone:

Area- cities/ towns	Notification of flood plain zone	Demarcation		Encroachment & direct discharge GeoCode/ Sampling point	Encroachment removal status	Timeline for completion
		No development zone pillars	Regulatory zone pillars			

6. Afforestation/ Plantation along the bank of River Ganga and its tributaries and their flood plain zones

Area- cities/ towns	Total plantation Geo Code/ Sampling Point	Proposed project	Timeline

7. Mining and Stone Crushing in river bed and flood plain zone of River Ganga and its tributaries:

Area of mining	FIR/ case registered/ year	Vehicles/ mineral seized	Action taken status	Cases pending in Court	Enforcement of EMGSM 2020 and Sustainable sand mining management guidelines 2016

1. The Tribunal has already directed for furnishing following

(1) District Ganga Protection Plan at city/ town level

District Ganga Protection Committee (DGPC) is required to formulate the action plan for each city and town located on main stem of river Ganga and its tributary and such Action Plan has to be prepared in accordance with the River Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016 (para 6 and 55).

(2) Contents of the Action Plan (Consolidated District Wise Action Plan including each City and Town abutting river Ganga and its Tributary)

2.1 Sewage Management

(i) Sewage generation (for entire District and individual town wise):

(ii) Existing Sewage Treatment Capacities :

(iii) Quantity of sewage is being treated (utilization capacity) :

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(iv) Performance of STPs particularly for FC :

(v) Where treated sewage is being discharged (to Ganga or tributaries) :

(vi) Reasons for Under-utilization of STPs (Connectivity of Households/ laying of sewer lines) :

(vii) Current Gap in sewage treatment :

(viii) Time bound plan for bridging the gap and tying up with financial arrangements and not delaying Tendering and identifying executing agencies or having any other issues :

(ix) Where untreated sewage (when there is no STP) is discharged (Ganga /Tributaries):

2.2 Drains joining Ganga and Tributary

(i) Number of drains carrying sewage- sullage or industrial waste water joining Ganga/ tributaries with their Quantity and Quality:

(ii) Drains joining outside city and town limits but, either joining in village or nearby town:

(iii) Inclusion of sewage flowing in drains into total sewage generation figures of each city and town and their interception and diversion to STPs:

2.3 Septage management (In case of no STP)

(i) Status of Septage management (with reference to FSTP/STP):

(ii) Management of Grey water and its disposal:

2.4 Industrial Pollution Control

(i) Attach the list on no. of industries generating trade effluents, their place of disposal and compliance including CETPs (town wise):

(3) Water quality status

Provide water quality status of Ganga and its tributaries in the District and city/ town in terms of its fitness for Bathing water quality that is, FC and FS:

(4) Notification of **Flood Plain Zones**:

(5) Issues relating to **Environmental Flow**:

2. Therefore, for each of the district/city/town under consideration, the desired information be submitted in the above format.

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प्रेषक,

जिला खनन अधिकारी
अम्बेडकरनगर।

सेवा में,

प्रभागीय वनाधिकारी
अम्बेडकरनगर।

पत्रांक 376 /खनन अनुभाग/ हरित अधिकरण/सूचना/2023 दिनांक 04 जनवरी,2024

विषयः– Information required in compliance of Hon'ble NGT order dated 04.12.2023 in O.A. 200/2014 MC Mehta Vs UOI and Ors.

संदर्भ :– Information required in compliance of Hon'ble NGT order dated 24.11.2023 in O.A. 200/2014 (C.W.P. No. 3727/1985) (I.A. No. 340/2022) MC Mehta Vs UOI and Ors and Hon'ble NGT order dated 04.12.2023 in O.A. 200/2014 MC Mehta Vs UOI and Ors.

महोदय,

कृपया उपर्युक्त विषयक अपने कार्यालय के पत्र संख्या 165/29-1 अम्बेडकरनगर दिनाक 02.01.2024 का सन्दर्भ ग्रहण करने का कष्ट करें, जिसके द्वारा निर्धारित प्रारूप पर सूचना चाही गई है।

अतः सन्दर्भित पत्र के अनुपालन में जनपद अम्बेडकरनगर से सम्बन्धित वांछित सूचना निर्धारित प्रारूप पर इस पत्र के साथ संलग्न कर प्रेषित है।

भवदीय,

(मो0 [illegible] 2024)
जिला खनन अधिकारी,
अम्बेडकरनगर।

पत्र संख्या व दिनांक उपरोक्त।
प्रतिलिपिः–जिलाधिकारी महोदय, अम्बेडकरनगर को सादर सूचनार्थ प्रेषित।

जिला खनन अधिकारी,
अम्बेडकरनगर।

VII. Mining:

Financial Year 2023-24 till month of December 2023

a.

Sand Mining	FIR/Case Registered	Vehicles/Mineral Seized	Action Taken Status	Case pending in Court	Enforcement of EMGSM 2020 and Sustainable sand mining management guidelines 2016
2023-24	1 case registered	02	Vehicle seized and pending in court	1	As per EMGSM 2020 and Sustainable sand mining management guidelines enforcement is carried out.

b.

Area of RBM Mining	Overloading illegal Transport	Action Taken	Penalty Imposed/Recovered
There is no source of RBM in District	178	Penalty imposed in 172 case and 6 cases (vehicles) Pending at mining office.	Rs. 46,24,000/-
Note:- In district Ambedkar Nagar with flow of River Ghaghra/Sarayu silt/sand deposited. No RBM deposit. are found in the district.			

04/01/2024

प्रेषक,

अधिशासी अभियन्ता
बाढ कार्य खण्ड अयोध्या

प्रेषित,

प्रभागीय वनाधिकारी
वन प्रभाग, अम्बेडकर नगर।

पत्रांकः– 37 /बा0का0ख0अयो0/एन0जी0टी0/दिनांक 04/01/2024

विषयः– Information required in compliance of Hon'ble NGT order dated 04.12.2023 in O.A. 200/2014 MC Mehta Vs UOI and Ors.

सन्दर्भ– आपका पत्रांक 1651/29–1/दिनांक 02.01.2024

महोदय,

कृपया उपरोक्त विषयक सन्दर्भित पत्र का अवलोकन करने की कृपा करें। मा0 एन0जी0टी0 द्वारा पारित आदेश के क्रम में खण्ड से सम्बन्धित वांछित सूचना निर्धारित प्रपत्र पर निम्नानुसार आपके पास प्रेषित है:–

V. Regulation of Flood Plain Zone:

Area- cities/ towns Notification of flood plain zone	Demarcation		Variable flow (per day)	Encroachment /Encroachment removal status	Timeline for completion	Barrage/ Cross-regulator
	No development zone pillars	Regulatory zone pillars				
Under Process	Demarcation of HFL through out Ambedkar Nagar District has been done which is situated at right bank of River Saryu in Year 2023.					

अधिशासी अभियन्ता
बाढ़ कार्य खण्ड, अयोध्या

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जल शक्ति मंत्रालय
MINISTRY OF
JAL SHAKTI
सत्यमेव जयते

Submitted in compliance of

HON'BLE NATIONAL GREEN TRIBUNAL

Order Date 05-Feb-2024

&

Submitted by :

DISTRICT GANGA COMMITTEE

Shahjahanpur (Uttar Pradesh)

Scanned with OKEN Scanner

ABOUT DISTRICT :

Shahjahanpur City is established by Shri Diler Khan and Shri Bahadur Khan sons of Shri Dariya Khan who was a soldier in the army of Mugal Emperor JAHANGEER. Both, Shri Diler Khan and Shri Bahadur Khan were dignitary in the regime of Shahjahan. After, pleasing with the services of Shri Dilerkhan, Shahjahan gifted 14 villages with the permission to construct a Fort. Diler khan developed a fort in "Nainar Khera Village" which was situated on the rivers Garrah and Khannaut. He also established 52 type of Pathan's Caste. Today, most of the mohallas are on the name of these castes.

It is situated at 27.35 N Latitude and 79.37 E longitude. Adjoining districts of the Shahjahanpur are Lakhimpur Khiri, Hardoi, Farrukhabad, Bareilly, Budaun & Pilibhit.Geographical Area of it is 4575 Sq. Kilometer.

This is a Agriculture based District of Uttar Pradesh. Flood – mostly effects Jalalabad Tehsil by Ramganga & Ganga River. Major crops of the district are Wheat, Gram, Millet & Potato.

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INTRODUCTION OF DISTRICT

a) Demography

Area	4,575 Sq Km	Population	346,103
No. of Tehsils	5	No. of Parliamentary Constituency	1
No. of Blocks	15	No. of Gram Panchayats	1077
No. of Town Areas	10	No. of Legislative Assemblies	6
No. of Census	14	No. of Revenue Villages	2325

Source - https://shahjahanpur.nic.in/demography/

b) Geographical

It is situated at 27.35 N Latitude and 79.37 E longitude. Adjoining districts of the Shahjahanpur are Lakhimpur Khiri, Hardoi, Farrukhabad, Bareilly, Budaun & Pilibhit.Geographical Area of it is 4575 Sq. Kilometer.

This is a Agriculture based District of Uttar Pradesh. Flood – mostly effects Jalalabad Tehsil by Ramganga & Ganga River. Major crops of the district are Wheat, Gram, Millet & Potato.

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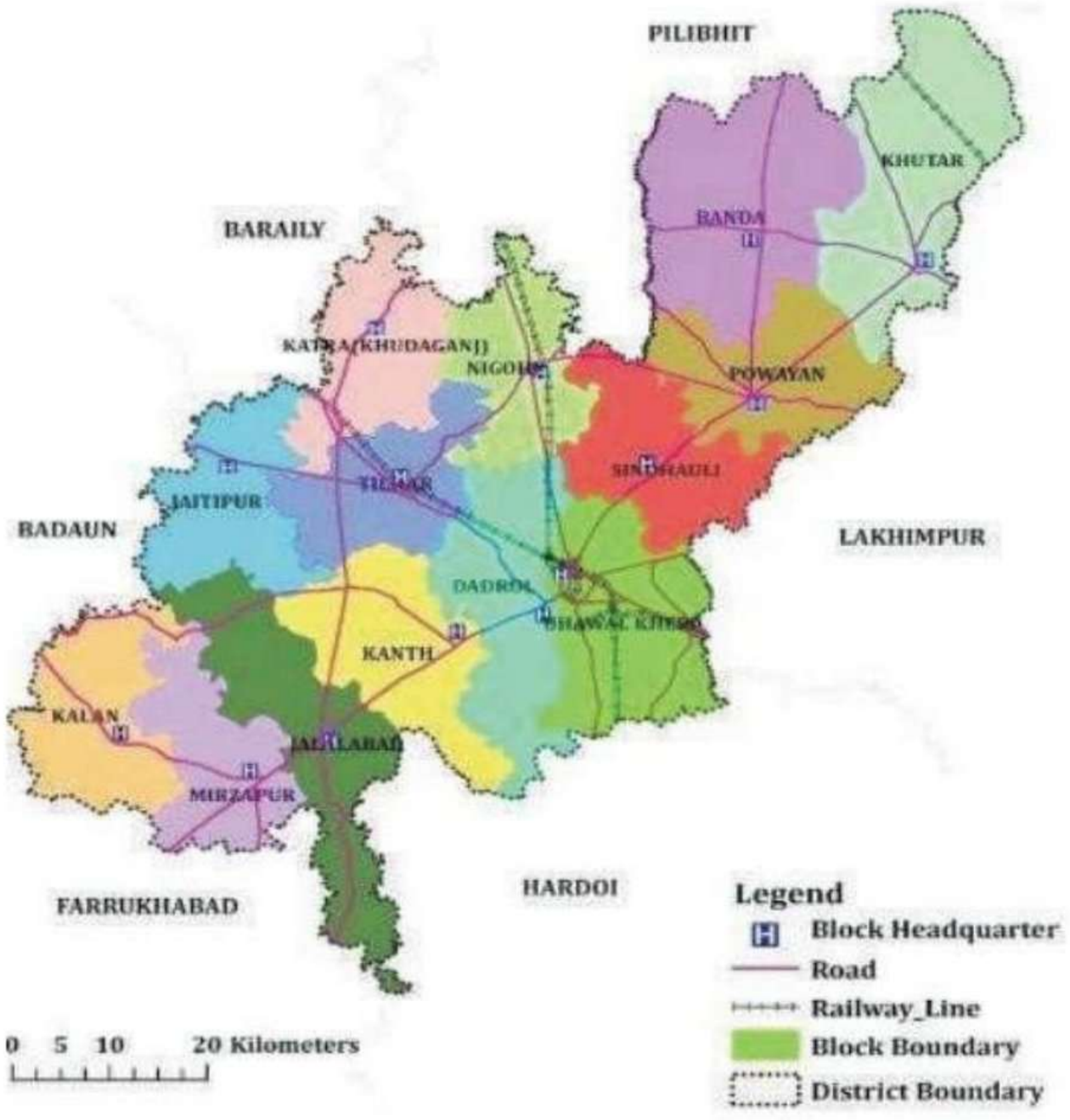
Administrative map of Shahjahanpur district, UP



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I- Sewage: The above information is to be submitted on the basis of end point sample analysis of the concerned drain.

Drain (city/town)	Total Drain Capacity (Approx)	Generation/day (MLD)	PH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride etc)	DO	TC	FC	Outlet flow	Colour/ odour	Discharged Into
MISHRIPUR DRAIN SHAHJAHANPUR	1.0	0.5	7.4	42	520	96	853	Chromium-0.1087 Copper-0.0187 Lead-ND Iron-2.8984 Zinc-0.2627 Manganese-0.2048 Arsenic-0.003 Mercury-ND	2.1	1400000	1100000	50	light blackish	River Khanaut
SARAI KAAIYA (POLICE CHOKI) DRAIN	4.2	2.1	7.6	44	360	80	945	Chromium-0.1087 Copper-0.0285 Lead-ND Iron-1.1874 Zinc-0.2596 Manganese-1.7073 Arsenic-0.002 Mercury-ND	1.6	1200000	920000	2.1	light blackish	River Khanaut
ROJA AHMADPUR DRAIN	0.80	0.4	7.3	48	320	84	625	Chromium-0.3001 Copper-0.0480 Lead-0.0769 Iron-2.4481 Zinc-0.3583 Manganese-0.2403 Arsenic-0.002 Mercury-ND	0	1300000	1100000	0.4	light blackish	River Khanaut
BANKA GHAT DRAIN (LEFT)	4.00	2	7.4	93	640	96	715	Chromium-0.1565 Copper-0.0187 Lead-ND Iron-0.7732 Zinc-0.0876 Manganese-0.2473 Arsenic-ND Mercury-ND	0	14000000	8400000	2	light blackish	River Khanaut

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BANKA GHAT DRAIN (RIGHT)	1.00	0.5	7.3	44	480	86	672	Chromium-0.1087 Copper-0.285 Lead-0.0769 Iron-5.5278 Zinc-0.2468 Manganese-0.5450 Arsenic-.008 Mercury-ND	1.3	8400000	7900000	0.5	light blackish	River Khanaut
ROSHANGANJ D/S HANUMATDHAM DRAIN NEAR RAILWAY LINE, SHAHJAHANPUR	7.0	3.5	7.1	45	360	88	832	Chromium-0.1087 Copper-0.0382 Lead-0.769 Iron-1.7998 Zinc-0.0939 Manganese-0.2615 Arsenic-0.002 Mercury-ND	1.2	7900000	6300000	3.5	light blackish	River Khanaut
DALELGANJ KHWAJA FIROZ DRAIN	2.6	1.3	7.7	48	320	98	636	Chromium-0.1087 Copper-0.0578 Lead-0.1538 Iron-10.6786 Zinc-0.3424 Manganese-1.3104 Arsenic-0.012 Mercury-ND	2.1	6300000	4800000	1.3	light blackish	River Khanaut
HAMNUMATDHAM DRAIN ROSHANGANJ, SHAHJAHANPUR	3.0	1.5	7.6	46	360	88	864	Chromium-0.2044 Copper-0.0382 Lead-0.0769 Iron-4.1951 Zinc-0.1959 Manganese-0.4033 Arsenic-0.005 Mercury-ND	1.1	8400000	7900000	1.5	light blackish	River Khanaut
ANTA CHAURAHA & BRIJ BIHAR DRAIN	4.0	2	7.3	54	400	86	740	Chromium- Copper- Lead- Iron- Zinc- Manganese- Arsenic- Mercury-	0	9200000	8400000	2	light blackish	River Khanaut

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BAHADURPUR & CHAMKANI KARWAL DRAIN	3.8	1.9	7.4	58	520	82	680	Chromium- Copper- Lead- Iron- Zinc- Manganese- Arsenic- Mercury-	1.3	1400000	1200000	1.9	light blackish	River Khanaut
KAKRA DRAIN, SHAHJAHANPUR	8.0	4	7.2	62	400	96	928	Chromium- Copper- Lead- Iron- Zinc- Manganese- Arsenic- Mercury-	1	7900000	6300000	4	light blackish	River Khanaut/ River Garrah
AZIZGANJ DRAIN, SHAHJAHANPUR	2.6	1.3	7.3	48	480	80	748	Chromium-0.1565 Copper-0.0187 Lead-ND Iron-2.6102 Zinc-0.1449 Manganese-0.3324 Arsenic-0.004 Mercury-ND	1.1	7900000	6300000	1.3	light blackish	River Khanaut/ River Garrah
YUNUS KHEL DRAIN, SHAHJAHANPUR	11.2	5.6	7.4	72	240	88	640	Chromium-0.0608 Copper-0.0968 Lead-0.2308 Iron-3.9429 Zinc-1.0494 Manganese-0.3891 Arsenic-0.004 Mercury-ND	0	9200000	8400000	5.6	light blackish	River Khanaut/ River Garrah
BAKSHI DRAIN JALALABAD ROAD PIPLAULA, SHAHJAHANPUR	3.0	1.5	6.2	72	520	98	1020	Chromium-00130 Copper-0.0089 Lead-0.0769 Iron-1.5476 Zinc-0.7054 Manganese-0.1269 Arsenic-0.002 Mercury-ND	0	16000000	14000000	1.5	blackish	River Khanaut/ River Garrah
KHAWAJA FIROJ DRAIN, SHAHJAHANPUR	1.40	0.70	7.6	50	360	84	664	Chromium-0.1087 Copper-0.0089 Lead-0.0769 Iron-0.5211 Zinc-0.1672	1.9	7900000	6300000	.0.70	light blackish	River Khanaut/ River Garrah

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								Manganese-0.5450 Arsenic-ND Mercury-ND						
ROJA AHAHMADPUR, RETI DRAIN, SHAHJAHANPUR	2.6	1.3	7.5	69	480	94	822	Chromium-0.1087 Copper-ND Lead-ND Iron-1.1154 Zinc-0.0462 Manganese-0.2828 Arsenic-0.002 Mercury-ND	1.2	9200000	8400000	1.3	light blackish	River Khanaut/ River Garrah
MEHMURIYA JALALNAGAR DRAIN SHUBHAS NAGAR, SHAHJAHANPUR	5.0	2.5	7.3	54	400	88	720	Chromium-0.2522 Copper-0.0675 Lead-0.1538 Iron-5.0415 Zinc-0.4793 Manganese-0.4741 Arsenic-0.005 Mercury-ND	0	8400000	7900000	2.5	light blackish	River Khanaut/ River Garrah

- **NOTE-** Treatment of Total Coliform and Fecal Coliform will be done through STP, for this purpose Ultra Violet Line is installed in STP. After treatment Total Coliform and Fecal Coliform will be within standard.

2. STP for treating the sewage of the drains ultimately flowing to river ganga or its tributaries

Existing STP (location & capacity)	Capacity (operational)	Inlet/ Outlet water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point	Proposed/ under construction STP With completion date
Maghai Tola, Capacity-40 MLD (Under Establisation)	5 MLD. STP is Under Establishment	4.95 MLD. STP is under establishment hence sample is not taken and analysed.	1 drain tapped out 17 drain	2.48 MLD	River Khannaut & River Garrah	95% work completed, remaining work will be completed by the first week of April 2024.

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2.1 STP ADDITIONAL INFORMATION

NAME OF DRAIN	POSITION OF STP WITH CAPACITY	GEO/COORDINATES	DISCHARGE QUANTITY FROM THE STP IN THE DRAIN	TOTAL PER DAY DISCHARGE FROM THE DRAIN INTO THE RIVER
Under Construction	40 MLD STP (Under Construction)	$27^0$51'06.7"N $79^0$54'35.4"E	No Discharge due to Under Construction	No Discharge due to Under Construction

Proposed STP (location & capacity)	Capacity (operational)	Inlet/ Outlet water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point Geo code/ sampling point	Proposed/ under construction STP with completion date
THERE IS NO ANOTHER STP IS PROPOSED IN DISTRICT SHAHJAHANPUR						

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3. Hotels/ Ashrams/Dharmshalas/residential complexes abutting river Ganga or its tributaries

Name of ULB	Number of Hotels/ ashrams/ dharamshalas	Consent to establish/ operate	STP	Discharge point	Action taken
Nagar Nigam Shahjahanpur	29	01	01	Municipal Drain	Notice Sent
Nagar Palika Parishad Tilhar	03	00	No STP	Municipal Drain	Notice Sent
Nagar Palika Parishad Powayan	00	00	No STP	No discharge	Notice Sent
Nagar Palika Parishad Jalalabad	00	00	No STP	No discharge	Notice Sent
Nagar Panchayat Nigohi	00	Not required	No STP	No discharge	Not required
Nagar Panchayat Khutar	00	Not required	No STP	No discharge	Not required
Nagar Panchayat Khudaganj	00	Not required	No STP	No discharge	Not required
Nagar Panchayat Katra	00	Not required	No STP	No discharge	Not required
Nagar Panchayat Kant	02	NO CTE/CTO	No STP	Municipal Drain	Notice Sent
Nagar Panchayat Kalan	00	Not required	No STP	No discharge	Not required
Nagar Panchayat Banda	00	Not required	No STP	No discharge	Not required
Nagar Panchayat Allahganj	00	Not required	No STP	No discharge	Not required
TOTAL	**34**	**01**	**01**	**Municipal Drain**	**Notice sent to 33 Hotel/Ashram**

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List of Hotel/Darmshala

Name of ULB	Number of Hotels/ ashrams/ dharamshalas
Nagar Nigam Shahjahanpur	1. M/s The Grand ARC, Navada Indepur, opposite Mumuksha ashram 2. Babylon Resort, 3. Hotel Swagat, Rickshaw Stand Bahadur ganj Road, Sadar Bazar, 4. Singh Guest House, Singh Hospital, Kutchery Road,Khirni Bagh 5. Pratiksha Home, 6. Hotel All is Well and Resturant, Azizganj, 7. City Home Stay, Near SP Office Kutchery Road, 8. Hotel Arhan 9. Hotel Shri Maha Kali Palace, Old Flyover, Sadar Bazar 10. Durga Hotel Inn, Officers Coloney 11. Hotel Paradise, Station Road, Ram Nagar Coloney 12. Hotel Grand Inn, Khirni Bagh, Sadar Bazar. 13. City Home Stay Guest House, Indira Nagar Coloney Road, Near City Public School, Brij Vihar Coloney 14. Hotel Royal Panna, Town Hall Road, Sadar Bazar 15. Hotel Satayam, Town Hall Road, Sadar Bazar 16. Hotel Sahara, NH24, Marha 17. Surya Hotel, Lala Tele Bajariya, Malgodam Road, Badujai Awwal 18. Hotel The Arc, Sondha 19. Mezban Hotel, Shahjahanpur Bye pasam Road 20. Hotel Park Inn, Near Police Chauki, Lodhipur 21. Rahi Tourist Bunalow, Kaench 22. Hotel Pathik, Marha, NH24, Tilhar Raod.

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	23. Kapoors Hut, Near Bareilly Mod 24. Aasha Mannat Guest House, Near Railway Settlement, Rosa, 25. Pankhi Hotel, Near Kali Badi Mandir, Khirni Bazar, 26. Hotel Imroz, Kachcha Katra More Road, Kachcha Katra, 27. Taj Hotel & Lodge, Station Road, Near Railway Station 28. Laxmi Hotel & Lodge, Ram Nagar Coloney 29. Hotel Classic, Station Road, Ramnagar Coloney
Nagar Palika Parishad Tilhar	1. Diamond Hotel, Mohalla Pachasa, Tilhar 2. S.K Restorent Moh- Nizamganj Tilhar 3. Couple Way Moh- Ummarpur Sarauroad
Nagar Panchayat Kant	1. Shimla Dhaba, Kant 2. Bharat Dhaba, Kant

4. IV. Industrial Effluent discharge by industries whose effluent is ultimately flowing to river Ganga or its tributaries

Total number of Industries	Daily effluent discharge	Treatment available (CETP/ PETP/ ETP operational capacity)	Effluent quality analysis (outlet of treatment plants)	GAP	Proposed/ under construction treatment project (with timeline)	Number of defaulting units- Action taken	Industrial solid waste generated/ day	Manner of disposal (Industrial solid waste)
16	34412 KLD	34412 KLD	List is on the next page.	No GAP	NO Proposed/ Under Construction	NO defaulting Unit	ASH.-222.792 MTD PRESS MUD-885 MTD	*Boiler Ash*-Disposed in low lying area and used in Bio-Fertilizer. *Press Mud*-used as manure.

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Details of GPI Categories Industries, Shahjahanpur

S. No	Name and Address of the unit	District	Production Capacity	Sector	ETP Status	Discharge	Intermediate and Final Discharge point	Environment Compliance Status (Complying/non Complying)
1	Bajaj Hindustan LTD (Sugar unit), Unit Maqsudapur, Block Banda, Shahjahanpur.	Shahjahanpur	10000 TCD	Sugar	Installed & operating	1000 KLD	No Discharge Used in Irrigation	Complying
2	Bajaj Energy Ltd, unit Maqsudapur, Block banda, Shahjahanpur	Shahjahanpur	90 MW	Thermal Power plants	Installed & operating	980 KLD	No Discharge Used in Irrigation	Complying
3	Dalmia Chini Mills Distillery Unit Nigohi, Shahjahanpur	Shahjahanpur	110 LED	Distillery	Installed & operating	ZERO	Incineration Boiler Throw MEE	Complying
4	Dalmiya Chini Mills, Nigohi, S	Shahjahanpur	1000 TCD	Sugar	Installed & operating	2000 KLD	No Discharge used in irrigation	Complying
5	K.R Pula & Papers Ltd (Unit 1) Shahjahanpur.	Shahjahanpur	2000 TCD	Paper	Installed & operating	3276 KLD	Recycled in Bagasse (Partially Discharge in bakshi Drain)	Complying
6	K.R Pula & Papers Ltd (Unit 2) Shahjahanpur.	Shahjahanpur	4000 TCD	Paper	Installed & operating	9400 KLD	Recycled in Bagasse (Partially Discharge in bakshi Drain)	Complying
7	Kisan Shakari Chini Mills Ltd Powayan, Shahjahanpur	Shahjahanpur	2500 TCD	Sugar	Installed & operating	250 KLD	No Discharge Used in Irrigation	Complying
8	Kisan Shakari Chini Mills Ltd Tilhar, Shahjahanpur	Shahjahanpur	2500 TCD	Sugar	Installed & operating	250 KLD	No Discharge Used in Irrigation	Complying
9	Kribhco Shyam Fertilizer, Piprola Shahjahanpur	Shahjahanpur	Urea-1095000 MTA	Fertilizer	Installed & operating	110 KLD	No Discharge Used in Irrigation	Complying

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10	Rosa Power Supply co Ltd (Stage-1) Rosa, Shahjahanpur	Shahjahanpur	Power Generation of 600 MW (2*300MW) Power plant	Thermal Power plants	Installed & operating	7296 KLD	Recycled in process	Complying
11	Rosa Power Supply co Ltd (Stage-2) Rosa, Shahjahanpur	Shahjahanpur	Power Generation of 600 MW (2*300MW) Power plant	Thermal Power plants	Installed & operating	9360 KLD	Recycled in Process	Complying
12	Awadh Sugar & Energy unit Rosa Sugar Works, Rosa Shahjahanpur	Shahjahanpur	450 TPD	Sugar	Installed & operating	450 KLD	No Discharge Used in Irrigation	Complying
13	United Sprites Ltd Rosa, Shahjahanpur	Shahjahanpur	ENA 30 KLD	Distillery	Installed & operating	40 KLD	Self-Closed	Complying
14	Rajshree Fine Chemicals Ltd, Katra Shahjahanpur	Shahjahanpur	160 KLD	Distillery	Installed & operating	ZERO	Incineration Boiler Throw MEE	Complying
15	M/S Risikesh Cement Company Shahjahanpur	Shahjahanpur	50 TPD	Cement	Installed & operating	ZERO	No Effluent Generation	Complying
16	Malbros International Pvt Ltd Bhatiyura, Tilhar,Shahjhanpur	Shahjahanpur	160 KLD	Distillery	Installed & operating	ZERO	Incineration Boiler Throw MEE	Complying

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V. Regulation of Flood Plain Zone:

Area- cities/ towns	Notification of flood plain zone	Demarcation		Encroachment & direct discharge GeoCode/ Sampling point	Encroachment Removal Status	Timeline for completion
		No development zone pillars	Regulatory zone pillars			
SHAHJAHANPUR	Notification done along the B.D. Bundh on board.	479	367	Lattitude-27.653666 Longitude – 79.425437 Max. Discharge-610839 Qusec.	No Encroachment found in flood zone	Completed

6. Afforestation/ Plantation along the bank of River Ganga and its tributaries and their flood plain zones

Area- cities/ towns	Total plantation Geo Code/ Sampling Point				Proposed project	Time line
	Name of River	Area (In HA)	No. of Sampling Plants (2023-24)	Geo Code/Sampling Point		
Kalan & Mirzapur	Ganga River	113	180800	27.634935°N 79.417083°E 27.650825°N 79.366199°E	5,32,800 in financial year 2024-25	July-August 2024
Powayan, Banda & Khutar	Gomti River	66	105600	28.217629°N 80.295579°E		
Shahjahanpur	Khannaut River	25	40000	27.884370°N 79.924058°E		
Powayan	Bhaisi River	5	8000	28.175141°N 80.173806°E		
Shahjahanpur	Garrah River	27.81	44500	27.954473°N 79.857827°E		
TOTAL	**05 RIVER**	**236.81**	**378900**			

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7. Mining and Stone Crushing in river bed and flood plain zone of River Ganga and its tributaries:

Area of mining	FIR/ case registered/ year	Vehicles/ mineral seized	Action taken status	Cases pending in Court	Enforcement of EMGSM 2020 and Sustainable sand mining management guidelines 2016
NIL	No FIR/Case have registered in 2023-24	No any Vehicle/mineral seized	Not required due to No FIR/Case	There is no any pending Court Case	Followed by Deptt.

1. The Tribunal has already directed for furnishing following information by order dated 24.11.2023:-

(1) District Ganga Protection Plan at city/ town level

District Ganga Protection Committee (DGPC) is required to formulate the action plan for each city and town located on main stem of river Ganga and its tributary and such Action Plan has to be prepared in accordance with the River Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016 (para 6 and 55).

- The District Ganga Plan for Shahjahanpur (UP) has been developed as a Model District Ganga Plan in a joint effort with the members of the District Ganga Committee Shahjahanpur, NMCG, SMCG and GIZ experts. A planning cycle of 5 years is foreseen, which started in 2022 with the preparation of the DGP. The progress is monitored and evaluated during the implementation which then leads to the selection of KWMls for the next 5-Year planning cycle and the elaboration of new interventions, specific targets and concrete action plan. DGP Shahjahanpur has submitted to State Mission for Clean Ganga on 23 August 2023 for Approval.

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(2) Contents of the Action Plan (Consolidated District Wise Action Plan including each City and Town abutting river Ganga and its Tributary)

1. Sewage Management

(i) Sewage generation (for entire District and individual town wise):

Sl. No.	Name of ULB	Total Sewage Generation (MLD)
1	Nagar Nigam, Shahjahanpur	42.48
2	Nagar Palika Parishad Tilhar	8.1
3	Nagar Palika Parishad Powayan	3.60
4	Nagar Palika Parishad Jalalabad	5.07
5	Nagar Panchayat Nigohi	2.73
6	Nagar Panchayat Khutar	2.27
7	Nagar Panchayat Khudaganj	1.95
8	Nagar Panchayat Katra	4.30
9	Nagar Panchayat Kant	3.60
10	Nagar Panchayat Kalan	2.12
11	Nagar Panchayat Banda	2.74
12	Nagar Panchayat Allahganj	1.95
	TOTAL SEWAGE OF ENTIRE DISTRICT	**80.91**

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(ii) Existing Sewage Treatment Capacities :

- **32 KLD FSTP in operation & 40 MLD STP (Under Construction)**

(iii) Quantity of sewage is being treated (utilization capacity) :Performance of STPs particularly for FC :

- **Utilization at Present – 0 MLD (due to under Construction)**
- **Gap in sewage Treatment – 13.178 MLD**
- **Sewage Treatment after operation of STP at full capacity – 40 MLD**

(iv) Where treated sewage is being discharged (to Ganga or tributaries) :

- **Not applicable due to under Construction.**

(v) Reasons for Under-utilization of STPs (Connectivity of Households/ laying of sewer lines)

- **The STP is in under construction and House hold connection & laying of sewer lines of going on in District.**

(vi) Current Gap in sewage treatment :

- **Total Sewage Generation – 42.48MLD**
- **Faecal Sludge Treatment at Present – 32 KLD**
- **Gap – 2.48 MLD**
- **Sewage Treatment after the functional of STP at full capacity – 40 MLD**

(vii) Time bound plan for bridging the gap and tying up with financial arrangements and not delaying Tendering and identifying executing agencies or having any other issues :

- **No. 32 KLD FSTP in operation.**

(viii) Where untreated sewage (when there is no STP) is discharged (Ganga /Tributaries):

- **There is no untreated sewage directly going into River Ganga.**

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2.2 Drains joining Ganga and Tributary

i) Number of drains carrying sewage – sullage or industrial waste water joining Ganga /Tributaries with their quantity and quality

Drain (city/town)	Total Drain Capacity (Approx)	Generation/day (MLD)	PH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride etc)	DO	TC	FC	Outlet flow	Colour/ odour	Discharged Into
MISHRIPUR DRAIN SHAHJAHANPUR	1.0	0.5	7.4	42	520	96	853	Chromium-0.1087 Copper-0.0187 Lead-ND Iron-2.8984 Zinc-0.2627 Manganese-0.2048 Arsenic-0.003 Mercury-ND	2.1	1400000	1100000	50	light blackish	River Khanaut
SARAI KAAIYA (POLICE CHOKI) DRAIN	4.2	2.1	7.6	44	360	80	945	Chromium-0.1087 Copper-0.0285 Lead-ND Iron-1.1874 Zinc-0.2596 Manganese-1.7073 Arsenic-0.002 Mercury-ND	1.6	1200000	920000	2.1	light blackish	River Khanaut
ROJA AHMADPUR DRAIN	0.80	0.4	7.3	48	320	84	625	Chromium-0.3001 Copper-0.0480 Lead-0.0769 Iron-2.4481 Zinc-0.3583 Manganese-0.2403 Arsenic-0.002 Mercury-ND	0	1300000	1100000	0.4	light blackish	River Khanaut
BANKA GHAT DRAIN (LEFT)	4.00	2	7.4	93	640	96	715	Chromium-0.1565 Copper-0.0187 Lead-ND Iron-0.7732 Zinc-0.0876 Manganese-0.2473 Arsenic-ND Mercury-ND	0	14000000	8400000	2	light blackish	River Khanaut

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BANKA GHAT DRAIN (RIGHT)	1.00	0.5	7.3	44	480	86	672	Chromium-0.1087 Copper-0.285 Lead-0.0769 Iron-5.5278 Zinc-0.2468 Manganese-0.5450 Arsenic-.008 Mercury-ND	1.3	8400000	7900000	0.5	light blackish	River Khanaut
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HAMNUMATDHAM DRAIN ROSHANGANJ, SHAHJAHANPUR	3.0	1.5	7.6	46	360	88	864	Chromium-0.2044 Copper-0.0382 Lead-0.0769 Iron-4.1951 Zinc-0.1959 Manganese-0.4033 Arsenic-0.005 Mercury-ND	1.1	8400000	7900000	1.5	light blackish	River Khanaut
ANTA CHAURAHA & BRIJ BIHAR DRAIN	4.0	2	7.3	54	400	86	740	Chromium- Copper- Lead- Iron- Zinc- Manganese- Arsenic- Mercury-	0	9200000	8400000	2	light blackish	River Khanaut

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BAHADURPUR & CHAMKANI KARWAL DRAIN	3.8	1.9	7.4	58	520	82	680	Chromium- Copper- Lead- Iron- Zinc- Manganese- Arsenic- Mercury-	1.3	1400000	1200000	1.9	light blackish	River Khanaut
KAKRA DRAIN, SHAHJAHANPUR	8.0	4	7.2	62	400	96	928	Chromium- Copper- Lead- Iron- Zinc- Manganese- Arsenic- Mercury-	1	7900000	6300000	4	light blackish	River Khanaut/ River Garrah
AZIZGANJ DRAIN, SHAHJAHANPUR	2.6	1.3	7.3	48	480	80	748	Chromium-0.1565 Copper-0.0187 Lead-ND Iron-2.6102 Zinc-0.1449 Manganese-0.3324 Arsenic-0.004 Mercury-ND	1.1	7900000	6300000	1.3	light blackish	River Khanaut/ River Garrah
YUNUS KHEL DRAIN, SHAHJAHANPUR	11.2	5.6	7.4	72	240	88	640	Chromium-0.0608 Copper-0.0968 Lead-0.2308 Iron-3.9429 Zinc-1.0494 Manganese-0.3891 Arsenic-0.004 Mercury-ND	0	9200000	8400000	5.6	light blackish	River Khanaut/ River Garrah
BAKSHI DRAIN JALALABAD ROAD PIPLAULA, SHAHJAHANPUR	3.0	1.5	6.2	72	520	98	1020	Chromium-00130 Copper-0.0089 Lead-0.0769 Iron-1.5476 Zinc-0.7054 Manganese-0.1269 Arsenic-0.002 Mercury-ND	0	16000000	14000000	1.5	blackish	River Khanaut/ River Garrah
KHAWAJA FIROJ DRAIN, SHAHJAHANPUR	1.40	0.70	7.6	50	360	84	664	Chromium-0.1087 Copper-0.0089 Lead-0.0769 Iron-0.5211 Zinc-0.1672	1.9	7900000	6300000	.0.70	light blackish	River Khanaut/ River Garrah

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								Manganese-0.5450 Arsenic-ND Mercury-ND						
ROJA AHAHMADPUR, RETI DRAIN, SHAHJAHANPUR	2.6	1.3	7.5	69	480	94	822	Chromium-0.1087 Copper-ND Lead-ND Iron-1.1154 Zinc-0.0462 Manganese-0.2828 Arsenic-0.002 Mercury-ND	1.2	9200000	8400000	1.3	light blackish	River Khanaut/ River Garrah
MEHMURIYA JALALNAGAR DRAIN SHUBHAS NAGAR, SHAHJAHANPUR	5.0	2.5	7.3	54	400	88	720	Chromium-0.2522 Copper-0.0675 Lead-0.1538 Iron-5.0415 Zinc-0.4793 Manganese-0.4741 Arsenic-0.005 Mercury-ND	0	8400000	7900000	2.5	light blackish	River Khanaut/ River Garrah

NOTE- Treatment of Total Coliform and Fecal Coliform will be done STP, for this purpose Ultra Violet Line is installed in STP. After treatment Total Coliform and Fecal Coliform will be within the bathing standard.

(ii) Drains joining outside city and town limits but, either joining in village or nearby town:

- **No, TABLE AS ABOVE 2.1**

(iii) Inclusion of sewage flowing in drains into total sewage generation figures of each city and town and their interception and diversion to STPs:

- **01 STP is under construction at MAGHAI TOLA, Capacity – 40 MLD**

2. Septage management (In case of no STP)

i. Status of Septage management (with reference to FSTP/STP):

- **32 KLD FSTP in operation.**

ii. Management of Grey water and its disposal:

- **40 MLD STP (Under Construction)**

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2.4 Industrial Pollution Control

3. Attach the list on no. of industries generating trade effluents, their place of disposal and compliance including CETPs (town wise) :

Details of GPI Categories Industries, Shahjahanpur

S. No	Name and Address of the unit	District	Production Capacity	Sector	ETP Status	Discharge	Intermediate and Final Discharge point	Environment Compliance Status (Complying/non Complying)
1	Bajaj Hindustan LTD (Sugar unit), Unit Maqsudapur, Block Banda, Shahjahanpur.	Shahjahanpur	10000 TCD	Sugar	Installed & operating	1000 KLD	No Discharge Used in Irrigation	Complying
2	Bajaj Energy Ltd, unit Maqsudapur, Block banda, Shahjahanpur	Shahjahanpur	90 MW	Thermal Power plants	Installed & operating	980 KLD	No Discharge Used in Irrigation	Complying
3	Dalmia Chini Mills Distillery Unit Nigohi, Shahjahanpur	Shahjahanpur	110 LED	Distillery	Installed & operating	ZERO	Incineration Boiler Throw MEE	Complying
4	Dalmiya Chini Mills, Nigohi, S	Shahjahanpur	1000 TCD	Sugar	Installed & operating	2000 KLD	No Discharge used in irrigation	Complying
5	K.R Pula & Papers Ltd (Unit 1) Shahjahanpur.	Shahjahanpur	2000 TCD	Paper	Installed & operating	3276 KLD	Recycled in Bagasse (Partially Discharge in bakshi Drain)	Complying
6	K.R Pula & Papers Ltd (Unit 2) Shahjahanpur.	Shahjahanpur	4000 TCD	Paper	Installed & operating	9400 KLD	Recycled in Bagasse (Partially Discharge in bakshi Drain)	Complying
7	Kisan Shakari Chini Mills Ltd Powayan, Shahjahanpur	Shahjahanpur	2500 TCD	Sugar	Installed & operating	250 KLD	No Discharge Used in Irrigation	Complying
8	Kisan Shakari Chini Mills Ltd Tilhar, Shahjahanpur	Shahjahanpur	2500 TCD	Sugar	Installed & operating	250 KLD	No Discharge Used in Irrigation	Complying
9	Kribhco Shyam Fertilizer, Piprola Shahjahanpur	Shahjahanpur	Urea-1095000 MTA	Fertilizer	Installed & operating	110 KLD	No Discharge Used in Irrigation	Complying

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10	Rosa Power Supply co Ltd (Stage-1) Rosa, Shahjahanpur	Shahjahanpur	Power Generation of 600 MW (2*300MW) Power plant	Thermal Power plants	Installed & operating	7296 KLD	Recycled in process	Complying
11	Rosa Power Supply co Ltd (Stage-2) Rosa, Shahjahanpur	Shahjahanpur	Power Generation of 600 MW (2*300MW) Power plant	Thermal Power plants	Installed & operating	9360 KLD	Recycled in Process	Complying
12	Awadh Sugar & Energy unit Rosa Sugar Works, Rosa Shahjahanpur	Shahjahanpur	450 TPD	Sugar	Installed & operating	450 KLD	No Discharge Used in Irrigation	Complying
13	United Sprites Ltd Rosa, Shahjahanpur	Shahjahanpur	ENA 30 KLD	Distillery	Installed & operating	40 KLD	Self-Closed	Complying
14	Rajshree Fine Chemicals Ltd, Katra Shahjahanpur	Shahjahanpur	160 KLD	Distillery	Installed & operating	ZERO	Incineration Boiler Throw MEE	Complying
15	M/S Risikesh Cement Company Shahjahanpur	Shahjahanpur	50 TPD	Cement	Installed & operating	ZERO	No Effluent Generation	Complying
16	Malbros International Pvt Ltd Bhatiyura, Tilhar,Shahjhanpur	Shahjahanpur	160 KLD	Distillery	Installed & operating	ZERO	Incineration Boiler Throw MEE	Complying

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(3) Water quality status

Provide water quality status of Ganga and its tributaries in the District and city/ town in terms of its fitness for Bathing water quality that is, FC and FS:

RIVER WATER SAMPLING JANUARY-2024

SR. NO.	Name of River	Sampling Point	Dt. Of Sampling	Colour (Hazen/Appearance)	Odour	pH	D.O (mg/L)	B.O.D (mg/L)	C.O.D (mg/L)	Hardness as $CaCO_3$ (mg/L)	Calcium as Ca^{++} (mg/L)	Magnesium as Mg^{++} (mg/L)	Chloride as Cl^- (mg/L)	Alkalinity as $CaCO_3$ (mg/L)	TDS (mg/L)	TSS (mg/L)	TS (mg/L)	E.C. (µS/cm)	TURBIDITY (NTU)	Total Coliform (MPN/100ml)	Fecal Coliform (MPN/100ml)
1	Ramganga	D/S Farrukhabad road ,Allahganj	02.01..2024	18	Odourless	8.2	9.8	2.4	24	146	32.8	15.6	16	52	338	46	384	507	40	4800	4000
2	Ramganga	D/S Farrukhabad road ,Allahganj	05.01..2024	20	Odourless	8.0	9.9	2.5	20	144	31.2	16.0	14	50	284	54	338	426	42	4800	4000
3	Garrah river	U/S Chaurera village, Roza	08.01..2024	15	Odourless	7.8	8.7	2.4	20	160	35.2	17.5	16	54	256	58	314	384	40	13000	9200
4	Garrah river	shahjahanpur road Bridge	08.01..2024	25	Odourless	8.0	8.4	3.1	28	168	36.8	18.5	22	58	324	60	384	486	54	14000	11000
5	khannaut river	shahjahanpur road Bridge	08.01..2024	25	Odourless	8.0	8.3	3.8	32	178	37.6	20.4	24	66	348	70	418	522	58	2200	1700
6	Ramganga	D/S Farrukhabad road ,Allahganj	09.01..2024	20	Odourless	8.0	9.8	2.4	20	146	32.8	15.6	16	48	288	60	348	432	40	4000	3500

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7	Ramganga	D/S Farrukhabad road ,Allahganj	12.01..2024	20	Odourless	7.6	9.6	2.3	16	150	31.2	17.5	14	44	264	48	312	396	42	4000	3500
8	Ramganga	D/S Farrukhabad road ,Allahganj	16.01..2024	20	Odourless	7.8	9.7	2.4	20	154	32.0	18.0	14	46	274	58	332	411	44	3500	2600
9	Gomti river	D/S powayan khutar road bridge	18.01..2024	12	Odourless	8.2	8.8	2.1	20	144	32.0	15.6	18	86	228	40	268	342	30	2700	1400
10	Ramganga	D/S Farrukhabad road ,Allahganj	19.01..2024	20	Odourless	8.0	9.8	2.5	20	150	31.2	17.5	16	44	252	56	308	378	38	4600	3500
11	Garrah river	U/S Chaurera village, Roza	22.01..2024	15	Odourless	8.0	8.9	2.5	24	156	32.8	18.0	14	44	264	60	324	396	44	12000	8400
12	Garrah river	shahjahanpur road Bridge	22.01..2024	25	Odourless	7.8	8.2	3.0	32	170	43.2	15.1	24	60	373	68	441	560	50	3800	2700
13	khannaut river	shahjahanpur road Bridge	22.01..2024	25	Odourless	8.2	8.1	3.7	32	180	40.8	19.0	26	56	366	78	444	549	40	3100	2600
14	Ramganga	D/S Farrukhabad road ,Allahganj	23.01..2024	20	Odourless	8.0	9.9	2.3	24	146	33.6	15.1	12	40	274	60	334	411	40	4000	2600
15	Ramganga	D/S Farrukhabad road ,Allahganj	26.01..2024	20	Odourless	7.8	9.8	2.4	24	150	31.2	17.5	14	38	264	62	326	396	38	6300	4600
16	Ramganga	D/S Farrukhabad road ,Allahganj	30.01..2024	20	Odourless	7.8	9.9	2.3	20	148	32.0	16.5	16	42	328	38	366	492	42	4600	2600

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(4) Notification of **Flood Plain Zones** :

- **Notification done along the B.D. Bundh on board.**
- **14.560 KM B.D. Bundh is constructed along the Right bank of River Ganga**
- **There is No encroachment found near B.D. Bundh at river Ganga**
- **Demarcation of Flood Plain Zone : Completed**
  - **(i) No. of development zone pillars is 479**
  - **(ii) No. of Regulatory zone pillars is 369**

(5) Issues relating to **Environmental Flow**:

- **There is no any issue related to Environmental Flow in District Shahjahanpur**

- **Two location on river/s where joint E-Flow monitoring is being done regularly-**
  - **(i) Shahjahanpur Road Bridge, Shahjahanpur**
  - **(ii) Pali Shahabad Road Bridge, Shahjahanpur**

- **04 Rivers are monitoring Frequently & Weekly by UPPCB Bareilly.**
  - **(i) Garrah River**
  - **(ii) Khannaut River**
  - **(iii) Ramganga River**
  - **(iv) East Behgul River**

BEST PRACTICE

- UPOCMMS (UP Online Consent Management & Monitoring System)

Background:

Central Pollution Control Board (CPCB) plays role in abatement and control of pollution in the country by generating relevant data, providing scientific information, rendering technical inputs for formation of national policies and programs, training and development of manpower and organizing activities for promoting awareness at different levels of the Government and public. Central Pollution Control Board has planned to develop Online Consent Management and Monitoring System (OCMMS) for each state with

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help of National Informatics Centre (NIC) in all over India. In the year 7102, the Online Consent Management and Monitoring System (OCMMS) was implemented in Uttar Pradesh by the Central Pollution Control Board, its purpose to facilitate Industries to apply and Obtain on line for Consent to Establishment(CTE), Consent to Operate Water and Air (CTO Water & Air), Hazardous Waste Authorization, Bio-Medical Waste Authorization, Authorization under Plastic Waste Management Rule 7102, Authorization under Solid Waste Management Russia 7102, Authorization under E-waste Management Rules 7102, Authorization under CND Rules 7102.

Intervention:

To implement this process, Central Pollution Control Board organised Training programme & provided OCMMS software to Uttar Pradesh Pollution Control Board, site for this software is *upocmms.nic.in*. By using upocmms.nic.in one can apply for above said certificate from anywhere and can monitor his application, to whom it is pending and how long it was pending in some once account. At present *upocmms.nic.in* under Single Window System it is available through "NIVESH MITRA (niveshmitra.nic.in)"

Impact on public:

It had such a good impact on the public that there is no need to approach or call UPPCB office. Monitoring of application is very easy in all steps. After approval Certificate can be downloaded from nivesh mitra site or from **upocmms.nic.in.**

Key Outcome:

1. As all the applications are online, the status of Granted, Reject and Pending applications also remains online. Therefore, the status of applications available to everyone at all time. Result of this is all application are disposed within time or before time prescribed by UPPCB, HO and no pendency of application during the meeting of District Udyog Bandhu or Divisional Udyog Bandhu.
2. Industries have got the biggest benefit that the industrialist can monitor the application from his mobile or computer from wherever he is, at what stage his application is pending or if any query or approved. In case of query raised by uppcb email is send to registered email-id by Nivesh Mitra.
3. The certificate issued by the ***upocmms*** can be downloaded online, from its site or from Nivesh Mitra. for Need not to come to UPPCB office.
4. In the disposal of the application, the application is disposed of at several levels and finally the certificate is digitally signed by the competent authority, in this process it is known at what level the application has been pending for how long time. Regional Officer is

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Competent officers, keep monitoring continuously, if the application is pending with any officer after the prescribed period, then they order it for quick disposal.

5. Generated Certificate is available of all previous year on site and if required can be verified or download at any time by any person like Bank officials, Revenue Department officials etc.

Summary

1. It has become very convenient to each and every person if he forget/misplaced/damage certificate then need not to worry, certificate could be downloaded from site at any time.
2. Verification of certificate, which is produced by the any person concern, it is very easy to verify the certificate by putting application id in OCMMS site.

Lesson Learnt:

On line systems are very convenient for public as well as Department. We are about to use and adopt on line CTO, CTE, Hazardous waste and for other application On Line Reporting System. By Using on line reporting system disposal off application will be very fast.

- All Ganga Village (Near Ganga River) has declared as ODF+.
- Nagar Nigam Shahjahanpur Take a great initiative namely Kooda Dhan by co-ordination with NGO's.

(Prakhar Gupta)
Divisional Forest Officer/
Secretary-District Ganga Committee
Shahjahanpur

(Umesh Pratap Singh)
District Magistrate /
Chairman-District Ganga Committee
Shahjahanpur

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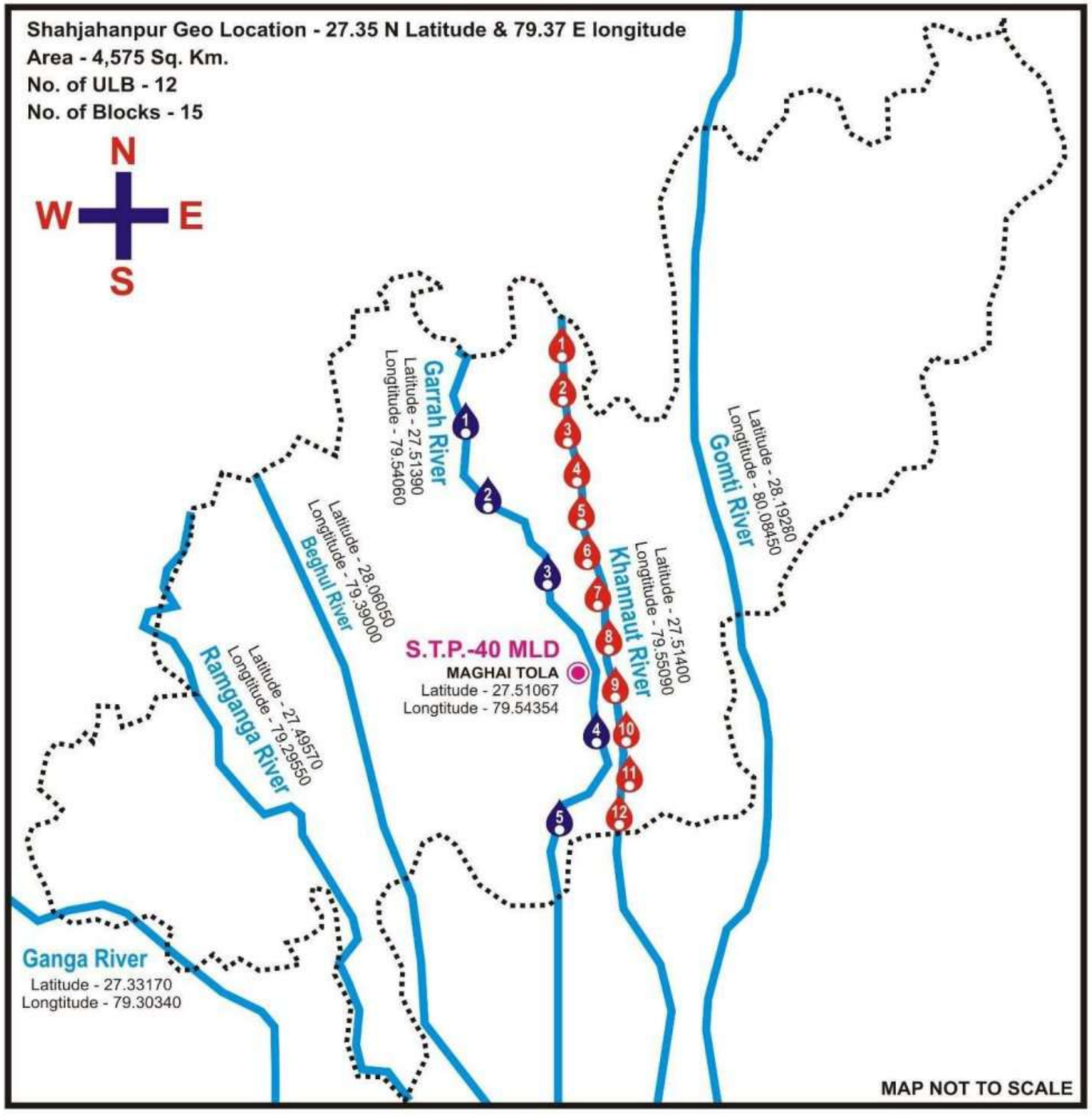
DISTRICT GANGA COMMITTEE-SHAHJAHANPUR



DRAIN DISCHARGE TO GARRAH RIVER

1- Kakra Drain
Geo Location - 27.874675, 79.900439

2- Azizganj Drain
Geo Location - 27.861458, 79.892631

3- Yunus Khel Drain
Geo Location - 27.864540, 79.903218

4- Bakshi Drain
Geo Location - 27.33300, 79.50280

5- Mehmuriya Jalanagar Drain
Geo Location - 27.888962, 79.891845

DRAIN DISCHARGE TO KHANNAUT RIVER

1- Mishripur Drain
Geo Location - 27.850870, 79.919458

2- Sarai Kaiyan Drain
Geo Location - 27.851534, 79.919002

3- Roza Ahmadpur Drain
Geo Location - 27.514425, 79.554813

4- Banka Ghaat (Left)
Geo Location - 27.521685, 79.551513

5- Banka Ghaat (Right)
Geo Location - 27.521437, 79.551627

6- Roshanganj Drain
Geo Location - 27.514500, 79.551122

7- Dalelganj Drain
Geo Location - 27.511008, 79.550408

8- Hanumat Dhaam Drain
Geo Location - 27.514310, 79.550456

9- Anta Chauraha & Brij Bihar Drain
Geo Location - 27.876310, 79.915111

10- Bahadurpura & Chamkani Drain
Geo Location - 27.880652, 79.916075

11- Khwaja Firoz Drain
Geo Location - 27.856477, 79.917741

12- Roza Ahmadpur Drain
Geo Location - 27.514425, 79.554813

District Boundary
River
Drain

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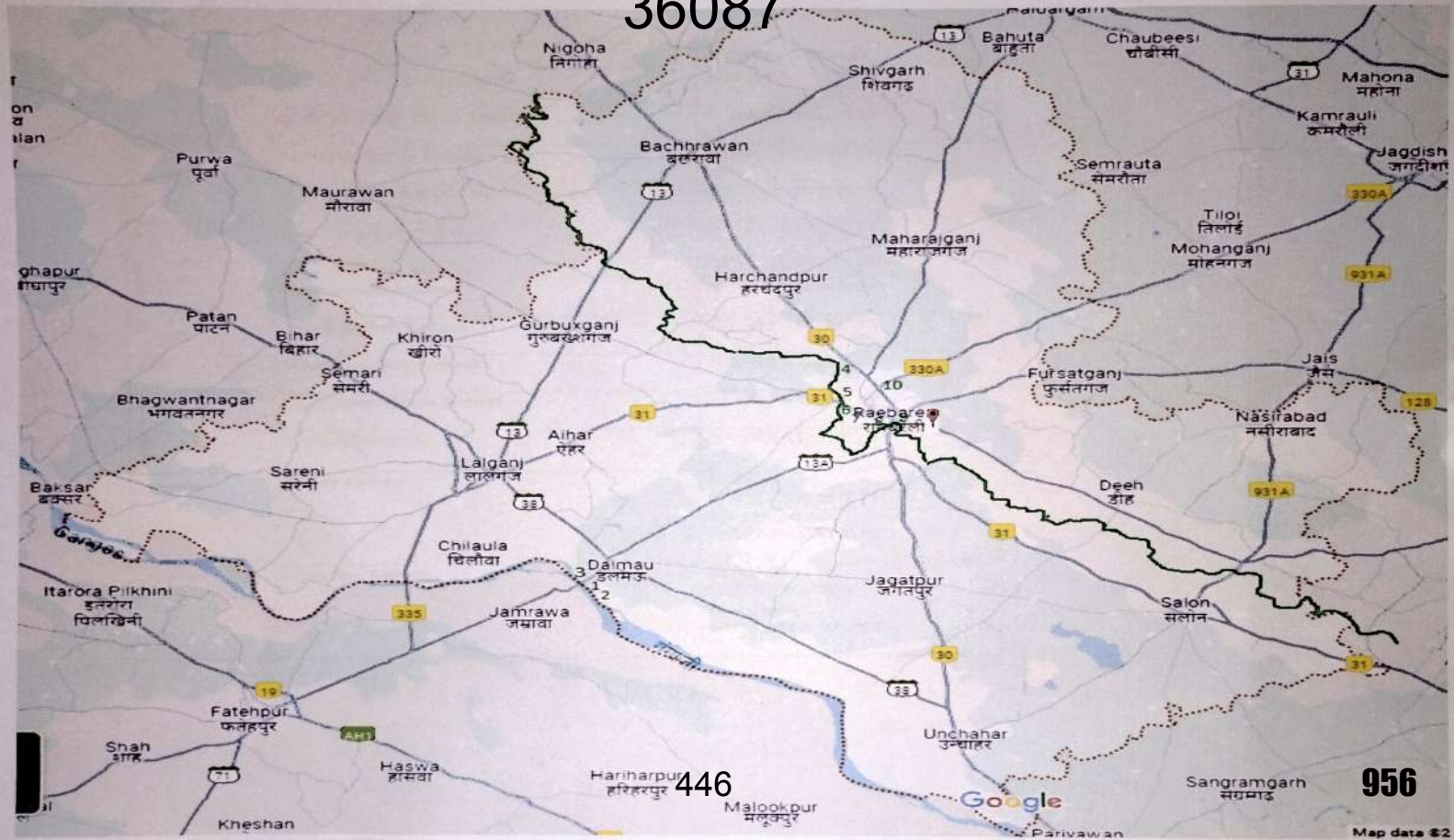
Raebareli District Map

36087



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956

Ligends		Latitude Longitude
1	SadakGhat Drain, Dalmau, Raebareli	26°03'51.8"N 81°01'38.6"E
2	PathwariGhat Drain, Dalmau, Raebareli	26°03'41.0"N 81°01'43.4"E
3	Padva Drain, Dalmau, Raebareli	26°04'07.1"N 81°01'37.2"E
4	Lohanipur/Rewati Ream KaTalab Drain, Raebareli	26°14'33.1"N 81°13'45.8"E
5	Rajghat/Surjupur Drain, Raebareli	26°13'54.2"N 81°13'32.2"E
6	Kanpur Road Drain, Raebareli	26°13'33.9"N 81°13'12.2"E
7	Police Line Drain, Raebareli	26°13'03.1"N 81°14'02.0"E
8	Indira Nagar Drain, Raebareli	26°12'24.9"N 81°14'27.0"E
9	Mahanandpur Drain, Raebareli	26°12'29.2"N 81°15'25.9"E
10	UPSIDC/Industrial Drain, Raebareli	26°13'42.5"N 81°16'17.8"E
	18 MLD STP, Raebareli	26°12'08.6"N 81°15'53.1"E
	Sai River, Raebareli	**UP Stream** 26°30'32.2"N 80°59'49.1"E **Down Stream** 26°00'54.4"N 81°34'10.7"E
	Ganga River, Raebareli	**UP Stream** 26°07'21.8"N 80°40'26.7"E **Down Stream** 25°49'06.3"N 81°20'31.9"E

Name of the District: Raebareli

District Ganga Committee, NGT Compiled Report on Behalf of Letter dated 24.11.2023 and 04.12.2023

1. Sewage

Drain (city/town/	Total flow of drain per day (MLD)	PH	BOD (mg/l)	COD (mg/l)	TSS (mg/l)	TDS (mg/l)	Fluoride (mg/l)	Nitrates (mg/l)	DO (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Outlet flow (MLD)	Chloride (mg/l)	Colour/ Odour (Hazen/ NA)	Discharged Into
Lohanipur Drain/Rewati Ram ka Talab Drain, Raebareli	6.06	8.04	24.5	116.8	42.0	580.0	1.82	0.35	1.9	2,20,000	70,000	6.06	75.0	20/Fishy	River Sai
Indira Nagar Drain, Raebareli	11.8	7.99	24.5	112.0	48.0	547.0	1.43	0.32	1.9	7,90,000	1,30,000	11.8	77.0	20/Fishy	River Sai
Police Line Drain, Raebareli	5.83	7.77	26.5	121.6	46.0	602.0	1.77	0.35	1.9	9,30,000	79,000	5.83	74.0	20/Fishy	River Sai
Kanpur Road Drain, Raebareli	6.06	7.93	29.0	131.2	52.0	622.0	1.72	0.34	1.8	1,70,000	70,000	6.06	75.0	20/Fishy	River Sai
Rajghat/Surjupur Drain, Raebareli	5.18	7.95	25.5	121.6	56.0	680.0	1.84	0.34	2.0	9,30,000	1,10,000	5.18	76.0	20/Fishy	River Sai
Mahanandpur Drain, Raebareli	3.74	7.99	24.5	118.4	43.0	670.0	1.76	0.34	2.9	94,000	39,000	3.74	76.0	20/Fishy	River Sai
UPSIDC/ Industrial Drain, Raebareli	3.95	8.17	20.5	97.6	40.0	542.0	1.06	0.32	6.6	70,000	2,000	3.95	75.0	20/Foul	River Sai
Sadak Ghat Drain, Dalmau, Raebareli	0.257	7.94	18.5	97.6	45.0	520.0	1.28	0.37	2.0	24,000	2,800	0.257	73.0	20/Fishy	River Ganga

Padva Drain, Dalmau, Raebareli	1.203	8.13	4.6	24.0	46.0	380.0	1.29	0.32	7.4	26,000	5,400	1.203	72.0	20/None	River Ganga
Pathwari Ghat Drain, Dalmau, Raebareli	0.234	7.92	23.5	99.2	46.0	506.0	1.2	0.35	1.7	28,000	2,800	0.234	72.0	20/Fishy	River Ganga

Drain (City/Town)	Heavy Metals							
	Total Cr (mg/l)	Cu (mg/l)	Pb (mg/l)	Fe (mg/l)	Zn (mg/l)	Mn (mg/l)	As (mg/l)	Hg (mg/l)
Lohanipur Drain/Rewati Ram ka Talab Drain, Raebareli	ND	ND	0.1834	0.4296	0.618	1.2242	ND	ND
Indira Nagar Drain, Raebareli	ND	ND	0.107	0.2342	0.5253	1.0845	ND	ND
Rajghat/Surjupur Drain, Raebareli	ND	ND	0.107	0.1454	0.0744	0.1487	ND	ND
UPSIDC/ Industrial Drain, Raebareli	ND	ND	0.2598	0.1099	0.5655	0.9448	ND	ND
Sadak Ghat Drain, Dalmau, Raebareli	ND	ND	0.2598	0.4828	0.0652	6.8876	ND	ND
Padva Drain, Dalmau, Raebareli	ND	ND	0.2598	0.1276	0.0281	0.1627	ND	ND
Pathwari Ghat Drain, Dalmau, Raebareli	ND	ND	0.1834	0.1454	0.0312	0.4909	ND	ND

ND- Not Detected

2. STP (SEWAGE TREATMENT PLANT)

Existing STP (location & capacity)	Capacity (Operational)	Inlet/ Outlet water quality & quantity	Number of tapped drains (quantity of discharge)	Final discharge point	Total Sewage generated	Total sewage treated by STPs	Gap	Proposal for minimising the gap
18 MLD STP, Parshadepur Road, Near PAC, Raebareli	18.0 MLD	As per norms	0	River Sai	39.62	Currently 03.0 MLD Discharge is being received	36.62	None

2.1 STP Additional Information

Name of Drain	Position of STP with Capacity	Geo Coordinates	Discharge Quantity from the STP in The Drain	Total Per Day Dischharge From The Drain in to The River
Sever line is being connected to the STP	18 MLD STP, Parshadepur Road, Near PAC, Raebareli, 18 MLD	26°12'09.6"N 81°15'54.3"E	3.0 MLD	36.62 MLD is being discharged to the river Sai after bioremediation.

Proposed STP (location & Capacity)	Capicity (Operational)	Inlet outlet Water Quakiaty & Quantity	Number of Tapped Drains(Quantity of Discharge)	GAP in Treatment	Final Discharge Point Geo Code/Sampling Point	Proposed Under construction STP with compeletion Date
There is no any STP proposed in the district Raebareli as per ofice record of UPPCB, Raebareli.						

3. HOTELS/ ASHRAMS

Number of Hotels/ ashrams/ dharamshalas	Consent to establish/ operate	STP	Discharge point	Action taken
Hotel Royal Railway Station Road	NO	No	Local Drain/Soak Pit/Septik	Notice Issued for compliance
Hotel Deep Railway Station Road	NO	No	Local Drain/Soak Pit/Septik	Notice Issued for compliance
Hotel Charan, Railway Station Road	NO	No	Local Drain/Soak Pit/Septik	Notice Issued for compliance
Hotel Heera, Railway Staion Road	NO	No	Local Drain/Soak Pit/Septik	Notice Issued for compliance
Hotel Panjabi Restaurant, Railway Staion	NO	No	Local Drain/Soak Pit/Septik	Notice Issued for compliance
Hotel Kanha Continental, Railway Staion	NO	No	Local Drain/Soak Pit/Septik	Notice Issued for compliance
Hotel Laxman, Kotwali Road	NO	No	Local Drain/Soak Pit/Septik	Notice Issued for compliance
Hotel Meera, Lucknow Road	CTO Granted	No	Local Drain/Soak Pit/Septik	None
Hotel Jai Deep,	NO	No	Local Drain/Soak Pit/Septik	Notice Issued for compliance
Maurya Utsav Lawn	NO	No	Local Drain/Soak Pit/Septik	Notice Issued for compliance
Baba Utsav Lawn	NO	No	Local Drain/Soak Pit/Septik	Notice Issued for compliance
Hotel Kanha	NO	No	Local Drain/Soak Pit/Septik	Notice Issued for compliance
Roi Utsav Lawn	NO	No	Local Drain/Soak Pit/Septik	Notice Issued for compliance
Laxman Hotel	NO	No	Local Drain/Soak Pit/Septik	Notice Issued for compliance
Narain Utsav Lawn	NO	No	Local Drain/Soak Pit/Septik	Notice Issued for compliance
Hotel Mera Man	NO	No	Local Drain/Soak Pit/Septik	Notice Issued for compliance
Hansi-Khushi Lawn	NO	No	Local Drain/Soak Pit/Septik	Notice Issued for compliance
Hotel Akash	NO	No	Local Drain/Soak Pit/Septik	Notice Issued for compliance
Hotel Santi Inn	NO	No	Local Drain/Soak Pit/Septik	Notice Issued for compliance
Krishna Guest House	NO	No	Local Drain/Soak Pit/Septik	Notice Issued for compliance
Hotel Saras	CTO Granted	No	Local Drain/Soak Pit/Septik	None
Bhundal Marriage Hol	NO	No	Local Drain/Soak Pit/Septik	Notice Issued for compliance
Hotel Surya	NO	No	Local Drain/Soak Pit/Septik	Notice Issued for compliance
Kamini Utsav Lawn	NO	No	Local Drain/Soak Pit/Septik	Notice Issued for compliance
V.I.P. Guest House	NO	No	Local Drain/Soak Pit/Septik	Notice Issued for compliance
Salooja Lawn	NO	No	Local Drain/Soak Pit/Septik	Notice Issued for compliance
Hotel Midway	NO	No	Local Drain/Soak Pit/Septik	Notice Issued for compliance
Capital Palace	NO	No	Local Drain/Soak Pit/Septik	Notice Issued for compliance
Hotel Laxman	NO	No	Local Drain/Soak Pit/Septik	Notice Issued for compliance
Talukedar Garden	NO	No	Local Drain/Soak Pit/Septik	Notice Issued for compliance
Prasant Utsav Lawn	NO	No	Local Drain/Soak Pit/Septik	Notice Issued for compliance
Maa Ambey Utsav Lawn	NO	No	Local Drain/Soak Pit/Septik	Notice Issued for compliance

Asiya Utsav Lawn	NO	No	Local Drain/Soak Pit/Septik	Notice Issued for compliance
Sadik Utsav Lawn	NO	No	Local Drain/Soak Pit/Septik	Notice Issued for compliance
Salimar Utsav Lawn	NO	No	Local Drain/Soak Pit/Septik	Notice Issued for compliance
Manas Marriage Lawn	NO	No	Local Drain/Soak Pit/Septik	Notice Issued for compliance
Hotel Satkar	CTO Granted	No	Local Drain/Soak Pit/Septik	None
Hotel Atithi	CTO Granted	No	Local Drain/Soak Pit/Septik	None
Hotel The Crown	CTO Granted	No	Local Drain/Soak Pit/Septik	None
Hotel Preet	No	No	Local Drain/Soak Pit/Septik	Notice Issued for compliance

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Total number of Industries	Daily effluent discharge	Treatment available (cetp/ petp/ etp operational capacity)	Effluent quality analysis (outlet of treatment plants)	Year	Proposed/ under construction treatment project (with timeline)	Number of defaulting units- Action taken	Industrial solid waste generated/ day	Manner of disposal (Industrial solid waste)
N.T.P.C. Unchahar Raebareli	384 KLD Industrial 3616 KLD Domestic	310 KLD LETP FOR Industrial effluent and Soak Pit/ Septik Tank 2000 KLD STP	Report Attached	74	There is no any Treatment Project is under construction	NONE	50-60 Kg Approx	In-house Processing
RCCPL (Reliance) Cement industry, Kundanganj, Raebareli.	0.0 KLD Industrial 10.0 KLD Domestic	15.0 KLD STP for Domestic Effluent	Report Attached	0	There is no any Treatment Project is under construction	NONE	30-40 Kg Approx	By Authorised TSDF
Birla corporation ltd. (cement division), Industrial Area, Amawan Road, Raebareli.	0.0 KLD Industrial 2.5 KLD Domestic	Soak Pit/ Septik Tank for Domestic Effluent	Report Attached	0	There is no any Treatment Project is under construction	NONE	30-40 Kg Approx	By Authorised TSDF
Visakha industries Pvt. ltd., Bachrawan, Raebareli.	0.0 KLD Industrial 5.0 KLD Domestic	10.0 KLD STP for Domestic Effluent	Report Attached	0	There is no any Treatment Project is under construction	NONE	30-40 Kg Approx	By Authorised TSDF
Ganpati Advisory ltd. (cement division), Bahaman Khera, Raebareli.	2.0 KLD Industrial 0.5 KLD Domestic	2.0 KLD ETP for industrial Effluent and Soak Pit/ Septik Tank for Domestic Effluent	Report Attached	0	There is no any Treatment Project is under construction	NONE	20 Kg Approx	By Authorised TSDF
R.D. Cement Pvt. Ltd., Churuwa, Raebareli	0.0 KLD Industrial 0.5 KLD Domestic	Soak Pit/ Septik Tank for Domestic Effluent	Report Attached	0	There is no any Treatment Project is under construction	NONE	20 Kg Approx	By Authorised TSDF

Modern Rail Coach Factory, Lalganj, Raebareli.	948 KLD Industrial 1650 KLD Domestic	224.0 KLD ETP (2) for industrial Effluent and 0.4 MLD and 1.1 MLD STP for Domestic	Report Attached	536 KLD	There is no any Treatment Project is under construction	NONE	30-40 Kg Approx	By Authorised TSDF
Forged wheel Plant (Rail Coach Factory) Lalganj, Raebareli.	0.0 KLD Industrial 1.0 KLD Domestic	Soak Pit/ Septik Tank for Domestic Effluent	Report Attached	0	There is no any Treatment Project is under construction	NONE	30-40 Kg Approx	By Authorised TSDF
Ganapati Advisory Ltd. (Cement Plant), Brahamankhera, Kundanganj, Raebareli.	0.0 KLD Industrial 0.5 KLD Domestic	Soak Pit/ Septic Tank for Domestic Effluent	Report Attached	0	There is no any Treatment Project is under construction	NONE	30-40 Kg Approx	By Authorised TSDF
VRH Lightening, Harchandpur, Raebareli.	0.5 KLD Industrial 1.0 KLD Domestic	5.0 KLD ETP (2) for industrial Effluent and Soak Pit/Septic Tank for Domestic Effluent	Report Attached	0	There is no any Treatment Project is under construction	NONE	20 Kg Approx	By Authorised TSDF

5. Regulation of Flood Plain Zone:

Area- cities/ towns	Notification of flood plain zone	Demarcation		Encroachment & Direct Discharge Geocode/Sampling Point/Encroachment removal status	Timeline for completion
		No development zone pillars	Regulatory		
	मा0 हरित अधिकरण नयी दिल्ली के विषयांकित आदेश के अनुपालन मे केंद्रीय जल आयोग द्वारा गंगा नदी के Segment A, Phase-I (हरिद्वार से उन्नाव तक) का निर्धारण किया गया। तदोपरान्त गंगा नदी के Segment A, Phase-II (उन्नाव से बलिया) Flood Plain Zone (FPZ) का निर्धारण किया जाना है। जनपद रायबरेली में Flood Plain Zone (FPZ) का निर्धारण नहीं हुआ है।	Zero	Zero	कार्य कराया जाना प्रस्तावित है।	कार्य कराया जाना प्रस्तावित है।

6. AFFORESTATION/ PLANTATION

Area- cities/ towns	Total plantation Geo Code/Sampling Point	Proposed project	Time line
Birla Cements, Industrial Area, Amawan Road, Raebareli	2000 Lon- 26°15'10.1"N Lat- 81°15'01.2"E	From UPPCB, Raebareli	2023-2024
RCCPL Campus, Kundanganj, Raebareli	10000 Lon- 26°24'07.7"N Lat- 81°07'53.8"E		
Visaka Industries, Campus, Kandawan, Raebareli	10000 Lon- 26°25'43.5"N Lat- 81°07'42.3"E		
Shahid Smarak Park, Raebareli	5950 Lon- 26°12'01.4"N Lat- 81°14'50.6"E		

Kotra Bahadurganj, Raebareli	45000 Lon- 25°49'29.5"N Lat- 81°20'43.1"E	Forest Department (Total 2248722)		
Arkha, Raebareli	Lon- 25°50'55.2"N Lat- 81°17'30.0"E			
Malik Bhiti, Raebareli	Lon- 26°04'05.0"N Lat- 80°58'16.7"E			
Har Bandhanpur Raebareli	Lon- 25°51'01.2"N Lat- 81°17'28.1"E			
Mandawa, Raebareli	Lon- 25°50'00.7"N Lat- 81°15'55.7"E			

7. Mining and Stone Crushing in River bed and Flood Plain Zone of River Ganga and its Tributries

Sand mining	FIR/ case registered/ year	Vehicles/ mineral seized	Action taken status	Cases pending in Court	Enforcement of EMGSM 2020 and Sustainable Sand Mining
0	0	156	अर्थ दण्ड आरोपित करते हुये धनराशि जमा कराई जाती है।	0	जिला स्तरीय गठित टास्कफोर्स के माध्यम से अवैध खनन परिवहन के विरुद्ध नियमानुसार कार्यवाही की जाती है।

The Tribunal has already directed for furnishing following information by order dated 24.11.2023:-

01.	**District Ganga Protection Plan at city/ town level** District Ganga Protection Committee (DGPC) is required to formulate the action plan for each city and town located on main stem of river Ganga and its tributary and such Action Plan has to be prepared in accordance with the River Ganga (Rejuvenation. Protection and Management) Authorities Order, 2016 (Para 6 and 55).	The meeting of District Ganga committee is held on regular basis in every month under the Supervision of District magistrate Raebareli.
02.	**Contents of the Action Plan (Consolidated District Wise Action Plan including each City and Town abutting river Ganga and its Tributary)**	
	2.1Sewage Management	
	(i)Sewage generation (for entire District and individual town wise):	27.0 MLD (As per given by Jal Nigam Urban, Raebareli)
	(ii)Existing Sewage Treatment Capacities	18 MLD
	(iii)Quantity of sewage is being treated (utilization capacity):	3.0 MLD
	(iv)Performance of STPs particularly for FC	920 MPN/100ml
	(v)Where treated sewage is being discharged (to Ganga or tributaries)	Treated sewage is being discharge to River Sai.
	(vi)Reasons for Under-utilization of STPs (Connectivity of Households/ laying of sewer lines)	STP is not connected with whole city sewer line. Sewer line is being connected with STP.
	(vii)Current Gap in sewage treatment	24.0 MLD
	(viii)Time bound plan for bridging the gap and tying up with financial arrangements and not delaying Tendering and identifying executing agencies or having any other issues	Not Applicable
	(ix)Where untreated sewage (when there is no STP) is discharged (Ganga /Tributaries)	Bioremediation is being done for the drains which is not tapped with STP and is being discharged to the river Ganga and River Sai.
	2.2 Drains joining Ganga and Tributary (i)Number of drains carrying sewage, sludge or industrial waste water joining Ganga/ tributaries with their Quantity and Quality	i. There are 10 drains being discharged to the River Ganga and Sai at Raebareli. Report attached.

	(ii)Drains joining outside city and town limits but, either joining in village or nearby town	NA
	(iii)Inclusion of sewage flowing in drains into total sewage generation figures of each city and town and their interception and diversion to STPs	Total city sewage generation is 27.0 MLD.
	2.3 Septage management (In case of no STP) (i)Status of Septage management (with reference to FSTP/STP)	32 KLD-CO FSTP has been installed at Parshadepur road, near PAC, 18 MLD STP.
	(ii)Management of Grey water and its disposal	Grey water is used for agricultural purposes and gardening.
	2.4 Industrial Pollution Control (i)Attach the list on no. of industries generating trade effluents, their place of disposal and compliance including CETPs (town wise):	There are no industries established in near Gomati River.
03.	**(3)Water quality status. Provide water quality status of Ganga and its tributaries in the District and city/ town in terms of its fitness for Bathing water quality that is, FC and FS:**	Report Attached
04.	**(4)Notification of Flood Plain Zones:**	There is No Area of City/Town affected by flood, That's why no required notification for specified City/Town area.
05.	**(5)Issues relating to Environmental Flow**	NA

Best Practices-

1. Pakka Ghat has been constructed at Gnaga River Ghat at Dalmau, Raebareli.
2. Awareness is being done by hordinga showing Do's and don'ts at Ganga river ghats.
3. Bioremediation and chlorination is being done in those drains which is not tapped.
4. 32 KLD FSTP has been installed for the septage management.
5. Mass awareness is being done by Mission Life as well as by various departments like UPPCB, Forest department (afforestation/ wetland/conservation), enforcement activities, livelihood generation, general and mass awareness through IEC, school outreach program, connection with ULB's and gram panchayat different industries.

5- Concluding remark.

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MSCB 154 TC-7516

HIG - 79, Sector - E, Aliganj, Lucknow - 226 024 Ph. : 0522-3584345, 8318644902 E-mail : etl_2@yahoo.com, ertlreport22@gmail.com

TEST REPORT

Report No. SW/01 **Date:** 30.12.2023

SEWAGE WATER (STP INLET) ANALYSIS REPORT

1.	Name & Address of The Industry	**M/s RCCPL Pvt. Ltd. Village - Karanpur, Near Kundanganj Railway Station, Distt.- Raebaraeilly (U.P.)- 229 303**
2.	ULR Code	TC751623000001306F
3.	Sample Code	ERTL/SW01/2023/12/23/189
4.	Sample Collected By	Lab Representative
5.	Date of Sample Collection	23.12.2023
6.	Date of Sample Received in Lab	23.12.2023
7.	Date of Analysis Completed	30.12.2023

S. N.	Physical Parameters	Unit	Method of Measurement	Observed Values
1.	Temperature	°C	APHA-2120-B	23.6
2.	Colour	-	APHA-2150-B	Yellowish
3.	Odour	-	APHA-2550-B	Septic
4.	Suspended solids	mg/L	APHA, 24th Ed. 2023, 2540-D	412.0
5.	Dissolved solids	mg/L	APHA, 24th Ed. 2023, 2540-C	1072.0
6.	Total Solids	mg/L	APHA, 24th Ed. 2023, 2540-B	1484.0
7.	Oil & Grease	mg/L	APHA, 24th Ed. 2023, 5520-C & D	18.7
S. N.	**Chemical Parameters**	**Unit**	**Method of Measurement**	**Observed Values**
8.	pH	-	APHA, 24th Ed. 2023, 4500 - H^+- B	7.60
9.	BOD (3 days at 27 °C)	mg/L	APHA, 24th Ed. 2023, 5210 - B & CPCB Method	60.0
10.	COD	mg/L	APHA, 24th Ed. 2023, 5220-B	224.0

Analyst Checked By (Laboratory In-charge)

Note : 1. The above results are related only to the test performed on the sample. Endorsement of product is neither inferred not implied. 2. This report is not to be reproduce wholly or in part and can not be used as an evidence in the court of law and should not be used in any advertising media without our special permission in writting. 3. Sample will be destroyed after fifteen days from the date of reporting. 4. Total liability of our lab is limited to the invoiced amount. 5. Report refers to the sample received by Envirochem Research & Test Labs Pvt. Ltd. unless mentioned otherwise.

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HIG - 79, Sector - E, Aliganj, Lucknow - 226 024 Ph. : 0522-3584345, 8318644902 E-mail : etl_2@yahoo.com, ertlreport22@gmail.com

TEST REPORT

Report No. SW/02 Date: 30.12.2023

SEWAGE WATER (STP OUTLET) ANALYSIS REPORT

1.	Name & Address of The Industry	**M/s RCCPL Pvt. Ltd. Village - Karanpur, Near Kundanganj Railway Station, Distt.- Raebaraeilly (U.P.)- 229 303**
2.	ULR Code	TC751623000001307F
3.	Sample Code	ERTL/SW02/2023/12/23/190
4.	Sample Collected By	Lab Representative
5.	Date of Sample Collection	23.12.2023
6.	Date of Sample Received in Lab	23.12.2023
7.	Date of Analysis Completed	30.12.2023

S. N.	Physical Parameters	Unit	Method of Measurement	Observed Values	Limiting Values As per MOEF Dated(13.10.2017)
1.	Temperature	°C	APHA-2120-B	23.8	Not to exceed 5°C above the receiving water temperature
2.	Colour	-	APHA-2150-B	Colourless	-
3.	Odour	-	APHA-2550-B	Odourless	-
4.	Suspended Solids	mg/L	APHA, 24th Ed. 2023, 2540-D	72.0	100.0
5.	Dissolved Solids	mg/L	APHA, 24th Ed. 2023, 2540-C	888.0	-
6.	Total Solids	mg/L	APHA, 24th Ed. 2023, 2540-B	960.0	-
7.	Oil & Grease	mg/L	APHA, 24th Ed. 2023, 5520-C & D	6.2	10.0
S. N.	**Chemical Parameters**	**Unit**	**Method of Measurement**	**Observed Values**	**Limiting Values**
8.	pH	-	APHA, 24th Ed. 2023, 4500-H^+-B	7.23	6.5-9.0
9.	BOD (3 days at 27 °C)	mg/L	APHA, 24th Ed. 2023, 5210-B & CPCB Method	26.0	30.0
10.	COD	mg/L	APHA, 24th Ed. 2023, 5220-B	140.0	250.0

Analyst Checked By (Laboratory In-charge)

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Tel: 0522- 4002545, Mobile: 09415518818,
GSTIN :- 09AAJFP5925G1ZY

Test Report for Waste Water Analysis

ULR- TC824124000000390

Report No.	Reference No.	Issue Date
PCS/WWQ/02/2024	PCS/BCLRHCW/01/2024	19/03/2024

1.	Name & Address of Industry:	M/s Birla Corporation Ltd. (Unit: Raebareli Hitech Cement Works) Plot No: D/14 to D/15, UPSIDC Industrial Area, Phase II, Amawan Road, P.O. Raebareli-229001 (U.P)		
2.	Type of Industry:	Cement Industry	7.Method of sampling:	PCS/WI/SAMP/21
3.	Sampling Location :	**RHCW Drain water**	8.Date of Monitoring :	04/03/2024- 07/03/2024
4.	Monitoring done by:	Mr Vipin & Mr Sunil	9.Sample Receipt in Lab:	07/03/2024
5.	Lab Code:	PCS24/48/317	10.Date of testing	08/03/2024 -11/03/2024
6.	Weather Condition:	Clear Sky	11.Sample Analyzed By:	Ms Alka Singh

S. N	Parameters	Unit	Reference Method 23rd Edition	Results (RHCW Waste Water)	Inland Surface Water*	Public Sewers*
1.	pH	-	APHA 4500-H^+-B	8.11	5.5 to 9.0	5.5 to 9.0
2.	TSS	mg/l	APHA 2540 D	78.9	100	600
3.	Oil& Grease	mg/l	APHA 5520-B	3.2	10	20
4.	COD	mg/l	APHA 5220-C	86.4	250	-
5.	BOD (3 Days at 27°C)	mg/l	IS: 3025 Part 44 1993 RA 2009	24.0	30	350
6.	Ammonical Nitrogen as N	mg/l	APHA 4500-NH_3-C	14.9	50	50
7.	Total Nitrogen	mg/l	APHA 4500-Norg-B	18.03	100	-

*The Environment (Protection) Rules, 1986, SCHEDULE – V See rule 3A General Standards For Discharge Of Environmental Pollutants Part-A :

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4. Prakriti Consultants Services are not regulatory agency hence no part of this report should be used for legal purpose under any circumstance
5. No deviation as per the Standard Method.

Authorized Signatory

(Dr. Divya Misra)
Managing Director

-------End of this Report---

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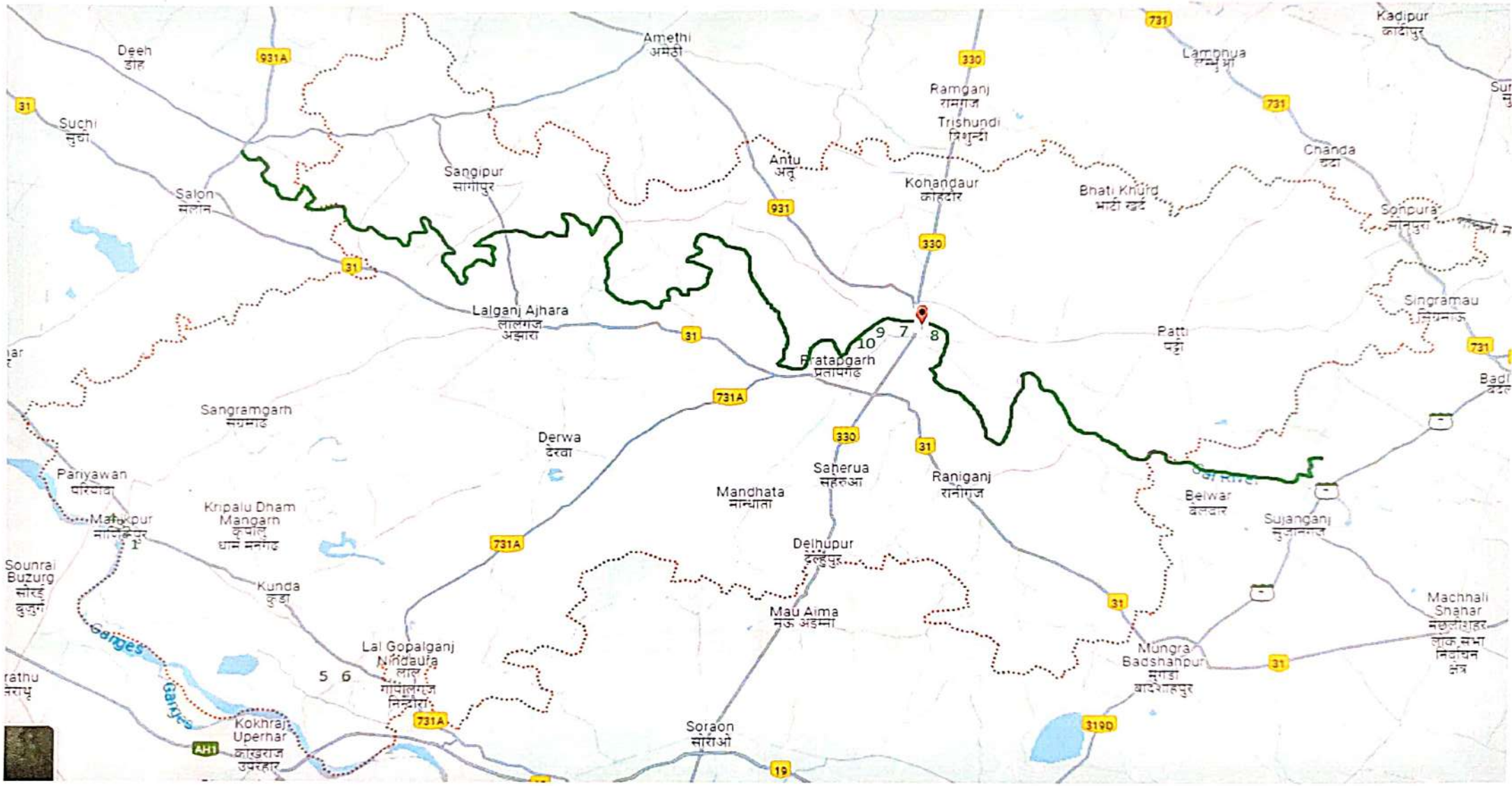
S. No.	Legends	LatitudeLongitude
1	PakkaGhat Drain, Manikpur, Pratapgarh (1.0 MLD STP)	25°46'00.7"N 81°24'03.5"E
2	Raja Hela Drain, Manikpur, Pratapgarh	25°46'10.9"N 81°23'54.9"E
3	Primary School Drain, Manikpur, Pratapgarh	25°46'11.6"N 81°23'54.2"E
4	MallahanTola Drain, Manikpur, Pratapgarh	25°46'11.9"N 81°23'53.9"E
5	GandaNala, Braipur, Kunda, Pratapgarh	25°38'47.6"N 81°34'01.4"E
6	GandaNala, Raiyapur, Kunda, Pratapgarh	25°38'47.6"N 81°34'01.4"E
7	City Drain, Belha, Pratapgarh	25°56'04.0"N 82°00'09.8"E
8	Ram Lila Maidan Drain, Belha, Pratapgarh (0.5 MLD Constructed Wetland)	25°55'54.3"N 82°00'34.6"E
9	Police Line Drain, Belha, Pratapgarh	25°55'55.2"N 82°00'00.1"E
10	Bhuliyapur Drain, Belha, Pratapgarh (2.5 MLD Constructed Wetland)	25°55'58.5"N 81°59'02.5"E
	8.95 MLD STP, Belha, Pratapgarh	25°56'03.9"N 82°00'19.0"E
	Sai River, Raebareli	**UP Stream** 26°00'54.4"N 81°34'10.7"E **Down Stream** 25°49'19.4"N 82°12'34.0"E
	Ganga River, Raebareli	**UP Stream** 25°49'06.3"N 81°20'31.9"E **Down Stream** 25°35'59.3"N 81°36'37.9"E

Pratapgarh District Map



Name of the District: Pratapgarh
District Ganga Committee, NGT Report

1. Sewage

Drain (city/town)	Total flow of drain per day (MLD)	PH	BOD (mg/L)	COD (mg/L)	TSS (mg/L)	TDS (mg/L)	Fluoride (mg/l)	Nitrates (mg/l)	DO (mg/L)	TC (MPN/100 ML)	FC (MPN/100 ML)	Outlet flow (MLD)	Cl (mg/L)	Colour/ odour (Hazen/ NA)	Discharged Into
Pakka Ghat Drain, Manikpur, Pratapgarh	0.68	8.04	23.0	97.6	44.0	472.0	1.18	0.34	1.8	46,000	14,000	0.68	75.0	20/Fishy	River Ganga
Mallahan Tola Drain, Manikpur, Pratapgarh	0.32	7.93	18.0	94.4	48.0	488.0	1.16	0.34	1.7	32,000	4,900	0.32	72.0	20/Fishy	River Ganga
Primary School Drain, Manikpur, Pratapgarh	0.15	8.01	16.0	96	47.0	470.0	1.17	0.35	1.6	40,000	11,000	0.15	74.0	20/Fishy	River Ganga
Raja Hela drain, Manikpur, Pratapgarh	0.18	7.95	17.5	100.8	50.0	474.0	1.17	0.33	1.7	46,000	11,000	0.18	72.0	20/Fishy	River Ganga
Ganda Nala, Braipur, Pratapgarh	10.50	8.15	3.6	23.04	46.0	382.0	1.03	0.37	7.6	2,000	4,900	10.50	74.0	20/Fishy	River Ganga
Ganda Nala, Raiyapur, Pratapgarh	11.00	8.15	3.6	23.04	46.0	382.0	1.03	0.37	7.6	2,000	4,900	11.00	74.0	20/Fishy	River Ganga
City Drain, Pratapgarh	8.37	7.8	22.0	102.4	69.0	518.0	1.41	0.34	2.2	94,000	39,000	8.37	74.0	30/Fishy	River Sai

Ramlila Maidan, Pratapgarh	0.67	7.77	25.5	115.2	70.0	530.0	1.21	0.35	1.8	1,70,000	54,000	0.67	76.0	20/Fishy	River Sai
Bhuliyapur Drain, Pratapgarh	0.78	7.74	22.5	112	62.0	502.0	1.38	0.35	1.7	26,000	3,400	0.78	74.0	30/Fishy	River Sai
Police Line Drain, Pratapgarh	4.50	7.36	24.0	110.4	70.0	530.0	1.27	0.35	1.6	21,000	9,400	4.50	75.0	20/Fishy	River Sai

Drain (City/Town)	Heavy Metals							
	Total Cr (mg/L)	Cu (mg/L)	Pb (mg/L)	Fe (mg/L)	Zn (mg/L)	Mn (mg/L)	As (mg/L)	Hg (mg/L)
Pakka Ghat Drain, Manikpur, Pratapgarh	ND	ND	0.2598	0.2164	0.1547	0.1767	ND	ND
Mallahan Tola Drain, Manikpur, Pratapgarh	ND	ND	0.1834	0.1276	0.096	0.1487	ND	ND
Primary School Drain, Manikpur, Pratapgarh	ND	ND	0.107	0.1454	0.0497	0.1976	ND	ND
Raja Hela drain, Manikpur, Pratapgarh	ND	ND	0.2598	0.1099	0.0127	0.0859	ND	ND
Ganda Nala, Braipur, Pratapgarh	ND	ND	0.1074	0.1099	0.0003	0.0859	ND	ND
Ganda Nala, Raiyapur, Pratapgarh	ND	ND	0.2598	0.1276	ND	0.0999	ND	ND
City Drain, Pratapgarh	ND	ND	0.1834	0.252	0.0343	0.1348	ND	ND

ND- Not Detected

2. STP (SEWAGE TREATMENT PLANT)

Existing STP (location & capacity)	Capacity (Operational)	Inlet/ Outlet water quality & quantity	Number of tapped drains (quantity of discharge)	Final discharge point	Total Sewage generated	Total sewage treated by STPs	Gap	Proposal for minimising the gap
8.95 MLD STP, Belha, Pratapgarh	8.95 MLD	As per norms	2	River Sai	12.87 MLD	Currently 06 MLD Discharge is being received	6.87	6.87 MLD is being discharged to the river Sai after bioremediation.
1.0 MLD STP at Pakka drain, Manikpur, Pratapgarh	1.0 MLD	As per norms	1	River Ganga	1.0 MLD	1.0 MLD	0	-
0.5 MLD Constructed Wetland STP at Ramlila Maidan Drain, Praapgarh	0.5 MLD	As per norms	1	River Sai	0.67	0.5	0.17	0.170 MLD is being discharged to the river Sai after bioremediation.
2.5 MLD Constructed Wetland STP at Bhuliya Drain, Praapgarh	2.5 MLD	As per norms	1	River Sai	0.78	0.78	0	-

2.1 STP Additional Information

Name of Drain	Position of STP with	Geo Coordinates	Discharge Quantity from the STP in	Total Per Day Dischharge From The
City Drain, Pratapgarh	8.95 MLD STP, Belha Pratapgarh, 8.95 MLD	25°56'03.8"N 82°00'19.2"E	6.0 MLD	5.37 MLD is being discharged to the river Sai after bioremediation.
Police Line Drain, Pratapgarh				
Pakka Drain, Manikpur, Pratapgarh	1.0 MLD STP at Pakka drain, Manikpur,	25°46'01.7"N 81°24'04.9"E	0.68 MLD	0
Ramlila Maidan Drain, Pratapgarh	0.5 MLD Constructed Wetland STP at Ramlila	25°55'54.3"N 82°00'34.8"E	0.67 MLD	0.170 MLD is being discharged to the river Sai after bioremediation.
Bhuliyapur Drain, Pratapgarh	2.5 MLD Constructed Wetland STP at Ramlila	25°55'54.6"N 82°00'00.3"E	0.78 MLD	0

Proposed STP (location & Capacity)	Capicity (Operational)	Inlet outlet Water	Number of Tapped	GAP in Treatment	Final Discharge Point Geo Code/Sampling Point	Proposed Under construction STP
There is no any STP proposed in the district Pratapgarh as per ofice record of UPPCB, Raebareli.						

3.Hotels/Ashrams/Dharamshalas

Number of Hotel/Ashrams/Dharamshalas	Consent to Establish/Operate	STP	Discharge Point	Action Taken
Hotel Krishna Marriage Lon Karanpur ward Belha	NO	No	Local Drain/Soak Pit/Septik Tank	Notice Issued for compliance
Hotal Indu Vihar Utsav Sadan, Dahilamau Daksini ward Belha	NO	No	Local Drain/Soak Pit/Septik Tank	Notice Issued for compliance
Assirwad Guest House, Dahilamau Daksini ward Belha	NO	No	Local Drain/Soak Pit/Septik Tank	Notice Issued for compliance
City Palace Hotel Dahilamau Uttari ward Belha	NO	No	Local Drain/Soak Pit/Septik Tank	Notice Issued for compliance
Sagun Marriage Hall, Hospital Ward, Bekha	NO	No	Local Drain/Soak Pit/Septik Tank	Notice Issued for compliance
Royal Gorden Marriage Hall, Vivek Nagar Ward Bekha	NO	No	Local Drain/Soak Pit/Septik Tank	Notice Issued for compliance
Krishna Lough, Vivel Nagar Ward Belha	NO	No	Local Drain/Soak Pit/Septik Tank	Notice Issued for compliance
Shyama Lough, Vivek Nagar Ward Belha	NO	No	Local Drain/Soak Pit/Septik Tank	Notice Issued for compliance
Plaza Marriage Hall, Sahodar Paschimi Belha	NO	No	Local Drain/Soak Pit/Septik Tank	Notice Issued for compliance
ath Hotel, Sahodar Paschimi	NO	No	Local Drain/Soak Pit/Septik Tank	Notice Issued for compliance
ek Hotel, Station Road Belha	NO	No	Local Drain/Soak Pit/Septik Tank	Notice Issued for compliance
hirwad Marriage Hall, Station ad Belha	NO	No	Local Drain/Soak Pit/Septik Tank	Notice Issued for compliance
Savitri Palace Hotel, Staion Road	NO	No	Local Drain/Soak Pit/Septik Tank	Notice Issued for compliance
Surya Palace Hotel, Station Raod Belha	NO	No	Local Drain/Soak Pit/Septik Tank	Notice Issued for compliance
Radheykrishna Marriage Hall, Sadar Bazar Ward, Belha	NO	No	Local Drain/Soak Pit/Septik Tank	Notice Issued for compliance
Saryoo Atithi Grah, Sadar Bazar Ward, Belha	NO	No	Local Drain/Soak Pit/Septik Tank	Notice Issued for compliance

Pradeep Hotel, Takkarganj ward Belha	NO	No	Local Drain/Soak Pit/Septik Tank	Notice Issued for compliance
Sneh Hotel, Takkarganj Ward Belha	NO	No	Local Drain/Soak Pit/Septik Tank	Notice Issued for compliance
Vailly Spaiej Hotel, Takkaganj ward Belha	NO	No	Local Drain/Soak Pit/Septik Tank	Notice Issued for compliance
Satyam In Hotel, Takkarganj ward Belha	NO	No	Local Drain/Soak Pit/Septik Tank	Notice Issued for compliance
Safaguest House/Marriage Hall, Acahlpur ward Belha	NO	No	Local Drain/Soak Pit/Septik Tank	Notice Issued for compliance
Kishori Sadan/Marriage Hall, Bhairopur ward Belha	NO	No	Local Drain/Soak Pit/Septik Tank	Notice Issued for compliance
Radhey Palace Marriage Hall Chibila Paschimi ward Belha	NO	No	Local Drain/Soak Pit/Septik Tank	Notice Issued for compliance
Shri Ram Vatika Marriage Hall Chilbila ward Belha	NO	No	Local Drain/Soak Pit/Septik Tank	Notice Issued for compliance
Kishor Marriage Hall Mulahi ward Belha	NO	No	Local Drain/Soak Pit/Septik Tank	Notice Issued for compliance
Ahooja Guest House Tehshil ward Belha	NO	No	Local Drain/Soak Pit/Septik Tank	Notice Issued for compliance

36112

4. Industrial Effluent discharge Discharge by Industries whose effluent is directly flowing to river Ganga or its tributaries

Total number of Industries	Daily effluent discharge	Treatment available (cetp/ petp/ etp operational capacity)	Effluent quality analysis (outlet of treatment plants)	GAP	Proposed/ under construction treatment project (with timeline)	Number of defaulting units- Action taken	Industrial solid waste generated/ day	Manner of disposal (Industrial solid waste)
There is no any Red Category Industry in the district Pratapgarh.								

5. Regulation of Flood Plain Zone:

Area- cities/ towns	Notification of flood plain zone	Demarcation No development zone pillars	Demarcation Regulatory zone pillars	Encroachment & Direct Discharge Geocode/Sampling Point/Encroachment removal status	Timeline for completion
Pratapgarh	There is no any notification for flood plain zone	-	-	-	-

6. AFFORESTATION/ PLANTATION

Area- cities/ towns	Total plantation Geo Code/Sampling Point	Proposed project	Time line
Pratapgarh	1,10,000 Square meter in 10 km of the main river streach	1,10,000 Square meter	01 Year

7. Mining: Mining and Stone Crushing in River bed and Flood Plain Zone of River Ganga and its Tributries

Sand mining	FIR/ case registered/ year	Vehicles/ mineral seized	Action taken status	Cases pending in Court	Enforcement of EMGSM 2020 and Sustainable Sand Mining Management Guidelines 2016
There is no any lease present in the distric	0		0	0	0

The Tribunal has already directed for furnishing following information by order dated 24.11.2023:-

01.	**District Ganga Protection Plan at city/ town level** District Ganga Protection Committee (DGPC) is required to formulate the action plan for each city and town located on main stem of river Ganga and its tributary and such Action Plan has to be prepared in accordance with the River Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016 (Para 6 and 55).	The meeting of District Ganga committee is held on regular basis in every month under the Supervision of District magistrate Pratapgarh.
02.	**Contents of the Action Plan (Consolidated District Wise Action Plan including each City and Town abutting river Ganga and its Tributary)**	
	2.1Sewage Management	
	(i)Sewage generation (for entire District and individual town wise):	37.15 MLD
	(ii)Existing Sewage Treatment Capacities	(12.95 MLD) 8.95 MLD STP, 1.0 MLD STP0.5 MLD & 2.5 MLD Wetland STP
	(iii)Quantity of sewage is being treated (utilization capacity):	7.95 MLD
	(iv)Performance of STPs particularly for FC	930 MPN/100ml
	(v)Where treated sewage is being discharged (to Ganga or tributaries)	Treated sewage is being discharge to River Sai.
	(vi)Reasons for Under-utilization of STPs (Connectivity of Households/ laying of sewer lines)	
	(vii)Current Gap in sewage treatment	24.2 MLD
	(viii)Time bound plan for bridging the gap and tying up with financial arrangements and not delaying Tendering and identifying executing agencies or having any other issues	Not Applicable
	(ix)Where untreated sewage (when there is no STP) is discharged (Ganga /Tributaries)	Bioremediation is being done for the drains which is not tapped with STP and is being discharged to the river Ganga and River Sai.
	2.2 Drains joining Ganga and Tributary (i)Number of drains carrying sewage, sludge or industrial waste water joining Ganga/ tributaries with their Quantity and Quality	i. There are 10 drains being discharged to the River Ganga and Sai at Pratapgarh. Report attached.
	(ii)Drains joining outside city and town limits but, either joining in village or nearby town	NA

	(iii)Inclusion of sewage flowing in drains into total sewage generation figures of each city and town and their interception and diversion to STPs	Total city sewage generation is 37.15 MLD.
	2.3 Septage management (In case of no STP) (i)Status of Septage management (with reference to FSTP/STP)	There is no any FSTP installed.
	(ii)Management of Grey water and its disposal	Grey water is used for agricultural purposes and gardening.
	2.4 Industrial Pollution Control (i)Attach the list on no. of industries generating trade effluents, their place of disposal and compliance including CETPs (town wise):	List Attached
03.	**(3)Water quality status. Provide water quality status of Ganga and its tributaries in the District and city/ town in terms of its fitness for Bathing water quality that is, FC and FS:**	Report Attached
04.	**(4)Notification of Flood Plain Zones:**	There is No Area of City/Town affected by flood, That's why no required notification for specified City/Town area.
05.	**(5)Issues relating to Environmental Flow**	NA

Best Practices-

1. Pakka Ghat has been constructed at Gnaga River Ghat at Manikpur, Pratapgarh and Sai River Pratapgarh.
2. Awareness is being done by hoardings showing Do's and don'ts at Ganga river ghats.
3. Bioremediation and chlorination is being done in those drains which is not tapped.
4. Mass awareness is being done by Mission Life as well as by various departments like UPPCB, Forest department (afforestation/ wetland/conservation), enforcement activities, livelihood generation, general and mass awareness through IEC, school outreach program, connection with ULB's and gram panchayat different industries.

5- Concluding remark.

वृक्षारोपण जन आन्दोलन-2023-(जियोटैग स्थल) as on 04-04-2024 13:08:47

क्रं॰सं॰	विभाग का नाम	कुल वृक्षारोपण स्थलों की संख्या	कुल जियोटैग स्थल	% स्थल (वृक्षारोपण स्थलों के सापेक्ष)	कुल रोपित (पौध संख्या)	जियोटैग स्थल पर पौधों की संख्या	जियोटैग % (रोपित के सापेक्ष)
1	2	3	4	5	6	7	8
1	आवास विकास विभाग	0	0	0.00	0	0	0.00
2	औद्योगिक विकास विभाग	0	0	0.00	0	0	0.00
3	सिंचाई विभाग	0	0	0.00	13000	0	0.00
4	उद्योग विभाग	0	0	0.00	0	0	0.00
5	प्रावधिक शिक्षा	1	0	0.00	0	0	0.00
6	उच्च शिक्षा	0	0	0.00	0	0	0.00
7	श्रम विभाग	0	0	0.00	0	0	0.00
8	परिवहन विभाग	0	0	0.00	0	0	0.00
9	रेलवे विभाग	0	0	0.00	0	0	0.00
10	रक्षा विभाग	0	0	0.00	0	0	0.00
11	जल शक्ति विभाग	20	37	185.00	0	12081	0.00
12	खाद्य सुरक्षा एवं औषधि प्रसाधन	0	0	0.00	500	0	0.00
13	खाद्य एवं रसद	0	0	0.00	450	0	0.00
14	ग्रामीण अभियंत्रण सेवा	0	0	0.00	700	0	0.00
15	दुग्ध विकास	0	0	0.00	375	0	0.00
16	नियोजन	2	0	0.00	450	0	0.00
17	पिछड़ा वर्ग कल्याण	1	0	0.00	200	0	0.00
18	महिला एवं बालविकास	0	0	0.00	500	0	0.00
19	युवा कल्याण	4	0	0.00	2400	0	0.00
20	लघु सिंचाई एवं भूगर्भ जल	0	0	0.00	335	0	0.00
21	दिव्यांग जन सशक्तिकरण	0	0	0.00	300	0	0.00
22	होमगार्ड नागरिक सुरक्षा और राजनैतिक पेंशन	2	0	0.00	950	0	0.00
23	राजस्व विभाग	408	40	9.80	165000	23500	14.24
24	लोक निर्माण विभाग	56	26	46.43	12000	3050	25.42
25	स्वास्थ्य विभाग	80	41	51.25	11100	4037	36.37
26	नगर विकास विभाग	21	74	352.38	36000	25915	71.99
27	गृह विभाग	24	13	54.17	7000	5200	74.29
28	बेसिक शिक्षा	1987	2175	109.46	47000	36880	78.47
29	कृषि विभाग	151	390	258.28	393000	333566	84.88
30	सहकारिता विभाग	175	152	86.86	8680	7370	84.91
31	पर्यावरण विभाग	176	195	110.80	170000	152217	89.54
32	उद्यान विभाग	73	73	100.00	259900	259289	99.76

33	ग्राम्य विकास विभाग	1320	2468	186.97	1967000	1984154	100.87
34	पशुपालन विभाग	46	103	223.91	7000	7166	102.37
35	पंचायतीराज विभाग	3562	542	15.22	200000	215381	107.69
36	माध्यमिक शिक्षा	181	278	153.59	21000	22995	109.50
37	ऊर्जा विभाग	68	22	32.35	3920	4452	113.57
38	व्यावसायिक शिक्षा	3	5	166.67	4000	5500	137.50
39	चिकित्सा शिक्षा	5	10	200.00	2000	20000	1000.00
40	**Grand Total**	**8366**	**6644**	**79.42**	**3334760**	**3122753**	**93.64**

DISTRICT GANGA REPORT

DISTRICT –AMETHI (U.P)

Submitted

In compliance of Hon'ble NGT Order

Dated 05 Febuary 2024

॥ नमामि गंगे ॥

निर्मल अविरल लोकधारा !

Submitted

By

District Ganga Committee, Amethi (U.P)

E-Mail:-dmamethi-up@nic.in

DISTRICT –AMETHI (U.P

कार्यालय प्रभागीय वनाधिकारी, अमेठी वन प्रभाग।

(पर्यावरण ,वन एवं जलवायु परिवर्तन विभाग, उत्तर प्रदेश)

पत्रांक 260 / 29–1 / N.G.T.(जिला गंगा समिति) अमेठी दिनांक 26 मार्च, 2024

सेवा में,

सुश्री प्रियंका स्वामी,
स्थायी अधिवक्ता उ0प्र0
आबद्ध, मा0 एन0जी0टी0 नई दिल्ली।

बिषय–मा0 राष्ट्रीय हरित अधिकरण नई दिल्ली द्वारा Original Application no. 200/2014 (I.A. No.340/2022, I.A. NO.872/2018, I.A. No.875/2014 & I.A.No.480/2018) M.c.Mehta Versus Union of India & Ors. में पारित आदेश दिनांक 05.02.2024 के अनुपालन में पत्र के साथ सलग्न निर्धारित प्रारूप पर सूचना आवश्यक कार्यवाही हेतु प्रेषित किये जाने के संबंध में।

महोदया,

कृपया मा0 राष्ट्रीय हरित अधिकरण नई दिल्ली द्वारा Original Application no. 200/2014 (I.A. No.340/2022, I.A. NO.872/2018, I.A. No.875/2014 & I.A.No.480/2018) M.c.Mehta Versus Union of India & Ors. में पारित आदेश दिनांक 05.02.2024 का सन्दर्भ ग्रहण करना चाहे, जिसके द्वारा ई–मेल के माध्यम से जनपद से सम्बन्धित अपेक्षित समस्त सूचनाओं को संकलित कर निर्धारित प्रारूप पर सूचना दाखिल करने हेतु दिनांक–13.03.2024 को आपके समक्ष उपस्थित होकर जनपद–अमेठी से सम्बन्धित अपेक्षित समस्त सूचनाओं को विस्तृत रूप से प्रस्तुत किये जाने के निर्देश दिया गया था जिसके क्रम में अपेक्षित समस्त सूचनाओं को निर्धारित प्रारूप पर संबंधित विभागों से समन्वय स्थापित करते हुए सूचना संकलित कर दिनांक 13.03.2024 को श्री ऋषिकेश सिंह जिला परियोजना अधिकारी जिला गंगा समिति अमेठी के माध्यम से प्रेषित किया गया था, जनपद से प्रेषित सूचनाओं में आप द्वारा बिन्दुवाद त्रुटियां अंकित कराई गई थी और त्रुटियों को सुधार कर समस्त सूचनाओं को दिनांक 28.03.2024 तक प्रेषित किये जाने हेतु निर्देश दिया गया था।

उक्त के क्रम में आप द्वारा अवगत कराई गई त्रुटियों को सुधार कर अपेक्षित समस्त सूचनाओं को सम्बन्धित विभागों से समन्वय स्थापित करते हुये सूचना संकलित कर उपलब्ध कराये गये निर्धारित प्रारूप पर जिलाधिकारी, महोदया के अवलोकनोपरान्त मूल प्रति कें साथ आवश्यक कार्यवाही किये जाने हेतु श्री ऋषिकेश सिंह जिला परियोजना अधिकारी, जिला गंगा समिति, अमेठी के माध्यम से प्रेषित किया जा रहा है।

कृपया स्वीकार करने का कष्ट करें।

भवदीय,

प्रभागीय वनाधिकारी
प्रभाग अमेठी

(रणवीर मिश्र)
प्रभागीय वनाधिकारी / सदस्य संयोजक,
जिला गंगा समिति, अमेठी।

पत्रांक /उक्तदिनांकित

प्रतिलिपि–

1–जिलाधिकारी महोदया / अध्यक्ष, जिला गंगा समिति, अमेठी को सादर सूचनार्थ प्रेषित।
2–मुख्य विकास अधिकारी, महोदय / नोडल अधिकारी, जिला गंगा समिति, अमेठी को सूचनार्थ प्रेषित।
3–जिला विकास अधिकारी, अमेठी को सूचनार्थ प्रेषित।
3–श्री ऋषिकेश सिंह जिला परियोजना अधिकारी, जिला गंगा समिति–अमेठी को इस निर्देश के साथ प्रेषित कि जनपद से सम्बन्धित समस्त अपेक्षित सूचनाओं के साथ निर्धारित समय पर प्रतिभाग करना सुनिश्चित करें।

(रणवीर मिश्र)
प्रभागीय वनाधिकारी / सदस्य संयोजक,
जिला गंगा समिति, अमेठी।

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मुख्य विकास अधिकारी /जिलाधिकारी महोदया, अमेठी।

कृपया पत्रावली के दाहिनी तरफ रक्षित मा0 राष्ट्रीय हरित अधिकरण नई दिल्ली द्वारा Original Application no. 200/2014 (I.A. No.340/2022, I.A. NO.872/2018, I.A. No.875/2014 & I.A.No.480/2018) M.c.Mehta Versus Union of India & Ors. दिनांक 05.02.2024 **(पताका–क)**, में पारित आदेश का संदर्भ ग्रहण करने का कष्ट करें, जिसके द्वारा मा0 राष्ट्रीय हरित अधिकरण नई दिल्ली द्वारा ओ0ए0 संख्या–200/2014 एम0सी0 मेहता बनाम यूनियन ऑफ इंडिया व अन्य में पारित आदेश के अनुपालन में जिला गंगा सुरक्षा समिति की रिपोर्ट निर्धारित प्रारूप पर मा0 एन0जी0टी में समयान्तर्गत दाखिल करने हेतु सुश्री प्रियंका स्वामी, स्थायी अधिवक्ता उ0प्र0 आबद्ध अधिवक्ता, मा0 एन0जी0टी0 को प्रेषित किया जाना है तथा दिनांक–13.03.2024 को उपस्थित होकर जनपद से सम्बन्धित अपेक्षित समस्त सूचनाओं को विस्तृत रूप से प्रस्तुत किया जाना है।

उक्त के क्रम में अपेक्षित समस्त सूचनाओं को सम्बन्धित विभागों द्वारा सूचना निर्धारित प्रारूप पर उपलब्ध कराया गया है। अधिशाषी अभियंता, खण्ड कार्यालय उत्तर प्रदेश जल निगम ग्रामीण, अमेठी द्वारा अपने कार्यालय के पत्र संख्या–482 दिनांक 01/03/2024**(पताका–ख)**, अधिशाषी अभियंता, सहायक शारदा सहायक खंड 41 अमेठी द्वारा अपने कार्यालय के पत्र संख्या–221 दिनांक 02/03/2024**(पताका–ग)**, कार्यालय उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड रायबरेली द्वारा अपने कार्यालय के पत्र संख्या–834 दिनांक 05/03/2024 **(पताका–घ)**, नोडल अधिशाषी अधिकारी द्वारा कार्यालय नगर पालिका परिषद गौरीगंज के पत्र संख्या–2075 दिनांक 07/03/2024**(पताका–च)**, जिला पंचायत राज अधिकारी अमेठी द्वारा अपने कार्यालय के पत्र संख्या–6631 दिनांक 06/03/2024**(पताका–छ)**, कार्यालय खनन अधिकारी अमेठी, खनन विभाग द्वारा अपने कार्यालय के पत्र संख्या–138 दिनांक 02/03/2024**(पताका–ज)**, उपायुक्त, उद्योग प्रोत्साहन एवं उद्यमिता विकास केंद्र द्वारा अपने कार्यालय के पत्र संख्या–922 दिनांक 07/03/2024 **(पताका–झ)**, व क्षेत्रीय वन अधिकारी मुसाफिरखाना वन प्रभाग अमेठी द्वारा अपने कार्यालय के पत्र संख्या–192 दिनांक 05/03/2024 **(पताका–ट)**, द्वारा सूचना उपलब्ध कराई गई है जो सम्बन्धित पताका पर रक्षित है, जिसे संकलित कर निर्धारित प्रारूप पर पत्रावली के दायी तरफ रक्षित किया गया हैं**(पताका–ठ)**,एवं निर्धारित प्रारूप में दाखिल कराये जाने हेतु सुश्री प्रियंका स्वामी, स्थायी अधिवक्ता मा0 एन0जी0टी0 नई दिल्ली के समक्ष जनपद–अमेठी की सूचना निर्धारित प्रारूप में प्रेषित किया जाना है।

अतः जिला गंगा सुरक्षा समिति से मा0एन0जी0टी0 में दाखिल कराने हेतु सम्बन्धित विभागों से प्राप्त सूचना संकलित कर निर्धारित प्रारूप पर प्रेषित किये जाने हेतु सूचना अधोहस्ताक्षरी द्वारा परीक्षण किया गया हैं। जो पत्रावली के दाहिनी तरफ रक्षित है।

कृपया सहमति की दशा में प्रेषित किये जाने हेतु सूचना पर हस्ताक्षर करना चाहे।

8/3/2024

(रणवीर मिश्र)
प्रभागीय वनाधिकारी
अमेठी वन प्रभाग

07/03/24

15/3/2024

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A. Geographical Detail :

District Amethi lies at the latitude 26°9' north and longitude 81°49' east at an average elevation of 101 metres (331 feet) from mean sea level. Total geographic area of the district about 2329 km2. The surface is generally level, being broken only by ravines in the neighbourhood of the rivers. The principal river is Gomati, which passes through north side of the district. North side of this district is bounded by Ayodhya district; South side is surrounded by Pratapgarh district. The District Barabanki, Raebareli lies in west of Amethi and the East side is bounded by district Sultanpur.

B. Population:

The district Amethi was created from District- Sultanpur district in 2010 with four tehsheel (Tiloi, Gauriganj, amethi,musafirkhana) and administrative head quarter situated in tehsheel Gauriganj. According to the 2011census Population of district Amethi is 18,67,678 in which 17,61,380 lived under rural area and rest 1,06298 belongs to Urban area. The district has population density of 1,867 in habitants per square kilometer (3,330/sq mi) Amethi has a sex ratio of 976 females for every 1000 males, and the literacy rate is 64.27%.

C. Blocks and villages:

There are 13 blocks and 682 villages in district Amethi

D. Urban area:

There are four urban local body in district Amethi in which 02 are Nagar Palika Parishad

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(Gauriganj and Jayas) and rest two are Nagar Panchayat (Amethi and Musafirkhana).

E. River flow in district:

The river Gomti is principal river of district amethi , which passes through north side of the district and also major source of water throughout the year. River Gomati originates from Gomath tal (formerly known as Fulhar Jheel) near Madho Tanda town of Pilibhit district. After traveling a distance of about 940 km. through Pilibhit, Shahjahanpur, Hardoi, Sitapur, Lucknow, Barabanki, Sultanpur, Jaunpur, and Ghazipur districts of Uttar Pradesh and finally drains into Ganga River near Saidpur/Kaithi in Ghazipur district of Uttar Pradesh. The Gomati River enter in district Amethi from Shukul Bazar and flows through in Shukul Bazar to Musafirkhana for 29 km before entering in neighbor district Sultanpur. In district Amethi 26 village are situated near the bank of this river .

F. Drains in district:

There is one major drain Kadunala in district Amethi of capacity 6.02MLD .

G. Nearest district:

The district Amethi have five neighbor districts from North side of this district is bounded by Ayodhya district; South side is surrounded by Pratapgarh district. The District Barabanki, Raebareli lies in west of Amethi and the East side is bounded by district Sultanpur.

H. Total Number of Industries in district:

There are total 28 Industries established in district Amethi (Table no 1).

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जिला संज्ञा राजिस्ट्रार

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1. Sewage

City/Drain	Total drain capacity	Generation /day	PH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride etc)	Fluoride (mg/l)	Nitrates (mg/l)	DO (mg/L)	TC (MPN/100 ML)	FC (MPN/100 ML)	Outlet flow and geo code sample point	Cl (mg/L)	Colour/ odour	Discharged into
Kadu Nala	6.02 ML	6.02	8.17	6.6	25.92	60	296	Pb-0.107 mg/L Fe-0.0744 mg/L Zn-0.235mg/L Mn-0.525 mg/L Cr, As,Cu,Hg- Not Detected	1.01	0.34	2	54000	17000	6.02	61	20/None	River Gomti
NPP JAIS	2.20 ML	2.08 ML															Niravlly Nala
NPP GAURIGANJ	1.90 ML	1.71 ML															Lodi Nala
NP Amethi	1.20 ML	1.08 ML															Sagra talab
NP Musafirkhan	1.0 ML	0.9 ML															Gvinga grand
TOTAL-	10.12 ML	9.71 MLD															

NPP/NP Drains meets in dry state to Major Drains.It is also recorded that there very less sewage generated in Urban area of District. Beside this the higher amount of sewage directly used by the farmer's for the agriculture purpose and some part of sewage get dry during flow.

2- STP (Sewage Treatment Plant) for treating the sewage of the drains ultimately flowing to river ganga or its tributaries.

Existing STP (location & capacity)	Capacity (operational)	Inlet/ Outlet water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point	proposed/under construction STP with completion date

There are no sewar line in URBAN LOCAL BODY (NAGAR PALIKA PARISHAD / NAGAR PANCHYAT) in district amethi. and also there is not established Seewage treatment plant (STP) in District amethi.In urban arae there are required 135 LPCD water for sewage system.In urban area drinking water work scheme are presently propesed.At present time in urban area used seewage treatment by septic tank or soakpit.From this discharge are very less or negiable.

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3. HOTELS/ ASHRAMS

Number of Hotels/ ashrams/ dharamshalas	Consent to establish/ operate	STP	Discharge point	Action taken
District -Amethi 09	yes	No	self soakpit	At present time in all Hotel/Ashram used seewage treatment by septic tank or soakpit.From this discharge are very less or negiable.

SR NO	Name of Hotel/ Ashram/Dharamshal	Consent to establish/ operate	STP	Discharge point Geocode/ sampling point	Action Taken
1	Revati Mahal Gauriganj	No	Not Installed	Through septic tank/Soak pit	-
2	Kalpatru Hotel and restarurent Gauriganj	No	Not Installed	Through septic tank/Soak pit	-
3	Alok Dhabha Gauriganj	No	Not Installed	Through septic tank/Soak pit	-
4	Jaiswal Dhabha Gauriganj	No	Not Installed	Through septic tank/Soak pit	-
5	Shiv shakti bhojnalay Gauriganj	No	Not Installed	Through septic tank/Soak pit	-
6	Maurya Restaurent Jayas	No	Not Installed	Through septic tank/Soak pit	-
7	Bangali Mishthan bhandar Jayas	No	Not Installed	Through septic tank/Soak pit	-
8	Rajshthan Amethi	No	Not Installed	Through septic tank/Soak pit	-
9	Hotel International	No	Not Installed	Through septic tank/Soak pit	-

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जनपद-अमेठी

4. Industrial Effluent discharge by industries whose effluents ultimately flowing to river Ganga or its tributaries.

Total number of Industries	Daily effluent discharge	Treatment available (cetp/ petp/ etp operational capacity)	Effluent quality analysis (outlet of treatment plants) Geocode sampling point)	GAP	Proposed/ under construction treatment project (with timeline)	Number of defaulting units- Action taken	Industrial solid waste generated/ day	Manner of disposal (Industrial solid waste)
28	15173KLD	15173KLD	As per norms	None	None	None	395.16 MT/Annum	Trough UPPCB Authorised TSDF

Total 28 Industries Established in District Amethi

S. No	Name of Vikas Khand	Name of Gram panchayat	Name of Industries
1	Jagdishpur	Kamrauli	BHEL, Industrial Area, Jagdishpur, Amethi
2	Jagdishpur	Utelwa	The West India Power Equipment Pvt. Ltd. (WIPE), Jagdishpur
3	Bhetua	Kudwa	Hindustan Aeronautics Limited Korwa, Munsiganj, Amethi
4	Jagdishpur	Utelwa	Indogulf Fertilizer Ltd. Jagdishpur, Amethi
5	Gauriganj	Tikariya	ACC Cement, Tikariya, Gauriganj, Amethi
6	Jagdishpur	Utelwa	Marwa Cement industries pvt. Ltd., Jagdishpur, Amethi
7	Bhadar	Trishundi	Indial Oil Corporation (LPG Bottling Plant), Trisundi, Amethi
8	Gauriganj	Tikariya	Bharat Petrolium (LPG Bottling Plant), Corporation Ltd., Tikariya.
9	Jagdishpur	Utelwa	A.B. Metals, Jagdishpur Industrial Area, Amethi
10	Jagdishpur	Utelwa	M.B.D. Industries, Jagdishpur Industrial Area, Amethi
11	Jagdishpur	Kathaura	Steel Authority of India Ltd. Jagdishpur SAIL Unit, Amethi
12	Amethi	Raipur Phulwari	Agrahari Masala Udyog (Rajesh Masala), Amethi
13	Jagdishpur	Utelwa	Shree Enterprises, Industrial area, Jagdishpur, Amethi
14	Jagdishpur	Utelwa	Shree packaging, Industrial area, Jagdishpur, Amethi
15	Jagdishpur	Utelwa	Quality packaging, Industrial area, Jagdishpur, Amethi
16	Gauriganj	Tikariya	ION Exchange, Pvt. Ltd., Tikariya, Amethi
17	Jagdishpur	Utelwa	Suchitra Metal Pvt. Ltd., Industrial area, Jagdishpur, Amethi
18	Gauriganj	Tikariya	Rajesh milk and Edible products, Sadhu Nagar., Tikari. Amethi.
19	Jagdishpur	Utelwa	Suguna Food Products, (Hatchery Unit) Industrial area, Jagdishpur.
20	Jagdishpur	Utelwa	Suguna Food Products, (Poultry Feed Unit) Industrial area. Jagdishpur, Amethi
21	Jagdishpur	Utelwa	Jafa Comfeed Pvt. Ltd. Industrial area, Jagdishpur, Amethi
22	Nagardeeh	Nagardeeh	Kanodia cem pvt. Ltd., Nagardeeh, Post Bhadar, teh and dist. Amethi
23	Trisundi	Trisundi	SLMG Pvt. Ltd., Trisundi, Industrial Area, UPSIDC, Amethi.
24	Navkhera	Navkhera	ABIS exports Pvt. Ltd., 36, 37, 38, 42, 43, 44, Vill. Navkhera, Teh.Tiloi, Amethi
25	Navkhera	Navkhera	ABIS exports Pvt. Ltd. 8,11,38,40,41,42, Vil. Navkhera, Teh. Tiloi, Amethi.
26	Gauriganj	Tikariya	MLR Foods, C-1, G-63, 64, 65, Tikaria Industrial Area Amethi.
27	Korwa	Korwa	GM Ordinance factory Project, Korwa, Amethi
28	Jagdishpur	Jagdishpur	Skylark Pvt. Ltd., A-3, Sector, 22, Industrial Area, Jagdishpur Amethi.

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5. Regulation of Flood Plain Zone:

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Area- cities/ towns	Notification of flood plain zone	Demarcation		Encroachment & direct discharge geo code / sampling point.	Encroachment removal status	Timeline for completion
		No Development zone pillars	Regulatory zone pillars			
District- Amethi	No area of city/town is effected by flood so no notification is needed fo specifically city/town area	No Development zone pillars have been installed.	No Regulatory zone pillars have been installed.	Stretch of river don't fall in city / town hence no encroachment and no need of removal of encroachment	NO encroachment in city/ town so no timeline is set for removal of encroachment	NO encroachment in city/ town so no timeline is set for removal of encroachment

6. AFFORESTATION/ PLANTATION along the bank of river ganga and its tributaries and their flood plains zones.

Area- cities/ towns		Total plantation Geo code/Sampling point	Proposed project	Time line
5 hec.	Majhgaon Van Block	4125 Lat- N- 26.64421 Long-E- 81.55850	Ongoing Project by Forest Depasrtment	Till Financial year 2023-24 (31st March 2024)
5 hec.	Khemmau Van Block	4125 Lat-N- 26.63160 Long-E- 81.61282	Ongoing Project by Forest Depasrtment	Till Financial year 2023-24 (31st March 2024)
5 hec.	Kishni Van Block	4125 Lat-N- 26.58733 Long-E- 81.65966	Ongoing Project by Forest Depasrtment	Till Financial year 2023-24 (31st March 2024)
5 hec.	Pali (Samda) Van Block	4125 Lat-N- 26.61760 Long-E- 81.66601	Ongoing Project by Forest Depasrtment	Till Financial year 2023-24 (31st March 2024)
5 hec.	Sansarpur Van Block	4125 Lat-N- 26.65246 Long-E- 81.58766	Ongoing Project by Forest Depasrtment	Till Financial year 2023-24 (31st March 2024)
5 hec.	Nadi Van Block	4125 Lat-N- 26.58945 Long-E- 81.68528	Ongoing Project by Forest Depasrtment	Till Financial year 2023-24 (31st March 2024)

7. Mining and stone crushing in riverbed and flood plain zone of river Ganga and its tributaries.

Area of mining	FIR/ case registered/ year	Vehicles/ mineral seized	Action taken status	Cases pending in Court	Enforcement of EMGSM 2020 and Sustainable sand mining management guidelines 2016
0	0	0	0	0	0

There are no mining area in District-Amethi

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The Tribunal has already directed for furnishing following information by order dated 24.11.2023:-

01.	**(1)District Ganga Protection Plan at city/ town level:-** District Ganga Protection Committee (DGPC) is required to formulate the action plan for each city and town located on main stream of river Ganga and its tributary and such Action Plan has to be prepared in accordance with the River Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016 (para 6 and 55).	There are 26 villages comes under the main stream of river Ganga Tributaries Gomti and Ganga Gram samiti organized in each villege for Rejuvenation, Protection and Management. The meetings of these committee Members organized on regular basis in every month and also District Ganga committee meeting held every month under the super vision of District Magistrate.
02.	**2.Contents of the Action Plan (Consolidated District Wise Action Plan including each City and Town abutting river Ganga and its Tributary) -**	
	2.1 Sewage Management:	
	(i) Sewage generation (for entire District and individual town wise):	Major Drain seweage generated is 6.02 and very less sewage generated in Urban area NPP/NP is .So total seweage generated is 9.71 MLD (As pr given by Nodal Executive officer District-Amethi & Central pollution control board Raibareli)
	(ii) Existing Sewage Treatment Capacities :	There are no STP established in District- Amethi.
	(iii) Quantity of sewage is being treated (utilization capacity) :	There are no STP Plant established so seweage is not being treated but in District amethi maximum Household used soakpit and septic tank.
	(iv) Performance of STPs particularly for FC	There are no STP established in District- Amethi so Performance of STPs particularly for Fecal coliform.
	(v) Where treated sewage is being discharged (to Ganga or tributaries) :	NO,treated sewage is being discharged (to Ganga or tributaries) :

जिला पर्यावरण अभियन्ता
जिला गंगा समिति अमेठी

	(vi) Reasons for Under-utilization of STPs (Connectivity of Households/ laying of sewer lines) :	There are no sewer line under Urban Local Body (NAGARPALIKAPARISHAD/NAGARPANCHYAT) in district Amethi. Except this there is no sewage treatment plant (STP) established in district under urban area , however it is required 135 LPCD water for sewage system. In urban area drinking water work scheme is presently proposed. At present in urban area fecal sludge treated through septic tank / soakpit.
	(vii) Current Gap in sewage treatment :	There are no gap of sewage treatment.
	(viii) Time bound plan for bridging the gap and tying up with financial arrangements and not delaying Tendering and identifying executing agencies or having any other issues :	Working as given order by govt. of UP and Govt. of India and proceed all rule and regulation for financial arrangement and indentify of executive agency.
	(ix) Where untreated sewage (when there is no STP) is discharged (Ganga /Tributaries)	No untreated sewage is discharged in (Ganga /Tributaries) Gomati river
	2.2 Drains joining Ganga and Tributary (i) Number of drains carrying sewage- sullage or industrial waste water joining Ganga/ tributaries with their Quantity and Quality:	There are no drains carrying sewage-sullage or industrial waste etc joining directly Ganga or tributaries.
	(ii) Drains joining outside city and town limits but, either joining in village or nearby town:	3 village are joined in Kadu nala Drain.
	(iii) Inclusion of sewage flowing in drains into total sewage generation figures of each city and town and their interception and diversion to STPs:	Major Drain seweage generated is 6.02 and very less sewage generated in Urban area NPP/NP is .So total seweage generated is 9.71 MLD.
	2.3 Septage management (In case of no STP) (i) Status of Septage management (with reference to FSTP/STP):	3.0 KLD FSTP Plant established in village Benipur District Amethi and run under guidance of Panchaytiraj department Amethi.

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जिला गंगा संरक्षण समिति

	(ii) Management of Grey water and its disposal:	Grey water management by panchayti raj department. In District Amethi there are 338 villege are covered by grey water management and constructed many assests as filter chamber, soak pit etc and 134 village are converted in model village.
	2.4 Industrial Pollution Control (i) Attach the list on no. of industries generating trade effluents, their place of disposal and compliance including CETPs (town wise):	There are 28 industries established in District Amethi, and no industries established near Gomati river. The waste generated from industries are disposed properly by industrial resources. The industrial waste material are not exposed in Gomati river. The meeting are continuously held with industries for industrial flow observation and certain direction are continuously given to Industries for waste disposal.
03.	**(3) Water quality status Provide water quality status of Ganga and its tributaries in the District and city/ town in terms of its fitness for Bathing water quality that is, FC and FS**	Water quality status of Ganga and its tributaries in the District and city send by UPPCB Raebareli which test report is given below.

Sr No	Date of Sampling	Sampling point	PH	Color (Hazen)	D.O. (mg/L)	BOD (mg/L)	TC (MPN/100ml)	FC (MPN/100 ml)
01-	18.03.2024	Gomti River Aam ghat Jagdeesh pur, Amethi	8.13	10	8.5	3.7	3900	2400
02-	18.03.2024	Gomti River Isauli ,Amethi	8.05	10	8.6	4.0	4000	2700
Primary water quality criteria for bathing water [G.S.R.742(E) Dated 25 September 2000]			6.5-8.5	-	5 mg/l or more	3 mg/lor less	-	500 Desirable 2500 Maximum permissible.

जिला पर्यावरण अभि...
जिला गंगा समिति(नमामि गंगे)
जनपद-अमेठी

04.	**(4) Notification of Flood Plain Zones:**	No area of city/town are effected by flood so no notification needed to specifically city/town area.
05.	**(5) Issues relating to Environmental Flow:**	Notification has been issued by dated 09.10.2018 The report is being submitted by the District Ganga /Environment committee.

जिला परियोजना अधिकारी
जिला गंगा समिति(नमामि...
जनपद–अमेठी

Best Practices in District- Amethi

A. Organic farming :

As per office record 0.27 % land comes under organic farming. The natural farming practices, organic farming, INM (Integrated Nutrient Management) technique and PM Pranam yojana adopted by farmers for reducing dependency on chemical fertilizers, moreover the Farmers have also adopted the crop residue management practices that reduces the crop burning.

B. Irrigation:

Sprinkler and drip irrigation practices have adopted by farmers to control unauthorized use of irrigation water, more over certain farmers also use solar pump for irrigation purposes.

C. Waste management:

(i) Solid waste management :

The Resource Recovery Center (RRC) have been constructed In 396 village of district Amethi and also constructed 283 garbage dustbin, 45 community NADEP and 32 vermicompost etc. The Material Recovery Facility (MRF) center of capacity 5TPD have been constructed in every ULBs (NagarPalika/ Nagar Panchyat)

(ii) Liquid Waste Management :

The filter chamber and Soakpit are constructed in 396 village of district Amethi.

जिला पंचायत अधिकारी
जिला पंचायत समिति(नगरीय)
जनपद-अमेठी

प्रभागीय वनाधिकारी
वन प्रभाग अमेठी

(iii) Fical sludge Management :

One FSTP plant of 3KLD established in village Benipur in district Amethi

(iv) Plastic Waste Management:

In rural area of district Amethi three plastic waste management established

(v) ODF+ Details

In rural area 338 village are selected for ODF+ Model village and 138 village are declared for ODF+ Model village rest village will be declare in Financial year 2024-25.

D -Forestation:

In district Amethi total 4544575 plants has been planted under area of 979 hectare during the financial year 2023-24.

जिला परियोजना अधिकारी
जिला पंचायत समिति(नगर पंचा)
जनपद-अमेठी

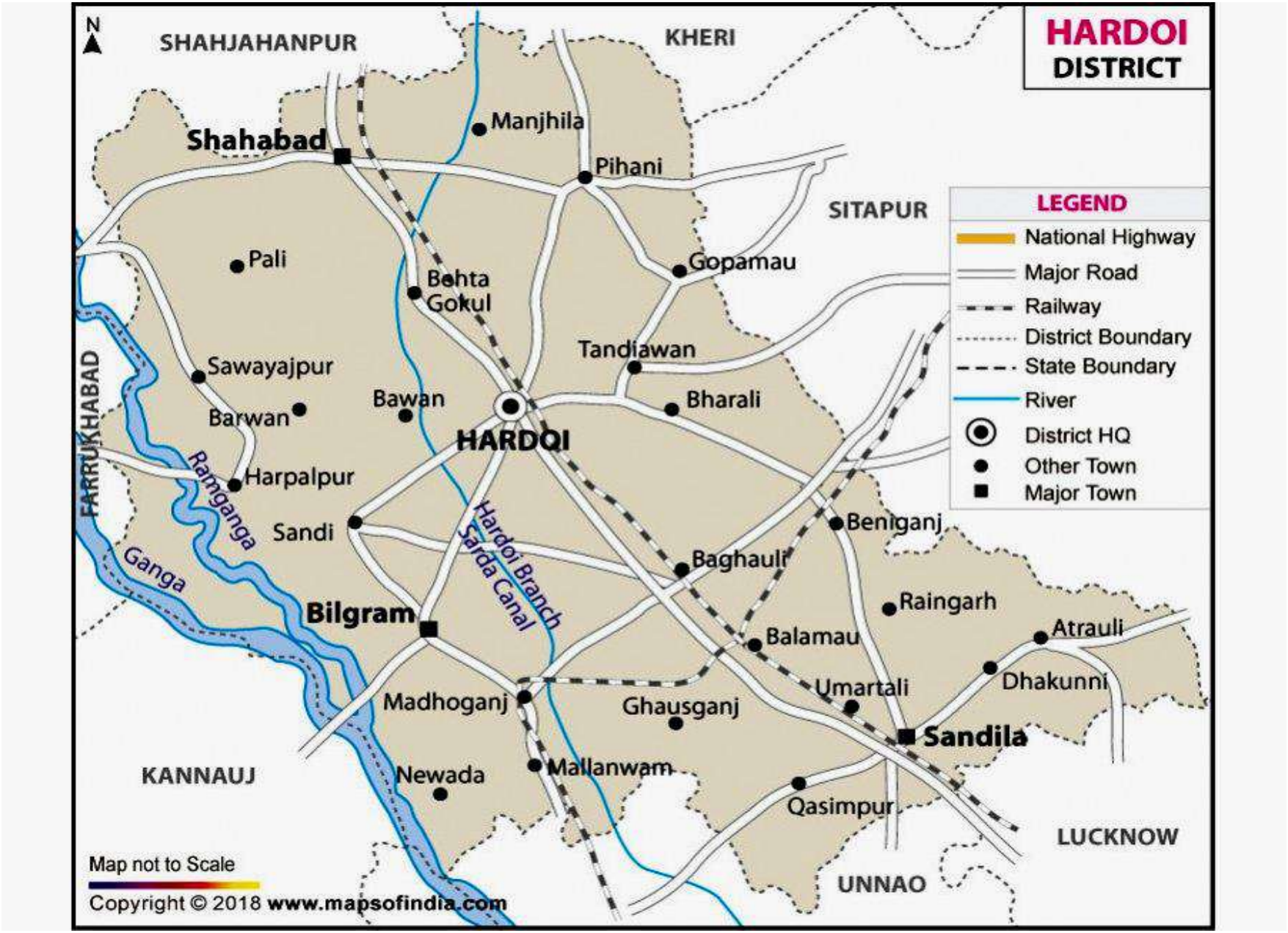
प्रभागीय वनाधिकारी
वन प्रभाग अमेठी

(Ganga tributaries Gomti river start and end point Coordinates in District.

भारत सरकार /
जल शक्ति मंत्रालय
GOVERNMENT OF INDIA

Report in
Compliance of Hon'ble NGT order
Dt. 24.01.2024
O.A 200/2014 MC Mehta Vs UOI and Ors

Report Submitted By-
DISTRICT GANGA COMMITTEE
DISTRICT HARDOI


HARDOI
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Gokul
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Sawayajpur
Barwan
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HARDOI
Harpalpur
Ramganga
Ganga
Sandi
Hardoi Branch
Sarda Canal
Beniganj
Baghauli
Raingarh
Bilgram
Balamau
Atrauli
Umartali
Dhakunni
Madhoganj
Ghausganj
Sandila
Mallanwam
Newada
Qasimpur
LEGEND
National Highway
Major Road
Railway
District Boundary
State Boundary
River
District HQ
Other Town
Major Town
Map not to Scale
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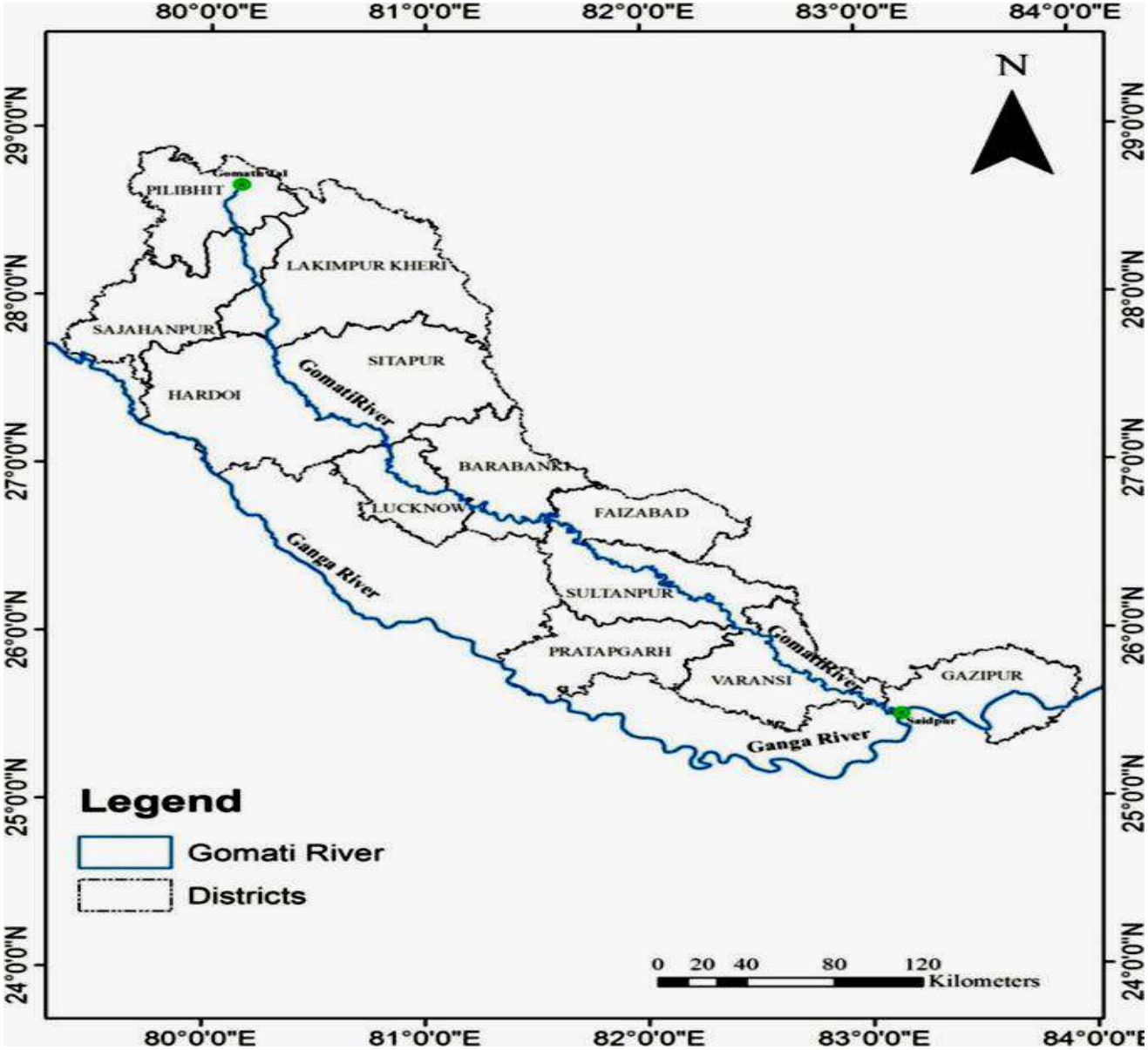
- **It has 7 Nagar Palika Parishads.**
    1. Hardoi
    2. Bilgram
    3. Mallawan
    4. Sandi
    5. Shahabad
    6. Pihani
    7. Sandila
- **It has 6 Nagar Panchayats**
    1. Pali
    2. Madhoganj
    3. Kursath
    4. Kachauna Patsaini
    5. Gopamau
    6. Beniganj

- Geographical area is 5947 km^2
- As per census 2011 population of the district is 4091380, out of which Female are 1887116 & Male are 2204264.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SAJAHANPUR
SITAPUR
HARDOI
GomatiRiver
BARABANKI
LUCKNOW
FAIZABAD
Ganga River
SULTANPUR
PRATAPGARH
VARANSI
GAZIPUR
Legend
Gomati River
Districts
0 20 40 80 120
Kilometers

1. Sewage

Drain (City/ Town)	Total drain capacity	Generation/ day	PH	BOD (mg/l)	COD (mg/l)	TSS (mg/l)	TDS (mg/l)	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride etc)	Nitrates	DO (mg/l)	TC (MPN/100 m)	FC (MPN/100 m)	Outlet flow and geo code/ Sample Point	Colour/ Odour	Discharged Into
Hardoi															
NPP Hardoi Maholiya	13.2 MLD	9.6 MLD	8.30	76	126.2	06	715	Fe-1.02, Cr-BDL Pb-BDL As-0.019, Mn-BDL, Cu-BDL, Zn-1.23, Hg-BDL, F-Nil	1.95	0.4	348	240	Lat-7.404736 Long-80.154759	Light Grey/ Unpleasant	Bhaista Drain
NPP Hardoi Post office talab to Chhuiya Drain	15.5 MLD	10.8 MLD	8.20	272	961.1	113	1052	Fe-1.05, Cr-BDL Pb-BDL As-0.019, Mn-BDL, Cu-BDL, Zn-1.22, Hg-BDL, F-Nil	1.85	0.2	345	278	Lat-27.384384 Long-80.131256 -	Light Grey/ Unpleasant	Chhuiya Drain
NPP Hardoi Daan Singh Puliya to Chhuiya drain via Bawan Road	12.5 MLD	9.2 MLD	8.50	136	320.4	118	986	Fe-0.89, Cr-BDL Pb-BDL As-0.021, Mn-BDL, Cu-BDL, Zn-1.05, Hg-BDL, F-Nil	3.19	0.2	278	221	Lat-27.38417 Long-80.106347	Light Grey/ Unpleasant	Chhuiya Drain

Shahabad															
NPP Shahabad (Hardoi)	9.5 MLD	0.31	8.84	108	112.4	67	820	Fe-0.62, Cr-BDL, PB-BDL, Zn-1.16, Hg-BDL, Fluoride-0.64	4.59	0.6	542	212	Lat 27.64966, Long 79.934291	Light Grey/ Unpleasant	Sunhari Talab
Pihani															
NPP Pihani Hardoi road drain	2.80	0.09	7.31	252	551.01	636	836.5	Fe-1.00 Cr-BDL Pb-BDL As-0.025 Mn-BDL Cu-BDL Zn-2.01 Hg-BDL F-Nil	5.10	0.4	542	348	Lat-27.629774 Log-80.195444	Blackish/ Unpleasant	Sai River
NPP Pihani Karawan road drain	2.80 MLD	0.09	7.47	108	234	98	950	Fe-0.97, Cr-BDL Pb-BDL, As-0.030 Mn-0.08, Cu-BDL, Zn-2.58 Hg-BDL, F-Nil	4.82	0.3	542	278	Lat-27.629774 Log-80.195444	Light Grey/ Unpleasant	Open Fields
NPP Pihani Gopamau Road Drain	2.80 MLD	0.09	8.28	22	163	315	459.70	Fe-0.81, Cr-BDL Pb-BDL, As-0.015 Mn-BDL, Cu-3.0 Zinc-1.98, Hg-BDL, F-Nil	1.63	0.41	278	79	Lat-27.629774 Log-80.195444	Blackish/ Unpleasant	Open Fields

Kursath															
NP Kursath Pani Tanki to Chhitariha Pond	0.56 MLD	0.18 MLD	8.21	50	102	16	682.2	Fe-0.95, Cr-BDL PB-BDL, Ar-0.024 Mn-BDL, Cu-BDL Zn-1.80, Hg-BDL Fluoride- Nil	1.43	0.4	426	177	Lat 27.131431 Long 80.244987	Light grey	Talab
Gopamau															
NP Gopamau Anis cement store to Kanji talab	1.20 MLD	1.03 MLD	7.80	20	30.61	31	439.7	Fe-0.68, Cr-BDL, Pb-BDL, As-0.021, Mn-BDL, Cu-BDL, Zn-1.53, Hg-BDL, F-Nil	1.17	0.3	345	221	Lat-27.530429Long-80.288588	Light Grey/ Unpleasant	Kanji talab
NP Gopamau Chunnan house to Sagar talab	1.08 MLD	0.84 MLD	8.01	40	91.83	78	624	Fe-0.83, Cr-BDL, Pb-BDL, As-0.009, Mn-BDL, Cu-BDL, Zn-1.92, Hg-BDL, F-0.23	3.10	0.2	542	348	Lat-27.53552^0 Long-80.28173^0	Light Grey/ Unpleasant	Sagar talab
Bilgram															
NPP Bilgram-Eidgah Anjuman (Kasupet Drain)	4 MLD	4 MLD	7.84	46	183	159	819.4	Fe-0.84, Cr-BDL Pb-BDL, As-0.020 Mn-BDL, Cu-BDL Zinc-1.87, Hg- BDL, F-Nil	3.87	0.7	70	43	Lat-27.17996 Log-80.028397	Light Grey/ Unpleasant	Talab

NPP Bilgram-Malkanth Sidri drain	2.80 MLD	2.80 MLD	7.82	20	30.6	18	730.2	Fe-0.74, Cr-BDL Pb- BDL, As-0.014 Mn-BDL, Cu-BDL Zinc-1.10, Hg-BDL, F-0.20	2.31	0.5	32	17	Lat-27.165866 Log-80.027124	Light Grey/ Unpleasant	Talab
Kachhauna															
NP Kachhauna Babulal Puliya	1.2 MLD	0.51 MLD	8.47	210	873	218	878.4	Fe-0.92, Cr-BDL PB-BDL, As-0.025 Mn-BDL, Cu-BDL Zn-1.70, Hg-BDL	5.18	0.1	348	175	Lat-27.158862 Log-80.3435	Light Grey/ Unpleasant	Ahirani Talab
NP Kachhauna Sumitra Tiraha	0.5 5MLD	0.25 MLD	7.82	34	126	21	709	Fe-1.46, Cr-BDL PB-BDL, As-0.015 Mn-BDL, Cu-BDL Zn-0.46, Hg-BDL	2.17	0.4	120	46	Lat-27.158862 Log-80.3435	Light Yellow /Unpleasant	Takiya
Sandi															
NPP Sandi KESAV BAGIYA KE PAS MOHALLA AULADGANJ	2.5 MLD	0.51 MLD	7.83	56	91.83	41	498.6	Fe-0.68, Cr-BDL, PB-BDL, As-0.015, Mn-BDL, Cu-BDL, Zn-1.22, Hg-BDL, F-0.52	2.46	0.20	426	345	Latitude-27.286972, Longitude-80.948043	Yellowish/ Unpleasant	GARRA RIVER

NPP Sandi Mohalla, Raytola	1.5 MLD	0.46 MLD	7.93	36	81.63	67	545.7	Fe-0.74, Cr-BDL, PB-BDL, As-0.012, Mn-BDL, Cu-BDL, Zn-1.98, Hg-BDL, F -Nil	2.24	0.2	212	148	Latitude-27.282909, Longitude-80.951513	Yellowish/ Unpleasant	GARRA RIVER
NPP Sandi Mohalla, Naushara	1.2 MLD	0.32MLD	7.93	64	122.44	90	586	Fe-0.75, Cr-BDL, PB-BDL, As-0.016, Mn-BDL, Cu-BDL, Zn-0.95, Hg-BDL, F- Nil	3.11	0.4	345	278	Latitude-27.291638Longitude80.948461	Yellowish/ Unpleasant	GARRA RIVER
Madhoganj															
NP Madhoganj Ambedkar Nagar	1.2 MLD	0.36 MLD	7.70	410	1029.4	792	1326	Fe-0.93, Cr-BDL, PB-BDL, As-0.014., Mn-BDL, Cu-BDL, Zn1.50,Hg-BDL, F-0.19l	5.12	0.2	350	228	Latitude-27120823 Longitude-80.139544	light grey/ Unpleasant	DAHRA TALAB
NP Madhoganj Singh Dwar	1.8 MLD	0.42 MLD	7.60	250	504.8	66	1072	Fe-0.99, Cr-BDL, PB-BDL, As-0.015, Mn-BDL, Cu-BDL, Zn-1.21, Hg-BDL, F-0.18	3.82	0.4	348	253	Latitude-27.11471 Longitude-80.141097	Dark grey/ Unpleasant	GHUINYA PAKARIYA TALAB

Pali															
NP Pali Mohalla Malikana to malik juggan ke makan se fukro wale talab tak	1.32 MLD	0.40 MLD per day	7.32	70	102	351	664.2	Fe-1.02, Cr BDL As-0.019, Mn-BDL Cu-BDL, Zn-1.76 Hg-BDL, F-0.21 Pb-BDL	4.32	0.1	253	177	Latitude-27.525936 Longitude-79.848290	Colour - Light Grey odour - Unpleasant	Talab
NP Pali Mohalla Partiyanaeem to Suresh Ke makan se kali mandir se talab tak	1.25 MLD	0.39 MLD per day	7.67	32	81.6	105	374.5	Fe 0.76. Cr BDL As-0.011, Mn-BDL Cu-BDL, Zn-1.59 Hg-BDL, Fluride-0.17, Pb- BDL	2.76	0.2	542	240	Latitude-27.536183 Longitude-79.847646	Colour - Light Grey odour - Unpleasant	Talab
Beniganj															
NP Beniganj Sandila – Hardoi road both side	1.90 MLD	1.51 MLD	7.77	44	234.6	31	765.2	Fe-0.89, Cr-BDL Pb-BDL, As-0.019 Mn-BDL, Cu-BDL, Zn-1.22 Hg-BDL, F-Nil	1.42	0.2	348	221	Latitude-27.29576 Longitude-80.44781	Light Grey/ Unpleasant	Durghatiya modh
Sandila															
NPP Sandila/ Pasaujan Nala	8.1MLD	3.5MLD	7.90	66	153	123	826.4	Fe-1.35, Cr-BDL, Pb-BDL, As-0.020, Mn-BDL, Zn-1.09, Hg-BDL, F-Nil	2.05	0.2	348	175	Latitude-27.06833, Longitude-80.52543	Light Grey/ Unpleasant	Kakrali Village Drain

Mallawan															
NPP Mallawan HARDOI TO UNNAO Road Drain	2.80 MLD	0.09	7.31	252	551.01	636	836.5	Fe-1.00, Cr-BDL Pb-BDL, As-0.025 Mn-BDL, Cu-BDL, Zn-2.01 Hg-BDL, F-Nill	5.10	0.4	542	348	Latitude-27.629774 Longitude-80.195444	Blackish/ Unpleasant	Open Fields
NPP Mallawan RAGHUPUR Road Drain	2.80	0.09	7.26	110	244	102	950	Fe-0.97, Cr-BDL Pb-BDL, As-0.030 Mn-0.08, Cu-BDL Zn-2.58, Hg-BDL F-Nill	4.72	0.5	550	205	Latitude-27.035236 Longitude-80.142562	Light Grey/ Unpleasent	Open Fields

- The above information is to be submitted on the basis of end point sample analysis of the concerned drain.
- At present STP (sewage treatment plant) is not established in Hardoi district.
- At present 32 KLD FSTP (Fecal Sewage Treatment Plant) is established and operating in Hardoi district.

2. STP (Sewage Treatment Plant) for treating the sewage of the drains ultimately flowing to river ganga or its tributaries

Existing STP (Location &Capacity)	Capacity (Operational)	Inlet/ Outlet water Quality &Quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point	Proposed/ Under Construction STP with Completion Date
NO STP IN DISTRICT HARDOI						
						STP Proposed at Nagar Panchayat Kursath (0.60 MLD STP With co-treatment (5.00 KLD))
						STP Proposed at Nagar Panchayat Pali (1.82 MLD STP With co-treatment (5.00 KLD))
						STP Proposed at Nagar Palika Parishad Bilgram 3.00 MLD STP with Co-treatment (10.00 KLD), I&D; MPS intercepting sewer, rising main, effluent channel
						STP Proposed at Nagar Panchayat Bengiganj (1.06 MLD STP With co-treatment (5.00 KLD))
						STP Proposed at Nagar Palika Parishad Sandila capacity 6.60 MLD STP With co-treatment-15.00 KLD)
						STP Proposed at Nagar Panchayat Mallawan

	(3.75 MLD STP With co-treatment (10.00 KLD))
	STP Proposed at Nagar Panchayat Kachhauna (1.62 MLD STP With co-treatment-5.00 KLD)
	STP Proposed at Nagar Panchayat Sandi (2.62 MLD STP With co-treatment-10.00 KLD)
	STP Proposed at Nagar Panchayat Madhoganj (1.18 MLD STP With co-treatment-5.00 KLD)
	STP Proposed at Nagar Panchayat Gopamau (1.62 MLD STP With co-treatment (5.00 KLD))
	STP Proposed at Nagar Panchayat Pihani (3.51 MLD STP With co-treatment (10.00 KLD))
• STP Not Existed in NPP & NP while agreement with NPP Hardoi (FSTP for Co Treatment) • There is no sewer line in any ULB of District Hardoi	

2.1 STP ADDITIONAL INFORMATION

NAME OF DRAIN	POSITION OF STP WITH CAPACITY	GEO - COORDINATES	DISCHARGE QUANTITY FROM THE STP IN THE DRAIN	TOTAL PER DAY DISCHARGE FROM THE DRAIN INTO THE RIVER
1. Gomti River U/s At Jahani Kheda, Hardoi	-	27.740161, 80.266891	-	-
2. Gomti River D/s At Bhatpur, Hardoi	-	27.188553, 80.801721	-	-
3. Garra River D/s At Pali, Hardoi	-	27.5393643, 79.8466409	-	-
4. Garra River U/s At Babarpur, Pali, Hardoi	-	27.5575027, 79.8427921	-	-
5. Garai Nala at Near Vill-Babarpur, Pali, Hardoi	-	27.5585127, 79.841461	-	-
6. Ram Ganga River meet with Ganga River at Tera Ghat Hardoi	-	27.1684855, 79.8749295	-	-
7. Garra River meet with Ganga River Near Vill-Zarella, Bilgram Hardoi	-	27.1365590, 79.951718	-	-
8. Sai River at Hardoi-Lko Road Bridge	-	27.2306319, 80.2497599	-	-

9. Sai River at Sandila-Mallawan Road Bridge, Near Vill. -Gausganj, Hardoi	-	27.076077, 80.2723	-	-
10. Sukheta Nala meet with Garra River Near Vill-Malwa-Akhbelpur, Hardoi	-	27.342313, 79.951818	-	-
• Presently, there is no any STP installed at Final Outlets of Drains / tributaries.				

Proposed STP (Location & Capacity)	**Capacity (Operational)**	**Inlet/Outlet Water Quality & Quantity**	**Number of tapped drains (Quantity of discharge)**	**GAP (in treatment)**	**Final discharge point Geo code/ Sampling Point**	**Proposed/ under construction STP with completion date**
There is no sewer line in any ULB of District Hardoi	-	-	-	-	-	-
Bilgram- 3.00 MLD STP with Co- treatment (10.00 kid)	Currently Not Operational	Light Grey/Unpleasant	Kasupet drain	NO Gap	Lat-27.17996 Log-80.028397	3.00 MLD STP with Co-treatment (10.00 kid),
Sandila NPP Proposed capacity 6.60 MLD STP With co-treatment-15.00 KLD)	Currently Not Operational	Light Grey/Unpleasant	Kakrali village drain	NO Gap	Lat-27.06833, Lon-80.52543	Proposed capacity 6.60 MLD STP With co-treatment-15.00 KLD)

3. Hotels/ Ashrams/Dharmshalas/Residential Complexes abutting River Ganga or its tributaries

Number of Hotels/ Ashrams/ Dharmshalas	Consent to Establish/ Consent to Operate	STP	Discharge Point	Action Taken
Hotel Basant Leela, Hardoi	Not Applied	Septic Tank/Soak Pit	Municipal Drain/ Road Side Drain	Notice sent
Atithi Hotel, Hardoi	Not Applied	Septic Tank/Soak Pit	Municipal Drain/ Road Side Drain	Notice sent
H K Hotel & Lawns, Hardoi	Not Applied	Septic Tank/Soak Pit	Municipal Drain/ Road Side Drain	Notice sent
Hotel Mahendra Plaza, Hardoi	Not Applied	Septic Tank/Soak Pit	Municipal Drain/ Road Side Drain	Notice sent
Pooja Hotel, Hardoi	Not Applied	Septic Tank/Soak Pit	Municipal Drain/ Road Side Drain	Notice sent
Hotel Siddhartha, Hardoi	Not Applied	Septic Tank/Soak Pit	Municipal Drain/ Road Side Drain	Notice sent
Sandila Guest House, Sandila	Not Applied	Septic Tank/Soak Pit	Municipal Drain/ Road Side Drain	Notice sent
Hotel KSR Grand, Sandila	Not Applied	Septic Tank/Soak Pit	Municipal Drain/ Road Side Drain	Notice sent
Laxmikant marriage Lawn Sandila	Not Applied	Septic Tank/Soak Pit	Municipal Drain/ Road Side Drain	Notice sent
Shree Bihari Ji Hotel & Banquet Hall, Sandila	Not Applied	Septic Tank/Soak Pit	Municipal Drain/ Road Side Drain	Notice sent

- The effluent coming out of 06 hotels established and operated in Nagar Palika Parishad, Hardoi, goes into Chhuiya Drain through the drains located on the road side and Chhuiya Drain joins Sai River (Bhansata River).

- The effluent coming out of 04 hotels established and operated by Nagar Palika Parishad, Sandila, Hardoi is disposed through road side drains into the Pasojan drain which then dries up.

4. IV. Industrial Effluent discharge by industries whose effluent is ultimately flowing to river Ganga or its tributaries

Total number of Industries	**Daily effluent discharge**	**Treatment available (CETP/ PETP/ ETP operational capacity)**	**Effluent quality analysis (outlet of treatment plants Geo code sampling point)**	**GAP**	**Proposed/ under construction treatment project (with timeline)**	**Number of defaulting units- Action taken**	**Industrial solid waste generated/ day**	**Manner of disposal (Industrial solid waste)**
Sandila - 13	11608 KLD	ETP installed in each Industry Separately of Adequate Capacity	As per schedule monitoring and analysis done by RO UPPCB, Unnao	0	No any Proposed/under construction treatment Project	No any Number of defaulting units- Action taken	10.96	Recycling/ Through TSDF

5. Regulation of Flood Plain Zone:

Area- Cities/ Towns	Notification of flood plain zone	Demarcation		Encroachment & direct discharge Geocode/ Sampling point	Encroachment removal status	Timeline for completion
		No development zone pillars	Regulatory zone pillars			
Hardoi	-	1979	844	List Attached	NA	Demarcation Piller is Installed

6. Afforestation/ Plantation along the bank of River Ganga and its tributaries and their flood plain zones

Area- cities/ towns	**Total plantation Geo Code/ Sampling Point**	**Proposed project**	**Timeline**
District - Hardoi	**2248027 (Letter dt 28.3.24 attached by DFO Hardoi)**	**7735708**	**2023-24**

Site wise list of tree plantation done in the year 2023-24 (35.0 crore) Tree Plantation Campaign 2023

Sr. No.	Place Name	Year 2023-24		GPS Reading	
		Area in Hq	Planted Trees	Latitude	Longitude
1	2	3	4	5	6
1	Khajohna Village Society-1	5.0	12500	N-27º 5'41.67"	E-80º 22'12.774"
2	Khajohna Village Society-2	5.0	12500	N-27º 05'20.91"	E-80º 22'13.164"
3	Khajohna Village Society-3	5.0	12500	N-27º 05'396"	E-80º 22'16.818"
4	Sandila Beniganj Road Km 23-26	5.0	8000	N-27º 16'23.14"	E-80º 27'23.14"
5	Sandila Beniganj Road Km 26-30	5.0	8000	N-27º 18'46.40"	E-80º 26'05.40"
6	Gausganj Village Society-1	5.0	12500	N-27º 04'59.127"	E-80º 16'32..031"
7	Gausganj Village Society-2	5.0	12500	N-27º 04'56.201"	E-80º 16'24.186"
8	Gausganj Village Society-3	5.0	12500	N-27º 04'50.027"	E-80º 16'23.394"
9	Gausganj Village Society-4	5.0	12500	N-27º 04'46.598"	E-80º 16'14.0106"
10	Gausganj Village Society-5	5.0	12500	N-27º 05'10.134"	E-80º 16'23..988"
11	Hathaoda Forest Block-1	5.0	12500	N-27º 11'16.764"	E-80º 23'14.112"
12	Hathaoda Forest Block-2	5.0	12500	N-27º 11'18.006"	E-80º 23'47.838"
13	Hathaoda Forest Block-3	5.0	12500	N-27º 11'16.422"	E-80º 24'16.794
14	Lonhra Forest Block-1	5.0	12500	N-27º 07'55.880"	E-80º 22'49.789"
15	Lonhara Forest Block-2	5.0	12500	N-27º 15'36.61"	E-80º 34'93.34"
16	Lonhra Forest Block-3	5.0	12500	N-27º 08'04.56"	E-80º 22'55.36"
17	Lonhra Forest Block-4	5.0	12500	N-27º 07'50.087"	E-80º 22'38.550"
18	Deennagar Forest Block-1	5.0	12500	N-27º 02'07.208"	E-80º 41'90.5"
19	Deennagar Forest Block-2	5.0	12500	N-27º 21'14.49"	E-80º 42'09.15"
20	Deennagar Forest Block-3	5.0	12500	N-27º 21'12.85"	E-80º 42'10.75"

21	Kamipur Forest Block-1	5.0	12500	N-27º 07'46.836"	E-80º 81'25.374"
22	Kamipur Forest Block-2	5.0	12500	N-27º 07'35.67"	E-80º 21'24.67"
23	Kamipur Forest Block-3	5.0	12500	N-27º 07'36.522"	E-80º 27'05.994"
24	Kamipur Forest Block-4	5.0	12500	N-27º 08'07.86"	E-80º 81'05.316"
25	Beniganj to Amarganj link road	5.0	8000	N-27º 18'49.46"	E-80º 27'09.37"
26	Sandila Gausganj Road Km 18-21	5.0	8000	N-27º 5'5.886"	E-80º 22'4.962"
27	Sharda Canal Lucknow Branch Mile No. 89-91	5.0	8000	N-27º 12'27.749"	E-80º 17'01..606"
28	Bairagikheda to Chapartala link road 0 3-06	5.0	8000	N-27º 16'54.74"	E-80º 28'42.63"
29	Baan-Para Village Society	5.0	12500	N-27º 06'34.787"	E-80º 17'38.599"
30	Nagwa One Block	5.0	12500	N-27º 15'59.44"	E-80º 21'50.63"
31	Umrapur Forest Block-1	5.0	12500	N-27º 15'46.015"	E-80º 21'28.623"
32	Umrapur Forest Block-2	5.0	12500	N-27º 15'48.012"	E-80º 21'32.457"
33	Umrapur Forest Block-3	5.0	12500	N-27º 15'59.44"	E-80º 21'50.63"
	Total	**165.0**	**385500**		
1	Karawa Forest Block-I	5.0	10000	N-27º 40'43.77"	E-80º 91'03.73"
2	Karawa Forest Block-II	5.0	10000	N-27º 41'4.00"	E-80º 8'41.00"
3	Karawa Forest Block-III	5.0	10000	N-27º 40'54.30"	E-80º 91'3.86"
4	Karawa Forest Block-IV	5.0	10000	N-27º 40'45.85"	E-80º 91'0.42"
5	Sharda Canal Hardoi Branch Km 121-126	5.0	3125	N-27º 37'48.76"	E-80º 23'59.00"
6	Sharda Canal Hardoi Branch Km 105 to 112	6.5	4050	N-27º 44'46.81"	E-80º 04'23.66"
	Total Forest Deposite	**31.5**	**47175**		
7	Majhila Village Society-1	5.0	12500	N-27º 40'21.91"	E-80º 03'6.94"
8	Majhila Village Society-2	5.0	12500	N-27º 40'21.17"	E-80º 03'2.30"

9	Majhila Village Society-3	5.0	12500	N-27º 40'20.93"	E-80º 02'53.32"
10	Majhila Village Society-4	5.0	12500	N-27º 40'23.12"	E-80º 02'15.05"
11	Majhila Village Society-5	5.0	12500	N-27º 40'25.55"	E-80º 02'34.71"
12	Majhila Village Society-6	5.0	12500	N-27º 40'15.66"	E-80º 02'32.88"
13	Majhila Village Society-7	5.0	12500	N-27º 40'14.05"	E-80º 02'58.75"
14	Majhila Village Society-8	5.0	12500	N-27º 40'55.34"	E-80º 02'46.61"
15	Majhila Village Society-9	5.0	12500	N-27º 41'3.14"	E-80º 02'48.44"
16	Majhila Village Society-10	5.0	12500	N-27º 41'4.59"	E-80º 02'48.44"
17	Majhila Village Society-11	5.0	12500	N-27º 40'7.44"	E-80º 02'34.24"
18	Majhila Village Society-12	5.0	12500	N-27º 39'45.80"	E-80º 02'20.28"
19	Majhila Village Society-13	5.0	12500	N-27º 39'53.44"	E-80º 04'22.37"
20	Madanapur Forest Block	5.0	12500	N-27º 27'39.00"	E-79º 48'54.00"
21	Bahpur Sapaha Forest Block	5.0	12500	N-27º 36'34.00"	E-79º 42'07.00"
22	Mannangala Forest Block	5.0	12500	N-27º 34'17.00"	E-79º 41'14.00"
23	Sandi Shahabad Road Km 19-25	6.0	9600	N-27º 30'51.37"	E-79º 58'10.82"
24	Banjariya Forest Block	5.0	12500	N-27º 41'34.00"	E-80º 4'7.00"
25	Karawa Forest Block-5	5.0	12500	N-27º 41'27.39"	E-80º 8'37.94"
26	Karawa Forest Block-6	5.0	12500	N-27º 41'29.74"	E-80º 8'53.57"
27	Karawa Forest Block-7	5.0	12500	N-27º 40'38.64"	E-80º 9'12.70"
28	Karsuagrant Forest Block	5.0	12500	N-27º 45'50.93"	E-80º 3'32.77"
29	Karaundi Forest Block	5.0	12500	N-27º 35'3.99"	E-80º 5'53.60"
30	Palthua Forest Block-1	5.0	12500	N-27º 31'36.00"	E-79º 54'53.00"
31	Palthua Forest Block-2	5.0	12500	N-27º 31'37.00"	E-79º 54'45.00"
32	Palthua Forest Block-3	5.0	12500	N-27º 31'24.00"	E-79º 54'59.00"
33	Jamura Forest Block	5.0	12500	N-27º 44'36.43"	E-80º 42'8.44"
34	Chandupur Khairai Forest Block	5.0	12500	N-27º 32'40.00"	E-79º 54'44.00"
	Total Social Forest	**141.0**	**347100**		
	Total	**172.5**	**394275**		

1	Bilgram-Kannauj road	10.0	16000	N-27º.02'.15"	E-80º.0'.45"
2	Terva Kulli Forest Block	10.0	16000	N27.01.55	E79.59.38
3	Indalapur Forest Block	5.0	12500	N27.04.11	E80.03.47
4	Nevada Gambhi Forest Block	5.0	12500	N27.07.11	E80.11.0
5	Adharra Forest Block-1	5.0	12500	N27.12.28	E80.07.09
6	Adharra Forest Block-2	5.0	12500	N27.12.34	E80.07.13
7	Adharra Forest Block-3	5.0	12500	N27.12.51	E80.07.17
8	Adharra Forest Block-4	5.0	12500	N27.12.30	E80.06.32
9	Madara Forest Block	5.0	12500	N27.17.10	E80.01.49
10	Naurangpur Forest Block-1	5.0	12500	N27.07.36	E80.0.03
11	Naurangpur Forest Block-2	5.0	12500	N27.07.35	E80.0.07
12	Naurangpur Forest Block-3	5.0	12500	N27.07.17	E80.0.30
13	Naurangpur Forest Block-4	5.0	12500	N27.07.08	E80.0.34
14	Naurangpur Forest Block-5	5.0	12500	N27.07.17	E80.0.47
15	Naurangpur Forest Block-6	5.0	12500	N27.07.08	E80.06.03
16	Turtipur Forest Block-1	5.0	12500	N27.07.17	E80.0.47
17	Turtipur Forest Block-2	5.0	12500	N27.16.02	E80.6.03
18	Bossa Forest Block-1	5.0	12500	N27.06.21	E80.12.42
19	Bossa Forest Block-2	5.0	12500	N27.06.3	E80.12.34
20	Noorpur Hathaoda Forest Block-1	5.0	12500	N27.12.04	E80.07.48
21	Noorpur Hathaoda Forest Block-2	4.0	10000	N27.11.17	E80.07.49
22	Babatmau Forest Block	10.0	16000	N27.0.44	E79.0.32
23	Panyori Forest Block	5.0	12500	N27.12.2	E79.59.46
24	Dhinnitusaura Forest Block	5.0	12500	N27.14.29	E80.8.41
25	Badhanwa Forest Block-1	5.0	12500	N27.8.53	E80.07.21
26	Badhanwa Forest Block-2	3.0	7500	N27.8.58	E80.07.49
27	Chaharpur Forest Block	5.0	12500	N27.10.2	E79.59.12
28	Tikri Forest Block	5.0	12500	N27.14.36	E80.8.35

29	Roshanpur Forest Block	5.0	12500	N27.09.02	E80.3.50
30	Shuklapur Bhagat Gram Samaj	5.0	12500	N27.09.34	E80.9.32
31	Ruia Forest Block	2.0	5000	N27.08.35	E80.9.33
	Total	**164.0**	**383000**		
1	Sanai Forest Block-1	5.0	12500	N27.01.16"	E80.30.53"
2	Sanai Forest Block-2	5.0	12500	N-27.01.20"	E-80.30.44"
3	Sanai Forest Block-3	5.0	12500	N-27.01.25"	E-80.31.15"
4	Sanai Forest Block-4	5.0	12500	N-27.01.30"	E-80.31.01"
5	Padri Forest Block	5.0	12500	N-27.0.32"	E-80.31.12"
6	Goswa Dongwa Forest Block-1	5.0	12500	N-27.2.05"	E-80.29.05"
7	Goswa Dongwa Forest Block-2	5.0	12500	N-27.2.01"	E-80.29.09"
8	Sank Forest Block-1	5.0	12500	N-27.1.42"	E-80.35.07"
9	Sank Forest Block-2	5.0	12500	N-27.01.30"	E-80.34.36"
10	Sank Forest Block-3	5.0	12500	N-27.01.54"	E-80.34.21"
11	Mohammadpur Velwaran One Block-1	5.0	12500	N-27.06.29"	E-80.34.19"
12	Mohammadpur Velwaran One Block-2	5.0	12500	N-27.06.12"	E-80.34.28"
13	Atsalia Forest Block	5.0	12500	N-27.09.20"	E-80.33.44"
14	Kakrali Forest Block-1	5.0	12500	N-27.03.13"	E-80.32.39"
15	Kakrali Forest Block-2	5.0	12500	N-27.03.29"	E-80.32.56"
16	Kakrali Forest Block-3	5.0	12500	N-27.02.47"	E-80.33.56"
17	Kakrali Forest Block-4	4.0	10000	N-27.03.21"	E-80.33.55"
18	Jamu Forest Block-2	5.0	12500	N-27.06.16.13"	E-80.31.16.32"
19	Usraha Forest Block-2	5.0	12500	N-27.06.12.23"	E-80.27.32.13"
20	Usharha Forest Block-3	5.0	12500	N-27.06.27.13"	E-80.27.07.13"
21	Samodha Forest Block-1	5.0	12500	N-27.06.42.11"	E-80.25.58.11"
22	Samodha Forest Block-2	5.0	12500	N-27.06.54.18"	E-80.25.40.13"
23	Samodha Forest Block-3	5.0	12500	N-27.06.58.12"	E-80.25.51.23"
24	Kherwa Forest Block	5.0	12500	N-27.07.54.13"	E-80.25.20.25"

25	Malhera Forest Block	5.0	12500	N-27.07.13.02"	E-80.29.29.10"
26	Chhanoiya Forest Block	5.0	12500	N-27.08.09.11"	E-80.27.53.15"
27	Bhitauli Forest Block	5.0	12500	N-27.06.52.18"	E-80.29.36.13"
28	Ghuspawa Forest Block-1	5.0	12500	N-26.58.27"	E-80.26.30"
29	Ghuspawa Forest Block-2	5.0	12500	N-26.58.42"	E-80.26.20"
30	Behandar Khurd Forest Block	5.0	12500	N-27.02.16"	E-80.26.24"
31	Sharda Canal-Lucknow Branch from Dhikunni to Godwa (right track)	5.0	8000	N-27.08.45"	E-80.36.01"
32	Sharda Canal-Sandila Branch from Dhikunni to Godwa (Left Track)	5.0	8000	N-27.08.43"	E-80.36.0"
	Total Social Forest	**159.0**	**388500**		
33	Jamu Forest Block	4.0	10000	N-27.06.16"	E-80.31.5"
34	Usharha Forest Block-1	5.0	12500	N-27.07.29"	E-80.25.57"
		9.0	**22500**		
	Total Sandila Range	**168.0**	**411000**		
1	Vari Forest Block-1	5.0	12500	N-27.69.30.37"	E-80.14.77.83"
2	Vari Forest Block-2	5.0	12500	N-27.69.14.22"	E-80.15.08.22"
3	Vari Forest Block-3	5.0	12500	N-27.69.36.25"	E-80.15.02.19"
4	Vari Forest Block-4	5.0	12500	N-27.69.74.94"	E-80.15.06.75"
5	Vari Forest Block-5	3.8	9500	N-27.69.40.02"	E-80.14.41.93"
6	Jabahar Navodaya Vidyalaya Itara	1.2	3000	N-27.65.39.12"	E-80.16.18.60"
7	Santarha Forest Block	5.0	12500	N-27.71.95.19"	E-80.11.69.23"
8	Sharda Canal Lucknow Branch Km 12-14	5.0	8000	N-27.60.74.53"	E-80.22.17.52"
9	Sharda Canal Lucknow Branch Km 87-93	5.0	8000	N-27.61.60.06"	E-80.21.98.42"

10	Kachnari Forest Block	5.0	8000	N-27.52.78.56"	E-80.29.96.51"
11	Shahpur Binaura Forest Land-1	5.0	12500	N-27.55.29.06"	E-80.21.71.54"
12	Shahpur Binaura Forest Land-2	5.0	12500	N-27.55.17.00"	E-80.21.75.85"
13	Shahpur Binaura Forest Land-3	5.0	12500	N-27.55.17.66"	E-80.21.12.19"
14	Kheria Mansoor Nagar Road Km 0-4	5.0	8000	N-27.54.16.60"	E-80.08.60.99"
	Total	**65.0**	**144500**		
1	Arwal Forest Block-1	8.0	12800	N-27.11.50"	E-79.46.19"
2	Arwal Forest Block-2	8.0	12800	N-27.11.48"	E-79.46.30"
3	Arwal Forest Block-3	8.0	12800	N-27.11.40"	E-79.46.41"
4	Arwal Forest Block-4	8.0	12800	N-27.11.45"	E-79.46.46"
5	Arwal Forest Block-5	8.0	12800	N-27.11.54"	E-79.46.47"
6	Waramau Forest Block-1	8.0	12800	N-27.13.49"	E-79.42.42"
7	Waramau Forest Block-2	8.0	12800	N-27.13.56"	E-79.42.45"
8	Waramau Forest Block-3	8.0	12800	N-27.13.44"	E-79.42.59"
9	Gadanpur Forest Block-1	10.0	16000	N-27.15.44"	E-79.42.02"
10	Gadanpur Forest Block-2	10.0	16000	N-27.15.21"	E-79.42.20"
11	Gadanpur Forest Block-3	8.0	12800	N-27.15.34"	E-79.42.02"
12	Gadanpur Forest Block-4	8.0	12800	N-27.15.31"	E-79.41.50"
13	Both tracks between km 11 to 18 of Sandi-Hardoi road	0.252	252	N-27.18.31"	E-79.52.23"
	Total	**100.252**	**160252**		
1	Parsani Forest Block-1	5.0	12500	N-27.24.58"	E-80.12.30"
2	Parsani Forest Block-2	5.0	12500	N-27.24.48"	E-80.12.33"
3	Parsani Forest Block-3	5.0	12500	N-27.25.04"	E-80.12.11"
4	Mangolapur Forest Block-1	5.0	12500	N-27.20.45"	E-80.12.57"
5	Mangolapur Forest Block-2	5.0	12500	N-27.20.6"	E-80.12.34"
6	Mangolapur Forest Block-3	5.0	12500	N-27.20.49"	E-80.13.1"
7	Mangolapur Forest Block-4	5.0	12500	N-27.20.23"	E-80.13.9"

8	Gangoli Forest Block-1	5.0	12500	N-27.22.40"	E-79.57.13"
9	Gangoli Forest Block-2	5.0	12500	N-27.23.7"	E-79.58.1"
10	Gangoli Forest Block-3	5.0	12500	N-27.22.59"	E-79.57.53"
11	Haripur Grant One Block-1	5.0	12500	N-27.24.17"	E-80.12.20"
12	Haripur Grant One Block-2	5.0	12500	N-27.24.20"	E-80.12.12"
13	Patkua Forest Block	5.0	12500	N-27.29.55.190"	E-80.8.46.222"
14	little Forest block	5.0	12500	N-27.29.12.181"	E-80.11.15.65"
15	Atwa Kataiya Forest Block	5.0	12500	N-27.40.06.89"	E-80.25.60.03"
16	Palpur Vairagikheda Forest Block-2	5.0	12500	N-27.15.33"	E-80.21.25"
17	Palpur Vairagikheda Forest Block-2	5.0	12500	N-27.15.17"	E-80.21.33"
18	Ahirori Forest Block-1	5.0	12500	N-27.20.33"	E-80.16.15"
19	Ahirori Forest Block-2	5.0	12500	N-27.21.27"	E-80.16.45"
20	Ahirori Thok Madhav-1 Village Society	5.0	12500	N-27.16.43"	E-80.18.2"
21	Ahirori Thok Madhav-2 Village Society	5.0	12500	N-27.26.43"	E-80.17.51"
22	Daniyalganj Village Society	5.0	12500	N-27.28.41.828"	E-80.7.30.352"
23	Atwa Asigaon Forest Block-1	5.0	12500	N-27.29.36.521"	E-80.5.15.083"
24	Atwa Asigaon Forest Block-2	5.0	12500	N-27.29.39.901"	E-80.5.5.30.222"
25	Mahuipuri Forest Block	5.0	12500	N-27.20.58"	E-80.12.24"
26	Neer Forest Block-1	5.0	12500	N-27.37.25.53"	E-80.2.3.988"
27	Bikapur Forest Block	10.0	16000	N-27.12.37"	E-80.12.52"
28	Sahora Scape	10.0	16000	N-27.25.20"	E-80.12.30"
29	Sekhaura Forest Block	5.0	12500	N-27.27.46"	E-80.21.2"
Total		**155.0**	**369500**		
Grand Total		**989.752**	**2248027**		

7. Mining and Stone Crushing in river bed and flood plain zone of River Ganga and its tributaries:

Area of Mining	**FIR / Case Registered/ Year**	**Vehicles/ Mineral Seized**	**Action Taken Status**	**Cases pending in Court**	**Enforcement of EMGSM 2020 and Sustainable sand mining management guidelines 2016**
Kutwapur Tehsil Bilgram Gata No.97 Rakba -20 He	No FIR has been registered till date	Vehicle are not seized	No action is pending	Case pending in Allahabad bench in Lucknow high court Writ No. 20319/2021	Samg 2016 and emgsm 2020 are enforced in area of Mining
Todora Tehsil Swaijpur Gata no.463, 464, 466 Rakba -10.380 He	No FIR has been registered till date	Vehicle are not seized	No action is pending	Case pending in Allahabad bench in Lucknow high court Writ No. 20319/2021	Samg 2016 and emgsm 2020 are enforced in area of Mining
Katri Parsola Chulramau Gata No. 319,357mi, 358, 359mi, 680, 682, 683k, 683kha, 683ga, 684, 688, 689k, 689kha, 690, 691, 692ka, 892kha, 683kha, 693, 649, 700ka, 700kha, 704, Rakba-21.36 He	No FIR has been registered till date	Vehicle are not seized	Reference No. 74/EC/SEAC/ 3996/2018 Date 22/05/2020 EC Revoked	Case pending in Allahabad bench in Lucknow high court Writ No. 20319/2021	Samg 2016 and emgsm 2020 are enforced in area of Mining

Compliance of Hon'ble NGT order
Dt. 24.01.2024
In
O.A 200/2014 MC Mehta Vs UOI and Ors
District -Hardoi

The Tribunal has already directed for furnishing following information by order dated 24.11.2023: -

(1) District Ganga Protection Plan at city/ town level

District Ganga Protection Committee (DGPC) is required to formulate the action plan for each city and town located on main stem of river Ganga and its tributary and such Action Plan has to be prepared in accordance with the river Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016 (para 6 and 55).

(In District Hardoi Ganga River and its tributaries Ram Ganga, Garra river, Gomti river and Sai river etc. situated.)

(2) Contents of the Action Plan (Consolidated District Wise Action Plan including each City and Town abutting river Ganga and its Tributary)

2.1 Sewage Management

(i) Sewage generation (for entire District and individual town wise):

S.No.	Name of ULB	Sewage Generation (MLD)
1	Nagar Palika Parishad, Hardoi	13.13
2	Nagar Palika Parishad, Shahabad, Hardoi	9.50
3	Nagar Palika Parishad, Bilgram, Hardoi	4.32
4	Nagar Palika Parishad, Sandi, Hardoi	3.75
5	Nagar Palika Parishad, Sandila, Hardoi	9.41
6	Nagar Palika Parishad, Pihani, Hardoi	5.02
7	Nagar Palika Parishad, Mallawan, Hardoi	5.35
8	Nagar Panchayat, Gopamau, Hardoi	2.30
9	Nagar Panchayat, Kachhauna, Patsaini, Hardoi	2.32
10	Nagar Panchayat, Pali, Hardoi	2.60

11	Nagar Panchayat, Beniganj, Hardoi	1.51
12	Nagar Panchayat, Kursath, Hardoi	0.86
13	Nagar Panchayat, Madhoganj, Hardoi	1.68
		61.75 MLD

(ii) Existing Sewage Treatment Capacities: **FSTP of Capacity 32 KLD installed at Nagar Palika Parishad Hardoi.**

(iii) Quantity of sewage is being treated (utilization capacity):

FSTP of Capacity 32 KLD installed at Nagar Palika Parishad Hardoi.

(iv) Performance of STPs particularly for FC: **FSTP of Capacity 32 KLD**

(v) Where treated sewage is being discharged (to Ganga or tributaries):

(vi) Reasons for Under-utilization of STPs (Connectivity of Households/ laying of sewer lines):

There is no sewer line in Hardoi District

(vii) Performance of STPs particularly for FC: **FSTP of Capacity 32 KLD and Operational**

(viii) Current Gap in sewage treatment: **No**

(ix) Time bound plan for bridging the gap and tying up with financial arrangements and not delaying Tendering and identifying executing agencies or having any other issues: **-**

(x) Where untreated sewage (when there is no STP) is discharged (Ganga /Tributaries): **Sai River/Garra River**

2.2 Drains joining Ganga and Tributary

(i) Number of drains carrying sewage- sullage or industrial waste water joining Ganga/ tributaries with their Quantity and Quality:

(ii)

S.No.	Drain	Domestic/Industrial/Mixed	Flow (MLD)	Quality Discharge Parameters
1	Garai Nala before meeting Garra River at Village Babarpur Sampling Date 06.01.2024	Domestic	1.37	pH - 7.75, BOD – 9.9 mg/l COD - 58.4 mg/l TSS – 102.0
2	Sukheta Nala before meeting Garra River at Village Malwa-Akhbelpur Sampling Date 06.01.2024	Domestic	4.80	pH - 7.89, BOD – 3.8 mg/l COD - 14.8 mg/l TSS – 52.0

(iii) Drains joining outside city and town limits but, either joining in village or nearby town:

As per the above Table

(iv) Inclusion of sewage flowing in drains into total sewage generation figures of each city and town and their interception and diversion to STPs. STP is proposed as per details given below:

2.3 Septage Management (In case of no STP)

S.No.		
1	Status of Septage management (with reference to FSTP/STP):	One FSTP installed at NPP Hardoi Capacity 32 KLD
2	Management of Grey water and its disposal:	For Irrigation purpose

Regarding additional information required for STP in Hardoi District.

We would like to apprise you that –

1. One FSTP of Capacity 32 KLD has been installed at NPP Hardoi to take care of entire sewage generated in Hardoi District.
2. In Hardoi District, there are Small Hotels and their sewage water are presently treated through Septic Tank and Soak Pit. Treated sewage water is utilised in gardening / lawn area.
3. In near future, to achieve the vision of Swachh Bharat Mission, following objectives are determined to be achieved in Hardoi District
   a) Sustainable Solid Waste Management
   b) Sustainable Sanitation & Used Water Management

According to the guidelines the details of the components for Used Water Management are as follows:

i) Interception and diversion of drains including last mile connectivity for nearest sewer network.
ii) Construction of STPs / FSTPs for Used Water Treatment.
iii) Desludging equipment for scheduled and need based desludging of all septic tanks.

Industrial Pollution Control

S.No.		
1	Attach the list on no. of industries generating trade effluents, their place of disposal and compliance including CETPs.	Industries list is attached. Industries have installed their individual ETP. **There is no CETP in District Hardoi.**

S.No.	Name and Address	Sector	Production Capacity	Status of ETP	Discharge	Discharge Point	Intermediate/ Final Discharge Point	Compliance Status/Action taken in case default
1	Baghauli sugar & Distillery Ltd, (Distillery Unit), Vill-Beekapur, post-Baghauli, Hardoi	Distillery	Rectified sprit/E.N.A.-100 KLD	Installed	1000 KLD	Treated effluent used for Irrigation/used in distiller unit	On land/used in distillery Unit	Closed
2	Baghauli sugar & Distillery Ltd, (Sugar Unit), Vill-Beekapur, post-Baghauli, Hardoi	Sugar	Sugar Cane crushing cap - 3500 TCD	Installed	700 KLD	Treated effluent used for Irrigation/used in distiller unit	On land/used in distillery Unit	Closed
3	DCM Shri Ram Ltd. (D.S.C.L.) Sugar unit, Hariyanva, Hardoi	Sugar	Sugar and electric co-generation	Installed	2600 KLD	Treated effluent used for Irrigation/used in Sugar unit	On land/used in Sugar Unit	Date of sample Collection - 15.02.24 pH-7.56 BOD-26.0 mg/l COD-192 mg/l TSS-22 mg/l Oil & Grease-4.2 mg/l
4	DCM Shri Ram Ltd. (D.S.C.L.) Sugar unit, Loni Hardoi	Sugar	Sugar and electric co-generation	Installed	1500 KLD	Zero Liquid Discharge	Zero Liquid Discharge	Date of sample Collection - 26.02.24 pH-7.56 BOD-26.0 mg/l

								COD-192 mg/l TSS-22 mg/l Oil & Grease-4.2 mg/l
5	DCM Shri Ram Ltd. (D.S.C.L.) Sugar unit, Roopapur, Hardoi	Sugar	Sugar	Installed	1300 KLD	Treated effluent used for Irrigation/used in Sugar unit	On land/used in Sugar Unit	Date of sample Collection 04.03.24 pH-7.73 BOD-22.6 mg/l COD-174 mg/l TSS-26.0 mg/l Oil & Grease-6.4 mg/l
6	Saf Yeast Company Pvt. Ltd., Industrial area, Sandila, Hardoi	Distillery/ Backers Yeast	Backers Yeast	Installed	800 KLD	Zero Liquid Discharge	Zero Liquid Discharge	Zero Liquid Discharge
7	V.R.S. Foods Ltd, Plot no.- C-5 & C-6, Industrial area, Sandila, Hardoi	Dairy	Skimmed milk Powder, Ghee, Butter, Milk packing	Installed	350 KLD	Zero Liquid Discharge	Zero Liquid Discharge	Date of sample Collection 09.01.24 pH-7.52 BOD-26.0 mg/l COD-184.00 mg/l TSS-82.0 mg/l Oil & Grease-7.6 mg/l
8	Varun Beverages Limited. B-2/1, Industrial Area, Sandila, Hardoi	Food & Beverages	Carbonated soft drinks, packaging drink water etc	Installed	900 KLD	Zero Liquid Discharge	Zero Liquid Discharge	Date of sample Collection 02.12.23 pH-7.93 BOD-20.0 mg/l COD-195.56 mg/l TSS-38.0 mg/l Oil & Grease-5.6 mg/l
9	DCM Shri Ram Ltd. (D.S.C.L.) Distillery Unit,	Distillery	ENA/ RSA/AA/Impure Alcohol	Installed	1937 KLD	Treated effluent used for Irrigation/used in distiller unit	Zero Liquid Discharge	Zero Liquid Discharge

	Hariyanwa, Hardoi		Cogeneration					
10	India Pesticide Ltd. D-2 to D-4, K-2 to K-11, UPSIDC Ind. Area, Sandila, Hardoi	Pesticide	Pesticide formulation Pesticide Technical (Insecticide, Fungicide, Herbicides, Intermediate	Installed	250 KLD	Zero Liquid Discharge	Zero Liquid Discharge	Zero Liquid Discharge
11	SHRI GANG INDUSTRIES AND ALLIED PRODUCTS LIMITED Plot no - B 2/6 B, 2/7, UPSIDC Industrial Area, Sandila Phase IV, Lucknow Hardoi Road, Tehsil Sandila, District Hardoi	Distillery	ENA/RS using Grain as main raw material Co-Generation Power	Installed	55 KLD	Treated effluent used for Irrigation/used in distiller unit	Zero Liquid Discharge	Date of sample Collection 21.09.23 pH-7.99 BOD-24.0 mg/l COD-192.0 mg/l TSS-38 mg/l Oil & Grease-5.8 mg/l
12	BERGER PAINTS INDIA LIMITED B4 & B5, Sandila Industrial Area, District Hardoi	Manufacturing of paints varnishes, pigments and intermediate (excluding blending/ mixing)	production of Water Base paints, Emulsion Intimated-, Liquid, Solvent Based Paint-Resin, Intimated and Powder Putty,	Installed	113 KLD	Zero Liquid Discharge	Zero Liquid Discharge	Date of sample Collection 24.11.23 pH-7.40 BOD-24.0 mg/l COD-148.0 mg/l TSS-72 mg/l
13	Poorvanchal Acid Private Limited, Plot no. E5-E14, Industrial area, Phase-2, Sandila, Hardoi	Chemical	Sulphuric Acid	Installed	103 KLD	Zero Liquid Discharge	Zero Liquid Discharge	Zero Liquid Discharge

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3.0 Water Quality Status

S.No.		
1	Provide water quality status of Ganga and its tributaries in the district and city/ town in terms of its fitness for Bathing water quality that is, FC and FS: **Ther is no Ganaga River**	As below

River/ Tributary	DO mg/l	BOD mg/l	TC MPN/100 ml	FC MPN/100 ml
Garra River U/s Babarpur Sampling Date 11.03.2024	7.6	3.1	23000	14000
Garra River D/s Pali Sampling Date 11.03.2024	7.4	3.2	25000	19000

4.0 Notification of Flood Plain Zones:

- U P State Govt. order dated 17.10.2018 has been issued declaring no development / no construction zone within 100m of the Ganga River on both sides.

- U P Demarcation of Flood Plain Zone – Completed on the right bank of Ganaga River i.e., 844 Nos. of Pillars in District Hardoi.

5.0 Issues relating to Environmental Flow:

- Notification issued by Government of India dated 09-Oct-2018 for ecological flow in Ganga River maintained.

Best Practices

1. Best practices adopted for Prevention and Control of Water Pollution:

   a. For 24X7 Surveillance of continuous operation of Effluent Treatment Plants in major water polluting industries Web Cameras and OCEMS, whose serves are linked to the Central Pollution Control Room and Uttar Pradesh Pollution Control Room.

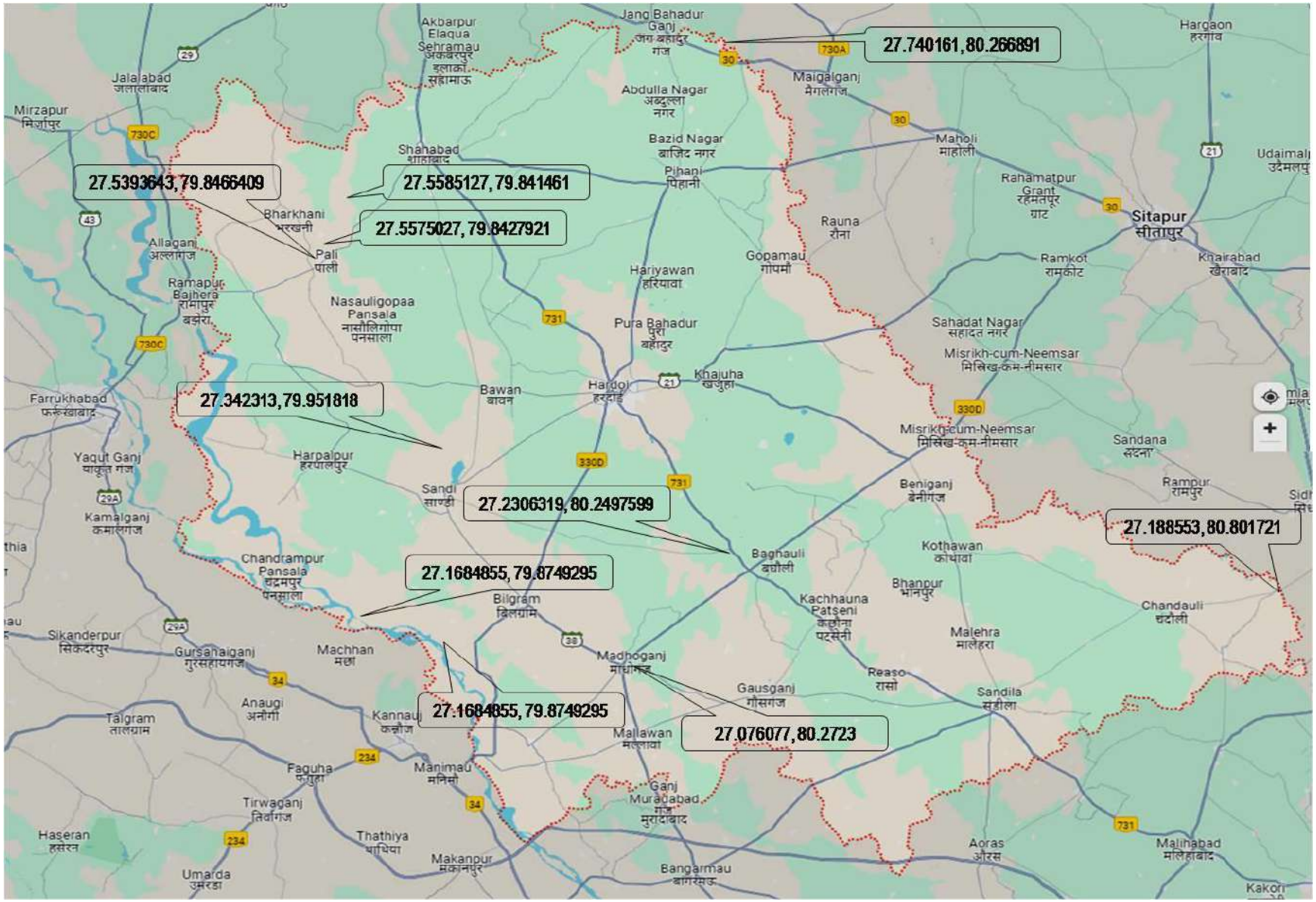
   b. Industries are operating their own ETP & STP to meet the PCB Norms and Complying Zero Liquid Discharge method.

   c. In District Hardoi two Distillery Units are installed. At present 01 Unit is operational and One Unit is not operational. Both Units are in Zero Liquid Discharge based.

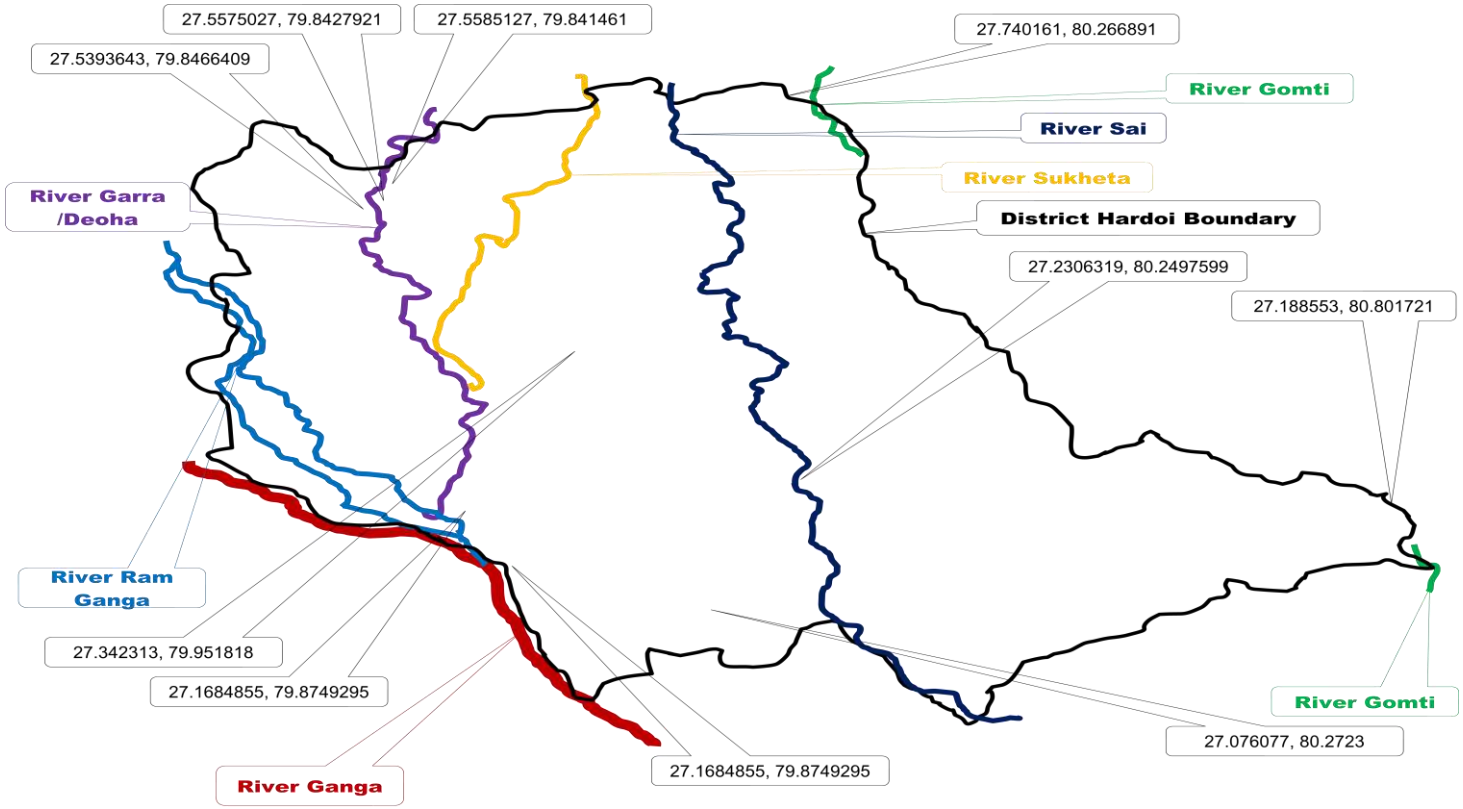
   d. All sugar industries have achieved 100% utilization of treated water in Recycling in process/ For use in Irrigation on agricultural Land,

   e. Miyawaki Afforestation done by the industries to maintain the Ecology and Environment.

Position marked in the Map



Regional Office, U.P. Pollution Control Board, Unnao **DISTT. HARDOI**



LEGEND

- River Ganga
- River Ram Ganga
- River Gomti
- River Garra /Deoha
- River Sai
- River Sukheta

Government of India
Ministry of Jal Shakti
Department of Water Resources,
River Development & Ganga Rejuvenation

GOVERNMENT OF UTTAR PRADESH

Report in
Compliance of Hon'ble NGT order
Dt 24.01.2024
O.A 200/2014 MC Mehta Vs UOI and Ors

नमामि गंगे

Report Submitted By:-

DISTRICT GANGA COMMITTEE
DISTRICT GHAZIPUR.

Introduction:- Ghazipur was covered with dense forest in Vedic era and it was a place for Ashrams of Saints during that period. The word Ghazipur does not figure as such in ancient Indian History, but according to some historians Raja Ghadhi father of Maharsi Jamdagni was from this place. This place is related to the Ramayana period where Maharshi Jamdagni, the Father of Maharshi Parsuram resided over here. The Famous Rishi Gautam & Chyavan were given teaching and sermon here in ancient period. The Lord Buddha who gave the first sermon in Sarnath, Varanasi which is not very far from here. The Aurihar area of Ghazipur district became the main center for teaching of Lord Buddha. Many stoopas and pillars are the main evidence of that period. Chinese TravelerHiuen Tsang had visited this area and described this place as Chanchu "The Land of Battle Fields".

This Place was the main center in medieval period from Sultanate period to Mughals. In Tughalk period, Zuna Khan, alias Muhammad Tuglak established the Jaunpur as the capital under which the Ghazipur was ruled. In the regime of Zuna Khan, the Saiyyad Massod Ghazi established this town, by defeating he Raja Mandhata, the ancestor of King Prithvi Raj Chauhan. In Lodhi Period, the Naseer Khan Nuhani was the Administrator of Ghazipur who changed its conditions. This Area was the main center during Mughal period when Babar took over the charge of Ghazipur and Muhammad Khan Nuhani became its administrator. In the reign of Akbar, the Afghan Ali Kuli Khan took over the charge of Ghazipur and developed the town Zamania. After the Death of Aurangjeb this area was taken by Jamindar Mansa Ram. Thereafter, Ghazipur came under the suzerainty of the Banaras state and Raja Balwant Singh, the Son of Mansa Ram became the King of Ghazipur. After the attack of Warren Hastings, the then Governor General of the British rule, this area was ruled over by various British rulers. The Lord Cornwallis, who was very famous for reforms in land came to visit this place and accidentally died. In his memory a beautiful tomb which attracts the tourist is also present in Ghazipur City.

This Area is Fertile with Great Freedom fighters. The Hero of Ist Freedom movement (which is popularly referred to as Sepoy Movement) Mangal Pandey comes from this soil only. The Famous Nilha Sahib Revolt is Associated with this place where the Farmers revolted against the British & they set on fire various Indigo Godowns. The Ghazipur Plays and has played a major role in India's Freedom Struggle.

In the history of Indian National movement the significant role was played by the people of Ghazipur. In home rule, Rolat Act, Khalafat Movement, Namak Kanoon, Videshi Bastro Ka Bahiskar Satyagrah & movement of 1942 the people of Ghazipur took part courageously & fearlessly to our pride. People namely Dr. Mukhtar Ahmad Ansari, Sahjanand Sarwasti, Dr. Sayad Mahmood Qazi, Nijamul Haq Anasri, Bhagawat Mishra, Gajanan Marwari, Vishwanath Sharma, Hari Prasad Singh, Vaseer, Ram Murat Singh, Ram Raj Singh, Bola Singh, Indradev Tripathi, Dev Karan Singh, Vishwnath Ji, Sideshawar Prasad Singh, Ram Sawaroop Pandey, Saraju Pandey, Dalsingar Dube, Ram Bahadur Shastri & other many others recorded their prideful roles. People of this district played indelible roles in QUIT INDIA MOVEMENT. Under the leadership of Dr. Shiv Pujan Rai a group of freedom fighters hoisted the tri-colour flag at Muhammadabad tehsil. Dr. Shiv Pujan Rai, Vans Narain Rai, Ram Badan Rai, Raj Narain Rai & Vasishth Narain Rai sacrified their lives for country on 18 Aug.1942.

After Independence, Ghazipur could not develop as it used to be in the past. But this soil gave brave soldiers like Brig. Usman, Paramveer Chakra awardee Veer Abdul Hameed, Ram Urgrah Pandey. In recent times Ghazipur showed its notable bravery in Kargil victory against Pakistan in 1999.

1. Sewage

Drain (city/ town)	Generation/ day	PH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride etc)	Nitrates	DO	TC	FC	Outlet flow and geo code/ sample point	Color/ odour	Discharged into
Gorawa Drain	2.7	7.23	36	176	114	630	Cr - ND* Cu - 0.0338 Cd - ND Pb - ND Zn - ND	2.5	1.8	2100000	1700000	Lat . 25.421526 Long . 83.55216	25	River Ganga
Kankarwa Drain	1.2	7.22	32	164	108	624	Cr - ND Cu - 0.0338 Cd - ND Pb - ND Zn - ND	2.3	1.4	1600000	920000	Lat . 25.417152 Long . 83.552759	25	River Ganga
Karpurimai Ghat Drain	2.9	7.21	32	176	110	626	Cr - ND Cu - 0.0447 Cd - ND Pb - ND Zn - ND	2.2	1.6	940000	700000	Lat . 25.41489 Long . 83.553408	25	River Ganga
Harizan Basti	0.02	7.28	40	204	114	638	Cr - ND Cu - 0.0665 Cd - ND Pb - ND Zn - 0.0399	2.8	1.8	2500000	1300000	Lat. 25.58687 Long. 83.60308	25	River Ganga
Samshan Ghat	0.103	7.32	36	196	116	632	Cr - ND Cu - 0.0447 Cd - ND Pb - ND Zn - 0.0061	2.6	1.9	1700000	1100000	Lat. 25.58617 Long. 83.60195	25	River Ganga
Rui Mandi	0.18	7.31	32	192	108	618	Cr - ND Cu - 0.0447 Cd - ND Pb - ND Zn - 0.0129	2.4	1.4	1300000	790000	Lat. 25.58522 Long. 83.60019	25	River Ganga

Budhava Mahadeva	0.49	7.24	40	178	126	636	Cr - ND Cu - 0.0447 Cd - ND Pb - ND Zn - 0.0095	3.1	1.3	2800000	1700000	Lat. 25.58478 Long. 83.59853	25	River Ganga
Mugal Pura	0.27	7.21	32	172	108	614	Cr - ND Cu - 0.0447 Cd - ND Pb - 0.0185 Zn - 0.0095	2.6	1.4	1100000	790000	Lat. 25.58445 Long. 83.59851	25	River Ganga
Posta Ghat	0.27	7.36	36	184	116	620	Cr - ND Cu - 0.0556 Cd - ND Pb - ND Zn - 0.0162	3.0	1.8	2100000	1700000	Lat. 25.58418 Long. 83.59771	25	River Ganga
Theri Bazar	0.25	7.18	32	168	104	598	Cr - ND Cu - 0.0447 Cd - ND Pb - ND Zn - 0.0129	2.3	1.4	1200000	940000	Lat. 25.5828 Long. 83.59492	25	River Ganga
Khirki Ghat	0.25	7.31	40	208	114	620	Cr - ND Cu - 0.0665 Cd - ND Pb - ND Zn - 0.0332	2.9	1.3	2200000	1300000	Lat. 25.58306 Long. 83.59587	25	River Ganga
Anzahi Ghat	3.91	7.33	36	196	114	618	Cr - ND Cu - 0.0556 Cd - ND Pb - ND Zn - 0.0129	2.7	1.5	2000000	1400000	Lat. 25.582 Long. 83.59395	25	River Ganga
Chetnath Ghat	0.686	7.35	40	222	128	626	Cr - ND Cu - 0.0556 Cd - ND Pb - 0.0185 Zn - ND	3.0	1.8	2100000	1100000	Lat. 25.58093 Long. 83.59148	25	River Ganga
Stimer Ghat	3.241	7.26	38	204	120	620	Cr - ND Cu - 0.0447 Cd - ND Pb - ND Zn - 0.0162	2.8	1.4	2300000	1300000	Lat. 25.5808 Long. 83.59118	25	River Ganga

Gola Ghat	0.102	7.35	36	184	110	612	Cr - ND Cu - 0.0665 Cd - ND Pb - ND Zn - 0.0230	2.6	1.7	1600000	920000	Lat. 25.57999 Long. 83.58888	25	River Ganga
Maksud Ghat	0.018	7.27	40	212	122	634	Cr - ND Cu - 0.0556 Cd - ND Pb - ND Zn - 0.0196	3.2	1.1	2600000	1300000	Lat. 25.57915 Long. 83.58775	25	River Ganga
Collecter Ghat	3.141	7.38	34	204	118	616	Cr - ND Cu - 0.0665 Cd - ND Pb - ND Zn - 0.0095	2.5	1.8	2000000	1400000	Lat. 25.5774 Long. 83.58409	25	River Ganga
Afim Factory Colony	0.018	7.23	38	206	120	592	Cr - ND Cu - 0.0338 Cd - ND Pb - ND Zn - 0.0061	2.3	1.4	2800000	1700000	Lat. 25.56953 Long. 83.56849	25	River Ganga
Dadri Ghat	3.233	7.24	36	184	110	624	Cr - ND Cu - 0.0665 Cd - ND Pb - ND Zn - 0.0061	2.9	1.5	2400000	1400000	Lat. 25.57432 Long. 83.57738	25	River Ganga
Naupura	0.018	7.32	32	178	108	598	Cr - ND Cu - 0.0556 Cd - ND Pb - ND Zn - 0.0061	2.2	2.1	1200000	940000	Lat. 25.57149 Long. 83.57162	25	River Ganga
Sai Mandir	3.119	7.23	36	188	114	614	Cr - ND Cu - 0.0556 Cd - ND Pb - ND Zn - 0.0129	2.7	1.2	1700000	1100000	Lat. 25.57171 Long. 83.57227	25	River Ganga
Mahala Basti (Sikandpur)	0.02	7.37	36	202	116	608	Cr - ND Cu - 0.0774 Cd - ND Pb - ND Zn - 0.0738	2.4	1.9	1700000	1200000	Lat. 25.56908 Long. 83.56767	25	River Ganga

D.M Banglo	3.141	7.29	38	194	114	615	Cr - ND Cu - 0.0556 Cd - ND Pb - 0.0185 Zn - 0.0264	2.5	1.8	1600000	920000	Lat. 25.56766 Long. 83.56629	25	River Ganga
Peer Nagar	0.027	7.21	32	174	110	590	Cr - ND Cu - 0.0665 Cd - ND Pb - 0.0185 Zn - 0.0095	2.1	1.5	1100000	790000	Lat. 25.56636 Long. 83.56378	25	River Ganga
Bada Mahadeva (Gora Bazar)	3.91	7.26	38	206	118	616	Cr - ND Cu - 0.0556 Cd - ND Pb - ND Zn - 0.0061	2.6	1.6	2800000	1700000	Lat. 25.56342 Long. 83.55931	25	River Ganga
Bada Mahadeva (Adarsh Bazar)	1.27	7.38	34	184	106	596	Cr - ND Cu - 0.0774 Cd - ND Pb - 0.0185 Zn - 0.0129	2.4	2	1200000	940000	Lat. 25.55414 Long. 83.54969	25	River Ganga
Kot Ghat	0.80	7.24	38	196	108	620	Cr - ND Cu - 0.0447 Cd - ND Pb - ND Zn - ND	2.8	1.8	2400000	1400000	Lat. 25.532875 Long. 83.225282	25	River Ganga
Budenath Mahadew Ghat Drain	0.60	7.31	38	188	116	624	Cr - ND Cu - 0.0447 Cd - ND Pb - ND Zn - ND	3.1	1.3	2000000	1400000	Lat. 25.533102 Long. 83.223324	25	River Ganga
Pakka Ghat Drain	1.00	7.26	42	204	122	630	Cr - ND Cu - 0.0556 Cd - ND Pb - 0.0185 Zn - 0.0162	3.3	1.5	2500000	1300000	Lat. 25.533866 Long. 83.220768	25	River Ganga
Sangat Ghat Drain	0.60	7.31	36	190	108	622	Cr - ND Cu - 0.0447 Cd - ND Pb - ND Zn - ND	2.9	1.9	2200000	1300000	Lat. 25.533978 Long. 83.219397	25	River Ganga

Mahaveer Ghat Drain	0.50	7.18	42	222	128	636	Cr - ND Cu - 0.0338 Cd - ND Pb - ND Zn - ND	3.4	1.2	2800000	1700000	Lat. 25.53431 Long. 83.218385	25	River Ganga
Ward No. 15 Malhiya Basti Drain	0.80	7.33	34	176	110	625	Cr - ND Cu - 0.0338 Cd - ND Pb - ND Zn - ND	2.6	1.9	1700000	1100000	Lat. 25.534673 Long. 83.216833	25	River Ganga
Rangmahal Ghat Drain	0.80	7.21	38	182	114	632	Cr - ND Cu - 0.0556 Cd - ND Pb - ND Zn - 0.0129	3.1	1.2	2000000	1400000	Lat. 25.535785 Long. 83.212006	25	River Ganga
Jauharganj Drain	0.90	7.28	42	208	122	638	Cr - ND Cu - 0.0338 Cd - ND Pb - ND Zn - 0.0061	3.2	1.8	1600000	920000	Lat. 25.537021 Long. 83.203243	25	River Ganga

The above information is to be submitted on the basis of end point sample analysis of the concerned drain

2. STP for treating the sewage of the drains ultimately flowing to river Ganga or its tributaries

Existing STP (location & capacity)	Capacity (operational)	Inlet/Outlet water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point	Proposed/under construction STP with completion date
No	21 MLD STP is under construction in Nagar Palika Parishad, Ghazipur	NA	No Tapped drain in the district	100%	River	Date of Completion is 10-04-2024.

2.1 STP ADDITIONAL INFORMATION

NAME OF DRAIN	POSITION OF STP WITH CAPACITY	GEO/ COORDINATES	DISCHARGE QUANTITY FROM THE STP IN THE DRAIN	TOTAL PER DAY DISCHARGE FROM THE DRAIN INTO THE RIVER
NA	21 MLD STP is under construction in Nagar Palika Parishad, Ghazipur	N 25.632675^0 E 83.569229^0	As there is no existing STP, There is no discharge quantity.	NA

Proposed STP (location & capacity)	Capacity (operational)	Inlet/Outlet water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point Geo code/sampling point	Proposed/under construction STP with completion date
There is no proposed STP in the district might be proposed in future	-	-	-	-	-	-

3. Hotels/Ashrams/Dharmshalas/residential complexes abutting river Ganga or its tributaries.

Number of Hotels/ashrams/ dharamshalas	Consent to establish/operate	STP	Discharge point	Action taken
11 nos.	**01**	**00**	**Septic Tank**	**Notice Sent**
M/S Hotel Shyam, Lanka, District-Ghazipur.	No	No	Septic Tank	Notice Sent
M/s Hotel Atithi Continental, Sainik Chauraha, Prakash Nagar, District-Ghazipur.	No	No	Septic Tank	Notice Sent
M/s Hotel SM Palace and Moti Mahal Delux Restaurant, Vikas Bhawan Road, Ghazipur.	No	No	Septic Tank	Notice Sent
M/s Atithi Hotel, Near Jail Gate, Lanka, Sakalendabad, Ghazipur.	No	No	Septic Tank	Notice Sent
M/s Madhur Tarang Hotel, Station Road, Ghazipur.	No	No	Septic Tank	Notice Sent
M/s Hotel The Grand Palace, NH-29, Chungi Opposite Hero Agency, Ghazipur.	No	No	Septic Tank	Notice Sent
M/s Nand Residency, NH-29, Near Old RKBK Petrol Pump, Banshi Bazar, Ghazipur.	No	No	Septic Tank	Notice Sent
M/s Hotel Living Legend, Mall Godam Road, Ghazipur.	No	No	Septic Tank	Notice Sent
M/s Hotel Gangotri, Mall Godam Road, Ghazipur.	No	No	Septic Tank	Notice Sent
M/s Hotel Sri Rangtop, Railway Station Road, Infront of Hanuman Temple, Gautam Buddh Colony, Mall Godam Road, Ghazipur.	No	No	Septic Tank	Notice Sent
M/s Hotel Shubhra Grand, Shubhra Complex, Mhubag Ghazipur.	No	No	Septic Tank	Notice Sent

4. IV. Industrial Effluent discharge by industries whose effluent is ultimately flowing to river Ganga or its tributaries.

Total Number of Industries	Daily effluent discharge	Treatment available (cetp/petp/etp operational capacity)	Effluent quality analysis (outlet of treatment plants Geo code sampling point)	GAP	Proposed/under construction treatment project (with timeline)	Number of defaulting units Action taken	Industrial solid waste generated/ day	Manner of disposal (industrial solid waste)
02	-	ETP install	-	Nil	No	00	NA	NA
M/s Lord Distillery Pvt. Ltd., Nandganj Saidpur, Ghazipur	Zero Liquid Discharge	-	Closed	No	NA	NA	NA	NA
M/s Government Opium and Alkaloid Works, Ghazipur	Domestic-540 KLD & Industrial 50 KLD	Installed	Achieving (As per Board norms)	No	NA	NA	NA	NA

5. Regulation f Flood Plain Zone:

Area cities/towns	Notification of flood plain zone	Demarcation		Encroachment & direct discharge geo code/ sampling point	Encroachment removal status	Timeline for completion
		No development zone pillars	Regulatory zone pillars			
Ghazipur	Not yet Notified by Govt.	-	-	-	-	-

6. Afforestation/Plantation along the bank of river Ganga and its tributaries and their flood plain zones.

Area cities/towns	Total plantation geo code/sampling point	Proposed Project	Time line
Ghazipur	(2023-24) - 488.70 Ha. along with 962063 plants.	Ongoing Project. (2024-25)	First week of July 2024. As per direction of government.

Plantation List 2023-24 with Geo Tag Location

SL. No.	Range	Type of Land	Selected Site	Area in Ha.	No. of Plants	Geo tag location			
1	2	3	4	5	6	7			
1	Saidpur	General	Nizampur to Saidpur Marg	3.00	4800	N	25.556713	E	83.255873
2	Saidpur	General	Jainpur to Vikrampur Marg	3.00	4800	N	25.601256	E	83.202602
3	Saidpur	General	Mudiyar to Dautalpur Marg	3.00	4800	N	25.562774	E	83.26248
4	Saidpur	General	Jauharganj to Dharammarpur Nagar Marg-A	5.00	8000	N	25.551464	E	83.205608
5	Saidpur	General	Jauharganj to Dharammarpur Nagar Marg-B	5.00	8000	N	25.259946	E	83.209864
6	Saidpur	General	Kauda to Bawakhari	1.00	1600	N	25.4041	E	83.144
7	Saidpur	Barren	Mathuchauri Gramsamaj	3.00	7500	N	25.618627	E	83.160656
8	Saidpur	Barren	Ukarav to Mirzapur Marg	3.00	7500	N	25.696425	E	83.244058
9	Saidpur	Barren	Gadanpur to Babatpur Pul Marg	4.00	10000	N	25.527227	E	83.076623
10	Saidpur	Barren	Ichawal to Gadanpur Marg	4.00	10000	N	25.539329	E	83.134132
11	Saidpur	Barren	Badegaw to Mirzapur Marg	3.00	7500	N	25.644735	E	83.214582
12	Saidpur	Barren	Mirzapur to Malaura Marg	3.00	7500	N	25.662055	E	83.171742
13	Saidpur	Barren	Bahadur Mod to Ibrahimpur Marg	5.00	12500	N	25"43.195'	E	83"18.969'
14	Saidpur	Barren	Bijahari to Dihawa Marg	4.00	10000	N	25"42.779	E	83"19.091
15	Saidpur	Barren	Akabarpur Gram Samaj Bhumi	3.00	7500	N	25"42.647'	E	83"17.327
16	Saidpur	Barren	Nadepur Gram Samaj Bhumi	3.00	7500	N	25"44.415'	E	83"14.932'
17	Saidpur	Barren	Baghaw to Rajpur Marg	3.00	7500	N	25"43.536"	E	83"19.007"
18	Saidpur	Barren	Salempur to Baghaw Marg	2.00	5000	N	25"43.828'	E	83"17.469'
19	Saidpur	General	Ishopur to Gopalpur Railway Bhumi	5.00	3125	N	25.528808	E	83.148567
20	Saidpur	General	Bapu Inter Collage, Sadat	3.00	1875	N	25.678712	E	83.314425
			Total.....	**68.00**	**137000**				
21	Zamania	General	Bakasada to Sayar Marg	5.00	8000	N	25'25'28.86"	E	83'45'46.45"
22	Zamania	General	Ramwal to Dedhgawa Miner	5.00	8000	N	25.547751°	E	83.621149°
23	Zamania	General	Daudpur to Gehudi Marg	5.00	8000	N	25.20.30	E	83.35.08
24	Zamania	General	Baruin to Tajpur Miner	5.00	8000	N	25.334369	E	83.550481
25	Zamania	General	Baruin to Mahali Miner	5.00	8000	N	25.350736	E	83.574709
26	Zamania	General	Ramwal to Sugwaliya	5.00	8000	N	25.546456	E	83.625134
27	Zamania	General	Taunga to Dedhgawa Marg	5.00	8000	N	25.502423	E	83.676724
28	Zamania	General	Dildarnagar to Dewal Marg	5.00	8000	N	25.41824	E	83.679866

29	Zamania	General	Utarauli to Udharanpur Marg	5.00	8000	N	25.507245	E	83.70746
30	Zamania	General	Faridpur to Bhadaura Miner	5.00	8000	N	25.451713	E	83.719975
31	Zamania	Barren	Biraupur to Basuka Marg	5.00	12500	N	25.515379°	E	83.743302°
32	Zamania	Barren	Nayi Bazar Miner	5.00	12500	N	25'19.56	E	83'32.11
33	Zamania	Barren	Purpur to Pachokhar Marg	5.00	12500	N	25.2749	E	83.3747
34	Zamania	Barren	Khajuha to Sugwaliya Marg	5.00	12500	N	25.517861	E	83.576898
35	Zamania	Barren	Ijari to Sabbalpur Marg	5.00	12500	N	25.518987	E	83.576898
36	Zamania	Barren	Matsa to Lahuwar Marg	2.00	5000	N	25.478467	E	83.57075
37	Zamania	General	Tajpur Kurra Gram Samaj Bhumi	5.00	3125	N	25.38572	E	83.693737
38	Zamania	General	Daudpur Gram Samaj Bhumi	5.00	3125	N	25.1986744	E	83.357774
			Total.....	**87.00**	**153750**				
39	Mohammadabad	General	Bachchhalpura to Sherpur Marg	3.00	4800	N	25.35'41.632	E	83.44'42.586
40	Mohammadabad	General	Batha to Surani Marg	2.00	3200	N	25.36'30.276	E	83.54'46.188
41	Mohammadabad	General	Gauspur to Kathaut	1.00	1600	N	25.3659.5116'	E	83.4209.216
42	Mohammadabad	General	Raghubarganj Gram to Sarauli	4.00	6400	N	25.4206.5916'	E	83.4052.014'
43	Mohammadabad	General	Reosada to Savitapur Marg	3.00	4800	N	25.37'52.392	E	83.51'32.853
44	Mohammadabad	General	Kundesar Mod to Sherpur Marg	4.00	6400	N	25.4012.1044'	E	83.3950.2812'
45	Mohammadabad	General	Dudiya to Mishrawaliya Marg	2.00	3200	N	25.40'11.733	E	83.53.22.696
46	Mohammadabad	General	Mahend to Siyadi Marg	4.00	6400	N	25.40'49.972	E	83.56'10.129
47	Mohammadabad	General	Mata to Kanuwan Marg	3.00	4800	N	25.3547.713	E	83.34'00.662
48	Mohammadabad	General	Siyadi Mod to Siyadi Marg	1.00	1600	N	25.38'23.452	E	83.55'02.967
49	Mohammadabad	General	Godaur to Mahendra Sonwani Marg	4.00	6400	N	25.40'47.368	E	83.54"37.195
50	Mohammadabad	General	Paranpur to Rajauli Marg	4.00	6400	N	25.40'45.134	E	83.46ə49.227
51	Mohammadabad	General	Birpur to Paliya Marg	3.00	4800	N	25.31'51.376	E	83.52'10.106
52	Mohammadabad	General	Sukhadehari to Amarupur	2.50	4000	N	25.616353	E	83.89447
53	Mohammadabad	General	Gathiya to Siridih Marg	1.00	1600	N	25.42065916	E	83.4052014
54	Mohammadabad	General	Macha to Sukhadehari	3.00	4800	N	25.58747	E	83.893699
55	Mohammadabad	General	Sukhdehara to Pandey ka pura	5.00	8000	N	25.588396	E	83.872097
56	Mohammadabad	General	Birbhanpur Pokhara Bhumi	1.50	938	N	25.451713	E	83.719975
			Total.....	**51.00**	**80138**				
57	Jakhaniya	General	Gharpatiya to Karakapur Pokhara	2.00	3200	N	25°39'25"	E	83°31'53"
58	Jakhaniya	General	Kataghara to Tauwa Marg	4.00	6400	N	25.629395	E	83.396796
59	Jakhaniya	General	Panishka to Sofipur Marg	2.00	3200	N	25.7327654	E	83.3861677
60	Jakhaniya	General	Manjhanpur to Bairak Marg	3.00	4800	N	25.7803416	E	83.36197324
61	Jakhaniya	General	Deva Marg to Sultanpur Miner	2.00	3200	N	25.808095	E	83.424831

62	Jakhaniya	General	Rasulpur to Parsotiya Marg	3.00	4800	N	25.39.329	E	83.25.21
63	Jakhaniya	General	Sarai Govind to Basila Nahar	3.00	4800	N	25.40.495	E	83.27.552
64	Jakhaniya	General	Jauharpur Gram Samaj Bhumi	2.00	3200	N	25.780894	E	83.335287
65	Jakhaniya	General	Semaur to Kritisinghpur Marg	2.00	3200	N	25.736097	E	83.40129
66	Jakhaniya	General	Alipur Madara Gram Samaj Bhumi	2.00	3200	N	25.761523	E	83.387541
67	Jakhaniya	General	Baharampur to Rampur Patari Nadi Bhumi	4.00	6400	N	25.822208	E	83.459562
68	Jakhaniya	Barren	Maudhiya Gram Samaj Bhumi	1.00	2500	N	25.615821	E	83.325785
69	Jakhaniya	Barren	Mubarakpur to Ghurehara Marg	3.00	7500	N	25.679403	E	83.491538
70	Jakhaniya	Barren	Makhanpur Gram Samaj Bhumi	3.00	7500	N	25.8069287	E	83.3435675
71	Jakhaniya	Barren	Bhudakuda Nahar to Banshi Marg	3.00	7500	N	25.7705112	E	83.3460509
72	Jakhaniya	Barren	Jalalabad to Jahagirpur	2.00	5000	N	25.8303963	E	83.4378416
73	Jakhaniya	Barren	Belahara to Rajapur Sampark Marg	2.00	5000	N	25.750145	E	83.296159
74	Jakhaniya	Barren	Uchauri Puliya to Shadiyabad Marg	2.00	5000	N	25.69418	E	83.351985
75	Jakhaniya	Barren	Sujanipur Gram Samaj Bhumi	2.00	5000	N	25.630824	E	83.42904
76	Jakhaniya	Barren	Gorari Gram Samaj Bhumi	3.00	7500	N	25.68472	E	83.363372
77	Jakhaniya	Barren	Dhamupur Charagah	5.00	12500	N	25.759891	E	83.422914
78	Jakhaniya	Barren	Hardaspurkala Gram Samaj Bhumi	3.00	7500	N	25.842846	E	83.452357
79	Jakhaniya	Barren	Matukpur Gram Samaj Bhumi	2.00	5000	N	25.779987	E	83.404155
80	Jakhaniya	Barren	Rampur Patari Gram Samaj Bhumi	1.50	3750	N	25.841028	E	83.44755
81	Jakhaniya	Barren	Sarai Gokul Gram Samaj Bhumi	2.00	5000	N	25.636794°	E	83.488191°
82	Jakhaniya	Barren	Jhotana to Mirpur Miner	2.00	5000	N	25.7479	E	83.30916
83	Jakhaniya	Barren	Maudhiya Pokhara Bhumi	2.00	5000	N	25.62208	E	83.326637
84	Jakhaniya	Barren	Ramban to Kudila Marg	2.00	5000	N	25.757777	E	83.357135
85	Jakhaniya	Barren	Barodih to Budanpur Sampark Marg	4.00	10000	N	25.789674	E	83.339733
86	Jakhaniya	Barren	Hamjapur to Baghayi Sampark Marg	1.50	3750	N	25.754897	E	83.360157
			Total.....	**75.00**	**161400**				
87	Mardah	General	Barahi Gulal Sarai Marg	3.00	4800	N	25°45'14.676	E	83°33'27.444
88	Mardah	General	Narangpur to Lawa Marg	3.00	4800	N	25°41'58.05	E	83°36'42.102
89	Mardah	General	Akaitha to Chaurabojh Marg	2.00	3200	N	25°42'34.35	E	83°36'25.254
90	Mardah	General	Singera to Fefara Marg	2.00	3200	N	25°48'41.706	E	83°37'55.344
91	Mardah	General	Sarai Mubarak Indaur Marg	2.00	3200	N	25°46'19.998	E	83°37'0.402
92	Mardah	General	Sarai Mubarak Abhisahan Marg	2.00	3200	N	25°45'24.828	E	83°37'13.116
93	Mardah	General	Sulemapur Bhawanipur Jhagaha Marg	2.00	3200	N	25°46'16.206	E	83°36'23.376

94	Mardah	General	Senobandh to Chak Kapil Marg	2.00	3200	N	25.44.45.084	E	83.30.52.644
95	Mardah	General	Tiyara to Karshay	1.50	2400	N	25.43.3.204	E	83.30.0.102
96	Mardah	General	Prithvipur Gram Samaj & Talab Bhita	2.00	3200	N	25.746243	E	83.606841
97	Mardah	Barren	Uchaur to Prithvipur Marg	2.00	5000	N	25°45'9.696	E	83°35'48.894
98	Mardah	Barren	Tarauti Rajwaha (Dharmpura to Khajurgaw)	2.00	5000	N	25°46'42.504	E	83°38'50.276
99	Mardah	Barren	Barahi Shakkapur Marg	2.00	5000	N	25.4529	E	83.3317
100	Mardah	Barren	Subhash Inter Collage, Ghariha	2.00	5000	N	25°52'4.164	E	83°36'42.396
101	Mardah	Barren	Purvanchal Expressway (Singera to Belasadi)	3.00	7500	N	25.81428	E	83.63002
102	Mardah	Barren	Belasadi to Asana Marg	2.00	5000	N	25°48'41.706	E	83°37'55.344
103	Mardah	Barren	Virano Rajwaha (Dharmagatpur to Raipur)	5.00	12500	N	25.45.35.474	E	83.29.18.642
104	Mardah	Barren	Kodari Kharat Marg	2.00	5000	N	25.47.28.392	E	83.29.40.662
105	Mardah	Barren	Mardah Rajwaha (Pandeypur to Haidarganj)	5.00	12500	N	25.49.24.714	E	83.32.35.22
106	Mardah	Barren	Panserawa to Nakhatpur Marg	2.00	5000	N	25.49.32.748	E	83.30.47.616
107	Mardah	Barren	Bhojapur to Nakhatpur Miner	2.00	5000	N	25.50.1.398	E	83.30.42.516
108	Mardah	Barren	Ghuraha Bandha Gram Samaj Bhumi	2.00	5000	N	25.821104	E	83.496832
109	Mardah	General	Purvanchal Expressway (Kodayi to Belasadi)	5.00	3125	N	25.68472	E	83.363372
110	Mardah	General	Purvanchal Expressway (Haidarganj to Kodayi)	5.00	3125	N	25.711206	E	83.791716
111	Mardah	General	Purvanchal Expressway (Harikaranpur to Haidarganj)	5.00	3125	N	25.768377	E	83.742821
112	Mardah	General	Purvanchal Expressway (Nakhatpur to Harikaranpur)	5.00	3125	N	25.586599	E	83.357024
			Total.....	**72.50**	**124400**				
113	Barachawar	Barren	Maheshpur to Alawalpur Marg	4.00	10000	N	25.721288	E	83.651236
114	Barachawar	Barren	Nadula to Ranga Marg	3.00	7500	N	25.792028	E	83.761002
115	Barachawar	Barren	Satanpur to Itaura Marg	4.00	10000	N	25.891747	E	83.649004
116	Barachawar	Barren	Nagawa to Katya Marg	3.00	7500	N	25.813083	E	83.704323
117	Barachawar	Barren	Amawa to Salempur Marg	4.00	10000	N	25.764539	E	83.80445
118	Barachawar	Barren	Dihawa to Husenabad Marg	3.00	7500	N	25.702318	E	83.718786
119	Barachawar	Barren	Husenabad to Gaur Tiyara Marg	3.00	7500	N	25.717089	E	83.737417
120	Barachawar	Barren	Gaur Tiyara to Bareji Marg	3.00	7500	N	25.711206	E	83.791716
121	Barachawar	Barren	Gopalpur to Dudhaura Nahar	4.00	10000	N	25.847685	E	83.626424
122	Barachawar	Barren	Kutubpur to Belasadi Marg	2.00	5000	N	25.804827	E	83.64289
123	Barachawar	Barren	Sanahua Dewali to Salamatpur Marg	3.00	7500	N	25.850591	E	83.649319
124	Barachawar	Barren	Ghandhi Memorial School Bhumi	2.00	5000	N	25.866142	E	83.64419
125	Barachawar	Barren	Badaura to Sanehua Marg	3.00	7500	N	25.837741	E	83.65702
126	Barachawar	Barren	Mahdaur to Sidhagarghat Marg	3.00	7500	N	25.826472	E	83.734673

127	Barachawar	Barren	Kamupur to Dubiha Marg	3.00	7500	N	25.719854	E	83.838518
128	Barachawar	Barren	Pindari to Dhotari Marg	4.00	10000	N	25.78522	E	83.771367
129	Barachawar	Barren	Nasirpur to Badesar Marg	2.00	5000	N	25.779485	E	83.710287
130	Barachawar	Barren	Khanpur to Dahendu Marg	2.00	5000	N	25.768377	E	83.742821
131	Barachawar	Barren	Badesar to Siyabasi Marg	2.00	5000	N	25.773134	E	83.74585
			Total.....	**57.00**	**142500**				
132	Ghazipur	General	Akhtiyarpur to Lava Marg	2.00	3200	N	25°40'47"	E	83°38'30"
133	Ghazipur	General	Prempura to Bhadev Sampark Marg	3.00	4800	N	25°41'54"	E	83°39'19"
134	Ghazipur	General	Saraiya Shekhuapur Marg	2.00	3200	N	25°39'18"	E	83°36'7"
135	Ghazipur	General	Bakuliyapur to Belawa Marg	3.00	4800	N	25°36'4"	E	83°34'5"
136	Ghazipur	General	Bhatauli to Sakara Marg	2.00	3200	N	25.53358'	E	83.50159'
137	Ghazipur	General	Belawa to Andhau bypass	3.00	4800	N	25.53358'	E	83.50159'
			Total.....	**15.00**	**24000**				
138	Nandganj	General	Dharammarpur Ganga Nadi Bandha	4.00	6400	N	25°24'45.4"	E	83°32'41.4"
139	Nandganj	General	Mahepur Sampark Marg, Pokhara Bhita & Bandha	4.00	6400	N	25°31'23.4"	E	83°29'32"
140	Nandganj	General	Jewal to Nindopur Marg	2.00	3200	N	25.516198	E	83.312793
141	Nandganj	General	Ghazipur to Chochakpur Marg (Parmeth to Khidirpur)	5.00	8000	N	25.526658	E	83.485244
142	Nandganj	Barren	Siyawa to Bhitari Sampark Marg	4.00	10000	N	25°35'26"	E	83°17'22"
143	Nandganj	Barren	Bhikkhepur Gram Samaj Bhumi	4.00	10000	N	25°37'04"	E	83°26'17"
144	Nandganj	Barren	Koryadih Gram Samaj Bhumi	3.00	7500	N	25°35'904"	E	83°22'946"
145	Nandganj	Barren	Dhawa to Shikarpur Marg	3.00	7500	N	25°36'18"	E	83°27'06"
146	Nandganj	Barren	Kamalpur Gram Samaj Bhumi	2.00	5000	N	25°35'5	E	83°20'59
147	Nandganj	Barren	Devkali Pump Canal (Sagara to Pachrasi)	3.00	7500	N	25.586599	E	83.357024
148	Nandganj	Barren	Badahara to Davopur Marg	4.00	10000	N	25.866142	E	83.64419
149	Nandganj	Barren	Dihiya Gram Samaj & Miner Bhumi	3.00	7500	N	25.68472	E	83.363372
150	Nandganj	Barren	Pacharasi Miner & Gram Samaj Bhumi	5.00	12500	N	25.590208	E	83.325461
151	Nandganj	Barren	Pacharasi to Badepur Sampark Marg	2.00	5000	N	25.566345	E	83.316872
152	Nandganj	Barren	Madanahi to Parmeth Sampark Marg	3.00	7500	N	25.535311	E	83.476747
153	Nandganj	Barren	Chhapara Varanasi Rail Marg 159/2 to 163/3 Bayi Patari	4.00	10000	N	25.530721	E	83.283095
154	Nandganj	Barren	Turana to Rajupur Marg	5.20	13000	N	25.593933	E	83.370053
155	Nandganj	General	Chhapara Varanasi Rail Marg 158/5 to 160/0	3.00	1875	N	25.615821	E	83.325785
			Total.....	**63.20**	**138875**				
			Grand Total.....	**488.70**	**962063**				

7. Mining and Stone Crushing in river bed and flood plain zone of River Ganga and its tributaries.

Area of mining	FIR/case registered /year	Vehicles/ mineral seized	Action taken status	Cases pending in Court	Enforcement of EMGSM 2020 and sustainable sand mining management guidelines 2016
1	1 in year 2023-24	7859.5 cum	Recovery issued	No any pending case	According to the UP Minor Mineral (Concession) Rule 2021 and UP government order, The District Magistrate has constituted task force at the district level to take necessary action against illegal mining.

1. The Tribunal has already directed for furnishing following.

(1) District Ganga Protection Plan at city/town level

District Ganga Protection Committee (DGPC) is required to formulate the action plan for each city and town located on main stem of river Ganga and its tributary and such action plan has to be prepared in accordance with the river Ganga (Rejuvenation, Protection and Management) Authorities order, 2016 (para 6 and 55).

(2) Contents of the action plan (Consolidated District Wise Action Plan including each city and town abutting river Ganga and its tributary)

2.1 Sewage Management

(i) Sewage generation (for entire district and individual town wise):

Name of District	Name of ULB	Total Population	Source Segregation (No of Ward)	House Hold	Total Sewage Generation (MLD)	Septic Tank/ Soak Pit
1	2	3	4	5	6	7
Ghazipur	Nagar Palika Parishad, Ghazipur	121658	25	19070	12.50	17163
	Nagar Palika Parishad, Mohammadabad	38328	25	6740	4.00	6240
	Nagar Palika Parishad, Zamania	33243	25	6035	1.80	3007
	Nagar Panchayat, Sadat	12394	11	2500	0.20	2300
	Nagar Panchayat, Jangipur	12223	11	2248	0.50	2048
	Nagar Panchayat, Bahadurganj	19992	13	2844	0.50	2449
	Nagar Panchayat, Dildarnagar	12855	8	1950	0.20	1050
	Nagar Panchayat, Saidpur	24438	15	5005	3.00	4750

(ii) **Existing sewage treatment capacities.**

STP of treatment capacity 21 MLD is proposed to be constructed at Devkathiya Ghazipur. In other ULBs land identification is under process. After land identification STP will be installed accordingly.

(iii) **Quantity of sewage is being treated (utilization capacity):** 0.00 %

Sewage Treatment after operation of STP Ghazipur.

(iv) **Performance of STPs particularly for FC:** None, Since there is no STP in district Ghazipur.

(v) **Where treated sewage is being discharged (to Ganga or tributaries):** Total sewage generated is being discharge to River Ganga.

(vi) **Reasons for under utilization of STPs (connectivity of households/laying of sewer lines):** STPs of Ghazipur are under construction for the future utilization.

(vii) **Current Gap in sewage treatment:** 100 %

(viii) **Time bound plan for bridging the gap and tying up with financial arrangements and not delaying tendering and identifying executing agencies or having any other issues.** There is a time bound plan one STP 21 MLD capacity is proposed for treatment of sewage. In other ULBs, land identification is under process.

(ix) **Where untreated sewage (when there is no STP) is discharged (Ganga/Tributaries):** Untreated sewage is discharged into River Ganga.

2.2 Drains joining Ganga and tributary

(i) Number of drains carrying sewage-sullage or industrial waste water joining Ganga/tributaries with their quantity and quality.

Drains	Quality Discharge
Gorawa Drain Sampling	BOD- 34 COD- 196 pH- 7.31 TSS- 108

Kankarwa Drain Sampling	BOD- 38 COD- 184 pH- 7.26 TSS- 112
Karpurimai Ghat Drain Sampling	BOD- 36 COD- 172 pH- 7.29 TSS- 106
Harizan Basti Sampling	BOD- 38 COD- 188 pH- 7.32 TSS- 114
Samshan Ghat Sampling	BOD- 34 COD- 176 pH- 7.36 TSS- 108
Rui Mandi Sampling	BOD- 38 COD- 206 pH- 7.34 TSS- 116
Budhava Mahadeva Sampling	BOD- 40 COD- 214 pH- 7.28 TSS- 118
Mugal Pura Sampling	BOD- 42 COD- 220 pH- 7.31 TSS- 116
Posta Ghat Sampling	BOD- 38 COD- 184 pH- 7.36 TSS- 110
Theri Bazar Sampling	BOD- 36 COD- 198 pH- 7.34 TSS- 112

Khirki Ghat Sampling	BOD- 38 COD- 208 pH- 7.35 TSS- 110
Anzahi Ghat Sampling	BOD- 40 COD- 218 pH- 7.33 TSS- 116
Chetnat Ghat Sampling	BOD- 36 COD- 194 pH- 7.39 TSS- 108
Stimer Ghat Sampling	BOD- 34 COD- 186 pH- 7.34 TSS- 106
Gola Ghat	BOD- 38 COD- 208 pH- 7.31 TSS- 112
Maksud Ghat Sampling	BOD- 36 COD- 192 pH- 7.28 TSS- 106
Collector Ghat Sampling	BOD- 40 COD- 218 pH- 7.26 TSS- 118
Dadri Ghat Sampling	BOD- 36 COD- 186 pH- 7.30 TSS- 108
Naupura Sampling	BOD- 42 COD- 220 pH- 7.32 TSS- 116

Sai Mandir Sampling	BOD- 36 COD- 192 pH- 7.26 TSS- 108
Afim Factory Colony Sampling	BOD- 40 COD- 202 pH- 7.29 TSS- 110
Mahala Basti (Sikandpur) Sampling	BOD- 34 COD- 188 pH- 7.31 TSS- 106
D.M Banglo Sampling	BOD- 32 COD- 172 pH- 7.35 TSS- 104
Peer Nagar Sampling	BOD- 36 COD- 214 pH- 7.29 TSS- 112
Bada Mahadeva (Gora Bazar) Sampling	BOD- 38 COD- 178 pH- 7.33 TSS- 108
Bada Mahadeva (Adarsh Bazar) Sampling	BOD- 34 COD- 166 pH- 7.40 TSS- 106
Kot Ghat Sampling	BOD- 38 COD- 174 pH- 7.33 TSS- 104
Budenath Mahadew Ghat Drain Sampling	BOD- 40 COD- 192 pH- 7.36 TSS- 118

Pakka Ghat Drain Sampling	BOD- 44 COD- 204 pH- 7.24 TSS- 118
Sangat Ghat Drain Sampling	BOD- 42 COD- 184 pH- 7.29 TSS- 114
Mahaveer Ghat Drain Sampling	BOD- 40 COD- 166 pH- 7.32 TSS- 212
Ward No. 15 Malhiya Basti Drain Sampling	BOD- 34 COD- 178 pH- 7.29 TSS- 106
Rangmahal Ghat Drain Sampling	BOD- 46 COD- 206 pH- 7.27 TSS- 116
Jauhargaj Drain Sampling	BOD- 50 COD- 214 pH- 7.38 TSS- 110

(ii) **Drains joining outside city and town limits but, either joining in village or nearby town:** None

(iii) **Inclusion of sewage flowing in drains into total sewage generation figures of each city and town and their interception and diversion to STPs:** None

2.3 Septage management (in case of no STP)

(i) **Status of Septage management (with reference to FSTP/STP):** None

(ii) **Management of Grey water and its disposal:** Through septic tank/sock pit.

2.4 Industrial Pollution Control

(i) Attach the list on no. of industries generating trade effluents, their place of disposal and compliance including CETPs (town wise):

S. No.	Name and Address of Grossly Polluting industries.	Production	Sector	ETP status	Discharge	Intermediate and final discharge point
1	M/s Lords Distillery Pvt. Ltd., Ghazipur, Nandganj, Saidpur, Ghazipur	Extra Neutral Alcohol (ENA)	Distillery	-	Presently self closed due to own reason	-
2	M/s Govt. Opium and Alkaloid Works, Ghazipur	Codeine, Narcotine, Phosphate, Thebaine and IMO Powder 50 ton/annum	Pharmaceutical	Yes	Domestic-540 KLD Industrial- 50 KLD	River Ganga

(3) Water quality status-

Provide water quality status of Ganga and its tributaries in the district and city/town in terms of its fitness for bathing water quality that is, FC and FS:

TEST REPORT: WATER LABORATORY (SURVACE WATER)

1- Sample Location: River Ganga at Collector Ghat, Ghazipur.
2- District: Ghazipur
3- Address: Ghazipur
4- Sample Source: River
5- Type of sample: Surface Water
6- Sample Collected by: Gyan Dutta Verma, JRF & Himanshu Srivastav, JRF
7- Odour: None
8- Quantity and packing: 2 Ltr. Plastic Jerrican, MPN and DO Bottle.
9- Date of Sample Collection: 15-03-2024
10- Analysis Indented by: RO Varanasi
11- Date of sample receipt in lab: 15-03-2024

Parameter	Unit	Results	Detection Range
pH, APHA 24th Ed. 4500-B: 2023	-	7.96	02-12
Turbidity, APHA 24th Ed 2130B	N.T.U	10	1-500NTU
Conductivity, APHA 24th Ed 2510B: 2023	uS/cm	480	0.1-10000uS/cm
Dissolved Solids, APHA 24th Ed. 2540^{0}C Total Dissolved Solids dried at 180^{0}C 2023	mg/1	310	5.0-10000mg/1
Hardness, APHA 24th Ed 2340^{0}C EDTA Titrimetric Method 2023	mg/1	168	10.0-5000 mg/1
Chloride, APHA 24th Ed 4500-Cl-B: 2023	mg/1	51.48	3.0-500 mg/1
Total Coliform, APHA 9221 24th Ed.: 2023	MPN/100 ml	3500	<1.8 MPN/100 ml & above
Fecal Coliform, APHA 9221 24th Ed.: 2023	MPN/100 ml	2200	<1.8 MPN/100 ml & above
BOD, APHA 24th Ed. 3 day 27^{0}C IS 3025 (Part 44): 1993 Bio 2023	mg/1	3.0	1.0-1000 mg/1
COD, APHA 24th Ed 5220 B Open Reflux Method 2023	mg/1	10	4.0-1000 mg/1
D.O. APHA 24th Ed. 4500-OB Iodometric Method 2023	mg/1	7.5	0.2-14.0 mg/1

Water Quality Criteria

Designated-Best-Use	Class of water	Criteria
Drinking water source without conventional treatment but after disinfection	A	Total Coliforms Organism MPN/100 ml shall be 50 or less pH between 6.5 and 8.5 Dissolved Oxygen 6mg/1 or more Biochemical Oxygen Demand 5 days 20^{0}C 2mg/1 or less
Outdoor bathing (Organised)	B	Total Coliforms Organism MPN/100 ml shall be 500 or less pH between 6.5 and 8.5 Dissolved Oxygen 5mg/1 or more Biochemical Oxygen Demand 5 days 20^{0}C 3mg/1 or less
Drinking water source after conventional treatment and disinfection	C	Total Coliforms Organism MPN/100 ml shall be 5000 or less pH between 6 and 9 Dissolved Oxygen 4mg/1 or more Biochemical Oxygen Demand 5 days 20^{0}C 3mg/1 or less
Propagation of wild life and fisheries	D	pH between 6.5 and 8.5 Dissolved Oxygen 4mg/1 or more free Ammonia (as N) 1.2mg/1 or less
Irrigation, Industrial Cooling, Controlled Waste disposal	E	pH between 6.0 to 8.5 Electrical Conductivity at 25^{0}C micro mhos/cm Max. 2250 Sodium absorption Ratio Max. 26 Boron Max. 2mg/1

River/Tributary	Sampling Point	DO	BOD	COD	FS	FC
Ganga	Downstream (Tarighat)	6.7	4.4	15.8	6300	13000
	Upstream (Bhusawal)	7.5	3.3	13.6	4300	9300

(4) Notification of **Flood Plain Zones:** Not yet notified by Govt.

(5) Issues relating to **Environmental Flow:**

To monitor the compliance of e-flow notification regular meeting of district Ganga committe and district environment committee is being held. Requirement for the clean Ganga river, the minimum quantity and timing of freshwater flows and levels necessary to sustain aquatic ecosystems which in turn support human, cultures, economies, sustainable livelihoods and well being is required for maintaining Environmental flow.

❖ **Best Practices:**

A. Ganga Swachhata Pakhwada is being organized every year on March 16th to 31st in district which promotes awareness in local people to keep the river clean and not throw the plastic and solid waste in the drains/river/lake/water bodies.

B. District Ganga Committee is constituted in the district to better moderate the activities and issue direction to the masses and the stakeholders involved in the restoration of rivers.

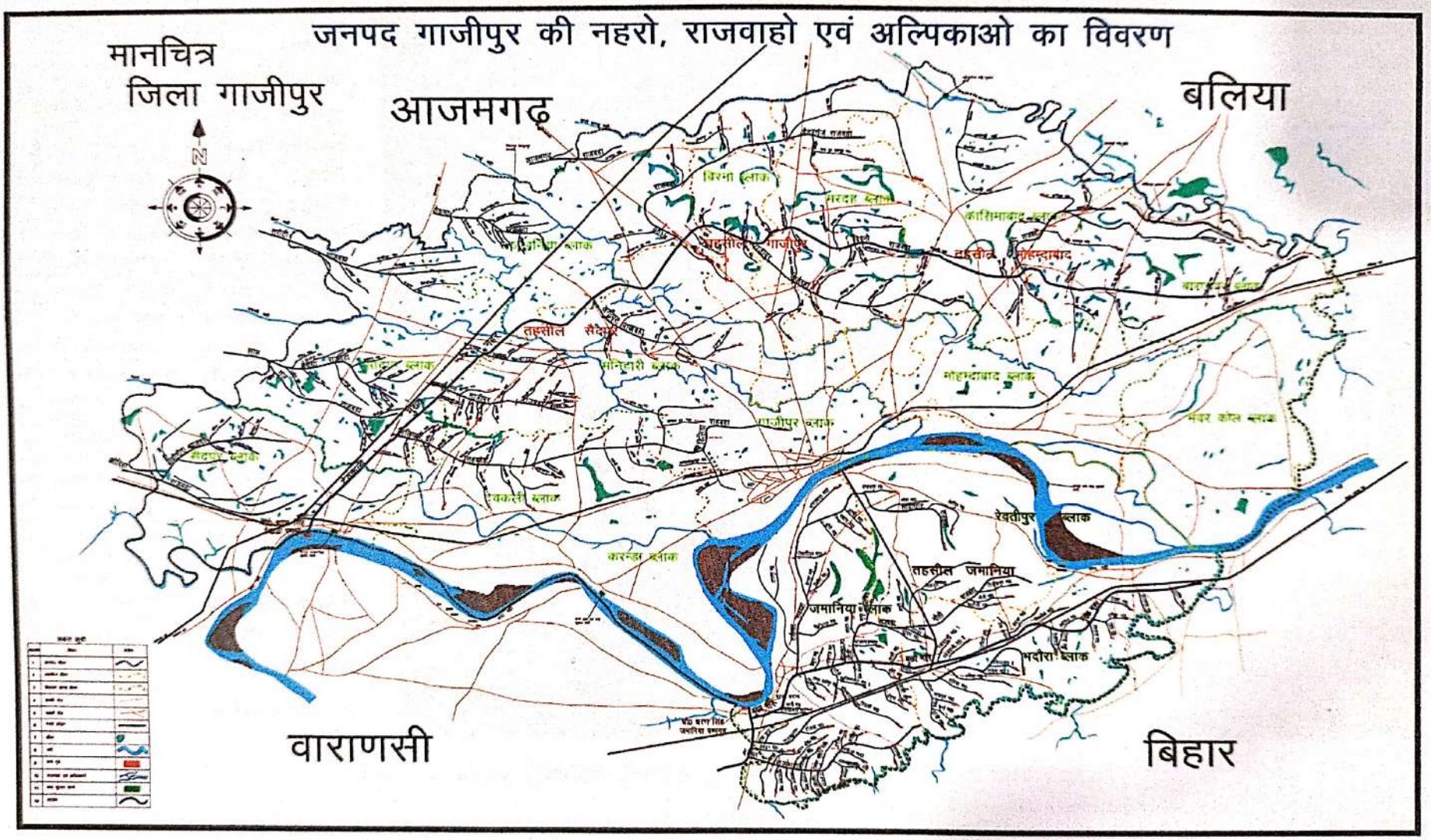
C. Organic farming is being promoted among the farmers by the agriculture departments.

D. Ganga Aartis are also being conducted in Ganga grams and various Ghats during Ganga Aarti masses are sensitized towards keeping Ganga clean and other related important issues.

(Vivek Yadav)
Divisional Director/Member Secretary
District Ganga Committee, Ghazipur

(Santosh Kumar Vaishya)
Chief Development Officer/
Nodal Officer,
District Ganga Committee, Ghazipur

(Aaryaka Akhauri)
District Magistrate/Chairman,
District Ganga Committee, Ghazipur


जनपद गाजीपुर की नहरो, राजवाहो एवं अल्पिकाओ का विवरण
मानचित्र
जिला गाजीपुर
आजमगढ़
बलिया
वाराणसी
बिहार
N
जमानिया ब्लाक
रेवतीपुर ब्लाक
मोहम्दाबाद ब्लाक
गाजीपुर ब्लाक
करन्डा ब्लाक
सदौरा ब्लाक

S. N.	Drain Name	Latitude	Longitude
1	Harizan Basti Drain	25.58687	83.60308
2	Samshan Ghat Drain	25.58617	83.60195
3	Rui Mandi Drain	25.58522	83.60019
4	Budhava Mahadeva Drain	25.58478	83.59853
5	Mugal Pura Drain	25.58445	83.59851
6	Posta Ghat Drain	25.58418	83.59771
7	Their Bazar Drain	25.5828	83.59492
8	Khirki Ghat Drain	25.58306	83.59587
9	Anzahi Ghat Drain	25.582	83.59395
10	Chetnat Ghat Drain	25.58093	83.59148
11	Stimar Ghat Drain	25.5808	83.59118
12	Gola Ghat Drain	25.57999	83.58888
13	Muksud Ghat Drain	25.57915	83.58775
14	Collecter Ghat Drain	25.5774	83.58409
15	Afim Factory Colony Drain	25.56953	83.56849
16	Dadri Ghat drain	25.57432	83.57738
17	Naupura Drain	25.57149	83.57162
18	Sai Mandir drain	25.57171	83.57227
19	Mahala Basti (Sikanpur) Drain	25.56908	83.56767
20	D.M Banglow Drain	25.56766	83.56629
21	Pear Nagar Drain	25.56636	83.56378
22	Bada Mahadeva (Gora Bazar) Drain	25.56342	83.55931
23	Bada Mahadeva (Adarsh Bazar) Drain	25.55414	83.54969

Map showing Drains discharge in River Ganga at Ghazipur.

S. N.	Drain Name	Latitude	Longitude
1	Kot Ghat Drain	25.532875	83.225282
2	Budenath Mahadew Ghat Drain	25.533102	83.223324
3	Pakka Ghat Drain	25.533866	83.220768
4	Sangat Ghat Drain	25.533978	83.219397
5	Mahaveer Ghat Drain	25.53431	83.218385
6	Ward No 15 Malhiya Basti Drain	25.534673	83.216833
7	Rangmahal Ghat Drain	25.535785	83.212006
8	Jauharganj Drain	25.537021	83.203243

Map showing Drains discharge in River Ganga at Saidpur, Ghazipur.

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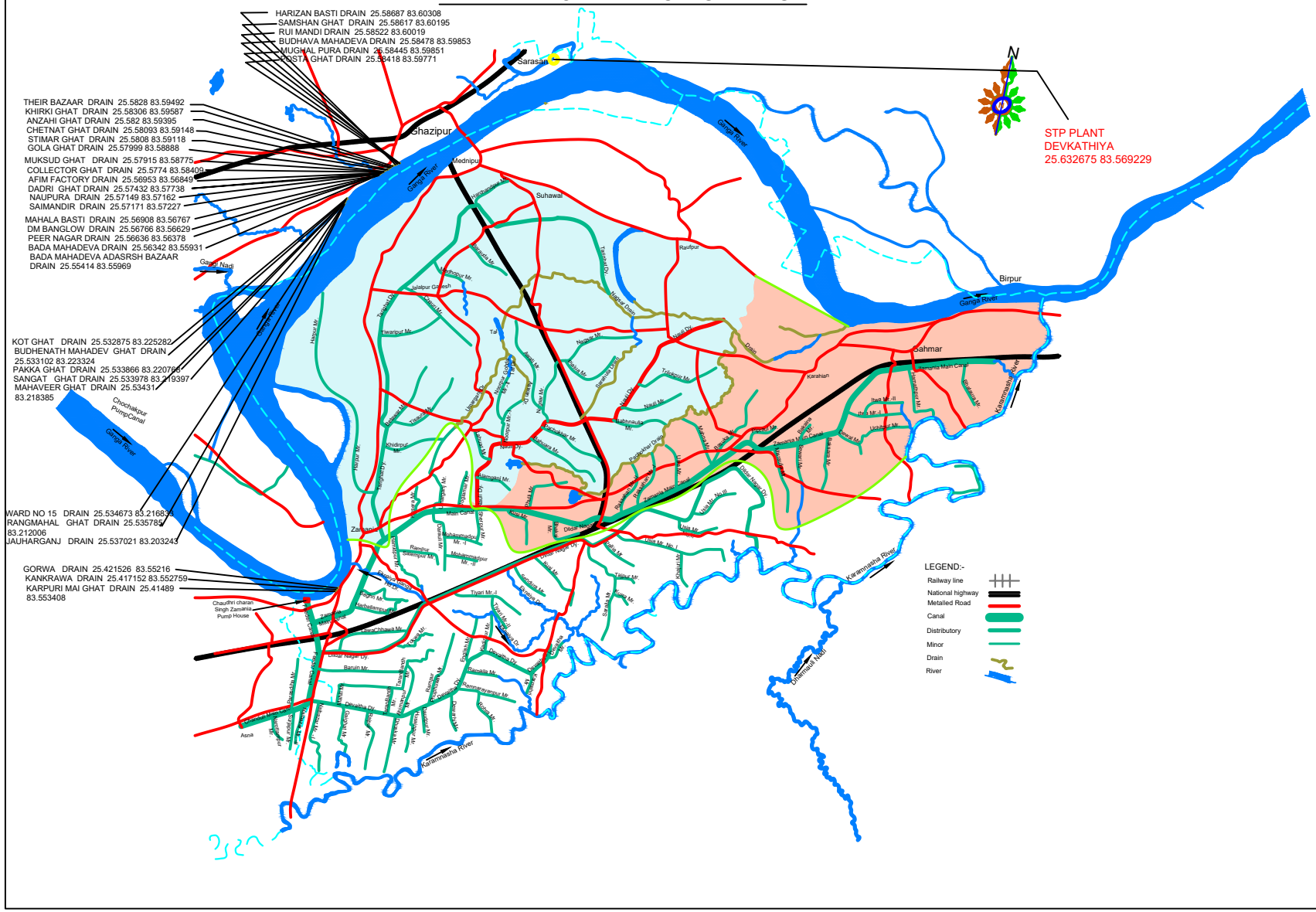

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Government of India
Ministry of Jal Shakti
Department of Water Resources,
River Development & Ganga Rejuvenation

Report in Compliance of Hon'ble NGT order dt. 24th January 2024 in O.A. 200/2014 MC Mehta Vs UOI and ors.

Report Submitted By:-

DISTRICT GANGA COMMITTEE
DISTRICT – MEERUT (UP)

I. Sewage

Drain (city/town/	TotalFlowofdrain	PH	BOD(mg/l)	COD (mg/l)	TSS(mg/l)	TDS(mg/l)	Heavymetals (Fe, Cr, PB, Ar, Mn,Cu, Zn,Hg,Fluorideetc)	Nitrates	DO (mg/l)	TC(MPN/100ml)	FC(MPN/100ml)	OutletflowinMLD	Cl(mg/l)	Colour/odour	DischargedInto
Abu Nala-1 Meerut		7.57	48.0	260.0	252.0	849.0			0	150000	120000	39.22		45 Hz/ Foul	Kali River
Abu Nala-2 Meerut		7.49	42.0	252.0	246	856.0			0	140000	100000	145.73		45 Hz/ Foul	Kali River
Odeon Drain Meerut		7.68	54.0	284.0	264.0	960.0			0	200000	150000	161.73		50 Hz/Foul	Kali River
ChhuiyaNala Meerut		7.35	30.0	220.0	194.0	834.0	**	**	0	940000	63000	2.5	**	35 Hz/ NoSp.	Kali RiveR
SardhanaDrain, Kalina Meerut		7.66	284.0	412.0	378.0	1023.0			0	2000000	160000	10.0		55 Hz/ Foul	Hind On RiveR
Chetawala Drain (date22.11.2023)		7.3	10	39	65	872			0	-	-	21.6		BDL<5	RiveR Gan Ga
Kinauni Drain	Dry														

Note-**Sample hasbeencollectedfor analysisandreportswill be submittedlateron.

1. Bioremediationisbeingdoneinall 03majordrainof citynamelyAbuNala-1,Abu Nala-2andOdeon.

2. InadditionPhytoremediationisadoptedistwo drainsnamelyAbuNala-2andOdeondrain

STP(SEWAGETREATMENTPLANT)

ExistingSTP(location &capacity)	Capacity(operational)	Inlet/Outletwaterquality& quantity	Number oftappeddrains(quantityof discharge)	Final dischargepoint	Proposalforminimising the Gap
ShatabadiNagar	15 MLD	4.8	0	KadrabadDrainby KhadauliDrainto Kaliriver	01STP 220MLD & 01 STP OF 65MLD
SportsGoodsComplex	7 MLD	4.5	0	KadrabadDrainby KhadauliDrainto Kaliriver	
ShraddhapuriYojnaPhase-1	6.0	4.3	0	Abunala-2toKali river	
ShraddhapuriYojnaPhase-2	6.0	6.0	0	Abunala-2toKali river	
VedVyaspuriYojna	15.0	3.5	0	KadrabadDrainby KhadauliDrainto Kaliriver	
PallavpuramPhase-1	7.0	6.5	0	Abunala-1toKali river	
PallavpuramPhase-2	11.0	5.9	0	Abunala-1toKali river	
Rakshapuram	6.0	4.3	0	Abunala-1toKali river	
Pandavnagar	3.0	2.3	0	Abunala-2toKali river	
Lohiyanagar	10.0	1.5	0	Odeon Drain to Kaliriver	
Ganganagar	10.0	5.0	0	Abunala-1toKali river	
JagritiViharExtension	72.0	72.0	01(35.0MLD)	KaliRivertoKali river	
SainikVihar	6.0	4.5	0	AbuNala-1toKali river	
ModipuramTiraha	5.0	5.0	0	AbuNala-1toKali river	

CandtechEnclave, Mrt. Cantt	0.73	0.42	0	Abunala-2toKali river	
EcoPark, Opp. Rajesh Enclave,Mrt.Cantt	0.5	0.4	0	Abunala-2toKali river	
CSDinfront of yogendrayadav Enclave, MrtCantt	0.2	0.2	0	Abunala-2toKali river	
PRC Lines near gurudwara,MrtCantt	0.4	0.3	0	Abunala-2toKali river	

TotalSewage GenerationinMeerut District- **323.57MLD**

ExistingSewage TreatmentCapacity(MLD)- **179.00MLD**

CurrentlevelofSewageTreatment(MLD)- **134.20MLD**

GapinSewageTreatment(MLD)- **189.37MLD**

Proposal to minimize the gap-One STP **220 MLD** capacity is proposed for treatment of sewage ofabunala-2 and Odeon drain by tapping. Consent to Establish (CTE) has been issued for the same byUPPCBon 20.12.2023.

- ONE MORE PROPOSAL OF 65 MLD ON DRAIN ABUNALA -1 IS ALSO PROPOSED.

A.SewageInformation

PROPOSEDSTP(location&capacity)	Capacity(operational)	Inlet/Outletwaterquality& quantity	Number oftappeddrains(quantity of discharge)	GAP (intreatment)	FINAL DISCHARGE POINT GEO CODE/ SAMPLING POINT	Proposed/ under construction with completion date
JAGRITI VIHAR	220 MLD	--	02 drains to be tapped		Kali river	2026
LOCATION YET TO BE FINALIZED	65 MLD	--	01 drain to be tapped		Kali river	--

30206

HOTELS/ASHRAMS

NumberofHotels/ashrams/dharamshalas	Consenttoestablish/operate	STP	Dischargepoint	Actiontaken
160 (Hotels/Banquettes)	35	167(STP/ soakpit/septictanks)	Dischargingtheireffluentto commonSTPs ofmunicipalauthority	1-NoAshram,DharamshalasandHotelsareestablishednearbytheGangariverinMeerutDistrict. However Public notice in newspaper videdated-14.06.2023hasbeenpublishedforcompliance of Water and Air Act to the hotels/banquettesetc.situatedinthecityarea. 2. All major red and orange category of hotelshaveobtainedconsenttooperate(CTO)fromUPPCB 3-ShowCauseNoticesforimpositionofenvironmental compensation has been issued todefaultersandalsopublicnoticehasbeenpublishedinthenewspaper.

II. IndustrialEffluentdischarge

Totalnumberofindustries	Dailyeffluentdischarge	Treatmentavailable(cetp/petp/etpoperationalcapacity)	Effluentqualityanalysis (outletoftreatmentplants)	GAP	Proposed / underconstructiontreatmentproject(withtimeline)	Number ofdefaulting units- Actiontaken	Industrial solidwastegenerated/ day	Mannerofdisposal(Industrial solidwaste)
54	26439 KLD	26439KLD	Online Monitoring System(OCEMS) isinstalledin all Grossly Polluting Industries, whichare connected to CPCB &UPPCB Servers	0	None	Recently Show Cause Noticeswereissuedto12and Directionswereissuedto17units .Closureorderwereissuedto02units.Atpresent showcauseof09hasbeen terminatedinrespectoftheircompliance withEnvironmentalActs.	72322.867 MTA hazardouswaste	Disposed through TSDF, waste oilrecyclersand tyrerecyclers.

III. RegulationofFloodPlainZone:

Area-cities/towns	Notification offloodplainzone	Demarcation		Encroachment& directdischarge	Encroachmentremovalstatus	Timeline forcompletion
		Nodevelopment zonepillars	Regulatory zonepillars			
Meerut	Ho'nbleNGT Dated 13July2017	Demarcation of FloodPlain Zone-Completedin rightbank ofGangariveri.e. **612 Nos. ofPillars** inDistt. Meerut	612Nos. ofPillars	No,encroachmentand directDischargethrough OneNos NaturalDrain nopolluted	--	--

AFFORESTATION/PLANTATION

Area-cities/towns	Totalplantation	Proposedproject	Timeline
WholeDistrictMeerut 2023	30Lakhs	29Lakhs	July-August2023
Whole District Meerut2024	Tentative and it willbe done by 20+departmentsofDistt. Meerut	28Lakhs	July-August 2024

Mining and Stone Crushing in river bed and flood plain zone of River Ganga and its tributaries:

Area of Mining	**FIR/ caseregistered/year**	**Vehicles/mineralseized**	**Actiontakenstatus**	**Casespending inCourt**	**Enforcement ofEMGSM2020and Sustainablesandminingmanagementguidelines2016**
Nil	Nil	Nil	Nil	Nil	Nil

DISTRICT GANGA COMMITTEE, MEERUT

1. **(1) District Ganga Protection Plan at city/ town level District Ganga Protection Committee (DGPC) is required to formulate the action plan for each city and town located on main stem of river Ganga and its tributary and such Action Plan has to be prepared in accordance with the River Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016 (para 6 and 55).**

2. **(2) Contents of the Action Plan (Consolidated District Wise Action Plan including each City and Town abutting river Ganga and its Tributary)**

Sewage Management

(i) District MEERUT – Total Sewage Generation – 359.40 MLD

TOWNS	TOTAL SEWAGE GENERATION (MLD)
NN MEERUT	323.57

NPP MAWANA	8.8
NPP Sardhana	10
NP Karnawal	0.60
NP Parikshitgarh	0.5

NP Lawar	0.5
NP Hastinapur	3.84
NP Siwal khas	0.70
NP Behsuma	0.60
NP Kharkhoda	2.48
NP Daurala	2.93
NP Falawada	0.60
NP Kithor	2.48
NP Shajahanpur	0.60
NP Harra	0.60

(ii) Existing Sewage Treatment Capacities

- TOTAL 18 STP, 179 MLD CAPACITY within Nagar Nigam area
  - *Under the Proposal*
- 220 MLD, JAGRITI VIHAR MEERUT
- 65.0 MLD, MEERUT

(iii) Quantity of sewage being treated (Utilization Capacity)

- Utilisation at present – 134.20 MLD out of total sewage of 323.57 MLD
- Gap – 189.37MLD (58.5%)
- Sewage Treatment After operation of all STPs at full capacity – 179 MLD

(iv) Performance of STPs particularly for FC

Monitoring of STPs Installed for Revival of River Kali(East)

Surface water contamination (through Drains)										
Monitoring of STP										
S.N.	Name of STP	Date of Sampling	Sampling point	Colour (Hazen)	pH	BOD (mg/l)	COD (mg/l)	TSS (mg/l)	Total Coliform MPN/100ml	Fecal Coliform MPN/ 100ml
1	M/S STP Shatabdi Nagar Yojana Meerut	09-10-2023	Final Outlet of STP	20	7.56	17	152	57	4800	3400

2	M/S STP Sports Goods Complex Meerut	09-10-2023	Final Outlet of STP	25	7.47	22	164	64	4600	3200
3	M/S STP Shradhapuri Yojana Phase-I Meerut	09-10-2023	Final Outlet of STP	20	7.62	16	156	67	4000	3100
4	M/S STP Shradhapuri Yojana Phase-II Meerut	09-10-2023	Final Outlet of STP	25	7.46	20	176	53	910	780
5	M/S STP Ved Vyaspuri Yojana Meerut	09-10-2023	Final Outlet of STP	20	7.78	18	164	67	4100	3200
6	M/S STP Pallavpuram Phase-I Meerut	09-10-2023	Final Outlet of STP	15	7.42	17	148	56	3900	2700
7	M/S STP Pallavpuram Phase-II Meerut	09-10-2023	Final Outlet of STP	20	7.56	16	168	64	3800	3100
8	M/S STP Rakshapuram Meerut	09-10-2023	Final Outlet of STP	25	7.42	22	180	57	5800	4000
9	M/S STP Pandev Nagar Meerut	09-10-2023	Final Outlet of STP	20	7.36	15	156	54	4300	3300
10	M/S STP Lohiya Nagar Meerut	09-10-2023	Final Outlet of STP	25	7.62	20	176	64	4700	3800

11	M/S STP Ganga Nagar Meerut	09-10-2023	Final Outlet of STP	20	7.47	18	144	46	930	610
12	M/S STP Jagriti Vihar Extension Garh Road Meerut	09-10-2023	Final Outlet of STP	10	7.48	8	76	9	830	600
13	M/S STP Sainik Vihar, Shradhapuri Phase-II, Meerut	09-10-2023	Final Outlet of STP	25	7.56	22	172	56	4800	3900
14	M/S STP Modipuram Tiraha	09-10-2023	Final Outlet of STP	20	7.54	17	164	76	910	610
15	M/S STP Candetch Enclave Mrt Cantt Meerut	09-10-2023	Final Outlet of STP	15	7.64	16	148	72	4000	3100
16	M/S STP Eco Park Opp. Site Rajesh Enclave Mrt Cantt Mrt	09-10-2023	Final Outlet of STP	20	7.46	18	152	63	3900	2700
17	M/S STP Ram CSD Infront of Yogendra Yadav Enclave Mrt Cantt Mrt	09-10-2023	Final Outlet of STP	25	7.57	20	160	72	4100	3100
18	M/S PRC Line Near Kanch Ka Gurudwara Mrt Cantt Mrt	09-10-2023	Final Outlet of STP	20	7.48	17	168	56	3800	2700

(v) Where treated sewage is being discharged (to Ganga or tributaries)

- Total sewage generated is being discharged to River Kali (EAST)

(vi) Reasons for Under-utilization of STPs (Connectivity of Households/laying of sewer lines)

- THE STPs WERE CONSTRUCTED TAKING INTO ACCOUNT THE FUTURE HABITATION.
- AS THE HABITATION IS INCREASING THE UTILISATION IS ALSO INCREASING ACCORDINGLY

(vii) The current gap in sewage treatment

Total sewage generation – 323.57 MLD (NAGAR NIGAM)

Sewage Treatment at present – 134.20 MLD

Gap – 189.37MLD (58.5%)

Sewage Treatment After the operation of all STPs on full capacity – 179 MLD

(viii) Time-bound plan for bridging the gap and tying up with financial arrangements and not delaying Tendering and identifying executing agencies or having any other issues:

- There is a time-bound plan, a proposal to minimize the gap - one STP 220MLD capacity is proposed for treatment of sewage of Abunala -2 and odeon drain by tapping. minimize the Gap of -189.37 MLD sewage. consent to establish has been issued for the same by UPPCB on 20.12.2023.

- There is another proposal of 65 MLD, STP for treatment of sewage of Abunala - 1.

(ix) Where untreated sewage (when there is no STP) is discharged (Ganga /Tributaries):

- there is no untreated sewage directly going into river Ganga

- the untreated sewage (overflow of septic tanks, etc.) goes to River Kali (there are 2 proposed STP for the treatment of untreated sewage)

Drains joining Ganga and Tributary

1. **Number of drains carrying sewage- sullage or industrial wastewater joining Ganga/ tributaries with their Quantity and Quality:**

Drain (city/ town/	Total Flow of drai	PH	BOD (mg/l)	COD (mg/l)	TS S (mg/ l)	TDS (m g/l)	Heavy metals (Fe, Cr, PB, Mn, Cu, Zn, Hg, Fluoride etc)	Nitra tes	DO (m g/l)	TC (MPN/ 100ml)	FC (MPN /100 ml)	Outlet flow in MLD	Cl(mg /l)	Colour/ odour	Disc harg ed Into
Abu Nala-1 Meerut	39.22 MLD	7.57	48.0	260.0	252.0	849.0			0	150000	120000	39.22		45Hz/ Foul	Kali River
Abu Nala-2 Meerut	145.73 MLD	7.49	42.0	252.0	246	856.0			0	140000	100000	145.73		45Hz/ Foul	Kali River
Odeon Drain Meerut	161.73 MLD	7.68	54.0	284.0	264.0	960.0			0	200000	150000	161.73		50Hz/Foul	Kali River
Chhuiya Nala Meerut	—	7.35	30.0	220.0	194.0	834.0	**	**	0	94000	63000	2.5	**	35Hz/ No Sp.	Kali Rive R
Sardhana Drain, Kalina Meerut	10 MLD	7.66	284.0	412.0	378.0	1023.0			0	200000	160000	10.0		55Hz/ Foul	Hind On Rive R

Chetawala Drain (date 22.11.23)	21.6 MLD	7.3	10	39	65	872			0	-	-	21.6		BDL<5	River Ganga
Kinauni Drain	Dry														

Note-** Sample has been collected for analysis and reports will be submitted later on.

1. Bioremediation is being done in all 03 major drains of the city namely Abu Nala-1, Abu Nala-2, and Odeon.
2. In addition Phytoremediation is adopted in two drains namely Abu Nala-2 and Odeon drain.

ii. Drains joining outside city and town limits but, either joining in village or nearby town:

- TABLE AS ABOVE 2.1

iii. Inclusion of sewage flowing in drains into total sewage generation figures of each city and town and their interception and diversion to STPs:

- There are 3 major drains namely Abunala - 1, Abunala -2, and odeon drain, which carry treated and untreated sewage simultaneously. There is a time-bound plan, and a proposal to minimize the gap - one STP 220MLD capacity is proposed for the treatment of sewage of Abunala -2 and Odeon drain by tapping. minimize the Gap of -189.37 MLD sewage. consent to establish has been issued for the same by UPPCB on 20.12.2023. There is another proposal of 65 MLD, STP for treatment of sewage of Abunala - 1

Septage management (In case of no STP)

i. Status of Septage management (with reference to FSTP/STP):

- There are 70% of households dependent on septic tanks / soakpits.
- There is one co-treatment facility (FSTP) of capacity 50KLD for fecal sludge management & disposal of septage, installed at the site of 72 MLD, STP.

ii. Management of Greywater and its disposal:

- All three major drains of the city carry greywater discharge. As stated above there is a proposal for tapping of all three drains in the near future.

2.4. Industrial Pollution Control

i. Attach the list of no. of industries generating trade effluents, their place of disposal and compliance including CETPs (town wise):

S.N.	Name of Industry	Production Sector- (Tannery, textile, Paper, Metal, Oil, Food, Other)	Presence of ETP (Effluent Treatment Plant in Industries)	Type of Industry	Total Industrial Effluent Generation (KLD)	Total Capacity of Treatments facility and its utilization (KLD)	Final Discharging Points	Compliance status	Action taken
1	Al-Saqib Exports Pvt. Ltd., Vill.-Alipur, Hapur Road, Meerut	Slaughter House	Yes	GPI	600	600	Irrigation	No	Dir^{n}. Issued on dt.17.05.2023
2	M/s Kanta Polytex India Pvt Ltd., Plot No - 18, Sec -8, Ved Vyas Puri, Industrial Area, Meerut	Dyeing of Yarn / Textile	Yes	GPI	32	32	Drain to Kali River	No	Dir^{n}. Issued on dt.19.05.2023
3	Daurala Organics Ltd. Daurala ,Meerut	Pharmaceutical	Yes	GPI	1400	1400	Drain to Kali River	No	Dir^{n}. Issued on dt.14.06.2023
4	Daurala Sugar Works (Chemical Unit) Daurala ,Meerut	Pharmaceutical	Yes	GPI	1450	1450	Drain to Kali River	Yes	
5	Gangol Sehkari Dugdh Utpadak Sangh Ltd, Gangol Road, Meerut	Milk Processing	Yes	GPI	600	600	Irrigation	Yes	
6	Harbans Dairy, Mohiuddipur, Meerut	Milk Processing	Yes	GPI	80	80	Drain to Kali River	Yes	
7	Harbans Lal Foods Pvt. Ltd, Mohiuddipur, Meerut	Milk Processing	Yes	GPI	492	492	Drain to Kali River	No	SCN issued under water act on dt-25.07.2023
8	Jyoti Industries (Changed name S.S Textiles), E-86, udyogpuram Partapur, Meerut	Yarn/Textile Processing	Yes	GPI	95	95	Drain to Kali River	Yes	
9	M/s Loothara Handloom Pvt.Ltd, Gangol Road,Meerut	Yarn/Textile Processing	Yes	GPI	15	15	Drain to Kali River	No	Closure order issued under water act on dt.12.06.20

									23
10	M/s Modern Process House, Mohakampur,Meerut	Yarn/Textile Processing	Yes	GPI	13	13	Drain to Kali River	Yes	
11	M/s Rachit Prints,B-9,10,11 Udyogpuram, Meerut	Yarn/Textile Processing	Yes	GPI	15	15	Drain to Kali River	Yes	
12	National Handloom, Mohkampur, Meerut	Yarn/Textile Processing	Yes	GPI	13	13	Drain to Kali River	No	SCN issued under water act on dt.28.06.2023
13	Pashupati Taxtiles, Garh Road, Meerut	Yarn/Textile Processing	Yes	GPI	10	10	Drain to Kali River	Yes	
14	Raj Kumar Textiles, A-16 Udyogpuram, Meerut	Dyeing and Textile	Yes	GPI	65	65	Drain to Kali River	No	Dir^{n}. Issued on dt.12.06.2023
15	Shakun Handifab, Partapur, Meerut	Yarn/Textile Processing	Yes	GPI	20	20	Drain to Kali River	No	SCN issued under water act on dt.25.07.2023
16	Sab Miller India Ltd(New name anheusher bouch), Kankarkheda, Meerut	Breweries	Yes	GPI	250	250	Drain to Kali River	No	Dir^{n}. Issued on dt.12.05.2023
17	U.P. Dyeing & Printing Works, 68 Navchandi Ground, Meerut	Yarn/Textile Processing	Yes	GPI	13	13	Drain to Kali River	No	SCN issued under water act on dt.04.07.2023
18	Alps Industries Ltd., Vill.-Aminagar Bhoorbaral,Meerut	Textile	Yes	GPI	400	400	Irrigation	Yes	
19	Anand Duplex Ltd. Unit -I,Vill – Saini Mawana Road, Mawana	Paper	Yes	GPI	650	650	Drain to Kali River	No	Dir^{n}. Issued on dt.17.07.2023

20	Anand Duplex Ltd. Unit -II,Vill – Saini Mawana Road, Mawana	Pulp &Paper	Yes	GPI	1000	1000	Drain to Kali River	No	SCN issued under water act on dt.22.05.2023
21	Anand Triplex Board Ltd., Vill – Saini Mawana Road, Meerut	Pulp &Paper	Yes	GPI	1900	1900	Drain to Kali River	No	SCN issued under water act on dt.06.09.2023
22	Chamunda Papers (P) Ltd., Dheerkheda Ind. Area ,Meerut	Pulp &Paper	Yes	GPI	Zero Liquid Discharge (ZLD)	Zero Liquid Discharge (ZLD)	Zero Liquid Discharge (ZLD)	Yes	
23	Daurala Sugar Works, Distillery Unit Daurala, Meerut	Distillery	Yes	GPI	Zero Liquid Discharge (ZLD)	Zero Liquid Discharge (ZLD)	Zero Liquid Discharge (ZLD)	No	Dir^{n}. Issued on dt.14.06.2023
24	Daurala Sugar Works, Sugar Unit, Daurala , Meerut	Sugar	Yes	GPI	2500	2500	Irrigation	No	Dir^{n}. Issued on dt.14.07.2023
25	Dev Priya Product Ltd. Vill Saini Mawana Road ,Meerut	Pulp &Paper	Yes	GPI	2200	2200	Kali River	Yes	
26	Dev Priya industries Ltd. Vill – Saini Mawana Road , Mrt	Pulp &Paper	Yes	GPI	Zero Liquid Discharge (ZLD)	Zero Liquid Discharge (ZLD)	Zero Liquid Discharge (ZLD)	No	Dir^{n}. Issued on dt.14.06.2023
27	Dev Priya Papers Ltd. Vill – Saini Mawana Road ,Meerut	Pulp &Paper	Yes	GPI	1150	1150	Kali River	No	Dir^{n}. Issued on dt.14.06.2023
28	IPL (U.P. State Sugar Corp. Ltd). Sakauti Tanda , Meerut	Sugar	Yes	GPI	500	500	Irrigation	No	Dir^{n}. Issued on dt.14.06.2023
29	Janki news print pvt. ltd.(Sumit	Pulp &Paper	Yes	GPI	Zero Liquid	Zero Liquid	Zero	Yes	

	Agro Products Ltd.) Panchali Baghpat Road ,Meerut				Discharge (ZLD)	Discharge (ZLD)	Liquid Discharge (ZLD)		
30	Kanav Papers Pvt Ltd. (Formaly known as Dev Priya Fibers Pvt.Ltd.. Panchli, Bagpath Road ,Meerut	Pulp &Paper	Yes	GPI	Zero Liquid Discharge (ZLD)	Zero Liquid Discharge (ZLD)	Zero Liquid Discharge (ZLD)	Yes	
31	Mawana Sugar Works, Mawana , Meerut	Sugar	Yes	GPI	2500	2500	Irrigation	No	SCN issued under water act on dt.15.09.2023
32	Naglamal Sugar Complex , (Distillery Unit), Naglamal, Meerut	Distillery	Yes	GPI	Zero Liquid Discharge (ZLD)	Zero Liquid Discharge (ZLD)	Zero Liquid Discharge (ZLD)	No	Dir^{n}. Issued on dt.19.05.2023
33	Naglamal Sugar Complex Garh Road, Meerut	Sugar	Yes	GPI	1200	1200	Irrigation	No	Dir^{n}. Issued on dt.14.06.2023
34	New Bonanja India Ltd., Saini, Mawana Road, Meerut	Pulp &Paper	Yes	GPI	600	600	Kali River	No	Dir^{n}. Issued on dt.17.07.2023
35	Paswara Papers Ltd., Mohiuddinpur , Meerut	Pulp &Paper	Yes	GPI	Zero Liquid Discharge (ZLD)	Zero Liquid Discharge (ZLD)	Zero Liquid Discharge (ZLD)	Yes	
36	Sangal Papers Ltd.Vill – Bhainsa Mawana, Meerut	Pulp &Paper	Yes	GPI	1500	1500	Drain to Kali River	Yes	
37	Shri Venktesh Paper Mills Formely Known as Anand Tissues Ltd., Vill.Fitkari, Mawana,Meerut	Pulp &Paper	Yes	GPI	1100	1100	Drain to Kali River	Yes	
38	Star Kraft Papers Pvt ltd (Formely known as Devstar Paper Pvt Ltd. Panchali,Bagpat Road,Meerut)	Pulp &Paper	Yes	GPI	Zero Liquid Discharge (ZLD)	Zero Liquid Discharge (ZLD)	Zero Liquid Discharge (ZLD)	Yes	

39	Anupam Processers, Partapur, Meerut	Yarn/Textile Processing	Yes	GPI	300	300	Drain to Kali River	No	SCN issued under water act on dt.23.05.2023
40	UP State Sugar Corp. Ltd. Mohiuddinpur ,Meerut	Sugar	Yes	GPI	250	250	Irrigation	No	SCN issued under water act on dt.25.04.2023
41	BMSR texofab pvt ltd. khsra no 84 mawana road meerut	Textile	Yes	GPI	170	170	Drain to Kali River	Yes	
42	Goldy Zippers plot no-9 khsra no 373 vill achrondra partapur meerut	Textile	Yes	GPI	3	3	Drain to Kali River	Yes	
43	Star Zippers A-8 Industrial area Partapur Meerut	Textile	Yes	GPI	2	2	Drain to Kali River	No	SCN issued under water act on dt.28.06.2023
44	Shri Adinath Texfeb, Vill kunda delhi road, Meerut	Textile	Yes	GPI	98	98	Drain to Kali River	No	Dir^{n}. Issued on dt.19.06.2023
45	Achintya Health Care Pvt Ltd, Gangol Road Partapur,Meerut	Pulp &Paper	Yes	GPI	400	400	Drain to Kali River	No	SCN issued under water act on dt.06.09.2023
46	M/s Shree Krishna Processing Khasara No.1142, Badaruddin Nagar Nanu, Tehsil Sardhana,District Meerut	Dyeing	Yes	GPI	-	-	-	No	Closure order issued
47	M/s Shree Bala ji Enterprises, Khasra No.1210 Gangol Road Partapur,Meerut	Zip Dyeing	Yes	GPI	3	3	Drain to Kali River	No	SCN issued under water act on dt.04.07.20

									23
48	M/s Ramesh Textile Kunda Partapur, Meerut	Dying and Printing	Yes	GPI	80	80	Drain to Kali River	Yes	
49	M/s Al Akhlaq Exports Limited, Khasra No 98-104, Alipur Jijmana, Hapur Road, Meerut	Frozen Meat Packaging	Yes	GPI	30	30	Irrigation	No	Dir^{n}. Issued on dt.17.07.2023
50	M/s Shiva Fasteners Private Limited, S-36, S-38, Industrial Estate, Partapur, Meerut	Zip Dyeing	Yes	GPI	5	5	Drain to Kali River	Yes	
51	M/s Shri Bahubali Trader Plot - 34, Village - Kamruddhin Nagar, Sardhana Meerut Road, Mandhiyai Sardhana, Meerut	Dying And Printing	Yes	GPI	335	335	Drain to Hindon River	No	Dir^{n}. Issued on dt.15.06.2023
52	Bajaj Hindustan Ltd, Sugar, Kinoni, Meerut	Sugar	Yes	GPI	2400	2400	Drain to Hindon River	Yes	
53	Bajaj Hindustan Ltd, Distillery Unit, Kinoni, Meerut	Distillery	Yes	GPI	Zero Liquid Discharge (ZLD)	Zero Liquid Discharge (ZLD)	Drain to Hindon River	Yes	
54	Sardhana Papers Pvt Ltd.,Sardhana,Meerut	Pulp & paper	Yes	GPI	Zero Liquid Discharge (ZLD)	Zero Liquid Discharge (ZLD)	Drain to Hindon River	Yes	

- **As there is no cluster of uniform nature industries, hence there is no CETP in District Meerut**

3. Water quality status

Provide water quality status of Ganga and its tributaries in the District and city/ town in terms of its fitness for Bathing water quality that is, FC and FS:

River Name	Sampling Poin	Sample Date	Colour (Hazen)	Odour	pH	Conductivity (µS/ c	T D S (mg/l)	D.O. (mg/l)	B.O.D (mg/l)	C.O.D (mg/l)	Total Hardness (mg/l)	Ca Hardness (CaCO3) (mg/l)	Mg Hardne (CaCO3) (mg/l)	Chloride (mg/l)	Sulphate (mg/l)	Total Coliform
Ganga	Nandnaur Hastinapur Bridge Near Hastinapur, Meerut	05.10 .2023	10	Odourle	7.34	320	200	8.4	2.2	10.0	140.0	100.0	40.0	15.0	10.0	1200
		20.10.203	10	Odourle	7.42	300	180	8.6	2.0	8.0	130.0	80.0	50.0	20.0	12.0	1100
Ganga	Makdumpur, Meerut	05.10.203	10	Odourle	7.38	340	210	8.2	2.0	12.0	150.0	110.0	40.0	20.0	10.0	1400
		20.10.203	15	Odourle	7.29	320	200	8.0	2.4	10.0	140.0	90.0	50.0	25.0	12.0	1200
Hindon	Sardhana Budhana Road U/S	07.10.203	60	Foul	7.59	840	540	Nil	58.0	296.0	380.0	260.0	120.0	40.0	46.0	200000

		22.10.203	50	Foul	7.48	810	520	Nil	54.0	288.0	360.0	250.0	110.0	40.0	48.0	170000
Hindon	Meerut Baghp Road D/S	07.10.203	25	No. Sp.	7.52	520	340	4.0	20.0	116.0	230.0	160.0	70.0	30.0	24.0	120000
		22.10.203	20	No .Sp.	7.58	460	300	4.2	18.0	112.0	210.0	150.0	60.0	25.0	22.0	100000
Kali East	U/S New Bonanza Pape Mills Vill.-Sai	09.10.203	30	No. Sp.	7.42	680	440	Nil	48.0	252.0	300.0	210.0	90.0	40.0	38.0	150000
		25.10.203	30	No. Sp.	7.45	660	420	Nil	46.0	244.0	290.0	190.0	100.0	45.0	34.0	140000
	M/S Garh Road	09.10.203	30	No. Sp.	7.51	600	390	Nil	42.0	252.0	270.0	180.0	90.0	30.0	30.0	130000
		25.10.203	30	No. Sp.	7.48	540	350	Nil	44.0	260.0	240.0	160.0	80.0	30.0	28.0	110000

	D/S Kharkhod Prikshit Garh Road	05.10.203	30	No. Sp.	7.54	520	330	Nil	38.0	236.0	240.0	150.0	90.0	25.0	24.0	94000
		20.10.203	35	No. Sp.	7.63	500	320	Nil	34.0	232.0	220.0	160.0	60.0	30.0	26.0	100000
			CLASS A		6.5-8.5			Min 6	Max		Max	Max		Max	Max	Max
	Tolerance Limits for Inland		CLASS B		6.5-8.5			Min 5	Max							Max
	Surface Water subject to		CLASS C		6.5-8.5		Max	Min 4	Max							Max
	Pollution		CLASS D		6.5-8.5	Max		Min 4								
	(IS:2296,1982)		CLASS E		6.5-8.5	Max	Max									

CLASS A	Drinking Water Source without Conventional Treatment but after Disinfection.
CLASS B	Outdoor Bathing
CLASS C	Drinking Water Source with Conventional Treatment followed by Disinfection.
CLASS D	Fish Culture and Wild Life Propagation

- NOTE- THE WATER QUALITY OF GANGA RIVER PERTAINS TO CLASS B STANDARD, HENCE THE WATER IS FIT FOR BATHING
- HINDON RIVER & KALI RIVER IS NOT FIT FOR BATHING
- **4. Notification of Flood Plain Zones:**

- U.P STATE govt. order dated 17.10.2018 has been issued declaring no development/ no construction zone within 100m of the Ganga river on both sides from Bijnore to Kanpur.
- Demarcation of Flood Plain Zone- Completed on the right bank of Ganga river i.e. **612 Nos. of Pillars** in Distt.Meerut

5. Issues relating to Environmental Flow:

a. Notification issued by Government of India dated 09-Oct-2018 for ecological flow in Ganga River maintained as below:-

b. Steps taken for maintaining Ecological flow/ status of compliance of the E-flow notifications.

Si No	Location of Barrage	Minimum flow releasing downstream near t barrage (in Cumec) (October to May)	Minimum flow releasi downstream near the barrage (in Cumec) (June to Sept.)
1	2	3	4
1	Bheem Gauda (Haridwar)	**36**	**57**
2	Bijnor	**24**	**48**

1. Compline of E-flow notification by Northern Division Ganga Canal (NDGC) Roorkee at Bheem Goda Barrage Haridwar U.K. in daily Gauge register
2. **36 Cumec** Water release from Bheem Goda Barrage Haridwar U.K.
3. **24 Cumec** Water release from Madhya Ganga Barrage Bijnor UP

1/2/2024

(Deepak Meena, IAS)
District Magistrate/Chairperson
District Ganga Committee, Meerut(UP)

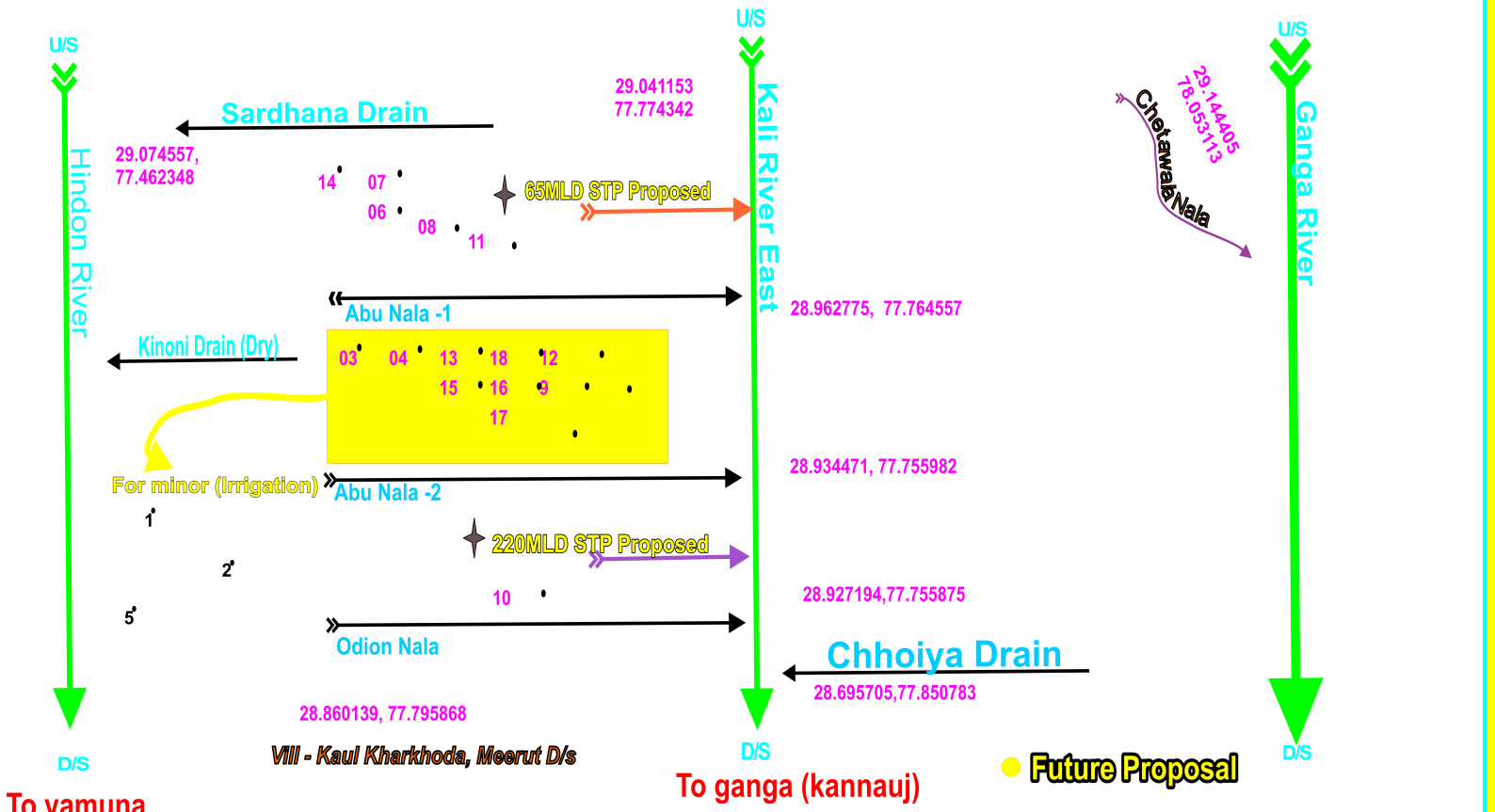
Best practices

1. Industries have installed Web Cameras along with the link at the Central Pollution Control Board (CPCB) and Uttar Pradesh Pollution Control Board (UPPCB) Control Room Office for 24x7 surveillance.
2. All Pulp & Paper industries are achieving charter guidelines for maximum recycling of treated effluent in the process itself.
3. All sugar industries have achieved 100% utilization of treated water in Recycling in process/For use in Irrigation on agricultural land. District Meerut is an ancient city that is related to the Mahabharat Era and has a historical place Hastinapur. Our Holy River Ganga flows through Hastinapur Town and Parikshitgarh Meerut which covers 11 Gram Panchayats overall. By the efforts of District Administration Meerut, all the Ganga Grams are declared ODF now.
4. For 24x7 surveillance of continuous operation of Effluent Treatment Plants in major water-polluting industries.
5. Projects/ Benefits in the last 3 years (Namami/ Amrit 2.0):-

   Under the Namami Gange Project, UP Jal Nigam URBAN Meerut constructed 72 MLD sewage treatment Plant for the Treatment of Sewerage water. Through this 72 MLD STP, the untreated sewerage is stopped which directly flows into the River Kali East, the tributary of River Ganga.

30234

DRAINS AND RIVERS OF DISTRICT MEERUT



S.N.	Location of STP	Installed Capacity of STP (in MLD)	Actual Utlization of installed Capacity
1	Shatabadi Nagar	15	4.8
2	Sports Goods Complex	7	4
3	Shraddhapuri Yojna Phase-1	6	5.5
4	Shraddhapuri Yojna Phase-2	6	5.6
5	Ved Vyaspuri Yojna	15	4.5
6	Pallavpuram Phase-1	7	6.5
7	Pallavpuram Phase-2	11	8
8	Rakshapuram	6	4.4
9	Pandavnagar	3	2.7
10	Lohiya nagar	10	2
11	Ganga nagar	10	3.8
12	Jagriti Vihar Extension	72	65
13	Sainik Vihar	6	5.95
14	Modipuram Tiraha	5	4.9
15	Candtech Enclave, Mrt. Cantt	0.73	0.42
16	Eco Park, Opp. Rajesh Enclave, Mrt. Cantt	0.5	0.4
17	CSD infront of yogendra yadav Enclave, Mrt Cantt	0.2	0.2
18	PRC Lines near gurudwara, Mrt Cantt	0.4	0.3

Government of India
Ministry of Jal Shakti
Department of Water Resources,
River Development & Ganga Rejuvenation

Report in
Compliance of Hon'ble NGT order
Dated 24.01.2024 in
O.A 200/2014 MC Mehta Vs UOI and Ors.

Report Submitted By :-

DISTRICT GANGA COMMITTEE
DISTRICT MUZAFFARNAGAR

I. Sewage

Drain (city/town)	Total discharge per day	PH	BOD	COD	TSS	TDS	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride, nitrates, chlorides, etc)	DO	TC	FC	Outlet flow and Geocode/ sampling tone	Colour/odour (hazen)	Discharged Into
Dhandhera drain, MZN	65	7.0	148	464	132	1780	Above mention heavy metals are not being done by regional laboratory due to unavailability of either resources or instruments/ equipments.	0	Reports awaited	Reports awaited	Latitude: 29°21'53.4"N & Longitude: 77°41'20.0"E	45 Hzn	Direct in River kali west
Khadarwala Drain, MZN	5.41	7.4	118	272	84	920	Same as above	0	-	-	Latitude: 29°28'06.8"N & Longitude: 77°40'51.7"E	30 hzn	Direct in River kali west
Krishnapuri Drain, MZN	16.83	7.6	112	264	106	868	Same as above	0	-	-	Latitude: 29°28'06.5"N & Longitude: 77°40'51.6"E	30 hzn	Direct in River kali west
Laddawala Drain, MZN	20.43	7.2	108	288	94	690	Same as above	0	-	-	Latitude: 29°28'33.1"N & Longitude: 77°41'09.5"E	40 hzn	Direct in River kali west
Mansurpur Drain, MZN	1.1	7.1	110	264	92	704	Same as above	0	-	-	Latitude: 29°21'32.7"N & Longitude: 77°41'16.8"E	45 hzn	Direct in River kali west
Nai basti khalapar Drain, Mzn	1.71	7.4	112	256	94	792	Same as above	0	-	-	Latitude: 29°27'06.1"N & Longitude: 77°40'37.0"	30 hzn	Direct in River kali west

Nyajipura drain , mzn	3.16	7.5	114	288	82	828	Same as above	0	-	-	Latitude: 29°28′38.9"N & Longitude: 77°41'10.8"E	40 hzn	Direct in River kali west
Shamli road drain, mzn	1.47	7.6	102	244	88	492	Same as above	0	-	-	Latitude: 29°28'21.4"N & Longitude: 77°40'50.3"E	35 hzn	Direct in River kali west
Sujdu Village drain, mzn	2.08	7.3	106	288	66	556	Same as above	0	-	-	Latitude: 29°27'03.2"N & Longitude: 77°40'36.1"E	40 hzn	Direct in River kali west
Begrajpur darin, mzn	65	7.2	146	248	110	386	Same as above	0	-	--	Latitude: 29°21'53.4"N & Longitude: 77°41'20.0"E	40 hzn	Direct in River kali west
Jatt mujhera drain, mzn	2.3	7.2	88	256	82	830	Same as above	0	-	-	Latitude: Longitude:	35 hzn	Direct in River kali west
Khatauli drain, mzn	4.65	7.5	52	160	72	720	Same as above	0	-	-	Latitude: 29.278421 Longitude: 77.787582	30 hzn	Direct in River kali East
Titawi drain, titawi, mzn	1.2	7.0	78	232	86	648	Same as above	0	-	-	Latitude: 29°21'32.7"N & Longitude: 77°41'16.8"E	45 hzn	Direct in River Hindon
Dhobi ghat drain, Budnana	100 % tapped into 10 MLD STP of Budhana												
Shamshan Ghat Drain, Budhana	100 % tapped into 10 MLD STP of Budhana												
Sabzi Mandi drain, Budhana	100 % tapped into 10 MLD STP of Budhana												

II. STP:

A.

Existing STP (location & capacity)	Capacity (operational)	Inlet/ Outlet water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point	Proposed/ under construction STP With completion date
32.5 MLD STP Nagar Palika Parishad, Kidwai Nagar, MZN	32.5 MLD	BOD - 30 mg/l TSS - 50 mg/l FC - 1000 mg/l	03 (Partially Trapped)	55 MLD	River Kali West	1. 32.5 MLD Cap. STP under commissioning at final stage at Kidwai Nagar 2. 22 MLD capacity STP under trial at Sahawali 3. 10 MLD capacity STP Budhana under trial

B.

Proposed STP (Location & capacity)	Capacity (operational)	Inlet/outlet water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point , geo code/ sampling point	Proposed under construction STP with completion date
22.00 MLD, Sahawali, Muzaffarnagar	Under trail run	BOD-250/10mg/l TSS-500/20mg/l COD-600/50mg/l TN-45/10 mg/l TP-07/01mg/l FC-230MPN/100ml	01	After operation of STP and full tapping of drain, No gap	River kali (W) through Sahawali drain 29.437173 77.725929	Feb,2024

32.5 MLD, Kidwai Nagar, Muzaffarnagar	Under commissioning	BOD-250/10mg/l TSS-500/20mg/l COD-500/50mg/l TN-45/10 mg/l TP-07/01mg/l FC-230MPN/100ml	04	After operation of STP and full tapping of drain, No gap	River Kali (W) 29.455561 77.682611	March, 2024
10.00 MLD, Budhana, Muzaffarnagar	6.8 MLD	BOD-250/10mg/l TSS-500/20mg/l COD-500/50mg/l TN-45/10 mg/l TP-07/01mg/l FC-230MPN/100ml	03	After full tapping of drain, No gap	River Hindon 29.286606 77.483536	Dec, 2023

III. HOTELS/ ASHRAMS

S. No.	Name of Hotels/ ashrams/ dharamshalas	Consent to establish/ operate	STP	Discharge point Geocode/ sampling point	Action taken
1.	Hotel Silver Spoon Bhopa road Muzaffarnagar	No	Not installed	Through septic tank/ soak pit	Notice sent
2.	Hotel Brown Prakash chowk Court road MZR	No	Not installed	Through septic tank/ soak pit	Notice sent
3.	Hotel Mahadev Opp. Bas stand MZR	No	Not installed	Through septic tank/ soak pit	Notice sent
4.	Hotel Shiv Near Jansath Road MZR	No	Not installed	Through septic tank/ soak pit	Notice sent
5.	Hotel Sheraton South Civil Line Railway Road MZR	no	Not installed	Through septic tank/ soak pit	Notice sent
6	Hotel Valentine Civil line Railway Road MZR	no	Not installed	Through septic tank/ soak pit	Notice sent
7	Hotel Natraj Civil line Railway Road	no	Not installed	Through septic tank/ soak pit	Notice sent

8	Hotel Omega Blue 173 Civil line Road MZR	no	Not installed	Through septic tank/ soak pit	Notice sent
9	Hotel Green Apple Ananand Bhawan Roorkee Road MZR	no	Not installed	Through septic tank/ soak pit	Notice sent
10	Hotel Golden Inn Vikash Bhawan Meerut Road	no	Not installed	Through septic tank/ soak pit	Notice sent
11	Pecan Hotel & Restaurant Opp. Vardhaman Hospital Jansath Road	no	Not installed	Through septic tank/ soak pit	Notice sent
12	Sangam Hotel Vill- Mustafabad Bypass RoadP MZR	no	Not installed	Through septic tank/ soak pit	Notice sent
13	Solitaire Inn NH-58 Meerut Road MZR	no	Not installed	Through septic tank/ soak pit	Notice sent
14	Hotel Radiant Inn Opp. Grand Plazza Bhopa Road	no	Not installed	Through septic tank/ soak pit	Notice sent
15	Gupta Resort, Inn NH-58 Meerut Road MZR	no	Not installed	Through septic tank/ soak pit	Notice sent
16	7 Sky hotel & Restaurant Mahaveer Chowk MZR	no	Not installed	Through septic tank/ soak pit	Notice sent
17	Hotel Galaxy Tower South Civil Line MZR	no	Not installed	Through septic tank/ soak pit	Notice sent
18	Omega Holiday Home Pvt. Ltd. Civil Line North MZR	no	Not installed	Through septic tank/ soak pit	Notice sent
19	Moolchand Resorts 8Km NH-58 Meerut Road	no	Not installed	Through septic tank/ soak pit	Notice sent
20	The Mithai Art Gandhi Colony MZR	no	Not installed	Through septic tank/ soak pit	Notice sent
21	The Green Restaurant North Civil Line Railway station MZR	no	Not installed	Through septic tank/ soak pit	Notice sent
22	Omega Bar & Restaurant North Civil Line Railway station MZR	no	Not installed	Through septic tank/ soak pit	Notice sent
23	Money Restaurant Court Road MZR	no	Not installed	Through septic tank/ soak pit	Notice sent

24	Biggies Pizza Restaurant Civil Line Circular Road MZR	no		Through septic tank/ soak pit	Notice sent
25	Oak Square Restaurant NH-58 Bypass road MZR	no	Not installed	Through septic tank/ soak pit	Notice sent
26	Akashay paatr Restaurant NH-Near Sher Nagar MZR	no	Not installed	Through septic tank/ soak pit	Notice sent
27	Paradise Restaurant NH-58 Bypass Road MZR	no	Not installed	Through septic tank/ soak pit	Notice sent
28	Biggies Pizza Restaurant 315 South Bhopa Road MZR	no	Not installed	Through septic tank/ soak pit	Notice sent
29	Bhagwati Banquet Hall Jansath Road MZR	no	Not installed	Through septic tank/ soak pit	Notice sent
30	Sidharth Banquet Hall Anand Vihar MZR	no	Not installed	Through septic tank/ soak pit	Notice sent
31	Arpan Banquet Hall Mahaveer Chowk MZR	no	Not installed	Through septic tank/ soak pit	Notice sent
32	Madhur Milan Palace Bhartiya Colony MZR	no	Not installed	Through septic tank/ soak pit	Notice sent
33	Var Vadhu Farm Roorkee road MZR	no	Not installed	Through septic tank/ soak pit	Notice sent
34	Santosh Palace Infrant OF Sangam Hotel MZR	no	Not installed	Through septic tank/ soak pit	Notice sent
35	Abhinandan Palace 4.5 Km Stone Roorkee Road MZR	no	Not installed	Through septic tank/ soak pit	Notice sent
36	Kiran Farm's Opp Ram Narsery Roorkee Road MZR	no	Not installed	Through septic tank/ soak pit	Notice sent
37	Raj Mahal Farm Radha Suwami satsang Roorkee Road MZR	no	Not installed	Through septic tank/ soak pit	Notice sent
38	Krishana Palace Near Guru Ram Rai School MZR	no	Not installed	Through septic tank/ soak pit	Notice sent

IV. Industrial Effluent discharge:

S. No.	Total number of Industries	Daily effluent discharge (in KLD)	Treatment available (cetp/ petp/ etp operational capacity)	Effluent quality analysis (outlet of treatment plants Geo code sampling point)	GAP	Proposed/ under construction treatment project (with timeline)	Number of defaulting units- Action taken	Industrial solid waste generated/ day	Manner of disposal (Industrial solid waste)
1.	Aggarwal Duplex & Board Mills Ltd. Bhopa Road Muzaffarnagar	700	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil	-	Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made
2.	Aristo Craft Paper Mills Pvt. Ltd. Meerut Road, Muzaffarnagar	250	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil	-	Haz. Waste generated as per the authorization granted by UPPCB	For scientific disposal of Haz. Waste agreement with TSDF being made
3	Bajaj Hindustan Ltd.Bhaisana, Muzaffarnagar.	2000	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made
4	Bindals Papers Mills Ltd. Bhopa Road, Muzaffarpur.	4000	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization	For the scientific disposal of Haz. Waste agreement with

								granted by UPPCB	TSDF being made
5	Bindalas Duplex Ltd, Bhopa Road (Unit-1), Muzaffarnagar	300	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made
6	Bindalas Ouplex Ltd, Bhopa Road (Unit-2) Muzaffarnagar	600	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For scientific disposal of Haz. Waste agreement with TSDF being made
7	D.L.S. Papers Pvt. Ltd.,10Km Meerut Road, Dhaulapul, Begrajpur, Muzaffarnagar	190	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made
8	DDLS Paper Pvt. Ltd., Meerut Road, Begrajpur, Muzaffarnagar	300	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made
9	D.S.M. Sugar Mansurpur, Meerut Road. Muzaffarnagar	1200	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made

10	Disha paper Industris, Jolly road, Muzaffarnagar	ZLD	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For scientific disposal of Haz. Waste agreement with TSDF being made
11	Galaxy Papers pvt.ltd. Jolly Road, Muzaffarnagar	ZLD	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made
12	Garg Duplex & Paper Mills (P) Ltd. Bhopa Road, Muzaffarnagar	1500	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made
13	H.J. Tannery Pvt. Ltd. Jolly Road muzaffarnagar	70	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made
14	I.P.L. (Formerly Titawi Sugar Complex), Titawi, Muzaffarnagar	750	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For scientific disposal of Haz. Waste agreement with TSDF being made

15.	I.P.L. Sugar Unit Rohana kalan, Muzaffarnagar	350	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made
16	Indian Potash Limited (Distillery Unit), Baheri, Muzaffarnagar	ZLD	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made
17	K.K. Duplex Pvt. Ltd., Jansath road, Muzaffarnagar	ZLD	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made
18	Mahalaxmi Craft & Tissues Bhopa Road, Jansath Muzaffarnagar.	150	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For scientific disposal of Haz. Waste agreement with TSDF being made
19	Meenu Papers (P) Ltd. Bhopa Road Muzaffarnagar	250	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made

20	Orient Board & Paper Mill Pvt. Ltd. Jansath Road, Muzaffarnagar	480	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made
21	Parijat Paper Mills, Ltd., Bhopa Road, Muzaffarnagar	ZLD	ETP Operational	As per the norms	Adequate capacity ETP installed			Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made
22	Krishnanchal Pulp & Papers Pvt. Ltd. (Formerly Prime Papers) Jolly Road, Muzaffarnagar	ZLD	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For scientific disposal of Haz. Waste agreement with TSDF being made
23	Genus Papers & Board Ltd. (Unit-2), (Formerly N.S. Papers Ltd.), Jansath Road, Muzaffarnagar	1800	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made
24	Rati Pushp Intermediats Pvt.Ltd.,Jansath Road, Muzaffarnagar	ZLD	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made

25	Shakti Craft & Tissues, Jansath road, Muzaffarnagar	135	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made
26	Shakumbari Pulp & Paper Bhopa Road, Muzaffarnagar	150	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For scientific disposal of Haz. Waste agreement with TSDF being made
27	Shri Bhageshwari Paper Mills (P) Ltd., 8hopa Road Unit-1 Muzaffarnagar	450	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made
28	Shri Bhageshwari Paper Mills (P) Ltd., Bhopa Road Unit-2 Muzaffarnagar	1100	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made
29	Siddheshwary Ind. Pvt. Ltd., Jansath Road, Muzaffarnagar	350	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made

30	Sidhbali Papers mills Ltd, Bhop Road, Muzaffarnagar	370	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For scientific disposal of Haz. Waste agreement with TSDF being made
31	Silver Tone Pulp & Paper, Bhopa Road, Muzaffarnagar.	1200	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made
32.	Silver Tone Pulp & Paper (Unit-2) Bhopa Road, Muzaffarnagar	1800	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made
33.	Silvertoan Paper Ltd. (Unit-1) Bhopa Road, Muzaffarnagar	1800	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made
34.	Silvertoan Paper Ltd. (Unit-2) Bhopa Road, Muzaffarnagar	500	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For scientific disposal of Haz. Waste agreement with TSDF being made

35.	Sir Shadi Lal Distillery & Chemical Works, Mansoorpur Muzaffarnagar	ZLD	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made
36.	Shri Veer Balaji Papers (Formerly Sita Paper Mill), 8hopa Road, Muzaffarnagar	ZLD	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made
37.	Suyash craft & papers ltd., Velhana, Muzaffarnagar	ZLD	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made
38.	S.K. Papers Ltd., Jolly road, Muzaffarnagar	300	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For scientific disposal of Haz. Waste agreement with TSDF being made
39.	Tehri Pulp & Papers Ltd. Bhopa Road (Unit- 1) Muzaffarnagar	700	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made

40.	Tehri Pulp & Papers Ltd. Bhopa Road (Unit- 2) Muzaffarnagar	600	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made
41	Tirupati Balaji Fibres Ltd.Bhopa Road, Muzaffarnagar	250	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made
42	Triveni Engg. Industries Ltd. (Alco Chemical Complex) Bilaspur, Jolly Road, Muzaffarnagar	ZLD	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For scientific disposal of Haz. Waste agreement with TSDF being made
43	Triveni Engg. industries Ltd. (Alco Chemical Complex) Unit-2 Bilaspur, Jolly Road, Muzaffarnagar.	ZLD	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made
44	Uttam Sugar Mills, Khaikheri, Muzaffarnagar	1000	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made

45	Magma industries, Begrajpur, Muzaffarnagar	50	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made
46	Vellum Papers Pvt. Ltd., Vill. Sikhreda, 9th Km. Jolly Road, Muzaffarnagar	210	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For scientific disposal of Haz. Waste agreement with TSDF being made
47	Saral Chemtech LLP, Jansath Road, Muzaffarnagar	17	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made
48	Hanumanat Paper Mills Pvt. Ltd., g.5 Km. Jansath Road, Vill. Shernagar, Muzaffarnagar	ZLD	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made
49	Aramco Papers Pvt. Ltd., Jolly Road, Muzaffarnagar	ZLD	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made

50	Al-Noor Exports, Jansath Road, Muzaffarnagar	480	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For scientific disposal of Haz. Waste agreement with TSDF being made
51	Gulshan Polyoles Ltd., Jansath Road, Muzaffarnagar	2450	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made
52	The Ganga Kisan Sahkari Chini Mills Ltd.,Morna, Muzaffarnagar.	550	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made
53	Tikaula Sugar Mills Ltd. Tikaula	1920	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made
54	Tikola Oistillery,Tikola, Muzaffarnagar.	ZLD	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For scientific disposal of Haz. Waste agreement with TSDF being made

55	Triveni Engineering & Industries Ltd. Sugar Unit Khatauli, Muzaffarnagar	1935	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made
56	Jain Processors, D-1, UPSIDC industrial Area Begrajpur, Muzaffarnagar (Dyeing)	90	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made
57	Ayman Collection, D-8, UPSIDC Industrial Area Begrajpur, Muzaffarnagar (Dyeing)	45	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made
58	Shakeel Jeans, K-20, UPSIDC Industrial Area Begrajpur, Muzafiarnagar (Dyeing)	40	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For scientific disposal of Haz. Waste agreement with TSDF being made
59	Bright Wash, K-23, UPSIDC Industrial Area Begrajpur, Muzaffarnagar (Dyeing)	35	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made

60.	Noor Fashion, K-19, UPSIDC Industrial Area Begrajpur, Muzaffarnagar(Dyeing)	34	ETP Operational	As per the norms	Adequate capacity ETP installed	Nil		Haz. Waste generated as per the authorization granted by UPPCB	For the scientific disposal of Haz. Waste agreement with TSDF being made

V. Regulation of Flood Plain Zone:

S. NO.	Name of wetland	Notification of flood plain zone	Demarcation (Area in hectares)	Encroachment & direct discharge GeoCode/Sampling point	Encroachment removal status
1.	Alampur	U.P STATE govt. order dated 17.10.2018 has been issued declaring no development/ no construction zone within 100m of the Ganga river on both sides from Bijnore to Kanpur.	185.00	Natural Lake present in the choel area of Madhya Ganga Nahar N-29-17-17.91 E-78-0-18.44	No Encroachment
2.	Haiderpur	Same as above	1221.00	Fully submerged wetland N-29-23-29.667 E-78-1-1.910	No Encroachment
3.	Boodhi ganga jheel	Same as above	389.0	Fully submerged wetland N-29-17-24.130 E-78-1-37.890	No Encroachment
4.	Jaitpur Gorsiwala-i	Same as above	50.00	Fully submerged wetland N-29-22-21.946 E-78-1-37-890	No Encroachment
5.	Jaitpur Gorsiwala-iii	Same as above	74.00	Fully submerged wetland N-29-22-15.341 E-78-1-5.440	No Encroachment

6.	Jalalpur Behda	Same as above	144.00	Partially submerged wetland N-29-25-56.434 E-78-1-39.756	No Encroachment
7.	Majispur	Same as above	26.00	Fully submerged area N-29-23-26.63 E-78.2.12.70	No Encroachment
8.	Kalyanpur	Same as above	1033.00	Fully submerged wetland in form of lake N-29-27-53.878 E-78-59-48.732	No Encroachment
9.	Jogiwali Jheel	Same as above	57.00	Fully submerged wetland in form of lake (natural lake) N-29-34-29.957 E-77-57-44.177	No Encroachment
10.	Kakawala ghat	Same as above	1179.00	Fully submerged wetland N-29-24-39.118 E-77-55-55.567	No Encroachment
11.	Chor ghat	Same as above	435.54	Fully submerged wetland in form of lake N-29-37-12.528 E-77-54-56.656	No Encroachment
12.	Badhiwala Jheel (Khedki)	Same as above	212.0	Fully submerged wetland in form of lake N-29-38-33.536 E-77-56-24.634	No Encroachment
13.	Badhiwala Jheel (suheli)	Same as above	238.0	Fully submerged wetland in form of lake N-29-36-06.430 E-77-56-14.163	No Encroachment
14.	Baikanthpur	Same as above	94.00	Fully submerged wetland in form of lake N-29-39-08.342 E-77-55-40.043	No Encroachment

VI. AFFORESTATION/ PLANTATION

Area- cities/ towns	Total plantation	Proposed project	Timeline
3,60,000 m sq.	39600 in the year 2020-21	Protection and care of the saplings planted.	2023-24

VII. Mining:

Area of mining Geocode/ sampling point	**FIR/ case registered/ year**	**Vehicles/ mineral seized**	**Action taken status**	**Cases pending in Court**	**Enforcement of EMGSM 2020 and Sustainable sand mining management guidelines 2016**
The District Survey report is prepared and it is also updated at regular intervals. At present neither any mining lease is operational in the district nor any area is in the district survey report.	In the financial year 2023-24, till now no FIR has been reported related to this matter(Area of sand mining lease)	From 01/01/2021 to till date , action has been taken on 29 case of illegal transportation of ordinary sand (category1) through Mcheck App	Penalties was imposed as per rules.	No data available related to this matter	–

Compliance of Hon'ble NGT order

Dated 24.11.2023

In

O.A 200/2014 MC Mehta Vs UOI and Ors

DISTRICT MUZAFFARNAGAR

Sewage Management

(i) District Muzaffarnagar – Total Sewage Generation – 78 MLD

Sl no	Name of ULB	Sewage Generation (MLD)
1.	Muzaffarnagar	65.00
2.	Khatauli	3.00
3.	Purkazi	1.00
4.	Meerapur	1.00
5.	Bhokerheri	0.75
6.	Budhana	4.00
7.	Sisauli	0.50
8.	Shahpur	0.75
9.	Charthawal	1.00
10.	Jansath	1.00
	Total	**78.00**

(i) Existing Sewage Treatment Capacities

- 32.5 MLD STP, Kidwai Nagar

Under Commissioning stage/Trial Run

- 10 MLD STP, Bhudana
- 32.5 MLD, Kidwai Nagar
- 22 MLD, Sahawali

(ii) Quantity of sewage being treated (Utilization Capacity)

At present – 32.5 MLD is being treated in STP out of total sewage of 78 MLD

Gap (Untreated Sewage at present) – 45MLD (58.5%)

Sewage Treatment after operation of all STPs on full capacity – 97MLD (No gap)

(iii) Performance of STPs particularly for FC

STP	Technology	Operational Status	Capacity (operational)	Inlet/Outlet Water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point Geo code/ sampling point	Proposed/ under construction STP With completion date
32.5 MLD, Kidwai Nagar	Oxidation Pond	Operational	100%	BOD-250/30mg/l TSS-500/50mg/l FC-1000MPN/100ml	3	0	29.455561, 77.682611	
22.00 MLD, Sahawali, Muzaffarnagar	SBR	Under Trial Run	_	BOD-250/10mg/l TSS-500/20mg/l COD-600/50mg/l TN-45/10 mg/l TP-07/01mg/l FC-230MPN/100ml	01	After Operation None	29.437173, 77.725929	Feb, 2024
32.5 MLD, Kidwai Nagar, Muzaffarnagar	SBR	Commissioning Stage	_	BOD-250/10mg/l TSS-500/20mg/l COD-500/50mg/l TN-45/10 mg/l TP-07/01mg/l FC-230MPN/100ml	04	After Operation None	29.455561, 77.682611	March, 2024
10.00 MLD, Bhudana, Muzaffarnagar	SBR	Operational	6.8MLD	BOD-250/10mg/l TSS-500/20mg/l COD-500/50mg/l TN-45/10 mg/l TP-07/01mg/l FC-230MPN/100ml	03	None after full capacity operation	29.286606, 77.483536	

(i) **Where treated sewage is being discharged (to Ganga or tributaries**) - Total sewage generated is being discharged to River Kali (West), River Hindon and River Kali (East)

(ii) Reasons for Under-utilization of STPs (Connectivity of Households/laying of sewer lines)

STP	Operational Status	STP capacity utilization	Reason for under utilization
32.5 MLD, Kidwai Nagar	Operational	100%	-
32.5 MLD, Kidwai Nagar	Under Commissioning	-	-
10 MLD Bhudana	Trial Run	68%	Connectivity of households
22 MLD, Sahawali	Trial Run	-	-

(iii) Current gap in sewage treatment

Total sewage generation – 78 MLD

Sewage Treatment at present – 32.5 MLD

Gap – 45MLD (58.5%)

Total Sewage Treatment quantity after operation of all STPs on full capacity – 97MLD (No gap)

STP	Technology	Operational Status	Capacity (operational)	Inlet/Outlet Water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point Geo code/ sampling point	Proposed/ under construction STP With completion date
32.5 MLD, Kidwai Nagar	Oxidation Pond	Operational	100%	BOD-250/30mg/l TSS-500/50mg/l FC-1000MPN/100ml	3	0	29.455561, 77.682611	
22.00 MLD, Sahawali, Muzaffarnagar	SBR	Under Trail Run	_	BOD-250/10mg/l TSS-500/20mg/l COD-600/50mg/l TN-45/10 mg/l TP-07/01mg/l FC-230MPN/100ml	01	After Operation None	29.437173, 77.725929	Feb, 2024
32.5 MLD, Kidwai Nagar, Muzaffarnagar	SBR	Commissioning Stage	_	BOD-250/10mg/l TSS-500/20mg/l COD-500/50mg/l TN-45/10 mg/l TP-07/01mg/l FC-230MPN/100ml	04	After Operation None	29.455561, 77.682611	March, 2024
10.00 MLD, Bhudana, Muzaffarnagar	SBR	Operational	6.8MLD	BOD-250/10mg/l TSS-500/20mg/l COD-500/50mg/l TN-45/10 mg/l TP-07/01mg/l FC-230MPN/100ml	03	None after full capacity operation	29.286606, 77.483536	

(iv) Time bound plan for bridging the gap and tying up with financial arrangements and not delaying Tendering and identifying executing agencies or having any other issues:

No timebound plan required. 03 proposed STPs are constructed/under trial run/commissioning stage. 100% treatment of sewage shall be achieved with operation of remaining 3 STPs on full capacities.

Where untreated sewage (when there is no STP) is discharged (Ganga /Tributaries): Nil. With operation of all STPs , there shall be no gap in treatment of sewage.

Drains joining Ganga and Tributary

(i) Number of drains carrying sewage- sullage or industrial waste water joining Ganga/ tributaries with their Quantity and Quality.

S. No.	Drain	Domestic/Industrial/ Mixed	Flow (MLD)	Quality Discharge Parameters
1.	Dhandhera Drain, MZN	Industrial	25	pH=7.0 BOD=148 COD=464 TSS=132 TDS=1780
2.	Khadarwala Drain, MZN	Domestic	5.41	pH=7.4 BOD=118 COD=272 TSS=84 TDS=920
3.	Krishnapuri Drain, MZN	Domestic	16.82	pH=7.6 BOD=112 COD=464 TSS=106 TDS=868

4.	Laddawala Drain, MZN	Domestic	20.43	pH=7.2 BOD=108 COD=288 TSS=94 TDS=690
5.	Mansurpur Drain, MZN	Mixed	1.1	pH=7.1 BOD=110 COD=264 TSS=92 TDS=704
6.	Nai Basti Khalapar Drain,MZN	Domestic	1.71	pH=7.4 BOD=112 COD=256 TSS=94 TDS=792
7.	Nyajipura Drain,MZN	Domestic	3.16	pH=7.5 BOD=114 COD=288 TSS=82 TDS=828
8.	Shamli Road Drain, MZN	Domestic	1.47	pH=7.6 BOD=102 COD=244 TSS=88 TDS=492
9.	Sujdu Village Drain, MZN	Domestic	2.08	pH=7.3 BOD=106 COD=288 TSS=66 TDS=556
10.	Begrajpur Drain, MZN	Mixed	55.0	pH=7.2 BOD=146 COD=248 TSS=110

				TDS=386
11.	Jatt Mujhera Drain, MZN	Industrial	2.5	pH=7.2 BOD=88 COD=256 TSS=82 TDS=830
12.	Khatauli Drain, Khatauli, MZN	Domestic	1.5	pH=7.5 BOD=52 COD=160 TSS=72 TDS=720
13.	Titawi Drain, Titawi, MZN	Domestic	1.2	pH=7.0 BOD=78 COD=232 TSS=86 TDS=648
14.	Dobhi Ghat Drain Budhana	Domestic	Drains totally tapped and sewage being treated in 10 MLD STP , Budhana	
15.	Sabzi mandi Drain Bdhana	Domestic		
16.	Shamshan Ghat Road Drain	Domestic		

(ii) **Drains joining outside city and town limits but, either joining in village or nearby town** : As per the above table

(iii) Inclusion of sewage flowing in drains into total sewage generation figures of each city and town and their interception and diversion to STPs:

Already operational STP of 32.5 MLD is utilizing 100% capacity and all concerned drains have been trapped. Out of 3 STPs of 10MLD, 32.5 MLD and 22MLD, 10 MLD STP has been made operational and remaining 32.5 MLD and 22 MLD STPs are under trial operation/Commissioning Stage. All concerned drains in these 3 new STPs shall be 100 % tapped soon

Septage management (In case of no STP)

(i) Status of Septage management (with reference to FSTP/STP):

Till date, there is no proposal in effect

(ii) Management of Grey water and its disposal:

Already operational STP of 32.5 MLD is utilizing 100% capacity and all concerned drains have been trapped. Out of 3 STPs of 10MLD, 32.5 MLD and 22MLD, 10 MLD STP has been made operational and remaining 32.5 MLD and 22 MLD STPs are under trial operation/Commissioning Stage. All concerned drains in these 3 new STPs shall be 100 % tapped soon

2.1 Industrial Pollution Control

Sl.No.	River (Hindon/Kali West/Kali East/Ganga)	Name of Industry Total no. of water polluting industries	Total Industrial discharge (MLD)	Treatment facility installed (Primary , secondary and tertiary treatment/ ZLD technology
1.	Hindon	02 (Sugar)	Used in Ferti Irrigation	
2.	Kali West	54	26.30	
3.	Kali East	01 (Sugar)	Used in Ferti Irrigation	
4.	Ganga	03 (02 Sugar, 01 Distillery)	Used in Ferti Irrigation Distillery - ZLD	

(1) Water quality status

River/Tributary	DO	BOD	TC	FC
Ganga (Shukratal Ghat)	6.6	2.0	1100	700
Kali East (Khatauli Drain)	Nil	52.0	NA	NA
Kali (West) D/S	Nil	36.0	NA	NA
Hindon D/S	Nil	36.0	NA	NA

(2) Notification of Flood Plain Zones – Government of Uttar Pradesh has issued notification dated 17.10.2018 regarding no construction/ no development zone uner 100 meter of both bank river

(3) Issues relating to Environmental Flow: Notification has been issued by vide notification dated 09.10.2018

The report is being submitted by the District Ganga/Environment Committee.

(Ankit Singh)
Regional Officer
UPPCB, Muzaffarnagar

(Kanahiya Patel)
D.F.O
Muzaffarnagar

(Arvind Mallappa Bangari)
District Magistrate
Muzaffarnagar

BEST PRACTICES

Best practices adopted for Prevention and Control of Water Pollution:

1. For 24x7 surveillance of continuous operation of Effluent Treatment Plants in major water-polluting industries, UPPCB and District Magistrate Muzaffarnagar directed industries to install CCTV cameras covering major units of ETPs which have been complied with and at present, major industries have installed CCTV Cameras along with the link at the Central Control Room of the District Administration Office for 24x7 surveillance.

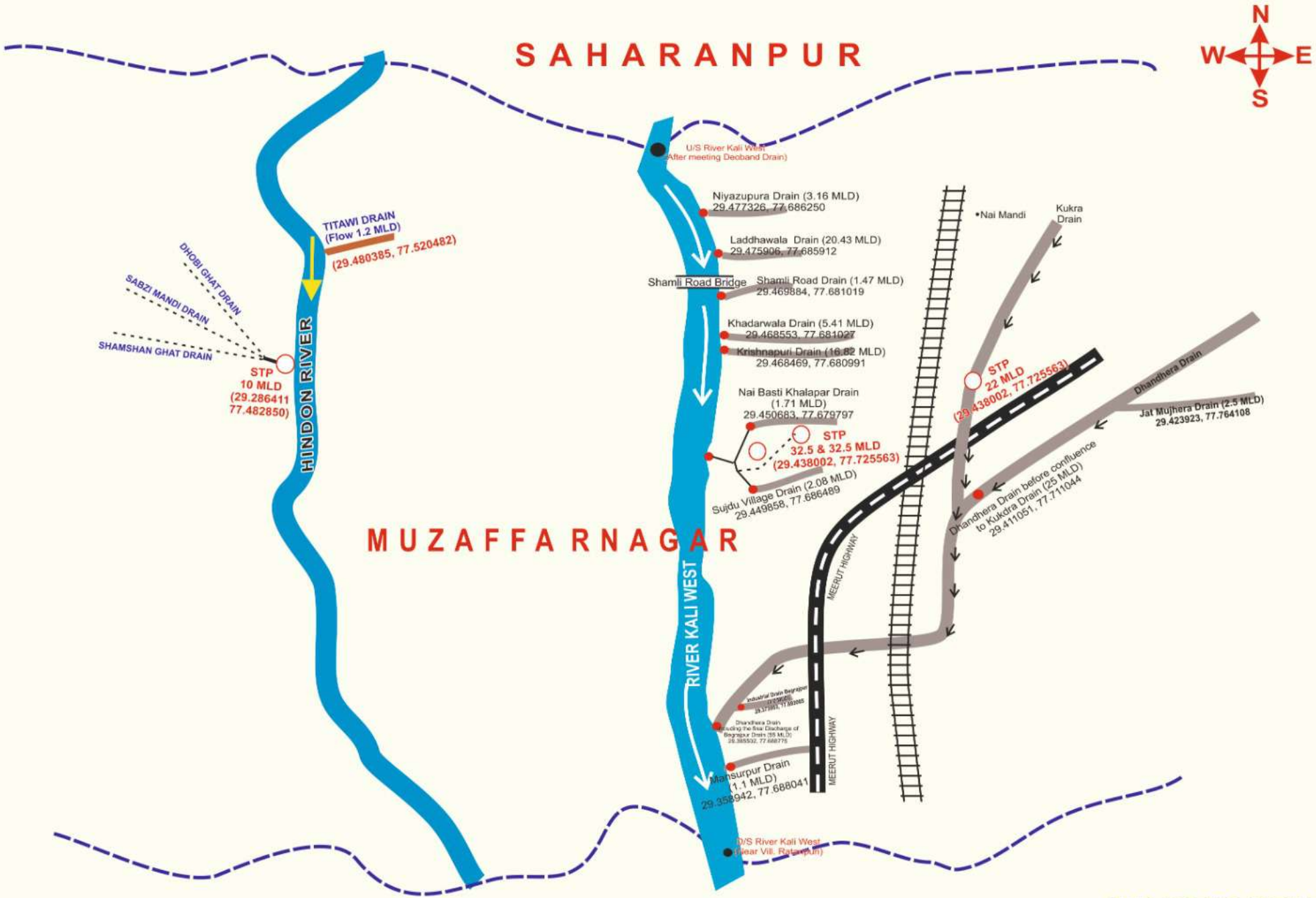
2. All Pulp & Paper industries are achieving charter guidelines for maximum recycling of treated effluent in the process itself. 09 Pulp & Paper industries have also achieved ZLD. Individual paper industries have succeeded in recycling more than 50% of effluent discharge in the process itself.

3. At present all distillery units in Muzaffarnagar are operating slop boilers for disposal of spent wash. No distillery unit is presently operating Bio Composting for disposal of spent wash. 01 distillery unit M/s Sir Shadilal Distillery & Chemical Works was the only unit operating Bio Composting which was also permanently closed by the Board in the year 2020-21.

4. All sugar industries have achieved 100% utilization of treated water in Recycling in process/For use in Irrigation on agricultural land.

5. Dhandhera/Begrajpur Drain is the major drain that carries treated industrial effluent due to which, the drain is timely deep silted/cleaned on regular intervals by the concerned industries in compliance with the directions issued by UPPCB and the District Administration.

REGIONAL OFFICE, U.P. POLLUTION CONTROL BOARD, MUZAFFARNAGAR



Government of India
Ministry of Jal Shakti
Department of Water Resources,
River Development & Ganga Rejuvenation

Report in
Compliance of Hon'ble NGT order
Dt 24.01.2024
O.A 200/2014 MC Mehta Vs UOI and Ors

Report Submitted By:-

DISTRICT GANGA COMMITTEE
DISTRICT HAPUR

Information required in compliance of Hon'ble NGT order 24.01.2024 in O.A. 200/2014 MC Mehta Vs UOI and ors.

Name of the District: Hapur

Length of stretch of river Ganga in the District: Ganga River (Hapur) – 38 KM

Stretch of any tributary in the district:

(a) Name: Kali east River

(b) Stretch length: 74.50

I. Sewage

Drain (city/town/	Total flow of drain per day	PH	BOD	COD	TSS	Heavy metals			Nitrates	DO	TC	FC	Outlet flow	Cl	Colour/ Odour	Discharged Into
						Cu	Fe	Ni								
Kadrabad Drain, Hapur	46.0 MLD	7.20	44	126	87	0.27	1.54	0.06	1.2	NIL	32×10^5	22×10^5	46 MLD	250	Turbid/ Faint	Kali River
Chhuiya Drain NH-24 Babugarh, Hapur	5 MLD	7.40	33	92	100	0.36	0.58	0.01	1.6	NIL	14×10^4	12×10^4	5 MLD	210	Turbid/ Faint	Kali River
Garh Drain near Village Garh, Hapur	3 MLD	7.50	22	48	55	0.14	2.10	ND	0.6	NIL	2400	1700	3 MLD	109	Turbid/ Odorless	Ganga River
Hapur Drain, Hapur	27 MLD	7.12	48	149	152	0.25	2.42	0.03	0.3	NIL	40×10^5	27×10^5	27 MLD	146	Turbid/Faint	Kali River
Hapur city Drain, Hapur	05 MLD	7.16	50	137	152	0.26	1.38	0.05	0.2	NIL	32×10^5	26×10^5	05 MLD	152	Turbid/Faint	Kali River
Fuldera Drain near Syana Escape Police Chowki, Hapur	**DRY**															

II- STP for treating the sewage of the drains ultimately flowing to river ganga or its tributaries:-

Existing STP (location & capacity)	Capacity (operational)	Inlet/ Outlet water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point/Geo Code/Sampling Point	Proposed/ under construction STP With completion date
06 MLD Garhmukteshwar, Hapur	Operational	BOD - 30 mg/l TSS - 50 mg/l FC - 1000 mg/l	01 3.5 MLD	No Gap	Ganga River Lat-28.775889, Long-78.118952	Nil
03 MLD Brijghat, Hapur	Operational	BOD - 30 mg/l TSS - 50 mg/l FC - 1000 mg/l	01 02 MLD	No Gap	Ganga River Lat-28.749625, Long-78.141193	Nil
03 MLD Pilkhuwa, Hapur	Operational	BOD - 30 mg/l TSS - 50 mg/l FC - 1000 mg/l	01 07 MLD	4.7 MLD	Kali River Lat-28.706363, Long-77.664151	Nil
30 MLD Rampur Road, Hapur	Operational	BOD - 30 mg/l TSS - 50 mg/l FC - 1000 mg/l	01 10 MLD	20.58 MLD Tapping of drains and sewer pipelines is under progress.	Kali River Lat-28.712825, Long-77.771041	Nil

Proposed STP (Location & capacity)	Capacity (operational)	Inlet/outlet water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point, geo code/ sampling point	Proposed under construction STP with completion date
Nil	NA	NA	NA	NA	NA	NA

***** Sewage Treatment After operation of all STPs on full capacity, only 4.7 MLD GAP left (Babugarh-0.7 MLD & Pilakhuwa-4 MLD). In this regards STPs of required capacity in Babugarh and Pilakhuwa shall be installed shortly.

III- Hotels/ Ashrams/Dharmshalas/residential complexes abutting river Ganga or its tributaries: -

Number of Hotels/ ashrams/dharamshalas	Consent to establish/ operate	STP	Discharge point Geocode/ sampling point	Action taken
13	01 (STP Installed)	Not Installed	Through septic tank/ soak pit	Notice sent
10	00	Not Installed	Through septic tank/ soak pit	Notice sent

IV. Industrial Effluent discharge by industries whose effluent is ultimately flowing to river Ganga or its tributaries: -

Total number of Industries	**Daily effluent discharge**	**Treatment available (CETP/ PETP/ ETP operational capacity)**	**Effluent quality analysis (outlet of treatment plants)**	**GAP**	**Proposed/ under construction treatment project (with timeline)**	**Number of defaulting units- Action taken**	**Industrial solid waste generated/ day**	**Manner of disposal (Industrial solid waste)**
36	6.076 MLD	ETP/PETP Installed in each individual industries of adequate capacity.	As per schedule, analysis done by Regional Office Ghaziabad	0	0	1- M/s PRATEAK MITTAL, W-32, TEXTILE CENTER PILAKHWA HAPUR- Show Cause Notice issued u/s 33A of water Act. 2- RAYBAN FOODS PRIVATE LIMITED, Khasara No. 925, 926, 926/1,1083, 1084/2, 1085, 1086, 1159, 1159/2, 1160/1, Rampur Marg, Bulandshahar Road, Hapur – Closure order issued u/s 33A of water Act.	20 TPD	Through TSDF/Authorized recyclers.

V. Regulation of Flood Plain Zone:

Area- cities/ towns	Notification of flood plain zone	Demarcation		Variable flow (Cusec)	Encroachment /Encroachment removal status	Timeline for completion
		No development zone pillars	Regulatory zone pillars			
Ganga River & Kali River, Hapur	UP State Govt. order dated 17.10.2018 has been issued declaring no development/no construction zone within 100 mtr of the Ganga River on both sides from Bijnor to Kanpur.	A project has been initiated for the demarcation of Flood Plain Zone. This project is based on the coordinates outlined in the report from the study of Hydrological modelling and hydrodynamic transport phenomena of flood moment by IIT.	Ganga River & Kali River is rain-fed and has nil discharge during the dry season.	Bheem Gauda (Haridwar) -36 Bijnor - 24	• A notice under section 61-B of Indian Forest Act 1927 has been issued to the concerned person for removal of encroachment. The proper action is under process with the help of Forest Department, Police Department and District Administration, Hapur. • A Biodiversity Park has been sanctioned by Government of India via file No. Ad-34012/1/2022 NMCG-NMCG for Hapur forest Division. The park area is about 51 ha which is located at Alamgirpur Forest Block of Garhmukteshwar Range. The tenure for completion of Biodiversity Park is 5 year's from 2022 to 2026. The Environment, Forest and Climate Change Department, Government of Uttar Pradesh will be the implementing agency for the project. The construction of Park is under progress. • The Plantation/Afforestation of about 105 ha has been done along flood plains of Ganga River Stretch in last 3 years. The restoration of land will be done by construction of Biodiversity Park as per suggestion from experts Prof. C.R. Babu and Dr. Faiyaz A. Khudsar, of Yamuna Biodiversity Park, New Delhi.	03 Years

VI- Afforestation/ Plantation along the bank of River Ganga and its tributaries and their flood plain zones:

Area- cities/ towns	Total plantation	Proposed project	Time line
Garhmukteshwar	25 Hectare	Biodiversity Park	2022-23 to 2025-26

VII. Mining and Stone Crushing in river bed and flood plain zone of River Ganga and its tributaries:

Area of mining/Geo code/Sampling point	FIR/ case registered/ year-2023	Vehicles/ mineral seized	Action taken status	Cases pending in Court	Enforcement of EMGSM 2020 and Sustainable sand mining management guidelines 2016
Nil	**04**	**155**	**Penalty imposed Rs 46,03,700.00**	**Nil**	**-**

Compliance of Hon'ble NGT order

Dt 24.11.2023

O.A 200/2014 MC Mehta Vs UOI and Ors.

District Hapur.

2.1 Sewage Management:-

(i) District Hapur – Total Sewage Generation – 44.28 MLD

Sl No	Towns/ULB	Sewage Generation (MLD)
1.	NPP, Hapur	30.58
2.	NPP, Pilkhuwa,	07
3.	NPP, Garhmukteshwar	06
4.	NP, Babugarh	0.7

(ii) **Existing Sewage Treatment Capacities**

- 06 MLD Garhmukteshwar, Hapur.
- 03 MLD Brijghat, Hapur.
- 03 MLD Pilkhuwa, Hapur.
- 30 MLD Rampur Road, Hapur

Under Commissioning stage/Trial Run: -Nil

(iii) **Quantity of sewage being treated (Utilization Capacity)**

At present – 18.5 MLD out of total sewage of 44.28 MLD
Gap – 25.78 MLD (58.22 %)
Sewage Treatment After operation of all STPs on capacity – 42 MLD {GAP 4.7 MLD (Babugarh-0.7 MLD & Pilakhuwa-4 MLD)}

(iv) Performance of STPs particularly for FC.

STP	Technology	Operationnal Status	Capacity (operational)	Inlet/Outlet Water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point Geo code/ sampling point	Proposed/ under construction STP With completion date
06 MLD Garhmukteshwar, Hapur	UASB followed by Extended aeration.	Operational	06 MLD	BOD - 30 mg/l COD-250 mg/l TSS - 100 mg/l FC - 1000 mg/l	01 3.5 MLD	No Gap	Ganga River Lat-28.775889, Long-78.118952	No
03 MLD Brijghat, Hapur	UASB followed by Extended aeration.	Operational	02 MLD	BOD - 30 mg/l COD-250 mg/l TSS - 100 mg/l FC - 1000 mg/l	01 02 MLD	No Gap	Ganga River Lat-28.749625, Long-78.141193	No
03 MLD Pilkhuwa, Hapur	UASB followed by Extended aeration.	Operational	03 MLD	BOD - 30 mg/l COD-250 mg/l TSS - 100 mg/l FC - 1000 mg/l	01 07 MLD	4.7 MLD	Kali River Lat-28.706363, Long-77.664151	No
30 MLD Rampur Road, Hapur	SBR	Operational	10 MLD	BOD - 30 mg/l COD-250 mg/l TSS - 100 mg/l FC - 1000 mg/l	01 10 MLD	20.58 MLD	28.712825, 77.771041	Tapping of drains and sewer pipelines is under progress.

(v) Where treated sewage is being discharged (to Ganga or tributaries) : - Total sewage generated is being discharge to River Ganga/Kali(East).

(vi) Reasons for Under-utilization of STPs (Connectivity of Households/laying of sewer lines)

STP	Operational Status	STP capacity utilization	Reason for under utilization
06 MLD Garhmukteshwar, Hapur	Operational	3.5 MLD	Connectivity of House hold/Sewar connection.
03 MLD Brijghat, Hapur	Operational	100%	-
03 MLD Pilkhuwa, Hapur	Operational	100%	-
30 MLD Rampur Road, Hapur	Operational	33.33 %	Connectivity of House hold/Sewar connection.

(vii) Current gap in sewage treatment

- Total Sewage generation – 44.28 MLD
- Sewage treatment at present- 18.5 MLD
- Gap – 25.78 MLD (58.22 %)
- Sewage Treatment After operation of all STPs on capacity – 42 MLD {GAP 4.7 MLD (Babugarh-0.7 MLD & Pilakhuwa-4 MLD)}

(viii) Time bound plan for bridging the gap and tying up with financial arrangements and not delaying Tendering and identifying executing agencies or having any other issues:

Sewage Treatment After operation of all STPs on full capacity, only 4.7 MLD GAP left (Babugarh-0.7 MLD & Pilakhuwa-4 MLD). In this regards STPs of required capacity in Babugarh and Pilakhuwa shall be installed shortly.

(ix) Where untreated sewage (when there is no STP) is discharged (Ganga /Tributaries): Kali River (East)

2.2 Drains joining Ganga and Tributary: -

(i) **Number of drains carrying sewage- sullage or industrial waste water joining Ganga/ tributaries with their Quantity and Quality:**

Drain	Domestic/ Industrial/ Mixed	Flow	Quality Discharge Parameters
Kadrabad Drain, Hapur	Mixed	46 MLD	BOD- 44 COD -126 pH – 7.20 TSS - 87 DO - Nil
Chhuiya Drain NH-24 Babugarh, Hapur	Domestic	05 MLD	BOD- 33 COD -92 pH – 7.40 TSS - 100 DO - Nil
Garh Drain near Village Garh, Hapur	Domestic	03 MLD	BOD- 22 COD -48 pH – 7.50 TSS - 55 DO - Nil
Hapur Drain, Hapur	Mixed	27 MLD	BOD- 48 COD -149

			pH – 7.12 TSS - 152 DO - Nil
Hapur city Drain, Hapur	Domestic	05 MLD	BOD- 50 COD -137 pH – 7.16 TSS - 152 DO - Nil
Fuldera Drain near Syana Escape Police Chowki, Hapur	DRY		

(ii) <u>Drains joining outside city and town limits but, either joining in village or nearby town:</u> Chhuiya Drain coming from Meerut.

(iii) <u>Inclusion of sewage flowing in drains into total sewage generation figures of each city and town and their interception and diversion to STPs:</u>

STP	Total Sewage Generation	Treatment of sewage	GAP (in treatment)
Nagar Pallika Parishad, Hapur	30.58	10 MLD	20.58 MLD
Nagar Pallika Parishad, Pilkhuwa,	07	03 MLD	4.0 MLD
Nagar Pallika Parishad, Garhmukteshwar	06	3.5 MLD	0.5 MLD
Nagar Panchayat, Babugarh	0.7	0	0.7 MLD

2.3 Septage management (In case of no STP) : -

(i) Status of Septage management (with reference to FSTP/STP): 32 KLD FSTP installed in Nagar Pallika Parishad, Hapur.

(ii) Management of Grey water and its disposal: Through Septic tank/Sock pit.

2.4 Industrial Pollution Control:

(i) Attach the list on no. of industries generating trade effluents, their place of disposal and compliance including CETPs (town wise): Details of CETP: -01 CETP of Capacity 2.1 MLD is installed and Operated in Pilkhuwa Textile Center, Hapur. Status of Water Polluting Industries which are established/operated in the catchment area of River Ganga and Kali East:-

Sl no	Name of Industry	Address	Treatment facility installed (ETP and PETP/ZLD technology	Total discharge KLD	Recipient River	Complying /Not Complying
1.	BHARAT TEXTILE MILLS	P85, TEXTILE CENTRE, PILKHUWA, HAPUR, UTTAR PRADESH 245304, HAPUR,245304	PETP installed	16 KLD	East Kali River	Complying
2.	BHAGWATI TEXTILE	B 70 UPSIDC IND. AREA M.G ROAD PHASE 1MASURI, HAPUR	ETP installed	42 KLD	East Kali River	Complying
3.	M/s SIMBHAOLI SUGARS LTD BRIJNATHPUR DISTILLERY	UNIT- BRIJNATHPUR DISTILLERY, VILLAGE BRIJNATHPUR, TEHSIL-HAPUR, DISTT.-HAPUR	ETP installed	ZLD	ZLD	Complying
4.	SIMBHAOLI SUGAR LTD UNIT	BRIJNATHPUR Hapur,HAPUR,	ETP installed	600 KLD	On Land	Complying

	BRIJNATHPUR SUGAR					
5.	JINDAL PIPES LIMITED	JINDAL PIPES LIMITED, 22ND MILES DELHI HAPUR ROAD. P.O. JINDAL NAGAR, DISTRICT HAPUR,	ETP installed	120 KLD	East Kali River	Complying
6.	CTA APPARELS PVT LTD	PLOT NO. P 26 TO P 29, HPDA TEXTILE CENTER YOJNA, PILKHUWA,HAPUR.	PETP installed	220 KLD	East Kali River	Complying
7.	GAURI DRAYERS	P-35, TEXTILE CENTRE PILAKHUWA, HAPUR,	PETP installed	18.0 KLD	East Kali River	Complying
8.	KARTIKEY PROCESSORS	B-8, B-9, UPSIDC Indl Area, M.G.Road, Hapur	ETP installed	60.0 KLD	East Kali River	Complying
9.	S R FASHION	G-169, M.G. Road, Industrial Area, Hapur.	ETP installed	15.0 KLD	East Kali River	Complying
10.	RAC PAPERS LIMITED	KHASRA NO- 420, VILLAGE-BADNAULI MODINAGAR ROAD, HAPUR,	ETP installed	ZLD	East Kali River	Complying
11.	SUPERTEX AND PRINTS CORPORATION	KHASRA NO. 586, PRATAPUR, PILAKHUA, TEHSIL-DHOLANA, HAPUR,	ETP installed	200 KLD	East Kali River	Complying
12.	RAYBAN FOODS PRIVATE LIMITED	Khasara No. 925, 926, 926/1,1083, 1084/2, 1085, 1086, 1159, 1159/2, 1160/1, Rampur Marg, Bulandshahar Road, Hapur 245101,	ETP installed	515 KLD (Total treated effluent will be used in boiler, cooling tower,	On Land	Not Complying

				floor washing, road side sprinkling & kernel technology)		
13.	YES TEX	Khasra No.-244, Front of Choupala Restaurant Behind of Petrol Pumb, NH-24, Delhi Hapur Road, Pilkhuwa, Hapur.	ETP installed	16 KLD	East Kali River	Complying
14.	G S DASS APPARELS PVT LTD	P-41, 42, 43, Textile Center Pilahuwa, Hapur,	PETP installed	22.0 KLD	East Kali River	Complying
15.	SHUBHANANDA TEXTILE MILLS PVT LTD	5/37,5/38, M.G. ROAD UPSIDC industrial area Phase -3, HAPUR,	ETP installed	30 KLD	East Kali River	Complying
16.	SIMBHAOLI SUGARS LTD UNIT SIMBHAOLI SUGAR SIMBHAOLI	SIMBHOALI HAPUR,,	ETP installed	ZLD	ZLD	Complying
17.	SIMBHAOLI SUGARS LTD UNIT SIMBHAOLI DISTILLERY SIMBHAOLI	Village SIMBHAOLI, Hapur,	ETP installed	ZLD	ZLD	Complying
18.	DAIRY CRAFT INDIA PVT LTD	Vill - Bahadurgarh, Tehsil-Gadhmukteshwar, Hapur.	ETP installed	45.0 KLD	East Kali River	Complying

19.	MOTHER DAIRY FRUIT AND VEGITABLE PVT LTD PILKHUWA	mother dairy fruit and vegetable pvt. ltd, 18 KM stone, Ghaziabad-Hapur Road, Pilkhuwa, Hapur (U.P.0-245304,HAPUR,245304	ETP installed	1160 KLD	East Kali River	Complying
20.	Moon Beverages Ltd Old Name HINDUSTAN COCA COLA BEVERAGES PVT LTD	5th Km Milestone Masuri-Gulawati Road Industrial area Tehsil Dhaulana Distt Hapur,HAPUR,201015	ETP installed	1900KLD	-	Complying
21.	RIYA PROCESSORS	PLOT NO. P-57, TEXTILE CENTRE, PILKHUWA, DISTT. HAPUR (U.P.)	PETP installed	9.0 KLD	East Kali River	Complying
22.	TIRUPATI DYEING AND PRINTING MILLS	G-581 TO 588, UPSIDC, INDUSTRIAL AREA, M.G. ROAD HAPUR,HAPUR,245101	PETP installed	35 KLD	East Kali River	Complying
23.	RKB TOWEL MANUFACTURING COMPANY LIMITED	VILLAGE- PARSAUN, NEAR 34TH KM STONE, NH-9, POST- JINDAL NAGAR, DISTRICT-HAPUR,HAPUR,201313	ETP installed	400 KLD	East Kali River	Complying
24.	BIVO GARMENTS	P-89, TEXTILE CENTRE YOJNA PILKHUA, HAPUR INDUSTRIAL AREA,HAPUR,245101	PETP installed	27.0 KLD	East Kali River	Complying
25.	GIRDHAR PROCESSOR	G-111, PHASE-1, M.G. ROAD INDUSTRIAL AREA, HAPUR.,HAPUR,245101	ETP installed	28 KLD	East Kali River	Complying
26.	VED CELLULOSE LTD	Khasara No- 231-232, Village - Lakhan , Hapur Road , NH-24 , Hapur,HAPUR,245101	ETP installed	ZLD	ZLD	Complying

27.	GOPALJEE DAIRY FOODS PVT LTD PILKHUWA	GOPALJEE DAIRY FOODS PVT. LTD. KHERPUR KHERABAD, PILKHUWA, HAPUR,UTTARPRADESH,HAPUR,245304	ETP installed	900 KLD(in which 500KLD is Recycled)	East Kali River	Complying
28.	M/s RRC REDROZE THREAD PVT LTD	P-17-18-19, Textile Centre, Pilakhua, Hapur,GHAZIABAD	PETP installed	6 KLD	East Kali River	Complying
29.	M/s GULMOHUR TEXTILE	P-105, Textile Centre, Pilukhua, Hapur	PETP installed	19.0 KLD	East Kali River	Complying
30.	M/s M A TRADERS BROS	P-51, P- 52 TEXTILE CENTER, PILKHUWA, TEHSIL DHAULANA, DISTT. HAPUR	PETP installed	36.0 KLD	East Kali River	Complying
31.	M/s SARASWATI THREAD MILLS	P - 55, TEXTILE CENTRE, PILAKHUWA, HAPUR	PETP installed	43.0 KLD	East Kali River	Complying
32.	M/s M A TRADERS BROS	P-46, Industrial Area, Textile Centre, Pilakhuwa, Distt-Hapur	PETP installed	20.0 KLD	East Kali River	Complying
33.	M/s PRATEAK MITTAL	W-32, TEXTILE CENTER PILAKHWA HAPUR	PETP installed	20.0 KLD	East Kali River	Not Complying
34.	M/s R R KNITFAB	P 66, Textile Center, Pillakhuwa, Hapur,	PETP installed	32.0 KLD	East Kali River	Complying
35.	M/s SS Creation	W-26, Textile Center, Pilkhuwa, HAPUR	PETP installed	18.0 KLD	East Kali River	Complying
36.	M/s PILKHUWA WATER PROOFING CO PVT LTD	PO Jindal Nagar Vill Parson, hapur	PETP installed	4.5 KLD	East Kali River	Complying

3 Water quality status: -

River/Tributary	Sampling Point	DO	BOD	FS	FC
Ganga	Down Stream	12.10	1.60	280	130
	Up Stream	11.80	1.70	350	170
Kali (East)	NH-24 (Up Stream)	0.0	45.0	3200000	2200000
	Jhandamusarafpur (Down Stream)	0.0	44.0	2600000	1700000

4- **Notification of Flood Plain Zones:** A notice under section 61-B of Indian Forest Act 1927 has been issued to the concerned person for removal of encroachment. The proper action is under process with the help of Forest Department, Police Department and District Administration, Hapur.

5- Issues relating to Environmental Flow: 30289

<table>
<tr><td>a) Notification of Ecological flow</td><td>Notification issued by Government of India dated 09.10.2018 for ecological flow of Ganga River maintain as below:-
<table>
<tr><th>Sl. No.</th><th>Location of Barrage</th><th>Minium flow downstream near the barrage (In Cumec) (Oct. to May)</th><th>Minimum flow releasing downstream near the barrage (In Cumec) (June to Sept.)</th></tr>
<tr><td>1</td><td>Bheem Gauda (Haridwar)</td><td>36</td><td>57</td></tr>
<tr><td>2</td><td>Bijnor</td><td>24</td><td>48</td></tr>
</table>
B – In the Compliance of E-flow notification by Northern Division Ganga Canal (NDGC) Roorkee at Bheem Goda Barrage Haridwar U.K. in daily Gauge register.</td></tr>
<tr><td>(b) Steps taken for maintaining Ecological flow/ status of compliance of the E-flow notifications</td><td>36 Cumec water release from Bheem Goda Barrage Haridwar U.K.
24 Cumec water release from Madya Ganga Barrage Bijnor U.P.</td></tr>
</table>

Disclaimers:

The final report is compiled by District Ganga Committee, Hapur. All the necessary information provided by the concerned Departments are given in the prescribed format.

(Vikas Mishra)
Regional Officer,
U.P. Pollution Control Board,
Ghaziabad.

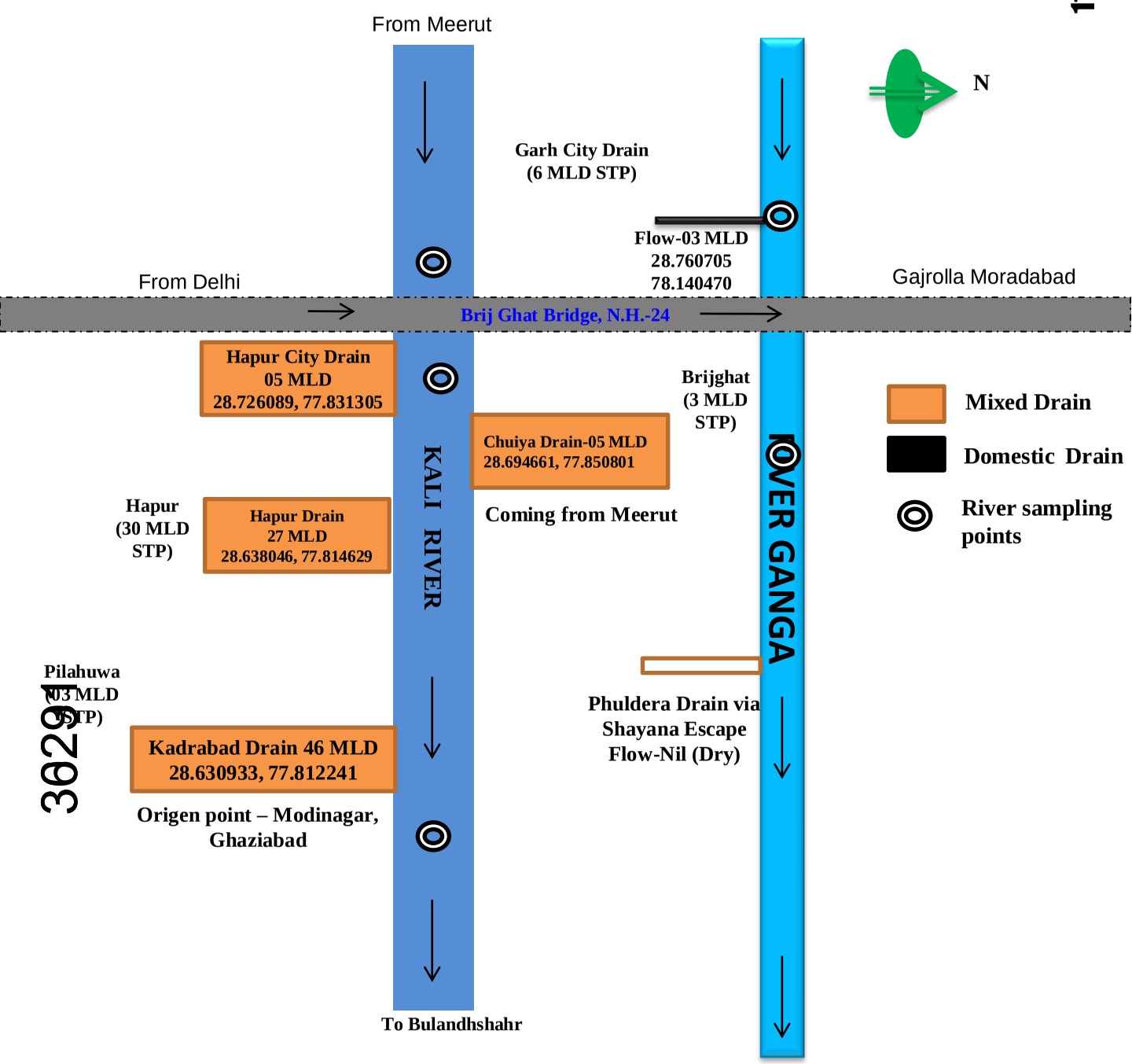
(Sanjay Kumar Mall)
District Forest Officer
Hapur.

(Prerna Sharma)
District Magistrate
Hapur.

Best practices

1. Best practices adopted for Prevention and Control of Water Pollution:
    a. For 24x7 surveillance of continuous operation of Effluent Treatment Plants in major water polluting industries CCTV Cammeras and OCEMS, whose servers are linked to the Central Pollution Control Room and Uttar Pradesh Pollution çontrol Room.
    b. Both Pulp & Paper are operating on the Zero Liquid Discharge method.
    c. At present, both distillery units in Hapur are operating the Zero liquid discharge method.
    d. All sugar industries have achieved 100% utilization of treated water in Recycling in process/For use in Irrigation on agricultural land.

Schematic Flow Diagram of East Kali & Ganga, River, Hapur.



30291

Submitted in Compliance of

HON'BLE NATIONAL GREEN TRIBUNAL

Order Date 24 January 2024

&

Submitted by

DISTRICT GANGA COMMITTEE

BIJNOR (UTTAR PRADESH)

Drain (city/town/	Total flow of drain per day	PH	BOD (mg/l)	COD (mg/l)	TSS (mg/l)	TDS (mg/l)	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride etc)	DO (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Outlet flow (geo coordinates)	Colour/ odour (hazen)	Discharged Into
Nasiya /Nohra drain, Near Village-Fajalabad, Tehsil Kanth, Dist-Moradabad	6.66 MLD	8.0	2.2	48	64	230	Fe-3.31, pb-ND, T.Cr-5.64, Ni-ND, Cu-1.5	6.8	940	700	29.104311, 78.647959	30	River Ramganga
Ekra Nala, Dhampur, Bijnor	7.16 MLD	7.10	80	248	136	322	Fe-4.51, pb-ND, T.Cr-3.41, Ni-ND, Cu-1.4	0	790	460	29.277271, 78.499702	Slightly grey	Karula/ Gagan River
Drain (city/town/	Total flow of drain per day	PH	BOD (mg/l)	COD (mg/l)	TSS (mg/l)	TDS (mg/l)	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride etc)	DO (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Outlet flow (geo coordinates)	Colour/ odour (hazen)	Discharged Into

NearTella Temple Mohalla.Santomallan Najibabad, District-Bijnor.	0.532 MLD	7.3	80	360	112	516	Fe-3.31, pb-ND, T.Cr-2.58, Ni-ND, Cu-2.0	0	1100	700	29.017827, 78.336452	greyish	Malan River
Near Ramleela Ground Moh. Pahadibagh Najibabad, District-Bijnor. (Bar mesh installed at outlet of Drain)	2.774 MLD	7.12	90	376	120	580	Fe-0.84, pb-ND, T.Cr-2.23, Ni-ND, Cu-0.95	0	1300	700	29.618879, 78.337866	greyish	Malan River
Drain (city/town/	Total flow of drain per day	PH	BOD (mg/l)	COD (mg/l)	TSS (mg/l)	TDS (mg/l)	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride etc)	DO (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Outlet flow (geo coordinates)	Colour/ odour (hazen)	Discharged Into
Abbu colony Drain near Abbu Colony Rampura,	0.96 MLD	7.2	70	352	108	482	Fe-4.0, pb-ND, T.Cr-2.11, Ni-ND, Cu-1.8	0	940	490	29.616295, 78.334100	greyish	Malan River

Najibabad, District-Bijnor.													
H.M.H Hospital Drain moh.-Rampura drain, Najibabad, District-Bijnor.	0.257 MLD	7.48	90	368	116	536	Fe-4.51, pb-ND, T.Cr-2.23, Ni-ND, Cu-1.6	0	1100	700	29.6168503, 78.3318590	greyish	Malan River

I. Sewage

II STP

Existing STP (location & capacity)	**Capacity (operational)**	**Inlet/ Outlet water quality & quantity**	**Number of tapped drains (quantity of discharge)**	**GAP (in treatment)**	**Final discharge point**	**Proposed/ under construction STP With completion date**
24 MLD STP, Village-khedki, Hemraj colony, Bijnor	Approx. 22 MLD	BOD -10 mg/l COD-40 mg/l TSS-25 TC-1100 mpn/100 ml FC-110 mpn/100 ml	17 tapped drains with in city (22 MLD)	0	Agriculture land/ Hemraj drain/ River Ganga	Proposed STP's Details Below

S.No.	**Name Of ULB**	**Proposed STP(MLD)**
1.	Haldaur	**1.90**

2.	Dhampur	**5.0**
3.	Sherkot	**6.5**
4.	Shehora	**5.0**
5.	Afjalgarh	**2.90**
6.	Nehtaur	**4.70**
7.	Nagina	**10.0**
8.	Najibabad	**9.0**
9.	Kiratpur	**6.5**
10.	Chandpur	**8.5**
11.	Noorpur	**4.50**
12.	Jhalu	**2.0**
13.	Mandawar	**2.0**
14.	Badhapur	**2.40**
15.	Sahaspur	**2.50**
16.	Jalalabad	**2.0**
17.	Sahanpur	**2.50**

III. HOTELS/ ASHRAMS

S.no.	Name of Hotels/ Ashrams /dharmshalas	Consent to establish/operate	STP	Discharge point Geocode/sampling point	Action taken
1	M/s Vyanjan Vatika, Bairaj Road, Bijnor.	NO	Not Installed	Through Septic tank or Soakpits	Notice sent
2	M/s Waliya Residency Pvt. Ltd. Kotwali road, Najibabad, Bijnor.	NO	Not Installed	Through Septic tank or Soakpits	Notice sent
3	M/s Sathi Lunch, Near Samrat Cinema hal, Najibabad, Bijnor.	NO	Not Installed	Through Septic tank or Soakpits	Notice sent
4	M/s Hotel Indralok, Near Gas Agency, Najibabad, Bijnor.	NO	Not Installed	Through Septic tank or Soakpits	Notice sent
5	M/s Invitation Hall, Near Malan Nadi, Najibabad, Bijnor.	NO	Not Installed	Through Septic tank or Soakpits	Notice sent
6	M/s Eurasia Palace Hotels & Banquets Pvt. Ltd., Eurasia Palace, Nagina Chowk, Dhampur, Bijnor	NO	Not Installed	Through Septic tank or Soakpits	Notice sent
7	M/s Shiv Vatika, Near Ranibag Choki, Dhampur, Bijnor.	NO	Not Installed	Through Septic tank or Soakpits	Notice sent
8	M/s Panchwati, Jalilpur road, Chandpur, Bijnor.	NO	Not Installed	Through Septic tank or Soakpits	Notice sent
9	M/s Paras Hotel, Chandpur, Bijnor.	NO	Not Installed	Through Septic tank or Soakpits	Notice sent
10	M/s Natraj Hotel, Chandpur, Bijnor.	NO	Not Installed	Through Septic tank or Soakpits	Notice sent
11	M/s Rajputana Hotel, kalagarh road, Dhampur, Bijnor.	NO	Not Installed	Through Septic tank or Soakpits	Notice sent
12	M/s Pearl Residency, Dhampur, Bijnor.	NO	Not Installed	Through Septic tank or Soakpits	Notice sent
13	M/s Royal Castle, Chhakkar road, Bijnor.	NO	Not Installed	Through Septic tank or Soakpits	Notice sent
14	M/s Rohit Hotel, Civil line, Bijnor	NO	Not Installed	Through Septic tank or Soakpits	Notice sent
15	M/s Aishwarya Hotel, Shakti chowk, Bijnor.	NO	Not Installed	Through Septic tank or Soakpits	Notice sent

16	M/s Khana Hotel, Bairaj road, Bijnor.	NO	Not Installed	Through Septic tank or Soakpits	Notice sent
17	M/s Hotel Ganga, Near guest House, civil line-II, Bijnor.	NO	Not Installed	Through Septic tank or Soakpits	Notice sent
18	M/s Hotel Rajat Residency, Station road, Bijnor.	NO	Not Installed	Through Septic tank or Soakpits	Notice sent

IV. Industrial Effluent discharge

S.No.	Total number of Industries	Daily effluent discharge	Treatment available (cetp/ petp/ etp operational capacity)	Effluent quality analysis (outlet of treatment plants Geo code sampling point)	GAP	Proposed/ under construction treatment project (with timeline)	Number of defaulting units- Action taken	Industrial solid waste generated/ day	Manner of disposal (Industrial solid waste)
1	Bajaj Hindustan sugar ltd., Bilai, bijnor	1500	ETP operational	As per Norms	Adequate Capacity ETP installed	Nil	-	Haz. Waste generated as per the authorization granted by uppcb	For the scientific disposal of Haz. Waste agreement with TSDF being made
2	Dhampur Sugar Mills Ltd.Dhampur Distt. Bijnor (U.P.)	2800	ETP operational	As per Norms	Adequate Capacity ETP installed	Nil	-	Haz. Waste generated as per the authorization granted by uppcb	For the scientific disposal of Haz. Waste agreement with TSDF being made
3	Dwarikesh Sugar Industries Ltd. Sugar	1300	ETP operational	As per Norms	Adequate Capacity ETP installed	Nil	-	Haz. Waste generated as per the authorization	For the scientific disposal of Haz. Waste

	Unit, Dwarikesh Nagar, Bundki, Distt. Bijnor							granted by uppcb	agreement with TSDF being made
4	Dwarikesh Sugar Industries Ltd. Dwarikesh Puram Afzalgarh, DistrictBijnor	1500	ETP operational	As per Norms	Adequate Capacity ETP installed	Nil	-	Haz. Waste generated as per the authorization granted by uppcb	For the scientific disposal of Haz. Waste agreement with TSDF being made
5	The Kisan Sahkari Chini Mills Ltd., Sneh Road, Najibabad, Distt. Bijnor	600	ETP operational	As per Norms	Adequate Capacity ETP installed	Nil	-	Haz. Waste generated as per the authorization granted by uppcb	For the scientific disposal of Haz. Waste agreement with TSDF being made
6	Wave Industries Pvt. Ltd. VillageRasidpur Gari, UnitBijnor.	600	ETP operational	As per Norms	Adequate Capacity ETP installed	Nil	-	Haz. Waste generated as per the authorization granted by uppcb	For the scientific disposal of Haz. Waste agreement with TSDF being made
7	P.B.S Foods, (Sugar) Pvt. Ltd, Chandpur, Distt. Bijnor.	900	ETP operational	As per Norms	Adequate Capacity ETP installed	Nil	-	Haz. Waste generated as per the authorization granted by uppcb	For the scientific disposal of Haz. Waste agreement with TSDF being made
8	Avadh Sugar & Energy Ltd, Sugar Unit,	2600	ETP operational	As per Norms	Adequate Capacity	Nil	-	Haz. Waste generated as per the	For the scientific disposal of

	Seohara, Distt. Bijnor				ETP installed			authorization granted by uppcb	Haz. Waste agreement with TSDF being made
9	Uttam Sugar Mills ltd., unit - Barkatpur, Tehsil - Najibabad, Dist. Bijnor	1700	ETP operational	As per Norms	Adequate Capacity ETP installed	Nil	-	Haz. Waste generated as per the authorization granted by uppcb	For the scientific disposal of Haz. Waste agreement with TSDF being made
10	The Kisan Sahkari Chini Mills Ltd, (Distillery Unit), VillJasvantpur, Sneh Road, Najibabad, Distt. Bijnor	ZLD	ETP operational	As per Norms	Adequate Capacity ETP installed	Nil	-	Haz. Waste generated as per the authorization granted by uppcb	For the scientific disposal of Haz. Waste agreement with TSDF being made
11	Dhampur Sugar Mills Ltd. (Unit distillery), Dhampur Distt. Bijnor (U.P.)	ZLD	ETP operational	As per Norms	Adequate Capacity ETP installed	Nil	-	Haz. Waste generated as per the authorization granted by uppcb	For the scientific disposal of Haz. Waste agreement with TSDF being made
12	Dwarikesh Sugar Industries Ltd, (Distillery Unit), UnitDwarikesh Nagar P.OBundki,	ZLD	ETP operational	As per Norms	Adequate Capacity ETP installed	Nil	-	Haz. Waste generated as per the authorization granted by uppcb	For the scientific disposal of Haz. Waste agreement with TSDF being made

	TehsilNagina, DisttBijnor								
13	Jain Distillery, 8th Km, Stone, Nagina road, Bijnor	ZLD	ETP operational	As per Norms	Adequate Capacity ETP installed	Nil	-	Haz. Waste generated as per the authorization granted by uppcb	For the scientific disposal of Haz. Waste agreement with TSDF being made
14	Mohit Petro Chemicals Pvt. Ltd, 9th Km. stone, Nagina road, Bijnor	ZLD	ETP operational	As per Norms	Adequate Capacity ETP installed	Nil	-	Haz. Waste generated as per the authorization granted by uppcb	For the scientific disposal of Haz. Waste agreement with TSDF being made
15	Uttam Sugar Mills Ltd ,(Distillery Unit), Vill. Barkatpur, Najibabad, Distt.- Bijnor	ZLD	ETP operational	As per Norms	Adequate Capacity ETP installed	Nil	-	Haz. Waste generated as per the authorization granted by uppcb	For the scientific disposal of Haz. Waste agreement with TSDF being made
16	Avadh Sugar & Energy Ltd, Distillery Unit, Seohara, Distt. Bijnor	ZLD	ETP operational	As per Norms	Adequate Capacity ETP installed	Nil	-	Haz. Waste generated as per the authorization granted by uppcb	For the scientific disposal of Haz. Waste agreement with TSDF being made
17	Chandpur Enterprises Ltd. (Paper Division), Noorpur Road,	800	ETP operational	As per Norms	Adequate Capacity ETP installed	Nil	-	Haz. Waste generated as per the authorization granted by uppcb	For the scientific disposal of Haz. Waste agreement with TSDF being made

	Chandpur, Bijnor.								
18	Mohit Paper Mills Pvt ltd. Nagina Road, Bijnor.	3056	ETP operational	As per Norms	Adequate Capacity ETP installed	Nil	-	Haz. Waste generated as per the authorization granted by uppcb	For the scientific disposal of Haz. Waste agreement with TSDF being made
19	Rama paper Mills Ltd, Kiratpur, Bijnor	2040	ETP operational	As per Norms	Adequate Capacity ETP installed	Nil	-	Haz. Waste generated as per the authorization granted by uppcb	For the scientific disposal of Haz. Waste agreement with TSDF being made
20	Shree Badri Kedar papers Pvt. LTD. Najibabad, Bijnor	-	-	-	-	-	-	-	Self Closed since 2019
21	Omar International Village Yakubpur, Sahaspur, Dhampur, Bijnor.	-	-	-	-	-	-	-	Closed since 2018

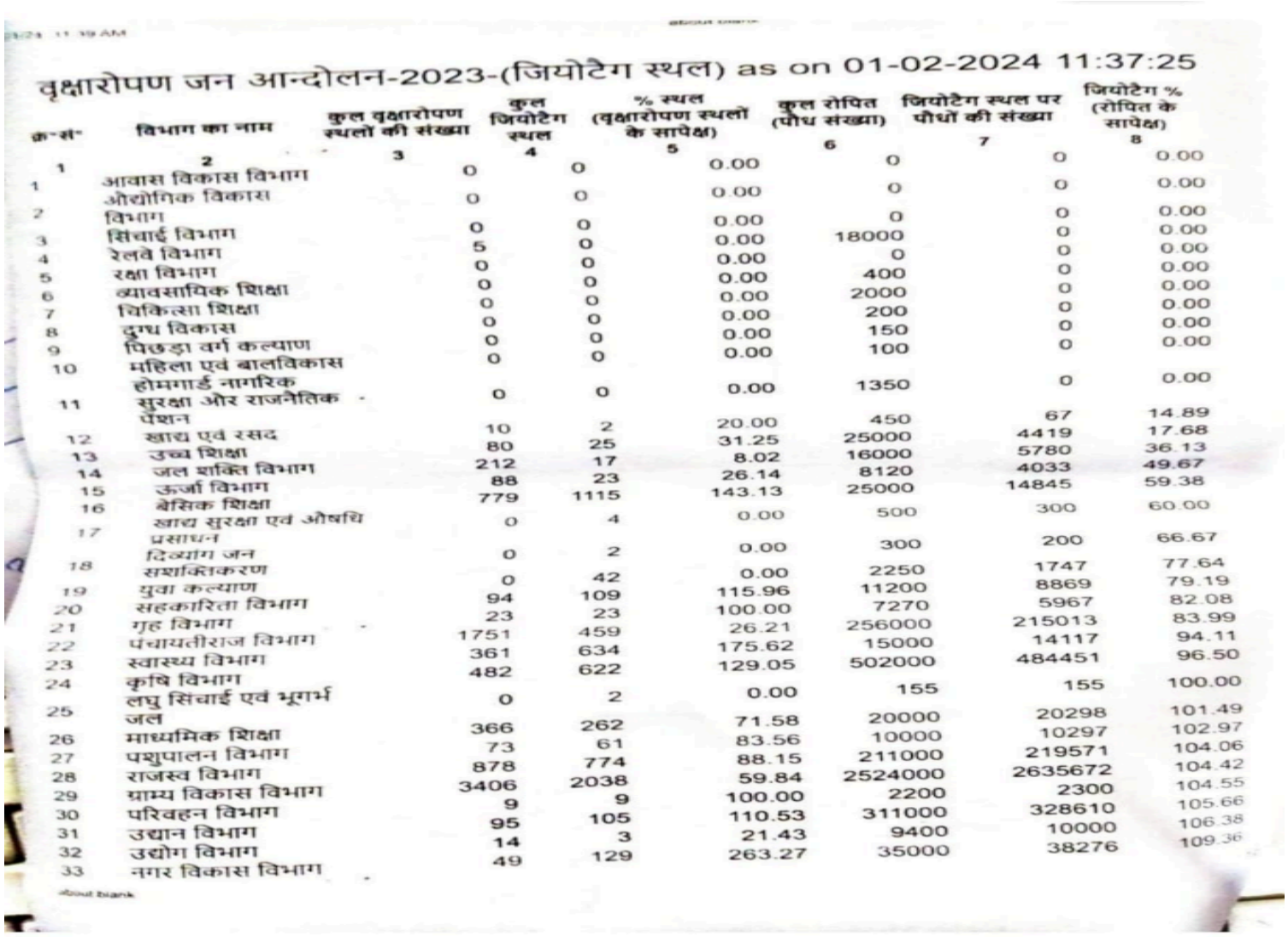
V. Regulation of Flood Plain Zone:

Area- cities/ towns	Notification of flood plain zone	Demarcation		Encroachment & direct discharge Geo Code/Sampling point	Encroachment removal status	Timeline for completion
	164/2020/2031//20-27-fl 0&4&07	No development zone pillars	Regulatory zone pillars			
Bijnor left bank of Ganga River		487	519		Not Pertain	N.A

VII.AFFORESTATION/ PLANTATION

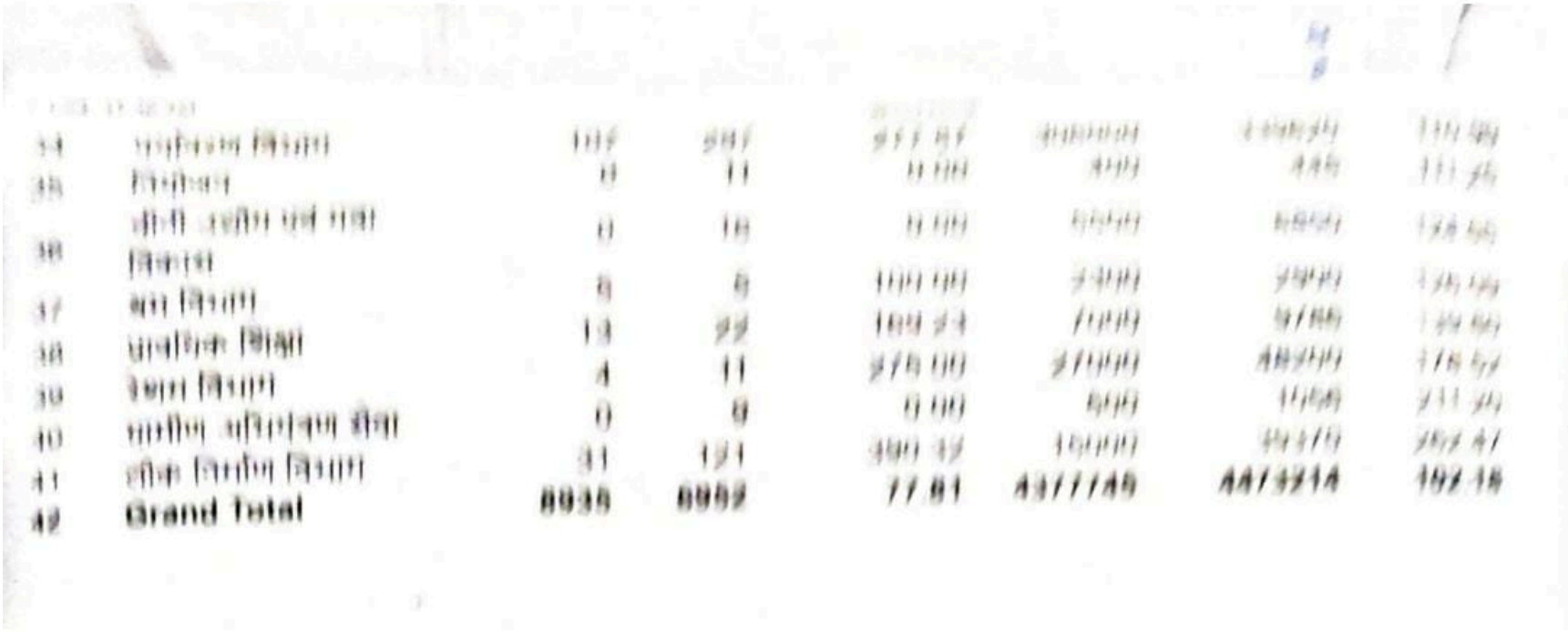
Total plantation (No. of plants planted)	**Year**
6593969	2022-23
7549845	2023-24
6827326	2024-25 {Proposed in current year}

Geo tagged Locations attached



वृक्षारोपण जन आन्दोलन-2023-(जियोटेग स्थल) as on 01-02-2024 11:37:25

क्र-सं-	विभाग का नाम	कुल वृक्षारोपण स्थलों की संख्या	कुल जियोटेग स्थल	% स्थल (वृक्षारोपण स्थलों के सापेक्ष)	कुल रोपित (पौध संख्या)	जियोटेग स्थल पर पौधों की संख्या	जियोटेग % (रोपित के सापेक्ष)
1	2	3	4	5	6	7	8
1	आवास विकास विभाग	0	0	0.00	0	0	0.00
2	औद्योगिक विकास विभाग	0	0	0.00	0	0	0.00
3	सिंचाई विभाग	0	0	0.00	0	0	0.00
4	रेलवे विभाग	5	0	0.00	18000	0	0.00
5	रक्षा विभाग	0	0	0.00	0	0	0.00
6	व्यावसायिक शिक्षा	0	0	0.00	400	0	0.00
7	चिकित्सा शिक्षा	0	0	0.00	2000	0	0.00
8	दुग्ध विकास	0	0	0.00	200	0	0.00
9	पिछड़ा वर्ग कल्याण	0	0	0.00	150	0	0.00
10	महिला एवं बालविकास	0	0	0.00	100	0	0.00
11	होमगार्ड नागरिक सुरक्षा और राजनैतिक पेंशन	0	0	0.00	1350	0	0.00
12	खाद्य एवं रसद	10	2	20.00	450	67	14.89
13	उच्च शिक्षा	80	25	31.25	25000	4419	17.68
14	जल शक्ति विभाग	212	17	8.02	16000	5780	36.13
15	ऊर्जा विभाग	88	23	26.14	8120	4033	49.67
16	बेसिक शिक्षा	779	1115	143.13	25000	14845	59.38
17	खाद्य सुरक्षा एवं औषधि प्रसाधन	0	4	0.00	500	300	60.00
18	दिव्यांग जन सशक्तिकरण	0	2	0.00	300	200	66.67
19	युवा कल्याण	0	42	0.00	2250	1747	77.64
20	सहकारिता विभाग	94	109	115.96	11200	8869	79.19
21	गृह विभाग	23	23	100.00	7270	5967	82.08
22	पंचायतीराज विभाग	1751	459	26.21	256000	215013	83.99
23	स्वास्थ्य विभाग	361	634	175.62	15000	14117	94.11
24	कृषि विभाग	482	622	129.05	502000	484451	96.50
25	लघु सिंचाई एवं भूगर्भ जल	0	2	0.00	155	155	100.00
26	माध्यमिक शिक्षा	366	262	71.58	20000	20298	101.49
27	पशुपालन विभाग	73	61	83.56	10000	10297	102.97
28	राजस्व विभाग	878	774	88.15	211000	219571	104.06
29	ग्राम्य विकास विभाग	3406	2038	59.84	2524000	2635672	104.42
30	परिवहन विभाग	9	9	100.00	2200	2300	104.55
31	उद्यान विभाग	95	105	110.53	311000	328610	105.66
32	उद्योग विभाग	14	3	21.43	9400	10000	106.38
33	नगर विकास विभाग	49	129	263.27	35000	38276	109.36



IX. Mining:

a.

Area of mining	FIR/ case registered/ year	Vehicles/ mineral seized	Action taken status	Cases pending in Court	Enforcement of EMGSM 2020 and Sustainable sand mining management guidelines 2016
No Sand Mining in Bijnor					

Compliance of Hon'ble NGT order Dt 24-01-2024 In O.A. 200/2014 MC Mehta Vs UOI and Ors

District Bijnor

Sewage management

(i) District Bijnor- Total Sewage generation- 110.34 MLD

S. No.	Name of ULB	Sewage Generation (MLD)
1.	Bijnor	22
2.	Haldaur	2.77
3.	Dhampur	6.77
4.	Sherkot	7.85
5.	Shehora	6.66
6.	Afjalgarh	3.94
7.	Nehtaur	6.25
8.	Nagina	12.91
9.	Najibabad	12.16
10.	Kiratpur	6.94
11.	Chandpur	4.93
12.	Noorpur	4.89

13.	Jhalu	2.27
14.	Mandawar	1.47
15.	Badhapur	2.45
16.	Sahaspur	2.97
17.	Jalalabad	2.78
18.	Sahanpur	0.33

(ii) Existing Sewage Treatment Capacities

24 MLD STP, Village Khedki, Bijnor

Proposed STP's

S.No.	Name Of ULB	Proposed STP(MLD)
1.	Haldaur	1.90
2.	Dhampur	5.0
3.	Sherkot	6.5
4.	Shehora	5.0
5.	Afjalgarh	2.90
6.	Nehtaur	4.70
7.	Nagina	10.0
8.	Najibabad	9.0
9.	Kiratpur	6.5

10.	Chandpur	8.5
11.	Noorpur	4.50
12.	Jhalu	2.0
13.	Mandawar	2.0
14.	Badhapur	2.40
15.	Sahaspur	2.50
16.	Jalalabad	2.0
17.	Sahanpur	2.50

(iii) Quantity of Sewage being treated (Utilization capacity)

At present 24 MLD STP is functional at rate of 22 MLD
Gap (Untreated Sewage at present)- 86.34 MLD

(iv) Performance Of STP particularly for FC

STP	Tecnology	Operational Status	Capacity (Operational)	Inlet/Outlet water quality & quantity	Number of tapped drains(quantity of discharge)	GAP (in treatment)	Final discharge point Geo code/sampling point	Proposed under constrution STP with completion date

24 MLD, Village Khedki Hemraj, Bijnor	UASB	Operational	22 MLD	BOD-250/30 mg/l TSS-500/50 mg/l FC-1000MPN/100 ml	17	0	29.376681 78.084267	Proposed STP's are as below

Proposed STP's

S.No.	Name Of ULB	Proposed STP(MLD)
1.	Haldaur	1.90
2.	Dhampur	5.0
3.	Sherkot	6.5
4.	Shehora	5.0
5.	Afjalgarh	2.90
6.	Nehtaur	4.70
7.	Nagina	10.0
8.	Najibabad	9.0

9.	Kiratpur	6.5
10.	Chandpur	8.5
11.	Noorpur	4.50
12.	Jhalu	2.0
13.	Mandawar	2.0
14.	Badhapur	2.40
15.	Sahaspur	2.50
16.	Jalalabad	2.0
17.	Sahanpur	2.50

(v) Where treated sewage is being discharged(To ganga or tributaries)-

Total sewage generated is being discharged to river Ganga, River Malan, River Ramganga and River Gagan

(vi) Reasons for under utilization of STP's (Connectivity of Households/laying of sewer lines)

STP	Operational Status	STP capacity utilization	Reason for under utilization
24 MLD, Village Khedki Hemraj, Bijnor	Oprerational	90%	_

(vii) Current Gap in sewage treatment

Total Sewage Generation- 110.34 MLD
Sewage treatment at present- 24 MLD
Gap- 86.34 MLD

STP	Tecnology	Operational Status	Capacity (Operational)	Inlet/Outlet water quality & quantity	Number of tapped drains(quantity of discharge)	GAP (in treatment)	Final discharge point Geo code/sampling point	Proposed under constrution STP with completion date
24 MLD, Village Khedki Hemraj, Bijnor	UASB	Operational	22 MLD	BOD-250/30 mg/l TSS-500/50 mg/l FC-1000MPN/100 ml	17	0	29.376681 78.084267	Proposed STP's are as below

(viii) Time Bound for bridging the gap and tying up with financial arrangement and not delaying tendering and identifying executing agencies or having any other issues

17 proposed STP's at 17 ULB's are yet to be installed.

(ix) Where untreated sewage(when there is no STP) is discharged(Ganga/Tributaries)

With the installation of 17 proposed STP. There shall be no gap in the treatment of sewage.

2.2 Drains Joining Ganga And Tributary

(i) number of drains carring sewage-sullage or industrial waste joining Ganga/tributaries with their quantity and quality.

S.No.	Drain	Domestic/Industrial/Mixed	Flow(MLD)	Quality Discharge Parameters
1	Hemraj Drain Bijnor	Domestic	22 MLD	pH=7.84 BOD=2.4 COD=64 TSS=58 TDS=224
2	Nasiya/Nohra drain , seohara dhampur	Domestic	6.66 MLD	pH=8.0 BOD=2.2 COD=48

				TSS=64 TDS=230
3	Ekra nalla, Dhampur	Domestic	7.16 MLD	pH=7.10 BOD=80 COD=248 TSS=136 TDS=322
4	Near Tella Temple ,najibabad	Domestic	0.5 MLD	pH=7.3 BOD=80 COD=360 TSS=112 TDS=516
5	Ramleela ground, najibabad	Domestic	2.77 MLD	pH=7.12 BOD=90 COD=376 TSS=120 TDS=580
6	Abbu colony, najibabad	Domestic	0.9 MLD	pH=7.2 BOD=70 COD=352 TSS=108 TDS=482
7	Near H.M.H. Hospital Drain, Najibabad	Domestic	0.25 MLD	pH=7.48 BOD=90 COD=368 TSS=116

				TDS=536
8	Chhoiyan Drain, Bijnor	Mixed	3 MLD	pH=7.9 BOD=4.0 COD=80 TSS=69 TDS=317

(ii) Drains Joining outside city and town limits but, either joining in village or nearby town

As per the Above Table

(iii) Inclusion of sewage flowing in drains into total sewage generation figures of each city and town and their interception and diversion to STP's

Already One 24 MLD STP in Bijnor city is operational . The Proposed 17 STP's as various ULB's . After installation of 17 STP's there will be no gap in Sewage management.

2.3 Septage Management(in case of no STP)

(i) Status of Status management (with reference to FSTP/STP)

Tiil date no proposal in effect.

Water Quality Status

S.NO		
1.	Provide water quality status of Ganga and its tributaries in the District and city/ town in terms of its fitness for Bathing water quality that is, FC and FS:	As below

River/Tributaries	DO (mg/l)	BOD (mg/l)	TC MPN/100 ml	FC MPN/100 ml
Gagan	8.70	1.5	1300	700
Ganga	9.20	1	1400	470
Malan	8.80	1.2	1300	470
Ramganga	8.7	1.3	1300	490

Fit For Outdoor Bathing

Notification of Flood Plain Zones

164/2020/2031/20-27-सि0-4-07(एन0जी0टी0)/16 टी0सी0 दि0 04.09.2020 U.P. Govt.

Issues Relating to Environmental Flow

7537 क्यूसैक

01/02/2024.

Divisional Director
Social Forestry Division
Bijnor

P. Bijnor 01.02.24

Chief Development Officer
Bijnor

01/2/24.

District Magistrate
Bijnor

BEST PRACTICES

The main economy of district Bijnor is sugarcane production apart from some agro-industrial units. Sherkot is famous for its brush business whereas the Nagina area of the district is famous for handicraft work.

1. Brush Business (Sherkot) :

Sherkot town in Dhampur assembly constituency of Bijnor district in western Uttar Pradesh is called the 'Brush City' of India. The major and minor industries of the city include only painting and drawing brushes and work related to this is done in almost every household of the city. Barring some individual small farming, brushwork is the main means of earning livelihood for the people of the city. Sherkot town has about 600 small cottage industry units that produce an estimated 70 percent of the painting and drawing brushes in India.
They employ 25,000 to 30,000 people in and around the municipality city. This small cottage industry is mainly unorganized. Most Indian brushes are produced in Sherkot, Uttar Pradesh (also known as the 'Brush Capital of India'), and the supply chain extends to Rajasthan, Kerala, Karnataka, Maharashtra, Tamil Nadu, Uttarakhand, and West Bengal etc.

2. Handicraft Work :

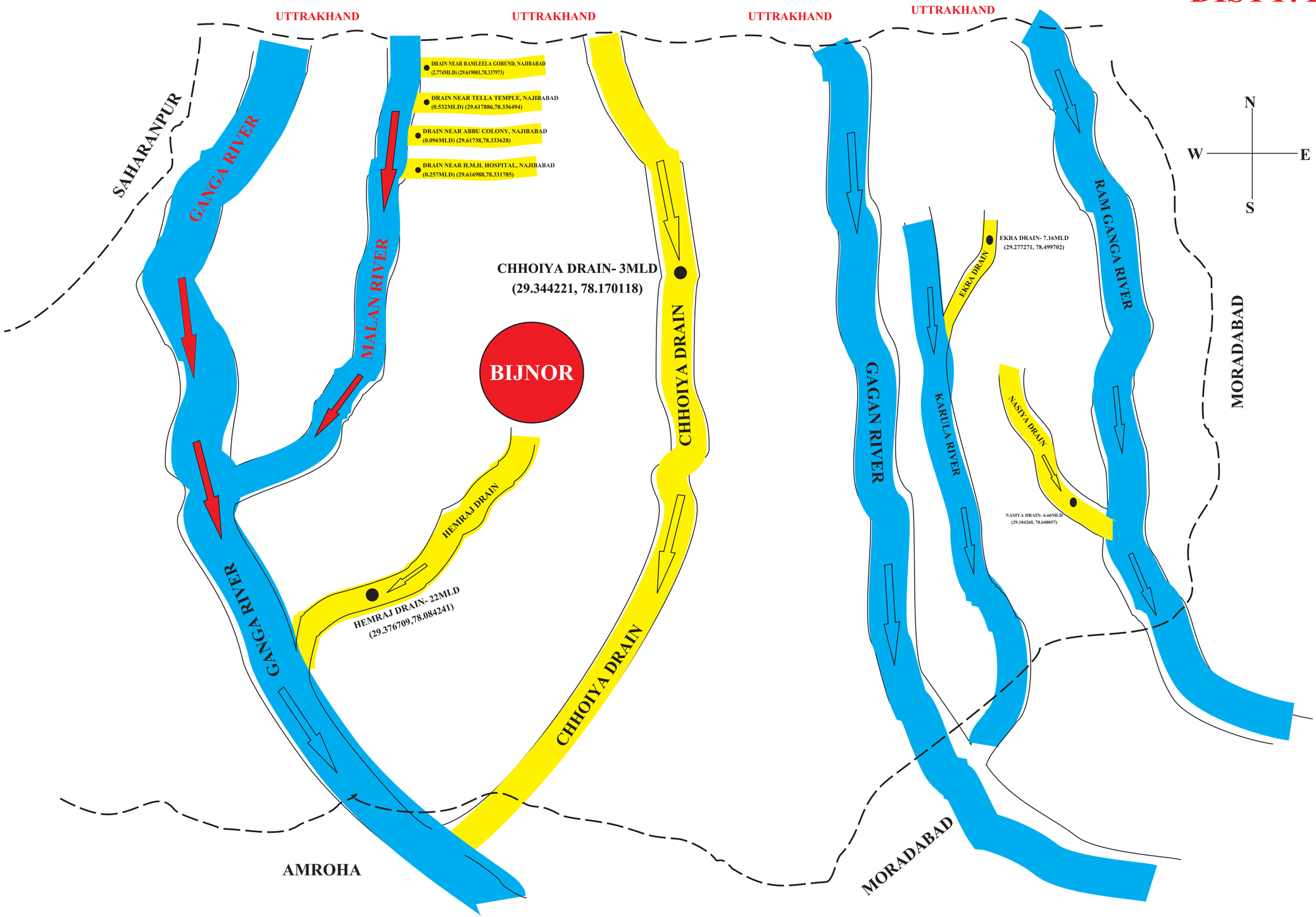
Nagina tehsil has been famous for handloom work since ancient times, out of which wood carving work is mainly famous. Also, volunteers and women make baskets, mats, etc. from the grass found on the banks of the Ganga, which provides employment to women and besides strengthening the economy, it is also helpful in environmental protection.

3. Special cultural and religious connections to rivers :

The fair begins with taking a holy dip in the River Ganga on the full moon day of Kartik Purnima (October- November). The festival begins ten days before the start of Kartik Purnima, during which traders can sell /sell goods. Bring some excellent breeds of cattle from all over India for purchase. On or after Kartik Purnima, various
cultural programs are organized.

REGIONAL OFFICE, U.P. POLLUTION CONTROL BOARD, BIJNOR

DISTT. BIJNOR



Government of India
Ministry of Jal Shakti
Department of Water Resources,
River Development & Ganga Rejuvenation

Report in
Compliance of Hon'ble NGT order
Dt 24.1.2024
O.A 200/2014 MC Mehta Vs UOI and Ors

Report Submitted By-
DISTRICT GANGA COMMITTEE

DISTRICT AMROHA

1. **Sewage**

Drain (city/town/	Total flow of drain per day	PH	BOD (mg/l)	COD (mg/l)	TSS (mg/l)	TDS (mg/l)	Heavy metals (Fe, Cr, PB, Ar, Mn, Cu, Zn, Hg, Fluoride etc)	DO (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Outlet flow (geo coordinates)	Colour/ odour (hazen)	Discharged Into
Chhoiya drain Near meeting River Ganga, RasoolpurB Havar(Sample date-06.10.23	3 MLD	7.59	2.2	32	65	243	**Fe-0.89, Pb-ND, T.Cr-0.35, Ni-ND, Cu-1.5 Sample date-06.10.23**	7.9	790	360	29.069167, 78.076667	10(Haz)	River Ganga
Bagad Drain Near NH-24, Bridge Gajraula, Amroha (Sample Date-06.10.2023	3.5 MLD	7.64	10	96	84	368	**Fe-2.31, Pb-ND, T.Cr-1.7, Ni-ND,Cu-1.2 Sample date-06.10.23**	4.0	940	490	**28.806171, 78.217797**	20(Haz)	River Ganga

STP

Existing STP (location & capacity)	Capacity (operational)	Inlet/ Outlet water quality & quantity	Number of tapped drains (quantity of discharge)	GAP (in treatment)	Final discharge point	Proposed/ under construction STP With completion date
NO STP IN DISTRICT AMROHA	-	-	-	-	-	STP Proposed at Nagar Palika Gajraula Capacity-6.5 MLD

II. HOTELS/ ASHRAMS

Number of Hotels/ ashrams/ dharamshalas	STP	Discharge point	Action taken
9	CollectionTank, Settling Tank, Septic Tank	Municipal Drain/Road side Drain	04 Notice sent

a. DETAILS OF THE HOTEL

Sl. No.	Hotel Name
1	M/s Vasant Hotel, NH-24, Delhi-Moradabad road, Gajraula, Amroha.
2	M/s Swagat Hotel, NH-24, Delhi-Moradabad road, Gajraula, Amroha.
3	M/s Sumaglum Hotel, Joya road, Amroha.
4	M/s Hotel Regal-77, Naugava Sadat road, Amroha.
5	M/s Hotel Haveli (Ex Name Meriton Hotel), NH-24, Delhi-Moradabad road, Gajraula, Amroha.
6	M/s Abhinandan Hotel, Atrasi road, Amroha.
7	M/s Amro palace, kanth road, Amroha.
8	M/s Parth hotel, T.P. Nagar, Amroha.
9	M/s Highway resort, Gajraula, Amroha.

IV. Industrial Effluent discharge

Total number of Industries	Daily effluent discharge	Treatment available (cetp/ petp/ etp operational capacity)	Effluent quality analysis (outlet of treatment plants Geo code sampling point)	GAP	Proposed/ under construction treatment project (with timeline)	Number of defaulting units- Action taken	Industrial solid waste generated/ day	Manner of disposal (Industrial solid waste)
13	5347 KLD	**ETP installed in each Industry Separately of Adequate**	**As per schedule monitoring and analysis done by Regional Office UPPCB, Bijnor**	0	-	-	752.29	Through TSDF

		Capacity						

a. Status of Grossly Polluting Industries

S.N.	Name and Address	Sector	Production Capacity	Status of ETP	Discharge	Discharge Point	intermediate / Final Discharge Point	Compliance Status/ Action taken in case default
1	Wave Industries Pvt. Ltd, Vill-Malaysia Po-Mandi Dhanaura, Distt-Amroha	Sugar	Cane crushing capacity-10500 TCD and 30MW co-generation power plant	Installed	2100 KLD	Treated effluent used for Irrigation /used in distillery unit	On land/ used in distillery unit	Complied Sample date-13.12.23 pH-7.9 BOD-28 mg/l COD-176 mg/l TDS-940 mg/l TSS-28 mg/l
2	Triveni Engineering & Industries ltd. Chandanpur, Hasanpur, Distt. Amroha	Sugar	Cane crushing capacity-6000 TCD	Installed	1200 KLD	Treated effluent used for Irrigation	On land	Complied Sample date-05.12.23 pH-7.85 BOD-28 mg/l COD-192 mg/l TDS-640 mg/l TSS-28 mg/l
3	Kisan Sahkari Chini Mills Ltd, Hasanpur, Distt. Amroha	Sugar	Cane crushing capacity-2500 TCD	Installed	500 KLD	Treated effluent used for Irrigation	On land	Complied Sample date-14.12.22 pH-7.94 BOD-26 mg/l COD-176 mg/l TDS-768 mg/l TSS-27 mg/l

4	Jubilant Ingrevia Limited (Distillery Unit) Bhartiagram, Gajraula District- Amroha,	Distillery	183 KLD Alcohol production in non-monsoon season and 133 KLD at monsoon season	Installed	Spent wash 1460 KLD	Incinerated in incineration boiler/Bio composting, ZLD	ZLD	Complied
5	Wave Industries Pvt. Ltd, (Distillery Unit) Vill-Malaysia Musallepur, Po-Mandi Dhanaura, Distt-Amroha	Distillery	140 KLD Ethanol Production by using B- Heavy Mollasses / sugar syrup &7 MW co-generation power and production of Ethyl Alcohal-100 KLD by using C- Heavy Mollasses.	Installed	Spent wash 800 KLD	Incinerated in incineration boiler, ZLD	ZLD	Complied
6	Coral News Prints Ltd. Gajraula, Amroha.	Paper	News print paper 20 MT/day	Installed	400 KLD	Treated effluent recycled in process/used for irrigation	On land	Complied Sample date-18.07.23 pH-7.98 BOD-26 mg/l COD-192 mg/l TDS-504 mg/l TSS-28 mg/l
7	Kamakshi Papers Pvt. Ltd., Gajraula, Distt. Amroha	Paper	News print , writing printing and Kraft Paper 60 MT/day	Installed	585 KLD	Treated effluent recycled in process/used for irrigation	On land	Complied Sample date-03.11.23 pH-7.83 BOD-24 mg/l COD-152 mg/l TDS-512 mg/l TSS-25 mg/l
8	JUBILANT INGREVIA LIMITED (CHEMICAL UNIT 1) Bhartiagram, Gajraula District- Amroha.	Chemical Unit	Acetaldehyde 20550 MT/Month, Acetic Acid & derivatives 16004.2 MT/Month, Acetic Anhydride 3250 MT/Month, Ethyl/butyl Acetate 7452.1 MT/Month, Formaldehyde 19912.5 MT/Month, Diketene Ester Derivatives 500 MT/Month, Diketene Amide Derivative 333.3 MT/Month, Diketene Arylide derivatives 500 MT/Month, Other Ketene & Diketene Derivatives 166.7 MT/Month.	Installed	590 KLD	Treated effluent reused in process/ used for horticulture	ZLD	Complied
9	Jubilant Ingrevia Limited (Chemical Unit II) Bhartiagram, Gajraula, District- Amroha.	Chemical Unit	Pyridine and Picoline derivatives 90000 TPA etc.	Installed	825 KLD	Incinerated in incineration boiler, ZLD	ZLD	Complied
10	Jubilant Agri and Consumer Products Limited (Fertilizer	Fertilizer Unit	Single Super Phosphate (SSP, Zincoated SSP)-22500 MT per month,	Installed (Settling tank)	110 KLD	Treated effluent recycled in water scrubbing	ZLD	Complied

	Unit) Bhartiagram, Gajraula, Amroha.		Granular(GSSP,Zn-GSSP,B-GSSP,ZnB-GSSP, BIOSTIMULANT-22500 MT per month and Sulphuric Acid-9000 MT per month					
11	Dairy India Pvt Ltd. Gajraula, Amroah.	Milk Processing	Milk, Curd, Chach, Cheese, Milk Powder and Ghee by processing 300 KLD raw milk.	Installed	562 KLD	Treated effluent used for irrigation	On Land	Complied Sample date-05.12.23 pH-8.0 BOD-28 mg/l COD-176 mg/l TDS-564 mg/l TSS-27 mg/l
12	Umang Dairies Ltd. 3 Km. Hasanpur road Gajraula, Amroha	Dairy	Milk powder-1410 Ton/Month, Panner-180 Ton/Month and Butter/Ghee-300 Ton/Month	Installed	950 KLD	Treated effluent used in process	ZLD	Complied
13	A.Q. Frozen Foods Pvt. Ltd, Kunda feeder road, Bacchrayun Amroha.	Slaughter House and Meat Processing	Slaughtering of Animals 800 Buffalos/day, 2000 Goat/sheep/day.	Installed	–	–	–	Unit closed Since 2020

V. Regulation of Flood Plain Zone:

Area- cities/ towns		Notification of flood plain zone	Demarcation		Encroachment & direct discharge Geo Code/Sampling point	Encroachment removal status	Timeline for completion
			NO Development Zone Pillars	Regulatory Zone Pillars			
Amroha left bank of Ganga River			555	476	**There is no encroachment on land of River Ganga in District Amroha**	**There is no encroachment on land of River Ganga in District Amroha**	Demarcation has been completed

AFFORESTATION/ PLANTATION

Area- cities/ towns	Total plantation	Proposed plantation in the year 2022 & 2023
DHANAURA	268800	District Plan achieved for the year 2022 and 2023
DHANAURA	164800	
DHANAURA	249600	
HASANPUR	408800	
HASANPUR	385000	
HASANPUR	242800	

VII. Mining:

a.

Area of mining	FIR/ case registered/ year	Vehicles/ mineral seized	Action taken status	Cases pending in Court	Enforcement of EMGSM 2020 and Sustainable sand mining management guidelines 2016
जनपद अमरोहा में रामसर साईट एवं हसिल्रापुर वन्यजीव अभ्यरण होने	जनपद अमरोहा में रामसर साईट एवं हसिल्रापुर वन्यजीव अभ्यरण होने के कारण खनन क्षेत्र चिन्हित नहीं हो सकता	279	खनन विभाग द्वारा कार्यवाही करते हुए पनेल्टी लगाई गयी है	जनपद अमरोहा में रामसर साईट एवं हसिल्रापुर वन्यजीव अभ्यरण होने के कारण	जनपद अमरोहा में रामसर साईट एवं हसिल्रापुर वन्यजीव अभ्यरण होने के कारण खनन क्षेत्र चिन्हित नहीं हो सकता।

के कारण खनन क्षेत्र चिन्हित नहीं हो सकता।			74.83 Lakh पनेल्टी लगाते हुए वसूली की कार्यवाही की गयी ।	खनन क्षेत्र चिन्हित नहीं हो सकता	

b.

Area of RBM Mining	Overloading Illegal Transport	Action Taken	Penalty Imposed/Recovered
NO RBM MINING	NO RBM MINING	NO RBM MINING	NO RBM MINING

Compliance of Hon'ble NGT order

Dt 24.1.2024

In

O.A 200/2014 MC Mehta Vs UOI and Ors

District- Amroha

Sewage Management

S.NO	NAME OF ULB	SEWAGE GENERATION(MLD)
1.	HASANPUR	12
2.	DHANAURA	4
3.	GAJRAULA	7.4
4.	JOYA	1.8
5.	UJHARI	2.64
6.	SAIDNAGLI	2
7.	NAUGAWAN SADAT	4
8.	AMROHA	27.29
9.	BACHHRAON	3

2.	Existing Sewage Treatment Capacities :	STP Proposed at Gajraula Capacity-6.5 MLD
3.	Quantity of sewage is being treated (utilization capacity	STP is Proposed Capacity-6.5 MLD
4.	Performance of STPs particularly for FC :	STP is Proposed
5.	Where treated sewage is being discharged (to Ganga or tributaries) :	Sewage is being discharged to Bagad river

6.	Reasons for Under-utilization of STPs (Connectivity of Households/ laying of sewer lines) :	STP is Proposed Capacity-6.5 MLD
8.	Time bound plan for bridging the gap and tying up with financial arrangements and not delaying Tendering and identifying executing agencies or having any other issues :	STP is Proposed
9.	Where untreated sewage (when there is no STP) is discharged (Ganga /Tributaries):	Total sewage generated is being discharged to Bagad River

Drains Joining Ganga and Tributary

1.Number of drains carrying sewage- sullage or industrial waste water joining Ganga/ tributaries with their Quantity and Quality:

S.No	Drain	Domestic/Industrial/Mixed	Flow (MLD)	Quality Discharge Parameters
1.	Chhoiya drain Near meeting River Ganga, RasoolpurB Havar(Sample date-06.10.23	Domestic	3	PH-7.59 BOD-2.2 COD-32 TSS-65 TDS-243
2.	Bagad Drain Near NH-24, Bridge Gajraula, Amroha Sample Date- 06.10.2023	Domestic	3.5	PH-7.64 BOD-10 COD-96 TSS-84 TDS-368

2.**Drains joining outside city and town limits but, either joining in village or nearby town:-** As per the above Table

3.Inclusion of sewage flowing in drains into total sewage generation figures of each city and town and their interception and diversion to STPs: STP is Proposed at Gajraula, Capacity 6.5 MLD

Septage Management (In case of no STP)

S.NO		
1.	Status of Septage management (with reference to FSTP/STP):	**One FSTP installed at Daidera, Amroha Capacity-32 KLD** **STP Proposed at Nagar Palika Gajraula Capacity-6.5 MLD**
2.	Management of Grey water and its disposal:	Total sewage generated is being discharged to river Bagad.

Industrial Pollution Control

S.NO		
1.	Attach the list on no. of industries generating trade effluents, their place of disposal and compliance including CETPs	List Attached Below
	Town Wise	

S.N.	Name and Address	Sector	Production Capacity	Status of ETP	Discharge	Discharge Point	intermediate / Final Discharge Point	Compliance Status/ Action taken in case default
1	Wave Industries Pvt. Ltd, Vill-Malaysia Po-Mandi Dhanaura, Distt-Amroha	Sugar	Cane crushing capacity-10500 TCD and 30MW co-generation power plant	Installed	2100 KLD	Treated effluent used for Irrigation /used in distillery unit	On land/ used in distillery unit	Complied Sample date-13.12.23 pH-7.9 BOD-28 mg/l COD-176 mg/l TDS-940 mg/l TSS-28 mg/l

2	Triveni Engineering & Industries ltd. Chandanpur, Hasanpur, Distt. Amroha	Sugar	Cane crushing capacity-6000 TCD	Installed	1200 KLD	Treated effluent used for Irrigation	On land	Complied Sample date-05.12.23 pH-7.85 BOD-28 mg/l COD-192 mg/l TDS-640 mg/l TSS-28 mg/l
3	Kisan Sahkari Chini Mills Ltd, Hasanpur, Distt. Amroha	Sugar	Cane crushing capacity-2500 TCD	Installed	500 KLD	Treated effluent used for Irrigation	On land	Complied Sample date-14.12.22 pH-7.94 BOD-26 mg/l COD-176 mg/l TDS-768 mg/l TSS-27 mg/l
4	Jubilant Ingrevia Limited (Distillery Unit) Bhartiagram, Gajraula District- Amroha,	Distillery	183 KLD Alcohol production in non-monsoon season and 133 KLD at monsoon season	Installed	Spent wash 1460 KLD	Incinerated in incineration boiler/Bio composting, ZLD	ZLD	Complied
5	Wave Industries Pvt. Ltd, (Distillery Unit) Vill-Malaysia Musallepur, Po-Mandi Dhanaura, Distt-Amroha	Distillery	140 KLD Ethanol Production by using B- Heavy Mollasses / sugar syrup &7 MW co-generation power and production of Ethyl Alcohal-100 KLD by using C- Heavy Mollasses.	Installed	Spent wash 800 KLD	Incinerated in incineration boiler, ZLD	ZLD	Complied
6	Coral News Prints Ltd. Gajraula, Amroha.	Paper	News print paper 20 MT/day	Installed	400 KLD	Treated effluent recycled in process/used for irrigation	On land	Complied Sample date-18.07.23 pH-7.98 BOD-26 mg/l COD-192 mg/l TDS-504 mg/l TSS-28 mg/l
7	Kamakshi Papers Pvt. Ltd., Gajraula, Distt. Amroha	Paper	News print , writing printing and Kraft Paper 60 MT/day	Installed	585 KLD	Treated effluent recycled in process/used for irrigation	On land	Complied Sample date-03.11.23 pH-7.83 BOD-24 mg/l COD-152 mg/l TDS-512 mg/l TSS-25 mg/l

8	JUBILANT INGREVIA LIMITED (CHEMICAL UNIT 1) Bhartiagram, Gajraula District- Amroha.	Chemical Unit	Acetaldehyde 20550 MT/Month, Acetic Acid & derivatives 16004.2 MT/Month, Acetic Anhydride 3250 MT/Month, Ethyl/butyl Acetate 7452.1 MT/Month, Formaldehyde 19912.5 MT/Month, Diketene Ester Derivatives 500 MT/Month, Diketene Amide Derivative 333.3 MT/Month, Diketene Arylide derivatives 500 MT/Month, Other Ketene & Diketene Derivatives 166.7 MT/Month.	Installed	590 KLD	Treated effluent reused in process/ used for horticulture	ZLD	Complied
9	Jubilant Ingrevia Limited (Chemical Unit II) Bhartiagram, Gajraula, District- Amroha.	Chemical Unit	Pyridine and Picoline derivatives 90000 TPA etc.	Installed	825 KLD	Incinerated in incineration boiler, ZLD	ZLD	Complied
10	Jubilant Agri and Consumer Products Limited (Fertilizer Unit) Bhartiagram, Gajraula, Amroha.	Fertilizer Unit	Single Super Phosphate (SSP, Zincoated SSP)-22500 MT per month, Granular(GSSP,Zn-GSSP,B-GSSP,ZnB-GSSP, BIOSTIMULANT-22500 MT per month and Sulphuric Acid-9000 MT per month	Installed (Settling tank)	110 KLD	Treated effluent recycled in water scrubbing	ZLD	Complied
11	Dairy India Pvt Ltd. Gajraula, Amroah.	Milk Processing	Milk, Curd, Chach, Cheese, Milk Powder and Ghee by processing 300 KLD raw milk.	Installed	562 KLD	Treated effluent used for irrigation	On Land	Complied Sample date-05.12.23 pH-8.0 BOD-28 mg/l COD-176 mg/l TDS-564 mg/l TSS-27 mg/l
12	Umang Dairies Ltd. 3 Km. Hasanpur road Gajraula, Amroha	Dairy	Milk powder-1410 Ton/Month, Panner-180 Ton/Month and Butter/Ghee-300 Ton/Month	Installed	950 KLD	Treated effluent used in process	ZLD	Complied
13	A.Q. Frozen Foods Pvt. Ltd, Kunda feeder road, Bacchrayun Amroha.	Slaughter House and Meat Processing	Slaughtering of Animals 800 Buffalos/day, 2000 Goat/sheep/day.	Installed	–	–	–	Unit closed Since 2020

Water Quality Status

S.NO		
1.	Provide water quality status of Ganga and its tributaries in the District and city/ town in terms of its fitness for Bathing water quality that is, FC and FS:	As below

River/Tributary	DO Mg/l	BOD Mg/l	TC MPN/100 ml	FC MPN/100 ml
Ganga	8.9	1.2	1300	490
Chhoiya Drain	7.9	2.2	790	360
Bagad Drain	7.64	10	940	490

Notification of Flood Plain Zones

164/2020/2031/20-27-सि0-4-07(एन0जी0टी0)/16 टी0सी0 दि0 04.09.2020 U.P. Govt.9

Issues Relating to Environmental Flow

River Ganga Flow at District Amroha Approx 7537 cusec

Divisional Forest Officer
Member Convenor
District Ganga Committee
Amroha

District Magistrate,
Chairman,
District Ganga Committee
Amroha

Best Practices

1. **Project benefits in last 3 years(Namami/ Amrit 2.0):**
   Under the Amrit 1.0 program, 18333 drinking water houses have been connected under the Drinking Water House Connections Scheme in Nagar Palika Parishad, Amroha.
2. **Afforestation/ Plantation:**

Area-cities/Towns	Total Plantation	Proposed Project	Timeline
DHANAURA	268800	District Plan	2021
DHANAURA	164800	District Plan	2022
DHANAURA	249600	District Plan	2023
HASANPUR	408800	District Plan	2021
HASANPUR	385000	District Plan	2022
HASANPUR	242800	District Plan	2023

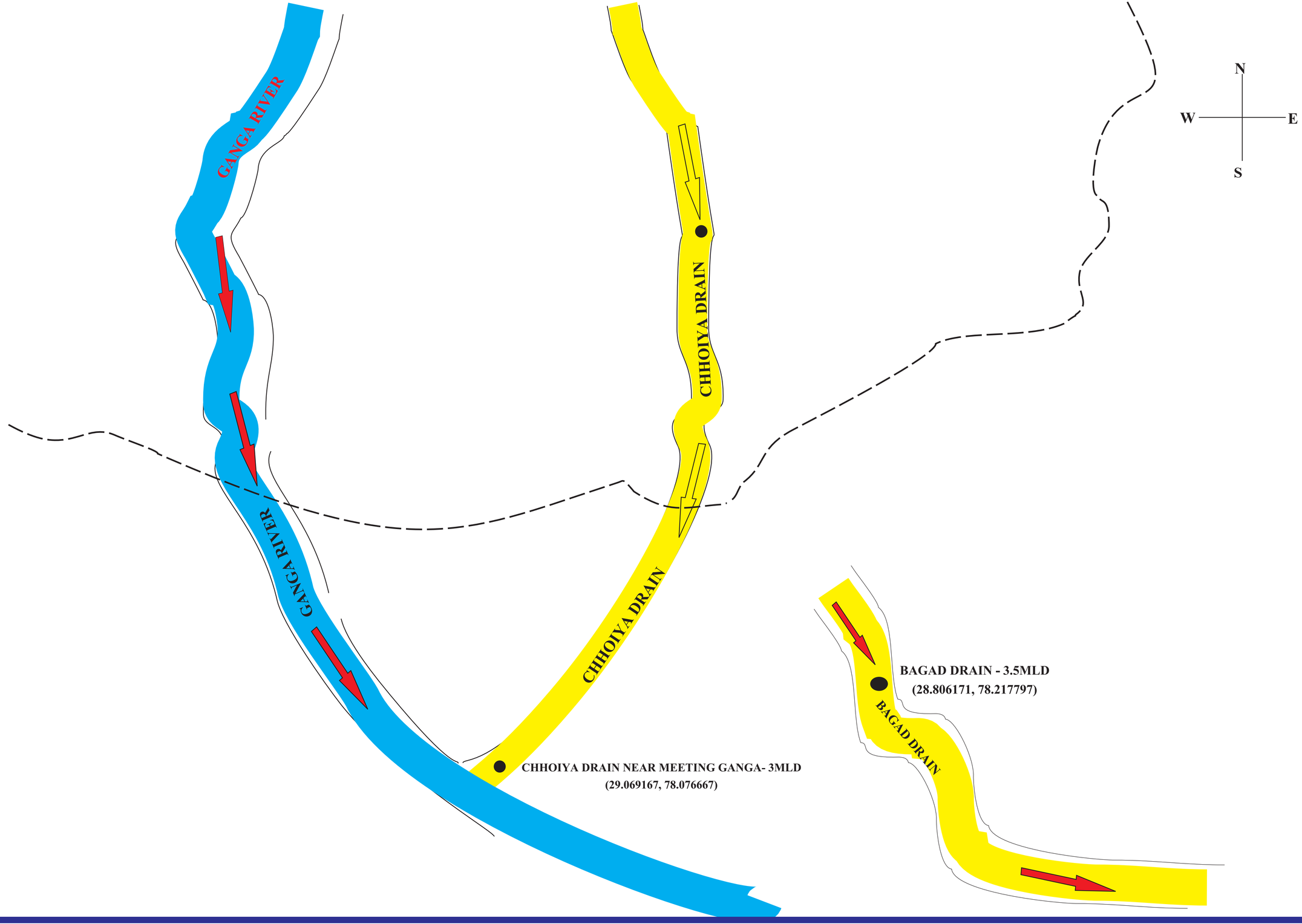
3. **SEWAGE CONTROL (how much progress has been there)**
   Around 27300 families are being benefited by the construction of 32 KLD FSTP/ Septage Management

4. **Contribution to Amrit 2.0 and Namami Gange**
   Under the Amrit 2.0 program, it is proposed to connect drinking water houses under the following schemes approved in Amroha District.

   a. Dhanaura Restructuring Drinking Water Scheme-7760
   b. Naugawan Saadat Restructuring Drinking Water Scheme-8460
   c. Joya Restructuring Drinking Water Scheme – 5468
   d. 24*7 drinking water supply scheme in Ward No. 08 Peergarh of Amroha Nagar -1302

REGIONAL OFFICE, U.P. POLLUTION CONTROL BOARD, BIJNOR

DISTT. AMROHA



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NAMAMI GANGE

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for Shahjahanpur

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LIST OF ABBREVIATIONS

AMRUT	Atal Mission for Rejuvenation and Urban Transformation
ARS	Artificial Recharge Structures
CBO	Community Based Organisation
CETP	Central Effluent Treatment Plant
CGWB	Central Ground Water Board
CWC	Central Water Commission
DEP	District Environment Plan
DGC	District Ganga Committee
DGP	District Ganga Plan
DIP	District Irrigation Plan
DoWR	Department of Water Resources
ETP	Effluent Treatment Plant
FGD	Focus Group Discussion
FSM	Fecal Sludge Management
GIZ	Gesellschaft für Internationale Zusammenarbeit
GRBMP	Ganga River Basin Management Plan
GW	Ground Water
IEC	Information, Education & Communication
IIT	Indian Institute of Technology
IPNM	Integrated Plant Nutrient Management
KWMI	Key Water Management Issues
MC	Municipal Corporation
MGNREGS	Mahatma Gandhi National Rural Employment Guarantee Scheme
MoHUA	Ministry of Housing and Urban Affairs
MRF	Material Recovery Facilities
NGO	Non-Governmental Organisation
NIUA	National Institute of Urban Affairs
NMCG	National Mission for Clean Ganga
NP	Nagar Panchayat
NPP	Nagar Palika Parishad
NWP	National Water Policy
NWM	National Water Mission
PMKSY	Pradhan Mantri Krishi Sichai Yojna
RBM	River Basin Management
RD & GR	River Development and Ganga Rejuvenation
SMCG	State Mission for Clean Ganga
SPMG	State Program Management Group
STP	Sewage Treatment Plant
SWA	State Wetlands Authority
SWaRA	State Water Resources Agency
SWaRDAC	State Water Resources Data Analysis Centre
ToT	Training of Trainers
UPPCB	Uttar Pradesh Pollution Control board
UPSOCA	Uttar Pradesh State Organic Certification Agency
ULB	Urban Local Body
WASCA	Water Security and Climate Adaptation in Rural areas
WWF	Worldwide Fund for Nature
WWTP	Waste Water Treatment Plant

EXECUTIVE SUMMARY

The District Ganga Plan for Shahjahanpur (UP) has been developed in a joint effort with the members of the District Ganga Committee Shahjahanpur, NMCG, SMCG UP and GIZ experts. The scope of this plan is to provide an assessment of the current issues related to the rejuvenation and protection of the catchment area of the Ganga in this district and to come up with interventions, specific targets and an action plan for addressing these.

The elaborated actions have the objective of addressing the 6 identified key water management issues (KWMIs). These aim to reduce pollution from agriculture runoff, improve sanitation and reduce pollution from domestic sewage, improve liquid waste management and reduce untreated industrial effluents entering the rivers, improve solid waste management, increase water storage capacities of natural water sources and restore wetlands, protect floodplains and address encroachment. Additional objectives aim to develop capacities for effective river protection, rejuvenation and to improve the livelihood situation in line with the Arth Ganga programme.

Hotspots have been identified to address the main issues and gaps within the 6 KWMIs. Shahjahanpur has been identified as a major city for improvement of domestic sewage and septage; water quality monitoring; and source segregation of waste. River encroachment is to be addressed at Khannaut and Garra rivers. In order to implement the DGP actions, a dedicated supporting cell is envisaged that includes district authorities trained on river rejuvenation, the RBM cycle, and operation, maintenance and monitoring of Sewage Treatment Plants (STPs) and Central Effluent Treatment Plants (CETPs).

A planning cycle of 5 years is foreseen, which started in 2022 with the preparation of the DGP. The progress is monitored and evaluated during the implementation which then leads to the selection of KWMIs for the next 5-year planning cycle and the elaboration of new interventions, specific targets and concrete action plan. The members of the DGC are committed to implementing the action plan of this DGP in the first planning cycle with the goal of developing a healthy river basin which provides a basis for healthy ecosystems, a prospering society and sustainable economy in the district.

SECTION A. INTRODUCTION

1 Context

1.1 GRBMP and its vision for Ganga and tributaries rejuvenation

The Ganga River Basin Management Plan (GRBMP) has the vision to restore the “wholesomeness” of rivers in the Ganga basin. Its main missions are related to Aviral and Nirmal Dhara (uninterrupted and unpolluted flows), ecological health and basin governance lay the framework for the activities for each of the Ganga tributaries when looking into the rejuvenation, protection and management of the rivers. Important activities, to contribute to the overall vision on the basin level, are to be implemented at a local scale in the districts. While the vision for the District Ganga Plan (DGP) would focus on river rejuvenation at the district level, goals, objectives and outcomes for each river may vary, though in totality contribute to the single vision.

1.2 Mandate for District Ganga Plan

As per the Authority Notification of 2016 each district in the Ganga basin is to prepare a periodic DGP. The plans are concerned with the reach of river Ganga, its tributaries, and associated riverine zone within the specific district. The plan shall include the activities to be undertaken by the District Ganga Committee (DGC) for protection, control, and abatement of environmental pollution in river Ganga and its tributaries, and their riverbed area abutting the specified district.

1.3 Past and ongoing work around similar exercises and its linkages with District Ganga Plans

Efforts to clean the Ganga date back over 30 years. In 2014, the Government of India launched the ambitious 'Namami Gange Programme' as an integrated conservation mission to achieve the goal of effective pollution control, conservation and rejuvenation of the Ganga. The National Mission for Clean Ganga (NMCG) was established as the nodal agency for the implementation of this programme. Initially, the focus was on cleaning the mainstem of the Ganga, but since many tributaries are also heavily polluted, the approach has now been expanded to the entire Ganga basin.

Under this flagship, several programmes have already been implemented and plans and guidelines have been developed. When developing DGPs, synergies with these programmes should be sought and used to avoid duplication and needless effort.

The DGPs need to align with previously prepared Ganga sub-basin (Ramganga basin) management plans as well as the overall GRBMP, developed by NMCG through a consortium of seven IITs. While all the aspects of the GRBMP, may or may not have direct bearing on the District Ganga Planning exercise; the basin principles

of Aviral Dhara (uninterrupted flows) and Nirmal Dhara (unpolluted flows) must remain the central theme of the DGP.

A lot of work has been done in the Ganga basin, and this chapter cannot give a comprehensive overview. Here, only a few selected activities are mentioned which are directly related to the development of this DGP.

Action plans for the rejuvenation of tributaries

The Namami Gange Programme is an integrated conservation mission by the Union Government of India, with a budget of INR 20,000 crores, that aims to combat pollution, support conservation, and rejuvenation of the National River Ganga. Various achievements under the Namami Gange Programme were creating additional sewage treatment capacity, river front development, river surface cleaning, biodiversity conservation, afforestation, public awareness through events, workshops, seminars, conferences and numerous IEC activities for public awareness and community mobilisation, industrial effluent monitoring, creation of Ganga Grams etc.

In 2001, the State Water Resources Agency (SWaRA) was created in Uttar Pradesh for better management, planning and sectoral allocation of water resources to various agencies. A data analytics centre named State Water Resources Data Analysis Centre (SWaRDAC) was set up by the Uttar Pradesh government to provide water related data for all river basins in the state to SWaRA to create all other central/ state water plans. A total of eight river basin assessments were conducted and basin plans prepared *viz.* Gandak Basin Plan, Ghagra Basin Plan, Gomti Basin Plan, Ganga Basin Plan, Ramganga Basin Plan, Rapti Basin Plan, Sone Basin Plan and Yamuna Basin Plan.

The Worldwide Fund for Nature India (WWF India) has a programme named Ganga / Ramganga Mitra Programme to conserve Ganga and its tributary - the Ramganga. The name ‘Ramganga Mitras’ translates to Friends of Ramganga and is a strong volunteer group of more than 4,000 people. This platform has been created for discussions, debates and to encourage design initiatives for mitigating ongoing threats to rivers. The initiatives have covered various ways to reduce pollution load to rivers, such as, promoting the use of organic fertilizers, reducing the dependency on various harmful agro-chemicals, promoting organic farming, and highlighting the best management practices on Sustainable Agriculture.

Urban River Management Framework

NMCG and the National Institute of Urban Affairs (NIUA) have drafted the Urban River Management Plan (URMP) framework for the development of URMPs in all Ganga towns that share the “Vision Ganga” principles published by NMCG in 2017. The main goal of URMPs will be to help cities along the Ganga river improve the condition of the river in their stretches. The URMP is a planning framework created to assist in organizing interventions systematically and comprehensively in order to revitalize and sustainably maintain the rivers in their territories. It is ingrained in the fundamental notion that improving the liveability of the towns requires preserving healthy rivers in the Ganga towns.

The plan for each city shall include the following three components in accordance with the URMP's design philosophy -

1. Environmental (corresponding to the environmentally responsible trait of the philosophy)
2. Financial (corresponding to the economically beneficial trait of the philosophy)
3. Social (corresponding to the socially inclusive trait of the philosophy)

District Environmental Plans

The District Environment Plan (DEP) focuses on overall environmental protection and management, addressing the various pollution sources at the district level. Some of the district action points indicated in the DEP are to inventory the quality of waterbodies in the district, to protect rivers/lakes, to inventory sources of water pollution, and to rejuvenate groundwater. This DGP has been developed in alignment with these plans and builds on information collected (in chapter 7) and actions suggested (in chapter 8) from these plans. The selected information has been sorted according to the key issues identified for this DGP.

Flood and Disaster Management Plans

In 2011, the Uttar Pradesh State Disaster Management Institute (UPSDMI) was founded. This institute has trained more than 6,000 officials from various departments, as well as other stakeholders, on disaster management through the organisation of 89 trainings, workshops, seminars, and conferences. For several probationary/in-service training programmes in the state, such as PCS Foundation, Medical Officer Foundation, Teacher's Training, etc., UPSDMI assisted in the development of Disaster Management Modules. Numerous training guides, manuals, and IEC materials have been created in Hindi and distributed. All districts have established District Disaster Management Authorities. The state education board's curriculum has been updated to include a disaster management curriculum.

WASCA districts plans

The Water Security and Climate Adaptation (WASCA) project is an Indo-German initiative to "improve water resource management through an integrated approach at national, state, and local levels with regard to climate adaptation in rural regions. WASCA project, which was initially designed for three years period starting from April 2019 to March 2022, has been extended to November 2024 (WASCA 2). “The project is commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ) in partnership with the Ministry of Rural Development (MoRD) and Ministry of Jal Shakti (MoJS) in India and is being implemented by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. The project increases the knowledge and capability of stakeholders at all levels, including public and private organisations, to plan and carry out actions related to the management of water resources. Additionally, the initiative seeks to improve the financing of climate-adapted water security by encouraging cooperation between various government agencies and other stakeholders. To do this, comprehensive pilot projects at the sub-basin/catchment level will be conducted in a few districts. Effective strategies will be extended to the state and federal levels. Additionally, considering the role the private

sector plays in the water sector, closer collaboration is anticipated to develop sustainable practices for local water security and to use public-private finance.

Development of Ramganga River Basin Management Plan

To promote the application of the River Basin Management (RBM) Cycle in India and to familiarize Indian authorities with the approach, a modular training concept on the RBM Cycle has been developed and pilot trainings for around 100 national and state level participants have been implemented in 2020. Building upon the above achievements, GIZ is working towards adopting the RBM Cycle approach to develop a RBM Plan for the Ramganga river basin in collaboration with NMCG.

The following five KWMIs have been identified and agreed upon through series of stakeholders' consultations in Ramganga basin:

1. Water quality deterioration at point source
2. Water quality deterioration due to non-point sources including agriculture activity
3. Alteration in river hydrology and water quantity
4. Alteration in groundwater regime impacting on sub-surface flow
5. Flood risk including encroachment and sand mining

Ramganga Plan by WWF India

WWF India has drafted Ramganga RBM plan, consistent with the Ganga RBM plan 2015, for the development, management and conservation of the Ramganga river basin for the next 20 years. The Ramganga RBM plan is built upon two traditional concepts *i.e.* Aviral Dhara and Nirmal Dhara. This plan mainly has four goals –

1) River and basin ecosystem health: physical condition of the river ecosystem itself;

2) Social, economic, and cultural benefits: the extent to which the basin provides benefits to society;

3) Basin governance and stakeholder practices: the way the basin is being managed and the activities of stakeholders with the basins and

4) Disaster and risk management: these goals and objectives relate to reducing the risk, frequency, and severity of disasters (notably floods and droughts).

2 Vision and scope

The vision for developing the district ganga plan for Shahjahanpur is to address the primary issues with respect to the protection, control, and abatement of environmental pollution in the Ramganga river and its tributaries and prioritise the key water management issues relevant to the district and identify the probable gaps. It also aspires to list the ongoing programmes and schemes addressing the identified issues. All these concerns are to be dealt with during the first RBM cycle (2020-2025) in the district with gender inclusive approach.

Additionally, Arth Ganga is also a key aspect where the NMCG is engaged in, aligning some of the tasks under Arth Ganga with Ganga rejuvenation. Thus, the DGP considers various elements of Arth Ganga. In addition to that, there may be other proposed interventions in the states to rejuvenate several smaller streams at district or inter-district level, which can be dovetailed into DGP.

3 General approach and methodology

The RBM cycle is a spiral process, where each cycle of the spiral comprises of several steps. Ganga rejuvenation is a collective and continuing responsibility. Developing the District Ganga Plan (DGP), therefore is understood as a spiral process, in which plans are made and implemented, new information is reviewed, feedback is received, priorities are modified and refined, and plans are adapted to changing circumstances. The RBM cycle approach is adopted for this DGP preparation which will be repeated after five to six years. It is expected that the next cycle of the spiral will be better managed than the previous one, after evaluation and lessons have been learned. Figure 1 shows the development process of the different chapters of the DGP along the District Ganga Planning Cycle.

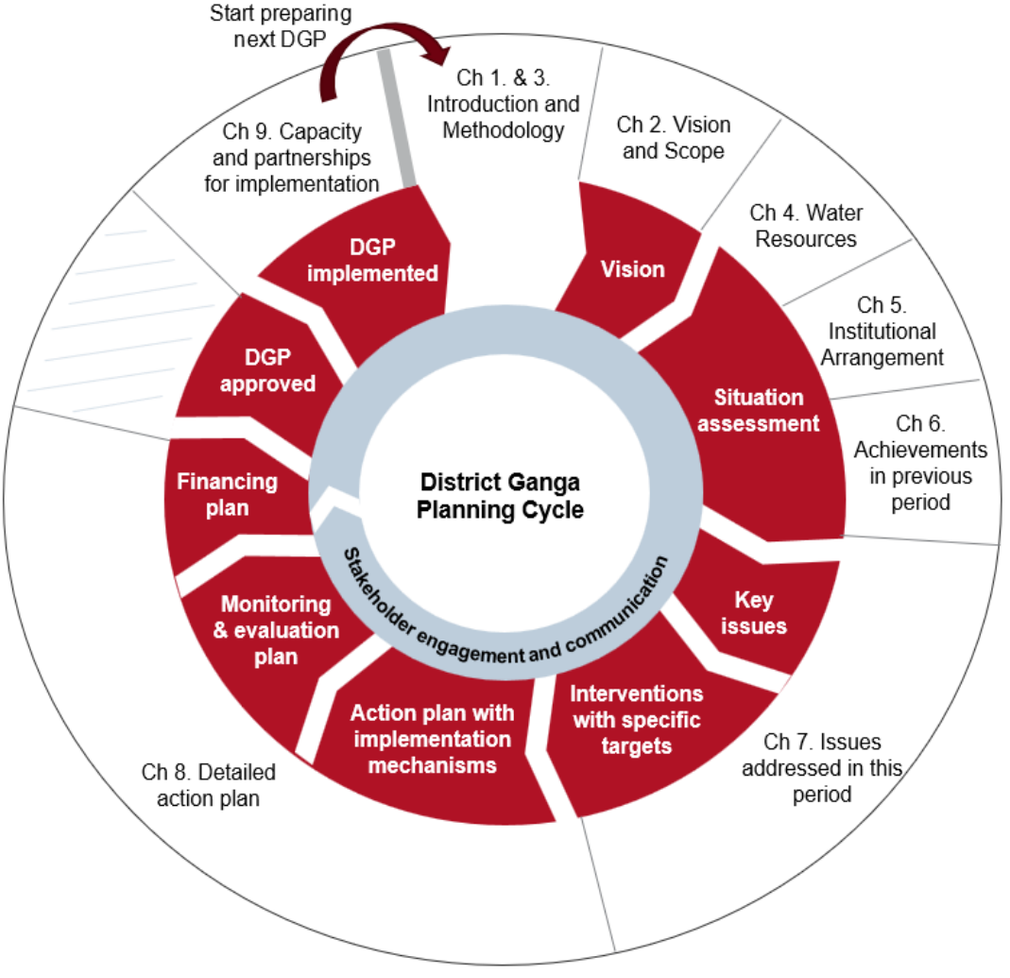


Figure 1: Step-wise approach for preparing the DGP

This approach should lead to a DGP that is not just structured uniformly, but also concise and specific to the district. It involves a comprehensive conceptual understanding of the issues pertaining to Ganga and its tributaries, but not necessarily on an accurate numerical analysis. The relevant river protection and rejuvenation issues are identified through a consultative process and series of interviews with key

stakeholders and decision makers rather than through an independent scientific study. In this management cycle, the DGP will address only a limited number of key water issues. Other identified water resources issues—which are less urgent —will be addressed in one of the next planning cycles.

District Ganga Plan Framework

A Handbook on the process to be adopted for the preparation of DGP, content and framework of DGP was drafted in consultation with the NMCG and other central and state level nodal agencies. Lessons learned, experience gathered, and challenges faced in drafting pilot DGPs are also addressed in the handbook document. Specially tailored approach and methodology given in the practical handbook was adopted for the preparation of this DGP.

For preparing the DGP for a management cycle, the cycle can be further split into a series of key steps:

STEP 1: Develop a vision

STEP 2: Prepare a baseline report and description of the water resources in the district

STEP 3: Map the institutional arrangements and relevant stakeholders

STEP 4: Implement a stock tacking exercise

STEP 5: Identify the key issues (4-6) that will be addressed in this management cycle

STEP 6: For each selected key issue, prepare an analysis and define the specific targets

STEP 7: For each specific target, prepare an action plan including budget estimations

STEP 8: Develop a monitoring and evaluation plan

STEP 9: Specify a funding source for each proposed intervention

STEP 10: Finalise the draft District Ganga Plan

STEP 11: Submit the draft District Ganga Plan for review from the relevant authorities and stakeholders; adapt DGP as needed

STEP 12: Submit the District Ganga Plan for approval by the SMCG

STEP 13: Implement DGP

The detailed methodology for each of the above steps is described in the **DGP Handbook.**

The DGPs are not developed in isolation but are integrated in several plans at different levels, which sometimes overlap. For instance, the DGPs need to align to national and state policies and adhere to the objectives and directions set in higher-level plans such as a (sub) River Basin Management Plan. The DGPs should also consider the (sometimes complex) transboundary dimension.

The information used for the DGP is compiled from existing secondary sources (references are given) and is not assessed specifically for the DGP.

Gender Inclusive Approach: The DGP also adopts a gender-sensitive and a gender-inclusive approach. Women form about 50 percent of the population and therefore, it is important that the plan ensures their needs, perspectives, ideas and involvement. Tools like surveys, focus group discussions (FGDs), consultations and dialogues should be made use of to ensure an inclusive process where the voices of women (and other vulnerable groups) are heard.

SECTION B: BIOPHYSICAL AND NON-BIOPHYSICAL CHARACTERISTICS

4 The water resources of the district

4.1 Basin overview

The river Ramganga originates as two streams, Western and Eastern Ramganga, that flow down into the plains independently. Western Ramganga originates near Gairsain (Uttarakhand) of Doodha Toli ranges in the lower Himalayas. It rises at an altitude of about 3,100 m in the lower Himalayas near the Lohba village in the Garhwal district of Uttaranchal. The river flows down through Patli Dun of lower Shivalik and then flows through Corbett National Park, Moradabad, Rampur, Bareilly, Badaun and Shahjahanpur and joins Ganga downstream of Farrukhabad. The total length of the river is 596 km with a catchment area of 32,493 km². Khoh, Gagan, Aril, Kosi and Deoha (Garra) are its major tributaries and the Kalagarh dam (embankment dam) is situated in this basin. Eastern Ramganga merges with river Sarju at Rameshwar ghat and finally confluences with river Kali and joins Ganga at Farrukhabad adjacent and opposite Ramganga.

The complete Ramganga basin lies between the Eastern longitudes of 78°16’23” and 80°07’35” and the Northern latitudes of 27°07’03” and 30°06’37” in Uttarakhand and Uttar Pradesh. The portion of Ramganga basin falling in Uttar Pradesh lies between the Eastern longitudes of 78°16’23” and 80°07’35” and the Northern latitudes of 27°07’3” and 29°45’56”, covering an area of 20,416.66 km² in Uttar Pradesh. The Ramganga basin is bounded by the Ganga basin to the West and Southwest, the Gomti basin to the Northeast and Southeast, while the Ghaghra basin slightly touches it in the upper Northeast. There are six sub-basins within the Ramganga basin namely Upper Ramganga, Kosi, Bhakra, Lower Ramganga, Aril and Garra, draining areas of 4,317.36 km² (21.15%), 1,023.51 (5.01%), 2,081.27 km² (10.19%), 5,085.06 km² (24.91%), 2,240.11 km² (10.97%) and 5,669.34 km² (27.77%), respectively, within Uttar Pradesh. The basin covers 12 districts (3 fully and 9 partially) and 82 blocks (49 fully and 33 partially) of Uttar Pradesh. The Ramganga river, which drains through the highlands of Chamouli, Uttarakhand and debouches into the plains of Uttar Pradesh, is one of the major tributaries of the Ganga river, joining from the left bank. Rivers Kho, Dhela, Kosi, West and East Baigul, Garra and Ramganga along with other tributaries originating in Uttarakhand state used to bring high floods into Bijnor, J.P. Nagar, Moradabad, Rampur, Bareilly, Shahjahanpur and Hardoi district.

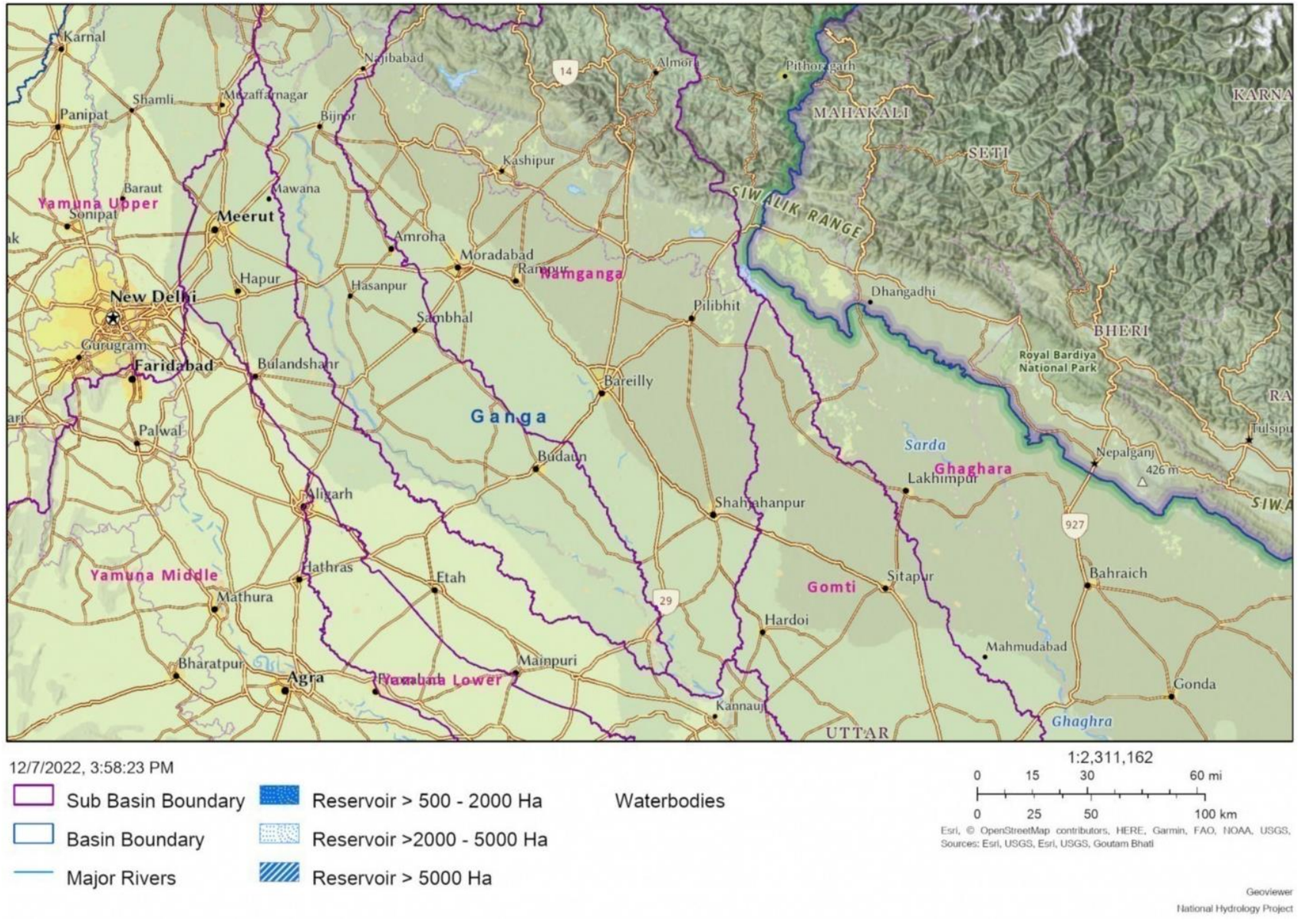


Figure 2: Overview and surrounding of Ramganga basin (Source: https://indiawris.gov.in/wris/#/Geoviewer)

4.2. District overview

Shahjahanpur district is situated southeast of Bareilly Circle and was established in 1813. Prior to its formation it was a part of district Bareilly and is now located in the Southeast of Rohilkhand Division. This district is the last district of the Western Region and is situated between Garra, Khannaut, Ramganga and Gomti rivers. Geographically, it is situated at 27.35 N latitude and 79.37 E longitude. The neighbouring districts of Shahjahanpur are Lakhimpur Khiri, Hardoi, Farrukhabad, Bareilly, Budaun, and Pilibhit. The geographical area of Shahjahanpur is 4575 km².

Figure 3: Map of Ramganga river basin showing Shahjahanpur

The district is administratively divided into 4 tehsils and 15 development blocks, with 124 Nyay Panchayats and 922 Gram Panchayats. The urban sector has 3 Nagar Palika Parishads (Shahjahanpur, Tilhar and Jalalabad) and 7 town areas with Nagar Panchayats (Katra, Powayan, Kanth, Khutar, Allahganj, Khudaganj and Railway Settlement Roza). The total number of villages is 2331 out of which 2080 are inhabited and 251, uninhabited.

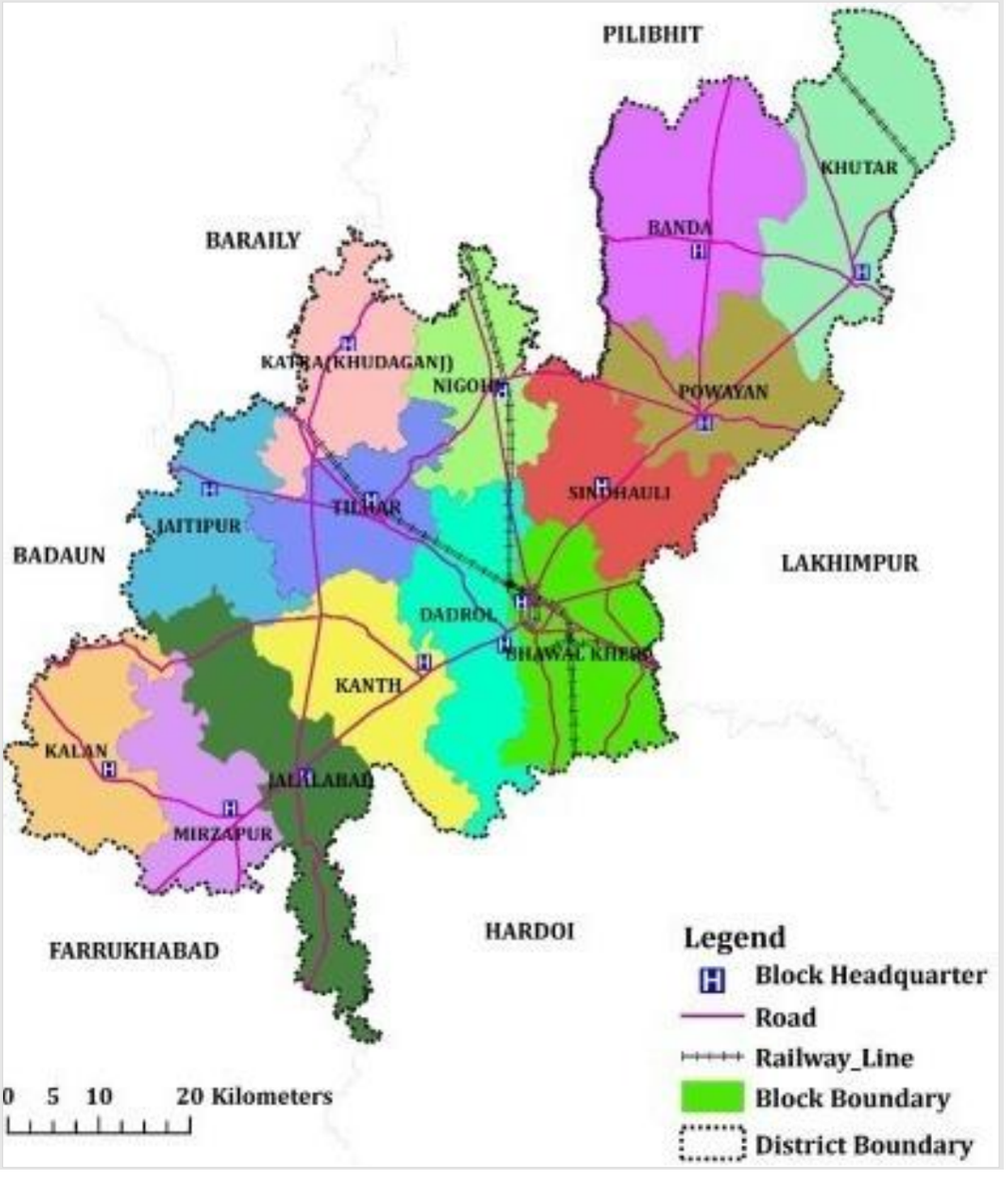


Figure 4: Administrative map of Shahjahanpur district, UP[1]

4.3 Topography and drainage network

The major drainage system of Shahjahanpur is Ramganga and Gomti with their tributaries – Garra, Khannaut, Bahgul, Jokhaland. The district Shahjahanpur forms part of Central Ganga Plains and has a flat topography with the overall slope towards south and southeast. The district's northern part merges imperceptibly into Terai marked by thick forests and marshy lands[2].

[1] (Department of Water Resources, 2020-21)Aquifer Mapping and Management of Ground Water Resources, Shahjahanpur District, UP

[2] Shahjahanpur.pdf (cgwb.gov.in)

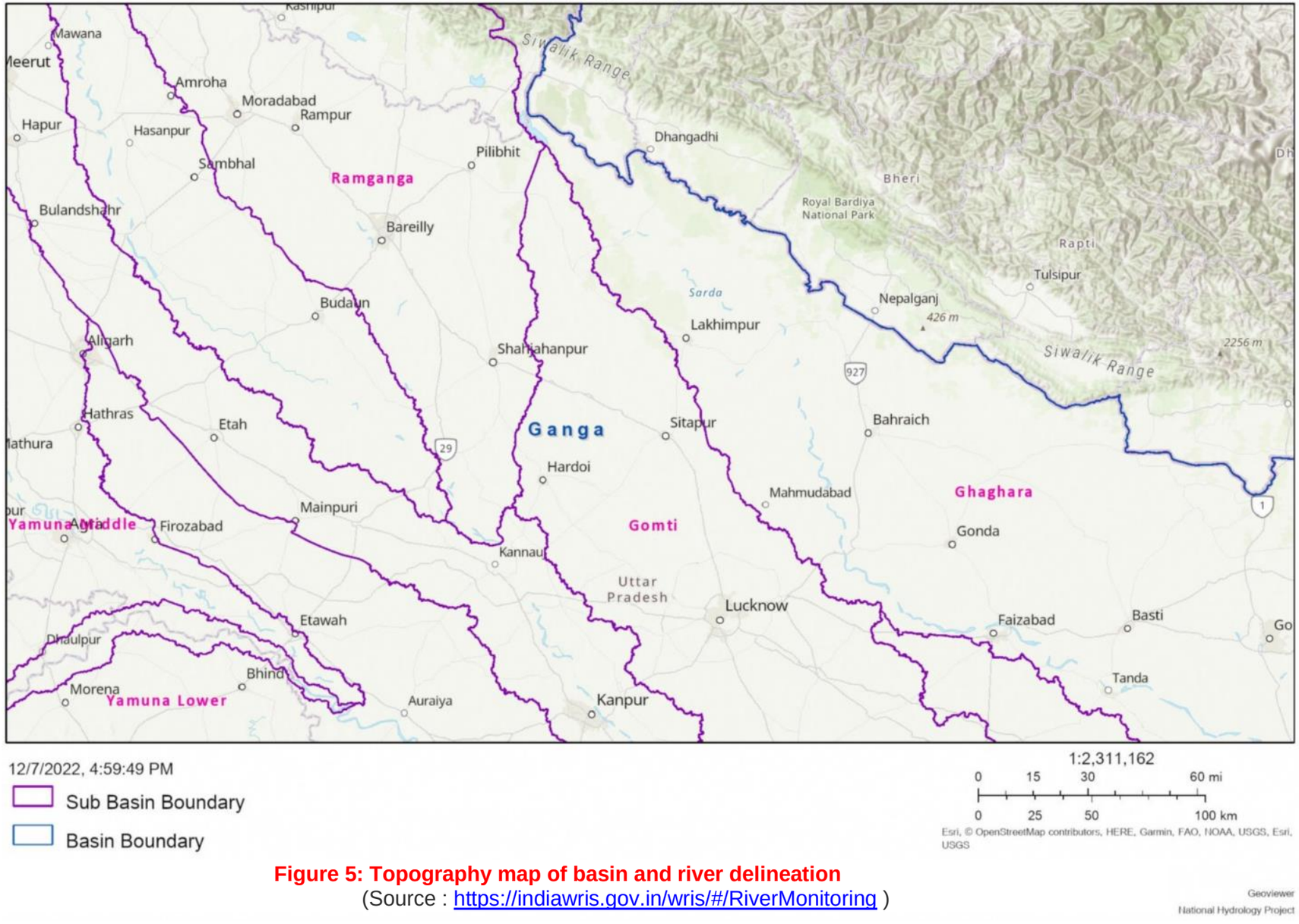


Figure 5: Topography map of basin and river delineation
(Source : https://indiawris.gov.in/wris/#/RiverMonitoring)

The Ramganga river, which flows NNW-SSE in the western part of the district, forms the principal drainage. The southwestern periphery is drained by the river Ganga. Other important rivers are Garra, Khannaut, Bahgul, Jokhal and Kathana. River Garra divides the district into almost equal halves.

In the district, there are about 118[3] -120 sewer drains (cumulative length of approx. 928.96 km.)[4] which are discharging to a nearby river. Out of total 9 Urban Local Bodies (ULBs) (1-MC, 2-M and 6- NP) present in the district, MC- Shahjahanpur is a major source of river pollution due to the discharge of untreated sewage. A total of 17 major sewer drains originating from MC-Shahjahanpur are identified as major sources of river pollution.

Table 1: Major drain-wise discharge capacity

SL No.	Drain Location	Drain Width (in m)	Drain Total Depth (in m)	Estimated Drain Discharge (in mld)	Drain Discharging into river
1	Maghaitola	4.5	2	2.4	Khannaut
2	Roshanganj (D/S at Hanumat Dham)	4.5	3	3.5	Khannaut
3	Husainpura at Hanumat Dham	0.6	0.6	0.5	Khannaut
4	Hanumat Dham	3	1.2	1	Khannaut
5	Banka Ghat (Left)	3	3	2	Khannaut
6	Banka Ghat (Right)	1	1.5	0.5	Khannaut
7	Lodhipur Pul	7	1.8	3.9	Khannaut
8	Mahmuriya/ Jalalnagar	5	4	4	Garra
9	Chhota Kakra	3	3	4	Garra
10	Yunush Khel	4	2.5	5.6	Garra
11	Azeez Ganj	2	4	1.3	Garra
12	Roza/Ahmadpur Reti	3	2	1.3	Khannaut
13	Fattepur Rati	1.5	2	0.4	Khannaut
14	Khwaja Firoz	1.4	1.5	0.7	Khannaut
15	Dalel Ganj	2	1.55	1.3	Khannaut
16	Saray Kaiyan Police Chowki	3	3.5	2.1	Khannaut
17	Rambag Mishripur	2.6	1.5	0.5	Khannaut
	Total			35	

4.4 Climate

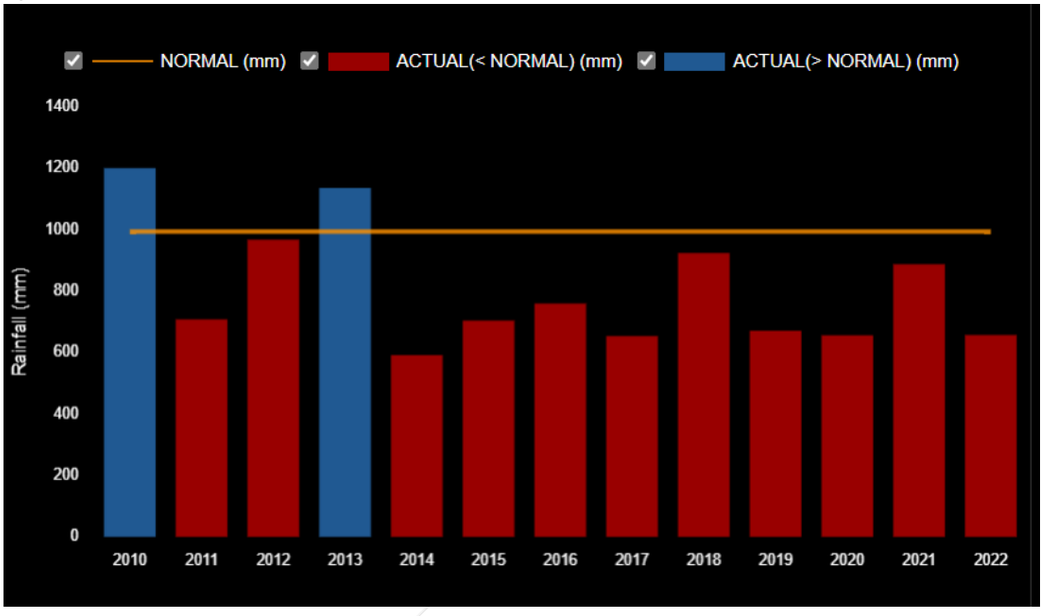
Over a year, Shahjahanpur district has both dry and wet climate with average temperature ranging between 3°C to 41°C. Shahjahanpur has 3 major distinct seasons – summer, monsoon and mild autumn. The typical summer season falls between March to May with daily maximum temperatures ranging from 36°C to 44°C. The rainy season falls between June to September and July being the wettest month of the year. Winter lasts from November to February and temperatures range from 3°C to 22°C (Department of Water Resources, 2020-21).

[3] Source: DEP- Shahjahanpur
[4] Source: Drainage | Official website of Irrigation and Water Resources Department, Ministry of Jal Shakti, Government of Uttar Pradesh, India. (idup.gov.in)

4.4.1 Rainfall

The amount of precipitation varies in the district of Shahjahanpur as shown in the figures below. The differences in precipitation occur between years, *e.g.* with a variation between 592 mm/year average rainfall in 2011 and 1200 mm/year in 2010 (a). During a typical year, the rainfall pattern is distinctly determined by the monsoon, which brings the majority of precipitation (b). During the last 6 years, the distribution of monthly precipitation has varied as shown in Table 2. The geographically distribution of rainfall within the district also varies and increases from west to east (c).

a)



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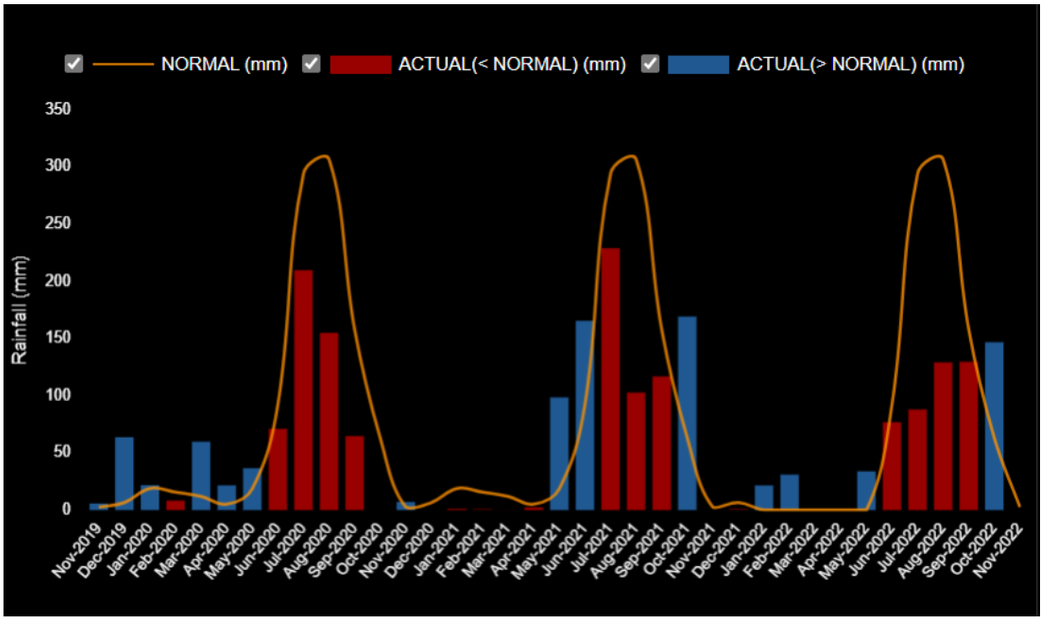


c)

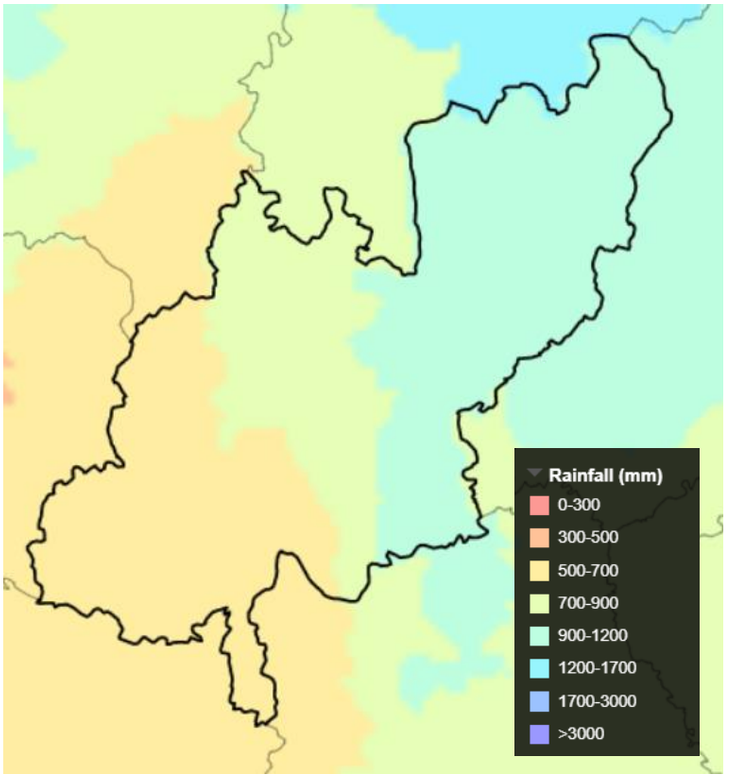


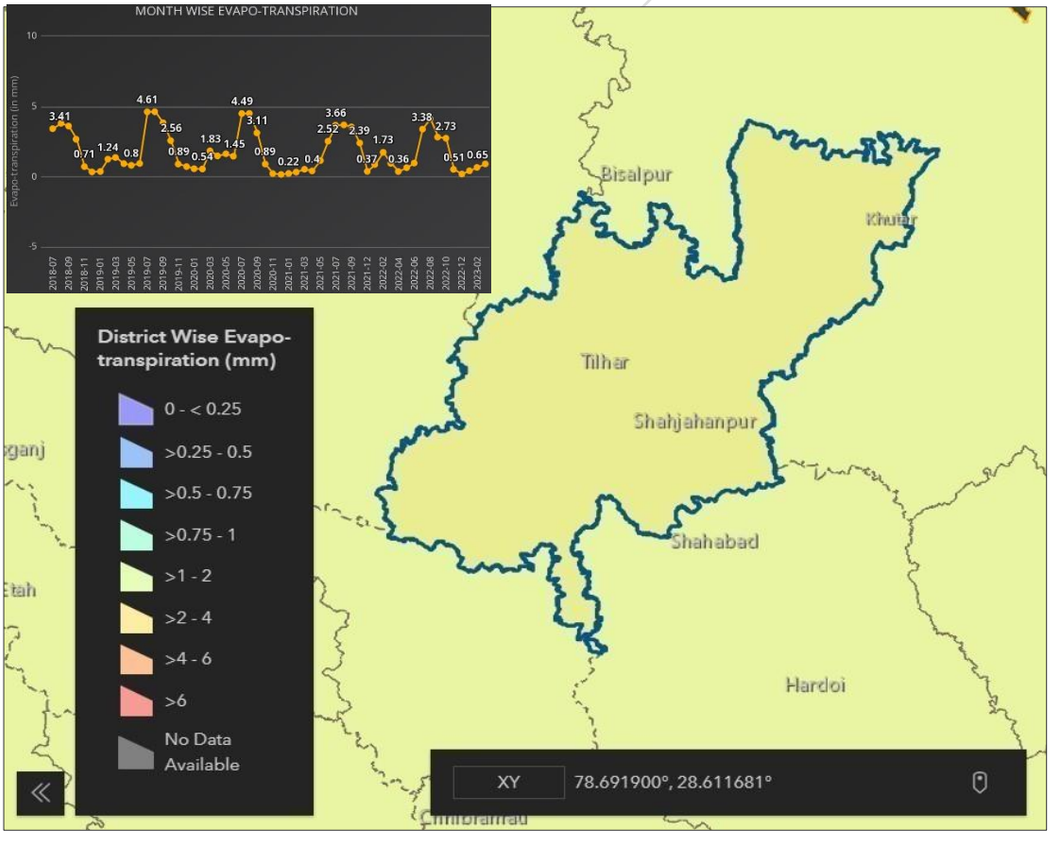
Figure 6 Rainfall pattern of District Shahjahanpur, a) annual average from 2010 until 2021, b) monthly distribution over last 3 years and c) spatial distribution of annual average in the district

Table 2: Rainfall data of Shahjahanpur for 6 years

Month	Normal (mm)	Actual rainfall (mm)					
		2017	2018	2019	2020	2021	2022
January	19	29.86	1.19	3.37	21.81	1.1	21.54
February	15.7	0.32	11.35	24.48	8.27	0.8	30.98
March	12	9.06	0.58	9.17	59.81	0.15	0
April	5.1	0.08	5.99	3.27	21.59	2.31	0
May	18.6	20.82	5.68	1.04	36.64	98.55	33.86
June	92.3	40.53	47.38	53.51	71.07	165.59	76.87
July	294.2	227.81	339.02	329.61	209.94	229.1	87.99
August	306.9	186.52	408.02	97.79	155.08	102.81	129.16
September	158.1	138.48	101.72	77.5	64.72	116.9	129.76
October	63	0.02	1.62	1.76	0	169.33	146.87
November	2.6	0	1.41	5.71	7.12	0	0
December	6.5	0.08	0	63.75	0	0.88	0.04
Total	994	653.58	923.96	670.96	656.05	887.52	380.4

4.4.2 Potential evapotranspiration

The average evapotranspiration of Shahjahanpur district during the last five years (2018-2022) was 1.74 mm/day. It remains highest during monsoon (July – August) and lowest during winter (November – December). During the monsoon period, it



ranges between 3.38 to maximum 4.49 mm/day, whereas during winter it varies from 0.15 (November 2022) to 0.89 mm/day(November 2019)[5].

4.5 River basins

4.5.1 Surface water

The Shahjahanpur district forms a part of the upper Ganga basin's central Ganga plains, which have a continuous flat topography with a dominant slope to the south and southeast. The Ramganga river forms the main drainage system, which runs NNW-SSE across the western portion of the area. The Ramganga, the Garra and the Gomti are the main rivers of the district where the Kathana, the Jhukma the Mensi rivers flow into the Gomti.

River Ramganga

The Ramganga river rises on the southern slopes of Dudhatoli Hill in the Chamoli in the Uttarakhand state and forms the most important drainage system in the Shahjahanpur district. From there, it flows through the districts of Badaun, Shahjahanpur, and Hardoi and eventually joins the Ganga river at the village of Katri Chandapur in the Hardoi district of U.P., after travelling a distance of about 596 km.

River Garra

River Garra is located adjacent to the Kathana river, which flows through a major

Figure 7: Evapotranspiration rate of Shahjahanpur (2018-2023)

and has also had issues with water quality due to massive industrialisation and urbanisation. The Khannaut, the Suketa and the Kai rivers feed the Garra River.

River Gomti

Gomti River is a tributary of Ganges, which originates from Gomat Taal in the Pilibhit district of Uttar Pradesh and extends about 960 km throughout the state crossing the Shahjahanpur district. The river is contaminated at several points throughout its course due to several industrial waste products, effluent from sugar refineries and distilleries, as well as domestic wastewater and sewage as it passes through a region which is the potential source of industrial and human contamination.

In the Shahjahanpur district, Kalagarh is the largest reservoir with a storage capacity of 2.8 BCM, the remaining storage capacity is limited to approximately 0.9 BCM.

[5] Source : India-WRIS (indiawris.gov.in)

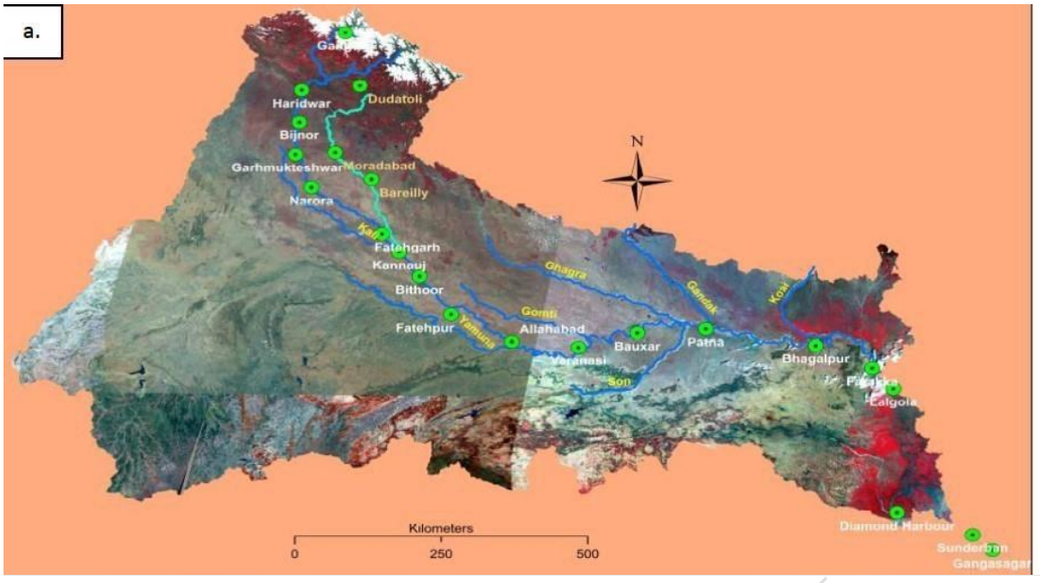


Figure 8: Ganga basin map showing the confluence of Ramganga at Farrukhabad[6]

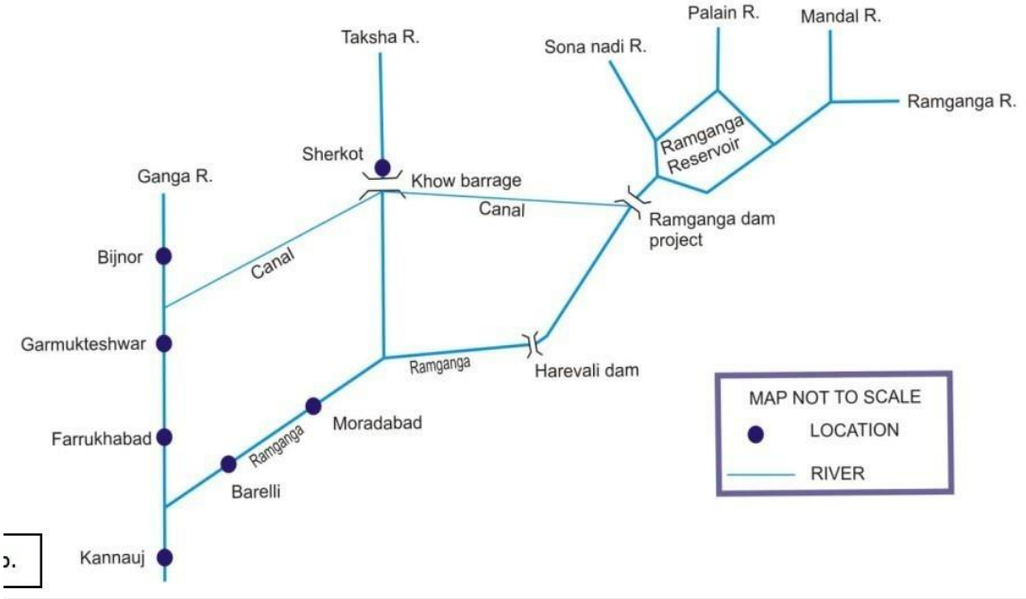


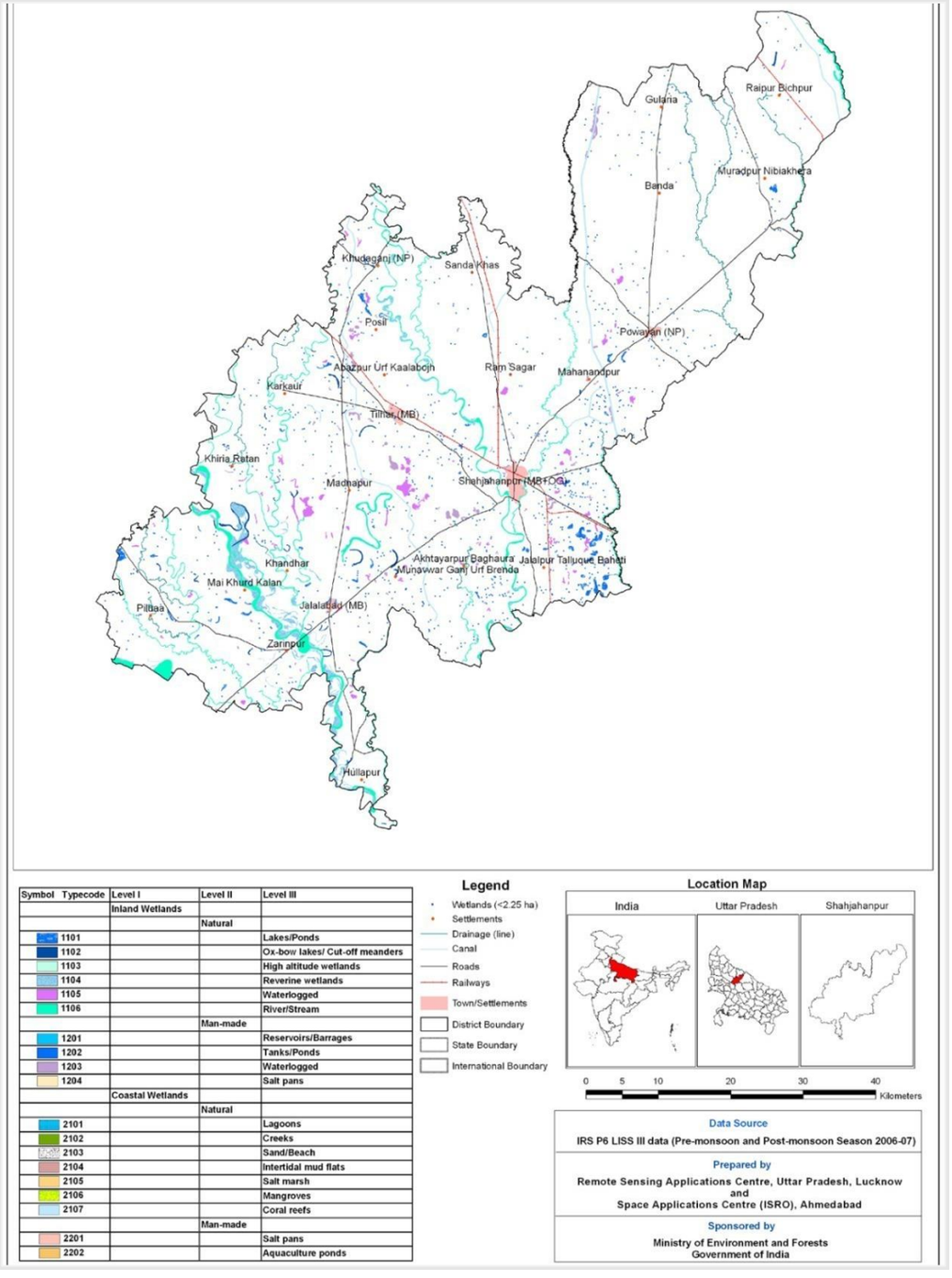
Figure 9: Line diagram of the Ramganga river[7]

The total wetland area in the district is 19,803 ha, most of which are natural wetlands. Besides rivers/streams, the major natural wetland types are riverine wetlands (23.2%), waterlogged (10.4%) and lakes/ponds (8.7%). In manmade category, waterlogged is the major one. In addition, there are 1,089 small wetlands (<2.25 ha). Detailed estimates of wetlands in Shahjahanpur are given in Table 3.

The area under aquatic vegetation in pre-monsoon season is 1,948 ha. Water spread area in post-monsoon season is 11,717 ha., whereas in pre-monsoon season it is

[6] 035_ENB_RAMGANGA.pdf (cganga.org)

6,291 ha. Moderate turbidity is observed in most of the wetlands. High turbidity is observed in rivers and streams during post-monsoon season.



Symbol	Typecode	Level I	Level II	Level III
		Inland Wetlands		
			Natural	
	1101			Lakes/Ponds
	1102			Ox-bow lakes/ Cut-off meanders
	1103			High altitude wetlands
	1104			Reverine wetlands
	1105			Waterlogged
	1106			River/Stream
			Man-made	
	1201			Reservoirs/Barrages
	1202			Tanks/Ponds
	1203			Waterlogged
	1204			Salt pans
		Coastal Wetlands		
			Natural	
	2101			Lagoons
	2102			Creeks
	2103			Sand/Beach
	2104			Intertidal mud flats
	2105			Salt marsh
	2106			Mangroves
	2107			Coral reefs
			Man-made	
	2201			Salt pans
	2202			Aquaculture ponds

Figure 10: Wetland map of Shahjahanpur, UP[7]

[7] National Wetland Atlas: Uttar Pradesh, 2010, Space Applications Centre, ISRO

Table 3: Area estimates of wetlands in Shahjahanpur[8]

Wet code	Wetland Category	No. of wetlands	Total wetland areas (ha.)	% of wetland areas (ha.)	Open Water	
					Post-monsoon area (ha.)	Pre-monsoon area (ha.)
1100	**Inland Wetlands - Natural**					
1101	Lakes/Ponds	75	1728	8.73	682	376
1102	Ox-bow lakes/ Cut-off meanders	38	789	3.98	494	207
1103	High altitude wetlands	-	-	-	-	-
1104	Riverine wetlands	130	4,597	23.21	3524	1,656
1105	Waterlogged	94	2,066	10.43	874	398
1106	River/Stream	178	8,285	41.84	5517	3,376
1200	**Inland Wetlands-Man-made**					
1201	Reservoirs/Barrages	-	-	-	-	-
1202	Tanks/Ponds	11	55	0.28	50	41
1203	Waterlogged	75	1,194	6.03	577	239
1204	Salt pans	-	-	-	-	-
	Sub-Total	**601**	**18,714**	**94.5**	**11,718**	**6,292**
	Wetlands (<2.25 ha), mainly Tanks	1,089	1,089	5.5	-	-
	Total	**1,690**	**19,803**	**100**	**11,718**	**6,292**
	Area under Aquatic Vegetation				4,239	1,948
	Area under turbidity levels					
	Low				1,543	1,263
	Moderate				10,175	4,122
	High				0	907

4.5.2 Groundwater

The major aquifer system of the Shahjahanpur district is quaternary alluvial deposits, which are considered to be older alluvium in major aquifer groups and are mainly comprised of sand and clay. The major lithological formations are sand and clay. Silt is found admixed with sand and clay. Net groundwater availability in the district is 40,974.03 ham., and groundwater draft (all uses) is 83,111.52 ham., hence the level of development of the groundwater is 58.96%.

There are three aquifer groups in the Shahjahanpur district, with depths ranging from 10 m to below 300 m. Overall, the water quality is good except in the deeper aquifer at Imaliya in the southern part, where it is brackish.

[8] Source: https://indianwetlands.in/uploads/NationalWetlandAtlas_UttarPradesh.pdf

Table 4: Aquifer groups in Shahjahanpur district, UP[9]

Aquifer system	Bottom Depth Range (mbgl)		Thickness of Aquifer (m)	
	From	To	Min	Max
Aquifer Group -1	90	130	90	130
Aquifer Group -2	170	235	75	120
Aquifer Group -3	Beyond 300	-	-	-

Aquifer Group -1 which is phreatic in nature begins from the ground level and extends up to variable depths. The height of bottom of the first aquifer group varies from 10 mbgl to 70 mbgl. According to the Figure 11 (map) the minimum thickness of the first aquifer is in the central part of the district whereas maximum thickness is in the south-eastern part of the district. The depth of the aquifer group 1 varies from 90 m (central parts) to 130 m (south-eastern part). Although primary constituent of the aquifer is sand, but mixing does occur. Sand content is variable from 80% to 85%.

Aquifer group 1 is underlain by a regional clay layer. This clay layer acts as a top confining layer for aquifer group 2. Thickness of this layer is in the range of 10 to 20 m.

Aquifer group 2 begins just after above confining layer at the top. Top of the aquifer group 2 is below 100 to 130 mbgl, while the bottom is below 175 to 230 mbgl. Sand is the most important constituent of this aquifer group. Mixing with variable size particle is observed too. The bottom of this aquifer group is bound by a moderately thick clay layer having a thickness in the range of 10 to 30 m. Hence, the top confining clay and bottom confining clay layer together give rise to confined aquifer system.

Aquifer group 3 begins from the bottom of the second confining clay layer and extends beyond 300 mbgl depth. Once again sand is the most dominating constituent of this aquifer.

[9] Source: Shahjahan UP.pdf (cgwb.gov.in) <Page 41 – 45>

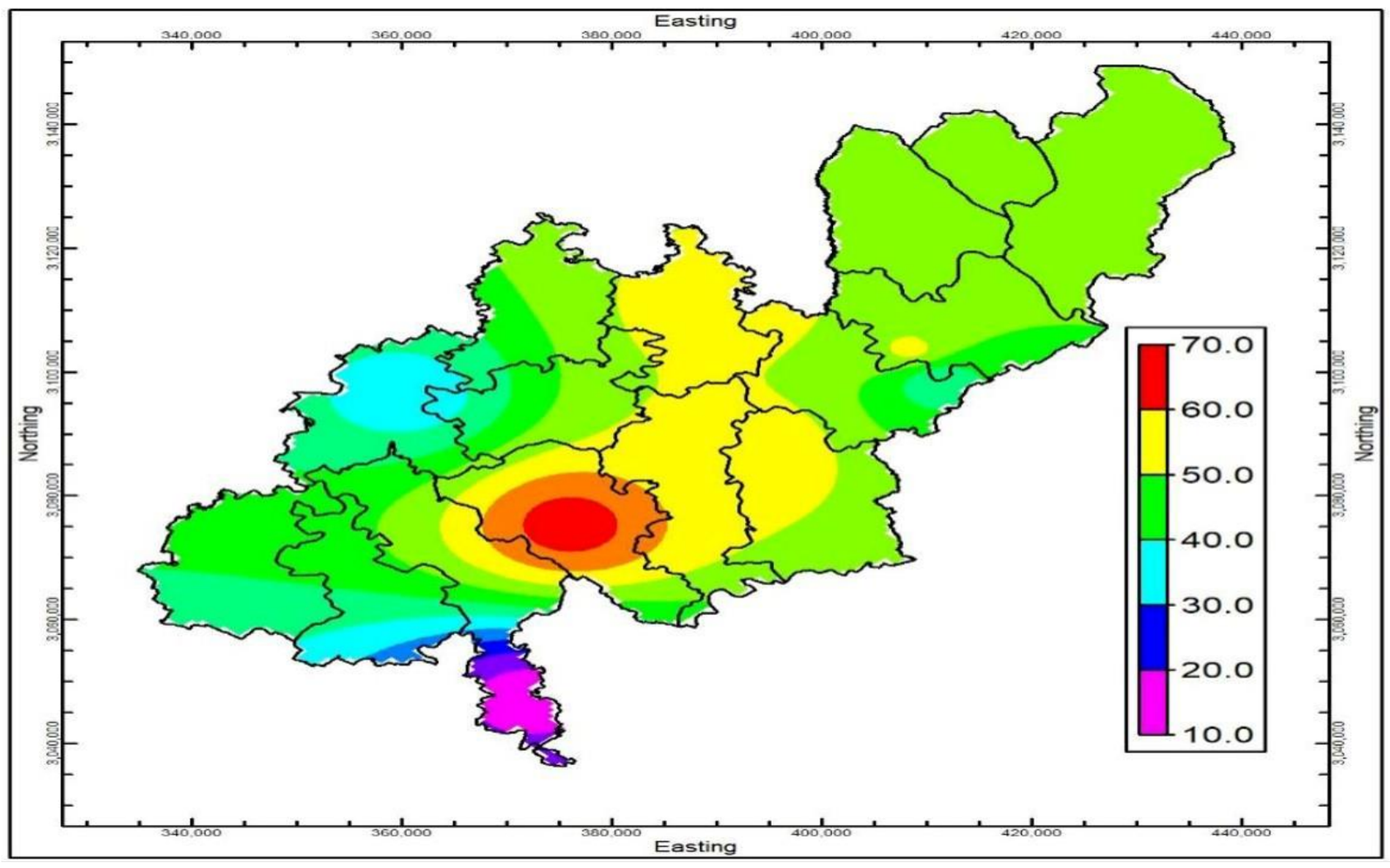


Figure 11: Bottom of the first aquifer from above mean sea level (Source [Shahjahan UP.pdf (cgwb.gov.in)])

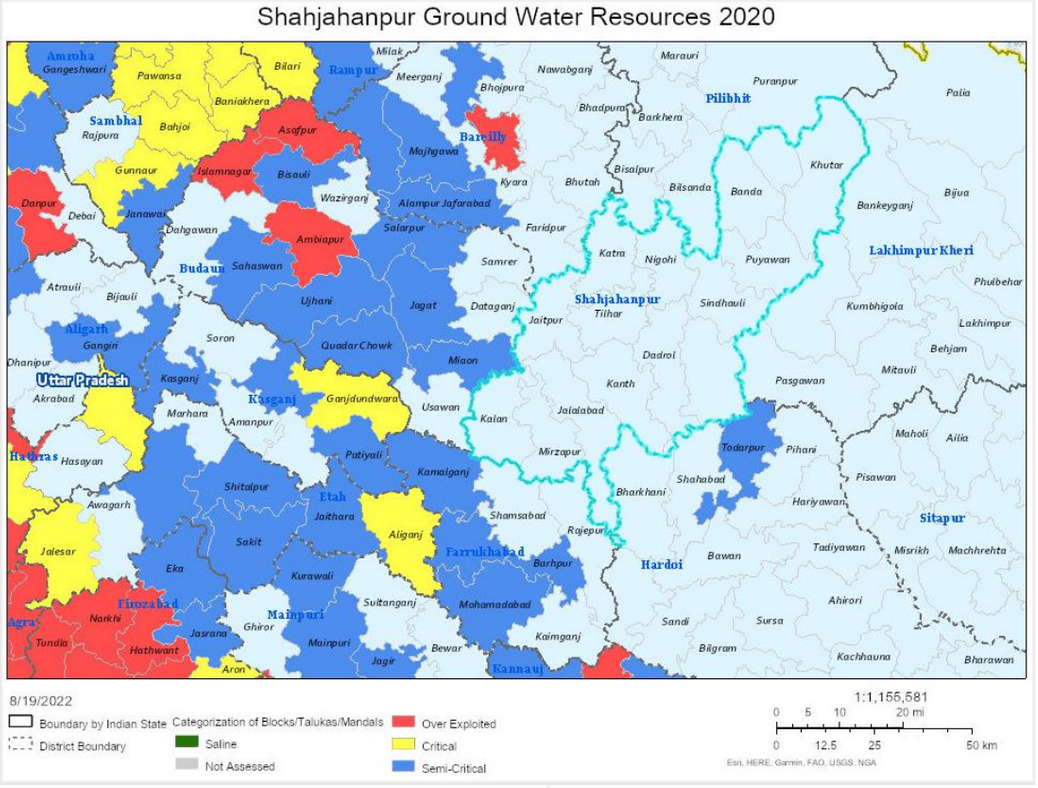


Figure 12: Groundwater resources map of Shahjahanpur district, UP[10]

4.5.3 Water use per sector

Table 5: Projected additional water demand for various sectors (for the year 2020)[11]

S. No.	Block	Additional Demand (in MCM)					
		Domestic	Crop	Livestock	Industrial	Power Generation	Total
1	Banda	12.22	512.28	2.29	0.00	0.00	526.79
2	Khutar	8.81	467.26	2.33	0.00	0.00	478.40
3	Powayan	11.77	357.67	2.27	0.00	0.00	371.71
4	Sindhauli	11.63	404.35	1.77	0.00	0.00	417.75
5	Khudaganj Katra	10.98	324.79	2.05	0.00	0.00	337.82
6	Jaitipur	8.92	281.64	1.97	0.00	0.00	292.52
7	Tilhar	12.04	353.28	2.15	0.00	0.00	367.47
8	Nigohi	9.20	319.26	2.05	0.00	0.00	330.51
9	Kanth	8.35	297.28	1.98	0.00	0.00	307.61
10	Dadrol	9.53	288.53	2.64	0.00	0.00	300.70
11	Bhawal Khera	35.46	324.25	2.77	0.00	0.00	362.49
12	Kalan	9.50	356.56	2.92	0.00	0.00	368.98

[10] https://indiawris.gov.in/wris/#/GWResources
[11] Source: https://pmksy.gov.in/mis/Uploads/2016/20161124030340830-1.pdf (Section: 4.7, Pg 93)

13	Mirzapur	7.71	274.04	3.02	0.00	0.00	284.76
14	Jalalabad	13.46	334.76	2.90	0.00	0.00	351.12
15	Madanapur	7.89	357.04	0.36	0.00	0.00	365.29
	Total	177.48	5253.00	33.46	0.00	0.00	5463.94

Note: Setting up of any new water consuming industry and power plan since 2016 to 2020 was not anticipated while this water demand was calculated in the year of 2016. Hence, any additional water demand for industrial and power generation purpose is not considered.

4.6 Water quality

4.6.1 Ground water quality

Chemical data of groundwater from shallow aquifer indicates that the groundwater is fresh. Generally, groundwater is suitable for irrigation purposes and in some areas suitable for drinking purposes as well. The groundwater quality problem may be grouped into two categories viz. geogenic and anthropogenic. The geogenic ground water quality problem mainly includes the occurrence of saline, brackish ground water and the presence of Fluoride, Iron, and Chloride concentrations beyond the maximum permissible limit. The higher concentration of Nitrate may be due to Anthropogenic activities. The blocks having ground water quality problems in shallow, phreatic aquifers have been identified in the district.

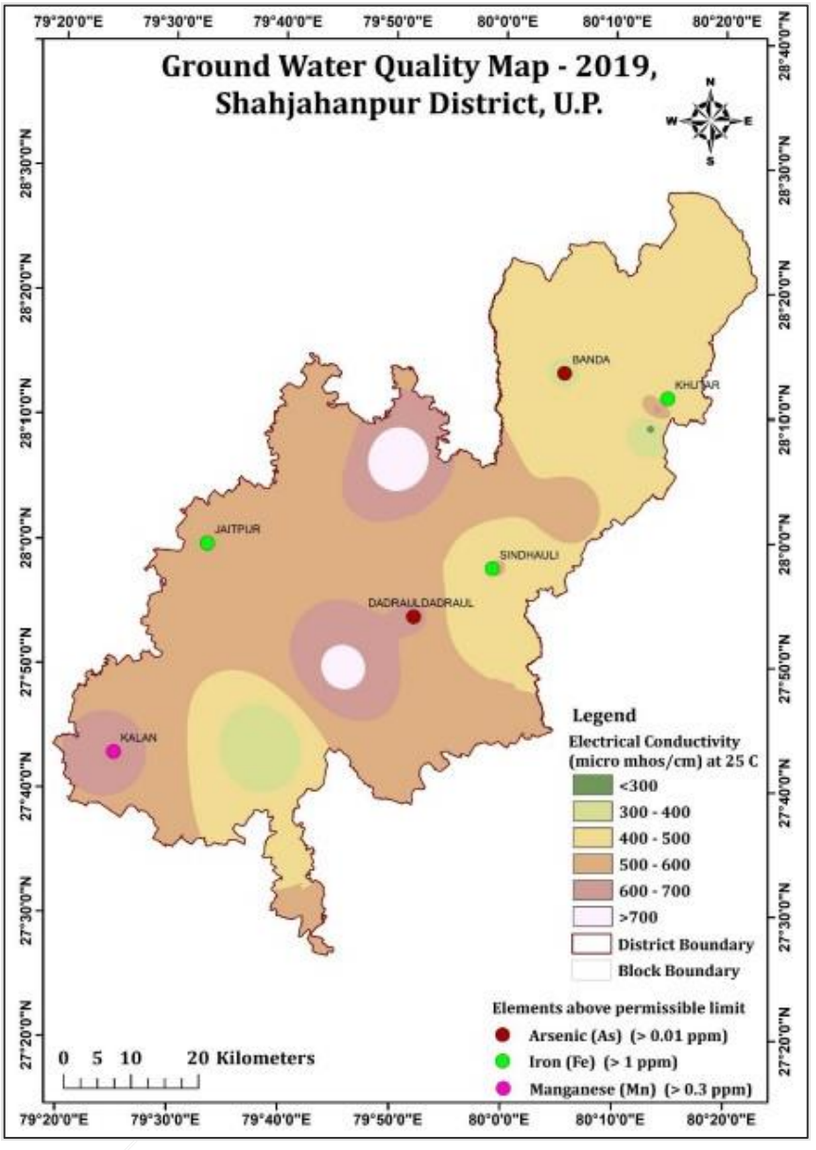


Figure 13: Groundwater Quality of Shahjahanpur District[12]

Six blocks in the district have a groundwater quality beyond the permissible limit. The constituents, above permissible and acceptable limits of Bureau of Indian Standards (BIS), are highlighted in red colour in Table 6.

[12] http://cgwb.gov.in/AQM/NAQUIM_REPORT/UP/Shahjahan%20UP.pdf

Table 6: Blockwise groundwater quality (Pre-monsoon, 2019)[13]

Block	NO_3	Fe	Mn	Zn	As	Pb
	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppb)
Banda	BDL	0.90	0.15	0.04	12.00	1.00
Bhawal Khera	BDL	0.09	0.12	1.61	5.00	2.00
Dadraul	BDL	1.45	0.10	0.13	17.00	1.00
Jaitpur	BDL	2.70	0.19	0.03	4.00	2.00
Jalalabad	BDL	0.41	0.10	0.04	3.00	1.00
Kalan	BDL	3.11	0.45	0.03	1.00	1.00
Kanth	BDL	0.08	0.03	0.03	2.00	1.00
Katra	BDL	0.05	0.11	0.41	2.00	2.00
Khutar	BDL	4.83	0.20	0.54	6.00	1.00
Madanapur	BDL	0.60	0.10	0.03	4.00	1.00
Mirzapur	BDL	0.47	0.01	0.05	1.00	2.00
Nigohi	61	0.18	0.15	0.14	2.00	2.00
Puyawan	BDL	0.23	0.03	0.11	0.00	1.00
Sindhauli	BDL	2.72	0.19	0.03	4.00	1.00
Tilhar	BDL	0.83	0.14	0.15	9.00	1.00

BDL = below detection limit

Table 7: Quality problem in the ground water resources of shallow phreatic aquifer

Chemical constituent responsible for quality problem	Maximum permissible limit in in the absence of alternate source (mg/ lit)	Concentration (mg/lit)	Affected blocks	Possible adverse effects
Nitrate (NO3)	45	61	Nigohi	May cause “Methemoglobinemia” (Blue Baby) disease.
Iron (Fe3+)	1	1.45 to 4.83	Dadraul, Jaitpur, Kalan & Khutar	May be used with caution after taking suitable treatment measures.
Manganese (Mn)	0.3	0.45	Kalan	Change in appetite and reduction in metabolism of iron to form haemoglobin.
Arsenic (As)	10 (ppb)	12 to 17 (ppb)	Banda & Dadraul	Causes skin damage, circulatory problems, risk of skin cancer

4.6.2 Surface water quality

The Shahjahanpur district has an old and deteriorated drainage system which results in sewage/sullage stagnation and water contamination. Domestic pollution of surface water and groundwater sources form the major reason for deteriorated water quality. Untreated domestic sewage/sullage flowing into the rivers Garra and Khannaut from

[13] Shahjahan UP.pdf (cgwb.gov.in) <Page 32- 35>

Shahjahanpur City results in river pollution. At the Garra river, there are around 18 to 20 untreated drainage discharge points.

The Uttar Pradesh Pollution Control Board (UPPCB) monitors the surface water quality of Ramganga river tributary at D/S Ramganga FBD road bridge, Shahjahanpur. The water quality of Ramganga river tributary at D/S Ramganga FBD road bridge, Shahjahanpur is not within the desirable limits set by CPCB under "Designated Best use" criteria. The yearly average water quality data of UPPCB is given in Table 8.

Table 8: Water quality downstream of Ramganga FBD road bridge, Shahjahanpur[14]

Parameters	D/S Ramganga FBD road bridge, Shahjahanpur					
	Year					**Average**
	2022	**2021**	**2020**	**2019**	**2018**	
pH	7.4	-	-	-	-	7.4
DO (mg/l)	8.8	9	9.5	10.1	7.6	9
BOD (mg/l)	2.9	3	2.8	3	2	2.74
COD (mg/l)	17.8	20	-	-	-	18.9
T.C (MPN/ 100 ml)	8742.0	12250.0	13167.0	14500.0	26750.0	15081.8
F.C (MPN/ 100 ml)	5614.0	-	-	-	-	5614.0

Primary water quality criteria for designated - best - use - classes

Class of water	Tolerance limit			
	DO (mg/l), min	BOD (mg/l), max	TC (MPN/ 100ml) max	pH
A: Drinking water source without conventional treatment but after disinfections	6	2	50	6.5- 8.5
B: Outdoor bathing (organized)	5	3	500	6.5- 8.5
C: Drinking water source after conventional treatment and disinfections	4	3	5000	6.5- 8.5
D: Propagation of wildlife and fisheries	4	-	-	6.5- 8.5
E: Irrigation, industrial cooling, controlled waste disposal	-	-	-	6.5- 8.5
Below E: Not meeting A, B, C, D & E criteria	-	-	-	

The analysis of river water quality data of UPPCB reveals that dissolved oxygen is above the required level of 4mg/l and ranges up to 10.1 mg/l. During pre-monsoon period. The monsoon to post-monsoon period, the dissolved oxygen is > 4mg/l. In the same way BOD is within desirable limit. Faecal coliform is beyond desirable limit of >2500 MPN/100ml and it ranges between >3300 mpn/100ml (pre-monsoon, 2022) to 8400 MPN/100ml (monsoon, 2022). The average value of the total coliform is also above 5000 MPN/100ml except it is <5000 MPN/100ml in the month of October and December (2022).

Major sources of industrial pollution are not found in Shahjahanpur district, except in one *nala* (canal) which originates from the KR Pulp and Papers mill located at Rampura village, Sadar Tehsil, Shahjahanpur district and is connected with

[14] UP Pollution Control Board, Lucknow (uppcb.com)

Ramganga at Hardoi district. Contaminated dark black water is directly discharged from the KR Paper factory which adds to the sewage system. There are 9 GPIs in the district where each of them has an Effluent Treatment Plant (ETP) with a cumulative treatment capacity of 25.34 MLD. There is significant water pollution through municipal and biomedical waste; waste and packaging materials from the sabzi mandis or vending units operating below the dilapidated bridge located at Raj Ghat on Garra river, adding to the deteriorating water quality levels. Since the water of Garra, Khannaut and Ramganga is generally very turbid and coloured brownish to black people do not use it.

4.7 Land cover and land use

The land use and land cover areas of Shahjahanpur of year 2017-2018 are given in the table below[15].

Table 9: Land cover and land use of Shahjahanpur district

S.No	Classes	Area (km^2)
1	Built up	257.93
2	Kharif crop	510.59
3	Rabi crop	137.05
4	Zaid crop	0.39
5	Double / Triple Crop	3,232.89
6	Current fallow	54.37
7	Plantation	16.34
8	Evergreen forest	0
9	Deciduous forest	106.64
10	Degraded / Scrub Forest	1.04
11	Littoral swamp	0
12	Grassland	0
13	Shifting cultivation	0
14	Wasteland	49.46
15	Rann	0
16	Waterbodies max	108.53
17	Waterbodies min	20.34
18	Snow cover	0

[15] India-WRIS (indiawris.gov.in)

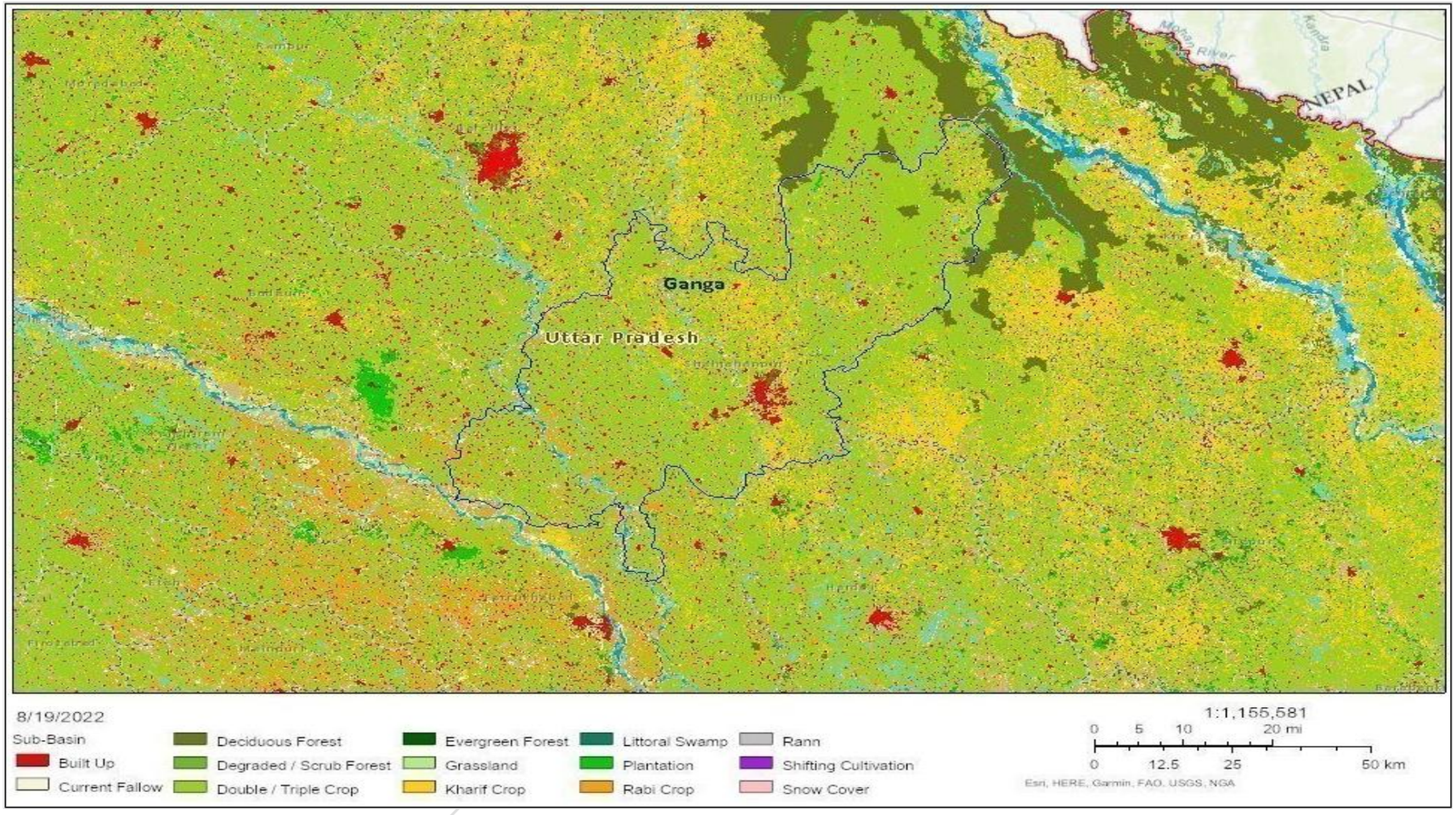


Figure 14: Land use and land cover of Shahjahanpur district[16]

[16] https://indiawris.gov.in/wris/#/lulc

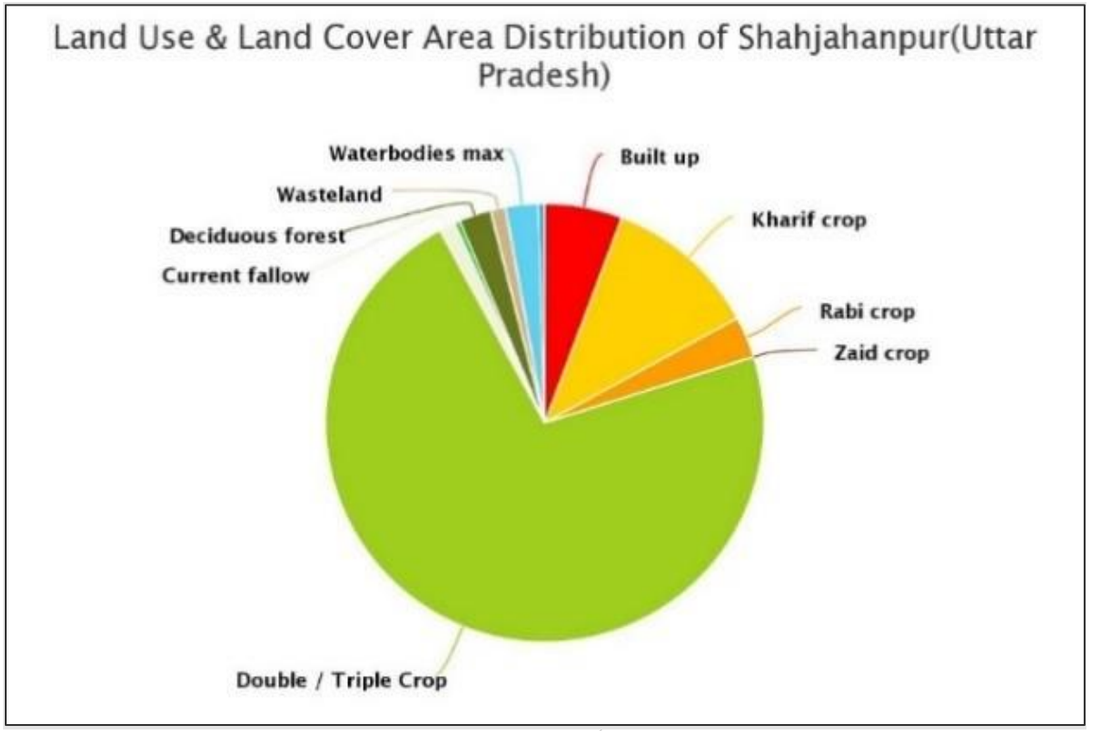
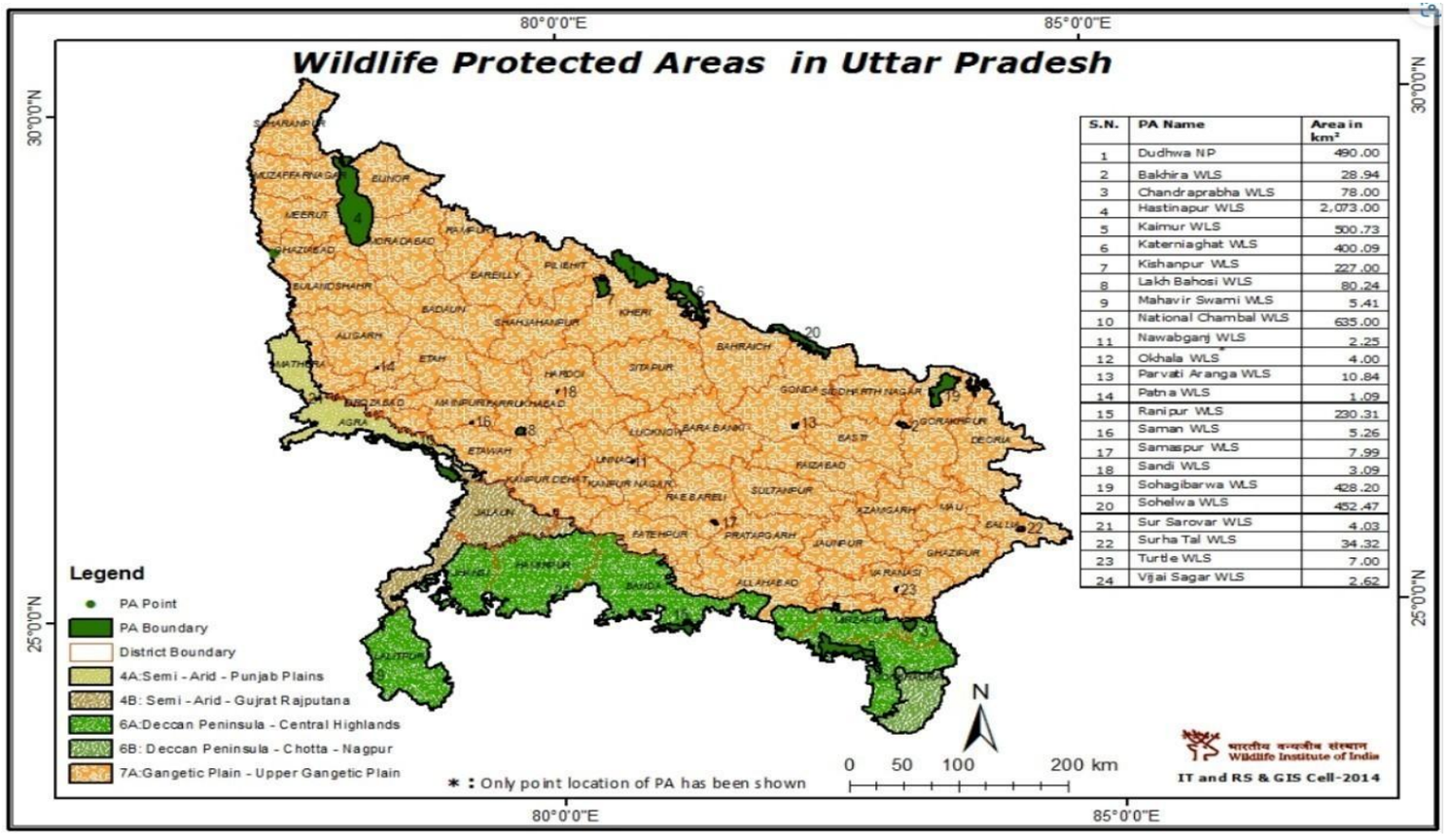


Figure 15: Pie-chart showing LULC distribution of Shahjahanpur[17]

[17] https://arcgis.com/apps/instant/media/index.html?appid=fc92d38533d440078f17678ebc20e8e2

4.8 Protected areas and environmental resources

The wildlife sanctuaries present in the district are Kishanpur Wildlife Sanctuary and Pilibhit Tiger Reserve. The illustrated Map shows the Wildlife Protected areas in Uttar Pradesh.



S.N.	PA Name	Area in km²
1	Dudhwa NP	490.00
2	Bakhira WLS	28.94
3	Chandraprabha WLS	78.00
4	Hastinapur WLS	2,073.00
5	Kaimur WLS	500.73
6	Katerniaghat WLS	400.09
7	Kishanpur WLS	227.00
8	Lakh Bahosi WLS	80.24
9	Mahavir Swami WLS	5.41
10	National Chambal WLS	635.00
11	Nawabganj WLS	2.25
12	Okhala WLS	4.00
13	Parvati Aranga WLS	10.84
14	Patna WLS	1.09
15	Ranipur WLS	230.31
16	Saman WLS	5.26
17	Samaspur WLS	7.99
18	Sandi WLS	3.09
19	Sohagibarwa WLS	428.20
20	Sohelwa WLS	452.47
21	Sur Sarovar WLS	4.03
22	Surha Tal WLS	34.32
23	Turtle WLS	7.00
24	Vijai Sagar WLS	2.62

Figure 16: Wildlife Protected Areas in Uttar Pradesh[18]

[18] http://wiienvis.nic.in/Database/Maps_PAs_1267.aspx

4.9 Ecology and biodiversity

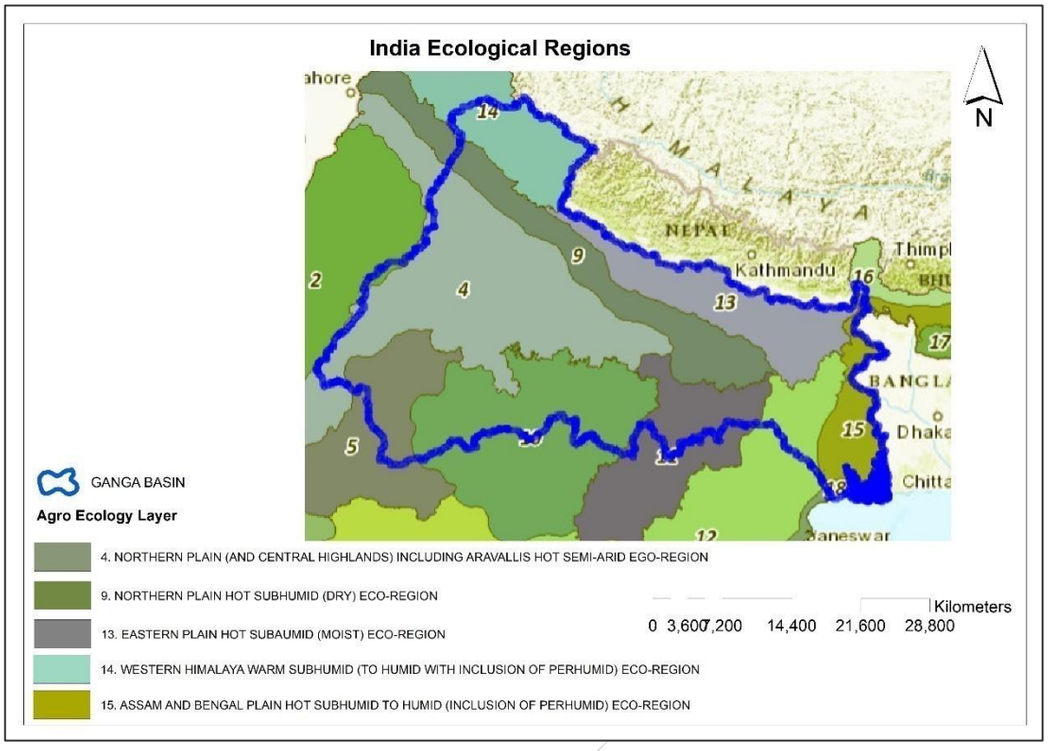


Figure 17: Ecological regions of Shahjahanpur district

Shahjahanpur district falls within the northern plains ecological regions.

Flora and Fauna[19]

The water quality is good and supports biodiversity up to Kalagarh and deteriorates downstream of Harveli barrage. Diatoms constitute the dominant group of phytoplankton and some blue-green algae and green algae are also reported in good numbers. Gharials and Mugger are the two higher forms reported in the river.

[19] http://cganga.org/wp-content/uploads/sites/3/2018/11/035_ENB_RAMGANGA.pdf

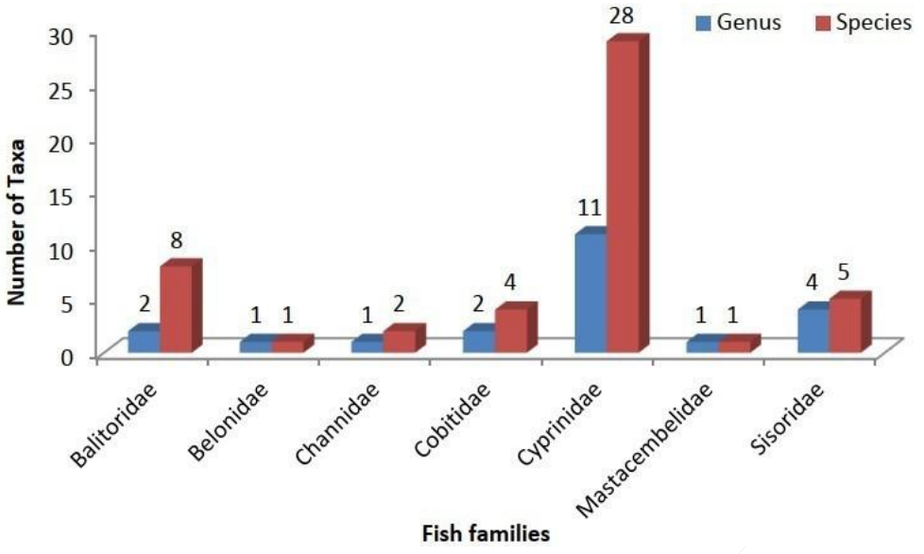


Figure 18: Distribution of fish in Ramganga

4.10 Socio-economic features

4.10.1 Population

The total population of Shahjahanpur is 3,006,538 according to the Census 2011[20]. The total area is 4,388 km² and the population density accordingly is 685 per km². 4 tehsils are situated in Shahjahanpur district i.e. Shahjahanpur, Jalalabad, Powayan, Tilhar under which 10 ULBs are located. In Shahjahanpur NPP, maximum population of 329,736 is counted where in Tilhar NPP, population of 61,444 is counted. In Jalalabad NPP, the popularion of 38,202 is observed and in Powayan NP, population of 28,613 is located (as per census 2011). The population count of ULBs of Shahjahanpur district is given in Table 10.

Table 10: Population count of ULBs in Shahjahanpur District

Name of ULBs	Population
Shahjahanpur (NPP)	329,736
Tilhar (NPP)	61,444
Jalalabad (NPP)	38,202
Allahganj (NP)	14,755
Powayan (NP)	28,613
Khutar (NP)	17,423
Kanth (NP)	27,137
Katra (NP)	32,440
Khudaganj (NP)	14,737
Railway Settlement Roza (NP)	11,489

[20] http://updes.up.nic.in/updes/data/s_abstract/abstract_2021.pdf

4.10.2 Socio-economic profile

From the district's 3,006,538 the total male population of the district is 1,606,403. The total female population is 1,400,135, the sex ratio is 872. The percentage of male literates in the district is 68.18%, whereas the percentage of female literates is 49.57%.

Table 11: Socio-economic profile of Shahjahanpur district[21]

Description	Detail
Total Population	3,006,538
Male Population	1,606,403
Female Population	1,400,135
Sex Ratio	872
Urban population	594,092
Rural population	2,412,446
Literates	59.54%
Male Literates	68.18%
Female Literates	49.57%

Shahjahanpur has 498,735 households, of which 405,601 are rural households, total urban households are 93,134, houseless rural the 0.06%, whereas there is no urban houseless population. Male headed households in rural areas stands at 92.77%, whereas female headed households percentage stands at 7.23%. The total rural population of Shahjahanpur is 2,376,415. 52 % of this population is literate, whereas there is 15% literacy rate below primary education.

The sources of income in rural areas are listed below.

Table 12: Sources of income in Shahjahanpur district[9]

Total Households	% involved in cultivation	% Manual Casual Labour	% Part-time, full time domestic service	% Foraging, rag picking	% Non-agricultural own account enterprise	% Begging/ charity/ alms collection	% Others
104,086	36.1	55.09	1.14	0.05	0.35	0.22	7.05

The sources of income in urban areas are listed below. In the urban areas of Shahjahanpur, beggars consisted of 0.03%, domestic workers consisted of 2.1%, street vendors consisted of 1.69%, and construction workers consisted of 9.31%, sanitation.

Workers consisted of 0.34%, homebased workers consisted of 3.11%, transport workers consisted of 1.06%, shop workers /assistants consisted of 2.62%, electricians / mechanics / assemblers consisted of 0.72%, washer-men consisted of 0.23%, other workers consisted of 11.46%, non-workers consisted of 3.46% and non-income from any sources consisted of 63.87%[22].

[21] DEP Shahjahanpur
[22] Socio Economic and Caste Census (SECC)

Source of income	**%**	Transport worker	1.06
Domestic Worker	2.1	Shop worker/ Assistant	2.62
Beggars	0.03	Electrician/ Mechanic/ Assembler	0.72
Street Vendor	1.69	Washer men	0.23
Construction worker	9.31	Other Worker	11.46
Sanitation Worker	0.34	Non-work	3.46
Home Based worker	3.11	No income from any source	63.87
Total population			**5,42,686**

4.10.3 Gender and vulnerable groups

As given under the population section, there are 872 females per 1000 males in the district and close to 50% women are literate as against about 60% literate men.

A focus group discussion was conducted with women farmer groups in village Noorpur Karahi – Jalalabad, Shahjahanpur in Dec 2022. This discussion was scheduled soon after a farmers' group meeting. In the farmer group meeting, 49 out of 100 farmers were women farmers.

Figure 19 FGD in Shahjahanpur district with women farmers

Figure 20 FGD with farmers in Shahjahanpur district

Observation from the FGD with women farmers:

1. The larger farmers' meeting was called by the district level government agencies to inform them about the support extended by government with reference to good quality seeds at a subsidized cost, crop insurance schemes, fertilizers, pesticides, as well as trainings and exposure visits for organic farming.
2. The women farmers constituted 49 percent of the farmer group.
3. A large proportion of the participating women had completed their intermediate education, a few of them were graduates and about 5 were post-graduates.
4. In terms of age, over 80-85% of the women were below the age of 40 years. There were also a few senior women above the age of 70 years.
5. The women farmers were involved in all stages of farming, from seed sowing to tending, harvesting and selling.
6. Women including the seniors, openly participated in the discussion and expressed their views confidently.
7. The information regarding meetings of farmer and other groups with government is not always inclusively extended as a common practice but mostly targets men farmers. Despite this, some women do participate in the meetings. For this meeting, an inclusive approach was followed in sharing information regarding the meeting resulting in an overwhelming number of women participants. This goes to say that inclusive approaches in themselves result in improved participation of women and perhaps other vulnerable groups too.

There is a need for including women in such meetings. The explanation that women are busy with household jobs is disempowering. Our experience says that if the process is enabling and empowering and the time of meeting is adjusted to include women, they do participate and engage.

4.10.4 Dominant livelihood systems

In rural areas of Shahjahanpur, 36.1% people were involved in cultivation, 55.09% in manual casual labour, 1.14% were involved in part-time or full-time domestic service, 0.05% were involved in foraging or rag picking, 0.35% people were involved in non-agricultural own account enterprise, 0.22% were either involved in begging, charity, alms collection[20].

In the urban areas of Shahjahanpur, beggars consisted of 0.03%, domestic workers consisted of 2.1%, street vendors consisted of 1.69%, construction workers consisted of 9.31%, sanitation workers consisted of 0.34%, homebased workers consisted of 3.11%, transport workers consisted of 1.06%, shop workers/assistants consisted of 2.62%, electricians/mechanics/assemblers consisted of 0.72%, washer (women) consisted of 0.23%, other worker consisted of 11.46%, non-workers consisted of 3.46% and non-income from any sources consisted of 63.87%[20]

4.10.5 Basic amenities

According to the National Family Health Survey – 5 (2019-21), the overall percentage of households having access to improved drinking water source is 100%. 69.2% household have improved sanitation facilities. Apart from drinking water and sanitation facility, only 40.4% of household use clean fuel for cooking. However, in the district, 84.1% of household had electricity services.[23]

5 The institutional arrangement in the district

Holistic and integrated strategic approaches of river rejuvenation address entire river basins and consider not only the problem of the sewage generated by human settlements. Other pressure factors such as industry, irrigation water withdrawal, hydropower utilisation, solid waste discharge and riverbank degradation are to be considered. Therefore, it is required to have planning, financing, monitoring, and coordinating authorities for strengthening the collective efforts of the Central Government and the State Governments and stakeholders in line with the NMCG Authority Notification Order, 2016 for effective abatement of pollution and rejuvenation, protection and management of the river Ganga.

5.1 NMCG, SMCG and DGC

National Mission for Clean Ganga (NMCG)
Prepare guidelines for district planning, mandate to DGCs in accordance with the Authority Notification. Approves the district plans and make financial arrangements for implementation.

State Mission for Clean Ganga (SMCG) Uttar Pradesh

State Mission for Clean Ganga (SMCG) Uttar Pradesh is an extended arm of NMCG for the state of Uttar Pradesh and implementing the Namami Gange and other programmes through various executing agencies.

[23] http://rchiips.org/NFHS/NFHS-5_FCTS/UP/Shahjahanpur.pdf

District Ganga Committee Shahjahanpur (**DGC – Shahjahanpur)**
Mandated to prepare District Ganga Plan in line with Authority notification.

5.2 Key stakeholders

Key stakeholders at national level

- **Central Groundwater Board (CGWB)**
  Contributions in district planning for sustainable development and management of ground water resources of the country.
- **Central Water Commission (CWC)**
  Contributions in district planning for components related to water resource management and monitoring of river water quality
- **National Water Academy (NWA)**
  Contributions in district planning based upon international RBM cycle approach. NWA has been involved with NMCG and GIZ in implementation of RBM cycle trainings.
- **Ministry of Jal Shakti, Department of Water Resources, River Development and Ganga Rejuvenation (DoWR, RD & GR)**
  MOJS, DoWR, RD & GR will not be directly involved in the planning stage of district plans. However, MoJS is the nodal ministry at central level to support Ganga and sub basin water framework development by the states.
- **Ministry of Jal Shakti, Department of Drinking Water and Sanitation and (DWS)**
  MOJS, DWS will not be directly involved in the planning stage of district plans. However, MoJS is the nodal ministry at central level to support Ganga and sub basin water framework development by the states.
- **Ministry of Housing and Urban Affairs (MoHUA)**
  will not be directly involved in the planning stage of District Plans. However, the policies, strategies and guidelines are being provided by CPHEEO to the States & Uts Governments including Municipal Corporations / Committees.
- **Central Pollution Control Board (CPCB)**
  Contributions in data/information on pollution abatement and water quality monitoring in the Basin
- **Centre for Ganga River Basin Management and Studies (cGanga)**
  Coordination and synergies of District Ganga Plan with the Ganga Basin Plan
- **Wildlife Institute of India (WII)**
  Coordination on biodiversity aspects, local awareness activities
- **National Institute of Urban Affairs (NIUA), MoHUA**
  Synergy with urban river management plan framework and urban river management plan for ULBs
- **National Institute of Hydrology, Roorkee, Ministry of Jal Shakti, Department of Water Resources, River Development and Ganga Rejuvenation, Govt. of India**
  Provide leadership in hydrology research through effective scientific solutions for achieving sustainable development and self-reliance of the water sector in India. Study scenarios of water resource availability under varying hydrological, climatic, sociocultural conditions through modelling

techniques. Provide scientific advice to the various stakeholders on water related issues.

Key stakeholders at state level

- **Uttar Pradesh Jal Nigam**

  Will be primarily involved in water supply and liquid waste management planning component of the District Plans. It is also to be involved for designing and execution of projects related to faecal sludge and septage treatment facilities

- **Uttar Pradesh Pollution Control Board**

  Provides recommendations and measures on matters concerning prevention and control of water & air pollution with the collection, compilation & preparation of data related to water & air pollution and organizing the IEC activities on the prevention, control of water & air pollution and waste management

- **Urban Development Department, Govt. of Uttar Pradesh**

  Works to implement the major schemes by Urban Development Directorate

- **Department of Rural Development, Govt. of Uttar Pradesh**

  Implements several programs in the area of self-employment, employment, rural housing, rural connectivity, village developments, etc. for rural economy and infrastructure development

- **Board of Revenue, Uttar Pradesh**

- **Uttar Pradesh Forest Department**

  Implements the National Forest Policy in order to ensure the ecological stability through the protection and sustainable management of natural resources

- **Irrigation and Water Resources Department, Govt. of Uttar Pradesh**

  Maintains information on hydropower projects, irrigation, water resources planning development and management

- **Remote Sensing and Application Centre, Uttar Pradesh**

  Involve in geophysical surveys, soil and water testing techniques for assessment, monitoring, utilisation and management of various natural resources of the state with a view to achieve sustainable development. RSAC-UP is carrying out the work in crop area and production estimation of different crops, space based information support for decentralized planning, wetland inventory assessment, monitoring of integrated watershed, vulnerability assessment, desertification and land degradation, assessment of plantation, water sector restructuring, unauthorized colony mapping within the area of Development Authorities of U.P., asset mapping, ground water targeting, rural & urban planning including smart city and infrastructure planning.

- **State Water Resources Data Analysis Centre (SWaRDAC)**
  SWaRDAC is technical arms of Uttar Pradesh Water Management and Regulatory Commission (UPWaMReC). It provides technical advice to commission and provides water related data to the SWaRA and other central/ state water plans for all river basins of the State.

Key stakeholders at district level

- **District administration authorities**
  Law & order, planning, development, and management activities.
- **Urban local bodies (ULBs) falling in the district**
- **Nagar Nigam**
  Planning, development, upkeeping and management activities.
- **Jal Nigam**
  Jal Nigam is responsible for planning, survey, design and execution of urban as well as rural water supply and sewage schemes in the state of Uttar Pradesh. In addition to above the Nigam has also been authorized as a construction agency
- **Irrigation Department**
  Canal Construction, tube wells, flood protection works and construction of reservoirs for the purpose of water conservation and generation of electricity and anti-erosion works.
- **Public Works Department**
  Construction, maintenance and planning of roads, bridges and government buildings.
- **Division/ District Office of Environment, Forest and Climate Change Department**
  Forest officers are responsible for the forests, environment and wildlife-related issues of forest.

- **ULBs, Shahjahanpur**
- **Agriculture Department**

  The main work of Department is to encourage food & nutritional security. The department provides various schemes, public friendly plans, soil testing, seeds & pesticides and information about machines for agriculture and soil conservation schemes.
- **Industrial associations**
- **District Panchayat Raj Department**

  The civic functions relating to sanitation, cleaning of public roads, minor irrigation, public toilets and lavatories, primary health care, vaccination, the supply of drinking water, constructing public wells, rural electrification, social health and primary and adult education, etc.
- **District Education Department**
  Education laws, policies and regulations; Implementing approved education and sports development plans, strategies. And programmes.
- **District e-Governance Department**

  National Informatics Centre (NIC) provides nationwide ICT infrastructure to support e-Governance services and various initiatives of Digital India in design, development and implementation of various e-Governance initiatives and Digital India programme.
- **Individual community representatives or organisations**

  Local representatives of the community and involvement of community-based organisations (CBOs), non-governmental organisations (NGOs) or water user groups is essential to highlight the local concerns.

5.3 Existing policies and programs

National Water Policy (2012)

The National Water Policy (NWP) (2012) insists on incorporating a participatory approach in various aspects of planning, design, development and management of the water resources schemes with a view to eventually transfer the management of created facilities to the user groups/ local bodies. The NWP 2012 mandates the centre, the states, the local bodies to ensure access to a minimum quantity of potable water for essential health and hygiene to all its citizens, available within easy reach of the household. Second the women's special concern related to water remain subsumed under that of the household which is the officially recognized social unit in all the NWP documents.

The main objectives of this policy are:

- Ensure preservation and optimal utilisation of the available resources
- Qualitative improvement in water resource management
- Maintain surface and underground water quality
- Maintain ecological and environmental balance while developing water resources.

National Water Mission

The main objectives of National Water Mission (NWM) are conserving water, minimizing wastage and ensuring more equitable distribution of water, both across and within states through integrated water resources development and management.

NWM has five goals as under:

I. Comprehensive water database in public domain and climate change impact assessment on water resources.
II. Promotion of citizen and state actions for water conservation, augmentation and preservation.
III. Focused attention to vulnerable areas including over-exploited areas.
IV. Increasing water use efficiency by 20%, and
V. Promotion of basin level integrated water resources management

Budget allocation: INR 50 crore budget allocated for research and development and implementation of NWM for the period 2023-24 (source: allsbe.pdf (indiabudget.gov.in) Item no.- 26, Page 221).

National Hydrology Project

Objective is to improve the extent, quality and accessibility of water resources information and to strengthen the capacity of targeted water resources management institutions. The project involves modernizing the monitoring network, transforming knowledge access, enhancing analytical tools and modernizing institutions.

Achievements:

- It establishes a nationwide 'Nodal' 'one point' platform for all states to collaborate and share data pertaining to water resources.
- Significant progress has been made in the fields of WRMS, WRIS, WROPS and WRICE.
- Nationwide repository of water resources data, NWIC has been established.
- Focusing on establishment of Real Time Data Acquisition System (RTDAS) on pan India basis.
- Integrated water resources management using cutting-edge technology.

Budget allocation: Total budget of INR 500.0 crores for National Hydrology Project and INR .3.95 crore for establishment of National Water informatics Centre (NWIC) for the period of 2023-24.

Master plan for artificial recharge for groundwater in India

The revised master plan for artificial recharge to groundwater has been made for the whole country at the district and block level. The plan is macro-formulated to work out the feasibility of various structures for the different terrain conditions of the country and respective estimated cost.

Budget allocation: The total cost for implementation of this revised master plan is INR 1,33,529.69 Cr, with INR 96,735.45 Cr (72%) for rural areas and INR 36,794.23 Cr (28%) for urban areas.

Achievements

- Under Master Plan, an area of 11. 23 km² has been identified for artificial recharge.
- The water required for artificial recharge has been worked out for each state. The surplus available for recharge after deducting the committed supply has been estimated for each State.

State Specific Action Plan (SSAPs) for the water sector under NWM

The NWM is supporting states and UTs to formulate state specific action plans for the water sector. SSAP is a comprehensive policy for the promotion of basin level integrated water resource management. It is a multidisciplinary activity requiring active participation of all government departments related to water from supply side, demand side, governance side, technology side and environment and climate change perspective and also that of non-government agencies and citizens. Thus, the formulation of plans involves convergence and synergy of all governmental and non-governmental stakeholders -.

Budget: Uttar Pradesh State Government has approved 51 Lakhs for this plan.

Jal Shakti Abhiyan

Focuses on saving and conserving rainwater. It involves the states and all stakeholders to create rainwater harvesting structures suitable to climatic conditions and sub-strata. It aims to accelerate water harvesting, conservation and bore well recharge activities in 256 water-stressed districts. to promote water conservation and water resource management by focusing on accelerated implementation of five

targeted interventions viz. water conservation and rainwater harvesting, renovation of traditional and other water bodies, reuse of water and recharging of structures, watershed development and intensive afforestation. Besides, the special interventions included development of Block Water Conservation Plans and District Water Conservation Plans, Krishi Vigyan Kendra Melas, Urban Wastewater Reuse and 3D contour mapping of all villages.

Achievements

- Has delivered over 3.5 lakh water measures in 256 districts. Out of these, 1.54 lakh are of water conservation and rainwater harvesting measures, 20,000 related to the rejuvenation of traditional water bodies, over 65,000 are reuse and recharge structures and 1.23 lakh are watershed development projects.
- An estimated 2.64 crore people have already participated in the Abhiyan making it a Jan Andolan. (Source: reference note, Jal Shakti Abhiyan, 2019)

National Policy for Women 2016

It is a generic policy framework that guides various sectors to issue more detail policy documents that are sector specific. The policy is created with a vision to build a society in which women attain their full potential and are able to participate as equal partners in all spheres of life and influence the process of social change. The mission is to create an effective framework to enable the process of developing policies, programmes and practices which will ensure equal rights and opportunities for women in family community, workplace and in governance.

Salient features of the National policy for women empowerment:

a) To create a society with women working as equal partners in all spheres of life
b) To develop a framework to ensure equal rights and opportunities for women
c) To carry out skill development and provide equal employment opportunities.
d) To address all forms of violence against women

Budget allocation: The funds directed to women-only schemes in various ministries of the government together have increased from ₹ 11,388.41 crore in 2015-16 to ₹ 17,412.01 crore in 2016-17. Allocation for Women Training Programmes for women police officers increased from ₹ 12 lakh in 2015-16 to ₹ 16 crore in 2016-17. The overall budget for women is generally calculated as a combination of Part A (100% provision is for women) and Part B (allocations for women constitute at least 30% of the provision), which budget stands at ₹ 90,624.76 crore in 2016-17 as against ₹ 81,249.12 crore in 2015-2016 (source: https://www.livemint.com/Home-Page/h0s3Phn00d6v2VK2DHio0L/Budget-2016-Mixed-bag-for-women.html)

Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS)

The objective of this scheme is to provide up to 100 days of unskilled manual work in a financial year to every household in rural areas as needed resulting in the creation of productive assets. Another aim of MGNREGS is to create productive assets (such as roads, canals, ponds, wells) of prescribed quality and durability, strengthening the livelihood resource base of the poor, proactively ensuring social inclusion and

strengthening Panchayati Raj Institutions (PRIs). Labour-intensive tasks like creating infrastructure for water harvesting, drought relief and flood control are preferred.

Budget allocation: The financial allocation under MGNREGS for financial year 2020-21 was enhanced from INR 61,500 crore at Budget Estimate stage to INR .1,11,500 crore at Revised Estimate stage. In financial year 2021-22, the financial allocation for MGNREGS was increased from INR .73,000 crore at Budget Estimate stage to INR 98,000 crore at Revised Estimate stage. (source:https://rural.nic.in/en/press-release/allocation-funds-under-mgnregs#:~:text=The%20financial%20allocation%20under%20Mahatma,crore%20at%20Revised%20Estimate%20stage)

Mission Amrit Sarovar

Main objective of this mission is to harvest and conserve water for future generations. The purpose of this mission is conserving water as well as expediting the infrastructural projects with soil and silt from the ponds, generating employment opportunities, irrigation, augmentation of tourism, fisheries etc. The salient features of the Mission Amrit Sarovar is as follows:

- Every district of the country will construct or rejuvenate at least 75 Amrit Sarovars.
- Every Amrit Sarovar will have a pondage area of at least 1 acre with a water holding capacity of about 10,000 cubic meters.
- Every Amrit Sarovar will be surrounded by trees like Neem, Peepal and Banyan etc.
- Every Amrit Sarovar will be a source of generation of livelihoods by using the water for different purposes like irrigation, fisheries, duckery, cultivation of water chestnut, water tourism and other activities.

AMRUT

Atal Mission for Rejuvenation and Urban Transformation (AMRUT) focuses on developing basic urban infrastructure in water supply sectors with the expected outcome of universal access to portable water for every household in mission cities. The AMRUT 2.0 scheme was launched for 5-year period (FY 2021-22 to 2025-26). The purpose of Atal Mission for Rejuvenation and Urban Transformation (AMRUT) is to:

- Ensure that every household has access to a tap with the assured supply of water and a sewerage connection.
- Increase the amenity value of cities by developing greenery and well-maintained open spaces (e.g. parks) and

Achievements

- The scheme has provided 79 lakhs of household tap water connections and 45 lakhs of sewer connections.

- The scheme promoted energy efficiency by replacing 76 lakhs of streetlights with energy efficient LED streetlights.

Budget allocation:

AMRUT 2.0 outlay - ₹2,99,000 crore including Central outlay of ₹76,760 crore for five years. This outlay includes funding of ₹22,000 crore (₹10,000 crore as Central Assistance) for ongoing projects of AMRUT till March 2023.

Against the total plan size of INR .77,640 crore of all the SAAPs (State Annual Action Plans), INR .39,011 crore (50%) has been allocated to water supply, INR .32,456 crore (42%) to sewerage and septage management, INR .2,969 crore (4%) storm water drainage projects.

The Government of India has so far allocated INR 39,011 crore for drinking water supply projects and INR 32,546 crore for sewerages and septage projects under the scheme.

Budget 2023-24: Urban Rejuvenation Mission - 500 Cities (under AMRUT) is INR 8000.0 Crore.

Programmes under Tourism Dept., Govt. of Uttar Pradesh

The tourism Dept. of Uttar Pradesh had a budget of 2.10 Cr for Ghat beautification near Hanumat dham near Khannaut river.

Projects under Nagar Vikas Nigam / Jal Nigam

Various projects at District level were taken up by the Govt. of Uttar Pradesh under Nagar Vikas Nigam/Jal Nigam.

- Construction of 32 KLD faecal sludge treatment plant on a budget of 5.23 Cr.
- Construction of a Central sewerage zone on a budget of 377.51 cr under sewerage scheme.
- Construction of RCC nala near Roja Mathiya Colony on a budget of 1.10 cr.
- Construction of RCC nala near CHINNAUR on a budget of 1.65 cr.
- Construction of 130 TPD capacity of solid waste management plant on a budget of 12.69 cr.
- Construction of nala from Madrakhel to Garra river on a budget of 6.55 cr.
- Construction of nala in Bahadurpura on a budget of 1.49 cr.
- Construction of RCC SW drain from Shiv Mandir to Bhuyyar Baba Mandir on a budget of 0.81 cr
- Amrut payable water yojana phase -2 on a budget of 32.60 cr.
- Nagar Vikas Nigam/Jal Nigam, Deen Dayal Upadhaya Nagar Vikas Yojana payable water yojana zone 4a, on a budget of 4.95 cr.

Swachh Bharat Mission

Swachh Bharat Mission (SBM) was launched with two components: SBM (Gramin) and SBM (Urban). The Mission aims to construct household and community owned toilets, their usage and Solid and Liquid Waste Management (SLWM) for achieving Open Defecation Free (ODF) Plus India. The rural component is implemented by the

Department of Drinking Water and Sanitation, the urban one is implemented by the Ministry of Housing and Urban Affairs. The government made a provision of INR 12,000 per toilet as financial incentive for promoting the toilet construction and its usage.

Urban Swachh Bharat Mission 2.0 was launched in October, 2021 with the mission to make all our cities 'Garbage Free'. SBM-Urban 2.0 will focus on: (i) sludge management, (ii) waste-water treatment, (iii) source segregation of garbage, (iv) reduction in single-use plastics and (v) control of air pollution caused by construction, demolition, and bio-remediation of dumpsites.

Achievements

- Under SBM (Gramin), 10.28 crore toilets have been constructed in 36 states/UTs. 603,175 villages were declared open defecation free in five years.
- More than 30 crore people participated in the behaviour change campaigns.
- On 2020, an Audio-Video Experience Centre, Rashtriya Swachhata Kendra (RSK) has been set up in New Delhi to bring to the people the unique story of continuous promotion for cleanliness and the success of Swachh Bharat Mission.
- SBM-Urban aims at making urban India free from open defecation and achieving 100% scientific management of municipal solid waste in 4,000+ towns in the country. Construction of 66 lakh individual household toilets (IHHLs) was conducted by October 2, 2019 under SBM Urban. However, this target was then lowered to 59 lakh IHHLS by 2019. This target was achieved by 2020
- 55 crore people changed their behaviour and started using toilets. With the attainment of Swachh Bharat, there has been a significant reduction in water and sanitation related diseases. The Swachh Bharat Mission has resulted in an annual profit of more than INR 50,000 per household in rural India. (source: https://pib.gov.in/FactsheetDetails.aspx?Id=148579)

Budget allocation:

SBM (Rural) - INR 7192.0 crore for the year 2023-24

SBM (Urban) – INR 5000.0 crore for the year 2023-24

Namami Gange Mission

Namami Gange Programme is an integrated conservation mission to accomplish the twin objectives of effective abatement of pollution, conservation and rejuvenation of National River Ganga. It is being operated under the Department of Water Resources, River Development and Ganga Rejuvenation, Ministry of Jal Shakti and implemented by the NMCG, and its state counterpart organisations i.e. State Programme Management Groups (SPMGs). Considering the need and spread of the programme, Govt. of India has further approved Namami Gange Mission –II.

Achievements

- 374 projects on cleaning the main stem of river Ganga and its first order tributaries are taken up along the main stem towns of river Ganga and 15

tributaries. Out of these 374 projects, 210 projects are completed and the remaining projects are at various stages of completion.

- 49 sewage management projects are under implementation and 98 sewage projects have been completed in 9 states. 28 sewage projects are under tendering and 1 new sewage projects launched in these states. Work is under construction for creating a sewerage capacity of 5175.87 (MLD).
- Construction and modernisation of 70 Ghats/Crematoria and renovation of 267 Ghats/Crematoria and Kunds/Ponds have been initiated.
- Projects to develop science - based aquatic species restoration plan for Ganga river along with conservation & restoration of aquatic biodiversity.
- A series of public outreach and community participation activities such as events, workshops, seminars, conferences and numerous IEC activities were organized. Various awareness activities through rallies, campaigns, exhibitions, shram daan, cleanliness drives, competitions, plantation drives and development and distribution of resource materials were organized and for wider publicity the mass mediums such as TV/Radio, print media advertisements, advertorials, featured articles and advertorials were published.
- Regulation and enforcement through regular and surprise inspections of GPIs is carried out for compliance verification against stipulated environmental norms. Action has been taken against 110 non-complying GPIs and are issued closure directions. Online Continuous Effluent Monitoring Stations (OCEMS) connectivity established to CPCB server in 885 out of 1072 GPIs.
- 1674 Gram Panchayats of 5 Ganga basin States have been identified for construction of toilets. Out of the targeted 1,527,105 units, MoDWS has completed construction of 853,397 toilets. Preparation of Ganga river basin Plan and development of 65 model villages is under progress.

Budget allocation

Namami Gange Mission –II: INR 22,500 Cr. budgetary outlay till 2026[24].

National Ganga Plan under NGM-II: INR 4000 Cr budget for FY 2023-24[25]

[24] Source: https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1739094
[25] Source: https://www.indiabudget.gov.in/doc/eb/allsbe.pdf

SECTION C. STOCK TAKING AND ANALYSIS OF KEY ISSUES FOR THIS PLANNING CYCLE

6 Summary of the achievements in the previous planning period

As the current District Ganga Plan is prepared for the 1st planning cycle, this section is not a part of the DGP; ongoing actions are mentioned in chapter 7 and prior work feeding into the GDP is mentioned in chapter 1.2.

There are several other existing plans on the district level which contribute to the rejuvenation and protection of the rivers in the district. The **District Environment Plan** focuses on conservation of the environment and natural resources including the assessment, mitigation and monitoring of adverse impacts of various pollution sources at district level. **District Irrigation Plans** focus on an efficient storage and allocation of the available water resources and the recently drafted 2016. **PCB Action Plans** for the major rivers in the district including action plans for pollution abatement. This **DGP has been developed in line with these plans** and partially builds on information collected (in chapter 7) and actions suggested (in chapter 8) from these plans. The selected information has been sorted according to the key issues identified in this DGP.

7 Prioritised issues & gaps that will be addressed in this RBM cycle

7.1 Situation analysis, key issues, and ongoing actions

Rapid urbanisation has put stress on its already existing problems of land, housing, water supply usage, sanitation and health facilities which led to development of domestic and commercial infrastructure in a haphazard and unplanned manner. Unavailability of sewage treatment facilities adds to the problem of sewage treatment and disposal. Usage of chemical fertilizers, pesticides and their run-off from agricultural fields creates both land and water pollution. Uncontrolled garbage dumping near river bodies like Garra and Khannaut contributes further to the pollution. The drainage network in the city is old and outdated and many portions are dilapidated which causes sewage/ sullage stagnation and water pollution. The issues existing in the district are classified into 4 clusters – **i) water quality ii) water quantity iii) ecological integrity iv) capacity building and public participation.**

7.1.1 Water quality

Point source pollution

Domestic sewage and sanitation / septage - Contamination of surface water

Total sewage generation

- Average water supply rate from ULB and Non-ULB sources – 149.5 lpcd[26]
- Total sewage generation - 42.58 MLD[27]
- Per capita sewage generation- 119.62 lpcd[28] (Calculated based on 2011 census)
- No sewage collection in the district
- Means of wastewater disposal: river disposal
- Name of river for wastewater disposal: Khannaut & Garra
- Number of untapped drains or nallah for wastewater disposal: 17
- Entire district has 928.96 km[29] long concrete drainage system out of which 55 km lies at Shahjahanpur city which is old, outdated and dilapidated causing sewage/ sullage stagnation and water pollution.

Treatment facilities

- There are no STPs at present in the district and all drains are directly discharged to Garra and Khannaut without any kind of treatment.
- There are about 17 untapped sewer drainage discharge points at the Garra river and Khannaut and since these are two of the major rivers in the district, it contributes to the surface and groundwater pollution.
- One STP with 40 MLD capacity is under construction at Keruganj, Shahjahanpur it will cater 70% area of the Shahjahanpur municipality.

[26] 066_GBP_IIT_EQP_SR_16_Ver-1_DEC-2014.pdf (cganga.org) – Page 11
[27] CONTROL OF URBAN POLLUTION (cpcb.nic.in)
[28] CONTROL OF URBAN POLLUTION (cpcb.nic.in)
[29] Source: Drainage | Official website of Irrigation and Water Resources Department, Ministry of Jal Shakti, Government of Uttar Pradesh, India. (idup.gov.in)

- 45 km out of total planned 186 km long drainage network is under construction.
- One private FSTP with 32 KLD capacity is operating at City Park Colony, Lodhipur (constructed under AMRUT funding, UP Jal Nigam).
- The wet waste to compost plant is under construction
- There are no e-waste and biomedical waste processing units in the district.

Water quality

- According to limits set by CPCB under “Designated Best use” criteria, the BOD (mg/l) of water under the D/S Ramganga FBD road bridge, Shahjahanpur is within the desirable limit.
- DO is above required level of 4mg/l and ranges up to 10.1 mg/l. During pre-monsoon period and monsoon to post-monsoon period, it is >4 mg/l.[30]
- Faecal coliform is beyond desirable limit of >2500 mpn/100 ml and it ranges between >3300 mpn/100 ml (pre-monsoon, 2022) to 8400 mpn/100 ml (Monsoon, 2022). Average value of total coliform are also above 5000 mpn/100 ml except it is <5000 mpn/100 ml in the month of October and December (2022) in the river water sample collected from D/S Ramganga FBD road bridge, Shahjahanpur by UPPCB

The water quality of Ramganga river tributary at D/S Ramganga FBD road bridge, Shahjahanpur is not within the desirable limits set by CPCB under “Designated Best use” criteria. The yearly average water quality data of UPPCB is given in Table 8

Per capita pollution load contribution (domestic)[31]

BO	DO	TK
9614.8 kg/d	16345.1 kg/d	1923.0 kg/d

Sanitation coverage including type, function status and usage of toilets[32]

- About 1,160 community sanitary complexes and 30 community soak pits have been constructed.
- 2811 households were given toilet under IHHL (Individual Household Latrine)/ under Swatch Bharat, 101 community toilets, 220 public toilets and 50 soak pits constructed under Swachh Bharat
- Shahjahanpur district is declared as ODF ++ which indicates 100% of households have a toilet facility. (All households located within 500 m radius of community toilet is considered as HH with toilet facility, even though all of the HH may not have own individual toilet facility)
- Out of 527,501 households, only 395,136 households have constructed toilets. This gap results in pollution of land and watercourses and several diseases.
- Every HH has to provide connection in rural area under Jal Jeevan mission

[30] http://www.uppcb.com/pdf/Ramganga_080922.pdf
[31] 066_GBP_IIT_EQP_SR_16_Ver-1_DEC-2014.pdf (cganga.org) Page 11
[32] https://sbm.gov.in/odfplusdashboard/phaseII/DistrictsDashboard.aspx

- Jal Jeevan Mission aims to connect about 2 lakh village households spread across 607 villages by the year 2024

Percentage Households dependent on onsite sanitation systems (complete septic tanks with soak pits/ only pits/direct discharge in drains)[33]

- District is declared as ODF ++ which indicates 100% households have a toilet facility
- 1160 community sanitary complex and 30 community soak pits constructed
- 2811 households provided with toilets under IHHL (Individual Household Latrine)/ Swachh Bharat
- 101 community toilets, 220 public toilets and 50 soak pits constructed under Swachh Bharat

Number of drains tapped in the STP/SPS/MPS[22]

There are no STPs at present in the district and all drains are directly discharged to River Garra and Khannaut without any kind of treatment.

Number of untapped drains[22]

- There are about 17 untapped sewer drainage discharge points at the Garra and Khannaut rivers. Since these are the major rivers in the district, it contributes to surface and groundwater pollution.
- There is no separate storm water drain in entire Shahjahanpur city

Volume of untreated sewage in each of the drains[22]

Bar screen attached with 17 nos. drainage discharge point at Garra and Khannaut Removing large objects and plastics is not sufficient to meet the discharge standards in the river.

Shahjahanpur city, situated on the river Ramganga, uses ground water as the sole source for meeting the domestic demand.

Table 13: Sewage fact sheet of Shahjahanpur district[34]

Surface Water Supply (MLD)	Nil
Ground Water Supply (MLD)	52
Number of Bore Wells	19
Ground Water Extraction per Bore Well (MLD)	2.737
Number of Hand Pumps/ tube wells	2500
Ground Water Extraction per Hand Pump (lpd)	500
Average Water Supply Rate from ULB Sources (lpcd)	146.03
Average Water Supply Rate from ULB & Non-ULB Sources (lpcd)	149.5

[33] DEP Shahjahanpur
[34] Source: 066_GBP_IIT_EQP_SR_16_Ver-1_DEC-2014.pdf (cganga.org)

Total Water Supply from ULB and Non-ULB Sources (MLD)	44.9
Total Sewage Generation (MLD)* (TBC)	42.58[35]
Per Capita Sewage Generation (lpcd)	119.62 lpcd[36] (Calculated based on 2011 census)
Sewage Collection (MLD)	Nil
Percentage of Sewage Collection (%)	Nil

Figure 21 shows the ground water extracted and the corresponding sewage generated in Shahjahanpur city.

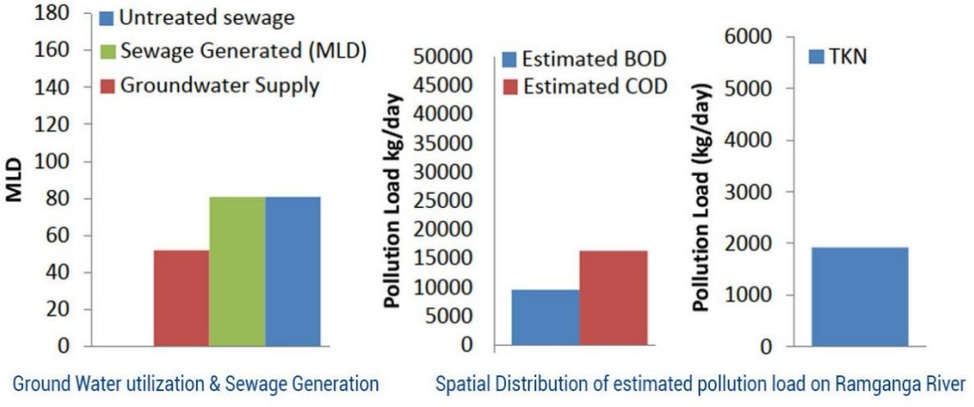


Figure 21: Ground water extraction vs sewage generation from Shahjahanpur district[37]

The main discharge into the river Ramganga occurs in Shahjahanpur city. There are 17 sewer drains which are originated from Shahjahanpur city and discharging to Garra and Khannaut River.

Table 14: Discharge of untapped drains in Shahjahanpur

SL No.	Drain Location	Drain Width (in m)	Drain Total Depth (in m)	Tentative Drain Discharge (in mld)	Drain Discharging into river
1	Maghaitola	4.5	2	2.4	Khannaut
2	Roshanganj (D/S at Hanumat Dham)	4.5	3	3.5	Khannaut
3	Husainpura at Hanumat Dham	0.6	0.6	0.5	Khannaut
4	Hanumat Dham	3	1.2	1	Khannaut
5	Banka Ghat (Left)	3	3	2	Khannaut
6	Banka Ghat (Right)	1	1.5	0.5	Khannaut
7	Lodhipur Pul	7	1.8	3.9	Khannaut
8	Mahmuriya/Jalalnagar	5	4	4	Garra
9	Chhota Kakra	3	3	4	Garra
10	Yunush Khel	4	2.5	5.6	Garra
11	Azeez Ganj	2	4	1.3	Garra

[35] CONTROL OF URBAN POLLUTION (cpcb.nic.in) Page -60
[36] CONTROL OF URBAN POLLUTION (cpcb.nic.in)
[37] 066_GBP_IIT_EQP_SR_16_Ver-1_DEC-2014.pdf (cganga.org)

SL No.	Drain Location	Drain Width (in m)	Drain Total Depth (in m)	Tentative Drain Discharge (in mld)	Drain Discharging into river
12	Roza/Ahmadpur Reti	3	2	1.3	Khannaut
13	Fattepur Rati	1.5	2	0.4	Khannaut
14	Khwaja Firoz	1.4	1.5	0.7	Khannaut
15	Dalel Ganj	2	1.55	1.3	Khannaut
16	Saray Kaiyan Police Chowki	3	3.5	2.1	Khannaut
17	Rambag Mishripur	2.6	1.5	0.5	Khannaut
	Total			35	

Number and location of drains directly discharging in the river including information on the volume of untreated sewage[22]

There are almost 17 nos. untapped sewer drainage discharge point at Garra and Khannaut river. Drain wise discharge is given at Table 14.

Number of drains with bar screen[22]

All the untapped drainage discharge points at the Garra river pass through bar screens to remove large objects and plastics, from wastewater. But this method not sufficient to meet the discharge standards in the river.

Remedial measures taken for the treatment of untreated drains[22]

- Bar screen attached with each drain to remove large objects and plastics is not sufficient to meet the discharge standard in the river
- Weekly cleaning of bar screen is carried out
- Regular cleaning of city drains is carried out
- One STP with 40 MLD capacity is under construction at Keruganj, Shahjahanpur it will cater 70% area of the Shahjahanpur municipality. However, there is one private FSTP with 32 KLD capacity is operating at City Park Colony, Lodhipur.
- DPR preparation is under process to augment bio-remediation in Unis Khel drain

Figure 22: Consultation with Municipal Commissioner

Figure 23: Consultation with Jal Nigam (Urban)

Figure 24: Consultation with DGC, Shahjahanpur

Figure 25: Consultation with SMCG, UP

Sewerage network system and number of connected households[22]

- Out of 186 km, 45 km is planned for construction of long drainage network, which will serve the demands of 80% of the households in the city.
- Entire district has 55 km. long concrete drainage system which is old, outdated and dilapidated which causes sewage/ sullage stagnation and water pollution.

% of treated sewage recycled / type of use[22]

There is no STP at present. All drains are directly discharging to river Garra and Khannaut without any kind of treatment.

Encroachment sites in urban areas (no. and length) [22]

Encroachment reported on river side setback zone (balm land) at Aziz Nagar and Lodhipur bridge over Khannaut river.

Figure 26: Encroachment on river Poramboke near Rajghat

Figure 27: Encroachment on Garra river near Aziz Nagar Bridge

Industrial pollution – contamination of surface water in urban areas

Total number of polluting industries sector-wise highlighting grossly polluting industries[38]

- There are 3 major industrial areas in the district, namely – Roza, Tilhar and Powayan [39].
- There are 10,063 registered industrial units.
- There are 9 GPIs in the district, where each of them has ETPs with a total capacity of 25.34 MLD.

Table 15: GPIs in the Shahjahanpur district

Sl. No.	Name of Industry	Type	ETP Capacity (KLD)	Treatment (KLD)	Effluent Discharge (KLD)
1	Bajaj Hindustan Ltd. (Sugar Unit), Unit Maqsudapur, Block Banda, Shahjahanpur	Sugar	1000	1000	1000
2	Kisan Sahkari Chini Mills Ltd., Tihar, Shahjahanpur	Sugar	500	500	250
3	Dalmiyan Chini Mills, Nigohi, Shahjahanpur	Sugar	3200	1500	1450
4	K.R. Pulp & Papers Ltd. (Unit I) Shahjahanpur	Paper	2100	1500	1200
5	K.R. Pulp & Papers Ltd. (Unit II) Shahjahanpur	Paper	12000	8000	5000
6	Kribhco Fertilizers Ltd., Piprola, Shahjahanpur	Fertilizer	4320	3600	1000
7	Rosa Power Supply Co. Ltd., (Stage- I & II), Roza Shahjahanpur	Power	720	720	Zero
8	Avadh Sugar & Energy Unit, Roza, Shahjahanpur	Sugar	1000	900	450
9	Kisan Sahkari Chini Mills Ltd., Puwayan, Shahjahanpur	Sugar	500	500	250
		TOTAL	**25340**	**18220**	**10600**
		in MLD	25.34	18.22	10.6

[38] http://www.uppcb.com/pdf/rwq_180216.pdf
[39] DIP Shahjahanpurr VK Bhatt AD EI.pdf (dcmsme.gov.in)

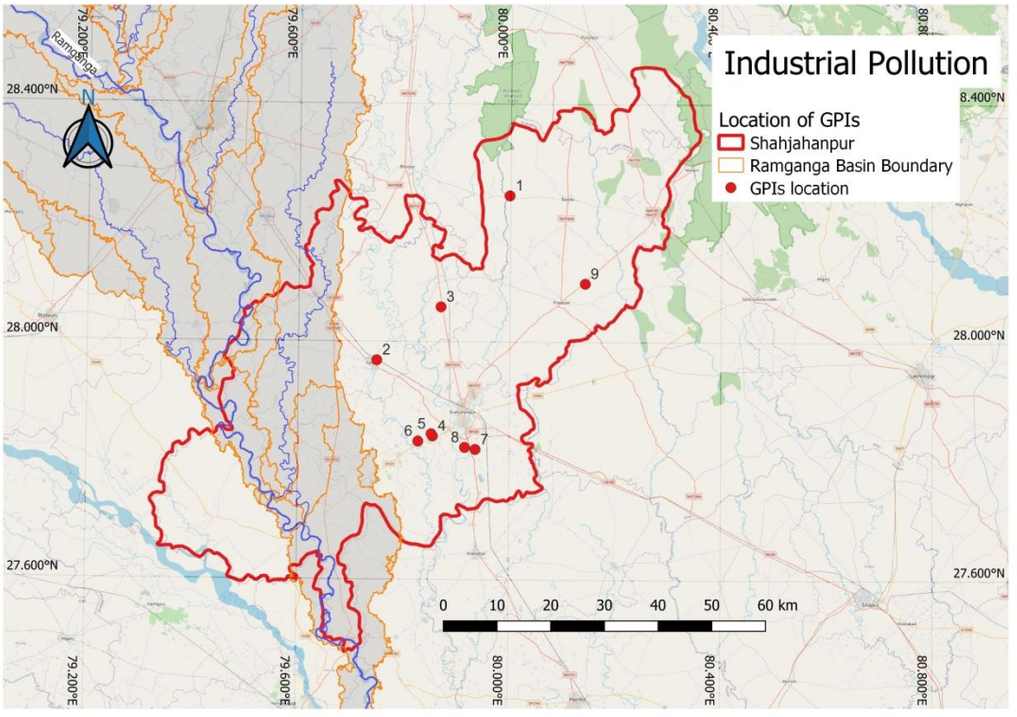


Figure 28: Location of GPIs in Shahjahanpur District as per SL No.

- One of the concerning GPIs, as observed, is from KR Pulp and Papers mill located at Rampura village, Sadar Tehsil, Shahjahanpur district connected with Ramganga at Hardoi District

Figure 29: Effluent discharge from KP Pulp and paper mill

Figure 30: Wetland

Figure 31: STP construction and laying of underground sewer line in progress

Total industrial effluents generated[40]

There are 9 GPIs in the district, where each of them has ETPs with a total capacity of 25.34 MLD.[41]

Total capacity of treatment facilities available and its utilisation[25]

Each of the 9 GPIs has ETP with cumulative treatment capacity of 25.34 MLD.

Number of ETPs/CETP installed and functioning condition in the district[25]

There are no CETP installed in the district at present.

Status of connectivity of ETPs with CETP/ untreated discharge in drains[25]

There are no CETP installed in the district at present.

Existing law enforcement instruments / policies

- Industries in operation without consent under Water (Prevention and Control Pollution) Act, 1974 and Air Act 1981 directed to UEPPCB to obtain consent, otherwise closure

[40] DEP Shahjahanpur
[41] Source: List of GPIs and attached ETP data provided by CPCB

- Hazardous and Other Waster (Management & Transboundary Movement) Rules 2016
- Effluent outlet standards prescribed under Environment (Protection) Rules 1986
- Charter for Prevention and Control of Pollution on Pulp and Paper Industries 2015
- Solid Waste Management Rules 2016

Water quality (indicator parameter BOD, COD and DO and parameters of main concern) downstream of major industrial pollution stretches

The water quality of Ramganga river tributary at D/S Ramganga FBD road bridge, Shahjahanpur is not within the desirable limits set by CPCB under "Designated Best use" criteria. The yearly average water quality data of UPPCB is given in Table 8.

- According to limits set by CPCB under "Designated Best use" criteria, the BOD (mg/l) of water under the D/S Ramganga FBD road bridge, Shahjahanpur is within the desirable limit.
- DO is above required level of 4mg/l and ranges up to 10.1 mg/l. During pre-monsoon period and monsoon to post-monsoon period, it is > 4mg/l. [42]
- Faecal coliform is beyond desirable limit of >2500 MPN/100ml and it ranges between >3300 mpn/100ml (pre-monsoon, 2022) to 8400mpn/100ml (Monsoon, 2022). Average value of total coliform is also above 5000mpn/100ml except it is <5000 MPN/100ml in the month of October and December (2022) in the river water sample collected from D/S Ramganga FBD road bridge, Shahjahanpur by UPPCB

Water pollution through municipal solid and biomedical waste

Municipal solid and biomedical waste generation trends and typology of waste[25]

Shahjahanpur district's population is projected to increase at 19.9%/ decade, which will also lead to an increase in municipal solid waste generation.

- Currently, the district produces approximately 413.15 tonnes per day municipal waste and only 35% of the population practices segregation of waste.
- Approximately 1200 kg/day biomedical waste is generated in the district where the treatment capacity is 150 kg/hr (3600 kg/day).

Table 16: Current status related to solid waste management

Sl. No.	Urban Local Bodies	No. of Wards	No. of Households	Population	Solid Waste Generation per day
1	Municipal corporations Shahjahanpur (Nagar Nigam)	60	76,349	392,437	143.68
2	Municipalities (Nagar Palika)	75	23,605	127,617	30.04
3	Nagar Panchayat (Town Area)	65	19,243	106,194	22.24

[42] http://www.uppcb.com/pdf/Ramganga_080922.pdf

Sl. No.	Local Bodies	No. of Village panchayats/ Blocks	No. of Households	Population	Solid Waste Generation per day
1	Block/ Taluk/ Mandal Tehsils	15	411,982	2,336,585	217.19 t
2	Village/ Gram Panchayats	1069	411,982	2,336,585	217.19 t

Source: DEP Shahjahanpur

Disposal practices (% of unregulated disperse, informal dump sites, official collection spots, good and bad practices)[25]

- Aquatic pollution because of indiscriminate dumping of municipal solid and biomedical waste into river water or waterbody.
- River water pollution due to throwing of vegetable waste and packaging materials from the sabji mandis and vending units operating on dilapidated bridge located at Raj Ghat on Garra river.
- Dumping of solid wastes on riverbanks of Garra and Khannaut rivers by local residents/ shop owner from ROB at Lodhipur, Ajij Ganj bridge; Subhas Nagar bridge; Keruganj bridge adds to water pollution.
- Waste segregation at source is practiced only by 35% household
- Manual sweeping is being carried out at Shahjahanpur city
- 48 waste collection and segregation shed and 260 community compost pits
- 90% of block/ wards are covered under door-to-door collection of wastes
- Purchase of 135 e-rickshaw vehicles is in progress
- Information, Education & Communication (IEC) activities are being carried out
- One disposal centre available

Figure 32: Indiscriminate disposal of municipal waste from bridges over Garra & Khannaut

Figure 33: Debris of old Lodhipur bridge

Figure 34: Cattle bathing on Khannaut river near Rajghat

Treatment facilities, their capacities and functioning conditions

- 48 waste collection and segregation sheds, 260 community compost pits, deposition centres[43].
- As only 35% households follow source segregation practice in the district, the wet and dry wastes are not processed properly.
- The wet waste to compost plant which was supposed to start from March 2022 is still under construction
- Compost site is still under construction
- Shahjahanpur MS is operating one waste segregation unit at Jail road near fire station and one Material Recovery Facility (MRF) Centre at Kakra, Shahjahanpur.
- Few volunteers with motivational support from municipal authority are organizing an awareness programme on river cleaning twice a month at Raj Ghat area.
- There are no e-waste processing units in the district.[44]

[43] https://sbm.gov.in/odfplusdashboard/phaseII/DistrictsDashboard.aspx
[44] Departmental Consultation, Nagar Nigam Shahjahanpur

Figure 35: Waste segregation unit at Jail Road near fire station

Total solid waste generated in main cities / entire district[25]

Waste generation rate in the Shahjahanpur district is 413.15 TPD municipal ward wise generation details is given at Table 16.

Legacy waste sites (number and size) [25]

There are no legacy dump sites in the district.

Segregation at source / waste collection & transportation / processing capacity/ disposal and recycling facilities[25]

- There are 48 waste collection and segregation sheds, and 260 community compost pits in the district.
- 35% of the population practices waste segregation at source and actions are now being taken to reach 100% waste segregation at individual household level.
- 135 e-rickshaw vehicles are purchased, IEC activities are being initiated, sufficient trolleys and mini collection trucks are available for efficient waste collection and transportation.
- One deposition centre and another implement adequate system are present, however the number has to be increased for an effective waste management system.

Interventions and actions to improve solid waste management[25]

- Extensive IEC activities are being carried out.
- Fine/penalty on defaulters shall be imposed.
- Activities like Nukkad Natak and Music shows shall be conducted for communities and public awareness.
- The gap of 20% in sweeping will be met out by mechanical road sweeper.
- To install adequate number of bulk generators, notices for the compliances of the same are already issued but Bulk Generators are still not processing their wet & dry Waste at Source. Final notice for the compliance needs to be issued again.
- Wet waste to compost plant is proposed and has been approved by the district level committee.
- MRF centre is functional with NGO and linkage with PW recyclers will be made.

- Plastic waste is being handed over to Nagar Nigam Shahjahanpur at district level cement plants for processing.
- Management plan for C&D waste.
- Uses of recycle C&D waste in non-structural concrete paving blocks lower layer of road paramount colony and rural road will be included in the policy through board of ULB.

Non-point source pollution

Rural & urban sanitation: Contamination of surface and groundwater

Number of villages/ULBs and their total households

- MC (60 Nos. Wards)- 76,349 (HH);
- Municipalities (75 nos. Wards – 23,605 (HH);
- Nagar Panchayat (65 Nos. wards)- 19,243 (HH).

The data has been summarized in the table below. [25]

Table 17: No of wards and households in the district

Sl. No.	Urban Local Bodies	No. of ULBs[45]	No. of Wards	No. of Households	Population
1	Municipal corporations Shahjahanpur (Nagar Nigam)	1	60	76,349	3,92,437
2	Municipalities (Nagar Palika)	3	75	23,605	1,27,617
3	Nagar Panchayat (Town Area)	6	65	19,243	1,06,194

Household sanitation coverage by type of sanitation

- District is declared as ODF ++ which indicates 100% household has toilet facility
- 1160 community sanitary complex and 30 community soak pits constructed
- 2811 households provided with toilets under IHHL (Individual Household Latrine)/ Swachh Bharat
- 101 community toilets, 220 public toilets and 50 soak pits constructed under Swachh Bharat

Amount and type (black, grey, mix, storm) of wastewaters draining into rivers

- The drainage network in the city is old and outdated and many portions are dilapidated which causes sewage/ sullage stagnation and water pollution.
- There are about 17 untapped sewer drainage discharge points at the Garra river and Khannaut and since it is one of the major rivers in the district, it contributes to the surface and groundwater pollution.
- Total sewage generation – 42.58 MLD[46]
- Per capita sewage generation – 119.62 LPCD

[45] Nagar Nigam/N.P.P./N.Panchayat | District Shahjahanpur, Government of Uttar Pradesh | India
[46] 066_GBP_IIT_EQP_SR_16_Ver-1_DEC-2014.pdf (cganga.org)

- Pollution load (domestic) - Per capita contribution (kg/d) – BO- 9614.8// CO-16345.1// TK- 1923.0
- Wastewater disposal means – river disposal
- Name of river/streams for wastewater disposal - Khannaut & Garra
- Number of drains/nallah for wastewater disposal - 17

Agricultural runoff: Growing pollution from agricultural chemicals

Land under agriculture[47]

- 607,162 ha of land in the district is under agriculture.
- Cultivable area – 3,49,958 ha
- Net sown area – 3,49,958 ha
- Gross cropped area – 61,258 ha
- Cropping intensity % - 175.04
- Area under wheat crop is 2,52,570 ha and yield of the crop is 30.3 q/ha.
- The second main crop is paddy, grown over an area of 2,09,742 ha with an average productivity of 23.59 q/ha.

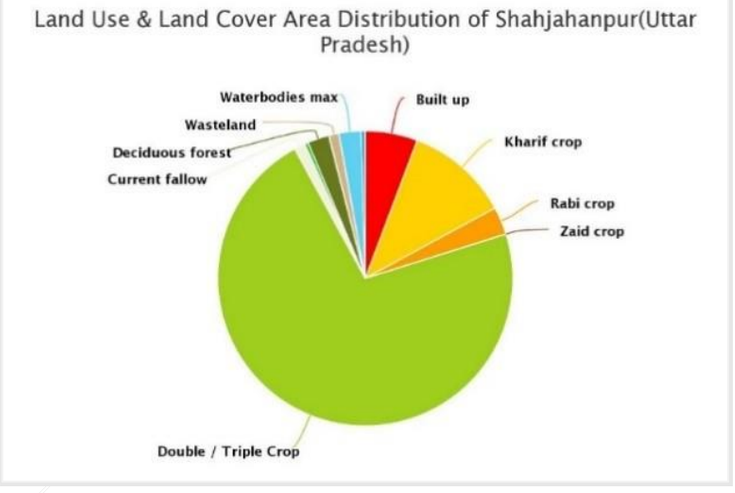


Figure 36: LULC distribution of Shahjahanpur district

Amount and types of fertilizers and pesticides used (in kg/ha)

Rate of fungicide and insecticide (liquid) application is lowest among all Ramganga river basin districts whereas application rate of insecticides (aerosol), mouse killer and weed killer are moderately high among all districts.

Table 18: Pesticides and Fertilizer uses in Shahjahanpur District (2019-22)

Pesticide and Fungicide	2019-20	2020-21	2021-22	3 year average	GCA'000 ha	Usage /1000 ha
Insecticide aerosols (kg)	1,36,425	1,15,892	1,19,073	1,23,797	582.9	212.38

[47] https://www.indiastatpublications.com/District_Factbook/Uttar_Pradesh/Shahjahanpur

Insecticide liquid (l)	15,899	20,829	23,423	20,050	582.9	34.40
Fungicide (kg)	20,146	26,434	25,731	24,104	582.9	41.35
Weed killer (kg)	49,272	71,284	76,950	65,835	582.9	112.94
Mouse killer (kg)	2,633	3,402	3,352	3,129	582.9	5.37
Biopesticide (kg)	111,705	94,120	105,292	103,706	582.9	177.91

Fertilizer usage

Table 19: Average fertilizer usage for the period 2017-2020 in Shahjahanpur district[48]

Average total in MT						Usage per hectare in (kg/ha)			
Crop	Area in ha	N	P	K	Other fertilizer	N	P	K	Other fertiliser
1. Paddy	210,760	27,765	7,487	669	824	131.7	35.5	3.2	3.9
2. Maize	2,300	102	132	0	0	44.4	57.5	NA	NA
3. Bajra	3,380	186	0	0	0	55.1	NA	NA	NA
4. Wheat	247,700	35,023	16,918	1,509	8,766	141.4	68.3	6.1	35.4
5. Barley	260	0	0	0	0	NA	NA	NA	NA
6. Arhar (Tur, Red Gram)	310	0	0	0	0	NA	NA	NA	NA
9. Bengal Gram	190	0	0	0	0	NA	NA	NA	NA
11. Groundnut	3,870	0	0	0	0	NA	NA	NA	NA
12. Sesame	8,850	0	0	0	0	NA	NA	NA	NA
13. Rapeseed & Mustard	14,440	1,709	1,106	66	23	118.4	76.6	4.6	1.6
14. Sugarcane	45,740	8,914	2,320	697	598	194.9	50.7	15.2	13.1
15. Potato	8,760	1,478	772	-	-	168.7	88.2	NA	NA

Note: 1. NA = either the crop is not grown OR data is not available - may be that particular input is not used. 2. Total area cultivated for each crop - taken from ICRISAT for 2014-2015.Major crops and average yields (in ton per ha)

Wheat, paddy, pulses, groundnut are the major crops in the district and their yields are given below in the table.

Table 20: Average yield of major crops in Shahjahanpur district[49]

Major crops	Average yields (in ton per ha)
Wheat	385.8
Paddy	247.3
Pulses	70.88
groundnut	113.42

Farming practices/techniques

[48] Source: NPK data from plot level data collected by Ministry of Agriculture (average of 2017-2020)
[49] https://shahajahanpur.kvk4.in/district-profile.html

Double and multiple cropping are widely practiced. Besides, shifting, and inter-cultivation, micro/drip/sprinkler irrigation are also practiced.[50]

Burning practices

Any such recorded information is not available. However, stubble burning practice is insignificant in comparison with Punjab or Haryana state.

Crops grown in Shahjahanpur district

The table below highlights the crops grown in riverbeds and riverbanks.[51]

Table 21: Major crops in Shahjahanpur District

Major field crops cultivated	Kharif (Area ('000 ha)	Rabi (Area ('000 ha)
Rice	162.992	
Wheat		253.928
Sugarcane		49.86
Sesame	22.675	
Sorghum	9.267	
Pearl millet	7.208	
Maize	6.619	
Blackgram	2.691	
Groundnut	4.722	
Pigeon pea	1.507	
Barley		3.295
Mustard		14.219
Toria		23.994
Chickpea		2.384
Lentil		26.393

% of land under organic farming[52]

- The exact area under organic farming could not be assessed.
- APEDA is providing 0 Year, 1 Year, 2 Year certification facility for organic product
- 38 villages which are located within a five-km trilogic distance from the Ganga rivers are included under Namami Gange project. Various welfare schemes including organic farming runs under Namami Gange project is being implemented in these villages on priority basis.
- There are three (3) UP State Organic Certification Agency (UPSOCA) registered operator working on organic certification in Shahjahanpur district[53]

Name of Operator	Product
Krishan Kumar	Grains
Mahendra Kumar Dubey	Grains & Sugarcane
Jitendra Pandey	Grains

[50] https://agricoop.nic.in/sites/default/files/UP1-Shahjhanpur-26.7.2012_0.pdf
[51] http://www.icar-crida.res.in/CP-2012/statewiseplans/Uttar%20Pradesh/UP1-Shahjhanpur-26.7.2012.pdf
[52] Départemental Consultation, Dept. of Agriculture
[53] https://apeda.gov.in/apedawebsite/Organic/LIST_OF_OPERATORS_(UPSOCA).pdf

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Involvement of women in farming and their roles [54]

Women are involved as both agricultural labourers and cultivators. There are 13,207 women cultivators and 10,962 women agricultural labourers.

7.1.2 Water quantity

Surface water

Inadequate (surface) water storage capacity

Surface Basin water budgets (including precipitation, seasonal water levels and river flow trend during the year)

The annual normal rainfall of the district is 994 mm. The year wise actual rainfall in the district is summarized in the table below. [55]

Table 22: Year wise actual rainfall in the district

Month	Normal (mm)	Year Wise Actual Rainfall (mm)					
		2017	2018	2019	2020	2021	2022
January	19	29.86	1.19	3.37	21.81	1.1	21.54
February	15.7	0.32	11.35	24.48	8.27	0.8	30.98
March	12	9.06	0.58	9.17	59.81	0.15	0
April	5.1	0.08	5.99	3.27	21.59	2.31	0
May	18.6	20.82	5.68	1.04	36.64	98.55	33.86
June	92.3	40.53	47.38	53.51	71.07	165.59	76.87
July	294.2	227.81	339.02	329.61	209.94	229.1	87.99
August	306.9	186.52	408.02	97.79	155.08	102.81	129.16
September	158.1	138.48	101.72	77.5	64.72	116.9	
October	63	0.02	1.62	1.76	0	169.33	
November	2.6	0	1.41	5.71	7.12	0	
December	6.5	0.08	0	63.75	0	0.88	
Total	994	653.58	923.96	670.96	656.05	887.52	380.4

Dynamic modelling of surface flows in the combined Ganga basin area of NRGB and Nepal was carried out using SWAT model. Model simulation was carried out for the period 1969–2006, and the results were calibrated with river discharges. The summary model outcome, vide Figure 37, shows that streamflow and evapotranspiration are the two main components of water outgo from the modelled basin area, with evapotranspiration being about 41-42% of precipitation. Model estimates of “virgin flows” and “present managed flows” in major rivers of the network are presented, vide Figure 38.

[54] https://www.indiagrowing.com/Uttar_Pradesh/Shahjahanpur_District
[55] https://indiawris.gov.in/wris/#/rainfall

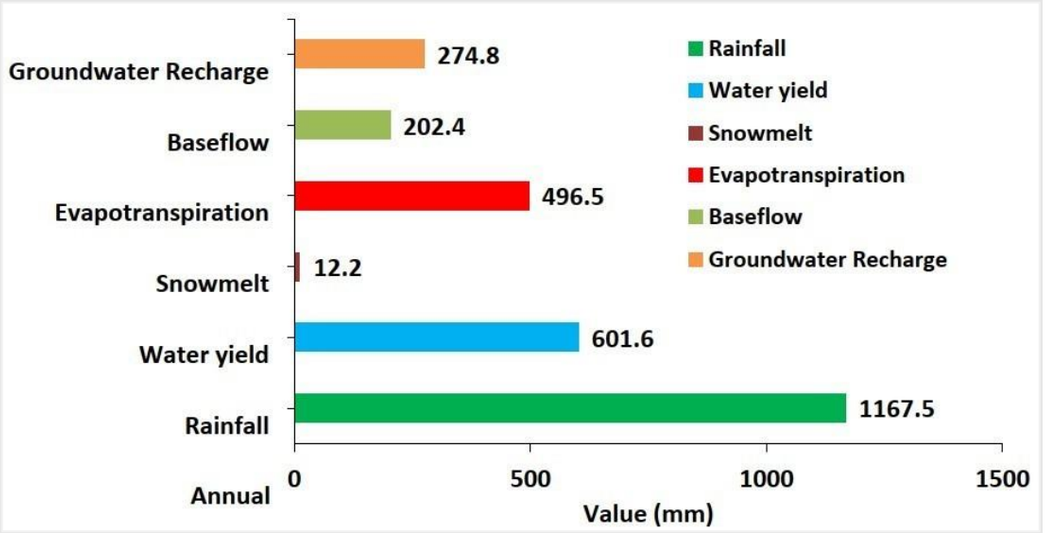

Figure 37: Average (1969-2006) annual water balance of the modeled Ganga basin

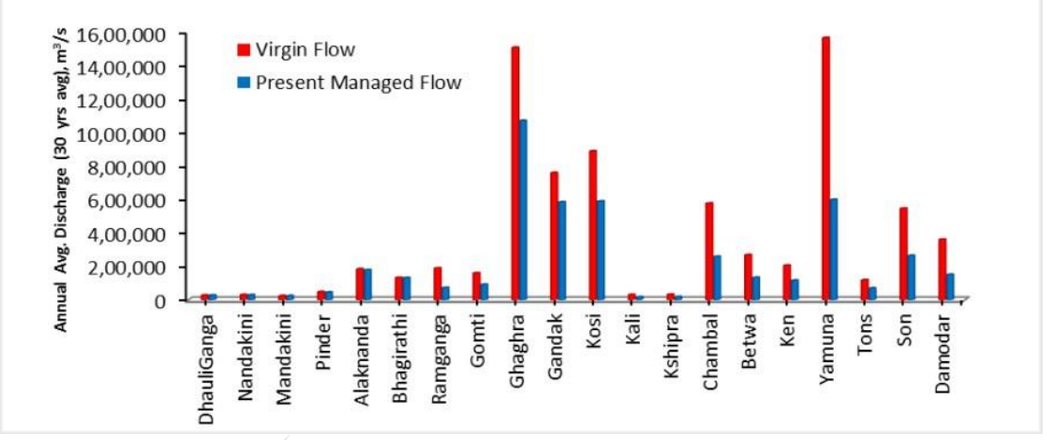

Figure 38: Annual flow contributions of different tributaries (sub-basins) to river Ganga

List and status of dams, barrages, anicuts, embankments, small pond areas etc. and their design storage capacities

Details provided under section 4.5, Table 3 and Figure 10.

- The total wetland area in the district is 19803 ha.
- Water spread area is post-monsoon season is 11717 ha., whereas in pre-monsoon season it is 6291 ha.
- Moderate turbidity is observed in most of the wetlands. High turbidity is observed in river/ stream during post-monsoon season.
- Bio-filter is augmented in wetland.

Siltation status of surface water bodies[56]

Sediment load is measured by CWC at two locations i.e. Bareilly and Dabri in Ramganga basin. The analysis of sediment data is presented in Figure 39, Figure 40, Figure 41, Figure 42, Table 23 and Table 24

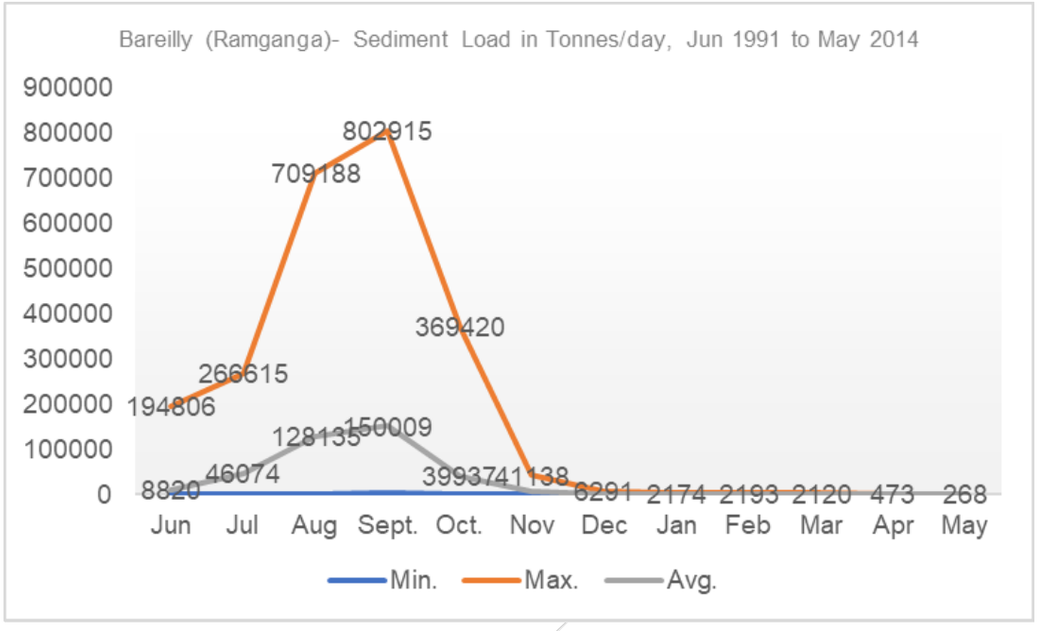

Figure 39: Sediment load in past 21 years at Bareilly (Ramganga)

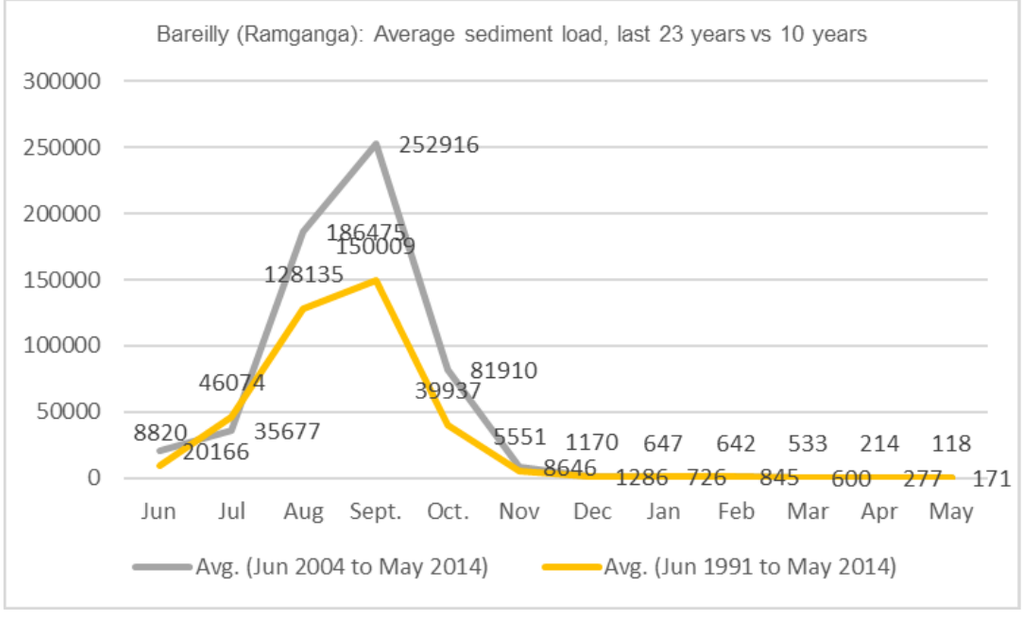

Figure 40: 23 years vs 10 years average sediment load at Bareilly

[56] GRBMP - Interim (nmcg.nic.in)

Table 23: Sediment Load at Bareilly (Ramganga river)

Location: Bareilly (Ramganga)					Catchment Area, km^2 : 18,340								
Sediment Load in Tonnes/day, 23 years data (Jun 1991 to May 2014)													
	Jun	Jul	Aug	Sept.	Oct.	Nov	Dec	Jan	Feb	Mar	Apr	May	Daily Average
Min.	2	57	300	3863	93	30	18	5	1	1	1	0	361
Max.	194806	266615	709188	802915	369420	41138	6291	2174	2193	2120	473	268	200766
Avg.	8820	46074	128135	150009	39937	5551	1170	647	642	533	214	118	31975
Sediment Load in Tonnes/day, 10 years data (Jun 2004 to May 2014)													
Min.	55	279	3789	14721	651	276	176	161	331	207	147	84	1729
Max.	194806	104151	709188	802915	369420	41138	3005	1538	2193	1375	439	268	186569
Avg.	20166	35677	186475	252916	81910	8646	1286	726	845	600	277	171	40304

Average sediment load at Bareilly site in past 23 years is 31975 tonnes per day (or 11.67 million tonnes/year or 8.39 million m^3/year) for 18340 km^2 i.e. 1.74 tonnes per day per km^2. This corresponds to a catchment denudation rate of 0.46 mm/year. While considering the last 10 years data, the sediment load at Bareilly site is 49034 tonnes per day (or 18.00 million tonnes/year or 12.93 million m^3/year) for 18340 km^2 i.e. 2.67 tonnes per day per km^2. This corresponds to a catchment denudation rate of 0.71 mm/year. In low flow years the sediment load is low while the high flow years have high sediment load. The sediment load is maximum in the month of September in correspondence to stream flow.

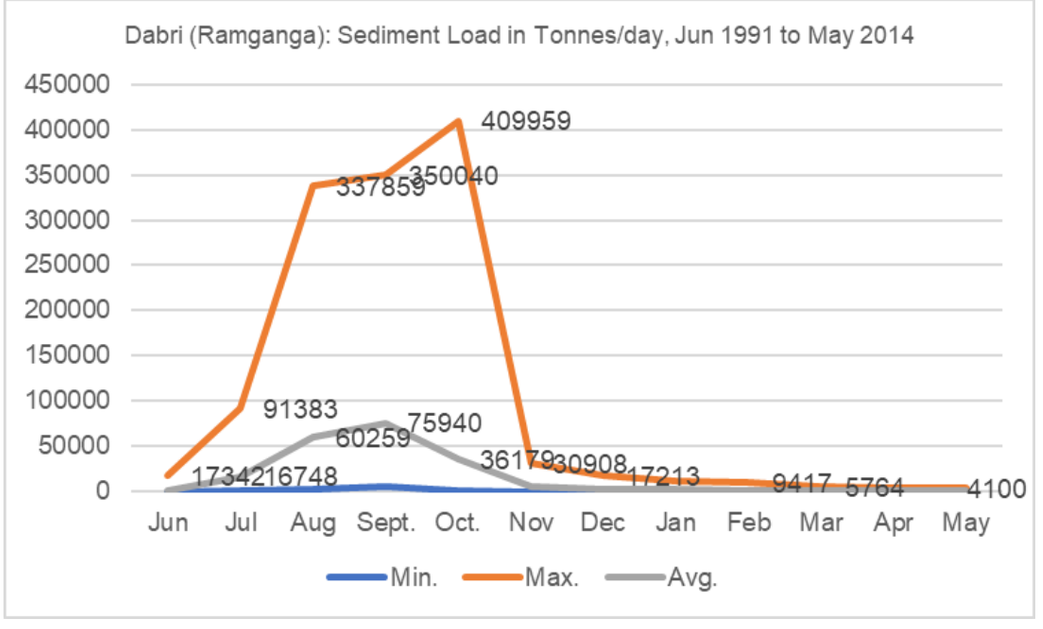

Figure 41: Sediment load in past 21 years at Dabri (Ramganga)

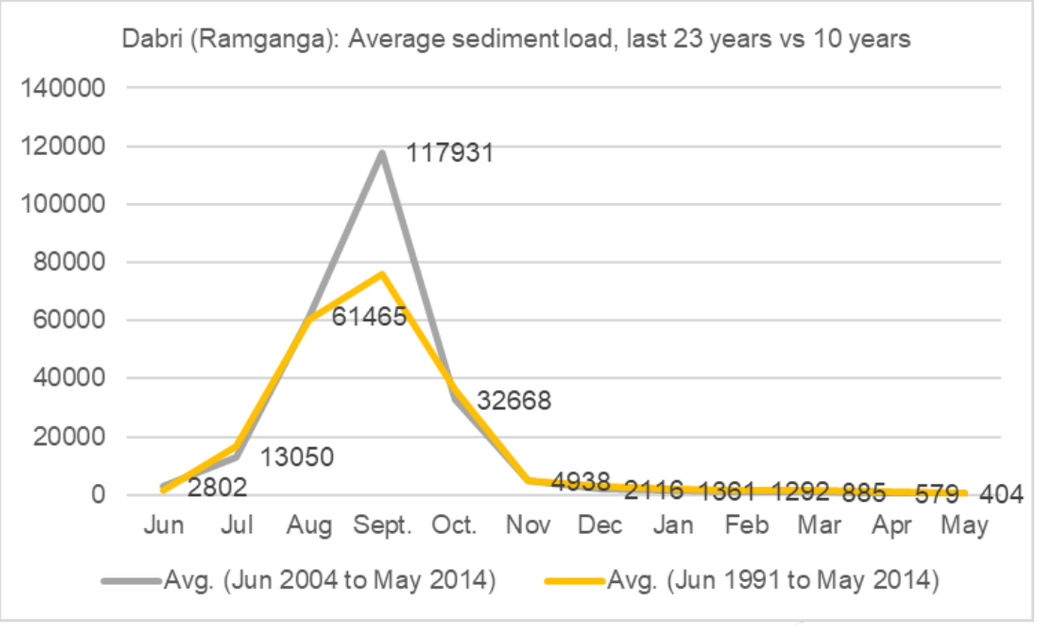

Figure 42: 23 years vs 10 years average sediment load at Dabri

Table 24: Sediment Load at Dabri (Ramganga river)

Location: Dabri (Ramganga)					Catchment Area, km^2: 23,919								
Sediment Load in Tonnes/day, 23 years data (Jun 1991 to May 2014)													
	Jun	Jul	Aug	Sept.	Oct.	Nov	Dec	Jan	Feb	Mar	Apr	May	Daily Average
Min.	21	367	2331	5598	918	214	123	111	136	60	28	27	827
Max.	17342	91383	337859	350040	409959	30908	17213	12335	9417	5764	3758	4100	108389
Avg.	1576	16748	60259	75940	36179	5042	2821	2112	1714	1344	876	699	17195
Sediment Load in Tonnes/day, 10 years data (Jun 2004 to May 2014)													
Min.	132	367	9006	16794	2915	619	349	242	253	135	105	49	2580
Max.	17342	32514	197095	350040	121808	8881	4212	2732	2209	2567	1215	991	61933
Avg.	2802	13050	61465	117931	32668	4938	2116	1361	1292	885	579	404	19984

Average sediment load at Dabri site in past 23 years is 17195 tonnes per day (or 6.28 million tonnes/year or 4.51 million m^3/year) for 23919 km^2 i.e. 0.72 tonnes per day per km^2. This corresponds to a catchment denudation rate of 0.19 mm/year. While considering the last 10 years' data, the sediment load at Dabri site is 19984 tonnes per day (or 7.29 million tonnes/year or 5.24 million m^3/year) for 23919 km^2 i.e. 0.84 tonnes per day per km^2. This corresponds to a catchment denudation rate of 0.22 mm/year. In low flow years the sediment load is low while the high flow years have high sediment load. The sediment load is maximum in the month of September in correspondence to stream flow.

Current effective Surface water storage capacity per rainfall

Table 25: Surface water storage in MCM[57]

Blocks	Check Dam	Stream Development	Nala Bunds	Ponds	Total Storage (MCM)
Banda	0.07	0.11	0.06	0.15	0.39
Bhawal Khera	0.04	0.07	0.03	0.09	0.23
Dadraul	0.05	0.07	0.03	0.09	0.24
Jaitipur	0.03	0.05	0.03	0.07	0.18
Jalalabad	0.07	0.10	0.05	0.14	0.36
Kalan	0.04	0.06	0.03	0.09	0.22
Kanth	0.04	0.06	0.03	0.08	0.21
Katra	0.04	0.06	0.03	0.08	0.21
Khutar	0.07	0.11	0.05	0.14	0.37
Madanapur	0.04	0.06	0.03	0.08	0.22
Mirzapur	0.05	0.07	0.04	0.10	0.26
Nigohi	0.05	0.07	0.03	0.09	0.24
Puwayan	0.04	0.06	0.03	0.08	0.22
Sindhauli	0.04	0.07	0.03	0.09	0.23
Tilhar	0.03	0.05	0.02	0.06	0.17
District Total	**0.69**	**1.03**	**0.54**	**1.43**	**3.76**

Encroachment status of surface water bodies – Ganga, key rivers, ponds and wetlands[58]

Encroachment reported on river side setback zone (balm land) at Aziz Nagar and Lodhipur bridge over Khannaut river.

Surface water usages (including floods)[59]

Surface water uses are mainly for Irrigation, Industrial consumption, and domestic purposes.

Existing rainwater harvesting structures[60]

Table 26: Artificial Recharge Systems (ARS) in the district

S.No	ARS Type	No of ARS
1	Check Dam	68
2	Desilting tanks	0
3	Percolation tanks	159
4	Subsurface Dyke	0
5	Recharge Shaft	68
6	Roof Top Rainwater Harvesting	0.1211
7	Spring shed Development/Watershed Development	0
8	Others	0

[57] http://cgwb.gov.in/AQM/NAQUIM_REPORT/UP/Shahjahan%20UP.pdf
[58] Field visit and Departmental Consultation
[59] DIP Shahjahanpur
[60] India-WRIS (indiawris.gov.in)

Type, no and capacity of rejuvenated water bodies and further scope for rejuvenation (type, no and capacity)

Total 115 no. waterbodies are rejuvenated out of targeted 327 nos. under mission Amrit Sarovar.

Table 27: Status of Amrit Sarovar implementation in Shahjahanpur district[61]

Block	Total Number of Sites Identified	Total Number of Works Commenced out of Total Identified Sites	Total Number of Works Completed out of the Commenced Works
Jalalabad	60	28	24
Powayan	106	58	35
Shahjahanpur	94	45	24
Tilhar	67	38	32
Total - Shahjahanpur District	327	169	115

Note: Status as on 13th February, 2023

Groundwater

Unknown groundwater potential

Zonal Groundwater budget (including groundwater abstraction rates, natural groundwater recharge etc.)

The table below highlights the total annual groundwater recharge in the district which is 25391.20 Ham. and the annual extractable ground water resource is 127221.07 Ham. [62]

Table 28: Total annual groundwater recharge in the District

Ground Water Recharge	Monsoon Season	Recharge from rainfall (Ham.)	88882.69
		Recharge from other sources (Ham.)	17119.02
	Non-monsoon Season	Recharge from rainfall (Ham.)	5231.84
		Recharge from other sources (Ham.)	25391.20
Total Annual Ground Water Recharge (Ham.)			136624.75
Total Natural Discharge (Ham.)			9403.68
Annual Extractable Ground Water Resource (Ham.)			127221.07
Current Annual Ground Water Extraction	Irrigation (Ham.)		69330.63
	Industrial (Ham.)		0.00
	Domestic (Ham.)		8071.57
	Total (Ham.)		77402.20
Annual GW Allocation for Domestic Use as on 2025 (Ham.)			9367.31
Net Ground Water Availability for future use (Ham.)			48523.13
Stage of Ground Water Extraction (%) (Ham.)			60.84

[61] Source: Mission Amrit Sarovar
[62] http://cgwb.gov.in/GW-Assessment/GWR-2020-Reports%20State/Uttar%20Pradseh_State_Report_Resource_2020.pdf

Areas with groundwater pollution and pollution type

The table below shows the groundwater quality in the district. The red mark demarcates above the permissible limit. The Fe concentration in most of the blocks is high followed by As and Mn. [63]

Table 29: Groundwater quality in the District

Block	Fe (ppm)	Mn (ppm)	Zn (ppm)	As (ppb)	Pb (ppb)
Banda	0.90	0.15	0.04	12.00	1.00
Bhawal Khera	0.09	0.12	1.61	5.00	2.00
Dadraul	1.45	0.10	0.13	17.00	1.00
Jaitpur	2.70	0.19	0.03	4.00	2.00
Jalalabad	0.41	0.10	0.04	3.00	1.00
Kalan	3.11	0.45	0.03	1.00	1.00
Kanth	0.08	0.03	0.03	2.00	1.00
Katra	0.05	0.11	0.41	2.00	2.00
Khutar	4.83	0.20	0.54	6.00	1.00
Madanapur	0.60	0.10	0.03	4.00	1.00
Mirzapur	0.47	0.01	0.05	1.00	2.00
Nigohi	0.18	0.15	0.14	2.00	2.00
Puyawan	0.23	0.03	0.11	0.00	1.00
Sindhauli	2.72	0.19	0.03	4.00	1.00
Tilhar	0.83	0.14	0.15	9.00	1.00

[63] http://cgwb.gov.in/AQM/NAQUIM_REPORT/UP/Shahjahan%20UP.pdf

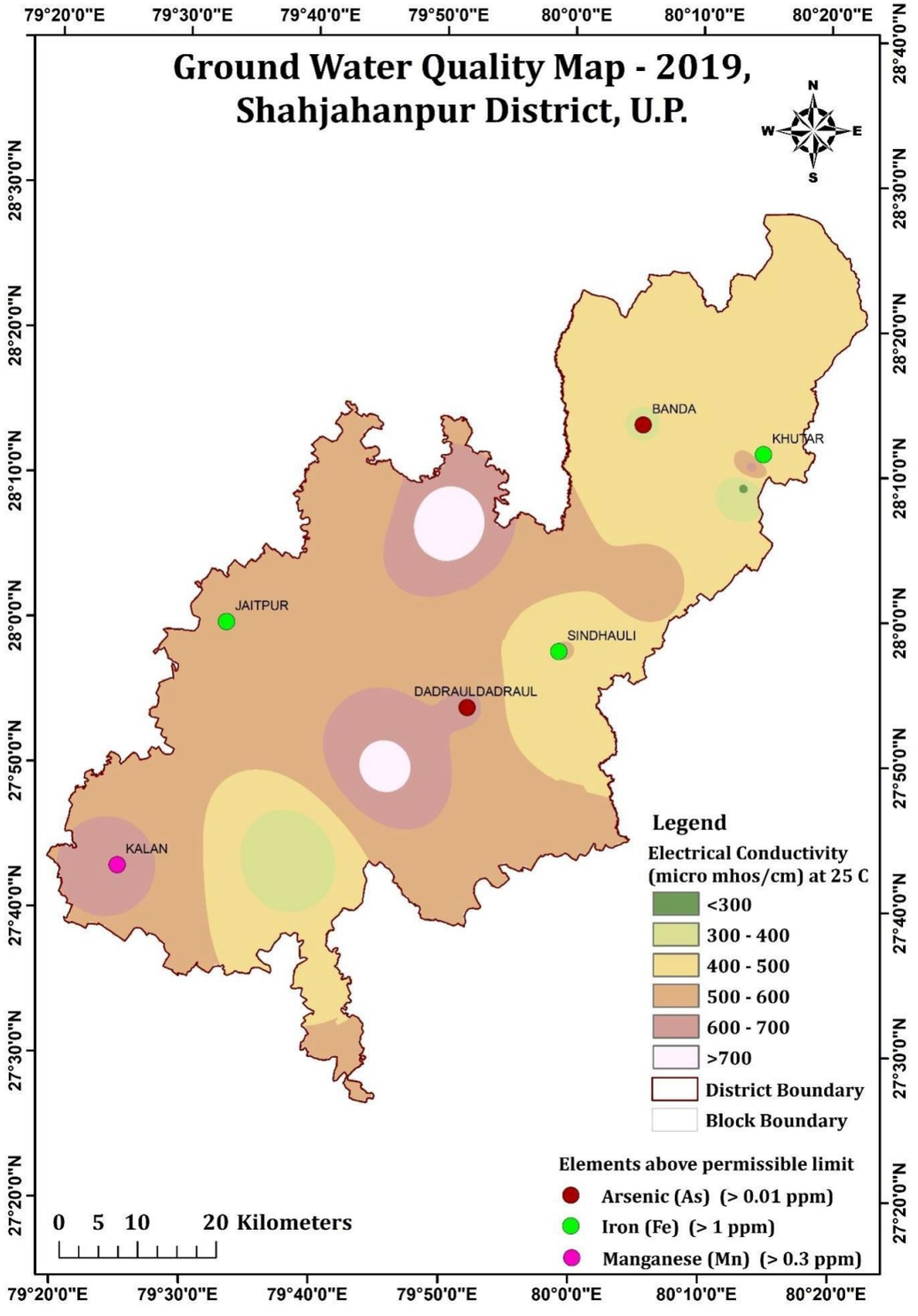

Figure 43: Groundwater quality map of Shahjahanpur district[64]

[64] http://cgwb.gov.in/AQM/NAQUIM_REPORT/UP/Shahjahan%20UP.pdf

Zones where surface-groundwater interaction is high

The Shahjahanpur district falls under safe zone in terms of groundwater extraction.

In the pre-monsoon season the groundwater table lies at 6.8 MBGL whereas it is 5.83-6.79 MBGL during rainy reason and 5.47 – 6.45 in the post-monsoon season.

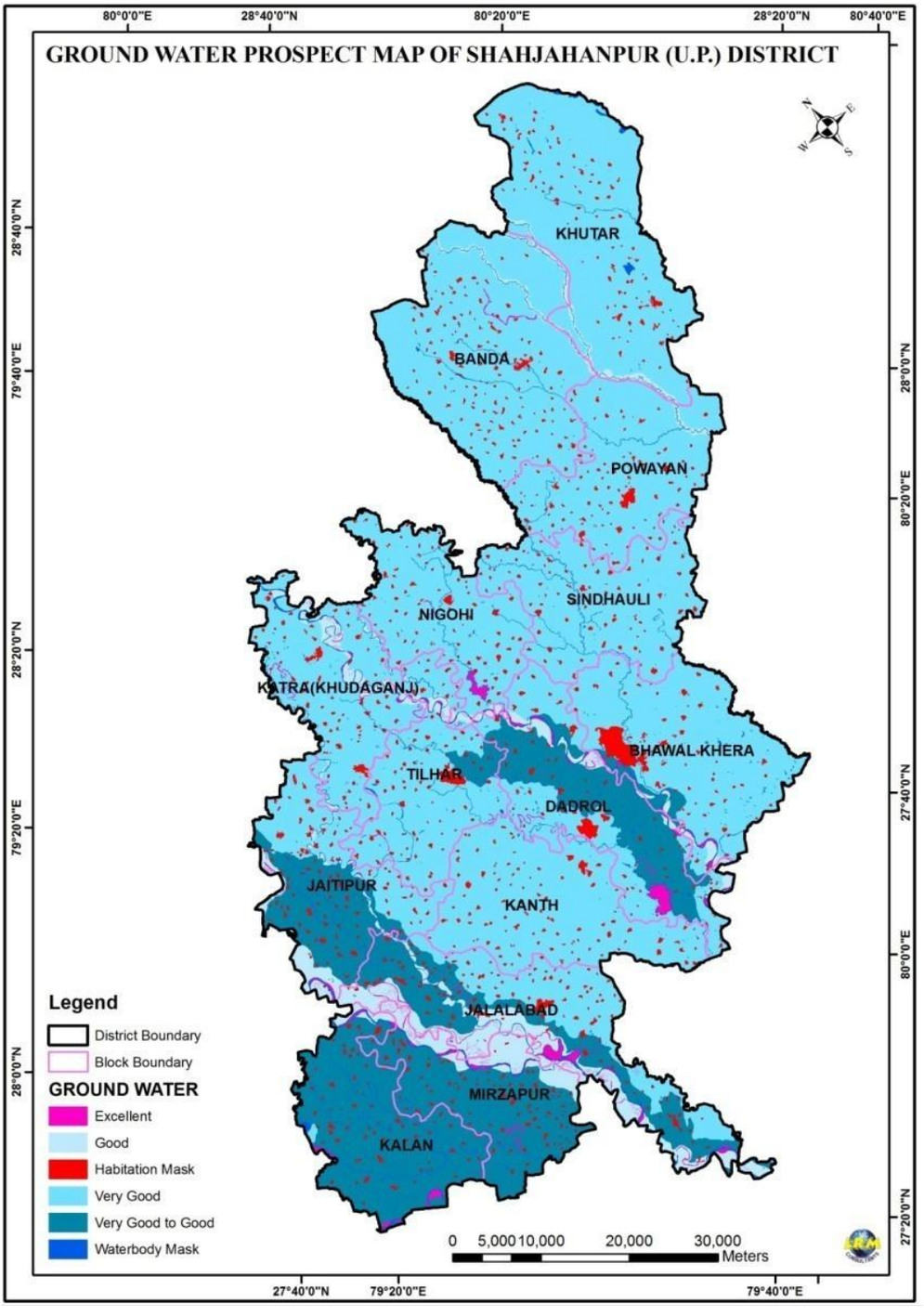

Figure 44: Groundwater map of Shahjahanpur district[65]

[65] DIP, Shahjahanpur

Existing Managed Aquifer Recharge (MAR) systems

Table 30: No. of existing ARS structures in Shahjahanpur District

S.No	ARS Type	No of ARS
1	Check Dam	68
2	Desilting tanks	0
3	Percolation tanks	159
4	Subsurface Dyke	0
5	Recharge Shaft	68
6	Roof Top Rainwater Harvesting	0.1211
7	Spring shed Development/ Watershed Development	0
8	Others	0

Scope for groundwater recharge / MAR systems (locations / area, capacity, water source and usage purpose)

There is a scope for 507.00 MCM water required for recharging groundwater. Hence, surplus water required for recharge is 29.0 MCM[66].

Table 31: Scope of groundwater recharge

Total Geographical Area (km²)	4569.00
Area Identified for ARS (km²)	875.00
Volume for Unsaturated Zone (MCM)	3110.00
Available Sub-surface Volume for ARS (MCM)	382.00
Water Required for Recharge (MCM)	507.00
Surplus Water Required for Recharge (MCM)	29.00

Unregulated groundwater use

Local abstraction regulations[37]

To control ground water exploitation in over-exploited and critical blocks in the state, there is a complete ban on the new government irrigation schemes such as minor irrigation tube wells, state tube wells and other such schemes.

GW budget (incl. GW abstraction rates and purposes)

The groundwater budget is summarized in Table 28.

About 80% area of the district is under agricultural use, with paddy and wheat grown on a large scale. Net irrigated area is about 92% of the net sown area, of which almost 97% contribution comes from ground water. Tube well is the most important method of irrigation in the district. An area of 225,089 ha is irrigated by tube wells which comprises 65.60% of Net Sown Area. Second most important method or source of irrigation is dug-well. A total of 107,450 ha i.e. 31.17% of Net Sown Area is irrigated by this method. Tube-well and dug-well together contributes to 96.47 % of total irrigation in the district. It shows very high dependency of irrigation on groundwater. Canal, although present, contribute very less (0.49%) in irrigation. This is due to easy access to ground water as water levels are not deep and ground water is directly under control of the individual farmer or user.

[66] https://indiawris.gov.in/wris/#/arsViewer

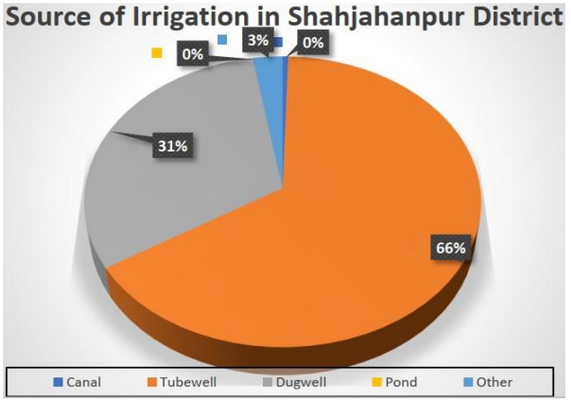

Figure 45: Percentage Distribution showing Methods of Irrigation in Shahjahanpur

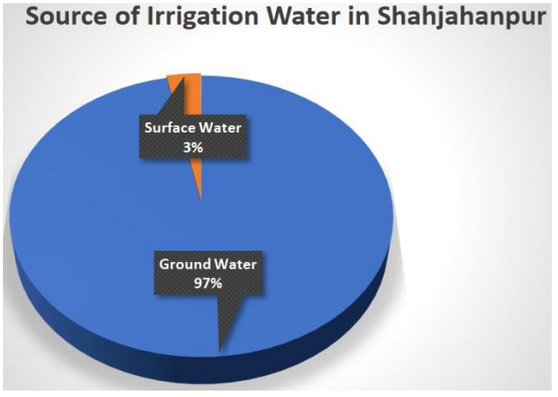

Figure 46: Source of Irrigation Water in Shahjahanpur District (U.P.)

Source: Shahjahan UP.pdf (cgwb.gov.in)

Trend of water levels[67]

Table 32: Trends of water levels at pre- and post-monsoon in Shahjahanpur district

Hydrograph Location	Pre Monsoon 2019	Post Monsoon 2019	Pre Monsoon 2020	Post Monsoon 2020
C.M.O. Office Campus	0	0	0	0
Ganna Shodh Sansthan Campus	8.75	8.2	8.63	8.2
Primary School Jalalabad	6.44	6.55	6.85	6.9
Junior High School Meeranpur Katra	5	2.95	5.05	3.6
Primary School Navadia	0	0	0	0
Primary School Sisaua	0	0	0	0
Vikas Bhawan Campus	12.98	12.6	12.65	12.7
Primary School Viriyaganj	0	0	0	0
Primary School Yakoobpur	4.7	4.98	5.2	5.05

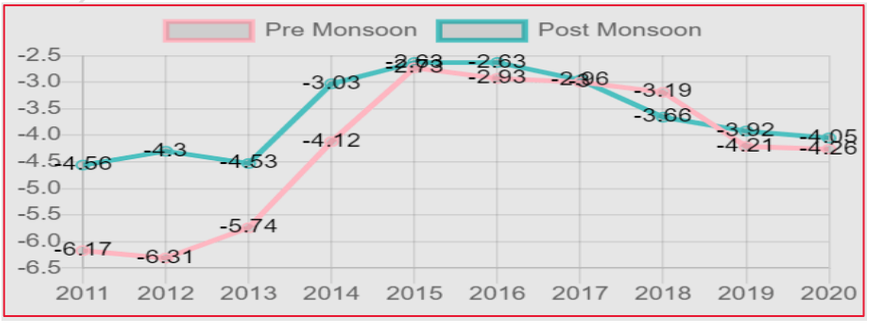

Figure 47: Water level trends pre- and post-monsoon[68]

[67] https://jjmup.org/wq/gwdof2.php
[68] http://cgwb.gov.in/AQM/NAQUIM_REPORT/UP/Shahjahan%20UP.pdf

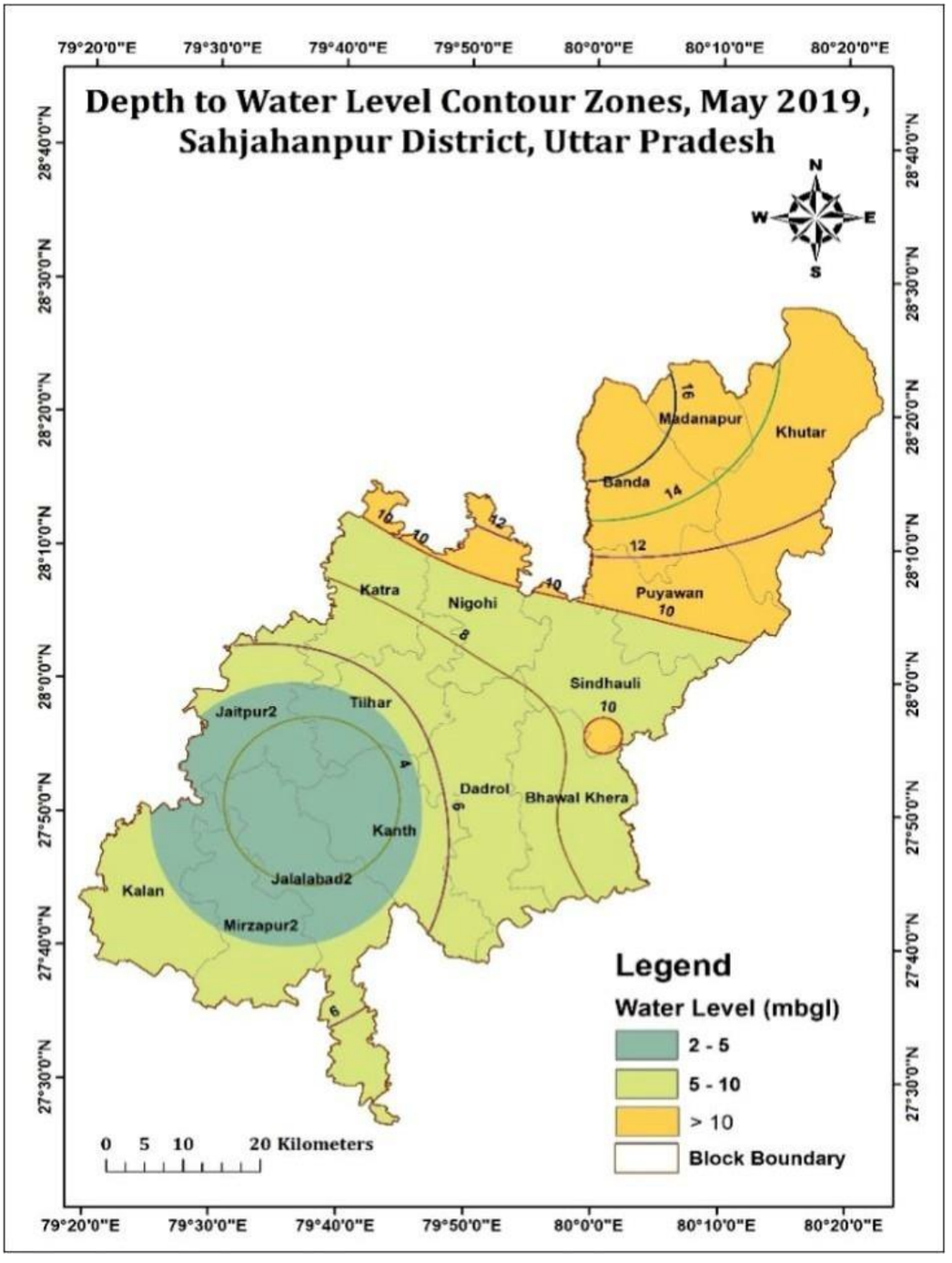

Figure 48: Depth to water level contour zones, pre-monsoon, Shahjahanpur[69]

[69] http://cgwb.gov.in/AQM/NAQUIM_REPORT/UP/Shahjahan%20UP.pdf

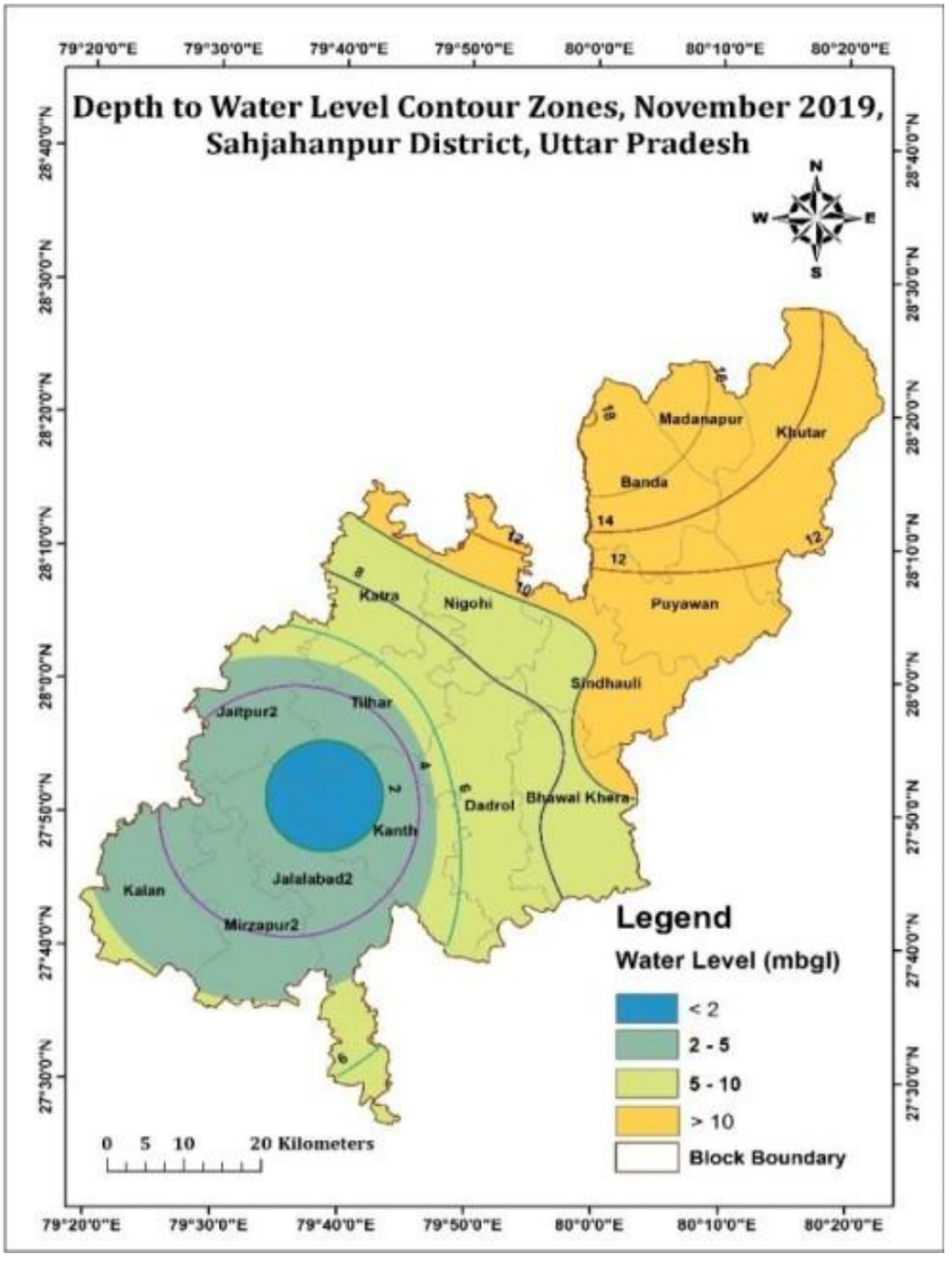

Figure 49: Depth to water level contour zones, post-monsoon, Shahjahanpur

Groundwater sources are drying up

Districts Water budget

About 80% area of the district is under agricultural use and almost 97% irrigation contribution comes from groundwater. Crop water demand is the highest out of all other categories of water use. Nine (9) GPIs covering sugar, paper, fertilizer, power plant and many other small scale industries (SSI) operating in the whole districts also consume significant amounts of water from different sources.

Table 33: Additional water demand for various sectors (estimated on 2016)[70]

Block	Domestic, MCM	Crop, MCM	Livestock, MCM	Industrial, MCM	Power Generation, MCM	Total, MCM
Banda	11.10	445.46	1.91	0.00	0.00	458.47
Khutar	8.01	406.31	1.94	0.00	0.00	416.26
Powayan	10.69	311.02	1.89	0.00	0.00	323.60
Sindhauli	10.56	351.61	1.48	0.00	0.00	363.65
Khudaganj Katra	9.97	282.43	1.71	0.00	0.00	294.11
Jaitipur	8.10	244.91	1.64	0.00	0.00	254.64
Tilhar	10.94	307.20	1.79	0.00	0.00	319.93
Nigohi	8.36	277.62	1.71	0.00	0.00	287.68
Kanth	7.59	258.50	1.65	0.00	0.00	267.74
Dadrol	8.66	250.90	2.20	0.00	0.00	261.75
Bhawal Khera	32.21	281.96	2.31	0.00	0.00	316.48
Kalan	8.62	310.05	2.44	0.00	0.00	321.11
Mirzapur	7.00	238.30	2.52	0.00	0.00	247.81
Jalalabad	12.23	291.09	2.42	0.00	0.00	305.74
Madanapur	7.17	310.47	0.30	0.00	0.00	317.93
Total, MCM	161.18	4567.82	27.89	0.00	0.00	4756.89

Irrigation practices

Micro/ drip/ sprinkler irrigation under govt. Schemes[71]

Water management

Water security cannot be guaranteed for the entire command area

Irrigation water usage pattern (water use per ha and crop or yield)[72]

- Detailed numbers on how much net irrigated area
- Crops listed: Wheat, pulses, paddy, groundnut
- Divided into 2 seasons; Kharif, Rabi

[70] https://pmksy.gov.in/mis/Uploads/2016/20161124030340830-1.pdf
[71] Microsoft Word - 93bb-0d06-7617-da43 (agricoop.nic.in)
[72] District Ground Water Brochure Of Shahjahanpur District

- Table of water requirement/demand is provided.

Table 34: Net irrigated area of Shahjahanpur district[49]

Block	Total area	Area other than agriculture use*	Net Area sown	% Net Area Sown	Net Area Irrigated	% Net Irrigated to net sown
Banda	44,125	8,985	35,140	79.64	32,375	92.13
Khutar	40,653	10,534	30,119	74.09	28,647	95.11
Powayan	28,369	5,102	23,267	82.02	21,940	94.3
Sindhauli	29,366	4,537	24,829	84.55	22,848	92.02
Khudaganj Katra	26,464	4,259	22,205	83.91	20,731	93.36
Jaitipur	24,498	5,497	19,001	77.56	17,983	94.64
Tilhar	21,985	3,866	18,119	82.42	17,133	94.56
Nigohi	25,036	3,723	21,313	85.13	18,164	85.22
Kanth	26,089	4,545	21,544	82.58	19,068	88.51
Dadrol	26,314	6,851	19,463	73.96	17,922	92.08
Bhawal Khera	29,016	5,628	23,388	80.6	19,535	83.53
Kalan	29,158	6,151	23,007	78.9	20,609	89.58
Mirzapur	24,179	5,006	19,173	79.3	18,009	93.93
Jalalabad	32,633	6,554	26,079	79.92	25,161	96.48
Madanapur	28,117	5,018	23,099	82.15	21,953	95.04
Total Rural	436,002	86,256	349,746	*80.22*	322,078	*92.09*
Total Urban	1,467	1,030	437	*29.79*	134	*30.66*
Total District	437,469	87,286	350,183	*80.05*	322,212	*92.01*

Interventions and measures[49, 73]

Improving upon the existing irrigation structures and prevent soil erosion due to frequent flooding the department has prepared schemes under the Pradhan Mantri Krishi Sichai Yojna (PMKSY). PMKSY will broadly focus on:

a) Creation of new water sources; repair, restoration and renovation of defunct water sources; construction of water harvesting structures, secondary & micro storage, groundwater development, enhancing potentials of traditional water bodies at village level like Jal Mandir (Gujarat); Khatri, Kuhl (H.P.); Zabo (Nagaland); Eri, Ooranis (T.N.); Dongs (Assam); Katas, Bandhas (Odisha and M.P.) etc.

b) Developing/augmenting distribution network where irrigation sources (both assured and protective) are available or created;

c) Promotion of scientific moisture conservation and run off control measures to improve ground water recharge so as to create opportunities for farmers to access recharged water through shallow tube/dug wells;

d) Promoting efficient water conveyance and field application devices within the farm viz, underground piping system, Drip & Sprinklers, pivots, rain-guns and other application devices etc.;

[73] Source: DIP Shahjahanpur

e) Encouraging community irrigation through registered user groups, farmers, producers, organisations, NGOs;

f) Farmer oriented activities like capacity building, training and exposure visits, demonstrations, farm schools, skill development in efficient water and crop management practices (crop alignment) including large scale awareness on more crop per drop of water through mass media campaign, exhibitions, field days, and extension activities through short animation films etc.

7.1.3 Ecological integrity

Freshwater biodiversity and habitats

Freshwater ecosystems are incredibly diverse and are hotspots of biodiversity. Freshwater habitats such as lakes, rivers, streams, wetlands and aquifers host an incredible proportion of world's biodiversity. Freshwater is less than 1% of total available water on earth.

Mapping of wetlands in the area and status of wetland health

The wetland map and category wise details of wetlands present in Shahjahanpur district is given at Figure 10 and Table 3

A total of 601 wetlands are present in the district.[74]

The inventory of the health card of only 5 wetlands in Shahjahanpur *viz.* Bharatpur, Bharatpur 2, Islamganj, Noorpur Tarsouna, Rajepur, Raipur are updated on the website, while the rest are still not uploaded.[75]

[74] https://vedas.sac.gov.in/vedas/downloads/atlas/Wetlands/National%20Wetland%20Atlas_Uttar%20Pradesh.pdf (Page – 110)
[75] https://indianwetlands.in/resources-and-e-learning/health-card-dashboard/

Table 35: Freshwater Biodiversity and Habitats[52]

	General Description										
	Wetland Name	Bharatpur		Bharatpur 2		Islamganj		Noorpur Tarsouna		Rajepur Raipur	
	Area (hectares)	0.61		1.07		1.38		3.24		3.91	
	Wetland Type	Natural (Inland)		Natural (Inland)		Natural (Inland)		Natural (Inland)		Natural (Inland)	
Code	**Indicator**	**Actual Value**	**Category**	**Actual Value**	**Category**	**Actual Value**	**Category**	**Actual Value**	**Category**	**Actual Value**	**Category**
A-01	% wetland converted to non-wetland use since 2000	0%	A	0%	A	1-5%	B	0%	A	0%	A
H-01	Ratio of number of natural inlets choked and diverted to total number of natural inlets	0-0.2	A	0-0.2	A	0.3-0.4	B	0-0.2	A	0-0.2	A
H-02	Ratio of number of natural outlets choked and diverted to total number of natural outlets	0-0.2	A	0-0.2	A	0.3-0.4	B	0-0.2	A	0-0.2	A
Q-01	%of samples conforming to desired BOD/DO/COD levels	60-80% sample meet the criteria	B	60-80% sample meet the criteria	B	60-80% sample meet the criteria	B	80-100% sample meet the criteria	A	80-100% sample meet the criteria	A
B-01	% wetland area covered by	<10%	A	<10%	A	11-20%	B	<10%	A	<10%	A

	invasive macrophytes										
G-01	Clearly demarcated wetlands map	Wetlands map prepared and under consideration of SWA	B	Wetlands map prepared and under consideration of SWA	B	Wetlands map prepared and under consideration of SWA	B	Wetlands map prepared and under consideration of SWA	B	Wetlands map prepared and under consideration of SWA	B
G-02	Wetland Management Plan	Management plan under preparation	D	Management plan under preparation	D	Management plan under preparation	D	Management plan under preparation	D	Management plan under preparation	D
G-03	Wetland Notification	Regulation planned process initiated	D	Regulation planned process initiated	D	Regulation planned process initiated	D	Regulation planned process initiated	D	Regulation planned process initiated	D

Status of Urban Wetlands in all ULBs[76]

- No wetland pollution reported in ULB's
- The inventory of the health card of only 5 wetlands in Shahjahanpur are updated on the website, while the rest are still not uploaded.[77]

Water-allocation mechanisms

- Water allocation mechanisms are present at eight locations of the Ramganga river, however, no specific data related to Shahjahanpur found.

River Water Quality during dry season

Described under section 4.6.2 Surface Water Quality.

7.1.4 Capacity building and public participation

Training needs

Topics relevant for capacity development

Fostering and Capacity Enhancement of Water Users Organisations, e.g., WUAs – proposed for Uttar Pradesh

Training and capacity building of DGC on RBM cycle planning and implementation

Topics not covered by existing training institutes and courses

Long term planning for 20 to 30 years, GIS based land use assignment, E-Flow assessment

Information provided in

- https://nmcg.nic.in/writereaddata/fileupload/59_Mainstreaming%20Urban%20River%20report%20-%20compressed.pdf
- https://edukemy.com/current-affairs/gazette/2021-07-16/urban-river-management
- https://urbanrivers.niua.org/themes/contrib/corporate_blue/pdf/vVol_1_-_Main_document.pdf

Identification of potential training institutes

- Sam Higginbottom University of Agriculture, Technology, and Sciences (SHUATS)
- District Institute of Education and Training Shahjahanpur
- Bank of Baroda under Scheme RSETI provides training on Agriculture in Shahjahanpur

Available other training options

- Anil Agarwal Environment Training Institute (AAETI), Nimli, Rajasthan - Both online and offline options

[76] https://indianwetlands.in/wetlands-overview/threats-and-management/

[77] https://indianwetlands.in/resources-and-e-learning/health-card-dashboard/

- River Cities Alliance (RCA)
- National Water Academy (NWA)

7.2 Selected Issues with situation analysis and specific targets

The situational assessment of the key issues by the DGC and the SMCG and the stakeholder consultation process concluded that the following key issues are to be dealt with in the first RBM cycle (2020-2027) in Shahjahanpur.

1) **Pollution from non-point sources (fertilizer and pesticides) in irrigated agriculture**
2) **Liquid waste management (domestic sewage) in urban areas and household sanitation in rural areas**
3) **Wetland management, declining groundwater tables and decreased baseflow in rivers**
4) **Industrial pollution**
5) **Solid waste management in rural and urban areas**
6) **Capacity building and public outreach (including Arth Ganga)**

To prepare for a meaningful action plan, the assessment of these issues is briefly analysed, potential measures identified, and specific targets concluded on. For these targets detailed action plans are elaborated in the next chapter.

Key Issue 1: Non-point source pollution (fertilizer and pesticides) in irrigated agriculture

Assessed gap: Fertilizers and pesticides leaching from agricultural fields located at both banks of the Ramganga river during floods cause river water pollution. Chemical leaching from agriculture practice at almost 100-meter-wide setback zone (balm land) located in both banks of the Ramganga river. Runoff of soil, pesticides, and fertilizer from agricultural fields is causing pollution of water resources that damages valuable riverine and aquatic ecosystems. Excess nitrogen leads to harmful algal blooms in water bodies while simultaneously polluting groundwater resources over time. Contamination of water resources from agricultural runoff will probably worsen since the use of chemical fertilizer and pesticides is expected to increase due to the promotion of double and multiple cropping.

Potential interventions:

1. Demonstration on integrated pest and nutrition management techniques
2. Phased reduction in application of chemical fertilizers through sensitisation and providing training in the rate, timing, method of application
3. Promoting organic cultivation in setback zone
4. Implementing conservation tillage and bund plantation
5. Managing livestock access to river
6. Conduct comprehensive awareness campaigns on reduced and less harmful pesticide application in close collaboration with respective Water Use Organisations (in the irrigation schemes)
7. Establish a riparian zone—some 10 m in width—along rivers, creeks, and drainage channels that will provide a natural filtration zone for agricultural runoff

8. Promotion of micro (drip/ sprinkler) irrigation.

Specific targets:

1. Implementation of IPNM strategy
2. Promotion of organic cultivation and welfare schemes
3. Taking measures to reduce flow of pollutants from agriculture field to the river

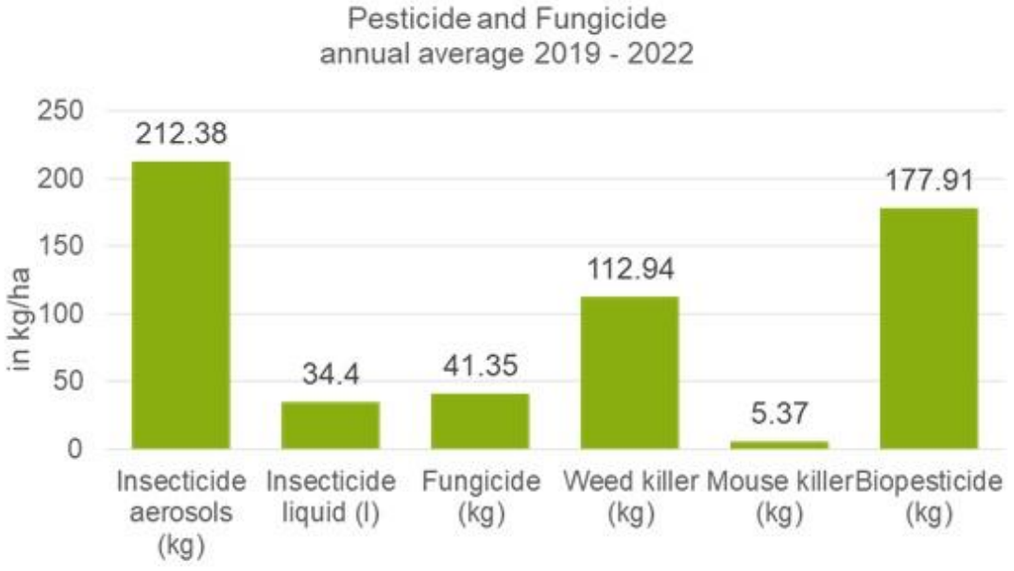

Figure 50: Pesticides and Fungicide consumption data for Shahjahanpur district

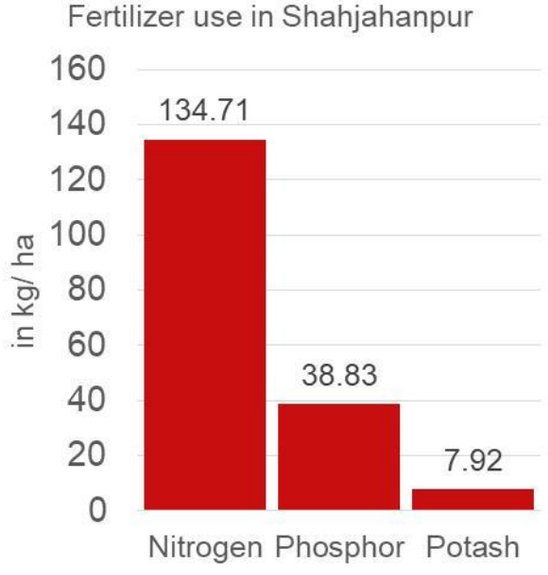

Figure 51: Fertilizer consumption data for Shahjahanpur District

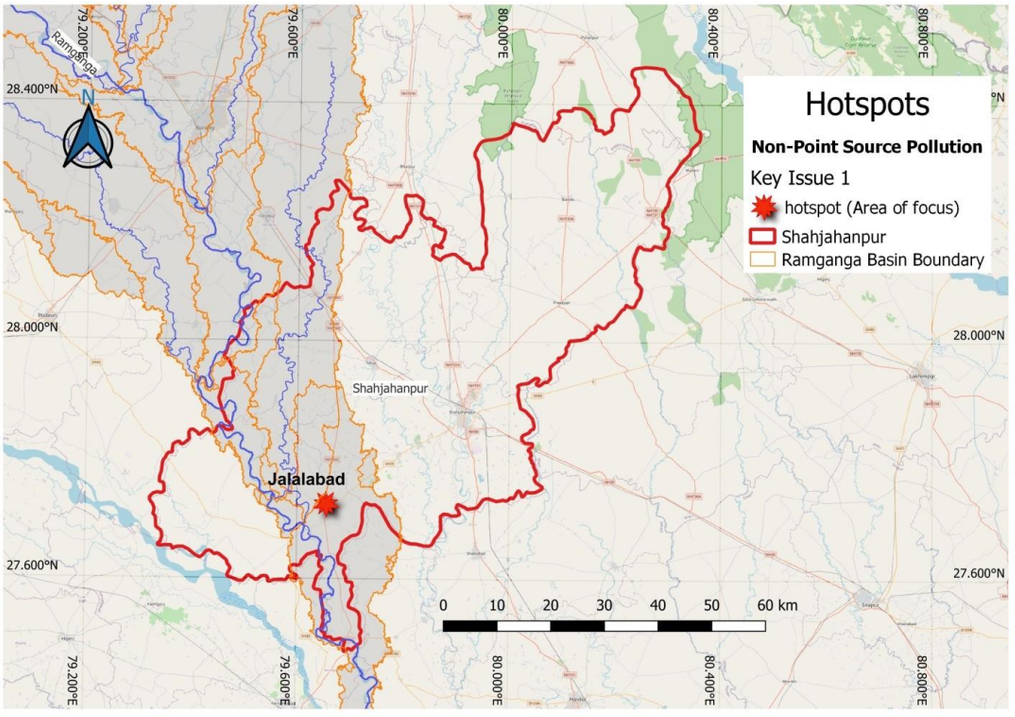

Figure 52: Rural areas with a focus on interventions for non-point source pollution

Key issue 2: Liquid waste management (domestic sewage) in urban areas and household sanitation in rural areas

Assessed gap: Domestic wastewater contains high levels of organic matter, nutrients and coliforms which contaminate water bodies. In Shahjahanpur the volume of domestic wastewater is increasing at a fast rate due to the rapidly growing urban population combined with general economic growth. While treatment plants are under construction, the gap between installed treatment capacity and wastewater generation is expected to grow further. Urban settlements are not yet connected to underground sewage systems and pollute ground and surface waters through open, untapped drains. E.g. untreated household sewage/ sullage form Shahjahanpur city is discharged into River Garra and Khannaut. There are 17 nos. untreated drainage discharge point at Garra and Khannaut rivers. Drainage network within Shahjahanpur city is old and outdated and many portions of the drainage system are dilapidated which causes sewage/ sullage stagnation and water pollution. The faecal sludge is discharged into open drains, fields, vacant lots, etc. in the absence of designated sludge disposal sites, contributing to environmental pollution. One private FSTP with 32 KLD capacity is operating at City Park Colony, Lodhipur. One STP with 40 MLD capacity is under construction at Keruganj, Shahjahanpur; 80% of civil construction work is completed; it will cater 70% area of the total Shahjahanpur city; STP is expected to operate from January to February 2023. 45 Km out of total planned 186 Km. long drainage network is already constructed. A 250 crore budget is allocated for STP and drainage network construction.

Potential interventions:

1. Augment co-treatment facility within 40 MLD STP which is under construction to cater to the remaining 30% area of the Shahjahanpur city area.
2. Complete 186 Km. long underground drainage network construction and connections to STPs before discharge into the river.
3. Monitor water quality for all the drains, nalas etc. discharging water into rivers
4. Repair 55 km. long old and dilapidated drainage systems
5. Develop Faecal Sludge and Septage Management Plan and provision FSTP in rural area
6. Increase drainage network coverage and connection to STPs
7. Augment bio-remediation in untapped drain
8. Ensure individual sanitation facility in all household at urban as well as rural area

Specific targets:

1. Ensure 100% treatment of sewer generated from city household before discharge to river water
2. Ensure individual sanitation facility at each household
3. Implement storm water drainage system
4. Ensure implementation of sludge and septage management in scientific way

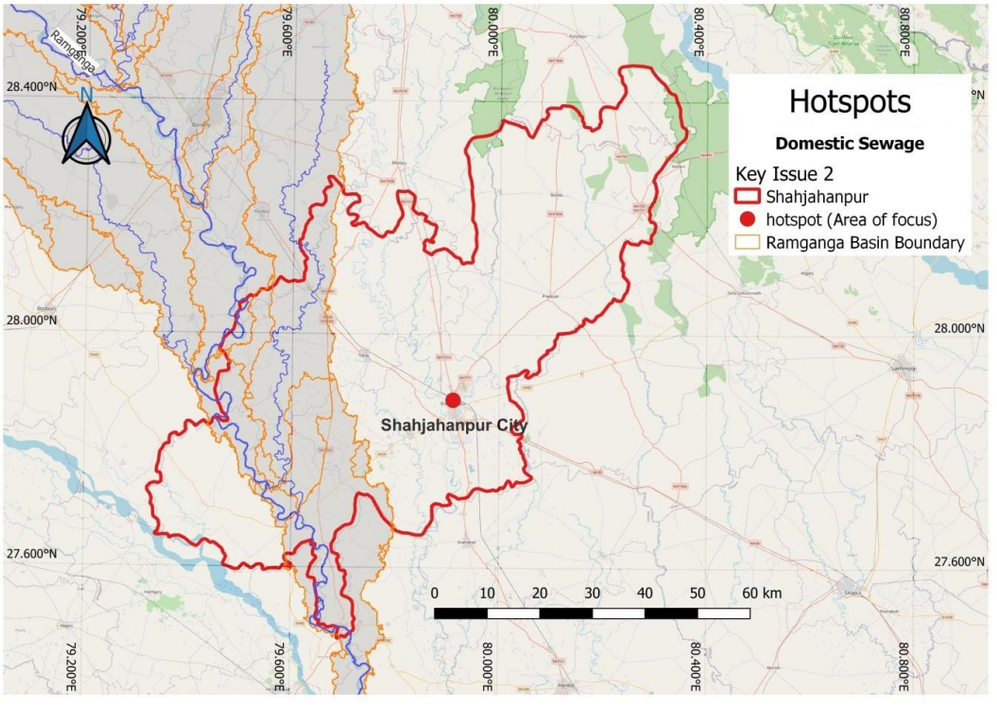

Figure 53: Location for installation of STPs

Key Issue 3: Wetland Management, declining groundwater tables and decreased baseflow in rivers

Assessed gap: Encroachment on wetlands, overexploitation of groundwater and insufficient surface water storage and management, is observed in Shahjahanpur. Encroachment was reported on river side setback zone (balm land) at Aziz Nagar and Lodhipur Bridge over Khannaut river. Demolition debris and foundation materials of old Lodhipur Bridge and Aziz Nagar bridge remained in the mainstream of Khannaut and Garra river respectively which is creating an obstruction to natural river flow hence reducing the environmental flow. Net groundwater availability is 40,974.03 ham whereas groundwater draft (all uses) is 83,111.52 ham, hence the level of development of groundwater is 58.96%. There is no water purification centre in Shahjahanpur district. Ground water is the only source for municipal supply. Shallow well irrigation pumps are the major source of irrigation during lean, dry period. Pre-monsoon GW table lies at 6.8 MBGL whereas it is 5.83- 6.79 MBGL during rainy reason and 5.47 – 6.45 at post-monsoon season. 19 nos. of ground water recharge pit each with 3X3 or 3X2 M dimension is constructed. Annual ground water recharge potential of the district from different recharge structure is 1.88 MCM. A total of 601 wetlands are present in the district. Bio-filter is augmented in wetland.

Potential interventions:

1. Ensure compliance to environmental regulations through appropriate administrative and legal measures, and reverse wetland encroachment
2. Groundwater regulation laws enforcement, monitor illegal groundwater abstractions and ensure compliance to the permitting system
3. Promote groundwater recharge by establishing, maintaining and protecting check dams, percolation tanks, subsurface dykes and recharge shafts
4. Encourage rainwater harvesting in agricultural areas through diverse means (swales, pits, contour bunds, etc.) in order to substitute water abstraction from rivers and ensure more base flow
5. Use alternate sources of water for irrigation purposes hence reducing the stress on groundwater specially during dry period
6. Promote rainwater harvesting and ground water recharge

Specific targets:

1. Conservation of wetland
2. Floodplain recovery and improving natural flow of river
3. Monitoring and better management of ground water resources
4. Improving groundwater recharging

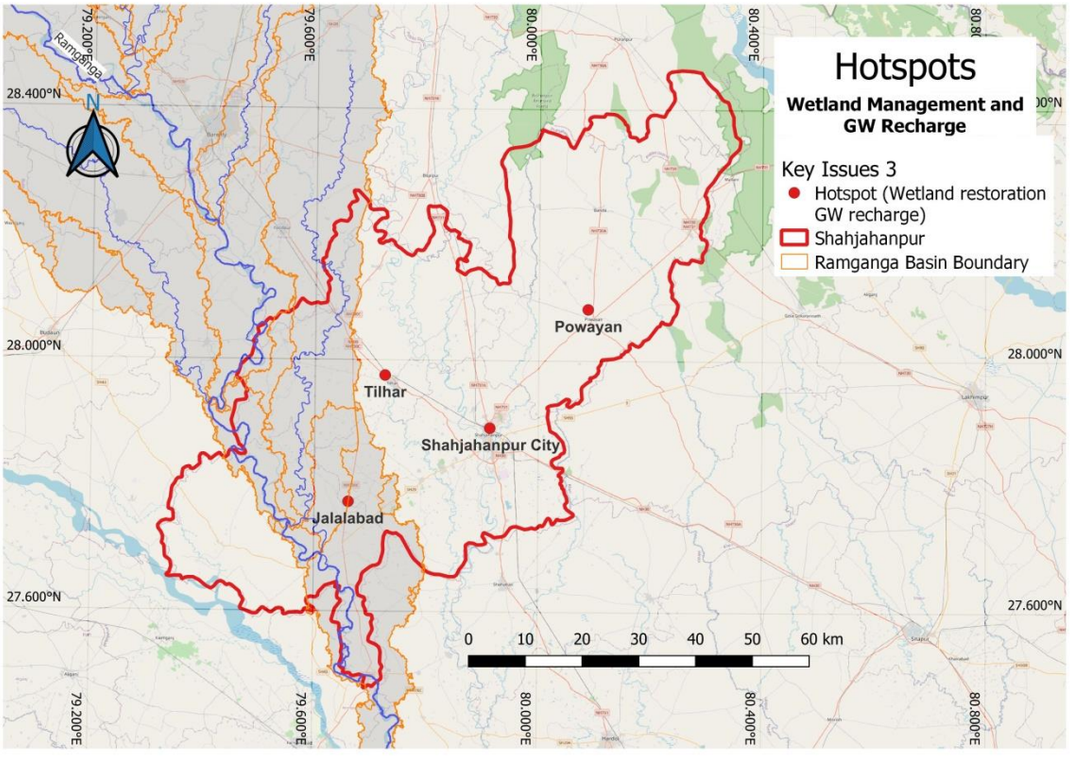

Figure 54: Location for conserving wetlands and GW recharge

Key Issue 4: Industrial Pollution

Assessed gap: With rapid economic growth and urbanisation, industrial pollution is increasing. In many places untreated industrial wastewater is discharged in rivers and streams, contaminating surface and groundwater resources. Although all 9 GPIs have ETPs with the official capacity of 25.34 MLD which covers the entire effluent load from these units the treated effluents are obviously not meeting the required quality standards and drains and rivers have anaerobic conditions. No CETPs exist in the district. One major source of industrial pollution found in Shahjahanpur district is from KR Pulp and Papers mill located at Rampura village, Sadar Tehsil, Shahjahanpur district connected with Ramganga at Hardoi District.

Potential interventions:

1. Construction of CETP with adequate capacity
2. Connecting all industrial effluents from respective ETPs to CETP before discharging into the rivers
3. Improving WQ monitoring network, with a specific focus on hotspots of water contamination
4. Regular sampling and inspection of industrial wastewater to map all pollution sources and identify pollution hotspots
5. Initiate the necessary action against industries that do not meet the standards

Specific targets:

1. Ensure proper treatment of effluent generated from GPIs
2. Regular monitoring of water/ effluent quality

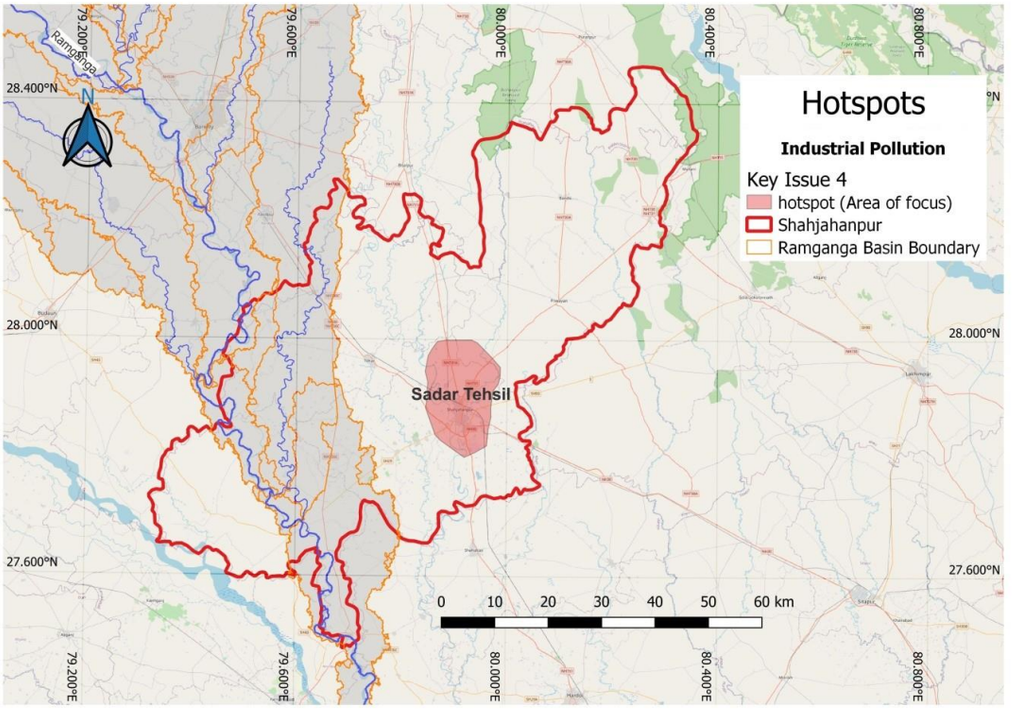

Figure 55: Area of focus for WQ monitoring and Installation of CETP

Key Issue 5: Solid waste management in rural and urban areas

Assessed gap:

Packaging materials, vegetable wastes dumped on both river banks and river water from Sabji mandi / vending unit operating on dilapidated bridge located at Raj Ghat on Garra River. Dumping of municipal waste on River Garra & Khannaut by local residents, shop owners from ROB at Lodhipur, Ajij ganj bridge; Subhas Nagar bridge; Keruganj bridge; 2 bridges in Bareilly – Lucknow highway, one bridge over Garra and another one on Khannaut. Two hazardous waste processing units (Ramapati Agro Chemicals, Rosa, Shahjahanpur; J.K. Chemicals Atsaliya, Shahjahanpur) available in the District are not functional. There are no e-waste processing units in the district. Shahjahanpur Municipal Corporation is operating one waste segregation unit at Jail road near Fire Station and One Material Recovery Facility (MRF) Centre at Kakra, Shahjahanpur. Few volunteers with motivational support from municipal authorities are organizing awareness programmes on river cleaning twice a month at Raj Ghat area.

Potential interventions:

1. Vending on River Over Bridge (ROB) should be prohibited by law and fencing may be provided on both sides in all ROB location.

2. Mass scale awareness programme on ecological integrity of rivers viz. river beautification and cleaning, throwing of household waste at waste bin provided by municipality authorities.
3. Adequate number of waste collection bins should be provided all over the city
4. Waste collection and evacuation system by municipality shall be regularized and strengthened further.
5. Waste Transfer Stations construction on priority basis
6. Separate Hazardous Waste, E-waste, C&D waste management units processing facility set up.

Specific targets:

1. Improve waste management practice
2. Awareness raising of local people
3. Adopt comprehensive environmental management practice

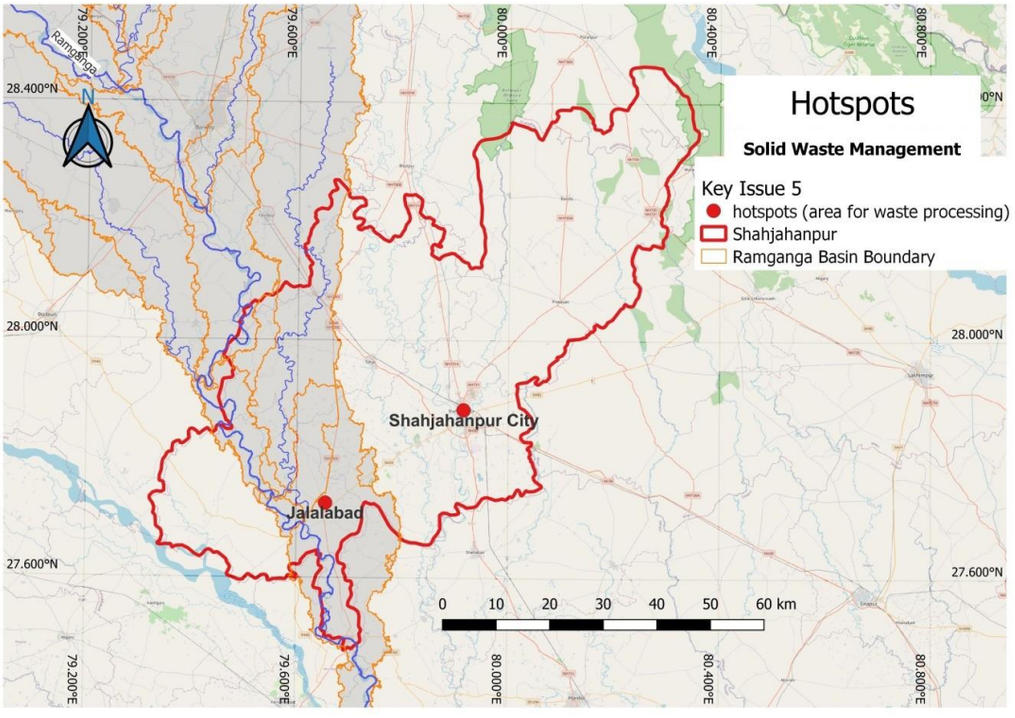

Figure 56: Locations where waste management practices and facilities is to be improved

Key Issue 6: Capacity building and public outreach (including Arth Ganga)

Assessed gap: The DGCs are mandated with the rejuvenation of the river stretches and the catchment area but currently lack capacities and human resources to look into the required actions to initiate, prepare, implement, operate and maintain associated projects. Diverse funding sources for implementing Ganga rejuvenation projects exist at the district level but are not be sourced by the district authorities. The topics of E-flow assessment and GIS based land use assignment are not included in the district level planning by DGC. Linkages and synergies with Arth Ganga with block development plan are still missing.

Potential interventions:

1. Make use of the existing funding sources for capacity building and human resource development in the area of river rejuvenation incl. RBM cycle, as well as various required environmental and civil engineering topics (STP, WWTP, ETP, CETP etc.)
2. Establish additional dedicated capacity at the DGCs of the pilot districts by seconding 2 designated professionals in the form of a supporting cell
3. Provide additional trained human resources to the executing agencies to technical topics for operation, maintenance and monitoring of STPs, Faecal Sludge Management (FSM) and CETPs, waste management facilities (MRF, Treatment, Storage, and Disposal Facilities, etc.)
4. Identify and involve suitable research institutes for capacity building
5. Conduct a gender sensitive outreach campaign for water related issues involving NGOs and self-help groups (especially women groups)
6. Foster the setup and enhance the capacities of Water Users Organisations (incl. gender sensitive composition)
7. Foster linkages and synergies with Arth Ganga during human resources development for other livelihood generation schemes.
8. Pilot DGCs act as ToT for other follow up DGCs for developing DGPs

Specific targets:

1. Training and capacity building of DGC with specifically trained resource person (with knowledge on gender sensitivity) who has the sole task of implementing, monitoring and revising the DGP
2. Training and capacity building of local community enhancing skills building and empowerment programme on women leadership skills, decision making skills
3. Engage resource institute to carryout special study
4. Capacity building programme on gender sensitisation for women on leadership and decision-making skills has been conducted for 5 NGOs

SECTION D. ACTION AND MONITORING PLAN AND IMPLEMENTATION

8 Detailed action plan

8.1 Selected issues

Key Issue 1: Non-point source pollution (fertilizer and pesticides) in irrigated agriculture

Action description	By	Start date	End date	Milestone	Required resources	Outcome	Linkages
Specific target 1: Training and capacity building on implementation of IPNM strategy							
Carryout training need assessment on promotion of IPNM	Department of Agriculture	Oct 2023	Apr 2024	Tender published, agency selected, agreement made, training need assessment done	Financial Allocation for survey	Capacity gap identified	Agriculture Dept. Budget/ Rashtriya Krishi Vikas Yojana
Develop training modules and IEC materials in local language with visual display covering crop specific IPNM practices.	Department of Agriculture	Oct 2023	Apr 2024	Agreement with specialised agency	Financial Allocation, List of ongoing initiatives	IPNM strategy & training material developed	Agriculture Dept. Budget/ Rashtriya Krishi Vikas Yojana
Organise training of trainers programme for at least ten (10) village resource persons/ individual service providers/ irrigation operators on crop wise IPNM strategy.	Department of Agriculture	May 2024	Oct 2024	Tender published, agency selected, agreement made, training of trainers done	Financial Allocation, Training Material, Training Agency	Local Trainers are capable of organizing orientation workshops to farmers	Agriculture Dept. Budget/ Rashtriya Krishi Vikas Yojana

Action description	By	Start date	End date	Milestone	Required resources	Outcome	Linkages
Orientation of farmers on IPNM through trained resource person (trainings of farmers shall be organized before the on-set of agricultural seasons, i.e., at least 30-45 days before sowing / planting)	Department of Agriculture	Dec 2024	Oct 2026	Training scheduled, area selected, farmers identified, resource person involved	Financial allocation, training material, resource person	Farmers are more aware on appropriate uses of fertilizers and pesticides	Agriculture Dept. Budget/ Rashtriya Krishi Vikas Yojana
Hand holding support shall be rendered to the farmers through the trained resource person during different stages of crop growth.	Department of Agriculture	Dec 2024	Oct 2026	Area selected, Farmers Identified, Resource person involved	Financial Allocation, Resource Person	Optimized uses of fertilizers and pesticides have achieved	Agriculture Dept. Budget/ Rashtriya Krishi Vikas Yojana
Farmers including women farmer groups are sensitized and trained on crop specific IPNM strategy and managing livestock access to river in twelve (12) villages located within five (5) km. aerial distance from Ramganga river.	Department of Agriculture	Dec 2024	Oct 2026	Training scheduled, Area selected, Farmers Identified, Resource person involved	Financial Allocation for Training Material, Resource Person	Women farmers are more sensitised towards IPNM strategy	Agriculture Dept. Budget/ Rashtriya Krishi Vikas Yojana/ Gender Sensitive measures
Incentivise the process to promote the use of water soluble, organic fertilizer	Department of Agriculture	Dec 2024	Oct 2026	Reduction in synthetic fertilizer consumption, Quantity of organic fertilizer used		Increase in use of organic fertilizer	Agriculture Dept. Budget/ Rashtriya Krishi Vikas Yojana

Action description	By	Start date	End date	Milestone	Required resources	Outcome	Linkages
Arrange series of behaviour change communication (BCC), awareness and education events/ campaigns; circulate messages; publish news and articles in cooperation with women water user groups	Department of Agriculture & Nehru Yuva Kendra Sangathan	Dec 2024	Oct 2026	BCC Agency identified and involved; Communication material developed; awareness campaign organised	Financial allocation for trainings, programmes, trainers, publications	Farmers are more aware on uses of optimized fertilizers and pesticides, water user groups are more aware and willing towards organic farming	Namami Gange Programme / Agriculture Dept. / Gender Sensitive measures
Specific target 2: Promotion of organic cultivation and welfare schemes							
All villages located within three (3) km aerial distance from Ramganga river shall be made completely chemical-free by promoting organic farming	Department of Agriculture	Dec 2024	Oct 2026	Area earmarked, Organic farming promoted	Resources for organic farming materials e.g.- bio composting, bio-pesticides	Reduction in synthetic fertilizer consumption, Increase in use of organic fertilizer	Namami Gange Programme / Agriculture Dept. Budget
Various welfare schemes promoted under project should be replicated in the selected twelve (12) villages where IPNM strategy is promoted. This will also promote Arth Ganga concept.	Department of Agriculture & Nehru Yuva Kendra Sangathan	Dec 2024	Oct 2026	Campaign organised	Financial Allocation for scheme identification selection criteria	Schemes are linked and benefits are assessed	Namami Gange Programme
Specific target 3: Taking measures to reduce flow of pollutants from agriculture field to the River							
Assessment/study of suitable areas/locations	Department of Agriculture	Oct 2023	Apr 2024	survey initiated, map prepared	Financial Allocation for survey, map preparation	Areas identified for bio filter zones;	Namami Gange Programme

Action description	By	Start date	End date	Milestone	Required resources	Outcome	Linkages
Installation of pilot bio-filter created along identified stretch	Department of Agriculture	Apr 2024	Mar 2026	Tender floated, bio-filter zone installed	Financial allocation for construction of bio filter zone	Bio filer zone established, water quality of River have improved	Namami Gange Programme
Impact monitoring of pilot bio-filter	Department of Agriculture	Apr 2026	Apr 2027	Agency for monitoring appointed, operation guideline have prepared	Financial allocation for operation and monitoring of bio-filter zones	Sustainability of bio-filter zones have achieved	Namami Gange Programme

Key Issue 2: Liquid waste management (domestic sewage) in urban areas and household sanitation in rural areas

Action description	By	Start date	End date	Milestone	Required resources	Outcome	Linkages
Specific target 1: Ensure 100% treatment of sewage generated from city household before discharge to river water							
Completion of remaining work of 40 MLD STP and 186 Km. long drainage network construction	Jal Nigam	Ongoing	Feb 2024	Construction is completed, STP commissioned		Treatment of waste water before discharge to River	Nagar Vikas Nigam / Jal Nigam/ AMRUT 2 / Namami Gange Programme
Augment co-treatment facility within 40 MLD STP to cover remaining 30% of the total Shahjahanpur city area.	Jal Nigam	May 2024	Apr 2026	Tender Floated, Agency Involved, Co-treatment augmented	Financial Allocation, Involving agency	Achievement of 100% treatment of sewerage discharge	Nagar Vikas Nigam / Jal Nigam/ AMRUT 2 / Namami Gange Programme
Detailed survey of drains, including location of I&D and STP	Jal Nigam	Sep 2023	Dec 2023	Tender Floated, Agency Involved, survey done, location identified	Financial Allocation, Involving agency	Detailed mapping and information collection is done	Nagar Vikas Nigam / Jal Nigam/ AMRUT 2 / Namami Gange Programme
Connecting all 17 untapped drains with STP	Jal Nigam	ongoing	Feb 2024	All drains are connected with STP	Financial Allocation, Commissioning agency	Zero discharge without treatment is insured	Nagar Vikas Nigam / Jal Nigam/ AMRUT 2 / Programme
Regular monitoring is done for the 17 drainage discharge points	UP-PCB & Jal Nigam	Oct 2023	continuous	Selection of monitoring location, Prepare monitoring schedule	Financial allocation	WQ of discharging points monitored	Namami Gange Programme

Action description	By	Start date	End date	Milestone	Required resources	Outcome	Linkages
Identification of five (5) drains and augmenting bioremediation in this RBM cycle.	Jal Nigam & ULBs	Nov 2023	Feb 2025	Floating of tender, Identification of drain and location, Engaging construction agency, commissioning of bioremediation	Financial allocation, Engage construction agency	Less untreated waste water discharged in the river	Nagar Vikas Nigam / Jal Nigam/ AMRUT 2
Scientific processing of biodegradable waste	ULBs	ongoing	Dec 2024	Floating of tender, Engaging construction agency, commissioning of the plant	Financial allocation for construction, materials, supervision	Processing and reutilisation of wet waste, better waste management achieved	Nagar Vikas Nigam
Specific target 2: Ensure individual sanitation facility at each household							
Provide integrated sanitation facility in each household at urban and rural area	ULBs	ongoing	Mar 2027	Household identified, tender floated, agency engaged, No. of sanitation facility installed	Financial allocation for construction, materials, supervision	100% household level sanitation achieved	Swachh Bharat Mission
Specific target 3: Implement storm water drainage system							
Existing open drainage systems is repaired and used for stormwater drainage including bar screen installation	ULBs	Nov 2023	Apr 2025	DPR prepared, Tender Floated, Agency Engaged	Financial allocation for materials, construction, supervision	Storm water drainage network is in place, Removal of large and solid particle before discharge	Nagar Vikas Nigam / Jal Nigam

Action description	By	Start date	End date	Milestone	Required resources	Outcome	Linkages
Specific target 4: Ensure implementation of sludge and septage management in scientific way							
Ensure collection, transportation and management of all sludge and septage on regular basis as per the State Septage policy which was promulgated on 31.10.2019.	ULBs	ongoing	continuous	Frequency of collection, quantity generated vs collected, final disposal process	Financial allocation for collection transportation of sludge, trucks	Better sludge management facility achieved	Nagar Vikas Nigam / Jal Nigam
Conduct feasibility study on treatment and management of faecal sludge at block level and rural area	ULBs	Nov 2023	Sep 2024	Questionnaires prepared, survey conducted, report prepared, Tender Floated, Agency Engaged	Financial allocation for survey, mapping	Actual situation and volume for treatment and management of sludge is identified	Nagar Vikas Nigam / Jal Nigam
Formation of septage management committee	ULBs	Nov 2023	Dec 2023	OM issued, Members identified		Septage management committee formed	Nagar Vikas Nigam / Jal Nigam
Ensure evacuation of septage on regular interval and proper treatment of faecal sludge	ULBs	Ongoing	continuous	Maintain generation vs treated data record	Financial allocation for sludge cleaning, transportation tanks	100 % treatment of faecal sludge achieved	Nagar Vikas Nigam / Jal Nigam
Quantification and reutilisation of STP sludge as an alternative for chemical fertilizers	ULBs & Department of Agriculture	Feb 2023	Continuous	Maintain logbook, STP sludge sold to farmers as compost		Promotion of organic fertilizer, revenue generated	Nagar Vikas Nigam / Jal Nigam

Key Issue 3: Wetland Management, declining groundwater tables and decreased base flow in rivers

Action description	By	Start date	End date	Milestone	Required resources	Outcome	Linkages
Specific target 1: Conservation of wetland							
Demarcation/ mapping of all existing wetlands in the district	UP State Biodiversity Board	Feb 2024	Nov 2024	OM issued, team deployed	Financial allocation, Team Deployed	Inventory of Wetland, Wetland Map	Namami Gange Programme/ Mission Amrit Sarovar
50 hectares of wetlands are recovered	UP State Biodiversity Board	Jan 2025	Jun 2026	Tender issued, contractor engaged	Financial allocation (for excavation, restoration, monitoring	Wetland Restored	Namami Gange Programme / Mission Amrit Sarovar
Specific target 2: Floodplain recovery and improving natural flow of river							
Rehabilitation of Encroachers to other places	ULBs	Nov 2023	Ju 2024	No. of Household affected, compensation provided,	Financial Allocation	Rehabilitation of Encroacher	Nagar Vikas Nigam
Anti-encroachment drive on river side setback zones	ULBs	Feb 2024	Mar 2025	Area identified; List of encroacher; Notification issued	Financial Allocation	Floodplain recovered	Nagar Vikas Nigam
Removal of construction debris from active flow channel	ULBs	Sep 2023	Mar 2025	Tender floated, agency deployed	Financial Allocation	River flow improved	Nagar Vikas Nigam
Removal of any establishment at river meandering point	ULBs	Feb 2024	Mar 2025	Area identified; list of encroacher; notification issued	Financial allocation	Floodplain recovered and river flow improved	Nagar Vikas Nigam
Specific target 3: Monitoring and better management of ground water resources							

Action description	By	Start date	End date	Milestone	Required resources	Outcome	Linkages
Mapping of groundwater resources	Irrigation and Water Resources Department, Govt. of UP	Feb 2024	Jun 2024	Team deployed, study Carried out	Financial allocation	Groundwater mapping done	Master Plan for artificial recharge to groundwater in India
Quarterly monitor of water level at wells in overexploited zones (pockets)	Minor Irrigation Department	Nov 2023	Continuous	Resource allocated, well identified, quarterly plan prepared	Financial allocation	Groundwater level measured	State Specific Action Plan (SSAPs) for Water Sector under NWM
Abstraction permits are regulated for sustainable abstraction and compliance is ensured	Minor Irrigation Department	Feb 2024	Continuous	Notification issued; Permit issued & renewed		Unaccounted extraction of groundwater is restricted	State Specific Action Plan (SSAPs) for Water Sector under NWM
Specific target 4: Improving groundwater recharging							
Augmenting roof-top rainwater harvesting in government building and installation of ground water recharge shaft	Jal Nigam	Ongoing	Continuous	Structure identified, tender floated, agency deployed, construction started	Financial allocation (for construction, supervision, materials), engage specialised agency	Improvement in ground water level observed	Nagar Vikas Nigam
Construct new check dams, pond, nala bund and develop stream to augment ground water recharge and water conservation as per recommendation given by CGWB. (Block wise (Detail recommendations are given	Department of Agriculture	Nov 2023	Oct 2025	Tender floated, agency Involved, construction started	Financial allocation (for construction, materials, supervision)	Improvement in irrigation facilities and ground water level has achieved	Jal Shakti Abhiyan/ MGNREGS

Action description	By	Start date	End date	Milestone	Required resources	Outcome	Linkages
under section 6.3 and 7.1 to 7.15 at Page 53 to 168 of "Aquifer Mapping and Management of Ground Water Resources report of Shahjahanpur district by CGWB" (Shahjahan UP.pdf (cgwb.gov.in))							
Construction of swales, pits, contour bunds, etc.	Department of Agriculture & Irrigation Department	Nov 2023	Oct 2024	Tender floated, specialised agency involved, training and demonstration provided	Financial allocation	Agri-runoff reduced and ground water table improved	Jal Shakti Abhiyan/ Agriculture Budget/ Mission

Key Issue 4: Industrial Pollution

Action description	By	Start date	End date	Milestone	Required resources	Outcome	Linkages
Specific target 1: Ensure proper treatment of effluent generated from GPIs							
Feasibility study to setup a CETP is conducted	UP PCB	Oct 2023	Jul 2024	Questionnaires prepared, tender floated, agencyi involved, feasibility study carried out & report submitted	Financial allocation	Area identified, feasibility assessed	Namami Gange programme

Action description	By	Start date	End date	Milestone	Required resources	Outcome	Linkages
Construction of CETP's to connect major polluters from insufficient working ETPs	UP PCB	Nov 2024	Nov 2025	Tender floated, agency involved, CETP constructed	Financial allocation for construction, materials, supervision	Ensure 100% treatment of waste water	Namami Gange programme,
Specific target 2: Regular monitoring of water/ effluent quality							
Strengthening of environmental monitoring laboratory of UPPCB.	UPPCB	Feb 2024	Aug 2024	Equipment purchased, HR deployed, training and capacity building done	Financial allocation for upgrading of equipment and monitoring mechanisms, HR deployed	Strengthening of environmental monitoring	Namami Gange programme
WQ monitoring sample spots are identified at drains, nalas, streams and rivers before and after GPIs, online monitoring of indicator parameters are installed	UPPCB	Nov 2025	Continuous	Monitoring location identified; Online monitoring station established	Financial allocation	Better compliance system in place, WQ monitored	Namami Gange programme
Monthly samples are taken at the identified spots as well as directly at the ETP discharge point and pollution hotspots identified	DGC / UPPCB	Nov 2025	Continuous	Location identified, Availability of portable testing kit, record maintained	HR allocation	WQ of identified spots are monitored and noted	Namami Gange programme
Ensure surprise environmental sample testing of at least one GPI industry in every month	UPPCB	Nov 2025	Continuous	portable testing kit purchased, record maintained	HR allocation	Unaccounted discharge of industrial wastewater has stopped	Namami Gange programme

Action description	By	Start date	End date	Milestone	Required resources	Outcome	Linkages
Take appropriate action on defaulter	UPPCB	Nov 2025	Continuous	Action record maintained	HR allocation	Better compliance system in place	Namami Gange programme

Key Issue 5: Solid waste management in rural and urban areas

Action description	By	Start date	End date	Milestone	Required resources	Outcome	Linkages
Specific target 1: Improve waste management practice							
Completion of construction work and commissioning of the two (2) waste to compost plant	ULBs in the district	Ongoing	Sep 2023	Progress status, % Completed, revised date of commissioning	Financial allocation	2 waste compost plant are installed, better waste management facility achieved	Projects under Nagar Vikas Nigam
ROBs are free from vending units and have been fenced	ULBs in the district	Oct 2023	May 2024	List of ROD listed, Tender floated, Agency Involved	Financial allocation for supervision, materials	Restrict indiscriminate throwing of waste into river water	Projects under Nagar Vikas Nigam
Estimate the actual requirement of waste bins to achieve 100% door to door collection and sets up waste bins accordingly	ULBs in the district	Dec 2023	Aug 2024	Estimate done, Location Identified, tender placed, waste bin sets up	Financial allocation for household survey, Waste bin	Achieve 100% door to door collection	Projects under Nagar Vikas Nigam
Door to door collection and processing of MSW	ULBs in the district	Ongoing	Continuous	Collection plan, frequency, quantity collected	Financial allocation for waste trucks	Improve the aesthetic value, better waste management	Projects under Nagar Vikas Nigam

Action description	By	Start date	End date	Milestone	Required resources	Outcome	Linkages
Estimate the requirement of waste transfer stations and set up stations accordingly	ULBs in the district	Dec 2023	Aug 2024	Estimate done, location identified, tender placed, agency involved, stations are setup	Financial allocation for equipment, construction, materials, supervision	Improvement in waste management achieved	Projects under Nagar Vikas Nigam
Set up separate Hazardous Waste, E-waste and C&D waste processing facility with adequate capacity	ULBs in the district	Aug 2024	Jul 2028	Feasibility study done, Tender Floated, Agency Involved, Waste processing facility installed	Financial Allocation for survey, materials, construction, supervision	Improvement in waste processing landscape	Projects under Nagar Vikas Nigam
Establish and commission waste to energy plant on immediate basis for which lease agreement is already done	ULBs in the district	Oct 2023	Aug 2026	Construction plan prepared and construction initiated	Financial allocation for construction, materials, supervision	Resource utilisation, revenue generated	Projects under Nagar Vikas Nigam
Ensure valid registration of all health care facilities and compliance to bio-medical waste management	UP PCB	Ongoing	Continuous	Listing of units, Registration status mapping, Validity of all Permit		Better management of bio-medical waste	
Quantification of biomedical waste generation and scientific disposal of same	ULBs in the district	Oct 2023	Continuous	Record maintained, Monthly generated vs disposed, mode and place of disposal		Better management of bio-medical waste,	
Specific target 2: Awareness raising of local people on waste management							
At least one awareness raising programme is organised in every month in the municipalities	ULBs in the district	Ongoing	Continuous	Number of programmes organised, picture, record		Local people are more aware on waste management	
Specific target 3: Adopt comprehensive environmental management- practice							

Action description	By	Start date	End date	Milestone	Required resources	Outcome	Linkages
Carryout environmental assessment and prepare comprehensive city environmental management plan	ULBs in the district	Sep 2023	May 2024	Tender floated, Agency Involved, Plan prepared	Financial allocation	Comprehensive Environmental Management Plan prepared	SBM (Urban)

Key Issue 6: Capacity building and public outreach (including Arth Ganga)

Action description	By	Start date	End date	Milestone	Required resources	Outcome	Linkages
Specific target 1: Training and capacity building of DGC with specifically trained resource person (with knowledge on gender sensitivity) having the sole task of implementing, monitoring and revising the DGP							
Setting up dedicated supporting cell/ secretariat	DGC	Jul 2023	Dec 2023	List of nodal agencies and departments		Supporting centre/ secretariat `established	Namami Gange programme, Arth Ganga
Recruitment of 3-4 resource person (with knowledge on gender sensitivity) at support cell/ secretariat having the sole task of implementing, monitoring, and revising the DGP	DGC	Nov 2023	Jan 2023	Interviews are conducted, experts recruited		Resource person recruited	Namami Gange programme, Arth Ganga
Identification of trainers/ training institute for training and capacity building	DGC	Jan 2024	Mar 2024	Institute mapped, Selected, Engaged		Training Institute Identified	Namami Gange programme, Arth Ganga
4-5 executing agencies (members of the DGCs, e.g., Jal Nigam, Irrigation department, Jal Sansthan, ULB) have been trained on river rejuvenation,	DGC	Apr 2024	Aug 2024	Training programme and events are organised	Financial allocation for training materials, programmes, trainers	DGC members are more aware on RBM Plan and RBM Cycle	Namami Gange programme, Arth Ganga

Action description	By	Start date	End date	Milestone	Required resources	Outcome	Linkages
RBM cycle and operation, maintenance and monitoring of STPs, CETPs, FSM							
Exchange workshops with at least 5 other DGCs are conducted on the development of DGPs	DGC	Dec 2024	Apr 2025	District list, Workshop plan	Financial allocation for organising workshop	Capacity development of other DGCs	Namami Gange programme, Arth Ganga
Specific target 2: Training and capacity building of local community enhancing skills building and empowerment programme on women leadership skills, decision making skills							
Identification of trainers/ training institute for training and capacity building	DGC	Jan 2024	Mar 2024	Institute mapped, Selected, Engaged		Training Institute Engaged	Namami Gange programme, Arth Ganga
Organized 10 training programmes with representatives of WUO, ULBs with enhancing skills building and empowerment programme for women	DGC	Apr 2024	Aug 2024	Training programme and events are organised	Financial allocation for training materials, programmes, trainers	Capacity building of CBOs, 50% women participation in WUO has achieved	Namami Gange programme, Arth Ganga, Gender sensitive measures
Strengthening and hand holding support of WUO	DGC	Dec 2024	Apr 2025	District list, Workshop plan shared	Financial allocation	Local WUO are more sensitized and able to prepare proposal for implementation of RBM programme	Namami Gange programme, Arth Ganga

Action description	By	Start date	End date	Milestone	Required resources	Outcome	Linkages
10 specific training on synergies with Arth Ganga are conducted	DGC	Dec 2014	Apr 2025	Theme identified, Training scheduled, List of participants prepared	Financial Allocation for training materials, programmes, trainers	Capacity development of DGC/ CBOs	Namami Gange programme, Arth Ganga
Specific target 3: Engage resource institute to carryout special study							
Two training institutes have taken up e-flow assessment, GIS based land use assignment and gender sensitive rural development planning in their curriculum for training of district authorities	DGC	Apr 2024	Aug 2024	Data collected for assessment, report prepared, Training programme and events are organised	Financial allocation for survey, data collection, mapping	Capacity building of DGC members, more information on RBM can assessed and planning prepared	Namami Gange programme, Arth Ganga, Gender sensitive measures
Specific target 4: Capacity building programme on gender sensitisation for women on leadership and decision-making skills has been conducted for 5 NGOs							
Identification of research institute for capacity building based on women leadership and decision making	DGC	Jan 2024	Mar 2024	Selection criteria defined; Agreement made		Agreement with research institute	Namami Gange programme, Arth Ganga
Involvement of NGOs in training and awareness programme	DGC	Apr 2024	May 2025	List of NGOs and their area of expertise, Engaging NGO, Training schedule prepared	Financial allocation for training materials, programmes	Capacity development of local community	Namami Gange programme, Arth Ganga

Action description	By	Start date	End date	Milestone	Required resources	Outcome	Linkages
Organizing capacity building programme by NGOs	Research institute	Jun 2024	Mar 2026	Trainings have been conducted	Financial allocation	5 NGOs have been trained on women leadership and decision-making skills	Namami Gange programme, Arth Ganga, Gender sensitive measures
Establishment of Key resources centre in research institutes	DGC	Feb 2024	Apr 2026	MoU prepared; KRC established	Budget (resources materials)	Local organisations are able to capacitate more frequently	Namami Gange programme, Arth Ganga

8.2 Monitoring and evaluation mechanism

Monitoring and Evaluation (M&E) is a vital element of the DGPs. It provides a mechanism to evaluate the progress of implementation within the district and the success of its objectives.

A measurable indicator will be specified for each specific target. It serves to monitor progress, strengthen accountability, and assess if the proposed intervention is working as intended. The indicator should be simple and accurately describe the specific target. It is important that the indicator is not data intensive and does not require a complicated data acquisition effort. Examples are provided in 17.

8.2.1 M&E Plan for Key Issue 1: Non-point source pollution (fertilizer and pesticides) in irrigated agriculture

No	Specific target	Indicator	Baseline	Target	Means of verification	Frequency (how often will it be measured?	Responsible (who will measure it)	Reporting (where will it be reported)
1	Specific target 1: Training and capacity building on implementation of IPNM strategy	IPNM plan is available, number of farmers received training, training manual, record of participants	0	10 – ToT, 12 Village	Document Verification, Record Check	Fortnightly	Dept. of Agriculture	Weekly Progress Report
2	Specific target 2: Promotion of organic cultivation and welfare schemes	Area covered, number of schemes introduced, number of beneficiary	Village - 0	12 village	Document Verification, Record Check	Fortnightly	Dept. of Agriculture	Weekly Progress Report
3	Specific target 3: Taking measures to reduce flow of pollutants from agriculture field to the River	Study carried out, bio-filter zone identified and installed	Bio-filter zone - 0		Physical verification	Fortnightly	Dept. of Agriculture	Weekly Progress Report

8.2.2 M&E Plan for Key Issue 2: Liquid waste management (domestic sewage) in urban areas and household sanitation in rural areas

No	Specific target	Indicator	Baseline	Target	Means of verification	Frequency (how often will it be measured?	Responsible (who will measure it)	Reporting (where will it be reported)
1	Specific target 1: Ensure 100% treatment of sewage generated from city household before discharge to river water	STP commissioned, co-treatment augmented, drains connected with STP, bioremediation augmented, wet waste plant erected	STP-0 MLD, Co-treatent-0% HH cover, Untapped Drain – 17 nos., Bioremediation-0, Wet waste plant- 0	STP-40 MLD, Cotreatent-30% HH cover, Untapped Drain – 0 nos., Bioremediation-5, Wet waste plant- 1	Physical verification, Progress report	Fortnightly	Jal Nigam	Weekly Progress Report, Monthly Report, Completion Report
2	Specific target 2: Ensure integrated sanitation facility at each household	No. of household receiving individual toilet	HH with individual sanitation 69.2%	100% house with individual toilet	Physical Verification, Progress report	Fortnightly	ULBs	Weekly Progress Report, Monthly Report,
3	Specific target 3: Implement storm water drainage system	Length of drain renovated, bar screen attached at discharge point	Drain repaired - 0 km, Bar screen Attached - 1	Storm water drain (repaired) – 55 Km.	Physical Verification, Progress report	Fortnightly	ULBs	Weekly Progress Report, Monthly Report
4	Specific target 4: Ensure implementation of sludge and septage	Feasibility report prepared, septage management committee	Sludge and septage is not treated scientifically	septage management plan is in place; sludge and septage is	Report verification, Physical verification	Fortnightly	ULBs and Jal Nigam	Daily generation of STP sludge

	management in scientific way	formed, effectiveness of septage management, STP sludge generated and reutilised		treated scientifically				

8.2.3 M&E Plan for Key Issue 3: Wetland Management, declining groundwater tables and decreased baseflow in rivers

No	Specific target	Indicator	Baseline	Target	Means of verification	Frequency (how often will it be measured?	Responsible (who will measure it)	Reporting (where will it be reported)
1	Specific target 1: Conservation of wetland	Inventory of wetland, wetland map, area recovered	Recovered wetland-0	Recovered wetland-50 hectares	Physical Verification, Site visit, Report & map	Monthly	UP State Biodiversity Board	Final Report, Monthly Progress Report
2	Specific target 2: Floodplain recovery and improving natural flow of river	Location wise list of encroachers, number of encroachers rehabilitated, cleanliness of active flow channel	No encroachers rehabilitated	All encroachers have been rehabilitated	Physical Verification, Site visit, No. of encroacher rehabilitated	Fortnightly	MC Shahjahanpur	Encroacher list and list of rehabilitated household
3	Specific target 3: Monitoring and better management of ground water resources	Identified ground water trap zone, water level data, abstraction permit issued, renewed	"Insufficient" management	"sufficient" GW trap zone identified, water level	Study report, monitoring report	Monthly	Irrigation and Water Resources Department, Govt. of UP	Study report, monitoring report

				data available and permits issued				
4	Specific target 4: Improving ground water resources	Area covered under roof top rainwater harvesting, number of recharge shaft installed, irrigation structure created, training provided on water conservation and water use efficiency	TBC in a feasibility study	TBC in a feasibility study	Progress report, number of training provided, training theme wise list of participants	Monthly	Department of Agriculture & Irrigation Department	Progress report

8.2.4 M&E Plan for Key Issue 4: Industrial Pollution

No	Specific target	Indicator	Baseline	Target	Means of verification	Frequency (how often will it be measured?	Responsible (who will measure it)	Reporting (where will it be reported)
1	Specific target 1: Ensure proper treatment of effluent generated from GPIs	Area identified, Feasibility study conducted, capacity of CETP, commissioning of CETP	CETP – 0 ns.	No-1 with required capacity	Physical verification, study report, Progress report	Feasibility report, Progress report	UP PCB	Feasibility report, Progress report

2	Specific target 2: Regular monitoring of water/ effluent quality	Equipment purchased, HR recruited, training provided, monitoring report, action taken report	Unreliable effluent WQ data, insufficient surprise visits	Monthly surprise visits conducted; Reliable effluent WQ data is available and industrial units comply with reliably controlled effluent standards;	Purchase order, Appointment/ joining letter, training record, monitoring report, action taken report	Monthly	UP PCB	State of the Environmental Report

8.2.5 M&E Plan for Key Issue 5: Solid waste management in rural and urban areas

No	Specific target	Indicator	Baseline	Target	Means of verification	Frequency (how often will it be measured?	Responsible (who will measure it)	Reporting (where will it be reported)
1	Specific target 1: Improve waste management practice	Status of compost plant, waste to energy plant, no. of ROB fenced, number of waste been provided, frequency of waste evacuation, quantity of waste	No.- 0	No.-2	Progress report, List of ROB covered with fencing material, Purchase order, record on waste generated,	Fortnightly	MC Shahjahanpur	Progress report, State of the Environment Report

		generated vs disposed, no. of registered healthcare unit			collected & processed			
2	Specific target 2: Awareness raising of local people on waste management	Number of programmes organised, picture, record	Programme-0	Programme-1/month	Attendance Sheet / record/ Picture	Monthly	MC Shahjahanpur	Progress report, State of the Environment Report
3	Specific target 3: Adopt comprehensive environmental management- practice	Agency Deployed, Study Report			Contract agreement, Study Report	Monthly	MC Shahjahanpur	Study report

8.2.6 M&E Plan for Key Issue 6: Capacity building and public outreach (including Arth Ganga)

No	Specific target	Indicator	Baseline	Target	Means of verification	Frequency (how often will it be measured?	Responsible (who will measure it)	Reporting (where will it be reported)
1	Specific target 1: Training and capacity building of DGC	Support cell established, person recruited, number of ToT, training of executing agency, number of workshops organised	Executing agencies-0 Resource person-0	Executing agencies-5, resource person-4	Training & workshop record, attendance sheet	Monthly	DGC	Training and workshop record

2	Specific target 2: Training and capacity building of local community	Number of trainings organised, list of participants, Theme of training	Training programme-0	Training programme-10	Training record, Attendance Sheet	Monthly	DGC	Training and workshop record
3	Specific target 3: Engage resource institute to carryout special study	Number of trainings organised, list of participants, theme of training			Training record, Attendance Sheet	Monthly	DGC	Training and workshop record
4	Specific target 4: Capacity building programme on gender sensitisation for women on leadership and decision-making skills has been conducted for 5 NGOs	Number of NGO involved, number of trainings organised, list of participants, theme of training	0	5	Training record, Attendance Sheet	Monthly	DGC	Training and workshop record

8.3 Gender sensitive plan for public outreach

Gender sensitive public outreach pertains to the involvement and active engagement of women (and other vulnerable groups) in the planning process by adopting enabling processes and mechanisms and removing barriers to Communication for Development (C4D). This has been used for several decades as a means to improve the involvement and active engagement of women and other vulnerable groups by promoting water & sanitation, health, nutrition education and numerous other human rights issues. There is abundant evidence demonstrating that communication strategies implemented through a mix of approaches, channels and aimed at a cross-section of the community members and stakeholders has a potential to inform, influence, motivate, engage and empower effectively.

Communication can also play a pivotal role in promoting gender equality through its ability to transform attitudes and break prevalent stereotypes that perpetuate gender-based discrimination and is also closely linked to empowerment as it contributes to building confidence and capacities of communities as a whole, including vulnerable groups to negotiate choices and have equal access to and control of resources.

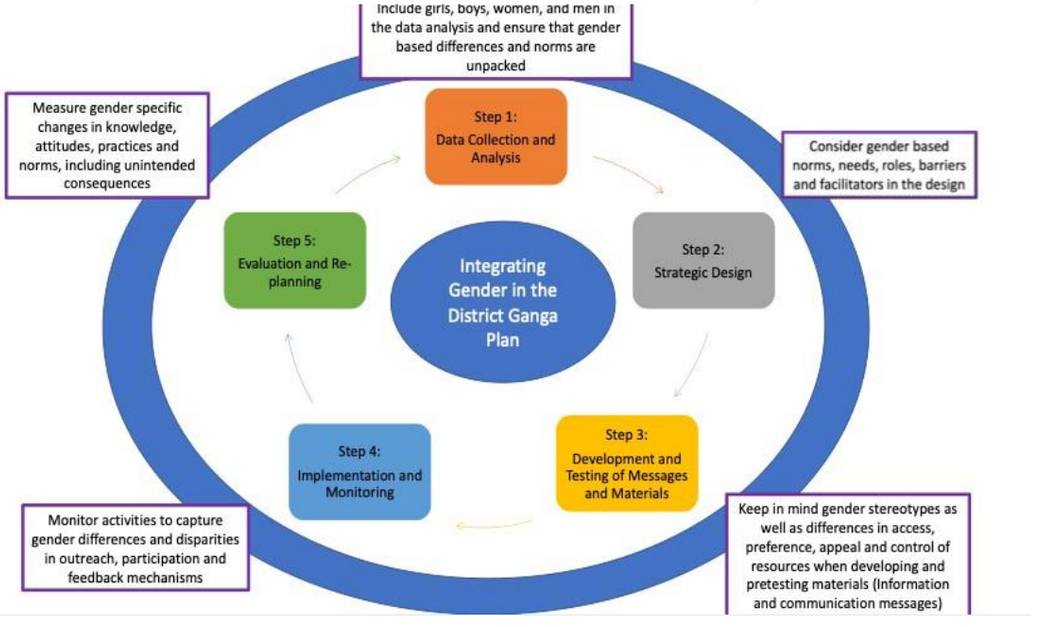

Figure 57 Five steps for gender outreach action

Data analysis

The purpose of this step is to understand the nature and extent of the issue, to identify the most vulnerable group(s) and underline the need for transformative and inclusive approaches. In this step it is particularly important to understand why certain groups are excluded and the responsible prevalent practices and stereotypes. Applying a gender lens at this step demands gender disaggregated data and a deeper understanding of the barriers and motivators and how they may be different across genders.

Asking the right questions at this stage will help to get the answers to some of the questions that are needed to develop a gender responsive strategy.

Strategic Design

This step focuses on the design and planning of the strategy. The proposed strategy should build on the evidence and insights garnered in Step 1 and the interventions should respond to the problem as well as the barriers and motivators. It is important to consult with both experts and participants to ensure that the proposed interventions and activities will be accepted in the local context.

Similarly, it is critical to validate the strategy and involve stakeholders and partners into the planning process. This becomes even more essential when dealing with sensitive issues or promoting non-traditional responses that government and policy makers may or may not accept. The plan should outline the expected change (i.e., the goals and objectives), how the change will be achieved (i.e., the channels, strategic approaches and activities) and how to measure success or progress on the key objectives of the strategy (i.e., the monitoring and evaluation framework). Applying a gender analysis in this stage will allow an understanding of how gender related factors may enable or hinder certain groups from accessing information.

Implementation and Monitoring

This is the stage when the plan is put into action and the various components or building blocks of the strategy such as the media products, messages, partnerships and capacity building efforts are rolled out. The intervention needs to be monitored to ensure that it is producing the desired results and enables one to make mid-course adjustments where required. The key gender considerations at this stage are that gender norms and roles are not impeding any group from participating in the activities that are being rolled out.

Evaluation and re-planning

This stage entails assessing whether the programme was effective and if yes, to what degree. This also helps assess whether or not the goals and objectives of the intervention were met. Evaluation provides an opportunity to assess the impact of an intervention or programme as well as to learn about what worked well and what did not. Applying a gender lens in this step will enable an understanding of how the intervention affected different genders and other vulnerable groups, if any. The evaluation should use appropriate gender-based measures to determine whether or not the intervention contributed to gender inclusivity.

BIBLIOGRAPHY FOR ABBREVIATION USED IN FOOTNOTES

Abbreviation	Author/Title / Source
DEP, Shp	Uttar Pradesh Pollution Control Board (2020-2022), District Environment Plan
SWM	Department of Drinking Water and Sanitation, Ministry of Jal Shakti, Swachh Bharat Mission Thursday 20220908 15004343.pdf (uppcb.com)
GPI	List of Grossly polluting industries (GPI) with respect to river Ganga in U.P. http://www.uppcb.com/pdf/rwq_180216.pdf
CPCB	Ministry of Environment, Forest & Climate Change (2017-2018), Central Pollution Control Board Annual Report https://cpcb.nic.in/openpdffile.php?id=UmVwb3J0RmlsZXMvOTIyXzE1NjQwMzg5OTFfbWVkaWFwaG90bzE0Mjg2LnBkZg==
STST	Ministry of Environment, Forest & Climate Change, ENVIS Centre on Hygiene, Sanitation, Sewage Treatment Systems and Technology http://www.sulabhenvis.nic.in/Database/National_16254.aspx
NWA	Ministry of Environment, Forest & Climate Change, National Wetland Atlas: Uttar Pradesh Slide 1 (indianwetlands.in)
UPSERI	Ministry of Environment, Forest & Climate Change, ENVIS Centre: Uttar Pradesh Status of Environment and Related Issues Ministry of Environment & Forests, Government of India (upenvis.nic.in)
UPDF, Shp	Indiastatpublications, Uttar Pradesh District Factbook: Shahjahanpur District https://www.indiastatpublications.com/District_Factbook/Uttar_Pradesh/Shahjahanpur
KVK, Shp	Krishi Vigyan Kendra, Shahjahanpur, District Profile Welcome Krishi Vigyan Kendra, Shahjahanpur (kvk4.in)
ACP, Shp	Department of Agriculture, Agriculture Contingency Plan for District: Shahjahanpur https://agricoop.nic.in/sites/default/files/UP1-Shahjhanpur-26.7.2012_0.pdf
CCP, Shp	International Journal of Geography, Geology and Environment 2019; 1(1): 41-47, Changes in cropping pattern in Shahjahanpur district, Uttar Pradesh https://www.geojournal.net/uploads/archives/1-1-7-725.pdf
SDP, Shp	Shahjahanpur District Population https://www.indiagrowing.com/Uttar_Pradesh/Shahjahanpur_District

WRIS	Ministry of Jal Shakti, India Water Resources Information System India-WRIS (indiawris.gov.in)
NGAP	Department of WR RD & GR Ministry of Jal Shakti, Namami Gange Annual Report (2018-19) https://nmcg.nic.in/writereaddata/fileupload/56_AnnualReport18-19.pdf
AMMP, Shp	Department of Water Resources, River Development and Ganga Rejuvenation, Ministry of Jal Shakti, Aquifer Mapping and Management Plan, Shahjahanpur District Uttar Pradesh (2020), Pg 60 http://cgwb.gov.in/AQM/NAQUIM_REPORT/UP/Shahjahan%20UP.pdf
DGWR	Ground Water Department U.P And Central Ground Water Board Northern Region, Lucknow, Dynamic Ground Water Resources Of Uttar Pradesh (2020) Uttar Pradseh_State_Report_Resource_2020.pdf (cgwb.gov.in)
GWCBD	Namami Gange & Rural Water Supply Department, (JJM-UP) Uttar Pradesh, Ground Water City & Block wise Dashboard, Jal Jeevan Mission - Uttar Pradesh (JJM - UP) (jjmup.org)
DIP, Shp	Department Of Agriculture Shahjahanpur, District Irrigation Plan Shahjahanpur, Pradhan Mantri Krishi Sinchayee Yojna (Pg 80, Table 3.4-Excisting type of irrigation, Section: 4.7, Pg 93) https://pmksy.gov.in/mis/Uploads/2016/20161124030340830-1.pdf
NWA	Ministry of Environment and Forests, National Wetland Atlas: Uttar Pradesh (Page – 110), https://vedas.sac.gov.in/vedas/downloads/atlas/Wetlands/National%20Wetland%20Atlas_Uttar%20Pradesh.pdf
WHCD	Ministry of Environmental, Forest and Climate Change, Wetlands of India Portal, Wetland Health Cards Dashboard https://indianwetlands.in/resources-and-e-learning/health-card-dashboard/
WOTM	Ministry of Environmental, Forest and Climate Change, Wetlands of India Portal, Wetland overview threat and management https://indianwetlands.in/wetlands-overview/threats-and-management/
EFHR	WWF-India (2018), Environmental flows for a healthy Ramganga, https://wwfin.awsassets.panda.org/downloads/ramganga_e_flows_report_2018.pdf
CFF	Directorate of Central Water Commission, Current Flood Forecast, Site, Hydrograph, Flood Forecast - Central Water Commission, Govt. Of India (india-water.gov.in)

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5. Source : India-WRIS (indiawris.gov.in)
6. 035_ENB_RAMGANGA.pdf (cganga.org)
7. Slide 1 (sac.gov.in)
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9. Source: Shahjahan UP.pdf (cgwb.gov.in) <Page 41 – 45>
10. https://indiawris.gov.in/wris/#/GWResources
11. Source: https://pmksy.gov.in/mis/Uploads/2016/20161124030340830-1.pdf (Section: 4.7, Pg 93)
12. http://cgwb.gov.in/AQM/NAQUIM_REPORT/UP/Shahjahan%20UP.pdf
13. Shahjahan UP.pdf (cgwb.gov.in) <Page 32- 35>
14. UP Pollution Control Board, Lucknow (uppcb.com)
15. India-WRIS (indiawris.gov.in)
16. https://indiawris.gov.in/wris/#/lulc
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20. http://updes.up.nic.in/updes/data/s_abstract/abstract_2021.pdf
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Draft District Ganga Plan
for Moradabad

August 2023

WWF-India

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Abbreviations used

AMRUT	Atal Mission for Rejuvenation and Urban Transformation
BCM	Billion Cubic Meters
BOD	Biochemical Oxygen Demand
CETP	Common Effluent Treatment Plant
cGanga	Centre for Ganga River Basin Management and Studies
CGWB	Central Groundwater Board
CPCB	Central Pollution Control Board
CWC	Central Water Commission
DEP	District Environment Plan
DGC	District Ganga Committee
DGP	District Ganga Plan
DO	Dissolved Oxygen
DoWR, RD & GR	Department of Water Resources, River Development and Ganga Rejuvenation
DWS	Ministry of Jal Shakti, Department of Drinking Water and Sanitation
ETP	Effluent Treatment Plant
FSTP	Faecal Sludge Treatment Plant
GPI	Grossly Polluting Industries
GRBEMP	Ganga River Basin Environmental Management Plan
GRBMP	Ganga River Basin Management Plan
IUCN	International Union for Conservation of Nature
MCM	Million Cubic Meters

MDA	Moradabad Development Authority
MLD	Million Litres per Day
MNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MoHUA	Ministry of Housing and Urban Affairs
MoRD	Ministry of Rural Development
MSW	Municipal Solid Waste
NbS	Nature-based Solutions
NGT	National Green Tribunal
NHP	National Hydrology Project
NIUA	National Institute of Urban Affairs
NMCG	National Mission for Clean Ganga
NNM	Nagar Nigam Moradabad
NWA	National Water Academy
NWIC	National Water Informatics Centre
NWM	National Water Mission
NWP	National Water Policy
RBM	River Basin Management
RSAC-UP	Remote Sensing and Application Centre
RTDAS	Real-Time Data Acquisition System
SBM	Swachh Bharat Mission
SMCG UP	State Mission for Clean Ganga Uttar Pradesh
SSAP	State Specific Action Plan
STP	Sewage Treatment Plant

SWaRA	State Water Resources Agency
SWaRDAC	State Water Resources Data Analysis Centre
UPID	Uttar Pradesh Irrigation Department
UPPCB	Uttar Pradesh Pollution Control Board
UPSDMI	Uttar Pradesh State Disaster Management Institute
URMP	Urban River Management Plan
WII	Wildlife Institute of India
WRICE	Water Resources Institutional Capacity Enhancement
WRIS	Water Resources Information Systems
WRMS	Water Resources Management Systems
WROPS	Water Resources Operation and Planning Systems
WWF India	World Wide Fund for Nature India

Executive summary

This two-page summary provides an overview of the document titled "District Ganga Plan for Moradabad District." The document aims to address the key issues and challenges related to the Ganga River Basin in the Moradabad District and proposes a comprehensive plan for its management and conservation.

The "District Ganga Plan for Moradabad District" document provides a comprehensive analysis of the district's biophysical and non-biophysical characteristics, identifies key issues for the planning cycle, and proposes actionable solutions. The stakeholder engagement process to develop this plan and the detailed action points highlight the collaborative efforts essential for the successful implementation of the plan. For the development of this plan a Working Group was constituted by the Chair (District Magistrate) of the Moradabad District Ganga Committee. The Chair of the Working Group is the CDO (Chief Development Officer) of Moradabad District and all concerned Line Departments are part of this Working Group. This Working Group had series of meetings and deliberations to develop this plan. The efforts were coordinated by WWF India. This document serves as a valuable resource for policymakers, stakeholders, and organizations involved in the management and conservation of the Ramganga River Basin in the Moradabad District, ultimately benefitting the parent basin, i.e., Ganga River Basin.

Section A: Introduction

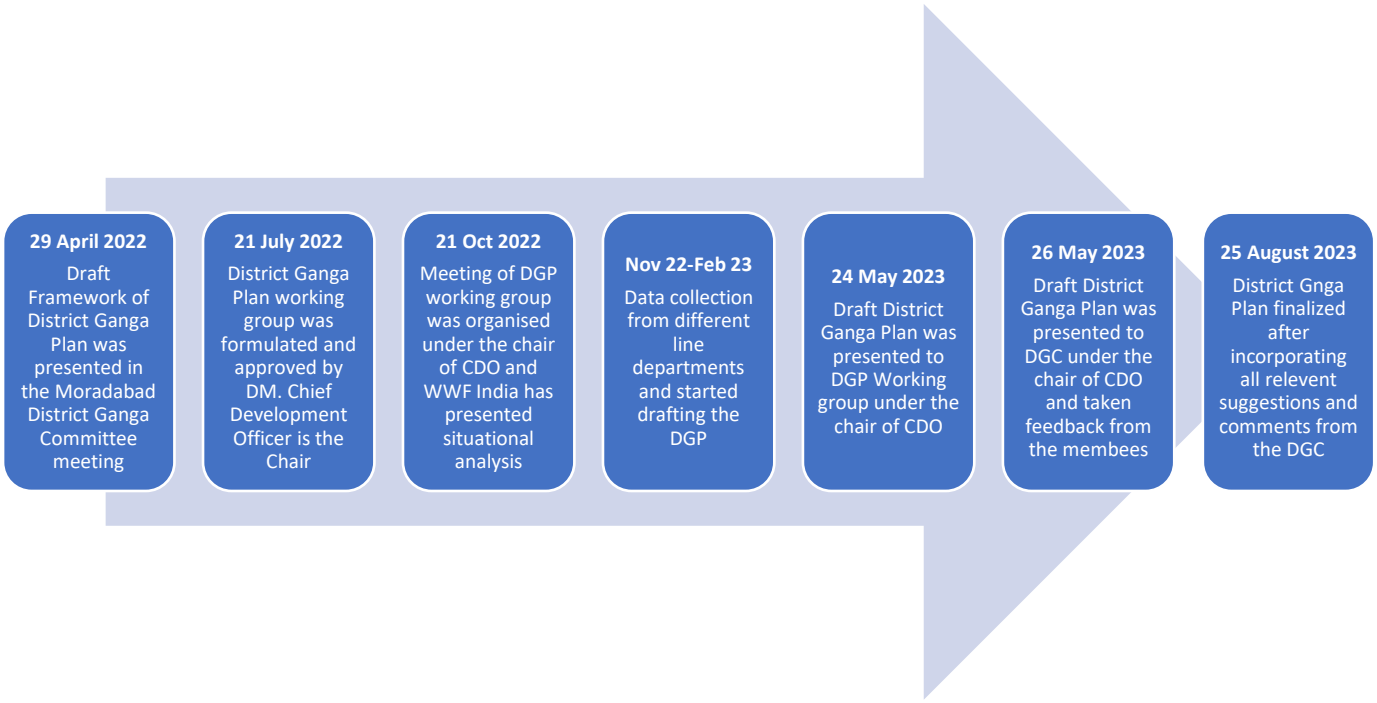
The document begins with a background on the Ganga River Basin Management Plan (GRBMP) and its vision. It highlights the importance of the District Ganga Plan directive and its interconnections with comparable initiatives. Additionally, it illustrates WWF's establishment of working groups to identify and prioritize pertinent issues. The vision and scope of the document are also outlined, emphasizing the need for a comprehensive approach to the management of the Ganga River Basin.

The vision of the District Ganga Plan for Moradabad aims to address core challenges related to the protection and conservation of the Ramganga River and its key tributaries (part of Ganga River basin). The plan prioritizes water management issues specific to the district and identifies existing programs and newer initiatives, aimed at resolving these challenges. The

fundamental objective is to ensure improved ecological health and vitality for all rivers within the district, guaranteeing long-term water security for the district and its freshwater ecosystems.

To achieve this vision, the plan leverages the methodology from the Ganga River Basin Management Plan (GRBMP) and incorporates two important Indian principles: *aviral dhara* (continuous flow) and *nirmal dhara* (unpolluted flow). It also considers the interdependencies and interconnectedness between different components of the river system, which directly affect river's overall well-being and value for the people and nature.

The approach to develop the Moradabad District Ganga Plan is illustrated in following figure.



Section B: Biophysical and Non-Biophysical Characteristics

This section provides an analysis of the district's physical resources, including an overview of the Ramganga basin and the Moradabad District. It explores the topography and drainage system, rainfall and climate patterns, available water resources, water quality, land use and land cover, agriculture and irrigation practices, floodplain and wetlands encroachment, industry, aquatic biodiversity, waste and sewage management, and other relevant factors. This

analysis forms the basis for understanding the current state of the district's water resources and their implications for the Ganga River Basin.

The Moradabad district is intersected by the Ramganga River, acting as the main watercourse, in which various tributaries merges in the district and in the upstream and the downstream. The hydrological system in the district consists of five distinct river catchments: Ramganga, Gaagan, Dhela, Kosi, and Aril. The district's hydrology is mainly shaped by the Ramganga River and its tributaries, dividing the district into two sections. The Moradabad district experiences an average annual rainfall of 992.9 mm. The normal monsoon rainfall from 1951 to 2000 amounts to 855.2 mm, while the normal non-monsoon rainfall stands at 137.2 mm. The region also exhibits significant temperature fluctuations during the winter and summer months, which ranges from an average minimum of 13.8°C in January and a maximum of 31.5°C in June.

The National Wetland Atlas reports a total wetland area of 7,174 hectares in the district. River/Stream is the dominant wetland type, covering 67% of the area. "*Hamre Talaab, Hamaree Dharohar*" campaign (to ascertain the state of wetlands in Moradabad city), conducted in 2014-15, found that 33 out of 80 wetlands have disappeared, indicating a rapid 41% loss of wetlands (3.9 hectares). The survey identified 10 new wetlands, bringing the total count to 57 (47 existing and 10 new).

In terms of groundwater availability, seven blocks in Moradabad District are safe, but some of the blocks, including Moradabad city are over-exploited due to high population density and substantial water extraction for various purposes. Groundwater data from 2017 and 2021 reveals a consistent and concerning decline, particularly in the city's western region with concentrated industrial activities. This downward trend is expected to worsen in the future due to increased water consumption.

During the monitoring conducted from March to June 2022 by WWF, a total of 52 species from 16 families were documented (Figure 45). Among these, Katghar had 18 species, while Agwanpur had 14 species. Out of the recorded species, four are classified as Threatened according to the IUCN List. *Cyprinus carpio* is an exotic species categorized as vulnerable, while *Chela laubuca* observed in both Agwanpur and Katghar is categorized as Near Threatened.

Section C: Situation Analysis of Key Issues for the Planning Cycle

This section outlines various strategies for effective water management in the Moradabad district. It includes developing comprehensive plans for managing domestic sewage, addressing pollution in the Dhela River, promoting sustainable agriculture water management, safeguarding floodplains and wetlands, implementing proper industrial water and waste management, enhancing capacity building at District Ganga Committees, and devising strategies for solid waste and E-waste management. Efforts will also focus on understanding and conserving key tributaries and ensuring Environmental Flows in the Ramganga River and its tributaries for ecological health and sustainability.

Section D: Stakeholder Process for Developing District Ganga Plan, Monitoring, and Implementation

This section focuses on stakeholder engagement in the development of the District Ganga Plan. It describes the stakeholder engagement process and highlights the role of "Ramganga Mitras" in implementing the plan. Currently over 4,000 dedicated volunteers ("Ramganga Mitras") are supporting various river conservation activities across the banks of Ganga and Ramganga rivers. This initiative is aimed to conserve the Ganga and Ramganga rivers by designing activities to mitigate threats, reduce pollution, and protect endangered species. Volunteers are trained in river and wetland health assessment and actively support conservation efforts.

A detailed action plan is also presented, outlining the specific steps and initiatives to be taken. Additionally, this section emphasizes the importance of monitoring and implementation, including a gender-sensitive outreach plan.

It is envisaged that, with the approval of Moradabad District Ganga Plan by concerned authorities (Moradabad DGC, UPSMCG, NMCG), some of the critical elements of the plan will enter implementation phase, thereby initiating the beginning of a crucial but complex journey of a healthy Ganga River.

Section A: Introduction

This part describes the rationale for preparing the plan, sets out the background to and process for developing the plan, and the structure of the document.

1. Background

1.1 The Ganga River Basin Management Plan (GRBMP) and its Vision

The Ganga River Basin Management Plan's (GRBMP) vision is to restore and revitalize the Ganga River and its tributaries and embodies a comprehensive vision aimed at the "Restoration of wholesomeness" of rivers within the Ganga Basin. The primary missions of GRBMP revolve around the attainment of *Aviral Dhara* (continuous flow) and *Nirmal Dhara* (clean flow) [1]. Besides this, there is another dimension, i.e., S*watch Kinara* (clean riverbank) which is also a critical one.

Establishing ecological health and implementing effective basin governance serve as fundamental frameworks for the multifaceted activities dedicated to the rejuvenation, protection, and management of the Ganga tributaries. At the local scale within respective districts, significant endeavours aligned with the basin-level vision are undertaken. The District Ganga Plan emphasizes river rejuvenation specific to each district, albeit with diverse goals, objectives, and outcomes. Nonetheless, these individual efforts collectively contribute to the overarching vision of restoring the Ganga River and its tributaries to their pristine or near-pristine condition.

1.2 District Ganga Plan Directive

The development of the District Ganga Plan is obligatory under the provisions stipulated in the River Ganga (Rejuvenation, Protection and Management) Authorities Order of 2016. Specifically, Clause 57 of the aforementioned order mandates the formulation of plans by District Ganga Committees (DGCs). Each DGC is required to prepare a comprehensive plan focused on the protection of the River Ganga, its tributaries, and the riverbed within the specified district. The prepared plan must be submitted to the National Mission for Clean Ganga for its approval. The plans crafted by the DGCs should encompass various key aspects, including:

- Activities intended to be executed by the DGC for the protection, control, and reduction of environmental pollution in the River Ganga, its tributaries, and their respective river bed areas.
- An estimation of the associated expenditure for implementing the proposed activities.
- Clear timelines delineating the planned activities and their corresponding milestones.

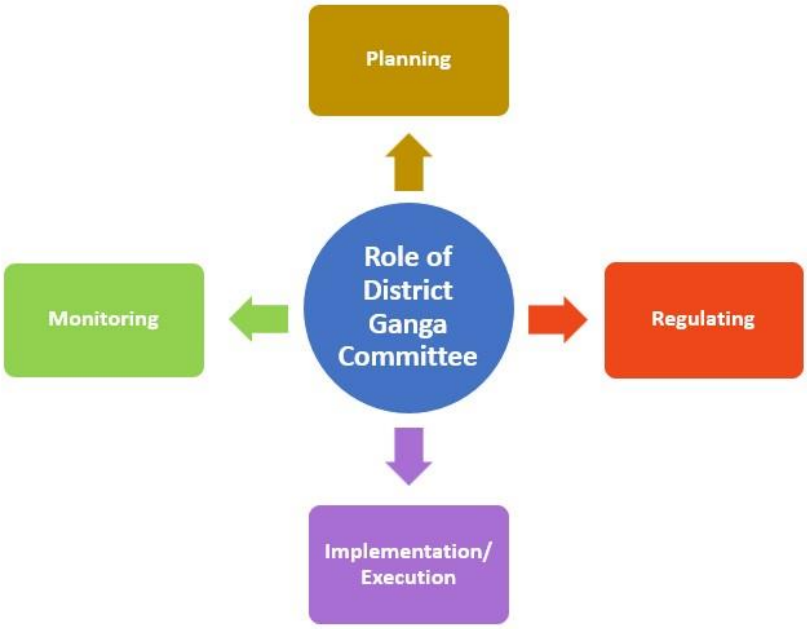


Figure 1 Role of District Ganga Committee (DGC)

Each district-level plan will centre its efforts on safeguarding and reviving pivotal rivers or river stretches located within the respective district. These comprehensive plans at the district level will play a vital role in fostering an integrated approach to river basin management.

1.3 Comparable Initiatives and their Interconnections with District Ganga Plans

Efforts towards the purification of the Ganga River have a rich history spanning over three decades. In 2014, the Government of India embarked on the ambitious 'Programme' to achieve effective pollution control, conservation, and rejuvenation of the Ganga through an integrated conservation mission. The implementation of this program falls under the purview of the National Mission for Clean Ganga (NMCG), established as the principal agency [2].

Initially, the focus primarily revolved around cleansing the main stem of the Ganga River. However, recognizing the substantial pollution burden in the tributaries as well, the scope of the program expanded to encompass the entire Ganga basin. Under the flagship of this

initiative, numerous programs have already been executed, accompanied by the formulation of plans and guidelines. During the development of District Ganga Plans (DGPs), it is imperative to seek synergies with these existing programs to prevent redundancy and unnecessary efforts [3]. Alignment with the sub-basin management plan, specifically the Ramganga Basin, and the comprehensive Ganga River Basin Management Plan (GRBMP) becomes crucial for DGPs [1][3]. The GRBMP, formulated by NMCG in collaboration with a consortium of seven Indian Institutes of Technology (IITs), sets the framework for basin-wide management [1]. While not all aspects of the GRBMP may directly impact the District Ganga Planning exercise, the fundamental principles of *Aviral Dhara* (uninterrupted flows), *Nirmal Dhara* (unpolluted flows) and *Swatch Kinara* (clean riverbank) must remain central themes in the development of District Ganga Plans. A significant amount of work has been undertaken within the Ganga Basin, and it is beyond the scope of this chapter to provide a comprehensive overview. Only selected activities directly relevant to the development of the District Ganga Plan are mentioned herein.

1.3.1 Action plans for the rejuvenation of tributaries

The Namami Gange Programme, implemented by the Union Government of India, is an integrated conservation mission with a substantial budget of Rs. 20,000 crores. Its primary objective is to effectively address pollution, promote conservation, and undertake rejuvenation measures for the National River Ganga. Noteworthy accomplishments under the Namami Gange Programme include the establishment of various sewage treatment facilities, riverfront development, river surface cleaning, biodiversity conservation, afforestation initiatives, and the organization of public awareness events, workshops, seminars, conferences, and numerous Information, Education, and Communication (IEC) activities aimed at mobilizing communities and raising public awareness. The program also entails rigorous monitoring of industrial effluents, the creation of Ganga Grams (Ganga Villages), and other significant undertakings [3].

In 2001, the State Water Resources Agency (SWaRA) was established in Uttar Pradesh to enhance the management, planning, and sectoral allocation of water resources among various agencies. The Uttar Pradesh Government further established the State Water Resources Data Analysis Centre (SWaRDAC), a Data Analytics Centre, to provide water-related data to SWaRA and all other central/state water plans about the state's river basins. Eight

comprehensive river basin assessments were conducted, leading to the formulation of basin plans for Gandak Basin, Ghagra Basin, Gomti Basin, Ganga Basin, Ramganga Basin, Rapti Basin, Sone Basin, and Yamuna Basin [4].

The Worldwide Fund for Nature India (WWF India) has developed a Ramganga River Basin Management Plan in collaboration with the Uttar Pradesh State Water Resources Agency (SWaRA). This document presents a comprehensive plan for the development, management, and conservation of the Basin, specifically focusing on the Ramganga River. The plan, while retaining the essence of GRBMP, aims to integrate a wide range of existing findings, recommendations, policies, plans, and activities, and strategically coordinate them to maximize the benefits derived from the basin while ensuring its long-term sustainability.

Aligned with a vision and goals set for the basin over the next 20 years, the plan outlines a strategy and a series of actions to be implemented within the next 5 years. These actions encompass both those already prescribed by other instruments, such as existing national and state policies and strategies, and those specifically formulated for the plan. The inclusion of these actions demonstrates their relevance to other activities within the basin and their contribution to the broader goals of the basin. Furthermore, this plan has been developed in alignment with the Ganga River Basin Management Plan (2015) to ensure consistency and coherence in the overall management approach.

In addition, the "Ramganga Mitras" is a dedicated volunteer group comprising over 4,000 individuals, actively supporting conservation activities along the banks of the Ganga and Ramganga rivers. This platform fosters discussions and debates to design initiatives for mitigating ongoing threats to the rivers. The initiatives encompass various aspects such as River Health Assessment (RHA), promoting the use of organic fertilizers, reducing reliance on harmful agrochemicals, advocating for organic farming, and implementing best management practices for sustainable agriculture, managing industrial and domestic water footprints, and raising awareness on several issues pertaining to river basin management. The group is also actively involved in a conservation program focused on safeguarding various endangered species found in the Ganga and Ramganga rivers, such as turtles, dolphins, and Gharials. Additionally, the volunteers have received training in River Health Assessment and Wetland Health Assessment, enabling them to develop a strong connection with the rivers and take

responsibility for their restoration. They are also committed to supporting relevant authorities in this endeavour.

1.3.2 Urban River Management Framework

The National Mission for Clean Ganga (NMCG) and the National Institute of Urban Affairs (NIUA) have collaboratively formulated the Urban River Management Plan framework (URMP) for the development of Urban River Management Plans (URMP) in all Ganga towns. This initiative aligns with the "Vision Ganga" published by NMCG in 2017 [5]. The primary objective of the URMP is to assist the cities situated along the Ganga River in enhancing the condition of the river within their respective stretches. The Urban River Management Plan (URMP) serves as a planning framework that enables systematic and comprehensive interventions to be organized by the Ganga towns, aiming to revitalize and sustainably maintain their rivers. The overarching goal is to improve the condition of the river within each city's jurisdiction. The underlying principle is based on the belief that enhancing the livability of these towns necessitates the preservation of healthy rivers. Each city's plan under the URMP will encompass three key components to create a holistic and balanced approach to urban river management, addressing environmental, economic, and social aspects for the sustainable development and preservation of the Ganga River in each city [5]. These components are aligned with the design philosophy of the URMP:

- **Environmental Component**: This component corresponds to the philosophy's emphasis on environmental responsibility and entails measures and strategies aimed at ensuring ecological sustainability and minimizing negative environmental impacts.
- **Financial Component**: Corresponding to the philosophy's focus on economic benefits, this component involves financial aspects and strategies aimed at generating economic value, promoting sustainable funding mechanisms, and ensuring the financial viability of the river management initiatives.
- **Social Component**: Aligned with the philosophy's commitment to social inclusivity, this component focuses on fostering community engagement, participation, and social equity. It encompasses strategies aimed at ensuring that the benefits of river management efforts are distributed equitably and that social cohesion is enhanced within the Ganga towns.

1.3.3 District Environmental Plan

The District Environment Plan (DEP) is expected to focus on comprehensive environmental protection and management measures that address various sources of pollution at the district level. It includes key action points such as conducting an inventory of water bodies, assessing the water quality in the district, implementing measures for the protection of rivers and lakes, identifying sources of water pollution, and rejuvenating groundwater resources. The development of the District Ganga Plan (DGP) aligns with the objectives and strategies outlined in the DEP, utilizing the information collected in Section C and the recommended actions provided in Section D, of this report. The relevant information has been organized and categorized based on the key issues identified for this specific DGP, ensuring a targeted and effective approach to addressing environmental concerns in the district.

1.3.4 District Plans

WWF along with the partnership of the Ministry of Jal Shakti has been working with respective District Administrations (Moradabad and Bareilly) on creating District Ganga Plans (DGPs) for Bareilly and Moradabad districts.

1.3.5 Flood and Disaster Management Plans

In 2011, the establishment of the Uttar Pradesh State Disaster Management Institute (UPSDMI) marked a significant milestone in the field of disaster management. Over the years, UPSDMI has played a crucial role in enhancing preparedness and capacity building by conducting a total of 89 training programs, workshops, seminars, and conferences, thereby imparting valuable knowledge and skills to more than 6000 officials from various departments and stakeholders. One of the notable contributions of UPSDMI has been its involvement in the development of disaster management modules for several probationary/in-service training programs in the state, including PCS Foundation, Medical Officer Foundation, Teacher's Training, and others. These modules serve as comprehensive resources to educate and equip individuals with the necessary tools and understanding to effectively respond to and manage disasters. To further support the dissemination of knowledge, UPSDMI has produced a multitude of training guides, manuals, and Information, Education, and Communication (IEC) materials in Hindi. These resources have been widely distributed to facilitate a better understanding and awareness of disaster management practices. In line with the establishment of District Disaster Management Authorities, all districts within the state

have successfully set up their respective authorities, ensuring a decentralized and coordinated approach to disaster management at the local level. Additionally, recognizing the importance of integrating disaster management into the education system, the state education board has taken the initiative to update its curriculum. This curriculum revision incorporates a dedicated disaster management component, ensuring that students are equipped with the necessary knowledge and skills to respond effectively to disasters and contribute to building a resilient society [6].

1.3.6 Development of Ramganga River Basin Management Plan by WWF India

WWF India has formulated the Ramganga River Basin Management (RBM) plan, which aligns with the Ganga RBM plan of 2015, outlining a strategic framework with vision, goals and Objectives for the development, management, and conservation of the Ramganga River basin over the next 20 years. The Ramganga RBM plan is grounded on fundamental concepts, namely *Aviral Dhara* (uninterrupted flow), *Nirmal Dhara* (unpolluted flow) and *Swatch Kinara* (clean riverbank), which serve as guiding principles throughout the plan. The plan encompasses four primary goals, each addressing distinct aspects of the basin's management and conservation. By addressing these goals and their associated objectives, the Ramganga RBM plan aims to promote the long-term sustainability and resilience of the Ramganga river basin, ensuring the well-being of both the ecosystem and the communities dependent on it.

- **River and basin ecosystem health**: This goal focuses on the physical state and condition of the river ecosystem itself, aiming to enhance its ecological health and integrity.
- **Social, economic, and cultural benefits**: This goal assesses the extent to which the basin provides societal benefits, encompassing various dimensions such as social well-being, economic prosperity, and cultural preservation.
- **Basin governance and stakeholder practices**: This goal pertains to the management of the basin and the practices of the stakeholders involved. It emphasizes the need for effective governance structures, stakeholder engagement, and sustainable practices within the basin.
- **Disaster and risk management**: This goal centres around reducing the risk, frequency, and severity of disasters, particularly floods and droughts, within the basin. It involves implementing measures and strategies to mitigate and manage such risks effectively.

2. Vision and scope

The vision of making the District Ganga Plan for Moradabad district is to effectively tackle the core challenges of the safeguarding, regulation, and mitigation of environmental contamination in the Ramganga River and its tributaries. Furthermore, it aims to prioritize the significant water management issues specific to the district and identify potential gaps in addressing them. Additionally, the initiative seeks to compile a comprehensive inventory of ongoing programs and schemes aimed at resolving the identified issues. The resolution of all these concerns will be undertaken through a systematic and organized approach and will be generally based on the vision for the Ramganga River Basin Management Plan and the Ganga River Basin Management Plan documents.

The fundamental objective of developing the District Ganga Plan (DGP) for Moradabad district is to realize a comprehensive vision where all rivers and river stretches within the district exhibit robust ecological health and vitality. This vision encompasses the long-term assurance of water security for the district and its associated ecological systems.

By leveraging the methodology employed in the Ganga River Basin Management Plan (GRBMP), the vision is grounded in indigenous Indian principles, namely *aviral dhara* (continuous flow), *nirmal dhara* (unpolluted flow) and *Swatch Kinara* (clean riverbank). In addition, it incorporates a contemporary comprehension of the interdependencies between various components of a river system, which directly impact its overall well-being and operational efficacy. The overarching vision encompasses the integration of four distinct dimensions of the river system, as outlined in the GRBMP. These dimensions are:

- ***Aviral dhara* (continuous flow)**: The preservation of optimal river flows during periods of low water availability is ensured. This entails the maintenance, restoration, or enhancement of longitudinal, lateral, and vertical connectivity within the river Ganga and its tributaries within the district. Furthermore, the identification, restoration, and protection of floodplains and floodplain wetlands are prioritized. Additionally, wetlands located within a 5 km buffer zone of Ramganga River are systematically mapped, their health condition is assessed, and rejuvenation efforts are initiated as deemed necessary. The promotion of sustainable agricultural practices is actively

encouraged, leading to increased crop water productivity and reduced freshwater extraction from ground water. Moreover, concerted efforts are made to improve the efficiency of domestic, agricultural, and industrial water usage.

- ***Nirmal dhara* (unpolluted flow)**: Efforts are undertaken to enhance the water quality within the river Ganga and its tributaries. This encompasses the implementation of measures to capture and treat all drainage systems that discharge into the river Ganga and its tributaries. Additionally, strict adherence to the pollution control norms established by the Pollution Control Board is expected from all industries operating within the district.
- **Basin Management and Governance**: A comprehensive five-year basin management plan, accompanied by a well-defined implementation roadmap, is formally endorsed by all relevant stakeholders while securing necessary investments for its execution. The District Ganga Committee undergoes capacity-building initiatives, focusing on key facets of river rejuvenation and conservation. Stakeholder ownership and active participation in river conservation efforts are fostered through a structured communication framework, as well as targeted campaigns for awareness, education, and outreach. Furthermore, annual river health report cards serve as crucial tools, providing vital insights for the formulation and adjustment of adaptive management strategies required for overall basin management.
- **Ecological Entity (Biodiversity and habitat management)**: Efforts are dedicated to enhancing the habitats of significant aquatic species, including Ganga River Dolphins, gharials, otters, and turtles. This involves targeted initiatives to improve the conditions and suitability of their respective habitats. Community-led conservation programs are implemented within crucial biodiversity hotspots, aiming to stabilize the population of these species. Furthermore, meticulous identification and protection measures are applied to safeguard key wetlands in the district that support diverse biodiversity.

These four dimensions are associated with the fundamental components that constitute a river ecosystem. They offer direction in terms of conserving:

- The flow regime, encompassing Environmental Flows (E-Flows), utilizing the concept of "continuous flow."
- Water quality and sediment chemistry, through the concept of "unpolluted flow."

- Habitat, represented by the physical structure of the river ecosystem, is referred to as the "geologic entity."
- River basin management while securing necessary investments for its execution.
- Aquatic and riparian biodiversity is collectively referred to as the "ecological entity."

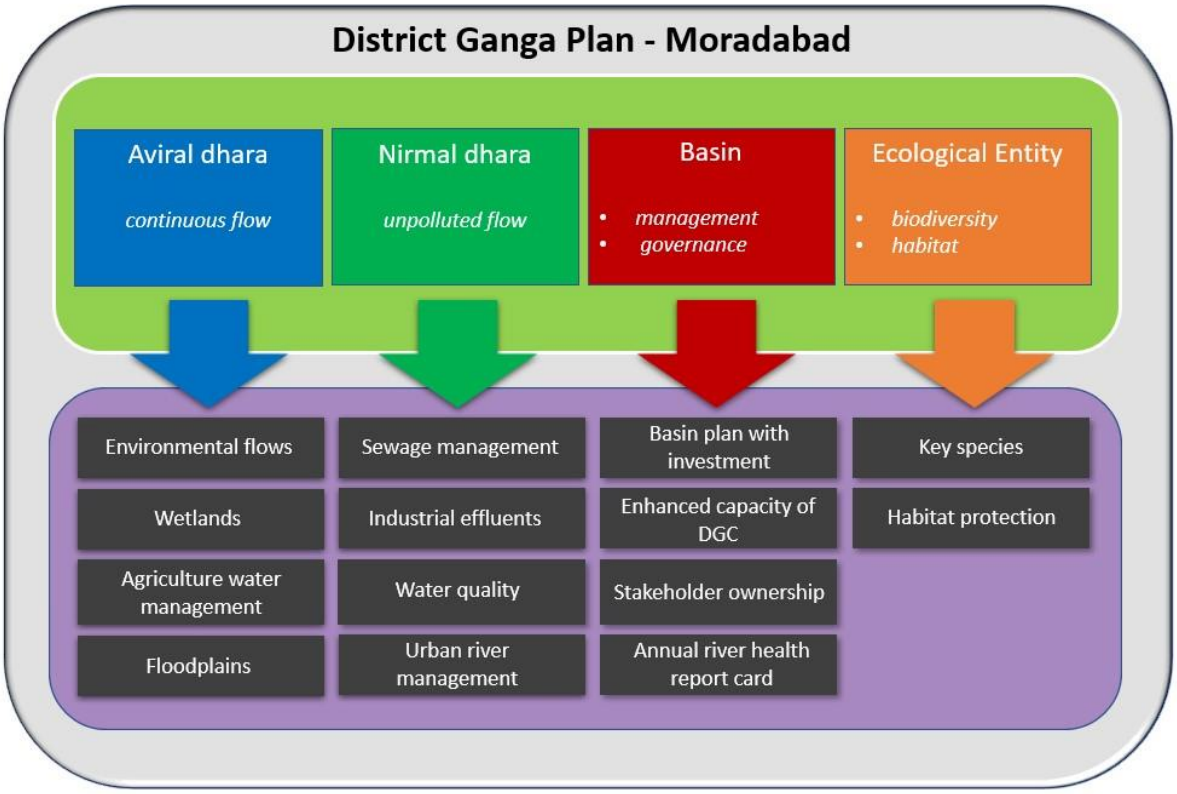


Figure 2 Vision and scope for the District Ganga Plan - Moradabad

3. Framework for District Plan: General approach and methodology

The National Mission for Clean Ganga, Uttar Pradesh State Mission for Clean Ganga, GIZ and WWF India have collaboratively devised a comprehensive framework that was employed by the District Ganga Committees (DGCs) to formulate District Ganga Plans. Initially, this framework is undergoing a trial phase in the districts of Moradabad and Bareilly. The primary objective of this framework is to assist DGCs in devising plans that ensure the safeguarding and rejuvenation of key rivers and river stretches within their respective district boundaries. The framework has been standardized to be utilized uniformly by all District Ganga Committees for planning purposes. However, it also possesses the necessary flexibility to accommodate local requirements and specifications.

To facilitate understanding and guidance for districts and stakeholders, the framework is presented in a comprehensible manner, supplemented with tables, templates, and examples. Additionally, efforts are underway to develop an online portal version of the framework, which will enhance data management, analysis, planning, and progress monitoring capabilities. The process of planning and implementation is based on a multi-stakeholder approach that emphasizes synergies, fostering dialogues, collaborations, and partnerships among various entities involved. Furthermore, the framework enables regular monitoring and evaluation of progress concerning the district plans.

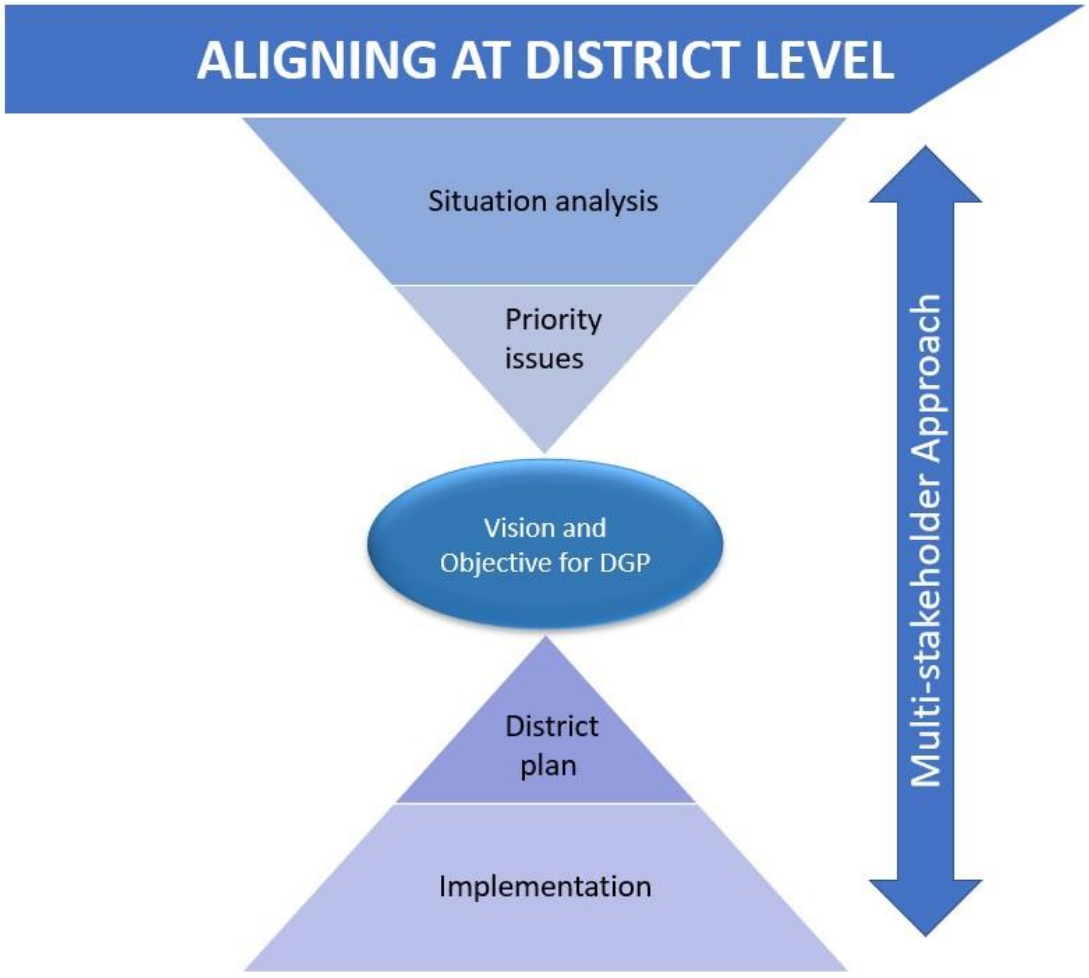


Figure 3 Approach for designing District Ganga Plan (DGP)

The key methodological principles and general principles for developing a District Ganga Plan entail ensuring alignment with the Ganga River Basin Environmental Management Plan (GRBEMP), Arth Ganga, and relevant State Policies. These principles encompass:

- *Aviral dhara* (Uninterrupted flow): Emphasizing the need for continuous flow of the river, and *Nirmal dhara* (Unpolluted flow): Prioritizing the maintenance of clean and unpolluted water flow.
- Acquiring a comprehensive understanding of the entire system to inform planning decisions.
- Taking proactive action, even in the absence of complete knowledge.
- Identifying and prioritizing immediate issues while adopting a phased and iterative approach to achieve long-term goals.
- Enabling adaptation to changing circumstances and acknowledging that basin planning is an inherently iterative process.
- Developing sectoral and thematic plans that are relevant and consistent with the overall basin plan.
- Addressing issues at the appropriate scale by integrating local plans within the broader basin plan.
- Engaging stakeholders to strengthen institutional relationships and ensure their participation in the planning process.
- Maintaining a steadfast focus on implementing the basin plan comprehensively throughout its duration.

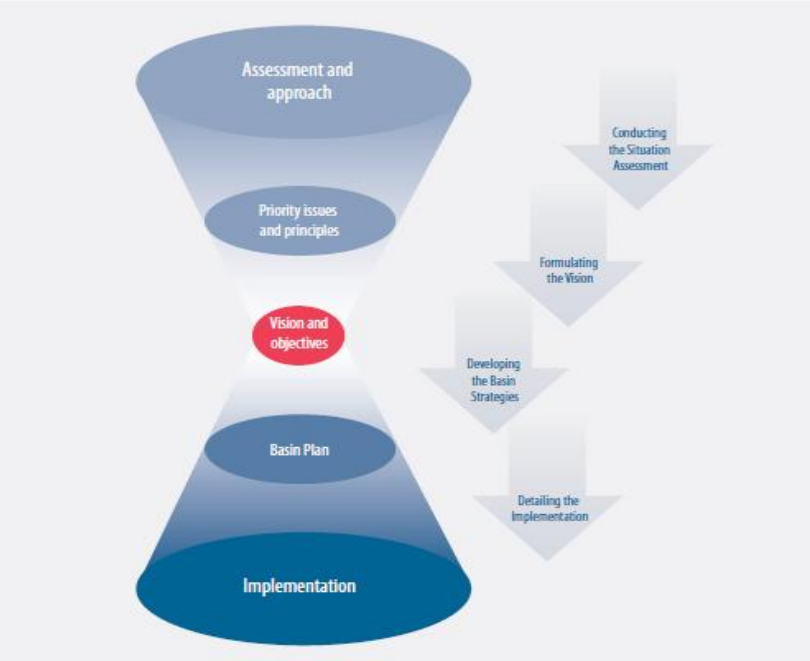


Figure 4 Key principles for designing a district plan comprehensively [7]

The Framework for the District Ganga Plan is specifically structured to provide comprehensive support and guidance throughout the entire planning process, encompassing initiation, implementation, and monitoring and evaluation stages. This ensures the continuous evolution and vitality of the district plan, transforming it into a dynamic and adaptable document that undergoes iterative cycles of planning.

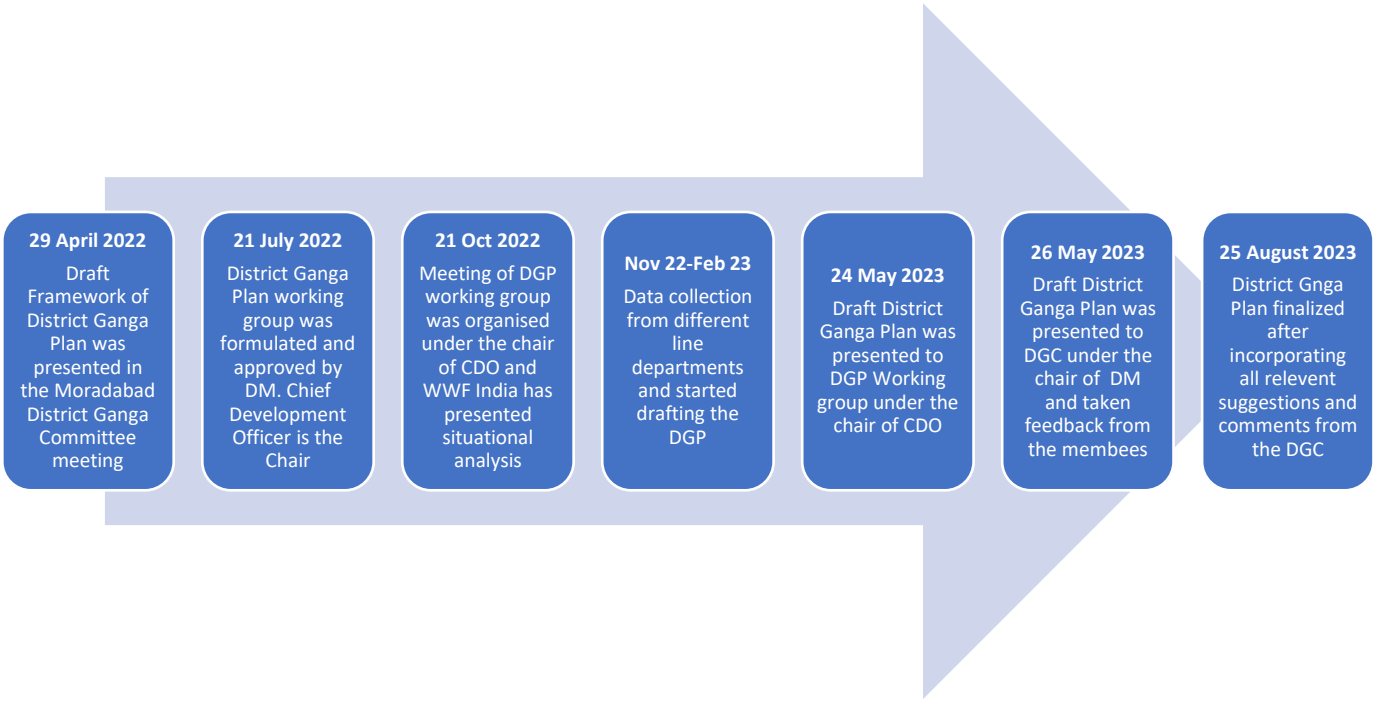


Figure 5 WWF's Process to develop the DGP with timelines

1. **Situation analysis**: The process of conducting a situation analysis entails the systematic collection of baseline data and assessment of the biophysical and ecological attributes of the rivers, along with identifying potential threats they face. This analysis also involves evaluating significant past and ongoing initiatives in the district about river conservation. Furthermore, a gap analysis is conducted to identify areas that require attention and improvement. Lessons learned from previous experiences are also incorporated into the analysis to inform future planning and decision-making processes.
2. **Prioritization of key issues**: The prioritization of key issues is carried out through a rigorous and iterative process, following the acquisition of baseline information through a comprehensive situation analysis. This prioritization process involves active participation from relevant stakeholders, ensuring their input and feedback are

incorporated. The iterative nature of the process allows for continuous refinement and adjustment of priorities as new information and insights emerge.

3. **District Ganga Plan**: After completing the participatory process of a situation analysis and conducting a thorough gap analysis, which involves collecting baseline data from various concerned line departments, the next step is to embark on a visioning exercise. This exercise serves as a guiding force in the development of a comprehensive plan. It allows for the effective mobilization of resources, ensuring that they are utilized in an efficient and targeted manner to achieve the envisioned goals and objectives.

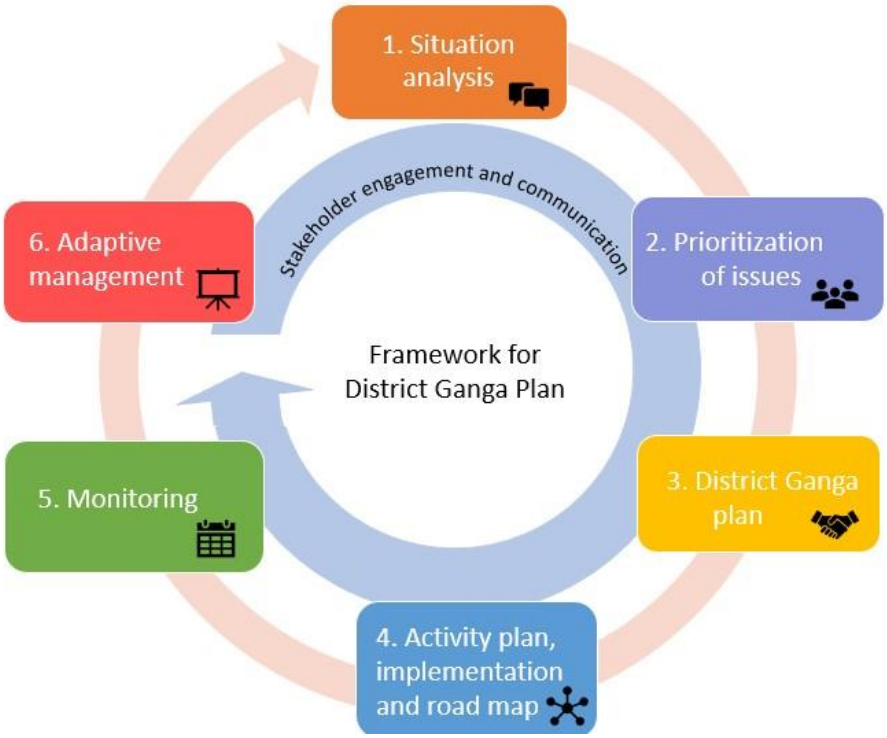


Figure 6 Framework for District Ganga Plan

4. **Activity plan, implementation and roadmap**: The formulation of activity plans and an implementation roadmap serves as an essential tool to provide clear guidance and direction to the relevant stakeholders regarding the path forward and the necessary actions to be undertaken. These plans outline specific activities, strategies, and timelines, enabling stakeholders to effectively navigate the implementation process and ensure the successful execution of the identified actions.
5. **Monitoring**: As the on-ground implementation commences, it is of utmost importance to engage in systematic and regular monitoring of progress. The process of continuous monitoring and evaluation enables the working committee and relevant stakeholders

to assess whether the implementation efforts are proceeding as planned and yield significant outcomes. By closely tracking the progress, potential deviations or areas requiring adjustments can be identified promptly, ensuring that the implementation remains on track and delivers the intended impact.

6. **Adaptive management**: By conducting regular monitoring, the progress can be diligently monitored, allowing for effective tracking of advancements. Furthermore, this monitoring process provides an opportunity for adaptive management, wherein adjustments and revisions to the strategy or plan can be made if the progress is not aligned with the desired trajectory. Such adaptability and responsiveness are integral elements of the iterative and participatory approach, ensuring that the implementation remains flexible and responsive to evolving circumstances and emerging insights.

The River Basin Management (RBM) Plan cycle follows a spiral process, wherein each cycle consists of several distinct steps. Given that Ganga rejuvenation is a collective and ongoing responsibility, the development of the District Ganga Plan (DGP) is perceived as a spiral process. This process involves the formulation and execution of plans, the review of new information, the receipt of feedback, the modification and refinement of priorities, and the adaptation of plans to changing circumstances. The RBM cycle approach is adopted in the preparation of this DGP, to repeat the cycle every five to six years. It is anticipated that each subsequent cycle of the spiral will demonstrate improved management compared to the preceding one, driven by evaluations conducted and lessons learned. Figure 6 visually illustrates the progression of different framework cycles of the DGP throughout the District Ganga Planning Cycle.

The District Ganga Plan also incorporates a gender-sensitive approach, recognizing that women comprise approximately 50 percent of the population. The plan must acknowledge and addresses their unique needs, perspectives, and participation. To ensure an inclusive process where the voices of women are heard, various tools such as surveys, focus group discussions, consultations, and dialogues should be utilized. These methodologies facilitate active engagement and input from women, fostering an environment that embraces their ideas and contributions.

Section B: Biophysical and Non-Biophysical characteristics

This part describes the status of the basin, its role in supporting human communities, and challenges and threats to the health of the basin. It also discusses current responses to these issues.

4. District's physical resources

4.1 The Ramganga basin overview

The river Ramganga has two separate streams known as the Western Ramganga and Eastern Ramganga, which flow independently. The Eastern Ramganga is a part of the Sharda Basin where it merges with the river Saryu at Rameshwar Ghat and subsequently converges with the river Sharda/Mahakali at Pancheshwar (Champawat district, Uttarakhand).

The Western Ramganga originates in the Doodha Toli ranges of the lower Himalayas near Gairsain (Uttarakhand). It originates at an elevation of approximately 3,100 m (Latitude 30°5'N, longitude 79°16'E) near the Lohba village in the Garhwal district of Uttaranchal. The river then flows through the Patli Dun of the lower Shivalik range, traversing Corbett National Park, Bijnor, Moradabad, Rampur, Bareilly, Budaun, and Shahjahanpur, before eventually joining the Ganga downstream of Farrukhabad [8].

The Western Ramganga River is a spring-fed river and the first major tributary to join the Ganga River. The river descends through the Corbett National Park and onto the Ganga floodplains (Figure 7). A monsoon-fed system, the river flows approximately 665 km, predominately in a southerly direction until it joins the Ganga at Tehra Ghat village. The basin has an area of approximately area 24,459 km^2. This represents around 2.8% of the total area of the Ganga Basin [9][10].

The basin is home to a population of around 16.8 million people, many of whom are dependent upon groundwater-irrigated agriculture. The mean annual regulated flow at the basin outlet is around 6.3 billion cubic meters (BCM) which is 2% of the total water resources of the Ganga. The total utilizable groundwater resource in the basin is approximately 5.6 BCM, and around 73% of that resource is presently abstracted, with groundwater taken both for irrigation purposes and also to supplement or replace domestic water supply systems [9].

Figure 7 Map of Ramganga Basin

The river's hydrological regime is significantly impacted by the monsoon season, wherein approximately 80% of the total surface water flow occurs between 15 June and 15 October (Figure 8). Concurrently, more than 70% of the annual sediment load is transported during the monsoon months [8].

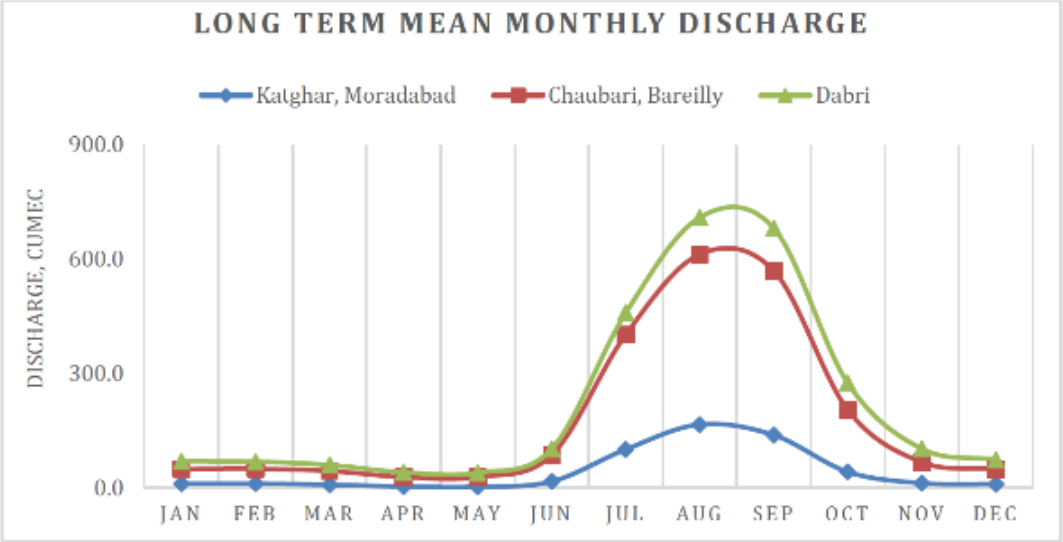


Figure 8 Average river flows at selected sites in the Ramganga River [11]

Table 1 Key features of the Ramganga Basin. Source: Ramganga E-Flows report of WWF India.

Characteristic	Details
Length	<650 km
Catchment area	24,459 km^2
Average annual renewable water resources	Total: 18 BCM Groundwater: 6.2 BCM Surface water: 11.8 BCM
Utilisable water resources	Total: 10.95 BCM Groundwater: 5.65 BCM Surface water: 5.30 BCM
Total average water abstractions (surface and groundwater)	Total: 10.43 BCM Consisting of: • 0.44 BCM abstracted within the Rāmgangā • 8.44 BCM abstracted from groundwater within the basin • 1.38 BCM diverted to Lower Ganga Canal annually • 0.17 BCM diverted for drinking water supplies to Delhi
Total instream water storage	2.9 BCM
Contribution to the flow of the Ganga	Approx. 2%
Major tributaries	Binao, Gagas, Nair, Badangad, Mandal, Sona, Khoh, Gaagan, Dhara, Baneilli, Pili, Phika, Dehla, Kosi, West Baigul, Aril,and East Baigul
Spatial distribution	Uttarakhand (12 % of the area), Uttar Pradesh (88 %)
Population	Approx. 18.36 million
GDP (within the basin)	>105,498 Rs. Cr.
Climate	Predominately sub-tropical monsoon

Average rainfall	800 - 2,200mm
Major land use categories (% of the basin)	Agriculture: 71.17% Forests: 17 % Pasture: 10.49% Water bodies: 1.02% Built-up land and settlements: 0.24%
Major industries	Metals, chemicals, fertilizers, paper, pulp, textiles, leather
Agriculture	The area under Agriculture land: 16,465 km^2 Major Kharif Crops: rice, jowar, maize, bajra and moong Major Rabi Crop: wheat, barley, pea Perennial Crop: sugarcane

4.2 Overview of the Moradabad District

Moradabad, situated in the Indian state of Uttar Pradesh, is a prominent district. Its establishment dates back to 1625 A.D. when it was founded by Rustam Khan. The city derives its name from Prince Murad Baksh, who was the son of the renowned Mughal Emperor Shah Jahan [12]. District Moradabad, situated in the western region of Uttar Pradesh, India, is renowned for its expertise in brass handicraft manufacturing [13]. The total land area of the district spans 3718 square kilometres, with 3570 square kilometres designated as rural and 148 square kilometres designated as urban. The population density in the district is recorded at 1284 individuals per square kilometre. The district is home to significant social and cultural landmarks, including the Kali Devi Temple, Jama Masjid, and Gurudwara Shri Guru Tek Bahadur Sahab Ji Maharaj, all situated along the riverbank. During the Navratri Mela at the Kali Devi Temple, several thousands of visitors gather to pay homage and visit the river.

According to the census conducted in 2011, the aggregate population of Moradabad District amounts to 4,772,006 individuals. Among them, 1,573,623 individuals (32.98%) reside in urban areas, while 3,198,383 individuals (67.02%) reside in rural areas. Based on projections, the estimated current population of the district in 2023 is 5,990,000 individuals [14].

Moradabad District consists of four Tehsils: Thakurdwara, Kanth, Moradabad, and Bilari (Table 2). Among these, Thakurdwara Tehsil comprises two blocks, namely Thakurdwara and Dilari, and encompasses a total of 313 villages. Kanth Tehsil, on the other hand, has only one block named Chajjlet, encompassing 201 villages. Moradabad Tehsil comprises three blocks, namely

Moradabad, Mundapandey, and Bhagatpur Tanda, with a total of 355 villages. Lastly, Bilari Tehsil consists of two blocks, Bilari and Kundarki, and includes 341 villages (Figure 9).

Table 2 Blocks in Moradabad district

Tehsil	Blocks	No. of Villages
1. Thakurdwara	1. Thakurdwara	313
	2. Dilari	
2. Kanth	3. Chajjlet	201
3. Moradabad	4. Moradabad	355
	5. Mundapandey	
	6. Bhagatpur Tanda	
4. Bilari	7. Bilari	341
	8. Kundarki	

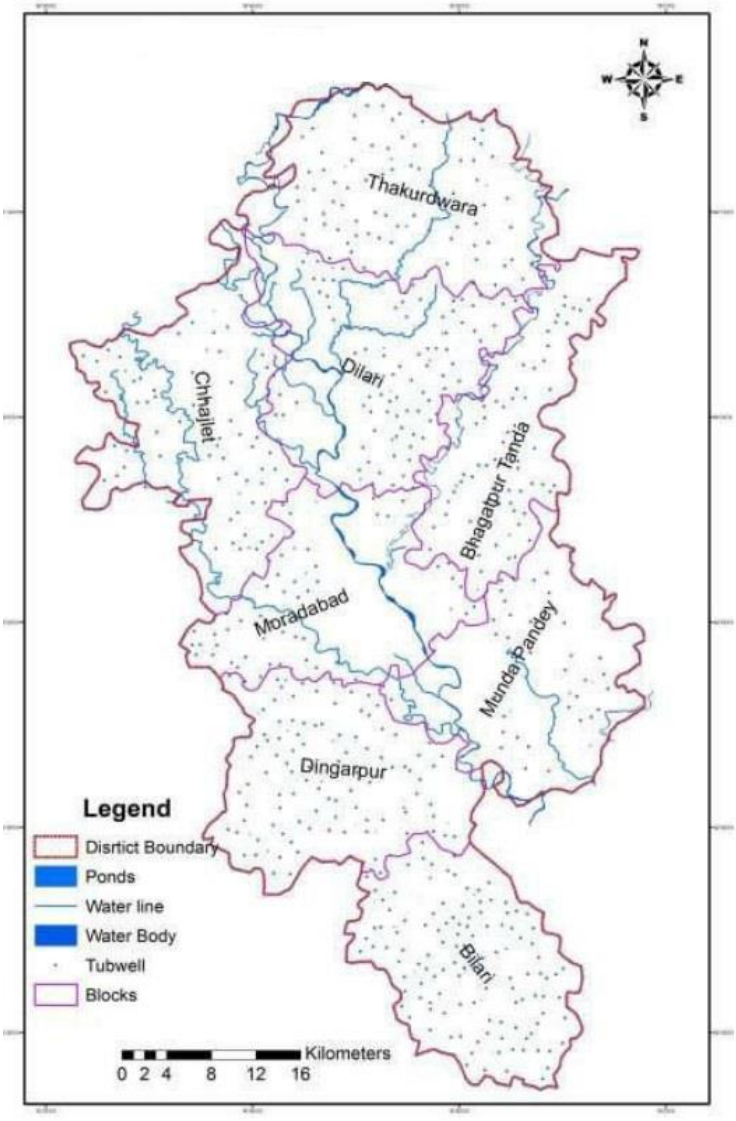


Figure 9 Blocks in Moradabad district [15]

The cartographic representation of Moradabad city (Figure 10) illustrates a notable expansion of the urban centre in the western region, adjacent to the railway line, with a particular focus on the Gaagan River direction. This development is observed due to the already high population density in the central area of the city. In conjunction with the growth of residential zones, a multitude of emerging industries have also been established. However, it is crucial to consider that these industries have the potential to generate untreated effluents that may pose a risk of polluting the Gaagan River, subsequently impacting the Ramganga River.

The urban area encompasses a comprehensive network of 70 administrative wards, with ward number 8 exhibiting the lowest population count and ward number 7 demonstrating the highest population count (Figure 10).

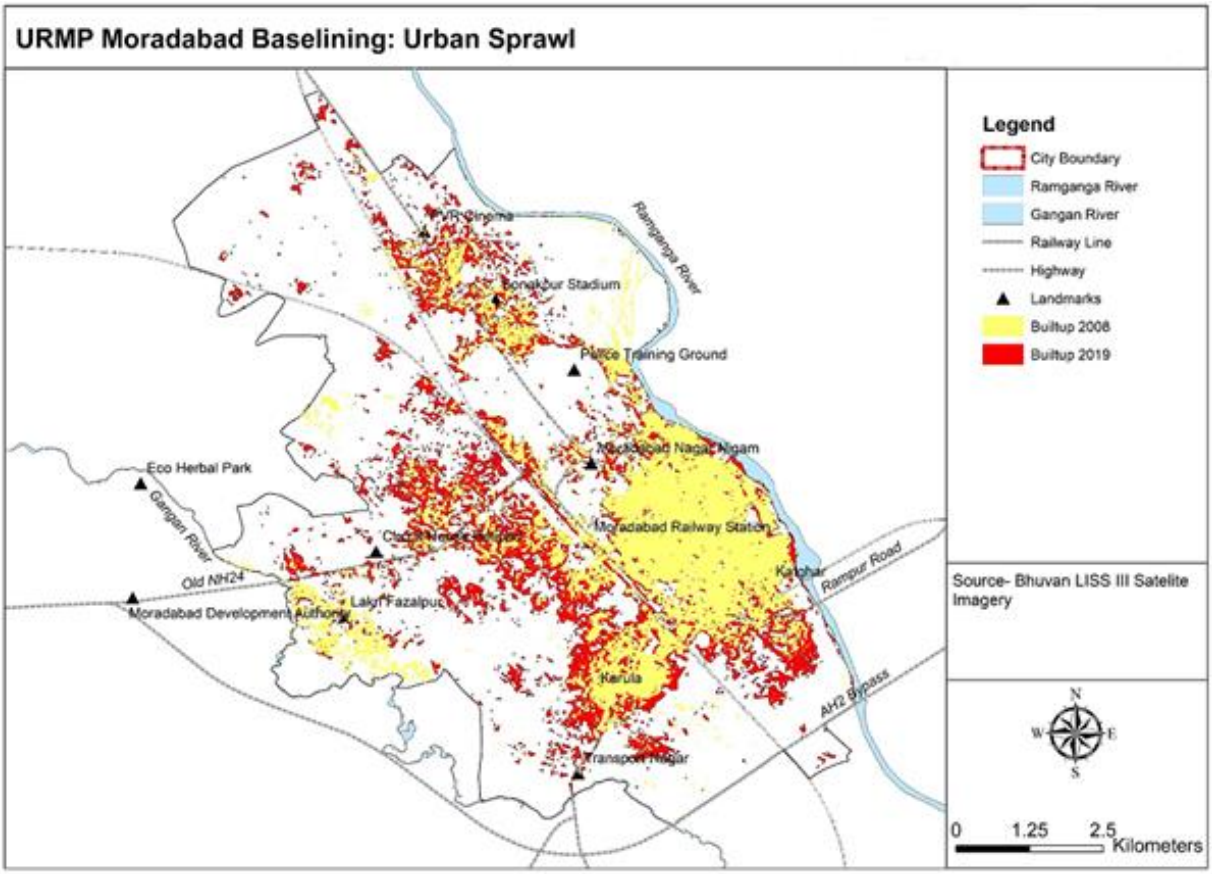


Figure 10 Map of Moradabad city indicating a rapid growth

The accompanying graphic representation (Figure 11) provides an overview of the population distribution across each ward within the Nagar Nigam Moradabad (NNM) region. This map serves to visually depict the varying levels of population density in the respective wards.

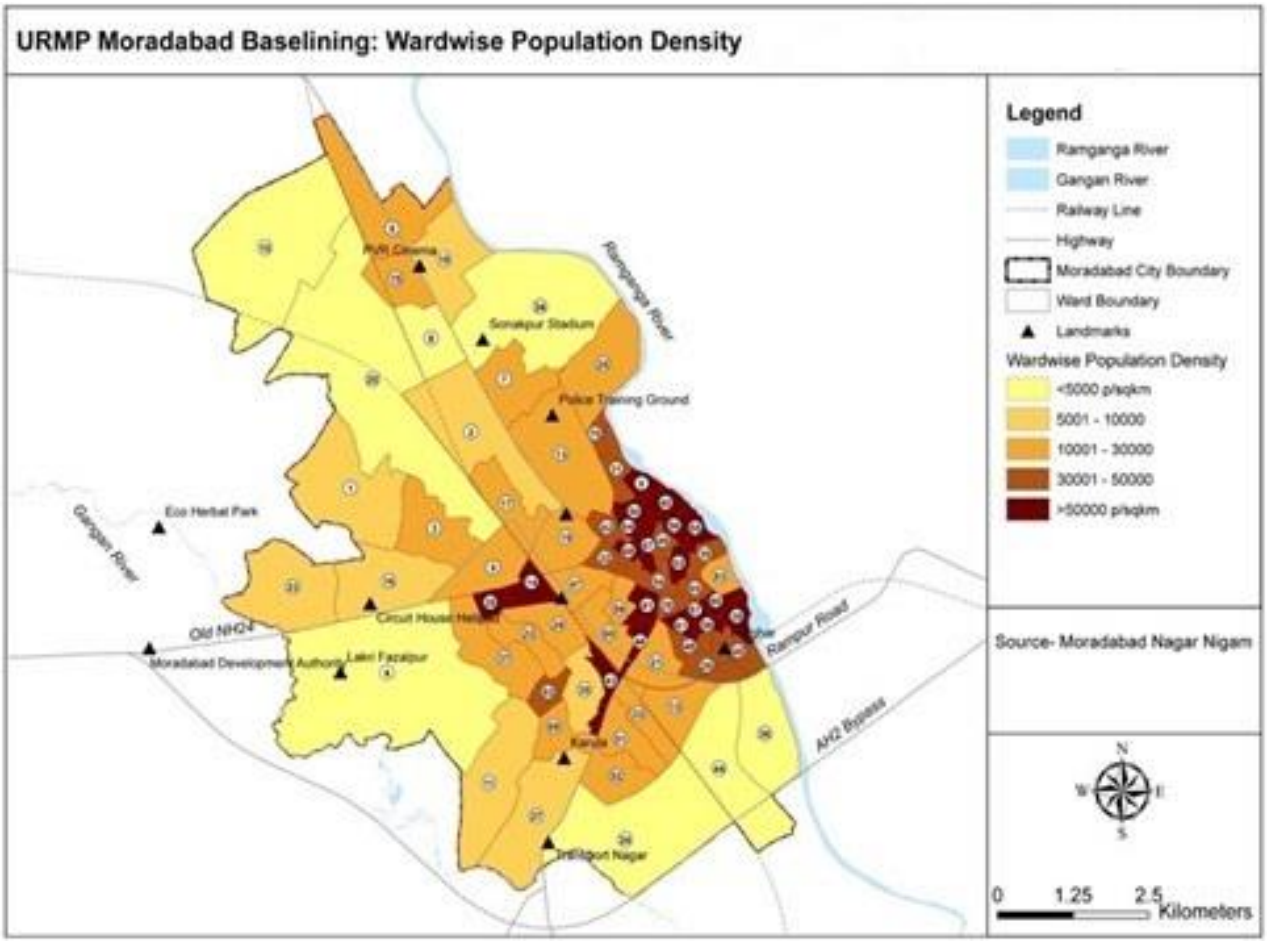


Figure 11 Map of Moradabad city showing ward-wise population density

4.3 Topography and drainage system

The Moradabad district is traversed by the Ramganga River, which serves as the primary watercourse, accommodating the convergence of several small tributaries within the district and in downstream areas. The district's hydrological system comprises five distinct river catchments, namely Ramganga, Gaagan, Dhela, Kosi, and Aril. The eastern region of the district is predominantly influenced by the Ramganga River and its affiliated tributaries, including Lapakna, Rajhera, Kosi, and Dhela, among others. Within the district's boundaries, the rivers Dhela and Gaagan join the Ramganga River, while the Aril River originates within the district's jurisdiction and subsequently flows downstream [15]. The hydrological system of the district is primarily influenced by the river Ramganga and its tributaries. The Ramganga River is subject to the influx of sewage originating from the Moradabad city, primarily conveyed through a network of 24 significant drainage channels.

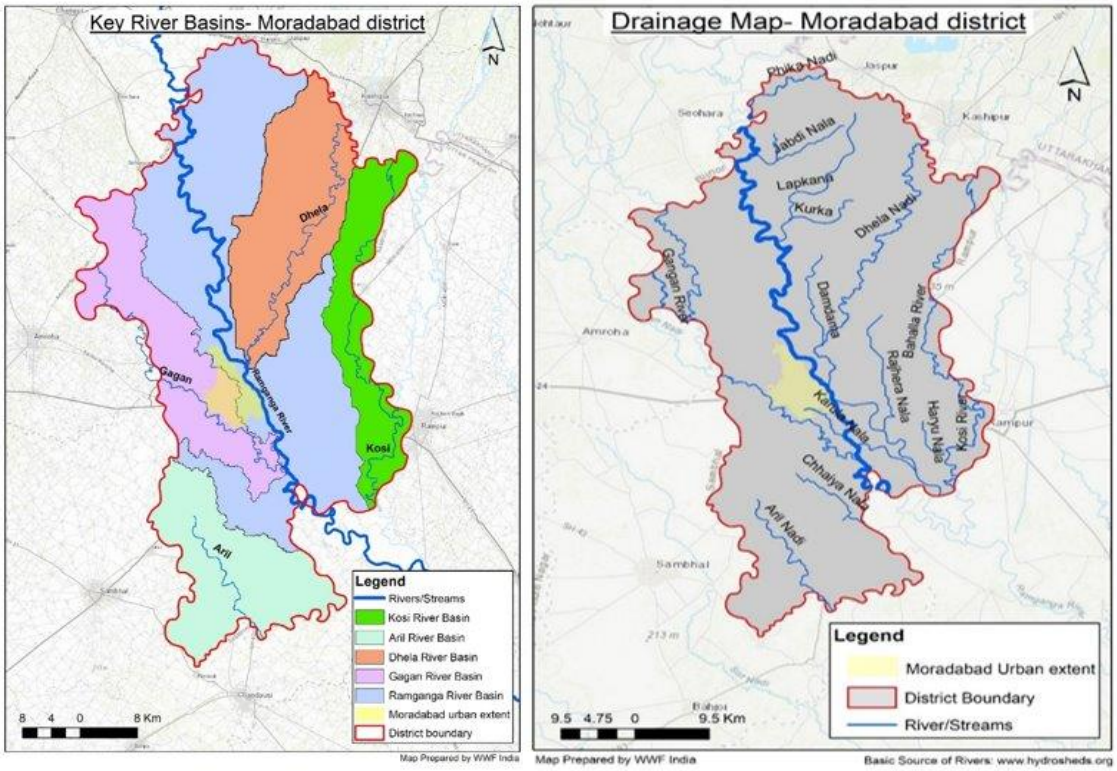


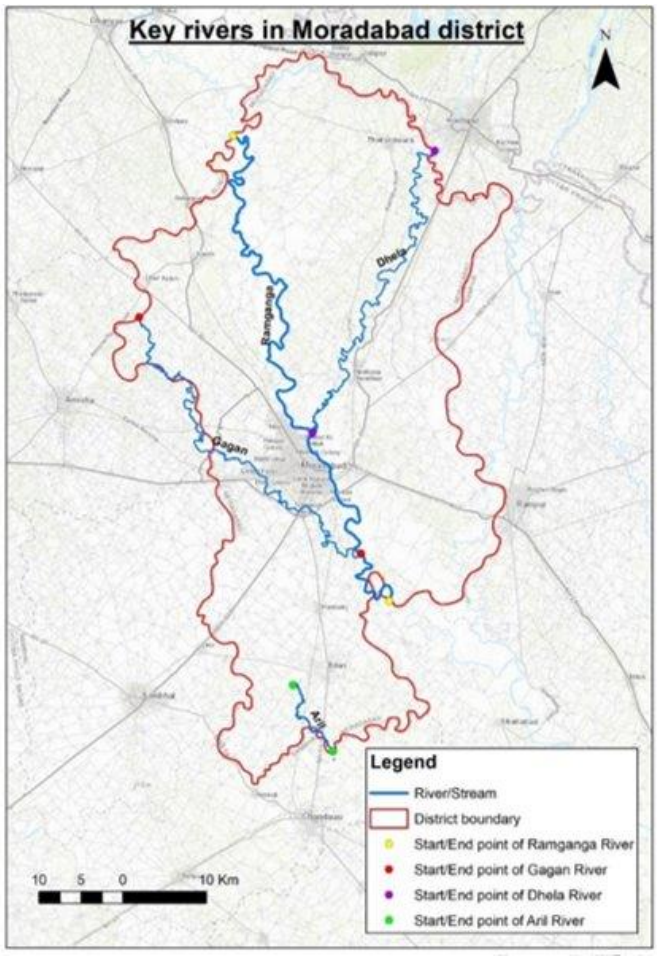
Figure 12 Moradabad district - Key River Basins (left) and Drainage Map (right). Source: WWF India (left) and Basic source of rivers - hydrosheds.org (right)

The western part of the district is drained by the Gaagan, Karula[1], and Aril rivers. Conversely, the eastern part of the district is drained by the Ramganga River and its key tributaries, namely Lapakhna, Rajhera, Kosi, and Dhela Rivers [15].

Table 3 River and its tributaries in the Moradabad district

First-order river (main river)	Second-order river (Tributary)	Third-order river (Sub tributary)
Ramganga river (97.5 Km)	Dhela (70.5 Km)	Dhandi
		Damdama (19 km)
	Gaagan (60.3 Km)	
	Aril (20.2 Km)	
	Karula (20.7 Km) Approx	
	Chhaiya	
	Lapakhna (32 km)	Kurka (10.5 km)
	Phika (10 km)	
	Kosi (18 km)	Bahalla (34 km)
	Rajhera (18 km)	

[1] The Karula River or drain mentioned here is a different from the one in upstream Bijnor district; where Agriculture Water Management work is going on. The Karula River of Bijnor district is a tributary of Gaagan River, whereas the Karula River or drain, mentioned in this document is a direct tributary to Ramganga River.



Name	Latitude	Longitude
Ramganga entry	29.1954	78.6703
Ramganga exit	28.6956	78.8721
Dhela entry	28.9967	78.5589
Dhela confluence	28.746	78.833
Gaagan entry	29.1826	78.9179
Gaagan confluence	28.8758	78.7738
Aril origin	28.603	78.756
Aril exit	28.5324	78.8065

Figure 13 Key rivers of the district Moradabad with Coordinates

Based on the recent study conducted in 2022, the basin area of the Dhela River was segmented into three zones, with zone 3 the administrative boundaries of the Moradabad district. Zone 3 encompasses the catchment area starting from Kachanalgaji in Udham Singh Nagar and extending to the Bhojpur village in the Moradabad district, where the Dhela River eventually merges with the Ramganga River near the place known as Chakkar Ki Milak. The river course within Moradabad District spans approximately 70.5 km. Within the catchment area of the Dhela River in Moradabad district, the major settlements include Pipalsana and Bhojpur, situated under the Thakurdwara Tehsil. The Dhela River enters Moradabad District near the village of Farid Nagar.

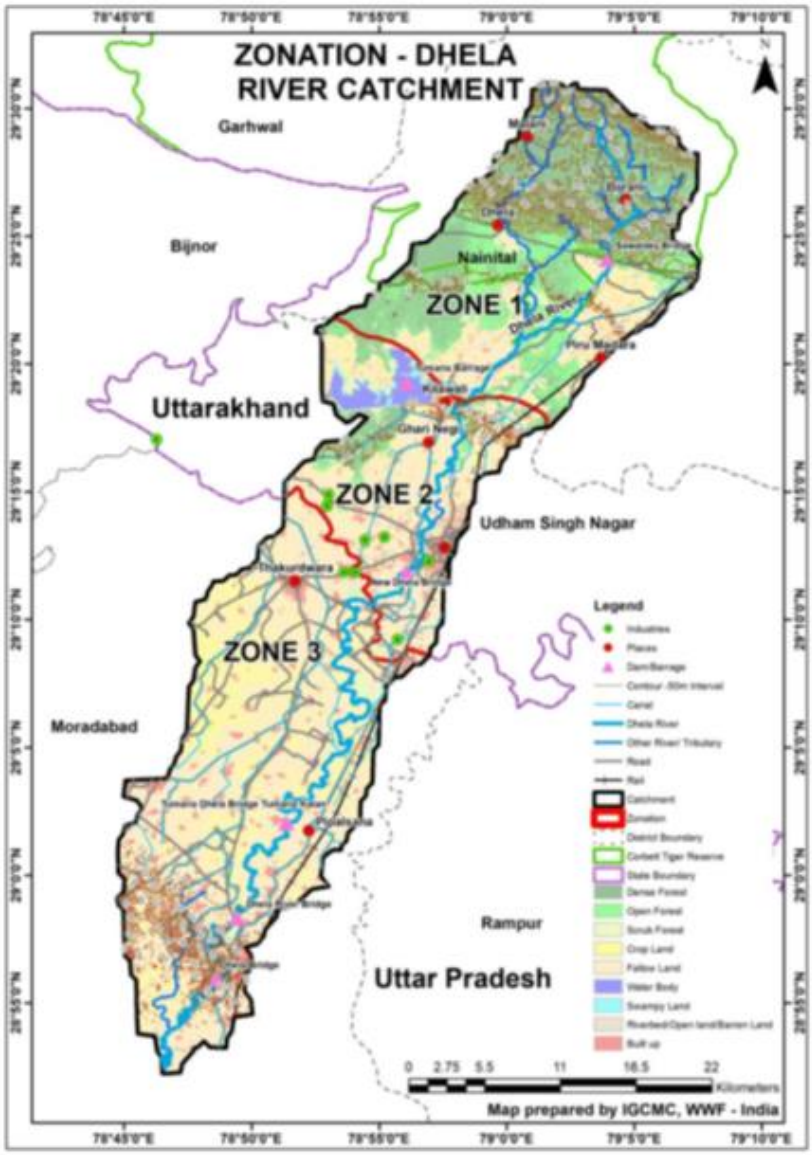


Figure 14 Zonation of Dhela River Catchment

The downstream catchment area of Dhela Basin within zone 3 of Moradabad district exhibits a varying elevation range of 188 to 250 meters. This geographical region encompasses diverse land uses, including water bodies, cultivated land for crops, and developed areas. In terms of climatic conditions, the temperatures recorded in these areas range from 27 to 28.6°C, while the annual rainfall falls within the range of 953 to 1200 mm. The prevailing soil type in this zone is primarily alluvial-derived soil, which is characteristic of the region. Additionally, a population density map is utilized to depict the distribution of population across the area, with green indicating areas of lower population density and red representing areas with higher population density.

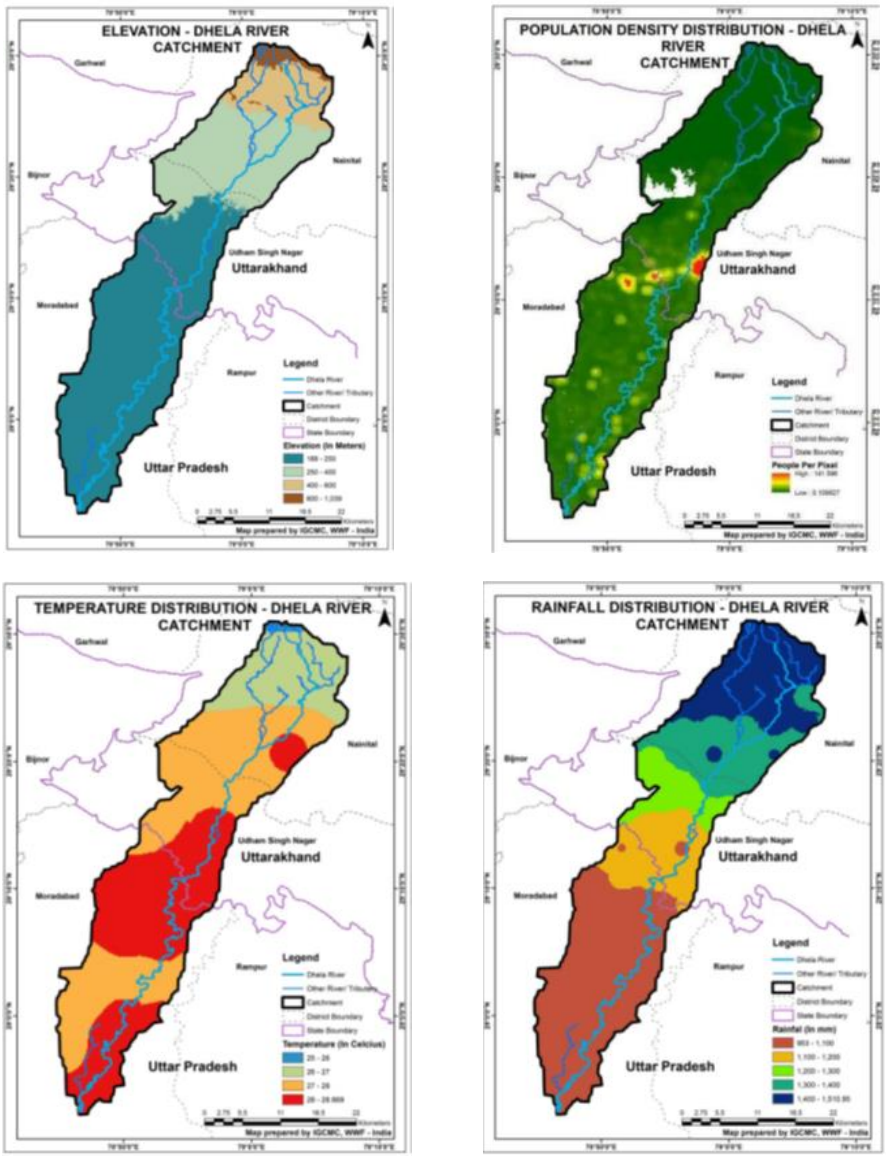
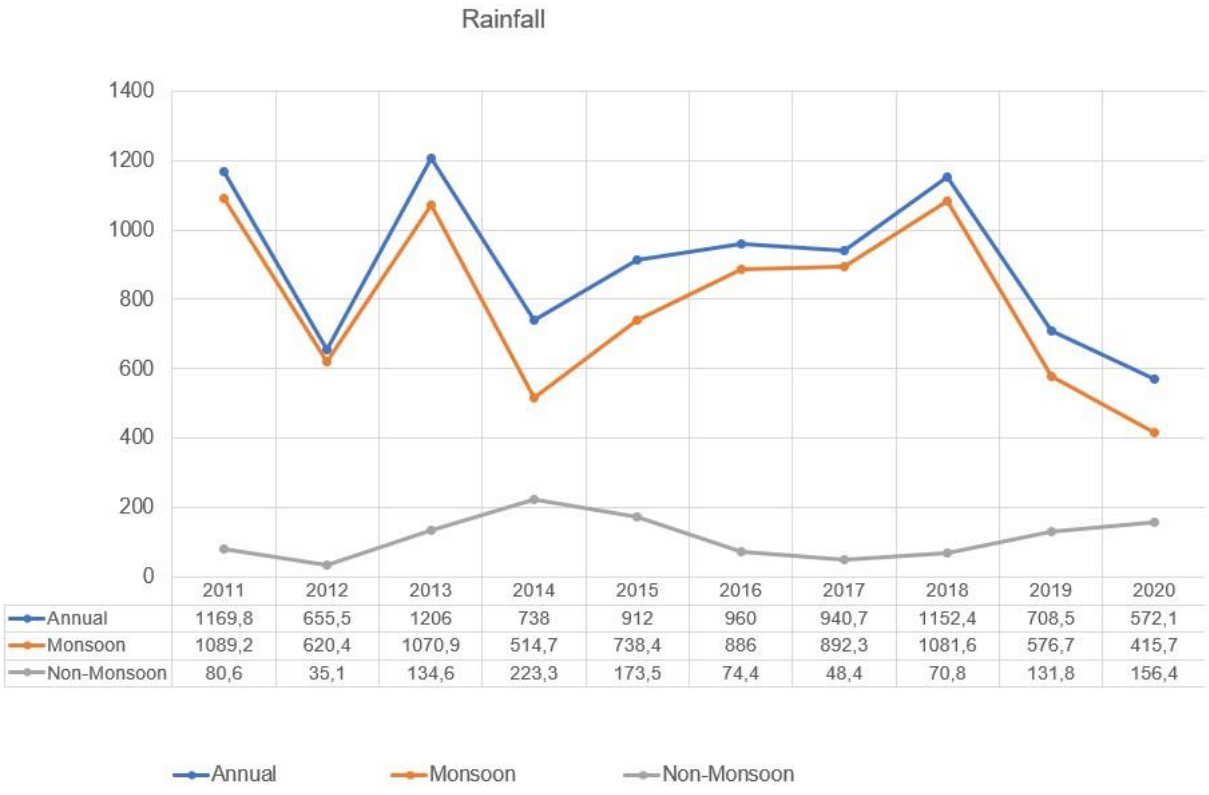


Figure 15 Graphical representations showing (a) elevation, (b) population density, (c) temperature and (d) rainfall distribution in the Dhela Basin

4.4 Rainfall and Climate

The advancement of hydrometeorology as a scientific field is intricately connected to the increased utilization of meteorology in addressing issues related to hydrology, agriculture, and groundwater studies. Rainfall data plays a pivotal role in groundwater recharge assessments, as well as in the design and construction of water resource projects. Long-term rainfall data is crucial in estimating the water flows within streams. All forms of precipitation are quantified in terms of the vertical depth of water that would accumulate on a level surface if the entire precipitation were to remain in place. For the district under consideration, the normal monsoon rainfall (1951-2000) amounts to 855.2 mm, while the normal non-monsoon rainfall stands at 137.2 mm. The average annual rainfall for the district is recorded as 992.9 mm [15]. It is worth noting that a declining trend in rainfall has been observed in the Moradabad district between 2011 and 2020, with precipitation decreasing from 1000 mm to 550 mm [16].



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Annual	1169,8	655,5	1206	738	912	960	940,7	1152,4	708,5	572,1
Monsoon	1089,2	620,4	1070,9	514,7	738,4	886	892,3	1081,6	576,7	415,7
Non-Monsoon	80,6	35,1	134,6	223,3	173,5	74,4	48,4	70,8	131,8	156,4

Figure 16 Recorded rainfall in Moradabad district from 2011 to 2020 during monsoon and non-monsoon times [16]

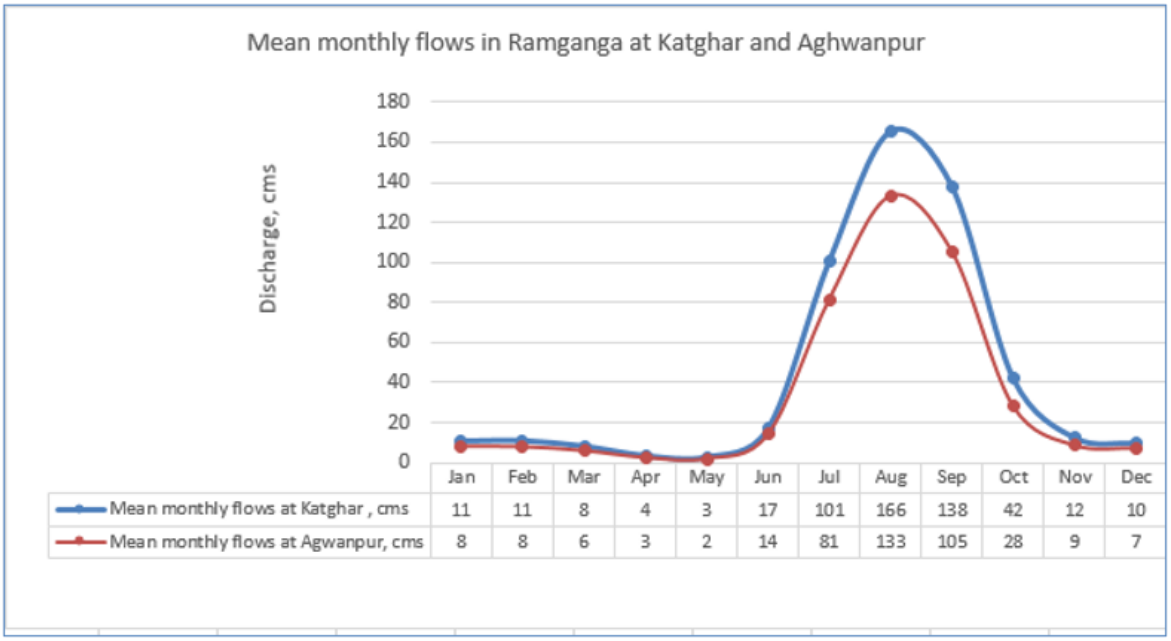
In terms of temperature, the district experiences an average minimum of 13.8°C in January and a maximum of 31.5°C in June, based on data spanning from 1991 to 2021 [16]. Significant temperature fluctuations are observed during the winter and summer months in the region. In May and June, the average daily maximum temperature reaches approximately 40°C, while

the average daily minimum temperature hovers around 25°C. Conversely, during the winter season, the average daily maximum temperature decreases to around 21°C, with the average daily minimum temperature dropping to approximately 8°C. Furthermore, when the district experiences the influence of cold waves caused by frigid winds originating from the Northern Himalayas, the temperature drops considerably, leading to even lower temperatures than the aforementioned averages [15].

4.5 Available water resources

4.5.1 Surface water (Rivers)

The Central Water Commission (CWC) has set up a gauge station at Katghar in Moradabad to monitor the water discharge of the Ramganga River. Regular measurements of the river's flow are taken from this site and Figure 17 depicts an average monthly flows regime in Ramganga River at Katghar location in Moradabad. At upstream of this location, there is another CWC gauge station near Seohara in Bijnor district. Additionally, one more gauge station has been established by WWF India and UPID (Uttar Pradesh Irrigation Department) upstream of the Ramganga River at Hareoli Barrage in the Bijnor district in 2022 (functional in lean season only). This gauge station monitors the recommended Environmental Flows (during lean season) that are being released from Hareoli Barrage.



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean monthly flows at Katghar , cms	11	11	8	4	3	17	101	166	138	42	12	10
Mean monthly flows at Agwanpur, cms	8	8	6	3	2	14	81	133	105	28	9	7

Figure 17 Mean monthly flows in Ramganga River at Katghar and Aghwanpur

The mean annual volume of water in the Ramganga River at Agwanpur, before the point of confluence with the Dhela River, has been recorded as 1000 million cubic meters (MCM) based on long-term average data spanning the last 30 years. On the other hand, after the confluence with the Dhela River, the mean annual volume of water in the Ramganga River at Katghar is recorded as 1400 MCM, considering the same long-term average data over the past three decades. It is necessary to establish an additional monitoring station at a feasible location on the tributaries of Ramganga River, which have their majority of lengths within the district. This information would be beneficial for gaining insights into the overall volume of water being discharged from the district. This will also help in monitoring and documenting baseline flows scenario of smaller tributaries which will also assist in planning river rejuvenation activities.

4.5.2 Surface water (Wetlands)

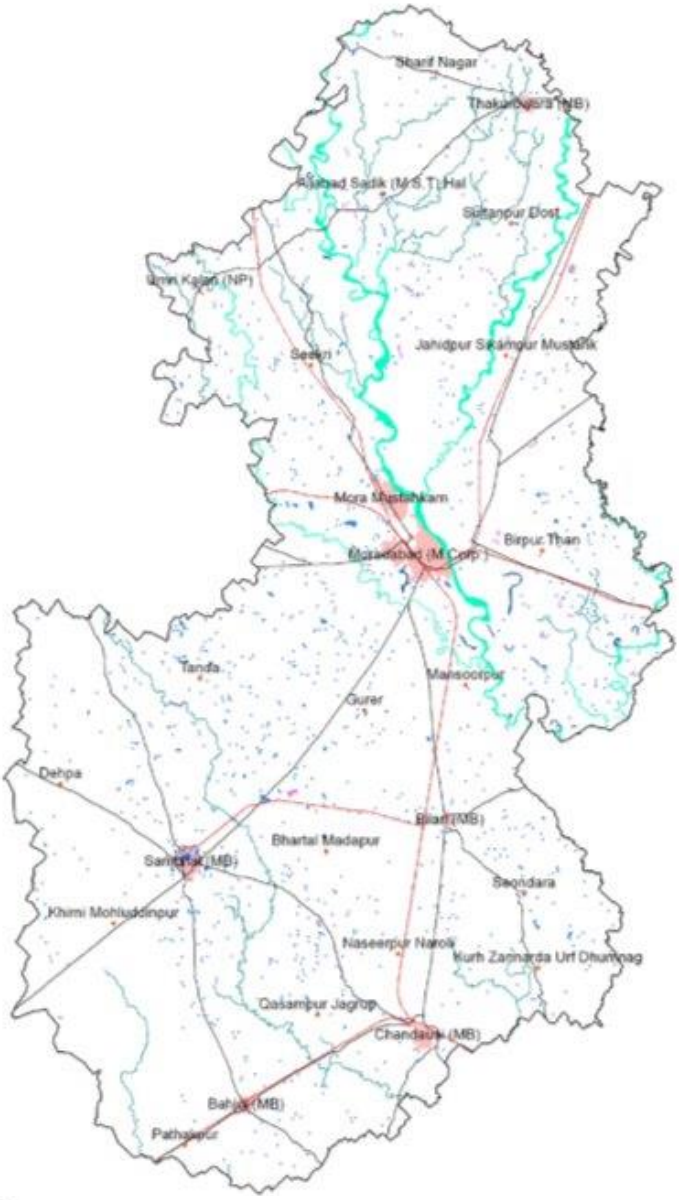
As Per the National Wetland Atlas, the overall wetland area within the district measures 7174 hectares. The predominant wetland type in the district is categorized as River/Stream, encompassing 67 percent of the total wetland area in the district. Other significant wetland types include oxbow lakes, tanks/ponds, and waterlogged areas. The waterlogged category attributed to human activities, particularly associated with canals, covers an area of 185 hectares. A total of 1083 small wetlands, each measuring less than 2.25 hectares, have been identified and marked off. During the post-monsoon season, the area occupied by aquatic vegetation is 386 hectares, while in the pre-monsoon season, it is 68 hectares. The water spread area during the post-monsoon season amounts to 3013 hectares, whereas, in the pre-monsoon season, it measures 2203 hectares. Moderate turbidity is predominantly observed across numerous wetlands in the district [17].

Area in ha

Sr. No.	Wettcode	Wetland Category	Number of Wetlands	Total Wetland Area	% of wetland area	Open Water	
						Post-monsoon Area	Pre-monsoon Area
	1100	**Inland Wetlands - Natural**					
1	1101	Lakes/Ponds	28	224	3.12	83	63
2	1102	Ox-bow lakes/ Cut-off meanders	24	268	3.74	189	116
3	1103	High altitude wetlands	-	-	-	-	-
4	1104	Riverine wetlands	4	22	0.31	22	13
5	1105	Waterlogged	27	242	3.37	168	184
6	1106	River/Stream	52	4874	67.94	3013	2203
	1200	**Inland Wetlands -Man-made**					
7	1201	Reservoirs/Barrages	-	-	-	-	-
8	1202	Tanks/Ponds	61	276	3.85	193	116
9	1203	Waterlogged	21	185	2.58	147	72
10	1204	Salt pans	-	-	-	-	-
		Sub-Total	**217**	**6091**	**84.90**	**3815**	**2767**
		Wetlands (<2.25 ha), mainly Tanks	1083	1083	15.10	-	-
		Total	**1300**	**7174**	**100.00**	**3815**	**2767**

Figure 18 Area estimates of wetlands in Moradabad [17]

Symbol	Typecode	Level I	Level II	Level III
		Inland Wetlands		
			Natural	
	1101			Lakes/Ponds
	1102			Ox-bow lakes/ Cut-off meanders
	1103			High altitude wetlands
	1104			Reverine wetlands
	1105			Waterlogged
	1106			River/Stream
			Man-made	
	1201			Reservoirs/Barrages
	1202			Tanks/Ponds
	1203			Waterlogged
	1204			Salt pans
		Coastal Wetlands		
			Natural	
	2101			Lagoons
	2102			Creeks
	2103			Sand/Beach
	2104			Intertidal mud flats
	2105			Salt marsh
	2106			Mangroves
	2107			Coral reefs
			Man-made	
	2201			Salt pans
	2202			Aquaculture ponds



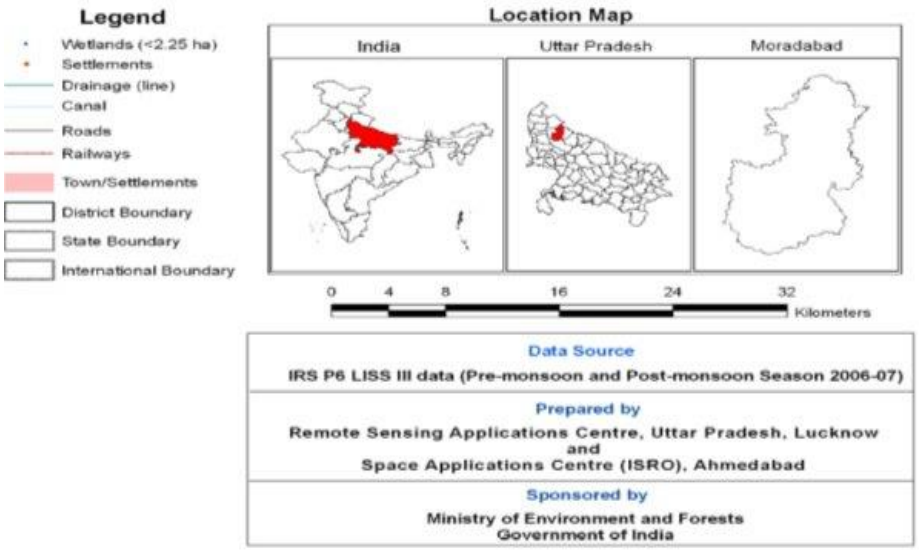


Figure 19 Locations of wetlands in Moradabad district

A joint initiative between WWF India and IIT (Indian Institute of Technology) Kanpur was undertaken to conduct a comprehensive study (during 2020-21) aimed at assessing the current state of wetlands within the Ramganga basin. The study specifically focused on examining the connectivity of these wetlands with the rivers (river wetlands relationship). The analysis resulted in the identification of four distinct categories of wetlands based on their characteristics and behaviour during the study period.

A total of 122 wetlands were successfully identified in Moradabad district and categorized according to the following classifications (Figure 20):

- Persistent: Wetlands falling under this category were mapped using pixels exhibiting a Wet% value ranging from 90% to 100%. This indicates that these pixels remained consistently wet for at least 90% of the duration of the study. Persistent wetlands, also known as permanent wetlands, refer to the areas of land that remain saturated or inundated with water for extended periods, typically throughout the year or for a significant period of it. These wetlands are characterized by a high water table, resulting in the presence of standing water or saturated soil conditions that support unique ecosystems. Persistent wetlands play crucial ecological roles by providing habitat for specialized plant and animal species, contributing to water storage and filtration, and supporting overall biodiversity
- Intermittent: These wetlands displayed intermittent patterns of being alternately wet and dry throughout the study period. Intermittent wetlands, also known as seasonal wetlands, are areas of land that experience fluctuations in water availability throughout the year. Unlike persistent wetlands, which remain wet or saturated for extended periods, intermittent wetlands may undergo periods of complete drying or significantly reduced water levels during certain seasons or climatic conditions. These wetlands are typically dependent on seasonal rainfall to fill up with water. During wet periods, they support diverse aquatic ecosystems, including unique plant and animal species adapted to these dynamic conditions. However, during dry periods, the wetland may appear as dry land or contain only isolated pockets of water. Intermittent wetlands play essential roles in water storage, nutrient cycling, and providing critical habitats for various species, particularly those adapted to both aquatic and terrestrial environments.

- Intensifying: Wetlands falling within this category demonstrated a higher frequency of being wet in recent times compared to their historical state between 1990 and 1994. These are the wetlands that experience an expansion in the water-spread area over time and are often referred to as expanding wetlands or growing wetlands. These wetlands demonstrate an increase in the extent of their water-covered areas, which can result from various factors such as changing hydrological patterns, increased rainfall, reduced evaporation, or altered land use practices in their surrounding areas.
- Diminishing: Wetlands categorized as diminishing displayed a reduced frequency of being wet in recent times compared to their historical state. Diminishing wetlands refer to wetland areas that are experiencing a reduction in their extent or ecological quality over time. These wetlands are undergoing a process of decline, often due to various factors such as habitat loss, drainage for agriculture or urban development, pollution, invasive species, altered hydrological regimes, or climate change impacts. The reduction in wetland areas can result in the loss of critical habitats for numerous plant and animal species, leading to declines in biodiversity. Diminishing wetlands also have implications for water storage, flood control, water quality, and other ecosystem services that wetlands provide. Conservation efforts are essential to protect and restore diminishing wetlands to ensure their ecological functions and the benefits they provide to both wildlife and human communities.

Additionally, two further classifications were assigned:

- New: This category comprises wetlands that have formed only within the past five years, indicating recent development.
- Lost: Wetlands falling into this category have been lost or disappeared within the past five years.

Furthermore, these wetlands were further categorized based on their size and proximity, specifically within a 5-kilometre radius of the river.

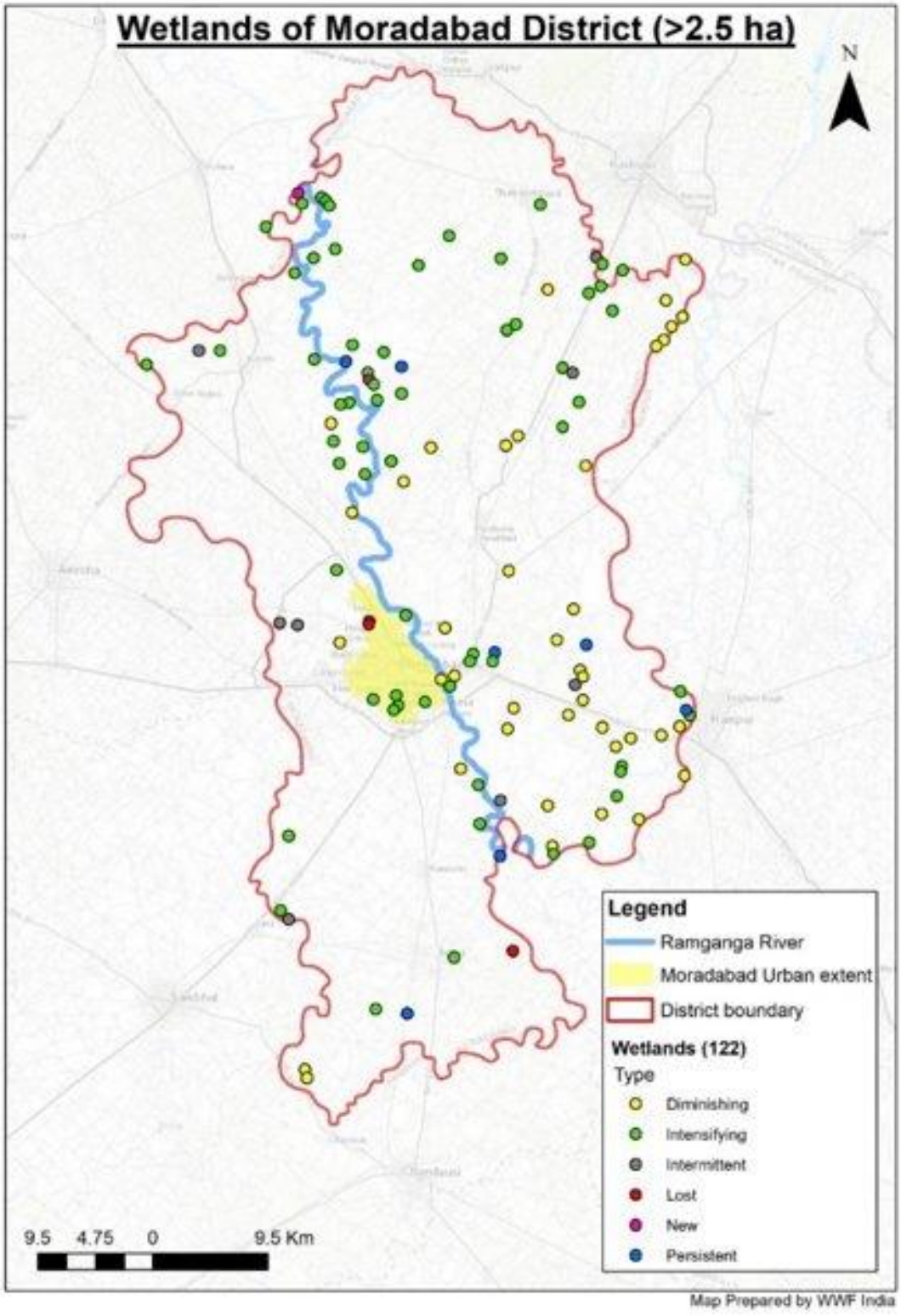


Figure 20 Types of wetlands in Moradabad District

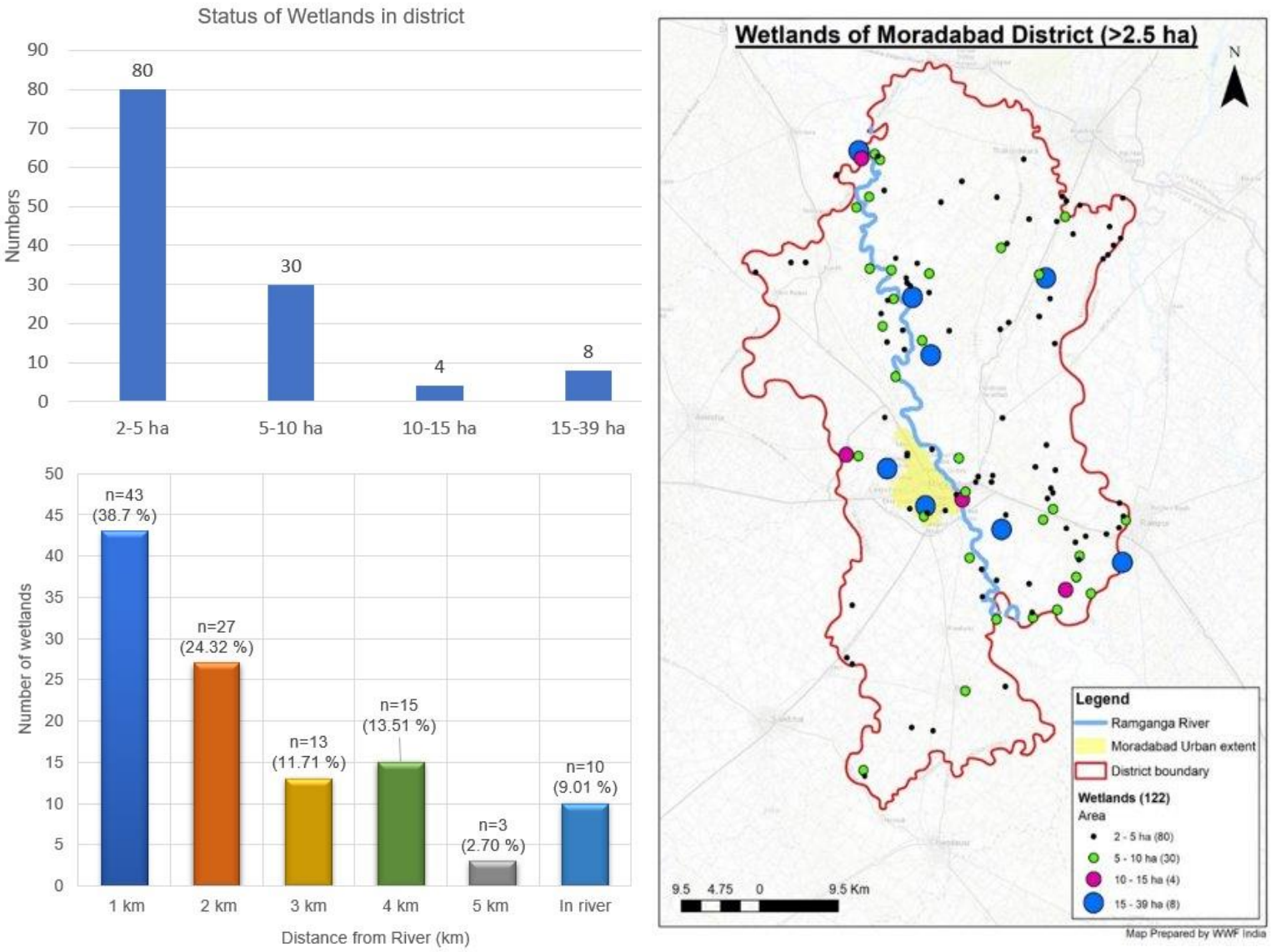


Figure 21 Status of wetlands in Moradabad district

A comprehensive assessment of floodplain wetlands mapping was conducted in the Thakurdwara and Dilari Blocks. This was a collaborative effort between the District Administration Moradabad and WWF India resulting in a joint survey of the wetlands in Thakurdwara. The survey, conducted from January to February 2019, identified a total of 111 floodplain wetlands. Of these, water was observed in 46 wetlands, while 55 were found to be dry. These wetlands were distributed across 26 villages within the surveyed area. Based on the survey findings, a total of 16 wetlands were recommended for restoration under the MNREGA (Mahatma Gandhi National Rural Employment Guarantee Act) scheme to revive their ecological functioning. This successful endeavour suggests the potential for conducting

similar wetlands mapping projects in other Tehsils like Moradabad, Kanth, and Mundapandey etc. within the Moradabad region.

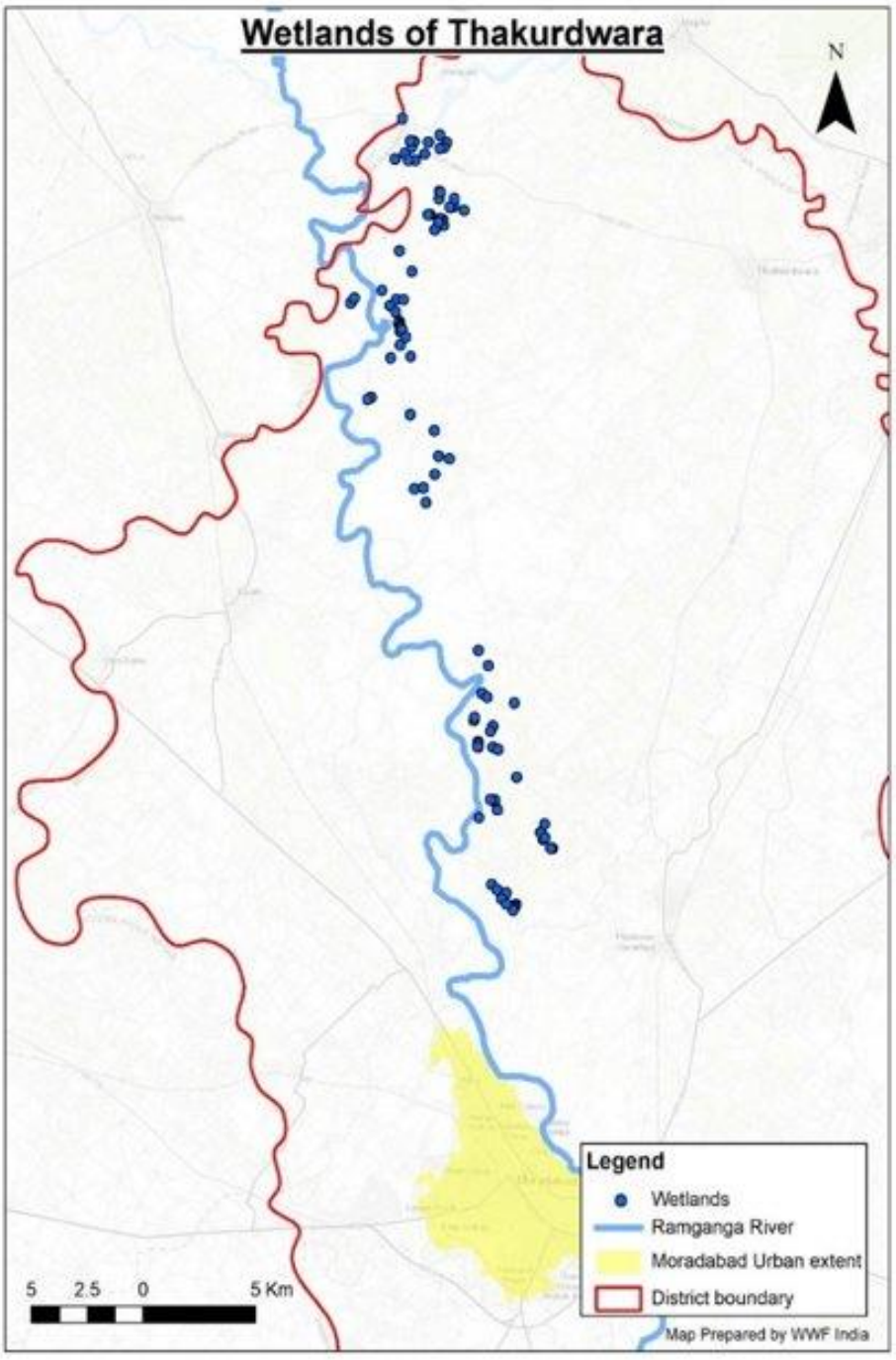


Figure 22 Wetlands of Thakurdwara

A complete assessment was conducted on each wetland to evaluate various threats, encompassing domestic activities such as bathing, the release of domestic sewage, fishing, pollution from solid waste, encroachment, and agricultural practices. The results (Figure 23) revealed that encroachment emerged as the most significant threat, affecting 69.4% of the

surveyed wetlands. This was followed by solid waste pollution, impacting 34.2% of the wetlands, while pollution resulting from sewage disposal was observed in 31.5% of the wetlands.

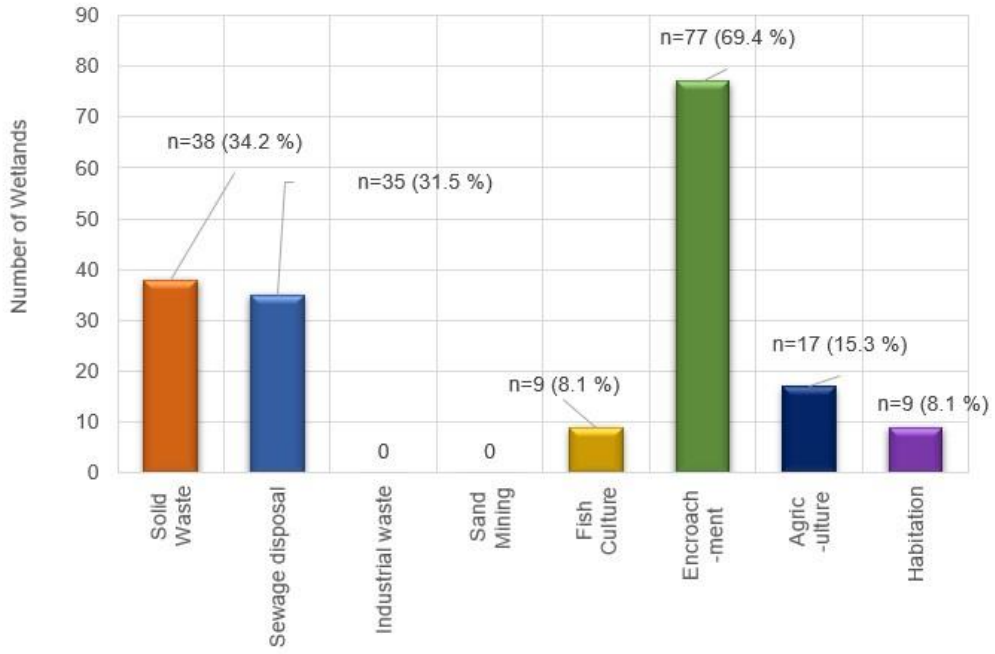


Figure 23 Threats to wetlands in Thakurdwara and Dilari Blocks

Apart from this study, a mapping endeavour was also undertaken to assess floodplain wetlands located along the Ramganga River. The survey focused specifically on 11 prioritized floodplain wetlands within the district (Figure 24), as identified in the WWF India-IIT Kanpur report. Ground truthing activities were conducted to validate and gather data on specific parameters related to these wetlands.

In addition to the Floodplain wetlands, urban wetlands were also mapped in Moradabad city. The Moradabad city underwent a comprehensive Census of Urban Wetlands in 2014, led by the *Ramganga Mitras*[2]. Based on the 2013 Nagar Nigam data, a total of 87 wetlands were reported, with 6 of them having multiple (2 or more) *gata* numbers. Consequently, the city had 80 wetlands as per the list. Findings from the "*Hamare Talaab, Hamari Dharohar*" campaign revealed that out of the 80 wetlands, 47 were still in existence, while 33 had

[2] Group of active citizens in the Ramganga basin, who join the Ramganga conservation efforts on voluntary basis. In this multi-stakeholder group, people come from different walks of life, for instance – government departments, district administration, social workers, civil society, teachers, youth, businessmen etc.

completely vanished. This implies that the city has experienced a rapid loss of 41% of its wetlands, equivalent to a loss of 3.9 hectares of wetland area.

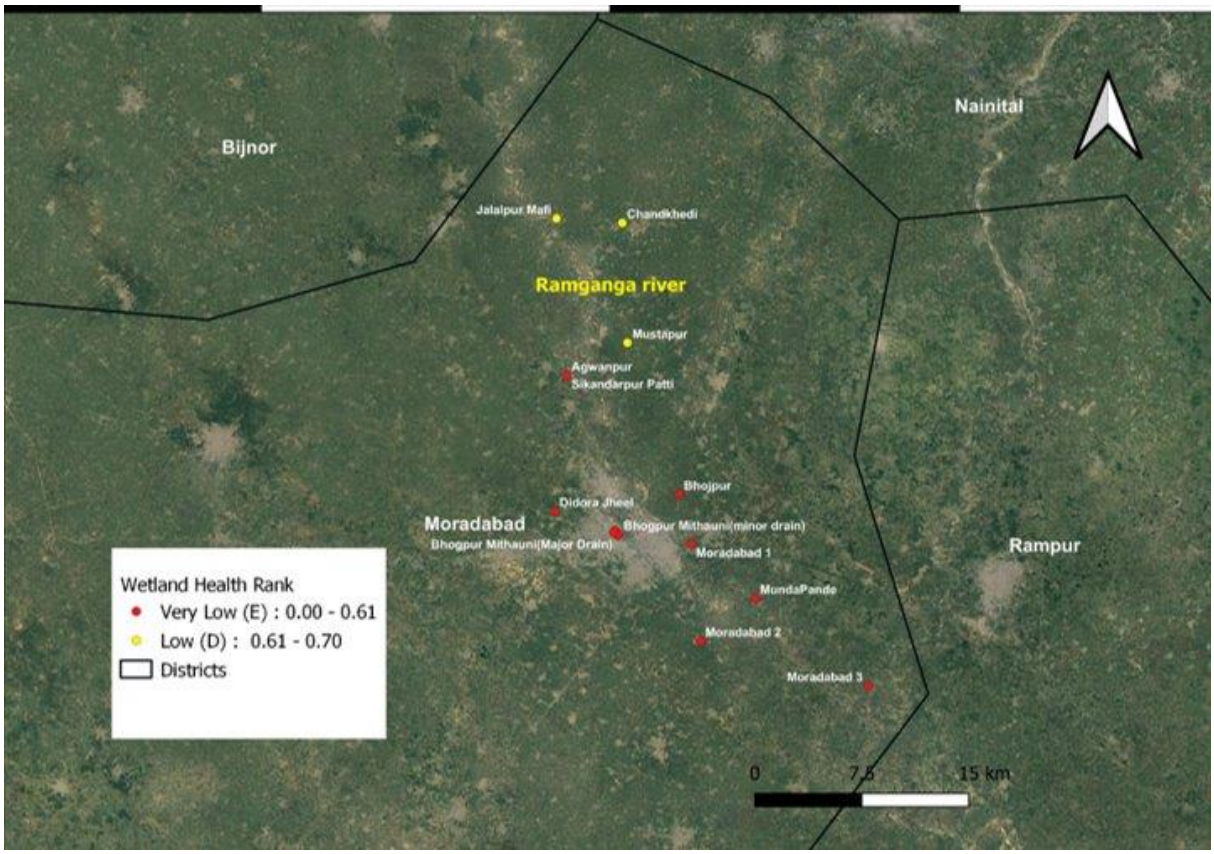


Figure 24 Ten Prioritized floodplain wetlands along the Ramganga River

During the campaign, an additional 10 new wetlands were identified, resulting in a total count of 57 wetlands in the city (47 existing and 10 new). These 57 wetlands are distributed across 14 wards, meaning that 46 wards in the city do not have any wetlands. Consequently, now after 10 years of last such survey, there is a need to conduct a similar survey in the city to ascertain the current status of wetlands and identify any changes that may have occurred.

4.5.3 Groundwater

Groundwater is present within the pore spaces of the unconsolidated alluvial sediments in the saturation zone. The near-surface sediments, reaching depths of up to 30 meters, consist of fine to medium-grained sand with occasional thin clay layers. Groundwater in this zone typically exists under unconfined conditions, where dug wells and common hand pumps are commonly constructed. Above this zone, between two to six meters in depth, the sediments primarily exhibit an argillaceous nature, composed of silt and clay. Beneath this cover lies the sand formation, which forms the upper aquifer. This aquifer is largely unconfined and

accommodates numerous cavity wells, dug wells, domestic hand pumps, and shallow private tube wells. These water sources are utilized for domestic purposes, gardening, and irrigation purposes by marginal farmers. Groundwater in the second and third aquifers occurs under semi-confined to confined conditions [18].

Moradabad district is characterized by the presence of Quaternary alluvium, which has been deposited by the Ganga and Ramganga river systems. From a lithological perspective, the alluvial sediments consist of varying proportions of sand, silt, clay, and *kankars*. The Moradabad district consists mainly of alluvial soil, with a specific yield estimated at 16% and rainfall infiltration at 22% for all its blocks [15].

Table 4 The summary of the estimation of dynamic groundwater resources in Moradabad district [15].

1	Total Annual ground water recharge by all sources	= 76059.02 ham
2	Net ground water available in the district.	= 69092.04 ham
3	Existing gross ground water draft for all uses	= 66773.43 ham
4	Provision for domestic, industrial requirement up to 2025	= 79691.26 ham
5	Net ground water available for future irrigation development	= 5800.72 ham
6	Stage of ground water development average of district	= 96.64 %.
7	Over exploited Moradabad city	
8	Critical Block is Bilari	= 1
9	Semi Critical blocks are Dingarpur, Mundapandey, Chhajlet, Dilari, Moradabad and Bhagatpur Tanda	= 6
10	Safe blocks (Thakurdwara)	= 1

The rivers in the district, including Ramganga, rely on groundwater as their primary source of water. Analysis of data from the past decade reveals a consistent decrease in both rainfall and the groundwater table. Specifically, the rainfall has declined from 1000 mm to 550 mm (Figure 25). Additionally, the groundwater levels have experienced a decline of approximately 4-5 meters at the district level. Currently, there is a lack of significant large-scale rainwater harvesting systems implemented within the district.

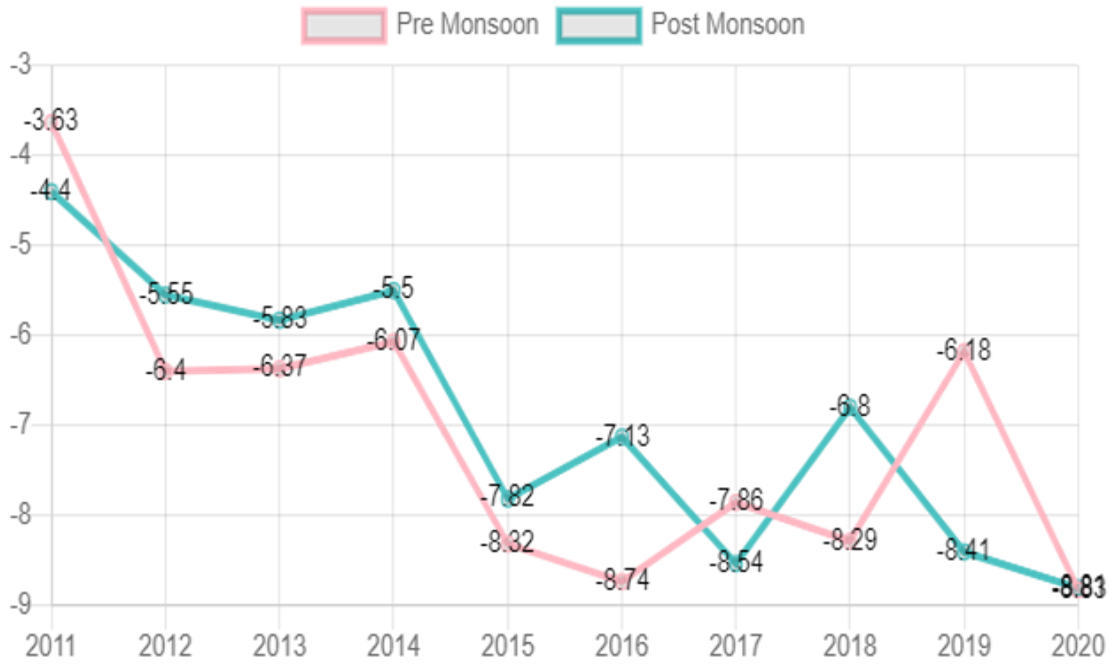


Figure 25 Decline in Groundwater table levels over the past ten years in the district [16]

Table 5 Recharge & Discharge Estimates of Moradabad district [15]

S.No.	Assessment Unit- Blocks	Recharge from Rainfall during Monsoon Season	Recharge from Other Sources during Monsoon Season	Recharge from Rainfall during Non-Monsoon Season	Recharge from Other Sources during Non-Monsoon Season	Total Annual Ground Water Recharge
1	BHAGATPUR TANDA	5911.55	674.98	660.11	898.13	8144.77
2	BILARI	4454.17	743.67	720.66	976.80	6895.30
3	CHHAJLET	7719.87	1826.38	811.54	2420.53	12778.32
4	DEENGARPUR	7391.88	851.68	825.41	1150.27	10219.24
5	DILARI	3787.57	3121.46	629.39	3310.23	10848.65
6	MUNDA PANDEY	7392.40	819.00	825.47	1343.76	10380.63
7	MORADABAD	3009.73	534.53	504.12	917.41	4965.78
8	THAKURDWARA	3745.09	3320.29	622.34	4138.61	11826.33
	TOTAL	43412.26	11891.99	5599.04	15155.74	76059.02

Table 6 Dynamic Ground Water Resource of Moradabad district [15]

S.No.	Blocks	Net Annual Ground Water A vailability	Existing Gross Ground Water Draft for All Use (4+5)	Provision for Domestic and Industrial Requirement Supply for next 25 years	Net Ground Water Availability for future Irrigation development (3-4-7)	Stage of Ground Water Development (6/3)* 100 (%)	Category
1	2	3	6	7	8	9	10
1	BHAGATPUR TANDA	7330.30	7300.42	946.14	0.00	99.59	CRITICAL
2	BILARI	6205.77	8058.38	714.72	0.00	129.85	OE
3	CHHAJLET	12139.40	11352.31	906.17	474.83	93.52	CRITICAL
4	DEENGARPUR	9197.31	7816.62	1312.49	895.16	84.99	SAFE
5	DILARI	9763.78	13364.05	1154.55	0.00	136.87	OE
6	MUNDA PANDEY	9342.57	7078.79	988.85	1895.27	75.77	SAFE
7	MORADABAD	4469.20	3590.44	1153.51	373.26	80.34	SAFE
8	THAKURDWARA	10643.69	8212.42	792.83	2162.18	77.16	SAFE
	TOTAL	**69092.04**	**66773.43**	**7969.26**	**5800.72**	**96.64**	

The block-level groundwater data of Moradabad district reveals a decline in water levels specifically in Bhagatpur Tanda, Bilari, Chajlet, and Dingerpur, while the remaining blocks have remained relatively stable. Notably, blocks such as Dilari and Mundapandey, which are located adjacent to the Ramganga River, have either maintained stability or shown improvements in groundwater levels (Figure 26). On the other hand, blocks like Billari, which are situated away from the river, have experienced the maximum decline.

Within Moradabad District, six blocks fall under the semi-critical category in terms of groundwater availability. However, Moradabad city is classified as being in an over-exploited zone. This can be attributed to the high population density in the city, leading to significant water extraction for domestic, industrial, and agricultural purposes [16]. Bilari is in critical and Thakurdwara is in a safe zone.

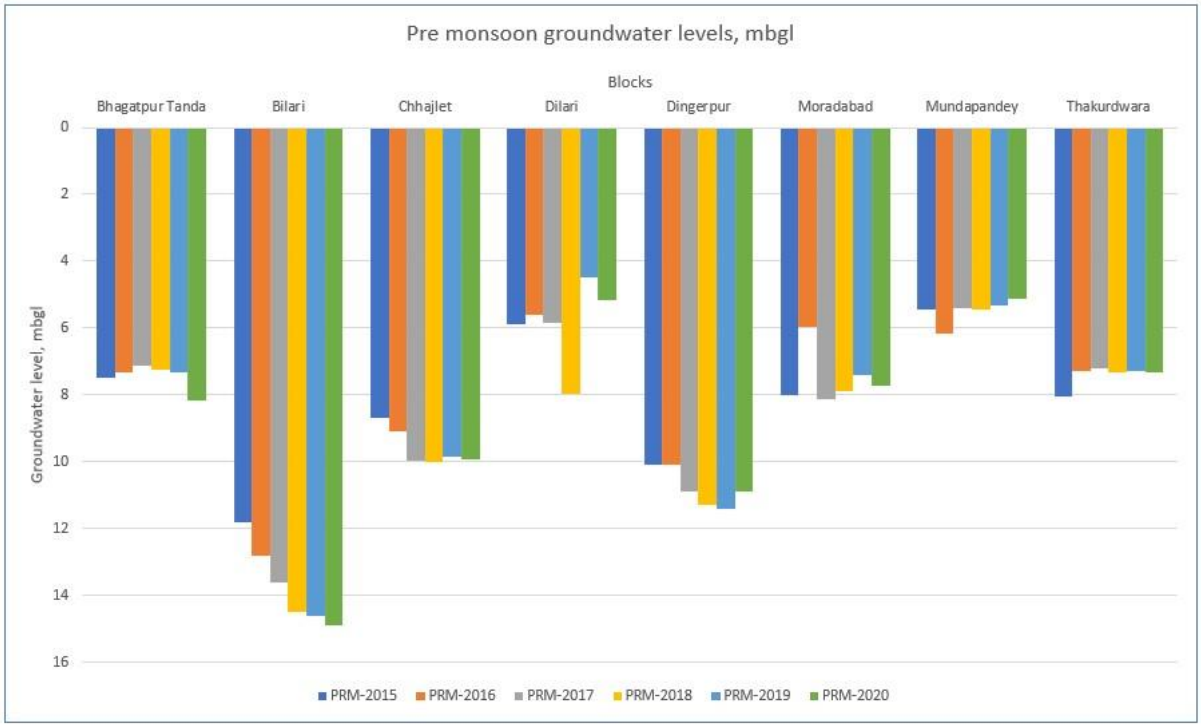
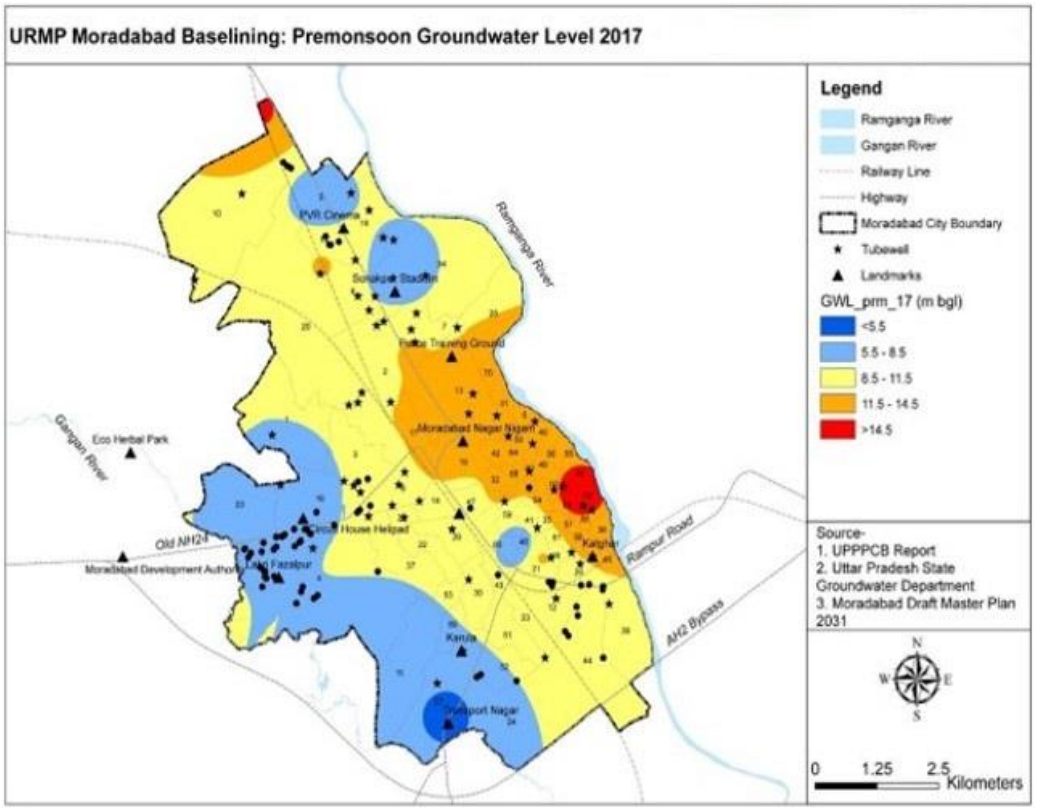


Figure 26 Block-wise Average Depth of Water level of Moradabad District [16]

The groundwater situation in Moradabad City is currently a matter of concern. The city relies solely on groundwater as its primary water source, with an extraction rate of approximately 190 million litres per day (MLD) to meet domestic water demand. Alarming findings from the monitoring conducted by the state groundwater department indicate a significant decline in groundwater levels, with a reduction of 90 cm per year. These findings raise concerns about the sustainability of the current extraction rates. According to the NAQUIM (National Aquifer Mapping and Management Program), report specifically addressing Moradabad district, the stage of groundwater extraction in this area is estimated to be at 80.34%, classifying it as a semi-critical situation. As a result, the city is in urgent need of innovative strategies to reduce its reliance on groundwater and ensure its judicious and sustainable use [15].

Analysis of groundwater data from the years 2017 and 2021 indicates a consistent and concerning downward trend in the water table, particularly in the western region of the city, which coincides with the concentration of industrial activities. This decline in groundwater levels is anticipated to intensify in the future due to increased water consumption rates.



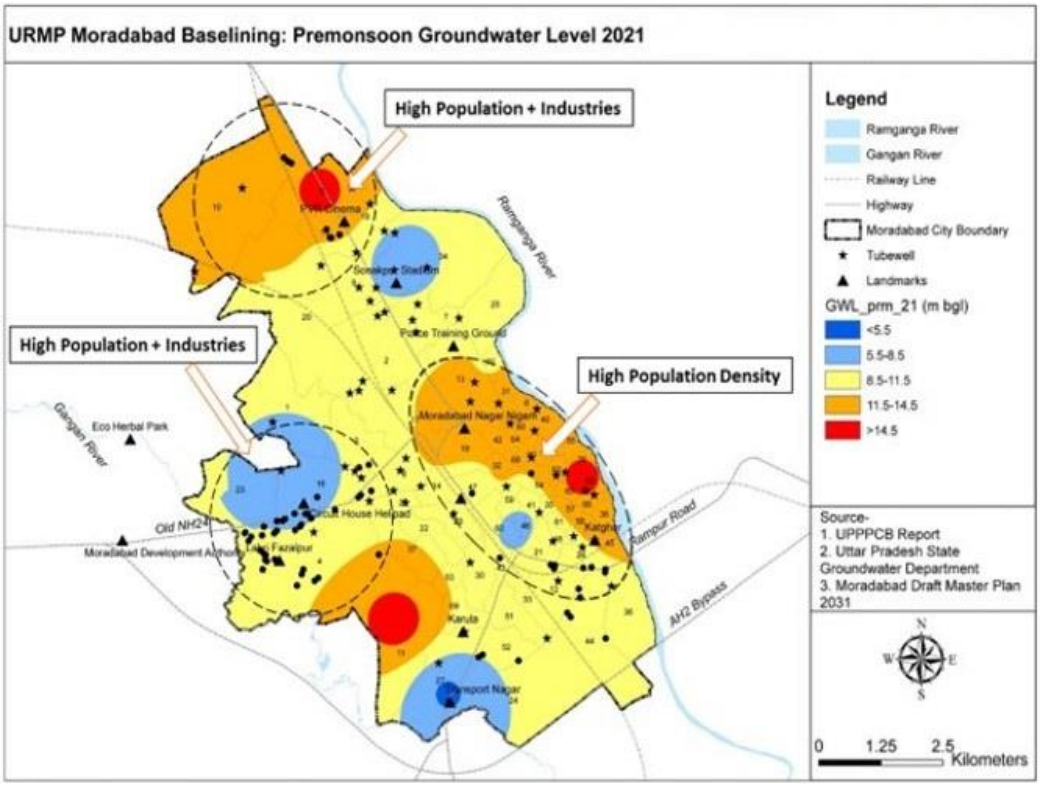
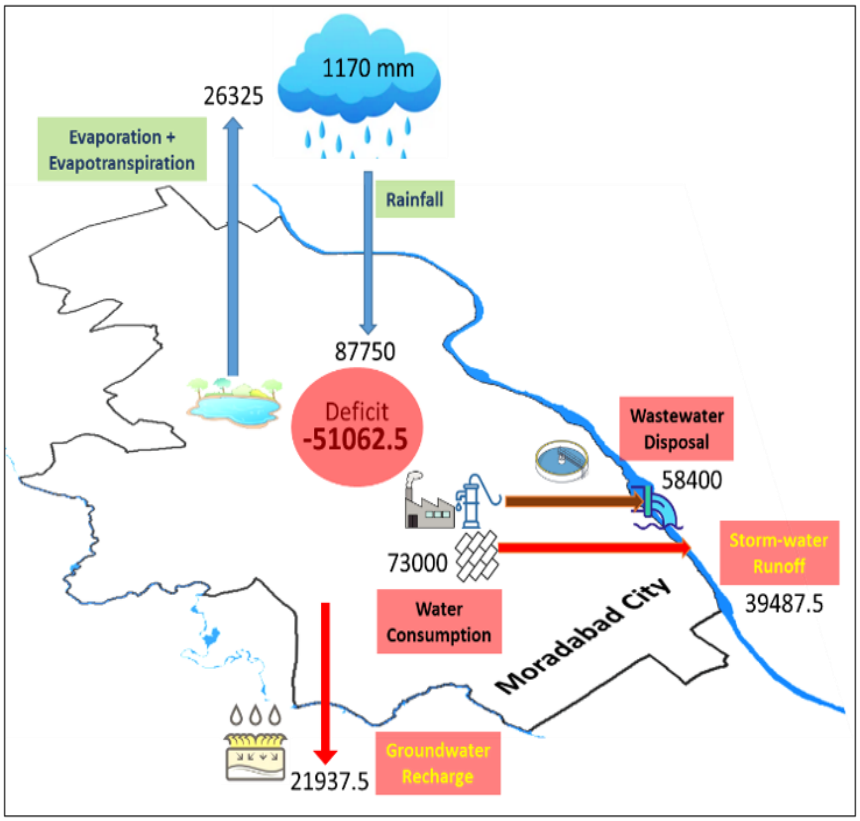


Figure 27 Comparison of Groundwater scenario in Moradabad city from 2017 and 2021

The water budget of Moradabad City has been evaluated by considering various factors such as the city's area of 75 square kilometres, an average annual rainfall of approximately 1100 mm, and accounting for normal recharge conditions, runoff, and natural water losses. Based on these considerations, an estimated water budget has been formulated. However, the analysis reveals a negative net water balance for the city, indicating that the withdrawal of water exceeds the annual demand met through rainfall input. This suggests a deficit in the available water resources to meet the city's water requirements.



Scenario 1 – Business-as-Usual		
Rainfall availability for 75 sq.km.@ 1170 mm/year	87,750	ML
Natural recharge – 25%	21,937.5	ML
Runoff (Stormwater flow) – 45%	39,487.5	ML
Evapotranspiration – 30%	2,6325	ML
Water Balance		
Water Demand(Consumption) @200 MLD	73,000	ML
Net water balance	-51,062.5	ML
Negative Water Balance (over extraction of groundwater)		

Figure 28 Water budget of the Moradabad city. Source: Urban River Management Plan (under submission)

The Tumaria reservoir, Dhela feeder, and Dehla Barrage are situated along Dehla River in Uttarakhand. In recent years, these water bodies have experienced a significant decline in water levels, accompanied by a reduction in groundwater recharge during the monsoon season. This decline can be attributed to changes in rainfall patterns and the escalating demands of the growing population for industrial and agricultural purposes.

The groundwater quality in specific locations is a cause for concern. Farid Nagar village (Tehsil Thakurdwara) exhibits heavily polluted water with depths ranging from 80 to 100 feet. Basai experiences heavily polluted water at a depth of 180 feet. Bhojpur encounters water pollution

with depths of 50 to 60 feet. Chandpur suffers from water pollution with depths of 90 to 100 feet. Lalpur Baxaura faces slightly polluted water at depths ranging from 100 to 150 feet.

4.6 Water quality

4.6.1 Surface water

Moradabad is renowned as "Peetal Nagri" due to its brassware industries. The impact of urban and industrial activities on the water quality of the Ramganga River in Moradabad has been significant [19]. Table 7 presents an analysis of several key parameters, namely pH, dissolved oxygen (DO), biochemical oxygen demand (BOD), chemical oxygen demand (COD), total coliform, and faecal coliform. The analysis covers the period from January to August 2022 and focuses on two specific locations: upstream of the Ramganga River at Agwanpur and at Katghar, situated beneath a road bridge. This assessment was achieved by summarizing the multiple water test results into a single indicator known as the Water Quality Index (WQI). The WQI serves as a concise measure for water quality management and decision-making purposes [19].

Table 7 Surface water characteristics in Rivers of Moradabad [20]. The green colour represents a value less than the permissible limit, whereas red represents a value exceeding the permissible limit.

Location	u/s Ramganga river, Agwanpur						Katghar under road bridge					
Year 2022	**pH**	**DO (mg/l)**	**BOD (mg/l)**	**COD (mg/l)**	**Total Coliform (MPN/ 100 ml)**	**Feacal Coliform (MPN/ 100ml)**	**pH**	**DO (mg/l)**	**BOD (mg/l)**	**COD (mg/l)**	**Total Coliform (MPN/ 100 ml)**	**Feacal Coliform (MPN/ 100ml)**
January	NA	8.40	2.00	16.00	700		NA	4.30	7.00	24.00	13000	
February	NA	7.80	2.20	16.00	700		NA	3.80	8.00	32.00	15000	
March	7.5	8.50	2.20	20.00	700		7.3	3.10	7.60	24.00	11000	
April	7.2	8.20	4.60	16.00	900		7.7	3.60	7.20	28.00	17000	
May	7.2	8.50	2.00	16.00	700		7.5	4.10	7.60	32.00	13000	
June	7.6	7.80	2.00	16.00	900		7.3	4.00	7.80	28.00	17000	
July	7.6	7.90	2.00	16.00	700		7.6	4.30	7.20	32.00	19000	
August	7.6	7.80	2.00	16.00	900	500	7.6	4.00	8.00	32.00	23000	9000

CPCB Class B (Outdoor Bathing)Total Coliforms Organism MPN/100ml shall be 500 or less pH between 6.5 and 8.5 Dissolved Oxygen 5mg/l or more; Biochemical Oxygen Demand 5 days 20C 3mg/l or less

CPCB Class D (Propagation of wildlife and fisheries)- pH between 6.5 to 8.5 Dissolved Oxygen 4mg/l or more; Free Ammonia (as N) 1.2 mg/l or less

During the lean season, which spans from January to June, analysis of the Ramganga River's dissolved oxygen (DO) levels at the Katghar, Moradabad site (Figure 30) for the period of January 2022 to January 2023, revealed that 60% of the observations indicated DO concentrations precisely at the permissible limit of 4 mg/l. Conversely, 40% of the observations depicted DO levels falling below this permissible limit. In contrast, during the subsequent monsoon and post-monsoon season, covering the period from June to December, it was observed that 90% of the observations demonstrated DO concentrations above the permissible limit of 4 mg/l. The data recorded at the immediate upstream of Moradabad city (Agwanpur site) indicates that the DO remained way above permissible limits (6-8 mg/l) showing good river health in terms of water quality (Figure 30).

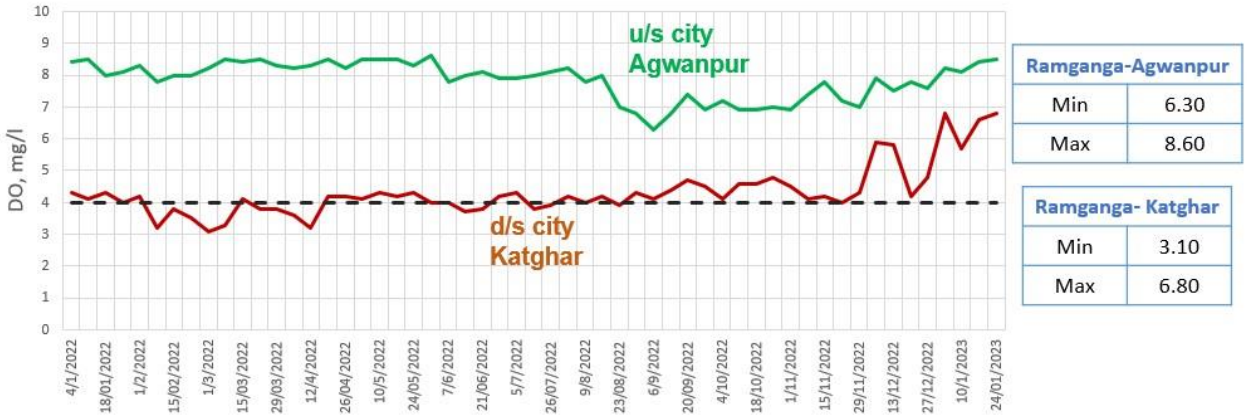


Figure 29 Variation in Biological Oxygen Demand- Ramganga (Jan 2022-Jan 2023) [20]. >3 mg/l is the MAX limit CPCB Class D- Propagation of Wildlife and fisheries

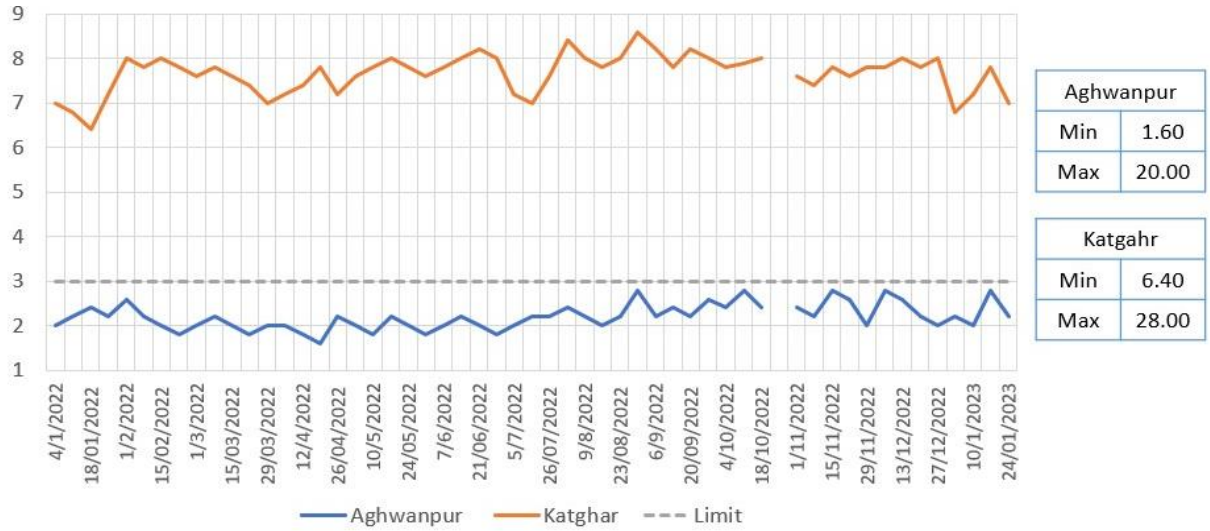


Figure 30 Variation in Dissolved Oxygen- Ramganga (Jan 2022-Jan 2023) [20].

The data collected from January 2022 to January 2023 demonstrates that the dissolved oxygen (DO) levels in Dhela (Figure 31) consistently remained below the permissible limits, measuring less than 4 mg/l. On the other hand, in Gaagan, the DO levels consistently remained above the permissible limits, measuring greater than 4 mg/l.

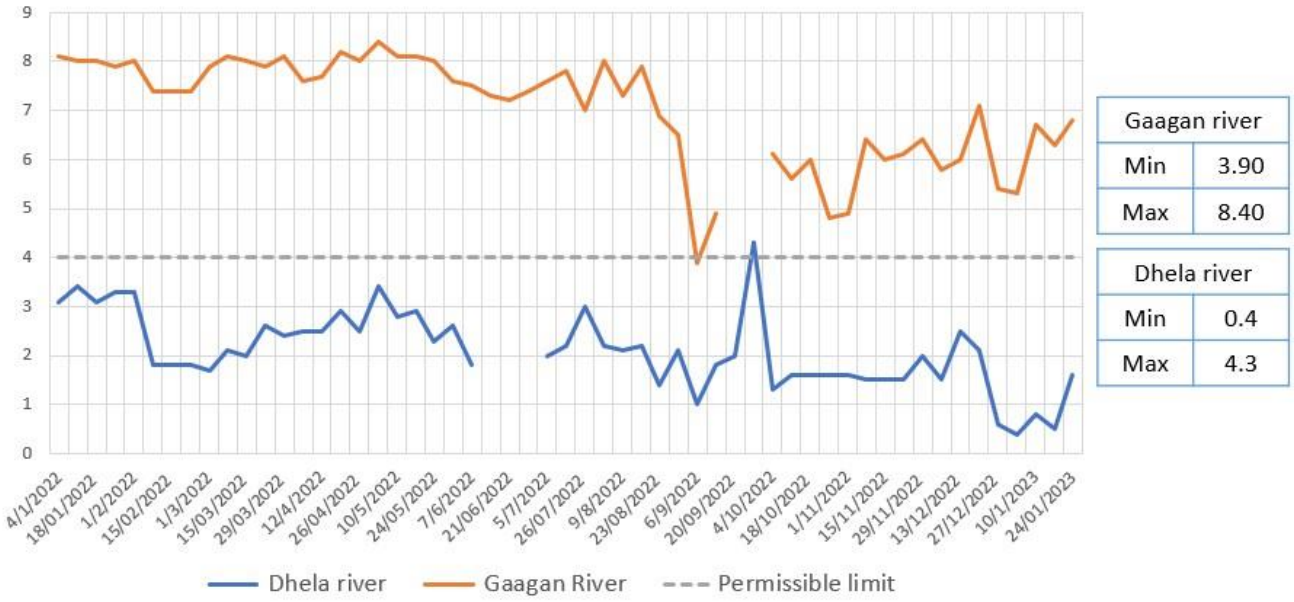


Figure 31 Variation in Dissolved Oxygen; mg/l- Dhela and Gaagan rivers (Jan 2022-Jan 2023)

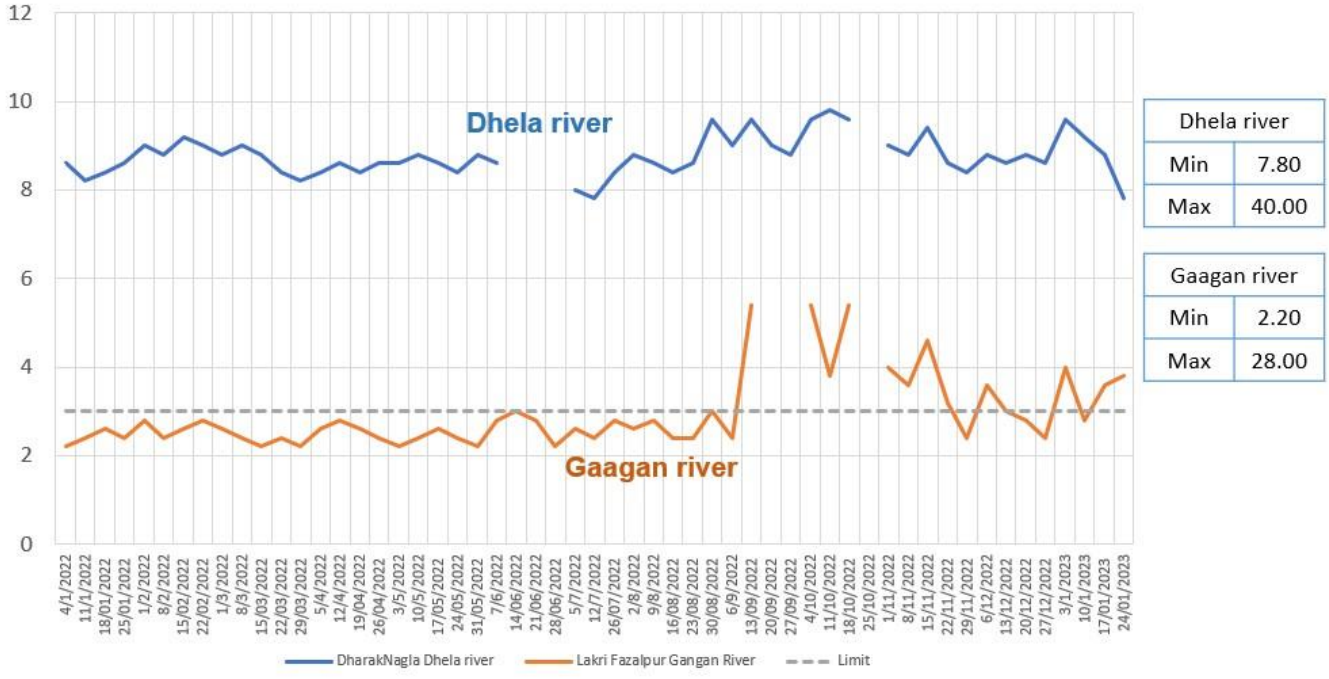


Figure 32 Variation in Biological Oxygen Demand- Dhela and Gaagan river (Jan 2022-Jan 2023). >3 mg/l is the MAX limit CPCB Class D- Propagation of Wildlife and fisheries

In July 2022, WWF India conducted water quality monitoring in the Moradabad district to assess the water quality of rivers and drains. The findings are presented in Figure 33. Within the core city area, the drains exhibited alarmingly low levels of Dissolved Oxygen (DO), almost approaching zero. Furthermore, elevated values of Biochemical Oxygen Demand (BOD) were recorded in six drains located within the core city.

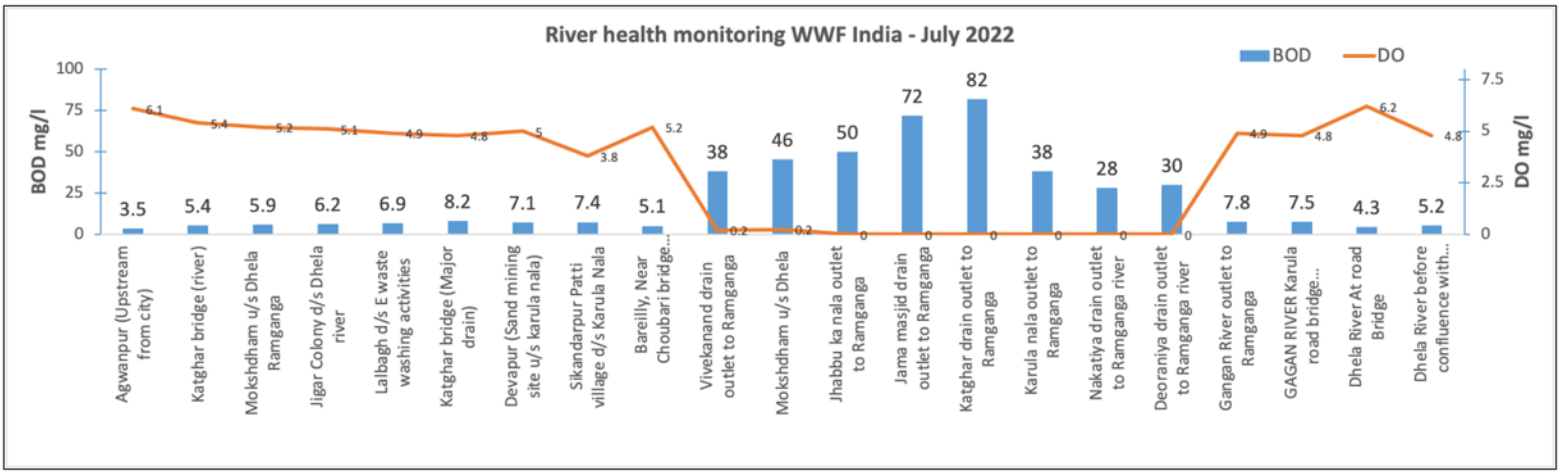


Figure 33 River health monitoring done by WWF

Table 8 Water quality of Dhela impacting River Ramganga. Source: Report on Dhela river- 2022-23 WWF India. Red represents a value exceeding the permissible limit.

	L-1		L-2		L-3		L-4		L-5	
	(Dehla vill.)		Dehla Barrage		Manpur		Burhanpur		Bhagatpur	
	PRM	PTM	PRM	PTM	PRM	PTM	PRM	PTM	PRM	PTM
Air Temp. (0C)	42	38		35		35	35	36		31
Water Temp. (0C)	35	29		30		24	34	31		26
Water appearance	clear	clear		muddy		clear	Black	Black		Black
Turbidity (NTU)	>10	>10		>50		>10	100	<100		100
pH	7	7.5		7		7	6	7		7
Dissolved oxygen (mg/lit)	7.5	7		4		6	ND	ND		ND
Ammonia (mg/lit)	ND	ND		1		1	2	3		1
Phosphorus (mg/lit)	ND	ND		ND		ND	0.4	0.3		0.1
Chloride (mg./l)	35.45	35.45		35.45		35.45	248.15	70.9		212.7
Nitrate (mg/lit.)	ND	ND		ND		ND	5	10		5
Total hardness (mg./lit.)	120	160		200		240	400	520		400
Coliform (Present/Absent)	A	A		A		A	P	P		P

4.6.2 Groundwater

In 2020, a comprehensive assessment of groundwater quality status was conducted by analyzing 39 water samples extracted from IM II Handpumps situated throughout the district (

Table 10). The results revealed that 5% of the samples exceeded the standard limit for pH, indicating an imbalance in the acidity or alkalinity of the groundwater. While fluoride contamination is a significant concern in certain areas, none of the samples collected from the district exhibited fluoride concentrations surpassing the permissible limit, ensuring compliance with safety guidelines. Moreover, 10% of the samples exhibited nitrate levels exceeding 45 mg/L. This elevation in nitrate concentration is likely attributed to anthropogenic activities such as agricultural practices, domestic sewage, and industrial operations. Additionally, the analysis showed that 15% of the groundwater samples in the district demonstrated elevated concentrations of total hardness. This indicates an increased presence of minerals in the water, which can impact its suitability for various applications.

Table 9 Groundwater quality status - Moradabad district

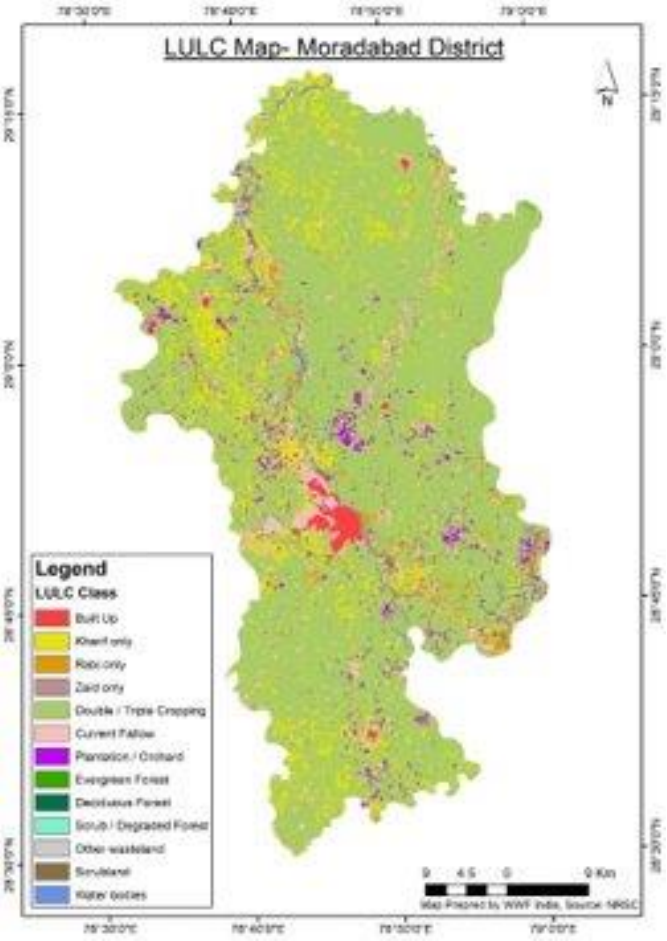
Water quality	**Limit**	**Unit**	**Percentage of sample beyond the limit**
pH	6.5-8.5	mg/L	5
Fluoride	1.5	mg/L	0
Nitrate	45	mg/L	10
Total Hardness	250	mg/L	15
Phosphate	0.2	mg/L	0

Table 10 Result of 39 water samples extracted from IM II Handpumps situated throughout the Moradabad district. Red represents a value exceeding the permissible limit.

S.N		pH	EC	CO3	HCO3	Cl	F	NO3	SO4	TH	Ca	Mg	Na	K	SiO2	PO4
1	GWS 1	8.39	440	24	183	14	0.24	0.4	3.2	160	52	7	25	2	26	0.11
2	GWS 2	8.46	376	12	195	7	0.19	4.6	6.5	170	40	17	15	2	14	nd
3	GWS 3	8.35	398	6	207	21	0.22	nd	5.7	125	16	21	42	2	9	nd
4	GWS 4	7.82	1160	nil	171	184	nd	112	83	370	96	32	82	11	10	nd
5	GWS 5	7.54	795	nil	372	35	0.32	1.3	78	355	100	26	29	15	31	nd
6	GWS 6	7.65	900	nil	366	78	0.27	0.41	51	320	96	19	63	7	31	nd
7	GWS 7	8.11	510	nil	183	57	0.24	0.2	15	190	40	22	26	6	27	nd
8	GWS 8	7.82	382	nil	232	14	0.54	0.17	4	160	48	10	20	4	29	nd
9	GWS 9	7.85	510	nil	293	14	0.24	0.25	17	220	60	17	22	5	27	nd
10	GWS 10	7.93	410	nil	256	7	0.28	0.15	10	190	56	12	19	4	28	nd
11	GWS 11	7.83	380	nil	238	7	0.29	0.02	4.9	160	48	10	17	4	28	nd
12	GWS 12	7.56	945	nil	427	78	0.26	0.73	54	380	88	39	61	10	33	nd
13	GWS 13	8.17	400	nil	207	14	0.01	0.2	6	140	20	22	21	6	33	nd
14	GWS 14	8.2	305	nil	171	14	0.06	nd	8.4	110	24	12	24	4	11	nd
15	GWS 15	8.43	348	6	165	18	0.21	2	16	135	20	21	23	4	14	nd
16	GWS 16	8.54	368	6	195	18	0.12	0.49	8	160	48	10	17	3	11	0.15
17	GWS 17	8.19	377	nil	134	7	0.05	13	70	145	24	21	26	5	21	nd
18	GWS 18	8.08	375	nil	232	7	0.28	0.07	3.3	170	40	17	15	2	8	nd
19	GWS 19	8.23	470	nil	244	14	0.35	0.2	4	120	24	15	51	2	22	nd
20	GWS 20	7.88	475	nil	268	21	0.28	0.31	11	200	40	24	27	3	12	nd
21	GWS 21	8.73	395	12	214	7	0.22	nd	6.1	95	14	15	56	2	12	nd
22	GWS 22	7.83	828	nil	195	92	0.16	101	70	305	60	38	66	7	24	nd
23	GWS 23	8.07	540	nil	183	50	0.16	0.2	39	190	48	17	30	10	23	nd
24	GWS 24	8.19	420	nil	214	28	0.18	4.3	10	165	24	26	26	8	17	nd
25	GWS 25	8.07	515	nil	250	25	0.32	19	24	200	40	24	36	5	17	nd
26	GWS 26	7.98	550	nil	177	78	0.08	20	25	230	40	32	30	5	19	nd
27	GWS 27	8.42	348	6	146	35	0.01	4.3	8.5	110	28	10	35	3	8	nd
28	GWS 28	8.35	365	6	110	35	0.04	nd	48	135	24	18	28	4	16	nd
29	GWS 29	7.91	860	nil	122	78	0.13	166	79	280	76	22	67	4	27	nd
30	GWS 30	8.2	818	nil	183	71	0.24	124	99	220	28	36	98	3	13	nd
31	GWS 31	8.38	440	12	92	67	nd	15	23	160	24	24	30	7	16	nd
32	GWS 32	7.85	416	nil	195	28	0.25	0.7	25	155	44	11	23	18	7	nd
33	GWS 33	8.2	485	nil	262	14	0.76	nd	30	130	48	2	61	4	11	nd
34	GWS 34	8.37	530	24	220	21	0.15	0.2	13	180	52	12	36	3	23	0.11
35	GWS 35	8.19	668	nil	262	71	0.23	16	35	250	64	22	43	6	11	nd
36	GWS 36	8.18	525	nil	329	7	0.71	nd	5	145	24	21	66	1	10	nd
37	GWS 37	8.17	398	nil	244	7	0.36	nd	3.9	115	20	16	46	3	14	nd
38	GWS 38	8.1	435	nil	268	7	0.38	nd	6.5	135	30	15	48	2	10	nd
39	GWS 39	8.35	610	12	305	7	0.5	0.44	15	110	12	19	90	1	21	nd

4.7 Land use and land cover

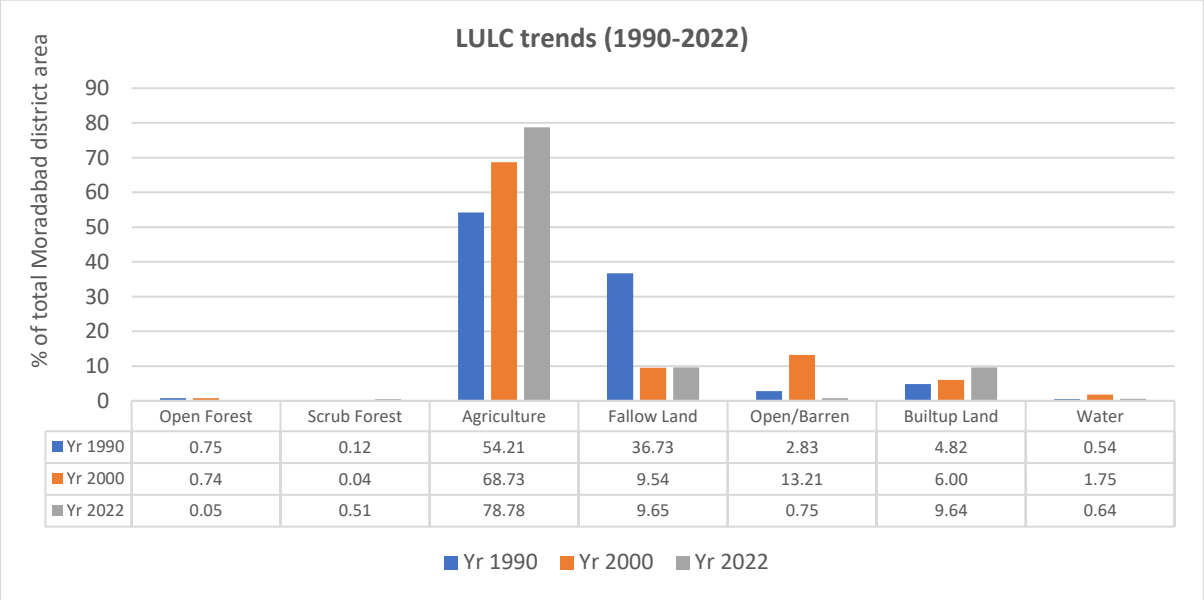
In the Moradabad district, the majority of the land area, amounting to 90%, is dedicated to agricultural activities. The prevalent crops in this region, such as sugarcane and paddy, require significant amounts of water for their growth, leading to substantial extraction of groundwater resources within the district. Surface water-based irrigation, reliant on canals, is susceptible to the impacts of droughts. Canal irrigation systems are present in select blocks of the district, namely Chajjlet, Dilari, and Thakurdwara. It is worth noting that approximately 16,488 hectares of land in the district are irrigated using canals and other surface water sources, while the remaining 266,753 hectares heavily rely on groundwater sources for irrigation purposes. The district of Moradabad exhibits a high reliance on groundwater for irrigation, accounting for 94% of the irrigated area, while the remaining portion is serviced by canal-based irrigation systems. The available resources for irrigation in the district include 511 canals, 471 government-owned tube wells, 107,191 pump sets, and 524 groundwater pump sets.



CLASS NAME	Area ha	Area %
Built-Up	2174.19	0.93
Kharif only	22092.49	9.47
Rabi only	5289.18	2.27
Zaid only	1451.65	0.62
Double / Triple Cropping	178653.50	76.58
Current Fallow	13080.88	5.61
Plantation / Orchard	5821.36	2.50
Evergreen Forest	31.36	0.01
Deciduous Forest	14.11	0.01
Scrub / Degraded Forest	27.28	0.01
Other wasteland	344.33	0.15
Scrubland	1911.71	0.82
Water bodies	2399.35	1.03

Figure 35 Lanuse and landcover of Moradabad district. Source: WWF-India

The analysis of land use and land cover trends in the Moradabad district from 1990 to 2022 reveals significant changes. The area dedicated to agriculture has experienced a substantial increase, witnessing a growth of 25% over the observed period. Conversely, the extent of fallow land has decreased by 24%, indicating a decline in unused or uncultivated areas. Another notable trend is the expansion of built-up land, primarily associated with urbanization. The built-up land area witnessed a rise of 5% during the same period, indicating the transformation of rural or natural areas into developed urban regions.



	Open Forest	Scrub Forest	Agriculture	Fallow Land	Open/Barren	Builtup Land	Water
Yr 1990	0.75	0.12	54.21	36.73	2.83	4.82	0.54
Yr 2000	0.74	0.04	68.73	9.54	13.21	6.00	1.75
Yr 2022	0.05	0.51	78.78	9.65	0.75	9.64	0.64

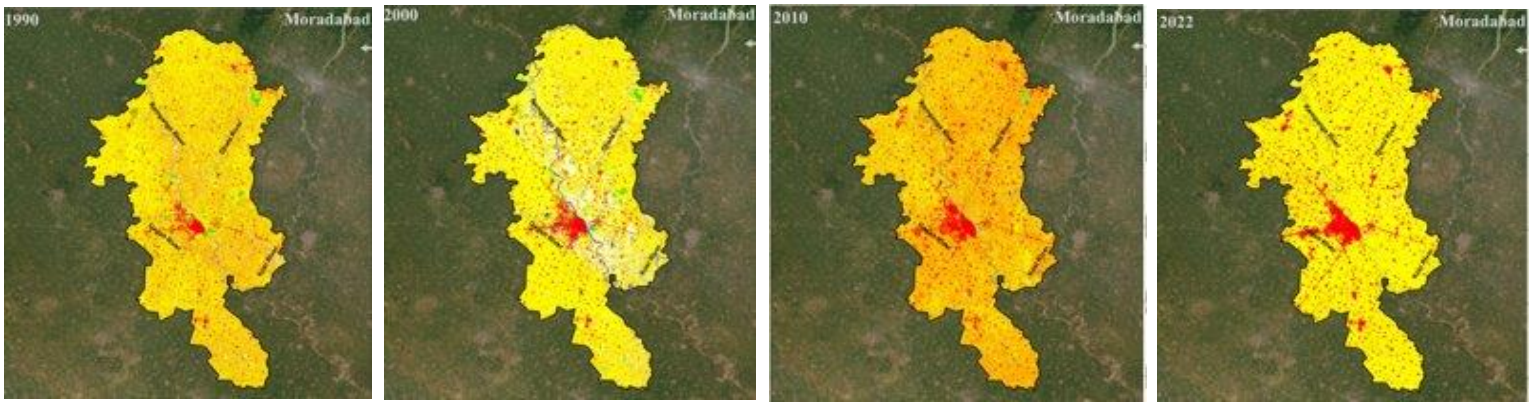


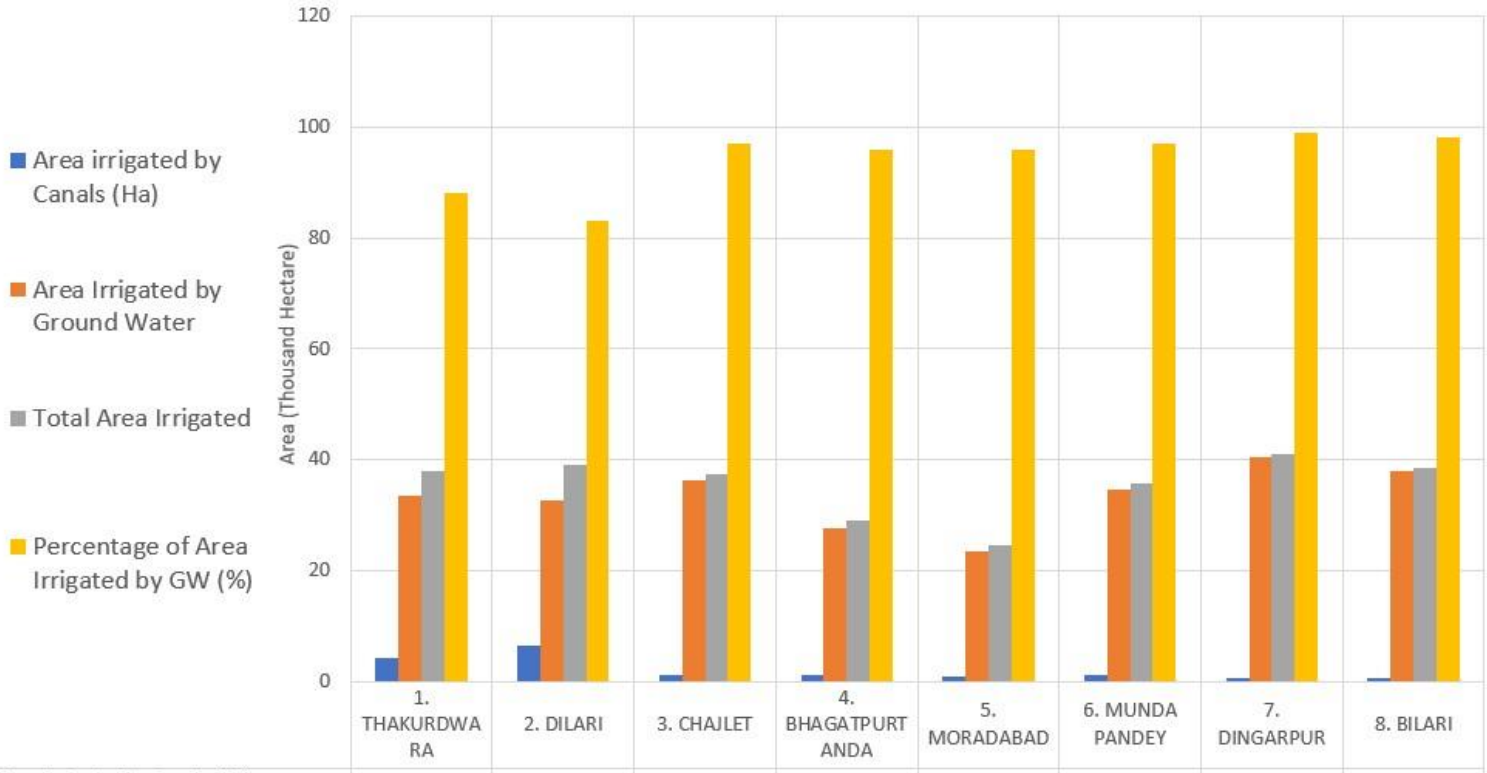
Figure 36 Land use and land change trends (1990-2022). Source: WWF-India

4.8 Agriculture and irrigation

Irrigation within the Moradabad district is facilitated by various minor irrigation structures, including tube wells, ponds, and water derived from Sewage Treatment Plants (STP) or Effluent Treatment Plants (ETP). Canal irrigation, on the other hand, is limited to specific blocks within the district, namely Thakurdwara, Bhagatpur, Dilari, and Chhajlet. Out of the total area of 17,941 hectares, approximately 16,488 hectares are irrigated by canals and other surface water sources, while the remaining 158,453 hectares are irrigated by groundwater sources in the district (Table 11) (Figure 37) [15].

Table 11 Irrigated Area (Ha) by Surface and Ground Water in Moradabad district [15]

BLOCKS	Canal (Ha)	Tubewell		Well	Pond	Total
		Public	Private			
THAKURDWARA	4389	900	15774	16814	0	37877
DILARI	6477	606	15340	16708	0	39131
CHAJLET	1157	2526	17219	16533	0	37435
BHAGATPURTANDA	1206	404	11971	15441	0	29022
MORADABAD	949	684	9975	12880	0	24488
MUNDA PANDEY	1104	707	15979	17871	0	35661
DINGARPUR	593	3043	10198	27215	0	41049
BILARI	613	3607	8934	25424	0	38578
Total Rural	16488	12477	105390	148886	0	283241
Total Urban	0	875	7169	9567	0	17611
Total District (Ha)	**16488**	**13352**	**112559**	**158453**	**0**	**300852**



	1. THAKURDWARA	2. DILARI	3. CHAJLET	4. BHAGATPURTANDA	5. MORADABAD	6. MUNDA PANDEY	7. DINGARPUR	8. BILARI
Area irrigated by Canals (Ha)	4,389	6,477	1,157	1,206	0,949	1,104	0,593	0,613
Area Irrigated by Ground Water	33,488	32,654	36,278	27,816	23,539	34,557	40,456	37,965
Total Area Irrigated	37,877	39,131	37,435	29,022	24,488	35,661	41,049	38,578
Percentage of Area Irrigated by GW (%)	88	83	97	96	96	97	99	98

Figure 37 Irrigated Area (Ha) by Surface and Ground Water in Moradabad district [15]

A significant proportion, specifically 94%, of the district's land area is supported by groundwater irrigation. The overall length of the canal network within the district amounts to 511 kilometres (Table 12).

Table 12 Percentage of Area (Ha) Irrigated by Groundwater in Moradabad district [15]

Block	Area irrigated by canals (Ha)	Area irrigated by Groundwater	Total irrigated area	Percentage of the area covered by Groundwater (%)
THAKURDWARA	4389	33488	37877	88
DILARI	6477	32654	39131	83
CHAJLET	1157	36278	37435	97
BHAGATPURTANDA	1206	27816	29022	96
MORADABAD	949	23539	24488	96
MUNDA PANDEY	1104	34557	35661	97
DINGARPUR	593	40456	41049	99
BILARI	613	37965	38578	98
Total District	**16488**	**266753**	**283241**	**94**

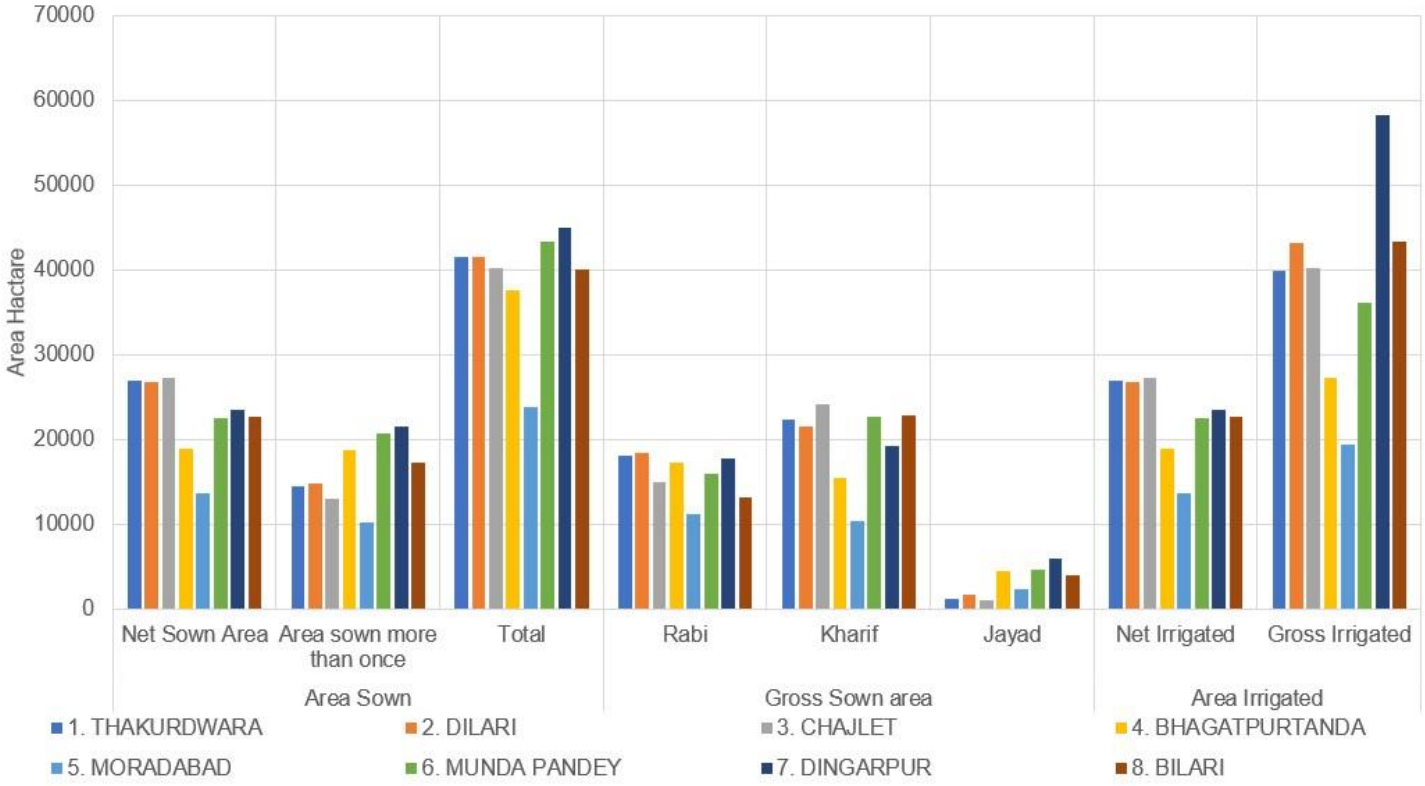


Figure 38 Area under main crops in Moradabad district [15]

Table 13 Major crops sown in Moradabad district [15]

	Total rice		Wheat		Total pulses (Chiefly Urad, Masur, Gram, Pea etc.)		Total Oilseeds (Chiefly Lahi/ Sarson & Til)		Sugarcane	
Block	**Total**	**Irrig.**	**Total**	**Irrig.**	**Total**	**Irrig.**	**Total**	**Irrig.**	**Total**	**Irrig.**
1. Thakurdwara	17082	17082	16801	16801	512	37	63	58	7986	7986
2. Dilari	18779	18779	16693	16693	307	41	55	55	4680	4680
3. Chajlet	6494	6494	13312	13312	131	65	225	225	17849	17849
4. Bhagatpurtanda	15418	15418	14516	14516	266	36	203	203	2636	2636
5. Moradabad	8948	8948	9388	9388	146	21	99	99	2633	2633
6. Munda pandey	17767	17767	18097	18097	356	64	209	197	1244	1244
7. Dingarpur	364	364	15926	15926	615	88	667	667	3785	3785
8. Bilari	8779	8779	14272	14272	1439	157	810	803	3402	3402
Total Rural	***93631***	***93631***	***119005***	***11900***	***3772***	***509***	***2331***	***2307***	***44215***	***44215***
Total Urban	***2674***	***2674***	***2871***	***2871***	***907***	***14***	***80***	***73***	***504***	***504***
Total District	***96305***	***96305***	***121876***	***12187***	***4679***	***523***	***2411***	***2380***	***44719***	***44719***

In the Moradabad district, certain blocks like Chajjlet, Thakurdwara, Dilari, and Bhagatpur Tanda have an abundant water supply. However, there has been a significant decline in irrigated land and crop production over the past decade. Several blocks in irrigated areas, namely Dingerpur, Bilari, Bhagatpur Tanda, and Moradabad, are facing critical conditions due to the overexploitation of water resources. The primary irrigation facilities in these critical blocks include tube wells, pump sets, and ponds. Unfortunately, the groundwater levels in these areas have been depleting rapidly, and there is an absence of canals. The only source of groundwater recharge is rainfall during the southwest monsoon period. Moreover, the excessive use of irrigation for crop cultivation has led to a reduction in the availability of water from the Ramganga Canal [21].

Moradabad district is characterized by the cultivation of major crops such as Sugarcane, Wheat, and Paddy (Figure 38) (Table 13). Additionally, the practice of pallage farming is prevalent, focusing primarily on cucurbits, with melons, cucumbers, and gourds being the most commonly grown varieties. Sugarcane cultivation takes place from September to October, with harvesting occurring between February and March. The preferred seed varieties for Sugarcane are 038 and 064. For optimal growth, Nitrogen is administered in the form of urea at a rate of 40-50 kg per bigha, along with compost. Diammonium phosphate (DAP) is applied to provide the necessary phosphorous, as well as a portion of the nitrogen. A recommended dosage for phosphorous is 40-60 kg P2O5 per hectare.

Wheat is sown from October to December and harvested from April to May. The recommended seed varieties for Wheat are 2967 and 54502. To manage weeds effectively, herbicides such as Piroxofop Propanyl and Clodinafop Ropargyl at a concentration of 15% WP are used. Additionally, Metribuzin at a concentration of 20% WP, Urea at 0.5%, Diammonium phosphate (DAP) at 7-10 kg per *bigha*, and Zinc (3-4 kg per *bigha*) are applied before sowing.

Paddy cultivation begins in June, with harvest occurring from mid-October to November. The recommended seed varieties for Paddy include 2626 Basmati, Noori, and Sharbati. Herbicides such as Clodinafop Propargyl, Combitec, and Endosulfan (reported in some villages) are utilized. In terms of fertilization, a combination of Zinc and NPK at a ratio of 12:32:16 is applied, along with 10 kg of Urea and organic fertilizer (*gobar khad*) per *bigha*. In *pallage* farming, the recommended practices involve the application of Urea, NPK, and Piroxofop Propanyl at a concentration of 15% (0.5L per *bigha*).

4.9 Floodplain and wetlands encroachment

The National Green Tribunal (NGT) has issued a directive to designate a no-construction zone extending 100 meters from the edge of the Ganga River, spanning from Haridwar to Unnao. Due to limited available land, there has been encroachment upon the floodplain in various areas of Moradabad, particularly along the rivers passing through the city, namely Ramganga, Gaagan, and Karula. The urbanized regions within the floodplains of the Ramganga River have been established for approximately 40-50 years, whereas the development on the floodplains of the Gaagan River is relatively recent, with a timeframe of 15-20 years (according to available Google imagery). Floodplains are of critical importance as they are susceptible to periodic inundation during flood seasons. The high density of the population has led to the expansion of built-up areas reaching towards the rivers. Significant encroachment hotspots, including both built-up and agricultural areas, have been identified along the Ramganga, Gaagan, Karula, and Aril rivers.

According to an analysis conducted using Google imagery, several notable hotspots of built-up areas in stretch (28.882634°N, 78.749574°E to 28.815130°N, 78.803056°E) have been identified in the vicinity of the Ramganga River (Figure 39). These locations include TDI City, Chakkar Ki milak, Jigar Colony, Daulat Bagh, Kisrol, Faiz Ganj, Lalbagh, Gadi Khana, Jama Masjid, Barwalan, and Dayanand Colony. These areas exhibit a significant presence of constructed structures as observed from the visual data available through Google imagery.

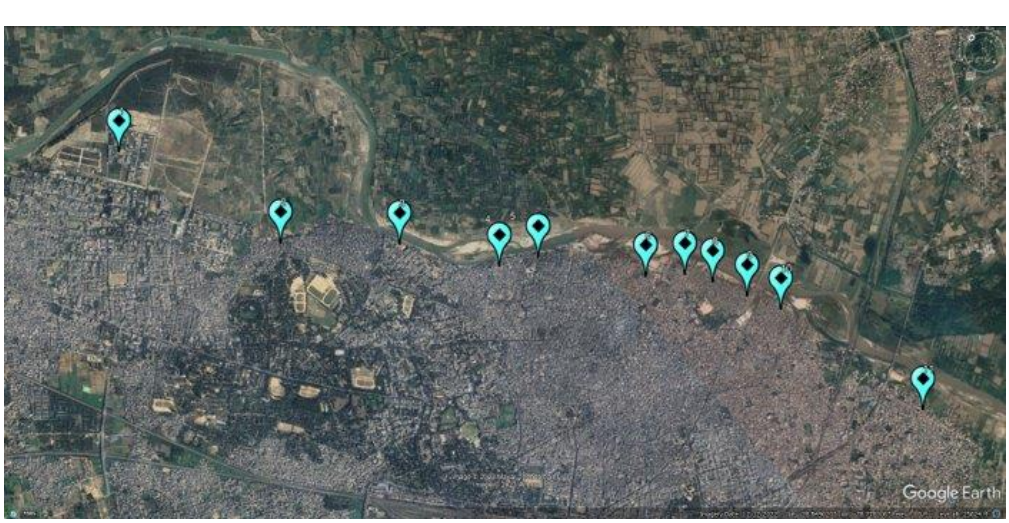


Figure 39 Built up area in stretch: Ramganga river

Through the utilization of Google imagery, a prominent hotspot of built-up area has been identified along the stretch encompassing the Gaagan River (Figure 40), specifically ranging from coordinates 28.842300°N, 78.687022°E to 28.816563°N, 78.718983°E. The identified locations within this stretch include Lakri Fazalpur and Sector 15, New Moradabad.

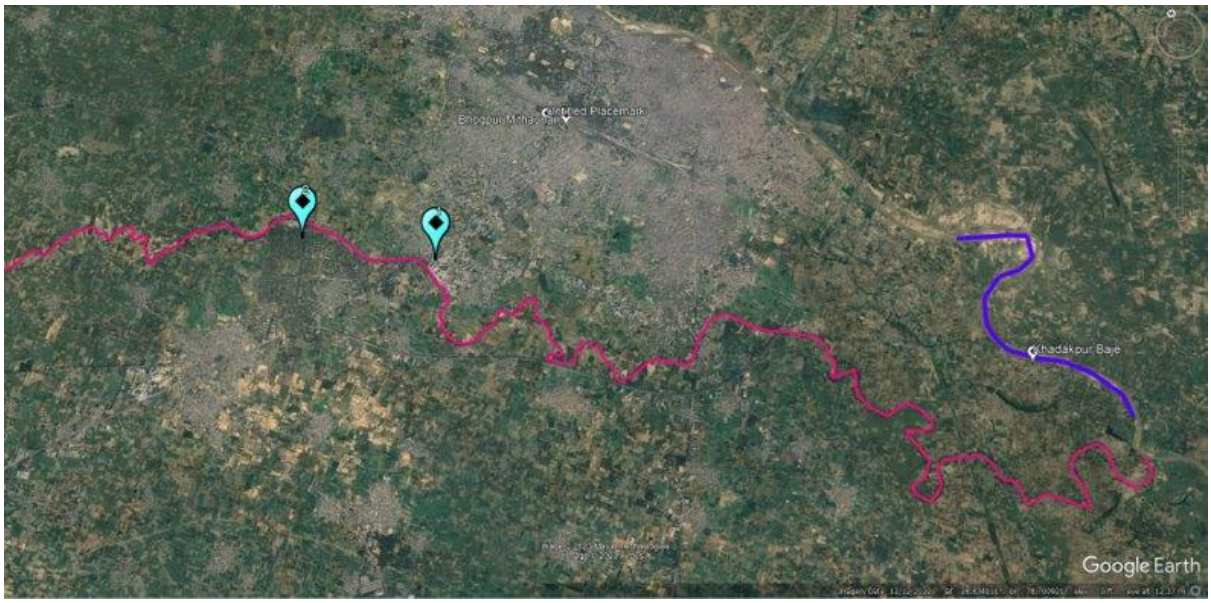


Figure 40 Built-up area in stretch: Gaagan River

Similarly, Utilizing Google imagery, a comprehensive analysis has identified specific locations where encroachments have taken place along the Karula River. These areas demonstrate the presence of unauthorized structures or activities encroaching upon the designated space, as observed through the comprehensive examination of Google imagery data. The identified encroachment sites span from coordinates 28.852405°N, 78.734978°E to 28.807251°N, 78.781347°E. The locations exhibiting encroachment along this stretch include Gautam Budh Colony, Bank Colony, Kashiram Nagar, Hydel Colony, Chidiya Tola, Line Par, Prem Nagar, Karula, Zahid Nagar, and Rahmat Nagar.

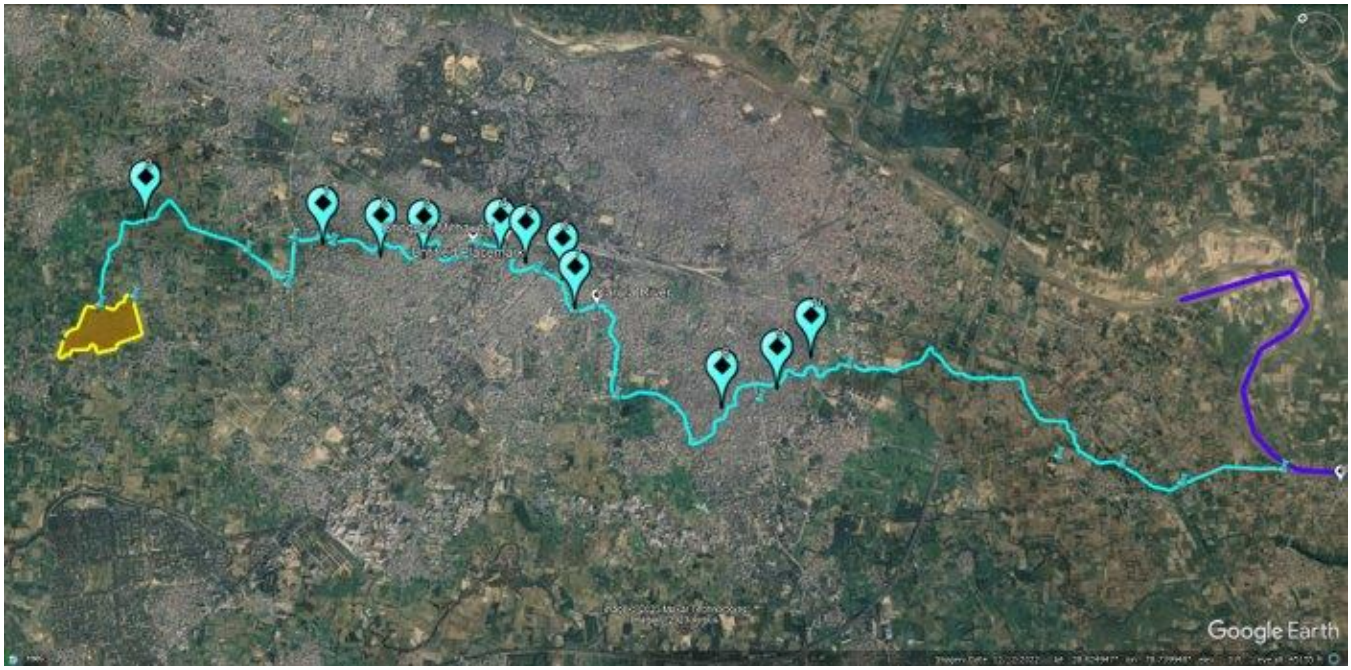


Figure 41 Built-up area in stretch: Karula River

The following cartographic representations (Figure 39, Figure 40, and Figure 41) delineate the precise alignment of embankments along the Ramganga and Gaagan rivers, alongside the demarcation of a 100-meter no-development zone, as stipulated by the directives set forth by the esteemed National Green Tribunal (NGT). These maps effectively elucidate the pervasive encroachments observed in proximity to the riverbanks within the urban core, thereby emphasizing the urgent requirement for a comprehensive resettlement initiative.

The preservation of the rivers and wetlands from the detrimental effects of urban development presents a formidable challenge to the municipal administration. Nevertheless, the city's master plan encompasses judicious provisions, including the demarcation of floodplains and the implementation of Development Control Regulations (DCRs), intended to proactively forestall any future encroachments within the remaining areas.

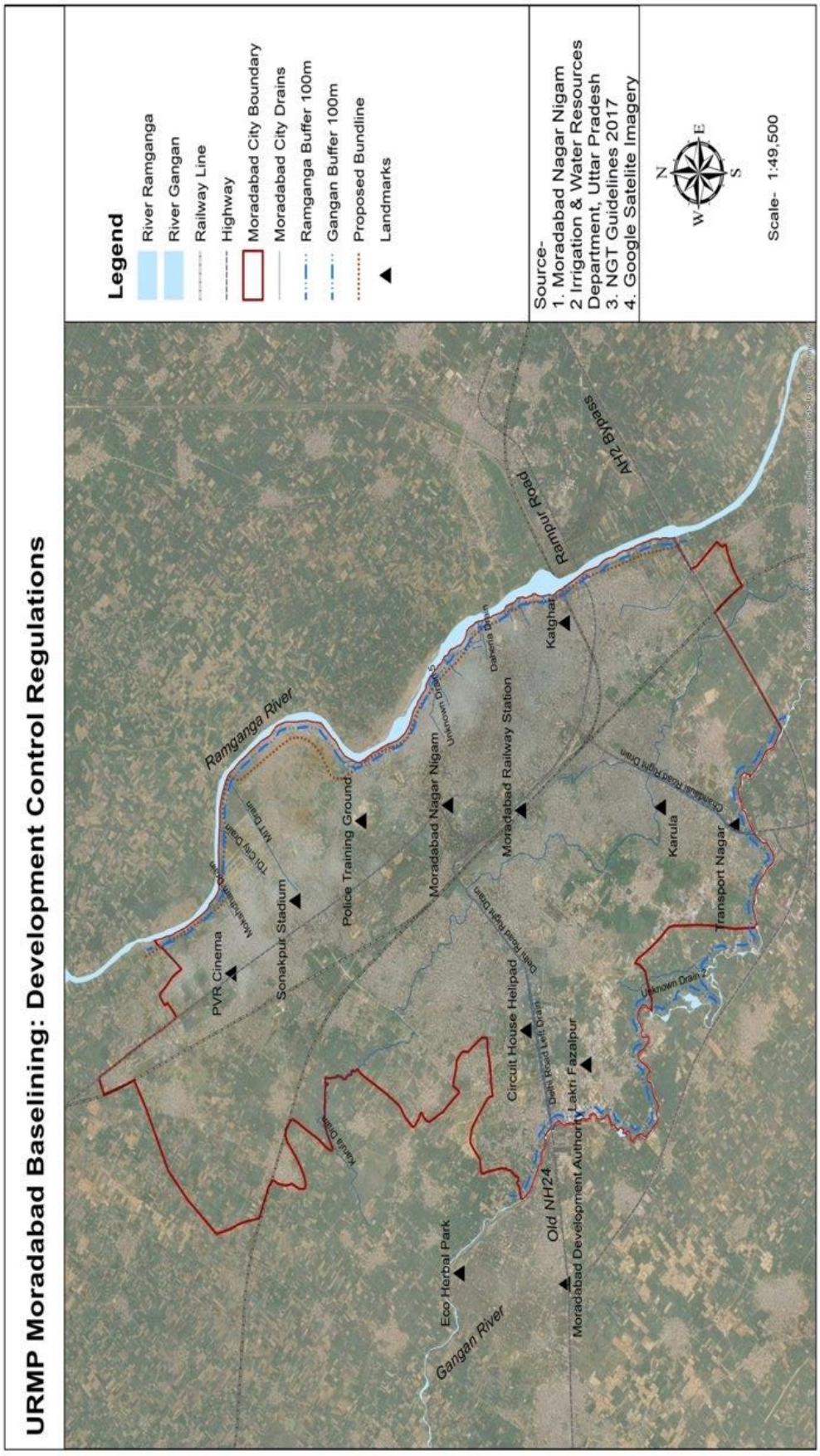


Figure 42 Urban River Management Plan (URMP) Moradabad Baselining

4.10 Industry

The prominent industries in the district encompass a range of sectors including Sugar, Milk processing, Paper, Distillery, Dyeing, textile synthetic fiber, and brass manufacturing. Of particular concern is the pollution of rivers resulting from the discharge of industrial effluents. The pollution burden in surface water streams, rivers, and drains, particularly in Karula Nala and Dhela Rivers, poses a significant issue. According to the Uttar Pradesh Pollution Control Board – Moradabad (UPPCB), the overall quantity of industrial waste generated in the district is measured at 5.92 MLD. Within the city, a total of 78 Effluent Treatment Plants (ETPs) have been established specifically for brass industries. These ETPs collectively discharge 0.530 MLD of treated effluent into five city drains, which ultimately flow into the Ramganga River through the Karula *Nala* and Gaagan Rivers. Karula *Nala* serves as the primary conduit for industrial waste originating from a significant portion of the city, ultimately discharging into the Ramganga River near Sikandarpur Patti village. Regrettably, the district currently lacks a Common Effluent Treatment Plant (CETP), exacerbating the challenges associated with managing industrial wastewater [20].

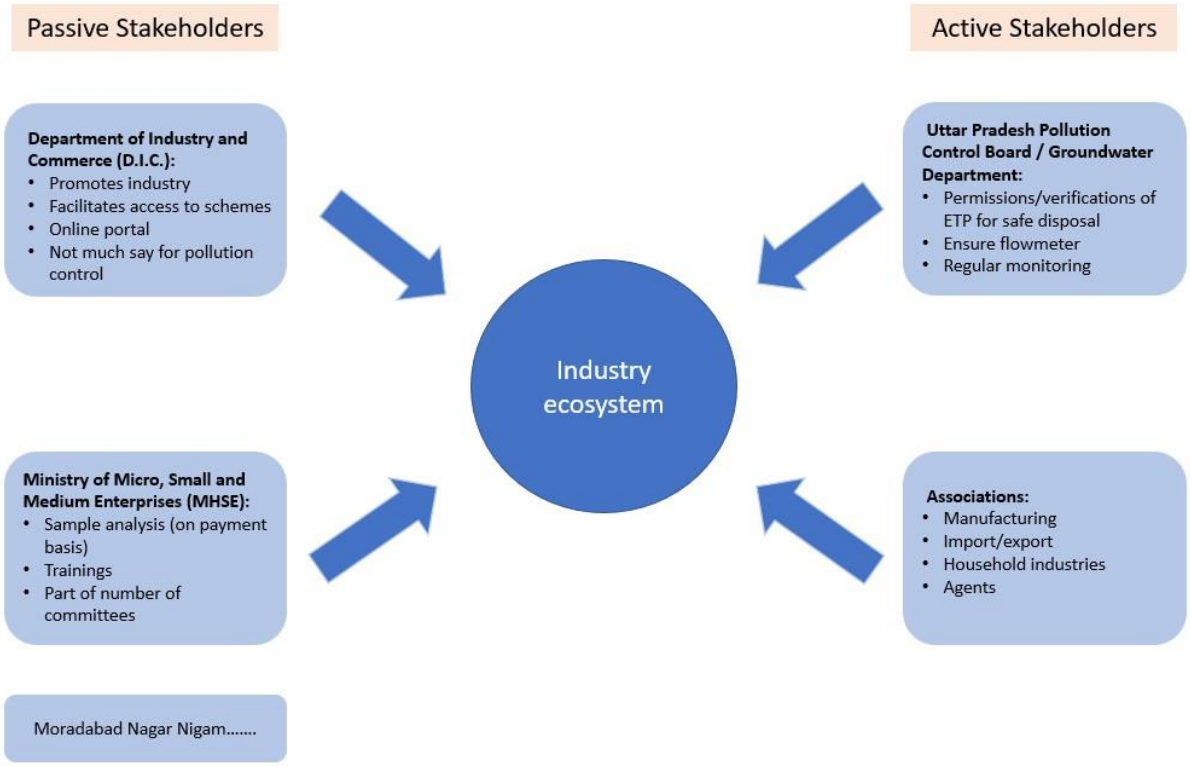


Figure 43 Industry ecosystem in Moradabad District

Moradabad city has gained renown for its thriving metalware industry. According to official records, approximately 9,330 small-scale industries are operating within the city [22]. However, it is crucial to acknowledge that the metalware handicraft industry and e-waste processing sectors are also significant contributors to the pollution of rivers. Moradabad boasts an estimated 4,000-5,000 manufacturing units, out of which 600 units are primarily engaged in export activities. Among these units, approximately 1,200 rely on water consumption for electroplating processes. Unfortunately, only 20% of these units have taken the initiative to install Effluent Treatment Plants (ETPs), and even among those, 80% are currently non-functional.

Table 14 List of Grossly Polluting Industries (GPI) Industries in district

1	Ajudhya Sugar Mills, Raja ka sahaspur, Bilari	Sugar
2	Deewan Sugar Ltd., Agwanpur, Kanth Road	Sugar
3	Genus Paper & Boards Ltd., Agwanpur	Paper
4	Milk Food Ltd., Agwanpur	Dairy
5	National Industrial Corporation Ltd. Raja ka sahaspur, Bilari	Distillery
6	Pashupati Acrylon Ltd., Kashipur Road, Thakurdwara	Dyeing and Textile synthetic fibre
7	Ramchandra Straw Products Ltd., Vill-Vijaipur, Tehsil Bilari, Dist	Paper
8	Rana Sugar Ltd. (Unit 3), Belwara, Manpur	Sugar
9	Shakumbhri Straw Products Ltd. (Unit-1), Vill- Deori, Chandausi Road. Tehsil Bilari	Paper
10	Shakumbhri Straw Products Ltd. (Unit-II), Vill- Deori, Chandausi Road. Tehsil Bilari	Paper
11	Shakumbhri Straw Products Ltd. (Unit-III), Vill- Deori, Chandausi Road. Tehsil Bilari	Paper
12	Triveni Engineering & Ind. Ltd. (Sugar Unit), Rani Nagal, Tehsil- Thakurdwara	Sugar

Within the catchment area of Dhela River, there are 14 Grossly Polluting Industries (GPIs) in operation. The combined water consumption of these GPIs amounts to 56,514 KLD (Kilo Liters per Day), while approximately 29,490 KLD of wastewater is discharged either directly or indirectly into the Dhela River through drainage systems [23].

Table 15 Status of Industrial pollution in Dhela River [23]

	Water use (KLD)	Effluent generate
Katyayini Paper Mills Pvt. Ltd. Near Sodhi Farm, vill. KuddiyawalaJaspur	2665	2250
Katyayini Paper Mills Pvt. Ltd. Near Sodhi Farm, vill. KuddiyawalaJaspur	5430	4920
Naini Tissues Ltd., Moradabad Road, Kashipur	7675	5020
Prolific Papers Pvt. Ltd.Vill. Girdhai, Kashipur	1858	1000
Sidarth Papers Pvt. Ltd (Unit 2), Moradabad Road, Kashipur	5625	2200
Siddheshwari Paper Udyog Pvt. Ltd., Moradabad Road, Kashipur	4660	2000
Bahl Paper Mills Limited., Aliganj Road, Kashipur	5000	3450
Sidharth Papers Pvt. Ltd., Moradabad Road, Kashipur	4680	2200
Sahota Papers Limited., Narayanpur, Jaspur	5010	2250
Dev Rishi Papers Pvt. Ltd., Jagatpurpatti, Jaspur, Kashipur	2325	1650
Fibremarx Papers Pvt Limited., Haldua Sahu, Shivrajpur, Kashipur	3500	2600
Vishwanath Paper & Boards Ltd, Haldua Sahu, Shivrajpur, Kashipur	1965	1750
B.R. Papers Pvt. Ltd., Vill. Lalpur, Tehsil Jaspur, Kashipur	1296	270
The Kisan Sahakari Chini Mill, Nadehi, US Nagar	4825	180

The Uttar Pradesh Pollution Control Board (UPPCB) has four monitoring stations in the Moradabad district, two of them on the Ramganga River, one on the Dhala River, and one on the Gaagan River. One monitoring station is upstream of the Ramganga River at Agwanpur village, while the other is on the downstream side at Katghar, Road bridge. On the Dhela River, the monitoring station is located in Dharak Nagla (Bhojpur), while on the Gaagan River, the monitoring station is located at Lakri Fazalpur, Delhi Road bridge. In addition to the aforementioned four locations along the rivers, the UPPCB is also actively monitoring a total of 24 drains in the city.

4.11 Aquatic Biodiversity (Fishes)

According to a study published in the Indian Journal of Animal Sciences, a comprehensive assessment of fish species in the Ramganga River was conducted at eight distinct locations. Notably, two of these locations, Agwanpur and Katghar, were situated within the boundaries of the Moradabad district. Their survey revealed a total of 92 fish species present in the Ramganga River, with 36 species recorded in Agwanpur and 43 species recorded in Katghar. These species predominantly belong to the families Cyprinidae, Siluridae, Belonidae, Ambassidae, and Bagridae. Furthermore, fish surveys were conducted during E-Flows monitoring of the Ramganga River at additional locations, including Hareoli (Bijnor), Agwanpur, and Katghar (Moradabad). The outcomes of these surveys have been visually represented through graphical presentations [24].

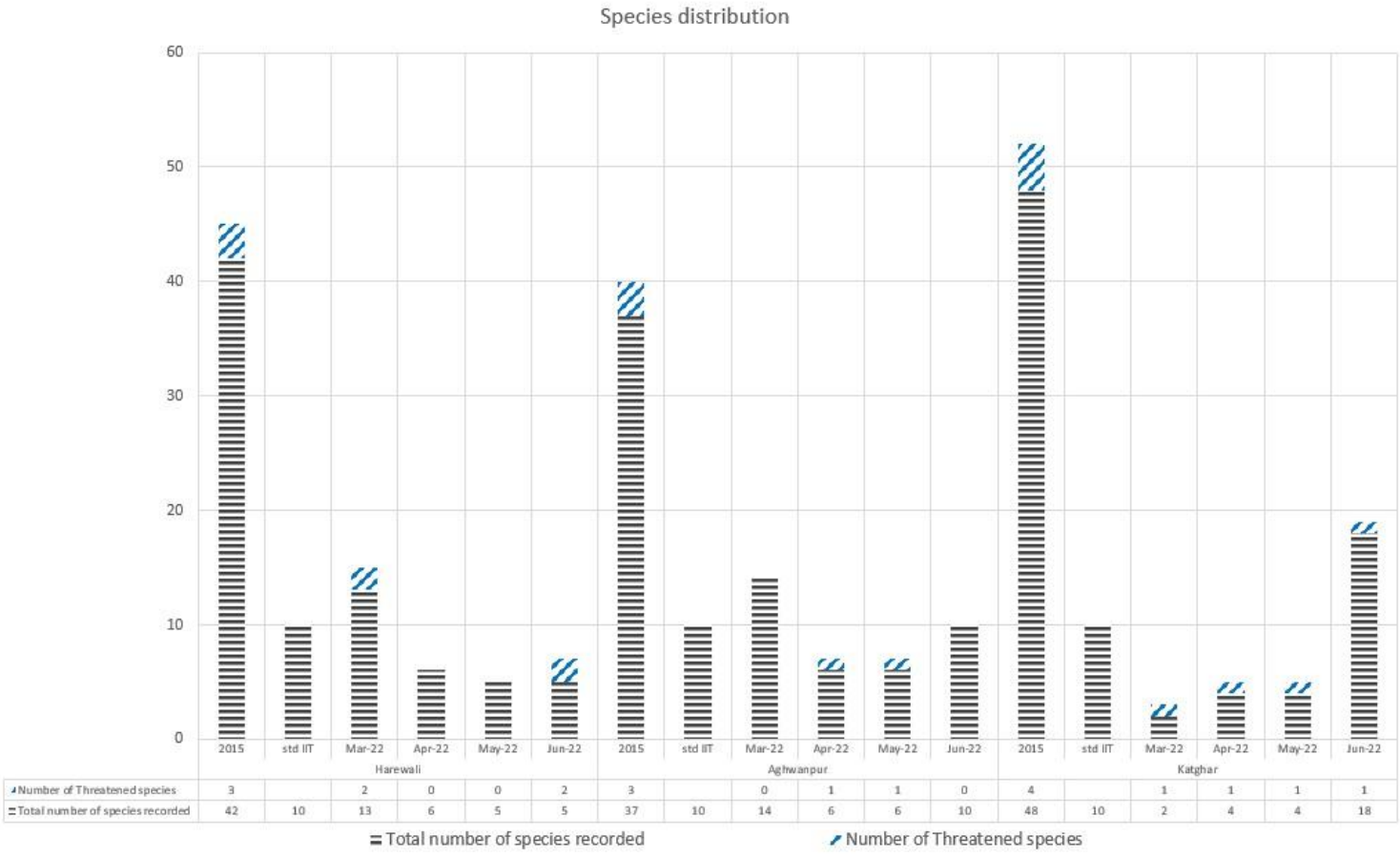


Figure 44 Fishes of Ramganga river

A total of 52 species, distributed among 16 families, were documented during the E-Flows monitoring conducted from March to June 2022 by the WWF (Figure 45). Among these, Katghar accounted for 18 species, while Agwanpur contributed 14 species. Out of the entire recorded species, four are classified as threatened according to the IUCN List. *Cyprinus carpio* is an exotic species and falls under the vulnerable category as designated by the IUCN list. *Chela laubuca*, which was observed in both Agwanpur and Katghar, is categorized as near threatened.

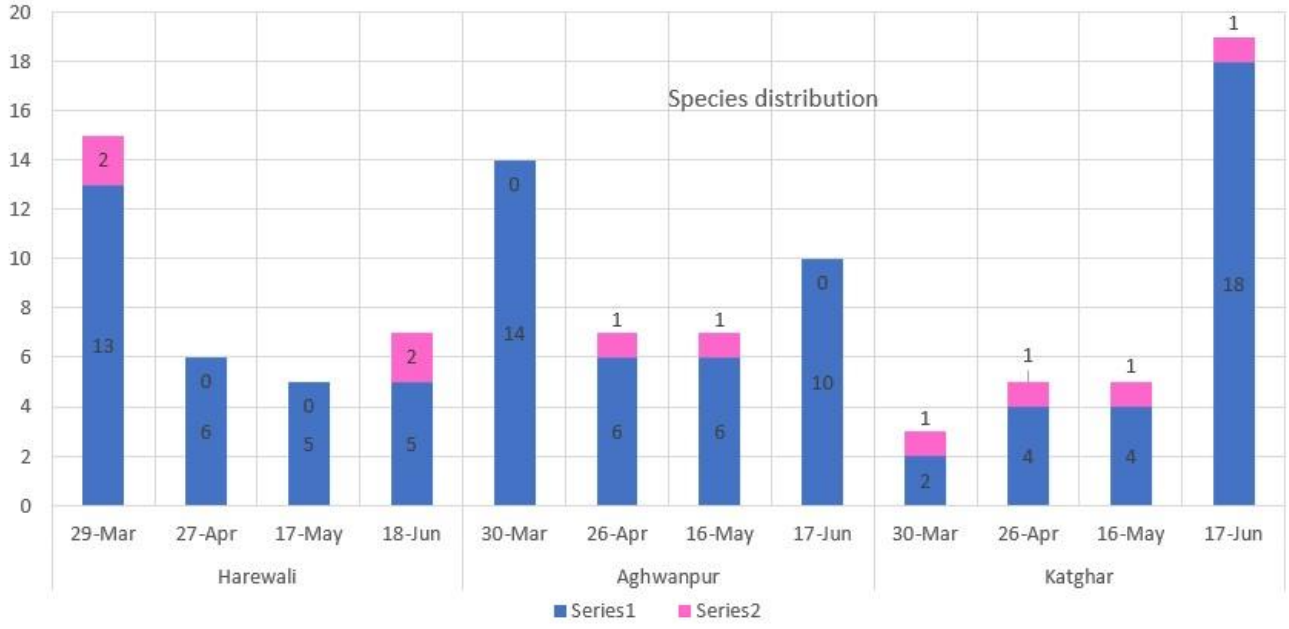


Figure 45 Species distribution in the Ramganga River. Series 1 represent number of threatened species and Series 2 represent total number of species

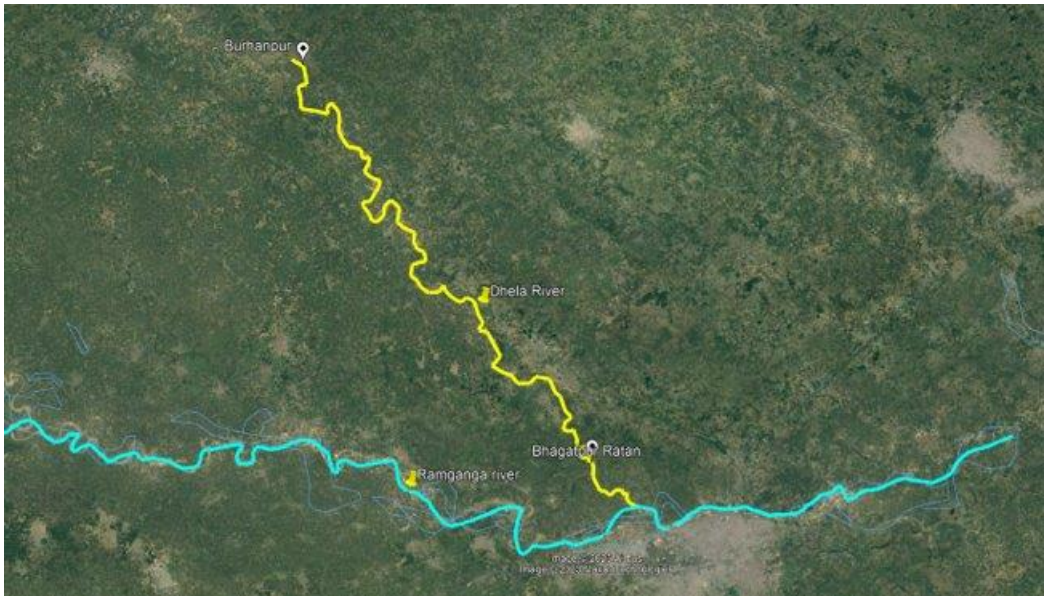


Figure 46 Dhela River confluence with Ramganga River

A comprehensive investigation into the ichthyofauna and water quality of the Dhela River was conducted in June 2022, focusing on five designated locations: Bhagwatipur, Masanpur, Burhanpur, Dhela Village, and Swaldha, along with Dhela Barrage. Among these locations, the three sites situated in the Moradabad district were determined to be completely devoid of water, exhibiting no signs of aquatic presence (Figure 47). During the study, a total of 9 fish species (Table 16), belonging to 2 orders and 4 families, were identified and documented at two specific sampling stations, namely Burhanpur and Dhela Village in Uttarakhand. Out of the 9 recorded species, 8 were categorized as least concern, indicating a relatively stable conservation status, while one species, *Tor putitora* (*Mahseer*), was classified as endangered, highlighting the need for conservation measures to protect its population.

Figure 47 River Dhela at Bhagwatipur in Moradabad District in May 2022

Table 16 Key species recorded in Dhela River in the District boundary

Channa punctata* (Bloch 1793)- *Sol
Channa striata (Bloch, 1793)- *Soli*
Colisa fasciatus (Bloch & Sch. 1801)-
Rasbora rasbora (Hamilton 1822)-
Heteropneustes fossilis (Bloch 1794)- Singhi

4.12 Waste and Sewage

The overall volume of sewage generated within the district amounts to 163 million litres per day (MLD), which is subsequently discharged into River Ramganga, Gaagan, and Karula nala/river through a network of 24 primary drainage channels. Among these 24 drains, 17 channels exclusively transport domestic waste, while the remaining 7 drains carry mixed types of waste. None of the drains solely carry industrial waste. Due to the absence of separate sewer line networks in cities, stormwater often becomes intermingled with the sewage flow. Within the city, a sewage treatment plant (STP) with a capacity of 58 MLD is operational, aiming to treat and manage the sewage effectively. Out of the total 24 drains, 21 channels direct approximately 108 MLD of waste to the Ramganga River, while the remaining 3 drains convey 35 MLD of waste to Gaagan. The cumulative municipal sewerage generation stands at 163 MLD, whereas industrial waste contributes 0.530 MLD, which is transported through 5 specific drainage channels [20].

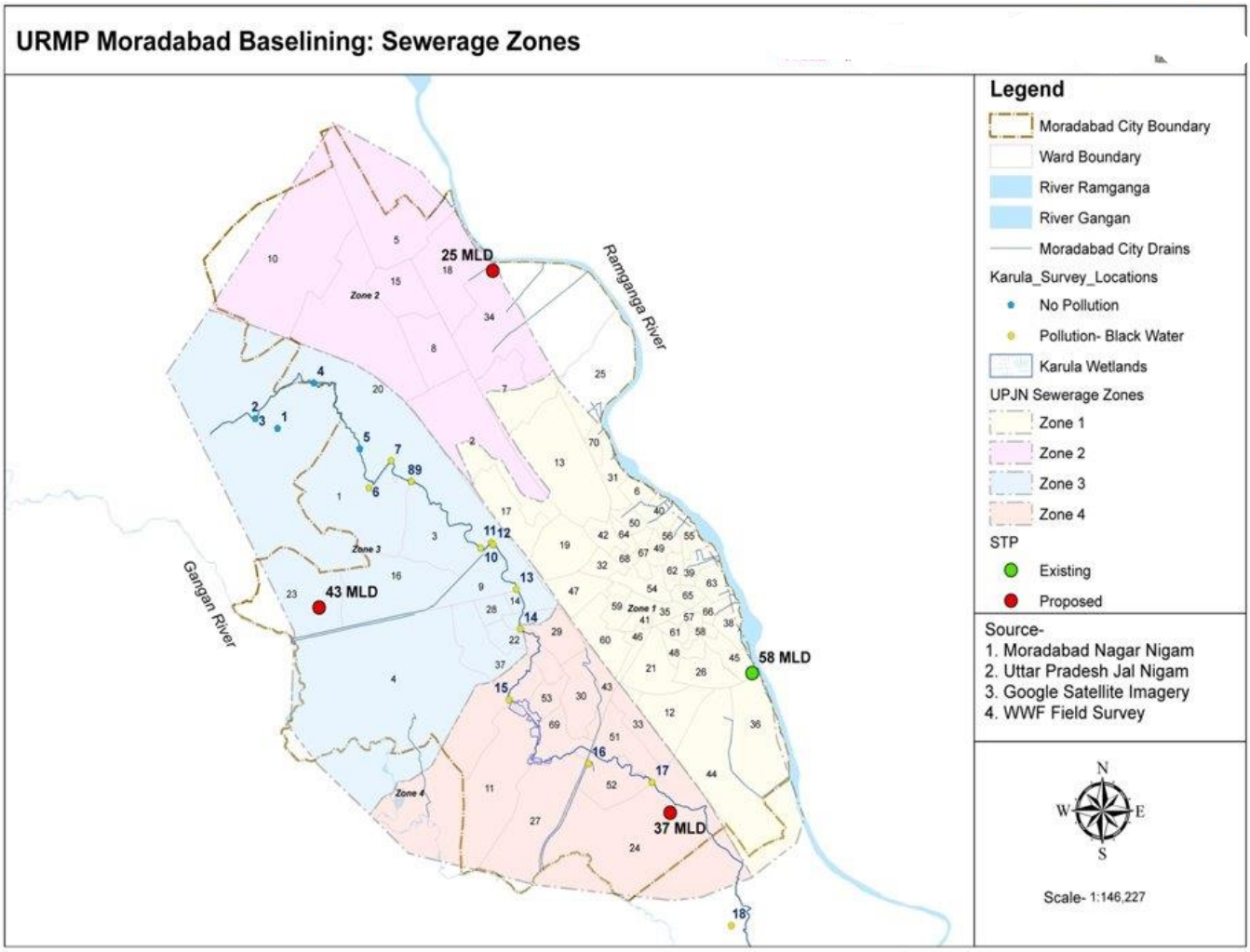


Figure 48 Zone wise location of STP in Moradabad district

Table 17 Summary of STP- Existing and Under Planning in Moradabad District [22]

S.No.	Zone	No. of drains	Status of Drain			Sewage discharge (MLD)			Total discharge in the rivers
			Tapped	Un-tapped	Partially tapped	Treated	Un-Treated	Total	
1	I	14	14	0	0	24	34	58	58
2	II	5	0	5	0	0	25	25	25
3	III	2	0	2	0	0	43	43	43
4	IV	3	0	3	0	0	37	37	37
Total		**24**	**14**	**10**	**0**	**24**	**139**	**163**	**163**

Zone (a)	Households (2015-16) (b)	Households connected with toilet (c)	% (d)	STP (MLD) (e)	Remark
I	79,500	78,247	98.42%	58	Existing, operational at 41 % capacity (24 MLD)
II	23,128	19,476	84.21%	25	Proposed under NMCG grant, DPR prepared (2017-18)
III	27,265	21,908	80.35%	43	Proposed, DPR prepared (2020-21)
IV	26,073	19,668	75.43%	37	Proposed, DPR prepared (2020-21)
	1,55,966	1,39,299	84.60%	163	

The Nagar Nigam of Moradabad has successfully implemented a total of 32 bio-remediation units along the 24 drainage channels responsible for carrying sewage to both the Ramganga River and Gaagan Rivers. Within the municipal corporation limits, a fully operational 10 thousand litres per day (KLD) decentralized sewage treatment plant has been established, ensuring efficient treatment of sewage within the designated area [22].

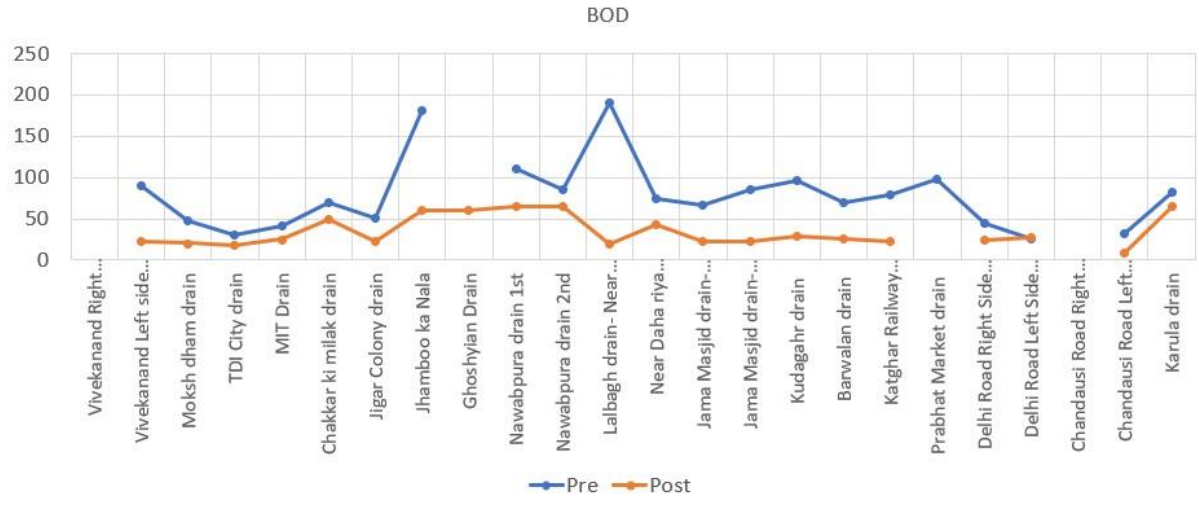


Figure 49 Graph representing pre and post-effect on BOD after the installation of 32 Bio-remediation units on the 24 drains carrying sewage to the Ramganga river and Gaagan Rivers.

Table 18 Status of Sewage drains in Moradabad District. Drains with GREEN colour have been tapped.

S.No.	Name Of Drain	Discharge (MLD)	Tapped Discharge	Discharge as per contract	Average flow recorded
1	Vivekanand (Left) Drain	1.08		1.08	
2	Vivekanand (Right) Drain	2.61		2.61	2.90
3	Mokshdham Drain	7.22		7.22	18.43
4	TDI City Drain	4.86		4.86	0.50
5	MIT Drain	7.50		7.50	35.33
6	Chakkar ki Milak Drain	2.00	2.00	0.00	2.99
7	Jigar Colony Drain	1.00	1.00	0.00	1.41
8	Jhabbu Ka Nala	10.00	4.00	6.00	9.66
9	Ghosiyan Drain	2.00	1.50	0.50	
10	Nawabpura Drain(1)	1.00	1.00	0.00	1.53
11	Nawabpura Drain(2)	2.00	2.00	0.00	2.15
12	Lalbagh Kali Mandir Drain	1.00	1.00	0.00	1.68
13	Near Dahariya Behind Hathi Mandir	2.50	2.00	0.50	3.27
14	Jama Maszid (Left)	1.00	1.00	0.00	1.84
15	Jama Maszid (Right)	0.90	0.80	0.10	2.06
16	Kudaghar Darin	5.00	0.50	4.50	4.47
17	Barvalan Drain	5.00	4.00	4.50	0.39
18	Katghar Rly St.Drain near Bridge	6.50	1.50	2.50	2.28
19	Prabhat Market Drain	1.75	1.75	0.00	
20	Delhi Road (Right) Drain	4.86		4.86	2.69
21	Delhi Road (Left) Drain	2.09		2.09	2.50
22	Chandausi Road (Left) Drain				
23	Chandausi Road (Right) Drain	2.98		2.98	0.38
24	Karula Drain	26.11		26.11	44.08
		100.96	**22.3**	**77.91**	**141**

A substantial percentage, approximately 74%, of households within Moradabad city is connected to on-site sanitation systems, including septic tanks and soak pits (Figure 50). As a result, effective management of faecal sludge and septage (FSSM) becomes imperative for the city's sanitation infrastructure. Despite having a Faecal Sludge Treatment Plant (FSTP) with a capacity of 32 kiloliters (KL), the current utilization of the facility is limited due to inadequate planning and a lack of awareness among the city's residents. The existing provisions for septage management are severely inadequate, posing a significant risk to the health and hygiene of rivers, water bodies, and drainage systems. Approximately 65% of the city is covered by a sewerage network, providing a more comprehensive sanitation solution. To cater

to the needs of the floating population, the construction of 88 community toilets at 11 locations and 226 public toilets at 29 locations has been undertaken throughout the city. Furthermore, 36 smart toilets have been strategically installed at 18 locations within the city, leveraging technological advancements for improved sanitation facilities.

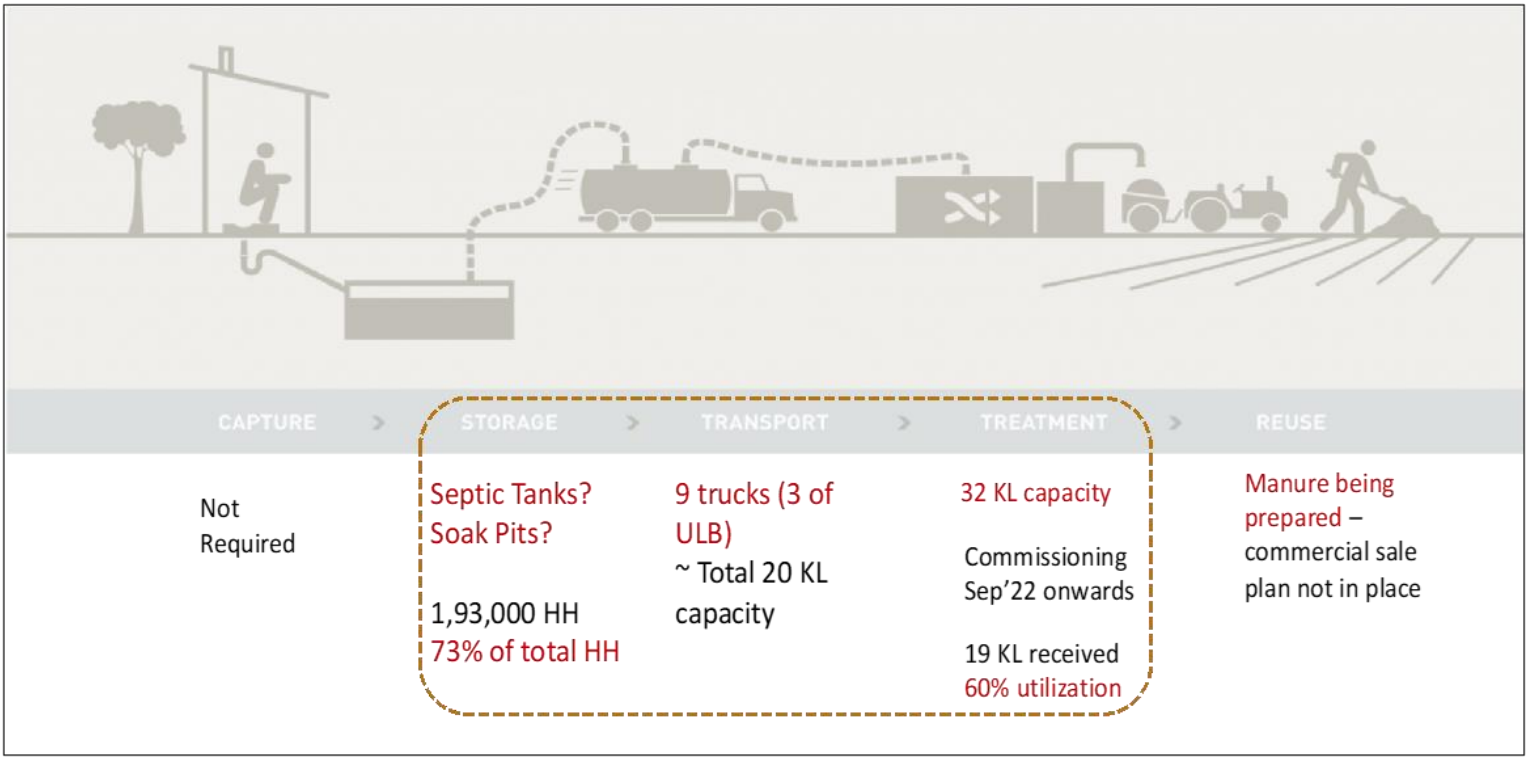


Figure 50 Current status of FSM value chain in Moradabad city. Source: URMP (under submission)

An 18 Million Liters per Day (MLD) capacity Sewage Treatment Plant (STP) is currently under construction, while a proposal for a 14 MLD STP has been submitted to the National Mission for Clean Ganga (NMCG) for financial assistance on the Dhela River. The rivers Dhela is directly polluted by industrial effluent transported through the Dhandi and Pachhna drains, as well as the Choti Dhela and Lapakna Nala. In addition, six municipal drains carry sewage and municipal drainage from Kashipur town, which ultimately flows into the Dhela River. The sewage generated by Kashipur town amounts to approximately 28 MLD.

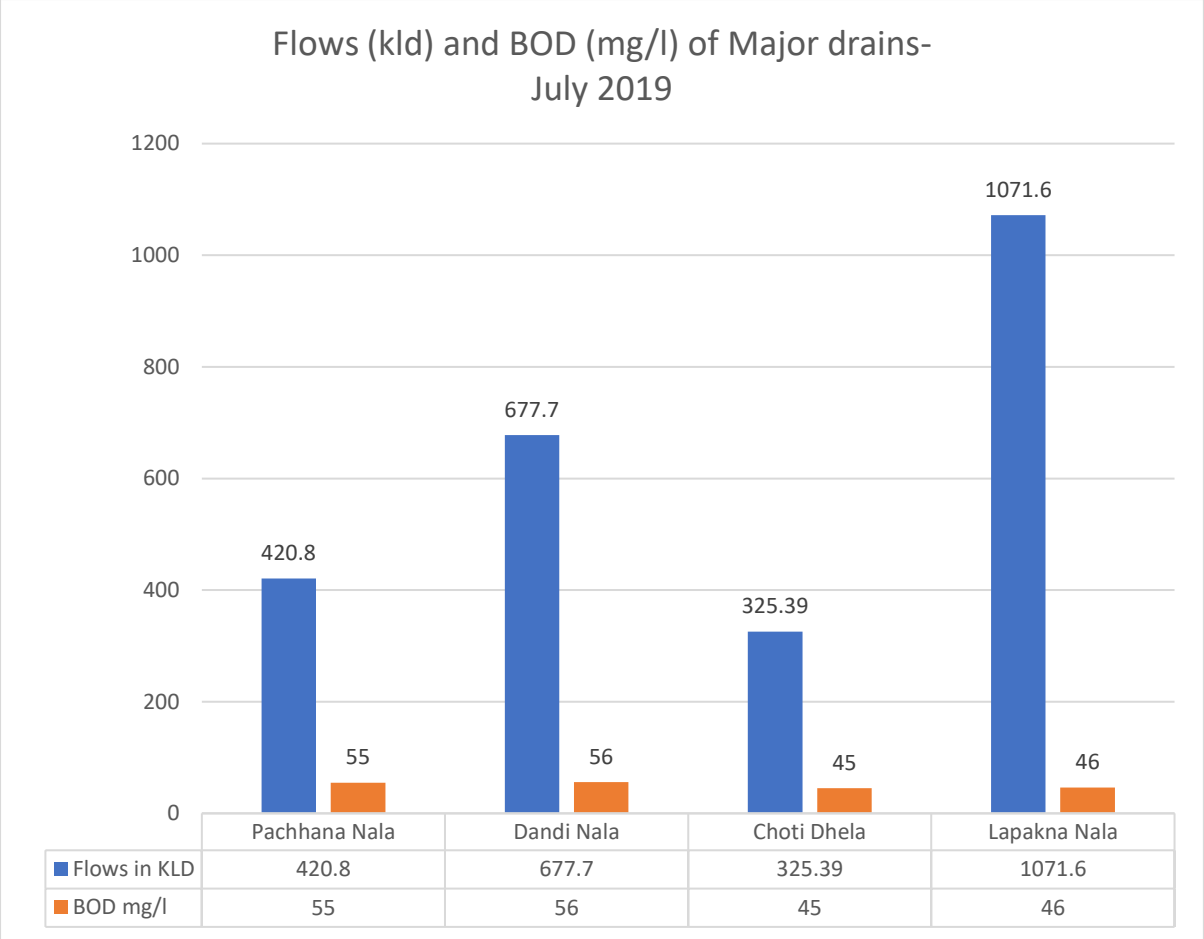


Figure 51 Status of Domestic sewage in Dhela River [25]

4.12.1 Solid waste

The total quantity of solid waste generated in the city of Moradabad is estimated to be 372 Tons per Day (TPD). Currently, 31% of the waste is being separated at the source of generation. The waste collection system covers all 70 wards, ensuring that 100% of the waste is collected and transported to the designated landfill site. This process involves the use of 280 waste collection vehicles equipped with separate compartments for dry and wet waste. To further enhance waste segregation at the source, an NGO called Samvedna Society is collaborating with the Municipal Corporation (MC) to educate residents at the ward level. The trenching ground located at Rampur Road is tasked with handling 580,000 metric tonnes of legacy waste. M/s NACOF has been selected to manage the processing and safe disposal of this waste. The agency commenced waste processing activities on January 18th, 2022, and has processed approximately 285,000 metric tonnes of legacy waste so far. M/s NACOF has installed a Pozollana machine plant with a capacity of 2,200 TPD. The project is expected to

be completed by June 30th, 2023. The city does not have any identified Garbage Vulnerable Points (GVPs) within its jurisdiction.

The Municipal Corporation has established a fully operational "Waste to compost plant" with a capacity of 400 Tons per Day (TPD). Currently, all freshly generated waste is being disposed of at the designated processing site. The diverse culture, changing food habits, and lifestyles in the area contribute to the generation of various types of waste, posing a challenge for the Municipal Corporation in terms of waste collection, treatment, and management. In the current circumstances, the Moradabad Municipal Corporation is undertaking actions to address the management of Municipal Solid Waste (MSW) through the implementation of potential solutions at both centralized and decentralized levels. This involves utilizing scientific treatment processes such as fresh waste treatment, legacy waste treatment, and water treatment. Legacy solid waste has been deposited in the floodplain and along the riverbank, while the MSW processing unit is also situated in the floodplain area. There is currently no leachate treatment facility available at the dumping yard. Religious waste, specifically at the Kali Temple, has been observed to be dumped along the riverbanks [26].

4.12.2 E-waste

Addressing the issue of E-waste is of paramount importance in mitigating river pollution in Moradabad city. E-waste processing is visibly concentrated in two specific locations. The first site is situated in the river bed, adjacent to the Kali Mata Temple. The second site is located at the Bandhe Wali Mazar, opposite the Jama Masjid (Figure 53). These sites serve as hubs where primitive industries engage in processing e-waste. The e-waste is directly discharged into the river or wetland, to extract metals and ash. Informal household metalware industries utilize this recovered ash, which is employed in lining furnaces, while the extracted metals are utilized in the production of handicraft items.

According to information provided by a local non-governmental organization (NGO), approximately 500 young workers are engaged in this informal and highly polluting activity. At any given time, around 100 workers operate at the aforementioned sites. The e-waste is sourced from markets in the Delhi National Capital Region (NCR). Workers purchase the waste and subsequently burn it to recover valuable metals, primarily copper, gold, and aluminium. The following (Figure 52) represents the supply chain involved in the informal e-waste processing activities within the city.

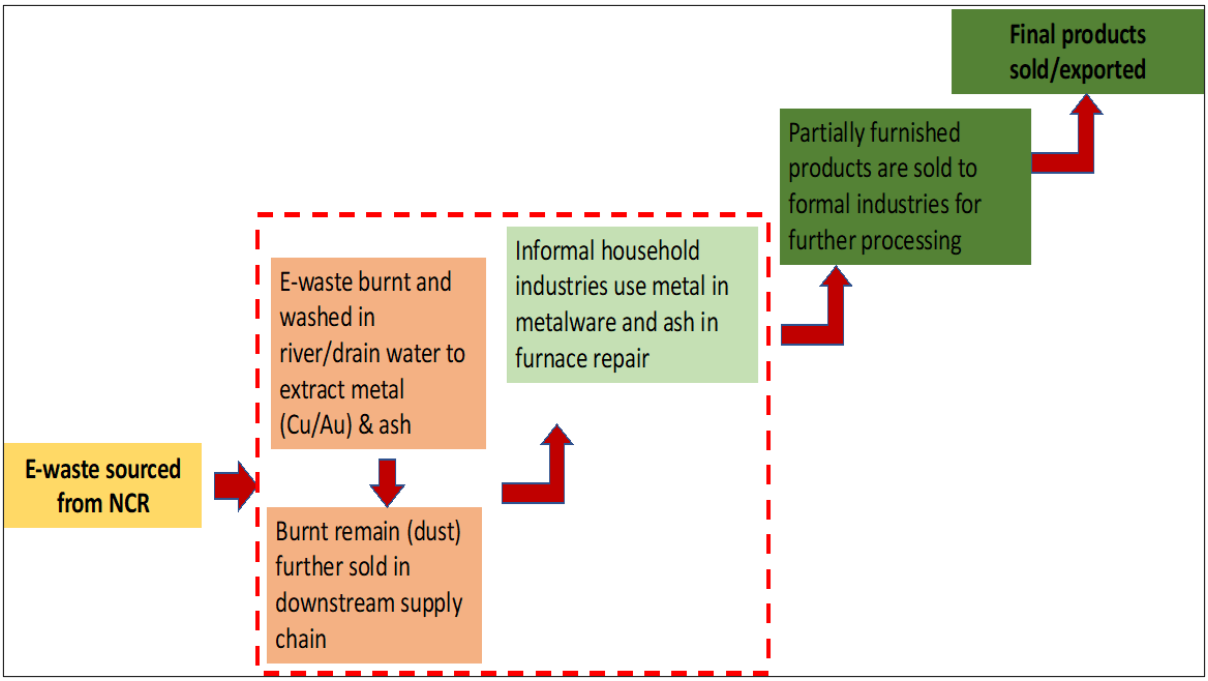


Figure 52 Informal E-Waste Processing in Moradabad City

Figure 53 Key Hot Spots of E-Waste processing along Ramganga River

5. Institutional arrangement of the District

Comprehensive and integrated strategies for the rejuvenation of rivers encompass entire river basins, taking into account not only the issue of sewage generated by human settlements but also other contributing factors such as industrial activities, irrigation water extraction, hydropower utilization, discharge of solid waste, and degradation of riverbanks. Therefore, it is imperative to establish planning, financing, monitoring, and coordinating authorities to strengthen the collective efforts of the Central Government, State Governments, and stakeholders in alignment with the NMCG Authority Notification Order of 2016. This will ensure the effective mitigation of pollution and the restoration, protection, and management of the Ganga River.

5.1 NMCG, SMCG, and DGC

National Mission for Clean Ganga (NMCG): The NMCG is responsible for developing guidelines for district planning and mandates the District Ganga Committees (DGCs) under the Authority Notification. It approves district plans and facilitates financial arrangements for their implementation.

State Mission for Clean Ganga Uttar Pradesh (SMCG UP): The SMCG UP is an extended arm of the National Mission for Clean Ganga (NMCG) specifically designated for the state of Uttar Pradesh. It implements the Namami Gange program and other related initiatives through various executing agencies.

District Ganga Committee (DGC – Moradabad): The DGC in Moradabad is mandated to formulate the District Ganga Plan following the Authority Notification.

5.2 Key Stakeholders

5.2.1 National level

- **Central Groundwater Board (CGWB):** Contributes to district planning by providing inputs for the sustainable development and management of groundwater resources across the country.
- **Central Water Commission (CWC):** Contributes to district planning by focusing on components related to water resource management and monitoring the quality of river water.

- **National Water Academy (NWA):** Contributes to district planning based on the internationally recognized River Basin Management (RBM) cycle approach. NWA collaborates with NMCG and GIZ to implement RBM cycle training.
- **Ministry of Jal Shakti, Department of Water Resources, River Development and Ganga Rejuvenation (DoWR, RD & GR):** While not directly involved in the planning stage of district plans, MoJS, DoWR, RD & GR serve as the nodal ministry at the central level to support the development of Ganga and sub-basin water frameworks by the states.
- **Ministry of Jal Shakti, Department of Drinking Water and Sanitation (DWS):** Similar to the previous ministry, MoJS, DWS is not directly involved in the planning stage of district plans but provides central-level support for the development of Ganga and sub-basin water frameworks by the states.
- **Ministry of Housing and Urban Affairs (MoHUA):** Although not directly involved in the planning stage of district plans, MoHUA provides policies, strategies, and guidelines through CPHEEO to the state and union territory governments, including municipal corporations/committees.
- **Central Pollution Control Board (CPCB):** Contributes by providing data and information on pollution abatement and monitoring the water quality within the basin.
- **Centre for Ganga River Basin Management and Studies (cGanga):** Coordinates and ensures synergy between the District Ganga Plan and the Ganga Basin Plan.
- **Wildlife Institute of India (WII):** Coordinates biodiversity aspects and local awareness activities within the district plans.
- **National Institute of Urban Affairs (NIUA), MoHUA:** Ensures synergy with the urban river management plan framework and urban river management plans for urban local bodies (ULBs).
- **National Institute of Hydrology, Roorkee,** Ministry of Jal Shakti, Department of Water Resources, River Development and Ganga Rejuvenation, Govt. of India**:** Provides leadership in hydrology research, offering scientific solutions for sustainable development and self-reliance in the water sector. Conducts studies on water resource availability under varying hydrological, climatic, and sociocultural conditions using

modelling techniques. Offers scientific advice to various stakeholders on water-related issues.

5.2.2 State level

- **Uttar Pradesh Jal Nigam:** Uttar Pradesh Jal Nigam will primarily play a key role in the water supply and liquid waste management planning component of the District Plans. It will also be involved in the design and execution of projects related to faecal sludge and septage treatment facilities.
- **Uttar Pradesh Pollution Control Board:** The Uttar Pradesh Pollution Control Board is responsible for providing recommendations and implementing measures related to the prevention and control of water and air pollution. They collect, compile, and analyze data on water and air pollution, as well as organize Information, Education, and Communication (IEC) activities on pollution prevention, control, and waste management.
- **Urban Development Department, Govt. of Uttar Pradesh:** The Urban Development Department of the Government of Uttar Pradesh works towards implementing major schemes through the Urban Development Directorate.
- **Department of Rural Development, Govt. of Uttar Pradesh:** The Department of Rural Development, under the Government of Uttar Pradesh, implements various programs aimed at promoting self-employment, rural housing, rural connectivity, village development, and other initiatives for the development of rural economy and infrastructure.
- **Board of Revenue, Uttar Pradesh:** The Board of Revenue in Uttar Pradesh serves a role in revenue administration and management within the state.
- **Uttar Pradesh Forest Department:** The Uttar Pradesh Forest Department is responsible for implementing the National Forest Policy, focusing on ecological stability and the sustainable management of natural resources.
- **Uttar Pradesh Irrigation and Water Resources Department:** The Irrigation and Water Resources Department, under the Government of Uttar Pradesh, is mandated for construction, operation and maintenance of water resources infrastructures (primarily irrigation and flood protection) in the state. They also maintains information on

irrigation, rivers, water resources infrastructure, hydropower, water resources and management.

- **Remote Sensing and Application Centre, Uttar Pradesh:** The Remote Sensing and Application Centre (RSAC-UP) is involved in geophysical surveys and employs techniques for soil and water testing. Its main objectives are the assessment, monitoring, utilization, and management of various natural resources in the state. RSAC-UP provides support for crop area estimation, production estimation of different crops, space-based information for decentralized planning, wetland inventory assessment, integrated watershed monitoring, vulnerability assessment, desertification and land degradation monitoring, plantation assessment, water sector restructuring, unauthorized colony mapping, asset mapping, groundwater targeting, rural and urban planning (including smart city planning), and infrastructure planning.
- **State Water Resources Data Analysis Centre (SWaRDAC):** SWaRDAC serves as the technical arm of the Uttar Pradesh Water Management and Regulatory Commission (UPWaMReC). It provides technical advice to the commission and supplies water-related data to the State Water Resources Agency (SWaRA) and other central/state water plans for all river basins in the state.

5.2.3 District level

- **District administration authorities:** The district administration authorities are responsible for law and order, as well as planning, development, and management activities within the district.
- **Urban local bodies (ULBs) falling in the district:** Urban local bodies, including Nagar Nigam, are involved in planning, development, upkeep, and management activities within their respective urban areas.
- **Jal Nigam:** Jal Nigam is responsible for the planning, survey, design, and execution of water supply and sewage schemes in both urban and rural areas of Uttar Pradesh. It is also authorized as a construction agency.
- **UP Irrigation & Water Resources Department:** The Irrigation Department is responsible for the construction operation and management of canals, state-tube wells, flood protection works, reservoirs for water conservation and anti-erosion works. The Flood Divisions of this department, in some of the flood-prone districts of

the state, deals extensively with the floods and river management. One such division exists in Moradabad as well, called Floods Division – Moradabad. Officials from this division office are part of Moradabad DGC as well.

- **Public Works Department:** The Public Works Department is involved in the construction, maintenance, and planning of roads, bridges, and government buildings.
- **Division/District Office of Environment, Forest, and Climate Change Department:** The forest officers in the Division/District Office of the Environment, Forest, and Climate Change Department are responsible for issues related to forests, the environment, and wildlife within their jurisdiction.
- **Agriculture Department:** The Agriculture Department focuses on promoting food and nutritional security. They provide various schemes, soil testing services, seeds and pesticides, and information about agricultural machinery and soil conservation programs.
- **Industrial associations:** Industrial associations play a role in the district's development and may contribute to relevant initiatives or programs.
- **District Panchayat Raj Department:** The District Panchayat Raj Department is responsible for civic functions related to sanitation, cleaning public roads, minor irrigation, public toilets and lavatories, primary healthcare, vaccination, drinking water supply, construction of public wells, rural electrification, and social health and primary and adult education.
- **District Education Department:** The District Education Department oversees education laws, policies, and regulations. They implement approved education and sports development plans, strategies, and programs.
- **District e-Governance Department:** The District e-Governance Department, in collaboration with the National Informatics Centre (NIC), supports nationwide ICT infrastructure to facilitate e-Governance services and various initiatives of the Digital India program.
- **Individual community representatives or organizations:** The involvement of individual community representatives or organizations such as community-based organizations (CBOs), non-governmental organizations (NGOs), or water user groups is

crucial to address local concerns and ensure community participation in decision-making processes.

- **Revenue Department: T**he Revenue Department is responsible for various administrative and financial functions related to revenue collection, land management, and related matters. The department plays a crucial role in managing the state's resources, ensuring proper utilization of land, and generating revenue for the government.

5.2.3 Other organizations work

WWF India, under the guidance of the district administration, has been organizing training programs for Ramganga *Mitras* in the Moradabad district. *Mitras*, known as Friends of Rivers and Wetlands, is a group of dedicated volunteers representing various stakeholder groups. Their primary objective is to safeguard rivers and wetlands through active participation in conservation efforts and the sustainable management of these natural resources.

These training programs are aimed to enhance their awareness of responsibilities towards river conservation and their roles within the District Ganga Committee (DGC). The training sessions focused on building their capacities in River Health Assessment, Wetlands Health Assessment, and Sustainable Agriculture.

- **River Health Assessment:** The *Mitras* received training on conducting water quality tests using portable water testing kits and meters. They gained knowledge about testing parameters such as dissolved oxygen, phosphate, nitrate, etc. Additionally, they learned about assessing the health of rivers in terms of floodplain health, river channel health, biota health, and community perception.
- **Wetlands Health Assessment:** The training covered the mapping and conservation of wetlands. Experts provided detailed presentations on different types of wetlands, their functions, and the major threats they face. The participants understood the significance of wetlands for humans, animals, and the environment. Water quality testing kits were also provided to the heads of five villages from each block in the district.
- **Sustainable Agriculture:** The *Mitras* gained knowledge about best agriculture practices that promote water and chemical savings. They were exposed to live

demonstrations on the preparation of bio-fertilizers and bio-pesticides using locally available ingredients.

5.3 Existing policies and procedures

5.3.1 National Water Policy (2012)

The National Water Policy (2012) emphasizes the integration of a participatory approach into various aspects of water resources planning, design, development, and management. The ultimate goal is to facilitate the transfer of management responsibilities for constructed facilities to user groups or local bodies. The NWP 2012 mandates the central government, state governments, and local bodies to guarantee that all citizens have access to a minimum quantity of safe drinking water for essential health and hygiene purposes, conveniently available within their households' proximity. Furthermore, the policy recognizes women's specific concerns regarding water within the context of the household, which is the officially acknowledged social unit in all NWP documents. The primary objectives of this policy are:

- Ensure the preservation and optimal utilization of available water resources.
- Facilitate qualitative enhancements in water resource management.
- Sustain the quality of surface and underground water.
- Maintain ecological and environmental equilibrium during the development of water resources.

5.3.2 National Water Mission

The primary objective of the National Water Mission (NWM) is to promote the conservation of water, minimize wastage, and ensure a more equitable distribution of water resources both within and across states through integrated development and management of water resources. The NWM encompasses five specific goals:

- Establishing a comprehensive water database accessible to the public and assessing the impact of climate change on water resources.
- Encouraging citizens and states to take action in water conservation, augmentation, and preservation.
- Providing focused attention to particularly vulnerable areas, including those that are over-exploited.
- Achieving a 20% increase in water use efficiency.

- Promoting integrated water resources management at the basin level.

A budget allocation of Rs 50 crore has been assigned for the research, development, and implementation of the NWM during the period of 2023-24 [27].

5.3.3 National Hydrology Project

The primary objective of the National Hydrology Project (NHP) is to enhance the scope, quality, and accessibility of water resource information while strengthening the capacity of targeted water resources management institutions. This undertaking involves the modernization of monitoring networks, the transformation of knowledge access, the enhancement of analytical tools, and the modernization of relevant institutions. Significant accomplishments of the project include:

- Establishment of a nationwide centralized platform, referred to as the National Water Informatics Centre (NWIC), which serves as a singular point for all states to collaborate and exchange data on water resources.
- Substantial advancements have been made in the domains of Water Resources Management Systems (WRMS), Water Resources Information Systems (WRIS), Water Resources Operation and Planning Systems (WROPS), and Water Resources Institutional Capacity Enhancement (WRICE).
- A nationwide repository of water resources data has been successfully established. Emphasis is being placed on establishing a Real-Time Data Acquisition System (RTDAS) on a pan-India scale.
- Integrated water resources management is being implemented through the utilization of cutting-edge technology.

For the period of 2023-24, the National Hydrology Project has a total budget allocation of Rs. 500.0 crores. Additionally, an allocation of Rs. 3.95 crore has been dedicated to the establishment of the National Water Informatics Centre (NWIC) [27].

5.3.4 Master Plan for Artificial Recharge to Groundwater in India

Regarding the Master Plan for the Artificial Recharge of Groundwater in India, a revised plan has been formulated at the district/block level to encompass the entire country. This plan macroscopically examines the feasibility of various structures suitable for the diverse terrain

conditions of the country and estimates their respective costs. Key achievements of the Master Plan include:

- Identification of an area of 11.23 km² for artificial recharge.
- Determination of water requirements for recharge in each state, taking into account the surplus available after deducting the committed supply.

The budget allocation for implementing this revised master plan amounts to Rs. 1,33,529.69 crore, with Rs. 96,735.45 crore (72%) allocated for rural areas and Rs. 36,794.23 crore (28%) allocated for urban areas [27].

5.3.5 State Specific Action Plan (SSAPs) for Water Sector under NWM

National Water Mission (NWM) facilitates the formulation of state-specific action plans for the water sector, supporting states and Union Territories (UTs) in this endeavour. The State Specific Action Plan (SSAP) encompasses a comprehensive policy that promotes integrated water resource management at the basin level. This policy is a multidisciplinary undertaking that requires active involvement from all government departments involved in water supply, demand, governance, technology, and environmental and climate change aspects. It also involves the participation of non-governmental agencies and citizens. Hence, the formulation of plans necessitates convergence and synergy among all governmental and non-governmental stakeholders.

In terms of budget, the Uttar Pradesh State Government has allocated 51 Lakhs for the implementation of this plan.

5.3.6 Jal Shakti Abhiyan

Jal Shakti Abhiyan focuses on the conservation and preservation of rainwater. It involves the participation of states and all stakeholders to establish rainwater harvesting structures suitable for specific climatic conditions and sub-strata. The objective is to accelerate water harvesting, conservation, and bore well recharge activities in 256 water-stressed districts. The initiative promotes water conservation and water resource management through the implementation of five targeted interventions: water conservation and rainwater harvesting, renovation of traditional and other water bodies, reuse of water and recharging structures, watershed development, and intensive afforestation. Additionally, special interventions include the development of Block Water Conservation Plans, District Water Conservation

Plans, Krishi Vigyan Kendra Melas, Urban Wastewater Reuse, and 3D contour mapping of all villages.

Notable achievements of the Jal Shakti Abhiyan include:

- The implementation of over 3.5 lakh water measures in 256 districts. This includes 1.54 lakh measures related to water conservation and rainwater harvesting, 20,000 measures for the rejuvenation of traditional water bodies, over 65,000 structures for reuse and recharge, and 1.23 lakh projects for watershed development.
- Approximately 2.64 crore people have actively participated in the Abhiyan, making it a mass movement (Jan Andolan).

5.3.7 National Policy for Women 2016

The National Policy for Women 2016 serves as a comprehensive policy framework that guides various sectors to develop more detailed policy documents specific to their domains. The policy envisions a society where women achieve their full potential and participate as equal partners in all spheres of life, influencing the process of social change. Its mission is to establish an effective framework for developing policies, programs, and practices that ensure equal rights and opportunities for women in family, community, workplace, and governance. Key features of the National Policy for Women's Empowerment include:

- The creation of a society where women work as equal partners in all spheres of life.
- Development of a framework for ensuring equal rights and opportunities.
- Provision of skill development and equal employment opportunities.
- Addressing all forms of violence against women.

In terms of budget allocation, the funding dedicated to women-only schemes across various government ministries experienced growth from ₹ 11,388.41 crores in 2015-16 to ₹ 17,412.01 crores in 2016-17. Specifically, the allocation for Women's Training Programmes aimed at women police officers increased from ₹ 12 lakh in 2015-16 to ₹ 16 crore in 2016-17. The overall budget for women is typically computed by combining Part A, where 100% of the provision is designated for women, and Part B, where allocations for women constitute a minimum of 30% of the provision. In 2016-17, the total budget for women amounts to ₹ 90,624.76 crore, as compared to ₹ 81,249.12 crore in 2015-16 [28].

5.3.8 Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA)

The Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA) aims to provide up to 100 days of unskilled manual work per financial year to every rural household based on demand, resulting in the creation of productive assets. Its objectives include the construction of quality and durable productive assets such as roads, canals, ponds, and wells, enhancing the livelihood resource base of the poor, promoting social inclusion, and strengthening Panchayati Raj Institutions (PRIs). The scheme prioritizes labour-intensive activities related to water harvesting infrastructure, drought relief, and flood control.

In terms of budget allocation, the financial provision for MNREGA has increased from Rs. 61,500 crore at the Budget Estimate stage to Rs. 1,11,500 crore at the Revised Estimate stage in the financial year 2020-21. Similarly, for the financial year 2021-22, the allocation was raised from Rs. 73,000 crore at the Budget Estimate stage to Rs. 98,000 crore at the Revised Estimate stage [29].

5.3.9 Mission Amrit Sarovar

Mission Amrit Sarovar has a primary objective of conserving and harvesting water for future generations. It also serves additional purposes such as expediting infrastructural projects using soil and silt from ponds, generating employment opportunities, irrigation, promoting tourism, and fostering fisheries. Key features of the mission include:

- Construction or rejuvenation of a minimum of 75 Amrit Sarovars in each district, with each Sarovar having a pondage area of at least 1 acre and a water holding capacity of around 10,000 cubic meters.
- The Sarovars will be surrounded by tree plantations, including Neem, Peepal, and Banyan, and will be utilized for various activities such as irrigation, fisheries, water tourism, duck farming, water chestnut cultivation, and other livelihood generation initiatives [30].

5.3.10 Atal Mission for Rejuvenation and Urban Transformation (AMRUT)

The Atal Mission for Rejuvenation and Urban Transformation (AMRUT) focuses on the development of basic urban infrastructure in the water supply sector within designated mission cities. Its main objective is to achieve universal access to portable water for every

household in these cities. The AMRUT 2.0 scheme was launched for a period of five years, from FY 2021-22 to 2025-26. The goals of AMRUT include ensuring access to tap water and sewerage connections for every household and enhancing the aesthetic value of cities through the development of well-maintained green spaces, such as parks. Regarding achievements:

- The scheme has successfully provided 79 lakh household tap water connections and 45 lakh sewer connections.
- Additionally, it has promoted energy efficiency by replacing 76 lakh streetlights with energy-efficient LED streetlights.

In terms of budget allocation, the total outlay for AMRUT 2.0 is Rs. 2,99,000 crore, including a central outlay of Rs. 76,760 crore for the five years. This outlay incorporates funding of Rs. 22,000 crore (with Rs. 10,000 crore as central assistance) for ongoing AMRUT projects until March 2023. Among the various components of the plan, Rs. 39,011 crore (50%) is allocated to water supply, Rs. 32,456 crore (42%) to sewerage and septage management, and Rs. 2,969 crore (4%) to stormwater drainage projects. The Government of India has allocated Rs. 39,011 crore for drinking water supply projects and Rs. 32,546 crore for sewerage and septage projects under this scheme.

5.3.11 Programs under the Tourism Department, Government of Uttar Pradesh

Under the Programs of the Tourism Department of Uttar Pradesh, a budget of Rs. 2.10 crore has been allocated for the beautification of Ghats near Hanumat Dham, situated near the Khannaut River.

5.3.12 Projects under Jal Nigam

Projects undertaken by the Uttar Pradesh Government under Nagar Vikas Nigam/Jal Nigam include:

- Out of 24 drains, 14 are fully or partially tapped, and the tapping process is underway for 5 drains. In Zone 2, the remaining 5 drains are scheduled to be tapped by 2025, as the Detailed Project Report (DPR) for the same has been submitted to NMCG in New Delhi.
- One 58 MLD Sewage Treatment Plant (STP) is installed and operational, while a 25 MLD STP is currently under construction.

- Two STPs, with capacities of 35 MLD and 45 MLD, are proposed, with a target completion date set for 2025.
- A 32 KLD Faecal Sludge Treatment Plant (FSTP) is currently operational, processing 10 KLD.
- The installation of 125 km of sewer lines in Zone-2 is in progress and is expected to be completed by January 2024. The commissioning of the sewer line will take place after the completion of the 25 MLD STP.
- The Detailed Project Report (DPR) for Inflow and Infiltration (I&D) work and a 3.70 MLD STP in Kanth Nagar Panchyat, Moradabad, under Swachh Bharat Mission-Urban-2.0, has been submitted to headquarters.
- Additionally, the DPR for I&D work and a 3.90 MLD STP proposed in Bilari Nagar Palika Parishad, Moradabad, under Swachh Bharat Mission-Urban-2.0, has also been submitted at headquarters.

5.3.13 Swachh Bharat Mission

The Swachh Bharat Mission (SBM) was initiated with two components: SBM (Gramin) and SBM (Urban), to construct household and community-owned toilets and promote their usage, as well as implement effective Solid and Liquid Waste Management (SLWM) to achieve an Open Defecation Free (ODF) India. The rural component is overseen by the Department of Drinking Water and Sanitation, while the urban component falls under the Ministry of Housing and Urban Affairs. To incentivize the construction and usage of toilets, the government provided a financial incentive of Rs. 12,000 per toilet.

In October 2021, the Urban Swachh Bharat Mission 2.0 was launched to make all cities in India "Garbage Free." SBM-Urban 2.0 focuses on several key areas, including sludge management, wastewater treatment, source segregation of garbage, reduction in single-use plastics, and controlling air pollution caused by construction, demolition, and bio-remediation of dumpsites. Some notable achievements of the Swachh Bharat Mission include:

- Construction of 10.28 crore toilets in 36 states and union territories under SBM (Gramin), resulting in 603,175 villages being declared open defecation free.
- Additionally, over 30 crore people participated in behaviour change campaigns, and the establishment of the Rashtriya Swachhata Kendra (RSK) in New Delhi provided an

audio-video experience centre to showcase the continuous promotion and success of the Swachh Bharat Mission.

- Under SBM-Urban, the goal is to eliminate open defecation in urban areas and achieve 100% scientific management of municipal solid waste in over 4,000 towns across the country. By October 2, 2019, 66 lakh individual household toilets (IHHLs) were constructed under SBM Urban, and this target was later revised to 59 lakh IHHLs by 2019, which was successfully achieved by 2020.
- The Swachh Bharat Mission has led to a significant change in behaviour, with 55 crore people adopting toilet usage and contributing to a notable reduction in water and sanitation-related diseases. Moreover, it has resulted in an annual profit of over Rs. 50,000 per household in rural India.

The budget allocation for the Swachh Bharat Mission in the year 2023-24 is Rs. 7192.0 crores for SBM (Rural) and Rs. 5000.0 crores for SBM (Urban) [31].

5.3.14 Namami Gange Mission

The Namami Gange Programme is a comprehensive conservation initiative aimed at achieving two main objectives: effectively reducing pollution and conserving and rejuvenating the National River Ganga. It operates under the Department of Water Resources, River Development, and Ganga Rejuvenation, which falls under the Ministry of Jal Shakti. The program is implemented by the National Mission for Clean Ganga (NMCG) and its state counterpart organizations known as State Programme Management Groups (SPMGs). Recognizing the significance and scope of the program, the Government of India has approved Namami Gange Mission-II. Key accomplishments of the Namami Gange Programme include:

- The undertaking of 374 projects focused on cleaning the main stem of the River Ganga and its primary tributaries, encompassing the main stem towns and 15 tributaries. Out of these 374 projects, 210 have been completed, while the remaining projects are at various stages of completion.
- Furthermore, 49 sewage management projects are currently being implemented, and 98 sewage projects have been completed across nine states. Additionally, 28 sewage projects are in the tendering phase, and one new sewage project has been launched

in these states. Work is underway to create a sewerage capacity of 5175.87 million litres per day (MLD).

- The program has initiated the construction and modernization of 70 Ghats/Crematoria and the renovation of 267 Ghats/Crematoria and Kunds/Ponds.
- Moreover, projects are being undertaken to develop science-based plans for the restoration of aquatic species in the Ganga River, while also focusing on the conservation and restoration of aquatic biodiversity.
- Numerous public outreach and community participation activities have been organized, including events, workshops, seminars, conferences, and various Information, Education, and Communication (IEC) initiatives. Various awareness activities such as rallies, campaigns, exhibitions, cleanliness drives, competitions, plantation drives, and the development and distribution of resource materials have been conducted. To ensure wider publicity, mass media channels such as TV, radio, print media advertisements, advertorials, and featured articles have been utilized.
- The program emphasizes the regulation and enforcement of environmental norms through regular and surprise inspections of Grossly Polluting Industries (GPIs) to verify compliance. Action has been taken against 110 non-compliant GPIs, and closure directions have been issued. Additionally, Online Continuous Effluent Monitoring Stations (OCEMS) connectivity has been established to the Central Pollution Control Board (CPCB) server in 885 out of 1072 GPIs.
- In terms of sanitation, 1674 Gram Panchayats in the five Ganga Basin States have been identified for toilet construction. Out of the targeted 15,27,105 units, the Ministry of Drinking Water and Sanitation (MoDWS) has completed the construction of 8,53,397 toilets. Efforts are also underway to develop the Ganga River Basin Plan and establish 65 model villages.

The budget allocation for Namami Gange Mission-II is Rs. 22,500 crore, while the National Ganga Plan under NGM-II has been allocated a budget of Rs. 4000 crore for the fiscal year 2023-24 [27][32].

Section C: Situation Analysis of key issues for the planning cycle

This part describes the stock taking and key issues for the planning cycle. This also includes collection of existing information and generation of baseline information.

6. District Ganga Plan: Sample scenarios for synergy

A comprehensive analysis is required for all rivers within the district, including those that contribute hydrologically and ecologically to the main stem of the Ganga or its tributaries, down to the sub-tributary level. It should be noted that detailed information may not be readily accessible for all rivers within the district, particularly considering the varying stream orders. Therefore, the proposed district plan should encompass an action plan and resource allocation specifically dedicated to data collection and planning for such rivers.

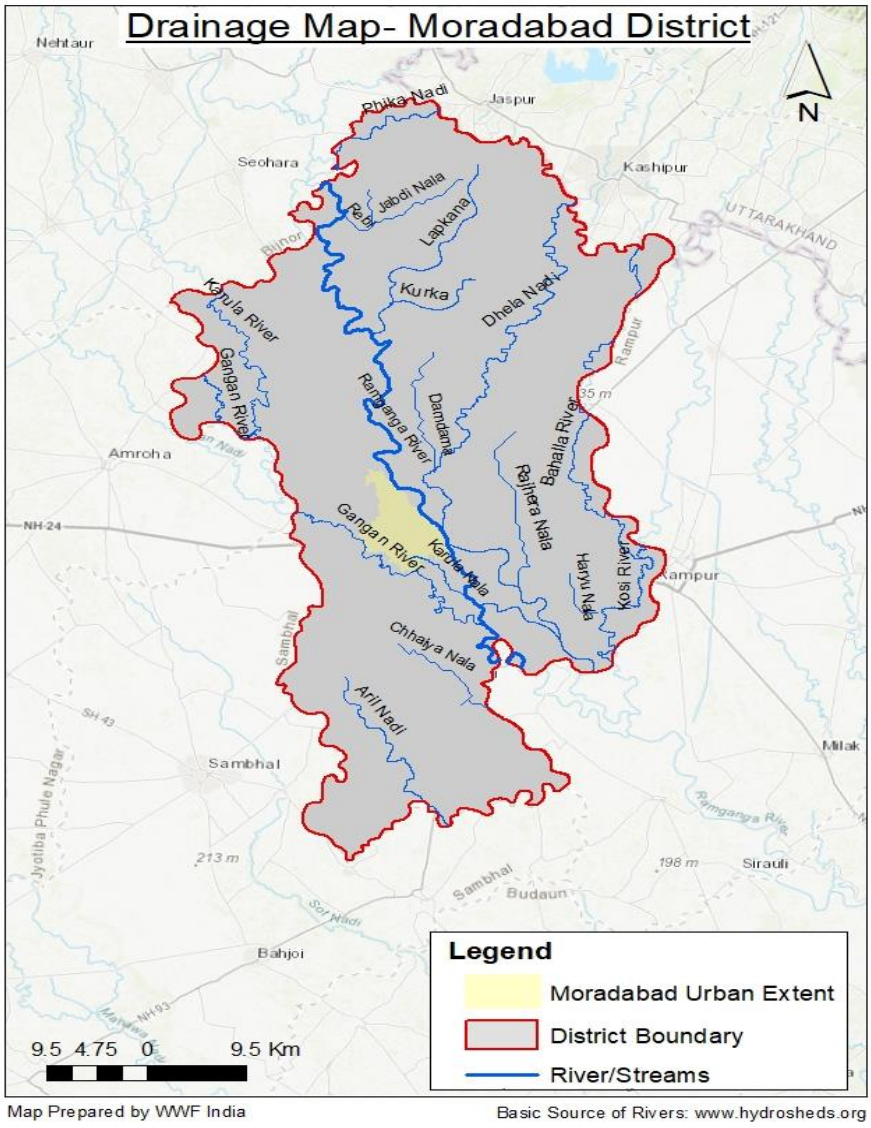


Figure 54 Drainage map of Moradabad District

- **Scenario 1:** In this scenario, the focus is on rivers that fall entirely within the district boundaries. The planning and management efforts should be directed towards these rivers to ensure their sustainable development and conservation.
- **Scenario 2:** This scenario recognizes the transboundary nature of certain rivers, requiring collaborative planning and coordination with neighbouring districts. Synergistic approaches should be employed to address the shared challenges and opportunities presented by these rivers.
- **Scenario 3:** In this scenario, the district, being located in the most downstream stretch of the river, will establish synergies with all the upstream districts. The planning efforts should encompass the entire river basin, aiming to effectively manage the resources and address the cumulative impacts on the downstream region (Figure 55).

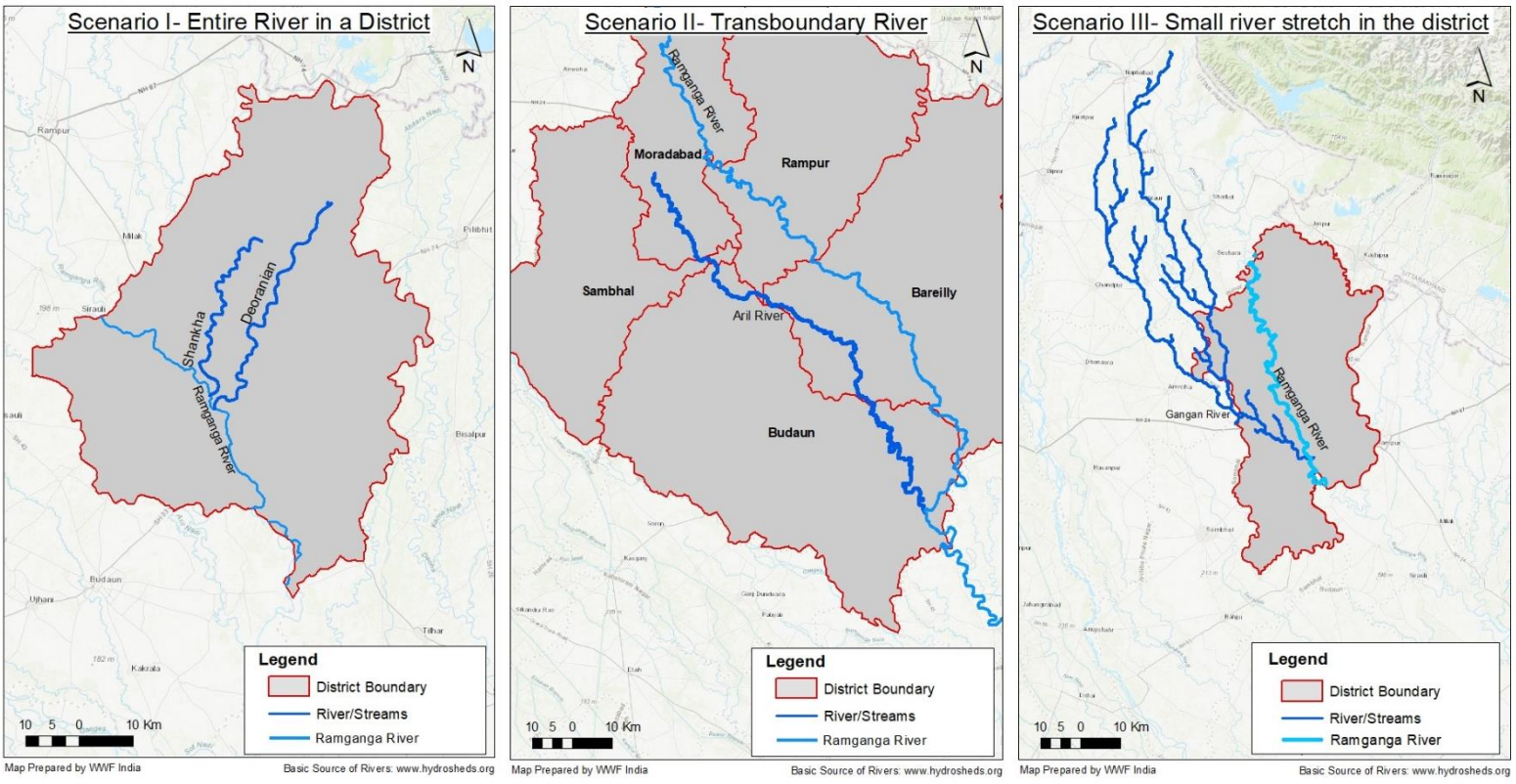


Figure 55 District Ganga Plan: Sample Scenarios for Synergy Analysis

While drafting the Key Priority Issues, the above dimension is taken into account and the suggestions are made accordingly.

7. Selected key issues of Moradabad district to be addressed

A total of nine key priority issues have been identified in the Moradabad District that need to be addressed:

- **Effective management of domestic sewage:** The focus will be on developing comprehensive strategies for the management and treatment of domestic sewage in the district, ensuring proper sanitation practices and reducing pollution. Emphasis will be placed on managing water demand and implementing sewage treatment measures in urban and peri-urban areas to address the challenges posed by increasing population and urbanization.
- **Pollution mitigation in Dhela River:** Measures will be taken to address the pollution issues originating from the Dhela River, which has been causing adverse impacts on the water quality and ecological health of the Ramganga River.
- **Agriculture water management:** The adoption of appropriate practices and policies (Irrigation Water Use Efficiency) will be promoted to enhance water and food security in the agricultural sector, while also improving climate resilience.
- **Floodplain protection and wetlands restoration:** Efforts will be made to safeguard the floodplains and restore wetland ecosystems, with particular attention given to addressing river floodplain protection in the Ramganga, Gaagan, Aril, and Karula rivers within the district.
- **Industrial water and waste management:** Measures will be implemented to ensure the effective management of water resources in industrial activities, along with the proper treatment and disposal of industrial waste.
- **Capacity building and human resources development:** The development of skills and knowledge will be prioritized, particularly at the District Ganga Committees (DGCs), including the Arth Ganga initiative, to strengthen their capacity in managing Ganga-related programs and projects.
- **Solid waste and E-Waste management:** Strategies will be devised to manage solid waste and electronic waste effectively, both in urban and rural areas, aiming for sustainable waste management practices.

- **Conservation and understanding of key tributaries:** Efforts will be made to gather knowledge and information regarding the current status and conservation of significant tributaries within the Moradabad district.
- **Regional focus on Environmental Flows:** Measures will be taken to maintain and enhance the Environmental Flows in the Ramganga River and its tributaries, ensuring the ecological health and sustainability of the entire river system.

7.1 Key Issue- 1: Domestic sewage management; Water demand management and sewage treatment in urban/peri-urban areas

7.1.1 Potential intervention

1. Enhancement of Faecal Sludge and Septage Management (FSSM) in the city:

- Establish a comprehensive digital database of on-site sanitation systems (households, public/community toilets) to effectively monitor and manage the faecal sludge and septage in the city.
- Arrange for adequate number of dedicated vehicles (30 to 40 depending upon the need) to carry out the scheduled emptying of septic tanks and cesspools, ensuring timely and efficient waste removal.
- Geo-tag the existing desludging vehicles to track their location and optimize their deployment for improved service delivery.
- Optimize the utilization of existing Faecal Sludge Treatment Plants (FSTP) with a capacity of 32 kiloliters per day, exploring strategies to maximize their operational efficiency.
- Explore the possibility of co-treatment of faecal sludge in the existing Sewage Treatment Plants (STP) with a capacity of 58 million litres per day, thereby leveraging the existing infrastructure to handle additional waste streams.

2. Development of an effective municipal and e-waste management plan:

- Notification of designated clusters for e-waste washing, ensuring compliance with appropriate regulations and guidelines.
- Explore the potential for reusing treated wastewater in handcart units involved in e-waste washing, subject to water quality testing to ensure suitability and safety.

- Establish a joint monitoring group involving community stakeholders to actively monitor the Sewage Treatment Plant (STP) outlets and assess their compliance with relevant standards and regulations.

3. Promoting sustainable practices in high-rise buildings, residential colonies, educational institutions, and multiplexes:

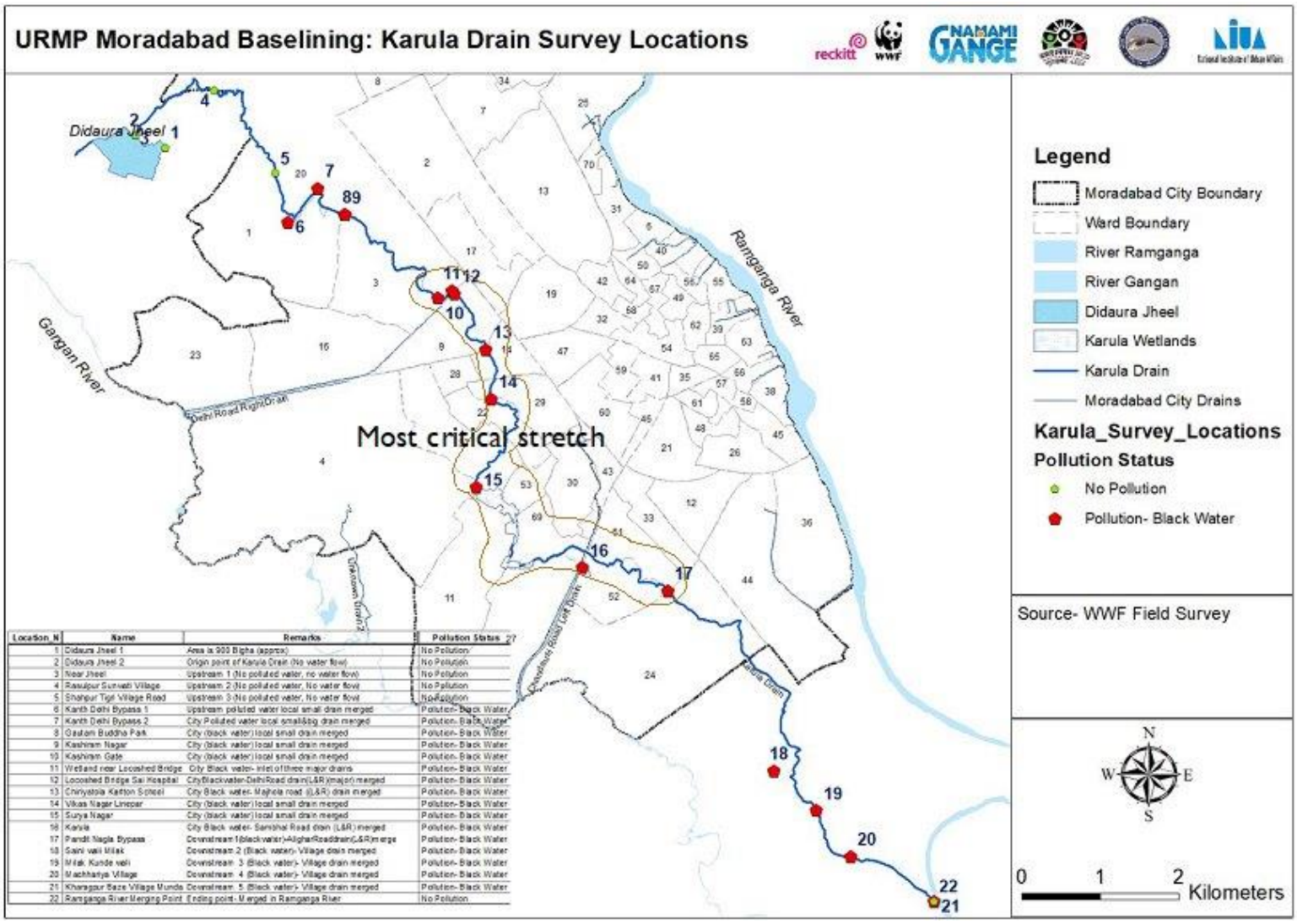
- Encourage the reuse of treated water from STPs for non-potable purposes such as flushing and gardening, thereby promoting water conservation practices.
- Ensure compliance with water-saving measures in these establishments, aiming to minimize water wastage and optimize resource utilization.

7.1.2 Potential intervention

The Karula drain, which spans approximately 25 kilometres from its origin in the Dindaura Jeel outside the Municipal Corporation's limits to its final discharge point in the Ramganga River, is the longest in the area. Fifteen smaller drains converge into the Karula drain, further contributing to its pollution load.

1. Implementation of decentralized wastewater treatment in the Karula drain and Pollution control in the Karula Drain using Nature-based Solutions (NbS).

2. A proposed Sewage Treatment Plant (STP) with a capacity of 38 million litres per day (MLD) is planned for the downstream section of the Karula drain.



Location_N	Name	Remarks	Pollution Status
1	Didaura Jheel 1	Area is 900 Bigha (approx)	No Pollution
2	Didaura Jheel 2	Origin point of Karula Drain (No water flow)	No Pollution
3	Near Jheel	Upstream 1 (No polluted water, no water flow)	No Pollution
4	Rasulpur Sunwali Village	Upstream 2 (No polluted water, No water flow)	No Pollution
5	Shahpur Tigri Village Road	Upstream 3 (No polluted water, No water flow)	No Pollution
6	Kanth Delhi Bypass 1	Upstream polluted water local small drain merged	Pollution- Black Water
7	Kanth Delhi Bypass 2	City Polluted water local small&big drain merged	Pollution- Black Water
8	Gautam Buddha Park	City (black water) local small drain merged	Pollution- Black Water
9	Kashiram Nagar	City (black water) local small drain merged	Pollution- Black Water
10	Kashiram Gate	City (black water) local small drain merged	Pollution- Black Water
11	Wetland near Locoshed Bridge	City Black water- inlet of three major drains	Pollution- Black Water
12	Locoshed Bridge Sai Hospital	CityBlackwater-DelhiRoad drain(L&R)major) merged	Pollution- Black Water
13	Chiriyatola Kattion School	City Black water- Majhola road (L&R) drain merged	Pollution- Black Water
14	Vikas Nagar Linepar	City (black water) local small drain merged	Pollution- Black Water
15	Surya Nagar	City (black water) local small drain merged	Pollution- Black Water
16	Karula	City Black water- Sambhal Road drain (L&R) merged	Pollution- Black Water
17	Pandit Nagla Bypass	Downstream1(blackwater)+HigherRoaddrain(L&R)merge	Pollution- Black Water
18	Saini vali Milak	Downstream 2 (Black water)- Village drain merged	Pollution- Black Water
19	Milak Kunde vali	Downstream 3 (Black water)- Village drain merged	Pollution- Black Water
20	Machhariya Village	Downstream 4 (Black water)- Village drain merged	Pollution- Black Water
21	Kharagpur Baze Village Munda	Downstream 5 (Black water)- Village drain merged	Pollution- Black Water
22	Ramganga River Merging Point	Ending point- Merged in Ramganga River	No Pollution

Figure 56 Locations of Survey at the Karula Drain done by WWF

The comprehensive revival plan consists of three main stages (Table 19), encompassing site preparation and pollution mitigation measures in both the drain and the core wetland area.

Table 19 Revival plan for the Karula Drain

Stage 1	Site preparation	The delineation of a 30-meter buffer zone around the wetland is proposed to establish a designated area known as the "people-water connect belt." Within this belt, a total of 18 smaller segments have been identified, which can be developed as riparian buffer strips measuring 5-10 meters along the periphery of the wetland. The implementation of these buffer strips aims to effectively mitigate pollution and prevent encroachment in the vicinity of the wetland.
Stage 2	Pollution abatement in the drain	Creation of treatment lagoons at the confluence point of Karula drain and Karula wetland.
Stage 3	Pollution abatement in wetland	Floating wetlands for the waterbody revival in various zones of wetlands are proposed in these 3-stage plan.

7.1.3 Potential intervention

Case Study-1

Water Footprint Campaign

The Water Footprint Campaign in Moradabad is a collaborative initiative undertaken by Nagar Nigam and WWF-India. This initiative is predicated on a strategic vision aimed at exemplifying a demand-side management paradigm within the context of 10,000 households.

The primary objectives of this campaign encompass educating and motivating individuals and households concerning the Water Footprint concept. Furthermore, it entails equipping individuals with the requisite skills to quantify water consumption and identify wastage patterns at the household level. The campaign seeks to bolster positive behavioural patterns by advocating water-efficient practices as a component of demand-side management strategies implemented within the city.

An integral facet of this undertaking is the identification and recognition of individuals or entities who have demonstrated noteworthy reductions in their water footprint. These exemplary water users are envisioned to serve as catalysts, inspiring others and assuming the mantle of water champions within the city. Integral to the campaign's success is the measurement of the water footprint and the subsequent cultivation of efficient water utilization practices among households. This transformation encompasses both behavioural adjustments and the implementation of pertinent technical interventions.

The campaign has received participation from 4,595 households, covering 25 schools and 5 wards. It emphasizes the importance of measuring the water footprint and encourages households to adopt efficient water use practices through behavioural changes and technical interventions.

The specific targets are:

Actions	Short term (upto 1 year)	Medium term (2-3 Years)	Long term (4-5 Years)	Responsible department/ agencies/ stakeholder	Remark / Scheme
1. Improving Faecal Sludge and Septage Management (FSSM) in the city	▪ Establishing a comprehensive digital database of on-site sanitation systems (households, public/community toilets) for the efficient monitoring and management of faecal sludge and septage in the city. ▪ Ensuring the availability of an adequate fleet of dedicated vehicles (30 to 40, depending on demand) to carry out scheduled emptying of septic tanks and cesspools, ensuring timely and efficient waste removal. ▪ Geographically tagging the existing desludging vehicles to track their locations and optimize their deployment to enhance service delivery.	▪ Maximizing the utilization of existing Faecal Sludge Treatment Plants (FSTP) with a daily capacity of 32 kiloliters, exploring strategies to improve their operational efficiency. ▪ Investigating the potential for co-treatment of faecal sludge in existing Sewage Treatment Plants (STP) with a capacity of 58 million litres per day, thereby leveraging the existing infrastructure to manage additional waste streams.		▪ Nagar Nigam in collaboration with local community members ▪ Jal Nigam ▪ Revenue department ▪ District Administration ▪ Uttar Pradesh Pollution Control Board ▪ Local organizations ▪ WWF India	▪ Swachh Bharat Mission (Urban) 2.0 ▪ Gandhivadi E-waste Yojna of MoEF ▪ Jalshakti Abhiyan ▪ Waste to Energy
2. Developing an efficient municipal and e-waste management strategy	▪ Designating specific clusters for e-waste processing, ensuring adherence to				

Actions	Short term (upto 1 year)	Medium term (2-3 Years)	Long term (4-5 Years)	Responsible department/ agencies/ stakeholder	Remark / Scheme
	relevant regulations and guidelines. ▪ Evaluating the possibility of reusing treated wastewater in handcart units involved in e-waste processing, contingent upon water quality testing to ensure suitability and safety. ▪ Establishing a collaborative monitoring group involving community stakeholders to actively oversee the Sewage Treatment Plant (STP) outlets and assess their compliance with applicable standards and regulations.				
3. Encouraging sustainable practices in high-rise buildings, residential colonies, educational institutions, and multiplexes	▪ Explore the possibility of promoting the utilization of treated wastewater from STPs for non-potable purposes like toilet flushing and gardening, thereby endorsing water conservation practices. ▪ Pilot test in atleast 5 high rise building and large complexes/colonies	▪ Enforcing water-saving measures in these establishments to minimize water wastage and optimize resource utilization.			

Actions	Short term (upto 1 year)	Medium term (2-3 Years)	Long term (4-5 Years)	Responsible department/ agencies/ stakeholder	Remark / Scheme
4. Karula Drain	▪ Identify the suitable sites for the implementation of Nature based solutions along the course of Karula drain. ▪ Design and plan nature-based solutions tailored to each site, which could include vegetated swales or biofiltration systems. ▪ Secure necessary permits and approvals for the construction and operation of these solutions. ▪ Collaborate with local community members and WWF India to engage volunteers and local expertise in the implementation process. ▪ Install and establish site specific NbS at key locations ▪ Regularly monitor the effectiveness of the nature-based solutions in treating domestic wastewater and reducing pollution.	▪ Scale up NbS to remaining sites ▪ Continue regular monitor of the effectiveness of the nature-based solutions in treating domestic wastewater and reducing pollution. ▪ Implementing decentralized wastewater treatment in the Karula drain for pollution control. ▪ Planning to construct a proposed Sewage Treatment Plant (STP) with a daily capacity of 38 million litres in the downstream section of the Karula drain.			

Actions	Short term (upto 1 year)	Medium term (2-3 Years)	Long term (4-5 Years)	Responsible department/ agencies/ stakeholder	Remark / Scheme
	▪ Conduct public awareness campaigns to inform residents about the importance of these solutions and encourage responsible wastewater disposal.				
5. Upscaling of Water Footprint Campaign	▪ Develop educational materials and outreach programs to raise awareness about the Water Footprint concept among households and individuals. ▪ Collaborate closely with WWF-India to develop a comprehensive plan for expanding the Water Footprint Campaign. ▪ Identify key target areas within the city and peri-urban regions for the campaign's expansion.	▪ Organize workshops, seminars, and community events to engage residents and motivate them to adopt water-saving practices.	▪ Monitor and evaluate the campaign's impact through surveys, data collection, and feedback from participants.		

7.2 Key Issue- 2: Agriculture water management; mainstreaming package of practices/policies to enhance food/water security and enhance climate resilience

7.2.1 Potential intervention

Agricultural water management should adopt a three-pronged approach:

- **Supply-Side Interventions:** Optimize water availability for irrigation through the maintenance and rehabilitation of canals and the conjunctive utilization of groundwater for irrigation purposes. Linking of tail-ends of canals with nearby drains/streams/rivulets/rivers or ponds/wetlands is also a critical activity under this approach.
- **Demand-Side Interventions:** Promote judicious use of irrigation water by implementing practices such as line sowing, maintaining optimum water depth in farms, adopting trench-based sugarcane cultivation, and using bio-fertilizers and bio-pesticides, application of micro-nutrients etc. These practices aim to maximize irrigation water use efficiency and maintain humus in the soil.
- **Institutional Strengthening (Water User Associations-WUAs):** Establish and strengthen Water User Associations and similar groups to provide a joint platform for farmers to collaborate and work towards sustainable agricultural practices.

While adopting these three approaches agriculture can aid efficient water management leading to saving of freshwater for environmental and other ecosystem purposes (like enhancing the water levels in the river, improving the water availability in the ponds and wetlands for more number of days/months in a year for the people and nature).

Case Study- 2

Sustainable agriculture water management

WWF-India along with several stakeholders (District administration, UPI&WRD, Agriculture department, Water Users Association, communities), is working on agriculture water management through training and demonstration of a Package of Practices in crops like Sugarcane, Wheat, and Maize in canal command areas of Bijnor, Moradabad and Amroha. This endeavour, which has been in progress since 2017, has engaged more than one hundred thousand farmers. The cumulative outcome of these interventions has resulted in the conservation of a substantial volume of water, exceeding one hundred million litres, from irrigation activities. Significant water savings ranging from 17% to 34%, have been realized at the farm level through the diligent execution of these initiatives.

Figure 57 Agriculture water management work in Canal command

Parallel similar sustainable agriculture activities were carried out in the zone of influence of wetlands in Bareilly district during the year 2021-22 (Aril river basin). Along with wetland restoration activities in wetlands one of the objectives was also to train farmers on better management practices in agriculture to reduce water abstractions and use of chemical inputs. Training and demonstration of PoPs including generation and use of organic bio-fertilizers and pesticides were conducted with 500 plus farmers (in crops like Wheat, Mentha, and vegetables). This increased yield of crop produce (10-15%), water savings of 25%, reduction of chemical usage by 10-20% and enhanced soil health.

Figure 58 WWF-India initiatives in sustainable agriculture water management in wetlands catchment

The strategic expansion of this undertaking across the expanse of the Bareilly district holds the potential to furnish notable advantages to the region's indigenous freshwater resources, encompassing rivers, ponds, and groundwater reservoirs.

Figure 59 Village kesopur meeting krti sharda devi main cannel (left) and Making of Amrit Khad and Amrir Paani (right)

7.2.2 Potential intervention

This potential has been implemented since 2017 across the canal command area of irrigation schemes managed by the UP Irrigation & Water Resources Department, benefiting over one lakh forty thousand farmers in the Bijnor-Moradabad-Amroha; Kasganj districts. As a result, more than 250 million litres of saved water from irrigation canal command area have contributed to enhanced flows in the Karula and Gaagan rivers.

Figure 60 Use of Trencher tool in raising Sugarcane crop in a farm in Bijnor district

Significant water savings ranging from 17% to 34% have been observed at the farm level through these initiatives. By scaling up this work throughout the Moradabad district, local freshwater resources, including rivers, ponds, and groundwater, can further benefit from these measures.

The specific targets are:

Actions	Short term (upto 1 year)	Medium term (2-3 Years)	Long term (4-5 Years)	Responsible department/ agencies/ stakeholder	Remark / Scheme
1. Transform 10% of Agriculture Area in the district.	▪ Collaborate with farmers, KVKs, Agriculture department, to raise awareness and provide training on sustainable farming practices, including efficient irrigation methods, crop selection, and organic farming. ▪ Initiate the transformation of 2-3% of the agriculture area in each block within the first year through training, capacity building and adoption of better management practices in agriculture (including adoption and application of biofertilizers Amrit Paani and Amrit Khaad)	▪ Continue scale up of demonstration and training in agriculture area keeping 10% area target (implementation plan can be can be developed at block level) ▪ Monitor impacts at farm level on aspects like productivity, soil health, input costs, economic benefits, adoption of organic farming techniques etc. ▪ Provide incentives and support to encourage farmers to transition to sustainable practices.	▪ Sustain the practice and aim for continuous improvement, ensuring that the agriculture area remains under sustainable practices, with a focus on long-term environmental and economic benefits.	▪ Agriculture Department ▪ Horticulture ▪ Krishi Vigyan Kendra's ▪ Uttar Pradesh Irrigation Department ▪ WWF India ▪ Farmers	▪ Rashtriya Krishi Vikas Yojana (RKVY) ▪ Mission for Integrated Development of Horticulture. ▪ Pradhan Mantri Krishi Sichayee Yojana (PMKSY) ▪ Micro Irrigation Fund (MIF): ▪ National Mission on Sustainable Agriculture (NMSA) ▪ MGNREGA (Mahatma Gandhi National Rural Employment Guarantee Act) ▪ Paramparagat Krishi Vikas Yojana (PKVY)
2. Constitution of WUA's as per UP-PIM act 2009 across all	▪ Identify canal systems with functional WUA's in the district and the ones where WUA's are not	▪ Expand the formation of WUA's to cover 30% of	▪ Constitute Water Users' Associations in atleast 70% of feasible canal systems across the		

functional irrigation canals in the district.	formed/process initiated and develop a list of feasible canal command areas for WUA formation. ▪ Raise awareness among farmers in canal command area on significance and functions of WUA's in atleast 5 canal system ▪ Organize exposure visits of irrigation department field functionaries and farmers in active and progressive WUA. ▪ Training and capacity building of farmers and Irrigation department field functionaries on UPPIM act 2009 and WUA formation process ▪ Under preparatory phase of WUA formation in 5 canal system, identify villages in commands, make voter list, hold elections. ▪ Establish Water Users' Associations (WUA's) in 5 irrigation canals irrigation canals in Bareilly district.	the total feasible canal command areas	district, ensuring effective, community-led water resource management, and sustained support for sustainable water use practices Monitoring and evaluation of the impact		

3. Linking tail ends of canals with nearby rivers/ponds	▪ Identify and assess the feasibility of linking tail ends of canals with nearby rivers/ponds to initiate pilot projects (for all the canals in the district). ▪ Conduct field validation surveys in tail ends with farmers and concerned line departments ▪ Develop detailed implementation plan (techno-financial) and connect atleast 30% of feasible canal systems tail ends to nearby river/pond ▪ Install gauges at tail ends and monitor the flows going into river/ponds.	▪ Link 40% more canal tail with nearby rivers or ponds to enhance local water security and rejuvenate smaller rivers/ponds, especially during the summer season. ▪ Monitor flows at tail ends at regular intervals and maintain a temporal database.	▪ Among the feasible canal system, connect rest of the 30% of canal system tail ends to rivers/ponds. ▪ Calculate the total amount of water saved and evaluate the impact.		
4. Promotion of Agricultural Systems and Organic Farming	▪ Conduct awareness programmes to engage with farmers to discuss and demonstrate the benefits of organic farming practices. ▪ Train and build capacity of farmers in 10% of villages in district (200 villages) generation and use of bio-fertilizer and bio-pesticide	▪ Scale up the training, capacity building and demonstration of use of organic ways of cultivation in additional 20% of villages (400 villages) ▪ Monitor and document impacts. ▪ Award and recognize progressive farmers/villages/officials	▪ By end of 5 years atleast 50%of the villages should be adopting organic ways of cultivation ▪ Scale up the training, capacity building and demonstration of use of organic ways of cultivation in additional		

	(Amrit paani and Amrit khaad) ▪ Monitor and document impact on crop health, Water savings, soil health, productivity, reduction in chemical use, costs etc ▪ Award and recognize progressive farmers/villages/officials on adoption of organic farming techniques	on adoption of organic farming techniques	20% of villages (400 villages). ▪ Monitor and document impacts ▪ Award and recognize progressive farmers/villages/officials on adoption of organic farming techniques		

7.3 Key Issue- 3: Untreated/Partially treated liquid and solid waste from industries

7.3.1 Potential intervention

- Regular monitoring and sampling of industrial wastewater are essential to accurately identify and map all pollution sources within the district and pinpoint areas of significant contamination. To enhance the monitoring network and focus on areas with high water contamination, improvements need to be made.
- Strict actions should be initiated against industries that fail to meet the standards outlined in the District Environment Plan or those set by regulatory agencies such as the Pollution Control Board (PCB) or the Bureau of Indian Standards (BIS).
- Regular and surprise inspections should be conducted on Gross Polluting Industries (GPIs), Brass industries, and industries falling under the Red category. The purpose of these inspections is to ensure compliance with effluent discharge standards set by relevant regulatory agencies.
- Given that all the listed industries rely on groundwater as a water resource, it is crucial to implement extensive water recycling measures, particularly in units that generate substantial volumes of effluents like paper mills, sugar mills, and distilleries.
- It is imperative to install the Counter Current Mechanism (CCM – developed jointly by WWF India and IIT Kanpur) in brass industries equipped with electroplating plants. Additionally, efforts should be made to identify unregistered plants operating in densely populated remote areas of the city and raise awareness about the benefits of CCM. Encouraging and promoting the installation of CCM in these unregistered plants is essential.

7.3.2 Potential intervention

- Out of the total 78 industries with Effluent Treatment Plants (ETPs) installed, they must modify or upgrade their systems with the latest technology for effluent treatment. These industries should adopt appropriate technologies that enable Zero Liquid Discharge (ZLD) to effectively manage their wastewater.

7.3.3 Potential intervention

- Establish a collaborative monitoring mechanism involving irrigation authorities, UPPCB (Uttar Pradesh Pollution Control Board), scientific experts from institutions such as TMU

(Teerthanker Mahaveer University), Hindu College, and representatives from local organizations. Random inspections of industries should be conducted once per season, and a comprehensive report should be submitted to the District Ganga Committee (DGC).

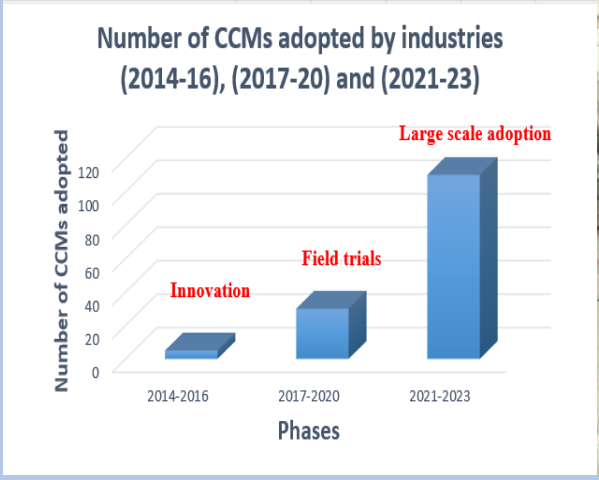
- Ensure the installation of water treatment facilities in all industries, achieving 100% compliance.
- Ensure the proper operation of existing Effluent Treatment Plants (ETPs) and install ETPs in industries where they are currently absent.
- Strengthen the capacity of personnel in water quality (WQ) monitoring and quality assurance/quality control (QA/QC) procedures for WQ data.
- Regularly test the sewage and industrial wastewater for specific parameters such as Dissolved Oxygen (DO), Biochemical Oxygen Demand (BOD), Chemical Oxygen
- Demand (COD), Ammonia, Chlorides, Fluoride, Nitrate, Phosphate, as well as heavy metals including Zinc (Zn), Copper (Cu), Lead (Pb), Chromium (Cr), using RHA/Merck kits at specified intervals. (Responsible Departments: UPPCB, Nagar Nigam, and Local Organizations).

Case study- 3

Counter Current Mechanism- A clean technology solution to reduce freshwater consumption in metalware industry

Rinsing is a daily operation in electroplating plans of brass industries, often carried out using traditional methods that excessively consume rinse water, leading to a notable depletion of fresh water resources. WWF India has introduced a device known as the Counter Current Mechanism, developed collaboratively by WWF India and IIT Kanpur specifically for brass industries equipped with electroplating plants in Moradabad. This mechanism proves effective in reducing fresh water consumption in these industries.

The automated Counter Current Mechanism (CCM) comprises a composite Polypropylene tank with three partitions, allowing water to flow between partitions. Moreover, the CCM incorporates an automatic Total Dissolved Solids (TDS) controller mechanism, ceasing the flow of fresh water when the TDS falls below a specified threshold. In contrast to the conventional system, which involves 2 to 3 simultaneous fresh water taps and leads to overconsumption, the CCM employs only one tap. This tap activates when the TDS surpasses a predetermined threshold and automatically stops when the TDS drops below the specified value.



Presently, 148 units of the Counter Current Mechanism (CCM) have been installed in 31 metalware industries. The initial implementation involved the installation of 2 units at the MHSC institute in 2017-18 as a pilot for testing purposes.

Following several upgrades, including the addition of a TDS controller, sensor, and solenoid valve, these units have been installed in various household units as well as small, medium, and large-scale industries. The Polypropylene (PP) tank, crucial for this industry, is priced at approximately INR 18-25 thousand. Data analysis indicates significant water savings ranging from 30-40% in different scenarios when utilizing these tanks.

Notable Achievements:

- 32 prominent export units have successfully embraced 140 Counter Current Mechanisms (CCMs).
- A majority of leading exporters have taken the initiative to adopt CCMs, utilizing their own funds and benefiting from technical guidance provided by WWF-India.
- There is a growing interest among industries to transition their electroplating units entirely to CCM-based rinsing methods.
- The adoption of CCMs has contributed to industries attaining a higher sustainability index.
- A significant reduction of 14 million liters in fresh water consumption has been achieved as of February 2023.
- A Buyer-Supplier platform has been established to integrate CCM practices into the core of business operations.

The specific targets are:

Actions	Short term (upto 1 year)	Medium term (2-3 Years)	Long term (4-5 Years)	Responsible department/ agencies/ stakeholder	Remark / Scheme
1. Establish New Water Quality Monitoring Stations	▪ Set up additional water quality monitoring stations in key rivers such as Aril, Gaagan, and Karula nala/river, with a specific focus on locations like upstream of Khadakpur Baje village (28.776947°N; 78.806178°E). ▪ Increase the number of monitoring stations in existing rivers like Ramganga, both at the entry point (29.1954 N; 78.6703 E) and exit point (28.6956 N; 78.8721 E) within the district boundary. ▪ Consider establishing monitoring stations at critical points like Sikandarpur Patti village (downstream of Karula nala/river), Dhela River before its confluence with	Continue monitoring the water quality parameters and publish the data		▪ Uttar Pradesh Pollution Control Board ▪ Nagar Nigam ▪ District Administration ▪ Expert from TMU or Hindu Colleges ▪ Central Pollution Control Board ▪ NMCG & SMCG – UP & Uttarakhand	▪ Jal Shakti Abhiyan ▪ National Plan for Conservation of Aquatic Eco-systems (NPCA) ▪ Mission Amrit Sarovar

	Ramganga River, and Gaagan River at locations where major drains discharge into the river.				
2. Enforce Stringent Measures on Major Polluting Units	▪ Implement rigorous enforcement measures on major polluting industrial units, compelling them to upgrade and modify their manufacturing processes and Effluent Treatment Plants (ETPs) to strictly comply with the required discharge parameters.				
3. Ensure 100% Effluent Treatment through ETPs	▪ Mandate that all industries release effluent only after it has undergone proper treatment through Effluent Treatment Plants (ETPs) before being discharged into any stretch of river or stream.	▪ To enhance adherence, a coalition comprising stakeholders and external experts, potentially affiliated with universities or colleges, can be established. ▪ This team will conduct routine inspections of these industries in collaboration with the UPPCB team and provide regular reports to the DGC			

7.4 Key Issue- 4: Pollution from solid and E-Waste in urban and rural areas

7.4.1 Potential intervention

- Promote and establish the practice of waste segregation-at-source among households and waste generators, and instruct both formal and informal waste collectors to only collect segregated waste. Consider introducing financial incentives to encourage segregation-at-source.
- Implement a 50% reduction in waste collection charges for individuals or households that engage in waste segregation.
- Organize a comprehensive door-to-door awareness and education campaign in collaboration with civil society entities such as local non-governmental organizations (NGOs) and community organizations. Expand these efforts to Urban Local Bodies (ULBs).
- Encourage large housing complexes, buildings, multiplexes, and similar establishments to setup composting and waste separation facilities.
- Establish dedicated bio-waste collection and processing facilities at major markets, such as the Vegetable and Fruit Mandi at Prem Nagar Line Par area and the fish market at Rampur Doraha. Involve local entrepreneurs in the implementation of these facilities. Additionally, establish sanitary landfills for the disposal of inert and non-recyclable waste.
- For areas where door-to-door waste collection is not available, establish waste deposit points equipped with separate compartments for different types of waste.

7.4.2 Potential intervention

- Set up decentralized centres at the municipal level dedicated to material recovery, micro-composting, bio-gas generation, and waste disposal, including hazardous waste. Local entrepreneurs should be actively involved in these initiatives.
- Establish sanitary landfills specifically designed for the safe and appropriate disposal of inert and non-recyclable waste materials.
- Coordinate river-bank clean-up activities, engaging community organizations in the process.

- Construct and deploy "plastic traps" in rivers to effectively capture and collect floating plastic debris from water bodies. Community organizations should be actively engaged in these efforts.
- Commission a comprehensive study focusing on sustainable e-waste management practices, aiming to identify effective strategies and guidelines for the appropriate handling and disposal of electronic waste.

The specific targets are:

Actions	Short term (upto 1 year)	Medium term (2-3 Years)	Long term (4-5 Years)	Responsible department/ agencies/ stakeholder	Remark / Scheme
1. Integration of Waste and Rag Pickers	▪ Formalize the inclusion of waste and rag pickers into the formal workforce, providing them with permanent public employment opportunities. ▪ Emphasize the inclusion of women pickers in these initiatives.			▪ Nagar Nigam ▪ Urban Local Bodies ▪ Local NGOs ▪ Uttar Pradesh Pollution Control Board	▪ Swachh Bharat Mission-Urban (SBM-U) ▪ zero garbage generation scheme ▪ Total Sanitation campaign
2. Achievement of 100% Source Segregation	▪ Develop a comprehensive plan outlining the strategy for achieving 100% source segregation in all ULBs (Urban Local Bodies). ▪ Provide financial incentives (if possible) to households and entities that effectively practice waste segregation at the source. ▪ Implement source segregation in 20% of target area	▪ Implement source segregation in 40% of target areas ▪ Explore and implement financial incentives, such as reduced waste collection fees, for individuals and entities actively engaged in waste segregation practices.	▪ Implement source segregation in 100% of target areas		

3. Regular Awareness and Education Events	▪ Organize a minimum of two awareness and education events per month in collaboration with local community organizations, schools, and experts (aligning with initiatives like Swachh Bharat Abhiyan and other initiatives by state Govt.) ▪ These events should include workshops, seminars, street plays, and community meetings to educate residents about the importance of waste segregation and responsible waste disposal. ▪ Publish messages, news articles, and educational materials in local newspapers, on social media, and through other communication channels to reach a broader audience.	▪ Continue to organise these events include workshops, seminars, street plays, and community meetings to educate residents about the importance of waste segregation and responsible waste disposal.			
4. School-Based Awareness Programs	▪ Collaborate with local NGOs and experts to design and implement	▪ Continue the process of spreading awareness in the schools to achieve set targets of these years	▪ Continue the process of spreading awareness in the schools to achieve set targets of this years		

	awareness programs in schools. ▪ Phase the programs to target 25% of the schools in the district every year, ensuring that all schools are covered over time. ▪ Develop age-appropriate educational materials and curriculum for students to learn about waste segregation and environmental stewardship. ▪ Organize interactive sessions, competitions, and field visits to waste management facilities to engage students actively.				

7.5 Key Issue- 5: Floodplain encroachment and degradation of wetlands leading to destruction of habitats and loss of lateral connectivity in Ramganga/ Gaagan/ Aril/ Karula rivers in the district

7.5.1 Potential intervention

In the district, a total of 122 wetlands have been identified and classified into different categories, including Persistent, Intermittent, Intensifying, Diminishing, New, and Lost. It is necessary to adopt distinct management strategies for each category of wetland. Priority should be given to the conservation of Diminishing wetlands as they are at a high risk of disappearing, while a more lenient approach can be taken for Persistent wetlands. To ensure accurate data, joint surveys of prioritized floodplain wetlands will be conducted involving the Revenue Department, community members, the Rural development department, the Irrigation department, the UP-Pollution control department, the District Administration and WWF-India. Using baseline data collected, wetlands can be prioritized based on a prioritization matrix and restoration activities can be initiated.

The Ministry of Environment, Forest and Climate Change has developed a comprehensive four-pronged approach for wetland conservation, which includes:

- Inventorization of Wetlands and Preparation of 'Brief Documents' reporting its current status including threats, ecosystem services, values, ownerships etc.
- Preparation of Wetland Health Cards
- Enrolment of Wetland *Mitras* (Friends)
- Preparation of an Integrated Management Plan covering aspects such as Catchment and Hydrology, Water Quality, Biodiversity, and Governance.

7.5.2 Potential intervention

As per the rules and regulations governing wetlands, specific activities have been categorized as prohibited, permitted, and regulated. These classifications aim to ensure the effective management and conservation of wetland ecosystems.

Table 20 According to wetlands rules following activities are prohibited, permitted and regulated

Activity	Prohibited	Regulated	Permitted
Reclamation/ filling up			
Solid waste disposal	Within Wetland	Surrounding the Wetland	
Sewage disposal	Within Wetland	Surrounding the Wetland	
Selective desilting			
Promotion of fisheries			
Use of agro-chemical		Zone of Influence	

7.5.3 Potential intervention

- Identify prominent structures with substantial roof areas within the district for rainwater harvesting (RWH) purposes.
- Conduct routine monitoring of groundwater quality in collaboration with multiple stakeholders and domain experts.
- Investigate potential opportunities for recharge utilizing alternative sources such as canal networks, seepage from tanks, and water bodies.

7.5.4 Potential intervention

- In anticipation of the pending floodplain zonation exercise, delineate some strip of land along both sides of the rivers. This task will involve collaboration among the Revenue Department (RD), Uttar Pradesh Irrigation & Water Resources Department (UPI&WRD), and the District Administration.
- Safeguard the boundaries of the floodplain by implementing nature-based solutions, such as establishing tree lines or employing other suitable measures. Strict restrictions should be imposed on permitting any new construction activities within the river catchment area.

7.5.5 Potential intervention

- Floodplain delineation in alignment with NGTs directives for Ganga, while considering the "Room for the River" approach will be done.
- Specific Development Control Regulations (DCR) will be formulated to guide development activities within the designated floodplain areas.

- A public green space will be established on the cleared area adjacent to the floodplain, providing a recreational and environmentally friendly area for the community.
- Strict monitoring mechanisms will be put in place, utilizing regular inspections and up-to-date high-resolution satellite imagery. This will enable the identification of hotspots and problem areas, allowing for frequent inspections of sites such as Mokshdham, Lalbagh and Katghar.
- Measures will be implemented to prevent the unauthorized dumping of solid waste on the riverbanks and in the floodplain. This will include targeting specific locations such as Mokshdham, Lalbagh and Katghar.

Case Study-4

River rejuvenation through Wetland restoration in Aril basin (Bareilly district)

The Aril floodplain wetland restoration case study entailed a collaborative effort of several stakeholders including District administration, Line departments, community members and WWF-India, in conjunction with partner institutions IIT-Kanpur and Geovale. Earlier, WWF-India carried out an extensive study of mapping of wetlands Ramganga basin covering several districts. This comprehensive study was aimed at evaluating the wetland locations and connectivity with catchments and rivers within the Ramganga basin. The study was instrumental in identifying suitable wetlands within the Aril basin for potential restoration initiatives. Three specific wetland areas were specifically chosen for restoration activities: Khangwa Shyam (10.6 hectares), Lilaur Lake (42 hectares), and Bahoda Kheda (7.42 hectares), all situated within the Bareilly district.

Throughout the restoration process, a spectrum of pivotal variables encompassing critical threats, ecosystem service delivery, water quality, hydrological connectivity, and water availability underwent meticulous assessment. Elaborate baseline surveys were conducted, focusing on parameters such as water quality, hydrological connectivity, and the prevalence of aquatic vegetation. The discerned threats and pressures encompassed aspects such as the excessive proliferation of weeds, congestion in channels which are water inflow and outflow pathways, sewage contamination, excess usage of water and chemicals in agriculture and the fragmentation of habitats. A comprehensive evaluation was executed encompassing the identification of threats, topographical surveys and cross-sectional analysis of water quality testing enabling a holistic appraisal of the wetland health. Following this assessment, a robust wetland restoration strategy was devised. This strategy was subsequently realized through a collaborative, multi-stakeholder approach, involving the active participation of the District Administration, line departments, local village communities, and WWF-India.

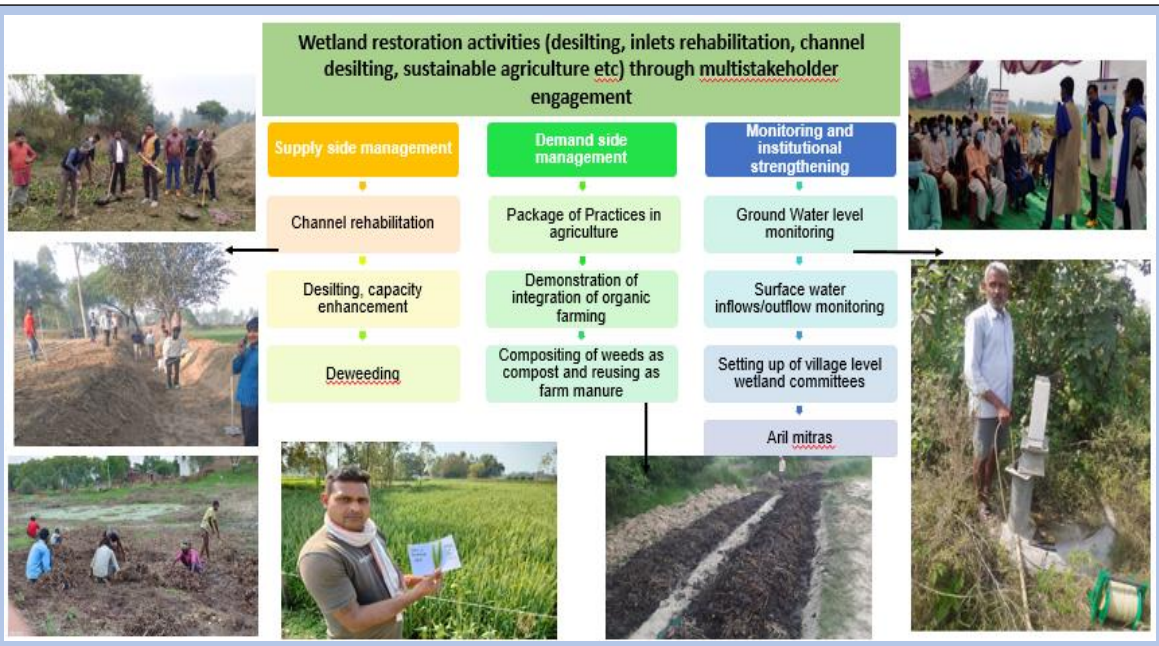


Figure 61 Wetland restoration activities

The implementation was augmented by harnessing resources from various departments and schemes; like – MNREGA, Irrigation, and Forest. WWF-India contributed technical expertise alongside financial support.

Noteworthy achievements emanated from these endeavours. Notably, during the period of August 2022, approximately 60 million litres of water were channelled into the Aril River via the Khangwa Shyam wetland outlet. Collectively in three target wetlands in Bareilly

Figure 62 Rejuvenated Khangwa Shyam Wetland

Figure 63 Rejuvenated Lilaur Lake

Figure 64 Rejuvenated Bahoda Kheda Wetland

Agricultural practices were positively impacted, manifesting in improved yields and crop health attributed to the adoption of sustainable agricultural techniques such as "Amrit Paani," "Amrit Khaad," "Jeevamrat," and the "Wheat Package of Practice" (PoP). The adoption of PoPs resulted in a 10-20 % reduction in chemical usage, a 25% reduction in water application/abstraction and a 10-20% improvement in yields.

Figure 65 Adoption of better agriculture practices leading to better crop health

Moreover, discernible enhancements in groundwater levels underscored successful aquifer recharge (GW levels enhanced by 4-5 feet), signifying the effective role of the restored wetland in facilitating groundwater replenishment within the region's ecosystem.

Apart from this about 2,500 quintals of water hyacinth weed were removed from the wetland and converted into 700 quintals of organic compost which was distributed among farmers to support organic farming.

Figure 66 Pre and post-scenario of the revival of Aril's floodplain wetland through de-weeding

The specific targets are:

Actions	Short term (upto 1 year)	Medium term (2-3 Years)	Long term (4-5 Years)	Responsible department/ agencies/ stakeholder	Remark / Scheme
1. Comprehensive Study on Streams	▪ Collaborate with Groundwater department, UPI&WRD and other technical experts to conduct a comprehensive study to develop understanding of surface and groundwater inter-linkages to identify losing and gaining streams/stretches. ▪ Field validation of identified stretches to develop water management plan	▪ Use the study's findings to prioritize areas for interventions in river rejuvenation and groundwater recharge and reduce water demand during the first cycle of the District Ganga Plan (DGP).	▪ Monitor and evaluate the impact of interventions	▪ District Administration ▪ Revenue department ▪ Uttar Pradesh Irrigation Department ▪ Forest Department ▪ State Wetlands Authority (SWA) ▪ WWF India ▪ Local NGO's	▪ National Plan for Conservation of Aquatic Ecosystems (NPCA) ▪ Amrit Darohar and Amrit Sarovar Scheme ▪ Ministry of Environment, Forest and Climate Change (MOEFCC) ▪ Jal Shakti Abhiyan ▪ Atal Bhujal Yojana ▪ National Water Mission ▪ MNREGA
2. Restoration of 50 % of degraded Wetlands in next 5 years	▪ Collect baseline data of all 122 degraded wetlands (>2.5 ha area) (format of data collection to be shared by WWF-India). ▪ Considering threats, degradation, groundwater critical zones, ecological	▪ Continue working on restoration activities for wetlands taken up under year 1. Scale up the wetland restoration work in additional 5 wetlands in each of 8 blocks (covering 40 wetlands) ▪ Monitor impacts through pre and post	▪ Scale up the wetland restoration work in additional 5 wetlands in each of 8 blocks (covering 40 wetlands). Target should be to carry out atleast one or more restoration activity in		

	significance and ownership, develop on ground restoration plan with detailed activities for atleast 5 prioritized wetlands in each block, which are of ecological and hydrological significance. The activities should be implemented in a phased manner, addressing short-term threats first and progressing toward long-term restoration measures. Focus should on restoration of 122 odd degraded category wetlands. ▪ Prioritize the restoration activities and make plan for implementation in 1st year ▪ Implement critical selected activities in 1st year of restoration and monitor the impacts ▪ Align the wetland conservation work with initiatives of Central and State government (like	implementation observations on parameters like inflows, groundwater levels, water quality, weeds, inlet conditions, biodiversity etc. ▪ Reward and recognize water champions	each of the identified wetlands. ▪ Monitor impacts through pre and post implementation observations on parameters like inflows, groundwater levels, water quality, weeds, inlet conditions, biodiversity etc. ▪ Evaluate the impact of interventions on these wetlands and see the improvement of water quality and ground water levels		

	Save Wetland campaigns, Amrit Sarovar etc) ▪ Monitor impacts through pre and post implementation observations on parameters like inflows, groundwater levels, water quality, weeds, inlet conditions, biodiversity etc.				
3. Management of Aquatic Weeds (e.g., Hyacinth)	▪ Identify wetlands that are plagued by aquatic weeds like hyacinth. ▪ Implement strategies to remove and manage these weeds, including the conversion of the removed biomass into bio compost. ▪ Training and capacity building of various stakeholders, block wise, (farmers, line departments, panchayat raj officials etc) on removal and conversion into biocompost. ▪ Carry out deweeding and subsequent conversion into biocompost in 10%	▪ Scale up and periodic the deweeding , and subsequent conversion into biocompost in additional 30% of wetlands which are infested with weed. ▪ Monitor impacts on wetland health ▪ Promote the use of the bio compost in local agriculture to improve soil health and support organic farming practices. ▪ Reduce pollution loads in wetlands/rivers to	▪ Scaleup the process of weed removal in other identified wetlands. ▪ Establish a robust compost distribution system through KVK,s and gram panchayat level (compost generated from water hyacinth)		

	of wetlands which are infested. ▪ Develop a distribution mechanism of water hyacinth compost among farmers in wetlands zone of influence ▪ Application of organic compost generated from weed into agriculture farms and monitor the impacts.	minimize spread of water hyacinth wed			
4. Restoration of Floodplain Wetlands	▪ Select floodplain wetlands strategically, focusing on those that can help increase base flows along the Ramganga and other selected tributaries. Priority should be given to those wetlands, outlets of which can be connected to nearby rivulets to enhance surface water flows. ▪ Develop and implement restoration plans with multistakeholder approach for 2-3 wetland in each block to enhance hydrological connectivity,	▪ Scale up developing of restoration plans and implementation of prioritized activities in selected floodplain wetlands and continue working on wetlands taken up under 1st year. ▪ Monitor impacts (inflows, storage capacity, water quality, groundwater levels etc) through wetland health assessment ▪ Develop educational programs and engage the community to raise awareness about the importance of floodplain	▪ Monitor and evaluate the impact of restoration of floodplain wetlands on the rivers, biodiversity habitats, local water security, and groundwater of the area. ▪ Scaleup the models to the other tributaries in the district. ▪ Legal Protections: Advocate for and implement legal protections and regulations that ensure the long-term conservation and		

	Invasive weed management, water quality improvement. ▪ Carry out restoration of floodplain wetlands ▪ Monitor impacts (pre and post implementation of activities)	wetlands and their restoration.	preservation of the floodplain wetland.		
5. Collaboration and Technical Support	▪ Stakeholder Identification: Identify and engage key stakeholders, including government agencies, environmental organizations, local communities, landowners, and experts in relevant fields, to form the basis of collaboration ▪ Establish a multi-departmental and inter-agency collaboration involving the District administration, Revenue Department, UPI&WRD, Flood Control Department, Rural Development Department, Groundwater department, Gram	▪ Collaborative Research: Foster partnerships with academic institutions and research organizations to conduct scientific research relevant to the floodplain wetland restoration. Encourage innovation and knowledge sharing. ▪ Organise multiple training sessions for stakeholders, on the biodiversity conservation, River Health assessment and Wetland health assessment	▪ Long-Term Funding Sustainability: Establish mechanisms for long-term funding sustainability to support ongoing monitoring, maintenance, and adaptive management of the restored wetland. ▪ Monitoring and Evaluation: Maintain a robust monitoring and evaluation framework to assess the progress of restoration efforts, adapt strategies as needed, and measure the long-term impact of the project.		

	pradhans, WWF-India, DGC's can act as a multi-departmental and inter-agency collaboration platform headed by District Magistrate. ▪ Support in developing Standard Operating Procedure (SoPs) and training of key resources for wetland restoration of different typologies (schemes that can be leveraged, budgets, expenditures, roles and responsibilities etc) ▪ Leverage schemes like Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA) to engage local communities in wetland restoration efforts, providing employment opportunities. ▪ Needs Assessment: Conduct an initial assessment of technical, financial, and logistical				

	support required for the restoration project. ▪ Resource Mobilization: Begin seeking funding and resources to initiate the restoration project and secure commitments from potential collaborators. ▪ Agreement Framework: Establish agreements or Memoranda of Understanding (MOUs) outlining the roles, responsibilities, and expectations of all involved parties.				

7.6 Key Issue- 6: Gaps in capacity, skills (Social, technical and institutional) and human resources in DGC for implementation of Ganga authority order

There is significant potential for augmenting capacities and human resources at the District Ganga Committee (DGC) to address the necessary actions for initiating, preparing, implementing, operating, and maintaining projects and activities associated with the rejuvenation of rivers and wetlands, encompassing improvements in both water quality and quantity. Multiple funding sources are accessible for the implementation of Ganga rejuvenation initiatives and can be effectively utilized by the DGC.

Case Study-5

Nodal officers Trainings

Under the guidance of the district administration Moradabad, WWF India has organized training programs for the Nodal Officers (Gram Pradhans) representing 54 floodplain villages located along the bank of river Ramganga. These programs aimed to enhance their awareness of their responsibilities towards river conservation and their roles within the District Ganga Committee (DGC). The training sessions focused on building their capacities in River Health Assessment, Wetlands Health Assessment, Sustainable Agriculture and community led turtle conservation.

As Nodal Officers in the District Ganga Committee, their roles and responsibilities encompass various areas:

- **River Health Assessment:** The Nodal Officers received training on conducting water quality tests using portable water testing kits and meters. They gained knowledge about testing parameters such as dissolved oxygen, phosphate, nitrate, etc. Additionally, they learned about assessing the health of rivers in terms of floodplain health, river channel health, biota health, and community perception.

- **Wetlands Health Assessment**: The training covered the mapping and conservation of wetlands. Experts provided detailed presentations on different types of wetlands, their functions, and the major threats they face. The participants understood the significance of wetlands for humans, animals, and the environment. Water quality testing kits were also provided to the heads of five villages from each block in the district.

- **Sustainable Agriculture:** The Nodal Officers gained knowledge about best agriculture practices that promote water and chemical savings. They were exposed to live demonstrations on the preparation of bio-fertilizers and bio-pesticides using locally available ingredients.

Case study- 6

Community led turtle conservation

The Gangetic River system in Uttar Pradesh, India, hosts 14 turtle species. Unfortunately, extensive riverbed farming along the Ganga River in Uttar Pradesh has encroached upon these turtles' natural habitat, leading to the destruction of their nesting and basking grounds. In response to this threat to endangered turtles in the Upper Ganga region, a collaborative in-situ turtle conservation program was initiated in 2012 by the UP Forest Department and WWF-India, with a focus on involving local communities.

Between 2012 and 2021, 828 turtle nests were rescued from riverbed farming with the help of 520 riverbed farmers in the Upper Ganga and Ramganga rivers. These newly hatched turtles from the rescued egss, were nurtured in a specially designed nursery pond during the flood season and then released into their respective rivers during the winter when their reduced food requirements eased their transition to their natural habitat.

The community-led turtle conservation approach in the Upper Ganga River and river Ramganga comprises three main elements: raising awareness and providing training to local riparian communities, rescuing turtle nests from riverbed farming, and protecting vulnerable turtle nests on-site. The program includes organizing awareness campaigns in riparian villages to engage local residents in freshwater turtle conservation. These efforts also build the capacity of community members to protect turtle nests near their agricultural fields.

The conservation process involves selecting suitable sites for turtle hatcheries, establishing the hatcheries, collecting eggs from riverbed farming, transporting them, placing them in the hatchery, incubating and caring for the hatchlings in the nursery, and finally, releasing them.

Riverbed farmers are encouraged to monitor and conserve turtle nests in their fields, fostering a sense of ownership and stewardship toward biodiversity conservation.

The collaboration between WWF-India and the Uttar Pradesh State Forest Department ensures that farmers offer turtle eggs found in their farms for safekeeping in riverside hatcheries. Farmers are also encouraged to safeguard turtle nesting habitats along the River Ganga in the Hastinapur Wildlife Sanctuary.

Before this initiative, farmers used to discard turtle nests found in their fields. However, the program has encouraged farmers to care for these nests and inform the Uttar Pradesh Forest Department and WWF-India about vulnerable turtle nests. Farmers also assist field teams in relocating these nests to riverside hatcheries. This program fosters a sense of ownership among riparian communities and raises awareness about the importance of turtles in the river's ecosystem.

This initiative showcases a model of community-based conservation in which communities voluntarily allocate a portion of their land, previously used for riverbed farming, for the nesting and basking of freshwater turtles in the River Ganga. This act benefits the turtles and also safeguards crops from submersion due to fluctuating water levels, along a 40-meter-wide, 5-kilometer-long strip of riverbed.

7.6.1 Potential intervention

- Utilize the available resources from ongoing programs and projects such as the Ramganga Mitras initiative under the Arth Ganga Concept by the National Mission for Clean Ganga (NMCG) for capacity building and human resource development in the field of river rejuvenation.
- Establish an additional dedicated capacity within the District Ganga Committee (DGC) in the form of a supporting cell, consisting of designated professionals. This cell will provide essential support and expertise in carrying out the committee's objectives.
- Make use of the existing network of Ramganga Mitras for community mobilization, awareness campaigns, and sensitization activities related to River Health Assessment and Wetland Health Assessment.
- Promote, establish and strengthen the capacities of Water Users Associations (WUAs) to enhance their ability to participate in and contribute to sustainable water management practices.

The specific targets are:

Actions	Short term (upto 1 year)	Medium term (2-3 Years)	Long term (4-5 Years)	Responsible department/ agencies/ stakeholder	Remark / Scheme
1. Promotion of Cultural Heritage and Tourism	▪ Identify the places that are heritage and have culturally importance in the district. ▪ Collaborate with the Tourism Department and local stakeholders to promote cultural heritage and tourism along the Ramganga and its surroundings.	▪ Organize activities to attract tourists and raise awareness about the region's natural and cultural significance. ▪ Develop promotional materials, to highlight the unique cultural and natural attractions of the area.		▪ Tourism Department ▪ District Administration ▪ District Ganga Committee ▪ WWF India ▪ Local institutions ▪ Forest Department ▪ Nagar Nigam	▪ National Water Awards and Water Heroes ▪ Har Khet Ko Pani ▪ Information, Education & Communication (IEC) scheme of DoWR, RD & GR ▪ Jalanidhi, Swajaladhara ▪ NYKS Awareness Generation Campaign
2. Establishment of Biodiversity Park	▪ Collaborate with the Forest Department, Revenue department and local communities to identify suitable locations for these parks and this may be in urban or peri urban areas.	▪ Expedite the process of establishing biodiversity parks in both urban and peri-urban regions. ▪ Develop and implement awareness programs to engage the public in biodiversity conservation and create a sense of ownership			
3. Dedicated Supporting Cell for DGC	▪ Establish a dedicated supporting cell or secretariat within the District Ganga Committee	▪ Build the capacity of these resources on various aspects when required.			

	(DGC) to oversee the implementation, monitoring, and revision of the District Ganga Plan (DGP). ▪ Appoint two trained resource persons who will be responsible for coordinating and facilitating the DGP's activities.				
4. Training for Executing Agencies	▪ Identify 4-5 executing agencies (e.g., Jal Nigam, Irrigation Department, Nagar Nigam, and UPPCB) involved in river rejuvenation and groundwater management. ▪ Provide training to these agencies on river rejuvenation techniques, the River Basin Management (RBM) cycle, and the operation, maintenance, and joint monitoring of Sewage Treatment Plants (STPs), Common Effluent Treatment Plants (CETPs), and Faecal Sludge	▪ Provide support to build capacities and assist in implementation through collaborative efforts			

	Management (FSM) systems. ▪ Include a focus on gender-sensitive training and ensure women's participation in the capacity-building programs.				
5. Awareness-Raising at "Jalshakti Kendra"	▪ Conduct awareness-raising activities and programs at "Jalshakti Kendra" to engage local citizens and involve different line departments in efforts to elevate the profile of river rejuvenation. ▪ Collaborate with the District Ganga Committee (DGC) and WWF India for effective implementation.				

7.7 Key Issue- 7: Gaps in knowledge on status, issues and actions needed for the conservation of key tributaries in Moradabad district

7.7.1 Potential intervention

- Addressing the knowledge gap regarding water resources, water quality, encroachment, and other pertinent information related to the critical tributaries of the Ramganga River, namely Aril, Karula, and Gaagan.
- Undertaking a comprehensive mapping and assessment exercise to evaluate the condition and health of 3rd-order and 4th-order streams that contribute to the Ramganga River.

The specific targets are:

Actions	Short term (upto 1 year)	Medium term (2-3 Years)	Long term (4-5 Years)	Responsible department/ agencies/ stakeholder	Remark / Scheme
1. Seasonal Surveys of Tributaries and data collection	▪ Survey protocols: Develop a comprehensive survey plan with protocols that outlines the scope, objectives, and methodologies for conducting seasonal surveys of the Ramganga River tributaries, including Dhela, Gaagan, Aril, Karula naala and others. ▪ Stakeholder Engagement: Identify and engage relevant stakeholders, such as government agencies, local communities, and environmental organizations, to participate in or support the survey efforts. ▪ Baseline data collection: Carry out seasonal (pre monsoon, post monsoon and monsoon season surveys) recording	▪ Data Continuity: Maintain consistent seasonal surveys over multiple years to detect patterns and variations in tributary conditions, allowing for more robust trend analysis. ▪ Water Quality Improvement: Initiate or advocate for water quality improvement efforts, such as the reduction of pollutants or the restoration of riparian habitats based on the data findings ▪ Data Analysis: Begin analyzing the temporal collected data to identify immediate issues and trends affecting the tributaries, which can inform early mitigation efforts.	▪ Ecosystem Health Improvement: Implement long-term restoration and conservation measures based on the data collected to improve the overall health of the tributaries and the larger water bodies they feed. ▪ Water Resource Planning: Integrate the long-term survey data into regional water resource planning, ensuring that the needs of both the environment and the community are considered in future water management decisions.	▪ Revenue Department ▪ Uttar Pradesh Pollution Control Board ▪ Uttar Pradesh Irrigation Department and Flood Division ▪ Uttar Pradesh Forest Department ▪ Groundwater Department ▪ Uttar Pradesh Jal Nigam ▪ Nagar Nigam ▪ Urban Local Bodies ▪ Experts from Universities and Colleges ▪ WWF India	▪ Public Interaction Programs ▪ Water Nirmal Abhiyan

	observation on hydrology (river flows) groundwater levels, water quality (chemical and physical characteristics), and biodiversity (including fish populations). ▪ Install river flow monitoring gauges on tributaries to assess the baseline flows ▪ Public Awareness: Raise awareness about the importance of tributary surveys and their potential impact on the health of larger water bodies within the community.				
2. Reporting and Data Utilization		▪ Compile the data obtained from seasonal surveys into comprehensive reports, including baseline information on the tributaries' current state. ▪ Share the findings and reports with relevant stakeholders, including government agencies,			

		local communities, and environmental organizations. ▪ Use the generated data to identify key issues and challenges in the tributaries, and develop plans for their remediation and restoration. ▪ Use the Data to build awareness among community and other stakeholders ▪ Publish the survey findings as reports and photo albums/brochures			
3. Implementation of Restoration Plan		▪ Collaborate with relevant stakeholders (government departments, CSO's, technical experts etc) and use the long-term trend data and reports to develop integrated river basin plans (with focus on tributaries) for sustainable water management ▪ Prioritize actions to restore and rehabilitate the tributaries based on	▪ Implement remedial measures, such as habitat restoration, water quality improvement, and sustainable fisheries management, as needed. ▪ Develop policies around protection of floodplains, inlet channels, wetlands etc.		

		the severity of issues and available resources.			

7.8 Key Issue- 8: Regional issues- maintaining and enhancing Environmental Flows in Ramganga River and its tributaries

7.8.1 Potential intervention

Ensuring the maintenance of Environmental Flow (E-Flow) in the Ramganga River is of paramount importance in safeguarding the river's ecological well-being and fostering thriving biodiversity across the entire river basin.

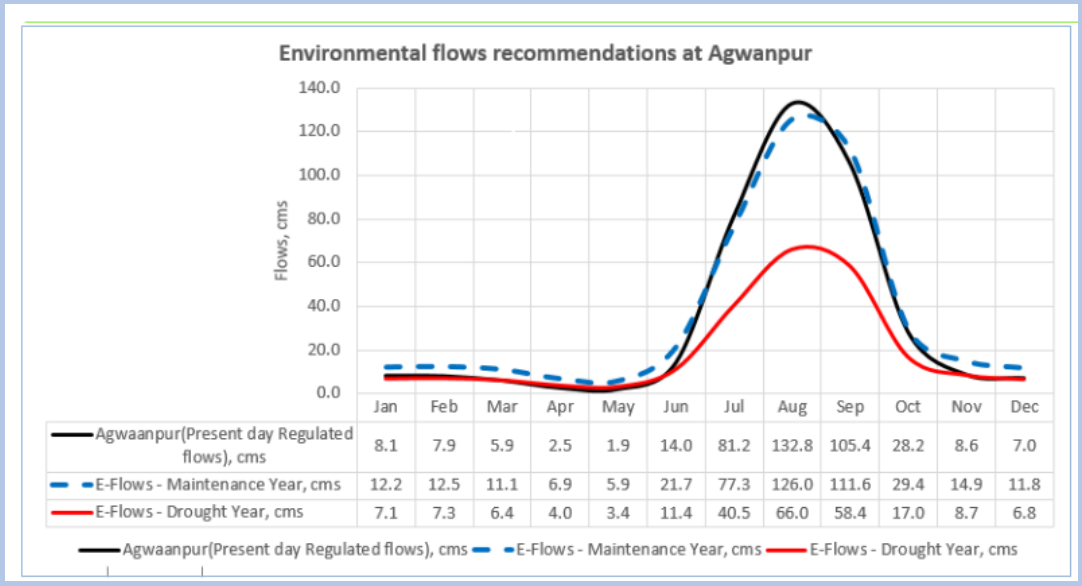
-Regional issues-

Case study- 7

Maintaining Environmental Flows in Ramganga River at Agwanpur and Katghar site in Moradabad district

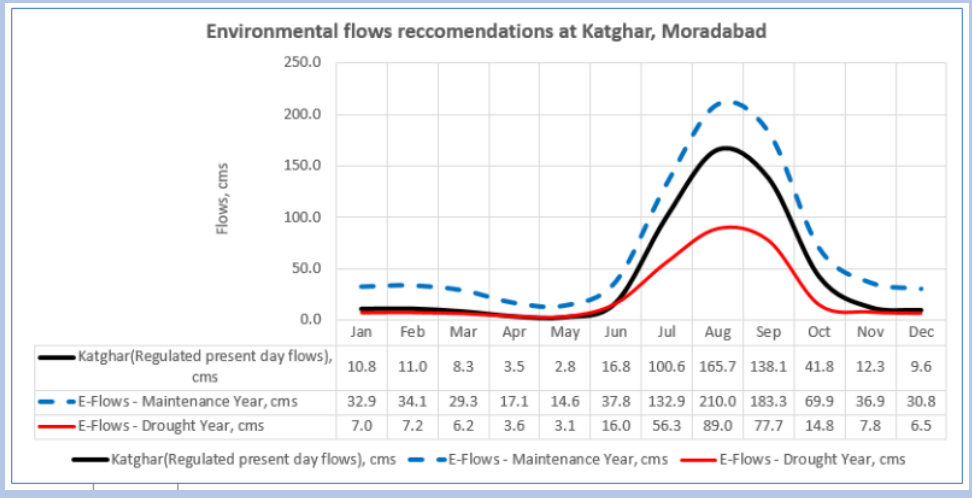
WWF India, in collaboration with various partner organizations, took up a scientific assessment of the E-Flows at eight designated locations within the Ramganga River basin.

In the Moradabad district, the E-Flow study was conducted at two specific sites: Agwanpur, situated upstream of the city, and Katghar site, located near the railway bridge downstream of the city (**Error! Reference source not found.**)(Figure 68). Before 2018, the river experienced inadequate water flow throughout the year. However, through the dedicated efforts of WWF-India and constructive engagement with key stakeholders, particularly the Uttar Pradesh Irrigation Department (UPID), a sustainable year-round water flow has now been achieved. The assessment of the Ramganga River's Environmental Flows was carried out between 2013 and 2015.



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Agwaanpur(Present day Regulated flows), cms	8.1	7.9	5.9	2.5	1.9	14.0	81.2	132.8	105.4	28.2	8.6	7.0
E-Flows - Maintenance Year, cms	12.2	12.5	11.1	6.9	5.9	21.7	77.3	126.0	111.6	29.4	14.9	11.8
E-Flows - Drought Year, cms	7.1	7.3	6.4	4.0	3.4	11.4	40.5	66.0	58.4	17.0	8.7	6.8

Figure 67 E-flows recommendations at Agwanpur, Moradabad



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Katghar(Regulated present day flows), cms	10.8	11.0	8.3	3.5	2.8	16.8	100.6	165.7	138.1	41.8	12.3	9.6
E-Flows - Maintenance Year, cms	32.9	34.1	29.3	17.1	14.6	37.8	132.9	210.0	183.3	69.9	36.9	30.8
E-Flows - Drought Year, cms	7.0	7.2	6.2	3.6	3.1	16.0	56.3	89.0	77.7	14.8	7.8	6.5

Figure 68 E-flows recommendations at Katghar, Moradabad

Under the Uttar Pradesh Irrigation Department (UPID) directive issued in February 2021, a discharge of 144 cusecs of Environmental Flows (E-Flows) is being released from the Hareoli barrage into the Ramganga River during the lean season, spanning from December to mid-June, every year.

A collaborative effort was undertaken to monitor the release of E-Flows during the year 2022, and it is recommended that this monitoring exercise be continued in the subsequent years as well. The outcomes of the monitoring conducted in 2022 are depicted in the below figures (Figure 69)(Figure 70).

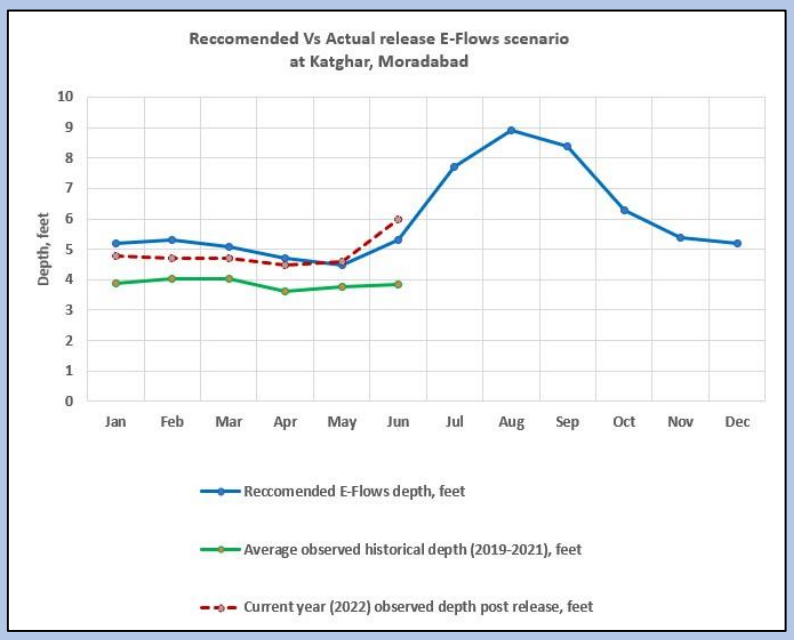


Figure 69 Recommended vs actual released e-flows at Katghar, Moradabad

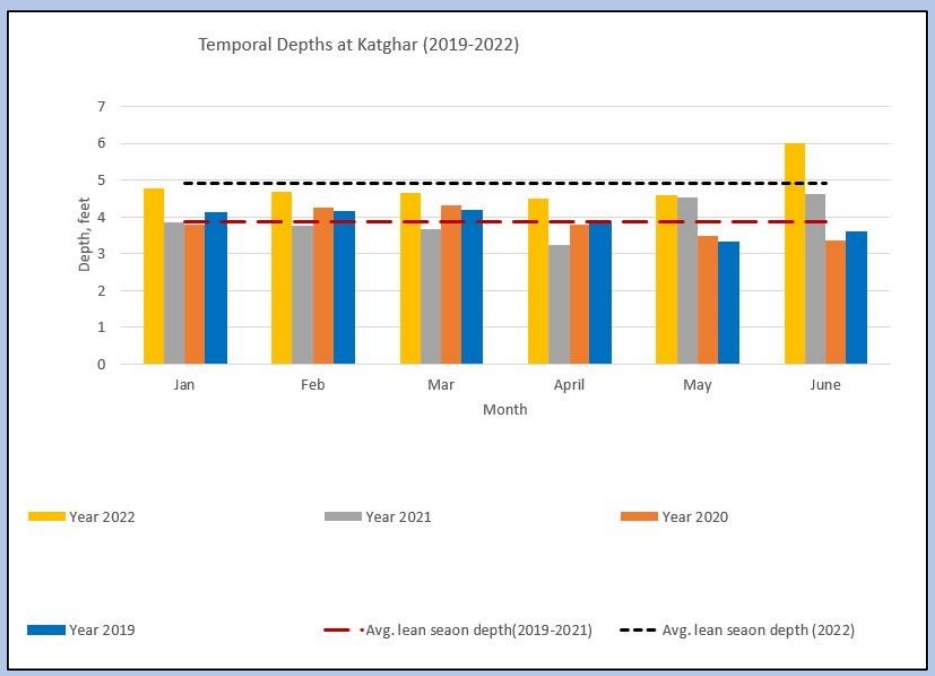


Figure 70 Temporal depths at Katghar, Moradabad

The specific targets are:

Actions	Short term (upto 1 year)	Medium term (2-3 Years)	Long term (4-5 Years)	Responsible department/ agencies/ stakeholder	Remark / Scheme
1. Regular Monitoring of the impact of enhanced flows in Ramganga river At selected location	▪ Assess baseline information of diversity, occurrence and population of aquatic species (fish, turtles etc) in Ramganga river. ▪ Jointly monitor the impact of E-Flows maintenance/enhanced flows on fish populations, aquatic biodiversity, and the assimilating capacity of the Ramganga and Dhela River	▪ Periodic data collection on fish populations, aquatic biodiversity, and water quality in the Ramganga river. ▪ Share the findings with relevant stakeholders and the public to raise awareness	▪ Use the monitoring results to adapt and refine the E-Flows maintenance strategy as needed to maximize ecological benefits.		▪ AMRUT 2.0 Scheme ▪ Mission Amrit Sarovar ▪ Namami Gange Programme
2. Long-term E-Flows Maintenance Target in Ramganga river and Tributaries	▪ Collaborate with UPI&WRD and other stakeholders, thematic experts to E-Flows assess E-Flows in Dhela River. ▪ Map and prioritize floodplain wetlands which can provide hydrological benefits to river. ▪ Restore wetlands in loosing nature stretches of	▪ Carry out E-Flows assessment of critical tributaries which has majority of portion within Moradabad district (like Dhela, Gaagan and Aril rivers) ▪ Improve hydrological connectivity of tributaries of Dhela like Dhandi river.	▪ Carry out tributary rejuvenation activities which will not only improve health of tributaries but also Ramganga river. ▪ Regularly assess and adjust flow releases as needed to meet E-Flows targets. ▪ Seek funding and support from relevant stakeholders	▪ District Administration ▪ KVK's ▪ Uttar Pradesh Irrigation Department (UPID) ▪ Ground water department ▪ Agriculture Department	

	river (where river loses water to groundwater) ▪ Build capacity of riparian village farmers (in losing stretch) to adopt sustainable water management in agriculture starting by adoption of usage of "Amrit paani/Jeevamrat" (biofertilizers) which improves soil water holding capacity and reduce water demand and groundwater abstractions	▪ Restoration of floodplain wetlands in river basin ▪ Monitor riverine flows in Dhela before confluence with Ramganga river. ▪ Increase coverage of sustainable agriculture practices with aim to reduce water application, by 10% in each block (especially in riparian villages along Dhela, Gaagan and Ramganga river) ▪ Focus on rejuvenation of tributaries (like Dhandi, Karula and Gaagan) to support E-Flows maintenance in Ramganga river	to implement and sustain the E-Flows initiative.	▪ Local universities/ Research institution ▪ WWF India	

7.9 Key Issue- 9: Regional issues- : Pollution from the Dhela River, Reduced flows and heavy pollution loads negatively impacting the Ramganga River

7.9.1 Potential intervention

Conduct an environmental flows assessment of the Dhela River to determine the desired water quantity and quality that should be maintained before its confluence with the Ramganga River. This work is currently underway by WWF India, with the support from UP Irrigation Department.

The specific targets are:

Actions	Short term (upto 1 year)	Medium term (2-3 Years)	Long term (4-5 Years)	Responsible department/ agencies/ stakeholder	Remark / Scheme
1. Conduct Comprehensive E Flows Assessment	▪ Develop a detailed plan for an E Flows assessment of the Dhela River to accurately understand the current flow patterns and identify specific areas of water stress. ▪ Collaborate with relevant environmental agencies, hydrologists, and experts to ensure a comprehensive evaluation of the river's ecological flow requirements.	▪ Analyze the findings of the E Flows assessment to determine the recommended flows necessary for sustaining the ecological balance of the Dhela River. ▪ Develop a strategy for the operational management of the Dhela Barrage to align with the recommended flow rates identified in the E Flows assessment.		▪ District Administration ▪ KVK's ▪ Uttar Pradesh Irrigation Department (UPID) ▪ Ground water department ▪ Agriculture Department ▪ Revenue Department ▪ WWF India	▪ Water Nirmal Abhiyan ▪ National Water Supply Scheme ▪ National Rural Drinking Water Program ▪ Mission Amrit Sarovar
2. Conduct Comprehensive Hydraulic Connectivity Assessment of Dhela river	▪ Design a comprehensive plan for the restoration of floodplain wetlands, incorporating scientific principles and best practices. ▪ Map and prioritize floodplain wetlands which can provide hydrological benefits to river.	▪ Implement an adaptive management approach, regularly reviewing data and making adjustments to the restoration plan based on monitoring results and changing environmental conditions.			

	▪ Restore wetlands in loosing nature stretches of river (where river loses water to groundwater) ▪ Specify restoration techniques, such as re-establishing natural water flow channels, removing invasive species, and promoting native vegetation. ▪ Engage local communities, environmental groups, and relevant stakeholders in the restoration efforts.				
3. Tributary Restoration Plan	▪ Initiate a comprehensive restoration plan for key tributaries, starting with Dhandi, to enhance the inflow of freshwater into the Dhela River ▪ Conduct a detailed assessment of the Dhandi tributary's current ecological health, focusing on water quality, flow rates, and overall ecosystem condition. ▪ Implement restoration measures for Dhandi, emphasizing the	▪ Introduce interventions to optimize water flow in the Dhandi tributary, addressing obstacles, sedimentation, and channel morphology to enhance freshwater contribution to the Dhela River. ▪ Engage local communities and stakeholders in the restoration process, fostering awareness and collaboration for sustained tributary health.	▪ Implement strategies to improve water quality in the Dhandi tributary, addressing pollution sources and promoting sustainable land use practices in the catchment area.		

	restoration of natural habitats, reforestation, and the creation of buffer zones to support biodiversity.				
4. Establishment of Meso-Level Setup	▪ Formulate and establish a meso-level institution, committee, or working group dedicated to basin-scale activities for the Dhela River. ▪ Ensure representation and participation from both districts, Moradabad and Udham Singh Nagar, to address the diverse priorities and interests of each district. ▪ Task the meso-level entity with the responsibility of planning and coordinating activities aimed at enhancing the health of the Dhela River. ▪ Develop a strategic plan that considers input from both districts and aligns with the overall objectives of river health improvement.	▪ Facilitate collaboration among stakeholders and streamline the execution process. ▪ Encourage active participation and engagement from relevant stakeholders, including local communities, government bodies, and environmental organizations, within the meso-level setup. ▪ Facilitate regular meetings and deliberations within the meso-level setup to review progress, address emerging challenges, and adapt strategies based on evolving conditions.	▪ Allocate resources effectively within the meso-level setup to support the planning, coordination, and execution of activities for Dhela River improvement. ▪ Identify funding sources and ensure equitable distribution of resources between the two districts.		

	▪ Empower the meso-level setup to oversee the execution of planned activities, ensuring effective implementation of strategies for Dhela River improvement.				

Section D: Stakeholder Engagement

This part describes the overall process for the implementation and continuous monitoring of the District Ganga Plan (DGP)

7 Detailed Action Plan

The District Ganga plan framework was collaboratively developed with SMGC and subsequently presented in the meeting of the District Ganga Committee in Moradabad held in April 2022. During this meeting, the District Magistrate was requested to constitute a committee and designate a nodal officer to initiate the development of the District Ganga Plan (DGP) in Moradabad district.

In July 2022, upon the proposal of the Divisional Forest Officer Moradabad, the District Magistrate, Shri Shailendra Kumar Singh, approved the formation of a DGP working group, under the Chair of CDO (Chief Development Officer). This group included key members from various line departments. To conduct a situational analysis, WWF India began collecting data on the major rivers within the district boundaries, such as Ramganga, Dhela, Aril, Gaagan, and Karula rivers. The findings of this analysis were presented during the inception meeting of the District Ganga Plan working group in October 2022, chaired by Chief Development Officer Shri Sumit Yadav. The members discussed the presented data and identified gaps that required further data collection from related line departments.

Following consultation with the line departments, data collection commenced, and the drafting of the DGP began. The draft plan was shared with the DGP working group in May 2023, where it received feedback and comments from the members, which were subsequently incorporated into the plan. The final draft was then presented to the District Ganga Committee in July 2023, where comments from the members were taken and integrated to create this final version of the plan (Figure 5).

Figure 71 DGP Working group meeting held on 21 Oct 2022

Figure 72 DGP Working group meeting held on 24 May 2023

Formation of a working committee (or group) under the nodal officer appointed by DM:

- The formation of a working committee is proposed, with representation from key line departments and stakeholder groups. The committee would be convened and steered by the Nodal officer appointed by the DM/DGC.
- Each department/stakeholder group to subsequently nominate a member who will work closely with the nodal officer. The nominated member would be the concerned authority for implementation, data management and monitoring of progress as per action assigned to their relevant department.

Role of the DGP working committee (or group):

- Driving force for the planning process.
- The members of the committee will represent their respective departments and stakeholder groups, and be the key point of contact for coordination and implementation.
- This committee will support situation analysis, consolidation of data and baseline information, and overall knowledge management, led by representatives from respective line departments and stakeholder groups.
- The group shall be responsible for both planning and defining the vision and goal for the district and key rivers identified as well as the monitoring of progress against targets, budgets and timelines.
- The committee will support and work closely with the Nodal officer.

Review, discussion and Capacity Building on DGC Planning Framework:

- The DGP working committee (or group) will review and discuss the framework to gain an understanding through a capacity-building exercise of how the framework is organized and how it supports the planning process.

Inception meeting to discuss outcomes of Situation Analysis:

- An inception workshop would be conducted with members of the working committee, nominated members from all concerned line departments and any other relevant stakeholders to initiate the process of District Ganga Plan development.

- This meeting is useful in discussing the way forward for the stakeholders concerned. This would be a participatory process.

Situational analysis of Key rivers/Tributaries:

- Subsequently, data collection for situation analysis to be initiated, this would help in understanding the current scenario of the ecological health (keys threats and issues) of the key rivers within the district boundaries (i.e. 4 in Moradabad – Ramganga, Dhela, Gaagan and Aril).
- In certain cases, some data may not be readily available, in that case, field surveys, and primary, and secondary data collection may be undertaken to supplement available data on the current status of the rivers at specific points.

Gap analysis, identification of Stakeholders and Potential synergies:

- This process allows for an assessment of gaps in implementation, resource allocations, limitations and the need for additional support. Subsequently, issues and areas of work may be prioritized. This would also allow the opportunity to identify potential synergies among different stakeholder groups and departments.

Prioritization of Issues:

- Here the results of the situational analysis may be presented, basis which this will contribute to later stages of gap analysis, prioritization of issues and subsequently allocation of work to concerned departments and stakeholders.

Visioning exercise with the working committee, (Vision/Goals/Outcomes), Setting targets:

- This exercise will focus on envisioning a future for key rivers in a district and the goals and objectives that would contribute to it.
- With baselines available and gaps identified, through this exercise the working committee would arrive at an informed decision on what District plans should aim to achieve. Further, this exercise helps arrive at how this vision for the rivers and the district can be realised.

Monthly meetings, monitoring and course correction:

- Regular monthly meetings of the working committee are to be organized for review and monitor progress, as well as course corrections if required.
- Data from all the related line departments are to be collected on the various aspects indicated in the framework, for developing the district plan.

Draft District Ganga Plan developed with a detailed work plan:

- Drafting of District Ganga Plan to be initiated basis the available data, consultation, visioning exercises and brainstorming.
- This draft may be further discussed with the working group and the concerned stakeholders towards finalisation and be presented to the DGP working committee and District Ganga Committee to get insight from the members and incorporate their suggestions and comments.

Finalisation of District Ganga Plan:

- Following the incorporation of inputs and feedback from stakeholders and working committee members, the plan is to be finalised.

Monitoring and evaluation against plan activities and reporting:

- Once the implementation of the plan is initiated it would be vital to monitor and evaluate progress against set targets, budgets and timelines. If required, the plan may be adapted and revised. This process will be supplemented by monthly meetings.

8 Stakeholder engagement (Ramganga Mitras in action)

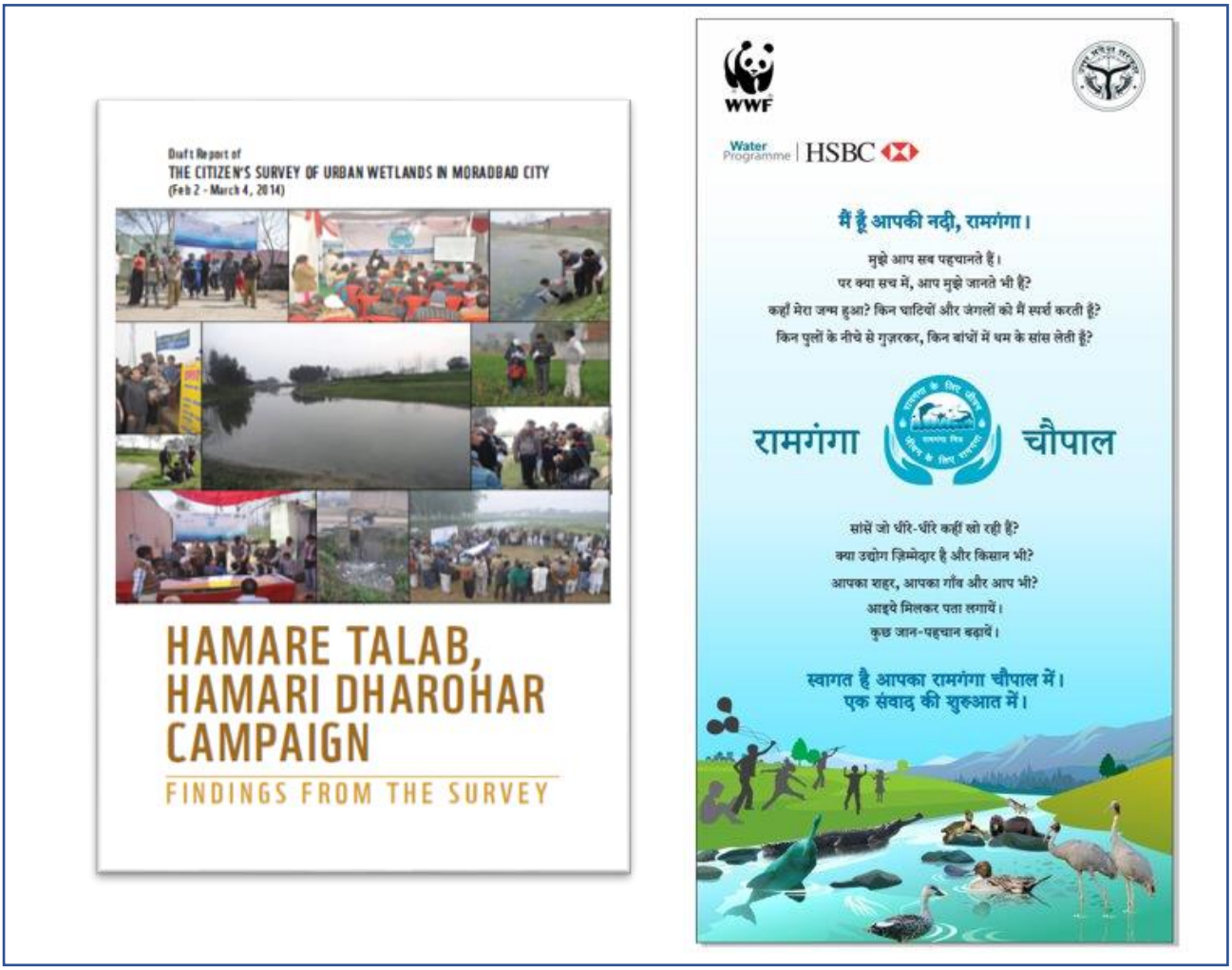
Mitra's, known as Friends of Rivers and Wetlands, is a group of dedicated volunteers representing various stakeholder groups. Their primary objective is to safeguard rivers and wetlands through active participation in conservation efforts and the sustainable management of these natural resources.

Mitra's come together with a common purpose, collaborating and fostering a collective vision for the preservation of freshwater resources. They possess valuable indigenous and local knowledge of the wetlands and catchment areas, enabling them to contribute effectively to conservation initiatives.

These passionate individuals are driven to protect rivers, wetlands, and aquatic biodiversity. They demonstrate self-motivation and a willingness to invest their time and efforts in these endeavours. Mitra's act as influencers within their communities, offering support and understanding regarding wetland issues and recognizing the intrinsic value of these ecosystems.

Figure 73 Ramganga Mitras in action.

Figure 74 Mitras in action to know the cause of fish mortality in Ramganga river in April 2016 in Moradabad.



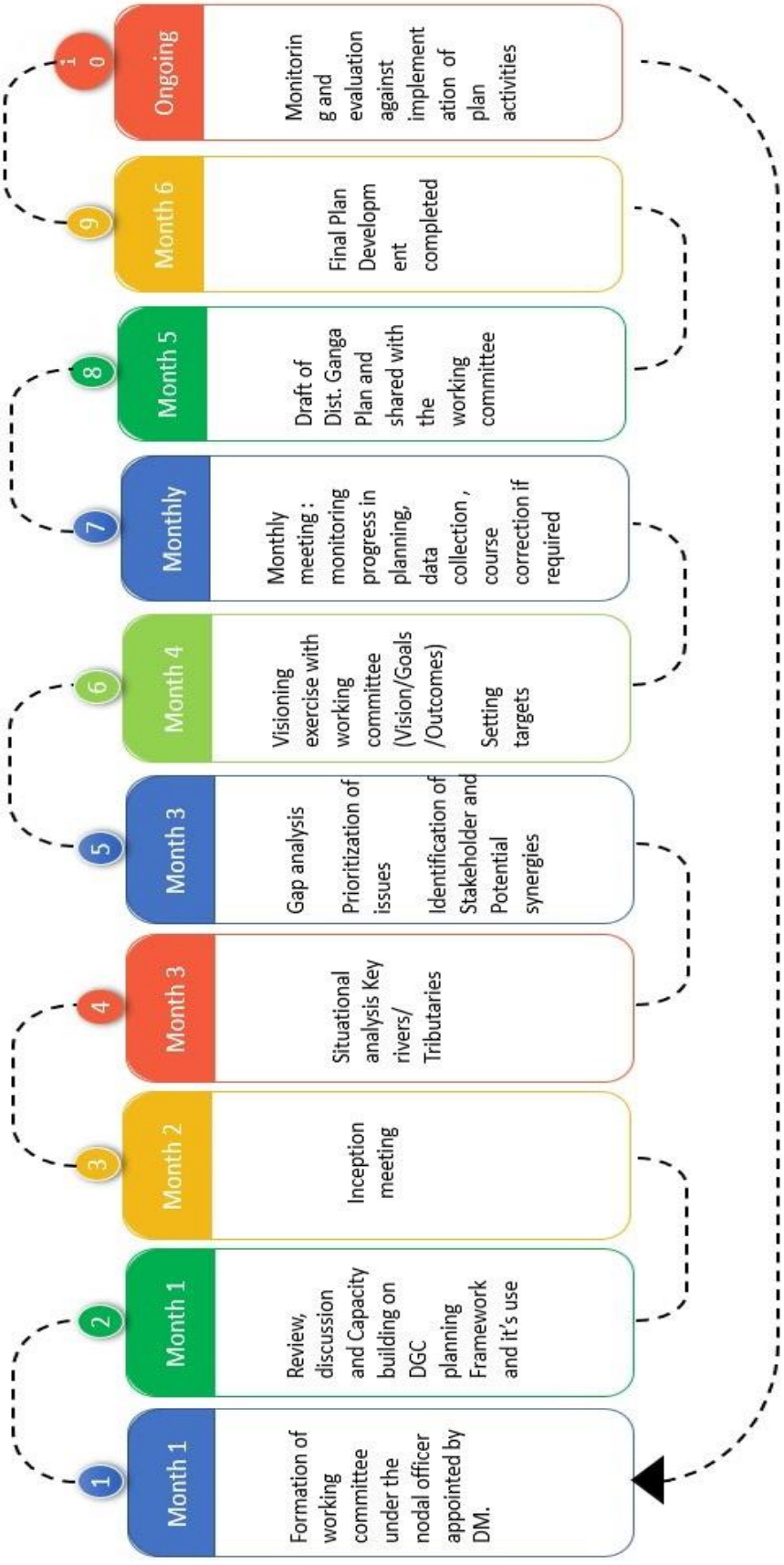


Figure 75 Stakeholder engagement Process for District Ganga Detailed Action Plan

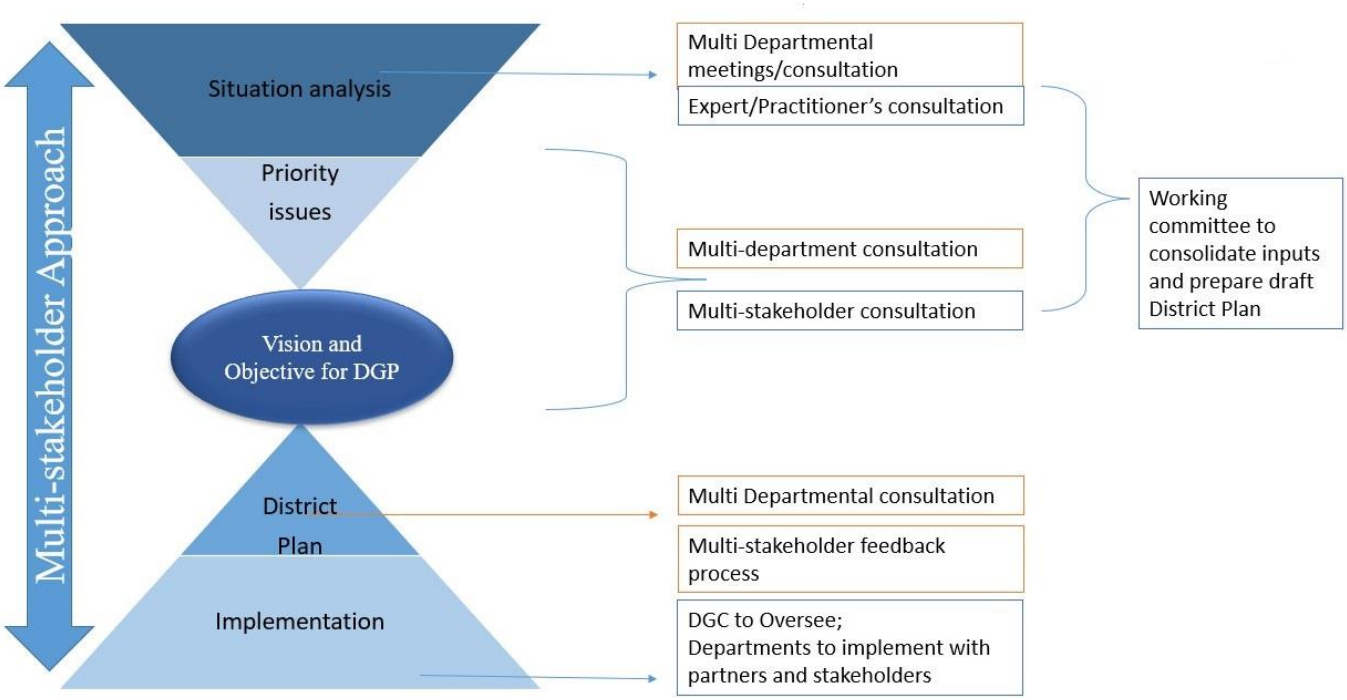


Figure 76 Detailed stakeholder process

Table 21 All relevant state policies (Environment, water, forest, agriculture, pollution) having bearing on river floodplain and larger basin scale will be considered as part of this process.

List of stakeholders	Situation analysis	Priority issues and principle	Vision and Objective	District Plan	Implementation
Municipal corporation	√	√	√	√	√
Irrigation department, Flood division	√	√	√	√	√
UPPCB	√	√	√	√	√
Divisional Forest Department	√	√	√	√	√
Jal Nigam	√	√	√	√	√
Ground water department	√	√	√	√	√
Panchayat Raj department	√	√	√	√	√
Revenue department	√	√	X	X	X
Health department	√	X	X	X	X
Fisheries department	√	√	√	√	√
Development authority	√	√	√	√	√
District Industries centre	√	√	√	√	√
Agriculture department	√	√	X	√	√
Sugarcane department	√	√	X	√	√
CSO- Mitras, Civil defence, Farmers, etc.	√	√	√	√	√
Ganga grams and other gram panchayats	√	√	√	√	√
Academia/ Sector experts	√	√	√	√	X
NGO's	√	X	√	√	√
Industry and Industry associates	√	√	X	√	√
Rural Development (CDO, DDO DC MANREGA)	√	√	√	√	√
NMCG	√	X	X	√	X
SMCG	√	√	√	√	X

8.1 Stakeholder Engagement Plan

A stakeholder engagement plan (Figure 78) is a strategic document that outlines how an organization will engage and communicate with its stakeholders. Stakeholders are individuals, groups, or organizations that have an interest or can be affected by the activities and decisions of the organization. Developing a stakeholder engagement plan is essential to ensure that stakeholders are effectively involved, their needs and concerns are addressed, and their perspectives are considered in decision-making processes. Stakeholder engagement should be an ongoing process, and it is crucial to maintain open and transparent communication with stakeholders throughout the life cycle of a project or organization. [33].

- Facilitates increased community ownership.
- Promote greater community engagement in rejuvenation and conservation initiatives.
- Strengthen collaboration among stakeholders.
- Promote a comprehensive understanding of the imperative for a holistic approach to River Ecology and River Rejuvenation.

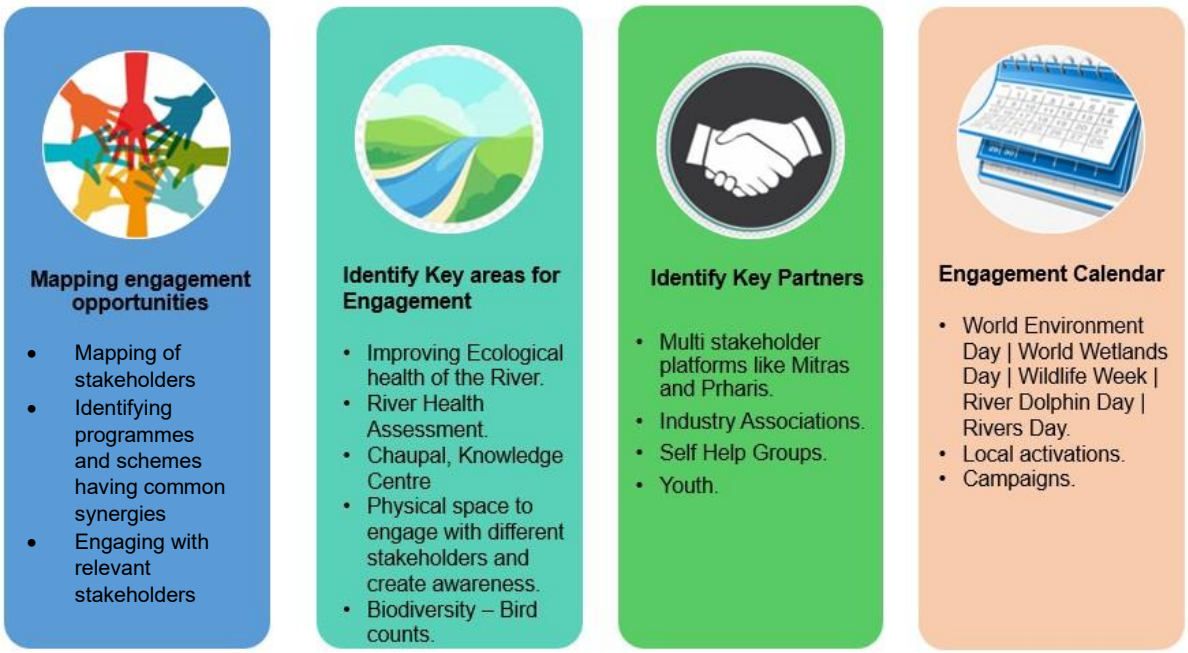


Figure 78 Stakeholder Engagement Plan

9 Monitoring and Evaluation

The process of Monitoring and Evaluation (M&E) is an essential component of the District Ganga Plan (DGP), aimed at assessing the implementation progress within the district and the achievement of its objectives. M&E entails establishing measurable indicators for each specific target, which enable the monitoring of progress, enhancing accountability, and evaluating the effectiveness of the intended intervention. These indicators should be concise and accurately describe the specific target, avoiding excessive data requirements or complex data acquisition efforts.

During this stage, the implementation of the plan takes place, involving the deployment of various components such as media products, messages, partnerships, and capacity-building initiatives. It is crucial to monitor the intervention to ensure that it is yielding the desired outcomes and to facilitate adjustments as needed during the course of implementation. Gender considerations are of particular importance at this stage, ensuring that gender norms and roles do not hinder the participation of any group in the activities being rolled out.

Following Table 22 lists the monitoring and evaluation tasks for all the key identified issues.

Table 22: M&E approach for key identified issues

Objective	Monitoring	Evaluation
Identified Key Issue-1 Domestic sewage management; Water demand management and sewage treatment in urban/peri-urban areas		
Bolstering Faecal Sludge and Septage Management (FSSM)	Track improvements in FSSM infrastructure, service coverage, and efficiency.	Assess reduction in open defecation, increase in safe waste disposal, and FSSM facility utilization.
Systematic Emptying with Geotagged De-sluggers	Record frequency and efficiency of emptying using geotagged de-sluggers.	Measure reduction in untreated waste, improved scheduling, and optimized resource allocation.
Collaborative STP Monitoring with Local Communities	Engage local communities and experts from TMU and Hindu College etc. in STP monitoring and record participation levels.	Evaluate community awareness, involvement, and the impact on STP operation and maintenance.
Decentralized Wastewater Treatment for Karula Drain	Monitor the implementation and performance of decentralized treatment for Karula drain.	Assess water quality improvement, reduction in pollution, and drain ecosystem restoration.

Upscaling Water Footprint Campaign	Track the spread of the water footprint campaign in the city and peri-urban areas.	Measure increased public awareness, behaviour change towards water conservation, and reduced water wastage.
Identified Key Issue-2 Agriculture water management- overuse of water and chemicals leading to depletion of ground water table, pollution due to agriculture runoff and leaching.		
Objective:	**Monitoring:**	**Evaluation:**
Conversion of Farmland to Sustainable agriculture and water management practices	Track the percentage of farmland transformed annually	Assess crop yield improvements, water usage reductions, and adoption rates of sustainable practices.
Establishment of Water Users' Associations (WUAs) across all irrigation canals	Record the number of WUAs established and their coverage. Capacity building initiatives for WUAs	Evaluate the effectiveness of WUAs in promoting sustainable farming practices and community engagement.
Linking tail-ends of irrigation Canals to Nearby Water Bodies (rivers/streams/rivulets/village-ponds/wetlands)	Number of canals-to-water body linkages annually in the district	Measure increased water availability, ecological enhancements, and local water security.
Promotion of irrigation Water Use Efficiency (WUE) and Organic or semi-organic farming practices (Package of Practices – PoPs)	Adoption rates of PoPs around irrigation WUE and organic or semi-organic farming practices.	Assess improvements in soil health and moisture, water retention, and crop productivity through farmer consultations. Assess improvements in irrigation WUE and routing the same to local water-bodies (rivers/streams / rivulets/village-ponds/wetlands)
Identified Key Issue-3 Disposal of untreated/ Partially treated liquid and solid waste from industries into water bodes		
Objective:	**Monitoring:**	**Evaluation:**
Implementation of Counter Current Mechanism (CCM) in Electroplating Brass Industries	Track the number of adoptions of CCM in electroplating brass industries.	Assess the reduction in pollution levels, improved water use efficiency, and regulatory compliance due to CCM implementation. Also, measure the reduction of freshwater consumption.
Identification of Unregistered Plants	Identify unregistered electroplating plants in the city and record their compliance status.	Measure the increase in registered and compliant plants due to awareness campaigns and incentives.
New Water Quality Monitoring Stations	Install monitoring stations at designated spots as specified like upstream of Khadakpur	Regularly analyze water quality data to detect changes, pollution

	Baje village (28.776947°N; 78.806178°E), Sikandarpur patti village downstream of Karula nala/river, at Dhela river pre-Ramganga confluence, Dhandi river, and Gaagan river meeting major drains	sources, and trends in pollution levels. Reporting of results and analysis in the DGCs for further action.
Identified Key Issue-4 Pollution from solid and E-Waste in urban and rural areas		
Objective:	**Monitoring:**	**Evaluation:**
Incentives for Source Segregation	Track the adoption rate of source segregation and the reduction in collection charges for participants	Assess the increase in source segregation, reduction in mixed waste, and effectiveness of the incentive scheme.
Extensive Awareness Drives and Expansion	Measure the reach of awareness campaigns, including civil society involvement and expansion to urban local bodies (ULBs).	Evaluate increased public awareness, participation, and improved waste sorting practices.
Sustainable E-Waste Management Study	Track the progress and completion of the e-waste management study. Involve local academic institutions like – Hindu College, TMU etc.	Evaluate the study's findings and recommendations, including feasible strategies for sustainable e-waste management. Implementation of study findings in a phased manner.
Bio-Waste Processing Units in Markets	Track the establishment and operation of bio-waste processing units in markets.	Measure the reduction in organic waste sent to landfills, involvement of local entrepreneurs, and the impact on local waste management.
Identified Key Issue-5 Floodplain encroachment leading to degradation of habitats (for aquatic life-forms) and loss of lateral connectivity in Ramganga/ Gaagan/ Aril/ Karula rivers in district		
Objective:	**Monitoring:**	**Evaluation:**
Joint scientific surveys through remote sensing and GIS applications and priority area identification (river floodplains and critical village ponds and wetlands along/near the river floodplains)	Number of joint surveys involving Revenue, local organizations, and district Administration to assess degree of floodplain and wetland degradation.	Evaluate the survey findings to determine critical river stretches and floodplain wetland sites for conservation and restoration based on ecological significance and potential impact. Identification of priority areas for action and initiation of action.
Strict Monitoring Mechanisms and Hotspot Identification	Implement regular inspections and utilize remote sensing and GIS applications for continuous monitoring.	Assess the effectiveness of monitoring through identified hotspots, problem areas, and early intervention measures at critical sites, such as Mokshdham, Lalbagh Katghar
Buffer Zone Establishment and Nature-Based Techniques	Establish and monitor the 500-meter buffer zone on	Evaluate the buffer zone's impact on floodplain protection, water

	both riverbanks using nature-based techniques like vegetation and tree barriers.	quality, and ecosystem health, and assess the success of nature-based techniques.
Floodplain Wetland Restoration	Select floodplain wetlands for restoration and implement restoration measures.	Monitor the restoration progress.
Identified Key Issue-6 Gaps in capacity, skills (Social, technical and institutional) and human resources in DGC for implementation of Ganga authority order		
Objective:	**Monitoring:**	**Evaluation:**
Dedicated Supporting Cell for DGP	Track the establishment of the supporting cell and its functioning.	Evaluate the effectiveness of the cell in coordinating DGP activities, resource allocation, and overall project management.
Training of Executing Agencies	Monitor the training of executing agencies (Jal Nigam, Irrigation department, Nagar Nigam, UPPCB) on river rejuvenation, RBM cycle, STP/CETP operation, and FSM.	Assess the improvement in agencies' understanding on river management concepts and their ability to effectively execute related tasks.
Training Programmes for Line Departments	Track the organizing of training programs involving representatives from various line departments, including women's participation.	Evaluate participants' knowledge enhancement, adoption of sustainable practices, and increased inter-departmental collaboration.
Activities at "Moradabad Jalshakti Kendra"	Monitor the activities, trainings and programs conducted at "Jalshakti Kendra" to raise awareness and involve various line departments.	Assess the level of public awareness, community participation, and integration of multiple departments for holistic water management.
Cultural Heritage and eco-tourism Promotion	Monitor the promotion of cultural heritage and tourism activities (boat rides, bird watching) around Ramganga and its surroundings.	Assess the increase in tourist footfall, local community engagement, and overall impact on cultural preservation and tourism development.
Identified Key Issue-7 Gaps in knowledge on status, issues and actions needed for conservation of key tributaires in Moradabad district.		
Objective:	**Monitoring:**	**Evaluation:**
Expert Team Formation (inter-disciplinary) and Seasonal Surveys	Form a team of inter-disciplinary experts and conduct seasonal surveys of tributaries (2nd, 3rd, and 4th orders) to gather baseline data on hydrology, water quality, overall floodplains and	Assess the completeness and accuracy of collected data, track survey frequency, and coverage of tributaries. Presentation of survey findings at DGC Meetings and actions initiated.

	wetlands health and aquatic biodiversity (e.g., fish).	
Bridging Knowledge Gap on Water Resources	Monitor the dissemination of information on water resources, water quality, flood-plains and wetlands health etc., of critical tributaries (Aril, Karula, Gaagan).	Evaluate the reach of information, community engagement, and the extent to which the knowledge gap is being addressed.
Identified Key Issue-8 Régional issues- a) Maintaining and enhancing Environmental Flows in Ramganga river and its tributaries		
Objective:	**Monitoring:**	**Evaluation:**
Joint Environmental Flows Monitoring	Regularly monitor flows in Ramganga River at Agwanpur and Katghar and its comparison of E-Flows recommendations.	Assess the quantity and quality of water flows to ensure the health and aquatic biodiversity of the river.
Sustaining Environmental Flows (E-Flow)	Continuously monitor and assess the maintenance of Environmental Flows in Ramganga River.	Evaluate the river's health, biodiversity, and the effectiveness of E-Flows management measures.
Identified Key Issue-9 Régional issues- b) Pollution from Dhela river, Reduced flows and heavy pollution loads negatively impacting the Ramganga river		
Objective:	**Monitoring:**	**Evaluation:**
Long-Term E-Flows Maintenance	Continuously monitor and assess the maintenance of long-term and year-round environmental flows (E-flows) in Ramganga with support from UPI&WRD (Uttar Pradesh Irrigation & Water Resources Department).	Evaluate the success in achieving consistent and sustainable E-Flows levels.
Impact on river health, including – Fishes and aquatic Biodiversity:	Jointly monitor the impact of E-Flows maintenance on fish populations, aquatic biodiversity, and the river's assimilating capacity.	Assess changes in fish diversity, abundance, and overall river ecosystem health.

9.1 Gender-sensitive outreach Plan

Gender-sensitive outreach refers to the deliberate inclusion and active participation of women (as well as other vulnerable groups) in the planning process through the adoption of inclusive processes and mechanisms that address barriers they may face. Communication for Development (C4D) has been utilized for several decades as a powerful tool for enhancing the

well-being of children, women, and families. It is employed to promote various human rights issues such as health, nutrition, water, sanitation, education, and more.

A wealth of evidence demonstrates that communication strategies, implemented through a diverse range of approaches, and channels, and targeting different participants and stakeholders, can effectively inform, influence, motivate, engage, and empower individuals and communities. Communication plays a pivotal role in advancing gender equality by challenging and transforming attitudes and stereotypes that perpetuate gender-based discrimination. Moreover, it is closely intertwined with empowerment as it contributes to building the confidence and skills necessary to negotiate choices and demand equal access to and control of resources.

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NAMAMI GANGE

Draft District Ganga Plan
for Bareilly

September 2023

WWF-India

Development of model District Ganga Plan (DGP) for four districts of Ganga Basin, namely – Moradabad, Bareilly, Shahjahanpur (All from Uttar Pradesh) and Udham Singh Nagar (Uttarakhand) is a joint initiative of the World Wide Fund for Nature – India (WWF-India) and Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ) under the aegis of National Mission for Clean Ganga (NMCG), Ministry of Jal Shakti, Government of India.

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Abbreviations used

AMRUT	Atal Mission for Rejuvenation and Urban Transformation
BCM	Billion Cubic Meters
BOD	Biochemical Oxygen Demand
CETP	Common Effluent Treatment Plant
cGanga	Centre for Ganga River Basin Management and Studies
CGWB	Central Groundwater Board
CPCB	Central Pollution Control Board
CWC	Central Water Commission
DEP	District Environment Plan
DGC	District Ganga Committee
DGP	District Ganga Plan
DO	Dissolved Oxygen
DoWR, RD & GR	Department of Water Resources, River Development and Ganga Rejuvenation
DWS	Ministry of Jal Shakti, Department of Drinking Water and Sanitation
ETP	Effluent Treatment Plant
FSTP	Faecal Sludge Treatment Plant
GPI	Grossly Polluting Industries
GRBMP	Ganga River Basin Management Plan
IUCN	International Union for Conservation of Nature
MCM	Million Cubic Meters
BDA	Bareilly Development Authority

MLD	Million Litres per Day
MNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MoHUA	Ministry of Housing and Urban Affairs
MoRD	Ministry of Rural Development
MSW	Municipal Solid Waste
NbS	Nature-based Solutions
NGT	National Green Tribunal
NHP	National Hydrology Project
NIUA	National Institute of Urban Affairs
NMCG	National Mission for Clean Ganga
NNM	Nagar Nigam Moradabad
NWA	National Water Academy
NWIC	National Water Informatics Centre
NWM	National Water Mission
NWP	National Water Policy
RBM	River Basin Management
RSAC-UP	Remote Sensing and Application Centre
RTDAS	Real-Time Data Acquisition System
SBM	Swachh Bharat Mission
SMCG UP	State Mission for Clean Ganga Uttar Pradesh
SSAP	State-Specific Action Plan
STP	Sewage Treatment Plant
SWaRA	State Water Resources Agency

SWaRDAC	State Water Resources Data Analysis Centre
UPID	Uttar Pradesh Irrigation Department
UPPCB	Uttar Pradesh Pollution Control Board
UPSDMI	Uttar Pradesh State Disaster Management Institute
URMP	Urban River Management Plan
WII	Wildlife Institute of India
WRICE	Water Resources Institutional Capacity Enhancement
WRIS	Water Resources Information Systems
WRMS	Water Resources Management Systems
WROPS	Water Resources Operation and Planning Systems

Executive summary

This two-page summary provides an overview of the document titled "District Ganga Plan for Bareilly District." The document aims to address the key issues and challenges related to the Ganga River Basin in the Bareilly District and proposes a comprehensive plan for its management and conservation.

The "District Ganga Plan for Bareilly District" document provides a comprehensive analysis of the district's biophysical and non-biophysical characteristics, identifies key issues for the planning cycle, and proposes actionable solutions. The stakeholder engagement process and the detailed action plan highlight the collaborative efforts needed for successful implementation. This document serves as a valuable resource for policymakers, stakeholders, local departments/agencies and organizations involved in the management and conservation of the Ganga River Basin in the Bareilly District.

Section A: Introduction

The document begins with a background on the Ganga River Basin Management Plan (GRBMP) and its vision. It highlights the importance of the District Ganga Plan Directive and its interconnections with comparable initiatives. Additionally, it illustrates the establishment of working groups to identify and prioritize pertinent issues (from the perspective of water resources management) that the district is grappling with. The vision and scope of the document is also outlined, emphasizing the need for a comprehensive approach to the management of the Ganga River Basin.

The vision of the District Ganga Plan for Bareilly aims to address core challenges related to the protection, regulation, and reduction of river and catchment degradation impacting river health and freshwater resources in the Ramganga River and its tributaries. The plan prioritizes water management issues specific to the district and identifies existing programs, initiatives, and best practices aimed at resolving these challenges. The fundamental objective is to ensure robust ecological health and vitality for all rivers within the district, ensuring long-term water security for the city and its ecosystems.

To achieve this vision, the plan leverages the methodology from the Ganga River Basin Management Plan (GRBMP) and incorporates two important Indian principles: *Aviral Dhara*

(continuous flow) and *Nirmal Dhara* (unpolluted flow). It also considers the interdependencies between different components of the river system, which directly affect its overall well-being and efficiency. The following approach was followed to develop the District Ganga Plan for Bareilly District.

Section B: Biophysical and Non-Biophysical Characteristics

This section provides an analysis of the district's physical resources, including an overview of the Ramganga basin and the Bareilly District. It explores the topography and drainage system, rainfall and climate patterns, available water resources, water quality, land use and land cover, agriculture and irrigation practices, floodplain and wetlands encroachment, industry, aquatic biodiversity, waste and sewage management, and other relevant factors. This analysis forms the basis for understanding the current state of the district's resources and their implications for the Ganga River Basin.

The entire hydrological network in the region is regulated by the dominant presence of the Ramganga River and its associated tributaries, including the Siddha, Dojora, Baigul (west), Kicha, Sankha, Deoraniya, Nakatia, Baigul (east), Deoha, and Aril rivers. It is noteworthy that all of these rivers, except for the Aril River, converge with the Ramganga River on its left bank.

The primary contributor to precipitation in the region is the monsoon season, typically occurring from mid-June to mid of October. Among these months, July and August experience the highest rainfall. Throughout the year, the district's average temperature ranges from a minimum of 14.1 °C in January to a maximum of 31.6 °C in May. Over the period from 2011 to 2020, a noticeable downward trend in average annual rainfall has been observed in Bareilly district. Specifically, there has been a decline from 1196 mm to 750 mm in rainfall amounts.

Water-intensive agricultural practices, particularly the cultivation of crops such as paddy exert a substantial demand for freshwater resources in the region, leading to significant groundwater extraction in the Bareilly District. The land use and land cover analysis of District Bareilly reveals that the majority of the area (87%) is dominated by agricultural activities. The predominant crops grown in the region is wheat followed by rice and then sugarcane. Among these, sugarcane and paddy require significant amounts of water, resulting in extensive extraction of groundwater in the district.

Within the district, 11 blocks are categorized as being in the safe category (out of 15 blocks) in terms of groundwater availability. However, the city of Bareilly is classified as over-exploited, while Alampur Zafarabad, Majhgawan, Ram Nagar, and Fatehganj fall into the semi-critical category.

The Aril River basin experiences large-scale over-extraction of groundwater due to its prominence as the primary water source for various purposes. Consequently, this excessive exploitation has resulted in a rapid decline in groundwater levels in recent years. This decline can be attributed to reduced areas available for recharge, particularly close to the Aril River.

Mapping carried out by WWF-India and IIT Kanpur indicates that there are 275 wetlands/ponds (>2.5 ha) in Bareilly district, which provides valuable ecosystem services including local water security to communities, groundwater recharge, base-flows to rivers, habitats for aquatic and avian species etc. Due to several threats and pressures, about 70% of them have become degraded over a period, which needs to be protected and conserved to support the ecological health of the basin and district.

Section C: Situation Analysis of Key Issues for the Planning Cycle

This section outlines various strategies for effective water management in the Bareilly district. It includes developing comprehensive plans for addressing Water Over-Abstraction, promoting sustainable Agricultural and Waste Water Management, devising strategies for Solid Waste Management, safeguarding Floodplain Integrity and Wetlands Conservation, enhancing Capacity, Skills, and Human Resource Gaps at District Ganga Committees, and addressing Knowledge Deficits in Tributary Conservation for effective conservation efforts. Efforts will also focus on understanding and conserving key tributaries and ensuring Environmental-Flows (E-Flows) in the Ramganga River and its tributaries for ecological health and sustainability.

Section D: Stakeholder Process for Developing District Ganga Plan, Monitoring, and Implementation

This section focuses on stakeholder engagement in the development of the District Ganga Plan. It describes the stakeholder engagement process and highlights the role of "Ramganga Mitras" in implementing the plan. WWF India operates the Ganga/Ramganga Mitra Programme, involving several dedicated volunteers ("Ramganga Mitras"). The program aims to conserve the Ganga and Ramganga rivers by designing initiatives to mitigate threats, reduce pollution, and protect endangered species. Volunteers are trained in river and wetland health assessment and actively support conservation efforts.

A detailed action plan is also presented, outlining the specific steps and initiatives to be taken. Additionally, this section emphasizes the importance of monitoring and implementation, including a gender-sensitive outreach plan.

Section A: Introduction

This part describes the rationale for preparing the plan, sets out the background to and process for developing the plan, and the structure of the document.

1. Background

1.1 The Ganga River Basin Management Plan (GRBMP) and its Vision

The Ganga River Basin Management Plan's (GRBMP) vision is to restore and revitalize the Ganga River and its tributaries and embodies a comprehensive vision aimed at the "Restoration of wholesomeness" of rivers within the Ganga Basin. The primary missions of GRBMP revolve around the attainment of *Aviral* (continuous flow) and *Nirmal Dhara* (clean flow) [1]. Establishing ecological health and implementing effective basin governance serve as fundamental frameworks for the multifaceted activities dedicated to the rejuvenation, protection, and management of the Ganga tributaries. At the local scale within respective districts, significant endeavours aligned with the basin-level vision are undertaken. The District Ganga Plan emphasizes river rejuvenation specific to each district, albeit with diverse goals, objectives, and outcomes. Nonetheless, these individual efforts collectively contribute to the overarching vision of restoring the Ganga River and its tributaries to their pristine condition.

1.2 District Ganga Plan Directive

The development of the District Ganga Plan is obligatory under the provisions stipulated in the River Ganga (Rejuvenation, Protection and Management) Authorities Order of 2016. Specifically, Clause 57 of the aforementioned order mandates the formulation of plans by District Ganga Committees (DGCs). Each DGC is required to prepare a comprehensive plan focused on the protection of the River Ganga, its tributaries, and the riverbed within the specified district. The prepared plan must be submitted to the National Mission for Clean Ganga (NMCG) through the State Mission for Clean Ganga (SMCG) for its approval. The plans crafted by the DGCs should encompass various key aspects, including:

- Activities intended to be executed by the DGC for the protection, control, and reduction of environmental pollution in the River Ganga, its tributaries, and their respective riverbed areas.
- An estimation of the associated expenditure for implementing the proposed activities.

- Clear timelines delineating the planned activities and their corresponding milestones.

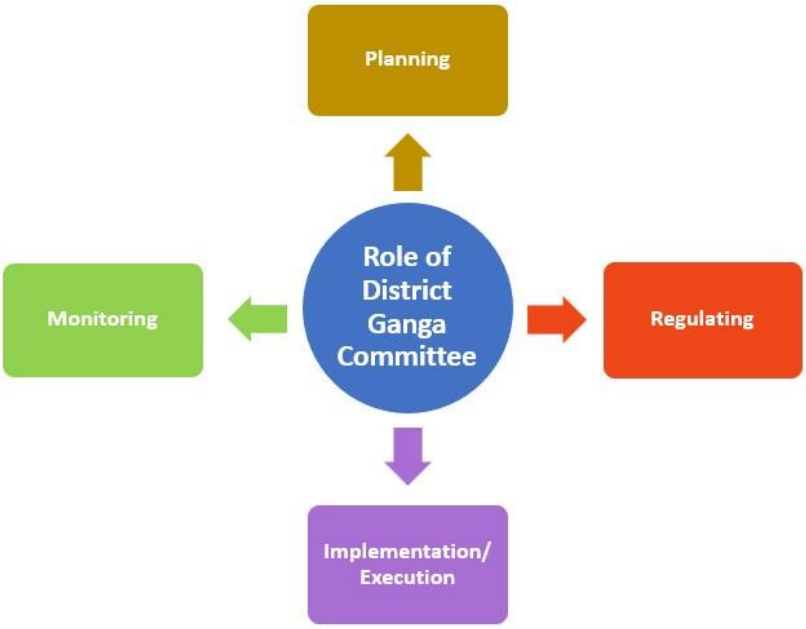


Figure 1 Role of District Ganga Committee (DGC)

Each district-level plan will centre its efforts on safeguarding and reviving pivotal rivers situated within the respective district. These comprehensive plans at the district level will play a vital role in fostering an integrated approach to river basin management.

1.3 Comparable Initiatives and their Interconnections with District Ganga Plans

Efforts towards the purification of the Ganga River have a rich history spanning over three decades. In 2014, the Government of India embarked on an ambitious 'Programme' to achieve effective pollution control, conservation, and rejuvenation of the Ganga through an integrated conservation mission. The implementation of this program falls under the purview of the National Mission for Clean Ganga (NMCG), established as the principal agency [2].

Initially, the focus primarily revolved around cleansing the main stem of the Ganga River. However, recognizing the substantial pollution burden in the tributaries as well, the scope of the program expanded to encompass the entire Ganga basin. Under the flagship of this initiative, numerous programs have already been executed, accompanied by the formulation of plans and guidelines. During the development of District Ganga Plans (DGPs), it is imperative to seek synergies with these existing programs to prevent redundancy and unnecessary efforts [3]. Alignment with the sub-basin management plan, specifically the

Ramganga Basin, and the comprehensive Ganga River Basin Management Plan (GRBMP) becomes crucial for DGPs [1][3]. The GRBMP, formulated by NMCG in collaboration with a consortium of seven Indian Institutes of Technology (IITs), sets the framework for basin-wide management [1]. While not all aspects of the GRBMP may directly impact the District Ganga Planning exercise, the fundamental principles of *Aviral Dhara* (uninterrupted flows) and *Nirmal Dhara* (unpolluted flows) must remain central themes in the development of District Ganga Plans. A significant amount of work has been undertaken within the Ganga Basin, and it is beyond the scope of this chapter to provide a comprehensive overview. Only select activities directly relevant to the development of the District Ganga Plan are mentioned herein.

1.3.1 Action plans for the rejuvenation of tributaries

The *Namami Gange* Programme, implemented by the Union Government of India, is an integrated conservation mission with a substantial budget of Rs. 20,000 crores. Its primary objective is to effectively address pollution, promote conservation, and undertake rejuvenation measures for the National River Ganga. Noteworthy accomplishments under the *Namami Gange* Programme include the establishment of various sewage treatment facilities, riverfront development, river surface cleaning, biodiversity conservation, afforestation initiatives, and the organization of public awareness events, workshops, seminars, conferences, and numerous Information, Education, and Communication (IEC) activities aimed at mobilizing communities and raising public awareness. The program also entails rigorous monitoring of industrial effluents, the creation of Ganga Grams (Ganga Villages), and other significant undertakings [3].

In 2001, the State Water Resources Agency (SWaRA) was established in Uttar Pradesh to enhance the management, planning, and sectoral allocation of water resources among various agencies. The Uttar Pradesh Government further established the State Water Resources Data Analysis Centre (SWaRDAC), a Data Analytics Centre, to provide water-related data to SWaRA and all other central/state water plans about the state's river basins. Eight comprehensive river basin assessments were conducted, leading to the formulation of basin plans for Gandak Basin, Ghagra Basin, Gomti Basin, Ganga Basin, Ramganga Basin, Rapti Basin, Sone Basin, and Yamuna Basin [4]. The World Wide Fund for Nature India (WWF India) along

with UP SWaRA has developed E-flow recommendations for all the major rivers of Uttar Pradesh.

The World Wide Fund for Nature India (WWF India) has developed a Ramganga River Basin Management Plan in collaboration with the Uttar Pradesh State Water Resources Agency (SWaRA). This document presents a comprehensive plan for the development, management, and conservation of the Basin, specifically focusing on the Ramganga River. The plan aims to integrate a wide range of existing findings, recommendations, policies, plans, and activities, and strategically coordinate them to maximize the benefits derived from the basin while ensuring its long-term sustainability.

Aligned with a vision and goals set for the basin over the next 20 years, the plan outlines a strategy and a series of actions to be implemented within the next 5 years. These actions encompass both those already prescribed by other instruments, such as existing national and state policies and strategies, and those specifically formulated for the plan. The inclusion of these actions demonstrates their relevance to other activities within the basin and their contribution to the broader goals of the basin. Furthermore, this plan has been developed in alignment with the Ganga River Basin Management Plan (2015) to ensure consistency and coherence in the overall management approach.

In addition, WWF India also operates the Ganga/Ramganga Mitra Programme, which aims to conserve the Ganga River and its primary tributary, the Ramganga. The "Ramganga Mitras" is a dedicated volunteer group comprising several individuals. This platform fosters discussions and debates to design initiatives for mitigating ongoing threats to the rivers. The initiatives encompass various aspects such as promoting the use of organic fertilizers, reducing reliance on harmful agrochemicals, advocating for organic farming, and implementing best management practices for sustainable agriculture. These measures contribute to the reduction of pollution load in the rivers.

1.3.2 Urban River Management Framework

The National Mission for Clean Ganga (NMCG) and the National Institute of Urban Affairs (NIUA) have collaboratively formulated the Urban River Management Plan framework (URMP) for the development of Urban River Management Plans (URMP) in all Ganga towns. This initiative aligns with the "Vision Ganga" published by NMCG in 2017 [5]. The primary objective

of the URMP is to assist the cities situated along the Ganga River in enhancing the condition of the river within their respective stretches. The Urban River Management Plan (URMP) serves as a planning framework that enables systematic and comprehensive interventions to be organized by the Ganga towns, aiming to revitalize and sustainably maintain their rivers. The overarching goal is to improve the condition of the river within each city's jurisdiction. The underlying principle is based on the belief that enhancing the livability of these towns necessitates the preservation of healthy rivers. Each city's plan under the URMP encompasses three key components to create a holistic and balanced approach to urban river management, addressing environmental, economic, and social aspects for the sustainable development and preservation of the Ganga River in each city [5]. These components are aligned with the design philosophy of the URMP:

- **Environmental Component**: This component corresponds to the philosophy's emphasis on environmental responsibility and entails measures and strategies aimed at ensuring ecological sustainability and minimizing negative environmental impacts.
- **Financial Component**: Corresponding to the philosophy's focus on economic benefits, this component involves financial aspects and strategies aimed at generating economic value, promoting sustainable funding mechanisms, and ensuring the financial viability of the river management initiatives.
- **Social Component**: Aligned with the philosophy's commitment to social inclusivity, this component focuses on fostering community engagement, participation, and social equity. It encompasses strategies aimed at ensuring that the benefits of river management efforts are distributed equitably and that social cohesion is enhanced within the Ganga towns.

1.3.3 District Environmental Plan

The District Environment Plan (DEP) focuses on comprehensive environmental protection and management measures that address various sources of pollution at the district level. It includes key action points such as conducting an inventory of water bodies, assessing the water quality in the district, implementing measures for the protection of rivers and lakes, identifying sources of water pollution, and rejuvenating groundwater resources and Plantation. The development of the District Ganga Plan (DGP) aligns with the objectives and strategies outlined in the DEP, utilizing the information collected in Section C and the

recommended actions provided in Section D, of this report. The relevant information has been organized and categorized based on the key issues identified for this specific DGP, ensuring a targeted and effective approach to addressing environmental concerns in the district.

1.3.4 District Plans

The Bareilly district administration along with WWF India is developing the Bareilly District Ganga Plan (DGP) with support from all line departments and agencies. This work is under the aegis of NMCG, Ministry of Jal Shakti, Government of India. There are four DGPs, which are under formulation. These plans are for the districts of Moradabad and Bareilly (developed jointly by respective district administrations and WWF India along with line departments) and Udhamsingh Nagar and Shahjehanpur (developed jointly by respective district administrations and GIZ along with line departments).

1.3.5 Flood and Disaster Management Plans

In 2011, the establishment of the Uttar Pradesh State Disaster Management Institute (UPSDMI) marked a significant milestone in the field of disaster management. Over the years, UPSDMI has played a crucial role in enhancing preparedness and capacity building by conducting a total of 89 training programs, workshops, seminars, and conferences, thereby imparting valuable knowledge and skills to more than 6,000 officials from various departments and stakeholders. One of the notable contributions of UPSDMI has been its involvement in the development of disaster management modules for several probationary/in-service training programs in the state, including PCS Foundation, Medical Officer Foundation, Teacher's Training, and others. These modules serve as comprehensive resources to educate and equip individuals with the necessary tools and understanding to effectively respond to and manage disasters. To further support the dissemination of knowledge, UPSDMI has produced a multitude of training guides, manuals, and Information, Education, and Communication (IEC) materials in Hindi. These resources have been widely distributed to facilitate a better understanding and awareness of disaster management practices. In line with the establishment of District Disaster Management Authorities, all districts within the state have successfully set up their respective authorities, ensuring a decentralized and coordinated approach to disaster management at the local level. Additionally, recognizing the importance of integrating disaster management into the education system, the state education board has taken the initiative to update its curriculum.

This curriculum revision incorporates a dedicated disaster management component, ensuring that students are equipped with the necessary knowledge and skills to respond effectively to disasters and contribute to building a resilient society [6].

1.3.6 Development of Ramganga Plan by WWF India

WWF India has formulated the Ramganga River Basin Management (RBM) plan, which aligns with the Ganga RBMP of 2015, outlining a strategic framework for the development, management, and conservation of the Ramganga River basin over the next 20 years. The Ramganga RBM plan is grounded on two fundamental concepts, namely *Aviral Dhara* (uninterrupted flow) and *Nirmal Dhara* (unpolluted flow), which serve as guiding principles throughout the plan. The plan encompasses four primary goals, each addressing distinct aspects of the basin's management and conservation. By addressing these goals and their associated objectives, the Ramganga RBM plan aims to promote the long-term sustainability and resilience of the Ramganga river basin, ensuring the well-being of both the ecosystem and the communities dependent on it.

- **River and basin ecosystem health**: This goal focuses on the physical state and condition of the river ecosystem itself, aiming to enhance its ecological health and integrity.
- **Social, economic, and cultural benefits**: This goal assesses the extent to which the basin provides societal benefits, encompassing various dimensions such as social well-being, economic prosperity, and cultural preservation.
- **Basin governance and stakeholder practices**: This goal pertains to the management of the basin and the practices of the stakeholders involved. It emphasizes the need for effective governance structures, stakeholder engagement, and sustainable practices within the basin.
- **Disaster and risk management**: This goal centres around reducing the risk, frequency, and severity of disasters, particularly floods and droughts, within the basin. It involves implementing measures and strategies to mitigate and manage such risks effectively.

2. Vision and scope

The vision of making the District Ganga Plan for Bareilly is to effectively tackle the core challenges of the safeguarding, regulation, and mitigation of environmental contamination in the Ramganga River and its tributaries. Furthermore, it aims to prioritize the significant water management issues specific to the district and identify potential deficiencies in addressing them. Additionally, the initiative seeks to compile a comprehensive inventory of ongoing programs and schemes aimed at resolving the identified issues. The resolution of all these concerns will be undertaken through a systematic and organized approach and will be generally based on the vision for the Ramganga basin document, prepared by WWF India in collaboration with the Uttar Pradesh State Water Resources Agency.

The fundamental objective of WWF-India in developing the District Ganga Plan (DGP) for Bareilly district is to realize a comprehensive vision where all rivers within the district exhibit robust ecological health and vitality. This vision encompasses the long-term assurance of water security for the city and its associated ecological systems.

By leveraging the methodology employed in the Ganga River Basin Management Plan (GRBMP), the vision is grounded in two indigenous Indian principles, namely *Aviral Dhara* (continuous flow) and *Nirmal Dhara* (unpolluted flow). In addition, it incorporates a contemporary comprehension of the interdependencies between various components of a river system, which directly impact its overall well-being and operational efficacy. The overarching vision encompasses the integration of four distinct dimensions of the river system, as outlined in the GRBMP. These dimensions are:

- ***Aviral dhara* (continuous flow)**: The preservation of optimal river flows during periods of low water availability is ensured. This entails the maintenance, restoration, or enhancement of longitudinal, lateral, and vertical connectivity within the river Ganga and its tributaries within the district. Furthermore, the identification, restoration, and protection of floodplains and floodplain wetlands are prioritized. Additionally, wetlands located within a 5 km buffer zone within the district's boundaries are systematically mapped, their health condition is assessed, and rejuvenation efforts are initiated as deemed necessary. The promotion of sustainable agricultural practices is actively encouraged, leading to increased crop water productivity and reduced

freshwater extraction. Moreover, concerted efforts are made to improve the efficiency of domestic, agricultural, and industrial water usage.

- ***Nirmal dhara* (unpolluted flow)**: Efforts are undertaken to enhance the water quality within the river Ganga and its tributaries. This encompasses the implementation of measures to capture and treat all drainage systems that discharge into the river Ganga and its tributaries. Additionally, strict adherence to the pollution control norms established by the Pollution Control Board is expected from all industries operating within the district.
- **Basin Management and Governance**: All relevant stakeholders while securing necessary investments for its execution formally endorse a comprehensive five-year basin management plan, accompanied by a well-defined implementation roadmap. The District Ganga Conservation Committee undergoes capacity-building initiatives, focusing on key facets of river rejuvenation and conservation. Stakeholder ownership and active participation in river conservation efforts are fostered through a structured communication framework, as well as targeted campaigns for awareness, education, and outreach. Furthermore, annual river health report cards serve as crucial tools, providing vital insights for the formulation and adjustment of adaptive management strategies required for overall basin management.
- **Ecological Entity (Biodiversity and Habitat Management)**: Efforts are dedicated to enhancing the habitats of significant aquatic species, including Ganga River Dolphins, gharials, otters, and turtles. This involves targeted initiatives to improve the conditions and suitability of their respective habitats. Community-led conservation programs are implemented within crucial biodiversity hotspots, aiming to stabilize the population of these species. Furthermore, meticulous identification and protection measures are applied to safeguard key wetlands in the district that support diverse biodiversity.

These four dimensions are associated with the fundamental components that constitute a river ecosystem. They offer direction in terms of conserving:

- The flow regime, encompassing environmental flows, utilizing the concept of "continuous flow."
- Water quality and sediment chemistry, through the concept of "unpolluted flow."

- Habitat, represented by the physical structure of the river ecosystem, is referred to as the "geologic entity."
- River basin management while securing necessary investments for its execution.
- Aquatic and riparian biodiversity is collectively referred to as the "ecological entity."

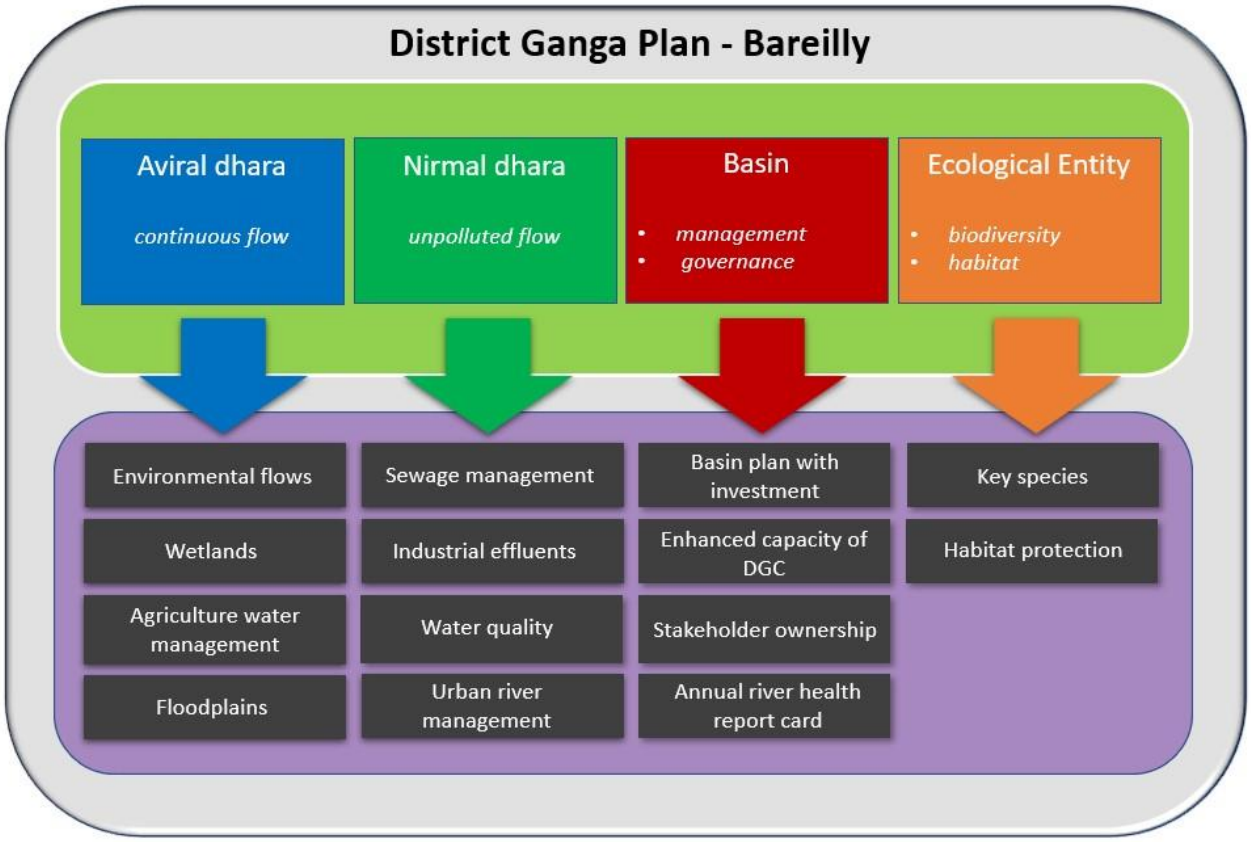


Figure 2 Vision and scope for the District Ganga Plan - Bareilly

3. Framework for District Plan: General approach and methodology

The State Mission for Clean Ganga and WWF India have collaboratively devised a comprehensive framework that is employed by the District Ganga Committees (DGCs) to jointly formulate District Ganga Plans. Initially, this framework will undergo a trial phase in the districts of Moradabad and Bareilly. The primary objective of this framework is to assist DGCs in devising plans that ensure the safeguarding and revitalization of crucial rivers within their respective district boundaries. The framework has been standardized to be utilized uniformly by all District Ganga Committees for planning purposes. However, it also possesses the necessary flexibility to accommodate local requirements and specifications.

To facilitate understanding and guidance for districts and stakeholders, the framework is presented in a comprehensible manner, supplemented with tables, templates, and examples.

Additionally, efforts are underway to develop an online portal version of the framework, which will enhance data management, analysis, planning, and progress monitoring capabilities. The process of planning and implementation is based on a multi-stakeholder approach that emphasizes synergies, fostering dialogues, collaborations, and partnerships among various entities involved. Furthermore, the framework enables regular monitoring and evaluation of progress concerning the district plans.

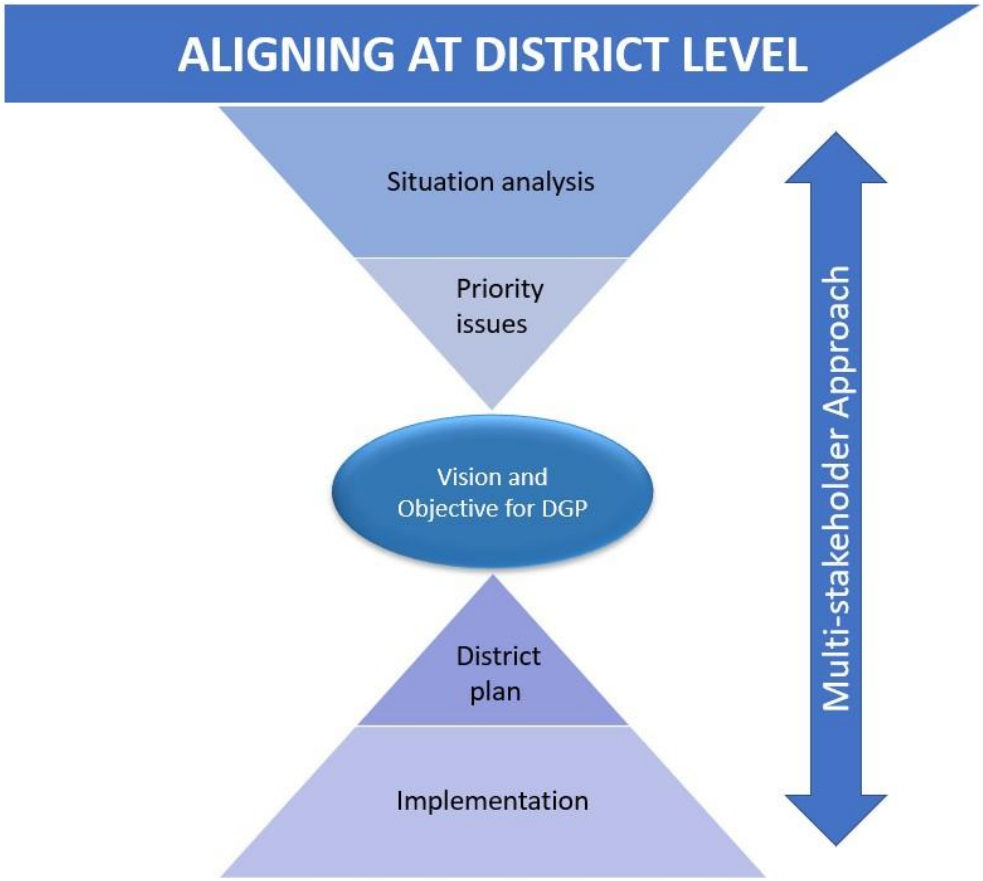


Figure 3 Approach for designing District Ganga Plan (DGP)

The key methodological principles and general principles for developing a District Ganga Plan entail ensuring alignment with the Ganga River Basin Management Plan (GRBMP), Arth Ganga, and relevant State Policies. These principles encompass:

- Aviral Dhara (Uninterrupted flow): Emphasizing the need for continuous flow of the river, and Nirmal Dhara (Unpolluted flow): Prioritizing the maintenance of clean and unpolluted water flow.
- Acquiring a comprehensive understanding of the entire system to inform planning decisions.

- Taking proactive action, even in the absence of complete knowledge.
- Identifying and prioritizing immediate issues while adopting a phased and iterative approach to achieve long-term goals.
- Enabling adaptation to changing circumstances and acknowledging that basin planning is an inherently iterative process.
- Developing sectoral and thematic plans that are relevant and consistent with the overall basin plan.
- Addressing issues at the appropriate scale by integrating local plans within the broader basin plan.
- Engaging stakeholders to strengthen institutional relationships and ensure their participation in the planning process.
- Maintaining a steadfast focus on implementing the basin plan comprehensively throughout its duration.

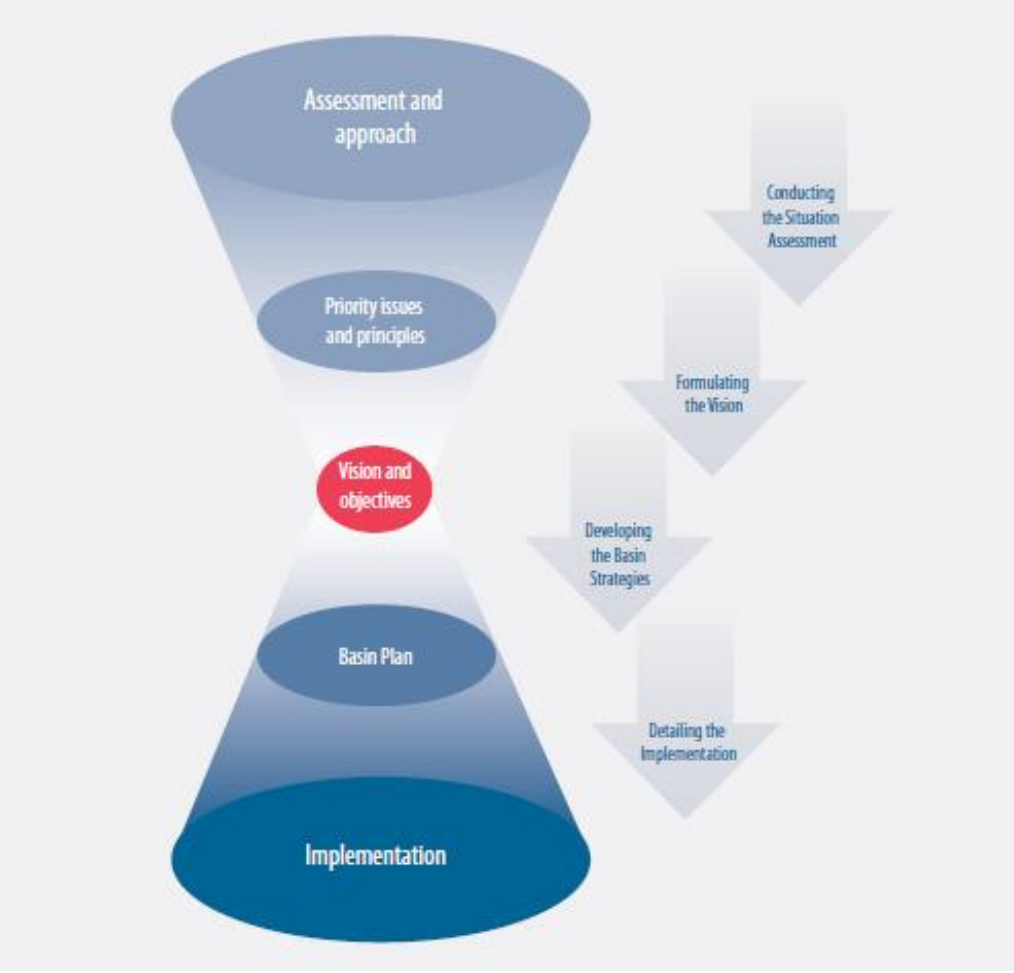


Figure 4 Key principles for designing a district plan comprehensively [7]

The Framework for the District Ganga Plan is specifically structured to provide comprehensive support and guidance throughout the entire planning process, encompassing initiation, implementation, and monitoring and evaluation stages. This ensures the continuous evolution and vitality of the district plan, transforming it into a dynamic and adaptable document that undergoes iterative cycles of planning.

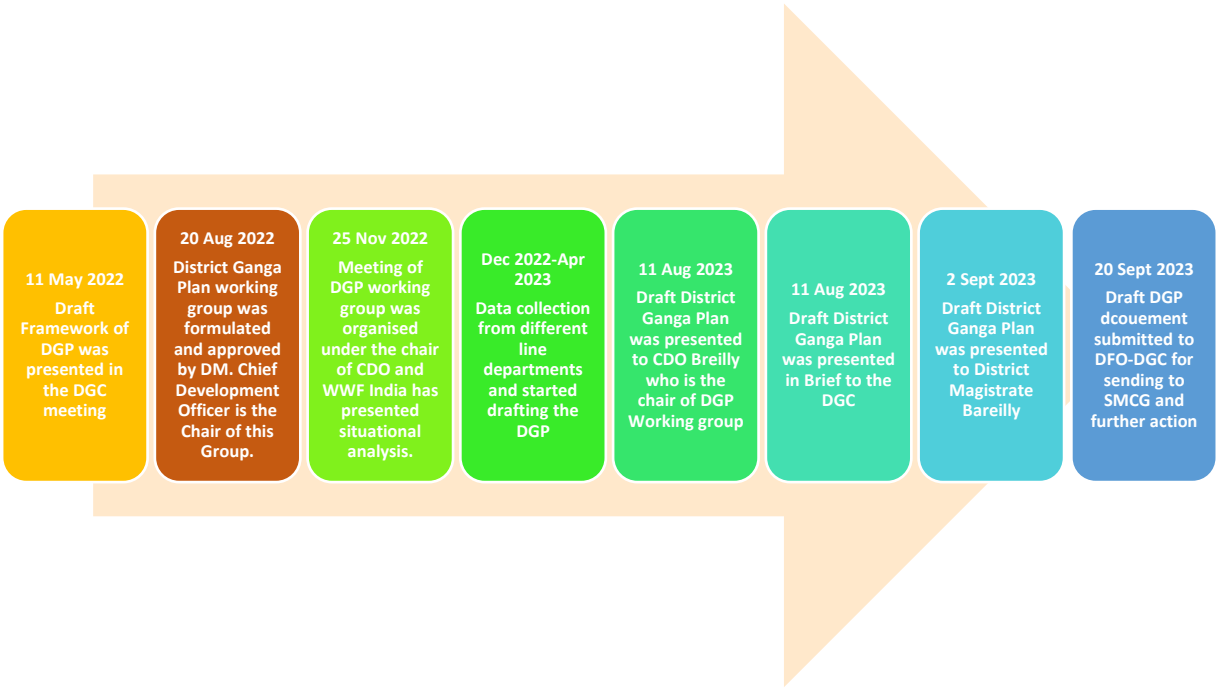


Figure 5 WWF-India's Approach to develop the DGP with timelines

1. **Situation analysis**: The process of conducting a situation analysis entails the systematic collection of baseline data and assessment of the biophysical and ecological attributes of the rivers, along with identifying potential threats they face. This analysis also involves evaluating significant past and ongoing initiatives in the district about river conservation. Furthermore, a gap analysis is conducted to identify areas that require attention and improvement. Lessons learned from previous experiences are also incorporated into the analysis to inform future planning and decision-making processes.
2. **Prioritization of issues**: The prioritization of issues is carried out through a rigorous and iterative process, following the acquisition of baseline information through a comprehensive situation analysis. This prioritization process involves active participation from relevant stakeholders, ensuring their input and feedback are

incorporated. The iterative nature of the process allows for continuous refinement and adjustment of priorities as new information and insights emerge.

3. **District Ganga Plan**: After completing the participatory process of a situation analysis and conducting a thorough gap analysis, which involves collecting baseline data, the next step is to embark on a visioning exercise. This exercise serves as a guiding force in the development of a comprehensive plan. It allows for the effective mobilization of resources, ensuring that they are utilized in an efficient and targeted manner to achieve the envisioned goals and objectives.

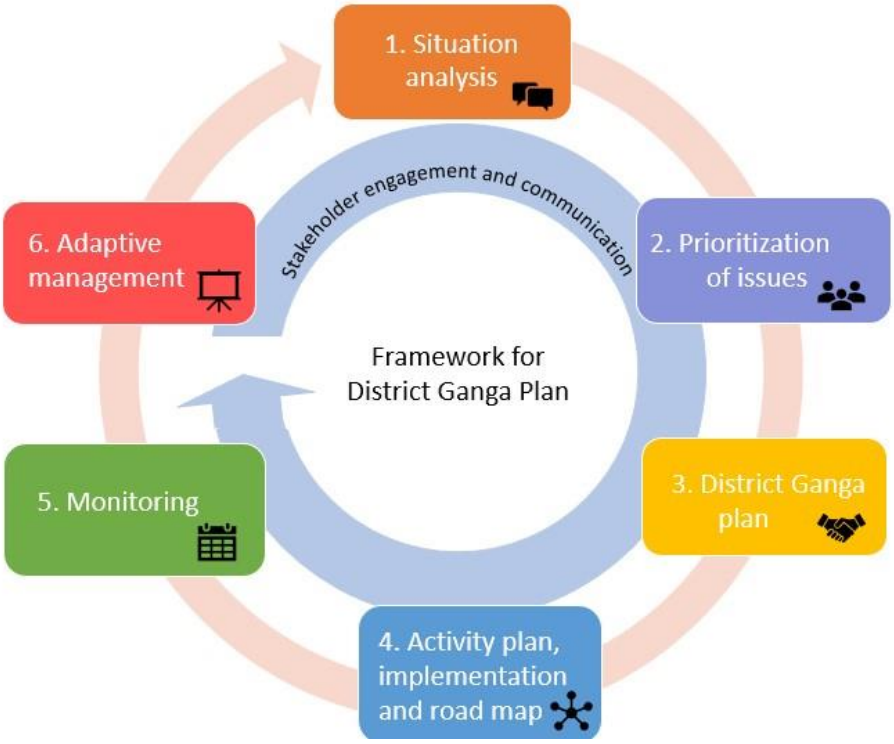


Figure 6 Framework for District Ganga Plan

4. **Activity plan, implementation and roadmap**: The formulation of activity plans and an implementation roadmap serves as an essential tool to provide clear guidance and direction to the relevant stakeholders regarding the path forward and the necessary actions to be undertaken. These plans outline specific activities, strategies, and timelines, enabling stakeholders to effectively navigate the implementation process and ensure the successful execution of the identified actions.
5. **Monitoring**: As the on-ground implementation commences, it is of utmost importance to engage in systematic and regular monitoring of progress. The process of continuous

monitoring and evaluation enables the working committee and relevant stakeholders to assess whether the implementation efforts are proceeding as planned and yield significant outcomes. By closely tracking the progress, potential deviations or areas requiring adjustments can be identified promptly, ensuring that the implementation remains on track and delivers the intended impact.

6. **Adaptive management**: By conducting regular monitoring, the progress can be diligently monitored, allowing for effective tracking of advancements. Furthermore, this monitoring process provides an opportunity for adaptive management, wherein adjustments and revisions to the strategy or plan can be made if the progress is not aligned with the desired trajectory. Such adaptability and responsiveness are integral elements of the iterative and participatory approach, ensuring that the implementation remains flexible and responsive to evolving circumstances and emerging insights.

The River Basin Management (RBM) Plan cycle follows a spiral process, wherein each cycle consists of several distinct steps. Given that Ganga rejuvenation is a collective and ongoing responsibility, the development of the District Ganga Plan (DGP) is perceived as a spiral process. This process involves the formulation and execution of plans, the review of new information, the receipt of feedback, the modification and refinement of priorities, and the adaptation of plans to changing circumstances. The RBM cycle approach is adopted in the preparation of this DGP, to repeat the cycle every five to six years. It is anticipated that each subsequent cycle of the spiral will demonstrate improved management compared to the preceding one, driven by evaluations conducted and lessons learned. Figure 6 visually illustrates the progression of different framework cycles of the DGP throughout the District Ganga Planning Cycle.

The district Ganga plan also incorporates a gender-sensitive approach, recognizing that women comprise approximately 50 percent of the population. The plan must acknowledge and address their unique needs, perspectives, and participation. To ensure an inclusive process where the voices of women are heard, various tools such as surveys, focus group discussions, consultations, and dialogues should be utilized. These methodologies facilitate active engagement and input from women, fostering an environment that embraces their ideas and contributions.

Section B: Biophysical and Non-Biophysical characteristics

This part describes the status of the basin, its role in supporting human communities, and challenges and threats to the health of the basin. It also discusses current responses to these issues.

4. District's physical resources

4.1 The Ramganga basin overview

The river Ramganga originates in Uttarakhand and there are two rivers known with the name Ramganga. The Western Ramganga and Eastern Ramganga, both of them flow independently. The Western Ramganga originates in the Doodha Toli ranges of the lower Himalayas near Gairsain (Uttarakhand). It originates at an elevation of approximately 3,100 m near the Lohba village in the Garhwal district of Uttaranchal. The river then flows through the Patli Dun of the lower Shivalik range, traversing Corbett National Park, Moradabad, Rampur, Bareilly, Badaun, and Shahjahanpur, before eventually joining the Ganga in Hardoi district (tehra-ghat) [8].

The Western Ramganga River is a spring-fed river and the first major tributary to join the Ganga River. The source of the river is located at an elevation of 3,110 meters above sea level (Latitude 30°5'N, longitude 79°16'E) and from its origins there, in the Central Lower Himalayas within the state of Uttarakhand, the river descends through the Corbett National Park and onto the Ganga floodplains (Figure 7). A monsoon-fed system, the river flows approximately 665 km, predominately in a southerly direction until it joins the Ganga at Tehra Ghat village in the Hardoi district of Uttar Pradesh. The basin is approximately 24,459 km^2. This represents around 2.8% of the total area of the Ganga Basin [9][10].

The basin is home to a population of around 16.8 million people, many of whom are dependent upon groundwater-irrigated agriculture. The mean annual regulated flow at the basin outlet is around 6.3 billion cubic meters (BCM) which is 2% of the total water resources of the Ganga. The total utilizable groundwater resource in the basin is approximately 5.6 BCM, and around 73% of that resource is presently abstracted, with groundwater taken both for irrigation purposes and also to supplement or replace domestic water supply systems [9].

The river's hydrological regime is significantly impacted by the monsoon season, wherein approximately 80% of the total surface water flow occurs between 15 June and 15 October (Figure 8).

Figure 7 Map of Ramganga Basin

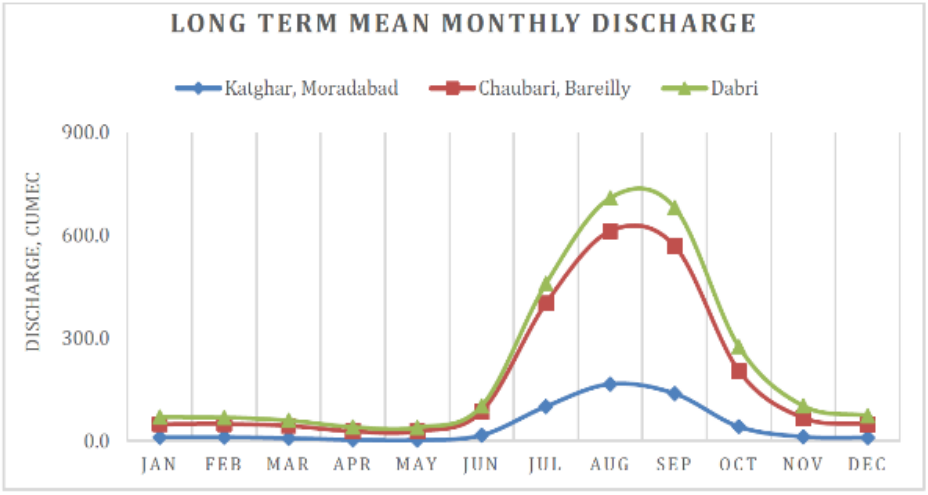


Figure 8 Average river flows at selected sites in the Ramganga River [11]

Table 1 Key features of the Ramganga Basin. Source: National Institute of Hydrology, 1998-99; Central Water Commission 2012, WWF-India (2014-19).

Characteristic	Details
Length	<650 km
Catchment area	24,459 km^2
Average annual renewable water resources	Total: 18 BCM Groundwater: 6.2 BCM Surface water: 11.8 BCM
Utilisable water resources	Total: 10.95 BCM Groundwater: 5.65 BCM Surface water: 5.30 BCM
Total average water abstractions (surface and groundwater)	Total: 10.43 BCM Consisting of: • 0.44 BCM abstracted within the Rāmgangā • 8.44 BCM abstracted from groundwater within the basin • 1.38 BCM diverted to Lower Ganga Canal annually • 0.17 BCM diverted for drinking water supplies to Delhi
Total instream water storage	2.9 BCM
Contribution to the flow of the Ganga	Approximately 2%
Major tributaries	Binao, Gagas, Nair, Badangad, Mandal, Sona, Khoh, Gaagan, Dhara, Baneilli, Pili, Phika, Dehla, Kosi, West Baigul, Aril,and East Baigul
Spatial distribution	Uttarakhand (12 % of the area), Uttar Pradesh (88 %)
Population	Approx. 18.36 million
GDP (within the basin)	>105,498 Rs. Cr.
Climate	Predominately sub-tropical monsoon
Average rainfall	800 - 2,200mm
Major land use categories (% of the basin)	Agriculture: 71.17% Forests: 17 % Pasture: 10.49% Water bodies: 1.02% Built-up land and settlements: 0.24%
Major industries	Metals, chemicals, fertilizers, paper, pulp, textiles, leather
Agriculture	The area under agricultural land: 16,465 km^2 Major Kharif Crops: rice, jowar, maize, bajra and moong Major Rabi Crop: wheat, barley, pea Perennial Crop: sugarcane

4.2 Overview of the Bareilly District

Bareilly is a municipality situated in the northern region of Uttar Pradesh, India, close to the Ramganga River. It is designated as a Commissionery district and falls within the geographical region of Rohilkhand. The city is located 252 kilometres (157 miles) to the north of the state capital, Lucknow, and 250 kilometres (155 miles) east of the national capital, Delhi. It ranks as the seventh-largest metropolis in Uttar Pradesh and the 50th-largest city in India. Bareilly is also selected as one of the ambitious projects under the "100 Smart City" initiative in India. Bareilly serves as a prominent centre for furniture manufacturing and trade, specializing in cane furniture production. It is also involved in the commerce of cotton, cereals, and sugar. The city gained significance through its inclusion in the "Counter Magnets" list of the National Capital Region (NCR), contributing to its status and development. Additionally, it is known as Bans-Bareilly; however, the name is not derived from the bans (cane) market, as it was named after two princes, Bansaldev and Baraldev, who were the sons of Jagat Singh Katehriya, the founder of the city in 1537 [12] [13].

The total area of Bareilly district is recorded as 4120 square kilometres. As per the population data from 2011, the district has a population of 4,448,359 individuals. The literacy rate in Bareilly stands at 58.49 percent. Bareilly is comprised of one corporation, with a total of 20 municipalities, 15 blocks, and 2,070 villages (Table 2) (Figure 9) [12].

Table 2 Physical features of Bareilly District

Tehsil	06
Blocks	15
Geographical area	4120 sq. km.
Gram panchayat	1193
Villages	2072
Total population	4448359

Tehsil	Blocks
1. Bareilly	Bhojipura
	Kyara
	Bithri Chainpur
2. Aonla	Alampur Zafarabad
	Ramnagar
	Majhgawa
3. Bahedi	Bahedi
	Richha
	Shergarh
4. Fareedpur	Fareedpur
	Bhuta
5. Meerganj	Meerganj
	Fatehganj West
6. Nawabganj	Nawabganj
	Bhadpura

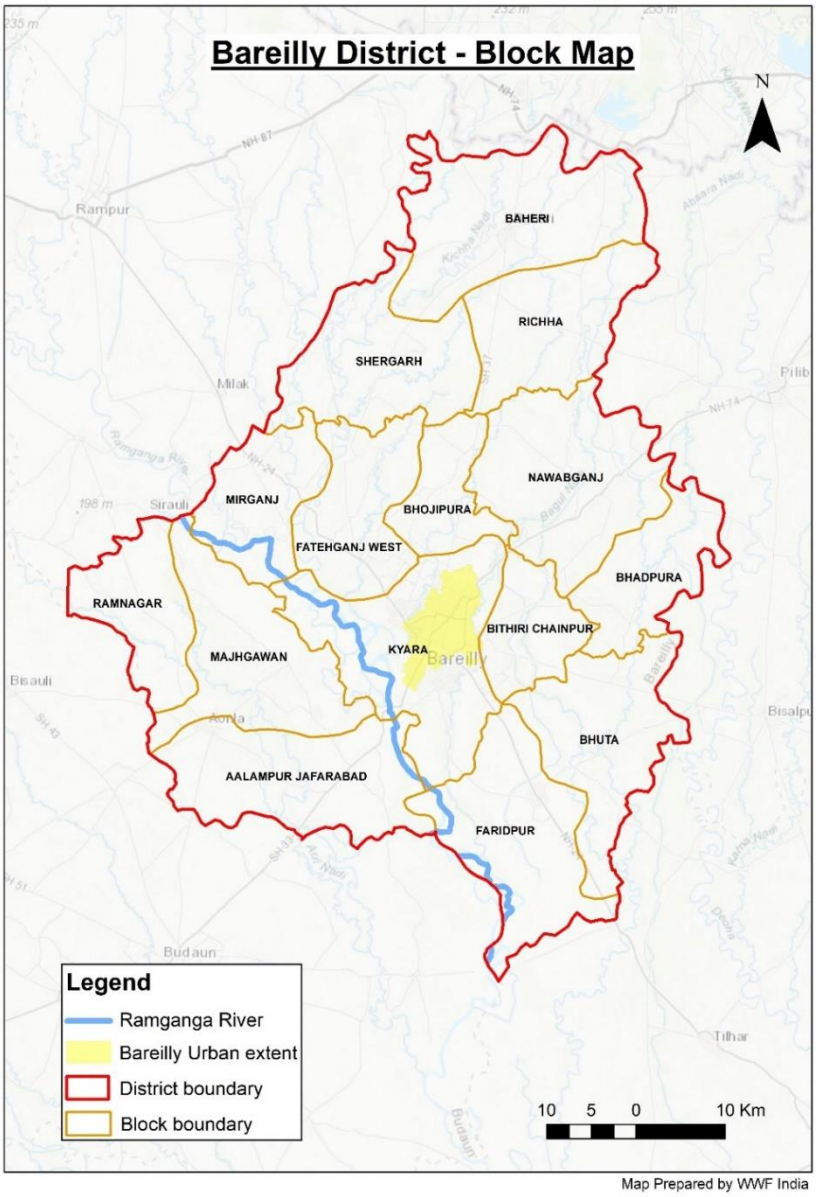


Figure 9 Administrative map of Bareilly District

4.2.1 Bareilly City

The city of Bareilly, with a jurisdiction of 10605 Ha (106.05 sq. km) of area, is a Municipal Corporation administered by Bareilly Nagar Nigam. The prominent rivers in the vicinity of Bareilly include Ramganga, Devraniya, Nakatiya, and Shankha. Furthermore, Bareilly serves as a key railway junction within the Central Zone, and it is intersected by important roadways such as SH-33, SH-37, and NH 24.

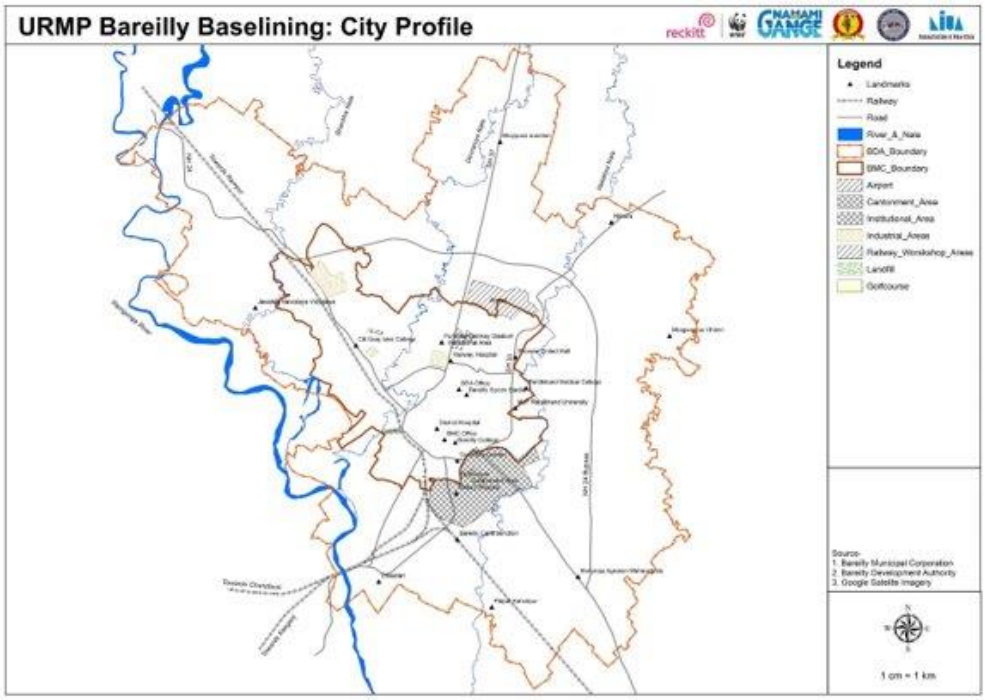


Figure 10 Bareilly City profile

Ward-wise population density is given in the below map (Figure 11). It is noted that the old settlement has a high-density population in the city.

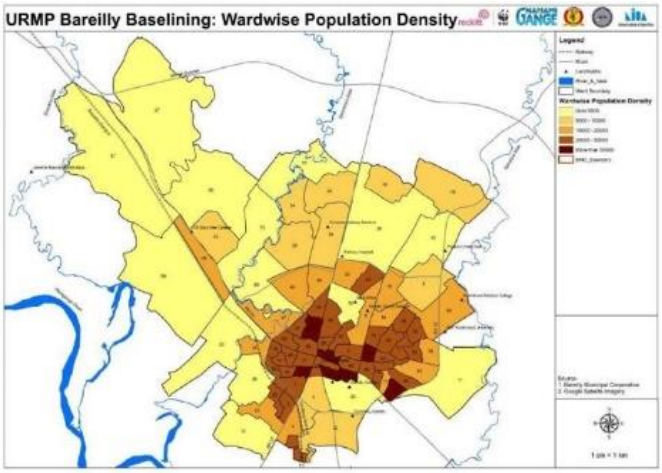
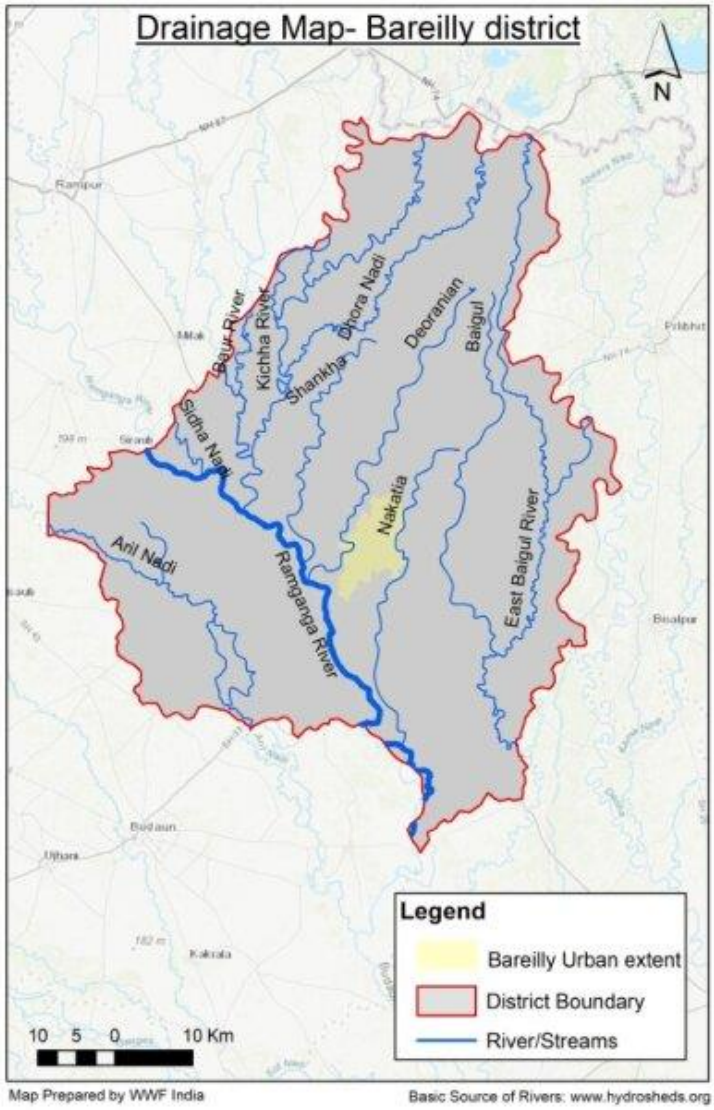


Figure 11 Ward-wise Population Density Distribution of Bareilly City

4.3 Topography and drainage system

The Ramganga River, a significant freshwater source, courses through the Bareilly district, accommodating various minor tributaries both within the district itself and in downstream districts.

Though Aril River drains a catchment of Ramganga from the right bank of Ramganga of the western region of the district the eastern portion of the district is drained by the Ramganga River and its associated tributaries, namely Sidha, Baur, Kichha, Dhora, Shankha, Deoraniya, Nakatiya, and Baigul rivers.



River/ Stream	Length (km)	Starting Point	End point
Ramganga	74.72	79.129E, 28.487N	79.484E, 28.04N
Aril	49.0	79.00E, 28.398N	79.27E, 28.164N
Nakatia	50.8	79.54E, 28.494N	79.471E, 28.145N
Deoraniya	58.38	79.554E, 28.683N	79.346E, 28.337N
Shankha	45.73	79.433E, 28.617N	79.34E, 28.361N
Dhora	106.9	79.566E, 28.84N	79.258E, 28.418N
Kichha	70.28	79.494E, 28.865N	79.311E, 28.575N
Nabaur	24.3	79.227E, 28.585N	79.269E, 28.481N
Sidha	12.85	79.165E, 28.52N	79.204E, 28.46N
East Baigul	128.15	79.629E, 28.862N	79.622E, 28.15N

Figure 12 Drainage map of Bareilly District with locational attributes of drainage network in Bareilly district

The entire hydrological network in the region is regulated by the dominant presence of the Ramganga River and its associated tributaries, including the Siddha, Dojora, Bahgaul (west), Kicha, Sankha, Deoraniya, Nakatia, Bahagaul (east), Deoha, and Aril rivers. It is noteworthy that all of these rivers, except for the Aril River, converge with the Ramganga River on its left bank.

The Ramganga River, a significant tributary of the Ganga River, originates in the Garhwal mountain range. Serving as a crucial right-bank tributary of the Ramganga River, the Aril River holds substantial importance within the hydrological framework [14].

Table 3 Details of rivers in district Bareilly [15]

	River name	Discharge (cusec)	Total length (km)	Length in dist. (km)	Tehsil	Origin point	Confluence
1	Ramganga river	400000	360	75	Meerganj, Sadar	Kalagarh Dam	Ganga Kannauj
2	Pilakhar	80484	51	20	Meerganj	Kemri Dam rampur	Bhakra
3	Kulli	21180	65	15	Meerganj	Rampur	West Baigul
4	Kichhha	163000	120	30	Bahedi	Nainital	West Baigul
5	Dhora	28240	50	21	Meerganj	Dhaura Dam	West Baigul
6	West Baigul	90620	95	46	Meerganj	Haripura	Dojora
7	Bhakra	84014	107	37	Meerganj	Nainital	Dojora
8	Dojora	141200	12	12	Meerganj	Bhakra+Wbaigul	Ramganga
9	Devraniya	8825	112	55	Sadar	d/s Baigul dam	Ramganga
10	Pangheli	24710	67	19	Nawabganj	Baigul Dam	Kailash River
11	Apsara	24710	62	21	Nawabganj	Baigul Dam	Kailash River
12	Kailash	56480	115	49	Fareedpur	Pandheli+Apsara	East Baigul
13	East Baugul	20156	48	18	Nawabganj	Daigul Dam	Kailash River
14	Devha	127009	245	30	Nawabganj	Nanak Sagar Dam	Ganga Kannauj

The cluster of natural drainage pathways plays a significant role in understanding the hydrological and river basin dynamics of Bareilly.

The topography and the contours of the city direct the flow and deviation of the storm water and un-tapped wastewater ultimately to the Ramganga river through various channels and Nakatiya and Deoraniya rivers.

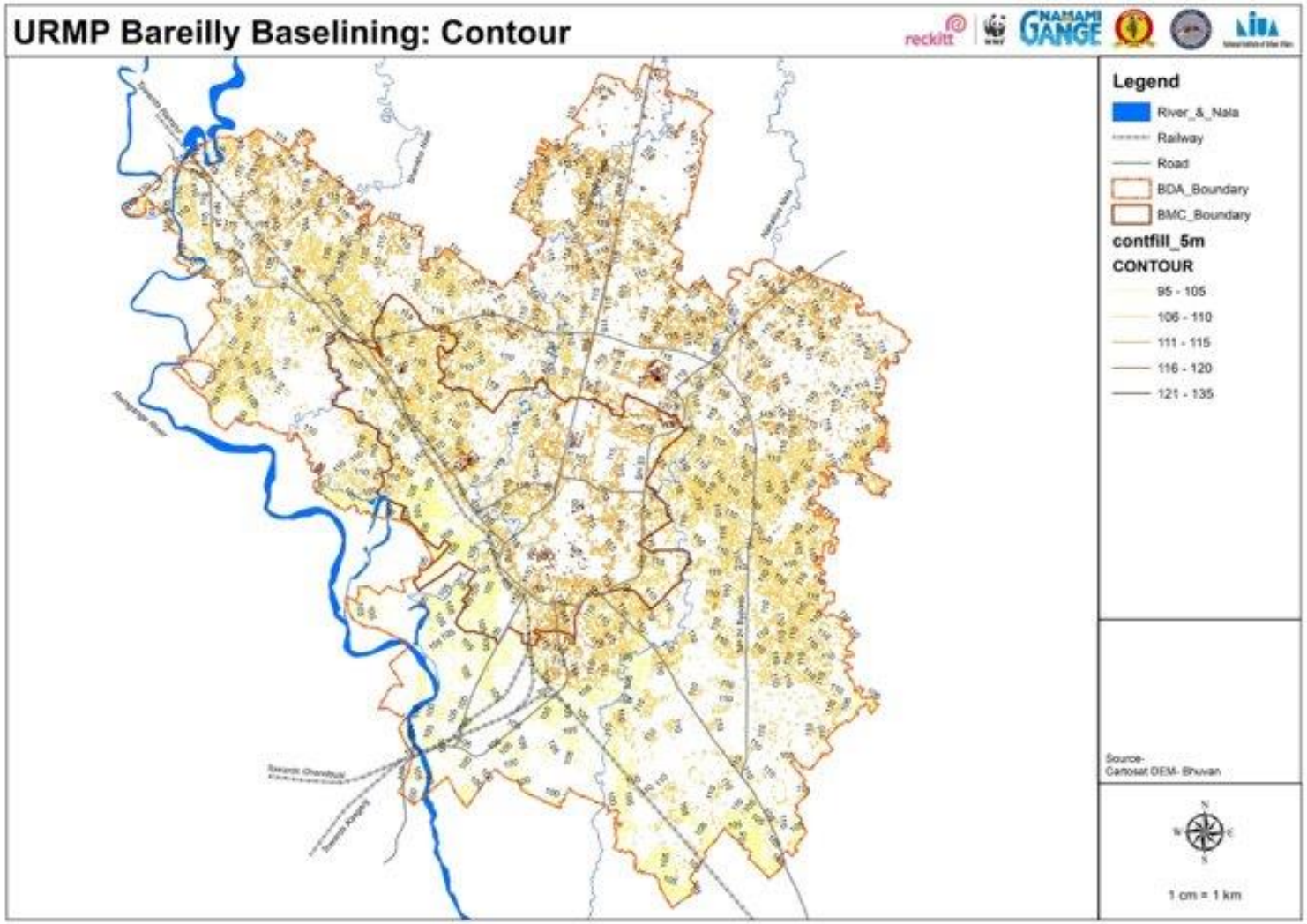


Figure 13 Contour lining of Bareilly

Bareilly district is drained by several rivers, the surface water resources data and information are available only for Ramganga and Aril River as of now. In the initial 5-year (First phase) plan of the District Ganga Plan, the focus has been placed on four key rivers within Bareilly District: specifically, the Ramganga River, Aril River, Deoraniya River, and Nakatiya River. It is noteworthy that the latter two rivers have undergone a transformation into drainage systems, and their status with regard to pollution is being examined in various sections of the report.

WWF-India is working in both Ramganga and Aril from past several years and have collected critical information related to various thematic including flows, landuse, groundwater and pollution, which is being presented here. For other rivers/streams it is strongly recommended that a monitoring mechanism to be set in place through concerned line department to collect flow data in different rivers which are critical for Bareilly district.

The Aril River Basin

Apart from Ramganga basin in Barelly district, WWF India as part of its initiative has done research on Aril River, a tributary of Ramganga River and a critical river passing through the district. The following subsection discusses the status of Aril River basin and its health. The Aril River at Bareilly traverses through three distinct administrative divisions, namely Ramnagar Block, Majhgawan Block, and Alampur Jafarabad Block. The comprehensive village mapping in the Bareilly district reveals a total of 62 villages distributed across these blocks:

- Ramnagar Block: Comprises 23 villages
- Majhgawan Block: Comprises 17 villages
- Alampur Jafarabad Block: Comprises 22 villages

The population residing in this area amounts to approximately 1.89 million individuals, as per the 2011 Census data. Among this population, around 11% can be classified as urban residents.

Aril is a 170 Km long tributary of Ramganga having a catchment area of 2,240 square kilometres, which accounts for approximately 10.97% of the entire Ramganga basin. The Aril River originates from Gumsani village in the Sambhal district where its catchment and traverses drain water from 17 blocks across six districts, namely Moradabad, J.P. Nagar, Sambhal, Rampur, Bareilly, and Budaun. It eventually merges with the Ramganga River at Navada-Madhukar village in the Dataganj block of Budaun (Figure 14).

To strengthen its initiatives towards wetland conservation to maintain the hydrological, geomorphological and ecological balance of the Ganga basin and its tributaries, WWF-India is working in the Aril River basin on river and wetland rejuvenation. The river is predominantly fed by groundwater and used to be a perianal river a few decades back however due to degradation in its catchment due to over-abstractions of groundwater, encroachment, land use change, increase in water demand, degradation of wetlands etc. These pressures have led to a state where the river does not even hold seasonal flow for even a couple of months now and has turned into a seasonal flashy river.

Regarding rainfall, the Aril River experiences an average annual precipitation of 854.64 mm, based on data from 1961 to 2015. The majority of this rainfall is attributed to the monsoon season, accounting for 86.36% of the total rainfall.

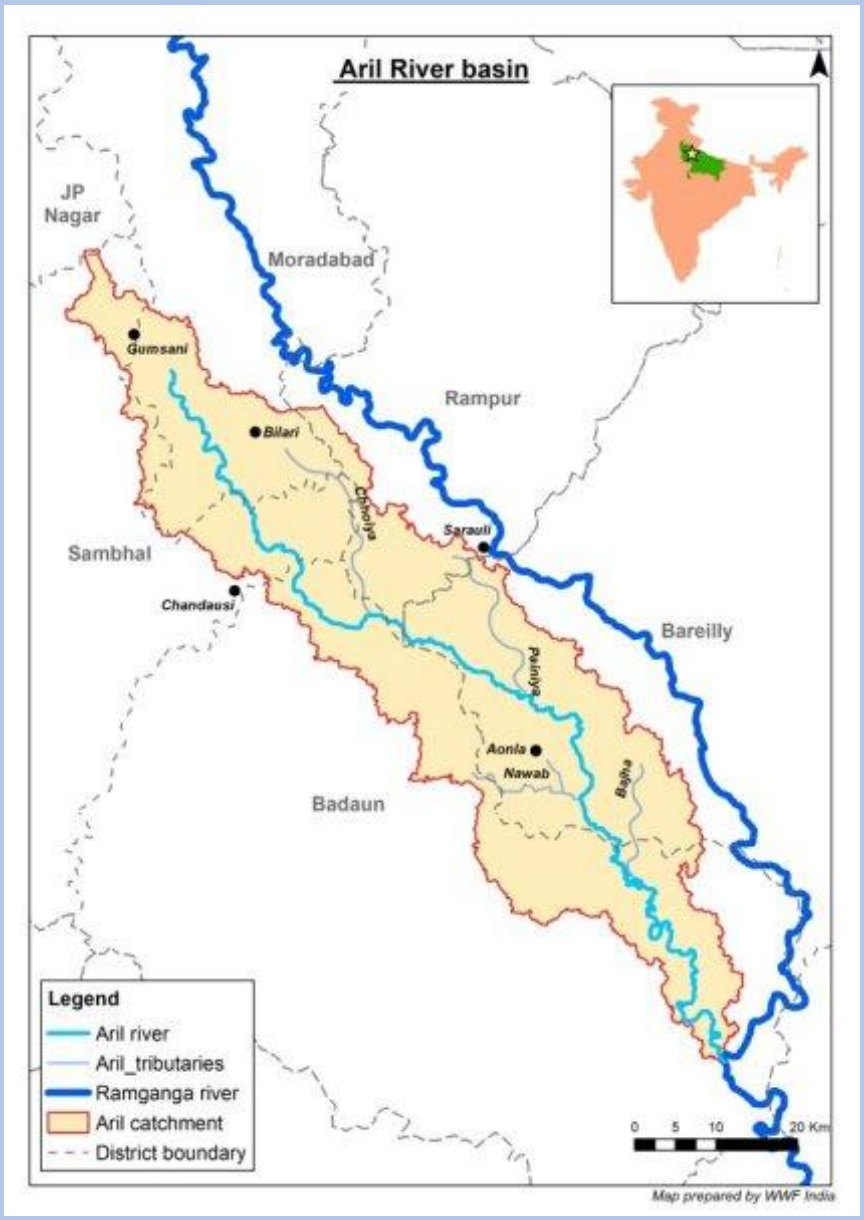


Figure 14 Districts in the Aril Basin

Within the monsoon season, the months of July and August receive the highest amount of rainfall, constituting 69.44% of the monsoon rainfall and 59.97% of the overall precipitation.

The Aril Basin experiences a sub-tropical, monsoonal climate characterized by distinct seasonal variations. During the winter months, spanning from October to February, the climate is cool and dry, often accompanied by fogs and light showers. Summers, from March to early June, are hot and dry. The monsoon season, occurring from mid-June to September is characterized by warm and humid conditions, with frequent episodes of heavy rainfall.

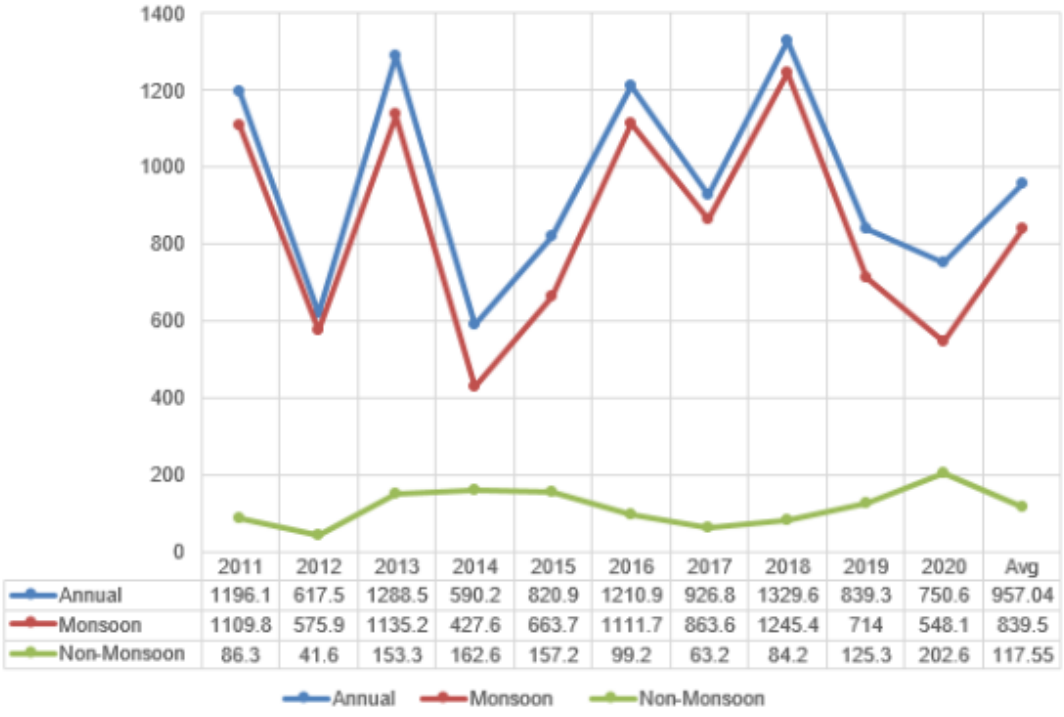
In terms of temperature, the Aril plain exhibits a range of 5°C to 25°C during winter and 20°C to over 40°C during summer. The highest monthly mean maximum temperature is recorded in June, reaching 35.62°C, while the lowest monthly mean minimum temperature is observed in January, measuring 17.87.

The Aril River which used to be a perineal river a few decades ago is now being turned into a seasonal flashy river where flows remain in the river for only a few months/days when it rains. The baseflows are almost negligible in the river. There is one monitoring station on Aril near Dataganj (maintained by the flood control department). The surface water resources amount to 486.05 Million Cubic Meters (MCM), while the groundwater resources contribute an additional 528.37 MCM. Combined, these sources yield a total water availability of 1014.42 MCM. But the water demand exceeds the supply which is leading to reduced flows in the river.

There is no major water resource infrastructure on the rivers passing through Bareilly except the newly constructed Budaun Irrigation Project on Ramganga, which was built to provide canal water to the Budaun district. The designed discharge at barrage head-works is 56 cumec for a period of 120 days in a year.

4.4 Rainfall and Climate

The primary contributor to precipitation in the region is the summer monsoon, typically occurring from mid-June to Mid-October. Among these months, July and August experience the highest levels of rainfall. Throughout the year, the district's temperature ranges from a minimum of 14.1 °C in January to a maximum of 31.6 °C in May, based on data collected between 1991 and 2021 [14][16].



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Avg
Annual	1196.1	617.5	1288.5	590.2	820.9	1210.9	926.8	1329.6	839.3	750.6	957.04
Monsoon	1109.8	575.9	1135.2	427.6	663.7	1111.7	863.6	1245.4	714	548.1	839.5
Non-Monsoon	86.3	41.6	153.3	162.6	157.2	99.2	63.2	84.2	125.3	202.6	117.55

Figure 15 Average Annual Rainfall in Bareilly District from 2011 to 2020 [16].

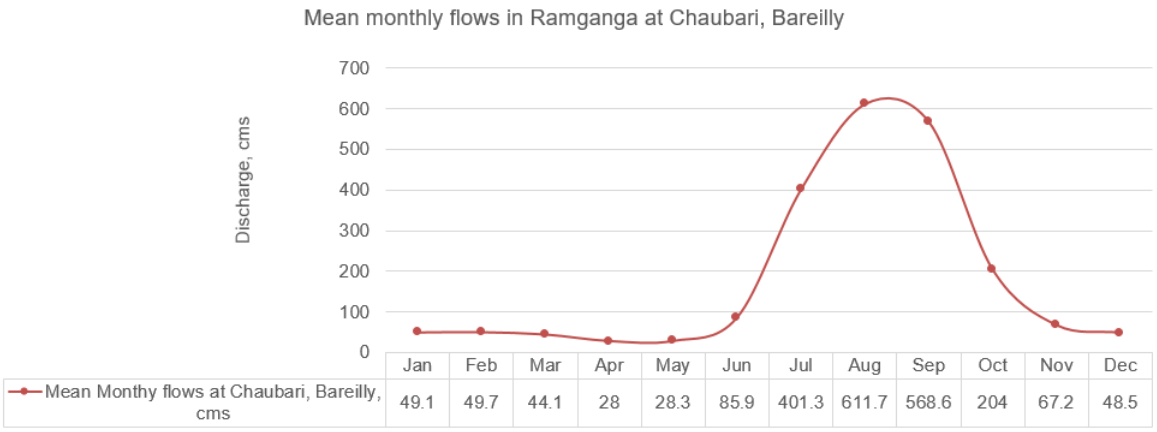
Over the period from 2011 to 2020, a noticeable downward trend in average annual rainfall has been observed in Bareilly district. Specifically, there has been a decline from 1196 mm to 750 mm in rainfall amounts [16].

4.5 Available water resources

4.5.1 Surface water (Rivers)

The Bareilly district is drained through several rivers and its tributaries carrying significant amounts of freshwater. The volumetric amount passing through this particular location at Chaubari on the Ramganga River, on an annual basis is estimated to be approximately 5600 Million Cubic Meters (MCM). The majority of this flow is during monsoon season while the river lacks adequate Environmental Flows. It is essential to emphasize that this figure represents the long-term average data derived from observations spanning the past three

decades, thus providing a comprehensive and reliable assessment of the district's water availability over an extended period.



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean Monthy flows at Chaubari, Bareilly, cms	49.1	49.7	44.1	28	28.3	85.9	401.3	611.7	568.6	204	67.2	48.5

Figure 16 Surface water resources in Bareilly District

Apart from Ramganga and Aril, there are several key tributaries like Kichha and East Baigul (along with other smaller streams) for which data around surface water resources is not well monitored or if it is done, the data is not available in the public domain. The data if available with any department can be collected and appended here in this valuable document. In addition to surface water in rivers, Bareilly district is home to a complex network of canals that receive water from minor barrages on left-bank rivers such as Kichha and Baigul. These canals provide water for irrigation on the right bank of Ramganga (Bareilly district). The left bank (Aril catchment) does not have any operational canal command.

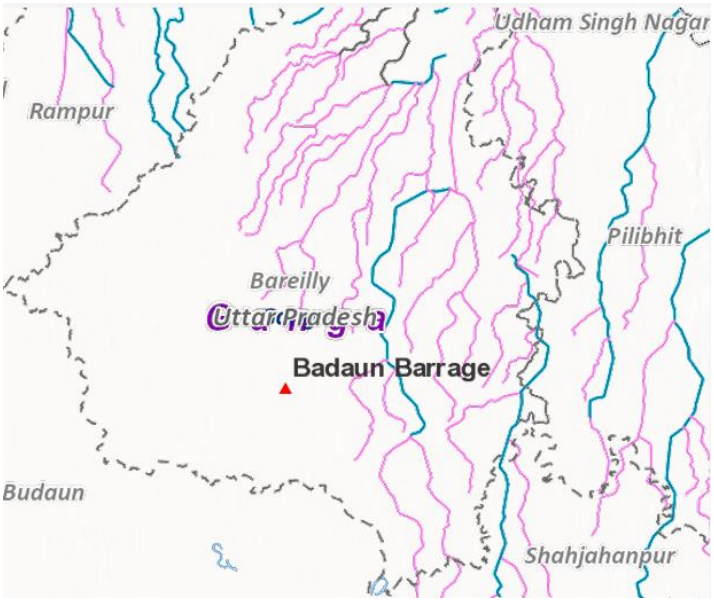


Figure 17 Canal network map of Bareilly district (IndiaWRIS)

4.5.2 Surface water (Wetlands)

Wetlands play a crucial role in river rejuvenation by maintaining aquifers' health and providing baseflows to rivers. A healthy wetland also helps improve local water security, supporting key biodiversity, acting as a carbon sink, and flood cushion, and helping improve resilience. Healthy flowing rivers provide a myriad of ecosystem services The rivers and wetland catchments are subjected to loss of connectivity, due to over-abstraction of groundwater, diversion of surface water, unsustainable agriculture practices, pollution, land use change, encroachment of inlets etc. Based on the comprehensive study carried out by WWF India and IIT Kanpur during the period of 2020-21, a total of 275 wetlands (>2.5 ha) have been mapped within the Bareilly district along with their degradation status that has happened over some time. These wetlands have been categorized based on their characteristics and dynamics (Figure 18).

- Persistent: Wetlands falling under this category were mapped using pixels exhibiting a Wet% value ranging from 90% to 100%. This indicates that these pixels remained consistently wet for at least 90% of the duration of the study.
- Intermittent: These wetlands displayed intermittent patterns of being alternately wet and dry throughout the study period.
- Intensifying: Wetlands falling within this category demonstrated a higher frequency of being wet in recent times compared to their historical state between 1990 and 1994.
- Diminishing: Wetlands categorized as diminishing displayed a reduced frequency of being wet in recent times compared to their historical state.

Additionally, two further classifications were assigned:

- New: This category comprises wetlands that have formed only within the past five years, indicating recent development.
- Lost: Wetlands falling into this category have been lost or disappeared within the past five years.

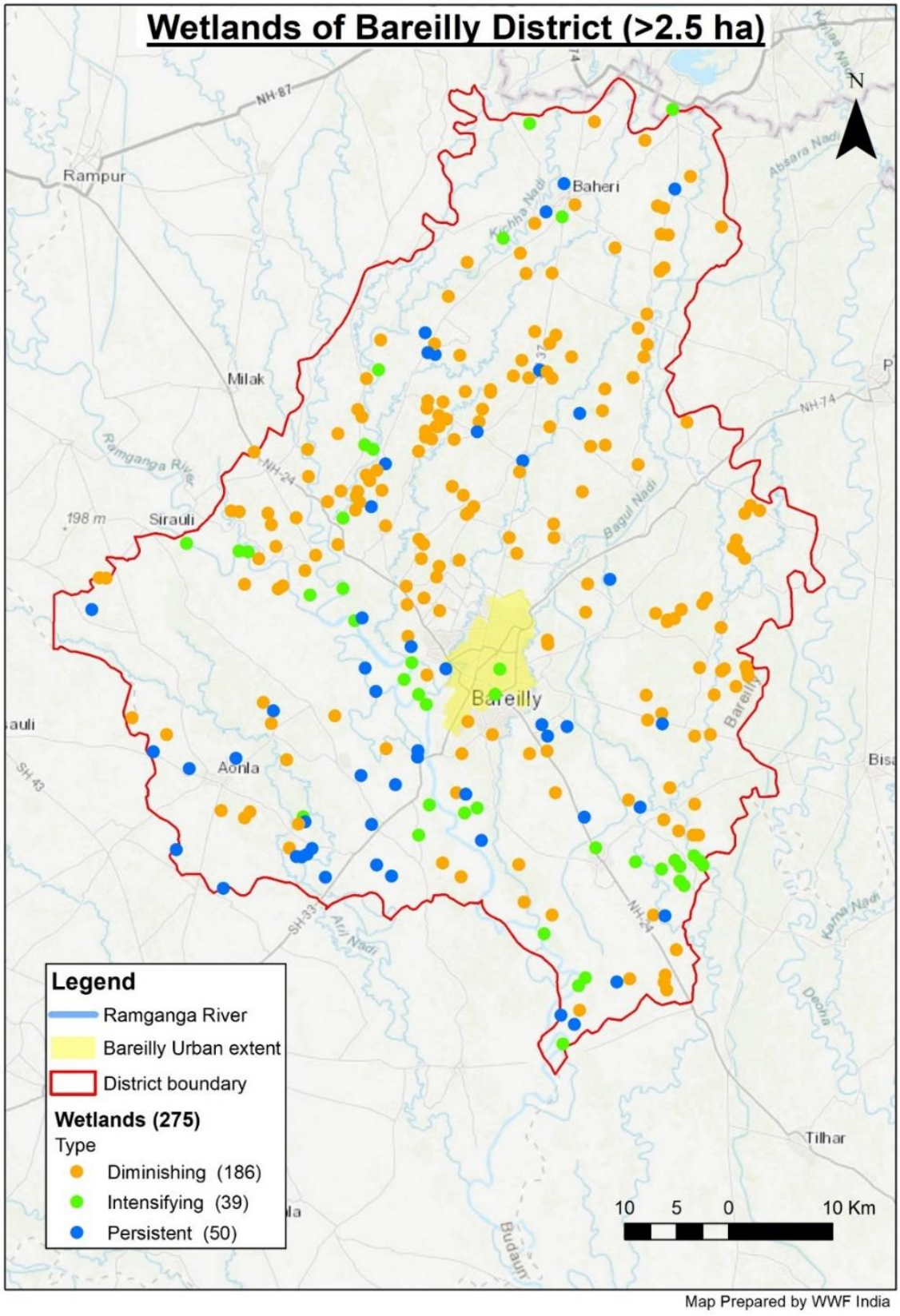


Figure 18 Wetlands in Bareilly District

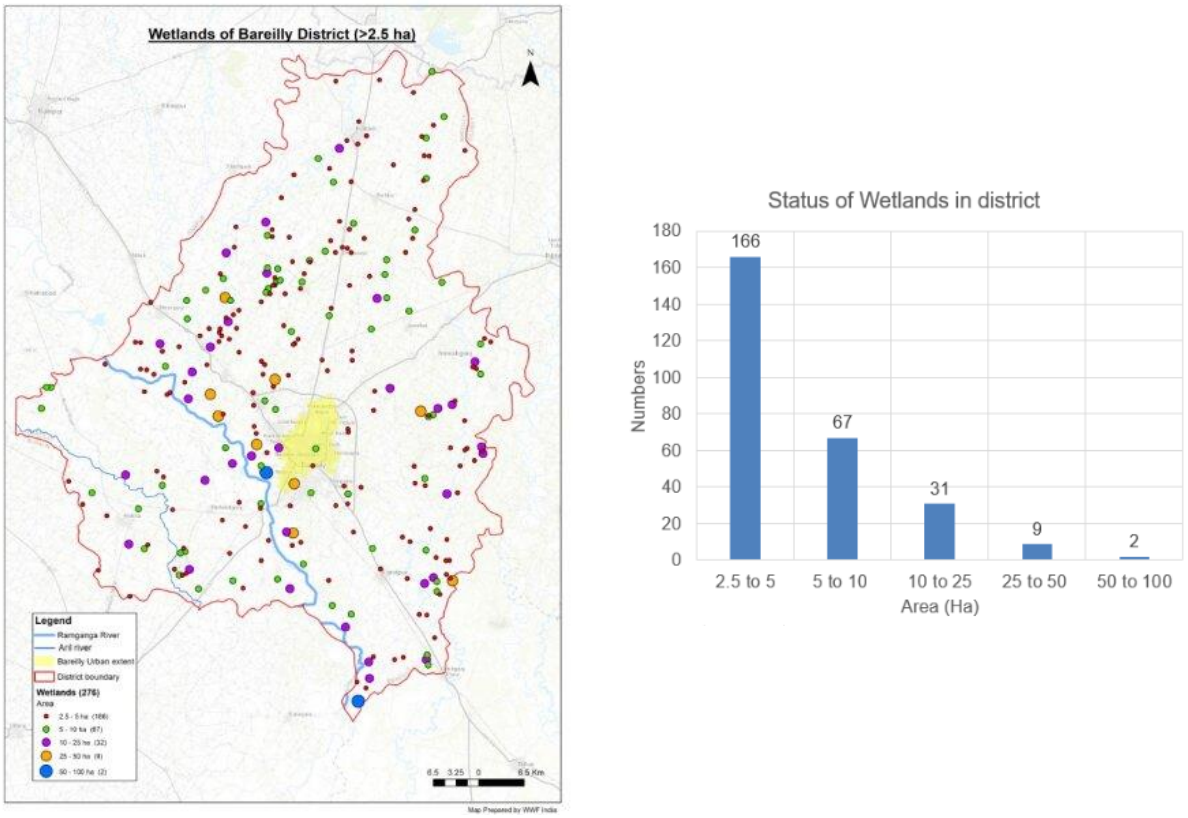


Figure 19 Categorization of wetlands based on area (Bareilly District)

The data (Figure 19) suggests that the majority of wetlands in Bareilly district (>2.5 ha) are diminishing or degraded in nature whereas the rest 30 % is either of stable health or getting intensified (largely due to continuous load of pollution). Area of about 60% of the wetlands are between 2.5-5 ha, 25% between 5-10 ha whereas large wetlands (>25 ha) are about 4%. According to National wetland Atlas (2010), Bareilly district has 353 wetlands in the district (Table 4).

Table 4 Area estimates of wetlands in Bareilly. Source: National Wetland Atlas: Uttar Pradesh, Space Applications Centre, SAC/RESA/AFEG/NWIA/ATLAS/12/2010, ISRO, Ahmedabad, India, 372p

Area in ha

Sr. No.	Wettcode	Wetland Category	Number of Wetlands	Total Wetland Area	% of wetland area	Open Water	
						Post-monsoon Area	Pre-monsoon Area
	1100	**Inland Wetlands - Natural**					
1	1101	Lakes/Ponds	43	473	4.34	144	139
2	1102	Ox-bow lakes/ Cut-off meanders	37	574	5.27	362	195
3	1103	High altitude wetlands	-	-	-	-	-
4	1104	Riverine wetlands	42	1370	12.57	1116	294
5	1105	Waterlogged	54	391	3.59	274	138
6	1106	River/Stream	95	6269	57.53	5030	3630
	1200	**Inland Wetlands -Man-made**					
7	1201	Reservoirs/Barrages	-	-	-	-	-
8	1202	Tanks/Ponds	13	59	0.54	56	32
9	1203	Waterlogged	69	612	5.62	399	212
10	1204	Salt pans	-	-	-	-	-
		Sub-Total	**353**	**9748**	**89.46**	**7381**	**4640**
		Wetlands (<2.25 ha), mainly Tanks	1148	1148	10.54	-	-
		Total	**1501**	**10896**	**100.00**	**7381**	**4640**

Symbol	Typecode	Level I	Level II	Level III
		Inland Wetlands		
			Natural	
	1101			Lakes/Ponds
	1102			Ox-bow lakes/ Cut-off meanders
	1103			High altitude wetlands
	1104			Reverine wetlands
	1105			Waterlogged
	1106			River/Stream
			Man-made	
	1201			Reservoirs/Barrages
	1202			Tanks/Ponds
	1203			Waterlogged
	1204			Salt pans
		Coastal Wetlands		
			Natural	
	2101			Lagoons
	2102			Creeks
	2103			Sand/Beach
	2104			Intertidal mud flats
	2105			Salt marsh
	2106			Mangroves
	2107			Coral reefs
			Man-made	
	2201			Salt pans
	2202			Aquaculture ponds

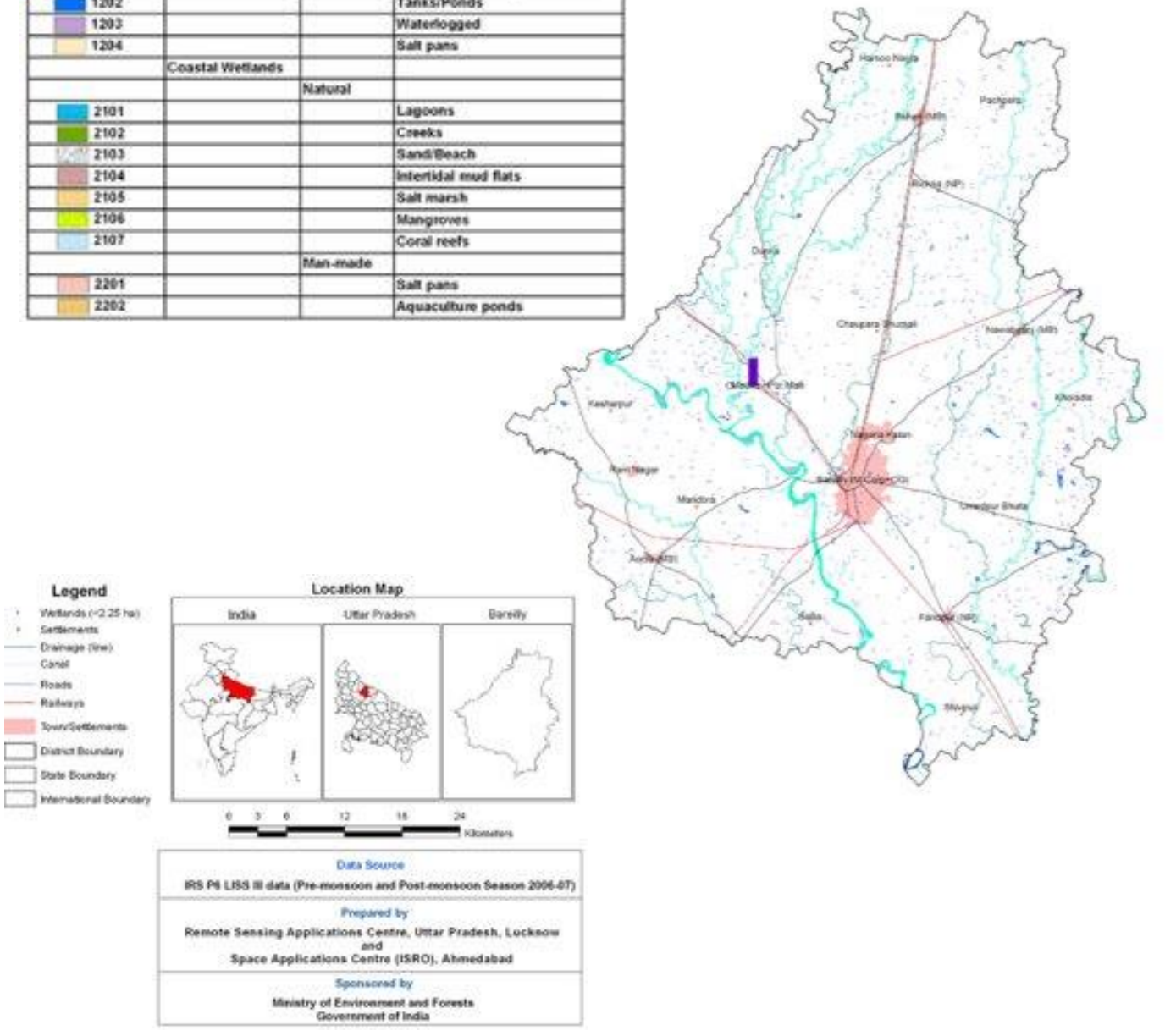


Figure 20 Map of Wetlands in Bareilly district (Source: National Wetland Atlas)

Wetlands of Aril Basin

A comprehensive assessment conducted in the Aril Basin has identified 34 wetlands in Aril basin within the Bareilly district with the inherent capability to augment base flows and provide crucial support to the Aril River. The identification of these specific wetlands and their associated significance in maintaining base flows accentuates their pivotal role in preserving the hydrological integrity and resilience of the Aril basin. This systematic identification and understanding of these wetland resources serve as essential guidelines for the development of targeted conservation and management strategies, facilitating the preservation and sustainable utilization of these invaluable water resources for the benefit of the Aril River and its surrounding ecosystem.

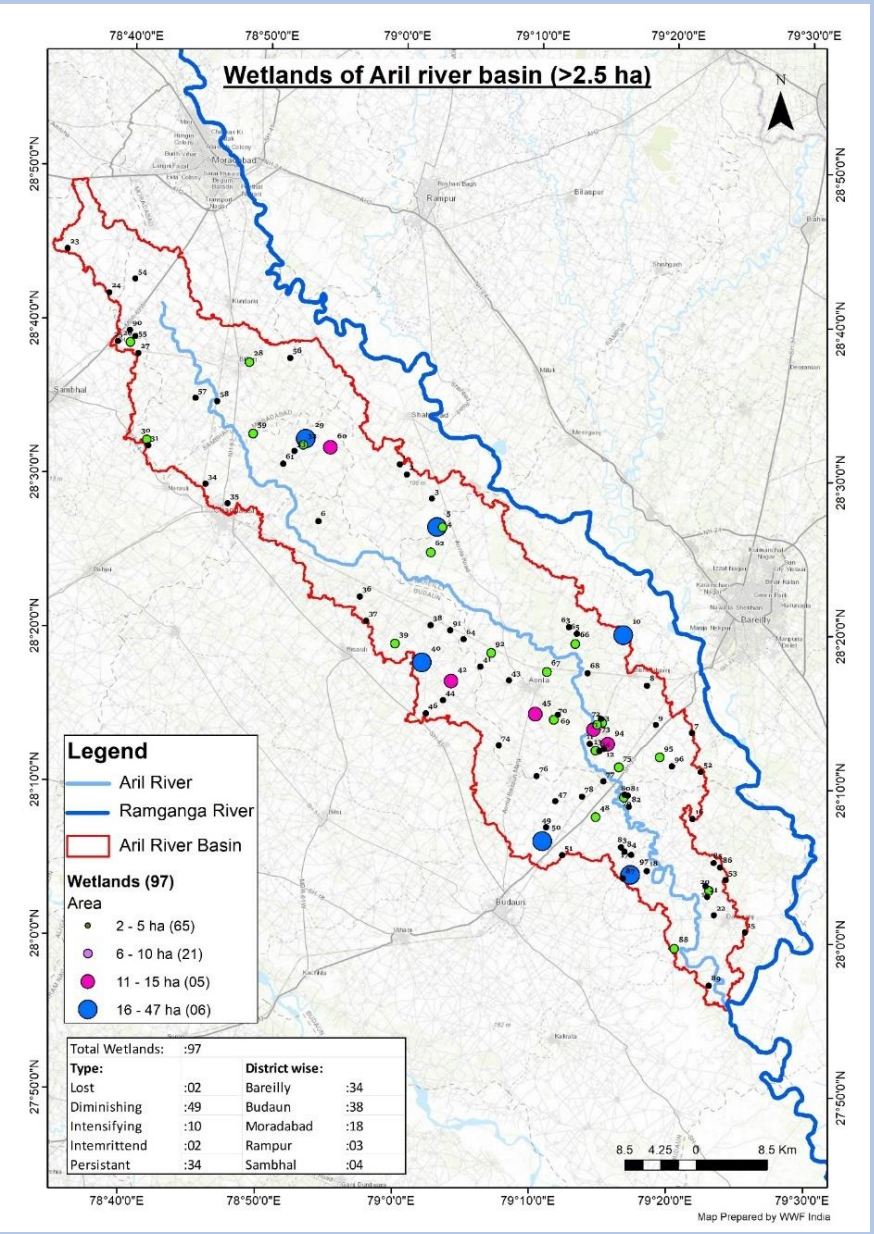


Figure 21 Wetlands of Aril Basin

4.5.3 Groundwater

Groundwater is present within the pore spaces of the unconsolidated alluvial sediments in the saturation zone. The near-surface sediments, reaching depths of up to 30 meters, consist of fine to medium-grained sand with occasional thin clay layers. Groundwater in this zone typically exists under unconfined conditions, where dug wells and common hand pumps are commonly erected. Above this zone, between two to six meters in depth, the sediments primarily exhibit an argillaceous nature, composed of silt and clay. Beneath this cover lies the sand formation, which forms the upper aquifer. This aquifer is largely unconfined and accommodates numerous cavity wells, dug wells, domestic hand pumps, and shallow private tube wells. These water sources are utilized for domestic purposes, gardening, and irrigation purposes by marginal farmers. Groundwater in the second and third aquifers occurs under semi-confined to confined conditions [17].

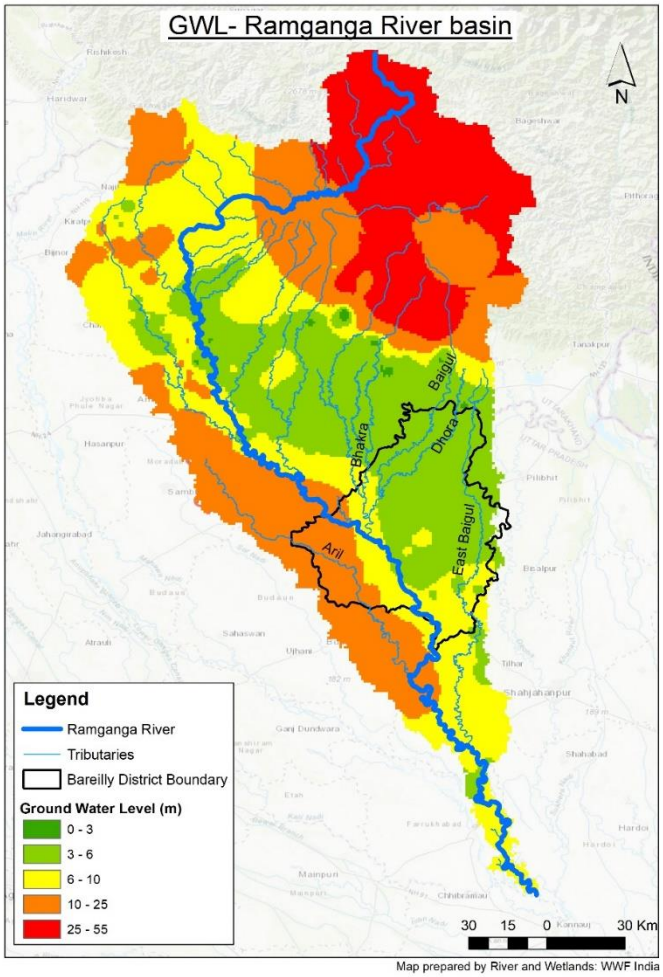


Figure 22 Depth to groundwater levels (below ground level) in Ramganga basin and Bareilly district (lower aquifer)

Bareilly district is heavily reliant on its groundwater reserves to fulfil requirements for domestic, commercial, and industrial water consumption. According to the Central Ground Water Board (CGWB), the subsurface water level in Bareilly is undergoing rapid depletion.

An examination of the dynamics of groundwater resources in 2020 reveals crucial indicators. The existing gross groundwater draft for all uses is estimated to be 85,236 Hectare-meters (Ham), whereas the net annual groundwater availability stands at 125,453 Ham. The stage of groundwater development, which indicates the proportion of groundwater extracted compared to its availability, currently stands at 67.94%. The groundwater study carried out by WWF-India for the entire Ramganga basin indicates that water levels in Bareilly district ranged from 0-6 m (bgl) on the left bank of Ramganga while its ranges from 6-25 m (bgl) on the right bank of Ramganga (Aril catchment).

Water-intensive agricultural practices, particularly the cultivation of crops such as paddy and sugarcane, exert a substantial demand for water resources in the region, leading to significant groundwater extraction in the Bareilly District. Within the district, 11 blocks are categorized as being in the safe category in terms of groundwater availability. However, the city of Bareilly is classified as over-exploited, while Alampur Zafarabad, Majhgawan, Ram Nagar, and Fatehganj fall into the semi-critical category [17].

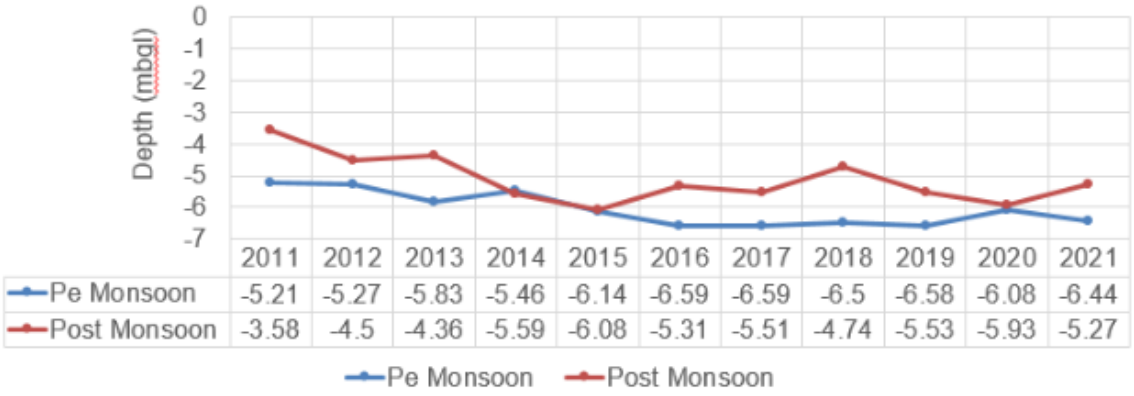


Figure 23 Groundwater scenario in Bareilly District

The average groundwater level data of the past decade indicates water levels in both pre and post-monsoon seasons have declined by 1.5 m (5 feet). However, there is spatial variation in the groundwater scenario over the district. Based on block-level data analysis (Figure 23), a

noticeable decrease in water levels has been observed in Ramnagar, Alampur Zafrabad, Faridpur, and Majhgawan. The data makes it evident that blocks such as Ramnagar and Alampur Zafrabad are situated within the basin of the Aril River, which experiences dry conditions for a significant portion of the year. Consequently, reliance on groundwater becomes essential for fulfilling various water-related needs.

In these blocks, there is substantial groundwater extraction, encompassing both domestic and agricultural purposes [16]. The Alampur Jafarabad block is currently undergoing a situation of pronounced over-exploitation, manifesting at a substantial rate of 109.11% (Table 5). In contrast, the Meerganj block is positioned within the under-critical range, exhibiting a value of 99.04%.

Table 5 Ground water scenario in the Bareilly District [16]

DYNAMIC GROUND WATER RESOURCES OF BAREILLY, U.P.
(As on 31.03.2004)

Sl. No.	Assessment units blocks	Annual ground water recharge (in ham)	Net annual ground water availability (in ham)	Existing gross ground water draft for all uses (in ham)	Net ground water availability for future irrigation development (in ham)	Stage of ground water development (in %)	Category of block
1.	Alampur Zafrabad	5752.79	5177.51	5649.36	-681.08	109.11	Over exploited
2.	Baheri	13231.33	11908.19	6940.81	4710.32	58.29	Safe
3.	Bhadpura	6257.25	5944.39	5885.44	-159.03	99.01	Semi critical
4.	Bhojipura	5918.18	5622.27	4973.36	528.02	88.46	Safe
5.	Bhuiah	9600.08	9120.08	8903.09	-112.75	97.62	Semi critical
6.	Bithrichainpur	6290.65	5661.58	4330.94	1170.24	76.50	Safe
7.	Faridpur	10008.33	9507.91	8338.05	971.33	87.70	Safe
8.	Fatehganj (W)	6492.72	6168.08	6002.41	22.76	97.31	Semi critical
9.	Kiyara	3736.05	3362.44	3277.85	-40.51	97.48	Semi critical
10.	Majhgawn	6237.22	5613.50	5043.81	449.60	89.85	Safe
11.	Meerganj	6955.48	6259.93	6199.96	-169.66	99.04	Critical
12.	Nawabganj	9092.08	8182.87	8174.65	-188.91	99.90	Semi critical
13.	Ram Nagar	5751.07	5175.97	4804.73	193.29	92.83	Semi critical
14.	Richha	9115.23	8203.70	4590.08	3443.62	55.95	Safe
15.	Shergarh	8249.86	7424.87	7064.61	98.61	95.15	Semi critical
	Total	**112688.31**	**103333.31**	**90179.15**	**10235.83**	**87.27**	

This situation is a cause for significant concern, especially given the absence of a formulated strategy by the Jal Nigam for integrating surface water sources into the existing water supply infrastructure.

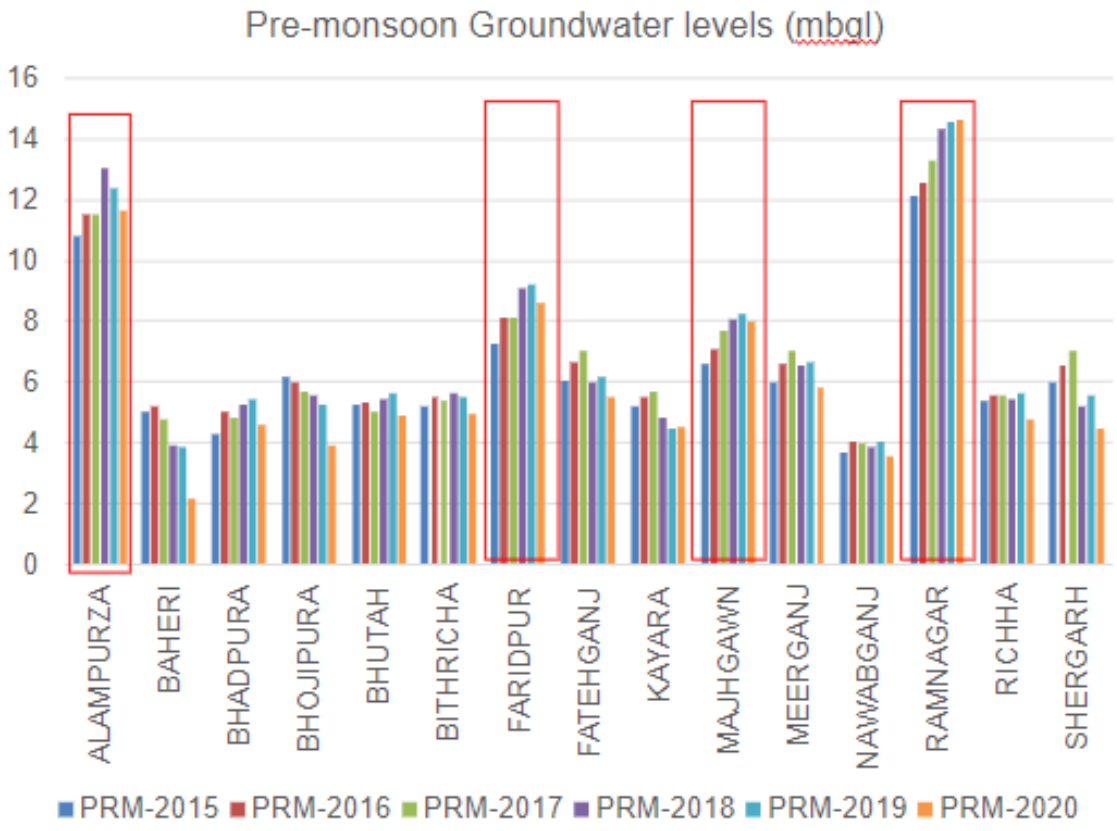


Figure 24 Block-wise Average Depth of Water level of Bareilly [16]

The Ramganga River, along with other rivers in the district, constitutes a network of river systems primarily sustained by groundwater sources. Analysis of data spanning the past decade reveals a discernible decrease in both rainfall patterns and groundwater levels (Figure 23)(Figure 24). Specifically, the recorded rainfall has exhibited a decline from 1196 mm to 750 mm. Currently, no extensive rainwater harvesting systems have been observed within the district [16].

The Aril River basin experiences large-scale over-extraction of groundwater due to its prominence as the primary water source for various purposes. Consequently, this excessive exploitation has resulted in a rapid decline in groundwater levels in recent years. This decline can be attributed degradation of wetlands, over-abstraction of groundwater for agriculture and changes in climate. The level of groundwater development in the region currently stands at 92.97%. The water table has significantly declined beyond the depths of 10-20 meters

below ground level (mbgl) in approximately 59% of the basin area, while it has reached depths of 5-10 mbgl in 40% of the area.

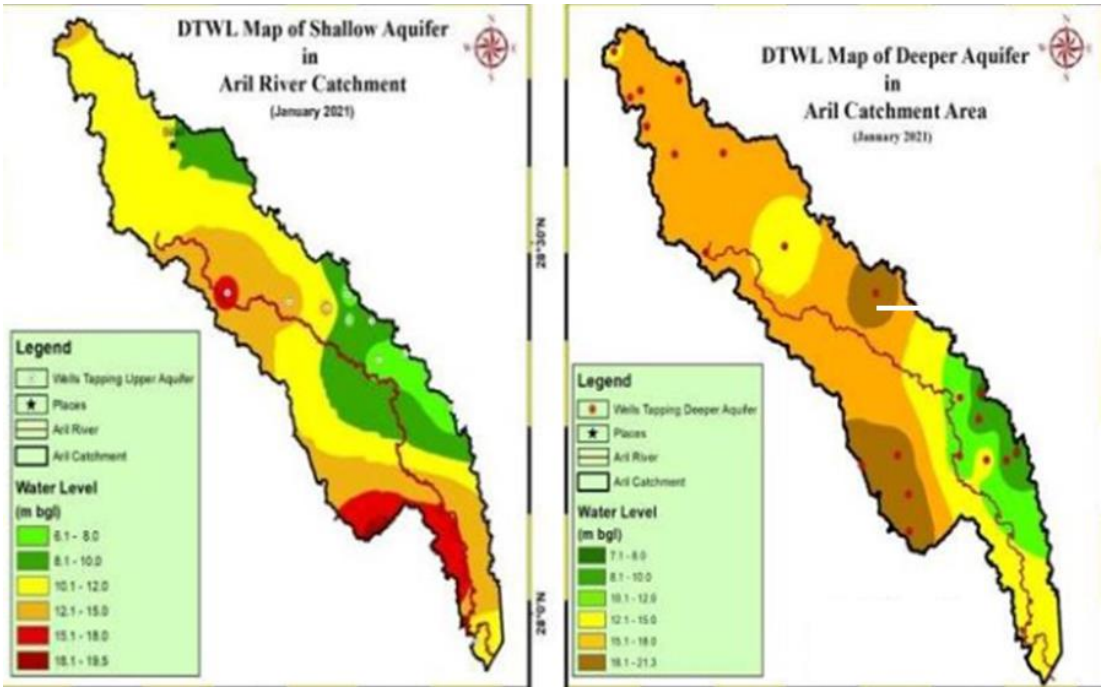


Figure 25 Groundwater scenario in the Aril basin

The cumulative effect of water-intensive agriculture and over-extraction of groundwater highlights the pressing need for sustainable management practices and conservation efforts to mitigate the adverse impacts on groundwater resources, particularly in the Aril River basin.

Bareilly city and its water demand within the administrative boundary (BDA/BMC) is heavily dependent on its groundwater reserves. It is mainly to fulfil requirements for domestic, commercial, and industrial water consumption. According to the Central Ground Water Board (CGWB), the subsurface water level in Bareilly is undergoing rapid depletion. This situation is a cause for significant concern, especially given the absence of a formulated strategy by the Jal Nigam for integrating surface water sources into the existing water supply infrastructure.

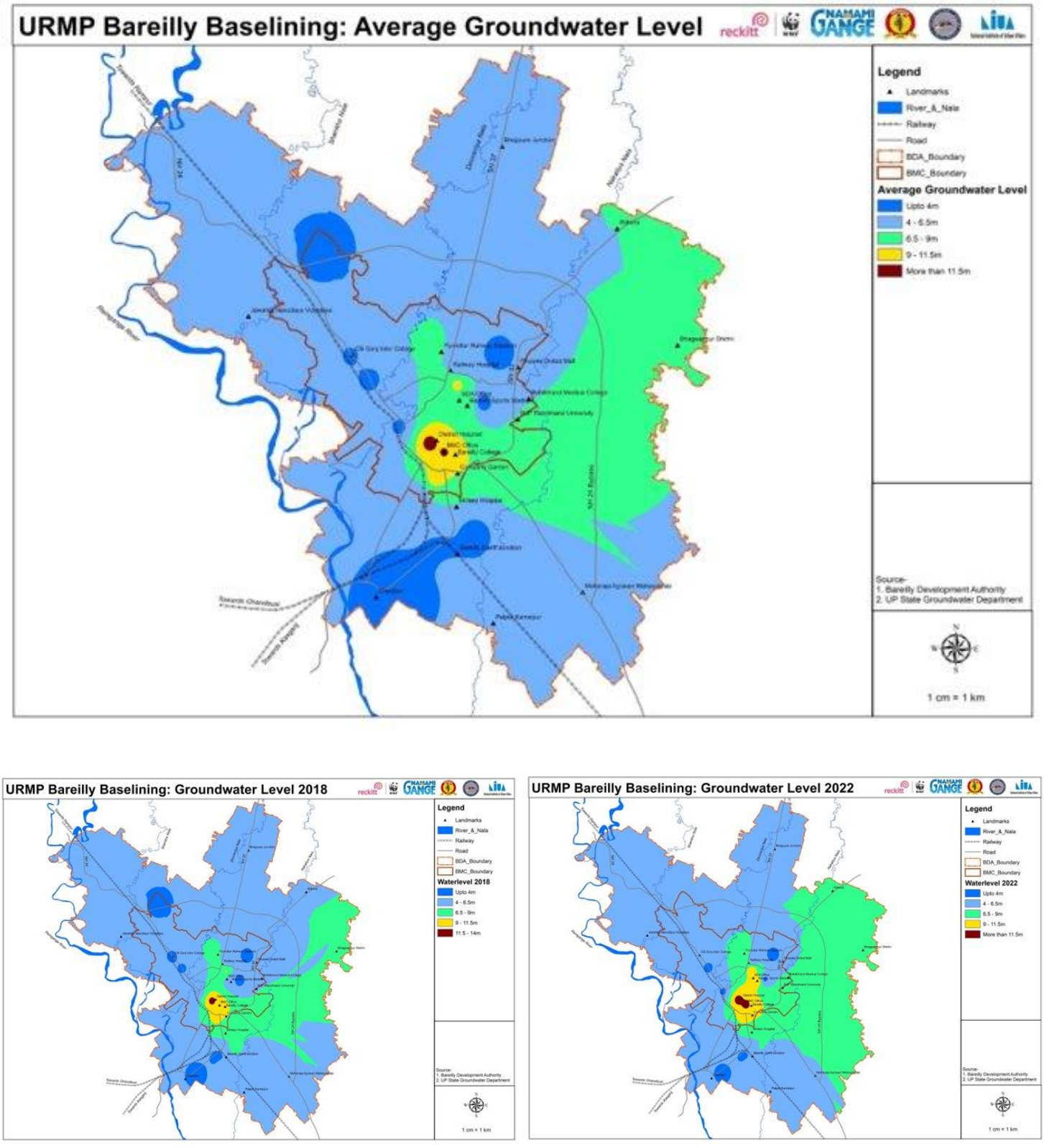


Figure 26 Bareilly Groundwater levels. (a) Average Groundwater level, and (b) Difference between Bareilly Ground level in 2018 and 2022.

4.6 Water quality

4.6.1 Surface water

There are several sources of water pollution within Bareilly district that flow through a few streams and rivulets into bigger rivers like Ramganga. In accordance with the Central Pollution Control Board (CPCB) guidelines, the permissible limits for water quality parameters in Class B (Outdoor Bathing) are as follows:

- Total Coliforms Organism MPN/100ml: The count should be 500 or less.
- pH: The pH level should fall within the range of 6.5 to 8.5.
- Dissolved Oxygen: The minimum concentration of dissolved oxygen should be 5mg/l or more.
- Biochemical Oxygen Demand (BOD): The BOD level, determined over a period of 5 days at 20°C, should be 3mg/l or less.

On the other hand, for Class D (Propagation of Wildlife and Fisheries), the CPCB guidelines prescribe the following limits:

- pH: The pH value should range from 6.5 to 8.5.
- Dissolved Oxygen: The minimum concentration of dissolved oxygen should be 4 mg/l or more.
- Free Ammonia (as N): The level of free ammonia should be 1.2 mg/l or less.

Water quality samples of Ramganga river at Kapurpur, Mirganj, Bareilly were analysed for parameters (Table 6 Surface water characteristics- Ramganga River Bareilly [19]. Table 6 namely pH, dissolved oxygen (DO), biochemical oxygen demand (BOD), chemical oxygen demand (COD), total coliform, and faecal coliform. The analysis covers the period from January to August 2022 and focuses on one specific location: upstream of the Ramganga River. This assessment was achieved by summarizing the multiple water test results into a single indicator known as the Water Quality Index (WQI). The WQI serves as a concise measure for water quality management and decision-making purposes [18].

Table 6 Surface water characteristics- Ramganga River Bareilly [19].

Note: CPCB Class B (Outdoor Bathing)Total Coliforms Organism MPN/100ml shall be 500 or less pH between 6.5 and 8.5 Dissolved Oxygen 5mg/l or more; Biochemical Oxygen Demand 5 days 20C 3mg/l or less

Location	u/s Ramganga river, Kapurpur, Mirganj, Bareilly					
Year 2022	pH	DO (mg/l)	BOD (mg/l)	COD (mg/l)	Total Coliform (MPN/ 100 ml)	Fecal Coliform (MPN/ 100ml)
January		8.0	3.2	24	14000	
February		8.5	3.1	20	13000	
March	7.6	8.2	3.1	24	13000	
April	7.5	8.3	3.2	24	14000	
May	7.6	7.7	3.2	28	14000	
June	7.4	6.2	3.0	24	14000	9300
July	7.4	6.5	3.2	24	14000	9300
August	7.0	5.8	3.2	28	17000	11000

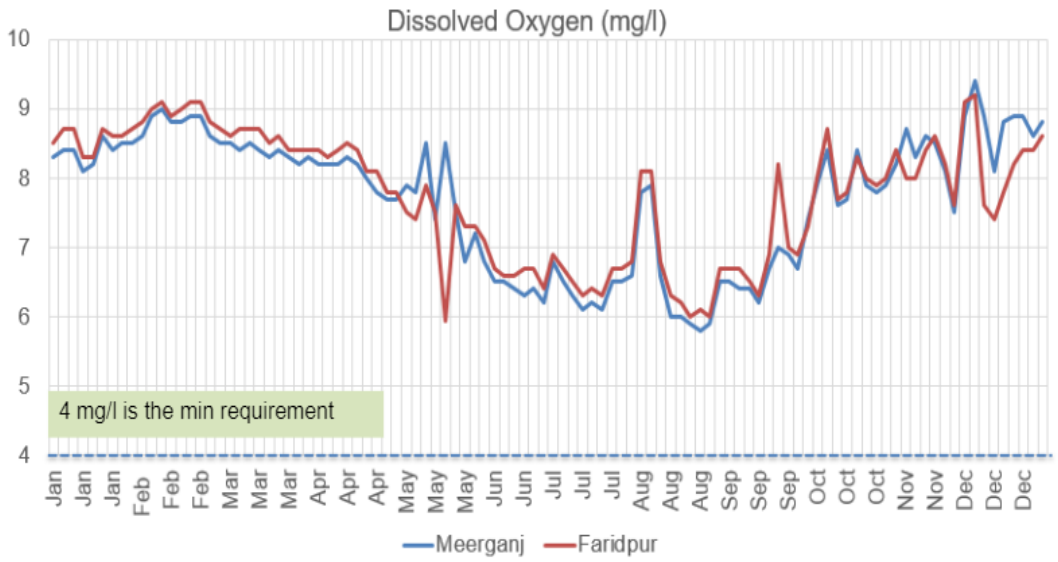


Figure 27 Dissolved Oxygen of Ramganga River (2022)

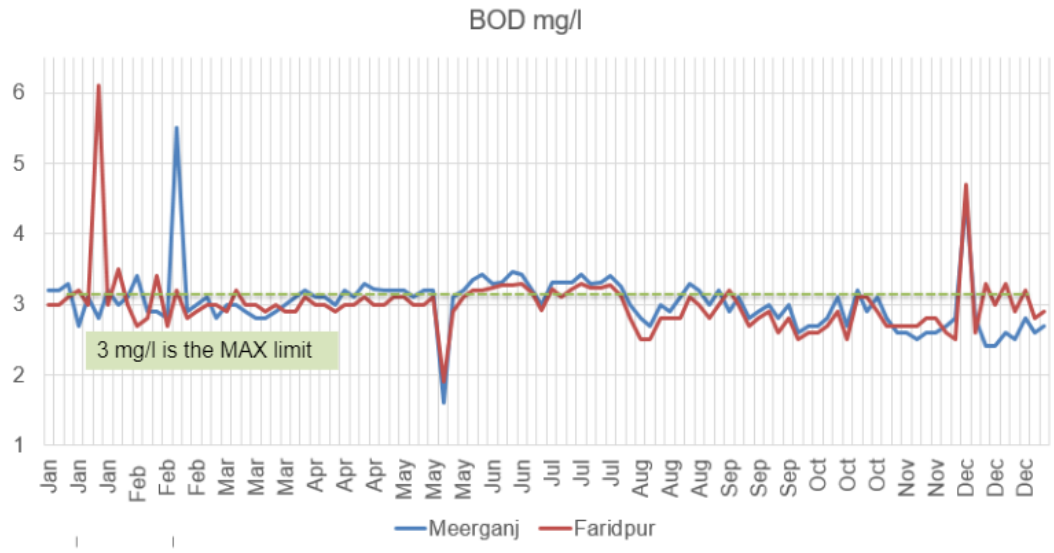


Figure 28 BOD of Ramganga River (2022)

Surface water characteristics of the Nakatiya, Deoraniya rivers, and Choubari drains were subjected to weekly monitoring of water quality by the Uttar Pradesh Pollution Control Board (UPPCB). The Nakatiya drain, spanning a length of 100 kilometres, the Deoraniya river with a length of 5.5 kilometres, and the Choubari drain extending for 17 kilometres were the areas under observation. The annual average data for the year 2022 has been provided in Table 7. It is worth noting that the levels of dissolved oxygen in all three water bodies are significantly below the minimum requirement of 4 mg/l, which is essential for the survival of most aquatic organisms. Moreover, the levels of BOD (Biochemical Oxygen Demand), COD (Chemical Oxygen Demand), and Total Coliforms in these water bodies exceed the standard limits prescribed for water quality assessment.

Table 7 Annual average data for the year 2022 for the Nakatiya, Deoraniya rivers and Choubari drain [19].

Annual average-2022	pH	Dissolved Oxygen (mg/L)	BOD (mg/L)	COD (mg/L)	Total Coliform (MPN/100 mL)
Nakatiya	7.17	0.37	38.77	277.36	11936363.64
Deoraniya	7.15	0.34	35.80	238.93	8627272.73
Choubari	7.19	0.14	31.03	230.17	1308571.43

Figure 29 Nakatia River getting waste through 15 drains.

4.6.2 Groundwater

All groundwater samples exhibited elevated levels of total alkalinity, ranging from 247.5 mg/l to 574 mg/l, surpassing the maximum permissible limit of 200 mg/l (). With the exception of Dhanaura and Beevni villages, total coliforms were detected in all the samples. Out of the 11 samples collected, 6 samples demonstrated elevated levels of total hardness, exceeding the standard value of 200 mg/l. Analysis revealed that 8 samples contained high levels of phosphate, while in 3 samples, the phosphate content remained within the acceptable limit of 0.2 mg/l.

Table 8 Block wise ground water quality. Red represents a value exceeding the permissible limit.

Locations of Ground water sample.2016		Dhanora in Alampur Jafrabad block	Chandaua in Alampur jafrabad block	Ghillora in Alampur Jafrabad block	Firojpur in Alampur jafrabad Block	Badrai in Alampur jafrabad Block	Chura Narvadia in Machgawan Block	Beevani in Machgawan Block	Dhaka in Machgawan Block	Langura , Alampur jafrabad Block	Akha in Machgawan Block	Gaini in Machgawan Block
Parameters		Bareilly	Bareilly	Bareilly	Bareilly	Bareilly	Bareilly	Bareilly	Bareilly	Bareilly Ctrl	Bareilly Ctrl	Bareilly Ctrl
Water temperature	25	26	26	28	27	27	28	28	26.8	28	27.5	27
pH	6.5-8.5	7.1	7.08	7.02	7.55	7.14	7.16	7.62	7.46	6.98	7.5	7.24
Turbidity	10	12.8	37.5	1.7	0	29.4	0	10.5	0	43.3	0	0.8
Total dissolved solids	500	596	1042	452	402	756	402	442	542	518	412	428
Electrical conductivity		858	1494	648	581	1088	579	629	780	735	595	612
Total suspended solids	100*	28	34	8	6	16	8	16	8	32	4	11
Total Hardness	200	380	560	280	190	380	120	190	230	270	180	150
Total Alkalinity	200	376.2	574	346.5	267.3	356.4	267.3	415.8	356.4	297	316.8	247.5
Ammonia	0.5 max	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nitrates	45	BDL	1.6	2	1.8	1.1	1.3	BDL	1.6	1.4	2.2	2.1
Total Phosphates	<0.2	BDL	0.7	0.57	0.24	0.18	0.38	BDL	0.4	0.2	0.38	0.2
Chlorides	250	25	135	15	15	70	20	50	10	35	10	20
Fluoride	1.5 max	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Sodium		94.5	160	46	90.5	81.5	145	72	120	58.5	97	140
Potassium		3.5	21	9.6	5.1	19.8	3.2	103	6.2	35	6.3	6.1
Total coliform	Absent	Absent	3	7	5	10	5	Absent	7	5	8	11
Fecal Coliform	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent

4.7 Land use and land cover

The land use and land cover analysis of District Bareilly reveals that the majority of the area (87%) is under agriculture use. The predominant crops grown in the region are Wheat, followed by Rice and Sugarcane (NICRA). Crops like sugarcane and paddy, require significant amounts of water, resulting in extensive extraction of groundwater in the district. Surface water irrigation for agriculture is susceptible to drought conditions, and there are canals available in certain blocks of the district (Right bank of Ramganga), although specific data regarding their operations and distribution is currently unavailable. It is worth mentioning that an area of 13,135 hectares is irrigated by canals, while 131 hectares rely on ponds for irrigation. The remaining 295,638 hectares in the district rely on groundwater sources for irrigation. Approximately 96% of the total area in District Bareilly is irrigated using groundwater, while the remaining portion is served by canals and ponds.

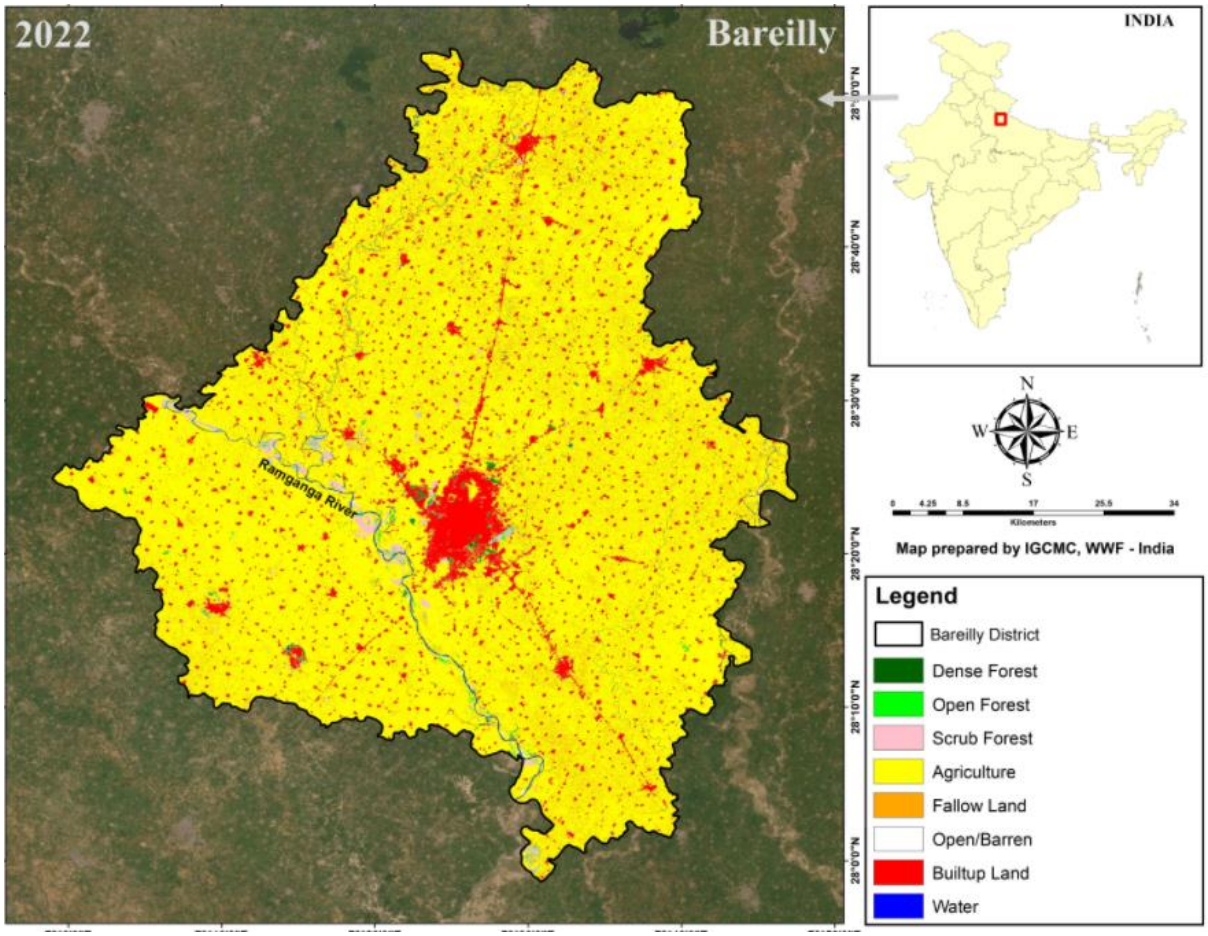
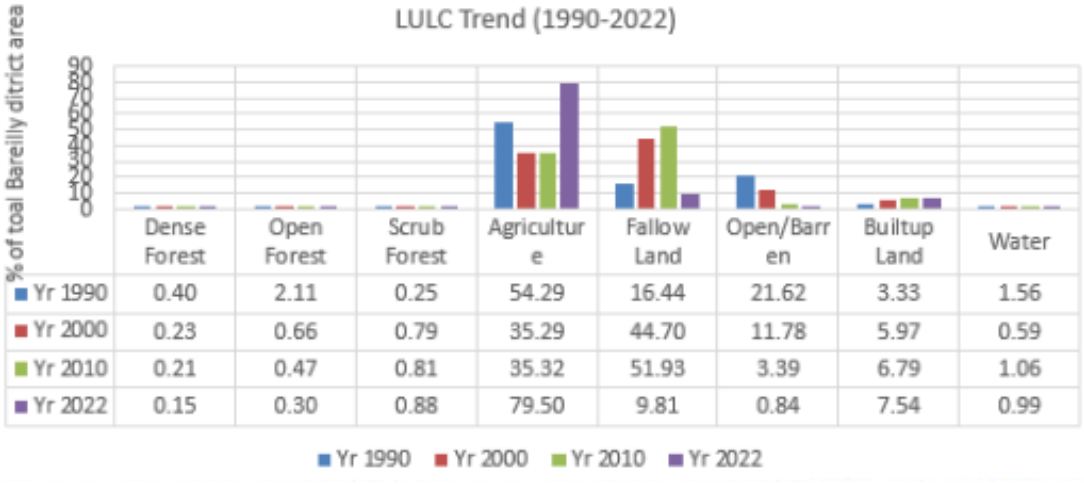


Figure 30 Landuse/Landcover map of Bareilly district, 2022 (WWF-India)

The existing irrigation infrastructure in the district comprises 3,265 kilometres of canals, 2,685 government-owned tube wells, and a significant number of privately-owned tube wells and pumps, estimated to be 421,723 in total.

Table 9 Land use and land cover trend of District Bareilly (1990-2022)



	Dense Forest	Open Forest	Scrub Forest	Agriculture	Fallow Land	Open/Barren	Builtup Land	Water
Yr 1990	0.40	2.11	0.25	54.29	16.44	21.62	3.33	1.56
Yr 2000	0.23	0.66	0.79	35.29	44.70	11.78	5.97	0.59
Yr 2010	0.21	0.47	0.81	35.32	51.93	3.39	6.79	1.06
Yr 2022	0.15	0.30	0.88	79.50	9.81	0.84	7.54	0.99

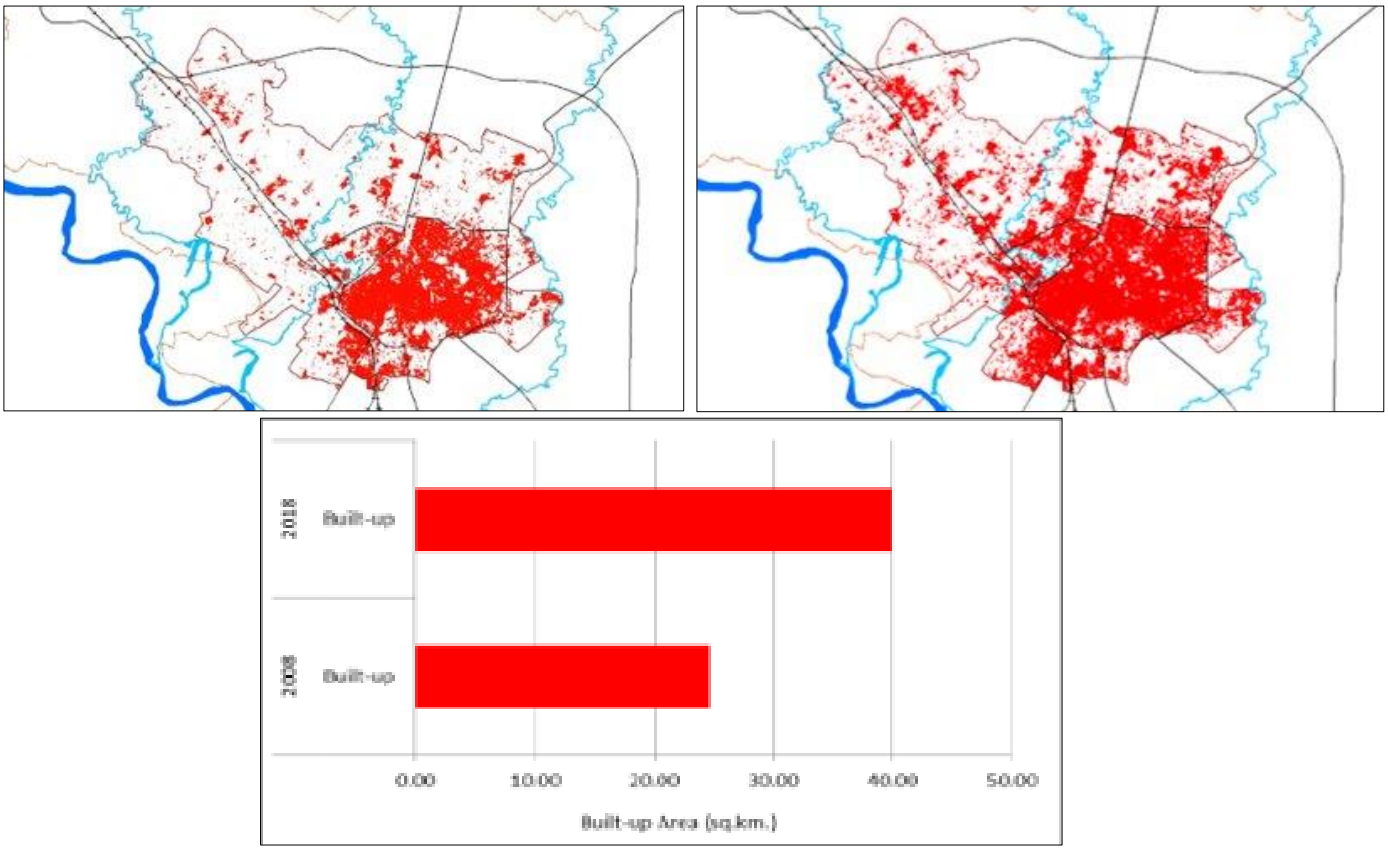


Figure 31 Landuse and Landcover of Bareilly City in 2008 (left) and 2018 (right)

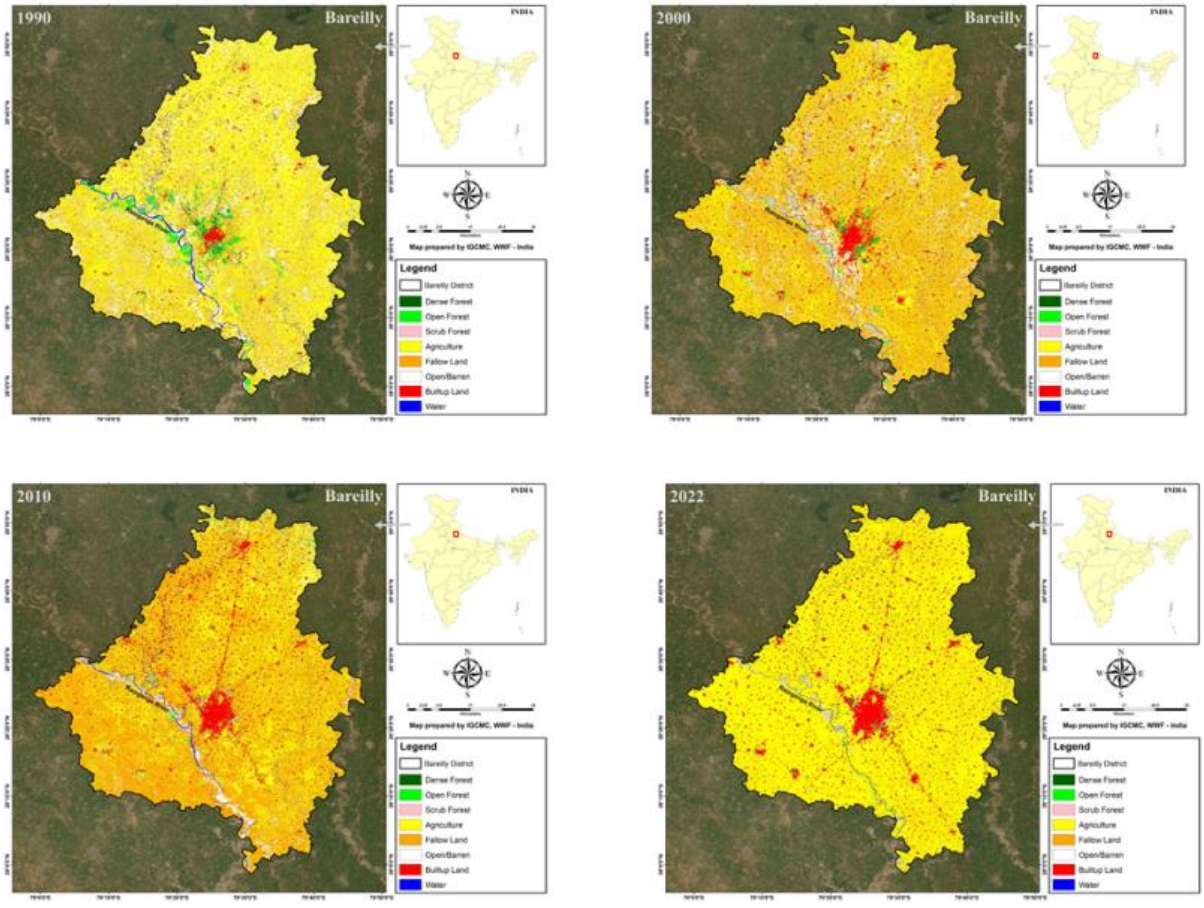


Figure 32 Land use and land cover trend of District Bareilly (1990-2022)

Since 1990, there has been a notable transformation in land use patterns in this region (Table 9)(Figure 31). The area dedicated to agriculture has expanded by approximately 18-20%, equivalent to 750 square kilometres. Conversely, the extent of open and barren land has decreased by 20%, while the built-up areas, encompassing both urban and rural regions, have seen a growth of 4%, accounting for an additional 160 square kilometres. Furthermore, the area covered by water bodies has experienced a marginal decline of 0.5%, shrinking by 20 square kilometres (Figure 32). In summary, a significant portion of open land has been converted into agricultural and urban zones, while water bodies have been encroached upon by agricultural land use. The increase in area under agriculture and built-up land indicates an increase in water demand (irrigation and domestic) and also pollution load which is putting pressure on water resources.

4.8 Agriculture and irrigation

In the district, irrigation is primarily facilitated through minor irrigation structures, which include tube wells, dug wells, and ponds. Canal irrigation, however, is limited to specific blocks within the district (right bank of Ramganga). The exact details regarding the blocks where canal irrigation is practised are currently unavailable and await further data. It is important to note that a total area of 13,266 hectares in the district is irrigated through canals and other surface water sources. The remaining area of 158,453 hectares relies on groundwater sources for irrigation purposes (Figure 33). Approximately 96% of the area in the district is irrigated by Groundwater.

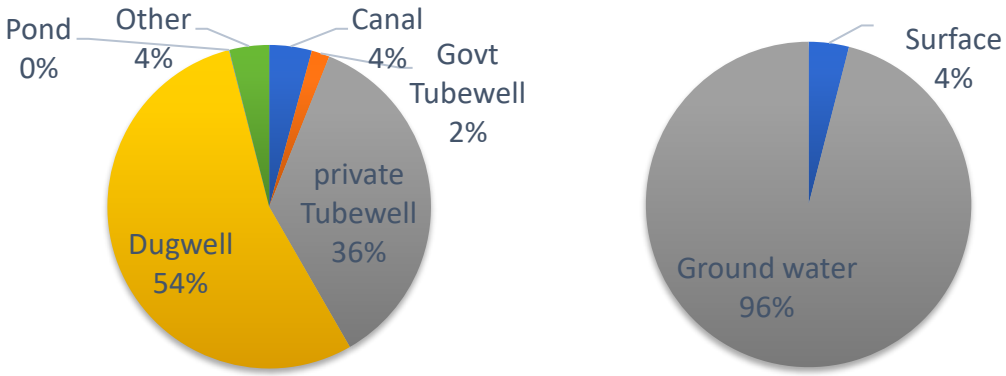


Figure 33 Irrigation sources for the Bareilly District

Table 10 Agriculture statistics in Bareilly district- 2018-19 (Area in Ha)

Total Reporting Area	406915
Net area under cultivation	326527
Area sown more than once	210272
Gross area sown, *Rabi, Kharif* and *Zayed*	534758
Area sown under *Rabi* crops	237879
Area sown under *Kharif* crops	276559
Area sown under *Zayed* crops	20320

Table 11 Irrigated Area (Ha) by Surface and Ground Water -Bareilly district [20].

		Blockwise Irrigated area in hectare						
S.No.	Block Name	Canal	Tubewell		Dugwell	Pond	Other	Total
			State	Private				
1	Baheri	2770	270	15495	11185	8	904	30632
2	Shergarh	1414	309	7268	9471	12	1030	19504
3	Richha	2066	216	6262	10882	14	815	20255
4	Meerganj	24	215	5693	8987	6	877	15802
5	Fatehganj	118	416	6023	4042	8	863	11470
6	Bhojipura	709	307	7914	5031	6	865	14832
7	Kiyara	0	289	2883	6673	18	740	10603
8	Ram Nagar	0	781	6835	9888	5	900	18409
9	Majhgawan	0	314	8724	16082	2	760	25882
10	Alampur Zafarabad	0	263	6116	15859	4	599	22841
11	Bithri Chanpur	967	254	8657	10271	3	559	20711
12	Nawabganj	2089	544	9507	13451	33	1005	26629
13	Bhadpura	982	143	6717	11098	2	674	19616
14	Bhutah	1494	585	5657	15685	4	986	24411
15	Faridpur	502	633	5704	14297	6	588	21730
	Village Total	*13135*	*5539*	*109455*	*162902*	*131*	*12165*	*303327*
	Urban Total	*0*	*40*	*608*	*4865*	*0*	*64*	*5577*
	District Total	*13135*	*5579*	*110063*	*167767*	*131*	*12229*	*308904*

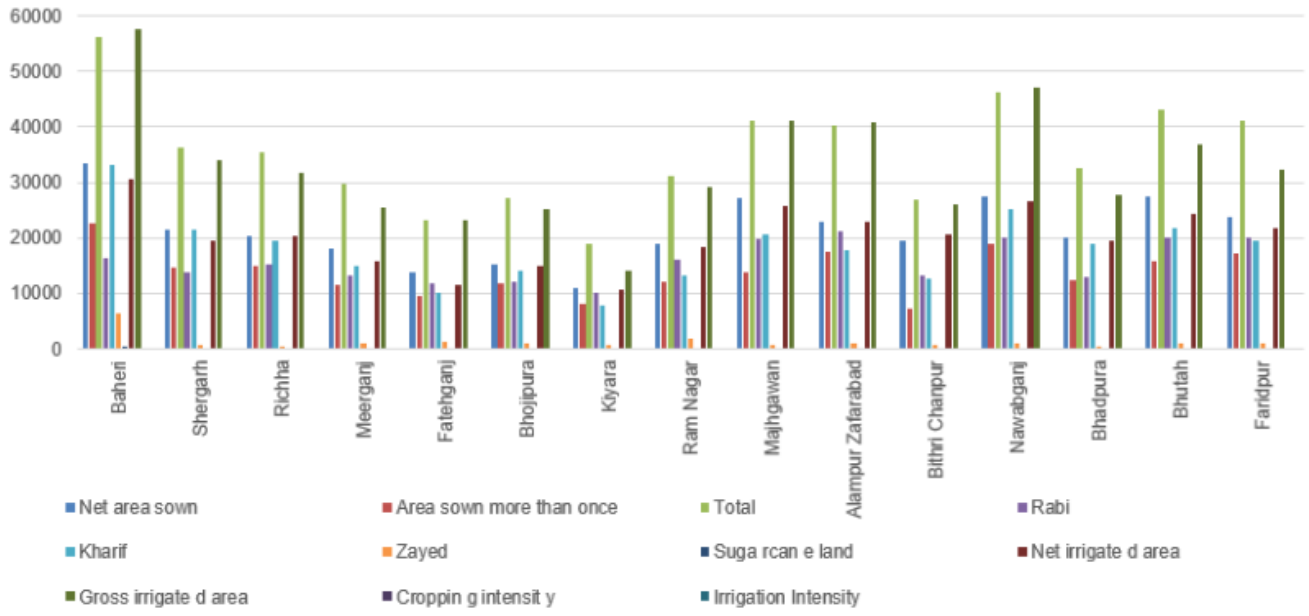


Figure 34 Block wise area under main crops in Bareilly district [20].

The agricultural statistics in Bareilly District for 2018-19 (Table 10) reveal various important metrics related to land utilization in the region. The total reporting area, which represents the land utilized for agricultural activities, is documented as 406,915 hectares. Within this reporting area, the net area under cultivation amounts to 326,527 hectares. A significant portion of the cultivated area, namely 210,272 hectares, is allocated for multiple crop rotations. Furthermore, the gross area sown, which includes Rabi, Kharif, and Jayed crops, encompasses an extensive land extent of 534,758 hectares. Among the sown areas, 237,879 hectares are specifically allocated for Rabi crops, while a designated portion of 276,559 hectares is utilized for sowing Kharif crops. Lastly, a distinct area measuring 20,320 hectares is dedicated solely to the cultivation of Jayed crops. These statistics provide valuable insights into the distribution and utilization of land resources for agricultural purposes in the region.

In the Aril Basin, the predominant crops cultivated are wheat and mentha (commonly known as mint). Paddy cultivation, on the other hand, is primarily undertaken for self-consumption and is not pursued for commercial purposes. Mentha cultivation, known for its high water requirements, is widespread throughout the region, occupying approximately 30-40% of the agricultural land area. In addition to the main crops, poplar and eucalyptus trees are grown to serve as an additional source of income for farmers.

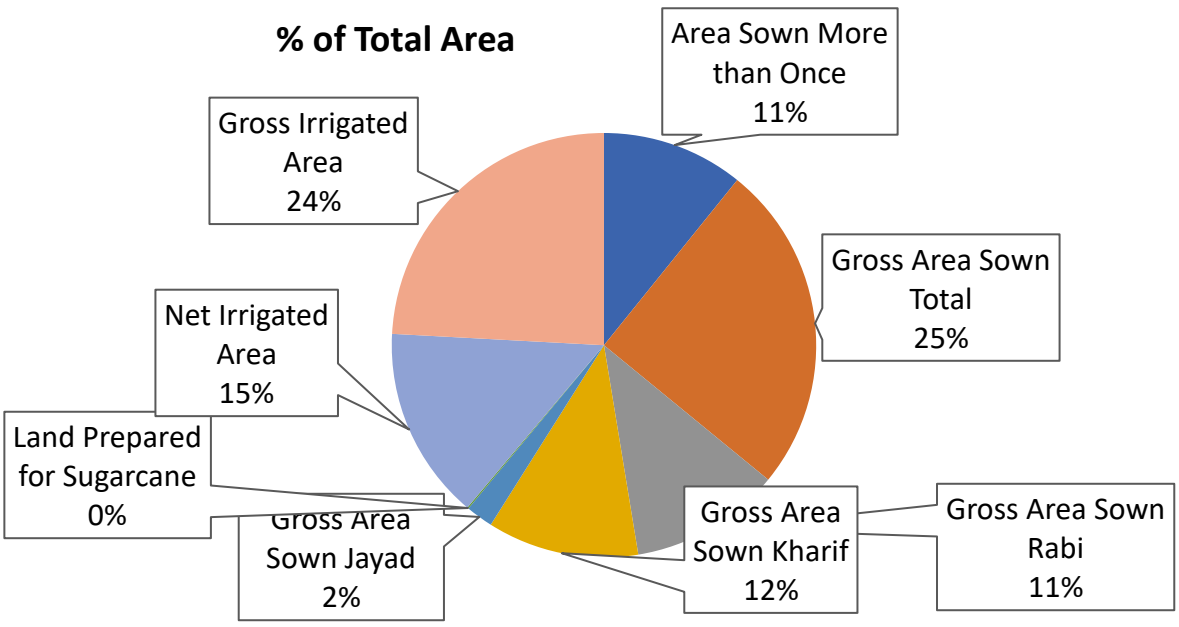


Figure 35 Cropping pattern in Aril basin

Notably, extensive eucalyptus plantations have been observed in this area, contributing to the agricultural landscape and providing economic benefits to the local community.

4.9 Floodplain and wetlands encroachment

The floodplains of rivers, inlets and wetland areas are subjected to encroachment and land use change. This leads to choked inlets, a decline in freshwater inflows, a reduction in the flood cushioning capacity of rivers, a decrease in groundwater recharge etc.

Figure 36 Extensive Eucalyptus plantation has been observed in the Aril Basin area.

The Landuse/Landcover changes suggest that the region has been subjected to a huge change in land use/landcover. About 20% of open land (which includes river floodplains, inlet channels, wetland zones of influence and other areas) has been converted to agriculture land and settlements built-up area. There has been an encroachment on the floodplain in various rivers and wetlands. One of the main reasons for degradation in 50% of wetlands is the loss of connectivity due to encroachment and choking of inlets. Floodplain demarcation measures are not consistently implemented, resulting in the construction of houses and long-term habitation in these areas for durations spanning 10 to 20 years.

As these areas are floodplains, they are prone to periodic inundations, and the provision of basic facilities is inadequate or non-existent. The encroachment has extended towards the river due to the high population density in the region. Notably, significant encroachment hotspots have been identified along the Nakatiya and Deoraniya rivers. Furthermore, in Bakar Ganj along the Deoraniya River, a municipal solid waste dump has been established close to the river bank, at a distance of 430 meters.

Figure 37 Encroached stretch: Deoraniya or Qila river (28.358205° N; 79.385808° E to 28.387137° N to 79.389495° E)

Several locations have been identified as sites of encroachment in the vicinity of the Deoraniya River. These locations include Anand Vihar Colony, Swaleh Nagar, Gangwar Colony, Kela Bagh, Katghar, Bakar Ganj, and Prem Nagar. These areas have experienced unauthorized occupation and construction, encroaching upon the land near the Deoraniya River. The identification of these specific locations is crucial for understanding the extent and distribution of encroachment activities in the region.

Figure 38 Encroached stretch sections: Deoraniya or Qila river. (1 and 2) Bakar Ganj and (3) Nainital Bypass

Figure 39 Encroached stretch: Nakatiya river (Left side - From 28.397381°N; 79.467480°E to 28.356993°N; 79.471186°E ,Total 7.45 km Stretch) and (right side - From 28.340578°N; 28.340578°E to 28.330510° N; 79.453911°E, Total 2.8 km Stretch)

Several locations have been identified as areas of encroachment around the Nakatiya River. These locations include Dhaurera Mafi, Umang Phase 2, Ujjwal Phase 1, Rain Phase 1 and 4, Mahanagar Colony, Suresh Sharma Nagar, Greater Green Park Colony, Umariya, and Chetna Colony. These areas have experienced unauthorized occupation and construction, encroaching upon the land adjacent to the Nakatiya River. Identifying these specific locations is important for assessing the extent and distribution of encroachment activities in the region surrounding the Nakatiya River.

Figure 40 Encroached stretch sections: Nakatiya river

Various locations have been observed in the Aril River stretch (within Bareilly district) where floodplain encroachment has taken place. This encroachment primarily occurs for agricultural purposes, as the river experiences low flow throughout most of the year. The encroachment involves the occupation of land adjacent to the Aril River for agricultural activities. By identifying these specific locations, we gain insight into the extent and nature of encroachment along the course of the Aril River.

Figure 41 Encroached stretch sections: Aril River

Encroachment is also observed in inlets of wetlands, which brings freshwater inflows from the catchment. For instance, one such wetland is Khangwa Shyam (Aonla), where WWF-India worked with the district administration Bareilly to rehabilitate the inlet channels, which are choked, and encroached (Figure 42).

Figure 42 Encroachment and choking of wetland inlet (before and after rehabilitation)

4.10 Industry

The industrial landscape in Bareilly encompasses a range of sectors, including Sugar, Food and Beverages, fertilizers, Distillery, Slaughterhouse and Meat Processing, Chemical, Milk Processing, and Paper. A significant concern arises from the pollution of rivers due to the discharge of industrial effluents. It is worth noting that the board through a closure order has closed the slaughterhouse, and all industries have implemented Effluent Treatment Plants (ETP) to manage their wastewater. Approximately 12,732 kilolitres per day (KLD) of industrial wastewater is generated by 14 industries in the region. This wastewater is discharged into nearby water bodies, ultimately reaching the Ramganga River. The wastewater follows a route through Shankha, Bhakra, West Baigul, Kichha, Deoraniya, Nakatiya, and East Baigul. The pollution load in surface water streams, rivers, and drains, particularly in Nakatiya Nala and Deoraniya, raises significant concerns in stretches passing through Suresh Sharma Nagar and Mahanagar Colony. In the densely populated areas of the city, municipal and industrial drains are the sole sources of water flow in the rivers, namely Nakatiya and Deoraniya. During monsoon seasons, the flows increase, and locals report a depth increase from 4-5 feet to 7-8 feet at Bakar Ganj. Notably, the district lacks a Common Effluent Treatment Plant (CEPT) to address the wastewater management needs effectively.

Table 12 List of Grossly Polluting Industries (GPI) Industries in the Bareilly District.

1	Ajudhya Sugar Mills, Raja ka sahaspur, Bilari	Sugar
2	Deewan Sugar Ltd., Agwanpur, Kanth Road	Sugar
3	Genus Paper & Boards Ltd., Agwanpur	Paper
4	Milk Food Ltd., Agwanpur	Dairy
5	National Industrial Corporation Ltd. Raja ka sahaspur, Bilari	Distillery
6	Pashupati Acrylon Ltd., Kashipur Road, Thakurdwara	Dyeing and Textile synthetic fibre
7	Ramchandra Straw Products Ltd., Vill-Vijaipur, Tehsil Bilari, Dist	Paper
8	Rana Sugar Ltd. (Unit 3), Belwara, Manpur	Sugar
9	Shakumbhri Straw Products Ltd. (Unit-1), Vill- Deori, Chandausi Road. Tehsil Bilari	Paper
10	Shakumbhri Straw Products Ltd. (Unit-II), Vill- Deori, Chandausi Road. Tehsil Bilari	Paper
11	Shakumbhri Straw Products Ltd. (Unit-III), Vill- Deori, Chandausi Road. Tehsil Bilari	Paper
12	Triveni Engineering & Ind. Ltd. (Sugar Unit), Rani Nagal, Tehsil- Thakurdwara	Sugar

Table 13 Discharge and Route of Industrial effluent.

S.No.	Name & Address of Unit	Route to reach the river	Discharge (KLD)
1	Brindavan Beverages Pvt. Ltd.	Indsustrial → Shankha River→ Ramganga	1200.0
2	D.S.M. Sugar	Pilakhar Drain → Bhakra River→ West→ Behgul→Ramganga	1000.0
3	Dwarikesh Sugar Industries Ltd.	ZLD	ZLD
4	Dwarikesh Sugar Industries Ltd.	Drain→ East Begul →Ramganga	750.0
5	IFFCO Ltd., Aonla,	Aril River → Ganga	5712.0
6	Kesar Enterprises Ltd. (Distillery Unit)	Kicha River → Bhakra River → West Behgul → Ranganga	ZLD (450)
7	Kesar Enterprises Ltd. (Sugar Unit)	Kicha River → Bhakra River → West Behgul → Ranganga	1250.0
8	Kisan Sahkari Chini Mills Ltd.	Drain → Deoraniya Drain → Ramganga	1000.0
9	Rehbar Food Industries Pvt. Ltd.	Drain→ Nakatiya Drain→ Ramganga	1000.0
10	Nagar Nigam Slaughter Houe,	Drain→ Nakatiya Drain→ Ramganga	120.0
11	Oswal Overseas Ltd. (Sugar Unit	Local Drain → East Behgul → Ramganga	250.0
12	Premier Agri Foods Pvt. Ltd.	Local Drain → Nakatiya Drain→ Ramganga	350.0
13	Rama Shyama Paper Ltd.,	Sathrapur Drain→ Nakatiya Drain → Ramganga	1100.0
14	Superior Industries Ltd. (Distillery)	Local Drain → Deoraniya Drain → Ramganga	ZLD (360)

Table 14 Monitoring stations of UPPCB in Bareilly district

Exiting Monitoring stations	Name of the Rivers/Drains	Monitoring station locations	Latitude	Longitude
1	Nakatiya drain		28.250412	79.43643047
2	Deorania drain			
3	Choubari drain		28.29485692	79.39262486
4	u/s Ramganga	Meerganj, Rampur road bridge	28.455113	79.197405
5	d/s Ramganga	Faridpur, Shahjahanpur rd bridge	28.131778	79.486891
6	West Baigul		28.49756093	79.27236313
7	Bhakhra		28.520499	79.250902
8	East Baigul		28. 071719	79.637491
9	Aril River		28. 229238	79.235029

Within the Aril Basin (within Bareilly district), the industrial sector is represented by the presence of the Fertilizer Industry, specifically IFFCO (Indian Farmers Fertiliser Cooperative Limited)which generates approximately 5,712 kiloliters per day (KLD) of effluent part of which (treated/partially treated) is discharged into Aril river. It is noteworthy that an operational Effluent Treatment Plant (ETP) has been installed to manage and treat the effluent produced by the fertilizer industry within the basin.

Figure 43 Water Effluent Discharge in Aril from IFFCO Plant

4.11 Aquatic Biodiversity (Fishes)

According to the research findings published in the esteemed journal "Indian Journal of Ecology (2022) 49(5): 1786-1793, 2022," a comprehensive study identified a total of 18 fish species inhabiting the Choubari section of the Ramganga river. These fish species are classified into several families, namely Bagridae, Ambassidae, Belonidae, Channidae, Cobitidae, Heteropneustidae, and Mastacembelidae. This study provides valuable insights into the diverse fish fauna present in the specific region of the Ramganga river, contributing to the understanding of aquatic biodiversity and ecological dynamics in the area.

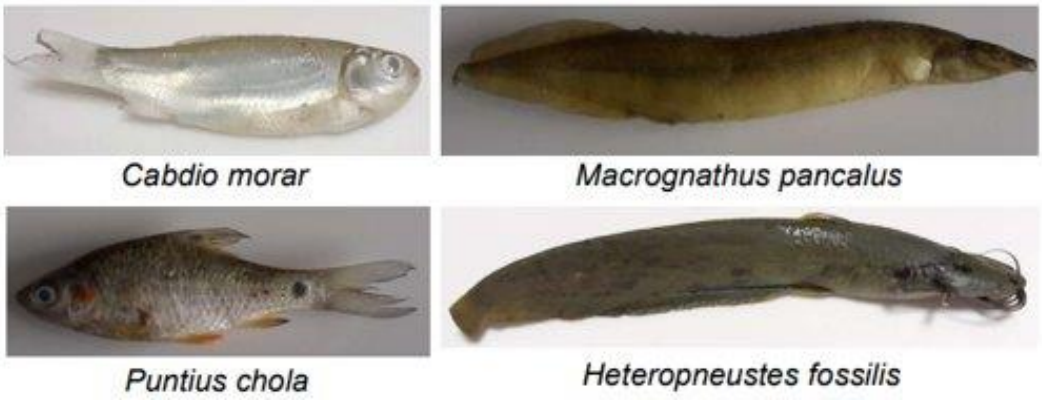


Figure 44 Fishes of Ramganga river

Evaluating biodiversity is crucial for assessing the state of biological diversity across various ecological levels and for tracking changes in both time and space. This gathered information serves as a guiding principle for making decisions about the management of biological diversity, encompassing aspects of production and conservation. Unfortunately, we currently lack data regarding the hydraulic habitat requirements of the major vertebrate and invertebrate fauna in the River Ramganga.

The River Ramganga, a significant tributary of the River Ganga, was chosen as the site for an E-Flows Assessment and pilot demonstration conducted by WWF India from 2014 to 2015. This assessment involved the participation of local and national experts. The study focused on eight specific locations along the Ramganga River, with comprehensive year-round field investigations encompassing aquatic biodiversity, fluvial geomorphology, river health, socio-cultural aspects, and livelihoods considerations. One of the identified locations was Choubari comes in the Bareilly district. To gather information on the fish fauna, the research team conducted experimental fishing using cast nets at each site for a duration of one hour. During each catch, they recorded data on species diversity, abundance, size, and weight. Additionally, they preserved a sample of each species in a 10% Formaldehyde Solution. Fish species were identified according to established identification guides, and all species names adhered to the Fish Base database.

The study documented a total of 32 fish species in Ramganga river at Choubari, which are listed in Table 15. *Cyprinus carpio*, an exotic fish was recorded from this location along with other threatened species like *Wallago attu* (NT); *Bagarius bagarius* (NT) and *Ailia colia* (NT).

Table 15 Fish species recorded at Choubari in River Ramganga during the study period (May 2014 - January 2015)

S.no	Name of the fish species	Common name	Conservation status
	Order-Cypriniformes		
	Family-Cyprinidae		
1	*Cyprinus carpio* (Linnaeus, 1758)	Common carp	Exotic
2	*Labeo boga* (Hamilton, 1822)	Boga	Least Concern (LC)
3	*Devario devario*	Sind Danio	Least Concern (LC)
4	*Laubuca laubuca* (Hamilton, 1822)	Indian Glass Barb	Least Concern (LC)
5	*Pethia conchonius* (Hamilton, 1822)	Rosy Barb	Least Concern (LC)
6	*Pethia ticto* (Hamilton, 1822)	Ticto Barb	Least Concern (LC)
7	*Osteobrama cotio* (Hamilton, 1822)	Minnows	Least Concern (LC)
8	Cabdio morar (Hamilton, 1822)	Morari	Least Concern (LC)
	Family-Cobitidae		

9	*Acanthocobitis botia* (Hamilton, 1822)	Mottled Loach	Least Concern (LC)
10	*Aborichthys elongates* Hora, 1921		Least Concern (LC)
11	*Setipinna phasa* (Hamilton, 1822)	Gangetic Hair-fin Anchovy	Least Concern (LC)
	Order-Osteoglossiformes		
	Family-Notopteridae		
12	*Wallago attu* (Bloch & Schneider, 1801)	Padin	Near Threatened (NT)
13	*Sisor rabdophorus* (Hamilton, 1822)	Sisor Catfish	Least Concern (LC)
	Family-Bagridae		
14	*Sperata seenghala* (Sykes, 1839)	Giant River-Catfish	Least Concern (LC)
15	*Sperata aor* (Hamilton, 1822)	Long-whiskered Catfish	Least Concern (LC)
16	*Mystus vittatus* (Bloch, 1794)	Striped dwarf catfish	Least Concern(LC)
17	*Mystus cavasius* (Hamilton, 1822)	Gangetic Mystus	Least Concern (LC
18	*Mystus bleekeri* (Day, 1877)	Day's Mystus	Least Concern (LC)
	Order-Beloniformes		
	Family- Belonidae		
19	*Xenentodon cancila* (Hamilton, 1822)	Freshwater Garfish	Least Concern (LC)
	Order- Siluriformes		
	Family- Sisoridae		
20	*Glyptothorax telchitta* (Hamilton, 1822)	Sisorid Catfishes	Least Concern (LC)
21	*Glyptothorax pectinopterus* (McClelland, 1842)	River Cat	Least Concern (LC)
22	*Gagata cenia* (Hamilton, 1822)	Gagata	Least Concern (LC)
23	*Bagarius bagarius* (Hamilton, 1822)	Goonch	Near Threatened (NT)
	Family- Schilbeidae		
24	*Ailia colia* (Hamilton, 1822)	Gangetic Ailia	Near Threatened (NT)
	Order- Perciformes		
	Family-Ambassidae		
25	*Chanda nama* (Hamilton, 1822)	Elongate Glass-perchlet	Least Concern (LC)
26	*Parambassis ranga* (Hamilton, 1822)	Indian Glassy Fish	Least Concern (LC)
	Family-Osphronemidae		
27	*Trichogaster fasciata* (Bloch & Schneider, 1801)	Banded Gourami	Least Concern (LC)
	Family-Channidae		
28	*Channa punctata* (Bloch, 1793)	Spotted Snakehead	Least Concern (LC)
	Family-Gobiidae		
29	*Glossogobius giuris* (Hamilton, 1822)	Tank Goby	Least Concern (LC)
	Order-Synbranchiformes		
	Family-Mastacembelidae		
30	*Macrognathus pancalus* (Hamilton, 1822)	Barred Spiny Eel	Least Concern (LC
	Family-Claridae		
	Family-Schilbeidae		
31	*Eutropiichthys murius* (Hamilton, 1822)	Schilbid Catfishes	Least Concern (LC)
	Order- Mugiliformes		
	Family-Mugilidae		
32	*Sicamugil cascasia* (Hamilton, 1822)	Yellow-tail Mullet	Least Concern (LC)

4.12 Waste and Sewage

Currently, there is no operational treatment plant in the district. However, a treatment plant with a capacity of 35 million litres per day (MLD) has been completed and is currently undergoing trial runs. As a temporary solution, the installation of bioremediation systems utilizing Mesars Green way technology from New Delhi has been implemented in all the drains. Water quality testing is conducted on a fortnightly basis to monitor the effectiveness of these measures. The total volume of wastewater generated in the district amounts to 129.68 MLD, and unfortunately, all the sewage is discharged into the rivers without undergoing any treatment through 15 drains, including Nakatiya and Deoraniya.

The Uttar Pradesh Jal Nigam (rural) is actively involved in the construction of four Sewage Treatment Plants (STPs) to address this issue. These projects include the completion and testing of the 35 MLD Saraye Talfi (Amrut) STP, scheduled to be conducted next month, the 1 MLD Trishuul airbase (*Nammai Gange*) STP planned for 2023, the 42 MLD Harun Nagla (*Nammai Gange*) STP also expected to be operational in 2023, and the 20 MLD Choubari (*Nammai Gange*) STP, which is also planned for completion in 2023. In most cities, there is a lack of separate sewer line networks, resulting in the mixing of stormwater with sewage. The sewerage connectivity in the region accounts for approximately 32%, while 68% of toilets are connected to septic tanks and soak pits, as reported by the NNM Bly (National Nutrition Mission Bly) initiative [16].

The overall length of the sewerage network pipes within the city spans approximately 206.2 kilometres. However, it is important to note that the age of these sewerage network pipes is relatively young, estimated to be around 35 years. The area covered by the sewerage network is limited to approximately 25 square kilometres.

In accordance with the requirements set by the Urban Local Body (ULB), all households have been equipped with toilets and Individual Household Latrines (IHHL). The construction targets have been successfully achieved. Additionally, Community Toilets (CT) and Public Toilets (PT) have been constructed to accommodate the needs of the floating population.

A significant proportion of households rely on septic tanks for sewage disposal. Unfortunately, many of these septic tanks lack soak pits. Consequently, the black water discharged from these

septic tanks flows into open sewerage drains, leading to surface water pollution and biodiversity degradation in the surrounding river stretches.

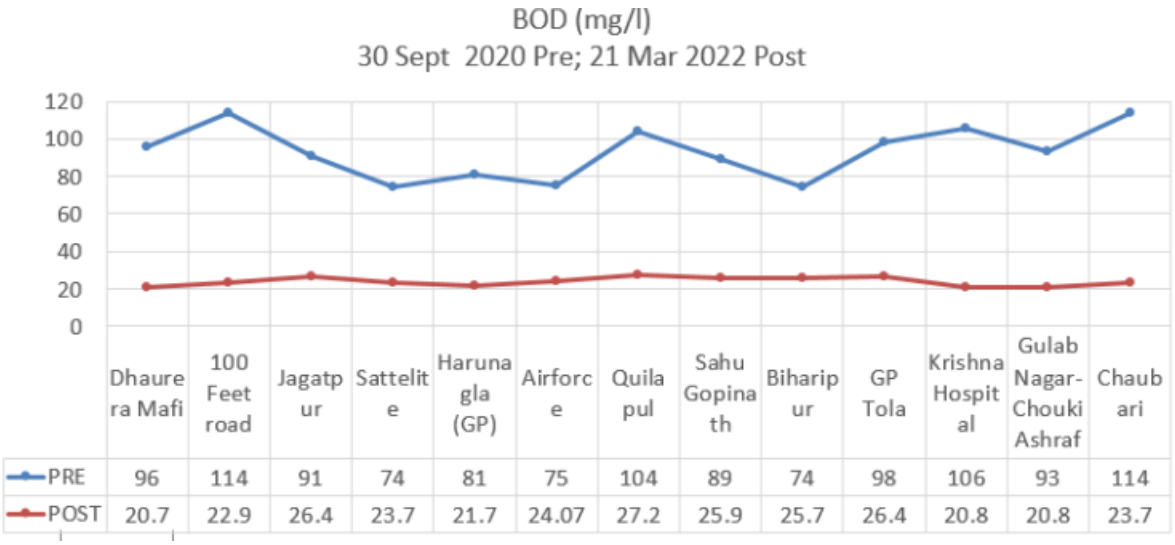
Table 16 Status of wastewater in Bareilly

Total number of current households in ULB	292075
Total number of HH with sewage connection	65265
Total number of HH with Onsite sanitation (OSS) Septic tank	104287
Total number of HH with Onsite sanitation (OSS) Twin pit	33780

Table 17 Major drains carrying waste to Nakatiya

S.No.	Drain	Discharge
1	Dhaurera mafi Barrier Nala	Total discharge of the first 13 drains is 42 MLD
2	Dhaurera mafi Village Nala	
3	100 foota road Nala	
4	Jagatpur Police Choki to Nakatiya river	
5	Supercity Nala	
6	Sunrise colony Nala	
7	Asheesh Royal Park Nala	
8	Rohillkhand College Nala	
9	Mahanagar Nala	
10	Harunagla Nala-1	
11	Harunagla Nala-2	
12	Green Park Nala	
13	Satellite Bus stand Nala	
14	Airforce drain	1 MLD
15	Choubari drain	20 MLD

The Municipal Corporation (Nagar Nigam) has implemented a total of 15 bioremediation points along the 14 drains that transport sewage to the Ramganga river. These bioremediation points have been strategically installed to address and mitigate the environmental impact of the sewage discharged into the river.



	Dhaurera Mafi	100 Feet road	Jagatpur	Satellite	Harunagla (GP)	Airforce	Quilapul	Sahu Gopinath	Biharipur	GP Tola	Krishna Hospital	Gulab Nagar-Chouki Ashraf	Chaubari
PRE	96	114	91	74	81	75	104	89	74	98	106	93	114
POST	20.7	22.9	26.4	23.7	21.7	24.07	27.2	25.9	25.7	26.4	20.8	20.8	23.7

Figure 45 Phytoremediation technique in Bareilly District

Bioremediation in Bareilly refers to the implementation of biological processes to mitigate environmental pollution and restore contaminated sites in the region. This methodology involves the utilization of living organisms, such as bacteria, plants, or fungi, to break down, absorb, or neutralize pollutants present in soil, water, or air. The objective of bioremediation is to promote the natural degradation of pollutants, thereby reducing their adverse impact on the local ecosystem and human health [25].

In the context of Bareilly, where groundwater depletion and environmental contamination have been identified as pressing concerns, bioremediation strategies could potentially address these issues. For instance, bioremediation techniques might involve introducing specific bacteria or plants that can break down pollutants in the soil or groundwater. By harnessing the natural capabilities of these organisms, the contamination levels could gradually be reduced, allowing for the rehabilitation of affected areas.

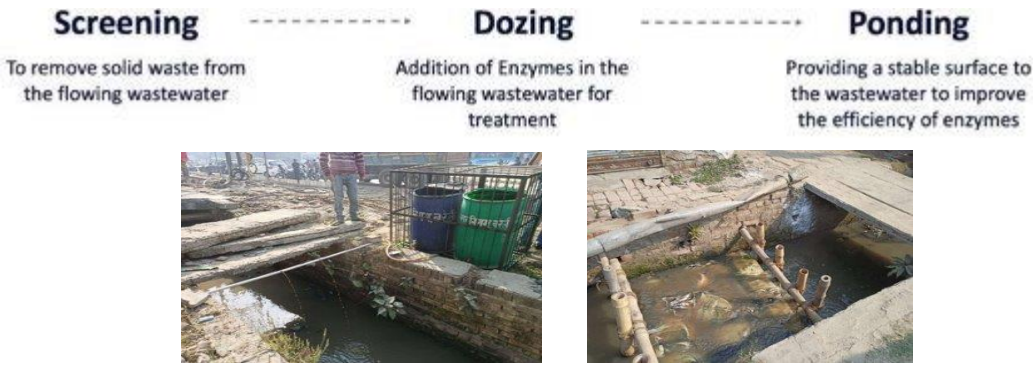


Figure 46 Dozing of Enzymes at Satellite Drain Bareilly (left) and Process of Ponding at Satellite Drain Bareilly (right)

The Municipal Corporation of Bareilly has successfully commissioned a decentralized wastewater treatment facility, situated at Akshar Vihar Park, with a processing capacity of 25,000 litres per day (KLD). This facility operates as a reception point for wastewater originating from the adjacent residential sectors. Subsequently, the wastewater undergoes comprehensive treatment processes, culminating in the release of treated effluent into a designated pond. Furthermore, the reconstituted wastewater resulting from the plant's treatment operations is efficiently harnessed to address various horticultural demands in locations including Gandhi Park, proximate parks, and roadside plantations. Additionally, the treated wastewater is judiciously employed for road cleansing activities.

Figure 47 Wastewater Treatment Plant at Akshar Vihar, Bareilly (left) and Pond at Akshar Vihar Park (right)

4.12.1 Solid waste

The total quantity of solid waste generated within the ULBs (Urban Local Bodies) of Bareilly is estimated to be approximately 432 tons per day (TPD). As part of waste management initiatives, 32 Community Composters have been installed in a ward-wise manner, and Pit Composting is also being practised in the city. Currently, 40% of door-to-door waste segregation has been implemented in all ULBs, falling short of the targeted 100%.

None of the ULBs have facilities for managing waste generated by Bulk Waste Generators. Thirteen ULBs have GPS-enabled vehicles for waste collection, namely Bahari, Anola, Fareedpur, Bisaratganj, Meerganj, Sahi, Shergadh, Deoraniya, Thiriya Nizamat Kha, Rithaura, Sirauli, Richa, and Sheeshgadh. There are no Solid Waste Processing Facilities specifically for dry waste (RDF) within the ULBs. Thirty-four compost pits are available across the ULBs for waste management. Sixteen ULBs have constructed Material Recovery Facility (MRF) centres,

with one under construction and one MRF centre (NPP Nawabganj) in the process of being established. These MRF centres collectively have a functional capacity of approximately 190 TPD for the management of dry waste.

There are two waste sites identified in the area:

- Bakar Ganj
- Swale Nagar (under construction for the establishment of a new waste site)

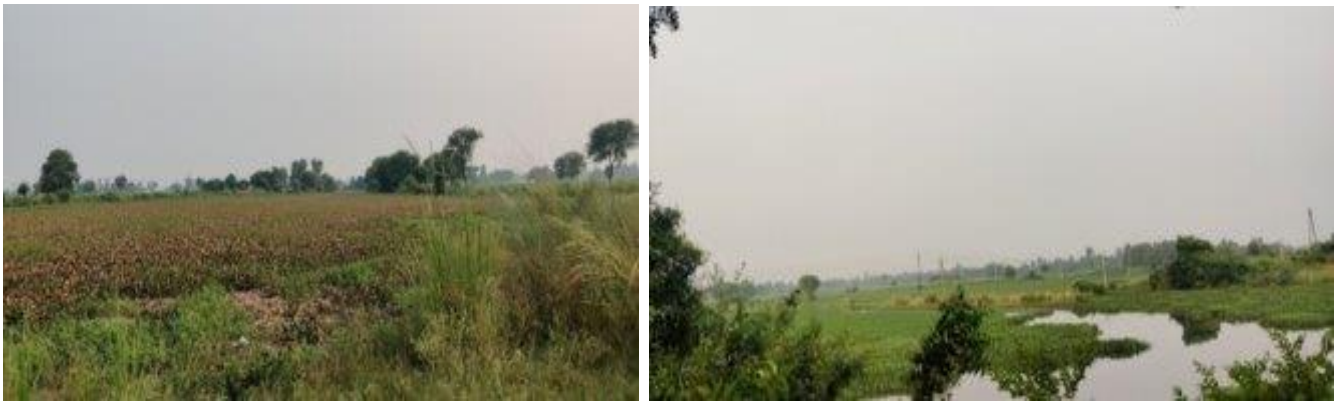


Figure 48 Drain which moves to Paiga village and connected to Aril River

Currently, 25% of waste segregation is being practised in all wards of the city. Solid waste is being disposed of at the Bakar Ganj site, which covers an area of 5.17 hectares. The mixing of waste poses challenges to recycling and material recovery efforts since segregated waste transportation becomes inconsistent. The groundwater quality in the Bakar Ganj area is reported to be very poor, and locals do not rely on it for drinking purposes.

The management of solid and liquid waste within the Aril basin poses a significant challenge, particularly in the villages. The accumulation of both biodegradable and non-biodegradable waste is observed throughout the villages and even in the river bed, contributing to environmental pollution. The presence of open drains in all villages exacerbates the situation by facilitating the flow of liquid waste, which poses a health hazard to the local population. Additionally, it is worth noting that domestic sewage originating from Aonla City finds its way to the Aril River through the Nawab (Pilia) River, further contributing to the pollution load. These observations are sourced from a report conducted by WWF India during the Aril survey.

5. Institutional arrangement of the District

Comprehensive and integrated strategies for the rejuvenation of rivers encompass entire river basins, taking into account not only the issue of sewage generated by human settlements but also other contributing factors such as industrial activities, irrigation water extraction, hydropower utilization, discharge of solid waste, and degradation of riverbanks. Therefore, it is imperative to establish planning, financing, monitoring, and coordinating authorities to strengthen the collective efforts of the Central Government, State Governments, and stakeholders in alignment with the NMCG Authority Notification Order of 2016. This will ensure the effective mitigation of pollution and the restoration, protection, and management of the Ganga River.

5.1 NMCG, SMCG, and DGC

National Mission for Clean Ganga (NMCG): The NMCG is responsible for developing guidelines for district planning and mandates the District Ganga Committees (DGCs) under the Authority Notification. It approves district plans and facilitates financial arrangements for their implementation.

State Mission for Clean Ganga Uttar Pradesh (SMCG UP): The SMCG UP is an extended arm of the National Mission for Clean Ganga (NMCG) specifically designated for the state of Uttar Pradesh. It implements the Namami Gange program and other related initiatives through various executing agencies.

District Ganga Committee Bareilly (DGC – Bareilly): The DGC in Bareilly is mandated to formulate the District Ganga Plan following the Authority Notification.

5.2 Key Stakeholders

5.2.1 National level

- **Central Groundwater Board (CGWB):** Contributes to district planning by providing inputs for the sustainable development and management of groundwater resources across the country.
- **Central Water Commission (CWC):** Contributes to district planning by focusing on components related to water resource management and monitoring the quality of river water.

- **National Water Academy (NWA):** Contributes to district planning based on the internationally recognized River Basin Management (RBM) cycle approach. NWA collaborates with NMCG and GIZ to implement RBM cycle training.
- **Ministry of Jal Shakti, Department of Water Resources, River Development and Ganga Rejuvenation (DoWR, RD & GR):** While not directly involved in the planning stage of district plans, MoJS, DoWR, RD & GR serve as the nodal ministry at the central level to support the development of Ganga and sub-basin water frameworks by the states.
- **Ministry of Jal Shakti, Department of Drinking Water and Sanitation (DWS):** Similar to the previous ministry, MoJS, DWS is not directly involved in the planning stage of district plans but provides central-level support for the development of Ganga and sub-basin water frameworks by the states.
- **Ministry of Housing and Urban Affairs (MoHUA):** Although not directly involved in the planning stage of district plans, MoHUA provides policies, strategies, and guidelines through CPHEEO to the state and union territory governments, including municipal corporations/committees.
- **Central Pollution Control Board (CPCB):** Contributes by providing data and information on pollution abatement and monitoring the water quality within the basin.
- **Centre for Ganga River Basin Management and Studies (cGanga):** Coordinates and ensures synergy between the District Ganga Plan and the Ganga Basin Plan.
- **Wildlife Institute of India (WII):** Coordinates biodiversity aspects and local awareness activities within the district plans.
- **National Institute of Urban Affairs (NIUA), MoHUA:** Ensures synergy with the urban river management plan framework and urban river management plans for urban local bodies (ULBs).
- **National Institute of Hydrology, Roorkee, Ministry of Jal Shakti, Department of Water Resources, River Development and Ganga Rejuvenation, Govt. of India:** Provides leadership in hydrology research, offering scientific solutions for sustainable development and self-reliance in the water sector. Conducts studies on water resource availability under varying hydrological, climatic, and sociocultural conditions using

modelling techniques. Offers scientific advice to various stakeholders on water-related issues.

5.2.2 State level

- **Uttar Pradesh Jal Nigam:** Uttar Pradesh Jal Nigam will primarily play a key role in the water supply and liquid waste management planning component of the District Plans. It will also be involved in the design and execution of projects related to faecal sludge and septage treatment facilities.
- **Uttar Pradesh Pollution Control Board:** The Uttar Pradesh Pollution Control Board is responsible for providing recommendations and implementing measures related to the prevention and control of water and air pollution. They collect, compile, and analyze data on water and air pollution, as well as organize Information, Education, and Communication (IEC) activities on pollution prevention, control, and waste management.
- **Urban Development Department, Govt. of Uttar Pradesh:** The Urban Development Department of the Government of Uttar Pradesh works towards implementing major schemes through the Urban Development Directorate.
- **Department of Rural Development, Govt. of Uttar Pradesh:** The Department of Rural Development, under the Government of Uttar Pradesh, implements various programs aimed at promoting self-employment, rural housing, rural connectivity, village development, and other initiatives for the development of rural economy and infrastructure. MGNREGA under MoRD aims to enhance livelihood security in rural areas where one of the aims is to create durable assets such as roads, canals, ponds and wells.
- **Board of Revenue, Uttar Pradesh:** The Board of Revenue in Uttar Pradesh serves a role in revenue administration and management within the state.
- **Uttar Pradesh Forest Department:** The Uttar Pradesh Forest Department is responsible for implementing the National Forest Policy, focusing on ecological stability and the sustainable management of natural resources.
- **Irrigation and Water Resources Department, Govt. of Uttar Pradesh:** The Irrigation and Water Resources Department, under the Government of Uttar Pradesh, maintains information on hydropower projects, irrigation, water resources planning,

development and management. The department is also known as Uttar Pradesh Irrigation Department (UPID), Uttar Pradesh Irrigation & Water Resources Department (UPI&WRD).

- **Remote Sensing and Application Centre, Uttar Pradesh:** The Remote Sensing and Application Centre (RSAC-UP) is involved in geophysical surveys and employs techniques for soil and water testing. Its main objectives are the assessment, monitoring, utilization, and management of various natural resources in the state. RSAC-UP provides support for crop area estimation, production estimation of different crops, space-based information for decentralized planning, wetland inventory assessment, integrated watershed monitoring, vulnerability assessment, desertification and land degradation monitoring, plantation assessment, water sector restructuring, unauthorized colony mapping, asset mapping, groundwater targeting, rural and urban planning (including smart city planning), and infrastructure planning.
- **State Water Resources Data Analysis Centre (SWaRDAC):** SWaRDAC serves as the technical arm of the Uttar Pradesh Water Management and Regulatory Commission (UPWaMReC). It provides technical advice to the commission and supplies water-related data to the State Water Resources Agency (SWaRA) and other central/state water plans for all river basins in the state.

5.2.3 District level

- **District administration authorities:** The district administration authorities are responsible for law and order, as well as planning, development, and management activities within the district.
- **Urban local bodies (ULBs) falling in the district:** Urban local bodies, including Nagar Nigam, are involved in planning, development, upkeep, and management activities within their respective urban areas.
- **Jal Nigam:** Jal Nigam is responsible for the planning, survey, design, and execution of water supply and sewage schemes in both urban and rural areas of Uttar Pradesh. It is also authorized as a construction agency.
- **Uttar Pradesh Irrigation & Water Resources Department (UPI&WRD):** The UPI&WRD is responsible for the construction of canals, tube wells, flood protection works,

reservoirs for water conservation and electricity generation, maintaining drainage network, and anti-erosion works.

- **Public Works Department:** The Public Works Department is involved in the construction, maintenance, and planning of roads, bridges, and government buildings.
- **Division/District Office of Environment, Forest, and Climate Change Department:** The forest officers in the Division/District Office of the Environment, Forest, and Climate Change Department are responsible for issues related to forests, the environment, and wildlife within their jurisdiction.
- **Agriculture Department:** The Agriculture Department focuses on promoting food and nutritional security. They provide various schemes, soil testing services, seeds and pesticides, and information about agricultural machinery and soil conservation programs.
- **Industrial associations:** Industrial associations play a role in the district's development and may contribute to relevant initiatives or programs.
- **District Panchayat Raj Department:** The District Panchayat Raj Department is responsible for civic functions related to sanitation, cleaning public roads, minor irrigation, public toilets and lavatories, primary healthcare, vaccination, drinking water supply, construction of public wells, rural electrification, and social health and primary and adult education.
- **District Education Department:** The District Education Department oversees education laws, policies, and regulations. They implement approved education and sports development plans, strategies, and programs.
- **District e-Governance Department:** The District e-Governance Department, in collaboration with the National Informatics Centre (NIC), supports nationwide ICT infrastructure to facilitate e-Governance services and various initiatives of the Digital India program.
- **Individual community representatives or organizations:** The involvement of individual community representatives or organizations such as community-based organizations (CBOs), non-governmental organizations (NGOs), or water user groups is crucial to address local concerns and ensure community participation in decision-making processes.

5.2.4 Other organizations work

WWF India, under the guidance of the district administration, has been organizing training programs for Ramganga Mitras in the Bareilly district. Mitras, known as Friends of Rivers and Wetlands, is a group of dedicated volunteers representing various stakeholder groups. Their primary objective is to safeguard rivers and wetlands through active participation in conservation efforts and the sustainable management of these natural resources. These training programs are aimed to enhance their awareness of responsibilities towards river conservation and their roles within the District Ganga Committee (DGC). The training sessions focused on building their capacities in River Health Assessment, Wetlands Health Assessment, and Sustainable Agriculture.

- River Health Assessment: The Mitras received training on conducting water quality tests using portable water testing kits and meters. They gained knowledge about testing parameters such as dissolved oxygen, phosphate, nitrate, etc. Additionally, they learned about assessing the health of rivers in terms of floodplain health, river channel health, biota health, and community perception.

5.3 Existing policies and procedures

5.3.1 National Water Policy (2012)

The National Water Policy (2012) emphasizes the integration of a participatory approach into various aspects of water resources planning, design, development, and management. The ultimate goal is to facilitate the transfer of management responsibilities for constructed facilities to user groups or local bodies. The NWP 2012 mandates the central government, state governments, and local bodies to guarantee that all citizens have access to a minimum quantity of safe drinking water for essential health and hygiene purposes, conveniently available within their households' proximity. Furthermore, the policy recognizes women's specific concerns regarding water within the context of the household, which is the officially acknowledged social unit in all NWP documents. The primary objectives of this policy are:

- Ensure the preservation and optimal utilization of available water resources.
- Facilitate qualitative enhancements in water resource management.
- Sustain the quality of surface and underground water.

- Maintain ecological and environmental equilibrium during the development of water resources.

5.3.2 National Water Mission

The primary objective of the National Water Mission (NWM) is to promote the conservation of water, minimize wastage, and ensure a more equitable distribution of water resources both within and across states through integrated development and management of water resources. The NWM encompasses five specific goals:

- Establishing a comprehensive water database accessible to the public and assessing the impact of climate change on water resources.
- Encouraging citizens and states to take action in water conservation, augmentation, and preservation.
- Providing focused attention to particularly vulnerable areas, including those that are over-exploited.
- Achieving a 20% increase in water use efficiency.
- Promoting integrated water resources management at the basin level.

A budget allocation of Rs 50 crore has been assigned for the research, development, and implementation of the NWM during the period of 2023-24 [21].

5.3.3 National Hydrology Project

The primary objective of the National Hydrology Project (NHP) is to enhance the scope, quality, and accessibility of water resource information while strengthening the capacity of targeted water resources management institutions. This undertaking involves the modernization of monitoring networks, the transformation of knowledge access, the enhancement of analytical tools, and the modernization of relevant institutions. Significant accomplishments of the project include:

- Establishment of a nationwide centralized platform, referred to as the National Water Informatics Centre (NWIC), which serves as a singular point for all states to collaborate and exchange data on water resources.
- Substantial advancements have been made in the domains of Water Resources Management Systems (WRMS), Water Resources Information Systems (WRIS), Water

Resources Operation and Planning Systems (WROPS), and Water Resources Institutional Capacity Enhancement (WRICE).

- A nationwide repository of water resources data has been successfully established. Emphasis is being placed on establishing a Real-Time Data Acquisition System (RTDAS) on a pan-India scale.
- Integrated water resources management is being implemented through the utilization of cutting-edge technology.

For the period of 2023-24, the National Hydrology Project has a total budget allocation of Rs. 500.0 crores. Additionally, an allocation of Rs. 3.95 crore has been dedicated to the establishment of the National Water Informatics Centre (NWIC) [21].

5.3.4 Master Plan for Artificial Recharge to Groundwater in India

Regarding the Master Plan for the Artificial Recharge of Groundwater in India, a revised plan has been formulated at the district/block level to encompass the entire country. This plan macroscopically examines the feasibility of various structures suitable for the diverse terrain conditions of the country and estimates their respective costs. Key achievements of the Master Plan include:

- Identification of an area of 11.23 km² for artificial recharge.
- Determination of water requirements for recharge in each state, taking into account the surplus available after deducting the committed supply.

The budget allocation for implementing this revised master plan amounts to Rs. 1,33,529.69 crore, with Rs. 96,735.45 crore (72%) allocated for rural areas and Rs. 36,794.23 crore (28%) allocated for urban areas [21].

5.3.5 State Specific Action Plan (SSAPs) for Water Sector under NWM

National Water Mission (NWM) facilitates the formulation of state-specific action plans for the water sector, supporting states and Union Territories (UTs) in this endeavour. The State Specific Action Plan (SSAP) encompasses a comprehensive policy that promotes integrated water resource management at the basin level. This policy is a multidisciplinary undertaking that requires active involvement from all government departments involved in water supply, demand, governance, technology, and environmental and climate change aspects. It also involves the participation of non-governmental agencies and citizens. Hence, the formulation

of plans necessitates convergence and synergy among all governmental and non-governmental stakeholders.

In terms of budget, the Uttar Pradesh State Government has allocated 51 Lakhs for the implementation of this plan.

5.3.6 Jal Shakti Abhiyan

Jal Shakti Abhiyan focuses on the conservation and preservation of rainwater. It involves the participation of states and all stakeholders to establish rainwater harvesting structures suitable for specific climatic conditions and sub-strata. The objective is to accelerate water harvesting, conservation, and bore well recharge activities in 256 water-stressed districts. The initiative promotes water conservation and water resource management through the implementation of five targeted interventions: water conservation and rainwater harvesting, renovation of traditional and other water bodies, reuse of water and recharging structures, watershed development, and intensive afforestation. Additionally, special interventions include the development of Block Water Conservation Plans, District Water Conservation Plans, Krishi Vigyan Kendra Melas, Urban Wastewater Reuse, and 3D contour mapping of all villages.

Notable achievements of the Jal Shakti Abhiyan include:

- The implementation of over 3.5 lakh water measures in 256 districts. This includes 1.54 lakh measures related to water conservation and rainwater harvesting, 20,000 measures for the rejuvenation of traditional water bodies, over 65,000 structures for reuse and recharge, and 1.23 lakh projects for watershed development.
- Approximately 2.64 crore people have actively participated in the Abhiyan, making it a mass movement (Jan Andolan).

5.3.7 National Policy for Women 2016

The National Policy for Women 2016 serves as a comprehensive policy framework that guides various sectors to develop more detailed policy documents specific to their domains. The policy envisions a society where women achieve their full potential and participate as equal partners in all spheres of life, influencing the process of social change. Its mission is to establish an effective framework for developing policies, programs, and practices that ensure

equal rights and opportunities for women in family, community, workplace, and governance. Key features of the National Policy for Women's Empowerment include:

- The creation of a society where women work as equal partners in all spheres of life.
- Development of a framework for ensuring equal rights and opportunities.
- Provision of skill development and equal employment opportunities.
- Addressing all forms of violence against women.

In terms of budget allocation, the funding dedicated to women-only schemes across various government ministries experienced growth from ₹ 11,388.41 crore in 2015-16 to ₹ 17,412.01 crore in 2016-17. Specifically, the allocation for Women's Training Programmes aimed at women police officers increased from ₹ 12 lakh in 2015-16 to ₹ 16 crore in 2016-17. The overall budget for women is typically computed by combining Part A, where 100% of the provision is designated for women, and Part B, where allocations for women constitute a minimum of 30% of the provision. In 2016-17, the total budget for women amounted to ₹ 90,624.76 crore, as compared to ₹ 81,249.12 crore in 2015-16 [22].

5.3.8 Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS)

The Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) aims to provide up to 100 days of unskilled manual work per financial year to every rural household based on demand, resulting in the creation of productive assets. Its objectives include the construction of quality and durable productive assets such as roads, canals, ponds, and wells, enhancing the livelihood resource base of the poor, promoting social inclusion, and strengthening Panchayati Raj Institutions (PRIs). The scheme prioritizes labour-intensive activities related to water harvesting infrastructure, drought relief, and flood control.

In terms of budget allocation, the financial provision for MGNREGS has increased from Rs. 61,500 crore at the Budget Estimate stage to Rs. 1,11,500 crore at the Revised Estimate stage in the financial year 2020-21. Similarly, for the financial year 2021-22, the allocation was raised from Rs. 73,000 crore at the Budget Estimate stage to Rs. 98,000 crore at the Revised Estimate stage [23].

5.3.9 Mission Amrit Sarovar

Mission Amrit Sarovar has a primary objective of conserving and harvesting water for future generations. It also serves additional purposes such as expediting infrastructural projects

using soil and silt from ponds, generating employment opportunities, irrigation, promoting tourism, and fostering fisheries. Key features of the mission include:

- Construction or rejuvenation of a minimum of 75 Amrit Sarovars in each district, with each Sarovar having a pondage area of at least 1 acre and a water holding capacity of around 10,000 cubic meters.
- The Sarovars will be surrounded by tree plantations, including Neem, Peepal, and Banyan, and will be utilized for various activities such as irrigation, fisheries, water tourism, duck farming, water chestnut cultivation, and other livelihood generation initiatives [24].

5.3.10 Atal Mission for Rejuvenation and Urban Transformation (AMRUT)

The Atal Mission for Rejuvenation and Urban Transformation (AMRUT) focuses on the development of basic urban infrastructure in the water supply sector within designated mission cities. Its main objective is to achieve universal access to portable water for every household in these cities. The AMRUT 2.0 scheme was launched for a period of five years, from FY 2021-22 to 2025-26. The goals of AMRUT include ensuring access to tap water and sewerage connections for every household and enhancing the aesthetic value of cities through the development of well-maintained green spaces, such as parks. Regarding achievements:

- The scheme has successfully provided 79 lakh household tap water connections and 45 lakh sewer connections.
- Additionally, it has promoted energy efficiency by replacing 76 lakh streetlights with energy-efficient LED streetlights.

In terms of budget allocation, the total outlay for AMRUT 2.0 is Rs. 2,99,000 crore, including a central outlay of Rs. 76,760 crore for the five years. This outlay incorporates funding of Rs. 22,000 crore (with Rs. 10,000 crore as central assistance) for ongoing AMRUT projects until March 2023. Among the various components of the plan, Rs. 39,011 crore (50%) is allocated to water supply, Rs. 32,456 crore (42%) to sewerage and septage management, and Rs. 2,969 crore (4%) to stormwater drainage projects. The Government of India has allocated Rs. 39,011 crore for drinking water supply projects and Rs. 32,546 crore for sewerage and septage projects under this scheme.

5.3.11 Programs under the Tourism Department, Government of Uttar Pradesh

Under the Programs of the Tourism Department of Uttar Pradesh, a budget of Rs. 2.10 crore has been allocated for the beautification of Ghats near Hanumat Dham, situated near the Khannaut River.

5.3.12 Swachh Bharat Mission

The Swachh Bharat Mission (SBM) was initiated with two components: SBM (Gramin) and SBM (Urban), to construct household and community-owned toilets and promote their usage, as well as implement effective Solid and Liquid Waste Management (SLWM) to achieve an Open Defecation Free (ODF) India. The rural component is overseen by the Department of Drinking Water and Sanitation, while the urban component falls under the Ministry of Housing and Urban Affairs. To incentivize the construction and usage of toilets, the government provided a financial incentive of Rs. 12,000 per toilet.

In October 2021, the Urban Swachh Bharat Mission 2.0 was launched to make all cities in India "Garbage Free." SBM-Urban 2.0 focuses on several key areas, including sludge management, wastewater treatment, source segregation of garbage, reduction in single-use plastics, and controlling air pollution caused by construction, demolition, and bio-remediation of dumpsites. Some notable achievements of the Swachh Bharat Mission include:

- Construction of 10.28 crore toilets in 36 states and union territories under SBM (Gramin), resulting in 603,175 villages being declared open defecation-free.
- Additionally, over 30 crore people participated in behaviour change campaigns, and the establishment of the Rashtriya Swachhata Kendra (RSK) in New Delhi provided an audio-video experience centre to showcase the continuous promotion and success of the Swachh Bharat Mission.
- Under SBM-Urban, the goal is to eliminate open defecation in urban areas and achieve 100% scientific management of municipal solid waste in over 4,000 towns across the country. By October 2, 2019, 66 lakh individual household toilets (IHHLs) were constructed under SBM Urban, and this target was later revised to 59 lakh IHHLs by 2019, which was successfully achieved by 2020.
- The Swachh Bharat Mission has led to a significant change in behaviour, with 55 crore people adopting toilet usage and contributing to a notable reduction in water and

sanitation-related diseases. Moreover, it has resulted in an annual profit of over Rs. 50,000 per household in rural India.

The budget allocation for the Swachh Bharat Mission in the year 2023-24 is Rs. 7192.0 crore for SBM (Rural) and Rs. 5000.0 crore for SBM (Urban) [26].

5.3.13 Namami Gange Mission

The Namami Gange Programme is a comprehensive conservation initiative aimed at achieving two main objectives: effectively reducing pollution and conserving and rejuvenating the National River Ganga. It operates under the Department of Water Resources, River Development, and Ganga Rejuvenation, which falls under the Ministry of Jal Shakti. The program is implemented by the National Mission for Clean Ganga (NMCG) and its state counterpart organizations known as State Programme Management Groups (SPMGs). Recognizing the significance and scope of the program, the Government of India has approved Namami Gange Mission-II. Key accomplishments of the Namami Gange Programme include:

- The undertaking of 374 projects focused on cleaning the main stem of the River Ganga and its primary tributaries, encompassing the main stem towns and 15 tributaries. Out of these 374 projects, 210 have been completed, while the remaining projects are at various stages of completion.
- Furthermore, 49 sewage management projects are currently being implemented, and 98 sewage projects have been completed across nine states. Additionally, 28 sewage projects are in the tendering phase, and one new sewage project has been launched in these states. Work is underway to create a sewerage capacity of 5175.87 million litres per day (MLD).
- The program has initiated the construction and modernization of 70 Ghats/Crematoria and the renovation of 267 Ghats/Crematoria and Kunds/Ponds.
- Moreover, projects are being undertaken to develop science-based plans for the restoration of aquatic species in the Ganga River, while also focusing on the conservation and restoration of aquatic biodiversity.
- Numerous public outreach and community participation activities have been organized, including events, workshops, seminars, conferences, and various Information, Education, and Communication (IEC) initiatives. Various awareness

activities such as rallies, campaigns, exhibitions, cleanliness drives, competitions, plantation drives, and the development and distribution of resource materials have been conducted. To ensure wider publicity, mass media channels such as TV, radio, print media advertisements, advertorials, and featured articles have been utilized.

- The program emphasizes the regulation and enforcement of environmental norms through regular and surprise inspections of Grossly Polluting Industries (GPIs) to verify compliance. Action has been taken against 110 non-compliant GPIs, and closure directions have been issued. Additionally, Online Continuous Effluent Monitoring Stations (OCEMS) connectivity has been established to the Central Pollution Control Board (CPCB) server in 885 out of 1072 GPIs.
- In terms of sanitation, 1674 Gram Panchayats in the five Ganga Basin States have been identified for toilet construction. Out of the targeted 15,27,105 units, the Ministry of Drinking Water and Sanitation (MoDWS) has completed the construction of 8,53,397 toilets. Efforts are also underway to develop the Ganga River Basin Plan and establish 65 model villages.

The budget allocation for Namami Gange Mission-II is Rs. 22,500 crore, while the National Ganga Plan under NGM-II has been allocated a budget of Rs. 4000 crore for the fiscal year 2023-24 [21][27].

Section C: Situation Analysis of key issues for the planning cycle

This part describes the stock taking and key issues for the planning cycle. This also includes collection of existing information and generation of baseline information.

6. Selected key issues of Bareilly district to be addressed

A total of six key priority issues have been identified in the Bareilly District that need to be addressed:

- **Over-Abstraction of water and Agricultural Water Management:** This challenge pertains to the excessive groundwater withdrawal of water, predominantly in both urban and rural regions encompassing domestic and agricultural domains within the Ramganga and Aril basins.
- An intricate issue involves the imprudent utilization of water resources (excess withdrawal amplified by low water use efficiencies) and chemicals in agricultural practices, leading to the undesirable diminishing of groundwater levels and water quality. Furthermore, the ramifications encompass pollution due to agricultural runoff and leaching.
- **Waste-water Management:** Necessitating meticulous attention, this matter spans both domestic (specifically in Deoraniya and Nakatiya) and industrial sectors, warranting efficacious management protocols.
- **Solid Waste Management:** This facet demands a comprehensive approach in both urban and rural environments, necessitating effective strategies to mitigate the challenges posed by solid waste.
- **Floodplain Integrity and Wetlands Conservation:** To ensure regional water security and augment climate resilience, safeguarding and rehabilitating floodplains, particularly addressing issues related to mining and palaze activities, is of paramount significance. This initiative also extends to the safeguarding of wetlands. These measures are pivotal for riverbank preservation, wetland health and river-wetland co-management.
- **Capacity, Skills, and Human Resource Gaps:** Challenges arise from inadequacies in capacities, and skills encompassing social, technical, and institutional domains, and

the availability of human resources within the District Ganga Committee (DGC) to effectively execute mandates stipulated by the Ganga authority order.

- **Knowledge Deficits in Tributary Conservation:** A knowledge deficit prevails regarding the current status, issues, and requisite actions for the conservation of vital tributaries within the Bareilly district. Addressing these gaps is integral to informed and effective conservation efforts.

6.1 Key Issue- 1 (a): Over abstraction of water in Urban areas (b) Over abstraction of water in Agriculture; non-point source of pollution

6.1.1 Potential intervention

Over-abstraction of water, whether in urban or rural areas for domestic or agricultural use, can lead to serious water resource depletion and environmental issues. Implementing effective interventions is crucial to address this problem sustainably. With an increase in population and area under agriculture (WWF-India LULC trend analysis, 2023) the water demand and abstractions are increasing. Within the degradation of freshwater resources, it is imperative to minimize the over-abstraction for a sustainable future.

- **Setting up of monitoring mechanism**: To manage the resources better, it has to be well monitored at a finer level. This will not only help understand the demand-supply gap but also make appropriate policies around the management and use of water resources. It is recommended here that Bareilly district being rich in rivers, wetlands and groundwater, monitoring sites be established on key rivers; increase the number of groundwater monitoring stations; and collect baseline info on wetlands.
- **Education and Awareness**:
    - Raise awareness about the importance of water conservation and the consequences of over-abstraction through campaigns like water footprint campaigns (WWF-India, Bareilly Nagar Nigam etc.).
    - Conduct educational campaigns to inform the public about responsible water use practices
- **Rainwater Harvesting**:
    - Encourage the collection and storage of rainwater for domestic and agricultural purposes.

- Provide incentives or subsidies for the installation of rainwater harvesting systems

Case Study-1

Water Footprint Campaign

The Water Footprint Campaign in Bareilly is a collaborative initiative undertaken by Nagar Nigam and WWF-India. This initiative is predicated on a strategic vision aimed at exemplifying a demand-side management paradigm within the context of 10,000 households.

The primary objectives of this campaign encompass educating and motivating individuals and households concerning the Water Footprint concept. Furthermore, it entails equipping individuals with the requisite skills to quantify water consumption and identify wastage patterns at the household level. The campaign seeks to bolster positive behavioural patterns by advocating water-efficient practices as a component of demand-side management strategies implemented within the city.

An integral facet of this undertaking is the identification and recognition of individuals or entities who have demonstrated noteworthy reductions in their water footprint. These exemplary water users are envisioned to serve as catalysts, inspiring others and assuming the mantle of water champions within the city. Integral to the campaign's success is the measurement of the water footprint and the subsequent cultivation of efficient water utilization practices among households. This transformation encompasses both behavioural

- **Sustainable Agriculture Practices**: About 80-90% of freshwater resources are abstracted for irrigation purposes. To minimize water abstraction rates and quantum, it is recommended to train/build the capacity of farmers and other stakeholders on sustainable farming practices that use improved irrigation practices to enhance water use efficiency, adopt water-efficient crop varieties and usage of organic fertilizers/pesticides (*Amrit Paani* and *Amrit Khaad*) to save water in agriculture.
- **Integrated Water management Plans**:
    - Develop comprehensive integrated tributary catchment level water management plans which provide accurate info on demand, supply and gap

analysis along with specific recommendations on water management that take into account the needs of all water users, including environmental needs.

A comprehensive approach to agricultural water management should incorporate a three-fold strategy:

- **Supply-Side Interventions:** This encompasses strategic measures aimed at optimizing the accessibility of water for irrigation purposes. Such measures encompass the maintenance and rehabilitation of both canal systems and groundwater-based irrigation mechanisms. There are several canal systems and wetlands, which also provide water for irrigation, canals (through surface water) and wetlands spread over Bareilly district (through ground water recharge function) should be identified and rehabilitated/rejuvenated through a multi-stakeholder led collective action approach.
- **Demand-Side Interventions:** This facet entails the prudent utilization of irrigation water through a range of techniques. These techniques encompass precision practices such as line sowing, meticulous management of water depths within agricultural plots, the implementation of trench-based sugarcane cultivation methodologies (improving water use efficiencies), and the application of bio-fertilizers and bio-pesticides (improving soil health, water retention capacities). The objective is to ensure the utmost efficiency in the use of irrigation water while concurrently maximizing agricultural output.
- **Institutional Strengthening (Water Users' Associations – WUAs):** This entails the establishment and empowerment of Water Users' Associations (WUAs) and water users' groups. These entities provide a collaborative platform for farmers to collectively adopt and pursue sustainable agricultural practices. Furthermore, this approach seeks to foster a sense of unity among farmers and facilitate the adoption of practices that ensure long-term agricultural sustainability.

Additionally, a strategy involving the linkage of the terminus of canal systems with nearby local rivers or ponds is recommended. This linkage is envisioned to bolster the water availability within these localized freshwater resources, thereby contributing to enhanced overall water resource availability.

Case Study- 2

Sustainable agriculture water management

WWF-India along with several stakeholders (District administration, UPI&WRD, Agriculture department, Water Users Association, communities), is working on agriculture water management through training and demonstration of a Package of Practices in crops like Sugarcane, Wheat, and Maize in canal command areas of Bijnor, Moradabad and Amroha. This endeavour, which has been in progress since 2017, has engaged more than one hundred thousand farmers. The cumulative outcome of these interventions has resulted in the conservation of a substantial volume of water, exceeding one hundred million litres, from irrigation activities. Significant water savings ranging from 17% to 34%, have been realized at the farm level through the diligent execution of these initiatives.

Figure 49: Agriculture water management work in Canal command

Parallel similar sustainable agriculture activities were carried out in the zone of influence of wetlands in Bareilly district during the year 2021-22 (Aril River basin). Along with wetland restoration activities in wetlands one of the objectives was also to train farmers on better management practices in agriculture to reduce water abstractions and use of chemical inputs. Training and demonstration of PoPs including generation and use of organic bio-fertilizers and pesticides were conducted with 500 plus farmers (in crops like Wheat, Mentha, and vegetables). This increased yield of crop produce (10-15%), water savings of 25%, reduction of chemical usage by 10-20% and enhanced soil health.

Figure 50 WWF-India initiatives in sustainable agriculture water management in wetlands catchment I in Bareilly district

The strategic expansion of this undertaking across the expanse of the Bareilly district holds the potential to furnish notable advantages to the region's indigenous freshwater resources, encompassing rivers, ponds, and groundwater reservoirs.

Figure 51 Making of Amrit Khad and Amrir Paani

The Specific Targets are-

Actions	Short term (upto 1 year)	Medium term (2-3 Years)	Long term (4-5 Years)	Responsible department/ agencies/ stakeholder	Remark / Scheme
Every year, Transform 10% of Agriculture Area toward Sustainable Practices	▪ Collaborate with farmers, KVKs, Agriculture department, to raise awareness and provide training on sustainable farming practices, including efficient irrigation methods, crop selection, and organic farming. ▪ Initiate the transformation of 2-3% of the agriculture area within the first year, focusing on pilot projects to assess feasibility and gather data	▪ Continue scale up of demonstration and training in agriculture area keeping 10% area target (implementation plan can be can be developed at block level) ▪ Monitor impacts at farm level on aspects like productivity, soil health, input costs, economic benefits, adoption of organic farming techniques etc ▪ Provide incentives and support to encourage farmers to transition to sustainable practices.	▪ Sustain the practice and aim for continuous improvement, ensuring that the agriculture area remains under sustainable practices, with a focus on long-term environmental and economic benefits.	▪ Agriculture Department ▪ Horticulture ▪ Krishi Vigyan Kendra's ▪ Uttar Pradesh Irrigation Department ▪ WWF India ▪ Farmers	▪ Rashtriya Krishi Vikas Yojana (RKVY) ▪ Mission for Integrated Development of Horticulture ▪ Pradhan Mantri Krishi Sichayee Yojana (PMKSY) ▪ Micro Irrigation Fund (MIF) ▪ National Mission on Sustainable Agriculture (NMSA) ▪ MGNREGA (Mahatma Gandhi National Rural
▪ Constitution of Water Users' Associations (WUA's)	▪ Identify canal systems with functional WUA's in the district and the ones	▪ Expand the formation of WUA's to cover 30%	▪ Constitute Water Users' Associations in atleast 70% of feasible canal systems		

Actions	Short term (upto 1 year)	Medium term (2-3 Years)	Long term (4-5 Years)	Responsible department/ agencies/ stakeholder	Remark / Scheme
	where WUA's are not formed/process initiated and develop a list of feasible canal command areas for WUA formation. ▪ Raise awareness among farmers in canal command area on significance and functions of WUA's in atleast 5 canal system ▪ Organize exposure visits of irrigation department field functionaries and farmers in active and progressive WUA. ▪ Training and capacity building of farmers and Irrigation department field functionaries on UPPIM act 2009 and WUA formation process ▪ Under preparatory phase of WUA formation in 5 canal system, identify villages	of the total feasible canal command areas	across the district, ensuring effective, community-led water resource management, and sustained support for sustainable water use practices Monitoring and evaluation of the impact		Employment Guarantee Act) ▪ Paramparagat Krishi Vikas Yojana (PKVY)

Actions	Short term (upto 1 year)	Medium term (2-3 Years)	Long term (4-5 Years)	Responsible department/ agencies/ stakeholder	Remark / Scheme
	in commands, make voter list, hold elections ▪ Establish Water Users' Associations (WUA's) in 5 irrigation canals irrigation canals in Bareilly district.				
▪ Linking Tail Ends of Canals with Nearby Rivers/Ponds	▪ Identify and assess the feasibility of linking tail ends of canals with nearby rivers/ponds to initiate pilot projects (for all the canals in the district). ▪ Conduct field validation surveys in tail ends with farmers and concerned line departments ▪ Develop detailed implementation plan (techno-financial) and connect atleast 30% of feasible canal systems tail ends to nearby river/pond ▪ Install gauges at tail ends and monitor the	▪ Link 40% more canal tail with nearby rivers or ponds to enhance local water security and rejuvenate smaller rivers/ponds, especially during the summer season. ▪ Monitor flows at tail ends at regular intervals and maintain a temporal database.	▪ Among the feasible canal system, connect rest of the 30% of canal system tail ends to rivers/ponds. ▪ Calculate the total amount of water saved and evaluate the impact.		

Actions	Short term (upto 1 year)	Medium term (2-3 Years)	Long term (4-5 Years)	Responsible department/ agencies/ stakeholder	Remark / Scheme
	flows going into river/ponds.				
▪ Promote Organic Farming to be integrated with conventional practices	▪ Conduct awareness programmes to engage with farmers to discuss and demonstrate the benefits of organic farming practices. ▪ Train and build capacity of farmers in 10% of villages in district (200 villages) generation and use of bio-fertilizer and bio-pesticide (Amrit paani and Amrit khaad) ▪ Monitor and document impact on crop health, Water savings, soil health, productivity, reduction in chemical use, costs etc ▪ Award and recognize progressive farmers/villages/officials on adoption of organic farming techniques	▪ Scale up the training, capacity building and demonstration of use of organic ways of cultivation in additional 20% of villages (400 villages) ▪ Monitor and document impacts ▪ Award and recognize progressive farmers/villages/officials on adoption of organic farming techniques	▪ By end of 5 years atleast 50%of the villages should be adopting organic ways of cultivation ▪ Scale up the training, capacity building and demonstration of use of organic ways of cultivation in additional 20% of villages (400 villages). ▪ Monitor and document impacts ▪ Award and recognize progressive farmers/villages/officials on adoption of organic farming techniques		

Actions	Short term (upto 1 year)	Medium term (2-3 Years)	Long term (4-5 Years)	Responsible department/ agencies/ stakeholder	Remark / Scheme
▪ Upscaling of Water Footprint Campaign	▪ Collaborate closely with WWF-India to develop a comprehensive plan for expanding the Water Footprint Campaign. ▪ Identify key target areas within the city and peri-urban regions for the campaign's expansion.	▪ Develop educational materials and outreach programs to raise awareness about the Water Footprint concept among households and individuals. ▪ Organize workshops, seminars, and community events to engage residents and motivate them to adopt water-saving practices.	▪ Monitor and evaluate the campaign's impact through surveys, data collection, and feedback from participants.		

6.2 Key Issue- 2: Waste water management (Domestic-Deoraniya and Nakatiya and industrial)

- Conduct an assessment of the operational effectiveness of Sewage Treatment Plants (STPs) (Once they have started in the district) regarding the discharge of treated effluent. This evaluation should transpire precisely at the juncture of the effluent's release into the adjacent river or stream.
- Formulate a comprehensive plan for the management of faecal sludge and septage (FSSM) to ensure judicious handling and disposal practices.
- Compile pertinent data about sanitation arrangements at the household level. The municipal authorities (Nagar Nigam) can oversee this monitoring initiative on a ward-wise basis, considering that the city is segmented into a total of 70 administrative wards. Active community engagement is imperative for the success of this endeavour.
- Recognizing that high-rise buildings, residential complexes, educational institutions, and multiplexes collectively represent significant sources of both sewage generation and municipal solid waste, stringent measures should be enforced to ensure the establishment of metered water supply in these infrastructures. The absence of an effective Sewage Treatment Plant (STP) leads to the discharge of untreated wastewater into the Nakatiya, Deoraniya, and Ramganga rivers, instigating considerable pollution and thereby posing substantial risks to public health.

Available data validates the influx of pollutants into the Ramganga River originating from the Nakatiya and Deoraniya Rivers. These pollutants encompass a combination of domestic and industrial effluents, accompanied by elevated Biological Oxygen Demand (BOD) levels. These levels markedly exceed the recommended thresholds set by the Central Pollution Control Board (CPCB), surpassing the stipulated limit of 3 mg/l.

Situated within a hydrologically sensitive geographical context, Bareilly City interfaces with multiple watercourses. This scenario is further exacerbated by encroachments and pollution sources, which are notably accentuated by the lack of adequate sewage treatment infrastructure. In response to this imperative, the proposition of establishing four nature-based wastewater treatment facilities is put forth as a viable course of action (Figure 52).[1]

[1] Nature-Based Solutions (NBS): Nature-based solutions are strategies and approaches that use or mimic natural processes to address environmental and societal challenges. These solutions harness the power of nature to provide sustainable and

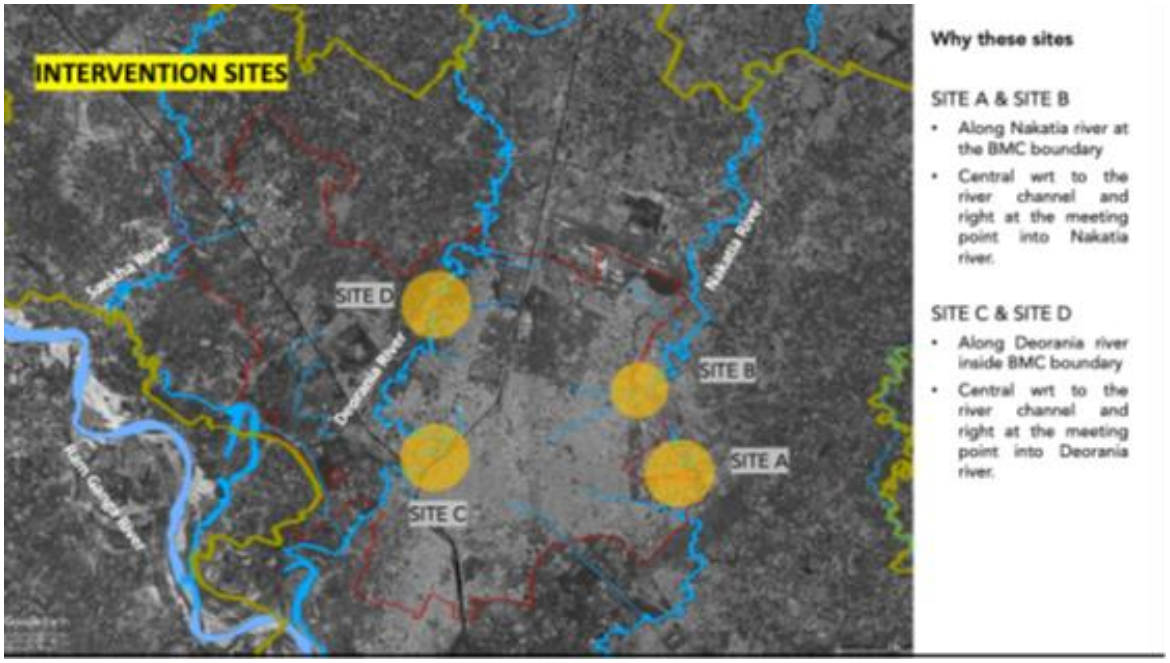


Figure 52 Potential identified intervention sites [20]

effective ways to mitigate and adapt to various issues, such as climate change, biodiversity loss, and sustainable development. Nature-based solutions often involve the restoration, protection, and sustainable management of ecosystems and biodiversity to enhance their capacity to provide benefits to both people and the environment.

SITE B

- Area = 2.62 acres
- Along Nakatia river at the BMC boundary
- Presently encroached by water hyacinth and as land for potential real estate
- Surrounded by built clusters on 2(+1) sides;
- Initially part of the river floodway (water channel) or floodplain
- Receives water from Nakatia river and a sewage drain

SITE C

- Area = 3.37 acres
- Along Deorania river
- Presently encroached by water hyacinth
- Surrounded by built clusters on all the sides ; near a major roadway
- Initially part of the river floodway (water channel)
- Receives water from Deorania and a sewage drain

The proposed treatment systems for these sites include:

Floating Wetlands (FTWs): FTWs are small artificial platforms that facilitate the growth of aquatic emergent plants (*i.e. Typha, Phragmitis, Scirpus etc*) in deeper water. These plants absorb nutrients and contaminants, while their extensive root systems and floating island material create a biofilm that promotes nutrient uptake and degradation. FTWs also provide shelter, reducing turbulence and aiding sediment settling, thus transforming pollutants into harmless by products.

Treatment Lagoons: Wastewater treatment lagoons are manmade ponds designed to receive, hold, and naturally treat wastewater. Beneficial bacteria and other organisms break down organic components over time. Lagoons are constructed and lined to prevent groundwater leakage and can be used individually or as part of a larger treatment system.

Phumdis: Phumdis are unique floating islands found exclusively in Manipur's Loktak Lake in north-eastern India. These islands consist of a mix of vegetation, soil, and organic matter in various stages of decomposition, covering a significant portion of the lake's surface.

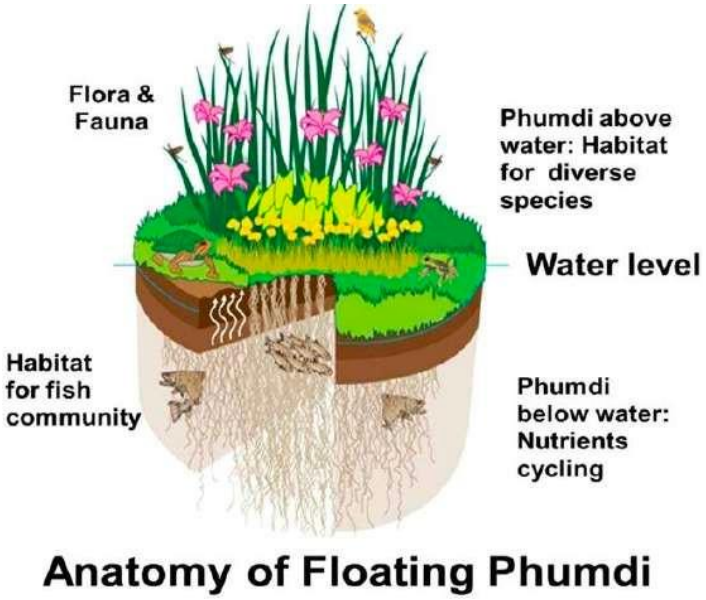


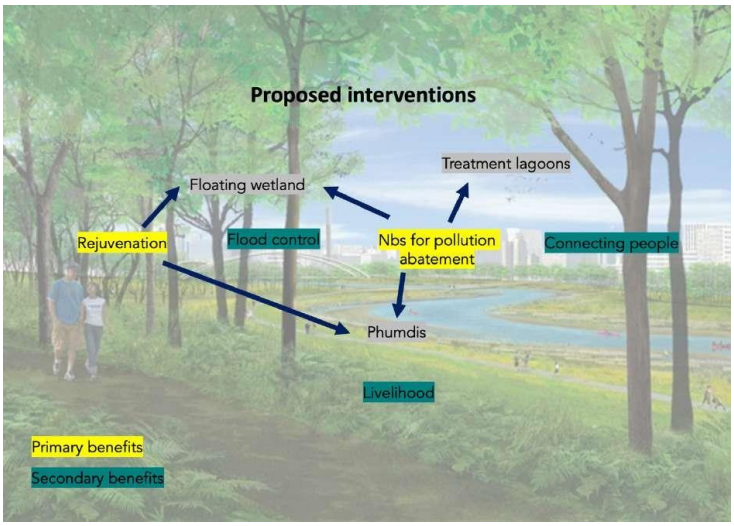
Figure 53 Phumdis during different seasons

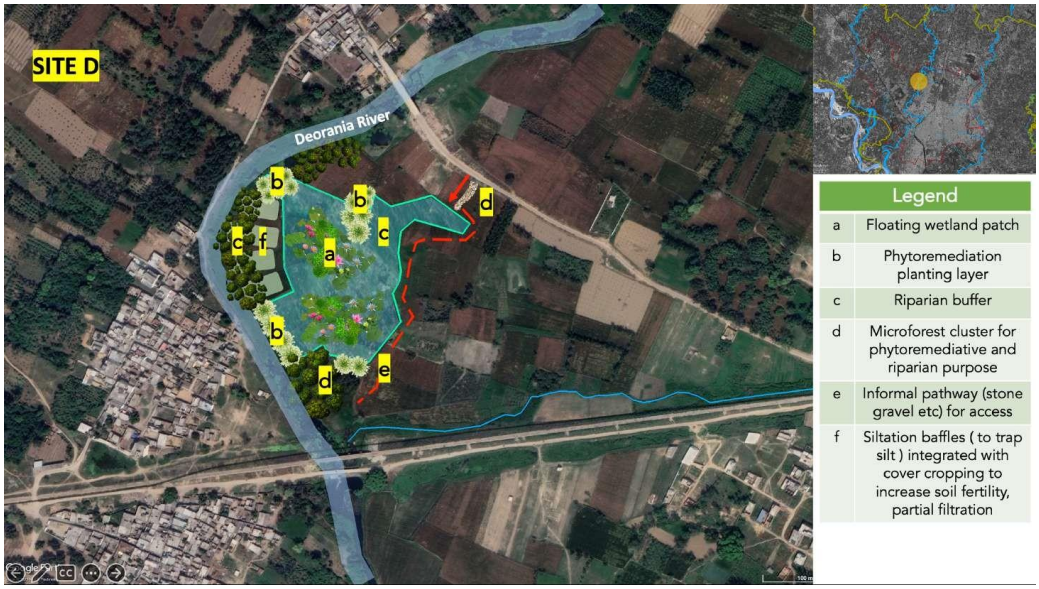
Figure 54 Treatment of Wastewater through Floating Wetland

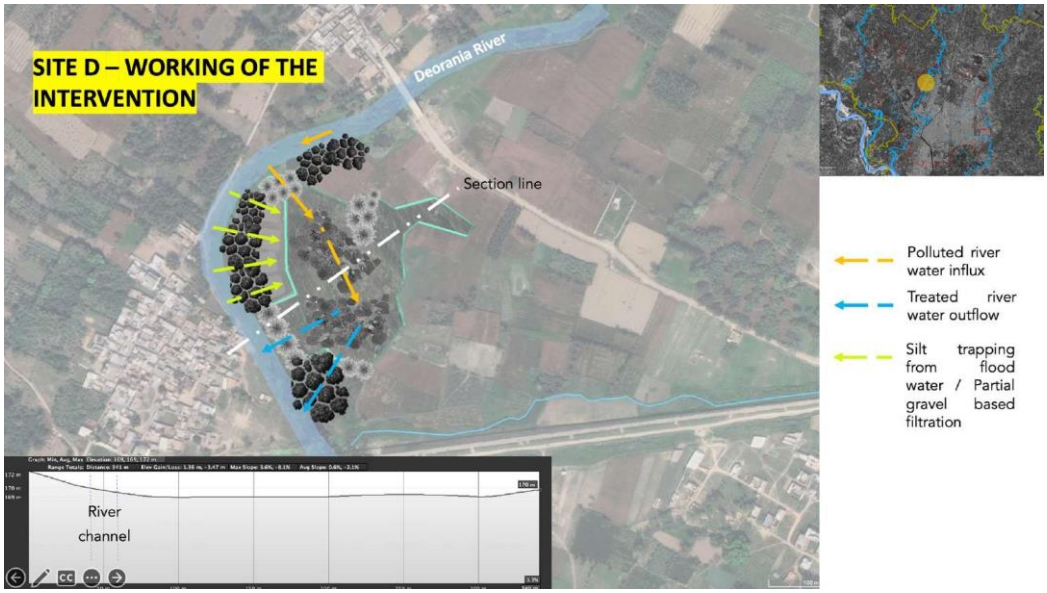
These nature-based solutions offer a multifaceted approach to address pollution in the river channels, enhance flood control measures, and foster a stronger connection between people and the river.

A conceptual plan for Site D illustrates the strategic placement of these diverse nature-based technologies and their contribution to wastewater treatment.

These systems will significantly alleviate the burden on Sewerage Treatment Plants (STPs), reducing their workload by X%. Additionally, they open up opportunities for alternative economic activities beyond pollution control, including tourism, recreational fishing, and fish farming.


Proposed interventions
Floating wetland
Treatment lagoons
Rejuvenation
Flood control
Nbs for pollution abatement
Connecting people
Phumdis
Livelihood
Primary benefits
Secondary benefits


SITE D
Deorania River
Legend
a Floating wetland patch
b Phytoremediation planting layer
c Riparian buffer
d Microforest cluster for phytoremediative and riparian purpose
e Informal pathway (stone gravel etc) for access
f Siltation baffles (to trap silt) integrated with cover cropping to increase soil fertility, partial filtration


SITE D – WORKING OF THE INTERVENTION
Deorania River
Section line
Polluted river water influx
Treated river water outflow
Silt trapping from flood water / Partial gravel based filtration
River channel

The Specific Targets are-

Actions	Short term (upto 1 year)	Medium term (2-3 Years)	Long term (4-5 Years)	Responsible department/ agencies/ stakeholder	Remark / Scheme
1. Joint Monitoring of Drains	▪ Establish a collaborative team involving representatives from Nagar Nigam, local community members, and local organizations. ▪ Develop a monitoring plan that outlines the responsibilities of each stakeholder, frequency of monitoring, and data collection methods. ▪ Testing of Water quality and effluent volume in selected drains (monthly /seasonal)	▪ Implement regular inspections and monitoring of drains to identify blockages, damage, or other issues. ▪ Create a reporting mechanism for stakeholders to share findings and coordinate actions for drain maintenance and repairs.		▪ Nagar Nigam ▪ Local community members ▪ Uttar Pradesh Pollution Control Board ▪ District Administration ▪ WWF India	▪ Swachh Bharat Mission (Urban) 2.0 ▪ Gandhivadi E-waste Yojna of MoEF ▪ Jalshakti Abhiyan ▪ Waste to Energy
2. Implementing Nature-Based Solutions for Wastewater Treatment	▪ Conduct a detailed site assessment for the four identified locations along the Nakatiya and Deoraniya rivers and identify best suited NBS method to improve water quality	▪ Secure necessary permits and approvals for the construction and operation of these solutions. ▪ Collaborate with local community members and WWF India to engage volunteers and local	▪ Scale up different working models in regions with similar pollution issues (river stretches and wetlands) ▪ Develop policy around NBS methods for ecological restoration highlighting their		

	▪ Develop techno-financial implementation plan to improve water quality using nature-based solutions in target rivers and wetlands ▪ Pilot test the NBS method at one site each on Nakatiya and Deoraiya rivers and wetlands if needed.	expertise in the implementation process. ▪ Through monitoring mechanism assess the impacts of NBS solutions ▪ Scale up and replicate the successful NBS methods in more sites along the target rivers ▪ Conduct public awareness campaigns to inform residents about the importance of these solutions and encourage responsible wastewater disposal. ▪ Document various successfully implemented NBS methods along with their efficacy and replicability in rivers and wetlands.	efficacy, cost effectiveness, working typologies/water quality thresholds etc.		

6.3 Key Issue- 3: Solid waste management in urban and rural areas

- Facilitate and promote waste segregation at its source, to be carried out by households or entities generating waste. Provide explicit instructions to formal and informal waste collectors, mandating them to exclusively gather waste that has been segregated at the point of origin. Explore the introduction of financial incentives aimed at stimulating adherence to the practice of waste segregation at the source.
- Consider the option of reducing waste collection fees by half for individuals and entities actively engaged in waste segregation practices.
- Coordinate an all-encompassing campaign targeted at increasing awareness and education regarding waste management. This initiative can be collaboratively undertaken with civil society entities, including local non-governmental organizations (NGOs) and other community-based organizations. This awareness drive should subsequently extend to urban local bodies (ULBs).
- Promote the establishment of composting and waste separation facilities within substantial residential complexes, high-rise buildings, and multiplexes. This is intended to enhance the capacity for on-site waste management.
- Undertake the establishment of facilities designed to collect and process organic waste, particularly within prominent marketplaces like Vegetable and Fruit Mandis and fish markets. This engagement can involve the participation of local entrepreneurs. Furthermore, the creation of sanitary landfills tailored for the disposal of inert and non-recyclable waste is proposed.
- For areas that are not equipped with door-to-door waste collection systems, implement designated waste deposit points outfitted with separate compartments for distinctive waste streams.
- Institute decentralized facilities at the municipal level dedicated to material recovery, micro-composting, bio-gas generation, and comprehensive waste management, encompassing the handling of hazardous waste. Facilitate the active participation of local entrepreneurs in these endeavours.
- Initiate the establishment of sanitary landfills specifically intended for disposing of inert and non-recyclable waste, effectively addressing the management of waste streams that are not amenable to conventional recycling processes.

- Coordinate concerted efforts to conduct clean-up operations along riverbanks. In the pursuit of this objective, seek the involvement of community organizations to ensure broad-based participation.
- Engineer and implement structures known as 'plastic traps' within water bodies to capture floating plastic debris from rivers. To achieve this, engage the active participation of community organizations to foster a collective commitment to the endeavour.
- Commence the commissioning of a study focused on sustainable management strategies for electronic waste (e-waste), a critical facet of contemporary waste management practices.

The specific targets are:

Actions	Short term (upto 1 year)	Medium term (2-3 Years)	Long term (4-5 Years)	Responsible department/ agencies/ stakeholder	Remark / Scheme
1. 100% Achievement on Source Segregation:	▪ Develop a comprehensive plan outlining the strategy for achieving 100% source segregation in all ULBs (Urban Local Bodies). ▪ Provide financial incentives (if possible) to households and entities that effectively practice waste segregation at the source. ▪ Implement source segregation in 10% of target area	▪ Implement source segregation in 40% of target areas ▪ Explore and implement financial incentives, such as reduced waste collection fees, for individuals and entities actively engaged in waste segregation practices.	▪ Implement source segregation in 100% of target areas	▪ Urban Local Bodies ▪ Uttar Pradesh Pollution Control Board ▪ Nagar Nigam ▪ Central Pollution Control Board ▪ NMCG & SMCG – UP & Uttarakhand ▪ Local NGOs	▪ Jal Shakti Abhiyan ▪ National Plan for Conservation of Aquatic Eco-systems (NPCA) ▪ Mission Amrit Sarovar
2. Awareness and Education Events	▪ Organize a minimum of two awareness and education events per month in collaboration with local community organizations, schools, and experts (aligning with initiatives like Swachh Bharat Abhiyan and other initiatives by state Govt.)	▪ Continue to organise these events include workshops, seminars, street plays, and community meetings to educate residents about the importance of waste segregation and responsible waste disposal.			

	▪ These events should include workshops, seminars, street plays, and community meetings to educate residents about the importance of waste segregation and responsible waste disposal. ▪ Publish messages, news articles, and educational materials in local newspapers, on social media, and through other communication channels to reach a broader audience.				
3. Awareness Programs at School Levels	▪ Collaborate with local NGOs and experts to design and implement awareness programs in schools. ▪ Phase the programs to target 25% of the schools in the district every year, ensuring that all schools are covered over time. ▪ Develop age-appropriate educational materials and curriculum for students to learn about waste	▪ Continue the process of spreading awareness in the schools	▪ Continue the process of spreading awareness in the schools		

	segregation and environmental stewardship. ▪ Organize interactive sessions, competitions, and field visits to waste management facilities to engage students actively.				

6.4 Key Issue- 4: Floodplain (mining and palaze) and wetlands protection and restoration to ensure local water security and enhance climate resilience, which includes measures to address riverbank encroachment- Ramganga/Aril River/Deoraniya/Nakatiya

The district has identified a total of 275 wetlands, which have been categorized based on their characteristics into Persistent, Intermittent, Intensifying, Diminishing, New, and Lost. These distinct categories necessitate the formulation of distinct management strategies tailored to each. Diminishing wetlands warrant immediate attention due to the imminent risk of their disappearance, whereas Persistent wetlands can be approached with a more restrained intervention strategy and should be protected through policy and monitoring that can prevent them from any degradation.

Concerted collaborative efforts involving the Revenue Department, WWF, Village community, Rural development department, Minor irrigation/flood department and the district administration should conduct joint field surveys of all 275 wetlands, aimed at validating their characteristics on the ground. This will help authorities to create a repository of wetlands and their status. This data will help identify the threats, and pressures and develop individual wetland restoration plans. A brief simplified format of baseline data collection is available with WWF-India, which is being used to collect baseline data. In January 2023, about 30 plus stakeholders from selected blocks falling within the Aril basin of Bareilly district were trained by WWF-India on wetland conservation and baseline data collection using the mentioned format. The participants included technical assistants, gram pradhans, panchayat secretaries etc.

The Ministry of Environment, Forest and Climate Change has developed a comprehensive four-pronged approach to wetland conservation, encompassing the following phases:

- Inventory Creation of Wetlands and Formulation of Concise Documentation
- Compilation of Wetland Health Cards
- Facilitation of Wetland Mitra Enrollments
- Formulation of Integrated Management Plans encompassing Catchment and Hydrology, Water Quality, Biodiversity, and Governance aspects.

According to Wetlands Rules of Government of India, the following activities are prohibited, permitted and regulated:

Activity	Prohibited	Regulated	Permitted
Reclamation/ filling up			
Solid waste disposal	Within Wetland	Surrounding the Wetland	
Sewage disposal	Within Wetland	Surrounding the Wetland	
Selective desilting			
Promotion of fisheries			
Use of agro-chemical		Zone of Influence	

- Regular Groundwater quality and water level monitoring with the support of multi-stakeholders and experts. The density of monitoring stations within each block should be increased. Community-level groundwater level monitoring should be encouraged and training should be provided to the key people. This will help in planning and implementing appropriate water conservation measures to tackle water security issues at a local scale.
- Explore the possibilities of recharge from other sources like canal networks, and seepage from tanks and water bodies.
- Identify the key building with a large roof area in the district for RWH (Rain Water Harvesting).

In anticipation of the forthcoming floodplain zonation process, delineate a tract of land spanning 500 meters on both banks of the rivers. This undertaking involves collaborative efforts amongst the Revenue Department (RD), Uttar Pradesh Irrigation Department (UPID), and the District Administration.

- Ensure the preservation of floodplain demarcations through the adoption of nature-based interventions, such as the establishment of vegetative tree lines or comparable methodologies. Stringent regulations must be enforced, disallowing any approvals for new construction activities within the river catchment area.
- The revenue department and district administration should map all the rivulets and their actual width as per cadastral records and effort should be made in consultation with community members to free up river space so that freshwater flows can contribute to better health of rivers and wetlands.

- Implement the creation of a publicly accessible green area within the space that has been recently cleared in proximity to the floodplain.
- Enforce a rigorous system of monitoring characterized by frequent inspections and the utilization of current high-resolution satellite imagery. This monitoring mechanism is designed to identify focal points of concern and areas presenting issues, thus facilitating the necessary intervention measures.
- Mitigate the improper disposal of solid waste along riverbanks and within the floodplain, particularly at unauthorized sites situated in the vicinity of the Nakatiya and Deoraniya rivers.

Case Study-3

River rejuvenation through Wetland restoration in Aril basin (Bareilly district)

The Aril floodplain wetland restoration case study entailed a collaborative effort of several stakeholders including District administration, Line departments, community members and WWF-India, in conjunction with partner institutions IIT-Kanpur and Geovale. Earlier, WWF-India carried out an extensive study of mapping of wetlands Ramganga basin covering several districts. This comprehensive study was aimed at evaluating the wetland locations and connectivity with catchments and rivers within the Ramganga basin. The study was instrumental in identifying suitable wetlands within the Aril basin for potential restoration initiatives. Three specific wetland areas were specifically chosen for restoration activities: Khangwa Shyam (10.6 hectares), Lilaur Lake (42 hectares), and Bahoda Kheda (7.42 hectares), all situated within the Bareilly district.

Throughout the restoration process, a spectrum of pivotal variables encompassing critical threats, ecosystem service delivery, water quality, hydrological connectivity, and water availability underwent meticulous assessment. Elaborate baseline surveys were conducted, focusing on parameters such as water quality, hydrological connectivity, and the prevalence of aquatic vegetation. The discerned threats and pressures encompassed aspects such as the excessive proliferation of weeds, congestion in channels which are water inflow and outflow pathways, sewage contamination, excess usage of water and chemicals in agriculture and the fragmentation of habitats. A comprehensive evaluation was executed encompassing the identification of threats, topographical surveys and cross-sectional analysis of water quality

testing enabling a holistic appraisal of the wetland health. Following this assessment, a robust wetland restoration strategy was devised. This strategy was subsequently realized through a collaborative, multi-stakeholder approach, involving the active participation of the District Administration, line departments, local village communities, and WWF-India.

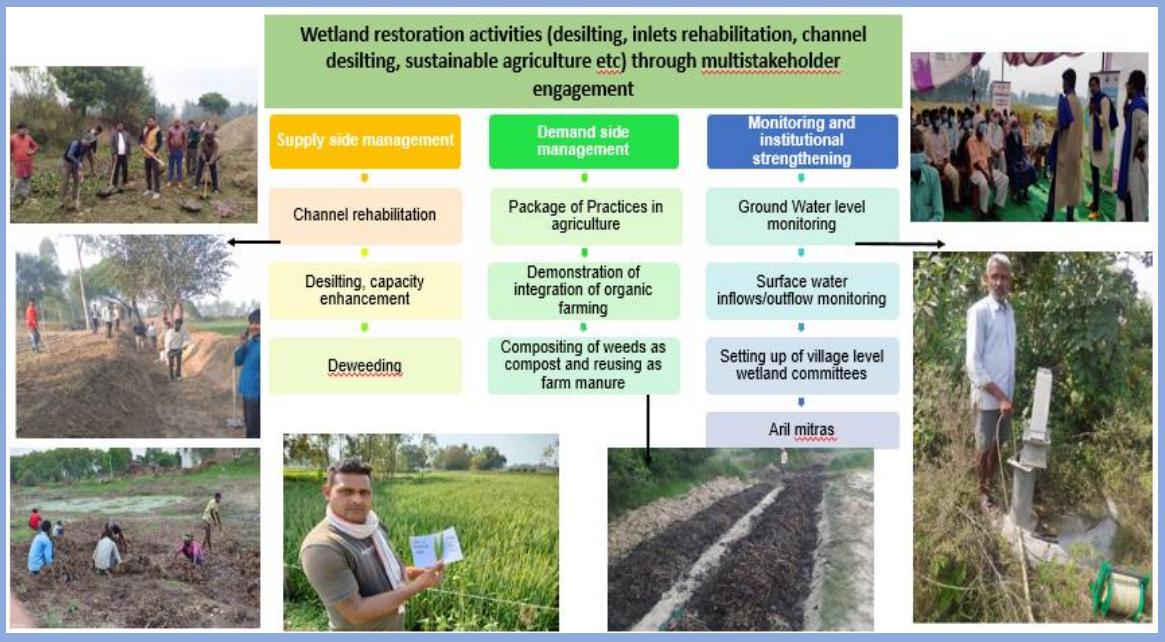


Figure 55 Wetland restoration activities

The implementation was augmented by harnessing resources from various departments and schemes; like – MNREGA, Irrigation, and Forest. WWF-India contributed technical expertise alongside financial support.

Noteworthy achievements emanated from these endeavours. Notably, during the period of August 2022, approximately 60 million litres of water were channelled into the Aril River via

the Khangwa Shyam wetland outlet. Collectively in three target wetlands in Bareilly district, about 300 million litres of additional water flowed into these wetlands (30 Million litres in Khangawa Shyam, 20 ML in Bahoda kheda and 250 ML in Lilaur Lake).

Figure 56 Rejuvenated Khangwa Shyam Wetland

Figure 57 Rejuvenated Lilaur Lake

Figure 58 Rejuvenated Bahoda Kheda Wetland

Agricultural practices were positively impacted, manifesting in improved yields and crop health attributed to the adoption of sustainable agricultural techniques such as "Amrit Paani," "Amrit Khaad," "Jeevamrat," and the "Wheat Package of Practice" (PoP). The adoption of PoPs resulted in a 10-20 % reduction in chemical usage, a 25% reduction in water application/abstraction and a 10-20% improvement in yields.

Figure 59 Adoption of better agriculture practices leading to better crop health

Moreover, discernible enhancements in groundwater levels underscored successful aquifer recharge (GW levels enhanced by 4-5 feet), signifying the effective role of the restored wetland in facilitating groundwater replenishment within the region's ecosystem.

Apart from this about 2,500 quintals of water hyacinth weed were removed from the wetland and converted into 700 quintals of organic compost which was distributed among farmers to support organic farming.

Figure 60 Pre and post-scenario of the revival of Aril's floodplain wetland through de-weeding

The specific targets are:

Actions	Short term (upto 1 year)	Medium term (2-3 Years)	Long term (4-5 Years)	Responsible department/ agencies/ stakeholder	Remark / Scheme
1. Identifying Losing and Gaining Streams and Groundwater Mapping	▪ Collaborate with Groundwater department, UPI&WRD and other technical experts to conduct a comprehensive study to develop understanding of surface and groundwater inter-linkages to identify losing and gaining streams/stretches. ▪ Field validation of identified stretches to develop water management plan	▪ Use the study's findings to prioritize areas for interventions in river rejuvenation and groundwater recharge and reduce water demand during the first cycle of the District Ganga Plan (DGP).	▪ Monitor and evaluate the impact of interventions	▪ District Administration ▪ Revenue department ▪ Forest department ▪ Uttar Pradesh Irrigation Department ▪ WWF India ▪ Local NGO's ▪ MNREGA	▪ National Plan for Conservation of Aquatic Ecosystems (NPCA) ▪ Amrit Darohar and Amrit Sarovar Scheme ▪ Ministry of Environment, Forest and Climate Change (MOEFCC) ▪ Jal Shakti Abhiyan ▪ Atal Bhujal Yojana ▪ National Water Mission ▪ MNREGA
2. Restoration of 50 % of degraded Wetlands in next 5 years	▪ Collect baseline data of all 270 plus degraded wetlands (>2.5 ha area) (format of data collection to be shared by WWF-India). ▪ Considering threats, degradation, groundwater critical zones, ecological	▪ Continue working on restoration activities for wetlands taken up under year 1. Scale up the wetland restoration work in additional 5 wetlands in each of 14 blocks (covering 70 wetlands) ▪ Monitor impacts through pre and post implementation	▪ Scale up the wetland restoration work in additional 5 wetlands in each of 14 blocks (covering 70 wetlands). Target should be to carry out atleast one or more restoration activity in each of the identified wetlands. ▪ Monitor impacts through pre and post		

Actions	Short term (upto 1 year)	Medium term (2-3 Years)	Long term (4-5 Years)	Responsible department/ agencies/ stakeholder	Remark / Scheme
	significance and ownership, develop on ground restoration plan with detailed activities for atleast 5 prioritized wetlands in each block, which are of ecological and hydrological significance. The activities should be implemented in a phased manner, addressing short-term threats first and progressing toward long-term restoration measures. Focus should on restoration of 180 odd degraded category wetlands. ▪ Prioritize the restoration activities and make plan for implementation in 1st year ▪ Implement critical selected activities in 1st year of restoration and monitor the impacts ▪ Align the wetland conservation work with	observations on parameters like inflows, groundwater levels, water quality, weeds, inlet conditions, biodiversity etc. ▪ Reward and recognize water champions	implementation observations on parameters like inflows, groundwater levels, water quality, weeds, inlet conditions, biodiversity etc. ▪ Evaluate the impact of interventions on these wetlands and see the improvement of water quality and ground water levels		

Actions	Short term (upto 1 year)	Medium term (2-3 Years)	Long term (4-5 Years)	Responsible department/ agencies/ stakeholder	Remark / Scheme
	initiatives of Central and State government (like Save Wetland campaigns, Amrit Sarovar etc) ▪ Monitor impacts through pre and post implementation observations on parameters like inflows, groundwater levels, water quality, weeds, inlet conditions, biodiversity etc.				
3. Management of Aquatic Weeds (e.g., Hyacinth)	▪ Identify wetlands that are plagued by aquatic weeds like hyacinth. ▪ Implement strategies to remove and manage these weeds, including the conversion of the removed biomass into bio compost. ▪ Training and capacity building of various stakeholders, block wise, (farmers, line departments, panchayat raj officials etc) on	▪ Scale up and periodic the deweeding, and subsequent conversion into biocompost in additional 30% of wetlands which are infested with weed. ▪ Monitor impacts on wetland health ▪ Promote the use of the bio compost in local agriculture to improve soil health and support organic farming practices.	▪ Scaleup the process of weed removal in other identified wetlands. ▪ Establish a robust compost distribution system through KVKs and gram panchayat level (compost generated from water hyacinth) ▪		

Actions	Short term (upto 1 year)	Medium term (2-3 Years)	Long term (4-5 Years)	Responsible department/ agencies/ stakeholder	Remark / Scheme
	removal and conversion into biocompost. ▪ Carry out deweeding and subsequent conversion into biocompost in 10% of wetlands which are infested. ▪ Develop a distribution mechanism of water hyacinth compost among farmers in wetlands zone of influence ▪ Application of organic compost generated from weed into agriculture farms and monitor the impacts.	▪ Reduce pollution loads in wetlands/rivers to minimize spread of water hyacinth wed			
4. Restoration of Floodplain Wetlands	▪ Select floodplain wetlands strategically, focusing on those that can help increase base flows along the Ramganga and other selected tributaries. Priority should be given to those wetlands, outlets of which can be connected to nearby	▪ Scale up developing of restoration plans and implementation of prioritized activities in selected floodplain wetlands and continue working on wetlands taken up under 1st year. ▪ Monitor impacts (inflows, storage capacity, water quality, groundwater levels	▪ Monitor and evaluate the impact of restoration of floodplain wetlands on the rivers, biodiversity habitats, local water security, and groundwater of the area. ▪ Scaleup the models to the other tributaries in the district.		

Actions	Short term (upto 1 year)	Medium term (2-3 Years)	Long term (4-5 Years)	Responsible department/ agencies/ stakeholder	Remark / Scheme
	rivulets to enhance surface water flows. ▪ Develop and implement restoration plans with multistakeholder approach for 2-3 wetland in each block to enhance hydrological connectivity, Invasive weed management, water quality improvement. ▪ Carry out restoration of ▪ Monitor impacts (pre and post implementation of activities)	etc) through wetland health assessment ▪ Develop educational programs and engage the community to raise awareness about the importance of floodplain wetlands and their restoration.	▪ Legal Protections: Advocate for and implement legal protections and regulations that ensure the long-term conservation and preservation of the floodplain wetland.		
5. Collaboration and Technical Support	▪ Stakeholder Identification: Identify and engage key stakeholders, including government agencies, environmental organizations, local communities, landowners, and experts in relevant fields, to form the basis of collaboration	▪ Collaborative Research: Foster partnerships with academic institutions and research organizations to conduct scientific research relevant to the floodplain wetland restoration. Encourage innovation and knowledge sharing.	▪ Long-Term Funding Sustainability: Establish mechanisms for long-term funding sustainability to support ongoing monitoring, maintenance, and adaptive management of the restored wetland. ▪ Monitoring and Evaluation: Maintain a robust monitoring and evaluation framework to assess the		

Actions	Short term (upto 1 year)	Medium term (2-3 Years)	Long term (4-5 Years)	Responsible department/ agencies/ stakeholder	Remark / Scheme
	▪ Establish a multi-departmental and inter-agency collaboration involving the district administration, Revenue Department, UPI&WRD, Flood Control Department, Rural Development Department, Groundwater department, Gram pradhans, WWF-India, DGC's can act as a multi-departmental and inter-agency collaboration platform headed by District Magistrate. ▪ Support in developing Standard Operating Procedure (SoPs) and training of key resources for wetland restoration of different typologies (schemes that can be leveraged, budgets, expenditures, roles and responsibilities etc)	▪ Organise multiple training sessions for stakeholders, on the biodiversity conservation, River Health assessment and Wetland health assessment	progress of restoration efforts, adapt strategies as needed, and measure the long-term impact of the project.		

Actions	Short term (upto 1 year)	Medium term (2-3 Years)	Long term (4-5 Years)	Responsible department/ agencies/ stakeholder	Remark / Scheme
	▪ Leverage schemes like Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA) to engage local communities in wetland restoration efforts, providing employment opportunities. ▪ Needs Assessment: Conduct an initial assessment of technical, financial, and logistical support required for the restoration project. ▪ Resource Mobilization: Begin seeking funding and resources to initiate the restoration project and secure commitments from potential collaborators. ▪ Agreement Framework: Establish agreements or Memoranda of Understanding (MOUs) outlining the roles,				

Actions	Short term (upto 1 year)	Medium term (2-3 Years)	Long term (4-5 Years)	Responsible department/ agencies/ stakeholder	Remark / Scheme
	responsibilities, and expectations of all involved parties.				

6.5 Key Issue- 5: Gaps in capacity, skills (Social, technical and institutional) and human resources in DGC for implementation of Ganga authority order

Presently, there exists substantial potential for augmenting the capabilities and human resources within the District Ganga Committee (DGC). This augmentation is imperative to facilitate the comprehensive examination, formulation, execution, operation, and sustenance of projects and activities pertinent to the restoration of rivers and wetlands. These endeavours encompass both the enhancement of water quality and the augmentation of water quantity. Multiple funding avenues are accessible to facilitate the implementation of Ganga rejuvenation initiatives, which can be effectively harnessed by the District Ganga Committee (DGC).

- Utilize the available resources derived from ongoing programs and projects focused on capacity enhancement and human resource development, such as the Ramganga Mitras initiative operating within the framework of river rejuvenation under the Arth Ganga Concept supported by the National Mission for Clean Ganga (NMCG).
- Augment the existing infrastructure of the District Ganga Committee (DGC) by establishing an additional specialized capacity in the form of a dedicated support cell comprising skilled professionals. The group should also be trained in conflict resolution.
- Leverage the existing cadre of Ramganga Mitras to facilitate a range of community mobilization, awareness propagation, and sensitization undertakings. These initiatives encompass campaigns related to River Health Assessment and Wetland Health Assessment.
- Promote the establishment and fortification of Water user organisations, fostering their operational capabilities in the context of sustainable water resource management.

Case Study-4

Nodal officers Trainings

WWF India, in collaboration with the district administration, has successfully executed the first phase of training aimed at Nodal Officers (Gram Pradhans) hailing from 49 floodplain villages. The primary objective of this training was to cultivate an awareness regarding the pivotal roles these officers play in the preservation of rivers and the functioning of the District Ganga Committee. This training initiative encompasses the augmentation of their competencies in sustainable agriculture practices, as well as the deepening of their understanding of the responsibilities entrusted to the District Ganga Committee. The training regimen encompassed comprehensive instruction on sustainable agricultural methodologies, including hands-on demonstrations of bio-fertilizers and bio-pesticides. This instructional program was further extended to encompass the subject of Community-led Turtle Conservation, thereby enriching the participants' knowledge base.

The forthcoming phase of training is poised to engage Nodal Officers in hands-on activities employing portable analytical kits to assess crucial water quality parameters. This segment of training will be dedicated to fostering an in-depth comprehension of river health dynamics and the significance of wetland ecosystems. The officers will be equipped with the skills necessary for evaluating the health of rivers and wetlands.

The gaps in capacity, skills (Social, technical and institutional) and human resources in DGC can be categorised into the following sections:

- **Social**
    - Awareness, Mitras, public participation
- **Technical**
    - Capacity building on hydrological scenarios, monitoring, connectivity etc.
    - Training and capacity building on biodiversity conservation in Ganga and its tributaries.
- **Institutional**
    - Training programs on Ganga conservation, environmental science, and relevant technical skills.
    - Collaboration with academic institutions and NGOs to provide technical expertise.
    - Regular review and evaluation of DGC activities to identify ongoing capacity needs.

Case study-5

Community led turtle conservation

The Gangetic River system in Uttar Pradesh, India, hosts 14 turtle species. Unfortunately, extensive riverbed farming along the Ganga River in Uttar Pradesh has encroached upon these turtles' natural habitat, leading to the destruction of their nesting and basking grounds. In response to this threat to endangered turtles in the Upper Ganga region, a collaborative in-situ turtle conservation program was initiated in 2012 by the UP Forest Department and WWF-India, with a focus on involving local communities.

Between 2012 and 2021, 828 turtle nests were rescued from riverbed farming with the help of 520 riverbed farmers in the Upper Ganga and Ramganga rivers. These newly hatched turtles from the rescued egss, were nurtured in a specially designed nursery pond during the flood season and then released into their respective rivers during the winter when their reduced food requirements eased their transition to their natural habitat.

The community-led turtle conservation approach in the Upper Ganga River and river Ramganga comprises three main elements: raising awareness and providing training to local riparian communities, rescuing turtle nests from riverbed farming, and protecting vulnerable turtle nests on-site. The program includes organizing awareness campaigns in riparian villages to engage local residents in freshwater turtle conservation. These efforts also build the capacity of community members to protect turtle nests near their agricultural fields.

The conservation process involves selecting suitable sites for turtle hatcheries, establishing the hatcheries, collecting eggs from riverbed farming, transporting them, placing them in the hatchery, incubating and caring for the hatchlings in the nursery, and finally, releasing them.

Riverbed farmers are encouraged to monitor and conserve turtle nests in their fields, fostering a sense of ownership and stewardship toward biodiversity conservation.

The collaboration between WWF-India and the Uttar Pradesh State Forest Department ensures that farmers offer turtle eggs found in their farms for safekeeping in riverside hatcheries. Farmers are also encouraged to safeguard turtle nesting habitats along the River Ganga in the Hastinapur Wildlife Sanctuary.

Before this initiative, farmers used to discard turtle nests found in their fields. However, the program has encouraged farmers to care for these nests and inform the Uttar Pradesh Forest Department and WWF-India about vulnerable turtle nests. Farmers also assist field teams in relocating these nests to riverside hatcheries. This program fosters a sense of ownership among riparian communities and raises awareness about the importance of turtles in the river's ecosystem.

This initiative showcases a model of community-based conservation in which communities voluntarily allocate a portion of their land, previously used for riverbed farming, for the nesting and basking of freshwater turtles in the River Ganga. This act benefits the turtles and also safeguards crops from submersion due to fluctuating water levels, along a 40-meter-wide, 5-kilometer-long strip of riverbed.

The specific targets are:

Actions	Short term (upto 1 year)	Medium term (2-3 Years)	Long term (4-5 Years)	Responsible department/ agencies/ stakeholder	Remark / Scheme
1. Promoting Cultural Heritage and Tourism	▪ Identify the places that are heritage and have culturally importance in the district. ▪ Collaborate with the Tourism Department and local stakeholders to promote cultural heritage and tourism along the Ramganga and its surroundings.	▪ Organize activities such as boat tours, bird watching tours, and yoga sessions to attract tourists and raise awareness about the region's natural and cultural significance. ▪ Develop and distribute promotional materials, including brochures and online content, to highlight the unique cultural and natural attractions of the area.		▪ Tourism Department ▪ District Administration ▪ District Ganga Committee ▪ WWF India ▪ Local institutions ▪ Forest Department ▪ Nagar Nigam	▪ National Water Awards and Water Heroes ▪ Har Khet Ko Pani ▪ Information, Education & Communication (IEC) scheme of DoWR, RD & GR ▪ Jalanidhi, Swajaladhara ▪ NYKS Awareness Generation Campaign
2. Establishment of Biodiversity Parks	▪ Collaborate with the Forest Department, Revenue department and local communities to identify suitable locations for these parks and this may be in urban or peri urban areas.	▪ Expedite the process of establishing biodiversity parks in both urban and peri-urban regions. ▪ Develop and implement awareness programs to engage the public in biodiversity conservation and create a sense of ownership			

3. Dedicated Supporting Cell/Secretariat for DGC	▪ Establish a dedicated supporting cell or secretariat within the District Ganga Committee (DGC) to oversee the implementation, monitoring, and revision of the District Ganga Plan (DGP). ▪ Appoint two trained resource persons who will be responsible for coordinating and facilitating the DGP's activities.	▪ Built the capacity of these resources when required.			
4. Capacity Building for Executing Agencies	▪ Identify 4-5 executing agencies (e.g., Jal Nigam, Irrigation Department, Nagar Nigam, and UPPCB) involved in river rejuvenation and groundwater management.	▪ Provide training to these agencies on river rejuvenation techniques, the River Basin Management (RBM) cycle, and the operation, maintenance, and joint monitoring of Sewage Treatment Plants (STPs), Common Effluent Treatment Plants (CETPs), and Faecal Sludge Management (FSM) systems. ▪ Include a focus on gender-sensitive training and ensure women's			

		participation in the capacity-building programs.			
5. Organizing Training Programs	▪ Coordinate training programs with representatives from different line departments involved in water management and river rejuvenation.	▪ Ensure that the training programs are comprehensive and cover key aspects of sustainable water management. ▪ Continue ongoing training for the District Ganga Committee (DGC) to enhance their knowledge and skills.			

6.6 Key Issue- 6: Gaps in knowledge on status, issues and actions needed for the conservation of key tributaries in Bareilly district

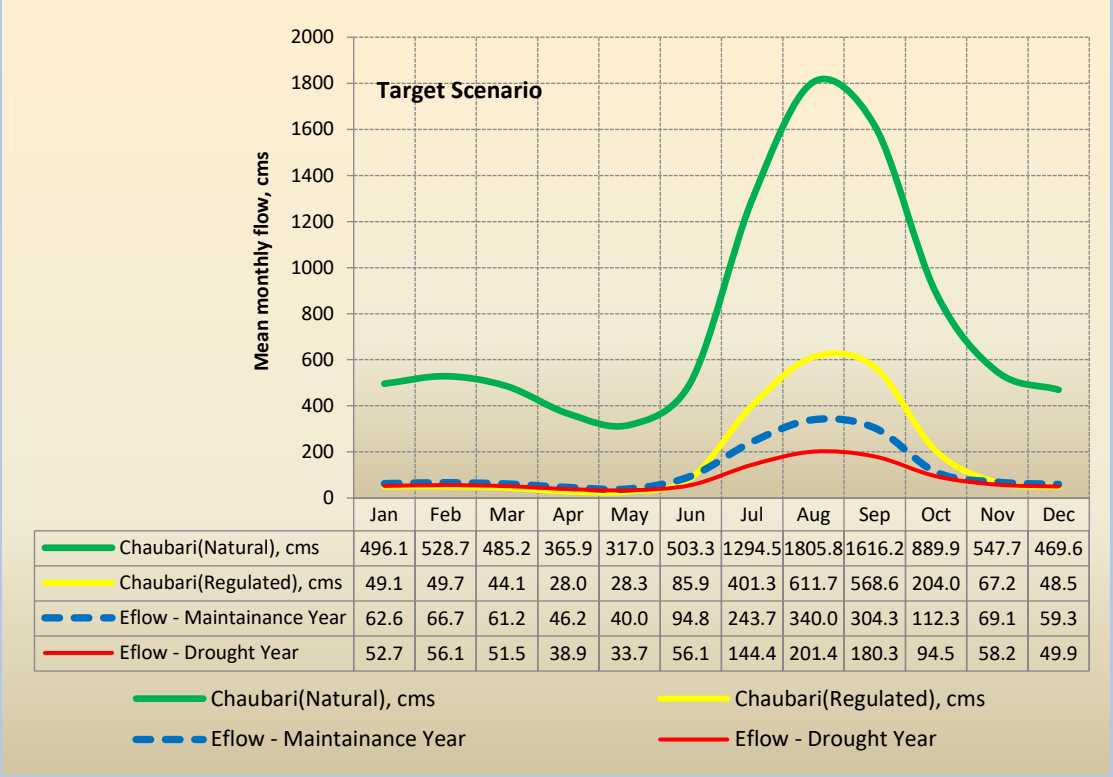
- Bridging the knowledge gap on information around water resources, water quality, encroachment etc. of some critical tributaries of the Ramganga River. (Aril, Nakatiya and Deoraniya).
- Setting up of river flow monitoring sites and water quality monitoring sites on tributaries (like Kichha, East Baigul, Deoraniya, Shanka) whose majority of stretch falls in Bareilly district or joins Ramganga or any other major tributaries. This can be a unique initiative by the district administration to strengthen the monitoring mechanism of smaller tributaries, which can set up baselines and help formulate strategies to restore.
- Develop a smaller river restoration plan considering a holistic Integrated River basin management approach. This will align with the Government of India's and NMCG's initiative of rejuvenating a target of 75 rivulets in Uttar Pradesh. By rejuvenating smaller rivers hydrological and ecological health of Ganga can be improved.
- Identification and mapping of Key hotspots (cultural and heritage) along the river Ramganga and it tributaries.

– Regional issue –

Case Study - 6

Maintaining Environmental Flows in Ramganga River at Chaubari site in Bareilly district

WWF India along with partners (IIT Kanpur, IIT Delhi, IIT BHU Varanasi, HNB Garhwal University, People's Science Institute, local experts) conducted E-Flows assessment for Ramganga River (2013-15). As part of that exercise, E-Flows recommendations are made for Chaubari site in Bareilly district, the present-day flows and desired E-Flows are illustrated in following graph. The recommended E-Flows regime is required to be maintained at Chaubari location and for that, the district authorities need to interact with upstream districts (Moradabad & Bijnor).



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Chaubari(Natural), cms	496.1	528.7	485.2	365.9	317.0	503.3	1294.5	1805.8	1616.2	889.9	547.7	469.6
Chaubari(Regulated), cms	49.1	49.7	44.1	28.0	28.3	85.9	401.3	611.7	568.6	204.0	67.2	48.5
Eflow - Maintainance Year	62.6	66.7	61.2	46.2	40.0	94.8	243.7	340.0	304.3	112.3	69.1	59.3
Eflow - Drought Year	52.7	56.1	51.5	38.9	33.7	56.1	144.4	201.4	180.3	94.5	58.2	49.9

It is envisaged that, since in this district, there is strong surface-water and ground-water interaction and hence the regulation and check on ground-water extraction will improve the base-flows in the Ramganga River and thus eventually aid E-Flows maintenance in Ramganga River at Chaubari site. Besides this, healthy floodplain wetlands will significantly contribute to the base-flows and local water security. This will help in maintaining the ground-water levels and will therefore aid E-Flows maintenance in Ramganga River in the district.

The specific targets are:

Actions	Short term (upto 1 year)	Medium term (2-3 Years)	Long term (4-5 Years)	Responsible department/ agencies/ stakeholder	Remark / Scheme
1. Long-term E-Flows Maintenance Target in Aril and Ramganga river	▪ Collaborate with UPI&WRD and other stakeholders, thematic experts to E-Flows assess E-Flows in Aril River. ▪ Map and prioritize floodplain wetlands which can provide hydrological benefits to river. ▪ Restore wetlands in loosing nature stretches of river (where river loses water to groundwater) ▪ Build capacity of riparian village farmers (in losing stretch) to adopt sustainable water management in agriculture starting by adoption of usage of "Amrit paani/Jeevamrat" (biofertilizers) which improves soil water holding capacity and reduce water demand and groundwater abstractions ▪	▪ Carry out E-Flows assessment of critical tributaries which has majority of portion within Bareilly district (like Kichha, East Baigul) ▪ Rehabilitate river channels in Upper reaches of Aril to enhance hydrological connectivity and increase catchment contribution of surface run off ▪ Improve hydrological connectivity of tributaries of Aril by removing encroachments in floodplains. ▪ Restoration of floodplain wetlands in river basin ▪ Monitor Aril riverine flows at exit of Moradabad district, and in Bareilly district	▪ Carry out tributary rejuvenation activities which will not only improve health of tributaries but also Ramganga river. ▪ Regularly assess and adjust flow releases as needed to meet E-Flows targets. ▪ Seek funding and support from relevant stakeholders to implement and sustain the E-Flows initiative.	▪ District Administration ▪ KVK's ▪ Uttar Pradesh Irrigation Department (UPID) ▪ Ground water department ▪ Agriculture Department ▪ Local universities/ Research institution ▪ WWF India	▪ AMRUT 2.0 Scheme ▪ Mission Amrit Sarovar ▪ Namami Gange Programme ▪ Public Interaction Programs ▪ Water Nirmal Abhiyan

Actions	Short term (upto 1 year)	Medium term (2-3 Years)	Long term (4-5 Years)	Responsible department/ agencies/ stakeholder	Remark / Scheme
		▪ Increase coverage of sustainable agriculture practices with aim to reduce water application, by 10% in each block (especially in riparian villages along Aril and Ramganga river) ▪ Focus on rejuvenation of tributaries (like Kichha, Baigul etc) to support E-Flows maintenance in Ramganga river			
2. Monitoring Impact on Fishes and Aquatic Biodiversity Target	▪ Assess baseline information of diversity, occurrence and population of aquatic species (fish, turtles etc) in Ramganga, its tributaries and floodplain wetlands ▪ Jointly monitor the impact of E-Flows maintenance/enhanced flows on fish populations, aquatic biodiversity, and the assimilating capacity of the Ramganga and Aril River	▪ Periodic data collection on fish populations, aquatic biodiversity, and water quality in the Ramganga river. ▪ Share the findings with relevant stakeholders and the public to raise awareness	▪ Use the monitoring results to adapt and refine the E-Flows maintenance strategy as needed to maximize ecological benefits.		

Actions	Short term (upto 1 year)	Medium term (2-3 Years)	Long term (4-5 Years)	Responsible department/ agencies/ stakeholder	Remark / Scheme
	▪				
3. Seasonal Surveys of Tributaries and data collection	▪ Survey protocols: Develop a comprehensive survey plan with protocols that outlines the scope, objectives, and methodologies for conducting seasonal surveys of the Ramganga River tributaries, including Kichha, East Baigul, Deoraniya, Shanka, and others. ▪ Stakeholder Engagement: Identify and engage relevant stakeholders, such as government agencies, local communities, and environmental organizations, to participate in or support the survey efforts. ▪ Baseline data collection: Carry out seasonal (pre monsoon, post monsoon and monsoon season surveys) recording	▪ ▪ Data Continuity: Maintain consistent seasonal surveys over multiple years to detect patterns and variations in tributary conditions, allowing for more robust trend analysis. ▪ Water Quality Improvement: Initiate or advocate for water quality improvement efforts, such as the reduction of pollutants or the restoration of riparian habitats based on the data findings ▪ Data Analysis: Begin analyzing the temporal collected data to identify immediate issues and trends affecting the tributaries, which can inform early mitigation efforts.	▪ Ecosystem Health Improvement: Implement long-term restoration and conservation measures based on the data collected to improve the overall health of the tributaries and the larger water bodies they feed. ▪ Water Resource Planning: Integrate the long-term survey data into regional water resource planning, ensuring that the needs of both the environment and the community are considered in future water management decisions.		

Actions	Short term (upto 1 year)	Medium term (2-3 Years)	Long term (4-5 Years)	Responsible department/ agencies/ stakeholder	Remark / Scheme
	observation on hydrology (river flows) groundwater levels, water quality (chemical and physical characteristics), and biodiversity (including fish populations). ▪ Install river flow monitoring gauges on tributaries to assess the baseline flows ▪ Public Awareness: Raise awareness about the importance of tributary surveys and their potential impact on the health of larger water bodies within the community.				
4. Reporting and Data Utilization		▪ Compile the data obtained from seasonal surveys into comprehensive reports, including baseline information on the tributaries' current state.			

Actions	Short term (upto 1 year)	Medium term (2-3 Years)	Long term (4-5 Years)	Responsible department/ agencies/ stakeholder	Remark / Scheme
		▪ Share the findings and reports with relevant stakeholders, including government agencies, local communities, and environmental organizations. ▪ Use the generated data to identify key issues and challenges in the tributaries, and develop plans for their remediation and restoration. ▪ Use the Data to build awareness among community and other stakeholders ▪ Publish the survey findings as reports and photo albums/brochures ▪			
5. Implementation of Restoration Plan		▪ Collaborate with relevant stakeholders (government departments, CSO's . technical experts etc) and use the long term trend	▪ Implement remedial measures, such as habitat restoration, water quality improvement, and		

Actions	Short term (upto 1 year)	Medium term (2-3 Years)	Long term (4-5 Years)	Responsible department/ agencies/ stakeholder	Remark / Scheme
		data and reports to develop integrated river basin plans (with focus on tributaries) for sustainable water management ▪ Prioritize actions to restore and rehabilitate the tributaries based on the severity of issues and available resources.	sustainable fisheries management, as needed. ▪ Develop policies around protection of floodplains, inlet channels, wetlands etc.		

Section D: Stakeholder Engagement

This part describes the overall process for the implementation and continuous monitoring of the District Ganga Plan (DGP)

7. Detailed Action Plan

The framework for the District Ganga Plan (DGP) was collaboratively developed with the State Mission for Clean Ganga (SMGC). It was later presented at the District Ganga Committee meeting in Bareilly held on May 13, 2022. During this presentation, the roles of various line departments and other stakeholders in the development of the DGP in the district were explained. Following this, the District Magistrate was asked to establish a working group (committee) for the DGP and appoint a nodal officer to kickstart the planning process in Bareilly district.

On August 20, 2022, at the recommendation of the Divisional Forest Officer Bareilly, the District Magistrate approved the formation of the DGP working group (Committee). This group included key members from different line departments and other stakeholders. This multi-stakeholder group is responsible for coordinating meetings, conducting a comprehensive situational analysis, and formulating the DGP, with technical support from WWF-India.

To conduct a situational analysis, WWF India initiated data collection on major rivers within the district boundaries, such as the Ramganga, Nakatiya, Deoraniya and Aril rivers. The results of this analysis were presented during the inception meeting of the DGP working group on November 24, 2022, chaired by Chief Development Officer. During this meeting, members discussed the presented data and identified gaps that required further data collection from relevant line departments.

Following consultations with these line departments, data collection began to fill the gaps, and the drafting of the DGP commenced. The draft plan was shared and presented to Chief Development Officer, who also chairs the DGP working group. His feedback and comments were incorporated into the plan. Subsequently, the District Ganga Plan was presented to the District Ganga Committee meeting held on August 11, 2023; later on, the same was presented in detail to the District Magistrate, Bareilly on September 2, 2023.

Figure 61 WWF-India presented the DGP Framework to the DGC in the meeting held on 13 May 2022

कार्यालय जिलाधिकारी बरेली।

पत्रांक 821 /29–5 बरेली दिनांक 20 अगस्त 2022

आदेश

भारत सरकार के जल संसाधन,नदी विकास और गंगा संरक्षण मंत्रालय द्वारा जारी राजपत्र संख्या 2458 दिनांक 07 अक्टूबर 2016 के अन्तर्गत दिये गये निर्देशो के कम में गंगा नदी के पुनरूद्धार हेतु जिला स्तर पर जिला गंगा संरक्षण समिति (जिला गंगा समिति) का गठन इस कार्यालय के पत्रांक 1123/29–5 दिनांक 19–09–2017 द्वारा पूर्व में किया जा चुका है। भारत सरकार के उक्त राजपत्र के खण्ड–57 के अनुसार प्रत्येक जिला गंगा समिति गंगा नदी और उसकी सहायक नदियों और उनके नदी तटों से सटे विनिर्दिष्ट जिलों के संरक्षण हेतु अपनी योजना तैयार करेगा और उक्त को राष्ट्रीय स्वच्छ गंगा मिशन को अनुमोदन के लिये प्रस्तुत करेगा। इस सम्बन्ध में राज्य स्वच्छ गंगा मिशन और डब्ल्यू.डब्ल्यू.एफ. इण्डिया ने संयुक्त रूप से जिला गंगा योजना के लिये एक रूप रेखा विकसित की है।

अतः जनपद बरेली की जिला गंगा योजना तैयार किये जाने हेतु निम्न प्रकार से बहु–हितधारक कार्यकारी समूह का गठन निम्न प्रकार से किया जाता है:–

"बहु हितधारक–कार्यकारी समूह जनपद–बरेली"

क्रमांक	अधिकारी का पदनाम	कार्यकारी समूह में भूमिका
1	2	3
1	मुख्य विकास अधिकारी,बरेली	अध्यक्ष
2	उपाध्यक्ष बरेली विकास प्राधिकरण बरेली अथवा नामित प्रतिनिधि	सदस्य
3	नगर आयुक्त नगर निगम बरेली अथवा नामित प्रतिनिधि	सदस्य
4	मुख्य चिकित्साधिकारी बरेली अथवा नामित प्रतिनिधि	सदस्य
5	अधिशासी अभियंता बाढ खण्ड/सिंचाई खण्ड/रूहेलखण्ड नहर	सदस्य
6	अधिशासी अभियंता/सहायक अभियंता, भू–गर्भ जल विभाग,बरेली	सदस्य
7	उप जिलाधिकारी बरेली,मीरगंज,आंवला व फरीदपुर।	सदस्य
8	जिला विकास अधिकारी बरेली।	सदस्य
9	अधिशासी अभियंता उ0प्र0 जल निगम,बरेली	सदस्य
10	जिला अर्थ एवं संख्याधिकारी बरेली।	सदस्य
11	उपायुक्त उद्योग,जिला उद्योग केन्द्र बरेली।	सदस्य
12	क्षेत्रीय अधिकारी उ0प्र0 प्रदूषण नियंत्रण बोर्ड बरेली।	सदस्य
13	जिला पंचायत राज अधिकारी बरेली।	सदस्य
14	उप निदेशक, कृषि बरेली।	सदस्य
15	जिला गन्ना अधिकारी बरेली।	सदस्य
16	सहायक निदेशक मत्स्य बरेली।	सदस्य
17	उपायुक्त श्रम एवं रोजगार बरेली।	सदस्य
18	जिला नियंत्रक सिविल डिफेंस बरेली	सदस्य
19	डा0 आलोक खरे,एसोसिएट प्रोफेसर बॉटनी विभाग,बरेली कॉलेज बरेली	सदस्य
20	निदेशक रिवर बेसिन,वैटलैण्ड एण्ड वॉटर पॉलिसी डब्ल्यू.डब्ल्यू.एफ0 इण्डिया।	सदस्य
21	उप प्रभागीय वनाधिकारी वन एवं वन्य जीव प्रभाग,बरेली	सदस्य

क्रमशः.....2 पर

उक्त गठित कार्यकारी समूह जिला गंगा समिति के अन्तर्गत रहते हुये जिला गंगा प्लान तैयार किये जाने हेतु विभिन्न विभागो से जो भी सूचनाएं/आंकडो की आवश्यकता होगी,उन्हे कार्यकारी समूह को उपलब्ध कराया जायेगा जिससे कि समय गंगा एक्शन प्लान तैयार कर उच्च स्तर को प्रेषित किया जा सके। कार्यकारी समूह के कार्यो का विवरण निम्न प्रकार है:–

1– हितधारको के सहयोग से जिला गंगा योजना की तैयारी,समीक्षा और अंतिम रूप देने के लिये मार्ग दर्शन देना।

2– जिला गंगा योजना को विकसित करने की प्रकिया में हितधारकों का सहयोग करना,बैठकें आयोजित करना,दृष्टि और लक्ष्यों को पारिभाषित करना,प्रमुख नदियों की पहचान करना जिला गंगा योजना के लिये कार्ययोजनाएं और बजट तैयार करना।

3– जिला गंगा योजना को बनाने में विभिन्न विभागों से इनपुट प्राप्त करना,उनकी समीक्षा करना तथा जिला गंगा योजना का प्रारूप तैयार करना।

4– संस्थागत स्तर पर सहायता हेतु सभी सम्बन्धित विभागो के साथ समन्वय बनाते हुये जिले में नदियो की वास्तु स्थिति का आंकलन करना और जानकारी एकत्रित करना।

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जिलाधिकारी
बरेली

पत्रांक 821 / 29–5 दिनांकित।

प्रतिलिपि–मुख्य विकास अधिकारी बरेली/नोडल अधिकारी जिला गंगा समिति को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

प्रतिलिपि–प्रभागीय वनाधिकारी वन एंव वन्य जीव प्रभाग,बरेली को सूचनार्थ एंव आवश्यक कार्यवाही हेतु प्रेषित।

प्रतिलिपि–उपरोक्त नामित समस्त सदस्यो को सूचनार्थ एंव आवश्यक कार्यवाही हेतु प्रेषित।

प्रतिलिपि–निदेशक रिवर बेसिन,वैटलैण्ड एण्ड वॉटर पॉलिसी डब्ल्यू0डब्ल्यू0एफ0 इण्डिया मुरादाबाद को सूचनार्थ एंव आवश्यक कार्यवाही हेतु प्रेषित।

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जिलाधिकारी
बरेली

Figure 62 Bareilly District Magistrate formulated the DGP working group on 20 August 2022

Formation of a working committee (or group) under the nodal officer appointed by DM:

- The formation of a working committee was proposed, with representation from key line departments and stakeholder groups. The committee was convened and steered by the Nodal officer appointed by the DM/DGC.
- Each department/stakeholder group subsequently nominated a member who has worked closely with the Nodal Officer. The nominated member was the concerned authority for implementation, data management and monitoring of progress as per action assigned to their relevant department.

Role of the DGP working committee (or group):

- Driving force for the planning process.
- The members of the committee represented their respective departments and stakeholder groups, and they were the key point of contact for coordination and implementation.
- This committee supported situation analysis, consolidation of data, baseline information, and overall knowledge management. From each line department, the representing officer provided required information.
- The group was responsible for both planning and defining the vision and goal for the district and key rivers identified as well as the monitoring of progress against targets, budgets and timelines.
- The committee supported and worked closely with the Nodal Officer.

Review, discussion and Capacity Building on DGC Planning Framework:

- The DGP working committee (or group) reviewed and discussed the framework to gain an understanding through a capacity-building exercise on how the framework was organized and how it would support the planning process.

Inception meeting to discuss outcomes of Situation Analysis:

- An inception workshop was conducted with members of the working committee, nominated members from all concerned line departments and any other relevant stakeholders to initiate the process of District Ganga Plan development.

- This meeting was useful in discussing the way forward for the stakeholders concerned. This was a participatory process.

Situational analysis of Key rivers/Tributaries:

- Subsequently, data collection for situation analysis begun, this helped in understanding the current scenario of the ecological health (key threats and issues) of the key rivers within the district boundaries.
- In certain cases, some data was not be readily available, in such cases, field surveys, and primary, and secondary data collection was undertaken to supplement available data on the current status of the rivers at specific points.

Gap analysis, identification of Stakeholders and Potential synergies:

- This process allowed for an assessment of gaps in implementation, resource allocations, limitations and the need for additional support. Subsequently, issues and areas of work were jointly prioritized. This allowed the opportunity to identify potential synergies among different stakeholder groups and departments.

Prioritization of Issues:

- The results of the situational analysis was presented. On this basis, gap analysis, prioritization of issues and subsequently allocation of work to concerned departments and stakeholders.

Visioning exercise with the working committee, (Vision/Goals/Outcomes), Setting targets:

- This exercise focussed on envisioning a future for key rivers in a district and the goals and objectives that would contribute to it.
- With baselines available and gaps identified, through this exercise the working committee arrived at an informed decision on what, District Plan should aim to achieve. Further, this exercise helped in arrive at how this vision for the rivers and the district can be realised.

Monthly meetings, monitoring and course correction:

- Regular monthly meetings of the working committee were organized for review and monitor progress, as well as course corrections if required.

- Data from all the related line departments were collected on the various aspects indicated in the framework, for developing the district plan.

Draft District Ganga Plan developed with a detailed work plan:

- The drafting of District Ganga Plan initiated on the basis of available data, consultation, visioning exercises and brainstorming.
- This draft was further discussed with the members of the working committee and the concerned stakeholders. Afterwards, the same was presented to the DGP working committee. The comments and suggestions from the working committee members were addressed and later on, the DGP was presented to the District Ganga Committee to get the insight from the members and incorporate their suggestions and comments.

Finalisation of District Ganga Plan:

- Following the incorporation of inputs and feedback from stakeholders and working committee members and DGC members, the plan was finalised.

Monitoring and evaluation against plan activities and reporting:

- Once the implementation of the plan is initiated it would be vital to monitor and evaluate progress against set targets, budgets and timelines. If required the plan may be adapted and revised. This process will be supplemented by monthly meetings.

8. Stakeholder engagement (Ramganga Mitras in actions)

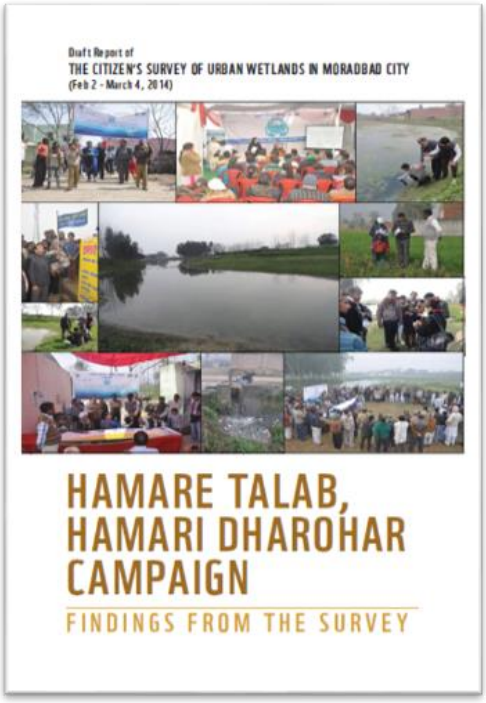
Mitra's, known as Friends of Rivers and Wetlands, is a group of dedicated volunteers representing various stakeholder groups. Their primary objective is to safeguard rivers and wetlands through active participation in conservation efforts and the sustainable management of these natural resources.

Figure 63 Ramganga Mitras in action.

Mitra's come together with a common purpose, collaborating and fostering a collective vision for the preservation of freshwater resources. They possess valuable indigenous and local knowledge of the wetlands and catchment areas, enabling them to contribute effectively to conservation initiatives.

These passionate individuals are driven to protect rivers, wetlands, and aquatic biodiversity. They demonstrate self-motivation and a willingness to invest their time and efforts in these endeavours. Mitra's act as influencers within their communities, offering support and understanding regarding wetland issues and recognizing the intrinsic value of these ecosystems.

Figure 64 Mitras contributing to different restoration and monitoring activities in rivers and wetlands in Bareilly district



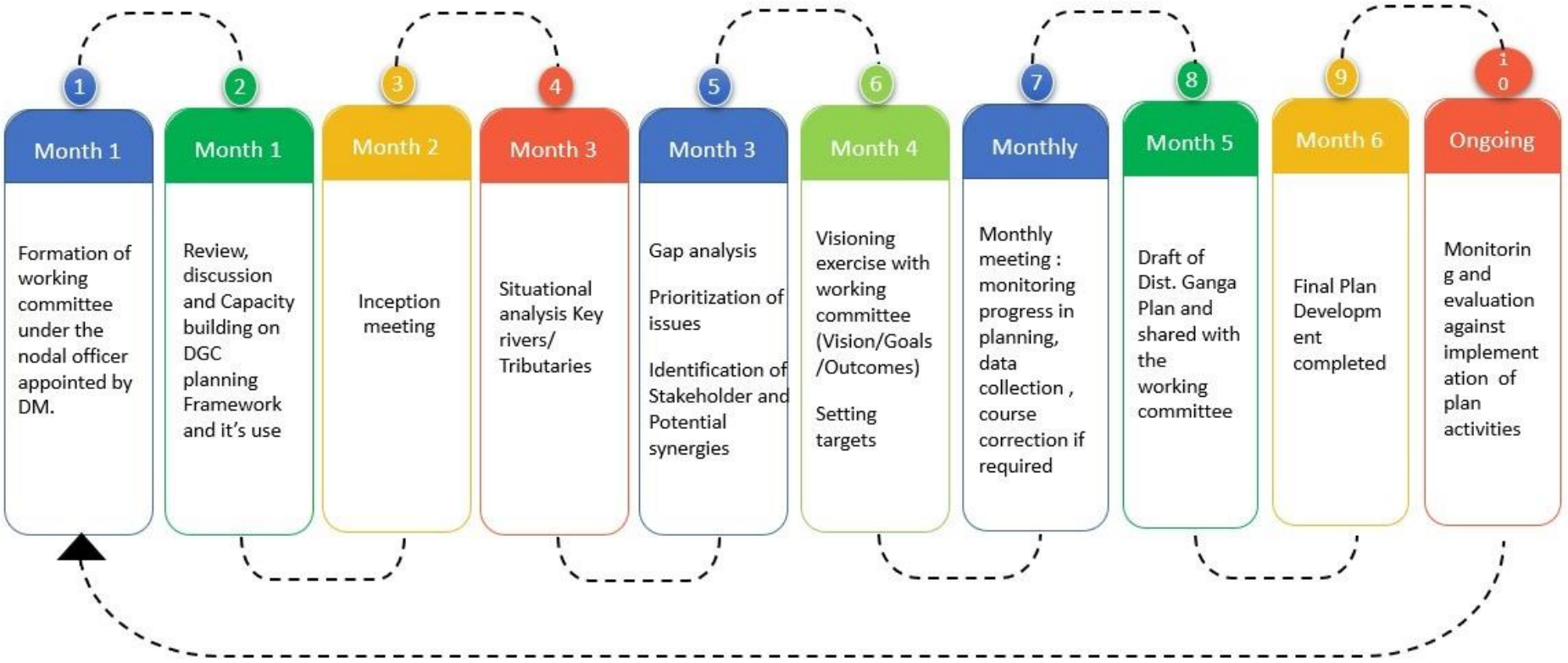


Figure 65 Process for development of District Ganga Plan

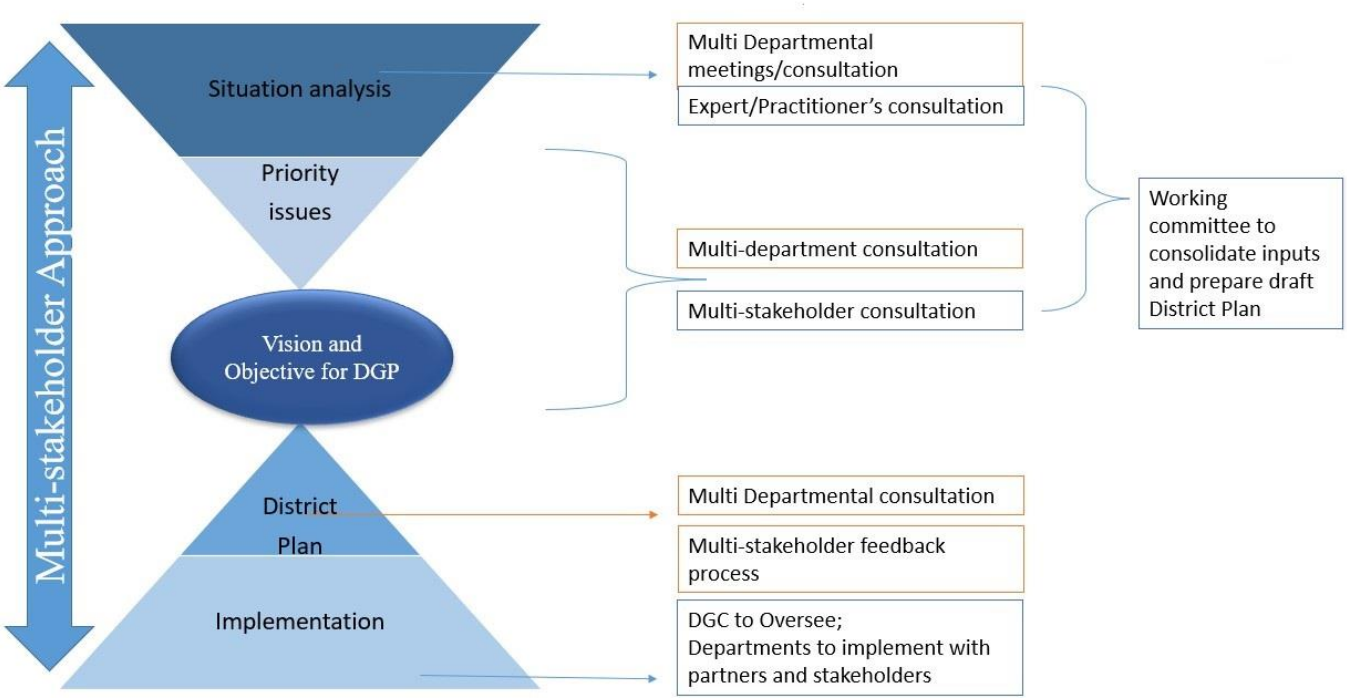


Figure 66 Detailed stakeholder process

Table 18 All relevant state policies (Environment, water, forest, agriculture, pollution) having bearing on river floodplain and larger basin scale will be considered as part of this process.

List of stakeholders	Situation analysis	Priority issues and principle	Vision and Objective	District Plan	Implementation
Municipal corporation	√	√	√	√	√
Irrigation department, Flood division	√	√	√	√	√
UPPCB	√	√	√	√	√
Divisional Forest Department	√	√	√	√	√
Jal Nigam	√	√	√	√	√
Ground water department	√	√	√	√	√
Panchayat Raj department	√	√	√	√	√
Revenue department	√	√	X	X	X
Health department	√	X	X	X	X
Fisheries department	√	√	√	√	√
Development authority	√	√	√	√	√
District Industries centre	√	√	√	√	√
Agriculture department	√	√	X	√	√
Sugarcane department	√	√	X	√	√
CSO- Mitras, Civil defence, Farmers, etc.	√	√	√	√	√
Ganga grams and other gram panchayats	√	√	√	√	√
Academia/ Sector experts	√	√	√	√	X
NGO's	√	X	√	√	√
Industry and Industry associates	√	√	X	√	√
Rural Development (CDO, DDO DC MANREGA)	√	√	√	√	√
NMCG	√	X	X	√	X
SMCG	√	√	√	√	X

8.1 Stakeholder Engagement Plan

A stakeholder engagement plan (Figure 68) is a strategic document that outlines how an organization will engage and communicate with its stakeholders. Stakeholders are individuals, groups, or organizations that have an interest or can be affected by the activities and decisions of the organization. Developing a stakeholder engagement plan is essential to ensure that stakeholders are effectively involved, their needs and concerns are addressed, and their perspectives are considered in decision-making processes. Stakeholder engagement should be an ongoing process, and it is crucial to maintain open and transparent communication with stakeholders throughout the life cycle of a project or organization. [33].

- Facilitates increased community ownership.
- Promote greater community engagement in rejuvenation and conservation initiatives.
- Strengthen collaboration among stakeholders.
- Promote a comprehensive understanding of the imperative for a holistic approach to River Ecology and River Rejuvenation.

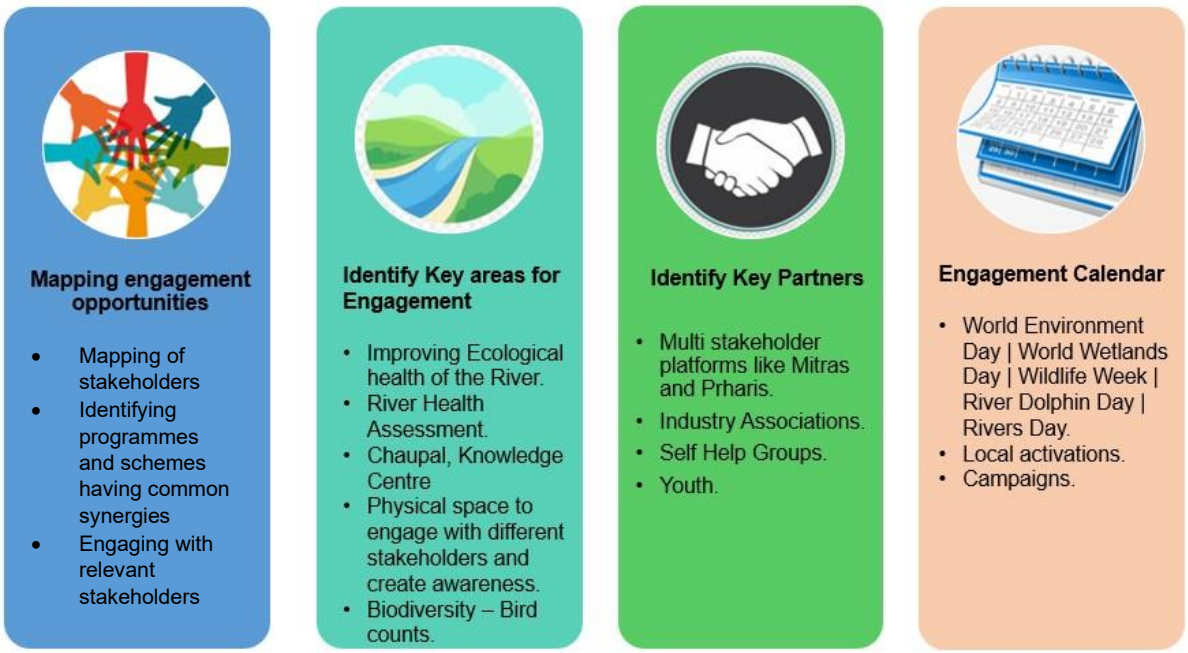


Figure 68 Stakeholder Engagement Plan

9. Monitoring and Evaluation

The process of Monitoring and Evaluation (M&E) is an essential component of the District Governance Program (DGP), aimed at assessing the implementation progress within the district and the achievement of its objectives. M&E entails establishing measurable indicators for each specific target, which enable the monitoring of progress, enhancing accountability, and evaluating the effectiveness of the intended intervention. These indicators should be concise and accurately describe the specific target, avoiding excessive data requirements or complex data acquisition efforts.

During this stage, the implementation of the plan takes place, involving the deployment of various components such as media products, messages, partnerships, and capacity-building initiatives. It is crucial to monitor the intervention to ensure that it is yielding the desired outcomes and to facilitate adjustments as needed during the course of implementation. Gender considerations are of particular importance at this stage, ensuring that gender norms and roles do not hinder the participation of any group in the activities being rolled out.

Table 19 Monitoring and Evaluation of Bareilly DGP - key identified issues

Objective	Monitoring	Evaluation
Identified Key Issue-1 **Over use of water in irrigation, leading to depletion of the groundwater table and depletion of base flow in Ramganga and Aril rivers.**		
Monitoring Water Usage in Irrigation	Continuously monitor water usage for irrigation activities, particularly groundwater extraction.	Assess trends in water consumption and groundwater levels over time.
Groundwater Table Depletion	Regularly measure groundwater levels and assess changes in the groundwater table.	Evaluate the rate of groundwater depletion and its impact on the aquifer.
Base Flow Depletion in Rivers	Monitor base-flows and corresponding water levels in the river, particularly in the Ramganga and Aril rivers.	Assess the impact of excessive water use on river base flow and aquatic ecosystems.
Identified Key Issue-2 **Agriculture water management- overuse of water and chemicals leading to depletion of ground water table, pollution due to agriculture runoff and leaching**		
Objective:	**Monitoring:**	**Evaluation:**
Water Usage in Agriculture	Continuously monitor water consumption in agriculture, focusing on groundwater extraction. Track trends in water usage to identify excessive use	Evaluate the adherence of farmers to water and chemical usage regulations. Assess the effectiveness of enforcement measures

Chemical Usage	Regularly monitor the use of chemicals, pesticides, and fertilizers in agriculture. Record quantities used and types of chemicals applied	Assess the adoption of water-efficient irrigation methods and sustainable farming practices. Evaluate the reduction in water use and chemical inputs
Groundwater Table Depletion	Monitor groundwater levels at regular intervals in affected areas. Evaluate changes in the groundwater table to assess depletion	Evaluate the extent of groundwater depletion caused by agricultural practices. Assess the impact on the aquifer and water availability
Pollution Levels	Monitor water quality in areas affected by agriculture runoff and leaching. Assess pollution levels, including the presence of chemicals and contaminants	Evaluate the degree of pollution in water bodies due to agricultural runoff and leaching. Assess the impact on aquatic ecosystems and water quality
Identified Key Issue-3 **Waste water management (Domestic-Deoraniya river and Nakatiya river and industrial)**		
Objective:	**Monitoring:**	**Evaluation:**
Wastewater Generation	Continuously monitor the volume of domestic and industrial wastewater generated. Track sources and quantities of wastewater.	Evaluate the impact of domestic and industrial wastewater on Deoraniya and Nakatiya rivers. Assess changes in water quality, aquatic life, and ecosystem health.
Wastewater Treatment	Regularly monitor the performance of wastewater treatment plants (WWTPs) when operated. Assess the efficiency of treatment processes.	Assess the effectiveness of wastewater treatment plants in reducing pollution. Evaluate their contribution to improved water quality.
Water Quality	Monitor the quality of discharged wastewater into Deoraniya and Nakatiya rivers. Measure parameters like biochemical oxygen demand (BOD) and chemical oxygen demand (COD).	Evaluate the reduction in pollution load in the rivers due to wastewater management efforts. Assess improvements in water quality indicators.
Compliance with Standards	Monitor compliance with wastewater discharge standards and regulations. Track violations and non-compliance incidents.	Evaluate the involvement of industries and communities in wastewater management initiatives. Assess the impact of awareness programs.
Identified Key Issue-4 **Solid waste management in urban and rural areas**		
Objective:	**Monitoring:**	**Evaluation:**
Waste Generation and Collection	Continuously monitor the quantity and types of solid waste generated in urban and rural areas. Track the efficiency of waste collection processes.	Evaluate the effectiveness of waste reduction and recycling initiatives. Assess the reduction in waste sent to landfills and increased recycling rates
Waste Transportation	Regularly monitor the transportation of collected waste to disposal sites. Assess	Assess the efficiency of waste collection, transportation, and disposal. Evaluate the cost-

	the effectiveness and frequency of waste transportation.	effectiveness of solid waste management programs.
Waste Segregation and Recycling:	Monitor the implementation of waste segregation at source and recycling programs. Track the quantities of recyclable materials collected.	Assess the impact of solid waste management on the local environment. Evaluate the reduction in pollution, landfill gas emissions, and soil contamination
Landfill Management:	Monitor landfill operations, including waste disposal and compaction. Assess landfill capacity and environmental impact.	Evaluate the level of community involvement in waste management practices. Assess the impact of awareness campaigns and community participation.
Identified Key Issue-5 **Floodplain (mining and palaze) and wetlands protection and restoration to ensure local water security and enhance climate resilience. which includes measures to address riverbank encroachment- Ramganga/Aril river/Deoraniya/Nakatiya rivers**		
Objective:	**Monitoring:**	**Evaluation:**
Floodplain and Wetlands Condition	Continuously monitor the condition of floodplains and wetlands in the target areas. Track changes in their extent, quality, and ecosystem health	Evaluate the effect of floodplain and wetland protection and restoration on local water security. Assess changes in water availability for communities and agriculture
Riverbank Encroachment	Regularly monitor riverbanks along the Ramganga, Aril, Deoraniya, and Nakatiya rivers. Assess encroachment levels and encroachment trends	Evaluate the success of riverbank encroachment control measures. Assess the reduction in encroachment and the protection of riverbanks.
Restoration Activities	Monitor the implementation of floodplain and wetland restoration measures. Track the progress of restoration projects and their effectiveness	Assess changes in biodiversity and ecosystem health in floodplains and wetlands. Evaluate the restoration's impact on local flora and fauna
Water Security Measures	Monitor the implementation of water security measures in floodplains and wetlands. Assess the impact on local water availability and climate resilience	Assess the enhancement of climate resilience achieved through floodplain and wetland restoration. Evaluate the mitigation of flood risks and improved water storage
Identified Key Issue-6 **Gaps in capacity, skills (Social, technical and institutional) and human resources in DGC for implementation of Ganga authority order**		
Objective:	**Monitoring:**	**Evaluation:**
Capacity Assessment	Continuously monitor the capacity and skills of the District Ganga Committee (DGC) members. Track their existing skills, training needs, and institutional support requirements	Evaluate the effectiveness of training programs in enhancing the technical, and institutional skills of DGC members. Assess the level of skills improvement and knowledge transfer

Training Programs	Monitor the implementation of training programs aimed at enhancing technical, and institutional skills. Track participation rates and training outcomes	Assess the impact of capacity building on DGC's ability to make informed decisions. Evaluate the quality and effectiveness of decision-making processes
Resource Allocation	Monitor the allocation of human and financial resources to the DGC. Assess whether resources are being allocated effectively to address capacity gaps	Evaluate the efficient utilization of human and financial resources by the DGC. Assess whether resources are allocated to address capacity gaps effectively
Compliance with Ganga Authority Orders	Regularly monitor DGC's compliance with orders and directives from the Ganga Authority. Track the implementation of required actions	Evaluate DGC's compliance with Ganga Authority orders and directives. Assess the degree of implementation and adherence to prescribed actions
Identified Key Issue-7 **Gaps in knowledge on status, issues and actions needed for conservation of key tributaries in Bareilly district.**		
Objective:	**Monitoring:**	**Evaluation:**
Baseline Knowledge Assessment	Conduct an initial assessment of the existing knowledge regarding the status, issues, and conservation actions needed for key tributaries in Bareilly district	Assess the quality and availability of data and information related to key tributaries. Evaluate whether data collection efforts have been successful
Research and Data Collection	Monitor ongoing research, data collection, and studies related to tributary conservation. Track the progress of data gathering activities.	Evaluate the extent to which knowledge gaps have been reduced through research, data collection, and awareness programs. Assess the improvement in understanding tributary status and conservation needs
Awareness and Training Programs	Monitor the implementation of awareness and training programs aimed at increasing knowledge on tributary conservation. Track the participation and engagement of stakeholders in these programs	Evaluate the effectiveness of awareness and training programs in increasing awareness and knowledge among stakeholders. Assess changes in attitudes and behaviour's related to tributary conservation.

9.1 Gender-sensitive outreach Plan

Gender-sensitive outreach refers to the deliberate inclusion and active participation of women (as well as other vulnerable groups) in the planning process through the adoption of inclusive processes and mechanisms that address barriers they may face. Communication for Development (C4D) has been utilized for several decades as a powerful tool for enhancing the

well-being of children, women, and families. It is employed to promote various human rights issues such as health, nutrition, water, sanitation, education, and more.

A wealth of evidence demonstrates that communication strategies, implemented through a diverse range of approaches, and channels, and targeting different participants and stakeholders, can effectively inform, influence, motivate, engage, and empower individuals and communities. Communication plays a pivotal role in advancing gender equality by challenging and transforming attitudes and stereotypes that perpetuate gender-based discrimination. Moreover, it is closely intertwined with empowerment as it contributes to building the confidence and skills necessary to negotiate choices and demand equal access to and control of resources.

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NAMAMI GANGE

हैंडबुक

जिला गंगा योजना के लिए

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जर्मनी के फेडरल सरकार की संस्था के रुप में जीआईजेड सतत विकास के लिए अंतर्राष्ट्रीय सहयोग के क्षेत्र में सरकार के लक्ष्यों को प्राप्त करने के लिए कार्यरत है।

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मानचित्र :
इस हैंडबुक में केवल सूचना के उद्देश्य से मानचित्रों का प्रयोग किया गया है। ये मानचित्र किसी भी प्रकार राष्ट्रीय सीमाओं या भूभागों के बारे में अंतर्राष्ट्रीय कानूनों के तहत दावों की पुष्टि नहीं करते। जीआईजेड इन मानचित्रों के बारे में किसी तरह की जिम्मेदारी नहीं लेता कि ये अद्यतन, पूर्ण और सटीक हैं। इसके इस्तेमाल से होने वाले किसी भी प्रकार के प्रत्यक्ष या अप्रत्यक्ष नुकसान के लिए देयता की जिम्मेदारी जीआईजेड पर नहीं होगी।

जर्मनी के फेडरल मिनिस्ट्री ऑफ इकनॉमिक कोऑपरेशन ऐंड डेवलेपमेंट (बीएमजेड) की ओर से

इस प्रकाशन के तथ्यों की जिम्मेदारी जीआईजेड की है।

नयी दिल्ली, सितंबर 2023

प्राक्कथन

भूमिका

यह हैंडबुक गंगा और इसकी सहायक नदियों की संरक्षा तथा पुनरुत्थान के लिए बनाया गया दस्तावेज़ है जो व्यापक स्तर पर जिला गंगा योजना के निर्माण के लिए बुनियाद का काम करेगा। यह हैंडबुक जिला गंगा समितियों की क्षमता और समन्वय संरचना को मजबूत बनाने में सहयोग करेगा। इससे प्राथमिकता के आधार पर निर्धारित मुद्दों और संबंधित जिलों में इन्हें लागू करने में के लिए प्रभावकारी कदम उठाना संभव हो पाएगा।

जल एक साझा संसाधन है। नदी बेसिन अनेक अधिकार-क्षेत्रों तथा प्रशासनिक सीमाओं के बीच फैला होता है। इसका इस्तेमाल कृषि, घरेलू तथा औद्योगिक और पर्यावरण संबंधी कार्यों के लिए किया जाता है। इस वजह से मीठे पानी के पारितंत्र की सुरक्षा, संरक्षा और उन्हें पुनर्जीवित करने हेतु समेकित सामूहिक कार्ययोजना के निर्माण तथा उनके कार्यान्वयन के लिए विभिन्न अंशधारकों का साथ मिलकर कार्य करना आवश्यक होता है जो स्वस्थ नदी-क्षेत्र के सामाजिक-सांस्कृतिक महत्व को संरक्षित करने में सहायक होता है।

भारत की राष्ट्रीय संस्थाएं इस बात को स्वीकार करती हैं कि नदियों की संरक्षा और उनके पुनरुत्थान के लिए व्यवस्थागत कार्यनीति का निर्माण आवश्यक है। इस दिशा में समेकित और सर्वांगीण कार्ययोजना को लागू करना शुरु किया जा चुका है। वर्तमान में चल रही गंगा पुनरुत्थान संबंधी पहलों ने एक साथ संपूर्ण नदी बेसिन पर विचार करना प्रारंभ कर दिया है। साथ ही, इन पहलों के द्वारा जलमल, औद्योगिक क्षेत्र से निकले गंदे जल, सिंचाई के लिए इस्तेमाल किए जाने वाले जल, जल-विद्युत के उपयोग, ठोस कचरे का प्रबंधन, पर्यावरणीय प्रवाह (ई-प्रवाह/e-flows), जैव-विविधता के संरक्षण और अंशधारकों द्वारा नेतृत्व जैसे मुद्दों पर भी व्यापक तौर से विचार शुरु हो चुका है।

तापी और रामगंगा जैसे नदी बेसिनों में नदी बेसिन प्रबंधन चक्र को अपना कर समग्र नदी बेसिन प्रबंधन व्यवस्था शुरु हो चुकी है। इसके अलावा, साझा फ्रेमवर्क अपनाते हुए रामगंगा बेसिन की चार जिला गंगा समितियों ने अपनी मॉडल जिला गंगा योजनाएं भी बना ली हैं। यूरोपीय संघ के वाटर फ्रेमवर्क निर्देश के कार्यान्वयन दृष्टिकोण पर आधारित चक्रीय नज़रिया कई अर्थों में बेहतर है। यह नज़रिया क्रमिक ढंग से महत्वपूर्ण मुद्दों को प्राथमिकता के आधार पर हल करने और साथ ही इन्हें लागू करने में पहचान किए गए कमजोर पहलुओं को ठीक करने के लिए नयी सूचनाएं भी उपलब्ध कराता है।

भारतीय नदी बेसिन में नदी बेसिन प्रबंधन (आरबीएम) योजना के अंतर्गत ये कदम भारत-जर्मनी विकास सहयोग प्रोजेक्ट 'Support to Ganga Rejuvenation (SGR)' के तहत उठाए गए हैं। इसे जर्मनी के आर्थिक सहयोग तथा विकास मंत्रालय (BMZ) की ओर से *Deutsche Gesellschaft für Internationale Zusammenarbeit* (GIZ) GmbH द्वारा कार्यान्वित किया जा रहा है। सन् 2015 से ही जर्मनी भारत सरकार के जल शक्ति मंत्रालय तथा राष्ट्रीय स्वच्छ गंगा मिशन के साथ मिलकर गंगा पुनरुत्थान के लिए कार्य करने को प्रतिबद्ध है। सन् 2017 से इस प्रोजेक्ट को India-EU Water Partnership (IEWP) को मजबूत करने के लिए यूरोपीय संघ के साथ मिलकर सहवित्त पोषण के आधार पर लागू किया जा रहा है।

इस प्रोजेक्ट के तहत अन्य संबंधित पहलुओं के लिए भी सहायता प्रदान की जा रही है जो नदियों के पुनरुत्थान कार्यक्रम की सफलता सुनिश्चित करने और व्यावहारिक योजनाओं के निर्माण, समन्वयन और संचालन व्यवस्थाओं के समेकित समाधान के लिए आवश्यक हैं। इसमें राष्ट्रीय स्वच्छ गंगा मिशन को संस्थागत रूप में मजबूती प्रदान करने, रामगंगा बेसिन में पर्यावरणीय प्रवाह (E-flow) संबंधी पहल, मानव मल मिश्रित नाले के पानी तथा जलमल प्रबंधन, परिशुद्ध जल के दोबारा सुरक्षित इस्तेमाल को बढ़ावा देने, जन जागरूकता तथा क्षमता निर्माण जैसे अन्य मुद्दों को भी शामिल किया गया है।

वर्ल्ड वाइड फंड फॉर नेचर- इंडिया (WWF-India) भारतीय नदियों और दलदलों संबंधी अपने कार्यक्रम के तहत 2017 से ही अनेक क्षेत्रों के विभिन्न अंशधारकों के साथ गंगा एवं इसकी प्रमुख सहायक नदी रामगंगा के पुनरुत्थान के लिए साझा दृष्टिकोण विकसित करने और इसके कार्यान्वयन के लिए सहयोग कर रहा है। गंगा तथा रामगंगा में वर्ल्ड वाइड फंड फॉर नेचर- इंडिया का कार्य इस सिद्धांत से प्रेरित है कि मीठे पानी के पारितंत्र की सुरक्षा, संरक्षा और पुनरुत्थान के लिए विभिन्न अंशधारकों के साथ सहयोग के आधार पर कार्य करना आवश्यक है। इस संगठन ने राज्य, बेसिन,जिला,एक्वीफर, वाटरशेड जैसे अनेक स्तरों पर विभिन्न अंशधारकों के साथ किए बहुआयामी कार्यों के द्वारा अनुभव प्राप्त किया है जिसे इस हैंडबुक में शामिल किया गया है। इन कार्यों के लिए इसे एचएसबीसी तथा रेकिट से वित्तीय सहायता प्राप्त हुई है। इसमें रामगंगा नदी बेसिन प्रबंधन, विभिन्न सहयोगियों के साथ मिलकर रामगंगा में ई-प्रवाह को पुनर्स्थापित करना और इसका आकलन, भूजल और ज़मीन की सतह पर पाए जाने वाले जल की अंतःक्रिया, मुरादाबाद और बरेली जिला गंगा समितियों के साथ नदियों के दलदली क्षेत्र का सह-प्रबंधन, नागरिक विज्ञान पर आधारित नदी स्वास्थ्य आकलन, जलीय जैव-विविधता और उनके निवास स्थल की सुरक्षा, औद्योगिक एवं शहरी जल व्यवस्था का नेतृत्व, अंशधारकों को साथ लाना और जिला प्रशासन, राष्ट्रीय स्वच्छ गंगा मिशन, उत्तर प्रदेश राज्य स्वच्छ गंगा मिशन के सहयोग से जल मित्रों के द्वारा सहयोगात्मक बेसिन गवर्नेंस सुनिश्चित करना जैसे कार्य शामिल हैं।

नदी बेसिन प्रबंधन एक जटिल कार्य है जिसमें विभिन्न एजेंसियों तथा संस्थानों की विशेषज्ञता की जरूरत होती है। इसलिए राष्ट्रीय स्वच्छ गंगा मिशन, जीआईजेड तथा डब्ल्यू डब्ल्यू एफ इंडिया एक साथ मिलकर जिला गंगा योजना प्रक्रिया पर काम कर रहे हैं। अपने अपने अनुभव और ज्ञान का इस्तेमाल कर वे इस प्रक्रिया को और भी समृद्ध बना रहे हैं। शुरुआत में ही अंशधारकों के साथ मिलकर जिला गंगा योजना के फ्रेमवर्क पर सहमति स्थापित की गयी और साथ मिलकर योजना का निर्माण किया गया। इसके बाद जीआईजेड दो जिलों, उत्तराखंड के उधमसिंह नगर तथा उत्तर प्रदेश के शाहजहांपुर में तथा डब्ल्यू डब्ल्यू एफ इंडिया उत्तर प्रदेश के दो अन्य जिलों, मुरादाबाद और बरेली में, इस प्रक्रिया को आगे बढ़ाने में सहयोग कर रही है। चार जिलों में मॉडल जिला गंगा योजना को विकसित करने की यह प्रक्रिया सहयोगात्मक और पुनरावृत्तीय रही है। इस प्रक्रिया में जिला स्तर के सभी अंशधारक तथा लाइन-विभाग एवं जिला गंगा समितियों के रूप में जिला प्रशासन उस टीम के अभिन्न अंग रहे हैं जिन्होंने अपनी अपनी जिला गंगा योजनाएं बनायी हैं।

जिला गंगा योजना में खास खास मुद्दों से संबंधित सुनिश्चित लक्ष्यों की प्राप्ति संबंधी पहल शामिल रहे हैं। इन पहलों में गंगा नदी तथा इसकी सहयोगी नदियों तथा निर्दिष्ट जिलों के अंदर इस नदी-क्षेत्र में प्रदूषण को कम करने, नदियों की संरक्षा और नियंत्रण जैसे कार्य भी शामिल हैं। समावेशी दृष्टिकोण को अपनाने के लिए जिला गंगा योजना के हर स्तर पर जेंडर संवेदनशील नज़रिए को अपनाया गया है।

जिला गंगा योजना के साथ ही इस मॉडल योजना निर्माण की प्रक्रिया में प्राप्त अनुभवों को शामिल करते हुए एक निर्देशक हैंडबुक का भी निर्माण किया गया है। यह हैंडबुक इस प्रक्रिया को क्रमबद्ध तरीके से सरल सोपानों में बांट कर उनका वर्णन करता है जिसमें रामगंगा बेसिन तथा अन्य जलग्रहण क्षेत्रों के उदाहरणों को भी शामिल किया गया है। इस हैंडबुक में अनुशंसाएं शामिल हैं जिनमें दिखाया गया है कि बेसिन जल प्रबंधन संबंधी फौरी चुनौतियों से किस प्रकार व्यावहारिक तौर पर निपटा जा रहा है। इसमें जिला गंगा योजना के विभिन्न चरणों के निर्माण की रूपरेखा भी दिशा निर्देशक के रूप में शामिल की गयी है। हैंडबुक विस्तृत फलक पर मुद्दों का परिचय और उनके संभावित समाधान भी प्रस्तुत करता है जिनका उपयोग जिला गंगा समितियां जिला गंगा योजना के निर्माण की प्रक्रिया के दौरान कर सकती हैं।

यह हैंडबुक हमारे सहयोगियों के बीच गहन संपर्क के आधार पर बनाया गया है। हम राष्ट्रीय स्वच्छ गंगा मिशन, राज्य स्वच्छ गंगा मिशन तथा उत्तर प्रदेश एवं उत्तराखंड के लाइन-विभागों के द्वारा लगातार दिए गए सहयोग के लिए आभारी हैं। जिला गंगा योजना निर्माण की प्रक्रिया में चार पायलट जिला गंगा समितियों के साथ संपर्क और विचार विमर्श एवं सहयोग अत्यंत उत्साहवर्द्धक रहा है जिसका इस्तेमाल इस हैंडबुक के निर्माण के दौरान अनुभवों को इकट्ठा करने के लिए किया गया है। हम उम्मीद करते हैं कि अन्य जिला गंगा समितियां भी अपनी जिला गंगा योजनाओं को बनाने के लिए इस हैंडबुक का इस्तेमाल करेंगी और इस के आधार पर गंगा एवं इसकी सहायक नदियों के सफल पुनरुत्थान के लिए कार्य करेंगी जो नमामि गंगे के अविरल और निर्मल गंगा संबंधी परिकल्पना को साकार करने में सहयोग करेगा।

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Abbrevations

BOD	Biological Oxygen Demand (जैविक ऑक्सीजन मांग)
CETP	Common Effluent Treatment Plants (सामान्य उत्सर्जन सफाई संयंत्र)
COD	Chemical Oxygen Demand (रासायनिक ऑक्सीजन मांग)
CPCB	Central Pollution Control Board (केंद्रीय प्रदूषण नियंत्रण बोर्ड)
CPHEEO	Central Public Health and Environmental Engineering Organization (केंद्रीय जन स्वास्थ्य तथा पर्यावरण इंजीनियरिंग संगठन)
DGC	District Ganga Committee (जिला गंगा सिमित)
DGP	District Ganga Plan (जिला गंगा योजना)
DO	Dissolved Oxygen (घुलित ऑक्सीजन)
EC	EU Commission (यूरोपियन संघ कमिशन)
EF	Environmental Flow (पर्यावरण प्रवाह)
ETP	Effluent Treatment Plants (उत्सर्जन सफाई संयंत्र)
FSSM	Faecal Sludge and Septage Management (जलमल तथा सेप्टेज प्रबंधन)
GIS	Geographic Information System (भौगोलिक सूचना व्यवस्था- जीआईएस)
GIZ	Gesellschaft für Internationale Zusammenarbeit
GLOF	Glacier Lake Outburst Floods (ग्लेशियर तालाब विस्फोट बाढ़)
GPI	Grossly Polluting Industries (अति प्रदूषण उद्योग)
GRBMP	Ganga River Basin Management Plan (गंगा नदी बेसीन प्रबंधन परियोजना)
GVPs	Garbage Vulnerable Points (कचड़ा संभावित स्थल)
IEC Incl	Information, Education and Communication (सूचना, शिक्षा तथा संचार) including (सह..)
MAR	Managed Aquifer Recharge (प्रबंधित एक्वीफर रिचार्ज)
M&E	Monitoring and Evaluation (निगरानी और मूल्यांकन)
MoHUA	Ministry of Housing and Urban Affairs (आवासन और शहरी कार्य मंत्रालय)
NGO	Non-Governmental Organisation (गैर सरकारी संगठन, एनजीओ)
NRLM	National Rural Livelihoods Mission (राष्ट्रीय ग्रामीण जीविका मिशन)
QA/QC	Quality Assurance / Quality Control (गुणवत्ता आश्वासन /गुणवत्ता नियंत्रण)
SAFE	Suitability, Acceptability, Feasibility Evaluation (उपयुक्तता, स्वीकार्यता, संभाव्यता आकलन)

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Abbrevations

SRLM	State Rural Livelihoods Mission (राज्य ग्रामीण आजीविका मिशन)
SMCG	State Mission for Clean Ganga (राज्य स्वच्छ गंगा मिशन)
SPCB	State Pollution Control Board (राज्य प्रदूषण नियंत्रण बोर्ड)
SPI	Seriously Polluting Industries (गंभीर प्रदूषण उद्योग)
STP/SPS	Sewage Treatment Plant / Sewage Pumping Station (जलमल परिशोधन संयंत्र, जलमल पंपिंग स्टेशन)
UDD	Urban Development Directorate (नगर विकास निदेशालय)
ULB	Urban Local Bodies (स्थानीय नगर निकाय)
WQ	Water Quality (जल गुणवत्ता)
WUA	Water Users Associations (जल प्रयोक्ता संगठन)
WWF	World Wide Fund for Nature (वर्ल्ड वाइड फंड फॉर नेचर)

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शब्दावली

इस अभिलेख में निम्नलिखित परिभाषाओं का प्रयोग किया गया है:

सुनिश्चित लक्ष्य

इस मैनुअल में सुनिश्चित लक्ष्य का प्रयोग सामान्य रूप से इस्तेमाल किए जाने वाले कार्यक्षमता संकेतक (परफोरमेंस इंडिकेटर्स) के अर्थ में किया गया है। जिला गंगा योजना के संदर्भ में इसका प्रयोग सफल हस्तक्षेपों को लागू किए जाने की माप के तौर पर किया गया है।

01 खंड हैंडबुक परिचय - व्यावहारिक गाइड की आवश्यकता और इसके इसका इस्तेमाल कैसे करें

1.1 हैंडबुक का उद्देश्य, दृष्टिकोण और प्रयोजन

उद्देश्य-

गंगा और इसकी सहायक नदियों के पुनरुत्थान, संरक्षण और प्रबंधन के लिए गंगा प्राधिकरण के 2016 में जारी विज्ञप्ति के अनुसार गंगा बेसिन के हर जिले को निर्धारित अवधि पर जिला गंगा योजना को संशोधित करने कहा गया था। योजना उन जिलों में गंगा, इसकी सहायक नदियों और उनसे संबंधित नदी-क्षेत्र पर विशेष ध्यान केंद्रित करती है। योजना में गंगा के स्वास्थ्य को सुनिश्चित करने के लिए जिला गंगा समिति द्वारा की जा रही गतिविधियों को शामिल किया गया है जो गंगा और इसकी सहायक नदियों की संरक्षा, नियंत्रण के साथ ही पर्यावरण प्रदूषण को नियंत्रित करने में सहायता करेगी। इस योजना में उन जिलों को शामिल किया गया है जहां गंगा और इसकी सहायक नदियों की तलहटी पायी जाती है। इसके अलावा इस योजना में इन कार्यों के लिए विस्तृत बजट और समय सीमा को भी शामिल किया गया है

जल हमारे जीवन के हर पहलू से संबंधित है और इसके साथ ही हमारे जीवन का हर पहलू पानी से जुड़ा है जैस कि - जनसंख्या में विकास, तेजी से बढ़ता शहरीकरण, कृषिऔर पर्यटन का विकास, पर्यावरण परिवर्तन जैसे तत्व जल संसाधनों पर दवाब को लगातार बढ़ा रहे हैं। इसी के मद्दे नजर, नदियों के पुनरुत्थान के कार्यक्रम के तहत नदी के पूरे बेसिन पर विचार करना आवश्यक है। हमें लोगों की बसाहट वाली जगहों से पैदा होने वाले जलमल और दवाब के अन्य कारकों के अलावा उद्योग, सिंचाई, भूजल दोहन, पनबिजली निर्माण, ठोस कचरे के बनने और नदी तट के नष्ट होने जैसे कारकों पर भी विचार करना होगा। आपस में गहराई से अंतर्संबद्ध कारकों की दृष्टि से हमें गंगा उपबेसिन के अंदर इस विषय पर समग्रता और मजबूती के साथ और समेकित नदी बेसिन प्रबंधन दृष्टिकोण के आधार पर विचार करना होगा जिसमें अंशधारकों के बीच गतिशील सहभागिता सुनिश्चित करनी होगी। इसकी वजह से जिला गंगा योजना अधिकाधिक जटिल हो जाती है।

इस उद्देश्य से जिला स्तर पर नदी बेसिन के प्रबंधन के लिए यह हैंडबुक एक समग्र परंतु आसानी से समझ में आने वाला दिशा-निर्देश पेश करता है जिसे गंगा प्राधिकरण के 2016 की अधिसूचना की जरूरतों को पूरा करने के लिए जिला गंगा समितियां सीधे सीधे अपना सकती हैं। इसके लिए यह हैंडबुक इसके विभिन्न अवयवों की व्याख्या करता है। इसके साथ ही यह जिला गंगा योजना के निर्माण के लिए विस्तृत दिशा-निर्देश भी प्रस्तुत करता है जो जिला स्तर पर जल संसाधनों से संबंधित समस्याओं और जरूरतों को रणनीतिक कार्ययोजना का स्वरूप देने में मदद करती है।

दृष्टिकोण

यह हैंडबुक विशेष तौर से-

- गंगा बेसिन के लिए विकसित नदी बेसिन योजना और प्रबंधन चक्र के लिए निर्मित सिद्धांतों का इस्तेमाल करता है। यह मॉडेल गंगा योजना के निर्माण के दौरान प्राप्त अनुभवों का भी प्रयोग करता है।
- किसी खास जिले तक सीमित नहीं है।
- अपने दृष्टिकोण की व्यवस्थित तरीके से और सरल सोपानों में बांट कर व्याख्या करता है जिन्हें रामगंगा बेसिन और दूसरे संबंधित जलग्रहण क्षेत्रों से लिए गए वास्तविक जीवन के उदाहरणों के द्वारा समझाया गया है।
- यह पके पकाए समाधान की जगह यह बताता है कि बेसिन जल संसाधनों के प्रबंधन की चुनौतियों से व्यावहारिक जीवन में किस तरह निपटा जा रहा है। इसके आधार पर यह कुछ सलाह प्रस्तुत करता है।
- जिला स्तर पर जल संसाधनों के प्रबंधन में संलग्न जिला गंगा योजना और इसके सहयोगियों को निर्दिष्ट करता है।
- इसे शाहजहांपुर, उधमसिंह नगर, बरेली और मुरादाबाद जिलों में विकसित मॉडल जिला गंगा योजना के आधार पर जांचा ओर संपुष्ट किया गया है। इस हैंडबुक को तैयार करने में जिला गंगा योजना के निर्माण के दौरान प्राप्त अनुभवो और फीडबैक का इस्तेमाल किया गया है।

जिला गंगा समिति इस हैंडबुक के इस्तेमाल से क्या हासिल कर सकते हैं और इसका इस्तेमाल कैसे करें?

यह हैंडबुक जिला गंगा समितियों को जिला गंगा योजना (डीजीपी) के निर्माण के लिए क्रमबद्ध तरीके से दिशा निर्देश उपलबद्ध कराता है। इसकी शुरुआत खंड-2 में योजना को डिजाइन करने के सामान्य सिद्धांतों से होती है। इनका प्रयोग एक व्यावहारिक, कारगर, संक्षिप्त और पर्यावरण की दृष्टि से सटीक, सामाजिक रुप से समेकित, जेंडर संवेदना से पूर्ण और आर्थिक रूप से लाभकारी जिला योजना बनाना सुनिश्चित करता है।

खंड 3 जिला गंगा योजना से संबंधित महत्वपूर्ण सूचनाएं उपलब्ध कराता है जिससे इसके संदर्भ को समझने में सहायता मिलती है। यहां जिला गंगा योजना के निर्माण के लिए आवश्यक कानूनी फ्रेमवर्क को समझाया गया है। इसके साथ ही पहले किए गए कार्यो और अभी चाल रहे कार्यों के बारे में भी बताया गया है जिनका प्रभाव योजना पर पड़ता है। साथ ही, गंगा बेसिन के जल संबंधी परिस्थिति और संस्थागत संरचना के बारे में भी बताया गया है।

नदी बेसिन प्रबंधन चक्र के अनुरूप (सुधार- संदर्भ स्रोत उपलब्ध नहीं) खंड 4 में जिला गंगा योजना के निर्माण के लिए सभी आवश्यक कदमों को बताया गया है। जिला गंगा योजना की सामान्य रूपरेखा, इसके अध्यायों और उप-अध्यायों को भी खंड 1.2 में शामिल किया गया है। हर अध्याय में इसकी कार्यप्रणाली को समझाने के लिए उपयोगी टिप्स, व्यावहारिक खाका और उदाहरण (हरे बॉक्स) में दिए गए हैं। शाहजहांपुर, उधमसिंह नगर जैसे मॉडल जिला गंगा योजना इसमें उपलब्ध हैं जिनके आधार पर अन्य जिला गंगा योजनाओं के निर्माण में सहायता मिल सकती है।

जिला गंगा समितियों को योजना निर्माण और गंगा संरक्षा तथा पुनरुत्थान के लिए पठनीय अन्य सामग्री खंड-5 में दी गयी है। ये इस हैंडबुक के निर्माण के दौरान इस्तेमाल की गयी पाठ सामग्री और आंकड़ों के स्रोत से संबंधित आलेखों को ढूंढने में सहायता कर सकते हैं।

संलग्नक 1 और संलग्नक 2 में जिला गंगा समितियों को जल-संबंधी समस्याओं की पहचान और आवश्यक हस्तक्षेप के लिए गंगा बेसिन के सामान्य जल संबंधी समस्याओं की सूची उपलब्ध कराई गयी है। इनका इस्तेमाल कर जिला गंगा समितियां जिला गंगा योजना के अंदर संभावित समस्याओं की पहचान और समस्याओं के आधार पर आवश्यक हस्तक्षेप को शामिल कर सकती हैं।

इस हैंडबुक से जिला गंगा समितियां क्या पाने की अपेक्षा रख सकती हैं:

- जिला गंगा योजना के निर्माण के लिए व्यावहारिक कदम दर कदम अनुदेशिका
- पूर्ण हो चुके जिला गंगा योजना से लिए गए उदाहरण पर आधारित सरल अनुदेश
- जल संबंधी सर्वसामान्य मुद्दे और उनका मुकाबला करने के लिए संभावित कार्यों की संग्रहीत सूची

1.2 इस हैंडबुक का प्रयोग कौन कर सकता हैं

इस हैंडबुक को जिला स्तर पर दो खास उद्देश्यों को ध्यान में रखकर बनाया गया है। पहला, जिला गंगा योजना के निर्माण के लि प्रबंधन संबंधी भूमिका और दूसरा, वास्तविक अभिलेख के निर्माण के लिए लागू करने की भूमिका।

पहला दायित्व जिला गंगा समिति का है जिसमें खास प्रशासनिक अधिकारी और जिले के प्राकृतिक संसाधनों के प्रबंधक शामिल होते हैं। जिला गंगा समिति को प्राधिकार द्वारा 2016 में जारी अधिसूचना के अनुरूप समय समय पर जिला गंगा योजना के निर्माण का कार्य सौंपा गया है। इस हैंडबुक में राज्य स्वच्छ गंगा मिशन (एसएमसीजी) और राष्ट्रीय स्वच्छ गंगा मिशन (एनएमसीजी) की जिम्मेदारियों को स्पष्ट किया गया है। यह जिला गंगा योजना के दायरा (Scope) और स्वरूप की स्पष्ट परिभाषा दी गयी है। इसके अंदर अपेक्षित परिणाम का खाका निर्मित किया गया है। साथ ही किस स्तर की व्याख्या अपेक्षित है उसे भी स्पष्ट किया गया है। इसमें अंशधारिकों के साथ विचार विमर्श की आवश्यकता को भी स्पष्ट किया गया है। इस प्रकार, यह हैंडबुक जिला गंगा समितियों को टास्क फोर्स के लिए विस्तृत टर्म्स ऑफ रेफेरेंस बनाने में मदद करता है जिन्हें वास्तविक जिला गंगा योजना तैयार करने की जिम्मेवारी सौंपी गयी है। इस संदर्भ में यह हैंडबुक जिला गंगा समितियों को प्रोजेक्ट शुरु करने, टास्क फोर्स के दिशा-निर्देशन, कार्य प्रगति की और अंततः राज्य स्वच्छ गंगा मिशन (एसएमसीजी) और राष्ट्रीय स्वच्छ गंगा मिशन (एनएममसीजी) की आवश्यकताओं के अनुरूप जिला गंगा योजना के मूल्यांकन में भी मदद करता है।

दूसरा दायित्व- लागू करने की जिम्मेवारी- इसका संबंध जिला गंगा योजना के निर्माण में संलग्न टीम की सहायता करना है। शायद इसमें जिला स्तर पर विभिन्न प्रकार के तकनीकी अधिकारियों का समूह शामिल होगा जो अलग अलग लाइन-विभागों से लिए गए होंगे। यह हैंडबुक जिला गंगा योजना के निर्माण के लिए सहायक पुस्तिका, मैनुअल, का काम करेगी। हर अध्याय में बताया गया है कि किस प्रकार क्रमबद्ध तरीके और परामर्शदातृ विधि से आवश्यक सामग्री का निर्माण किया जा सकता है। यह जिला गंगा योजना के सभी अवयवों के लिए चित्र और नक्शे तथा विस्तृत विषय सूची तैयार कर इच्छित परिणाम को प्राप्त करने की दृष्टि से उनका मानकीकरण करता है और उन्हें एक ठोस स्वरूप प्रदान करता है। इन अवयवों में भविष्य की परिकल्पना या दृष्टिकोण (vision) , खास समस्याओं का विश्लेषण, कार्ययोजना, नक्शे का विवरण, तालिका, आंकड़ों का संग्रह वगैरह शामिल हैं। इस प्रकार यह हैंडबुक जिला गंगा योजना के निर्माण में शामिल सभी व्यक्तियों तथा संस्थाओं के द्वारा इस्तेमाल किया जा सकता है, भले ही वे पूरे अध्याय को लिख रहे हों या सिर्फ एक मानचित्र बना रहे हों।

02 जिला गंगा योजना के निर्माण के सिद्धांत

खंड

यह हैंडबुक जिला गंगा समितियों की सहायता करता है औऱ जिला गंगा योजना के निर्माण में मदद करता है जो...

सरल

व्याहारिक, प्रभावकारी और संक्षिप्त होने के लिए जरूरी है किजिला गंगा योजना को वर्तमान में मौजूद संस्थागत संरचना और बजट संबंधी सीमाओं एवं उपलब्ध कर्मचारियों का उपयोग कर लागू किया जाना चाहिए। जटिल समाधानों के लिए बजट, दक्ष कर्मचारियों, प्रबंधना और सूचना व्यवस्था, मॉडलों और बजट के संदर्भ में विशाल संसाधनों की आवश्यकता होती है

प्रजातिगत लेकिन निश्चित

विभिन्न जिला गंगा योजनाओं के बीच समरुपता, समान गुणवत्ता स्थापित करने और योजनाओं के विकास को सुनिश्चित दिशा देने के लिए जिला गंगा योजनाओं के कुछ हिस्सों को प्रजातिगत होना आवश्यक है। लेकिन इसे स्वीकार किया जाता है कि पानी से संबंधित समस्याएं हर जिले के लिए विशिष्ट होते हैं।

सहक्रियाशील

यह महत्वपूर्ण है कि जिला गंगा योजना वर्तमान में चल रहे कार्यक्रम तथा योजनाएं सीधे सीधे वर्तमान में चल रही योजनाओं पर आधारित हों और उन्हें आगे बढ़ाएं, उनके पूरक के रूप में कार्य करें ताकि दोहराव से बचा जा सके। इनमें उप-बेसिन प्रबंधन योजना के साथ ही गंगा नदी बेसिन प्रबंधन योजना (GRBMP), शहरी नदी प्रबंधन योजना तथा अर्थ गंगा शामिल हैं।

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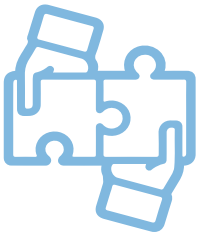
पर्यावरण की दृष्टि से जिम्मेवार

उन गतिविधियों को प्राथमिकता दें जो पारिस्थितिकी और पर्यावरण को कम से कम नुकसान पहुंचाएं। ऐसी गतिविधियों को बढ़ावा देने के लिए प्रकृति और पारिस्थितिकी आधारित पर्यावरण सहयोगी, ग्रीन तौर तरीकों का चुनाव आवश्यक है न कि धूसर ढांचागत विकास को।



सामाजिक रूप से समावेशी

उन गतिविधियों को प्राथमिकता देना जो समाज के सभी लोगों को लाभ में बराबर पहुंच सुनिश्चित करे। अपने सर्वोत्कृष्ट स्तर पर यह व्यक्तियों और समूहों के लिए उन परिस्थितियों को बढ़ावा देती है जो समाज में भाग लेने के लिए उन्हें प्रोत्साहित करती है। यह महिलाओं सहित समाज के पिछड़े और कमजोर वर्ग के लोगों को उनकी अपनी पहचान के आधार पर क्षमताओं, अवसर और आत्मसम्मान को आगे बढ़ाने में मदद करता है।

आर्थिक रूप से लाभप्रद और सतत

उन गतिविधियों को प्राथमिकता देना जो चक्रीय अर्थव्यवस्था को केंद्र में रख कर स्थानीय आबादी की आर्थिक स्थिति को सुधारने में मदद करें और जीविका के साधनों का निर्माण करे। स्थानीय संसाधनों से और बिना दीर्घकालीन तौर पर बाहरी आर्थिक सहायता के जिन कदमों को जारी रखा जा सकता है उन कदमों को प्रस्तावित करें। देखें मूल-सिद्धांत-1

जेंडर संवेदनशीलता

उन गतिविधियों को प्राथमिकता देना जो हर स्तर पर निर्णय की प्रक्रिया में महिलाओं की भागीदारी को बढ़ावा देते हैं। यह सुनिश्चित करता है कि महिलाओं के हित और उनकी जरूरतों की अनदेखी नहीं हो क्योंकि महिलाएं जल प्रबंधन में महत्वपूर्ण भूमिका निभाती हैं।

मापनीय

लागू किए गए कदमों के प्रभाव, जिला योजनाओं के लगातार सुधार और गलतियों को दोहराने से बचने के लिए तथा इनके मूल्यांकन और माप के लिए समेकित एम ऐंड ई योजना का इस्तेमाल

03 संदर्भ

खंड

3.1 गंगा नदी बेसीन प्रबंधन परियोजना (GRBMP) और गंगा तथा इसकी सहायक नदियों के पुनरुत्थान के लिए इसकी परिकल्पना- नियामक और राजनीतिक फ्रेमवर्क (जिला गंगा योजना का अध्याय 1.1)

गंगा नदी बेसिन प्रबंधन परियोजना है गंगा बेसिन की नदियों को उनकी संपूर्णता में पुनर्जीवित करना। पारिस्थितिकी स्वास्थ्य और बेसिन शासन सुनिश्चित करने के लिए अविरल और निर्मल धारा से संबंधित इसके मुख्य मिशनों ने गंगा की सभी सहायक नदियों के पुनरुत्थान, उनकी संरक्षा और प्रबंधन के लिए रूपरेखा प्रस्तुत की है। महत्वपूर्ण गतिविधियों को, बेसिन के स्तर पर समग्र परिकल्पना के लिए, स्थानीय और जिला के पैमाने पर लागू किया जाना आवश्यक है। जहां एक ओर जिला गंगा योजना की परिकल्पना जिला स्तर पर नदियों के पुनरुत्थान पर ध्यान केंद्रित करेगी, प्रत्येक नदी के लिए इसके उद्देश्य और परिणाम अलग अलग हो सकते हैं। हालांकि कुल मिला कर वे एक ही परिकल्पना को परिपुष्ट करेंगे।

प्राधिकार के 2016 की विज्ञप्ति के अनुसार गंगा बेसिन के हर जिले को जिला गंगा योजना बनाने को कहा गया था। योजना का संबंध उन जिलों में गंगा और इसकी सहायक नदियों के विस्तार था उनसे संबंधित नदीय क्षेत्र से था। योजना में जिला गंगा समिति द्वारा उन जिलों से लगे गंगा और इसकी सहायक नदियों तथा नदी की तलहटी क्षेत्र की संरक्षा, नियंत्रण और पर्यावरण प्रदूषण नियंत्रण संबंधी कार्यों को भी शामिल किया जाना शामिल था।

3.2 पूर्व में बेसिन क्षेत्र में किए गए इसी प्रकार के अन्य कार्य और जिला गंगा योजना से उनका जुड़ाव (जिला गंगा योजना, अध्याय 1.2)

गंगा के पुनरुत्थान का कार्य कई दशकों पहले शुरु हुआ था। सन् 2014में नमामि गंगे कार्यक्रम की शुरुआत की गयी थी। इस समेकित योजना का उद्देश्य प्रभावकारी प्रदूषण नियंत्रण, संरक्षा और गंगा नदी का पुनरुत्थान था। इस कार्यक्रम को लागू करने के लिए नोडल एजेंसी के तौर पर शुद्ध गंगा राष्ट्रीय मिशन (National Mission for Clean Ganga- NMCG) की स्थापना की गयी। शुरुआत में गंगा की मुख्य धारा को परिशुद्ध करने पर जोर दिया गया लेकिन कालक्रम में गंगा की अनेक सहायक नदियां भी गंभीर रुप से प्रदूषित हो गयीं जो कचरे को गंगा नदी में प्रवाहित करती थी। इसके मद्दे नजर कार्यक्रम को पूरे गंगा बेसिन को इसमें शामिल कर लिया गया।

इस फ्लैगशिप कार्यक्रम के तहत कई कार्यक्रम लागू किए जा चुके हैं। साथ ही कई योजनाएं और गाइडलाइंस भी लागू हुए हैं। जिला गंगा योजना के निर्माण के समय इन कार्यक्रमों के साथ सहजीविता को बढ़ावा दिया जाना चाहिए। अनावश्यक दुहराव और प्रयत्न से भी बचना चाहिए। जहां कहीं भी वर्तमान कार्यक्रमों के साथ दोहराव दिखाई दे, इसे संदर्भित किया जाना चाहिए। जिला गंगा योजना के निर्माण के दौरान ध्यान दिए जाने योग्य सबसे महत्वपूर्ण गतिविधियों की सूची नीचे दी गयी है।

जिला गंगा योजना (कार्य अवधि 2022-27) को उप-बेसिन प्रबंधन योजना (यानी रामगंगा नदी बेसिन प्रबंधन) के साथ जोड़ कर बनाया जाना चाहिए। इस विषय में अधिक जानाकरी बॉक्स 1 में देखें। साथ ही इसे व्यापक गंगा नदी बेसिन प्रबंधन योजना (GRBMP) के साथ भी जोड़ा जाना चाहिए जिसका निर्माण सात आईआईटी के साथ मिलकर शुद्ध गंगा राष्ट्रीय मिशन (National Mission for Clean Ganga NMCG) ने किया है। हालांकि व्यापक गंगा नदी बेसिन प्रबंधन योजना (GRBMP) के हर पहलू का सीधा संबध जिला गंगा योजना से नहीं है, लेकिन अविरल धारा और निर्मल धारा से संबंधित बेसिन सिद्धांतों को जिला गंगा योजना का भी मूल थीम अवश्य होना चाहिए।

बॉक्स 1- रामगंगा बेसिन प्रबंधन योजना (आरबीएम)

रामगंगा गंगा की सहायक नदी है। यह उत्तराखंड के कुछ हिस्सों और उत्तर-प्रदेश से होकर गुजरती है। संबंधित अधिकारियों और अंशधारकों को नदी बेसिन प्रबंधन (RBM) योजना (यहां उप बेसिन आरबीएम) से बेसिन के जल संसाधनों के प्रबंधन और टिकाउ, समेकित और समतामूलक ढंग से इस्तेमाल के लिए दिशा निर्देश प्राप्त होता है। इस प्रक्रिया में विभिन्न प्रकार के पर्यावरण और सामाजिक आर्थिक संदर्भों का भी खयाल रखा जाता है। इस प्रकार यह योजना सतह पर पाए जाने वाले और जमीन के अंदर पाए जाने वाले जल के इस्तेमाल की सीमा तय करता है। साथ ही जल की गुणवत्ता के न्यूनतम स्तर को भी परिभाषित करता है। बेसिन के स्तर पर यह जल संपदा से संबंधित केंद्रीय समस्याओं की पहचान भी करता है। साथ ही यह उनके समाधान के लिए आवश्यक कदम भी सुझाता है। गंगा बेसिन के लिए सभी नदी बेसिन प्रबंधन (आरबीएम) योजनाओं के दो प्राथमिक उद्देश्य हैं जिन्हें

1. अविरल धारा सुनिश्चित करने तथा
2. प्रदूषण विहीन प्रवाह सुनिश्चित करने के रूप में इकट्ठा किया गया है।

विभिन्न नदी बेसिन प्रवंधन योजनाओं के तहत सुझाए गए कदम अलग अलग और स्थान-विशिष्ट होंगे क्योंकि ये स्थानीय स्थितियों से संचालित होते हैं। जिला गंगा योजना के निर्माण के संबंध में नदी बेसिन प्रबंधन योजना उच्च स्तरीय संदर्भों के अनुरूप फ्रेमवर्क का निर्माण करता है और बेसिन के स्तर पर उद्देश्यों और प्राथमिकताओं का निर्धारण करता है।

गंगा नदी बेसिन के लिए अभी केवल रामगंगा से संबंधित नदी बेसिन प्रबंधन (आरबीएम) योजना का निर्माण कार्य चल रहा है।

जिला स्तर पर नदियों के पुनरुत्थान और संरक्षा से संबंधित कई अन्य योजनाएं चल रही हैं। इनमें जिला पर्यावरण योजना शामिल है जो पर्यावरण तथा प्रकृतिक संसाधनों की संरक्षा पर केंद्रित है। साथ ही यह जिला स्तर पर प्रदूषण के विभिन्न स्रोतों के नकारात्मक प्रभावों के मूल्यांकन, निगरानी और उन्हें दूर करने संबंधी गतिविधियों में भी संलग्न है। इसके अलावा जिला सिंचाई योजनाएं उपलब्ध जल संसाधनों को कुशल ढंग से इकट्ठा करने और उनके आबंटन, प्रदूषण नियंत्रण बोर्ड एक्शन प्लान के आधार पर जिले की नदियों में प्रदूषण को कम करने जैसे कार्य भी चल रहे हैं।

3.3 चालू वित्तीय स्कीम और परियोजनाएं

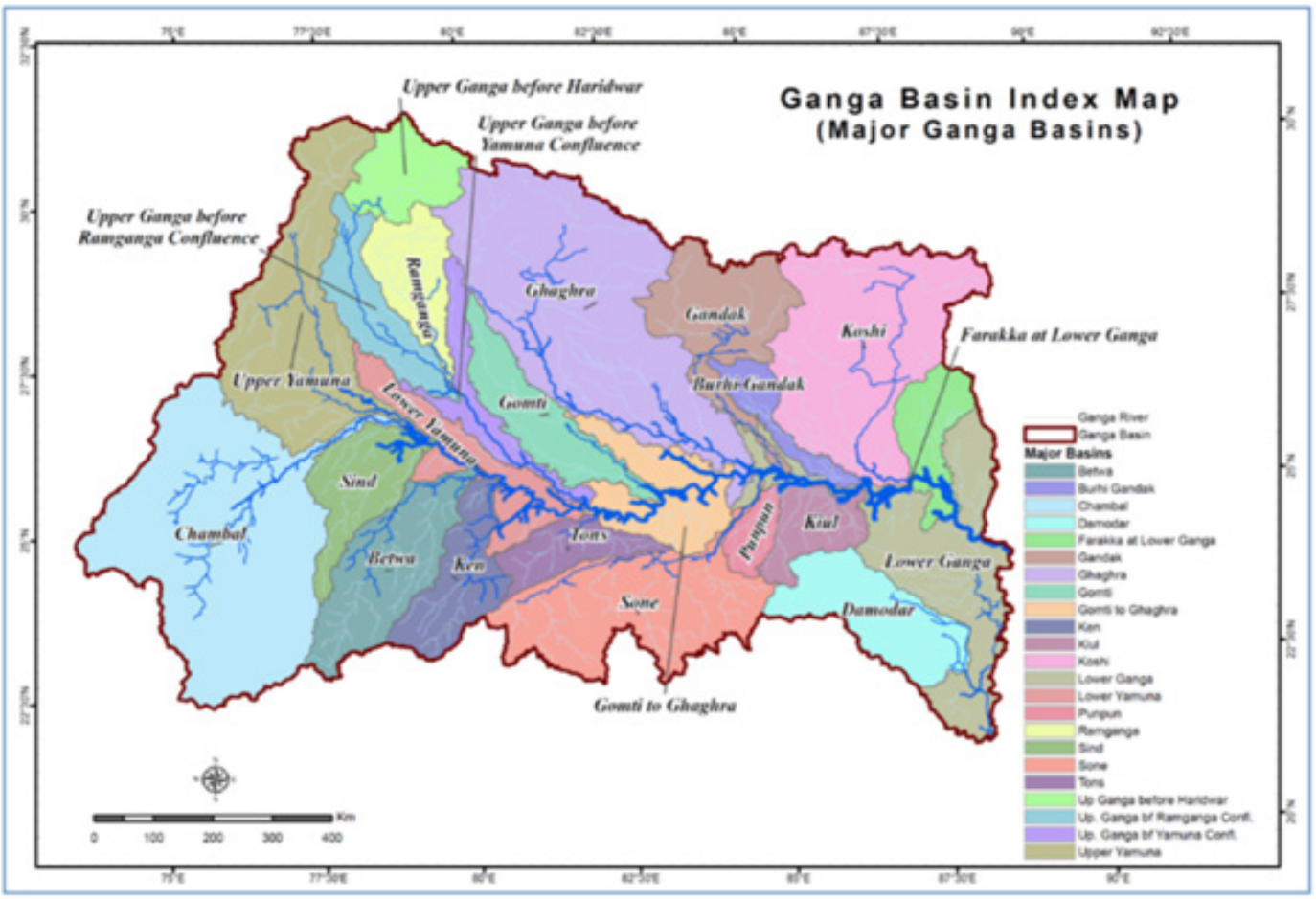
तालिका 1 में राज्य और जिला स्तर पर चालू स्कीम और परियोजनाओं का एक परिचय प्रस्तुत किया गया है जो जिला गंगा योजनाओं को वित्तीय सहायता प्रदान करती हैं। निर्दिष्ट गतिविधियों के लिए इन कार्यक्रमों की समीचीनता और उनकी अर्हता का परीक्षण अवश्य किया जाना चाहिए। (अधिक जानकारी के लिए हैंडबुक के अध्याय 2.8.3 को देखें)

तालिका 1.चालू वित्तीय स्कीम और परियोजनाएं

विभाग	चालू वित्तीय स्कीम और परियोजनाएं	थीम के अनुसार केंद्रीय तत्व- फोकस
जल शक्ति मंत्रालय	▪ जल जीवन मिशन ▪ जल शक्ति अभियान ▪ अटल भूजन योजना ▪ नमामि गंगे योजना ▪ राष्ट्रीय एक्वीफर मैपिंग प्रोग्राम ▪ भारत में भूजल को कृत्रिम ढंग से रिचार्ज करने का मास्टर प्लान ▪ स्वच्छ भारत मिशन (ग्रामीण)	सुरक्षित पेयजल, वर्षा जल को जमा करना और उसका संरक्षण, सामुदायिक नेतृत्व में भूजल प्रबधन की टिकाउ व्यवस्था, नदी प्रदूषण को रोकना, राष्ट्रीय नदी गंगा का पुनरुत्थान और संरक्षा,सभी एक्वीफर सिस्टमों की पहचान, वर्षाजल को इकट्ठा कर कृत्रिम रिचार्ज, चेक डैम, सफाई क्षेत्र का विकास
ग्रामीण विकास (MNREGA)	▪ महात्मा गांधी राष्ट्रीय ग्रामीण रोजगार गारंटी योजना (MGNREGS) ▪ राष्ट्रीय ग्रामीण आजीविका मिशन (NRLM)/ राज्य ग्रामीण आजीविका मिशन (SRLM)	महात्मा गांधी ग्रामीण रोजगार गारंटी योजना (MNREGA) के संसाधनों के इस्तेमाल की योजना और पारिस्थितिकी सेवाओं का विकास
जल संसाधन नदी विकास और गंगा संरक्षण विभाग	▪ अटल भूजल योजना	भूजल प्रबंधन
आवासन और शहरी कार्य मंत्रालय	▪ स्मार्ट शहर मिशन ▪ स्वच्छ भारत मिशन (शहरी) ▪ अटल नवीकरण और शहरी परिवर्तन मिशन (अमृत)	शहरों में मूल आधारभूत ढांचे का प्रबंध, साफ एवं सतत पर्यावरण, सार्वभौम स्वच्छता व्यवस्था और पेय जल उपलब्धता
नवीन और नवीकरणीय ऊर्जा मंत्रालय	▪ प्रधानमंत्री कुसुम (PM-KUSUM)	सौर कृषि पंपों की स्थापना और नवीकरणीय ऊर्जा का इस्तेमाल
सूक्ष्म, लघु एवं	▪ सौर चरखा मिशन	टिकाउ विकास, ग्रामीण आर्थिक विकास
पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय	▪ फसलों के अवशेष प्रबंधन के द्वारा किसानों के बीच पर्यावरण के प्रभावों का सामना करने के लिए क्षमता (climate resilience) का निर्माण ▪ जलवायु परिवर्तन के लिए राष्ट्रीय कार्य योजना	प्रदूषण नियंत्रण, फसलों के अवशेष को जलाने से पर्यावरण पर पड़ने वाले दुष्प्रभावों को रोकने, पारिस्थितिकी के सततपन में वृद्धि

3.4 बेसिन का विहंगम अवलोकन (जिला गंगा योजना, अध्याय 4.1)

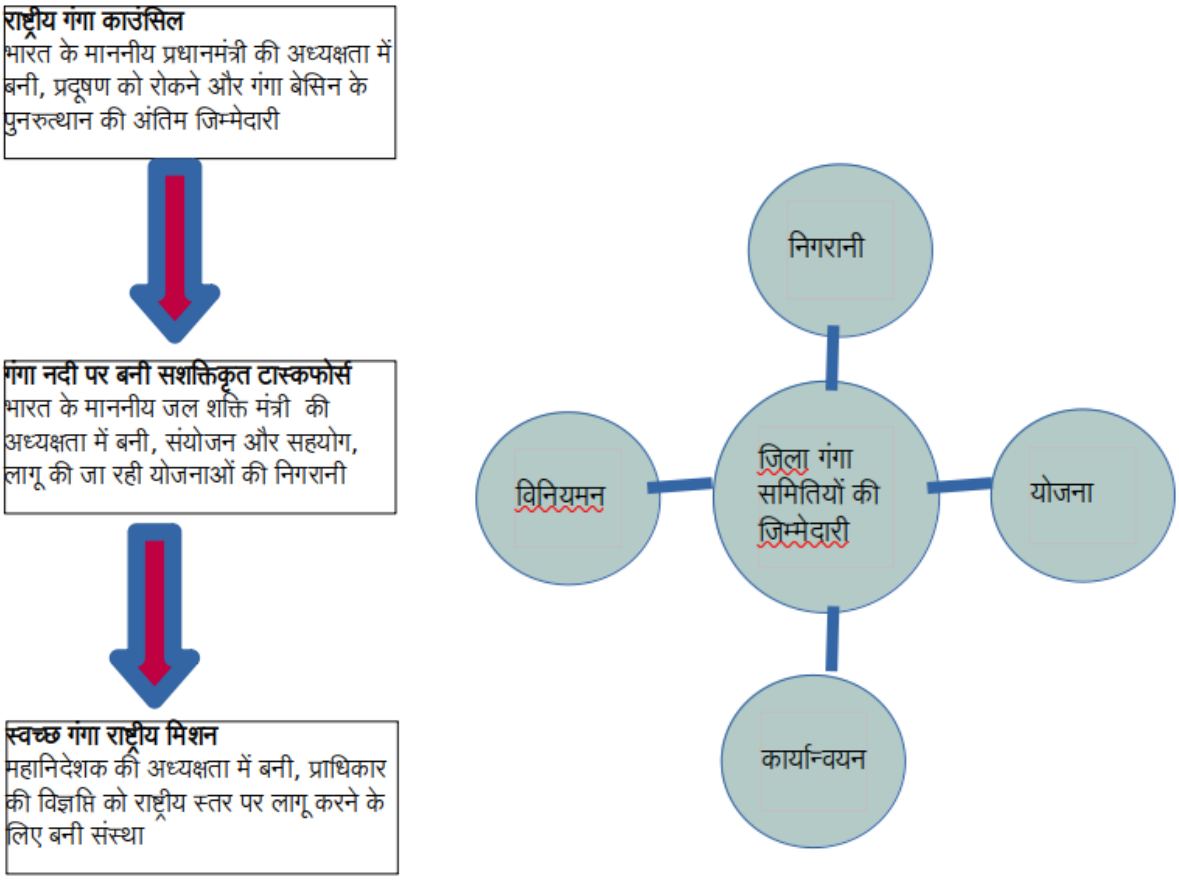
गंगा भारत की सबसे लंब नदी है। यह उत्तराखंड में स्थित पश्चिमी हिमालय से शुरु होती है। पहाड़ों से नीचे आने के बाद यह पूरब की ओर उत्तर भारत की गंगा घाटी से गुजरती है। इसके बाएं किनारे से मिलने वाली प्रमुख सहायक नदियां हैं- रामगंगा, गोमती, घाघरा, गंडकी और कोसी। इसके दाहिने किनारे से मिलने वाली प्रमुख सहायक नदियां हैं यमुना, सोन, पुनपुन और दामोदर। बाएं किनारे से मिलने वाली अनेक सहायक नदियां अपना अधिकांश जल नेपाल से ग्रहण करती हैं। फरक्का बराज से 18 किलोमीटर आगे चलकर गंगा बंगलादेश में प्रवेश करती है।



चित्र 1- गंगा बेसिन का मानचित्र

3.5 बेसिन संगठनो के प्रकार और उनकी भूमिका

गंगा को स्वच्छ बनाने और इसके पुनरुत्थान के लिए जल संसाधन, नदी विकास और गंगा पुनरक्षण मंत्रालय (जो अब जल शक्ति मंत्रालय के नाम से जाना जाता है) ने राष्ट्रीय, राज्य और जिला स्तर पर पांच-स्तरीय संरचना का निर्माण किया है। यह पांच स्तरीय संरचना सर्वोच्च स्तर पर प्रधानमंत्री से शुरु होकर जिला स्तर तक सभी अंशधारकों की भागीदारी सुनिश्चित करती है कि जहां इस योजना को वास्तविक तौर पर लागू किया जाता है। यह सभी अंशधारकों को एक स्थान पर इकट्ठा करती है ताकि एक समग्र दृष्टिकोण अपनाया जा सके।



04 जिला गंगा योजना निर्माण का रोडमैप

खंड

4.1 सामान्य विचार

4.1.1 भूमिका

अध्याय 4 में बताया जाएगा कि जिला गंगा योजना के प्रत्येक हिस्से को किस प्रकार व्यवस्थित, परामर्शपूर्ण तथा क्रमबद्ध ढंग से निर्मित किया जाएगा।

विस्तृत कार्यशैली (पैरा. 4.2) प्रस्तुत करने के पहले यह अध्याय जिला गंगा योजना के निर्माण के हर पहलू से संबंधित थीम का संक्षिप्त विवरण प्रस्तुत करेगा। साथ ही इसके क्रियान्वयन पर पड़ने वाले प्रभावों की भी चर्चा करेगा। इन थीमों में नदी बेसिन परियोजना तथा प्रबंधन चक्र, अंशधारकों की सहभागिता, जेंडर समावेशी दृष्टिकोण की आवश्यकता, अर्थ गंगा और आंकड़ों को जमा करने से संबंधित विषय शामिल हैं। जिला गंगा योजना के निर्माण और इसके सफल क्रियानव्यन के लिए आवश्यक हर पायदान पर इन थीमों पर ध्यानपूर्वक विचार करना आवश्यक होगा।

4.1.2 नदी बेसिन योजना और प्रबंधन चक्र

जिला गंगा योजना का सामान्य स्वरूप नदी बेसिन योजना तथा प्रबंधन चक्र से सुसंगत है। इसे राष्ट्रीय स्वच्छ गंगा मिशन (एनएमसीजी) द्वारा अपनाया गया है और नीचे इसका संक्षिप्त स्वरूप प्रस्तुत किया गया है।

गंगा का पुनरुत्थान एक लगातार चलने वाली जिम्मेवारी है। इसलिए, जिला गंगा योजना के विकास को वर्तुल प्रक्रिया के रूप में देखा जाता है जिसमें योजनाओं का निर्माण और उनका क्रियान्वयन किया जाता है, नयी सूचनाओं की विवेचना की जाती है, फीडबैक प्राप्त किया जाता है, प्राथमिकताओं को संशोधित किया जाता है और परिस्थितियों में परिवर्तन के अनुरूप योजनाओं में सुधार किया जाता है। इस चक्र को पांच या छह वर्ष के बाद दोहराया जाता है।

इस प्रक्रिया को 'अनुकूलनीय प्रबंधन' कहा जाता है। इसकी खास पहचान होती है लगातार प्राप्त हो रहे फीडबैक और प्राप्त सीखों के आधार पर प्रबंधन को बेहतर बनाने के लिए एक व्यवस्थित तथा संस्थागत प्रक्रिया। इसका उद्देश्य होता है लगातार बदलते हुए पर्यावरणीय तथा सामाजिक-आर्थिक परिस्थितयों के अनुसार अनुकूलन।

चित्र 1 में राष्ट्रीय स्तर पर नदी बेसिन योजना और प्रबंधन चक्र को दर्शाया गया है जो यूरोपीय संघ के वाटर फ्रेमवर्क निर्देश (2000/60/EC) की आवश्यकताओं और कार्यान्वयन दर्शन पर आधारित है। इस चक्र को जिला स्तरीय पैराग्राफ 4.2 में शामिल किया जाएगा।

चित्र 2- नदी बेसिन योजना तथा क्रियान्वयन चक्र

- नदी बेसिन योजना एवं प्रबंधन चक्र6. सम्पूर्ण नदी बेसिन / उपबेसिनी - राष्ट्रीय (प्रत्येक छः साल पर) अंतर्राज्यीय, के लिए प्रबंधन का निर्माण
- निगरानी नेटवर्क तथा कार्यक्रमों के डिजाइन की स्वीकृति7. नदी बेसिन प्रबंधन की परिभाषा - उद्देश्य और पूर्ण कार्यान्वयन की समय सीमा
- जल गुणपवत्ता का मूल्यांकन8. नदी बेसिन प्रबंधन के उद्देश्यों की प्राप्ति के लिए आवश्यक सोपानों (programme of measures - POM) का निर्माण
- प्रबंधन, क्रियान्वयन, मूल्यांकन तथा सुधार9. नदी बेसिन प्रबंधन योजना के अंग के रूप में POM की स्वीकृति और कार्यान्वयन.
- शासकीय एवं संयोजकीय तंत्र की स्पष्ट रूपरेखा10. नदी बेसिन प्रबंधन योजना की प्रभावशीलता का मूल्यांकन

4.1.3 हितधारक सहयोगिता

प्रभावी नीतिगत गतिविधि के लिए निर्णय कर्ताओं के व्यापक समूह, मुख्य पात्रो और संबंधित अंशधारकों के बीच विचार विमर्श आवश्यक होता है। इसलिए जिला गंगा योजना के प्रभावी क्रियान्वयन के लिए आवश्यक है निम्नलिखित समस्याओं पर लोगों के बीच सहमति का निर्माण हो-1. योजनावधि के दौरान किन समस्याओं को उठाया जाए 2. इन समस्याओं के पैदा होने के कारणों की पहचान 3. इनके समाधान का सर्वोत्कृष्ट तरीका यानि की उठाए जाने वाले कदमों की योजना- Plan of Measures (POM)

इसलिए जिला गंगा योजना के निर्माण के महत्वपूर्ण सोपानों पर अंशधारकों की सहयोगिता आवश्यक है। इनमें शामिल हैं-

- जल संबंधी समस्याओं की पहचान, वर्गीकरण और उनकी प्राथमिकताओं का निर्धारण।
- इस प्रबंधन चक्र में विचार किए जाने वाले समस्याओं का चुनाव।
- जल संबंधी इन समस्याओं की अवधारणात्मक समझ का विकास ताकि विश्लेषण की गुणवत्ता में वृद्धि हो और योजना को अपनाया जा सके।
- उठाए जाने वाले कदमों की पहचान और उनका चुनाव।
- क्रियान्वयन की प्रक्रिया पर आम सहमति का निर्माण

इसके बावजूद जिला गंगा योजना के समावेशीकरण और कारगर कार्यान्वयन के बीच संतुलन स्थापित करने की आवश्यकता है। आखिरकार, यह मान्यता का प्रबंधन संबंधी संसाधन विरल होते हैं, जिला गंगा समिति की अंशधारकों के साथ मिलकर काम करने की क्षमता पर भी लागू होती है।

इसीलिए अंशधारकों का चुनाव एक रणनीतिक महत्व का विषय है। इस प्रक्रिया में उन लोगों को प्राथमिकता दी जानी होगी जो व्यापक नेटवर्क में प्रभाव रखते हैं या जो समुदायों या व्यवसायों का प्रतिनिधित्व करते हैं। जिला गंगा योजना के विभिन्न चरणों में हितधारक भी अलग अलग होंगे। उदाहरण के लिए शुरुआती अवस्था में जब हमें जिले की जल संबंधी समस्याओं की पहचान और उनकी प्राथमिकताओं का निर्णय करना होगा तो उस समय एक व्यापक नजरिए की जरूरत होगी। बाद में चलकर जब हम कुछ चुने हुए समस्याओं पर ध्यान केंद्रित करेंगे तो एक सीमित दृष्टिकोण से विचार करना अधिक प्रभावकारी होगा। तालिका 1 में जिला गंगा योजना के निर्माण में अंशधारकों के चयन के आधार और उन अंशधारकों की संभावित जिम्मेदारियों के बारे में उदाहरण सहित बताया गया है। अंशधारकों की एक विस्तृत सूची संलग्नक 5.5 में दी गयी है जहां जिला गंगा योजना में उनकी सामान्य जिम्मेदारियों और अपेक्षित कार्यों के बारे में बताया गया है।

इसे स्वीकार किया जाता है कि घरेलू और छोटे स्तर पर जल प्रबंधन में महिलाओं की केंद्रीय भूमिका होती है लेकिन संस्थागत कारणों से उन्हें सहभागिता की प्रक्रिया में उचित प्रतिनिधित्व नहीं प्राप्त होता है। इसलिए अंशधारकों के साथ विचार विमर्श की प्रक्रिया में उनकी उचित भागीदारी सुनिश्चित करने के लिए हर तरह के प्रयास किए जाने चाहिए। (जेंडर समावेशी दृष्टिकोण के लिए नीचे दिया गया पैराग्राफ देखें)

तालिका 2.जिला गंगा योजना के निर्माण में शामिल किए जाने वाले संभावित अंशधारकों की अर्हता का प्रस्ताव और गंगा के पुनरुत्थान एवं इसकी संरक्षा में उनक भूमिका

S. No.	जिला गंगा योजना के निर्माण में शामिल किए जाने वाले संभावित अंशधारकों की अर्हता का प्रस्ताव	प्रमुख अंशधारकों के उदाहरण	जिला गंगा योजना में भूमिका
1	जल संबंधी मामलों के गवर्नेंस, आबंटन, जल नीति के निर्माण, आरबीएम संगठनों की स्थापना, आईडब्ल्यूआरएम प्रोजेक्ट के विकास, और जल के इस्तेमाल के लिए परमिट जारी करने वाली संस्थाएं जैसे की सरकारी मंत्रालय, विभाग और जिला, तालुका, तहसील और गांव के स्तर पर कार्य करने वाले सरकारी अधिकारी	सिंचाई एवं जल संसाधन विभाग	जिला गंगा योजने के निर्माण और इनके क्रियान्वयन की निगरानी। इस प्रक्रिया में जल संसाधनों से संबंधित परियोजनाओं, आबंटन, प्रबंधन, सिंचाई, नदी प्रबंधन, बाढ़ प्रबंधन जैसे मुद्दों पर ध्यान देना
		वन विभाग	सूचना प्रदान करना, जिला गंगा योजना के निर्माण और उनके कार्यान्वयन की निगरानी। इसके तहत वनों और विशेषकर पर्यावरण, वन्य जीवन और प्रजातियों के संरक्षण से जुड़े मुद्दों पर खास कर ध्यान दिया जाना।
		कृषि विभाग	सूचना प्रदान करना, जिला गंगा योजना के निर्माण और उनके कार्यान्वयन की निगरानी। कृषि कार्य, फसलों, कृषि संबंधी इनपुट और यंत्रों से जुड़े मुद्दों पर विशेष ध्यान देना।
		भूजल विभाग	सूचना प्रदान करना, जिला गंगा योजना के निर्माण और उनके कार्यान्वयन की निगरानी। भूजल दोहन, उनकी खोज, भूजल के स्तर की निगरानी, और विभिन्न जोन में उनके विभाजन संबंधी मुद्दों पर विशेष तौर पर ध्यान देना।
		राज्य प्रदूषण नियंत्रण बोर्ड	सूचना प्रदान करना, जिला गंगा योजना के निर्माण और उनके कार्यान्वयन की निगरानी। तरल अपशिष्ट, प्रदूषण और उद्योगों से संबंधित मुद्दों पर विशेष ध्यान देना।
		नगर निगम (शहर के म्यूनिसिपल कॉरपोरेशन)	सूचना प्रदान करना, जिला गंगा योजना के निर्माण और उनके कार्यान्वयन की निगरानी। ठोस अपशिष्ट, शहरों में भूमि अतिक्रमण, गैर-कानूनी ढंग से कचरा फेकने जैसे मुद्दों पर विशेष रूप से ध्यान देना।

S. No.	जिला गंगा योजना के निर्माण में शामिल किए जाने वाले संभावित अंशधारकों की अर्हता का प्रस्ताव	प्रमुख अंशधारकों के उदाहरण	जिला गंगा योजना में भूमिका
2	जल के मुख्य उपयोगकर्ताओं के प्रतिनिधि	जल संबंधी कार्य करने वाली संस्थाएं (वाटर यूटिलिटीज)	आंकड़ों की डिलीवरी, सुझाए गए हस्तक्षेपों और निर्दिष्ट उद्देश्यों का क्रियान्वयन
		किसान	
		उद्योग	
		गाड़ी धोने वाले केंद्र, वर्कशॉप	
		व्यापारिक केंद्र	
		वन्य-जीवन पार्क	
		मत्स्यपालन केंद्र	
		घर-परिवार (हाउसहोल्ड)	
		नौपरिवहन	
		पर्यटन	
3	वैसे अंशधारक जिनका प्रमुख जल प्रदूषकों के साथ अच्छा नेटवर्क हो जिनमें ठोस कचरा, तरल अपशिष्ट, औद्योगिक कचरा और मेडिकल कचरा भी शामिल है।	जिला स्तर के शहरों के प्रतिनिधि	आंकड़ों की डिलीवरी, सुझाए गए हस्तक्षेपों और निर्दिष्ट उद्देश्यों का क्रियान्वयन, क्षमता निर्माण और जन जागरूकता कार्यक्रमों में योगदान
		छोटे शहर, गांव, उद्योंगों के प्रतिनिधि।	
		कृषि संगठन	
		सामुदायिक नेता	
4	जल गुणवत्ता एवं प्रदूषकों के विशेषज्ञ	शोध संस्थाएं	जल की गुणवत्ता एवं उनके स्रोत, एवं प्रदूषण के प्रकार के बारे में आंकड़ों की डिलीवरी, नवाचारी हस्तक्षेपो और सुनिश्चित मुद्दों के लिए सुझाव
		विश्वविद्यालय	
		स्थानीय जल विभाग	

S. No.	जिला गंगा योजना के निर्माण में शामिल किए जाने वाले संभावित अंशधारकों की अर्हता का प्रस्ताव	प्रमुख अंशधारकों के उदाहरण	जिला गंगा योजना में भूमिका
5	समाज क प्रतिनिधि	डब्ल्यू डब्ल्यू एफ इंडिया	जिला योजनाओं के लिए आंकड़ों की डिलीवरी, हस्तक्षेपों और सुनिश्चित लक्ष्यो के बारे में सलाह, जिला योजना के लिए क्षमता निर्माण और प्रशिक्षण के साथ साथ मुरादाबाद जिल के लिए कार्य।
		अर्थवॉच	
		वॉटएएड	
		स्थानीय एवं नदी के किनारे बसने वाले समुदाय	
		जल उपभोक्ता संगठन	
6	शैक्षणिक एवं सार्वजिनक सूचना संबंधी गतिविधियों में शामिल अंशधारक जो वर्षाजल संचयन , भूजल रिचार्ज, प्रबंधित एक्वीफर रिचार्ज, बाथरुमों के लिए सोक-पिट बनाने, किचन से निकलने वाले गंदे पानी के शुद्धिकरण जैसी गतिविधियों को प्रोत्साहित करने में शामिल हैं या जन-जागरूकता अभियान, सूचना, शिक्षा एवं संचार (आईईसी) कार्यक्रमों, सेमिनार, वर्कशॉप, स्कूलों में आयोजने जैसे कामों में संलग्न है	शैक्षणिक संगठन एवं मीडिया	जल एवं अपशिष्ट जल प्रबंधन के बारे में जागरूकता फैलाने एवं क्षमता निर्माण का कार्य

4.1.4 जेंडर समावेशी दृष्टिकोण की आवश्यकता

जेंडर समानता का अर्थ होता है औरतों, पुरुषों, लड़के लड़कियों सहित सभी कमजोर वर्गों के लिए समान अधिकार, जिम्मेदारी और अवसर। समावेशी का अर्थ होता है सभी लोगों के दृष्टिकोणों और जरूरतों की स्वीकृति तथा उनका समाधान, भले ही उनका जेंडर जो भी हो। साथ ही व्यवस्था और इसकी प्रक्रियाओं में उनकी समानता सुनिश्चित करना भी जेंडर समानता की परिभाषा में शामिल है।

जेंडर, सामाजिक समावेशन और समानता सुरक्षित तथा स्वस्थ समाज तथा आर्थिक समृद्धि की दृष्टि से अत्यंत महत्वपूर्ण हैं। यह नदी बेसिन प्रबंधन की दृष्टि से और भी महत्वपूर्ण है जिस प्रक्रिया में घरेलू तथा कृषि संबंधी उपयोग के लिए जल की उपलब्धता, प्रबंधन और सुरक्षा की दृष्टि से खास तौर पर महत्व रखता है। साथ ही, महिलाओं को दुर्व्यवहार, आक्रमण तथा खराब स्वास्थ्य का खतरा भी अधिक रहता है जो सुरक्षित ढंग से प्रबंधित जल, स्वच्छता और सफाई (WASH- Water, Sanitation and Hygiene) सुविधाओं के अभाव में उनके काम करने, अध्ययन और सम्मानपूर्वक जीवन जीने की क्षमता पर भी बुरा प्रभाव डालता है। जो समाज सभी जेंडरों को समान रूप से मूल्यवान समझता है वह अधिक सुरक्षित और स्वस्थ होता है।

हालांकि जेंडर समानता मानवाधिकार और सतत विकास उद्देश्यों (Sustainable Development Goals- SDG5) में शामिल है, महिलाओं तथा अन्य कमजोर वर्गों को आज भी जल-प्रबंधन संगठनों, निर्णय करने वाले अवसरों और क्रियाकलापों में उचित प्रतिनिधित्व प्राप्त नहीं हुआ है। इसके लिए डब्लिन प्रिंसिपुल जैसी वैश्विक संस्थाओं ने भी आह्वान किया है जो जल-प्रबंधन में महिलाओं की केंद्रीय भूमिका की स्वीकृति, उपयोग और उन्हें महत्व देने की मांग करती हैं। इस प्रकार जल संसाधन/ नदी बेसिन प्रबंधन जेंडर संवेदनशील नजरिए की मांग करती है जो व्यवस्थागत परिवर्तनों को सुनिश्चित करे ताकि समुदायों को बेहतर आर्थिक तथा पर्यावरणीय लाभ मिल सकें। (ग्लोबल वाटर पार्टनरशिप 2021)[1]

जिला गंगा योजना में जेंडर संवेदनशील नजरिए को बढ़ावा देना

जेंडर संवेदनशील सहभागी दृष्टिकोण महिलाओं की भागीदारी बढ़ाने के रास्ते में आने वाली अनेक कठिनाइयों को स्वीकार करता है और इन्हें दूर करने के लिए व्यवस्थाओं का निर्माण करता है। इस प्रक्रिया में पुरुषों और महिलाओं के अलग अलग अनुभवों पर विशेष ध्यान दिया जाता है जो उनकी राय, चिंताओं, जरूरतों और प्राथमिकताओं में परिलक्षित होती हैं। यह साथ मिलकर या अलग अलग महिलाओं सहित सभी जेंडरों की सहभागिता को बढ़ावा देता है। यह लिंग के आधार पर बांट कर बनाए आंकड़ों का इकट्ठा करने और सभी लोगों की राय को जमा करने का एक बेहतरीन तरीका है। सहभागिता में इस्तेमाल किए जाने वाले तरीके, जैसे कि सामाजिक मैपिंग, धन के आधार पर रैंकिंग, वेन डायग्राम का इस्तेमाल और विभिन्न वर्गों के लोगों को एक साथ लेकर की जाने वाली यात्रा (Transect Walks) की जाने गरीब, हाशिए के लोगों और निरक्षर व्यक्तियों (खासकर महिलाओं) की दृष्टि से सर्वाधिक उपयुक्त है क्योंकि इन तरीकों के इस्तेमाल से उन्हें समस्याओं को समझने और उनका मानसिक खाका बनाने, एक दूसरे के साथ संवाद स्थापित करने, विकल्पों की तुलना और निर्णय करने में मदद मिलती है।[2]

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[1] Global Water Partnership 2021: Advancing towards gender mainstreaming in water resources management (https://www.gwp.org/globalassets/global/activities/act-on-sdg6/advancing-towards-gender-maintreaming-in-wrm---report.pdf)

[2] Guidelines for participatory gender sensitive approaches. - Prepared by Min Bdr. Gurung and Brigitte Leduc Nov 2009 - ICIMOD

अर्थपूर्ण सहभागिता संभव है

...अगर महिलाओं को सूचना उपलब्ध हो

...अगर वे अपनी राय जाहिर करती हैं

...जब उनकी राय सुनी जाती है और उनपर चर्चा की जाती है

...जब वे स्पष्टीकरण के लिए सवाल पूछती हैं,

...जब वे निर्णय लेने की प्रक्रिया को प्रभावित करती हैं

...जब निर्णय लेने की प्रक्रिया में उनकी चिंताओं को शामिल किया जाता है

समुदाय, खासकर महिलाओं के साथ किसी भी प्रकार की कार्ययोजना बनाने या उनके साथ विचार विमर्श करने के पहले नीचे दी गयी बाधाओं को पहले जांच लें। वैसे तो महिलाओं और समाज के अन्य कमजोर वर्गों के पास जल संसाधनों के प्रबंधन का व्यापक अनुभव होता है और वे पानी के घरेलू इस्तेमाल, जलमल के निष्पादन, जल प्रदूषण के नियंत्रण, जल तथा स्वच्छता, कृषि उत्पादन और खाद्य सुरक्षा के बारे में गहरा अनुभव रखते हैं, फिर भी विकास और प्रकृतिक संसाधनों के प्रबंधन की प्रक्रिया में महिलाओं और अन्य कमजोर वर्गो की सहभागिता सुनिश्चित करने के क्रम में अनेक बाधाएं आती हैं।

सार्वजनिक सभाओं तथा निर्णय की प्रक्रिया में महिलाओं की सहभागिता सुनिश्चित करने में आने वाली बाधाएं

- अज्ञान और निरक्षरता जिसे महिला और पुरुष और अधिक पुष्ट करते हैं
- खुलकर बोलने वाली महिलाओं द्वारा झेली जाने वाली आलोचना, उनके प्रति दुष्टतापूर्ण नजरिया और उनका मजाक उड़ाया जाना।
- विकास कार्यों में लगे लोगों और समुदाय के सदस्यों का अविश्वास
- परंपरागत भूमिका और सत्ता का विभाजन
- सूचना और संसाधनों पर पुरुषों का एकाधिकार
- सभाएं जिन स्थानों और समय पर आयोजित की जाती हैं वे महिलाओं के लिए उपयुक्त नहीं होते
- सभाएं गैर-स्थानीय भाषा में संचालित होती हैं।
- आर्थिक संसाधनों पर नियंत्रण का अभाव या पहुंच की कमी।
- महिलाओं के बीच एकता का अभाव या समुदाय के बीच आपसी संघर्ष
- महिलाओं को सफल होने के लिए पड़ने वाला अनुचित दवाब
- आत्म विश्वास और आत्म सम्मान की कमी
- अधिकारों के बारे में जानकारी का अभाव

जिला गंगा योजना में अपनाए जाने वाले जेंडर-संवेदी दृष्टिकोण के तरीके

- अपने जिला गंगा योजना में विभिन्न हस्तक्षेपों के अंदर जेंडर-समावेशी परिणामों, उत्पादों तथा लक्ष्यों को शामिल करें
- जेंडर संबंधी जो अवरोध क्षमताओं और उत्पादकता को अवरुद्ध करते हैं उन्हें दूर करने की कोशिश करें। (ऊपर महिलाओं की सहभागिता के मार्ग में आने वाले अवरोधों की सूची देखें।)
- जेंडर संवेदी अवरोधों की सर्वव्यापक परिस्थितिमूलक विवेचना करें जिसमें जेंडर पर आधारित आंकड़े शामिल हों। साथ ही इनमें जेंडर आधारित अवरोध, जरूरतों और प्राथमिकताओं को भी शामिल किया जाना चाहिए।
- प्रोजेक्ट को बनाते समय सभी अंशधारकों के साथ विचार विमर्श सुनिश्चित करें। इनमें महिलाओं तथा अन्य कमजोर वर्ग के लोगों को शामिल किया जाना चाहिए।
- जेंडर संबंधी विषमताओं और अवरोधों की पहचान के लिए विस्तृत जेंडर तथा सामाजिक विवेचना करें जिन्हें कार्ययोजना के द्वारा दूर करने की कोशिश की जाएगी। यह भी सुनिश्चित करें कि आपकी कार्ययोजना संसाधनों, सेवाओं तथा अवसरों तक पहुंच को जेंडर की दृष्टि से संतुलित बनाए।
- सामुदायिक स्तर पर समावेशी निर्णय प्रक्रिया को बढ़ावा दें।
- प्रोजेक्टों को सतत बनाने के लिए सामुदायिक स्वामित्व को बढ़ावा दें।
- सुनिश्चित करें कि प्रोजेक्ट के हितधारक जेंडर संवेदनशीलता से लैश हों। प्रोजेक्ट को डिजाइन करने और उनके कार्यान्वयन के पहले यह सुनिश्चित करें की इसके अंशधारकों को अगर इस क्षेत्र की जानकारी नहीं हो तो जेंडर संवेदी समावेशी दृष्टिकोण विकसित करने के लिए उनकी क्षमता में वृद्धि की जानी चाहिए या जिला कार्ययोजना में इसे शामिल किया जाना चाहिए।
- जेंडर संवेदनशीलता बढ़ाने के लिए और जेंडर जागरूकता में वृद्धि के लिए उन संस्थाओं को मजबूत किया जाना चाहिए जो जिला कार्ययोजना का निर्माण और उनका कार्यान्वयन करती हैं।
- सामान्यीकृत अवधारणाओं और भाषा जैसे 'किसान,' 'व्यापारी,' 'जल प्रयोगकर्ता', 'समुदाय' का इस्तेमाल करने से बचें। इसके बदले जिनके बारे में चर्चा हो रही है उन्हें ठोस रूप से इंगित करें जैसे कि 'महिला किसान', 'पुरुष व्यापारी,' 'पुरुष गड़ेरिए,' 'जल का इस्तेमाल करने वाली महिलाएं', 'धनी महिलाएं,' इत्यादि।
- पुरुषों और महिलाओं की राय, नजरिए, अनुभवों और अपेक्षाओं के बीच अंतर को रेखांकित करने का प्रयत्न करें।
- कार्ययोजना के कार्यान्वयन के पहले प्रोजेक्ट के विभिन्न जेंडर समूहों पर पड़ने वाले प्रभावों की निगरानी और मूल्यांकन करें।
- प्रचार सामग्री के निर्माण के दौरान तस्वीरों के चयन में जेंडर संवेदनशीलता का ख्याल रखें।
- कोशिश करें कि अलग अलग जेंडर समूहों के लिए लिखित या उनके प्रति इंगित सामग्री में वे समान रूप से दिखाई दें। यह अन्य चीजों के अलावा फॉर्म, अभिलेख, टेलिफोन डायरेक्टरी, इंट्रानेट और इंटरनेट पर उपलब्ध करायी गयी सामग्री, कार्यक्रमों के विज्ञापनों, फोल्डरों, पोस्टरों पर भी लागू होती है।

उधमसिंहनगर और शाहजहांपुर में किए गए फोकस्ड ग्रुप डिस्कशन (एफजीडी) से प्राप्त मुख्य सीखें

कल्याणी नदी रामगंगा की सहायक नदी है। यह उधमसिंह नगर के पूरे शहरी क्षेत्र के लिए पेयजल की आपूर्ति करती रही है। लेकिन इसका जल इतना प्रदूषित हो चुका है कि पीने के जल के रूप में अब इसका इस्तेमाल नहीं किया जा सकता। इससे स्थानीय समुदायों खासकर महिलाओं के बीच गहरी चिंता छा गयी है क्योंकि वे ही घरेलू इस्तेमाल के लिए पानी की व्यवस्था करती हैं। वर्तमान में सभी प्रकार का औद्योगिक कचरा, प्लास्टिक तथा नालियों का पानी इस नदी में गिराया जाता है।

लोगों से विचार विमर्श की प्रक्रिया के दौरान इस बात का खयाल रखा गया कि पुरुषों और स्त्रियों को बराबर संख्या में शामिल किया जाए। हालांकि शाहजहांपुर की महिला किसानों (कुल किसानों का 49 प्रतिशत) के बीच जेंडर संवेदनशीलता और समावेशी दृष्टिकोण की कमी दिखाई दी, वे विचार विमर्श की प्रक्रिया में शामिल होने को उत्सुक थी। वे बातचीत में काफी अच्छे ढंग से अपनी बात रख पा रही थी। लेकिन शाहजहांपुर में होने वाली विचार विमर्श की प्रक्रिया के दौरान जब पुरुषों और स्त्रियों को एक साथ रखा जाता था तो वे कम सक्रिय दिखाई देती थी। लेकिन केवल महिला किसानों को लेकर आयोजित की जाने वाली बैठकों में वे काफी मुखर तथा सक्रिय रहती थीं। महिलाओं के मुद्दों पर चर्चा करने के दौरान उन्हें उत्साहपूर्वक भाग लेने के लिए बढ़ावा देने हेतु बेहतर होगा कि ऐसी बैठकों में केवल महिलाओं को शामिल किया जाए। सबों से वास्ता रखने वाले मुद्दों पर बातचीत के लिए अलग से एफजीडी आयोजित की जा सकती है। महिलाओं के इस समुदाय में सभी वर्गों से लोगों को शामिल किया जाना चाहिए जिनमें कमजोर वर्गों की महिलाओं जैसे कि अकेली महिला द्वारा चलाए जा रहे परिवार की मुखिया, विकलांग महिला आदि को शामिल किया जाना चाहिए। अगर विचार विमर्श में शामिल सीएसओ, एनजीओ तथा सामुदायिक समूह जेंडर संवेदना से युक्त हों अथवा उन्हें जेंडर समावेशी नजरिया अपनाने को प्रेरित किया जाए, तो इससे भी मदद मिलती है। मजे की बात थी कि विचार विमर्श की प्रक्रिया के दौरान केवल महिलाओं ने अगली पीढ़ी के लिए भविष्य में जल की उपलब्धता के बारे में चिंता जाहिर की।

4.1.5 अर्थगंगा के साथ संपर्क

गंगा नदी में प्रदूषण को और कम करने, इसकी संरक्षा और पुनरुत्थान के लिए सरकार ने 2019 में अर्थगंगा मॉडल की स्थापना की। इस मॉडल में सतत विकास की परिकल्पना की गयी है जिसके तहत गंगा की सफाई और इसके पुनरुत्थान के लिए आर्थिक गतिविधियों पर विशेष ध्यान केंद्रित किया गया है। यह लोगों तथा नदी के बीच संबंध को सुदृढ़ करने की दृष्टि से अपनाया गया है जो इन हस्तक्षेपों के आर्थिक सततपन को सुनिश्चित करेगा। इसलिए जहां भी संभव हो, कार्ययोजना के निर्माण के दौरान अर्थगंगा के साथ इसे जोड़ने का खयाल रखा जाना चाहिए।

अर्थ गंगा के तहत छह मुख्य स्तंभों पर ध्यान केंद्रित किया गया है।

- जीरो बजट प्राकृतिक खेती जिसके तहत नदी के दोनों किनारों पर दस किलोमीटर के दायरे में रासायनिक खाद मुक्त खेती की जाएगी। गोबरधन योजना के तहत गोबर को खाद के रूप में इस्तेमाल किए जाने को बढ़ावा दिया जाएगा।
- संस्कृति, विरासत और पर्यटन- नौका पर्यटन, साहसपूर्ण खेल और योग संबंधित गतिविधियों का आयोजन
- नाली के कचरे और जलमल के आर्थिक इस्तेमाल को प्रोत्साहन जिसके तहत साफ किए गए पानी का इस्तेमाल सिंचाई, उद्योग आदि में कर स्थानीय शहरी निकायों के लिए पैसा कमाने के अवसर पैदा किए जाएं।
- हाट लगा कर उस क्षेत्र में रहने वाले लोगों के लिए रोजगार पैदा करने के अवसर दिए जाएं। इन हाटों में वे औषधीय गुणों वाले पौधे तथा आयुर्वेदिक उत्पादों और अन्य स्थानीय सामानों को बेच सकते हैं।
- गंगा नदी के विकास और इसे सतत बनाए रखने की प्रक्रिया में आर्थिक सहयोग और निर्भरता का प्रयोग कर जनता की भागीदारी सुनिश्चित करना।
- स्थानीय प्रशासन को जल की गवर्नेंस प्रक्रिया में सशक्तिकृत कर संस्थागत निर्माण को प्रोत्साहन देना।

4.1.6 आंकड़ा संचयन

जिला गंगा योजना के तीन विभिन्न सोपानों पर आंकड़ों के संचयन की जरूरत होती है।

पहला सोपान जिले की जल संपदा के सामान्य विवरण के समय उपस्थित होता है। (अध्याय 4) इस अध्याय में कुछ मानचित्र दिए गए हैं जो सार्वजनिक क्षेत्र में उपलब्ध स्रोतों तथा सुप्रतिष्ठित संस्थानों से लिए गए हैं। ये मानचित्र पूरे गंगा बेसिन को कवर करते हैं और ये आंकड़ों के संश्लेषण तथा विश्लेषण के बारे में मानकीकृत तरीकों पर आधारित हैं। इनमें से एक महत्वपूर्ण स्रोत है इंडिया वाटर रिसोर्सेज इंफोर्मेशन सिस्टम (https://indiawris.gov.in/wris/#/). इन आंकड़ों और इनकी परतों को समय समय पर आवश्यकतानुसार अद्यतन बनाया जाता है इसलिए एक क्षेत्र से लिए गए आंकड़ों की अलग अलग अवधियों के दौरान तुलना करना संभव होता है। इससे पता चलता है कि समय के साथ किस तरह हाइड्रोलॉजिकल आंकड़ों और जल संसाधनों से संबंधित मापदंड बदलते रहे हैं। संलग्नक 6.4 में जीआईएस लेयर्स की पहचान और इनके इन्हें डाउनलोड करने की विस्तृत जानकारी दी गयी है।

दूसरे सोपान के दौरान जमा किए गए आंकड़े (अध्याय 7 में दिया गया सिचुएशन एनेलेसिस) जिले के हिसाब से और प्रबंधन चक्र के अनुसार बदलता रहता है। हमें किन आंकड़ों की जरूरत होगी इसकी ठीक ठीक पहचान तभी संभव होगी जब हर जिले की विस्तृत सूची (इन्वेंट्री) बनायी जाएगी। ये आंकड़े जिले के अंदर खास खास स्रोतों से ही पैदा होंगे जिन्हें प्राथमिकता समस्याओं की प्राथमिकता को ध्यान में रखकर जमा किया जाएगा। इन आंकड़ों की गुणवत्ता और स्पष्टता जिलेवार और समस्याओं के आधार पर बदल सकती हैं। इस सोपान के लिए आंकड़ों को इकट्ठा करने का खाका संलग्नक 6.2 में दिखाया गया है।

आंकड़ों के संचयन की अंतिम कड़ी विस्तृत कार्ययोजना के निर्माण के समय उपस्थित होती है (अध्याय 8)। आंकड़ों को जमा करने के समय खास कोशिश की जाएगी की ये चुने हुए तरीकों को डिजाइन और उन्हें मापने की जरूरत को पूरा करें। आंकड़ों की जरूरत तात्कालिक और विशिष्ट होगी। आंकड़ों को जमा करने का यह सोपान अंतिम डिजाइन निर्माण की अवस्था के दौरान शुरु होगा। इस फेज में आंकड़ों को इकट्ठा करने के लिए किसी भी प्रकार का खाका उपलब्ध नहीं कराया गया है। इसके अलावा, केंद्रीय तथा राज्य सरकारों के विभागों और संगठनों के कई वेबसाइट हैं जहां से जिले/प्रखंड/स्थान से संबंधित निम्नलिखित आंकड़े इकट्ठा किए जा सकते हैं-

- जल संसाधनों की अवस्था (SW तथा GW)
- जल संसाधन ढांचागत व्यवस्था- इंफ्रास्ट्रक्चर
- जल प्रदूषण तथा स्रोत
- भूमि का उपयोग और बदलाव
- बारिश, तापमान
- मिट्टी का प्रकार
- कृषि का पैटर्न
- h. STP तथा ETPs

4.2 भूमिका तथा कार्यप्रणाली

4.2.1 जिला गंगा योजना की विषय सूची

जिला गंगा योजना की मुख्य संरचना नीचे विषय सूची में दी गयी है।

खंड A

भूमिका

1 गंगा नदी बेसिन प्रबंधन योजना (GRBMP) और गंगा तथा इसकी सहायक नदियों के पुनरुत्थान के बारे में इसकी परिकल्पना।

1.1 गंगा नदी बेसिन प्रबंधन योजना (GRBMP) और गंगा तथा इसकी सहायक नदियों के पुनरुत्थान के बारे में इसकी परिकल्पना।

1.2 पूर्व में किए गए इस प्रकार के कार्य तथा जिला गंगा योजना पर इसके प्रभाव

2 परिकल्पना तथा कार्यसीमा (स्कोप)

3 सामान्य नजरिया तथा कार्यप्रणाली

खंड B

जैव-भौगोलिक तथा गैर जैव-भौगोलिक संदर्भ

4 जिले की जल संपदा

4.1 बेसिन का सिंहावलोकन

4.2 जिले का सिंहावलोकन

4.3 भौगोलिक स्थिति और जल निकास नेटवर्क

4.4 जलवायु

4.5 नदी बेसिन

4.6 जल की गुणवत्ता

4.7 जमीनी क्षेत्र और जमीन का इस्तेमाल

4.8 संरक्षित क्षेत्र तथा पर्यावरणीय संसाधन

4.9 सामाजिक-आर्थिक विशिष्टताएं

5 जिले की संस्थागत व्यवस्था

5.1 राष्ट्रीय स्वच्छ गंगा मिशन(एनएमसीजी), राज्य स्वच्छ गंगा मिशन (एसएमसीजी) तथा जिला गंगा मिशन (डीजीसी)

5.2 मुख्य हितधारक

5.3 चालू नीतियां तथा कार्यक्रम

खंड C

मूल्यांकन तथा इस योजना चक्र के मुख्य समस्याओं की व्याख्या

6 पिछली योजनावधि के दौरान उपलब्धियों का सारांश

7 इस प्रबंधन चक्र के दौरान प्राथमिकता दिए जाने वाले समस्याएं, दूर की जाने वाली खामियां

7.1 परिस्थितियों की व्याख्या (Situational Analysis), मुख्य समस्याएं तथा चालू कार्यक्रम

7.2 कमियों की व्याख्या सहित चुनिंदा समस्याएं तथा चिह्नित लक्ष्य

खंड D

कार्ययोजना तथा निगरानी योजना तथा कार्यान्वयन

8 विस्तृत कार्ययोजना

8.1 चुने हुए कार्यों के लिए कार्ययोजना तथा चिह्नित लक्ष्य

8.2 निगरानी तथा मूल्यांकन की क्रियाविधि

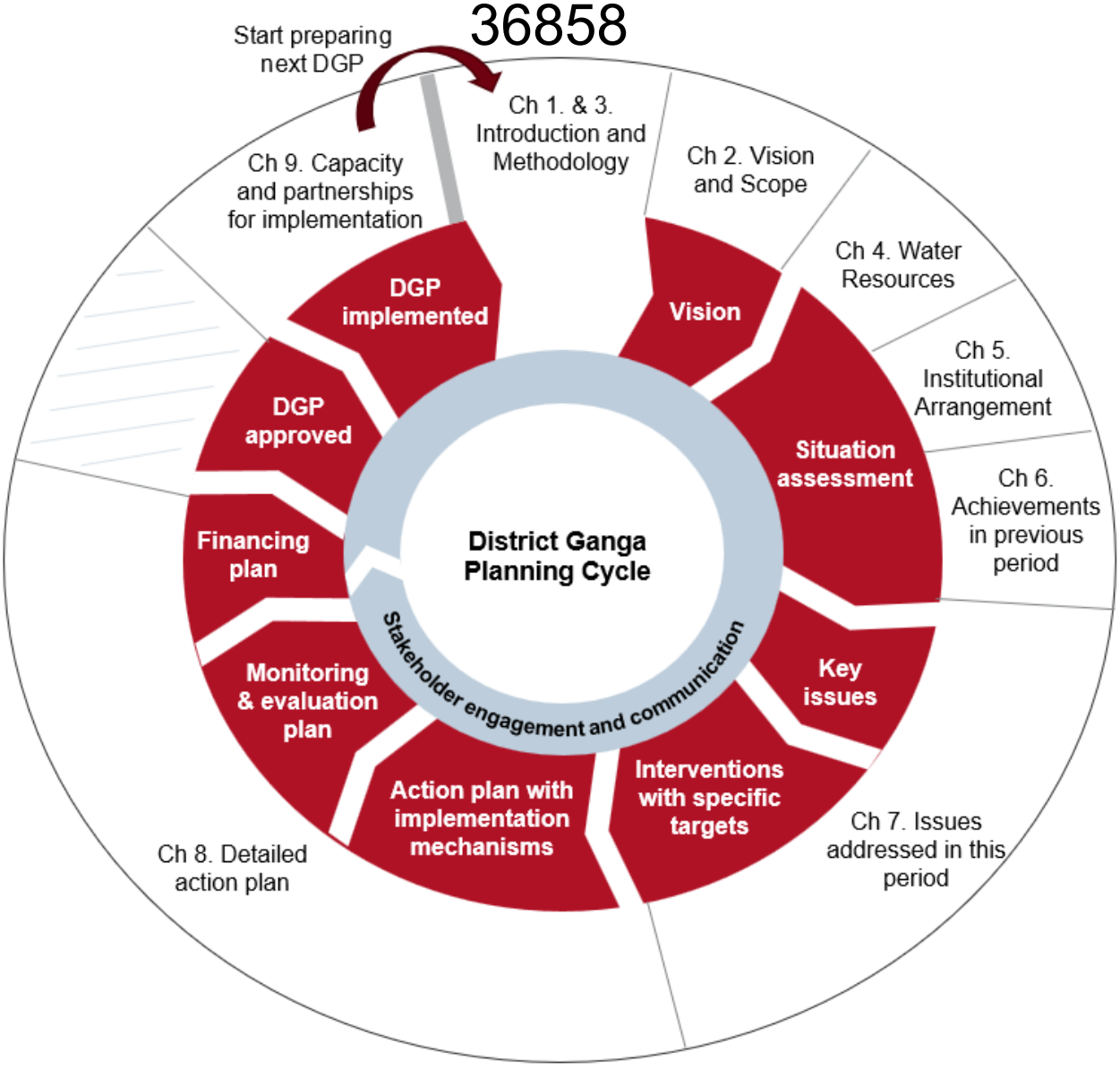
8.3 जेंडर संवेदी प्रचार-प्रसार कार्यक्रम

9 कार्यान्वयन के लिए क्षमता और सहभागिता

अध्याय1-3, जिला गंगा योजना के निर्माण का संदर्भ प्रस्तुत करता है। कुल मिलाकर ये हर जिला गंगा योजना में एक जैसा होता है। अध्याय 4-5 जिला केंद्रित है और जिले के जल संसाधनों तथा संस्थागत स्वरूप का सामान्य विवरण उपलब्ध कराता है। अध्याय 6 में हर जिले के भीतर पिछली योजना तथा प्रबंधन चक्र के कार्यों का मूल्यांकन किया गया है। अध्याय 7-8 में जिला गंगा योजना के मुख्य अंश को प्रस्तुत किया गया है जिसके साथ ही जिले की बुनियादी जल संसाधन प्रबंधन समस्याओं की सूची भी दी गयी है। इसके साथ ही कमियों का विश्लेषण (Gap Analysis), और चिह्नित किए गए खास समस्याओं को हल करने के लिए कार्ययोजना को भी दिखाया गया है।

4.2.2 योजना तथा कार्यान्वयन की क्रमानुसार प्रक्रिया

जैसा की पैराग्राफ 4.1.2. में बताया गया है, जिला गंगा योजना के लिए ऊपर दिए गए तालिका में दी गई विषयसूची को सामान्य नदी बेसिन योजना तथा प्रबंधन चक्र के साथ मिला दिया गया है। इस चित्र 1 में दिखाया गया है। भीतरी वृत्त में जिला गंगा योजना तथा इसके क्रियान्वयन की क्रमानुसार प्रक्रिया दिखाई गयी है। बाहरी वृत्त में जिला गंगा योजना के तत्संबंधित अध्यायों को दिखाया गया है जिसमें इन योजना प्रक्रियाओं की अलग अलग व्याख्या की गयी है।



चित्र 3- जिला गंगा योजना चक्र

ऊपर दी गयी कार्यप्रणाली को क्रमबद्ध प्रक्रिया के 13 सोपानों में बांट कर सरल बनाया गया है। इसे नीचे के फ्लो-चार्ट में देखा जा सकता है।

- जिला गंगा योजना चक्र 11. जिला गंगा योजना कार्यान्वित
- अंशधारकों को शामिल करना एवं उनसे संवाद12. अध्याय 1 तथा 3- भूमिका एवं कार्यप्रणाली
- कार्यदृष्टि- vision13. अध्याय 2- कार्यदृष्टि एवं कार्यसीमा (scope)
- परिस्थिति का आकलन14. अध्याय 4- जल संसाधन
- मुख्य मुद्दे15. अध्याय 5- संस्थागत व्यवस्था
- सुनिश्चित लक्ष्यों के साथ हस्तक्षेप16. अध्याय 6- पिछली अवधि की उपलब्धियां
- क्रियान्वयन तंत्र के साथ कार्ययोजना17. अध्याय 7- इस अवधि में हल किए गए मुद्दे
- निगरानी एवं मूल्यांकन18. अध्याय 8- विस्तृत कार्ययोजना
- वित्त-पोषण योजना19. अध्याय 9- कार्यान्वयन क्षमता एवं सहभागिता
- जिला गंगा योजना स्वीकृत20. अगले जिला गंगा योजना निर्माण की तैयारी

सोपान 1 परिकल्पना का निर्माण

सोपान 2 बेसलाइन रिपोर्ट का निर्माण तथा जिले के जल संसाधनों का खाका बनाना

सोपान 3 व्यवस्थागत स्वरूप तथा अंशधारकों की पहचान

सोपान 4 वर्तमान परिस्थितियों का लेखा जोखा तैयार करना

सोपान 5 मुख्य समस्याओं की पहचान (4-6) जिन्हें इस प्रबंधन चक्र के दौरान हल किया जाना है

सोपान 6 चुने गए हर समस्याएं के लिए दवाब और जोखिम विश्लेषण तैयार करना और लक्ष्यों को परिभाषित करना

सोपान 7 प्रत्येक निर्धारित लक्ष्य के लिए समय सीमा तथा वित्तीय अनुमान को शामिल करते हुए कार्य प्रक्रिया का निर्मा

सोपान 8 निगरानी तथा मूल्यांकन योजना का निर्माण

सोपान 9 प्रत्येक हस्तक्षेप के लिए वित्तीय स्रोत की पहचान

सोपान 10 जिला गंगा योजना के मसविदा को अंतिम स्वरूप देना

सोपान 11 जिला गंगा योजना को संबंधित अधिकारियों तथा अंशधारकों के समक्ष रिव्यू के लिए पेश करना, तदनुसार जिला गंगा योजना में सुधार

सोपान 12 राज्य स्वच्छ गंगा मिशन (एसएमसीजी) की स्वीकृति के लिए जिला गंगा योजना को पेश करना

सोपान 13 जिला गंगा योजना का क्रियान्वयन

सोपान 10 में जिला गंगा योजना का मसविदा तैयार कर लिया गया है। इसके बाद मसविदे को अंशधारकों और संबंधित अधिकारियों के सामने रिव्यू के लिए पेश किया जाता है। इस प्रक्रिया को पूरा करने के बाद, जिला गंगा योजना का अंतिम स्वरूप स्वीकृति के लिए राज्य स्वच्छ गंगा मिशन (एसएमसीजी) के पास भेजा जाता है। स्वीकृति के बाद इसका क्रियान्वयन सोपान 13 में आता है।

इस अध्याय के बाकी हिस्से में ऊपर दिए गए सोपानों की बाकी प्रक्रिया की व्याख्या की गयी है।

4.3 परिकल्पना

4.3.1 सोपान 1- परिकल्पना का निर्माण

जिला गंगा योजना अपनी कार्यावधि के दौरान अपनी परिकल्पना परिभाषित करेगा। यह सामान्य शब्दों में व्याख्या करेगा कि गंगा के पुनरुत्थान के लिए योजना अवधि के दौरान किन लक्ष्यों को प्राप्त करने का प्रयत्न करेगा। इस परिकल्पना, विजन स्टेटमेंट, को नमामि गंगे कार्यक्रम के व्यापक लक्ष्यों के अनुरूप होना चाहिए

> गंगा पुनरुत्थान की परिकल्पना (विजन) में नदी को उसकी संपूर्णता में पुनर्स्थापित करना निहित है जिसे अविरल धारा, निर्मल धारा, भूगर्भीय तथा पर्यावरणीय ऐक्यता के संदर्भ में परिभाषित किया गया है।
>
> (गंगा पुनरुत्थान के संदर्भ में राष्ट्रीय स्वच्छ गंगा मिशन (एनएमसीजी)की परिकल्पना)[3]

[3] https://nmcg.nic.in/vision_key.aspx

जिला गंगा योजना के लिए इस परिकल्पना को ठोस स्वरूप प्रदान करना आवश्यक है। साथ ही मध्य अवधि का दृष्टिकोण भी जरूरी होगा। इसे जिले के अपने खास पर्यावरणीय एवं संस्थागत संदर्भ पर आधारित होना चाहिए तथा प्रबंधन अवधि के दौरान अपनी प्राथमिकताओं पर जोर देना चाहिए। नीचे इसका एक उदाहरण दिया गया है। मॉडल जिला गंगा योजना में इस विजन के अन्य उदाहरण भी दिए गए हैं।

बॉक्स 2: परिकल्पना का उदाहरण:

जिले के लिए बनायी गयी परिकल्पना में गंगा तथा इसकी सहायक नदियों को हर साल अधिक स्वच्छ बनाना, प्रदूषण फैलाने वालों की जिम्मेदारी सुनिश्चित करना, नदी से संबंधित पारिस्थितिकी को वापस लाना शामिल है। इसके साथ ही अर्थ-गंगा अवधारणा को आगे बढ़ाना भी इस विजन में निहित है जो नदी संरक्षण के साथ ही इससे पैदा होने वाले रोजगार को एक साथ लेकर चलता है।

Further examples for visions are available in the model DGPs.

4.4 जिले के जल संसाधन

जिला गंगा योजना- अध्याय 4)

4.4.1 सोपान 2: बेसलाइन रिपोर्ट का निर्माण और जिले के जल संसाधनों का वर्णन

जिला गंगा योजना के तहत परिस्थितियों के आकलन के दो अवयव होते हैं-

1. सामान्य
2. कुछ चुने हुए समस्याओं का बहुत ही सुनिश्चित आकलन जिन्हें इस प्रबंधन अवधि के दौरान हल करने का प्रयत्न किया जाएगा। (खंड 1.8 देखें।)

जिला गंगा योजना के चौथे और पांचवें अध्याय केवल परिस्थितियों के सामान्य आकलन से संबंधित हैं। यह जिले की, खास कर गंगा के वाटर-शेड वाले जिलों के भौगोलिक, जलवायु संबंधी, हाइड्रोलोजिकल तथा सामाजिक-आर्थिक विशेषताओं की व्याख्या करता है।

सामान्य परिस्थिति विश्लेषण के आधार पर उन संदर्भगत पर्यावरण की समझदारी में वृद्धि होनी चाहिए जिनके आधार पर जिला गंगा योजना का निर्माण और कार्यान्वयन किया जाना है। साथ ही इस विश्लेषण से हमें उन मुख्य कारकों की बेहतर समझदारी होनी चाहिए जो जिले में गंगा जल की अवस्था को सर्वाधिक प्रभावित करते हैं। इसे संक्षिप्त होना चाहिए और इसकी लंबाई 12 पृष्ठ से अधिक नहीं होनी चाहिए। विश्लेषण के दो मुख्य अवयव हैं-

1. जिले के जल संसाधन (भू-प्राकृतिक संदर्भ) (जिला गंगा योजना का अध्याय 4)
2. जिले की संस्थागत संरचना (गैर भू-प्राकृतिक संदर्भ) (जिला गंगा योजना का अध्याय 5)

बॉक्स 3 में उन तत्वों को दिखाया गया है जो 'जिले के जल संसाधनों' को दर्शाते हैं। इन्हें केवल मानचित्र की मदद से दिखाया जाना चाहिए और इनकी व्याख्या के लिए बहुत ही कम शब्दों का इस्तेमाल करना चाहिए। इस खंड के लिए सूचना तथा आंकड़ों को चित्रों आदि से ही दिखाने की कोशिश की गयी है। संलग्नक 6.4 में इन मानचित्रों को बनाने के लिए विस्तृत दिशा-निर्देश दिए गए हैं। साथ ही मानचित्रों के उदाहरण भी दिए गए हैं।

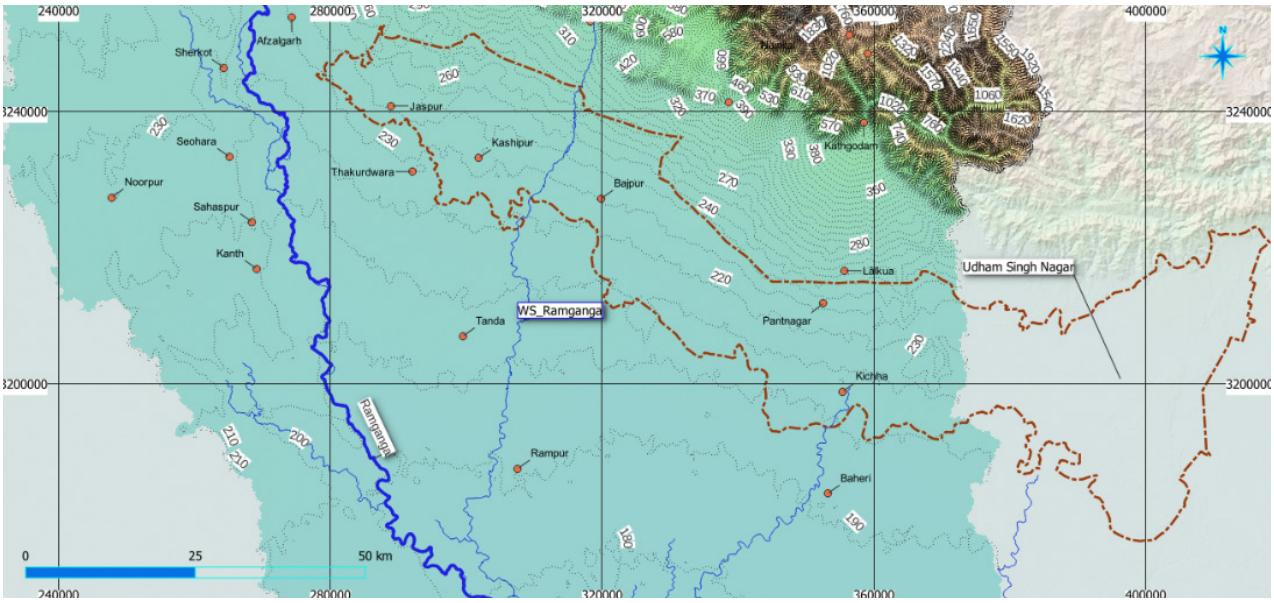
बॉक्स 3: जिले के जल संसाधन

- बेसिन तथा उप-बेसिन का सिंहावलोकन (संपूर्ण बेसिन तथा इसके उप-बेसिन का संक्षिप्त विवरण (जो भी लागू होता हो), इसकी मुख्य विशेषताएं और समस्याएं तथा बेसिन के अंदर जिले की अवस्थिति)

नीचे दिए गए विषय केवल जिलों पर लागू होते हैं-

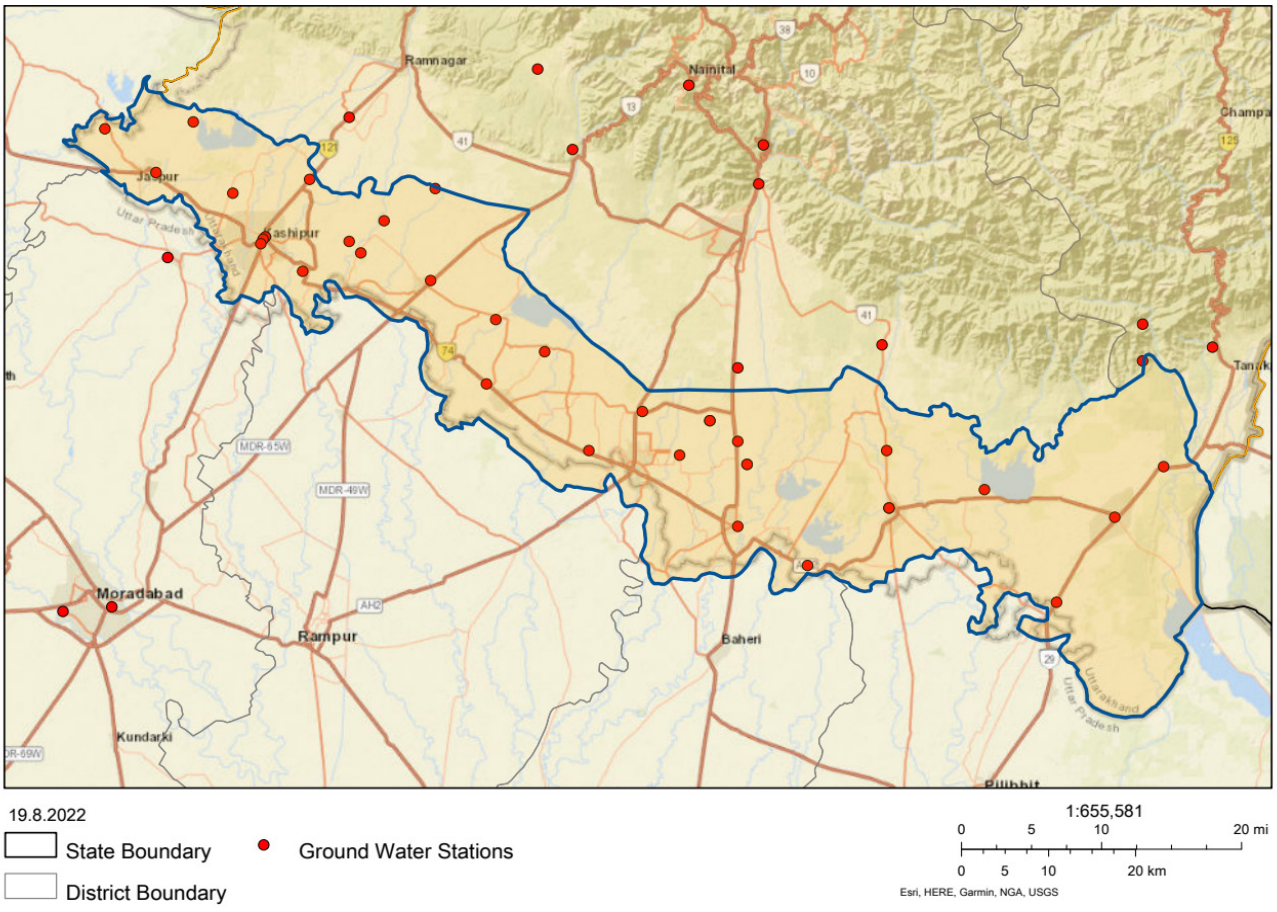
- भौगोलिक संरचना (Topography) तथा जलनिकास नेटवर्क
- जलवायु
  - → बारिश
  - → जल का संभावित वाष्पीकरण (Evapotranspiratio)
- नदी-बेसिन
  - → जमीन की सतह पर पाया जाने वाला जल (हाइड्रोलॉजिक रीजिम सहित)
  - → भूजल
  - → जल की गुणवत्ता (जल प्रदूषण के स्रोत, जलमल के परिशोधन, स्वच्छता सहित)
  - → जिले की सीमाओं के बीच के समस्याएं (जिले में प्रदूषकों की आने जाने सहित)
- भूमि क्षेत्र तथा जमीन का इस्तेमाल
- संरक्षित क्षेत्र तथा पर्यावरणीय संसाधन
- सामाजिक-आर्थिक विशेषताएं
  - → आबादी
  - → सामाजिक-आर्थिक स्वरूप (जेंडर संबंधी समस्याओं के मूल्यांकन सहित)
  - → जीविका की मुख्य साधन व्यवस्था
  - → सेक्टरों के अनुसार जल का उपयोग
  - → जल के मुख्य उपयोगकर्ता (नगर निगम, औद्योगिक, कृषि, पर्यावरण इत्यादि)
  - → जल प्रयोक्ता संगठनों की स्थिति जैसे की जिले के Water User Association (WUA)

बॉक्स 4a: जिले के जल संसाधन विशिष्टताओं का निरूपण करने वाले जीआईएस मानचित्र के उदाहरण



चित्र 4. उधमसिंह नगर जिले की भौगोलिक संरचना (टोपोग्रफी)

बॉक्स 4b: जिले के जल संसाधनों की विशिष्टता को दर्शाता जीआईएस मानचित्र



चित्र 5- उधमसिंह नगर के भूजल निगरानी केंद्र (स्रोत- Indiawris)

4.5 जिले की संस्थागत संरचना

जिला गंगा योजना- अध्याय 5)

4.5.1 सोपान 3: संस्थागत संरचना तथा संबंधित अंशधारकों का आकलन

इसके अलावा आकलन में जिले की संस्थागत संरचना की रूपरेखा को भी शामिल किया जाना चाहिए, खासकर उन तत्वों का जो जिला गंगा योजना के क्रियान्वयन को प्रभावित करते हैं।

बॉक्स 5: जिले की संस्थागत संरचना

(गंगा तथा इसकी सहायक नदियों की संरक्षा तथा पुनरुत्थान पर विशेष रुप से केंद्रित)

- जिला गंगा समितियों का गठन तथा अवस्थिति
- संबंधित सरकारी एजेंसियां
- प्रमुख हितधारक (उनकी भूमिका और जिम्मेदारियों सहित)
- चालू नीतियां और कार्यक्रम (राष्ट्रीय, राज्य और जिला स्तर पर)
- गंगा बेसिन के पुनरुत्थान में जिला स्तर के अधिकारियों की भूमिका, खासकर पहले आकलित नीतियों तथा कार्यक्रमों के संदर्भ में (इसमें जिला गंगा समितियों की भूमिका को भी शामिल किया जाना चाहिए।
- जिला स्तर पर वित्तीय संसाधनों का आकलन

बॉक्स 5 में 'जिले की संस्थागत व्यवस्था' के विभिन्न अवयवों को दिखाया गया है। इसका उद्देश्य उन गैर-जैव-भौतिक तत्वों को दिखाना है जिनका प्रभाव गंगा पुनरुत्थान पर पड़ता है जैसे कि संस्थागत संरचना, नियम-कानून, चालू नीतियां और कार्यक्रम, समन्वय की आवश्यकताएं, प्रबंधन क्षमताएं तथा बजट संबंधी बाधाएं।

बॉक्स 5 में दिए गए प्रत्येक बुलेट प्वाइंट के लिए पाठ तैयार करने की आवश्यकता है। इसका एक संक्षिप्त विवरण नीचे दिया जा रहा है।

जिला गंगा समितियों का गठन और उनकी अवस्था- जिला गंगा समितियों की कार्यकारी अवस्था, इसके गठन और कार्यान्वयन में संलग्न विभिन्न एजेंसियों द्वारा गंगा पुनरुत्थान कार्यों के विभिन्न अवयवों का संक्षिप्त विवरण तैयार किया जाना चाहिए।

संबंधित सरकारी एजेंसियां- जिला गंगा योजना के निर्माण और इसके क्रियान्वयन में कम या ज्यादा, अनेक सरकारी एजेंसियों की भूमिका होती है। इस खंड में गंगा पुनरुत्थान के कार्य में लगी सरकारी एजेंसियों और उनकी अपनी जिम्मेदारियों को रेखांकित किया जाएगा। साथ ही जिला गंगा योजना के निर्माण और क्रियान्वयन में आवश्यक तालमेल की आवश्यकता को भी दर्शाया जाएगा। इस क्रम में फोकस उन विभागों पर रहना चाहिए जो जिला गंगा समितियों में शामिल होते हैं।

मुख्य हितधारक Key Stakeholders. प्रभावकारी तथा सतत नीतिगत कार्य मुख्य अंशधारकों की सहभागिता पर निर्भर करता है (जिले के लाइन विभाग, स्थानीय समुदाय या/और उनके प्रतिनिधि)। यह जिला गंगा योजना को बेहतर बनाने में मदद करता है। साथ ही यह प्रस्तावित उपायों को मजबूत बनाने और उन्हें चालू रखने में भी सहायता करता है। इस खंड में संबंधित अंशधारकों तथा सहयोगियों का संक्षिप्त विवरण दिया जाएगा जो इन जिला गंगा योजनाओं के निर्माण और क्रियान्वयन में मदद करेगा। हैंडबुक के खंड 4 में अंशधारकों के चयन की अर्हता के बारे में बताया गया है।

चालू नीतियां और कार्यक्रम- चालू कार्यक्रमों और योजनाओं को आगे बढ़ाना और सीधे सीधे उनकी मदद और संपूरक की भूमिका अदा करना एक महत्वपूर्ण कार्य है। उदाहरण के लिए जिला गंगा योजना को शहरी नदी प्रबंधन योजना तथा अर्थगंगा के साथ सहक्रियता (synergy) विकसित करना चाहिए। चालू योजनाओं के दोहराव से बचा जाना चाहिए। इस खंड में जिले के अंदर वर्तमान में चल रहे जल संबंधी प्रोजेक्टों, कार्यक्रमों, नीतियों और नए कदमों की एकत्रित सूची दी जाएगी। साथ ही संक्षेप में चर्चा की जाएगी कि किस प्रकार ये पहलकदमियां जिला गंगा योजना की सहायता करेंगी।

अभी चल रहे नीतियों तथा कार्यक्रमों के विश्लेषण के लिए नीचे दिए गए तालिका का प्रयोग किया जा सकता है-

तालिका 3- चालू नीतियों तथा योजनाओं के विश्लेषण के लिए सोदाहरण खाका

नीतियां और योजनाएं	स्तर	विषय	जिला स्तर पर गंगा पुनरुत्थान से संबंधित लक्ष्य	बजट आबंटन	उपलब्धियां
उदाहरण- भारत में भूजल को कृत्रिम ढंग से रिचार्ज करने का मास्टर प्लान	राष्ट्रीय	भूजल रिचार्ज	भूजल के अति दोहन को कम करना	इस संशोधित मास्टर प्लान के क्रियान्वयन की कुल लागत रु. 1,33,529.69 करोड़ है जिसमें 96,735.45 करोड़ (72 प्रतिशत) ग्रामीण क्षेत्रों के लिए और 36,794.23 करोड़ (28 प्रतिशत) शहरी क्षेत्रों के लिए निर्धारित है।	मास्टर प्लान के तहत 11.23 वर्ग किलोमीटर का क्षेत्र कृत्रिम रिचार्ज के लिए चिह्नित है। प्रत्येक राज्य में कृत्रिम रिचार्ज के लिए जल की आवश्यकता की गणना कर ली गयी है। साथ ही प्रत्येक राज्य के लिए निर्धारित जल आपूर्ति के बाद बचने वाले जल का प्राक्कलन भी तैयार कर लिया गया है।

गंगा पुनरुत्थान में जिले के अधिकारियों की भूमिका- जल संसाधन प्रबंधन का विस्तृत दायरा होता है। इसलिए गंगा पुनरुत्थान से संबंधित कई समस्याएं जिले के अधिकारियों के कार्यक्षेत्र से बाहर होते हैं। इन्हें कृषि, सिंचाई, वन, जल विद्युत तथा अन्य तकनीकी एजेंसियों द्वारा देखा जाता है। साथ ही, कुछ ऐसे भी कार्य हो सकते हैं जो जिले के अधिकारियों तथा तकनीकी एजेंसियों दोनों के दायरे में आते हैं। इसलिए निर्धारित कार्यक्षेत्र (mandate) में एक हद तक लचीलापन आवश्यक है। साथ ही यह भी उतना ही आवश्यक है कि किसी भी समस्याएं को दरकिनार न किया जाए।

इस खंड में जिला गंगा योजना तथा जिले के अधिकारियों के कार्य के सीमाक्षेत्र को परिभाषित किया जाएगा यानी कि किन समस्याओं को जिला स्तर पर देखा जाना चाहिए या देखा जाएगा। इसके समांतर, इस खंड में यह भी बताया जाना चाहिए कि गंगा पुनरुत्थान से संबंधी कौन से बुनियादी समस्याएं जिला स्तर या नदी बेसिन स्तर पर निपटाया जाना चाहिए।

जिला स्तर पर बजट संसाधनों का आकलन- कार्यक्रमों को जब बाहरी वित्तीय सहायता के बिना, सहजता से और स्थानीय स्तर पर उपलब्ध संसाधनों के भीतर लागू किया जाता है और चलाया जाता है तो ये सतत होते हैं। इस खंड में उपलब्ध बजटीय संसाधनों का ब्योरा प्रस्तुत किया जाएगा। साथ ही इस खंड में अलग अलग विभागों द्वारा वर्तमान में गंगा पुनरुत्थान के लिए आवश्यक विभिन्न योजनाओं तथा कार्यक्रमों का खाका भी प्रस्तुत किया जाएगा।

4.6 पिछली योजना अवधि के दौरान उपलब्धियों का सार-संक्षेप (जिला गंगा योजना का अध्याय 6)

जिला गंगा योजना- अध्याय 6)

4.6.1 सोपान 4- मूल्यांकन गतिविधि का कार्यान्वयन

पिछले प्रबंधन चक्र के दौरान किए गए कामों का जायजा लेने के लिए की गयी कार्रवाई के तहत उन कार्यों के प्रभावी होने के बारे में मूल्यांकन किया जाएगा। इस दौरान यह विचार किया जाएगा कि उन्होंने अपने लिए निर्धारित उद्देश्यों की प्राप्ति में कितनी सफलता पायी है। इसे एक सरल तालिका के निर्माण के द्वारा पूरा किया जाता है जो वर्तमान अवस्था की तुलना पिछले जिला गंगा योजना में निर्धारित लक्ष्यों से करता है। जिन लक्ष्यों को पूरा नहीं किया जा सका या केवल आंशिक रूप से पूरा किया जा सका, उनके लिए संक्षिप्त विश्लेषण और व्याख्या प्रस्तुत की जानी चाहिए।

तालिका 4- मूल्यांकन गतिविधि के लिए खाका

हस्तक्षेप 1	लक्ष्य (पिछली जिला गंगा योजना में परिभाषित)	वर्तमान स्थिति (उपलब्धियों को दर्शाने वाली पूर्व निर्धारित सूचकों के आधार पर)	स्पष्टीकरण तथा सीखे गए सबक (यदि लक्ष्य पूरे नहीं हुए हों)

कार्यों का जायजा लेने के कई उद्देश्य होते हैं-

- पिछले अनुभवों के आधार पर अगली जिला गंगा योजना में सुधार
- गंगा पुनरुत्थान की चुनौतियों को बेहतर तरीके से समझना
- भविष्य के लिए अधिक वास्तविक लक्ष्यों का निर्धारण
- आंतरिक तथा बाह्य जवाबदेही का निर्धारण

इस खंड को 4 पृष्ठों से बड़ा नहीं होना चाहिए। यह तालिका पहली जिला गंगा योजना के लिए नहीं तैयार की जाएगी।

4.7 प्राथमिकता पर आधारित समस्याएं/ कमियां जिन्हें इस प्रबंधन अवधि के दौरान दूर किया जाएगा

जिला गंगा योजना- अध्याय 7)

4.7.1 सोपान 5- इस प्रबंधन चक्र के दौरान जिन समस्याओं को उठाया जाएगा उन मुख्य समस्याओं की पहचान

गंगा बेसिन के भौगोलिक विस्तार और विविधता के कारण बेसिन के जल संबंधी समस्याओं में विविधता पायी जाती है। ये स्थान के अनुसार बदलते भी रहते हैं। ये समस्याएं बहुत छोटे से लेकर बहुत बड़े तक हो सकते हैं। इनमें से कई चुनौतियां कम या ज्यादा गंगा नदी की अवस्था को भी प्रभावित करती हैं। इन समस्याओं की विविधता के बावजूद, गंगा नदी के पुनरुत्थान के दो प्रमुख अवयव हैं

1. प्रदूषण को कम करना
2. महत्वपूर्ण पर्यावरण संबंधी मूल्यों की रक्षा के लिए सूखे मौसम के दौरान जल प्रवाह को बढ़ाना

व्यावहारिक कारणों से प्रत्येक प्रबंधन चक्र के दौरान केवल 4-6 समस्याओं को उठाया जाएगा। उनकी पहचान, श्रेणीबद्ध करना और उनका चुनाव- इन्हें इस प्रबंधन अवधि के दौरान जिला गंगा योजना में शामिल किया जाएगा। इस प्रक्रिया में मुख्य अंशधारकों तथा निर्णय लेने वाले व्यक्तियों को शामिल करना और उनके साथ विचार विमर्श आवश्यक होता है।

यह सुनिश्चित किया जाना चाहिए कि प्राथमिकता के आधार पर चुने गए समस्याएं जिले की निर्धारित कार्यसीमा (mandate) के अंदर होना चाहिए क्योंकि सिद्धांततः यह स्वीकार किया जाता है कि गंगा बेसिन में जल प्रबंधन संबंधी कई समस्याओं को, जैसे कि सिंचाई की अल्प दक्षता, प्रमुख नदी में समय समय पर आने वाली बाढ़ को दूसरी एजेंसियों द्वारा देखा जाना चाहिए। चुने गए समस्याओं की प्राथमिकता निर्धारित करने के लिए नीचे दिए गए खाके का इस्तेमाल मददगार हो सकता है- (तालिका 1)

Table 5. मुख्य समस्याओं की प्राथमिकता तय करने के लिए खाका

पहचान किए गए मुख्य समस्याएं	समस्याएं की गंभीरता (बहुत अधिक- बहुत कम)	जिले की की निर्धारित कार्यसीमा / सीमाएं	चालू गतिविधियां	कमियां/ आवश्यक कार्रवाई)	प्राथमिकता (कृपया 4-6 समस्याओं को चुनें)

संलग्नक 5.1 में गंगा के पुनरुत्थान के लिए समस्याओं की विस्तृत सूची दी गयी है। इनमें से 20 समस्याओं पर इस अध्याय में विस्तार से चर्चा की गयी है। इन समस्याओं को इसलिए चुना गया है क्योंकि ये विस्तृत क्षेत्र में पाए जाते हैं, पूरे बेसिन क्षेत्र में मौजूद हैं और इन्हें नदी के स्वास्थ्य की दृष्टि से जरूरी हस्तक्षेपों के भीतर प्रतिनिधि गतिविधियां माना जाता है। जाहिर है कि जिले अपनी प्राथमिकता में अन्य समस्याओं को भी शामिल कर सकते हैं जो इस सूची में शामिल नहीं हैं लेकिन जिनका उन जिलों में नदी की अवस्था पर गंभीर प्रभाव पड़ता है। बॉक्स 6 में ऐसे ही एक काल्पनिक जिले का उदाहरण दिया गया है।

बॉक्स 6: प्रबंधन चक्र के दौरान निबटे जाने वाले मुख्य समस्याओं के उदाहरण । संलग्नक 5.1 में प्रत्येक समस्याएं की विस्तृत व्याख्या प्रस्तुत की गयी है।

- औद्योगिक मल(Effluent) से होने वाला प्रदूषण
- तरल कचरे से होने वाला प्रदूषण
- ठोस कचरे से होने वाला प्रदूषण
- अपर्याप्त जल संचयन ।
- दलदली भूमि का अतिक्रमण
- गैर चिह्नित स्रोतों से प्रदूषण, कृषि से रिसाव आिद

व्यावहारिक कारण से सुझाव दिया जाता है कि प्रत्येक प्रबंधन चक्र के दौरान 4-6 मुख्य समस्याओं पर ध्यान केंद्रित किया जाना चाहिए। यह जिला गंगा सिमित के पास उपलब्धि संसाधनों पर निर्भर करता है।

4.7.2 सोपान 6- सभी चुनिंदा समस्याओं के लिए दवाब और जोखिम विश्लेषण, खास लक्ष्यों को परिभाषित करना

एक बार मुख्य समस्याओं की पहचान हो जाने के बाद, समस्याओं तथा खामियों को समझने और उनसे निबटने के लिए लक्षित परिस्थिति आकलन (siutaion assessment) किया जाता है। यह एक अत्यंत ही व्यावहारिक विश्लेषण होता है जिसका उद्देश्य समस्याएं के पैमाने, इसकी बुनियादी वजह और उन संभावित कारकों की पहचान है जो इसके समाधान के मार्ग में अवरोध उपस्थित कर सकते हैं। मुख्य मकसद उन कदमों का आकलन है जो इस खास संदर्भ में सबसे कारगर होंगे। इस संदर्भ में परिस्थिति विश्लेषण के द्वारा पिछले कार्यक्रमों और हस्तक्षेपों के कारगर या नाकामयाब होने की वजहों को समझने की कोशिश की जानी चाहिए। मुख्य उद्देश्य है वर्तमान संदर्भ में सबसे कारगर हस्तक्षेपों की पहचान। इस क्रम में परिस्थिति आकलन के द्वारा पिछले कार्यक्रमों और कदमों की समीक्षा भी की जानी चाहिए और उनके सफल या विफल होने का आकलन किया जाना चाहिए। अगर एक साथ कई हस्तक्षेपों की जरूरत होती है तो परिस्थिति आकलन को इनके क्रम और समय के बारे में भी कुछ संकेत उपलब्ध कराना चाहिए। बॉक्स 7 में परिस्थिति आकलन का एक उदाहरण दिया गया है। जिन खामियों की पहचान की गयी है उनमें से कुछ को ग्राफ, चार्ट और नक्शे से भी दिखाया जा सकता है।

बॉक्स 7: पिरिस्थित आकलन तथा निर्दिष्ट लक्ष्य

मुख्य समस्या- दलदली क्षेत्र का क्षय: परिस्थिति आकलन (उदाहरण) : 55 हेक्टेयर में फैला यह दलदली क्षेत्र एक विशाल शहरी क्षेत्र के बाहरी इलाके में स्थित है। यह जमीन के धंसने से बना है जहां पर आसपास का पानी जमा होता है। इसमें शहरी क्षेत्र के 6 नालों का पानी भी शामिल है। दलदली क्षेत्र का करीब 20 हेक्टेयर क्षेत्र हमेशा पानी में डूबा रहता है जबकि बाकी 35 हेक्टेयर की इलाका साल के कुछ महीने ही पानी में डूबा रहता है। सामान्य वर्षा वाले साल में, नवंबर से जून के बीच यह भाग धीरे धीरे सूख जाता है। यह दलदली क्षेत्र पर्यावरण की दृष्टि से महत्वपूर्ण है जहां दूसरे क्षेत्रों से आए पक्षी शरण लेते हैं जिनमें से कई विलुप्त हो रही प्रजातियां भी शामिल हैं। पक्षियों के विशेषज्ञों ने ऐसी 120 प्रजातियों की पहचान की है। पिछले दशक में आसपास के क्षेत्रों से इको-टूरिज्म में बेतहाशा वृद्धि हुई है। शनिवार और रविवार को यहां भारी भीड़ होती है। इसके अलावा यह दलदली क्षेत्र आसपास के इलाकों के एक्वीफर (धरती के भीतर वह सतह जहां जाकर भूजल जमा होता है) को रिचार्ज करने में महत्वपूर्ण भूमिका अदा करता है। इस एक्वीफर का इस्तेमाल नगर निगम के द्वारा नए शहरी क्षेत्रों में जल आपूर्ति के लिए किया जाता है जो अब तक शहर के जल आपूर्ति व्यवस्था से नहीं जुड़े हैं।

लेकिन हाल के वर्षों में इस दलदली क्षेत्र की स्थिति में ह्रास हुआ है। सर्वप्रथम, इसका इस्तेमाल गैर-कानूनी ढंग से ठोस कचरे के निबटान के लिए किया जाता है। इस गैर-कानूनी गतिविधि के कारण दलदली क्षेत्र धीरे धीरे भरता जा रहा है। साथ ही यह जल प्रदूषण का भी एक बड़ा कारण है। इसके अलावा शहरी नालों से जो पानी इस दलदली क्षेत्र में गिराया जाता है उसमें गाद होती है, ईंट-पत्थर जैसी चीजें होती हैं और तरह तरह के जैविक तथा रासायनिक पदार्थ भी होते हैं जिनमें जीवाणु आदि पाए जाते हैं। अंत में, दलदल की मौसमी हिस्सा जो साल के 6-8 महीने सूखा रहता है उस का जरूरत से अधिक चारागाह के तौर पर इस्तेमाल किया जाता है क्योंकि यहां चरने के लिए आने वाले पशुओं पर किसी तरह का नियंत्रण नहीं है। परिणामस्वरूप, घास की प्रजातियों की गुणवत्ता में भी तेजी से ह्रास हुआ है। अब दलदल का यह हिस्सा घास वाली जमीन पर पाए जाने वाले पक्षियों के निवास स्थल का कार्य भी नहीं कर पा रहा है।

संभावित हस्तक्षेप

ठोस कचरे को फेंकना

- गैर कानूनी ढंग से ठोस कचरे को इस दलदली क्षेत्र में फेंकने से रोकने के लिए वर्तमान कानूनी प्रावधानों का इस्तेमाल
- आवश्यक होने पर कचरा फेंकने के लिए वैकल्पिक स्थान उपलब्ध कराना
- दलदली क्षेत्र से ठोस कचरे को हटाना
- ठोस कचरा यहां नहीं फेंका जाए इसे सुनिश्चित करने के लिए लगातार निगरानी की व्यवस्था

नाली के प्रदूषित जल का निकास

- ठोस कचरे के निपटान की व्यवस्था जिसमें शहरी क्षेत्रों में सीधे दलदल में गिरने वाली नालियों की सफाई की व्यवस्था तथा ठोस कचरे को जमा करने का इंतजाम शामिल हो।
- शहरी क्षेत्र में विभिन्न प्रकार के पर्यावरण सहयोगी (ग्रीन) आधारभूत संरचना तथा छोटे स्तर पर जल संग्रहण बेसिन की स्थापना जहां से पानी सीधे दलदली क्षेत्र में गिरता है।
- सभी छह नालियों के मुहाने पर जैव फिल्टर की स्थापना जो नाली के पानी के जैविक शुद्धिकरण का काम करता है

चारागाह में अत्यधिक मात्रा में पशुओं का चरना

- सामुदायिक संगठन की पहचान
- सतत चारागाह व्यवस्था के बारे में जागरूकता अभियान
- सतत चारागाह व्यवस्था की स्थापना जो मौसमी दलदली क्षेत्र में चरने वाले जानवरों की संख्या में कमी लाए। इसका विकास स्थानीय अंशधारकों के साथ करीबी विचार विमर्श के आधार पर किया जाना चाहिए।
- जो लोग मौसमी चारागाह का इस्तेमाल नहीं कर पाएंगे उन्हें एक मुश्त मुआवजा देना
- चारागाह के लिए सहमति प्राप्त योजना को लोग मानें, इसे सुनिश्चित करना।

सुनिश्चित लक्ष्य

1. जिस कचरे को दुबारा इस्तेमाल नहीं किया जा सकता या अक्रिय कचरे के लिए पांच वैकल्पिक कचरा निपटान स्थल उपलब्ध कराना (जिम्मेदारी- ULB)
2. एक एकड़ के दलदली क्षेत्र से ठोस कचरे का निपटान (जिम्मेदारी ULB तथा PCB)
3. कुल तीन किलोमीटर सड़क पर सफाई करने का कार्यक्रम शुरु करना (जिम्मेदारी- ULB)
4. 250 घरों के लिए ठोस कचरे को जमा करने की व्यवस्था करना (जिम्मेदारी- ULB)
5. छोटे स्तर पर 4 जल संग्रह बेसिन (micro retention basin) की स्थापना जिनका सतही क्षेत्रफल 0.5 एकड़ होगा (जिम्मेदारी- सिंचाई विभाग)
6. प्रत्येक नाले के मुहाने पर एक एकड़ क्षेत्रफल के छह जैविक फिल्टरों की स्थापना (जिम्मेदारी- वन/कृषि/उद्यान विभाग)
7. मौसमी दलदल वाले क्षेत्र में चरने वाले जानवरों की संख्या को घटाकर 20 करना (जिम्मेदारी- चुनी गयी CBO)

संलग्नक 2.2 में उन सूचनाओं की सूची संग्रहीत करने का खाका प्रस्तुत किया गया है जिन्हें इकट्ठा करना आवश्यक है। यह महत्वपूर्ण समस्याओं के लिए आवश्यक आंकड़ों की जरूरतों को चिह्नित करता है। जाहिर है कि आंकड़े सिर्फ उन्हीं महत्वपूर्ण समस्याओं के बारे में इकट्ठा किए जाने चाहिए जिनकी इस प्रबंधन चक्र के दौरान जरूरत होगी। (सोपान 5 देखें।)

प्रत्येक महत्वपूर्ण समस्याएं के लिए संलग्नक 2.3 में संभावित हस्तक्षेपों की सूची दी गयी है। यह कैटलॉग सभी हस्तक्षेपों को नहीं दिखाता है और जिले अपनी तरफ से स्थानीय परिस्थितियों, अनुभवों या पसंद के अनुरूप दूसरे हस्तक्षेप सुझा सकते हैं। महत्व इस बात का है कि सुझाए गए उपाय वास्तविक और पूर्ण करने योग्य होने चाहिए। और उन्हें सरकारी संस्थाओं, एनजीओ, किसानों के समूह, ठेकेदार आदि कार्यान्वयन संस्थाओं के हाथ में सौंपा जा सके। यह अत्यंत महत्वपूर्ण है कि ये हस्तक्षेप सही क्रम में लागू किए जाएं। इसका एक उदाहरण बॉक्स 7 में दिया गया है।

परिस्थिति आकलन तथा संभावित हस्तक्षेपों की वास्तविक सूची के आधार पर, एक निश्चित लक्ष्य को परिभाषित किया जा सकता है जिसमें बजट और समय संबंधी सीमाओं सहित कार्यान्वयन की अन्य व्यावहारिक समस्याओं को भी शामिल किया जाएगा। निर्धारित लक्ष्य इस प्रबंधन चक्र के दौरान मापनीय, वास्तविक तथा पूर्ण करने योग्य होने चाहिए। इसका उदाहरण बॉक्स 7 में दिया गया है। गंगा के पुनरुत्थान संबंधी कार्य के पैमाने को देखते हुए या संभावित है कि नदी के स्वास्थ्य को बेहतर बनाने वाले कई हस्तक्षेप और योजनाएं क्रमशः लागू की जाएंगी जो अनेक प्रबंधन चक्रों के बीच फैली होंगी।

इसके अलावा जिला गंगा योजना तथा बेसिन के अंदर उठाए गए अन्य हस्तक्षेपों जैसे कि जिला पर्यावरण योजना, जिला अर्थगंगा योजना (हैंडबुक का संबंधित खंड देखें) के बीच एक सहजीविता का संबंध होता है। ये सभी कार्यक्रम कुल मिला कर नदी की अवस्था को बेहतर बनाने के लक्ष्य को आगे बढ़ाती हैं। इसलिए जिला गंगा योजना दूसरी योजनाओं से भी यथोचित तत्वों को शामिल कर सकता है। दरअसल अन्य कार्यक्रमों से इस तरह के तत्वों को शामिल करने को प्रोत्साहित किया जाना चाहिए। कहा जा सकता है कि जिला गंगा योजना का लक्ष्य एक व्यापक विजन और फ्रेमवर्क उपलब्ध कराना, अन्य हस्तक्षेपों और गतिविधियों के बीच सामंजस्य स्थापित करना और जो कदम इन कार्यक्रमों में शामिल नहीं किए गए हैं उन्हें आगे बढ़ाना है।

इस कदम को उठाए जाने के दौरान अंशधारकों का सक्रिय और व्यापक समावेश सुनिश्चित किया जाना चाहिए ताकि इन समस्याओं पर सहमति बनायी जा सके 1) मुख्य समस्याएं जिनसे निबटना है 2) इन समस्याओं के पीछे कौन से कारण हैं और 3) उनके समाधान का सबसे बेहतर तरीका क्या है?

इसे स्वीकार किया जाता है कि महिलाएं घरेलू स्तर तथा छोटे पैमाने पर जल के प्रबंधन में महत्वपूर्ण भूमिका निभाती हैं लेकिन कई बार संस्थागत कारणों से भागीदारी की प्रक्रिया में उनका प्रतिनिधित्व कम होता है। इसलिए महिलाओं की आवाज को भागीदारों के साथ विचार विमर्श की प्रक्रिया में उचित प्रतिनिधित्व देने के लिए पूरी कोशिश की जानी चाहिए (इस हैंडबुक का खंड 4.1.2 देखें।)

4.8 विस्तृत कार्य योजना

जिला गंगा योजना- अध्याय 8)

4.8.1 सोपान 7- प्रत्येक निर्धारित लक्ष्य के लिए कार्ययोजना का निर्माण

र्ययोजना में प्रत्येक लक्ष्य को प्राप्त करने के लिए रूपरेखा तैयार की जाती है। इसमें कई कार्यों की एक सूची शामिल होती है। साथ ही इनकी समय सीमा और स्पष्ट लक्ष्य और माइलस्टोन (Milestone) तथा प्रत्येक कार्यखंड के लिए बजट भी इसमें शामिल किया जाना चाहिए। कार्ययोजना में यह भी स्पष्ट किया जाना चाहिए कि इस योजना का कार्यान्वयन कौन करेगा। नीचे के तालिका में इसका उदाहरण दिया गया है। वैकल्पिक रूप से, कार्ययोजना को गैंट चार्ट के द्वारा भी दिखाया जा सकता है। संभावित हस्तक्षेपों की एक और सूची संलग्नक 2.3 में दी गयी है जिनमें हल किए जाने वाले समस्याओं को शामिल किया गया है।

तालिका 6- कार्ययोजना का सोदाहरण खाका

निर्धारित लक्ष्य- 1- अक्रिया और दौबारा इस्तेमाल नहीं किए जाने योग्य कचरे के लिए वैकल्पिक स्थान उपलब्ध कराना

कार्य का विवरण	किसके द्वारा क्रियान्वयन होगा	शुरुआत तिथि	समाप्ति तिथ	माइलस्टोन	
कचरा जमा करने के लिए उचित स्थान (लैंडफिल) की पहचान	ULB / नगर निगम/ PCB	1 जनवरी	31 जनवरी	चयन के लिए अर्हता को परिभाषित करना, जीआईएस नक्शे का निर्माण	
कचरे को जमा करने के लिए स्थान को तैयार करना और उसकी सुरक्षा	ULB / नगर निगम/ PCB	1 फरवरी	30 सितंबर	टेंडर प्रकाशित करना, निर्माण कंपनी का चयन, स्थान को तैयार कर लिया जाना, स्थान को सुरक्षित कर लेना	
कचरे को जमा किए गए स्थान से लेकर लैंडफिल की जगह तक पहुंचाने के लिए बड़े आकार के ट्रकों की व्यवस्था	ULB / नगर निगम/ PCB	1 अक्टूबर	31 दिसंबर	कचरे को ढोने के लिए बड़े आकार के ट्क उपलब्ध, ट्रक ड्राइवर और उनके सहायक को बहाल कर लिया गया है।	

	आवश्यक संसाधन	परिणाम	टिप्पणी/ संबंध
	बजट (चयन अर्हता, आंकड़ों को इकट्ठा करने तथा जीआईएस मैपिंग के लिए)	कचरे को जमा करने के लिए उचित स्थान का चयन कर लिया गया	
	बजट (निर्माण कार्य, सामान,निगरानी, स्थान की घेरेबंदी आदि)	पर्यावरण में रिसाइकिल नहीं किए जाने योग्य कचरे और अक्रिय कचरे की स्थिति में सुधार, ठोस कचरे से रिसने वाले पदार्थों ने पर्यावरण और भूजल को प्रभावित नहीं किया	स्वच्छ भारत मिशन
	बजट(कचरा ढोने वाले बड़े ट्रकों, मजदूरों के लिए)	पर्यावरण के अंदर ठोस कचरे के कारण पैदा होने वाले प्रदूषण में कमी आयी है।	स्वच्छ भारत मिशन

4.8.2 सोपान 8- आकलन और निगरानी के लिए योजना निर्माण

निगरानी और आकलन (monitoring and evaluation- M&E) जिला गंगा योजना का एक महत्वपूर्ण अंग है। यह जिले के अंदर योजना के विकास और इसके क्रियान्वयन के आकलन की क्रियाविधि उपलब्ध कराता है जिससे इसके लक्ष्यों की सफलता को मापा जा सकता है।

प्रत्येक लक्ष्य के लिए एक मापनीय निर्देशक को सुनिश्चित किया जाएगा। इसके द्वारा प्रगति को मॉनीटर किया जा सकता है, जिम्मेदारी को मजबूत बनाया जा सकता है और प्रस्तावित हस्तक्षेप के प्रभावी होने या नहीं होने का आकलन किया जा सकता है। यह निर्देशक सरल होना चाहिए और निर्धारित लक्ष्य को सटीक ढंग से बताने में सक्षम भी होना चाहिए। यह महत्वपूर्ण है कि निर्देशक आंकड़ों से बोझिल नहीं हो और इसके लिए आंकड़े इकट्ठा करने की जटिल प्रक्रिया शामिल हो। तालिका 1 में इसका उदाहरण दिया गया है।

तालिका 7 - निगरानी और आकलन योजना का खाका- उदाहरण सहित

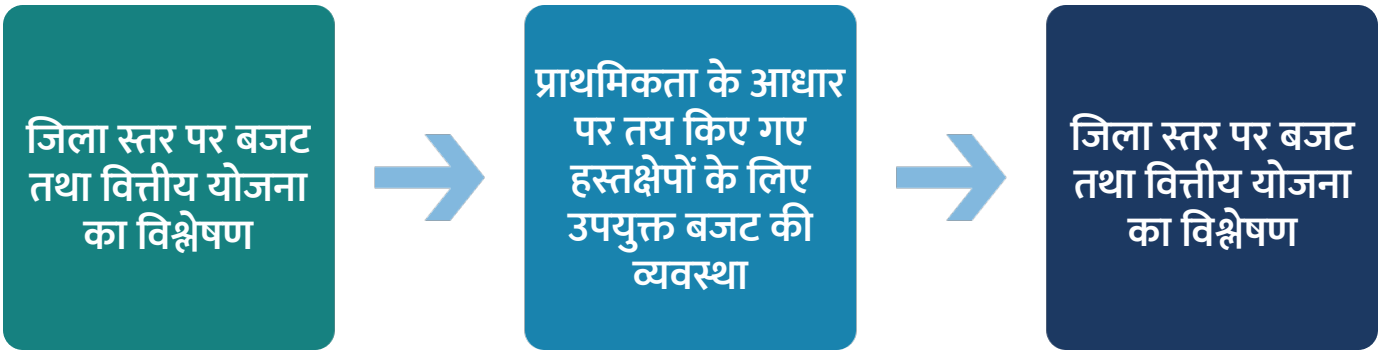
क्रम संख्या	निर्धारित लक्ष्य	निर्देशक	बेसलाइन	लक्ष्य	
1	अक्रिय तथा गैर-रिसाइक्लिंग योग्य कचरे के लिए पांच वैकल्पिक लैंडफिल स्थानों को उपलब्ध कराना	वैकल्पिक लैंडफिल स्थानों की संख्या	0	5	
2	एक हेक्टेयर से ठोस कचरा हटाना	क्षेत्र ठोस कचरे से मुक्त	0 हेक्टेयर	1 हेक्टेयर	
3	तीन किलोमीटर कुल लंबाई की सड़क पर सफाई कार्यक्रम लागू करना	सफाई किए गए सड़क की लंबाई	0 किलोमीटर	3 किलोमीटर	
4	...	...			

4.8.3 सोपान 9- प्रत्येक निर्धारित हस्तक्षेप के लिए वित्तीय स्रोत का निर्धारण

कार्ययोजना को लागू करने के लिए जब बजट संसाधनों की जरूरत होती है तो हमें इस बात का स्पष्ट उल्लेख करना होता है कि ये वित्तीय संसाधन कहां से आएंगे। जब पैसा चालू बजट से आ रहा है तो इसके संबंधित मद को निर्दिष्ट किया जाना चाहिए। कार्ययोजना के जिन हिस्सों के लिए बजट नहीं है या जिन्हें समयबद्ध तरीके से बजट सहायता नहीं दी जा रही, वे जिला गंगा योजना में विलंब कर सकते हैं या इसके क्रियान्वयन में बाधा डाल सकते हैं।

इसकी अनुशंसा की जाती है कि हमें केवल उन्हीं गतिविधियों या कार्यों को हाथ में लेना चाहिए जिन्हें उपलब्ध स्थानीय साधनों के आधार पर चलाया जा सकता है और जिनके लिए दीर्घ-अवधिक के लिए बाहरी फंडिंग की जरूरत नहीं होती है या जिन्हें जिले, राज्य या देश के स्तर पर चालू कार्यक्रमों की कार्यसीमा के भीतर कार्यान्वित किया जा सकता है।

	सत्यापन के साधन	बारंबारता (इसे कितनी बार मापा जाएगा)	जिम्मेदारी (इसकी माप कौन करेगा)	रिपोर्टिंग (इसकी रिपोर्ट कहां भेजी जाएगी)
	पर्यवेक्षक	सालाना	सर्वे-कर्ता	आकलन मैप, योजना अभिलेख
	पर्यवेक्षक	साप्ताहिक	ULB जैसी स्थानीय संस्थाएं	प्रोग्राम रिपोर्ट
	पर्यवेक्षक	साप्ताहिक	ULBs	प्रोग्राम रिपोर्ट



नीचे दिए गए सवाल कार्ययोजना के लिए उपयुक्त वित्तीय योजनाओं और प्रोग्रामों की पहचान और आकलन में मदद कर सकते हैं-

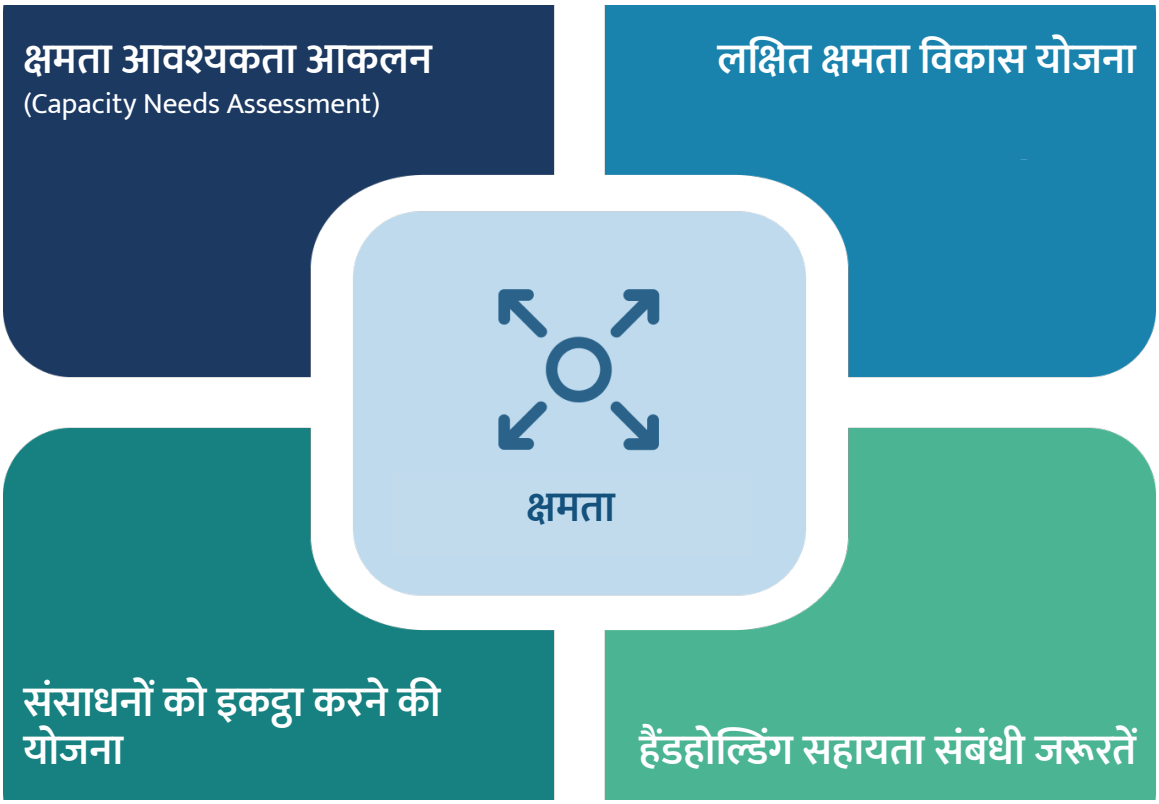
- फंडिंग की कितनी जल्दी जरूरत है? यह अल्प अवधि है या दीर्घावधि?
- कितने फंडिंग की जरूरत है?
- जिला, राज्य तथा राष्ट्रीय स्तर पर चल रही कौन सी वित्तीय योजनाएं तथा प्रोग्राम आपकी योजना में शामिल कार्यों के लिए वित्त उपलब्ध करवा सकती है जिनके लिए आप योग्यता रखते हैं। (वित्तीय योजनाओं तथा कार्यक्रमों की सूची खंड 3.3 में दी गयी है।)

4.9 कार्यान्वयन के लिए क्षमता और सहभागिता

जिला गंगा योजना- अध्याय 9

सामान्य तौर पर उपलब्ध क्षमताओं के भीतर जो हस्तक्षेप फौरी तौर पर जरूरी हैं और जिन्हें लागू करना संभव है उन्हें प्राथमिकता दिए जाने की अनुशंसा की जाती है।

इसके अलावा, जिला गंगा योजना क्षमता उच्च प्राथमिकता तथा फौरी तौर पर जरूरी क्षमताओं में पायी जाने वाली कमियों की पहचान क्षमता आवश्यकता आकलन (Capacity Needs Assessment) के आधार पर करती है। चिह्नित क्षमताओं में कमी को दूर करने के लिए, जिनमें क्षमता निर्माण तथा योजना में शामिल गतिविधियों को दक्षतापूर्ण ढंग से लागू करना भी शामिल है, आवश्यक कदमों के बारे में इस अध्याय में बताया गया है। इनमें प्रशिक्षण, जन जागरूकता अभियान, सूचना, शिक्षा तथा संचार (IEC) अभियान, सेमिनार, वर्कशॉप आदि शामिल हैं। इनके द्वारा निर्धारित लक्ष्य की प्राप्ति के लिए इस प्रक्रिया में शामिल अंशधारकों तथा इसके कार्यान्वयन के सहयोगियों की क्षमता में वृद्धि सुनिश्चित की जाती है।



चित्र-6- क्षमता विकास के अवयव

तालिका 8- क्षमता विकास आकलन संबंधी दस्तावेजीकरण का खाका-उदाहरण सहित

वर्तमान अवधि में निर्धारित कार्य	Responsible organisation and stakeholder involved in the successful implementation	Gaps in capacity and awareness and resulting needs	Possible partnerships that could cover capacity needs	Suitable capacity building measures
उपयुक्त लैंडफिल स्थानों की पहचान	ULB / PCB	जीआईएस मैप का निर्माण	बाहरी कंसलेंटेंसी	जीआईएस प्रशिक्षण

चिह्नित क्षमता विकास संबंधी उपायों से क्षमता विकास योजना का निर्माण होता है। योजना को कार्ययोजना के तरीके से ही निर्मित किया जा सकता है। (गलती: संदर्भ स्रोत नहीं दिया गया है) इस क्रम में नीचे दिए गए प्रश्न पूछे जा सकते हैं-

- चिह्नित किए गए कौन से क्षमता विकास कार्य अधिकृत संगठनों (जैसे कि प्रशिक्षण संस्थाओं) द्वारा उपलब्ध कराए जा रहे हैं?
- इन हस्तक्षेपों के लिए निर्दिष्ट समूह कौन से हैं?
- इन हस्तक्षेपों की कितनी जल्दी जरूरत होगी और क्या वे चिह्नित संस्थाओं द्वारा चलाए जा रहे कार्यक्रमों से मेल खाते हैं?
- किन वित्तीय संसाधनों की जरूरत है?

4.10 जिला गंगा योजना को पूरा करना

संशोधन तथा स्वीकृति

4.10.1 सोपान 10- जिला गंगा योजना के मसौदे का निर्माण

सोपान 1-9 में इकट्ठा की गयी सूचना की समीक्षा करें और जिला गंगा योजना के मसौदे को तैयार करें। इस मसौदे को तर्कशीलता और समझने में आसानी की दृष्टि से यथा आवश्यक संशोधित करें।

GRBMP तथा गंगा पुनरुत्थान के लिए इसके विजन की दृष्टि से इसमें भूमिका के तौर पर एक अध्याय जोड़ा जाएगा (पैराग्राफ 4.2.1 में दी गयी विषय सूची देखें।) यह भूमिका पिछले कामों की समीक्षा भी प्रस्तुत करेगी जिसमें पर्यावरण योजना, सिंचाई योजना तथा अन्य योजनाएं भी शामिल होंगी। जिला गंगा योजना संदर्भानुसार रखकर इन्हें आगे बढ़ाएगी।

भूमिका के तौर पर इस्तेमाल किए जाने वाले इस अध्याय के लिए नमूने का पाठ इस हैंडबुक के अध्याय 1-3 में देखा जा सकता है। ध्यान दें कि जिस जिले के लिए गंगा योजना तैयार की जा रही है उसके लिए इसे अपनाने के पहले कुछ संशोधन और परिवर्तन आवश्यक हो सकता है।

4.10.2 सोपान 11: जिला गंगा योजना के मसौदे को संबंधित अधिकारियों तथा अंशधारकों की संस्तुति के लिए पेश करें, आवश्यकतानुसार जिला गंगा योजना में संशोधन करें।

तैयार की गयी कार्ययोजना के क्रियान्वयन को गति देने और संबंधित कार्यान्वयन एजेंसियों के बीच इस योजना की मिल्कियत पैदा करने के लिए, जिला गंगा योजना के मसौदे को चिह्नित अंशधारकों और खासकर इसके क्रियान्वयन के लिए जिम्मेदार अधिकारियों के साथ साझा किया जाना चाहिए। इस फीडबैक प्रक्रिया से प्राप्त सूचना के आधार पर समस्याओं की समीक्षा और सबसे उपयुक्त और समीचीन तरीके के चयन में मदद मिलती है। जिला गंगा समिति को सावधानी बरतनी चाहिए कि इसके व्यापक विजन और लक्ष्यों के साथ किसी प्रकार का समझौता नहीं हो और अधिकारी आवश्यक निर्णयों और हस्तक्षेपों को अपनाने में बाधा न खड़ी करें जिसकी वजह से उनपर काम के बोझ में वृद्धि होती है। फीडबैक को शामिल करने या इन्हें अस्वीकार करने की अंतिम जिम्मेदारी जिला गंगा समिति की होनी चाहिए।

4.10.3 STEP 12: जिला गंगा योजना के मसौदे को संबंधित अधिकारियों तथा अंशधारकों की संस्तुति के लिए पेश करें, आवश्यकतानुसार जिला गंगा योजना में संशोधन करें।

जिला गंगा योजना V 0.2 के अंतिम मसौदे, जिसमें जिले के हितधारक तथा अधिकारियों का फीडबैक भी शामिल होता है, को भी स्थापित समीक्षा और स्वीकृति प्रक्रिया से गुजरना होता है। अंशधारकों द्वारा की गयी समीक्षा और स्वीकृति इस प्रक्रिया का आवश्यक अंग है क्योंकि प्रभावी नीतिगत कार्य के लिए यह आवश्यक होता है। लेकिन इसकी अंतिम स्वीकृति राष्ट्रीय स्वच्छ गंगा मिशन (एनएमसीजी) द्वारा प्रदान की जाती है। इस प्रकार, जिला गंगा समित जिला गंगा योजना का आखिरी मसौदा राज्य स्वच्छ गंगा मिशन (एसएमसीजी) के समक्ष प्रस्तुत करता है। योजना के समय सीमा के अंदर, अंतिम और पूर्ण कार्यान्वयन की जिम्मेदारी इसी संस्था की होती है।

कार्यान्वयन

4.10.4 सोपान 13- जिला गंगा योजना का क्रियान्वयन

अंतिम रूप से समीक्षा की गयी और स्वीकृति जिला गंगा योजना को क्रियान्वयन के लिए प्रस्तुत किया जाता है।

जिला गंगा समित संबंधित अधिकारियों तथा विभागों को कार्ययोजना का पालन करने, उनकी निगरानी औऱ आकलन की जिम्मेदारी सौंप देता है जिसे सोपान 7-8 में बताया गया है। ये उपलब्ध फंडिंग योजनाओं के आकलन का इस्तेमाल करते हैं जिन्हें सोपान 9 में चिह्नित किया गया है। आवश्यकतानुसार ये अधिक क्षमताओं को प्राप्त करने का भी प्रयत्न करते हैं।

4.10.5 सोपान 14- जिला गंगा योजना का संचार और प्रचार

विचारों को इकट्ठा करने, बाह्य और आंतरिक अंशधारकों द्वारा उनकी स्वीकृति, सहयोग और प्रतिबद्धता बढ़ाने के लिए उनका संचार महत्वपूर्ण होता है। कार्ययोजना को विकसित करने से लेकर क्रियान्वयन की कार्रवाई और सफलता के बारे में लोगों को जानकारी उपलब्ध कराने तक जिला योजना के प्रत्येक सोपान पर संचार उपयोगी होता है। संचार संबंधी हर गतिविधि के लिए आवश्यक है कि हम इसके लक्ष्यों, संचार उद्देश्यों और वांछित लोगों तक पहुंचने के साधनों को अनुकूलित करें। इसके लिए आप तालिका 7 में दिए गए खाके का इस्तेमाल कर सकते हैं।

तालिका 9- आंतरिक और बाह्य संचार योजना तैयार करने के लिए खाका- उदाहरण सहित

किन समस्याओं का संचार किया जाना है?	किसके लिए?	लक्ष्य क्या है?	किस संचार माध्यम के द्वारा	कब और कितनी बार?	Who is respo-nsible?	Budget needed	Source of funding
उदाहरण: प्रबंधित एक्वीफर रिचार्ज की नव स्थापित सुविधा के टेस्ट-फेज के लिए नए प्रकार की निगरानी व्यवस्था का सफलता पूर्वक इस्तेमाल।	जल-प्रयो-क्ता	इस व्यवस्था के लाभ और विश्वसनीयता के बारे में लोगों को बताना (अर्थात स्थापित की गयी निगरानी की नवाचारी व्यवस्था के बारे में) , औऱ जल की गुणवत्ता के स्थायित्व, उत्पादित जल की उपयोगकर्ता-ओं के बीच स्वीकृति को बढ़ाना	न्यूजलेटर, जिला गंगा समिति के वेबसाइट का होमपेज आदि	टेस्टिंग फेज के समाप्त होने के बाद और व्यवस्था के चालू होने के पहले।	Operating company	-	-

05 संलग्नक

5.1 गंगा बेसिन के मुख्य समस्याओं की सूची

क्लस्टर 1

जल की गुणवत्तआ

औद्योगिक जलमल(effluent) से होने वाला प्रदूषण-:

(अधिकांश) शहरी क्षेत्रों में भूजल अनियंत्रित औद्योगिक जलमल के प्रवाह से प्रदूषित होता है। (प्वाइंट सोर्स प्रदूषण)

तरल कचरे से होने वाला प्रदूषण:

शहरी और उसकी परिधि पर बने स्थानों में भूजल घर से निकलने वाले गंदे जल से प्रदूषित होता है। (नॉन-प्वाइंट सोर्स प्रदूषण)

ठोस कचरे से होने वाला प्रदूषण:

ग्रामीण और शहरी इलाकों में भूजल ठोस कचरे से प्रदूषित होता है (नॉन प्वाइंट सोर्स प्रदूषण)

शहरी क्षेत्र की नालियों से होने वाला प्रदूषण:

शहरी क्षेत्र की नालियों प्रदूषण का एक बड़ा स्रोत हैं। इसमें गाद, ईंट-पत्थऱ और विभिन्न प्रकार के जैविक तथा रासायनिक प्रदूषक तथा जीवाणु-विषाणु शामिल होते हैं जो तेज बारिश के दौरान बहकर एक स्थान से दूसरे स्थान तक चले जाते हैं। (नॉन-प्वाइंट सोर्स प्रदूषण)

कृषि कार्य से होने वाले रिसाव से होने वाला प्रदूषण:

खेती के लिए इस्तेमाल किए जाने वाले कीटनाशकों और खाद का रिसाव जल स्रोतों को प्रदूषित करता है और मूल्यवान नद तथा जल पारिस्थितिकी तंत्र को नुकसान पहुंचाता है। (नॉन-प्वाइंट सोर्स प्रदूषण)

शहरी बाढ़ :

निचले इलाकों में नालियों में रुकावट की वजह से समय समय पर शहरी इलाकों में बाढ़ आती रहती है। स्थानीय स्तर पर आने वाली इन बाढ़ों का संबंध प्रदूषण और स्वास्थ्य पर पड़ने वाले दुष्प्रभावों से है। ये संपत्ति और मूल्यवान आधारभूत ढांचे को भी नुकसान पहुंचाते हैं।

क्लस्टर 2

जल की मात्रा

अपर्याप्त जल संचयन:

जरूरत से अधिक उपलब्धता के समय भूजल के संचयन, जिसका जरूरत पड़ने पर इस्तेमाल किया जा सकता है, के अभाव में कई स्तरों पर अपर्याप्त जल संचयन की समस्या पायी जाती है। इसके परिणामस्वरूप पानी की कमी वाले महीनों में नदी के जल का जरूरत से अधिक दोहन किया जाता है।

बाढ़:

समय समय पर आने वाली बाढ़ा से फसलों, संपत्ति और नदी क्षेत्र के बुनियादी ढांटे को नुकसान पहुंचाती है। साथ ही यह दुर्लभ जल संसाधनों को भी नुकसान पहुंचाती है।

अज्ञात भूजल क्षमता के कारण गिरता हुआ जल-स्तर

भूजल संसाधनों से कितना जल सतत तौर पर निकाला जा सकता है इसकी ठीक ठीक जानकारी नहीं होती है। इसकी वजह से भूजल का जरूरत से अधिक दोहन होता है जो नदियों में बहकर जाने वाले जल की मात्रा (baseflow) को कम कर देता है।

अपर्याप्त भूजल प्रबंधन के कारण गिरता हुआ जल-स्तर :

भूजल के अनियंत्रित दोहन और अपर्याप्त प्रबंधन के कारण जल स्तर नीचे गिरता जा रहा है। इसके कारण आसपास की नदियों में जाने वाले बेस-फ्लो में कमी हो सकती है।

परि-नगरीय और इसके आसपास के इलाकों में अपर्याप्त जल आपूर्ति

insufficient शहरी औऱ उसके आसपास के इलाकों में नागरिक और औद्योगिक इस्तेमाल के लिए अपर्याप्त जल की व्यवस्था के कारण निजी तौर पर अनियंत्रित भूजल दोहन को बढ़ावा मिलता है जिससे स्थानीय स्तर पर भूजल के अत्यधिक इस्तेमाल की संभावना बढ़ जाती है। इसकी वजह से जल-स्तर नीचे गिर जाता है तथा आसपास की नदियों में बेस-फ्लो पर दुष्प्रभाव पड़ता है।

सिंचाई योजनाओं में जल असुरक्षा

सिंचित कृषि के कुल कमांड क्षेत्र में जल सुरक्षा की गारंटी उपलब्ध नहीं है। इसकी वजह से कभी पानी की कमी होती है तो कभी जरूरत से अधिक सिंचाई हो जाती है, कभी फसल कम होती है। सिंचाई के जल के अकुशल इस्तेमाल की वजह से भूजल का जरूरत से अधिक दोहन हो जाता है और बेस-फ्लो घट जाता है। कमांड क्षेत्र के फसल चक्र में बदलाव, नहरों में गाद जमा होने और उनका सही रख रखाव नहीं होने के कारण जल असुरक्षा में वृद्धि होती है।

जलजमाव और मिट्टी के खारा होने की समस्या :

जरूरत से ज्यादा सिंचाई के साथ ही पानी के निकास की पर्याप्त व्यवस्था नहीं होने के कारण जल जमाव होता है जिससे कालक्रम में सिंचाई योजना के छोर पर जमीन के खारा होने की समस्या पैदा होती है। यह जल, जो अंशतः बिना किसी उपयोग के वाष्प बनकर उड़ जाता है, नदी की निचले क्षेत्र में बेस-फ्लो को बढ़ाने का काम कर सकता है।

क्लस्टर 3

पारिस्थितिक संपूर्णता

दलदली क्षेत्र का विकास

लोगों के बसने या खेती के कारण दलदली क्षेत्र का अतिक्रमण होता है या उन्हें नष्ट कर दिया जाता है। इसका दलदलों के कारण होने वाले कई कार्यों पर बुरा प्रभाव होता है जिनमें नदी के स्वास्थ्य की रक्षा और हाइड्रोलोजिकल अतिक्रम को रोकने का काम शामिल होता है।

बाढ़क्षेत्र पर गैर-कानूनी कब्जा/ अतिक्रमण:

बाढ़ क्षेत्र के अतिक्रमण के कारण प्रदूषण में वृद्धि होती है। इसका बाढ़क्षेत्र के कुछ महत्वपूर्ण कार्यों और नदी से संबंधी इको-सिस्टम पर भी बुरा असर पड़ता है।

पर्यावरणीय प्रवाहों में बाधा :

पर्यावरणीय प्रवाह (ऐसे प्रवाह जो नदी के इकोसिस्टम की समग्रता की रक्षा करते हैं और लोगों तथा प्रकृति के सामानों और सेवाओं की रक्षा करते हैं) को प्राथमिकता नहीं दी जाती और इसलिए प्रायः ये पूर्ण नहीं हो पाते। इससे नदी के इको-सिस्टम को नुकसान पहुंचता है।

नदी चैनलों में कटान:

कटे हुए चैनलों के कारण बाढ़ा का पानी एक जगह इकट्ठा हो जाता है, भूजल की सतह नीचे चली जाती है और पर्यावरण को नुकसान पहुंचता है।

अनधिकृत ढंग से रेत का खनन:

बड़े पैमाने पर, बड़ी मशीनों के इस्तेमाल के द्वारा औद्योगिक रेत खनन के कारण भूजल की सतह नीचे चली जाती है, नदी का स्वरूप बदल जाता है और नदी के इकोसिस्टम की संपूर्णता नष्ट हो जाती है।

जल में गाद की अधिक मात्रा

जमीन के खिसकने, पहाड़ी क्षेत्रों में सड़क निर्माण, जंगलों के काटे जाने और खेती के गलत तौर तरीकों के कारण मिट्टी का क्षरण बढ़ता है और नदियों तथा नहरों में गाद की मात्रा बढ़ जाती है।

क्लस्टर 4

जल और संबंधित समस्याएं

अपर्याप्त जल प्रबंधन क्षमता:

जल संसाधनों के न्यायपूर्ण प्रबंधन में एक दूसरे से अलग थलग टुकड़ों में बंटी सोच, तथा अपर्याप्त समन्वय व्यवस्था के कारण बाधा पहुंचती है। इससे जल संसाधनों को लेकर होने वाले संभावित संघर्षों को घटित होने से पहले रोकने में भी बाधा पैदा होती है।

5.2 चयनित समस्याओं की विवेचना हेतु आंकड़े इकट्ठे करने के लिए खाका

समस्याओं का विश्लेषण करने के लिए बड़ी मात्रा में सूचना की जरूरत होती है। व्यापक दृष्टि को बरकरार रखने के लिए गंगा बेसिन में सामान्य रूप से उपस्थित होने वाले समस्याओं के लिए आवश्यक आंकड़ों के एक चयन को तालिका 1 दर्शाया गया है और अनुलग्नक 1 में इनकी व्याख्या की गयी है।

तालिका 10. चुनिंदा समस्याओं की विवेचना के लिए आवश्यक आंकड़ों का खाका

क्रमाक	निर्दिष्ट मुख्य समस्याएं	आंकड़ों की आवश्यकता	स्थित	स्रोत
1	**क्लस्टर 1- जल की गुणवत्ता**			
1	औद्योगिक उत्सर्जन से होने वाला प्रदूषण	सेक्टर के अनुसार प्रदूषण फैलाने वाले उद्योगों की सूची। इनमें अत्यधिक प्रदूषण फैलाने वाले उद्योगों को विशेष रूप से चिह्नि किया जाए।		
		जीपीआई और एसपीआई उद्योगों की सूची		
		कुल औद्योगिक उत्सर्जन की मात्रा		
		मल-शोधन की कुल उपलबद्ध क्षमता तथा इसका इस्तेमाल		
		जिले में स्थापित एवं कार्यरत मल शोधन संयंत्रों (ETPs/ CETP) की संख्या		
		असंशोधित जल वाली नालियों से ETP/ CEPT के जुड़े होने की स्थिति		
		जिले में आदेश को नहीं मानने वाले उद्योगों को जारी किए गए कुल कारण बताओ नोटिस और बंद करने के आदेशों की संख्या		
		कानून को लागू करवाने के लिए उपलब्ध साधन/ नीतियां		
		नदी के निचले छोर पर औद्योगिक प्रदूषण फैलाने वाले मुख्य क्षेत्र के आसपास जल की गुणवत्ता (सूचक- BOD, COD and DO तथा अन्य प्रमुख सूचक)		

क्रमाक	निर्दिष्ट मुख्य समस्याएं	आंकड़ों की आवश्यकता	स्थिति	स्रोत
1	**क्लस्टर 1- जल की गुणवत्ता**			
2	तरल कचरे से होने वाला प्रदूषण	कुल जलमल उत्पादन (प्रति स्थानीय निकाय- मुख्य शहरों के, पूरे जिले की आबादी)		
		संशोधन सुविधाएं (STP/SPS/MPS), उनका स्थान, उपयोग और संशोधित जलमल की गुणवत्ता/ कार्यकारी स्थिति		
		नदी के किनारे घरेलू प्रदूषण वाले मुख्य क्षेत्रों में जल की गुणवत्ता (सूचक- BOD तथा DO तथा अन्य प्रमुख तत्व)		
		स्वच्छता की पहुंच- जिसमें शौचालयों के प्रकार, कार्य, अवस्था और इस्तेमाल शामिल हो।		
		शौचालयों के जेंडर के अनुसार उपयोग के आंकड़े (कितन प्रतिशत महिलाओं और पुरुषों को शौचालय तक पहुंच है), देखरेख		
		ऑनसाइट स्वच्छता सुविधाएं कितने प्रतिशत लोगों को उपलब्ध हैं (सोख्ते सहित पूर्ण सेप्टिक टैंक/ केवल गड्ढे वाले शौचालय, सीधे नाले में मल प्रवाह वाले शौचालय)		
		STP/SPS/MPS में जोड़े गए नालों की संख्या		
		नहीं जोड़े गए नालों की संख्या		
		प्रत्येक नाले में अपरिष्कृत जलमल की मात्रा		
		सीधे नदियों में गिरने वाले नालों की संख्या और उनका ठिकाना, अपरिष्कृत जलमल की मात्रा का आंकड़ा		
		बार-स्क्रीन वाले नालों की संख्या		
		नालों से निकलने वाले अपरिष्कृत जलमल को साफ करने के लिए उठाए गए कदम		

क्रमाक	निर्दिष्ट मुख्य समस्याएं	आंकड़ों की आवश्यकता	स्थिति	स्रोत
1	**क्लस्टर 1- जल की गुणवत्ता**			
2	तरल कचरे से होने वाला प्रदूषण	नाले में प्रवाहित पाखाने के प्रबंधन की वर्तमान स्थिति और उनके निबटान की व्यवस्था		
		नालियों के नेटवर्क की व्यवस्ता और उनसे जुड़े घरों की संख्या		
		परिष्कृत जलमल का क्या प्रतिशत फिर से इस्तेमाल किया जाता है और उनके उपयोग के प्रकार		
		शहरी क्षेत्रों में जबर्दस्ती हथियाए गए स्थान (संख्या और उनकी लंबाई)		
3	ठोस कचरे से होने वाला प्रदूषण	नगर निगम के ठोस कचरे और बायोमेडिकल कचरे के उत्पादन की प्रवृत्ति और उनके प्रकार		
		कचरा निपटान का तौर तरीका (अनियंत्रित ढंग से बिखेरे गए कचरे का प्रतिशत, अनौपचारिक कचरा निपटान स्थल, औपचारिक कचरा संकलन स्थल, अच्छे और बुरे तरीके)		
		परिशोधन सुविधाएं, उनकी क्षमता और कार्य करने की परिस्थिति		
		मुख्य स्थलों पर पैदा हो रहा कुल ठोस कचरा, पूरे जिले में कुल ठोस कचरा)		
		पहले से चले आ रहे कचरा जमा करने की जगहें (संख्या और आकार)		
		स्रोत पर कचरे को अलग अलग करना/ कचरे को जमा करना, ले जाना/ परिशोधन क्षमता/ कचरे को हटाने और उन्हें रिसाइकिल करने की सुविधाएं		
		कचरे की दृष्टि से असुरक्षित स्थान (Garbage Vulnerable Point-GVPs)/ वे स्थान जहां नदी के पेट में वे स्थान जिन्हें कचरा फेंकने के लिए इस्तेमाल किया जाता है।		

क्रमाक	निर्दिष्ट मुख्य समस्याएं	आंकड़ों की आवश्यकता	स्थित	स्रोत
1	**क्लस्टर 1- जल की गुणवत्ता**			
4	शहरी क्षेत्रों की वर्षाजल वाली नालियों से बहकर आनेवाला प्रदूषण	जल की गुणवत्ता (सूचक- BOD तथा DO एवं अन्य चिंताजनक सूचक जैसे कि जीवाणु-विषाणु, जैविक और रासायनिक प्रदूषक, गाद) जो नदी की धारा के निचले क्षेत्रों में प्रदूषण फैलाने वाली खास जगहों पर पाए जाते हैं।		
		ठोस कचरे के प्रबंधन की स्थिति		
		वर्षाजल को जमा करने की विकेंद्रित सुविधाएं		
		पर्यावरण सहयोगी (ग्रीन) बुनियादी ढांचे की स्थिति, शहरी सीलिंग की स्थिति		
		बार-स्क्रीन वाले नालियों की संख्या		
5	कृषि रिसाव से होने वाला प्रदूषण	कृषि कार्य में इस्तेमाल की जाने वाली भूमि		
		इस्तेमाल किए जाने वाले कीटनाशक और खाद की मात्रा और प्रकार (प्रति हेक्टेटर किलोग्राम)		
		मुख्य फसलें और औसत उपज(प्रति हेक्टेयर टन)		
		खेती के तरीके/ तकनीक		
		खेती से रिसने वाले जल के कारण होने वाली मुख्य समस्याओं के सूचक तत्व औऱ उनकी सर्वोच्च मात्रा		
		फसलों को जलाने का चलन		
		नदी की तलहटी में उपजाए जाने वाले फसल		
		जैविक खेती के अंदर प्रतिशत भूमि		
		रासायनिक खाद पर समुदाय की निर्भरता कम करने के प्रति संवेदनशीलता का निर्माण		
		खेती में महिलाओं का शामिल होना और उनकी भूमिका		

क्रमाक	निर्दिष्ट मुख्य समस्याएं	आंकड़ों की आवश्यकता	स्थित	स्रोत
1	**क्लस्टर 1- जल की गुणवत्ता**			
6	शहरी बाढ़	अतिवृष्टि की घटनाओं की संख्या (भूतकाल में घटित और भविष्य में संभावित		
		नालियों में रुकावट		
		शहरी जल निकासी प्रणालियों की क्षमता (विशेष रूप से संयुक्त जल निकासी प्रणालियों की)		
		प्रतिशत शहरी सीलिंग / हरित बुनियादी ढांचे		
		विकेंद्रीकृत वर्षा जल संचयन प्रणाली		

क्रमाक	निर्दिष्ट मुख्य समस्याएं	आंकड़ों की आवश्यकता	स्थित	स्रोत
2	**क्लस्टर 2: जल की गुणवत्ता**			
7	अपर्याप्त जल संग्रहण	भू बेसिन जल का बजट (वर्ष के दौरान वाष्पीकरण, मौसमी जलस्तर और जल प्रवाह की प्रवृत्ति)		
		बांधों की सूची और अवस्था, बैराज, एनीकट, तटबंध, छोटे तालाबों का क्षेत्रफल और उनका डिजाइन, भंडारण क्षमता		
		भूजल से संबंधित वाटर-बॉडी की स्थिति		
		प्रति बारिश वर्तमान भूजल संचयन की प्रभावी स्थिति		
		भूजल वाटर बॉडीज जैसे गंगा, महत्वपूर्ण नदियां, तालाब और दलदली भूमि पर जबर्दस्ती कब्जे की स्थिति		
		भूजल के इस्तेमाल की अवस्था (बाढ़ सहित)		
		वर्षाजल संचयन की वर्तमान संरचनाएं		
		वर्षाजल संचयन के वर्तमान कार्य		

क्रमाक	निर्दिष्ट मुख्य समस्याएं	आंकड़ों की आवश्यकता	स्थित	स्रोत
2	क्लस्टर 2: जल की गुणवत्ता			
7	अपर्याप्त जल संग्रहण	पुनर्जीवित किए गए जलाशयों (वॉटर बॉडीज) के प्रकार, संख्या तथा क्षमता (प्रकार, संख्या और क्षमता)		
		भूजल को रिचार्ज करने की वर्तमान व्यवस्थाएं		
8	बाढ़	बेसिन जल के लिए बजट आबंटन		
		बाढ़ से संबंधित प्रमुख घटनाओं की सूची और उनका स्थानीयकरण		
		बाढ़क्षेत्र की मैपिंग और उनकी अवस्थिति (अतिक्रमण)		
		बारिश और इसके रुझान के बारे में जानकारी		
		बाढ़ के प्रबंधन के लिए उपलब्ध जलसंचयन क्षमता		
		बाढ़ के पानी का इस्तेमाल- समुदाय के द्वारा इस संबंध में अपनाए गए अच्छे तौर तरीकों की खोज करें। मुमकिन है कि परंपरागत रूप से इस्तेमाल किए जाने वाले कुछ तरीकों की पता चला जिन्हें हम फिर से चालू कर सकते हैं।		
		वर्षा के पानी के रिसाव का प्रबंधन करने संबंधी तौर तरीके (शहरी क्षेत्रों में)		
		भूमिक क्षेत्र औऱ जमीन का इस्तेमाल		
		वर्तमान में बाढ़ के आने की भविष्यवाणी और चेतावनी व्यवस्था		
		गंगा और इसकी सहायक नदियों के 5 किलोमीटर के दायरे में बाढ़क्षेत्र की मैपिंग		

क्रमाक	निर्दिष्ट मुख्य समस्याएं	आंकड़ों की आवश्यकता	स्थिति	स्रोत
2	क्लस्टर 2: जल की गुणवत्ता			
9	अज्ञात भूजल क्षमता के कारण नीचे गिरता हुआ भूजल स्तर	जोन के भूजल कार्य के लिए उपलब्ध बजट(इनमें भूजल दोहन दर, प्राकृतिक भूजल रिचार्ज आदि शामिल हैं)		
		भूजल प्रदूषण वाले क्षेत्र और प्रदूषण का प्रकार		
		मुख्य एक्वीफर और उनकी संचयन क्षमता		
		वे जोन जहां जमीन के सतह पर पाए जाने वाले जल और भूजल बीच अंतःसंबंध अधिक है।		
		वर्तमान Managed Aquifer Recharge (MAR) व्यवस्था		
		भूजल के रिचार्ज की संभावन / MAR व्यवस्थाएं (स्थान / क्षेत्र/ क्षमता/ जलस्रोत तथा उनके इस्तेमाल का उद्देश्य		
10	अपर्याप्त भूजल प्रबंधन के कारण नीचे जाता हुआ भूजल स्तर	भूजल दोहन के संबंध में स्थानीय कानून, एक्वीफर की मैपिंग		
		भूजल बजट (जिसमें इनके दोहन की दर और उद्देश्य भी शामिल हों)		
		जलस्तर का रुझान		
		कुओं का रजिस्टर(जल दोहन की अनुमति)		
		गैर-कानूनी कुओं की संख्या और उनके स्थान		
11	अपर्याप्त जल आपूर्ति	प्रति किसान और फसलों के लिए कुल सिंचाई के लिए जल की उपलब्धता		
		सिंचाई जल के इस्तेमाल का पैटर्न (प्रति हेक्टेयर जल का इस्तेमाल तथा उपज)		
		पानी की कमी का पूर्वानुमान लगाने की वर्तमान व्यवस्था/ तरीके		

क्रमाक	निर्दिष्ट मुख्य समस्याएं	आंकड़ों की आवश्यकता	स्थिति	स्रोत
2	क्लस्टर 2: जल की गुणवत्ता			
11	अपर्याप्त जल आपूर्ति	कृषि कार्य में होने वाली पानी की कमी को दूर करने की वर्तमान व्यवस्था		
		गैरकानूनी ढंग से सिंचाई के जल का इस्तेमाल रोकने की वर्तमान व्यवस्था		
12	सिंचाई परियोजनाओं में जल असुरक्षा	फसलों का पैटर्न, फसलों के प्रकार और फसल चक्र, जिन फसलों को लगाने पर रोक टोक की जाती है औऱ जिन फसलों को बढ़ावा दिया जाता है।		
		सिंचाई के तौर तरीके औऱ स्रोत		
		सहयोगात्मक सिंचाई प्रबंधन कानून के क्रियान्वयन की अवस्था		
		सिंचाई के लिए इस्तेमाल किए जाने वाले जल उपयोक्ता संगठनों की स्थिति		
		जिले के प्रगतिशील किसानो के बारे में सूचना और सतत खेती, कुशल जल उपयोग के लिए उनके द्वारा अपनाए गए तौर तरीके		
		छोटे छोटे नदी नालों की पहचान, स्थानीय नदियां और सिंचाई के लिए बनी नहरों से उनकी दूरी		
		सिंचाई के लिए बचाए गए जल से इन नदी नालों को पुनरुज्जीवित करने की योजना		
		सिंचाई व्यवस्था में वर्तमान रिजर्वायर, तालाब (उनकी संख्या तथा क्षमता)		
		कुशल सिंचाई के तौर तरीकों के लिए मौजूद राजनीतिक प्रोत्साहन, अकुशल सिंचाई जैसे नहर के लिए उपलब्ध प्रोत्साहन, फसल के आधार पर न कि जल के इस्तेमाल के आधार पर लगाया जाने वाला सिंचाई शुल्क		

क्रमाक	निर्दिष्ट मुख्य समस्याएं	आंकड़ों की आवश्यकता	स्थित	स्रोत
2	**क्लस्टर 2: जल की गुणवत्ता**			
13	जल जमाव तथा मिट्टी का खारा होना	जमीन के अंदर के भाग और जलस्तर का स्तरीकरण(Stratification) (अक्वीटार्ड का अस्तित्व)		
		सिंचाई के तौर तरीके और उनकी दक्षता, अति सिंचाई के उदाहरण		
		नालियों के तंत्र की स्थिति और उनके रखरखाव की परियोजनाएं		
		अतिवृष्टि से संबंधित घटनाएं		
		नालियों के अंदर गाद जमने की समस्या		
		विभिन्न उद्देश्यों के लिए भूजल के इस्तेमाल की व्यवहार्यता (उदाहरण- भूजल की गुणवत्ता)		
		नलकूपों का निर्माण (विशेष तौर पर सरकारी नलकूप)		
		खाद और/ या कीटनाशकों का इस्तेमाल		

क्रमाक	निर्दिष्ट मुख्य समस्याएं	आंकड़ों की आवश्यकता	स्थित	स्रोत
3	**क्लस्टर 3 : पारिस्थितिकी संपूर्णता**			
14	दलदलों पर गैर-कानूनी कब्जा (अतिक्रमण)	नदी बेसिन में दलदली भूमि की अवस्था और उनकी मैपिंग जिसमें अमृत सरोवरों का निर्माण भी शामिल है।		
		दलदली भूमि के स्वास्थ्य की स्थिति (पर्यावरण एवं वन मंत्रालय -MoEFCC- द्वारा टेंपलेट 9 में शामिल सूचक।		
		सभी ULB में शहरी दलदलों की स्थिति		
		अखंड और अस्वस्थ दलदलों के कारम और नदी जल की गुणवत्ता पर उनके प्रभाव		

क्रमाक	निर्दिष्ट मुख्य समस्याएं	आंकड़ों की आवश्यकता	स्थित	स्रोत
3	क्लस्टर 3 : पारिस्थितिकी संपूर्णता			
15	बाढ़ क्षेत्र का अतिक्रमण	बाढ़क्षेत्र का कुल रकबा और नदी का वह क्षेत्र जिस पर अतिक्रमण हो रहा है।		
		अतिक्रमित जमीनों के मालिक		
		नदी की तलहटी और नदी के किनारे उपजायी जाने वाली फसलें		
		कृषि संबंधी तौर-तरीके		
		Pallage कृषि का दायरा, कृषि रसायनों का प्रयोग		
16	पर्यावरणीय प्रवाहों को चालू नहीं रखना	E-flow प्रबंधन के लिए क्या कोई व्यवस्था है? अगर है तो क्या? जल आबंटन के तंत्र क्या उपलब्ध हैं?		
		फ्लो-रीजीम के मुख्य अवयवों की पहचान जो पर्यावरण अवस्था को प्रभावित करते हैं ? उदाहरण के लिए सूखे और बरसाती मौसम में बेस-फ्लो और अलग अलग आकारों के हाइ-फ्लो तथा बाढ़।		
		साल के दौरान नदी के जल का स्तर (खासकर सूखे मौसम में)		
		सूखे मौसम के दौरान जल की गुणवत्ता		
		मीठे पानी की जैवविविधता और पशु-पक्षियों के निवास व्यवस्तथा पर प्रभाव। औऱ उनकी इकोसिस्टम सेवाएं।		
		ग्लेशियरों की स्थिति (जहां वे पाए जाते हैं।)		
		ई-फ्लो प्रबंधन की क्या व्यवस्था है (यदि कोई व्यवस्था है तो) (क्या जल आबंटन का कोई तंत्र है?		
		फ्लो रीजिम के प्रमुख अवयव जो पर्यावरण की स्थितियों को नियंत्रित करते हैं। (जैसे कि सूखे और बरसाती मौसम का बेस फ्लो, अलग अलग आकार के हाइ फ्लो और बाढ़)		

क्रमाक	निर्दिष्ट मुख्य समस्याएं	आंकड़ों की आवश्यकता	स्थिति	स्रोत
3	**क्लस्टर 3 : पारिस्थितिकी संपूर्णता**			
17	नदियों के चैनलों को छोटा करना/ कटान	चैनल बनाना		
		कटाव		
		नदी के बीच से पत्थरों की खुदाई		
		हदबंदी/ नदी के किनारे भू प्रयोग में बदलाव(पेड़ो को हटाना आदि)		
		नदी में गाद को गिराना		
		नदी की धारा का वेग		
18	अवैध रेत खनन	जिले में रेत खनन के स्थानों का आकलन		
		व्यावसायिक रूप से अधिक खनन के स्थानों की पहचान, साथ ही इसकी मात्रा की गणना। समुदाय पर रेत खनन के प्रभाव को समझना काफी महत्वपूर्ण होता है। यह भी देखना चाहिए कि क्या इसमें बाल-श्रम का इस्तेमाल किया जाता है।		
		चैनलों की अवस्था (उनकी गुणवत्ता में ह्रास और कटाव)		
		भूजल संसाधनों की अवस्थिति और उनका इस्तेमाल		
19	नदियों में गाद की अधिक मात्रा	भूमि कटान का अधिक खतरा किन स्थानों को है? उनके प्रकार (प्राकृतिक या मानव निर्मित) , नुकसान की स्थिति और उनका पैमाना (यानी प्राकृतिक, भूआकृति सें संबंधित, भूगर्भीय गतिविधियां, जलवायु परिवर्तन से होने वाली अति वृष्टि के कारण, मानवीय दवाब, निर्माण कार्य, पशुओं के अत्यधिक चराने से उत्पन्न, जमीन की गुणवत्ता में कमी, अपर्याप्त कृषि कार्य (झूम खेती- काटो और जलाओ पद्धति से की जाने वाली खेती के प्रमाण), जंगली आग, नालो के द्वारा मानव मल को नदी में बहाया जाना आदि)		
		गाद का एक जगह जमा होना		
		चैनलों को अवरुद्ध करना		
		गाद जमा होने से रोकने के लिए नहरों के रख रखाव संबंधी गतिविधि		

क्रमाक	निर्दिष्ट मुख्य समस्याएं	आंकड़ों की आवश्यकता	स्थित	स्रोत
4	**क्लस्टर 4- जल संबंधी समस्याएं**			
20	अपर्याप्त जल प्रबंधन क्षमता	बेसिन जल का बजट		
		पानी के इस्तेमाल संबंधी नियम-कानून		
		प्रशासनिक स्थिति तथा जल उपयोक्ताओं के बीच समन्वय की स्थिति		
		गंगा प्रबंधन बोर्ड की स्थिति		
		जल विवादों और संघर्षों को सुलझाने के लिए संस्थागत व्यवस्थाएं		
		जल प्रयोक्ता संगठनों की स्थिति		
		सिंचाई व्यवस्था के अंदर पुरुषों और औरतों की भूमिका का विभाजन		
		महिलाओं की क्षमता और WUO में उनकी भागीदारी		

5.3 समस्याओं के अनुसार संभावित हस्तक्षेपों की संकलित सूची

इस अध्याय में पानी से संबंधित 20 महत्वपूर्ण मुद्दों पर विस्तारपूर्वक विचार किया गया है। साथ ही इनके समाधान के लिए संभावित कदमों के बारे में भी चर्चा की गयी है। हस्तक्षेपों की इस सूची को उदाहरण के रूप में देखा जाना चाहिए। इसे पूर्ण सूची के रूप में नहीं देखा जाना चाहिए।

5.3.1 क्लस्टर 1- जल की गुणवत्ता

प्रमुख समस्या 1 **औद्योगिक उत्सर्जन से होने वाला प्रदूषण**

परिचर्चा: तेजी से हो रहे आर्थिक विकास के साथ ही विभिन्न प्रकार के स्रोतों और औद्योगिक प्रक्रियाओं से होने वाले प्रदूषण (पॉइंट सोर्स प्रदूषण) की मात्रा में भारी वृद्धि अपेक्षित है। कई स्थानों पर प्रदूषित औद्योगिक जल सीधे नदियों और और धाराओं में बहा दिया जाता है। यह स्रोत और भूजल संसाधनों को प्रदूषित कर देता है। वर्तमान में कई नदियां दरअसल बड़े नालों का काम कर रही हैं जहां उद्योगों से निकलने वाला असंशोधित जल सीधे जमा होता है।

उद्योगों से निकलने वाले कचरे की मात्रा को शून्य के स्तर पर ले जाने से संबंधित अनेक कानून हैं जिनमें राज्यों के प्रदूषण नियंत्रण बोर्ड (SPCB) की महत्वपूर्ण भूमिका होती है।

लेकिन इसके पालन के लिए बनी व्यवस्था कई शहरों में अप्रभावी हैं जिसके पीछे कई कारण हैं जैसे कि

1. गंदगी फैलाने वाले प्रमुख औद्योगिक केंद्रों (हॉटस्पॉट) की निगरानी और वहां से नमूने जमा करने में अनियमितता
2. जल गुणवत्ता से संबंधित ऐसे आंकड़े जो प्रदूषण के स्रोत को पक्के तौर पर सुनिश्चित करें और जिन्हें अदालतों में साबित किया जा सके तथा
3. नियामक संस्थाओं एवं जल प्रबंधन एजेंसियों की पर्यावरण से संबंधित कानूनों को लागू करवाने के लिए अपर्याप्त क्षमता।

संबंधित लक्ष्यों सहित संभावित हस्तक्षेप (सूची पूर्ण नहीं है)

क्रम सं.	हस्तक्षेप	निर्दिष्ट लक्ष्य	समय सीमा	प्रकार
1.1	जल प्रदूषण के खास स्थानों को चिह्नित करते हुए जल गुणवत्ता (WQ) में निगरानी की गुणवत्ता में सुधार	स्थापित जल गुणवत्ता स्टेशनों की संख्या (इसमें स्थापित किए गए सेंसरों की संख्या, टेस्टिंग किट की उपलब्धता शामिल है) , जल गुणवत्ता के लिए लिये गए नमूनों की संख्या।	अल्प-मध्य अवधि	मटमैला
1.2	जल गुणवत्ता की निगरानी के लिए क्षमता निर्माण	जल गुणवत्ता की निगरानी के लिए योग्य लोगों की संख्या	अल्प-अवधि	मीठा (soft)
1.3	जल-गुणवत्ता की जांच के लिए सटीक Quality Assurance (QA)/ गुणवत्ता नियंत्रण (QC) प्रक्रिया की स्थापना जिन्हें अदालतों में साबित किया जा सकता है।	जल गुणवत्ता के लिए QA/QC स्थापित प्रक्रिया, गुणवत्ता निगरानी के लिए प्रशिक्षित लोगों की संख्या (नमूने जमा करना, लैब में काम, जल गुणवत्ता के आंकड़ों का विश्लेषण)	अल्प-अवधि	मीठा (soft)
1.4		Number of qualified personnel for WQ monitoring	अल्प-अवधि	मीठा (soft)

क्रम सं.	हस्तक्षेप	निर्दिष्ट लक्ष्य	समय सीमा	प्रकार
1.5	प्रदूषण के स्रोतों औऱ इनके हॉट-स्पॉट की पहचान के लिए नियमित रूप से औद्योगिक जलमल के नमूनों को इकट्ठा करना और निगरानी	जल गुणवत्ता की निगरानी के लिए कार्यक्रम की स्थापना, एक दूसरे से तुलनीय माप केंद्रों की संख्या जिन्हें आकलन में शामिल किया गया है।	अल्प-अवधि	मीठा (soft)
1.6	पर्यावरण संबंधी कानूनों के फोरी और प्रभावी पालन के लिए जल एजेंसियों की क्षमता का निर्माण	प्रशिक्षित लोगों का प्रतिशत	अल्प-अवधि	मीठा (soft)
1.7	जिला पर्यावरण योजना में निर्धारित मानकों का पालन नहीं करने वाले उद्योगों के खिलाफ आवश्यक कार्रवाई की शुरुआत	प्रदूषण स्रोतों की संख्या जहां प्रदूषण में कमी आयी है और जो अब जल गुणवत्ता के मानकों को पूरा करते हैं।	मध्य अवधि term	मीठा (soft)
	कृपया अन्य हस्तक्षेपों की पहचान करें			

संदर्भ (क्रॉस-रेफरेंस

- शहरी नदी प्रबंधन योजना (Urban River Management Plan)
- जिला पर्यावरण योजना (District Environment Plan)

प्रमुख समस्या 2 **तरल कचरे से प्रदूषण**

परिचर्चा: घर से उत्सर्जित गंदे पानी में बड़ी मात्रा में जैविक पदार्थ, पोषक तत्व और कॉलीफॉर्म होते हैं जिन्हें अगर बिना शुद्ध किए परिवेश में जाने दिया जाता है तो यह जलाशयों को प्रदूषित कर सकता है। इससे कैंसर, प्रजनन संबंधी बीमारियां, तपेदिक तथा पेट संबंधी रोग हो सकते हैं।

गंगा बेसिन में तेजी से बढ़ती शहरी आबादी और विकास की प्रक्रिया के कारण घरों में पैदा होने वाले गंदे पानी की मात्रा बहुत बढ़ गयी है। वैसे तो जल परिशोधन के कई संयंत्र कार्यरत हैं या बनाए जा रहे हैं, फिर भी स्थापित परिशोधन क्षमता और गंदे पानी की मात्रा के बीच अंतर और भी बढ़ने की संभावना है। परिशोधन और गंदे पानी की मात्रा के बीच का अंतर चालू परिशोधन संयंत्रों (STPs) के अपनी क्षमता के अनुरुप ठीक से काम नहीं करने का कारण और भी बढ़ जाता है। इसके अलावा, कई शहरी क्षेत्र अब भी जमीन के भीतर बनी मलवाहक नालियों (sewage system) से नहीं जुड़े हैं जिसके कारण खुली नालियों में बहने वाली गंदगी भूजल और जमीन की सतह पर मौजूद जलस्रोतों को प्रदूषित कर देता है। प्रायः मानव मल को खुली नालियों, मैदानों, खाली प्लॉटों आदि में फेंक दिया जाता है जो पर्यावरण में प्रदूषण फैलाते हैं। केंद्रीय प्रदूषण नियंत्रण बोर्ड (CPCB) (2013) के अनुसार शहरी क्षेत्रों और उसके आसपास के इलाकों से गंगा बेसिन में 80 प्रतिशत नालियों का पानी बिना परिशोधित किए हुए सीधे नदी में डाल दिया जाता है जिससे भूजल और सतह पर पाया जाने वाला जल प्रदूषित होता है।

संबंधित लक्ष्यों सहित संभावित हस्तक्षेप (सूची पूर्ण नहीं है)

क्रम सं.	हस्तक्षेप	निर्दिष्ट लक्ष्य	समय सीमा	प्रकार
2.1	विकेंद्रित तरीके का इस्तेमाल कर मल परिशोधन संयंत्रों (STP) की संख्या में वृद्धि जिनमें स्थानीय स्तर पर और छोटे संयंत्र शामिल हों।	नए मल परिशोधन संयंत्रों का कार्यान्वयन	दीर्घ अवधि	मटमैला
2.2	चालू STPs का इस्तेमाल करते हुए मल परिशोधन संयंत्रों (STP) की संख्या में वृद्धि	Treatment capacity added	मध्य अवधि	मटमैला
2.3	जमीन के भीतर बनी नालियों के नेटवर्क में विस्तार	km of underground sewerage network added and km of open drainage systems replaced	दीर्घ अवधि	मटमैला
2.4	मल परि शोधन के लिए इaecal sludge and Septage Management (FSSM) योजना का विस्तार जिसमें स्वच्छता सेवा कड़ी के अंदर वर्तमान स्थिति का आकलन, पूरे शहर में काम करने वाले समेकित स्लज ऐंड सेप्टेज प्रबंधन, रिपोर्टिंग, निगरानी और फीडबैक व्यवस्था, सुरक्षित मल निस्तारण स्थल आदि शामिल हैं।	FSSM योजना को पूरा करना, मानव मल के m^3 को सही ढंग से परिशोधित करना और इन्हें रिसाइकिल करना, सुरक्षित मल-निस्तारण स्थलों की संख्या	मध्य अवधि से दीर्घ अवधि के बीच	मटमैला

क्रम सं.	हस्तक्षेप	निर्दिष्ट लक्ष्य	समय सीमा	प्रकार
2.5	सुनिश्चित करना कि वर्षाजल और गंदा जल आपस में मिश्रित नहीं हों	अलग से बने हुए मानव-मल को ढोने वाली नालियों की कुल लंबाई	मध्य-अवधि	मटमैला
	कृपया अन्य हस्तक्षेपों की पहचान करें			

संदर्भ (Cross references)

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- Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems (2013)
- National Policy on Faecal Sludge and Septage Management (FSSM) (2017), शहरी कार्य और आवासन मंत्रालय द्वारा प्रकाशित
- हस्तक्षेप 6.3

टिप्पणी

जिला पर्यावरण योजना की टिप्पणी: " नए कचरा परिशोधन संयंत्रों की स्थापना या पुराने संयंत्रों को बेहतर बनाना तथा नालियों का जाल बिछाना स्थानीय निकायों का काम है। ये कार्य योजनाएं खर्चीली होती हैं इसलिए जिला प्रशासन स्थानीय शहरी निकायों और शहरी विकास विभाग के साथ विचार विमर्श कर कार्ययोजना बनाती है। कार्ययोजना को तालिका की आकृति में बनाना आवश्यक नहीं होता। स्थानीय शहरी निकाय/जिला प्रदूषण नियंत्रण बोर्ड/PCC तथा शहरी विकास विभाग (UDD) जलमल के संचयन और परिशोधन की योजनाओं के लिए बनी कार्ययोजना का हिस्सा हो सकती हैं। कार्ययोजना में दूसरी प्रासंगिक कार्ययोजनाओं को भी शामिल किया जा सकता है भले ही ऊपर के खाके में उनका उल्लेख नहीं किया गया हो।

प्रमुख समस्या 3 **ठोस कचरे से होने वाला प्रदूषण**

परिचर्चा: नगर निगमों का ठोस कचरा भूजल तथा जलाशयों को प्रदूषित करने वाला एक प्रमुख कारक है (नॉन-प्वाइंट सोर्स प्रदूषण)। इसमें मुख्य तौर पर बचा हुआ खाना, प्लास्टिक, कांच, टिन, कागज, कपड़ा और अन्य वस्तुएं शामिल होती हैं। इसके अलावा इनमें बिजली और इलेक्ट्रॉनिक कचरा भी शामिल होता है। ठोस कचरे को इकट्ठा करना शहरी क्षेत्रों में एक महत्वपूर्ण समस्या माना जाता है, ग्रामीण क्षेत्रों में भी यह एक बड़ी चुनौती है। इसीलिए ग्रामीण क्षेत्रों में ठोस कचरे को जमा करने पर आवश्यक ध्यान दिया जाना चाहिए।

ठोस कचरे के एक बड़े हिस्से को रिसाइकिल किया जा सकता है या वे सड़ कर मिट्टी में मिल सकते हैं (biodegradable)। कचरे की रिसाइक्लिंग, उनसे खाद बनाना या बायोगैस का उत्पादन स्थानीय उद्यमियों के लिए आमदनी का जरिया बन सकता है। इसीलिए ठोस कचरे का प्रबंधन अर्थगंगा कार्यक्रम से नजदीक से जुड़ा है।

संबंधित लक्ष्यों सहित संभावित हस्तक्षेप (सूची पूर्ण नहीं है)

क्रम सं.	हस्तक्षेप	निर्दिष्ट लक्ष्य	समय सीमा	प्रकार
	इकट्ठा करना, ढोना, रिसाइकिल करना और निबटान करना			
3.1	घरों में या प्रदूषण पैदा करने वाले स्रोत के स्थान पर ही कचरे को अलग अलग करना, औपचारिक या अनौपचारिक ढंग से कचरा इकट्ठा करने वाले लोगों को केवल अलग किए हुए कचरे को ही उठाने का निर्देश देना, स्रोत पर कचरे को अलग अलग करने के लिए वित्तीय प्रोत्साहन देना।	ठोस कचरे को अलग अलग करने वाले स्थानों की संख्या (घर, ब्लॉक या वार्ड), लागू किए गए वित्तीय प्रोत्साहन की संख्या, कचरा इकट्ठा करने वाले उन लोगों की संख्या जो केवल अलग किए हुए कचरे को उठाते हैं।	अल्प/ मध्य-अवधि	सॉफ्ट
3.2	सिविल सोसाइटी के साथ मिलकर व्यापक पैमाने पर घर घर जाकर जागरुकता और शिक्षण अभियान चलाना (स्थानीय एनजीओ तथा अन्य सामुदायिक संगठन)	आयोजित किए गए जागरूकता और शिक्षण कार्यक्रमों की संख्या, मैसेज, समाचार तथा प्रकाशित लेख	अल्प-अवधि	सॉफ्ट
3.3	घर घर जाकर कचरा जमा करने की व्यवस्था करना, इसके लिए छोटे ट्रकों या ट्रालियों की जरूरत होगी जिसमें अलग अलग खाने (compartment) बने होंगे।	जो घर, ब्लॉक या वार्ड घर घर जाकर अलग किए हुए कचरे को जमा करने वाले कार्यक्रम में शामिल होंगे उनकी संख्या	अल्प/ मध्य-अवधि	मटमैला
3.4	झाड़ू लगवाने के कार्यक्रम की शुरुआत- या तो मशीनी ढंग से या हाथ से	जिन इलकों में झाड़ू देने के कार्यक्रम की शुरुआत की गयी है।	अल्प-अवधि	मटमैला
3.5	जिन इलाकों में घर घर जाकर कचरा इकट्ठा करने का कार्यक्रम शुरु नहीं किया गया है वहां कचरा इकट्ठा करने के लिए निर्दिष्ट स्थल का निर्माण (जिनमें अलग अलग खांचे बने हों)	कचरा जमा करने के लिए स्थापित किए गए केंद्रों की संख्या	अल्प-अवधि	मटमैला

क्रम सं.	हस्तक्षेप	निर्दिष्ट लक्ष्य	समय सीमा	प्रकार
	इकट्ठा करना, ढोना, रिसाइकिल करना और निबटान करना			
3.6	बड़े बाजारों में जैव-कचरे को जमा करने और उनके प्रसंस्करण की सुविधा स्थापित करना, स्थानीय उद्यमियों को इस काम में शामिल करना	उन बड़े बाजारों की संक्या जहां जैव-कचरे तथा उनके प्रसंस्करण की सुविधा का निर्माण किया गया है।	अल्प/ मध्य-अवधि	मटमैला
3.7	बड़े आकार के कचरा ढोने वाले ट्रकों की व्यवस्था जो कचरा इकट्ठा करने की जगह से लेकर इनके प्रबंधन की जगह लेकर जाएं। (नीचे देखें)	इस्तेमाल किए गए ट्रकों की संख्या	अल्प/ मध्य-अवधि	मटमैला
3.8	सामान को वापस लाने (material recovery), बायोगैस के उत्पादन और खतरनाक कचरे सहित अन्य कचरे के निपटान आदि के लिए स्थानीय उद्यमियों की सहायता से नगर निगम के स्तर पर विकेंद्रीकृत स्थानों की स्थापना	कचरे के प्रसंस्करण एवं रिसाइक्लिंग के लिए स्थापित विकेंद्रीकृत केंद्रों की संख्या	मध्यम अवधि	मटमैला
3.9	अक्रिय तथा रिसाइक्लिंग नहीं करने के लायक कचरे के निष्पादन के लिए साफ सुथरे लैंडफिल की स्थापना	स्थापित लैंडफिलों की संख्या	मध्यम अवधि	मटमैला
	विविध			
3.10	नदी तट की सफाई कार्यक्रमों का आयोजन-एनजीओ तथा स्थानीय समुदाय के सदस्यों को इस कार्य में शामिल करना।	कार्यान्वित नदी तट सफाई कार्यक्रमों की संख्या	अल्प अवधि	मटमैला
3.11	तालाबों और छोटे जलाशयों की सफाई के लिए कार्यक्रमों का आयोजन, स्थानीय समुदाय के सदस्यों को इस कार्य में शामिल करना।	कार्यान्वित सफाई कार्यक्रमों की संख्या	अल्प अवधि	सॉफ्ट
3.12	नदियों, जलाशयों में बहने वाले प्लास्टिक को छानने के लिए 'प्लास्टिक ट्रैप' बनानास्थानीय समुदाय के सदस्यों को इस कार्य में शामिल करना।	कार्यान्वित प्लास्टिक ट्रैप की संख्या	अल्प अवधि	मटमैला
	पहले से काम कर रहे लैंडफिल			
3.13	लैंडफिल से पुराने कचरे को साफ करने के लि बायो-माइनिंग को बढ़ावा देना	स्थापित किए गए बाये माइनिंग स्थलों की संख्या	मध्यम अवधि	मटमैला

ID	Intervention	Specific Targets	Time Frame	Type
	पहले से काम कर रहे लैंडफिल			
3.14	पहले से चले रहे कचरे को फेंकने के स्थलों की बायो-कैपिंग	कचरा फेंकने के लिए इस्तेमाल किए जाने वाले पुराने स्थलों की संख्या जिन्हें कैप किया गया	मध्यम अवधि	मटमैला
	Please identify other interventions ...			

संदर्भ (Cross references)

- जिला पर्यावरण योजना (District Environmental Plan)
- जिला शहरी जल प्रबंधन योजना (District Urban River Management Plan)
- जिला अर्थ गंगा योजना (District Arth Ganga Plan)
- हस्तक्षेप 4.1 (Intervention 4.1)

प्रमुख समस्या 4 **शहरी क्षेत्रों में वर्षा जल के साथ बह कर आने वाला प्रदूषण (नॉन-प्वाइंट सोर्स प्रदूषण)**

परिचर्चा: शहरों में वर्षा के पानी का बहाव प्रदूषण रा एक प्रमुख स्रोत है। इसमें गाद, ईंट-पत्थऱ, विभिन्न प्रकार के जैविक और रासायनिक प्रदूषक और जीवाणु तथा विषाणु होते हैं जो तेज बारिश के दौरान शहरी जमीन से बहकर एक स्थान से दूसरे स्थान पर चले जाते हैं।

बारिस के साथ बहकर आया यह प्रदूषण नालियों में जमा हो जाता है जो नियमित रूप से पास की नदियों और झरनों, जलाशयों में जमा हो जाता है।

वर्षाजल के बहाव से होने वाले प्रदूषण के प्रबंधन का ठोस कचरे के निपटान से नजदीकी संबंध है।

संबंधित लक्ष्यों सहित संभावित हस्तक्षेप (सूची पूर्ण नहीं है)

क्रम सं.	हस्तक्षेप	निर्दिष्ट लक्ष्य	समय सीमा	प्रकार
	ठोस कचरे का प्रबंधन			
4.1	ठोस कचरे का प्रबंधन जिसमें झाड़ू देने का कार्यक्रम तथा ठोस कचरे को इकट्ठा करना शामिल है।	ठोस कचरे का m^3 जिसे पर्यावरण में प्रवेश करने से रोका गया	अल्प-अवधि	मटमैला
4.2	शहरी तथा उप-शहरी क्षेत्रों में बड़े पैमाने पर पशु पालन को रोकने के लिए निगम के कानूनों को लागू करना	शहरी और उप-शहरी इलाकों में पशुपालन को कितने प्रतिशत घटाया गया	अल्प-अवधि	सॉफ्ट
4.3	व्यापक पैमाने पर घर घर जाकर नागरिक संस्थाओं, एनजीओ एवं अन्य सामुदायिक संस्थाओं की सहायता से जागरूकता और शिक्षण अभियान चलाना	आयोजित किए गए जागरूकता और शिक्षण कार्यक्रमों,मैसेजों, खबरों और प्रकाशित लेखों की संख्या,	अल्प-अवधि	सॉफ्ट
	बारिस और सतह के धीमे रिसाव वाली घटनाओं को अंकित करना			
4.4	विकेंद्रित वर्षा जल संचयन (रेन वाटर हार्वेस्टिंग) को बढ़ावा देना	वर्षा जल संचयन की सुविधा वाले मकानों की संख्या, जमा किए हुए वर्षा जल का m^3	अल्प/ मध्यम अवधि	मटमैला/ हरा

क्रम सं.	हस्तक्षेप	निर्दिष्ट लक्ष्य	समय सीमा	प्रकार
	Capture rainfall and slow-down surface runoff			
4.5	सभी स्तरों पर वर्षाजल को जमा करने के लिए तालाब तथा बायोस्वेल्स की विकेंद्रित व्यवस्था खड़ी करना या पहले से चली आ रही व्यवस्था को मजबूत करना। ये जैविक ढंग से वर्षाजल को शुद्ध करने में मदद करने वाली संयंत्र की तरह काम करते हैं। इसे समुदाय के सहयोग से लागू किया जाना चाहिए। इन बुनियादी ढांचों की सुरक्षा के लिए दीर्घकालीन दृष्टिकोण अपनाने की जरूरत है जिसमें जन जागरूकता कार्यक्रमों का निर्माण शामिल है। इन्हें नागरिक संस्थाओं के द्वारा लागू किया जाना चाहिए।	जल संचयन के लिए बनाए गए या ठीक कर काम के लायक बनाए गए तालाबों की संख्या, स्वेलों की लंबाई।	मध्यम/दीर्घ अवधि	हरा/ सॉफ्ट
4.6	शहरी क्षेत्रों में विभिन्न प्रकार के पर्यावरण सहयोगी बुनियादी ढांचे की स्थापना जिनमें रिसावदार पगडंडियां, पार्किंग की जगहें और पैदल पथ तथा छोटे छोटे जल संग्रहण स्थलों का निर्माण शामिल है।	पर्यावरण सहयोगी बुनियादी ढांचे वाला m^2 , माइक्रो तालाबों की संख्या	मध्यम/दीर्घ अवधि	हरा
4.7	सभी पैमानों पर, बहुत छोटे से लेकर बड़े स्तर तक, रेन-गार्डेन की स्थापना जिनमें गहरी जड़ों वाले पौधे हों, जनता तक बात पहुंचाने के लिए कार्यक्रम करना और स्थानीय स	स्थापित रेन-गार्डनों का m^2	मध्यम-अवधि	हरा
	कृपया अन्य हस्तक्षेपों की पहचान करें...			

संदर्भ (Cross references)

- जिला शहरी नदी प्रबंधन योजना (District Urban River Management Plan)
- जलाशयों को पुनर्जीवित करने के लिए बनाए गए सूचक गाइडलाइंस(Indicative Guidelines for Restoration of Waterbodies (polluted lakes, ponds, rivers) in 2019 (CPCB)
- हस्तक्षेप3.4 (Intervention 3.4)
- हस्तक्षेप 6.1 (Intervention 6.1)
- हस्तक्षेप6.2 (Intervention 6.2)
- हस्तक्षेप 7.7 (Intervention 7.7)
- हस्तक्षेप8.13 (Intervention 8.13)

प्रमुख समस्या 5 **कृषि रिसाव से होने वाला प्रदूषण**

परिचर्चा: मिट्टी, कीटनाशकों, खाद के खेतों से रिसाव को सामान्यतौर पर कृषि रिसाव कहते हैं। इसकी वजह से जलस्रोतों का नॉन-प्वाइंट प्रदूषण होता है जो नदी तथा जलीय पारिस्थितिक तंत्र (इकोसिस्टम) को गहरा नुकसान पहुंचाता है। उदाहरण के लिए, अत्यधिक नाइट्रोजन की वजह से जलाशयों में नुकसानदेह शैवालों की मात्रा में तेजी से वृद्धि हो सकती है जो समय बीतने के साथ भूजल स्रोतों को भी प्रदूषित कर सकता है। नदियों के प्रदूषण में खेती एक बहुत बड़ा कारण है। कृषि रिसाव के कारण होने वाले जल स्रोतों के प्रदूषण में और भी बढ़ोत्तरी होने की संभावना है क्योंकि रासायनिक खाद और कीटनाशकों का उपयोग औऱ बढ़ने की संभावना है।

संबंधित लक्ष्यों सहित संभावित हस्तक्षेप (सूची पूर्ण नहीं है)

क्रम सं.	हस्तक्षेप	निर्दिष्ट लक्ष्य	समय सीमा	प्रकार
	कृषि रसायनों का इस्तेमाल कम करना			
5.1	लोगों में संवंदनशीलता बढ़ाकर और दर, समय तथा इस्तेमाल के तरीकों के बारे में प्रशिक्षण देकर खाद का इस्तेमाल कम करवाना	खेतों में संही ढंग से खाद के इस्तेमाल के लिए कितने किसानों को संवेदनशील बनाया गया	मध्य/ दीर्घ अवधि	सॉफ्ट
5.2	संबंधित जल उपयोक्ता संगठनों के साथ मिलकर एक व्यापक जागरूकता कार्यक्रम चलाना (सिंचाई योजनाओं के बारे में)	जागरूकता एवं शिक्षण संबंधी आयोजनों, मैसेजेज, खबरों तथा प्रकाशित लेखों की संख्या	अल्प अवधि	सॉफ्ट
5.3	जैविक खेती को बढ़ावा देना और गरमा धान की खेती को कम करना	जैविक खेती में परिवर्तित क्षेत्रफल	मध्य/ दीर्घ अवधि	हरा
	बायो फिल्टरों की स्थापना			
5.4	नदियों, क्रीक और नालों के किनारे किनारे नदी संबंधित जोन की स्थापना- चौड़ाई 10 मीटर। ये कृषि रिसाव रोकने के लिए एक प्रकार के प्राकृतिक फिल्टर जोन का काम करेंगे	स्थापित नदी जोन की लंबाई	मध्य अवधि	हरा
	कृपया अन्य हस्तक्षेपों की पहचान करें....			

संदर्भ (Cross references)

- जिला सिंचाई योजना
- जिला पर्यावरण योजना

प्रमुख समस्या 6 **शहरी बाढ़**

परिचर्चा: तेज बारिश के दौरान नालियों के बंद रहने से समय समय पर शहरी क्षेत्रों में बाढ़ आ जाती है, खासकर निचले इलाकों में जहां जरूरत से अधिक बहने वाला नाली का पानी इकट्ठा हो जाता है। नदी के आसपास बैक-वाटर प्रभाव के कारण शहरी इलाकों में बाढ़ की समस्या और भी बढ़ जाती है जिसमें नदी का जल स्तर बढ़ने के कारण नाले का पानी बाहर नहीं निकल पाता है। शहरी बाढ़ ठोस कचरे का कारण उत्पन्न प्रदूषण, मिली जुली नालियों में मानव मल सीधे गिरने से संबंधित होता है जिसका स्वास्थ्य पर बुरा असर होता है। इससे संपत्ति और महत्वपूर्ण बुनियादी ढांचे को भी नुकसान होता है।

जलवायु परिवर्तन के कारण होने वाली अतिवृष्टि और पक्के क्षेत्रों में हो रही लगातार वृद्धि के कारण आने वाले समय में कई शहरों में बाढ़ा की समस्या और भी गंभीर होने वाली है। इसकी वजह से सतह से रिसाव में भी वृद्धि होती है।

शहरी बाढ़ से बचने के लिए तीन तरीके उपलब्ध हैं।

1. यथासंभव वर्षा के पानी को इकट्ठा करना और जमीन से होने वाले रिसाव को कम करना
2. नालियों के तंत्र को बढ़ाना जिनमें वर्षा के पानी और गंदे पानी के लिए अलग अलग व्यवस्था हो।
3. महत्वपूर्ण उच्च मूल्य के इलाकों की रक्षा या उन्हें ऊंचा करना।

संबंधित लक्ष्यों सहित संभावित हस्तक्षेप (सूची पूर्ण नहीं है)

क्रम सं.	हस्तक्षेप	निर्दिष्ट लक्ष्य	समय सीमा	प्रकार
	बारिश के पानी को इकट्ठा करना और जमीन के रिसाव को धीमा करना			
6.1	विकेंद्रीकृत वर्षा जल संचयन को बढ़ावा देना	संचित वर्षा जल का m^3	अल्प अवधि/ मध्यम अवधि	मटमैला/ हरा
6.2	शहरी क्षेत्रों के जलाशयों की सुरक्षा या नए जलाशयों, पर्यावरण सहयोगी स्थानों (green spaces)का निर्माण, विभिन्न प्रकार के पर्यावरण सहयोगी बुनियादी ढांचे का निर्माण	शहरी क्षेत्रों मे स्थापित या संरक्षित जलाशयों तथा पर्यावरण सहयोगी स्थलों की संख्या, स्थापित पर्यावरण सहयोगी बुनियादी ढांचे का m^2	मध्यम अवधि/ दीर्घ अवधि	हरा
	नालियों की व्यवस्था में सुधार			
6.3	गंदे जल और बारिस के जल के लिए अलग अलग नालियों का निर्माण, खासकर बाढ़ संभावित शहरी क्षेत्रों में	जहां अलग अलग नालों का निर्माण किया गया है उसकी कुल लंबाई	मध्यम अवधि/ दीर्घ अवधि	मटमैला
6.4	शहरी क्षेत्रों में बारिश का पानी ढोने वाले नालों की क्षमता को बढ़ाना	बारिश का पानी ढोने वाले नव निर्मित नालों की कुल लंबाई	मध्यम अवधि/ दीर्घ अवधि	मटमैला

क्रम सं.	हस्तक्षेप	निर्दिष्ट लक्ष्य	समय सीमा	प्रकार
	शहरी बाढ़ क्षेत्रों के लिए कायदे कानूनों को लागू करना			
6.5	नदी के क्षेत्र में ठोस कचरे को फेंकने, गंदे जल के प्रवाह संबंधी सख्त कायदे कानून	नदी के किनारे जिन स्थानों को ठोस कचरे और गंदे जल के बहाव से मुक्त करवाया गया है उन स्थानो की कुल लंबाई	अल्प अवधि	सॉफ्ट
6.6	अनधिकृत रिहाइशी क्षेत्रों को हटाना, दूसरी जगहों पर ले जाना, इनके लिए रणनीति का निर्माण और वैकल्पिक स्थलों की व्यवस्था	बाढ़ क्षेत्र से हटाए, दूसरी जगहों पर बसाए गए घरों की कुल संख्या	मध्यम अवधि	सॉफ्ट/ मटमैला
6.7	नियमित निरीक्षण, सैटेलाइट से प्राप्त हाइ-रिजोल्यूशन तस्वीरों का इस्तेमाल कर स्थापित कायदे कानूनों का सख्ती से पालन सुनिश्चित करना, उन स्थानों, हॉटस्पॉट तथा समस्याग्रस्त स्थानों की पहचान जहां निरीक्षण को बढ़ाने की जरूरत है।	नदी के बाढ़ क्षेत्र की कुल लंबाई जहां निगरानी की पर्याप्त व्यवस्था कर दी गयी है।	अल्प अवधि	सॉफ्ट
6.8	बाढ़ क्षेत्र की सख्त निगरानी, प्रदूषण फैलाने वाले को कीमत अदा करनी होगी जैसे सिद्धांत (Polluter pays principle) इसमें शामिल होंगे, इन्हें नहीं मानने वालों पर भारी जुर्माना	सख्त निगरानी के लिए लागू किए गए कदम	अल्प अवधि/ मध्यम अवधि	सॉफ्ट
6.9	सबसे बेहतर प्रदर्शन करने वाले उद्योगों, रेजिडेंट वेलफेयर एसोशियन के लिए पुरस्कार। इन्हें नदी-पुरस्कार के रूप में दिया जा सकता है या उन्हें वर्तमान 'ग्रीन सर्टिफिकेशन' से जोड़ा जा सकता है।	दिए गए पुरस्कारों की कुल संख्या	अल्प अवधि	सॉफ्ट
	कृपया अन्य हस्तक्षेपों की पहचान करें...			

संदर्भ (Cross references)

- शहरी नदी प्रबंधन योजना
- हस्तक्षेप2.5
- हस्तक्षेप 4.4
- हस्तक्षेप 4.6
- हस्तक्षेप 7.7
- हस्तक्षेप 8.13
- हस्तक्षेप 8.14
- हस्तक्षेप 15.5
- हस्तक्षेप 15.7
- हस्तक्षेप 15.10
- हस्तक्षेप15.11

5.3.2 क्लस्टर 2- जल की गुणवत्ता

प्रमुख समस्या 7 **अपर्याप्त जल संचयन**

परिचर्चा: गंगा बेसिन में चूंकि एक ही अवधि के दौरान बारिस होती है, गंगा और इसकी सहायक नदियों में अधिकांश प्रवाह मॉनसून के महीने में पाया जाता है। यह प्रवृत्ति उन सहायक नदियों में और अधिक होती है जो ग्लेशियर से नहीं निकलती हैं। बाढ़ के समय पानी को जमा करने की पर्याप्त व्यवस्था नहीं होती और गंगा के सालाना प्रवाह का एक बड़ा हिस्सा बिना किसी उपयोगी इस्तेमाल के बह जाता है। परिणामस्वरूप, कम बारिश वाले महीनों में गुरुत्वाकर्षण आधारित सिंचाई तथा अन्य कार्यों के लिए जल दोहन की मात्रा अत्यधिक हो जाती है जिससे पर्यावरणीय प्रवाह पर बुरा असर होता है।

हर स्तर पर समय समय पर होने वाली पानी की कमी के निदान का सबसे स्पष्ट तरीका है जरूरत से अधिक जल या रिसाव को जमीन पर या विस्तृत क्षेत्र में फैले विभिन्न आकार के संचयन ढांचे में इकट्ठा करना जैसे कि प्लॉट, खेत, लैंडस्केप और कैचमेंट स्थानों में। यह हाइड्रोलोजिकल चक्र को ठीक करने में सहायता करेगा, जल सुरक्षा को बढ़ाएगा, अति वृष्टि या अनावृष्टि जैसी स्थितियों से बचाएगा और सूखे मौसम में अधिक जल उपलब्ध कराएगा जिसका उत्पादक तरीके से इस्तेमाल किया जा सकता है।

संबंधित लक्ष्यों सहित संभावित हस्तक्षेप (सूची पूर्ण नहीं है)

क्रम सं.	हस्तक्षेप	निर्दिष्ट लक्ष्य	समय सीमा	प्रकार
7.1	मुख्य सहायक नदियों पर बड़े या मध्यम आकार के जल संग्रह सुविधाओं का निर्माण। इसे एक संवेदनशील कार्य है जिस पर अंशधारकों के साथ पूरी तरह विचार विमर्श के बाद ही फैसला लिया जाना चाहिए।	स्थापित किए गए छोटे तथा बड़े आकार के जल संग्रह सुविधाओं की संख्या तथा इनमें इकट्ठा जल की मात्रा	दीर्घ अवधि	हरा/ मटमैला
7.2	छोटी सहायक नदियों पर छोटे रिजर्वायरों का निर्माण या इनके निर्माण के लिए वित्त मुहैया कराना	स्थापित किए गए छोटे रिजर्वायरों की संख्या और उनमें इकट्ठा किए गए जल की मात्रा	मध्य अवधि	हरा/ मटमैला
7.3	समुदाय के सहयोग से स्थानीय तालाबों, सरोवरों की मरम्मत, गाद की सफाई और उनकी सुरक्षा। इसमें तालाबों को स्थानीय जलाशयों से जोड़ने का काम भी शामिल है, वित्त प्रदान करना (या कर्ज उपलब्ध कराना	संख्या, mcm जल संग्रह	अल्प/ मध्यम अवधि	हरा/ मटमैला
7.4	खेतों के तालाब (farm pond) बनाना या उनकी मरम्मत, माइक्रो रिजर्वायर या घाटियों के तालाब (कृषि भूमि के स्तर पर)	स्थापित किए गए खेतों के तालाबों की संख्या, पुनर्जीवित किए गए स्थानीय तालाबों की संख्या	अल्प/ मध्यम अवधि	हरा/ मटमैला
7.5	दलदली भूमि को फिर से बनाना या उनकी सुरक्षा	संख्या, क्षेत्रफल	मध्यम/दीर्घ अवधि	हरा

Potential Interventions with related specific targets (list not complete)

क्रम सं.	हस्तक्षेप	निर्दिष्ट लक्ष्य	समय सीमा	प्रकार
7.6	विभिन्न तरीकों का इस्तेमाल कर कृषि क्षेत्रों में वर्षाजल संचय को बढ़ावा देना (जैसे स्वेल, गड्ढे, कंटूर बांध आदि)	संचित वर्षाजल का m^3	अल्प/ मध्यम अवधि	मटमैला/ हरा
7.7	शहरी क्षेत्रों में वर्षा जल संचयन को बढ़ावा देना	संचित वर्षाजल का m^3	अल्प/ मध्यम अवधि	मटमैला/ हरा
	कृपया अन्य हस्तक्षेपों की पहचान करें			
7.8	नदी के स्वास्थ्य के आकलन के बारे मे स्थानीय समुदायों की क्षमता में वृद्धि	नदी के स्वास्थ्य के आकलन में संलग्न लोगों की संख्या, उन स्थानों की संख्या जहां EHA चलाया जा रहा है।	अल्प/ मध्यम अवधि	

संदर्भ (Cross references)

- नदी बेसिन प्रबंधन योजना
- मुख्य समस्या 4, विशेष कर हस्तक्षेप 4.4
- हस्तक्षेप 6.1,
- हस्तक्षेप 8.13
- हस्तक्षेप 12.1
- हस्तक्षेप 12.2

प्रमुख समस्या 8 **बाढ़**

परिचर्चा: गंगा बेसिन के निचले क्षेत्रों में बाढ़ एक नियमित घटना है। यह नदी क्षेत्र में फसलों, संपत्ति और महत्वपूर्ण बुनियादी ढांचे को नुकसान पहुंचाती है और दुर्लभ जल संसाधनों को नष्ट करती है। बाढ़ का पानी प्रायः प्रदूषित होता है और इसमें ईंट-पत्थर आदि होते हैं। इनमें गाद की भारी मात्रा होती है।

बाढ़ प्रायः प्राकृतिक कारणों से आती है जैसे कि मॉनसून के दौरान तेज बारिश, उत्तर से दक्षिण की ओर बहने वाली समांतर सहायक नदियां जो हिमालय से निकलती हैं और जिनमें बरसात के महीने में पानी रहता है, गंगा के मैदान की बहुत ही हल्की ढलान जिसके कारण उन स्थानों पर पानी आसानी से बाहर नहीं निकल पाता जहां ये सहायक नदियां आपस में मिलती हैं आदि शामिल हैं। ऊपरी और मध्य कैचमेंट क्षेत्रों में लैंडस्केप की गुणवत्ता, जैसे जंगलों के काटे जाने, खराब होने की वजह से भी बाढ़ की समस्या में इजाफा होता है जिसके साथ बेसिन में जल संचयन क्षमता भी एक कारक है।

शहरी क्षेत्रों में बारिश के पानी का रिसाव भी स्थानीय स्तर पर बाढ़ का कारण है। यह जलस्रोतों को भी प्रदूषित करता है।

ऊपरी कैचमेंट क्षेत्रों में तेज बारिश और बादल फटने जैसी घटनाएं और पहाड़ी क्षेत्र होने के कारण भी अचानक बाढ़ और भूस्खलन हो सकता है।

संभव है कि जलवायु परिवर्तन के कारण बाढ़ों की तीव्रता और उनकी संख्या में वृद्धि हो। जलवायु परिवर्तन की वजह से

ऊपरी कैचमेंट क्षेत्र में Glacier Lake Outburst Floods (GLOF) का खतरा भी बढ़ सकता है।

संबंधित लक्ष्यों सहित संभावित हस्तक्षेप (सूची पूर्ण नहीं है)

क्रम सं.	हस्तक्षेप	निर्दिष्ट लक्ष्य	समय सीमा	प्रकार
	बाढ़ क्षेत्रों में भूमि प्रयोग को जोन में बांटना			
8.1	स्थानीय निवासियों की सहायता से बाढ़ मानचित्र बनाएं (धरातल की सचाई)	बाढ़ मानचित्र बनाए गए स्थानों का क्षेत्रफल	अल्प अवधि	सॉफ्ट
8.2	बाढ़ जोन को निर्दिष्ट करना तथा भूमि प्रयोग को जोन में बांटना, सुनिश्चित करें कि बाढ़ क्षेत्रों के कार्यों को बरकरार रखा जाए, बाढज़ क्षेत्रों में स्थायी निर्माण पर रोक लगाएं (इन्हें निर्माण निषिद्ध क्षेत्र घोषित करें।)	सुनिर्दिष्ट एवं सुरक्षित किए गए बाढ़ क्षेत्रों का m^2	अल्प अवधि	सॉफ्ट
8.3	बाढ़ क्षेत्रों का कृषि के लिए इस्तेमाल करें लेकिन उन फसलों को चुने जो समय समय पर होने वाले बाढ़ को सहन कर सकते हैं।	बाढ़ भूमि का कितना प्रतिशत कृषि कार्य के लिए इस्तेमाल किया गया है।	मध्य अवधि	हरा
8.4	महत्वपूर्ण बुनियादी ढांचों को दूसरे स्थानों पर ले जाएं (जिन्हें बाढ़ या अचानक आने वाली बाढ़ का खतरा है।)	बाढ़ से बचाए गए महत्वपूर्ण बुनियादी ढांचे का प्रतिशत	मध्य अवधि/ दीर्घ अवधि	सॉफ्ट/ मटमैला

क्रम सं.	हस्तक्षेप	निर्दिष्ट लक्ष्य	समय सीमा	प्रकार
	बाढ़ क्षेत्रों में भूमि प्रयोग को जोन में बांटना			
8.5	बाढ़क्षेत्रों में अतिक्रमण द्वारा बनाए गए मकानों आदि को हटाएं	कितने प्रतिशत अतिक्रमण की भूमि को हटाया गया	अल्प अवधि	हरा
8.6	ऊंची बाढ़ों से वर्तमान बुनियादी ढांचे के लचीलेपन में सुधार (जैसे कि पुल और बांध)	बुनियादी ढांचे में शामिल तत्वों में कितनी संख्या में बाढ़ के मामले में लचीलेपन का विकास हुआ है।	मध्य अवधि/ दीर्घ अवधि	मटमैला/ हरा
	जल संचयन क्षमता में वृद्धि			
8.7	'नदी के लिए स्थान' (room for the river) नजरिए का इस्तेमाल करते हुए पानी को जमा करने की क्षमता को बढ़ाने के लिए बाढ़-क्षेत्रों में वृद्धि	नव निर्मित बाढ़ क्षेत्रों का क्षेत्रफल	अल्प अवधि	हरा
	जलग्रहण(Catchment) क्षेत्र का पुनर्स्थापन			
8.9	सीधे सीधे होने वाले बहाव को रोकने के लिए और भूजल रिचार्ज को बढ़ाने के लिए भूजल रिचार्ज को बढ़ाना	पुनर्स्थापित किए गए छोटे जलग्रहण क्षेत्रों में सीधे सीधे बहाव को रोक कर भूजल में रिचार्ज का m^3	मध्य अवधि	हरा
8.10	नदीतट पर चेक डैम के उपयोग के साथ ही पौधे लगाकर झरनों औऱ छोटी नदियों का पुनर्स्थापन	नदी के किनारे निर्मित चेक डैमों और लगाए गए पौधों की संख्या	अल्प अवधि/ मध्य अवधि	मटमैला/ हर
	शहरी क्षेत्रों में बाढ़ नियंत्रण तथा नुकसान को रोकना			
8.11	ऊंचे मूल्य की जगहों को बाढ़ से बनचाने के लिए नए बांधों का निर्माण या उनकी ऊंचाई को बढ़ाना	बनाए गए या ऊंचा किए गए बांधों की संख्या	मध्य अवधि	हरा
8.12	शहरी क्षेत्रों में जलाशयों तथा पर्यावरण सहयोगी स्थलों (green spaces) की रक्षा, विभिन्न प्रकार के पर्यावरण सहयोगी बुनियादी ढांचे का निर्माण	नवनिर्मित या सुरक्षित किए गए पर्यावरण सहयोगी बुनियादी ढांचों तथा जलाशयों की संख्या तथा उनका क्षेत्रफल	मध्य अवधि/ दीर्घ अवधि	हरा
8.13	विकेंद्रीकृत वर्षाजल संचयन और उनका संरक्षण	जमा किए हुए वर्षाजल का m^3	अल्प अवधि/ मध्य अवधि	मटमैला/ हरा

क्रम सं.	हस्तक्षेप	निर्दिष्ट लक्ष्य	समय सीमा	प्रकार
	शहरी क्षेत्रों में बाढ़ नियंत्रण तथा नुकसान को रोकना			
8.14	शहरी क्षेत्रों में बारिश के पानी को बाहर निकालने की सुविधाओं का निर्माण	वर्षा जल के लिए बनाई गयी नालियों की कुल लंबाई	मध्य अवधि/ दीर्घ अवधि	मटमैला
	कृपया अन्य हस्तक्षेपों की पहचान करें...			

संदर्भ (Cross references)

- बाढ़ क्षेत्र की उपयुक्त चौड़ाई निर्धारित करने के लिए राष्ट्रीय ग्रीन ट्राइब्युनल के आदेशों का अनुसरण संदर्भ के रुप में इस्तेमाल किया जाना चाहिए
- शहरी नदी प्रबंधन योजना (Urban River Management Plan)
- हस्तक्षेप 4.4
- हस्तक्षेप 4.6,
- हस्तक्षेप 6.1
- हस्तक्षेप 6.2
- हस्तक्षेप 6.4
- हस्तक्षेप 7.7

प्रमुख समस्या 9 **भूजल की अज्ञात क्षमता के कारण भूजल की गिरती सतह**

परिचर्चा: गंगा बेसिन में अधिकांश भूजल संसाधनों के सतत भूजल दोहन की मात्रा का निर्धारण सुस्पष्टता के साथ नहीं किया जा सका है। भूजल के दोहन के लिए SAFE मानदंड स्थापित किए जा चुके हैं लेकिन हाल में किए गए अध्ययनों से पता चलता है कि सालाना भूजल रिचार्ज, जिस मात्रा में भूजल को सुरक्षित ढंग से दोहन किया जा सकता है, कुछ क्षेत्रों में पहले अनुमानित मात्रा से करीब 20 प्रतिशत कम है, खासकर अनावृष्टि के मौसम में। इसलिए कुछ क्षेत्रों में जल दोहन SAFE भूजल रिचार्ज दरों से कम होने के बावजूद, भूजल स्तर नीचे हो रहा है।

नवीकरणीय भूजल अनियमित वर्षा या नदी से लिए गए सिंचाई जल की स्थिति में उत्पादकता को सुनिश्चित करने के लिए सबसे उपयुक्त माना जाता है। कभी कभार नहरों में गाद जमा होने या जल प्रवाह में अंतर आने के कारण जल की मात्रा अनिश्चित होती है। पानी के अति दोहन से बचना चाहिए। कई वर्षों के औसत रिचार्ज दर का निर्धारण किया जाना महत्वपूर्ण है। भूगर्भीय कारकों, जलवायु और भूमि के उपयोग के आधार पर यह अलग अलग क्षेत्रों के लिए अलग अलग हो सकती है।

संबंधित लक्ष्यों सहित संभावित हस्तक्षेप (सूची पूर्ण नहीं है)

क्रम सं.	हस्तक्षेप	निर्दिष्ट लक्ष्य	समय सीमा	प्रकार
9.1	सभी स्तरों पर दीर्घ अवधि के लिए सतत भूजल की उपलब्ध मात्रा की माप के लिए अध्ययन करवाना	जलग्रहण क्षेत्रों की संख्या जहां लंबे समय तक सतत भूजल की उपलब्ध मात्रा सुनिश्चित कर ली गयी है या इसे अद्यतन बना लिया गया है।	मध्य- अवधि	सॉफ्ट
9.2	भूजल के दोहन के लिए SAFE मानदंडों को अद्यतन बनाना	उन जलग्रहण क्षेत्रों की संख्या जिनके लिए SAFE मानदंडों का अद्यतन बना लिया गया है।	मध्य- अवधि	सॉफ्ट
9.3	भूजल की निगरानी व्यवस्था की स्थापना, विस्तार, दीर्घकाल में भूजल के सतत दोहन की मात्रा को सुनिश्चित करने के लिए भूजल के सतह की माप, आवश्यकतानुसार SAFE मापदंडों का समायोजन	जिन जलग्रहण क्षेत्रों के लिए भूजल निगरानी की व्यवस्था कर ली गयी है उनका क्षेत्रफल	अल्प-अवधि	सॉफ्ट
	कृपया अन्य हस्तक्षेपों की पहचान करें...			

संदर्भ (Cross references)

- हस्तक्षेप 10.1

प्रमुख समस्या 10 **अपर्याप्त भूजल प्रबंधन के कारण भूजल स्तर में गिरावट**

परिचर्चा: गंगा का मैदान हिमालय की तलहटी से सटा हुआ है। यहां गहरी बलुआही मिट्टी पायी जाती है जिसमें भूजल को रिचार्ज करने की बड़ी क्षमता होती है। इसके अलावा, इस क्षेत्र में काफी वर्षा होती है और बेसिन के बड़े हिस्से में इसकी मात्रा 800 मिलीमीटर प्रति वर्ष से अधिक होती है। इसलिए बारिश के पहले और इसके बाद जल स्तर में 0.5 मीटर से लेकर 1.0 मीटर तक का अंतर होता है। (रामगंगा बेसिन योजना, मार्च 2020). इसका अर्थ साल में बड़ी मात्रा में जल का संग्रहन होता है।

इसके बावजूद, अनियंत्रित भूजल दोहन और अपर्याप्त भूजल प्रबंधन के कारण इसका स्तर गिरता जा रहा है। शहरी क्षेत्रों में विशेष तौर पर भूजल का जरूरत से अधिक दोहन पाया जाता है। इसके साथ ही सिंचाई परियोजनाओं के छोर पर बसे क्षेत्रों में भी भूजल का अत्यधिक दोहन पाया जाता है। इसकी वजह से पास की नदियों में बेस-फ्लो घट सकता है, दलदल सूख सकते हैं और अन्य दुष्परिणाम भी हो सकते हैं।

संबंधित लक्ष्यों सहित संभावित हस्तक्षेप (सूची पूर्ण नहीं है)

क्रम सं.	हस्तक्षेप	निर्दिष्ट लक्ष्य	समय सीमा	प्रकार
	सतत भूजल के इस्तेमाल को बढ़ावा दें			
10.1	लंबी अवधि के सतत भूजल उत्पादन का निर्धारण, आवश्यकतानुसार SAFE मानदंडों को समायोजित करना	उन जलग्रहण क्षेत्रों की संख्या जहां लंबी अवधि के लिए सतत भूजल उत्पादन तथा SAFE मानदंडों का निर्धारण कर लिया गया है या उन्हें अद्यतन बना लिया गया है।	अल्प/ मध्यम अवधि	सॉफ्ट
10.2	संशोधित SAFE मानदंडों के आधार पर औद्योगिक, कृषि, नगर निगम, शहरी क्षेत्र के आसपास के इलाकों और अन्य उपयोक्ताओं के लिए भूजल दोहन के लिए परमिट व्यवस्था की स्थापना	जलसंग्रहण क्षेत्रों की संख्या जहां भूजल दोहन के लिए परमिट व्यवस्था की स्थापना की गयी है।	मध्यम अवधि	सॉफ्ट
10.3	परमिट व्यवस्था के बारे में व्यापक जागरूकता कार्यक्रम का आयोजन, एनजीओ तथा अन्य सामुदायिक संस्थाओं को जागरुकता और शिक्षण अभियान में शामिल करना	जागरूकता, शैक्षणिक कार्यक्रम, मैसेजेज, खबरें तथा प्रकाशित लेखों की संख्या	अल्प अवधि	सॉफ्ट
10.4	गैर-कानूनी ढंग से भूजल के दोहन की निगरानी और परमिट सिस्टम को लागू करना	उन निजी नलकूपों की संख्या जिनकी निगरानी की गयी	अल्प अवधि	सॉफ्ट

क्रम सं.	हस्तक्षेप	निर्दिष्ट लक्ष्य	समय सीमा	प्रकार
	सतत भूजल के इस्तेमाल को बढ़ावा दें			
10.5	भूजल के स्तर की निगरानी ताकि लंबी अवधि में सतत भूजल उत्पादन की मात्रा सुनिश्चित की जा सके, आवश्यकतानुसार भूजल दोहन के परमिट का समायोजन	जलग्रहण क्षेत्र का रकबा जहां भूजल की निगरानी व्यवस्था कायम की जा चुकी है।	अल्प अवधि	सॉफ्ट
	भूजल रिचार्ज को बढ़ावा देना			
10.6	रिचार्ज तालाबों की स्थापना और उनके रखरखाव, दलदलों और बाढ़ क्षेत्रों के द्वारा भूजल रिचार्ज को बढ़ावा देना	स्थापित किए, मरम्मत किए या सुरक्षित बनाए गए रिचार्ज तालाबों, दलदलों और बाढ़क्षेत्रों की संख्या	मध्यम अवधि	हरा
10.7	रिचार्ज कुओं की स्थापना कर भूजल रिचार्ज को बढ़ावा देना। इसमें राष्ट्रीय आय़ निर्माण कार्यक्रम (National Income Generation Program) की सहायता ली जा सकती है।	स्थापित रिचार्ज कुओं की संख्या	मध्यम अवधि	मटमैला
10.8	सूखे कुओं से गाद हटा कर उन्हं भूजल रिचार्ज के लिए इस्तेमाल करना।	भूजल रिचार्ज के लिए तैयार किए गए सूखे कुओं की संख्या	मध्यम अवधि	मटमैला
10.9	खेतों में सोख्तों, इंफिल्ट्रेशन, परकोलेशन तथा छोटे छोटे रिचार्ज गड्ढों का निर्माण	स्थापित किए गए सोख्तों, इंफिल्ट्रेशन, परकोलेशन तथा छोटे छोटे रिचार्ज गड्ढों की संख्या	मध्यम अवधि	मटमैला/हरा
10.10	जमा किए गए बारिश के पानी को या मटमैले पानी को सीधे भूजल गड्ढों, कुओं और तालाबों को रिचार्ज करने के लिए इस्तेमाल करना	भूजल को रिचार्ज करने के लिए इस्तेमाल किए गए बारिश के पानी औऱ मटमैले पानी का m^3	मध्यम अवधि	मटमैला/हरा
10.11	भूजल में रिचार्ज किए गए प्रत्येक m^3 के लिए वित्तीय प्रोत्साहन (समुदायों, उद्योगों आदि के लिए)	भूजल रिचार्ज करने के लिए जिन क्षेत्रों में वित्तीय प्रोत्साहन दिया गया	अल्प अवधि	सॉफ्ट
10.12	रिचार्ज व्यवस्था की बेहतर निगरानी के द्वारा सुनिश्चित करना कि भूजल रिचार्ज के लिए लोगों को मेहनताना मिलता है	निगरानी के अंदर लाए गए रिचार्ज सिस्टमों की संख्या	अल्प अवधि	सॉफ्ट

क्रम सं.	हस्तक्षेप	निर्दिष्ट लक्ष्य	समय सीमा	प्रकार
	भूजल रिचार्ज को बढ़ावा देना			
10.13	उपयुक्तता मानचित्र के इस्तेमाल के द्वारा रिचार्ज सिस्टम की योजना में सुधार लाना, भूजल रिचार्ज को मुख्य धारा में लाना और योजना की सामान्य प्रक्रिया में शामिल करना।	वे क्षेत्र जिनके लिए भूजल रिचार्ज उपयुक्तता मानचित्र का निर्माण कर लिया गया है औऱ भूजल रिचार्ज को मुख्यधारा में शामिल कर लिया गया है और उन्हें सामान्य योजना प्रक्रिया में शामिल कर लिया गया है।	अल्प अवधि	सॉफ्ट
10.14	करार के आधार पर भूजल रिचार्ज के मेहनताना सुनिश्चित करना।	अंशधारकों के बीच करार के आधार पर जिन रिचार्ज सिस्टमों में सुधार लाया गया है उनकी संख्या	अल्प अवधि	सॉफ्ट
	कृपया अन्य हस्तक्षेपों की पहचान करें...			

संदर्भ (Cross references)

- हस्तक्षेप 9.1
- हस्तक्षेप 9.2
- हस्तक्षेप 9.3

प्रमुख समस्या 11 शहरी क्षेत्र औऱ उनके आसपास के क्षेत्र में अपर्याप्त जल आपूर्ति

परिचर्चा: शहरों और उसके आसपास के इलाकों में निगम तथा औद्योगिक इस्तेमाल के लिए उपलब्ध पानी की मात्रा अपर्याप्त होती है। इस कमी से निबटने के लिए लोग निजी नल कूप लगाते हैं जिससे भूजल का अतिदोहन होता है और उन स्थानों में भूजल का स्तर नीचे गिर जाता है। स्थानीय जलस्रोतों में बेस-फ्लो कम हो जाता है जिससे वहां की भूमि में निर्जलीकरण होता है।

जल संरक्षण के बारे मे जागरूकता के अभाव में भूजल का अति दोहन और भी बढ़ जाता है। इसलिए औद्योगिक उद्देश्यों सहित अन्य कार्यो के लिए भूजल का अक्षम इस्तेमाल व्यापक पैमाने पर देखा जाता है।

संबंधित लक्ष्यों सहित संभावित हस्तक्षेप (सूची पूर्ण नहीं है)

क्रम सं.	हस्तक्षेप	निर्दिष्ट लक्ष्य	समय सीमा	प्रकार
11.1	नगर निगम द्वारा शहरों और उसके आसपास के क्षेत्रों में जल की आपूर्ति बढ़ाना	सार्वजनिक जल आपूर्ति प्रणाली में शामिल किए गए शहरों के आसपास के क्षेत्र का प्रतिशत	मध्य/ दीर्घ अवधि	मटमैला
11.2	घरेलू इस्तेमाल के लिए आपूर्ति किए जाने वाले जल के लिए वर्षा जल जल संचयन को बढ़ावा देना, शहरी क्षेत्रों में इसे अनिवार्य बनाना	संचित वर्षा जल का m^3	अल्प/ मध्य अवधि	मटमैला/ हरा
11.3	चुंगी लगाकर जल की बचत औऱ मांग के प्रबंधन को बढ़ावा देना(खास कर औद्योगिक कार्यों के लिए)	वे क्षेत्र जिनके लिए नयी जल चुंगी व्यवस्था लागू की गयी है।	अल्प/ मध्य अवथि	अल्प/ मध्य/दीर्घ अवधि
11.4	जागरूकता बढ़ाकर और शिक्षण अभियान चलाकर पानी की बचत को बढ़ावा देना, इस कार्य में एनजीओ तथा सामुदायिक संगठनों को शामिल करना।	जागरूकता और शिक्षण के लिए आयोजित कार्यक्रमों, मैसेजेज, खबरों तथा प्रकाशित लेखों की संख्या	अल्प अवधि	सॉफ्ट
11.5	गंदे जल (मटमैला जल) के दोबारा इस्तेमल और रिसाइक्लिंग को बढ़ावा देना	दोबारा इस्तेमाल किए हुए/ रिसाइकिल किए हुए जल का m^3	अल्प/ मध्य/ दीर्घ अवधि	मटमैला/ हरा/ सॉफ्ट
11.6	भूजल रिचार्ज को बढ़ावा देना	भूजल में रिचार्ज किए हुए जल का m^3	अल्प/ मध्य/ दीर्घ अवधि	मटमैला/ हरा/ सॉफ्ट
	कृपया अन्य हस्तक्षेपों की पहचान करें...			

संदर्भ (Cross references)

- हस्तक्षेप 4.4
- हस्तक्षेप 6.1
- हस्तक्षेप 7.7
- हस्तक्षेप 8.13
- मुख्य समस्याएं 10

प्रमुख समस्या 12 सिंचाई योजनाओं में जल असुरक्षा

परिचर्चा: पूरे कमांड क्षेत्र के लिए जल सुरक्षा की गारंटी नहीं होती है। इसके कारण समय समय पर पानी की कमी होती है और विडंबना है कि अति सिंचन भी इसका एक परिणाम होता है। अति सिंचन सिंचाई के लिए उपलब्ध जल का अदक्ष उपयोग है जिसकी वजह से नदियों से जरूरत से अधिक जल का दोहन किया जाता है। यह घटते हुए बेस-फ्लो का एक मुख्य कारण है। इसके अलावा अति सिंचन के कारण जल जमाव तथा सिंचाई परियोजना के अंतिम छोर पर खारापन बढ़ने की समस्या भी पैदा होती है।

सिंचाई के द्वारा सुनिश्चित जल आपूर्ति की व्यवस्था की जाती है जो बेहतर उपज के लिए आवश्यक शर्त है। फिर भी अधिकांश सिंचाई परियोजनाओं के कुछ हिस्सों में समय समय पर पानी की कमी पायी जाती है। इसका मुख्य कारण है बाढ़ के समय सिंचाई जल में गाद की अधिक मात्रा जिसकी वजह से नहर में गाद जमा हो जाती है। जब सिंचाई के बुनियादी ढांचे का रख रखाव अच्छी तरह से नहीं किया जाता है तो जल की आपूर्ति गैर-भरोसेमंद हो जाती है। यह कमांड क्षेत्र के आखिरी छोर पर अधिक होता है। परिणामस्वरूप, जब कभी पानी उपलब्ध होता है तो किसान जरूरत से ज्यादा सिंचाई करने लगते हैं, हालांकि रोस्टर के अनुसार उस समय उनकी बारी नहीं होती है। इस तरह के आचरण से सिंचाई परियोजना के निचले छोर पर जल-असुरक्षा और बढ़ जाती है जिसका उपज पर बुरा असर होता है।

संबंधित लक्ष्यों सहित संभावित हस्तक्षेप (सूची पूर्ण नहीं है)

क्रम सं.	हस्तक्षेप	निर्दिष्ट लक्ष्य	समय सीमा	प्रकार
12.1	खेतों के बीच बने तालाबों औऱ माइक्रो-रिजर्वायर को बढ़ावा देना	बनाए गए तालाब और माइक्रो रिजर्वायरों की संख्या	लघु/ मध्य अवधि	हरा
12.2	कृषि कार्य के लिए वर्षा जल संचयन को बढ़ावा देना	संचयित वर्षा जल का m^3	लघु/ मध्य अवधि	मटमैला/हरा
12.3	भूतल जल (surface water) और थोक मात्रा में भूजल को मिलाकर इस्तेमाल करने को बढ़ावा देना।	ग्रामीण- जल के संयोजी (conjunctive) उपयोग की सीमा में आयी xxx हेक्टेयर भूमि। शहरी- जल के संयोजी (conjunctive) उपयोग की सीमा में आयी xxx हेक्टेयर भूमि। शहरी शहरों के आसपास की भूमि- ऊपर के दोनों केस के अनुसार।	दीर्घ अवधि (3 से 5 वर्ष के बीच)	मटमैला
12.4	जल उपयोक्ता संगठनों को बढ़ावा देना	मजबूत बनाए गए जल उपयोक्ता संगठनों (WUA) की संख्या	दीर्घ अवधि (3 से 5 वर्ष के बीच))	सॉफ्ट
12.5	सिंचाई जल के अवैध इस्तेमाल को रोकना (रोस्टर के बाहर)	अवैध ढंग से इस्तेमाल किए जा रहे xx संख्या पर रोक लगायी गयी।	मध्य अवधि (1 से 2 वर्ष के बीच)	सॉफ्ट
12.6	स्प्रिंक्लर और ड्रिप सिंचाई को बढ़ावा देना	ड्रिप और स्प्रिंक्लर विधि से सिंचित भूमि का क्षेत्र	दीर्घ अवधि (3 से 5 वर्ष के बीच)	मटमैला

Potential Interventions with related specific targets (list not complete)

क्रम सं.	हस्तक्षेप	निर्दिष्ट लक्ष्य	समय सीमा	प्रकार
12.7	कम पानी में होने वाली फसलों को बढ़ावा देना	सूखे से अप्रभावित रहने वाले पौधों को कितन क्षेत्रफल भूमि में लगाया गया?	दीर्घ अवधि (3 से 5 वर्ष के बीच)	हरा
12.8	इस्तेमाल किए गए पानी की मात्रा के आधार पर सिंचाई चुंगी का निर्धारण	अवैध ढंग से इस्तेमाल किए जा रहे xx संख्या पर रोक लगायी गयी।	मध्य अवधि (1 से 2 वर्ष के बीच)	सॉफ्ट
	कृपया अन्य हस्तक्षेपों की पहचान करें...			

संदर्भ (Cross references)

- हस्तक्षेप 13.3
- हस्तक्षेप 7.4
- हस्तक्षेप 7.6

प्रमुख समस्या 13 **जल जमाव तथा मिट्टी का खारा होना**

परिचर्चा: नहरों से सिंचित भूमि के कमांड क्षेत्र में करीब 10-20 प्रतिशत जमीन में जल जमाव की समस्या पायी जाती है। यह खास कर योजना के आखिरी छोर पर अधिक पाया जाता है। यह जल निकास के अपर्याप्त बुनियादी ढांचे और अति-सिंचाई के कारण होता है। अति वृष्टि होने की स्थिति में जल-जमाव की समस्या और भी बढ़ जाती है।

जल जमाव पानी के अदक्ष प्रयोग, बल्कि बर्बादी को परिलक्षित करता है। इस प्रकार के जल का एक हिस्सा वाष्पीकृत होकर नष्ट हो जाता है और उसकी कोई उत्पादकता नही रहती। अन्यथा यह जल नदी में रहता और और नदी के बहाव के निचले हिस्से में प्रवाह को बढ़ाने में सहायता करता।

इसके अलावा, जल जमाव के कारण भूमि का खारापन बढ़ता है क्योंकि जल के स्थिर होने के कारण लवण बहकर वहां से निकल नहीं पाता है। जमीन में खारेपन के बढ़ने से इसकी उपज में कमी आती है। इसके अलावा, जमीन की ऊपरी सतह के नीचे जल जमाव के कारण गहरे जड़ो वाले पेड़ों और फसलों को उपजाना कठिन हो जाता है। गंगा बेसिन की अधिकांश सिंचाई योजनाओं में ऐसे क्षेत्रों की संख्या बढ़ती जा रही है जहां जल जमाव के कारण मिट्टी में कमोबेश खारापन पाया जाता है। इसके अलावा, सूखे मौसम और कम बारिश के कारण भी खारेपन की समस्या में वृद्धि होती है।

इसे स्वीकार किया जाता है कि नहरों या खेती के जमीन से रिसकर अंदर जाने वाले जल का मतलब जल का नुकसान नहीं होता है, अगर यह भूजल को रिचार्ज करता है। लेकिन जल का जो हिस्सा वाष्पीकृत हो जाता है वह पूर्णतः जल का नुकसान है।

संबंधित लक्ष्यों सहित संभावित हस्तक्षेप (सूची पूर्ण नहीं है)

क्रम सं.	हस्तक्षेप	निर्दिष्ट लक्ष्य	समय सीमा	प्रकार
	जल जमाव			
13.1	गड्ढों, खुली नालियों, घास वाले जलमार्गों, मिट्टी के टीलों और हॉलो के इस्तेमाल से सतह पर जल के निकास को बेहतर बनाना	जमाव से मुक्त जल का m^3	मध्यम-अवधि	मटमैला/हरा
13.2	सतह के ठीक नीचे वाले भाग से मोल-ड्रेन, ग्रेवेल मोल प्लो की मदद से जल निकासी (शुरु करने के पहले मिट्टी के प्रकार की जांच कर लें।)	जमाव से मुक्त जल का m^3	मध्यम-अवधि	मटमैला/हरा
13.3	जलजमाव वाले क्षेत्रों में भूजल के पंपिंग की व्यवस्था (जहां ऊंचे भूतल की वजह से जल जमाव होता है वहां वर्टिकल ड्रेनेज व्यवस्था में सुधार)	किसी खास स्थान में सीमित नहीं रहने वाले एक्वीफर की संचयन क्षमता को बढ़ाना	मध्यम-अवधि	मटमैला
13.4	नहरों के कमांड क्षेत्र के उन हिस्सों में जहां जल जमाव की अधिक संभावना है वहां सिंचाई के मुख्य स्रोत के रूप में भूजल के (सतत) इस्तेमाल को बढ़ावा देना	जल जमाव का खतरा झेल रहे क्षेत्रों में भूजल से सिंचित खेतों की संख्या	मध्यम-अवधि	सॉफ्ट

क्रम सं.	हस्तक्षेप	निर्दिष्ट लक्ष्य	समय सीमा	प्रकार
	जल जमाव			
13.5	सिंचित कृषि के क्षेत्रों में जल की दक्षता बढ़ाने के लिए उपाय, इसमें जल उत्पादकता बढ़ाने के लिए संवेदनशीलता बढ़ाना और खेती के लिए आवश्यक जल की मात्रा को निर्धारित करने के लिए किसानों को प्रशिक्षित करना शामिल है।	बचाए गए सिंचाई जल का m^3	अल्प से दीर्घ अवधि	मटमैला/ सॉफ्ट/ हरा
13.6	ऊंची की गयी जमीन (raised bed farming) की स्थापना	जिन खेतों के बेड को ऊंचा कर दिया गया है उनका M^2	दीर्घ अवधि	हरा
13.7	जल सुरक्षा को बढ़ाकर अति-सिंचन से बचाना। मुख्य समस्या संख्या 12 में दिए गए हस्तक्षेपों को देखें।	मुख्य समस्या संख्या 12 को देखें	मुख्य समस्या संख्या 12 को देखें	मुख्य समस्या संख्या 12 को देखें
	भूमि का खारा होना			
13.8	सोडियम की अधिक मात्रा (sodic) / खारी हो चुकी भूमि को ठीक करना लेकिन केवल भूजल का इस्तेमाल कर (अन्यथा वे बहुत जल्दी फिर से नमक-प्रधान हो जाएंगी			मटमैला/हरा
13.9	कम खारे जल (भूजल, बारिस का पानी आदि) का इस्तेमाल कर सिंचाई करना	कम खारे जल से सिंचित भूमि का m^2	मध्यम-अवधि	हरा
13.10	जल के बेहतर इस्तेमाल के तरीके अपना कर अति-सिंचन से बचें	सिंचाई के लिए लागू किए गए स्प्रिंकलर और ड्रिप व्यवस्था की संस्था	मध्यम-अवधि	मटमैला
13.11	अधिक खारे जल में भी पैदा होने वाली फसलों की खेती	अधिक खारे जल में पैदा होने वाली फसलों वाली भूमिक का m^2	अल्प/ मध्यम अवधि	हरा
13.12	पलवार (mulching)	पलवाल इस्तेमाल करने वाली भूमिक का m^2	अल्प/ मध्यम अवधि	हरा
	कृपया अन्य हस्तक्षेपों की पहचान करें...			

संदर्भ (Cross references)

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- हस्तक्षेप 13.5

5.3.3 क्लस्टर 3: पर्यावरण संबंधी समग्रता

प्रमुख समस्या 14 **दलदली भूमि का अतिक्रमण**

परिचर्चा: अनेक स्थानों पर दलदली भूमि का अतिक्रमण किया जाता है या उन्हें नष्ट कर दिया जाता है जिसका दलदली भूमि के द्वारा किए गए कार्यों पर बुरा प्रभाव होता है। इन कार्यों में जंगली जानवरों के रहने की जगह और कई ऐसे कार्य शामिल हैं जो पर्यावरण के सतत होने की दृष्टि से महत्वपूर्ण हैं जैसे कि भूजल रिचार्ज, बाढ़ के प्रभाव को कम करना और नदी के निचले हिस्सों में बाढ़ा से सुरक्षा, बेस फ्लो, पोषक तत्वों में वृद्धि, गाद के स्वरूप में बदलाव और जल की गुणवत्ता को बढ़ाना शामिल है।

दलदली भूमि में ह्रास के कई कारण है जिनमें उनका अतिक्रमण सबसे अधिक पाया जाता है। इस समस्या पर नियंत्रण पाकर, समय के साथ प्राकृतिक प्रक्रियाओं का सहारा लेकर बिना किसी अन्य हस्तक्षेप से कई दलदली भूमियों को पुनर्जीवित किया जा सकता है।

संबंधित लक्ष्यों सहित संभावित हस्तक्षेप (सूची पूर्ण नहीं है)

क्रम सं.	हस्तक्षेप	निर्दिष्ट लक्ष्य	समय सीमा	प्रकार
14.1	दलदली भूमि को निर्दिष्ट करना, उनका सीमांकन करना	निर्दिष्ट और सीमांकित दलदली भूमि की संख्या	अल्प अवधि	सॉफ्ट
14.2	प्रत्येक दलदली क्षेत्र में अतिक्रमण की गयी भूमि का स्तर निश्चित करना (इसकी एक सूची तैयार करें)	आकलन की गई दलदली भूमि की संख्या	अल्प अवधि	सॉफ्ट
14.3	दलदली भूमि के महत्व और उनके सतत इस्तेमाल के बारे में एनजीओ तथा अन्य सामुदायिक संगठनों के सहयोग से जागरूकता अभियान का आयोजन और उनका कार्यान्वयन	आयोजित जागरुकता एवं शिक्षण अभियान, खबरों और प्रकाशित लेखों की संख्या	मध्यम अवधि	सॉफ्ट
14.4	उपयुक्त प्रशासनिक और कानूनी तरीकों का इस्तेमाल कर पर्यावरण संबंधी कानूनों के अनुपालन को सुनिश्चित करना और अतिक्रमित दलदली भूमि को वापस लेना	लागू किए गए प्रशासनिक एवं कानूनी कदमों की संख्या	मध्यम अवधि	सॉफ्ट
14.5	दलदली क्षेत्रों में अवैध गतिविधियों पर निगरानी रखना	निगरानी की गई दलदली भूमियों की संख्या	अल्प अवधि	सॉफ्ट
14.6	दलदली भूमि के स्वास्थ्य के आकलन के लिए स्थानीय समुदायों की क्षमता में वृद्धि	क्षमता में वृद्धि किए गए लोगों की संख्या, दलदली भूमि के लिए आयोजित WHA	अल्प से मध्यम अवधि	सॉफ्ट
	कृपया अन्य हस्तक्षेपों की पहचान करें..			

संदर्भ (Cross references)

- जिला पर्यावरण योजना

प्रमुख समस्या 15 **बाढ़ क्षेत्र का अतिक्रमण**

परिचर्चा: नदी के नजदीक जमीन का वह हिस्सा जो समय समय पर बाढ़ में डूब जाता है उसे बाढ़-क्षेत्र (flood plain) कहा जाता है। इस क्षेत्र की उर्वरा शक्ति बहुत अधिक होती है और यहां का पारिस्थितिकी तंत्र (इकोसिस्टम) काफी समृद्ध होता है। इसके अलावा यह लोगों की बसाहट और सड़क जैसे बुनियादी ढांचे के लिए भी पसंदीदा जगह होती है। शहरी क्षेत्रों में कभी कभी बाढ़ क्षेत्र पर झोपड़ पट्टियां बस जाती हैं जहां आबादी का घनत्व काफी अधिक होता है। यहां बुनियादी ढांचे का भी अभाव होता है। बाढ़ क्षेत्र भूजल रिचार्ज, बाढ़ की विभीषका को कम करने और उनमें रुकावट पैदा करने, कटाव को रोकने, गाद जमने से खराब होने वाले भूतल जल की गुणवत्ता को बेहतर बनाने और विभिन्न प्रकार के जलीय तथा भूमि पर रहने वाले पशु-पक्षियों और पेड़-पौधों को रहने का स्थान प्रदान करने जैसे कार्य करता है।

बाढ़ क्षेत्र के अतिक्रमण या रेत खनन या कचरा फेंकने के लिए इनका इस्तेमाल करने से प्रदूषण की समस्या में वृद्धि होती है। साथ ही बाढ़ क्षेत्र के महत्वपूर्ण कार्यों और नदी के इकोसिस्टम पर भी इसका बुरा प्रभाव पड़ता है।

बाढ़ क्षेत्र के अतिक्रमण को रोकना या उन्हें पुनर्जीवित करना काफी मुश्किल साबित हुआ है खासकर शहरी क्षेत्रों में। इसके लिए जागरूकता तथा संवेदनशीलता में वृद्धि, कानून को प्रभावी तरीके से लागू कराना तथा जीविका, आवासन और ठोस कचरे के निस्तारण के लिए वैकल्पिक व्यवस्था करना आवश्यक होता है।

संबंधित लक्ष्यों सहित संभावित हस्तक्षेप (सूची पूर्ण नहीं है)

क्रम सं.	हस्तक्षेप	निर्दिष्ट लक्ष्य	समय सीमा	प्रकार
15.1	बाढ़क्षेत्र की सीमाओं का स्पष्ट सीमांकन	जिन बाढ़क्षेत्रों के लिए सीमांकन कर दिया गया है उनकी कुल लंबाई	अल्प अवधि	सॉफ्ट
15.2	सड़कों, बांधों, पेड़ों की कतार तथा अन्य उपायों के द्वारा बाढ़क्षेत्र की सीमाओं की सुरक्षा	नदियों के जिन बाढ़क्षेत्रों की सीमा को सुरक्षित कर दिया गया है उनकी कुल लंबाई	अल्प से मध्यम अवधि	मटमैला/हरा
15.3	बाढ़ क्षेत्रों में स्वीकृति योग्य और गैर-स्वीकृति योग्य गतिविधियों का निर्धारण। यह नदियों की पहुंच के अनुसार अलग अलग हो सकता है।	बाढ़ क्षेत्र की नदियों की लंबाई जहां अवैध गतिविधियों को समाप्त कर दिया गया है।	मध्यम से दीर्घ अवधि	सॉफ्ट
15.4	बाढक्षेत्र के आसपास रहने वाले लोगों को इस क्षेत्र के इस्तेमाल संबंधी कानूनी प्रावधानों के बारे में संवेदनशील बनाना, जागरूकता और शिक्षण कार्यक्रमों के आयोजन में एनजीओ तथा अन्य सामुदायिक संगठनों को शामिल करना	आयोजित किए गए जागरूकता और शिक्षण कार्यक्रमों, मैसेजेज, खबरों और प्रकाशित लेखों की संख्या	अल्प अवधि	सॉफ्ट
15.5	अवैध ढंग से बसे क्षेत्रों को हटाना और उन्हें किसी अन्य स्थान पर बसाना, पुनर्वास और वैकल्पिक स्थान मुहैया कराने की रणनीति तैयार करना	बाढ़ क्षेत्र से पुनर्वासित किए गए लोगों और घरों की संख्या	मध्यम से दीर्घ अवधि	सॉफ्ट/हरा

क्रम सं.	हस्तक्षेप	निर्दिष्ट लक्ष्य	समय सीमा	प्रकार
15.6	शहरी क्षेत्रों में वाटर-फ्रंट को पुनर्जीवित करना	कितने किलोमीटर वाटर फ्रंट को पुनर्जीवित किया गया।	अल्प से मध्यम अवधि	हरा
15.7	बाढ़क्षेत्रों और नदी के किनारे ठोस कचरे को फेंके जाने से रोकना	कितने किलोमीटर नदीतट को ठोस कचरा फेंके जाने से मुक्त किया गया	अल्प अवधि	सॉफ्ट
15.8	बाढ़क्षेत्र में केवल जैविक खेती की अनुमति	नदी के बाढ़क्षेत्र के कितने किलोमीटर में जैविक खेती शुरु की गयी	मध्यम अवधि	हरा
15.9	कृत्रिम ढंग से बने दलदलों , पार्क, इंफिल्ट्रेशन तालाबों और पर्यावरण सहयोगी बुनियादी ढांचे द्वारा बाढ़क्षेत्रों का निर्माण	नदी के कुल कितने किलोमीटर क्षेत्र में बाढ़क्षेत्र को पुनर्जीवित किया गया।	मध्यम अवधि	हरा
15.10	नियमित निरीक्षण के आधार पर कठोर निगरानी व्यवस्था का निर्माण, अद्यतन हाइरिजोल्यून सैटेलाइट तस्वीरें, जिन स्थानों पर अधिक ध्यान दिए जाने की जरूरत है (hotspot) उनकी पहचान	नदी की कितनी लंबाई पर बाढ़ क्षेत्र की पर्याप्त निगरानी की व्यवस्था सुनिश्चित की गयी	अल्प अवधि और लगातार चलने वाली गतिविधि	सॉफ्ट
15.11	बाढ़क्षेत्रों में सख्ती से लागू करना, इसमें आर्थिक तरीकों को शामिल किया जाना शामिल है जैसे कि प्रदूषण करने वाले को हर्जाना देना होगा (polluter pay principle) अनुपालन नहीं करने वालों पर मोटा जुर्माना लगाना	कितने नियमों को सख्ती से लागू किया गया।	अल्प से मध्यम अवधि	सॉफ्ट
	कृपया अन्य हस्तक्षेपों की पहचान करें... ...			

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- शहरी नदी प्रबंधन योजना
- शहरी नदी प्रबंधन योजना, हस्तक्षेप 6.6
- शहरी नदी प्रबंधन योजना, हस्तक्षेप 6.5
- शहरी नदी प्रबंधन योजना, हस्तक्षेप 6.7
- शहरी नदी प्रबंधन योजना, हस्तक्षेप 6.8

प्रमुख समस्या 16 **पर्यावरणीय प्रवाहों का निर्वाहन नहीं होना**

परिचर्चा: इस बात पर आम सहमति पायी जाती है कि नदी के स्वाभाविक प्रवाह के निर्वाहन से नदी के स्वास्थ्य एवं जलजीवन पर अच्छा प्रभाव पड़ता है। इसे पर्यावरणीय प्रवाह (Environmental Flow- EF) कहा जाता है। पर्यावरणीय प्रवाह को जल संसाधनों के विकास और स्वस्थ तरीके से नदी का निर्वहन दोनों के बीच मेलजोल के रूप में देखा जाता है।

नोट करने की बात है कि पर्यावरणीय प्रवाह के आकलन के कई तरीके होते हैं। यह स्पष्ट नहीं है कि वर्तमान में आवश्यक पर्यावरणीय प्रवाह, पारिस्थितिकीय कार्य और सीमाओं पर आधारित हैं या नहीं।

गंगा बेसिन में प्रायः पर्यावरणीय प्रवाहों की प्राथमिकता का आकलन नहीं किया जाता है और इसीलिए वे प्रायः पूरे भी नही होते। उदाहरण के लिए यह भी अस्पष्ट है कि जब सिंचाई या अन्य कार्यों के लिए जल का दोहन किया जाता है तो उस समय पर्यावरणीय प्रवाह पर विचार किया जाता है या नहीं। परिणामस्वरूप कुछ सहायक नदियां साल के कुछ महीनों में कुल मिला कर सूखा रहता है। इससे नदियों की पारिस्थितिकी को नुकसान होता है। इसके अलावा, सूखे मौसम में पानी की कम मात्रा जल गुणवत्ता की चिंता को और बढ़ा देती है, विशेषकर शहरी क्षेत्रों में नदी प्रवाह के निचले छोर पर।

संबंधित लक्ष्यों सहित संभावित हस्तक्षेप (सूची पूर्ण नहीं है)

क्रम सं.	हस्तक्षेप	निर्दिष्ट लक्ष्य	समय सीमा	प्रकार
16.1	जलस्रोतों का वर्गीकरण और उनके वांछित सामाजिक आर्थिक विकास, इनसे संबंधित जल की मांग, और वर्तमान पर्यावरणीय मूल्य के फलन के रूप में पर्यावरणीय प्रवाह का निर्धारण	आकलित जल स्रोतों की संख्या और पर्यावरणीय प्रवाह की जरूरतों की पहचान	मध्यम एवं दीर्घ अवधि	सॉफ्ट
16.2	चालू रिजर्वायर और बराजों के पर्यावरणीय प्रवाहों की आवश्यकता को शामिल करें।	क्रियात्मक नीतियों में शामिल किए गए पर्यावरणीय प्रवाहों की संख्या	मध्यम से दीर्घ अवधि	सॉफ्ट
16.3	नदियों के बेस-फ्लो को बढ़ाने के लिए विभिन्न तरीकों को बढ़ावा देना	लागू किए गए तरीकों की संख्या	दीर्घ अवधि	मटमैला/हरा/ सॉफ्ट
16.4	अवैध ढंग से दोहन किए जा रहे पानी की निगरानी, पर्यावरण से संबंधित कानूनों का पालन सुनिश्चित करना	नदी की कितनी लंबाई से जल दोहन की निगरानी की व्यवस्था की गयी है।	मध्यम अवधि	सॉफ्ट
	कृपया अन्य हस्तक्षेपों की पहचान करें... ...			

क्रम सं.	हस्तक्षेप	निर्दिष्ट लक्ष्य	समय सीमा	प्रकार
16.5	जहां भी पर्यावरण प्रवाह के संबंध में अनुशंसा कर दी गयी है वहां स्थानीय अंशधारकों का निर्माण (इनमें लाइन विभाग और इससे संबंधित नागरिक शामिल होते हैं) करना और नदी के साइट पर ज्वाइंट निगरानी करना।	हितधारकों के समूह में लोगों की संख्या, हितधारकों के समूह में विविधता नदियों में उन स्थानों की संख्या जहां सहभागी तरीके से पर्यावरणीय प्रवाहों की निगरानी की जा रही है। इस निगरानी को कितनी बार किया जा रहा ह?	मध्यम एवं दीर्घ अवधि	मटमैला/ सॉफ्ट या दोनों- केस के अनुसार

संदर्भ (Cross references)

- नदी बेसिन प्रबंधन योजना
- जिला सिंचाई योजना

प्रमुख समस्या 17 **नदियों के चैनलों को खंडित करना**

परिचर्चा: नदियों के चैनलों को खंडित किए जाने की वजह से बाढ़ का पानी एक जगह इकट्ठा हो जाता है और इसके प्रवाह का सर्वोच्च स्तर बढ़ जाता है। इससे भूजल का स्तर नीचे चला जाता है और जमीन में धीरे धीरे पानी की कमी हो जाती है जो पर्यावरण को नुकसान पहुंचाता है। प्रायः इसकी शुरुआत पेड़ पौधों के कटने से होती है और वर्षा जमीन के अंदर नहीं घुस पाता है। परिणामस्वरूप, जमीन की सतह का बहाव शुरु हो जाता है और छोटी छोटी नालियों का जाल जैसा बन जाता है (drainage gullies). अच्छी ढलान वाली जगहों पर ये जाल क्रमशः घिस कर समाप्त हो जाते हैं। बाढ़ का पानी इन्हीं चैनलों में फंस कर रह जाता है और यह आसपास की जमीन पर नहीं फैलता है। ऊपर बताई गयी प्रक्रिया हर स्तर पर घटित होती है। एक बार शुरु हो जाने के बाद, क्रमशः इनकी गति तेज होती जाती है।

संबंधित लक्ष्यों सहित संभावित हस्तक्षेप (सूची पूर्ण नहीं है)

क्रम सं.	हस्तक्षेप	निर्दिष्ट लक्ष्य	समय सीमा	प्रकार
17.1	विभिन्न प्रकार के लैंडस्केपों को पुनर्जीवित करना और घने पेड़ पौधों से भरे क्षेत्र तैयार करने की तकनीक विकसित करना। इसमें चारागाह के रूप में सतत ढंग से इस्तेमाल पर भी एक सीमा लगायी जाती है।	नदियों के किनारे लगाए गए घने पेड़ पौधों वाले क्षेत्र की कुल लंबाई	मध्यम से दीर्घ अवधि	हरा
17.2	कटाव या भूक्षरण को रोकने के लिए उठाए गए विभिन्न कदम जैसे कि कंटूर बांध, हाफ मून, कंजर्वेशन जुताई, कंजर्वेशन टिलेज आदि का इस्तेमाल।	कटाव या भूक्षरण पर नियंत्रण के लिए उठाए गए कदम	अल्प से मध्यम अवधि	हरा/मटमैला
17.3	खंडित चैनल के अंदर गली-प्लग और चेक डैमों की श्रृंखला का निर्माण	बनाए गए गली-प्लग तथा चेक डैमों की संख्या	अल्प से मध्यम अवधि	मटमैला/हरा
	कृपया अन्य हस्तक्षेपों की पहचान करें... ...			

प्रमुख समस्या 18 **अवैध रेत खनन**

परिचर्चा: बड़े औद्योगिक पैमाने पर भारी मशीनों का इस्तेमाल कर रेत खनन बाढ़ क्षेत्र तथा नदी के तटों को नुकसान पहुंचाता है, भूजल के स्तर को नीच करता है और नदी के भौगोलिक स्वरूप को बदल सकता है। इसलिए यह पर्यावरण की अखंडता तथा नदियों के इकोसिस्टम के लिए ख़तरा माना जाता है।

औद्योगिक तरीके से बड़े पैमाने पर रेत के खनन और कारीगरों द्वारा छोटे पैमाने पर रेत खनन के बीच भेद करना आवश्यक है। कारीगरों द्वारा छोटे पैमाने पर रेत खनन बहुत ही लंबे समय से चल रहा है। यह स्थानीय आबादी को रोज़गार प्रदान करता है। इसका पर्यावरण पर भी बहुत कम प्रभाव पड़ता है। इसलिए छोटे पैमाने पर कारीगरों द्वारा किए जाने वाले रेत-खनन को प्रायः स्वीकृति दी जाती है।

संबंधित लक्ष्यों सहित संभावित हस्तक्षेप (सूची पूर्ण नहीं है)

क्रम सं.	हस्तक्षेप	निर्दिष्ट लक्ष्य	समय सीमा	प्रकार
18.1	खनन गतिविधियों की निगरानी करें और पर्यावरण संबंधी कानूनों के पालन के लिए स्तर सुनिश्चित करें	जिन नदियों में खनन गतिविधियों की निगरानी रखने के लिए व्यवस्था स्थापित की गयी है उनकी कुल लंबाई।	अल्प-अवधि	सॉफ्ट
18.2	अवैध रेत खनन की सूची, जिले में चलने वाले अन्य खनन कार्यों की सूची तैयार करना	कितनी संख्या में अवैध खनन गतिविधियों का पता लगाया गया है।	अल्प-अवधि	सॉफ्ट
18.3	उपयुक्त प्रशासनिक तथा कानूनी कार्रवाई के द्वारा सुनिश्चित करना कि खनन उद्योग पर्यावरण संबंधी कानूनों का पालन करे	स्थापित एवं लागू किए गए प्रशासनिक एवं कानूनी कदमों की संख्या	अल्प-अवधि	सॉफ्ट
	कृपया अन्य हस्तक्षेपों की पहचान करें... ...			
18.4	रेत खनन के क्षेत्रों के आसपास साथ मिलकर कछुओं के रहने की जगह या घड़ियालों के धूप सेंकने की जगहों का सर्वे करें। अगर किसी साइट पर पता चलता है या इसका दावा किया जाता है या साबित होता है कि ये इन प्रजातियों के निवास की जगह हैं तो रेत खनन तुरंत बंद करें। सर्वे करें।	साथ मिलकर किए गए सर्वे तथा जिले के अधिकारियों को उनकी रिपोर्ट सौंपने की संख्या कितनी संख्या में खनन गतियविधियों से जमीन को बाहर निकाला गया है	अल्प-अवधि से मध्यम अवधि	सॉफ्ट

संदर्भ (Cross references)

- जिला पर्यावरण योजना

प्रमुख समस्या 19 **नदी के जल में गाद की अधिक मात्रा**

परिचर्चा: पहाड़ी क्षेत्रों में सड़कों के बनने, वनो के काटे जाने और कृषि के गलत तरीकों को अपनाने की वजह से जमीन के कटाव और नदियों तथा नहरों में गाद की मात्रा में वृद्धि होती है। जलवायु परिवर्तन के कारण होने वाली अतिवृष्टि और जमीन के इस्तेमाल के तरीकों में आ रहे बदलाव, वनों में लगने वाली आग नदियों में जमा होने वाली गाद की मात्रा को और भी बढ़ा सकती है। इसके अलावा, मौसमों की विभीषिका भी जमीन खिसकने को बढ़ाने का काम करती है जिसकी वजह से अचानक गाद की मात्रा में वृद्धि होती है।

संबंधित लक्ष्यों सहित संभावित हस्तक्षेप (सूची पूर्ण नहीं है)

क्रम सं.	हस्तक्षेप	निर्दिष्ट लक्ष्य	समय सीमा	प्रकार
19.1	प्रत्येक स्तर पर विभिन्न प्रकार की मिट्टी और जल के संरक्षण संबंधी कदमों को लागू करना, खासकर पहाड़ी क्षेत्रों में ।	मिट्टी और जल संरक्षण के लिए उठाए गए कदमों की संख्या	लघु से दीर्घ अवधि	हरा / मटमैला
19.2	भूमि प्रबंधन में सुधार ताकि वनों के कटाव को रोका जा सके और वनों की मात्रा को बढ़ाया जा सके	वनरोपण का m^2	मध्यम से दीर्घ अवधि	हरा
19.3	पर्यावरण सहयोगी सड़कों की अवधारणा को बढ़ावा देना, रोड बनाने के दौरान विस्फोटकों के प्रयोग को कम से कम करना	पर्यावरण सहायक अवधारणा का इस्तेमाल कर बनायी गयी सड़कों की कुल लंबाई	मध्यम अवधि	मटमैला
19.4	छोटे मोटे भूस्खलन की तुरंत सफाई तथा ढलान पर घास तथा अन्य हरियालियों का रोपण	साफ किए गए भूस्खलन और बनायी गयी ढलान का m^2	लघु से मध्यम अवधि	हरा
	कृपया अन्य हस्तक्षेपों की पहचान करें... ...			

5.3.4 क्लस्टर 4: जल संबंधित समस्याएं

प्रमुख समस्या 20 **जल प्रबंधन की अपर्याप्त क्षमता**

परिचर्चा: जल संसाधनों के प्रबंधन में व्यापक पैमाने पर समस्याओं को शामिल किया जाता है। इसमें जिले के स्तर पर तकनीकी क्षमता की जरूरत होती है जिसमें आंकड़े, औजार, सॉफ्टवेयर, मॉडल और स्टाफ की जरूरत होती है। इसके लिए सही ढंग से कानून का अनुपालन सुनिश्चित करवाना जरूरी होता है ताकि उन कायदे कानूनों को लागू करवाया जा सके जिनके लिए सहमति बन चुकी है। इसके अलावा समन्वय के लिए तंत्र की जरूरत होती है ताकि पानी के समस्याएं पर संभावित टकरावों को होने से रोका जा सके या फिर उनका समाधान किया जा सके। इसके अलावा, जल संसाधनों के प्रबंधन में राज्य और जिले के स्तर पर एक दूसरे से कटकर काम करने के दृष्टिकोण को भी ठीक करने के लिए तंत्र स्थापित करने की जरूरत है।

शायद जिला गंगा योजना अपर्याप्त तकनीकी क्षमता के समस्याएं को हल नहीं कर सकता। लेकिन वे जल संसाधनों के उपयोक्ता तथा अंशधारकों के बीच पाए जाने वाले समन्वय तंत्र की कमियों को दूर करने के लिए विभिन्न पैमानों पर संस्थागत प्रयासों में सहयोग कर सकते हैं।

क्रम सं.	हस्तक्षेप	निर्दिष्ट लक्ष्य	समय सीमा	प्रकार
20.1	कमांड क्षेत्र के भीतर प्रभावकारी जल उपयोक्ता संगठनों (Water Users Associations -WUA) की स्थापन में मदद करें ताकि सहभागिता पूर्ण जल प्रयोग को बढ़ावा मिले, खाद के जरूरत से अधिक इस्तेमाल को बढ़ावा मिले और खाद के जरूरत से अधिक इस्तेमाल पर रोक लगायी जा सके।	स्थापित किए गए जल उपयोक्ता संगठनों की संख्या संख्या जल उपयोक्ता संगठनों की गतिविधियों का दस्तावेजीकरण ताकि वे सही ढंग से अपना काम पूरा कर सकें। संगठन की बैठक कितनी बार होती है और समय का अनुपालन करने की प्रवृत्ति।	मध्यम से दीर्घ अवधि	सॉफ्ट
20.2	जल उपयोक्ता संगठनों में महिलाओं की भागीदारी और उनकी क्षमता को बढ़ाना	कितनी प्रतिशत महिलाओं ने जल उपयोक्ता संगठन की बैठकों में भाग लिया	मध्यम से दीर्घ अवधि	सॉफ्ट
20.3	कृपया अन्य हस्तक्षेपों की पहचान करें... ...			

5.4 परिस्थिति आकलन के लिए जीआईएस मैप का इस्तेमाल कैसे करें

यह अध्याय दावा नहीं करता की यह जिला गंगा समिति के सदस्यों को जियोग्राफिक इंफर्मेशन सिस्टम (जीआईएस) के इस्तेमाल में प्रशिक्षित कर देगा। इसके लिए इस निर्देश पुस्तिका में कई विस्तृत गाइड-लाइनों का संदर्भ दिखाया गया है जो ऑनलाइन निःशुल्क उपलब्ध हैं। इस अध्याय में जिला योजनाओं के जीआईएस मैप को एक दूसरे के साथ तुलनीय बनाने न्यूनतम गुणवत्ता तथा डिजाइन की जरूरतों को पूरा करने के लिए के लिए संस्तुतियां पेश की गयी हैं।

जिओग्रफिक इंफर्मेशन सिस्ट्म्स (जीआईएस)

जिओग्रफिक इंफर्मेशन सिस्टम (जीआईएस) एक प्रकार की कंप्यूटर प्रणाली है जिसके द्वारा पृथ्वी की सतह पर स्थानों के आंकड़ो को कैप्चर करना, उन्हें इकट्ठा करना और प्रदर्शित करना संभव होता है।

जीआईएस सतह पर दिखने वाले पैटर्न और उनके संबंधों को बेहतर ढंग से समझने में मदद करता है। उदाहरण के लिए जीआईएस मैप प्रदूषण के स्रोतों से संबंधित स्थानों जैसे कि फैक्ट्री, और प्रदूषण संभावित स्थलों जैसे कि दलदली क्षेत्र तथा नदियों को नक्शे पर दिखा सकता है। यह मैप लोगों को जल आपूर्ति के उन स्रोतों की पहचान करने में मदद कर सकती हैं जहां प्रदूषण का खतरा अधिक होता है।

जीआईएस किसी भी ऐसी सूचना का इस्तेमाल कर सतका है जिसमें स्थान शामिल होतै है। आगे इस्तेमाल करने की दृष्टि से , आंकड़ों की परतों (data layers) के लिए वेक्टर या रैस्टर फॉर्मैट में सुनिश्चित, भौगोलिक अवस्थिति संबंधी सूचना की जरूरत होती है। प्रायः वेबसाइटों पर सरल jpg, png format में लो-रिजोल्यूशन वाली तस्वीरों का इस्तेमाल किया जाता है लेकिन वे जीआईएस के लिए आवश्यक आंकड़ों की दृष्टि से उपयोगी नहीं होती है क्योंकि उनका सीधे सीधे इस्तेमाल बिना सूचना और गुणवत्ता के गंभीर नुकसान के जीआईएस सॉफ्टवेयर में नहीं किया जा सकता। अगर इसे अत्यंत सरलीकृत ढंग से कहा जाए तो वेक्टर फाइल की तस्वीर और जिओग्रफिकल वेक्टर फाइल में वही अंतर होता है जो विभिन्न प्रकार के बंधनों से बंदे पीडीएफ फाइल और वास्तविक टेक्स्ट फाइल जैसे कि माइक्रोसॉफ्ट वर्ड के बीच होता है।

5.4.1 जिला गंगा योजना के लिए बनाए जाने वाले जीआईएस मैपों की गुणवत्ता संबंधी आवश्यकताएं

एक आदर्श जीआईएस मैप -

- स्थानिक सूचना को सर्वश्रेष्ठ ढंग से उपलब्ध करवाता है।
- इसके संदेश में पूर्ण स्पष्टता होती है।
- उपलब्ध सूचनाओं के आवश्यक हिस्सों तक केंद्रित रहता है। यह अनावश्यक तथा अप्रासंगिक सूचनाओं के हटा देता है।
  - → क्या जिस जिले और स्थान के लिए आवश्यक हस्तक्षेप के लिए मैं सूचनाएं तलाश रहा हूं वहां के लिए ये सूचनाएं उपलब्ध हैं ? ।
  - → अपने मैप की जरूरतों के मुताबिक गैर जरूरी चीजों को हटाएं, सरल बनाएं, यथोचित स्थान पर शामिल करें, सार-संक्षेप के तौर पर प्रस्तुत करें। जिन आंकड़ों की विस्तार में आवश्यकता है और जो उपयुक्त हैं उन्हें मैप के लिए चुनें।
- यह निर्दिष्ट स्थान की परिशुद्धता की गारंटी देता है।
- थीम एवं तार्किक दृष्टि से संगत परिशुद्धता निश्चित करता है।
- स्थानिक दृष्टि से आवश्यक गुणवत्ता प्रदान करता है।
  - → क्या हमारे पास आवश्यक अवधि के लिए आंकड़े उपलब्ध हैं जिनके आधार पर जरूरी निष्कर्ष निकाले जा सकते हैं?

- इसे पढ़ने में आसान, सुंदर होना चाहिए। साथ ही इसे उन संकेत चिह्नों का भी उपयोग किया जाना चाहिए जो स्वतः सही संबंधों को आंखों के सामने ले आते हैं।
  - → क्या लेबल तथा हस्ताक्षरों को पढ़ा जा सकता है? मैप में प्रयुक्त अक्षरों, संकेतों तथा इसकी पृष्ठभूमि के बीच अच्छा कंट्रास्ट होना चाहिए। इसके आधार पर निम्नलिखित आकारों का इस्तेमाल किया जा सकता है-
    - लकीरों की मोटाई > 0.08 मिलीमीटर
    - अलग अलग स्थानों पर बने बिंदु > 0.3 मिलीमीटर व्यास
    - क्रासेज > 0.8 मिलीमीटर
    - स्पेस > 0.15 मिलीमीटर
  - → ओवरले से बचें
  - → संबंधित आंकड़ों को वर्गों में विभाजित करना
  - → कलर कोड का बुद्धिमत्ता से इस्तेमाल करें : पानी के लिए नीला, कंटूर लाइन और सीमा क्षेत्र के लिए भूरा, पेड़ पौधों के लिए हरा , अज्ञात या अनुपलब्ध के लिए सफेद या मटमैले रंग का प्रयोग आदि।
- आवश्यक वर्णन उपलब्ध कराता है:

मैप में शामिल चीजें	अनिवार्य	ऐच्छिक
शीर्षक/उपशीर्षक	x	
अक्षांश व देशांतर सहित मैप फ्रेम	x	
Legend	x	
Signature (area, line, points, charts)	x	
North arrow	x	
कॉपीराइट, आंकड़ों का स्रोत	x	
स्केल बार (विषय, स्केल तथा उद्देश्य पर आधारित)		x
ग्रेटीक्यूल (Graticule)		x
प्रोजेक्शन (Projection)		x
निर्माता, तारीख (Author, date)		x

तालिका 11- (मैप के अवयव)[4]

[4] Adapted from Cartographic concepts and representations, University Stuttgart, Institute of Landscape Planning and Ecology

- संकेतक चिह्न (लेजेंड) (अनुवाद कोड)
  - → अच्छे स्थान पर व्यवस्थित किया हुआ (प्रायः दाहिनी ओर)
  - → संक्षिप्त एवं सुनिश्चित- बिना शब्द-संक्षेप का इस्तेमाल किए
  - → लेजेंड के साथ मैप के शीर्षक को दुहराने की जरूरत नहीं
  - → लेजेंड के शीर्षक के साथ LEGEND लिखने की जरूरत नहीं
  - → मूल्य की इकाई को केवल एक बार लिखा जाना चाहिए
  - → थीम वाले मैपों में केवल विषय से संबंधित हस्ताक्षर ही जरूरी
  - → भौगोलिक वर्णन वाल नक्शों (topographic maps) में सभी हस्ताक्षरों को लेजेंड में दिखाया जाना चाहिए
  - → मुख्य विषय को सबसे पहले

जिला गंगा परियोजना को तैयार करने के लिए आवश्यक जीआईएस कड़ों के लिए सुझाए गए स्रोत

वांछित आंकड़ों को जमा करना, उनका स्वरूप बदलना और उन्हें जीआईएस मैप बनाने के लिए इस्तेमाल करना मुश्किल तथा समय साध्य कार्य होता है। इसमें सहायता करने के लिए कई वेब आधारित प्लेटफॉर्म वेब-मैपिंग में सहयोग प्रदान करते हैं। जैसा कि India WRIS के उदाहरण में बताया गया है, विभिन्न स्रोतों से नियमित रूप से अद्यतन किए गए जल संबंधी लेयर और आंकड़ों को यहां उपलब्ध कराया जाता है और उन्हें समेकित किया जाता है। अगर संबंधित जिला गंगा समितियों को Q/ ArcGIS के साथ मिलाकर काम करने के संसाधन और क्षमता नहीं होती तो रेडिमेड जीआईएस मैप का इस्तेमाल संभव भी है और आसान भी, हालांकि उस प्लेटफॉर्म की स्वतंत्रता के पैमाने (degree of freedom) और मैप को अपने ढंग से डिजाइन नहीं कर पाना इसकी कमियां हैं। वेब-मैप की अनुशंसित सूची नीचे दी गयी है।

उचित जीआईएस सॉफ्टवेयर परिचालन से परिचित विशेषज्ञों के लिए सामान्य रूप से इस्तेमाल किए जा सकने वाले डेटाबेस की सूची आगे दी गयी है। वे इसमें दिए गए भू-स्थानिक (geo-spatial) आंकड़ों का इस्तेमाल कर जिला गंगा समितियों के लिए जीआईएस मैप का निर्माण कर सकते हैं।

पहले से डिजाइन किए गए जीआईएस मैप के लिए अनुशंसित स्रोतों की सूची

- **इंडिया वाटर रिसोर्सेज इंफर्मेशन सिस्टम (India Water Resources Information system)**
  (https://indiawris.gov.in/wris/#/)

  जल शक्ति मंत्रालय द्वारा स्थापित जन जल सूचना प्लेटफॉर्म। इसका उद्देश्य भारत में जल प्रबंधन के सबसे महत्वपूर्ण पहलुओं के बारे में सूचना का प्रसार है। इस प्लेटफॉर्म पर और जिओव्यूअर पर निम्नलिखित पहलुओं पर अच्छी जानकारी उपलब्ध है (नीचे देखें)-

  - → भूजल और भूतल जल (परिकल्पना,तुलना, अनेक केंद्रीय तथा राज्य एजेंसियों द्वारा सूचना को निगरानी साइटों से डाउन-लोड करने के विकल्प।)
  - → जलवायु सूचना (परिकल्पना, तुलना, केंद्रीय तथा राज्य एजेंसियों के जलवायु स्टेशनों द्वारा सूचना को निगरानी साइटों से डाउन-लोड करने के विकल्प।)
  - → रिवर-प्वाइंट (परिकल्पना,तुलना, अनेक केंद्रीय तथा राज्य एजेंसियों द्वारा सूचना को निगरानी साइटों से डाउन-लोड करने के विकल्प।)
  - → रिजर्वायर के आंकड़े (जल के स्तर एवं जल भंडारण के बारे में जानकारी उपलब्ध कराना, रिजर्वायर की मुख्य विशेषताओं की इंवेंट्री करना, जिन पर राज्य तथा केंद्र की एजेंसियां निगरानी रखती है।

1800

→ जल संसाधन प्रोजेक्ट (सिंचाई परियोजनाओं और जल संसाधन संरचनाओं के बारे में सूचना एवं स्थानिक सूची (इन्वेंट्री)),

- **इंडिया वाटर रिसोर्सेज इंफर्मेशन सिस्टम का जियो व्यूअर**
  (https://indiawris.gov.in/wris/#/Geoviewer)

  दि इंडिया WRIS Geoviewer (कृपयै लैंडिंग पेज पर चित्र 1 देखें जहां पूरे क्षेत्र में आंकड़ों के कवरेज का विस्तार दिखाया गया है। यह अलग अलग प्रकार के थीम आधारित लेयरों के भौगोलिक परिकल्पना (visualisation) को संभव करता है जिनकी दर्शनीयता तुलना की दृष्टि या आवश्यकतानुसार व्यू के लिए जरूरत के अनुसार चालू या बंद की जा सकती है। यह व्यू निम्नलिखित फीचरों के साथ पाया जाता है- लेजेंड, लेयर लिस्ट, बेसमैप, प्रिंट, सर्फेस प्रोफाइल, शेयर, ऐड डेटा, ज़ूम इन/ ज़ूम आउट, प्रीवियस/नेक्स्ट, ज़ूम, लोकेट, ग्लोबल सर्च, एट्रीब्यूट तालिका, सेलेक्ट, स्वाइप, मेजरमेंट, बुकमार्ग।

चित्र 7- इंडिया वाटर रिसोर्सेज इंफर्मेशन सिस्टम का स्क्रीन-शॉट जिसमें क्षेत्र के हिसाब से कवरेज को दिखाया गया है।

- **इंडियन स्पेस रिसर्च ऑर्गेनाइजेशन (ISRO) का जियो प्लेटफॉर्म**
  (http://bhuvan.nrsc.gov.in/gis/thematic/index.php)

  इस प्लेटफॉर्म पर जिला स्तर पर चुने हुए थीम के लिए पहले से डिजाइन किया हुआ जीआईएस मैप तथा अपरिष्कृत (raw) भूस्थानिक आंकड़ा उपलब्ध रहता है। इन थीम आधारित आंकड़ों के सेट को प्रयोक्ता अपने सिस्टम के साथ जोड़कर ओजीसी वेबसर्विसेज के रूप में इस्तेमाल कर सकते हैं।

- **भारत के जल संसाधन – सेंट्रल वाटर कमीशना के वेब-मैप**
  (https://craigdsouza.in/water_resources_india/)

  यह सीधे सीधे एक वेबमैप है जिसमें वाटरशेड, नदी बेसिन, एक्वीफर, भूजल की गहराई, भूमि की उर्वराशक्ति के उपयोगी लेयर उपलब्ध हैं। इसे वाटर रिसोर्सेज इंफर्मेशन सिस्टम (WRIS) ने सेंट्रल वाटर कमीशन के लिए बनाया है। अधिक जानकारी के लिए देखें-

  https://github.com/craigdsouza/water_resources_india

- **इंडिया वाटर टूल**
  (https://www.esri.in/en-in/industries/water/segments/water-resources)

  "इंडिया वाटर टूल, वर्जन 4 (IWT 4.0) एक विस्तृत, हाई-रिजोल्यूशन, आसानी से इस्तेमाल किया जाने वाला वेब मैप है जिसकी सहायता से इसका इस्तेमाल करने वाले लोग जल संबंधी खतरों को समझ सकते हैं औऱ आगे की कार्रवाई के लिए अपने साइट की प्राथमिकताएं तय कर सकते हैं। वे इसके आधार पर विश्लेषण भी कर सकते हैं और भारत में जल प्रबंधन संबंधी हस्तक्षेप भी निर्धारित कर सकते हैं। IWT 4.0 के अंदर भारत सरकार के महत्वपूर्ण अधिकारियों तथा दूसरी संस्थाओं द्वारा निर्मित 14 डेटा-सेट्स और वाटर-स्ट्रेस प्रारूपों को इकट्ठा किया गया है।" इन आंकड़ों को वेब-मैप में प्रदर्शित किया गया है जो प्रयोगकर्ताओं को विभिन्न थीम आधारित लेयरों की तुलना औऱ उन्हें प्रिंट करने की सुविधा प्रदान करता है।

सामान्य रूप से इस्तेमाल किए जाने वाले अप्रसंस्कृत भू-स्थानिक जीआईएस आंकड़े

- **NEXTGIS**
  https://data.nextgis.com/en/region/IN/base

  " यह वेबसाइट ओपेन स्ट्रीट मैप तथा कुछ अन्य ओपन एवं पब्लिक डोमेन में उपलब्ध स्रोतों का इस्तेमाल कर दुनिया भर में किसी भी क्षेत्र के लिए नियमित रूप से अपडेट किए स्थानिक डेटासेट उपलब्ध कराता है। इन आंकड़ों में जमीन के इस्तेमाल, जलाशयों, बस्तियों आदि के बारे में जानकारी शामिल होती है जिन्हें ESRI Shapefile, ESRI Geodatabase, map info TAB, GeoJSON, PBF, OpenStreetMap (XML), SQL (PostgreSQL), CSV, तथा PDF जैसे कई फॉर्मेटों में उपलब्ध कराया जाता है। ये आंकड़े वर्तमान में उपलब्ध अधिकांश जीआईएस के साथ उपयोग किए जाने के योग्य हैं।

- **Kaggle**
  (https://www.kaggle.com/datasets/nehaprabhavalkar/india-gis-data)

  इस वेबसाइट पर भारत के जल संसाधनों से संबंधित विभिन्न भू-स्थानिक आंकड़े उपलब्ध हैं जिनमें शेप फाइल, प्रोजेक्ट फाइल जैसे उपयोगी भूस्थानिक विश्लेषण संबंधी भी उपलब्ध हैं।

- **EarthExplorer by USGS**
  (https://earthexplorer.usgs.gov/)

  अर्थ एक्सप्लोरर अनेक थीम-आधारित डेटा-सेट उपलब्ध कराता है जिसका आधार पर सर्च, ब्राउजिंग डिसप्ले, मेटाडेटा एक्सपोर्ट और U.S. Geological Survey earth science data repositories (USGS) डेटा डाउनलोड किया जा सकता है।

- **Climate Data Store - Copernicus**
  https://cds.climate.copernicus.eu/#!/home

  डाउनलोड करने के लिए जलवायु संबंधी आंकड़े। " कोपरनिकस यूरोपीय संघ का अर्थ ऑबजेरवेशन कार्यक्रम है। यह पृथ्वी और इसकी जलवायु पर नजर रखता है और दुनिया भर के लिए जलवायु संबंधी आंकड़े उपलब्ध कराता है।"

- **मध्य अवधि के लिए मौसम संबंधी अनुमान हेतु यूरोपीय केंद्र**
  (https://www.ecmwf.int/en/forecasts/datasets)

  मौसम के बारे में पूर्वानुमान के लिए आंकड़े, डेटासेट। " The European Centre for Medium-Range Weather Forecasts (ECMWF) मौसम के पूर्वानुमान के बारे में आंकड़ों के उत्पादन एवं उनके प्रसार के लिए उत्तरदायी है। यह दुनिया भर के लिए जलवायु संबंधी आंकड़े उपलब्ध कराता है।"

- **OpenStreetMap**

  यह एक मुफ्त, ओपन, भौगोलिक डेटाबेस है जिसे स्वैच्छिक तौर पर काम करने वाले कुछ लोग खुली सहयोगिता के आधार पर चलाते है। यह ओपेन डेटाबेस लाइसेंस के तहत पंजीकृत है जिसके कारण प्रायः इसका उपयोग कर इलेक्ट्रॉनिक मैप बनाए जाते हैं, टर्न बाय टर्न नेविगेशन में मदद दी जाती है, मानवीय सहायता में सहयोग किया जाता है और डेटा विजुअलाइजेशन के लिए प्रयोग किया जाता है। OpenStreetMap अपने टोपोलॉजी का इस्तेमाल कर भौगोलिक फीचर्स को इकट्ठा करता है जिसे जीआईएस फाइल फॉर्मैट में एक्सपोर्ट किया जा सकता है। OpenStreetMap स्वयं एक ऑनलाइन मैप, जियोडेटा सर्च इंजिन और एडिटर है।"

- **खाद्य एवं कृषि संगठन (FAO) के डेटासेट तथा मैप**
  (https://www.fao.org/land-water/databases-and-software/en/)

  खाद्य एवं कृषि संगठन के डेटाबेस और सॉफ्टवेयर मॉडल में निम्नलिखित आंकड़े शामिल होते हैं जिन्हें निःशुल्क डाउनलोड किया जा सकता है।

  → AQUASTAT: FAO का वैश्विक जल सूचना सिस्टम

  → AQUACROP: फसल-जल उत्पादकता संबंधी सॉफ्टवेयर मॉडल जो इस क्षेत्र में अग्रणी माना जाता है।

  → AQUAMAPS: जल एवं कृषि संबंधित वैश्विक स्थानिक डेटाबेस

  → GAEZ: वैश्किव कृषि- पारिस्थितिकीय क्षेत्र

  → The Harmonized World Soil Database: मिट्टी की गुणवत्ता जांचने के लिए (soil mapping) 15000 इकाइयां जिनमें वर्तमान में कार्यरत soil information worldwide के स्थानीय तथा राष्ट्रीय अपडेट शामिल हैं।

- **Socioeconomic Data and Applications Center (SEDAC)**
  (https://earthdata.nasa.gov/eosdis/daacs/sedac)

  "NASA का socioeconomic Data and Applications Center (SEDAC) Center for International Earth Science Information Network (CIESIN) द्वारा संचालित होता है।. [...] SEDAC भूविज्ञान एवं अन्य सामाजिक-आर्थिक आंकड़ों को उपयोगी ढंग से इकट्ठा करता है जिसका इस्तेमाल बड़े पैमाने पर निर्णय का अधिकार रखने वालों और अन्य लोगों द्वारा किया जाता है। SEDAC के पास जनसंख्या, सतत विकास (sustainability) तथा भूस्थानिक आंकड़ों का एक बड़ा खजाना है।

5.4.2 जिला गंगा योजना के लिए आवश्यक जीआईएस मैप बनाने हेतु आवश्यक थीम-आधारित आंकड़े, उन्हें पाने के स्रोत

इस हैंडबुक के निर्माण के समय तक ऊपर दिए गए प्लेटफॉर्म पर आंकड़ों की स्थिति का आकलन और गंगा बेसिन के हर जिले में थीम आधारित स्थानिक मैप बनाने में उनकी उपयोगिता के आधार पर किया गया है। तालिका 1 में आवश्यक सभी थीम आधारित आंकड़ों को दिखाया गया है, साथ ही वे किस प्लेटफॉर्म पर मिल सकते हैं और उनका क्या स्वरूप है, अन्य विस्तृत जानकारी के स्रोत भी दिखाए गए हैं।

तालिका 12- जिला गंगा योजना के निर्माण के लिए उपयोगी विभिन्न प्लेटफॉर्म पर आंकड़ों की उपलब्धता

थीम आधारित आंकड़े	बेसिन और जिला स्तर पर जीआईएस आंकड़ों के लिए डेटाबेस	आंकड़ों का फॉर्मैट
टोपोग्रफी तथा नालियों का नेटवर्क		
टोपोग्रफी तथा नालियों का नेटवर्क	https://indiawris.gov.in/wris/#/RiverMonitoring	वेबमैप, तुरंत इस्तेमाल के योग्य मैप, डाउनलोड किया जा सकता है
	IndiaWRIS Geoviewer	वेबमैप, तुरंत इस्तेमाल के योग्य, डाउनलोड किया जा सकता है
प्रशासनिक आंकड़े		
जिले की सीमाएं	IndiaWRIS Geoviewer	वेबमैप, तुरंत इस्तेमाल के योग्य, डाउनलोड किया जा सकता है
	https://bhuvan-app1.nrsc.gov.in/thematic/thematic/index.php	वेब मैप, WMS
	https://gadm.org/download_country.html	रैस्टर/ वेक्टर डेटा
जल भौगोलिक (Hydrological) सीमा		
बेसीन की सीमा	IndiaWRIS Geoviewer	वेबमैप, तुरंत इस्तेमाल के योग्य मैप, डाउनलोड किया जा सकता है
उप-बेसिन की सीमा	IndiaWRIS Geoviewer	वेबमैप, तुरंत इस्तेमाल के योग्य मैप, डाउनलोड किया जा सकता है
जलवायु संबंधी आंकड़े		
वृष्टिपात	https://indiawris.gov.in/wris/#/rainfall	वेब मैप
	https://datosclima.es/en/ghcn/Location.php	खास स्टेशनों से अपरिष्कृत आंकड़े
संभावित इवैपोट्रांसपिरेशन (Evapotranspiration)	https://indiawris.gov.in/wris/#/evapotranspiration	वेबमैप, तुरंत इस्तेमाल के योग्य मैप, डाउनलोड किया जा सकता है

थीम आधारित आंकड़े	बेसिन और जिला स्तर पर जीआईएस आंकड़ों के लिए डेटाबेस	आंकड़ों का फॉर्मैट
भूतल जल		
संग्रहण रिजर्वायर गाद संबंधी अध्ययन	https://indiawris.gov.in/wris/#/sediment	वेबमैप, तुरंत इस्तेमाल के योग्य मैप, डाउनलोड किया जा सकता है
भूतल पर बने संग्रहण जलाशय	https://indiawris.gov.in/wris/#/surfaceWater	वेबमैप, तुरंत इस्तेमाल के योग्य मैप, डाउनलोड किया जा सकता है
	https://bhuvan-wbis.nrsc.gov.in/	वेबमैप, तुरंत इस्तेमाल के योग्य मैप, डाउनलोड किया जा सकता है, WMS
	IndiaWRIS Geoviewer	वेबमैप, तुरंत इस्तेमाल के योग्य मैप, डाउनलोड किया जा सकता है
नदी	https://indiawris.gov.in/wris/#/RiverMonitoring	वेबमैप, तुरंत इस्तेमाल के योग्य मैप, डाउनलोड किया जा सकता है
	IndiaWRIS Geoviewer	वेबमैप, तुरंत इस्तेमाल के योग्य मैप, डाउनलोड किया जा सकता है
भूतल जल की गुणवत्ता	https://indiawris.gov.in/wris/#/SWQuality	वेबमैप, तुरंत इस्तेमाल के योग्य मैप, डाउनलोड किया जा सकता है
	https://bhuvan-wbis.nrsc.gov.in/	वेबमैप, तुरंत इस्तेमाल के योग्य मैप, डाउनलोड किया जा सकता है, WMS
दलदली भूमि	https://indiawris.gov.in/wris/#/wetlands	वेबमैप, तुरंत इस्तेमाल के योग्य मैप, डाउनलोड किया जा सकता है
भूजल		
GW एक्वीफर के प्रकार	https://indiawris.gov.in/wris/#/Aquifer	वेबमैप, तुरंत इस्तेमाल के योग्य मैप, डाउनलोड किया जा सकता है
GW की खोज (कुओं की अवस्थिति, उनका लिथोलॉजिकल प्रोफाइल)	https://indiawris.gov.in/wris/#/Litholog	वेबमैप, तुरंत इस्तेमाल के योग्य मैप, डाउनलोड किया जा सकता है
जलस्तर संबंधी आचरण	https://indiawris.gov.in/wris/#/groundWater	वेबमैप, तुरंत इस्तेमाल के योग्य मैप, डाउनलोड किया जा सकता है
भूजल संसाधन का आकलन	https://indiawris.gov.in/wris/#/GWResources	वेबमैप, तुरंत इस्तेमाल के योग्य मैप, डाउनलोड किया जा सकता है
भूजल की विशेषताओं का अध्ययन	https://indiawris.gov.in/wris/#/GWProspects	वेबमैप, तुरंत इस्तेमाल के योग्य मैप, डाउनलोड किया जा सकता है

थीम आधारित आंकड़े	बेसिन और जिला स्तर पर जीआईएस आंकड़ों के लिए डेटाबेस	आंकड़ों का फॉर्मेट
भूजल		
कृत्रिम रिचार्ज संरचनाएं	https://indiawris.gov.in/wris/#/arsViewer	वेबमैप, तुरंत इस्तेमाल के योग्य मैप, डाउनलोड किया जा सकता है
भूजल की गुणवत्ता	https://indiawris.gov.in/wris/#/GWQuality	वेबमैप, तुरंत इस्तेमाल के योग्य मैप, डाउनलोड किया जा सकता है
जल की गुणवत्ता		
प्रदूषण के मुख्य स्रोत, जलमल का परिशोधन, स्वच्छता आदि	https://indiawris.gov.in/wris/#/Wasteland	वेबमैप, तुरंत इस्तेमाल के योग्य मैप, डाउनलोड किया जा सकता है
जिले की सीमाओं के बाहर के पहलू		
प्रदूषकों का आगमन और बहिर्गमन (Import and export)	https://indiawris.gov.in/wris/#/SWQuality	वेबमैप, तुरंत इस्तेमाल के योग्य मैप, डाउनलोड किया जा सकता है
भू संसाधन		
भू उपयोग तथा लैंडकवर मैप तथा तालिका	https://indiawris.gov.in/wris/#/lulc	वेबमैप, तुरंत इस्तेमाल के योग्य मैप, डाउनलोड किया जा सकता है
	https://bhuvan-app1.nrsc.gov.in/thematic/thematic/index.php	वेबमैप, तुरंत इस्तेमाल के योग्य मैप, डाउनलोड किया जा सकता है, WMS
	arcgis.com	वेब मैप, रैस्टर/ वेक्टर आंकड़े
भूमि (भूमि की गहराई, मिट्टी का अपर्दन, कटाव, उर्वरा क्षमता, ढलान)	https://indiawris.gov.in/wris/#/soil	वेबमैप, तुरंत इस्तेमाल के योग्य मैप, डाउनलोड किया जा सकता है
जल जमाव और खारापन	https://indiawris.gov.in/wris/#/waterLoggingSoilSalinity	वेबमैप, तुरंत इस्तेमाल के योग्य मैप, डाउनलोड किया जा सकता है
	https://bhuvan-app1.nrsc.gov.in/thematic/thematic/index.php	वेबमैप, तुरंत इस्तेमाल के योग्य मैप, डाउनलोड किया जा सकता है, WMS
बंजर भूमि का अध्ययन	https://indiawris.gov.in/wris/#/Wasteland	वेबमैप, तुरंत इस्तेमाल के योग्य मैप, डाउनलोड किया जा सकता है
	https://bhuvan-app1.nrsc.gov.in/thematic/thematic/index.php	वेबमैप, तुरंत इस्तेमाल के योग्य मैप, डाउनलोड किया जा सकता है, WMS

थीम आधारित आंकड़े	बेसिन और जिला स्तर पर जीआईएस आंकड़ों के लिए डेटाबेस	आंकड़ों का फॉर्मेट
सामाजिक आर्थिक आंकड़े		
सामाजिक आर्थिक जनगणना	https://indiawris.gov.in/wris/#/socioEconomic	वेबमैप, तुरंत इस्तेमाल के योग्य मैप, डाउनलोड किया जा सकता है
सामाजिक आर्थिक स्वरुप	https://indiawris.gov.in/wris/#/socioEconomic	वेबमैप, तुरंत इस्तेमाल के योग्य मैप, डाउनलोड किया जा सकता है
जीविका के मुख्य साधन/ कृषि-जलवायु संबंधी क्षेत्र	https://indiawris.gov.in/wris/#/Region	वेबमैप, तुरंत इस्तेमाल के योग्य मैप, डाउनलोड किया जा सकता है
सूखा प्रभावित क्षेत्र	https://indiawris.gov.in/wris/#/Drought	वेबमैप, तुरंत इस्तेमाल के योग्य मैप, डाउनलोड किया जा सकता है
जिले की सीमाओं के पार पहलू (जैसे प्रदूषकों का आगमन और बहिर्गम)	https://indiawris.gov.in/wris/#/interbasintransferLink	वेबमैप, तुरंत इस्तेमाल के योग्य मैप, डाउनलोड किया जा सकता है

5.5 जिला गगा योजना के मुख्य हितधारकों की सूची

5.5.1 राष्ट्रीय स्तर

हितधारक	जिला गंगा योजना की भूमिका एवं जिम्मेदारी
National Mission for Clean Ganga (NMCG)	जिला योजना के लिए मार्गदर्शन, जिला गंगा समिति को प्राधिकरण की अधिसूचना के अनुसार मैंडेट प्रदान करना। कार्यान्वयन के लिए जिला योजनाओं और वित्त की स्वीकृति
केंद्रीय भूजल बोर्ड (CGWB)	सतत विकास के लिए जिला योजना में योगदान और देश के भूजल संसाधनों का प्रबंधन
केंद्रीय जल आयोग (CWC)	जिला योजनाओं में जल संसाधन प्रबंधन से संबंधित अवयवों के लिए योगदान तथा जल की गुणवत्ता की निगरानी
राष्ट्रीय जल अकादमी (NWA)	अंतर्राष्ट्रीय नदी बेसिन प्रबंधन (RBM) चक्र पद्धति के अनुसार जिला योजना में योगदान। राष्ट्रीय जल अकादमी राष्ट्रीय स्वच्छ गंगा मिशन (एनएमसीजी) तथा जीआईजेड के साथ आरबीएम चक्र संबंधी प्रशिक्षण में शामिल है।
जल शक्ति मंत्रालय, जल संसाधन, नदी विकास तथा गंगा पुनर्जीवन विभाग (DoWR, RD & GR)	जिला योजनाओं को बनाने में जल शक्ति मंत्रालय, जल संसाधन, नदी विकास तथा गंगा पुनर्जीवन विभाग सीधे सीधे शामिल नहीं होते। लेकिन जल-शक्ति मंत्रालय राज्यों द्वारा गंगा और उप-बेसीन फ्रेमवर्क के विकास के लिए केंद्रीय स्तर पर शीर्ष संस्था का काम करती है।
जल शक्ति मंत्रालय, पेयजल विभाग तथा जल संसाधन एवं स्वच्छता विभाग	जल शक्ति मंत्रालय, जल संसाधन विभाग जिला योजनाओं के निर्माण में शामिल नहीं होंगे। लेकिन जल-शक्ति मंत्रालय राज्यों द्वारा गंगा और उप-बेसीन फ्रेमवर्क के विकास के लिए केंद्रीय स्तर पर शीर्ष संस्था का काम करती है।
आवासन और शहरी कार्य मंत्रालय (MoHUA)	आवासन एवम शहरी कार्य मंत्रालय जिला गंगा योजना के निर्माण में शामिल नहीं होगी। लेकिन राज्यों तथा केंद्र शासित प्रदेशों के साथ ही नगर निगमों और समितियों के लिए CPHEEO द्वारा नीतियां तथा कार्यनीतियां उपलब्ध करायी जाती हैं।
केंद्रीय प्रदूषण नियंत्रण बोर्ड (CPCB)	प्रदूषण नियंत्रण एवं बेसिन में जल की गुणवत्ता की निगरानी संबंधी आंकड़ो में योगदान
गंगा नदी बेसिन प्रबंधन एवं अध्ययन केंद्र Centre for Ganga River Basin Management and Studies (cGanga)	जिला गंगा योजना तथा गंगा बेसिन योजना को परस्पर लाभप्रद बनाने के लिए समन्वय
भारतीय वन्यजीव संस्थान Wildlife Institute of India (WII)	जैव-विविधता के पहलुओं के लिए समन्वय, स्थानीय जागरूकता संबंधी गतिविधियां
राष्ट्रीय नगर कार्य संस्थान(NIUA), आवासन एवम शहरी कार्य मंत्रालय	शहरी नदी प्रबंधन योजना फ्रेमवर्क के साथ सहभागिता तथा स्थानीय शहरी निकायों के लिए नदी प्रबंधन योजना तैयार करना

हितधारक	जिला गंगा योजना की भूमिका एवं जिम्मेदारी
राष्ट्रीय हाइड्रोलोजी संस्थान, रुरकी, जल संसाधन, नदी विकास तथा गंगा पुनर्जीवन विभाग, भारत सरकार (DoWR, RD & GR	भारत के जल सेक्टर में सतत विकास एवं आत्म निर्भरता के लिए प्रभावी वैज्ञानिक समाधान तथा हाइड्रोलोजी शोध के क्षेत्र में नेतृत्व प्रदान करना। मॉडलिंग तकनीकों का इस्तेमाल कर अलग अलग प्रकार के हाइड्रोलॉजिकल, जलवायु संबंधी, सामाजिक सांस्कृतिक परिस्थितियों का अध्ययन। जल संबंधी समस्याओं पर विभिन्न अंशधारकों को वैज्ञानिक सलाह प्रदान करना।

5.5.2 राज्य स्तर

हितधारक	जिला गंगा योजना की भूमिका एवं जिम्मेदारी
राज्य स्वच्छ गंगा मिशन मिशन(State Mission for Clean Ganga-SMCG)	जिला गंगा समितियों के साथ जिला योजना निर्माण के लिए समन्वय,। जिला स्तर पर हो रही गंगा पुनरुत्थान संबंधी गतिविधियों के क्रियान्वयन एवं निगरानी के लिए जिला गंगा समितियों को वित्तीय एवं तकनीकी सहयोग
उत्तराखंड पेय जल निगम (UKPJN)	उत्तराखंड पेय जल निगम मुख्यतः जिला योजना के जल आपूर्ति तथा तरल कचरे के प्रबंधन का कार्य देखेगी। मानव मल के निपटान और सेप्टेज ट्रीटमेंट व्यवस्था संबंधी कार्य भी इसकी कार्य परिधि में आते हैं।
जल संस्थान	
प्रदूषण नियंत्रण बोर्ड	
नगर विकास विभाग	
वन विभाग	
सिंचाई विभाग	जलविद्युत परियोजनाओं, सिंचाई, जलसंसाधन योजना विकास एवं प्रबंधन के बारे में जानकारी
राज्य औद्योगिक विकास निगम	
अंतरिक्ष उपयोग केंद्र (Space Application Centre)	

5.5.3 जिला स्तर

हितधारक	जिला गंगा योजना की भूमिका एवं जिम्मेदारी
जिला गंगा समिति	प्राधिकार की अधिसूचना के अनुसार जिला गंगा योजना का निर्माण
जल संस्थान	जल आपूर्ति की योजना बनाना, इसे प्रोत्साहन देना। साथ ही जल आपूर्ति की एक दक्ष व्यवस्था को चलाना। जहां संभव हो नालियों की व्यवस्था, जलमल का शुद्धिकरण, औद्योगिक कचरे का निपटान और उनका शुद्धिकरण- इन कार्यों की योजना बनाना, उन्हें आगे बढ़ाना और उनका कार्यान्वयन करना।
कृषि विभाग	खाद्य और पोषण सुरक्षा इस विभाग का मुख्य कार्य है। विभाग लोगों की सहायता की दृष्टि से विभिन्न प्रकार की योजनाएं बनाता है, मिट्टी तथा बीजों एवं कीटनाशकों की की जांच कराता है, कृषि तथा मिट्टी की सुरक्षा के लिए य़ोजनाएं बनाता है।
संबंधित जिलों में औद्योगिक संगठनों का निर्माण	
जिला पंचायती राज विभाग	स्वच्छता संबंधी नागरिक कार्य, सार्वजनिक सड़कों की सफाई, लघु सिंचाई, सार्वजनिक शौचालय तथा स्नानागार, प्राथमिक स्वास्थ्य केंद्र, टीकाकरण, पेयजल की व्यवस्था, सार्वजनिक कुओं का निर्माण, ग्रामीण विद्युतीकरण, सामाजिक स्वास्थ्य, प्राथमिक तथा प्रौढ़ शिक्षा।
जिला शिक्षा अधिकारी	शिक्षा संबंधी कानून, नीतियां तथा नियम, स्वीकृत शिक्षा तथा खेल संबंधी योजनाओं, कार्यनीतियों का क्रियान्वयन,
जिला ई-गवर्नेंस विभाग	National Informatics Centre (NIC) देशभर के पैमाने पर आईसीटी का बुनियादी ढांचा उपलब्ध कराता है जो ई-गवर्नेंस में सहायता करता है और डिजिटल इंडिया के अन्य कार्यक्रमों में भी सहयोग करता है। यह डिजिटल इंडिया के डिजाइन, विकास और ई-गवर्नेंस की कार्ययोजनाओं को दक्षता पूर्वक लागू करने में सहयोग करता है।

5.5.4 विकास कार्यों में संलग्न एजेंसियां, एनजीओ तथा अन्य

हितधारक	जिला गंगा योजना की भूमिका एवं जिम्मेदारी
डब्ल्यू डब्ल्यू एफ, इंडिया (WWF India)	जिला योजनाओं से संबंधित क्षमता निर्माण, प्रशिक्षण, का संयोजन, साथ ही मुरादाबाद जिले में चल रही योजनाएं
विश्व बैंक	आंकड़े उपलब्ध कराना, हस्तक्षेप के बारे में सलाह और निर्धारित लक्ष्य
अर्थवॉच	
वाटरएड	
दि एनर्जी रिसर्च इंस्टीट्यूट (TERI)	
राष्ट्रीय पर्यावरण इंजीनियरिंग शोध संस्थान (NEERI), नागपुर	
युनाइटेड नेशंस डेवलपमेंट प्रोग्राम (UNDP)	
यूरोपीय संघ European Union (EU)	
अंतर्राष्ट्रीय जल प्रबंधन संस्थान International Water Management Institute (IWMI)	
कन्फेडेरेशन ऑफ इंडियन इंडस्ट्री (CII), त्रिवेणी जल संस्थान (Triveni Water Institute)	
इंटरनेशनन काउंसिल फॉर लोकल इनवाइरनमेंटल इनिशिएटिव्स (ICLEI)	
जल एवं भूमि प्रबंधन संस्थान (WALMI)	
पीटीबी (PTB)	
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