Letter No. SMCG/UD&HD/NGT/2019/17-224
Govt. of Jharkhand
Urban Development & Housing Department

From;

Vinay Kumar Choubey, IAS
Secretary to Govt.

To,

Shri Rajeev Ranjan Mishra, IAS
Director General,
National Mission for Clean Ganga,
Major Dhyan Chand National Stadium,
First Floor, National Stadium,
India Gate, New Delhi-110002

Ranchi, Date 02/10/2020

Sub.: **Regarding Jharkhand Quarterly Progress Report in the matter of Hon'ble NGT Case OA no. 200/2014 – M.C. Mehta Vs. Union of India & Ors.**

Ref: Hon'ble NGT Case OA No. 200/2014 matter of *M.C. Mehta Versus Union of India &Ors.* order dated 18.12.2019.

Respected Sir,

As per the order uploaded on the website of the Tribunal on 18.12.2019 in respect of O.A. 200/2014 of *M.C. Mehta Versus Union of India & Ors.*, it is directed by the Hon'ble Court to file the quarterly progress report of various ongoing/upcoming projects related to abatement of pollution from river Ganga or its tributaries.

Accordingly, the Jharkhand Quarterly Progress Report is hereby enclosed with this letter for your kind information and further action.

Enclosure:

- Jharkhand Quarterly Progress Report
- Order dated 18.12.2019 in the matter OA No. 200/2014.

Yours faithfully,

7/10/2020

(Vinay Kumar Choubey)
Secretary to Govt.

Memo no. SMCG/UD&HD/NGT/2019/17 224 **Ranchi/Dated.** 02/10/2020

Copy to- Additional Chief Secretary, Forest, Environment & Climate Change Dept. Govt of Jharkhand / Member Secretary, JSPCB, Ranchi for kind information.

7/10/2020

Secretary to Govt.

Jharkhand Fourth Quarterly Progress Report in the matter of OA no. 200/2014 – M.C. Mehta Vs. Union of India & Ors.

Summary Sheet

1. During the course of flow of around 83 km of River Ganga from the State of Jharkhand, river Ganga passes through Sahibganj district of Jharkhand covering two towns i.e. Sahibganj and Rajmahal.

2. The Sahibganj Municipal Sewerage Project comprises of mainly two STPs of 5 MLD and 7 MLD capacity, approx. 55 kms of sewer pipe network and Interception & Diversion (I&D) of 2 nos. of drains have been completed.

3. The Rajmahal Municipal Sewerage Project comprises of mainly one no. of STP of 3.5 MLD capacity, approx. 35 kms of sewer pipe network and I&D of 4 nos. of drains are under construction and 70% of the work has been completed till 30.09.2020. The work is expected to be completed by 31.12.2020.

4. Due to the complete Lockdown in the State of Jharkhand, due to Covid-19 Pandemic from 21.03.2020, the construction work at site was completely stopped from 21.03.2020 to 07.05.2020, at present as per the guideline of Central and State Government, the construction work is resumed with only 30 % of labor/staff at site, due to which the actual timeline for completion of project got delayed and the expected date of completion is 31.12.2020.

5. The Sahibganj and Rajmahal Integrated Municipal Solid Waste Management Project has been started and the work is expected to be completed by March 2021.

6. In compliance of court direction dated 07.08.2019, the I&D at 2 nos. of drains at Sahibganj that are the only drains monitored by CPCB has been completed on 12.02.2019 and as an interim measure at 4 nos. of drains at Rajmahal, that are considered as dry / stagnant drains in which flow occurs only during monsoon season at Rajmahal, the screens at drains have been installed on dated 25.03.2019 i.e. well before the court order in this matter, to prevent the discharge of floating matter into the river and due to very less flow at these drains, as an interim measure natural and biological treatment with in-situ manual chemical method has been put in place well before 01.11.2019, and the same has been communicated to the CPCB during meeting on dated 07.01.2020 at CPCB, New Delhi and vide UD&HD letter no. 236 & 1391 dated 20.01.2020 & 22.05.2020 respectively to CPCB.

   Environmental Compensation levied for the defaulting drains have been waived off as the details of the interim remediation measures were provided by UD & HD , Govt of Jharkhand via letter no. B-190153/NGT/WQM-II/CPCB/2019-20-1405 dated 16.06.2020.

7. Department of Mines & Geology (GOJ) realized fine for illegal Sand Mining at Sahebganj is Rs. 15,85,000 , Total Vehicles Seized for illegal Sand Mining is 34 & FIRs Registered for illegal Sand Mining is 14.

1. Action Taken by the Jharkhand State on the various directions issued by the Hon'ble NGT Court in the order dated 18.12.2019.

Sr. No.	Directions issued by the Hon'ble NGT Court on order dated 18.12.2019	Compliance Report	Current progress in the last quarter
1	Preventing discharge of industrial effluents in Ganga and its tributaries/drains by ensuring installation of proper functioning of ETPs/CETPs.	a. No water polluting Industry is available in Sahibganj District of Jharkhand, i.e. the only District of Jharkhand through which River Ganga flows. b. List of Industries situated at Ramgarh, Bokaro and Dhanbad District of Jharkhand thorough which River Damodar flows i.e. the only tributary of river Ganga at Jharkhand, as provided by Jharkhand State Pollution Control Board (JSPCB) 42 ETPs are functioning and Zero liquid discharge is maintained at 20 ETPs, 5 Units Re-use the treated water & 5 Units are using the treated water for horticulture. Enclosure-Annexure-1. c. JSPCB is monitoring the status of installation and functioning of ETPs at these industries and status of ETPs of these industries are enclosed at Annexure-1.	An Environmental compensation amount of Rs. 4,37,47,769 has been recovered from industries for damage caused to the Damodar River. Enclosure- **Annexure-2.**
2	Utilization of treated sewage, use of sludge as a manure and septage management.	a. The Jharkhand State Action Plan for Utilization of treated waste water from the Sewerage Treatment Plants (STPs) is enclosed as **Annexure- 2.**	a. Action plan for utilization of treated waste water from operation STPs at Sahibganj is under preparation in consultation with SahibganjnagarParisahd.

		b. Sewerage Treatment Plant at Sahibganj is operational and the action plan for utilization of treated waste water from the STP is under preparation. STP at Ranchi, Adityapur, and Rajmahal Urban Local Bodies (ULBs) is under construction and action plan for utilization of treated waste water will be prepared after operation of STPs. c. The Action plan (for Re-use of treated Water) of the state is already submitted to Hon'ble NGT in the matter OA No. 148/2016 (MA No. 686/2017), Mahesh Chandra Saxena Vrs. South Delhi Municipal Corporation & Ors. and accordingly, action taken is ensured. d. Propsed action plan for utilization of treated Municipal wastewater from the STPs under opearational at Sahibganjis under preparation in coordination wihSahibganj Nagar Parishad. e. As per the discussion with Sahibganj Nagar Parishad, based upon the geographical location of the area and current activities/infrastructure developments going on in the nearby areas of ULB following possible areas are identified in which treated waste water from STP can be utilised:- 1. Agriculture. As per the discussion with ULB, prior to	b. Treated water is presently dischargeinto riverGanga throughthe Outfall structure as per specified norms.

		allocation of treated water for irrigation purposes in any area, soil hydraulic tests for those areas, water requirements for the crops/vegetation in the respective area and water quality of irrigation water to be used in those respective areas according to these tests should be computed. 2. Railway junction. Re-use treated water shall be used for washing, flushing, maintenance of the Railway junction. 3. Crusher unit. The treated water shall be used against the water requirement of crusher such as sprinkleing of the dust. 4. Urban local bodies. The treated water shall be used for solid waste management plant, horticulture, maintenance of the park, puplic toilet flushing and other construction activites in the town. 5. Enviromental/Recreational reuse. Maintenance of parks, gardens and developing landscaping 6.Construction Purpose. Supply of treated water to the new construction sites/developing area through tankers against a fixed predetermined charge 7.Sludge manure is not yet generated in STPs.	
3	Demarcation of flood plain zones and preventing encroachments thereof.	a. The Consultant for Demarcation of Flood Plane Zone has been appointed by Water Resources Department (WRD), Government of Jharkhand.	

		b. As per the Report provided by WRD, Government of Jharkhand, for demarcation of flood plain zone, hydrology of the river is required, that will be made available by march 2024 through Government of India sponsored National Hydrology Projects (NHP). c. Report on Demarcation of flood plain zones as provide by WRD, Government of Jharkhand is enclosed as **Annexure-3.** d. No encroachment has been reported by Circle Officers, Sahibganj/ Borio/ Taljhari/ Rajmahal/ Udhwa along the river Ganga in the territory of Jharkhand State.	
4	Maintenance of e-flow.	a. As per the report of Water Resource Department (WRD), Government of Jharkhand, there is no water flow/discharge regulatory structure on river Ganga within the territory of Jharkhand, hence there is no issue regarding the maintenance of e-flow within the stretch of river Ganga at Jharkhand. b. The Status report on e-flow determination as provided by the Water Resources Department, Government of Jharkhand is enclosed as **Annexure- 3.**	
5	Preventing dumping of solid and other waste in and around Ganga.	a. The dumping of solid waste in and around river Ganga has been mitigated through following measures taken:	a. Dumping of Solid waste and other waste in and around River Ganga within the ULB is stopped. Door to Door waste collection is active in these

		I. Concessionaire for integrated solid waste management at Sahebganj & Rajmahal ULBs have been appointed. II. 100% door to door collection has been carried out in both the ULBs. III. Distribution of 2 bins(1 for dry and another for wet waste) has been done in Sahebganj & Rajmahal ULBs . IV. To prevent littering continuous IEC activities are being undertaken by both the ULBs. V. Road sweeping on roads around bank of Ganga is being done . VI. Artistic Litter bins have been installed on the bank of Ganga river. VII. Screening in the drains & Nala is being done.	ghats areas catering all the residential. b. Public awareness and involments of various stakeholder –like Social workers, Student Organisations, SHG members Elected Representatives, ULB Officials, Staffs etc, has been done by the ULB to keep river Ganga and Ghats Clean. c. Sahebganj has been certified as ODF++ (open defecation free and faecal sludge management with wastewater treatment facility) by Quality Control of India. d. Rajmahal has been certified as ODF+ (open defecation free with additional feature of other sanitation facility like vending machine for sanitary pads & incinerators) by Quality Control of India.
6	Clearing old legacy waste dump sites.	a. A complaint mechanism is implemented & fine provision is there for littering waste in both the ULBs(Sahebganj & Rajmahal). b. One old legacy site at Sahebganj has been cleared and a Women's College has been setup on the aforesaid land. c. All dumpsites have been cleared in Rajmahal & Sahebganj.	a. Legacy waste dumpsites near river Ganga are cleared. A complaint mechanism is implemented & fine provision is there for people littering in & around the ghats areas.

7	a. Preventing and regulating illegal sand mining	1. Govt of Jharkhand has also constituted a State Level & District Level Task Force for prevention and monitoring of illegal mining and transportation of the mineral in the state. 2. Govt. of Jharkhand has formulated "The Jharkhand Minerals (Prevention of illegal Mining, Transportation and Storage) Rules, 2017 in order to curb illegal mining, transportation and storage of minerals in the state.The said rule provides the provision for search, seizure, confiscation of minerals being mined or transported illegally in the state and prohibitsany commercial dealing which includes buying, selling, processing, transporting of mineralswithoutbeing a dealer or mining lease holder.	1. The total number of district level task force Meetings conducted in FY 2018-19 were 150 and in FY 2019-20 were 49. 2. The rule has already been implemented and provides for provisions related to prevention of illegal mining in the state.
		3. Govt. of Jharkhand has also formulated Jharkhand Minor Mineral Concession (Amendment) Rules 2017 wherein its rule 54 states that in case during transportation of mineral any person unable to show valid challan shall be punishable with an imprisonment of 1 year/shall pay a penalty of double value of mineral/ both as the case may be.	3. Govt. of Jharkhand is implementing Rule 54 of Jharkhand Minor Mineral Concession Rule,2017
		4. State Govt. is also implementing star rating Framework for Minor Mineral blocks on similar lines as that of major minerals wherein-50% weightage is on the parameters, i) Systematic and sustainable mining and ii) Protection of Environment and Conservation of water with implementation of the star rating of minor mineral block, pollution due to minor mineral block id expected to be controlled	4. Star Rating has been included in Jharkhand Minor Mineral Concession Rules, 2019 As per Rule34L of JMMC (Amendment) Rule 2019 every mining leases holder in the state shall submit an evaluation report based on template shared for the star Rating by the state Govt. The Templates -50% weightage is on the parameters systematic and Sustainable Mining, Protection of Environment and Conservation of water. With implementation of the star rating of minor mineral blocks environmental impact

			due to mining of minor minerals is expected to be controlled.
		5. JSMDC Ltd. has implemented Sand Management System (SMS) to ensure efficient monitoring of sand mining operations at sand ghats and for sale of sand at stockyards. The Sand management System shall be able to validate the permitted quantity of sand to be dispatched to the buyers (data from permit) and also validate customer vehicles through its integration with JIMMS portal. SMS will also provide reconciliation features and audit functionalities of the transported quantity of sand Action Taken against Illegal Mining of Sand in Jharkhand.	5. Sand Management System has been implemented and currently monitoring sand mining operation at Sand Ghats in Jharkhand. A report detailing actions taken by the state Government during FY 19-20 for prevention of illegal mining and transportation of Sand in the districts related to River Ganga and its tributary Damodar is as follows: **Data related to Actions against illegal Mining of Sand**

S. No.	District	FIRs Registered	Total Vehicles Seized	Fines realized (Rs)
1	Hazaribagh	40	179	32,86,000
2	Dhanbad	32	269	10,97,500
3	**Sahibganj**	**14**	**34**	**15,85,000**
4	Dumka	7	90	10,19,400
5	Giridih	20	89	3,88,000
6	Koderma	37	74	3,58,200
7	Palamu	43	0	10,15,171
8	Ranchi	13	80	72,96,000

			9	Ramgarh	29	114	7,00,600
			10	Chatra	13	489	2,83,820
			11	Bokaro	37	110	15,14,000
			12	Lohardaga	2	27	1,97,200
			Total		287	1555	1,87,40,891

- Fine realized for illegal Sand Mining at Sahebganj is Rs. 15,85,000.

-Total Vehicles Seized for illegal Sand Mining is 34.

-FIRs Registered for illegal Sand Mining is 14.

	a. Sustainable Sand Mining	Govt. of Jharkhand has formulated an environmentally sustainable and social centric Comprehensive Sand mining policy, the Jharkhand State Sand Mining Policy 2017 and same has been already implemented. This is also in compliance with the judgment of Hon'ble Supreme Court in the matter of Deepak kumar v/s State of Haryana etc.and subsequent notifications of MoEF&CC, GoI	The said policy mandated for preparation of District Survey report (DSR) by the committee headed by Deputy Commissioner-cum-Chairman, DEIAA as envisaged in Para 7 (ii) of Part-II-section-3 Sub Section (ii) of Extraordinary Gazette of MoEF&CC, GoI dated 15/01/2016. Based on the DSR, Sand Ghats are to be categorized under two different categories namely Category-I and Category-II. Category-I sand ghats shall be used only for non – commercial purposes and shall be maintained and supervised by Gram Panchyat/Local Self Govt. Category-II sand ghats shall be allocated to Jharkhand State Mineral Development Corporation (JSMDC) Ltd. for a

			minimum period of 5 Years. Mining Shall be carried out by JSMDC Ltd. following all statutory provisions of guidelines/rules/acts. JSMDC Ltd. shall adopt scientific and sustainable mining practices and shall ensure transparent, fair and effective delivery system. Further, the said policy also mandated JSMDC Ltd. for adaptation of appropriate technology such as RFID/GPS tracking of vehicles, CCTV surveillance, Central monitoring, cashless online sale etc. to prevent illegal mining and transportation of sand.
8	Steps for conservation of groundwater particularly with reference to critical, semi-critical or over-exploited areas.	a. 144 nos. of Rain Water Harvesting Structures has been sanctioned for Rs. 5.89 Crores by WRD, Government of Jharkhand and it is completed by June, 2021. b. The report of WRD, Government of Jharkhand is enclosed as **Annexure- 3.**	
9	Restoration of water bodies.	a. 214 nos. of water bodies have been identified for restoration for which Rs. 185.08 Crores has been sanctioned by WRD, Government of Jharkhand and the work will be completed by March 2021. b. The report of WRD, Government of Jharkhand is enclosed as **Annexure- 3.**	
10	Monitoring and displaying of water quality.	a. Monitoring of water quality is being done on monthly basis and data is being uploaded on EWQDES and displayed on JSPCB website	

		https://jspcb.nic.in/quicklink/water-quality-status--of--river-ganga-falling-in-jharkhand.php b. Report of Water Samples of Ganga River & River Damodar are being collected and analysed on a regular basis.	
11	Taking action against polluters by way of recovering compensation for restoration of the damage to the environment.	a. JSPCB is ensuring the restoration of the damage to the environment by levying the Environment Compensation against the violators as a punitive action. b. The details as provided by JSPCB is enclosed as **Annexure – 1.** c. No Water polluting industry is available on the Sahibganj District of Jharkhand, from where River Ganga flows at Jharkhand. d. An Environmental compensation amount of Rs. 4,37,47,769 has been recovered from industries for damage caused to the Damodar River. Enclosure- **Annexure-2.** e. In 2019-2020 approximately Rs 2200 has been collected from the polluters in Rajmahal ULB & In the current financial year number of polluters has decreased considerably due to IEC activities carried out by the ULBs on a regular basis.	

12	Closing, till compliance, all establishments near river banks being run without necessary STPs and compliance of environmental norms.	a. JSPCB is ensuring the compliance and report is enclosed as **Annexure – 1.**	
13	Public awareness and involvement for prevention and control of pollution of Ganga.	a. Sahibganj and Rajmahal ULBs are organizing various activities like rally, shramdaan, nukkad natak, ganga arti etc. in which involvement of social workers, students, Elected representatives, ULB officials, staff etc. are ensured. b. The report of Sahibganj and Rajmahal ULBs is enclosed as **Annexure- 4.**	
14	Regulating activities on and around river Ganga including ghats and other establishments.	a. The regulating activities on and around river Ganga is ensured by Sahibganj and Rajmahal ULBs and report of ULBs is enclosed as **Annexure – 4.**	
15	Afforestation and setting up of biodiversity parks.	a. Under "Namami Gange" programme by NMCG, an afforestation project for Sahebganj has been sanctioned by NMCG under which Natural Landscape, Agriculture Landscape & Urban Landscape are to be covered in the river bank districts of Jharkhand. b. The Jharkhand State Forest Department is the implementing agency of this project and the overall status of this project as per provided by the Sahebganj Forest Division in the Financial year 2018-19 is 99%.	

		c. Number of plants planted till date are 642200. d. Under Namamai Gange Scheme, for development of Ganga River Basin, Agro Forestry and Bamboo Mission project is under implementation with Organic Agriculture Department and Horticulture Department. e. The latest report of project proposal of Arth Ganga – Sustainable and viable economic development framework for the Ganga Basin, submitted by the Jharkhand State to NMCG on dated 16.06.2020 is enclosed as **Annexure -6.**	
16	Good Irrigation Practices adopted in order to conserve the water at river Ganga and river Damodar areas of Jharkhand	a. Agriculture, Animal Husbandry & Co-operative Department, Government of Jharkhand has adopted the Centrally sponsored scheme namely Pradhan Mantri Krishi Sinchai Yojna (PMKSY) – Per Drop More Crop. b. The Action plan and the latest progress report of Agriculture, Animal Husbandry & Co-operative Department, Government of Jharkhand in this regard is attached hereto as **Annexure -7.**	c.
17	Identify the officials against whom administrative action has been taken by the State Govt. for delays in sanction, award of works etc. for various projects.	NA	

2. Status of compliance of timeline of the various targets to be achieved as per the Hon'ble NGT Court orders dated 10.12.2015, 13.07.2017 and 22.08.2019.

Sr. No.	Targets to be achieved as per orders dated 10.12.2015, 13.07.2017 and 22.08.2019 the timelines	Targets achieved and the reasons for delay in compliance	Targets not achieved and the Revised timelines proposed*	Action taken or suggested for violation of timelines or non-achieving of targets
1	Sahebganj Municipal Waste Water Scheme, **Major Project Components:** • Two units of total 12 MLD (7 & 5 MLD) Capacity of Sewerage Treatment Plants. (SBR Technology). • Around 55 kms of Sewer Pipe Network. • Total 5 nos. of SPS & 2 nos. of MPS. • I&D Work at 2 identified major Nallahs.	Project Completed and STPs are operational.	-	-
2	Rajmahal Municipal Waste Water Scheme **Major Project Components:** • One unit of 3.5 MLD capacity of Sewerage Treatment Plant. (SBR Technology). • Around 35 kms of Sewer Pipe Network. • Total 3 nos. of SPS & 1 no. of MPS. • I&D Work at 4 identified major Nallahs.	• Target Date of Completion of Project is 30.06.2020 • Overall Project Progress as on 25.09.2020 is 72 %.	-Revised timeline has been proposed is 31.12.2020. - Because of complete Lockdown in the State of Jharkhand, due to Covid - 19 Pandemic from 21.03.2020. The work at site was completely stopped, that was resumed from 08.05.2020 with very limited	-

			labor/staff as per the guideline of Central and State Government in this regards.	
3	Sahebganj & Rajmahal Solid Waste Management Project **Till date Activities Performed under this Project:** • Concessioner (M/s Consortium of Akansha Enterprises) has been appointed. • Door to Door waste collection work started. • Awareness activities for segregation of waste started. • Segregation has been initiated in all the wards of both the towns. (Rajmahal & Sahibganj) • Construction of waste processing plant started. • Approach Road to the Processing Plant is under Construction and around 70% completed. • Capex Cost- 18.92 Cr. • Opex cost- 164.19 Cr.	• Target date of completion is 31.03.2021 • O&M period- 20 years started after the capex.	-Because of complete Lockdown in the State of Jharkhand, due to Covid -19 Pandemic from 21.03.2020. The work at site was completely stopped.	-
4	Undertaking bioremediation and /or phytoremediation or any other remediation measures as an interim step for containing discharge from untapped drains/wherever STPs are not operating.	• In compliance of court direction dated 07.08.2019, the I&D at 2 nos. of drains at Sahibganj that are the only drains monitored by CPCB has been completed well before the timeline i.e. 12.02.2019. • As an interim measure at 4 nos. of drains at Rajmahal,		

		that are basically consider as dry / stagnant drains in which flow occurs only during monsoon season at Rajmahal, • The screening arrangements at drains have been installed on dated 25.03.2019 i.e. well before the court order in this matter, to prevent the discharge of floating matter into the river. • Also, due to very less flow at these drains, as an interim measure natural and biological treatment with in-situ manual chemical method has been put in place well before 01.11.2019, and the same has been communicated to the CPCB during meeting on dated 07.01.2020 and vide UD&HD letter no. 236 & 1391 dated 20.01.2020 & 22.05.2020 to CPCB. • Whereas provision of tapping of all 4 drains to the STP of 3.5 MLD have been already made in the ongoing work of Rajmahal Municipal Waste Water Project under Namami Gange Programme and that is under construction. • Environmental Compensation levied for the defaulting drains have been waived off as the details of the interim remediation measures were provided by UD & HD , Govt of Jharkhand via letter no. B-190153/NGT/WQM-II/CPCB/2019-20-1405 dated 16.06.2020.		

List of Annexures

Annexure No.	Details
Annexure – 1	Report from Jharkhand State Pollution Control Board (JSPCB)
Annexure – 2	Jharkhand State Action Plan for Utilization of treated waste water from the Sewerage Treatment Plants (STPs)
Annexure – 3	Report from Water Resources Department, Government of Jharkhand
Annexure – 4	Report of Sahibganj and Rajmahal ULBs
Annexure – 5	Report on prevention and regulation of illegal sand mining provided by Department of Mines and Geology, Government of Jharkhand
Annexure – 6	Report from Department of Forest, Environment & Climate Change, Government of Jharkhand.
Annexure - 7	Action plan and latest progress report on Action Plan from Agriculture, Animal Husbandry & Co-operative Department, Government of Jharkhand

Ph: 0326-2204933

झारखण्ड राज्य प्रदूषण नियंत्रण पर्षद्
Jharkhand State Pollution Control Board
HIG-1, Housing Colony, Dhanbad-826001

Letter No...1190..... Dated ...28/09/2020

From,

Regional Officer,
Dhanbad

To,

The Member Secretary,
Jharkhand State Pollution Control Board,
H.E.C., Dhurwa, Ranchi.

Sub: **Regarding information on status of compliance of River Ganga and its Tributary River Damodar in light of direction issued by the Hon'ble NGT in O.A. No.. 200/2014, dated 18.12.2019.**

Sir,

With reference to above subject matter, information on status of compliance related to river Ganga & it's tributary river Damodar is as below :

1. There are no CETPs installed in the jurisdiction of Regional Office Dhanbad as yet. List of ETP installed & functioning is enclosed as Annexure-I
2. Monitoring of river water quality is being done on monthly basis under NWMP which is uploaded in EWQDES.
3. For restoration of damage to the environment recovery of Environmental Compensation has been levied against polluters by H.Q., Ranchi as punitive action. List is enclosed in Annexure-II.
4. No closure directions have been issued against non-complying units for damaging river Damodar from this office.

Encl : A/a.

Your's faithfully,

28/09/2020

(Regional Officer)
Dhanbad

Annexure - I

List of ETP Installed & Functioning			
S.N.	Name & Address of Industry	Status of ETP	Remarks
1	M/s. Bokaro Steel Plant, B.S. City, Bokaro.	Installed & Functioning with continous online monitoring system	Discharge into Garga River & parameters found within the limit
2	M/s. Electrosteel Steels Ltd., At-Siyaljori, PO- Chandankiyari, Dist-Bokaro	Installed & Functioning with continous online monitoring system	Zero liquid discharge maintained
3	M/s. Ankur Bio-Chem Pvt. Ltd., At- Dhubi, PO- Nirsa, Dist- Dhanbad	Installed & Functioning	Zero liquid discharge maintained
4	M/s. Bokaro Dairy, Bokaro	Installed & Functioning	Zero liquid discharge maintained
5	M/s. Maithan Power Ltd., At- Dombhui, PO- Barnendia, Dist-Dhanbad	1. ETP Installed & Functioning with continous online monitoring system 2. Ash settling pond provided with recirculation system & functioning	Zero liquid discharge maintained
6	M/s. TTPS, At+PO– Lalpania,	Ash Settling Pond provided with recirculation system & Functioning	Zero liquid discharge maintained
7	M/s. CTPS,DVC At+PO- chandrapura	Ash Settling Pond provided with recirculation system & Functioning	Zero liquid discharge maintained
8	M/s. BTPS, DVC. PO- Bokaro thermal,	Ash Settling Pond provided with recirculation system & Functioning	Zero liquid discharge maintained
9	M/s. Bokaro Power Supply Co. Ltd. (Inside of premises of M/s. Bokaro Steel Plant, B.S. City, Bokaro.	Ash settling pond provided with recirculation system & functioning	Zero liquid discharge maintained
10	M/s. Imperial Fastner Ltd., At-Kathara, Dist- Bokaro	Ash Settling Pond provided with recirculation system & Functioning	Zero liquid discharge maintained
11	M/s. Moonidih Captive Power Plant, BCCL, Monidih, Dhanbad	Ash Settling Pond available with recirculation system	Unit is closed
12	M/s. Kathara Coal Washery, CCL, Kathara Area, Kathara, Dist Bokaro	Slurry Settling Pond provided with recirculation system & Functioning	Zero liquid discharge maintained
13	M/s. Swang Coal Washery, CCL, Kathara Area, Kathara, Dist Bokaro	Slurry Settling Pond provided with recirculation system & Functioning	Zero liquid discharge maintained
14	M/s. Kargali Coal Washery, CCL, B & K Area, Kargali, Bokaro	Slurry Settling Pond available with recirculation system	Unit is not in operation
15	M/s. Dugda Coal Washery, BCCL, PO-Dugda, Dist- Bokaro.	Slurry Settling Pond provided with recirculation system & Functioning	Zero liquid discharge maintained
16	M/s. Mahuda Coal Washery, BCCL, Mahuda, Dhanbad.	Slurry Settling Pond provided with recirculation system & Functioning	Zero liquid discharge maintained
17	M/s. Moonidih Coal Washery, BCCL, PO- Munidih, Dist- Dhanbad.	Slurry Settling Pond provided with recirculation system & Functioning	Zero liquid discharge maintained
18	M/s. Sudamdih Coal Washery, BCCL, Dhanbad.	Slurry Settling Pond provided with recirculation system & Functioning	Zero liquid discharge maintained
19	M/s. Dahibari Washery, BCCL, PO-Chirkunda, Dist- Dhanbad.	Slurry Settling Pond provided with recirculation system & Functioning	Zero liquid discharge maintained

List of ETP Installed & Functioning			
S.N.	Name & Address of Industry	Status of ETP	Remarks
20	M/s. 5.0 MTPA Patherdih NLW Washery, BCCL, PO- Patherdih Dhanbad.	Slurry Settling Pond available with recirculation system	Zero liquid discharge maintained
21	M/s. Chasnalla Coal Washery, SAIL (IISCO), Dhanbad.	Slurry Settling Pond provided with recirculation system & Functioning	Zero liquid discharge maintained
22	M/s. Jamadoba Coal Washery, Tata Steel Ltd., Jamadoba, Dhanbad.	Slurry Settling Pond provided with recirculation system & Functioning	Zero liquid discharge maintained
23	M/s. Bhelatand Coal Washery, Tata Steel Ltd., Bhelatand, Dhanbad.	Slurry Settling Pond provided with recirculation system & Functioning	Zero liquid discharge maintained
24	M/s. Madhuban Coal Washery, BCCL, Baghmara, Dhanbad.	Slurry Settling Pond provided with recirculation system & Functioning	Zero liquid discharge maintained
25	M/s. Priya Rice Processors Pvt. Ltd., Tundi Road , PO-Govindpur, Dhanbad	Installed & Functioning	Zero liquid discharge maintained
26	M/s. Jai Hanuman Rice Mill, Khudandih, Katras, Rajganj Road, Dhanbad.	Installed & Functioning	Zero liquid discharge maintained
27	M/s. Jagdamba Agro Food Pvt. Ltd., Panduki, Nagnagar, Barwadda, Dhanbad.	Installed & Functioning	Zero liquid discharge maintained
28	M/s. Shrikalyani Agritech Private Limited, Rangdih, Govindpur, Dhanbad	Installed & Functioning	Zero liquid discharge maintained
29	M/s. Shiv Shambhu Agrotech Private Limited, Rangdih, Govindpur, Dhanbad	Installed & Functioning	Zero liquid discharge maintained
30	M/s. I.E.L., Gomia, PO- I.E. Gomia, Dist- Bokaro	Installed & Functioning	Zero liquid discharge maintained
31	Ms/. Jamadoba Colliery canteen, TATA Steel, Jharia Division, Jamadoba, Dhanbad	Installed & Functioning	After treatment water is used in horty calture
32	Ms/. Jamadoba Washery canteen, TATA Steel, Jharia Division, Jamadoba, Dhanbad	Installed & Functioning	After treatment water is used in horty calture
33	TATA Central Hospital, TATA Steel, Jharia Division, Jamadoba, Dhanbad	Installed & Functioning	After treatment water is used in horty calture
34	Cental Work Shop,TATA Steel, Jharia Division, Jamadoba, Dhanbad	Installed & Functioning	After treatment water is re-used.
35	Bhelatand Colliery Canteen, TATA Steel, Bhelatand, Dhanbad	Installed & Functioning	After treatment water is used in horty calture
36	Sijua Colliery Canteen, TATA Steel, Sijua, Dhanbad	Installed & Functioning	After treatment water is used in horty calture
37	M/s. Shiv Shambhu Commercial Pvt. Ltd. Unit-II, At- Tilabani, PO- Govindpur, Dist- Dhanbad.	Installed & Functioning	After treatment water is re-used in process

Annexure - I

List of ETP Installed & Functioning			
S.N.	**Name & Address of Industry**	**Status of ETP**	**Remarks**
38	M/s. Mahadev Metal Industries, At-Jangalpur Road, Deoli, PO- Govindpur, Dist-Dhanbad.	Installed & Functioning	After treatment water is re-used in process
39	M/s. Mc.Nally Sayaji Eng. Ltd. (Unit-I), Kumardhubi, Dhanbad.	Installed & Functioning	After treatment water is re-used in process
40	M/s. Shree Dwarikesh Ecotex Private Limited, Plot No. C-13, C-15 & C-16, Kandra Industrial Area, Govindpur, Dist-Dhanbad	Installed & Functioning	After treatment water is re-used in process
41	M/s. Kamal Rice Mill, At- Panchrukhi, Govindpur, Dhanbad	Installed & Functioning	Zero liquid discharge maintained
42	M/s. Eastern Naphtha Chemical Pvt. Ltd., Phase-III/3B-3P, Bokaro Ind. Area, B.S. City.	Installed & Functioning	After treatment water is re-used in process

Annexure - II

List industries against whom Environmental Compensation has been levied for damaging river Damodar, by H.Q. Ranchi.

S.N.	**Name & Address of Industry**	**Environmental Compensation Amount**
1	M/s. CTPS,DVC At+PO- chandrapura, Bokaro	Rs. 1,48,08,000/- Vide JSPCB, H.Q. Ref. No. B-680, dated 07.05.2020
2	M/s. BTPS, DVC. PO- Bokaro thermal, Bokaro.	Rs. 2,89,39,769/- Vide JSPCB, H.Q. Ref. No. B-679, dated 07.05.2020

Water Quality Data for the period from January, 2020 to June 2020 entered in EWQDES

STN Code	Sampling Date	Sampling Time	Name Of Monitoring Location	Temperature	Dissolved O2	pH	BOD	Total Alkalinity	Chlorides	COD	Total Hardness	Calcium	Magnesium	Total Dissolved Solids	Total Suspended Solids
3553	25-01-2020	10:25 AM	DAMODAR RIVER NEAR TELMUCHO BRIDGE	17.5	7.4	7.5	2	98	60	84	84	14.4	11.71	518	92
4000	25-01-2020	10:10 AM	GARGA RIVER NEAR TELMUCHO BRIDGE	18	5.9	6.6	4.6	138	60	96	86	16	11.22	620	100
4740	25-01-2020	9:15 AM	LOCO TALAB) PUMPU TALAB), AT- BARMASIA, DHANBAD	17	5.2	7.4	15.1	118	52	100	248	41.6	35.13	580	90
4741	25-01-2020	8:30 AM	RANIBANDH TALAB NEAR ISM, DHANBAD	16	5.3	7.4	10.5	136	68	100	242	44	32.2	593	94
2383	26-01-2020	2:20 PM	DAMODAR U/S JAMADOBA WATER WORKS	19	7.5	7.4	1.1	88	42	80	78	13.6	10.73	618	92
2384	26-01-2020	2:50 PM	DAMODAR AT DOMGARH WATER WORKS D/S SINDRI	18	7.5	7.4	2.2	90	42	84	82	12.8	12.2	584	96
2391	26-01-2020	4:30 PM	DAMODAR AT PANCHET DAM	17	7.5	7.4	1.2	86	38	80	74	15.5	8.78	476	88
2392	26-01-2020	5:50 PM	BARAKAR AT MAITHAN DAM	16	7.6	7.5	1.3	99	42	72	88	14.4	12.68	510	90
4738	26-01-2020	11:10 AM	JAMUNIA RIVER NEAR LOHAPATTI BRIDGE, MAHUDA, DHANB	19	7.4	7.3	2.3	104	50	84	66	13.6	7.8	522	96
4739	26-01-2020	12:05 PM	KATRI RIVER, NEAR BHATINDA FALL, AT-TETENGABAD, M	20	7.1	7.2	4	138	60	88	290	68	29.28	530	10
2381	29-01-2020	12:55 PM	BOKARO AT ZARANGDIH BRIDGE	20	7.3	7.4	2.3	90	56	92	86	15.2	11.71	594	120
2382	29-01-2020	11:20 AM	DAMODAR AT PHUSRO ROAD BRIDGE	18.5	7.4	7.5	1.9	96	40	84	64	13.6	7.32	454	84
2390	29-01-2020	5:05 PM	DAMODAR AT TENUGHAT DAM	18	7.7	7.6	1	74	34	76	62	10.4	8.78	467	82
2394	29-01-2020	8:45 AM	TOP CHANCHI LAKE	17	7.5	7.5	1.3	82	40	68	72	12.8	9.76	444	70
3554	29-01-2020	2:30 PM	KONAR RIVER NEAR SWANG COAL WASHERY, BOKARO	21	7.4	7.5	2	107	58	92	90	16	12.2	578	92
3555	29-01-2020	12:45 PM	DAMODAR RIVER NEAR ZARANGDIH BRIDGE, BOKARO	19.5	7.5	7.6	1.5	90	40	80	82	13.6	11.71	572	78
3556	29-01-2020	1:05 PM	CONFLUENCE OF BOKARO & DAMODAR RIVER NEAR ZARANGDI	20	7.5	7.5	2.1	98	49	88	84	14.4	11.71	580	90
3557	29-01-2020	12:05 PM	DAMODAR RIVER NEAR BERMO RAILWAY STATION, BOKARO	19	7.4	7.5	1.6	88	38	80	60	12.8	6.83	576	60
2383	28-02-2020	2:00 PM	DAMODAR U/S JAMADOBA WATER WORKS	22	7.6	7.5	1.5	90	45	84	84	14.4	11.71	610	90

Water Quality Data for the period from January, 2020 to June 2020 entered in EWQDES

STN Code	Sampling Date	Sampling Time	Name Of Monitoring Location	Temperature	Dissolved O2	pH	BOD	Total Alkalinity	Chlorides	COD	Total Hardness	Calcium	Magnesium	Total Dissolved Solids	Total Suspended Solids
2384	28-02-2020	2:40 PM	DAMODAR AT DOMGARH WATER WORKS D/S SINDRI	23	7.6	7.4	2	88	40	80	88	15.2	12.2	580	90
2391	28-02-2020	4:40 PM	DAMODAR AT PANCHET DAM	22	7.6	7.5	1.4	85	40	76	78	12.8	11.22	476	84
2392	28-02-2020	5:55 PM	BARAKAR AT MAITHAN DAM	19	7.5	7.4	1.6	119	50	88	82	13.6	11.71	597	100
3553	28-02-2020	10:25 AM	DAMODAR RIVER NEAR TELMUCHO BRIDGE	19.5	7.6	7.4	1.9	99	62	80	76	12	11.22	530	90
4000	28-02-2020	10:15 AM	GARGA RIVER NEAR TELMUCHO BRIDGE	19	6	6.8	3.5	130	64	92	74	12.8	10.24	620	110
4738	28-02-2020	11:15 AM	JAMUNIA RIVER NEAR LOHAPATTI BRIDGE, MAHUDA, DHANB	20	7.5	7.4	2.4	100	54	88	66	12.8	8.29	526	94
4739	28-02-2020	12:15 PM	KATRI RIVER, NEAR BHATINDA FALL, AT-TETENGABAD, M	21	7.2	7.3	2.2	106	60	88	290	68	29.28	520	100
4740	28-02-2020	9:20 AM	LOCO TALAB) PUMPU TALAB), AT- BARMASIA, DHANBAD	18	5.4	7.3	15	116	50	104	242	37.6	36.11	580	92
4741	28-02-2020	6:50 AM	RANIBANDH TALAB NEAR ISM, DHANBAD	17	5.4	7.2	12.4	142	74	104	236	40	33.18	490	110
2381	29-02-2020	12:45 PM	BOKARO AT ZARANGDIH BRIDGE	20.5	7.3	7.4	2.8	116	62	100	84	14.4	11.71	620	120
2382	29-02-2020	11:25 AM	DAMODAR AT PHUSRO ROAD BRIDGE	18	7.4	7.5	2.4	96	42	80	66	12.8	8.29	605	95
2390	29-02-2020	5:05 PM	DAMODAR AT TENUGHAT DAM	17	7.7	7.6	1	80	40	80	68	12.8	8.78	484	96
2394	29-02-2020	8:40 AM	TOP CHANCHI LAKE	17	7.5	7.5	1.5	90	44	68	66	12	8.78	478	80
3554	29-02-2020	2:05 PM	KONAR RIVER NEAR SWANG COAL WASHERY, BOKARO	20.5	7.5	7.4	1.9	110	60	88	92	16	12.68	600	100
3555	29-02-2020	12:35 PM	DAMODAR RIVER NEAR ZARANGDIH BRIDGE, BOKARO	20	7.5	7.6	1.8	96	50	84	80	13.6	11.22	590	80
3556	29-02-2020	12:55 PM	CONFLUENCE OF BOKARO & DAMODAR RIVER NEAR ZARANGDI	20	7.4	7.5	2	100	60	100	86	14.4	12.2	600	90
3557	29-02-2020	12:05 PM	DAMODAR RIVER NEAR BERMO RAILWAY STATION, BOKARO	19	7.5	7.5	1.9	99	44	84	64	11.2	8.78	602	98
2383	13-03-2020	2:50 PM	DAMODAR U/S JAMADOBA WATER WORKS	29	7.6	7.5	1.4	80	42	80	82	13.6	11.71	594	86
2384	13-03-2020	11:40 AM	DAMODAR AT DOMGARH WATER WORKS D/S SINDRI	23	7.5	7.3	1.8	78	38	76	86	14.4	12.2	532	92

Water Quality Data for the period from January, 2020 to June 2020 entered in EWQDES

STN Code	Sampling Date	Sampling Time	Name Of Monitoring Location	Temperature	Dissolved O2	pH	BOD	Total Alkalinity	Chlorides	COD	Total Hardness	Calcium	Magnesium	Total Dissolved Solids	Total Suspended Solids
2391	13-03-2020	9:10 AM	DAMODAR AT PANCHET DAM	16	7.5	7.4	1.2	82	42	72	80	13.6	11.22	495	76
2392	13-03-2020	8:20 AM	BARAKAR AT MAITHAN DAM	15	7.6	7.5	1.5	120	48	84	84	12.8	12.68	584	98
4000	13-03-2020	6:45 PM	GARGA RIVER NEAR TELMUCHO BRIDGE	16	6.2	6.9	1.8	104	58	84	80	13.6	11.22	526	84
4738	13-03-2020	5:40 PM	JAMUNIA RIVER NEAR LOHAPATTI BRIDGE, MAHUDA, DHANB	18	7.4	7.5	2.3	106	52	84	68	13.6	8.29	482	98
4739	13-03-2020	4:50 PM	KATRI RIVER, NEAR BHATINDA FALL, AT-TETENGABAD, M	26	7	7.4	2.1	110	62	84	288	65.6	30.25	495	96
4740	13-03-2020	8:15 AM	LOCO TALAB) PUMPU TALAB), AT- BARMASIA, DHANBAD	15	5.6	7.2	14.8	114	48	100	244	38.4	36.11	540	90
4741	13-03-2020	7:10 PM	RANIBANDH TALAB NEAR ISM, DHANBAD	14	6	7.3	12.2	130	69	100	250	45.6	33.18	508	102
2381	16-03-2020	1:55 PM	BOKARO AT ZARANGDIH BRIDGE	20.5	7.2	7.4	2.6	120	72	104	86	14	12.44	600	140
2382	16-03-2020	11:50 AM	DAMODAR AT PHUSRO ROAD BRIDGE	17.5	7.3	7.5	2	100	48	84	64	12	8.29	604	96
2390	16-03-2020	5:10 PM	DAMODAR AT TENUGHAT DAM	17	7.7	7.6	1.4	86	42	72	70	12	9.76	478	82
2394	16-03-2020	8:30 AM	TOP CHANCHI LAKE	15	7.4	7.5	1.4	88	42	60	70	12.8	9.27	468	72
3554	16-03-2020	3:00 PM	KONAR RIVER NEAR SWANG COAL WASHERY, BOKARO	20.5	7.4	7.5	2.3	124	68	92	90	14	13.42	599	103
3555	16-03-2020	1:40 PM	DAMODAR RIVER NEAR ZARANGDIH BRIDGE, BOKARO	20	7.5	7.6	2	105	60	96	82	14.4	11.22	592	88
3556	16-03-2020	2:15 PM	CONFLUENCE OF BOKARO & DAMODAR RIVER NEAR ZARANGDI	20	7.4	7.5	2.1	100	70	88	88	13.6	13.17	580	110
3557	16-03-2020	12:25 PM	DAMODAR RIVER NEAR BERMO RAILWAY STATION, BOKARO	18	7.4	7.5	1.9	106	54	88	62	9.6	9.27	590	90
2383	13-04-2020	11:45 AM	DAMODAR U/S JAMADOBA WATER WORKS	24	7.8	7.2	1	86	42	76	78	12.8	11.22	526	88
2384	13-04-2020	1:00 PM	DAMODAR AT DOMGARH WATER WORKS D/S SINDRI	33	7.6	7.3	2	94	40	72	80	13.6	11.22	528	82
2391	13-04-2020	2:30 PM	DAMODAR AT PANCHET DAM	34	7.5	7.4	1	84	34	64	70	12	9.76	432	80
2392	13-04-2020	3:45 PM	BARAKAR AT MAITHAN DAM	32	7.4	7.3	1.1	96	42	68	80	13.2	11.46	520	82

Water Quality Data for the period from January, 2020 to June 2020 entered in EWQDES

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3553	13-04-2020	9:45 AM	DAMODAR RIVER NEAR TELMUCHO BRIDGE	29	7.5	7.6	1.1	90	48	80	74	12	8.78	498	92
4000	13-04-2020	9:30 AM	GARGA RIVER NEAR TELMUCHO BRIDGE	30	5.9	6.7	4.2	132	58	84	70	13.6	9.76	534	96
4738	13-04-2020	8:30 AM	JAMUNIA RIVER NEAR LOHAPATTI BRIDGE, MAHUDA, DHANB	29	7.4	7.2	2.8	102	50	72	64	12	8.29	498	82
4740	13-04-2020	5:00 PM	LOCO TALAB) PUMPU TALAB), AT- BARMASIA, DHANBAD	31.5	5.4	7.6	5.2	118	52	88	230	36	34.16	422	88
4741	13-04-2020	5:45 PM	RANIBANDH TALAB NEAR ISM, DHANBAD	30	5.6	7.1	14	132	60	104	204	40.6	25.01	534	92
2381	24-04-2020	1:00 PM	BOKARO AT ZARANGDIH BRIDGE	29	7.3	7.5	2	110	68	100	84	12.8	12.68	570	130
2382	24-04-2020	11:20 AM	DAMODAR AT PHUSRO ROAD BRIDGE	27	7.6	7.6	1.5	90	45	80	60	9.6	8.78	560	90
2390	24-04-2020	5:20 PM	DAMODAR AT TENUGHAT DAM	22	7.8	7.7	1	80	38	68	68	11.2	9.76	450	70
2394	24-04-2020	8:20 AM	TOP CHANCHI LAKE	26	7.6	7.4	1	86	40	56	68	10.4	10.24	435	65
3554	24-04-2020	3:10 PM	KONAR RIVER NEAR SWANG COAL WASHERY, BOKARO	31	7.5	7.6	1.4	120	66	88	88	13.6	13.17	590	90
3555	24-04-2020	12:50 PM	DAMODAR RIVER NEAR ZARANGDIH BRIDGE, BOKARO	30	7.7	7.8	1.8	102	58	88	80	13.6	11.22	580	80
3556	24-04-2020	1:10 PM	CONFLUENCE OF BOKARO & DAMODAR RIVER NEAR ZARANGDI	28	7.6	7.6	1.8	90	66	84	86	13.6	12.68	560	90
3557	24-04-2020	12:15 PM	DAMODAR RIVER NEAR BERMO RAILWAY STATION, BOKARO	30	7.7	7.8	1.2	100	50	84	58	8.6	8.78	560	80
4741	20-05-2020	9:00 AM	RANIBANDH TALAB NEAR ISM, DHANBAD	18	5.4	7.2	12.2	98	48	100	200	40	24.4	504	88
2392	20-05-2020	10:05 AM	BARAKAR AT MAITHAN DAM	19	7.5	7.4	0.9	92	40	64	78	12	11.71	508	80
2391	20-05-2020	11:00 AM	DAMODAR AT PANCHET DAM	20	7.6	7.5	0.8	90	38	64	68	10.4	10.24	494	78
2384	20-05-2020	12:10 PM	DAMODAR AT DOMGARH WATER WORKS D/S SINDRI	21	7.7	7.4	1	92	38	68	78	12.8	11.22	516	82
2383	20-05-2020	2:05 PM	DAMODAR U/S JAMADOBA WATER WORKS	23	7.6	7.3	1	88	40	72	76	12	11.22	498	86
4738	20-05-2020	3:10 PM	JAMUNIA RIVER NEAR LOHAPATTI BRIDGE, MAHUDA, DHANB	22	7.5	7.3	2.6	96	48	72	60	10.4	8.29	482	88

Water Quality Data for the period from January, 2020 to June 2020 entered in EWQDES

STN Code	Sampling Date	Sampling Time	Name Of Monitoring Location	Temperature	Dissolved O2	pH	BOD	Total Alkalinity	Chlorides	COD	Total Hardness	Calcium	Magnesium	Total Dissolved Solids	Total Suspended Solids
4000	20-05-2020	4:00 PM	GARGA RIVER NEAR TELMUCHO BRIDGE	21	6	6.8	4.1	102	56	80	68	12.8	8.78	498	92
3553	20-05-2020	4:30 PM	DAMODAR RIVER NEAR TELMUCHO BRIDGE	20	7.6	7.5	1	88	46	76	72	11.2	10.73	482	88
4740	20-05-2020	5:45 PM	LOCO TALAB) PUMPU TALAB), AT- BARMASIA, DHANBAD	19	5.6	7.5	5	110	48	84	220	35.2	32.2	414	86
2394	22-05-2020	8:45 AM	TOP CHANCHI LAKE	33	7.6	7.5	0.9	84	38	60	66	11.2	9.27	418	62
2382	22-05-2020	11:05 AM	DAMODAR AT PHUSRO ROAD BRIDGE	35	7.5	7.6	1.3	86	42	80	58	8.8	8.78	496	84
3557	22-05-2020	12:10 PM	DAMODAR RIVER NEAR BERMO RAILWAY STATION, BOKARO	36	7.4	7.6	1.1	98	48	80	54	8	8.29	502	82
3555	22-05-2020	1:00 PM	DAMODAR RIVER NEAR ZARANGDIH BRIDGE, BOKARO	35.5	7.6	7.7	1	96	52	76	74	12	10.73	492	78
2381	22-05-2020	1:20 PM	BOKARO AT ZARANGDIH BRIDGE	36.5	7.3	7.4	1.9	104	60	96	78	12.8	11.22	504	108
3556	22-05-2020	1:30 PM	CONFLUENCE OF BOKARO & DAMODAR RIVER NEAR ZARANGDI	36	7.5	7.5	1.3	102	58	84	76	12.8	10.73	514	82
3554	22-05-2020	3:00 PM	KONAR RIVER NEAR SWANG COAL WASHERY, BOKARO	35	7.4	7.5	1.2	108	60	84	80	12.8	11.71	504	88
2390	22-05-2020	5:10 PM	DAMODAR AT TENUGHAT DAM	34	7.8	7.7	0.8	76	36	64	66	12	8.78	434	68
4740	17-06-2020	9:00 AM	LOCO TALAB) PUMPU TALAB), AT- BARMASIA, DHANBAD	28	2.3	7.6	4.9	106	46	80	218	33.6	30.8	422	88
2392	17-06-2020	10:05 AM	BARAKAR AT MAITHAN DAM	30	7.6	7.5	0.8	96	42	60	76	12	11.45	502	82
2391	17-06-2020	11:55 AM	DAMODAR AT PANCHET DAM	34	7.7	7.6	0.7	94	40	68	66	9.6	7.89	512	80
2384	17-06-2020	12:40 PM	DAMODAR AT DOMGARH WATER WORKS D/S SINDRI	32	7.6	7.5	0.9	98	42	72	80	13.6	11.22	520	84
2383	17-06-2020	2:40 PM	DAMODAR U/S JAMADOBA WATER WORKS	31	7.5	7.4	0.9	92	44	76	78	12.8	11.22	522	90
4738	17-06-2020	3:50 PM	JAMUNIA RIVER NEAR LOHAPATTI BRIDGE, MAHUDA, DHANB	29	7.6	7.4	2.7	102	50	80	66	11.2	9.27	510	92
4000	17-06-2020	4:35 PM	GARGA RIVER NEAR TELMUCHO BRIDGE	27	6.7	6.9	4.2	110	98	84	70	13.6	8.78	532	98
3553	17-06-2020	5:00 PM	DAMODAR RIVER NEAR TELMUCHO BRIDGE	26	7.5	7.6	1.1	106	48	80	74	12	10.73	516	94

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STN Code	Sampling Date	Sampling Time	Name Of Monitoring Location	Temperature	Dissolved O2	pH	BOD	Total Alkalinity	Chlorides	COD	Total Hardness	Calcium	Magnesium	Total Dissolved Solids	Total Suspended Solids
4741	17-06-2020	6:15 PM	RANIBANDH TALAB NEAR ISM, DHANBAD	20	2.6	7.3	12.4	114	52	104	210	41.6	25.86	524	96
2394	19-06-2020	8:30 AM	TOP CHANCHI LAKE	30	7.4	7.5	1	96	40	64	68	12	9.27	426	64
2382	19-06-2020	11:10 AM	DAMODAR AT PHUSRO ROAD BRIDGE	31	7.6	7.5	1.4	90	44	84	60	9.2	9.02	512	86
3557	19-06-2020	11:45 AM	DAMODAR RIVER NEAR BERMO RAILWAY STATION, BOKARO	33.5	7.5	7.5	1.2	104	50	84	56	8.8	8.29	516	84
3555	19-06-2020	1:10 PM	DAMODAR RIVER NEAR ZARANGDIH BRIDGE, BOKARO	32	7.7	7.6	1.1	98	54	80	76	14.4	9.76	522	80
2381	19-06-2020	1:30 PM	BOKARO AT ZARANGDIH BRIDGE	33	7.5	7.4	2	112	62	100	82	16	10.24	514	112
3556	19-06-2020	1:45 PM	CONFLUENCE OF BOKARO & DAMODAR RIVER NEAR ZARANGDI	32.5	7.6	7.5	1.4	104	60	88	78	14	10.49	518	84
3554	19-06-2020	2:35 PM	KONAR RIVER NEAR SWANG COAL WASHERY, BOKARO	32	7.5	7.5	1.3	110	62	88	82	13.6	11.71	514	90
2390	19-06-2020	5:05 PM	DAMODAR AT TENUGHAT DAM	30	7.8	7.6	0.9	86	38	68	68	13.6	8.29	440	70

Jharkhand State Pollution Control Board, Regional Office, Hazaribag.

Physico chemical characteristics of river Damodar at different points.

For the month of April, 2020

Sl.No.	Ref. No.	Name of Sampling Points.	Date & time Sampling	Temp. Air/Water ^{0}C	pH	D.O.	BOD Mg/lt.	COD Mg/l	T.S. Mg/l.	TSS Mg/l.	TDS Mg/l
1.	147	U/s Bhairi River At- Rajrappa. Ramgarh	12.04.2020 at 02.25 PM	32/31.5	7.4	7.8	1.1	32	180	51	129
2.	148	D/s confluence of Damodar & Bhairi River, At- Rajrappa. Ramgarh	12.04.2020 at 02.45 PM	32/31.5	7.4	7.7	1.3	36	192	58	134
3.	149	Damodar River, at Ramgarh Near Ramgarh Road Bridge, Ramgarh.	12.04.2020 at 11.20 AM	32/29	7.4	7.8	1.2	40	209	85	124
4.	150	Nalkari Tributary , At Patratu Ramgarh.	12.04.2020 at 12.40 PM	32/30	7.3	7.6	1.4	44	253	96	157
5.	145	Brakar River, At- Koderma Near Tilaiya Dam.	11.04.2020 at 02.50 PM	32/31	7.4	7.6	1.3	44	196	68	118
6.	146	Tilaiya Dam, At- Koderma Near Intake Wall of DVC.	11.04.2020 at 03.25 PM	32/31	7.4	7.8	1.1	40	194	61	133
7.	143	Konar River, At-Bhishnugarh, Hazaribag, (Near at Konar Dam)	11.04.2020 at 11.40 AM	30/28	7.4	7.8	1.3	40	171	62	109
8.	144	Konar Dam at Bishnugarh, Hazaribag, Near Intak well of DVC	11.04.2020 at 12.15 PM	30/28	7.4	7.9	1.1	36	167	57	110
9.	151	Meetha Jheel, At-Hazaribag	12.04.2020 at 10.20 AM	28/27.5	7.4	7.6	1.2	36	158	45	113

Jharkhand State Pollution Control Board, Regional Office, Hazaribag.

Physico chemical characteristics of river Damodar at different points.

For the month of March, 2020

	Standard Limits		--	--	6.5 to 8.5	4.0 min.	3.0	-	-	-	1500

Sl.No.	Ref. No.	Name of Sampling Points.	Date & time Sampling	Temp. Air/Water ^{0}C	pH	D.O.	BOD Mg/lt.	COD Mg/l	T.S. Mg/l.	TSS Mg/l.	TDS Mg/l
1.	141	U/s Bhairi River At- Rajrappa. Ramgarh	11.03.2020 at 03.20 PM	31.5/29	7.4	7.6	1.8	44	378	42	336
2.	142	D/s confluence of Damodar & Bhairi River, At- Rajrappa. Ramgarh	11.03.2020 at 03.35 PM	31.5/29	7.3	7.4	1.7	45	452	69	383
3.	140	Damodar River, at Ramgarh Near Ramgarh Road Bridge, Ramgarh.	11.03.2020 at 02.35 PM	31.5/27.5	7.4	7.2	2.8	76	489	83	406
4.	139	Nalkari Tributary , At Patratu Ramgarh.	11.03.2020 at 11.40 AM	30/27	7.3	4.2	2.8	80	521	119	402
5.	134	Brakar River, At- Koderma Near Tilaiya Dam.	10.03.2020 at 12.20 PM	30/26	7.3	7.4	1.9	52	286	48	238
6.	135	Tilaiya Dam, At- Koderma Near Intake Wall of DVC.	10.03.2020 at 12.35 PM	30/26	7.2	7.2	1.8	48	278	42	236
7.	136	Konar River, At-Bhishnugarh, Hazaribag, (Near at Konar Dam)	10.03.2020 at 03.00 PM	31/28	7.3	7.4	1.7	52	358	61	297
8.	137	Konar Dam at Bishnugarh, Hazaribag, Near Intak well of DVC	10.03.2020 at 03.30 PM	31.5/28.5	7.4	7.2	1.6	48	349	57	292
9.	138	Meetha Jheel, At-Hazaribag	10.03.2020 at 05.50 PM	28/26	7.3	7.2	1.8	48	316	61	255

Jharkhand State Pollution Control Board, Regional Office, Hazaribag.

Physico chemical characteristics of river Damodar at different points.

For the month of February, 2020

Standard Limits -- -- 6.5 to 8.5 4.0 min. 3.0 - - - 1500

Sl.No.	Ref. No.	Name of Sampling Points.	Date & time Sampling	Temp. Air/Water ^{0}C	pH	D.O.	BOD Mg/lt.	COD Mg/l	T.S. Mg/l.	TSS Mg/l.	TDS Mg/l
1.	131	U/s Bhairi River At- Rajrappa. Ramgarh	25.02.2020 at 03.30 PM	27.5/25	7.4	7.8	1.4	44	371	40	331
2.	132	D/s confluence of Damodar & Bhairi River, At- Rajrappa. Ramgarh	25.02.2020 at 03.50 PM	28/26.5	7.2	7.6	1.7	52	413	61	352
3.	130	Damodar River, at Ramgarh Near Ramgarh Road Bridge, Ramgarh.	25.02.2020 at 02.10 PM	27/25	7.3	7.2	2.4	64	486	82	404
4.	129	Nalkari Tributary , At Patratu Ramgarh.	25.02.2020 at 11.50 AM	26/24.5	6.8	3.9	2.7	80	546	115	431
5.	125	Brakar River, At- Koderma Near Tilaiya Dam.	24.02.2020 at 11.15 AM	25.5/24	7.4	7.6	1.8	56	296	85	211
6.	126	Tilaiya Dam, At- Koderma Near Intake Wall of DVC.	24.02.2020 at 11.35 AM	26/24	7.2	7.8	1.9	52	286	81	205
7.	127	Konar River, At-Bhishnugarh, Hazaribag, (Near at Konar Dam)	24.02.2020 at 03.00 PM	27.5/26	7.4	7.7	1.7	52	349	48	301
8.	128	Konar Dam at Bishnugarh, Hazaribag, Near Intak well of DVC	24.02.2020 at 03.25 PM	27.5/26	7.3	7.6	1.8	56	363	49	314
9.	133	Meetha Jheel, At-Hazaribag	24.02.2020 at 05.25 PM	27.5/24	7.2	7.6	1.8	52	318	62	254

Jharkhand State Pollution Control Board, Regional Office, Hazaribag.

Physico chemical characteristics of river Damodar at different points.

For the month of May, 2020

Sl.No.	Ref. No.	Name of Sampling Points.	Date & time Sampling	Temp. Air/Water ^{0}C	pH	D.O.	BOD Mg/lt.	COD Mg/l	T.S. Mg/l.	TSS Mg/l.	TDS Mg/l
1.	157	U/s Bhairi River At- Rajrappa. Ramgarh	20.05.2020 at 02.45 PM	36/33	7.8	8.2	1.0	28	139	41	98
2.	158	D/s confluence of Damodar & Bhairi River, At- Rajrappa. Ramgarh	20.05.2020 at 03.05 PM	36/33	7.6	7.7	1.1	32	142	44	98
3.	159	Damodar River, at Ramgarh Near Ramgarh Road Bridge, Ramgarh.	20.05.2020 at 11.55 PM	35.32	7.7	8.0	1.1	40	186	72	114
4.	160	Nalkari Tributary , At Patratu Ramgarh.	20.05.2020 at 01.15 AM	36/33	7.6	7.8	1.2	44	198	82	116
5.	154	Brakar River, At- Koderma Near Tilaiya Dam.	19.05.2020 At 02.35 PM	37/33	7.4	7.9	1.2	40	182	56	126
6.	155	Tilaiya Dam, At- Koderma Near Intake Wall of DVC.	19.05.2020 at 03.15 PM	37/33	7.6	8.1	1.1	36	178	52	126
7.	152	Konar River, At-Bhishnugarh, Hazaribag, (Near at Konar Dam)	19.05.2020 at 11.30 AM	36.5/32.5	7.6	8.0	1.1	36	152	56	96
8.	153	Konar Dam at Bishnugarh, Hazaribag, Near Intak well of DVC	19.05.2020 at 12.05 PM	36.5/32.5	7.6	8.2	1.0	32	146	51	95
9.	156	Meetha Jheel, At-Hazaribag	20.05.2020 at 10.40 AM	33/29	7.6	7.7	1.1	32	142	39	103

Jharkhand State Pollution Control Board, Regional Office, Hazaribag.

Physico chemical characteristics of river Damodar at different points.

For the month of June, 2020

Sl.No.	Ref. No.	Name of Sampling Points.	Date & time Sampling	Temp. Air/Water ^{0}C	pH	D.O.	BOD Mg/lt.	COD Mg/l	T.S. Mg/l.	TSS Mg/l.	TDS Mg/l
1.	168	U/s Bhairi River At- Rajrappa. Ramgarh	20.06.2020 at 03.15 PM	33/30	7.7	8.1	1.1	32	142	43	99
2.	169	D/s confluence of Damodar & Bhairi River, At- Rajrappa. Ramgarh	20.06.2020 at 03.30 PM	33/29.5	7.7	7.8	1.2	40	146	45	101
3.	166	Damodar River, at Ramgarh Near Ramgarh Road Bridge, Ramgarh.	20.06.2020 at 12.15 PM	32/29	7.5	7.9	1.2	44	188	76	112
4.	167	Nalkari Tributary , At Patratu Ramgarh.	20.06.2020 at 01.30 PM	33/30	7.4	7.7	1.3	48	199	82	117
5.	163	Brakar River, At- Koderma Near Tilaiya Dam.	19.06.2020 at 02.50 PM	32/29	7.6	7.8	1.2	44	185	57	128
6.	164	Tilaiya Dam, At- Koderma Near Intake Wall of DVC.	19.06.2020 at 03.25 PM	32/29	7.6	8.0	1.0	40	181	52	129
7.	161	Konar River, At-Bhishnugarh, Hazaribag, (Near at Konar Dam)	19.06.2020 at 11.45 AM	32.5/28.5	7.4	7.9	1.2	40	158	59	99
8.	162	Konar Dam at Bishnugarh, Hazaribag, Near Intak well of DVC	19.06.2020 at 12.20 PM	32.5/29	7.4	8.0	1.1	36	152	55	97
9.	165	Meetha Jheel, At-Hazaribag	20.06.2020 at 11.00 AM	31/28	7.6	7.8	1.2	40	146	41	105

Jharkhand State Pollution Control Board, Regional Office, Hazaribag.

Physico chemical characteristics of river Damodar at different points.

For the month of July, 2020

Sl.No.	Ref. No.	Name of Sampling Points.	Date & time Sampling	Temp. Air/Water ^{0}C	pH	D.O.	BOD Mg/lt.	COD Mg/l	T.S. Mg/l.	TSS Mg/l.	TDS Mg/l
1.	178	U/s Bhairi River At- Rajrappa. Ramgarh	23.07.2020 at 02.50 PM	33/30.5	7.7	8.3	1.0	36	146	45	101
2.	179	D/s confluence of Damodar & Bhairi River, At- Rajrappa. Ramgarh	23.07.2020 at 03.20 PM	33/30	7.5	7.9	1.2	44	152	57	95
3.	176	Damodar River, at Ramgarh Near Ramgarh Road Bridge, Ramgarh.	23.07.2020 at 11.45 AM	31/28.5	7.6	8.1	1.3	48	192	77	115
4.	177	Nalkari Tributary , At Patratu Ramgarh.	23.07.2020 at 01.00 PM	33/30.5	7.6	8.0	1.2	44	176	78	98
5.	173	Brakar River, At- Koderma Near Tilaiya Dam.	22.07.2020 at 02.30 PM	32/29	7.5	7.7	1.3	48	191	61	130
6.	174	Tilaiya Dam, At- Koderma Near Intake Wall of DVC.	22.07.2020 at 03.05 PM	32/29	7.6	7.9	1.1	44	186	56	130
7.	171	Konar River, At-Bhishnugarh, Hazaribag, (Near at Konar Dam)	22.07.2020 at 11.30 AM	30/27	7.4	8.0	1.3	44	161	61	100
8.	172	Konar Dam at Bishnugarh, Hazaribag, Near Intak well of DVC	22.07.2020 at 12.05 PM	30/27	7.4	8.2	1.2	40	155	57	98
9.	175	Meetha Jheel, At-Hazaribag	23.07.2020 at 10.30 AM	30/27.5	7.4	7.6	1.3	44	151	45	106

Jharkhand State Pollution Control Board, Regional Office, Hazaribag

Physico chemical characteristics of river Damodar at different points.

For the month of August, 2020

Sl. No	Ref. No.	Name of Sampling Points.	Date & time Sampling	Temp. Air/Water ^{0}C	pH	D.O.	BOD Mg/lt.	COD Mg/l	T.S. Mg/l.	TSS Mg/l.	TDS Mg/l
1	182	Barakar river at Koderma, Near Tilaiya Dam	20.08.2020 at 02.15 PM	30/28	7.3	7.6	1.4	52	198	66	132
2.	183	Tilaiya Dam at Koderma, Near Intake Well of DVC.	20.08.2020 at 02.45 PM	30/28	7.4	7.8	1.2	48	190	59	131
3.	180	Konar River. At-Bishnugarh. Hazaribag. (Near at Konar Dam)	20.08.2020 at 11.20 AM	29.5/27	7.2	7.8	1.4	48	175	69	106
4.	181	Konar Dam, At Bishnugarh.. (Near Intake well of DVC)	20.08.2020 at 11.50 AM	29.5/27	7.2	8.0	1.2	44	165	61	104
5.	184	Meetha Jheel at Hazaribag.	22.08.2020 at 10.20 AM	29.5/28	7.4	7.4	1.4	52	165	57	108
6.	186	Naikari Tributary at Patratu, Ramgarh	22.08.2020 at 01.05 PM	31.28	7.5	7.8	1.3	48	179	81	98
7.	185	Damodar River Ramgarh ,Near Ramgarh Road Bridge. Ramgarh	22.08.2020 at 11.40 AM	30/29	7.5	7.7	1.4	56	197	81	116
8.	187	U/s Bhairvi River at Rajrappa, Ramgarh	22.08.2020 at 02.55 PM	31/30	7.6	8.1	1.2	48	158	51	107
9	188	D/s Confluence of Damodar & Bhairvi River at Rajrappa, Ramgarh	22.08.2020 at 03.25 PM	31.5/.30	7.4	7.8	1.4	52	188	73	115
		Standard Limits	--	--	6.5 to 8.5	4.0 min.	3.0	-	-	-	1500

15/9/2020
(C.K. Yadav)
A S.O.

15/09/2020
(R .N. Anjaan)
A S.O. –Cum- Lab. Incharge

15/9/2020
(A.K. Yadav)
R.O.

(R.N.Kashyap)
Board Analyst

Jharkhand State Pollution Control Board

Regional Office-Cum-Laboratory, Dumka

Ref. No. 784 **Dated**--30/04/2020

From

Regional Officer
Dumka.

To,

The Board Analyst,
Jharkhand State Pollution Control Board,
Ranchi.

Sub:- **Regarding analysis report for the month of April 2020(22.04.2020).**

Sir,

Please find enclosed here with the analysis report of the following points of Ganga river as per details:-

1. **Ganga River, At.- Rajmahal, Sahibganj**
2. **Ganga River U/S Near LCT ghat, Sahibganj**
3. **Ganga River D/S Near Janta Ghat, Sahibganj**
4. **Ganga River Sahibganj (Sangi Dalan) Sahibganj**
5. **Masanjore Dam, Dumka**
6. **Shiv Ganga Pond, Deoghar**

This is for your information & necessary action.

Yours faithfully

29/4/2020

Regional Officer
Dumka

Encl :-A/a.

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JSPCB

JHARKHAND STATE POLLUTION CONTROL BOARD

1. Lab.Ref. No. ....773..../ Dated..30/4/2020
2. Name of sample **Ganga River Sahibganj (Sangi Dalan) Sahibganj**
3. Sample collected by 1. **Sri R. D. Sahani** S.T
   2.
4. Sample analysed at Regional Office cum Laboratory **Tower Chowk, Dudhani, Dumka**
5. Name and designation of representative present at the time of sampling .....

	Parameter Analysed:	**Value**
1.	Date and time sampling	22.04.2020/5.20 P.M
2.	Temperature (A/W) C:	34^0C / 19^0C
3.	pH :	7.0
4.	D.O.mg/l :	10.5 mg/l
5.	BOD mg/l :	1.5 mg/l
6.	COD mg/l :	10.5 mg/l
7.	Total solids mg/l :	190.0 mg/l
8.	T. S. S. :-	51.0 mg/l
9.	T. D. S.:	139.0 mg/l
10.	Turbidity :	125.0 NTU
11.	Conductivity :	335.0 MHO

Remarks: **Parameters were found within acceptable limits.**

29/4/2020

S.S.A/J.S.A

29/4/2020

Regional Officer / Board analyst

10146

JHARKHAND STATE POLLUTION CONTROL BOARD

1. Lab.Ref. No. 1754 Dated 29/04/2020

2. Name of sample Ganga River U/S Near I.C.T Ghat Sahibganj

3. Sample collected by 1. Sri R. D. Sahani S/I
   2.

4. Sample analysed at Regional Office cum Laboratory Tower Chowk, Dudhani, Dumka

5. Name and designation of representative present at the time of sampling .....

	Parameter Analysed:	Value
1.	Date and time sampling	22/04/2020 /02.10 P.M
2.	Temperature (A/W) C:	37°C / 21°C
3.	pH :	7.1
4.	D.O.mg/l :	10.4 mg/l
5.	BOD mg/l :	1.7 mg/l
6.	COD mg/l :	10.5 mg/l
7.	Total solids mg/l :	190.0 mg/l
8.	T. S. S. :-	52.0 mg/l
9.	T. D. S.:	138.0 mg/l
10.	Turbidity :	120 NTU
11.	Conductivity :	330 MHO

Remarks: Parameters were found within acceptable limits.

S.S.A/J.S.A 29/4/2020

29/4/2020
Regional Officer / Board analyst

10144

JHARKHAND STATE POLLUTION CONTROL BOARD

1. Lab Ref No. 375 Dated 30/4/2020
2. Name of sample **Masanjore Dam**
   Dist.- Dumka
3. Sample collected by 1. **Sri R. D. Sahani** **S.T**
   2.
4. Sample analysed at Regional Office cum Laboratory **Tower Chowk, Dudhani, Dumka**
5. Name and designation of representative present at the time of sampling .....

	Parameter Analysed:	Value
1.	Date and time sampling	23.04.2020/10.30 AM
2.	Temperature (A/W) C:	35°C / 21°C
3.	pH :	7.0
4.	D.O.mg/l :	9.0 mg/l
5.	BOD mg/l :	1.8 mg/l
6.	COD mg/l :	10.5 mg/l
7.	Total solids mg/l :	230.0 mg/l
8.	T. S. S. :-	70.0 mg/l
9.	T. D. S.:	160.0 mg/l
10.	Turbidity :	150 NTU
11.	Conductivity :	312.0 MHO

Remarks: **Parameters were found within acceptable limits.**

29/4/2020

S.S.A/J.S.A

29/4/2020

Regional Officer / Board analyst

2401

JHARKHAND STATE POLLUTION CONTROL BOARD

1. Lab.Ref. No. 776...../ Dated...30/4/2020
2. Name of sample Ganga River At.- Rajmahal. Dist.- Sahibganj
   Sahibganj
3. Sample collected by 1. Sri R. D. Sahni S. T.
   2.
4. Sample analysed at Regional Office cum Laboratory Tower Chowk. Dudhani. Dumka
5. Name and designation of representative present at the time of sampling .....
   .....

	Parameter Analysed:	Value
1.	Date and time sampling	22.04.2020/10.20 A.M
2.	Temperature (A/W) C:	35°C / 21°C
3.	pH :	7.0
4.	D.O.mg/l :	10.5 mg/l
5.	BOD mg/l :	1.5 mg/l
6.	COD mg/l :	9.5 mg/l
7.	Total solids mg/l :	180.0 mg/l
8.	T. S. S. :-	51.0 mg/l
9.	T. D. S.:	129.0 mg/l
10.	Turbidity :	118.0 NTU
11.	Conductivity :	335.0 MHO

Remarks: Parameters were found within acceptable limits.

29/4/2020
S.S.A/J.S.A

29/4/2020
Regional Officer / Board analyst

1059

JHARKHAND STATE POLLUTION CONTROL BOARD

1. Lab.Ref. No. ...777.../ Dated.....30/4/2020
2. Name of sample **Shiv Ganga Pond, Near Baba Mandir, Deoghar**
3. Sample collected by 1. **Sri Ravi Kumar** **A.S.O** 2.
4. Sample analysed at **Regional Office cum Laboratory Tower Chowk, Dudhani, Dumka**
5. Name and designation of representative present at the time of sampling .....

	Parameter Analysed:	Value
1.	Date and time sampling	22.04.2020/04.10 P.M
2.	Temperature (A/W) C:	36°C / 20°C
3.	pH :	7.1
4.	D.O.mg/l :	8.8 mg/l
5.	BOD mg/l :	2.2 mg/l
6.	COD mg/l :	10.5 mg/l
7.	Total solids mg/l :	225.0 mg/l
8.	T. S. S. :-	65.0 mg/l
9.	T. D. S.:	160.0 mg/l
10.	Turbidity :	152.0 NTU
11.	Conductivity :	312.0 MHO

Remarks: **Parameters were found within acceptable limits.**

29/4/2020
S.S.A/J.S.A

29/4/2020
Regional Officer / Board analyst

2393

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JSPCB

JHARKHAND STATE POLLUTION CONTROL BOARD

1. Lab.Ref. No. ...778...../ Dated....30/4/2020
2. Name of sample **Ganga River D/S Janta Ghat Dist.- Sahibganj**
3. Sample collected by 1. **Sri R. D. Sahni** **S.T** 2.
4. Sample analysed at Regional Office cum Laboratory **Tower Chowk, Dudhani, Dumka**
5. Name and designation of representative present at the time of sampling .....

	Parameter Analysed:	Value
1.	Date and time sampling	22.04.2020/04.10 P.M
2.	Temperature (A/W) C:	36^0C / 21^0C
3.	pH :	7.1
4.	D.O.mg/l :	9.8 mg/l
5.	BOD mg/l :	1.6 mg/l
6.	COD mg/l :	10.5 mg/l
7.	Total solids mg/l :	195.0 mg/l
8.	T. S. S. :-	55.0 mg/l
9.	T. D. S.:	140.0 mg/l
10.	Turbidity :	120 NTU
11.	Conductivity :	330.0 MHO

Remarks: **Parameters were found within acceptable limits.**

29/4/2020

S.S.A/J.S.A

29/4/2020

Regional Officer / Board analyst

10145

Jharkhand State Pollution Control Board

Regional Office-Cum-Laboratory, Dumka

Ref. No. 954 **Dated** 10/06/2020

From

Regional Officer
Dumka.

To,

The Board Analyst,
Jharkhand State Pollution Control Board,
Ranchi.

Sub:- **Regarding analysis report for the month of May 2020 (25.05.2020).**

Sir,

Please find enclosed here with the analysis report of the following points of Ganga river as per details:-

1. **Ganga River, At.- Rajmahal, Sahibganj**
2. **Ganga River U/S Near LCT ghat, Sahibganj**
3. **Ganga River D/S Near Janta Ghat, Sahibganj**
4. **Ganga River Sahibganj (Sangi Dalan) Sahibganj**
5. **Masanjore Dam, Dumka**
6. **Shiv Ganga Pond, Deoghar**

This is for your information & necessary action.

Yours faithfully

30/5/2020

Regional Officer
Dumka

झारखण्ड

JSPCB

JHARKHAND STATE POLLUTION CONTROL BOARD

1. Lab.Ref. No. ...../ Dated...../

2. Name of sample **Shiv Ganga Pond, Near Baba Mandir, Deoghar**

3. Sample collected by 1. **Sri R. D. Sahni** **S. T**
   2.

4. Sample analysed at Regional Office cum Laboratory **Tower Chowk, Dudhani, Dumka**

5. Name and designation of representative present at the time of sampling .....
   .....

	Parameter Analysed:	**Value**
1.	Date and time sampling	25.05.2020/12.45 P.M
2.	Temperature (A/W) C:	36^0C / 22^0C
3.	pH :	7.0
4.	D.O.mg/l :	8.9 mg/l
5.	BOD mg/l :	2.1 mg/l
6.	COD mg/l :	10.5 mg/l
7.	Total solids mg/l :	230.0 mg/l
8.	T. S. S. :-	65.0 mg/l
9.	T. D. S.:	165.0 mg/l
10.	Turbidity :	155 NTU
11.	Conductivity :	310 MHO

Remarks: **Parameters were found within acceptable limits.**

S.S.A/J.S.A

26/5/2020
Regional Officer / Board analyst

2393

झारखण्ड

JSPCB

JHARKHAND STATE POLLUTION CONTROL BOARD

1. Lab.Ref. No. ...../ Dated...../

2. Name of sample **Ganga River At.- Rajmahal, Dist.- Sahibganj**

3. Sample collected by **Sahibganj** 1. **Sri Nirala Baskey** **Con. Ex.** 2.

4. Sample analysed at Regional Office cum Laboratory **Tower Chowk, Dudhani, Dumka**

5. Name and designation of representative present at the time of sampling .....

	Parameter Analysed:	**Value**
1.	Date and time sampling	25.05.2020/10.30 A.M
2.	Temperature (A/W) C:	34^0C / 21^0C
3.	pH :	7.0
4.	D.O.mg/l :	10.5 mg/l
5.	BOD mg/l :	1.6 mg/l
6.	COD mg/l :	9.6 mg/l
7.	Total solids mg/l :	205.0 mg/l
8.	T. S. S. :-	55.0 mg/l
9.	T. D. S.:	150.0 mg/l
10.	Turbidity :	120 NTU
11.	Conductivity :	330 MHO

Remarks: **Parameters were found within acceptable limits.**

30/5/2020

S.S.A/J.S.A

30/5/2020

Regional Officer / Board analyst

1059

झारखण्ड

JSPCB

JHARKHAND STATE POLLUTION CONTROL BOARD

1. Lab.Ref. No. ...../ Dated...../

2. Name of sample **Masanjore Dam**
Dist.- Dumka

3. Sample collected by **1. Sri R. D. Sahni** **S. T**
2.

4. Sample analysed at Regional Office cum Laboratory **Tower Chowk, Dudhani, Dumka**

5. Name and designation of representative present at the time of sampling .....
.....

	Parameter Analysed:	**Value**
1.	Date and time sampling	25.05.2020/10.25 AM
2.	Temperature (A/W) C:	30^0C / 21^0C
3.	pH :	7.2
4.	D.O.mg/l :	9.0 mg/l
5.	BOD mg/l :	1.8 mg/l
6.	COD mg/l :	10.6 mg/l
7.	Total solids mg/l :	220.0 mg/l
8.	T. S. S. :-	70.0 mg/l
9.	T. D. S.:	150.0 mg/l
10.	Turbidity :	150 NTU
11.	Conductivity :	314 MHO

Remarks: **Parameters were found within acceptable limits.**

30/5/2020

S.S.A/J.S.A

30/5/2020

Regional Officer / Board analyst

झारखण्ड

JSPCB

JHARKHAND STATE POLLUTION CONTROL BOARD

1. Lab.Ref. No. ...../ Dated...../

2. Name of sample **Ganga River U/S Near LCT Ghat Sahibganj**

3. Sample collected by 1. **Nirala Baskey** **Con. Ex.**
   2.

4. Sample analysed at Regional Office cum Laboratory **Tower Chowk, Dudhani, Dumka**

5. Name and designation of representative present at the time of sampling .....

	Parameter Analysed:	**Value**
1.	Date and time sampling	25.05.2020 /02.25 P.M
2.	Temperature (A/W) C:	36^0C / 21^0C
3.	pH :	7.1
4.	D.O.mg/l :	10.3 mg/l
5.	BOD mg/l :	1.7 mg/l
6.	COD mg/l :	10.5 mg/l
7.	Total solids mg/l :	210.0 mg/l
8.	T. S. S. :-	60.0 mg/l
9.	T. D. S.:	150.0 mg/l
10.	Turbidity :	120 NTU
11.	Conductivity :	330 MHO

Remarks: **Parameters were found within acceptable limits.**

30/5/2020

S.S.A/J.S.A

30/5/2020

Regional Officer / Board analyst

10144

झारखण्ड

JSPCB

JHARKHAND STATE POLLUTION CONTROL BOARD

1. Lab.Ref. No. ...../ Dated...../

2. Name of sample **Ganga River Sahibganj (Sangi Dalan) Sahibganj**

3. Sample collected by **1. Sri Nirala Baskey Con. Ex.** **2.**

4. Sample analysed at Regional Office cum Laboratory **Tower Chowk, Dudhani, Dumka**

5. Name and designation of representative present at the time of sampling .....

	Parameter Analysed:	**Value**
1.	Date and time sampling	25.05.2020/5.30 P.M
2.	Temperature (A/W) C:	33^0C / 19^0C
3.	pH :	7.1
4.	D.O.mg/l :	10.4 mg/l
5.	BOD mg/l :	1.6 mg/l
6.	COD mg/l :	10.5 mg/l
7.	Total solids mg/l :	205.0 mg/l
8.	T. S. S. :-	60.0 mg/l
9.	T. D. S.:	145.0 mg/l
10.	Turbidity :	125.0 NTU
11.	Conductivity :	334.0 MHO

Remarks: **Parameters were found within acceptable limits.**

30/5/2020

S.S.A/J.S.A

30/5/2020

Regional Officer / Board analyst

10146

झारखण्ड

JSPCB

JHARKHAND STATE POLLUTION CONTROL BOARD

1. Lab.Ref. No. ...../ Dated...../

2. Name of sample **Ganga River D/S Janta Ghat Dist.- Sahibganj**

3. Sample collected by **1. Sri Nirala Baskey Con. Ex.** **2.**

4. Sample analysed at Regional Office cum Laboratory **Tower Chowk, Dudhani, Dumka**

5. Name and designation of representative present at the time of sampling .....

	Parameter Analysed:	**Value**
1.	Date and time sampling	25.05.2020/04.15 P.M
2.	Temperature (A/W) C:	36^0C / 20^0C
3.	pH :	7.1
4.	D.O.mg/l :	9.8 mg/l
5.	BOD mg/l :	1.8 mg/l
6.	COD mg/l :	10.6 mg/l
7.	Total solids mg/l :	210.0 mg/l
8.	T. S. S. :-	60.0 mg/l
9.	T. D. S.:	150.0 mg/l
10.	Turbidity :	120 NTU
11.	Conductivity :	330 MHO

Remarks: **Parameters were found within acceptable limits.**

S.S.A/J.S.A 30/5/2020

30/5/2020

Regional Officer / Board analyst

10145

Jharkhand State Pollution Control Board

Regional Office-Cum-Laboratory, Dumka

Ref. No. 1010 **Dated-**13/06/2020

From

Regional Officer
Dumka.

To,

The Board Analyst,
Jharkhand State Pollution Control Board,
Ranchi.

Sub:- **Regarding analysis report for the month of Jun 2020 (08.06.2020).**

Sir,

Please find enclosed here with the analysis report of the following points of Ganga river as per details:-

1. **Ganga River, At.- Rajmahal, Sahibganj**
2. **Ganga River U/S Near LCT ghat, Sahibganj**
3. **Ganga River D/S Near Janta Ghat, Sahibganj**
4. **Ganga River Sahibganj (Sangi Dalan) Sahibganj**
5. **Masanjore Dam, Dumka**
6. **Shiv Ganga Pond, Deoghar**

This is for your information & necessary action.

Yours faithfully

13/6/2020

Regional Officer
Dumka

झारखण्ड

JSPCB

JHARKHAND STATE POLLUTION CONTROL BOARD

1. Lab.Ref. No. ...../ Dated...../

2. Name of sample **Ganga River Sahibganj (Sangi Dalan) Sahibganj**

3. Sample collected by **1. Sri Nirala Baskey Con. Ex.**
2.

4. Sample analysed at Regional Office cum Laboratory **Tower Chowk, Dudhani, Dumka**

5. Name and designation of representative present at the time of sampling .....
.....

	Parameter Analysed:	**Value**
1.	Date and time sampling	08.06.2020/5.20 P.M
2.	Temperature (A/W) C:	32^0C / 20^0C
3.	pH :	7.2
4.	D.O.mg/l :	10.5 mg/l
5.	BOD mg/l :	1.6 mg/l
6.	COD mg/l :	10.6 mg/l
7.	Total solids mg/l :	215.0 mg/l
8.	T. S. S. :-	60.0 mg/l
9.	T. D. S.:	155.0 mg/l
10.	Turbidity :	135.0 NTU
11.	Conductivity :	330.0 MHO

Remarks: **Parameters were found within acceptable limits.**

S.S.A/J.S.A 13/6/2020

13/6/2020

Regional Officer / Board analyst

10146

झारखण्ड

JSPCB

JHARKHAND STATE POLLUTION CONTROL BOARD

1. Lab.Ref. No. ...../ Dated...../

2. Name of sample **Ganga River D/S Janta Ghat**
Dist.- Sahibganj

3. Sample collected by **1. Sri Nirala Baskey** **Con. Ex.**
2.

4. Sample analysed at Regional Office cum Laboratory **Tower Chowk, Dudhani, Dumka**

5. Name and designation of representative present at the time of sampling .....

	Parameter Analysed:	**Value**
1.	Date and time sampling	08.06.2020/04.15 P.M
2.	Temperature (A/W) C:	32^0C / 19^0C
3.	pH :	7.2
4.	D.O.mg/l :	9.5 mg/l
5.	BOD mg/l :	1.6 mg/l
6.	COD mg/l :	10.5 mg/l
7.	Total solids mg/l :	210.0 mg/l
8.	T. S. S. :-	55.0 mg/l
9.	T. D. S.:	155.0 mg/l
10.	Turbidity :	140 NTU
11.	Conductivity :	320 MHO

Remarks: **Parameters were found within acceptable limits.**

S.S.A/J.S.A 13/6/2020

12/6/2020
Regional Officer / Board analyst

10145

झारखण्ड

JSPCB

JHARKHAND STATE POLLUTION CONTROL BOARD

1. Lab.Ref. No. ...../ Dated...../

2. Name of sample **Ganga River U/S Near LCT Ghat Sahibganj**

3. Sample collected by 1. **Nirala Baskey** **Con. Ex.**
   2.

4. Sample analysed at Regional Office cum Laboratory **Tower Chowk, Dudhani, Dumka**

5. Name and designation of representative present at the time of sampling .....

	Parameter Analysed:	**Value**
1.	Date and time sampling	08.06.2020 /02.20 P.M
2.	Temperature (A/W) C:	34^0C / 21^0C
3.	pH :	7.0
4.	D.O.mg/l :	10.2 mg/l
5.	BOD mg/l :	1.7 mg/l
6.	COD mg/l :	10.6 mg/l
7.	Total solids mg/l :	220.0 mg/l
8.	T. S. S. :-	55.0 mg/l
9.	T. D. S.:	165.0 mg/l
10.	Turbidity :	125 NTU
11.	Conductivity :	315 MHO

Remarks: **Parameters were found within acceptable limits.**

S.S.A/J.S.A 13/6/2020

13/6/2020

Regional Officer / Board analyst

10144

झारखण्ड

JSPCB

JHARKHAND STATE POLLUTION CONTROL BOARD

1. Lab.Ref. No. ...../ Dated...../

2. Name of sample **Masanjore Dam**
Dist.- Dumka

3. Sample collected by **1. Sri R. D. Sahni** **S. T**
2.

4. Sample analysed at Regional Office cum Laboratory **Tower Chowk, Dudhani, Dumka**

5. Name and designation of representative present at the time of sampling .....
.....

	Parameter Analysed:	**Value**
1.	Date and time sampling	08.06.2020/10.20 AM
2.	Temperature (A/W) C:	33^0C / 21^0C
3.	pH :	7.1
4.	D.O.mg/l :	8.5 mg/l
5.	BOD mg/l :	1.6 mg/l
6.	COD mg/l :	11.6 mg/l
7.	Total solids mg/l :	235.0 mg/l
8.	T. S. S. :-	70.0 mg/l
9.	T. D. S.:	165.0 mg/l
10.	Turbidity :	150 NTU
11.	Conductivity :	314 MHO

Remarks: **Parameters were found within acceptable limits.**

S.S.A/J.S.A 13/6/2020

13/6/2020
Regional Officer / Board analyst

झारखण्ड

JSPCB

JHARKHAND STATE POLLUTION CONTROL BOARD

1. Lab.Ref. No. ...../ Dated...../

2. Name of sample **Shiv Ganga Pond, Near Baba Mandir, Deoghar**

3. Sample collected by **1. Sri R. D. Sahni S. T**
2.

4. Sample analysed at Regional Office cum Laboratory **Tower Chowk, Dudhani, Dumka**

5. Name and designation of representative present at the time of sampling .....

	Parameter Analysed:	**Value**
1.	Date and time sampling	08.06.2020/2.45 P.M
2.	Temperature (A/W) C:	36^0C / 22^0C
3.	pH :	7.1
4.	D.O.mg/l :	8.8 mg/l
5.	BOD mg/l :	2.2 mg/l
6.	COD mg/l :	10.5 mg/l
7.	Total solids mg/l :	240.0 mg/l
8.	T. S. S. :-	65.0 mg/l
9.	T. D. S.:	175.0 mg/l
10.	Turbidity :	150 NTU
11.	Conductivity :	312 MHO

Remarks: **Parameters were found within acceptable limits.**

S.S.A/J.S.A 13/6/2020

13/6/2020

Regional Officer / Board analyst

2393

झारखण्ड

JSPCB

JHARKHAND STATE POLLUTION CONTROL BOARD

1. Lab.Ref. No. ...../ Dated...../

2. Name of sample **Ganga River At.- Rajmahal, Dist.- Sahibganj**
Sahibganj

3. Sample collected by **1. Sri Nirala Baskey Con. Ex.**
2.

4. Sample analysed at Regional Office cum Laboratory **Tower Chowk, Dudhani, Dumka**

5. Name and designation of representative present at the time of sampling .....
.....

	Parameter Analysed:	**Value**
1.	Date and time sampling	08.06.2020/10.20 A.M
2.	Temperature (A/W) C:	33^0C / 21^0C
3.	pH :	7.0
4.	D.O.mg/l :	9.5 mg/l
5.	BOD mg/l :	1.8 mg/l
6.	COD mg/l :	10.5 mg/l
7.	Total solids mg/l :	210.0 mg/l
8.	T. S. S. :-	55.0 mg/l
9.	T. D. S.:	155.0 mg/l
10.	Turbidity :	125 NTU
11.	Conductivity :	320 MHO

Remarks: **Parameters were found within acceptable limits.**

S.S.A/J.S.A

12/6/2020
Regional Officer / Board analyst

1059

Jharkhand State Pollution Control Board

Regional Office-Cum-Laboratory, Dumka

Ref. No. 1011 Dated- 13/06/2020

From

Regional Officer
Dumka.

To,

The Board Analyst,
Jharkhand State Pollution Control Board,
Ranchi.

Sub:- Regarding analysis report for the month of Jun, 2020.

Sir,

Please find enclosed here with the analysis report of the following points of Ganga river as per details:-

1. **Holy Pond of Shivganga, AtPo- Jarmundi, Basukinath, Deoghar**
2. **Kurwa Dumka Water Intake Point, Dumka**

This is for your information & necessary action.

Yours faithfully

13/6/2020

Regional Officer
Dumka

झारखण्ड

JSPCB

JHARKHAND STATE POLLUTION CONTROL BOARD

1. Lab.Ref. No. ...../ Dated...../

2. Name of sample **Kurwa Dumka Water Intake Point, Dumka (Water intake Point) Dumka**

3. Sample collected by **1. Sri R. D. Sahni S. T**
2.

4. Sample analysed at Regional Office cum Laboratory **Tower Chowk, Dudhani, Dumka**

5. Name and designation of representative present at the time of sampling .....
.....

	Parameter Analysed:	**Value**
1.	Date and time sampling	08.06.2020/11.10 A.M
2.	Temperature (A/W) C:	28^0C / 21^0C
3.	pH :	7.2
4.	D.O.mg/l :	8.5 mg/l
5.	BOD mg/l :	2.1 mg/l
6.	COD mg/l :	11.5 mg/l
7.	Total solids mg/l :	230.0 mg/l
8.	T. S. S. :-	70.0 mg/l
9.	T. D. S.:	160.0 mg/l
10.	Turbidity :	150.0 NTU
11.	Conductivity :	310.0 MHO

Remarks: **Parameters were found within acceptable limits.**

13/6/2020

S.S.A/J.S.A

13/6/2020

Regional Officer / Board analyst

4490

झारखण्ड

JSPCB

JHARKHAND STATE POLLUTION CONTROL BOARD

1. Lab.Ref. No. ...../ Dated...../

2. Name of sample **Holy Pond of Shivganga At.+Po- Jarmundi, Basukinath, Dumka**

3. Sample collected by **Dumka** 1. **Sri R. D. Sahni,** **S. T.** 2.

4. Sample analysed at Regional Office cum Laboratory **Tower Chowk, Dudhani, Dumka**

5. Name and designation of representative present at the time of sampling .....

	Parameter Analysed:	**Value**
1.	Date and time sampling	08.06.2020/04.00 P.M
2.	Temperature (A/W) C:	35^0C / 21^0C
3.	pH :	8.5
4.	D.O.mg/l :	8.5 mg/l
5.	BOD mg/l :	2.1 mg/l
6.	COD mg/l :	11.4 mg/l
7.	Total solids mg/l :	235.0 mg/l
8.	T. S. S. :-	65.0 mg/l
9.	T. D. S.:	170.0 mg/l
10.	Turbidity :	150 NTU
11.	Conductivity :	310 MHO

Remarks: **Parameters were found within acceptable limits.**

S.S.A/J.S.A 13/6/2020

13/6/2020

Regional Officer / Board analyst

4491

Jharkhand State Pollution Control Board

Regional Office-Cum-Laboratory, Dumka

Ref. No. 1289 Dated- 31/07/2020

From

Regional Officer
Dumka.

To,

The Board Analyst,
Jharkhand State Pollution Control Board,
Ranchi.

Sub:- **Regarding analysis report for the month of July 2020 (23.07.2020).**

Sir,

Please find enclosed here with the analysis report of the following points of Ganga river as per details:-

1. **Ganga River, At.- Rajmahal, Sahibganj**
2. **Ganga River U/S Near LCT ghat, Sahibganj**
3. **Ganga River D/S Near Janta Ghat, Sahibganj**
4. **Ganga River Sahibganj (Sangi Dalan) Sahibganj**
5. **Masanjore Dam, Dumka**
6. **Shiv Ganga Pond, Deoghar**

This is for your information & necessary action.

Yours faithfully

31/7/2020

Regional Officer
Dumka

झारखण्ड

JSPCB

JHARKHAND STATE POLLUTION CONTROL BOARD

1. Lab.Ref. No. ...../ Dated...../

2. Name of sample **Ganga River At.- Rajmahal, Dist.- Sahibganj**
Sahibganj

3. Sample collected by **1. Sri R. D. Sahni S. T**
2.

4. Sample analysed at Regional Office cum Laboratory **Tower Chowk, Dudhani, Dumka**

5. Name and designation of representative present at the time of sampling .....
.....

	Parameter Analysed:	**Value**
1.	Date and time sampling	23/07/2020/10.00 A.M
2.	Temperature (A/W) C:	36^0C / 30^0C
3.	pH :	7.2
4.	D.O.mg/l :	8.2 mg/l
5.	BOD mg/l :	1.8 mg/l
6.	COD mg/l :	12.4 mg/l
7.	Total solids mg/l :	290.0 mg/l
8.	T. S. S. :-	80.0 mg/l
9.	T. D. S.:	210.0 mg/l
10.	Turbidity :	210.0 NTU
11.	Conductivity :	310.0 MHO

Remarks: **Parameters were found within acceptable limits.**

S.S.A/J.S.A 30/7/2020

30/7/2020
Regional Officer / Board analyst

1059

झारखण्ड

JSPCB

JHARKHAND STATE POLLUTION CONTROL BOARD

1. Lab.Ref. No. ...../ Dated...../

2. Name of sample **Masanjore Dam, Dist.- Dumka**

3. Sample collected by 1. **Sri R. D. Sahani** **S.T**
2.

4. Sample analysed at Regional Office cum Laboratory **Tower Chowk, Dudhani, Dumka**

5. Name and designation of representative present at the time of sampling .....

	Parameter Analysed:	**Value**
1.	Date and time sampling	23/07/2020/11.30 AM
2.	Temperature (A/W) C:	36^0C / 31^0C
3.	pH :	7.8
4.	D.O.mg/l :	8.4 mg/l
5.	BOD mg/l :	2.6 mg/l
6.	COD mg/l :	16.2 mg/l
7.	Total solids mg/l :	420.0 mg/l
8.	T. S. S. :-	90.0 mg/l
9.	T. D. S.:	330.0 mg/l
10.	Turbidity :	216 NTU
11.	Conductivity :	306.0 MHO

Remarks: **Parameters were found within acceptable limits.**

S.S.A/J.S.A 30/7/2020

Regional Officer / Board analyst 30/7/2020

2401

झारखण्ड

JSPCB

JHARKHAND STATE POLLUTION CONTROL BOARD

1. Lab.Ref. No. ...../ Dated...../

2. Name of sample **Shiv Ganga Pond,**
Near Baba Mandir, Deoghar

3. Sample collected by **1. Sri R. D. Sahni** **S. T.**
2.

4. Sample analysed at Regional Office cum Laboratory **Tower Chowk, Dudhani, Dumka**

5. Name and designation of representative present at the time of sampling .....
.....

	Parameter Analysed:	**Value**
1.	Date and time sampling	23/07/2020/12.50 P.M
2.	Temperature (A/W) C:	34^0C / 29^0C
3.	pH :	8.4
4.	D.O.mg/l :	8.6 mg/l
5.	BOD mg/l :	2.6 mg/l
6.	COD mg/l :	18.6 mg/l
7.	Total solids mg/l :	446.0 mg/l
8.	T. S. S. :-	96.0 mg/l
9.	T. D. S.:	350.0 mg/l
10.	Turbidity :	212.0 NTU
11.	Conductivity :	314.0 MHO

Remarks: **Parameters were found within acceptable limits.**

S.S.A/J.S.A 30/7/2020

30/7/2020
Regional Officer / Board analyst

2393

झारखण्ड

JSPCB

JHARKHAND STATE POLLUTION CONTROL BOARD

1. Lab.Ref. No. ...../ Dated...../

2. Name of sample **Ganga River U/S Near LCT Ghat Sahibganj**

3. Sample collected by **1. Sri R. D. Sahni S. T.**
2.

4. Sample analysed at Regional Office cum Laboratory **Tower Chowk, Dudhani, Dumka**

5. Name and designation of representative present at the time of sampling .....

	Parameter Analysed:	**Value**
1.	Date and time sampling	23/07/2020 /2.30 P.M
2.	Temperature (A/W) C:	37^0C / 31^0C
3.	pH :	8.4
4.	D.O.mg/l :	8.4 mg/l
5.	BOD mg/l :	2.4 mg/l
6.	COD mg/l :	16.2 mg/l
7.	Total solids mg/l :	416.0 mg/l
8.	T. S. S. :-	90.0 mg/l
9.	T. D. S.:	326.0 mg/l
10.	Turbidity :	206 NTU
11.	Conductivity :	312 MHO

Remarks: **Parameters were found within acceptable limits.**

S.S.A/J.S.A 3 CHMO

Regional Officer / Board analyst

10144

झारखण्ड

JSPCB

JHARKHAND STATE POLLUTION CONTROL BOARD

1. Lab.Ref. No. ...../ Dated...../

2. Name of sample **Ganga River D/S Janta Ghat**
Dist.- Sahibganj

3. Sample collected by **1. Sri R. D. Sahni** **S. T**
2.

4. Sample analysed at Regional Office cum Laboratory **Tower Chowk, Dudhani, Dumka**

5. Name and designation of representative present at the time of sampling .....

	Parameter Analysed:	**Value**
1.	Date and time sampling	23/07/2020/4.20 P.M
2.	Temperature (A/W) C:	36^0C / 30^0C
3.	pH :	7.5
4.	D.O.mg/l :	8.2 mg/l
5.	BOD mg/l :	2.6 mg/l
6.	COD mg/l :	16.0 mg/l
7.	Total solids mg/l :	406.0 mg/l
8.	T. S. S. :-	94.0 mg/l
9.	T. D. S.:	310.0 mg/l
10.	Turbidity :	210 NTU
11.	Conductivity :	310.0 MHO

Remarks: **Parameters were found within acceptable limits.**

S.S.A/J.S.A 30/7/2020

30/7/2020
Regional Officer / Board analyst

10145

झारखण्ड

JSPCB

JHARKHAND STATE POLLUTION CONTROL BOARD

1. Lab.Ref. No. ...../ Dated...../

2. Name of sample **Ganga River Sahibganj (Sangi Dalan) Sahibganj**

3. Sample collected by **1. Sri R.D. Sahni S. T**
2.

4. Sample analysed at Regional Office cum Laboratory **Tower Chowk, Dudhani, Dumka**

5. Name and designation of representative present at the time of sampling .....

	Parameter Analysed:	**Value**
1.	Date and time sampling	23/07/2020/5.15 P.M
2.	Temperature (A/W) C:	36^0C / 29^0C
3.	pH :	8.2
4.	D.O.mg/l :	8.2 mg/l
5.	BOD mg/l :	2.4 mg/l
6.	COD mg/l :	18.4 mg/l
7.	Total solids mg/l :	420.0 mg/l
8.	T. S. S. :-	90.0 mg/l
9.	T. D. S.:	330.0 mg/l
10.	Turbidity :	210.0 NTU
11.	Conductivity :	316.0 MHO

Remarks: **Parameters were found within acceptable limits.**

30/7/2020

S.S.A/J.S.A

30/7/2020

Regional Officer / Board analyst

10146

Jharkhand State Pollution Control Board

Regional Office-Cum-Laboratory, Dumka

Ref. No. 1290 Dated 31/07/2020

From

Regional Officer
Dumka.

To,

The Board Analyst,
Jharkhand State Pollution Control Board,
Ranchi.

Sub:- **Regarding analysis report for the month of July 2020.**

Sir,

Please find enclosed here with the analysis report of the following points of Ganga river as per details:-

1. **Hand Pump Near Garbage Dump, Rakshibandh, Dumka**
2. **Holy Pond of Shivganga, AtPo- Jarmundi, Basukinath, Deoghar**
3. **Kurwa Dumka Water Intake Point, Dumka**
4. **At.- Sikatia, Dist.- Deoghar**

This is for your information & necessary action.

Yours faithfully
31/7/2020
Regional Officer
Dumka

झारखण्ड

JSPCB

JHARKHAND STATE POLLUTION CONTROL BOARD

1. Lab.Ref. No. ...../ Dated...../

2. Name of sample **At.- Sikatia, Dist.- Deoghar (Canal)**
Ps.- Sarath, Dist.- Deoghar

3. Sample collected by **1. Sri R. D. Sahni S. T.**
2.

4. Sample analysed at Regional Office cum Laboratory **Tower Chowk, Dudhani, Dumka**

5. Name and designation of representative present at the time of sampling .....
.....

	Parameter Analysed:	**Value**
1.	Date and time sampling	24.07.2020/04.30 P.M
2.	Temperature (A/W) C:	40^0C / 35^0C
3.	pH :	7.6
4.	D.O.mg/l :	8.6 mg/l
5.	BOD mg/l :	2.6 mg/l
6.	COD mg/l :	14.6 mg/l
7.	Total solids mg/l :	350.0 mg/l
8.	T. S. S. :-	70.0 mg/l
9.	T. D. S.:	280.0 mg/l
10.	Turbidity :	220 NTU
11.	Conductivity :	280.0 MHO

Remarks: **Parameters were found within acceptable limits.**

30/7/2020

S.S.A/J.S.A

30/7/2020

Regional Officer / Board analyst

4493

झारखण्ड

JSPCB

JHARKHAND STATE POLLUTION CONTROL BOARD

1. Lab.Ref. No. ...../ Dated...../

2. Name of sample **Hand Pump Near Garbage Dump, Rakshibandh, Dumka**
Dumka

3. Sample collected by **1. Sri R. D. Sahni S. T.**
2.

4. Sample analysed at Regional Office cum Laboratory **Tower Chowk, Dudhani, Dumka**

5. Name and designation of representative present at the time of sampling .....
.....

	Parameter Analysed:	**Value**
1.	Date and time sampling	24.07.2020/01.00 P.M
2.	Temperature (A/W) C:	42^0C / 36^0C
3.	pH :	7.5
4.	D.O.mg/l :	8.7 mg/l
5.	BOD mg/l :	1.8 mg/l
6.	COD mg/l :	12.2 mg/l
7.	Total solids mg/l :	306.0 mg/l
8.	T. S. S. :-	76.0 mg/l
9.	T. D. S.:	230.0 mg/l
10.	Turbidity :	160 NTU
11.	Conductivity :	260.0 MHO

Remarks: **Parameters were found within acceptable limits.**

30/7/2020

S.S.A/J.S.A

30/7/2020

Regional Officer / Board analyst

4492

झारखण्ड

JSPCB

JHARKHAND STATE POLLUTION CONTROL BOARD

1. Lab.Ref. No. ...../ Dated...../

2. Name of sample **Kurwa Dumka Water Intake Point, Dumka (Water intake Point) Dumka**

3. Sample collected by 1. **Sri R. D. Sahani** **S.T**
2.

4. Sample analysed at Regional Office cum Laboratory **Tower Chowk, Dudhani, Dumka**

5. Name and designation of representative present at the time of sampling .....

	Parameter Analysed:	**Value**
1.	Date and time sampling	24/07/2020/10.00 A.M
2.	Temperature (A/W) C:	40^0C / 34^0C
3.	pH :	7.6
4.	D.O.mg/l :	8.5 mg/l
5.	BOD mg/l :	2.4 mg/l
6.	COD mg/l :	14.6 mg/l
7.	Total solids mg/l :	380.0 mg/l
8.	T. S. S. :-	50.0 mg/l
9.	T. D. S.:	330.0 mg/l
10.	Turbidity :	190 NTU
11.	Conductivity :	260.0 MHO

Remarks: **Parameters were found within acceptable limits.**

30/7/2020

S.S.A/J.S.A

30/7/2020

Regional Officer / Board analyst

4490

झारखण्ड

JSPCB

JHARKHAND STATE POLLUTION CONTROL BOARD

1. Lab.Ref. No. ...../ Dated...../

2. Name of sample **Holy Pond of Shivganga At.+Po- Jarmundi, Basukinath, Dumka Dumka**

3. Sample collected by 1. **Sri R. D. Sahani** **S.T**
2.

4. Sample analysed at Regional Office cum Laboratory **Tower Chowk, Dudhani, Dumka**

5. Name and designation of representative present at the time of sampling .....

	Parameter Analysed:	**Value**
1.	Date and time sampling	24/07/2020/11.00 A.M
2.	Temperature (A/W) C:	41^0C / 33^0C
3.	pH :	8.2
4.	D.O.mg/l :	4.6 mg/l
5.	BOD mg/l :	2.4 mg/l
6.	COD mg/l :	18.4 mg/l
7.	Total solids mg/l :	340.0 mg/l
8.	T. S. S. :-	80.0 mg/l
9.	T. D. S.:	260.0 mg/l
10.	Turbidity :	220 NTU
11.	Conductivity :	300.0 MHO

Remarks: **Parameters were found within acceptable limits.**

S.S.A/J.S.A

Regional Officer / Board analyst

4491

Jharkhand State Pollution Control Board

Regional Office-Cum-Laboratory, Dumka

Ref. No. 1308 Dated- 17/08/2020

From

Regional Officer
Dumka.

To,

The Board Analyst,
Jharkhand State Pollution Control Board,
Ranchi.

Sub:- **Regarding analysis report for the month of Aug 2020 (07.08.2020).**

Sir,

Please find enclosed here with the analysis report of the following points of Ganga river as per details:-

1. **Ganga River, At.- Rajmahal, Sahibganj**
2. **Ganga River U/S Near LCT ghat, Sahibganj**
3. **Ganga River D/S Near Janta Ghat, Sahibganj**
4. **Ganga River Sahibganj (Sangi Dalan) Sahibganj**
5. **Masanjore Dam, Dumka**
6. **Shiv Ganga Pond, Deoghar**

This is for your information & necessary action.

Yours faithfully

Kamal 17/08/2020

Regional Officer
Dumka

झारखण्ड

JSPCB

JHARKHAND STATE POLLUTION CONTROL BOARD

1. Lab.Ref. No. ...../ Dated...../

2. Name of sample **Ganga River At.- Rajmahal, Dist.- Sahibganj**
Sahibganj

3. Sample collected by **1. Sri R. D. Sahni S. T**
2.

4. Sample analysed at Regional Office cum Laboratory **Tower Chowk, Dudhani, Dumka**

5. Name and designation of representative present at the time of sampling .....
.....

	Parameter Analysed:	**Value**
1.	Date and time sampling	07/08/2020/10.20 A.M
2.	Temperature (A/W) C:	37^0C / 31^0C
3.	pH :	7.3
4.	D.O.mg/l :	8.1 mg/l
5.	BOD mg/l :	1.6 mg/l
6.	COD mg/l :	12.6 mg/l
7.	Total solids mg/l :	300.0 mg/l
8.	T. S. S. :-	85.0 mg/l
9.	T. D. S.:	2150 mg/l
10.	Turbidity :	216.0 NTU
11.	Conductivity :	316.0 MHO

Remarks: **Parameters were found within acceptable limits.**

14/8/2020

S.S.A/J.S.A

14/08/2020

Regional Officer / Board analyst

1059

झारखण्ड

JSPCB

JHARKHAND STATE POLLUTION CONTROL BOARD

1. Lab.Ref. No. ...../ Dated...../

2. Name of sample **Masanjore Dam, Dist.- Dumka**

3. Sample collected by **1. Sri R. D. Sahani S.T**
2.

4. Sample analysed at Regional Office cum Laboratory **Tower Chowk, Dudhani, Dumka**

5. Name and designation of representative present at the time of sampling .....

	Parameter Analysed:	**Value**
1.	Date and time sampling	07/08/2020/11.40 PM
2.	Temperature (A/W) C:	38^0C / 31^0C
3.	pH :	7.7
4.	D.O.mg/l :	8.2 mg/l
5.	BOD mg/l :	2.8 mg/l
6.	COD mg/l :	16.4 mg/l
7.	Total solids mg/l :	436.0 mg/l
8.	T. S. S. :-	96.0 mg/l
9.	T. D. S.:	340.0 mg/l
10.	Turbidity :	220 NTU
11.	Conductivity :	308.0 MHO

Remarks: **Parameters were found within acceptable limits.**

14/8/2020

S.S.A/J.S.A

14/08/2020

Regional Officer / Board analyst

2401

झारखण्ड

JSPCB

JHARKHAND STATE POLLUTION CONTROL BOARD

1. Lab.Ref. No. ...../ Dated...../

2. Name of sample **Shiv Ganga Pond, Near Baba Mandir, Deoghar**

3. Sample collected by 1. **Sri R. D. Sahni** **S. T.**
2.

4. Sample analysed at Regional Office cum Laboratory **Tower Chowk, Dudhani, Dumka**

5. Name and designation of representative present at the time of sampling .....
.....

	Parameter Analysed:	**Value**
1.	Date and time sampling	07/08/2020/12.50 P.M
2.	Temperature (A/W) C:	35^0C / 29^0C
3.	pH :	8.6
4.	D.O.mg/l :	8.8 mg/l
5.	BOD mg/l :	2.4 mg/l
6.	COD mg/l :	18.4 mg/l
7.	Total solids mg/l :	450.0 mg/l
8.	T. S. S. :-	98.0 mg/l
9.	T. D. S.:	352.0 mg/l
10.	Turbidity :	216.0 NTU
11.	Conductivity :	316.0 MHO

Remarks: **Parameters were found within acceptable limits.**

14/8/2020

S.S.A/J.S.A

14/08/2020

Regional Officer / Board analyst

2393

झारखण्ड

JSPCB

JHARKHAND STATE POLLUTION CONTROL BOARD

1. Lab.Ref. No. ...../ Dated...../

2. Name of sample **Ganga River U/S Near LCT Ghat Sahibganj**

3. Sample collected by **1. Sri R. D. Sahni S. T**
2.

4. Sample analysed at Regional Office cum Laboratory **Tower Chowk, Dudhani, Dumka**

5. Name and designation of representative present at the time of sampling .....
.....

	Parameter Analysed:	**Value**
1.	Date and time sampling	07/08/2020 /03.00 P.M
2.	Temperature (A/W) C:	38^0C / 32^0C
3.	pH :	8.2
4.	D.O.mg/l :	8.6 mg/l
5.	BOD mg/l :	2.6 mg/l
6.	COD mg/l :	16.8 mg/l
7.	Total solids mg/l :	410.0 mg/l
8.	T. S. S. :-	92.0 mg/l
9.	T. D. S.:	318.0 mg/l
10.	Turbidity :	210 NTU
11.	Conductivity :	314 MHO

Remarks: **Parameters were found within acceptable limits.**

14/8/2020

S.S.A./J.S.A

14/8/2020

Regional Officer / Board analyst

10144

झारखण्ड

JSPCB

JHARKHAND STATE POLLUTION CONTROL BOARD

1. Lab.Ref. No. ...../ Dated...../

2. Name of sample **Ganga River D/S Janta Ghat**
Dist.- Sahibganj

3. Sample collected by **1. Sri R. D Sahni** **S. T**
2.

4. Sample analysed at Regional Office cum Laboratory **Tower Chowk, Dudhani, Dumka**

5. Name and designation of representative present at the time of sampling .....

	Parameter Analysed:	**Value**
1.	Date and time sampling	07/08/2020/04.30 P.M
2.	Temperature (A/W) C:	36^0C / 30^0C
3.	pH :	7.6
4.	D.O.mg/l :	8.4 mg/l
5.	BOD mg/l :	2.4 mg/l
6.	COD mg/l :	16.8 mg/l
7.	Total solids mg/l :	410.0 mg/l
8.	T. S. S. :-	92.0 mg/l
9.	T. D. S.:	318.0 mg/l
10.	Turbidity :	208 NTU
11.	Conductivity :	312.0 MHO

Remarks: **Parameters were found within acceptable limits.**

S.S.A/J.S.A 14/8/2020

14/08/2020
Regional Officer / Board analyst

10145

झारखण्ड

JSPCB

JHARKHAND STATE POLLUTION CONTROL BOARD

1. Lab.Ref. No. ...../ Dated...../

2. Name of sample **Ganga River Sahibganj (Sangi Dalan) Sahibganj**

3. Sample collected by **1. Sri R. D Sahni S. T**
2.

4. Sample analysed at Regional Office cum Laboratory **Tower Chowk, Dudhani, Dumka**

5. Name and designation of representative present at the time of sampling .....

	Parameter Analysed:	**Value**
1.	Date and time sampling	07/08/2020/5.30 P.M
2.	Temperature (A/W) C:	35^0C / 29^0C
3.	pH :	8.0
4.	D.O.mg/l :	8.4 mg/l
5.	BOD mg/l :	2.6 mg/l
6.	COD mg/l :	18.6 mg/l
7.	Total solids mg/l :	426.0 mg/l
8.	T. S. S. :-	92.0 mg/l
9.	T. D. S.:	334.0 mg/l
10.	Turbidity :	212.0 NTU
11.	Conductivity :	314.0 MHO

Remarks: **Parameters were found within acceptable limits.**

14/8/2020

S.S.A/J.S.A

14/08/2020

Regional Officer / Board analyst

10146

झारखण्ड
JSPCB

JHARKHAND STATE POLLUTION CONTROL BOARD

TOWNSHIP ADMINISTRATION BUILDING, HEC COMPLEX, DHURWA, RANCHI 834004
Telephone: 0651-2400850 (Fax)/ 2400851/2400852/2401847/2400979/240013

Ref. No.:- B-1522 Ranchi, Dated: - 05/10/2020

From,

Rajeev Lochan Bakshi,
Member Secretary.

To,

The Director,
State Urban Development Authority,
Urban Development & Housing Department,
Govt. of Jharkhand.

Sub- Information on status of compliance of River Ganga and its tributaries in the light of the direction issued by Hon'ble NGT in O.A. No. 200/2014, dated 18.12.2019 – Regarding.

Sir,

With regard to the subject stated above, the required information on **status of compliance of River Ganga and its tributaries in the light of the direction issued by Hon'ble NGT in O.A. No. 200/2014, dated 18.12.2019** has been prepared and the copy of the report is enclosed herewith for your kind reference and further action.

Thanking you.

Encl.:- A/a

Yours sincerely,

(Rajeev Lochan Bakshi)
Member Secretary

Annexure -2

Letter No.: SPMG/UD&HD/NGT/REUSE/2019/16/ 373

Govt. of Jharkhand

Urban Development & Housing Department

From;

Ajoy Kumar Singh, IAS
Secretary to Govt.

To,

Smt. Divya Sinha,
DH-UPC-I,
Central Pollution Control Board,
Parivesh Bhawan, East Arjun Nagar,
New Delhi-110032

Ranchi/Date. 26/11/19

Sub: In the matter ***OA No. 148/2016 (MA no. 686/2017)*** titled **Mahesh Chandra Saxena Versus South Delhi Municipal Corporation & Ors. in the Hon'ble NGT Court** Regarding **"Utilization of treated waste water from the STPs".**

Ref: CPCB letter no. **A-14011/1/2019** dated **07.10.2019**

Sir,

With reference to the above-mentioned subject, in the matter *OA No. 148/2016 (MA no. 686/2017)* on the Hon'ble NGT Court regarding **"Utilization of treated waste water from the STPs"**. The State has submitted the Action Plan to CPCB on dated 13.08.2019 in which your valuable comments have been received on dated 07.10.2019.

The Compliance report on the comments received and the revised Action Plan for Utilization of Treated Waste Water from STPs is hereby enclosed with this letter for your kind reference and further action.

Enclosure: A/A

Yours faithfully,

26/11/19

(Ajoy Kumar Singh)
Secretary to Govt.

Memo no. SMCG/UD&HD/NGT/REUSE/2019/16– 393 **Ranchi/Dated.** 26/11/19

Copy to- Additional Chief Secretary, Department of Forest, Environment & Climate Change / Member Secretary, JSPCB, Ranchi for kind information.

Secretary to Govt.
26/11/19

JHARKHAND COMPLIANCE REPORT

Sl.No.	ACTION POINT	REMARKS	COMMENTS	COMPLIANCE
1.	Estimate Present and Projected Sewage Generation and Treatment Capacity.	Ranchi, Adityapur, Sahibganj nagar and Rajmahal Nagar have their present and projected sewage generation	Present sewage generation Projected sewage generation Treatment capacity is missing and need to be provided.	• Treatment Capacity Details of Ranchi, Adityapur, Sahibganj & Rajmahal are incorporated under Point no. 10 of the Action Plan.
2.	Identify bulk users of Water: Industrial Clusters, Metro Rail Indian Railways, Infrastructure Projects, Agriculture, Bus Depots and PWD.	Proposed to use in Industrial Units, Construction activities Agriculture, Metro rail etc.	Explore more possibility to reuse wastewater by bulk and other details as per point no 2, 3, 4, and 5	• Under Point no. 10.3.2 of the Action Plan, for **Ranchi**: PVUNL has been identified as the bulk user who is intend to utilize complete 37 MLD of treated waste water from STP for which it is designed for its upcoming Thermal Power Plant at Patratu. • Under Point no. 10.4.2 of the Action Plan, for **Adityapur**: Necessary Direction to organize the meeting with Industries under Adityapur Industrial Cluster to aware them for the usage of treated waste water and to get the demand are given to the Executing Agency (JUIDCO) by UD&HD. • Under Point no. 10.5.2 and 10.6.2 of the Action Plan, for **Sahibganj and Rajmahal**: No major industrial unit is currently operational in the area.
3.	Quantify their potential Water demand of above identified bulk user users of water	Missing data yet to be added-		• Identified bulk user of treated waste water from the under construction STP of Ranchi is PVUNL, who intend to use complete 37 MLD of treated waste water for which the STP is designed. • To get the demand from the bulk user for Adityapur: Necessary Direction to organize the meeting with

				Industries under Adityapur Industrial Cluster to aware them for the usage of treated waste water and to get the demand are given to the Executing Agency (JUIDCO) by UD&HD. The same may be referred under Point no. 10.4.2 of the Action Plan. • The water demand of the identified bulk user for Sahibganj and Rajmahal will be determined from its city level action plan that will be prepared within three months from the date of final commissioning of STP.
4.	Development of Dead Water Aquatic Sources (Lakes, Pond, etc.)	Lakes/rivers rejuvenation, Ground water recharge		• Water Bodies at Adityapur, Rajmahal and Sahiganj has been identified and already provided in Annexure -8 of the Action Plan. • Further, the final City Level Action Plan for utilization of treated water of the respective ULB will be prepared within three months from the date of final commissioning of STP.
5.	Time line for establishing such infrastructure (Treatment Conveyance and Utilization of Treated Sewage)	2024 (intermediate year) to 2047 (ultimate year)		• The time line for completion of ongoing Sewerage/Septage projects may be referred from point no. 10.1 & 10.2 of the Action Plan. • The further timeline for establishing such infrastructure will be finalized in the final City Level Action Plan of the respective ULB, that will be prepared within three months from the date of final commissioning of STP.
6.	To promote use of treated waste water for various usages.	Landscaping, Public Parks Cooling water for Power, Plants and oil refineries Processing water for mills plants,		• Various usages like Landscaping, Public Parks, Cooling water for Power Plants, and oil refineries, Processing water for mills plants, Toilet flushing, Dust control,

		Toilet flushing, Dust control, Construction activities, concrete mixing, car, Cloth & Floor washing, Garden and irrigation using a hose spray or drip irrigation etc.		Construction activities, concrete mixing, car, Cloth & Floor washing, Garden and irrigation using a hose spray or drip irrigation etc. is proposed in the Action Plan as per the Jharkhand Waste Water Policy 2017 attached as Annexure -1.
7.	To promote supply of treated sewage into industrial cluster.	Super Thermal Power Plant (STPP) at Patratu is one of the potential users of treated effluent from 37 MLD STP Plant.		• Necessary Direction to organize the meeting with Industries under Adityapur Industrial Cluster to aware them for the usage of treated waste water and to get the demand are given to Executing Agency (JUIDCO) by UD&HD. The same may be referred under point no. 10.4.2 of the Action Plan.
8.	Industrial clusters can set up treatment facility to meet their raw water requirement instead of drawing ground water.	Missing data yet to be added	To explore possibility as per suggestion at point no. 8	• Request letter to Secretary, Department of Industries, Government of Jharkhand to explore the possibility on setting up of treatment facility by the Industries to meet their raw water requirement instead of drawing ground water has been given.

Action Plan for Utilization of Treated Waste Water from Sewage Treatment Plants (STPs)

झारखण्ड सरकार

Urban Development & Housing Department,
Government of Jharkhand

TABLE OF CONTENTS

1. Introduction

Urbanization in Jharkhand has picked up pace since its formation in year 2000, due to migration and associated economic activities in the urban areas. As seen in other growing economies, the state has experienced a corresponding increase in urbanization. While the 2001 census recorded an urban population of 5.9 million, corresponding to 22.24 percent of the total state population of 26.9 million; the 2011 census recorded an urban population of 7.9 million, corresponding to 24.05 percent of the total population of 32.9 million. Considering these projections, urbanization in the state can be expected to continue, and increasingly contribute to the state's GSDP.

Due to the rapid economic growth, urbanization and population growth, Jharkhand, like other states of India, faces serious environmental issues. These include pollution in urban and industrial areas and resource constraints with respect to water, land, forests and energy. Growing water scarcity and water pollution are the most severe environmental problems in the country. In addition to these, inadequate rainfall due to climate change has had a compounding effect on these resources. Erratic and unfavourable monsoon conditions have led to over-exploitation of ground water resources. Less than normal precipitation has resulted in less accumulation of fresh water. The low level of water inflow coupled with increased exploitation has resulted in depleting water levels in reservoirs and rivers.

Wastewater generation has increased along with the increase in water consumption and the quantity of untreated wastewater discharged into local water bodies have resulted in their becoming polluted and unattractive for most beneficial uses. The State has several rivers and river basins and the increased pollution has turned most of the rivers into a 'dead' waterway with high BOD concentrations (about 100 mg/L) and no dissolved oxygen.

Despite polluted conditions; farmers and communities in the downstream continue to use the River water as raw water source for various purposes such as agricultural, irrigation and for drinking as well. The strain on water resources has led to the excessive pumping of groundwater and groundwater levels are dropping fast. The ever-increasing urban population coupled with poor sanitation facilities has put a severe strain on India's freshwater resources, such as rivers, lakes and aquifers.

Industrialization and economic growth has increased the demand for fresh water while inadequate management and treatment of industrial and domestic wastewater has polluted such water sources. The combined effect of these has not only resulted in scarce and dwindling resources but has also made it difficult for cities to meet their increasing water needs. As a result, cities are adopting unsustainable practices, such as bringing water from distant places thereby increasing pumping

stages (which increase the cost of landed water) and over-exploitation of groundwater resources.

2. Background

Water recycling is reusing treated wastewater for beneficial purposes such as agricultural and landscape irrigation, industrial processes, toilet flushing, and replenishing a ground water basin (referred to as ground water recharge). Water recycling offers resource and financial savings. Wastewater treatment can be tailored to meet the water quality requirements of a planned reuse. Recycled water for landscape irrigation required less treatment than recycled water for drinking water. A common type of recycled water is water that has been reclaimed from municipal wastewater, or sewage. The term water recycling is generally used synonymously with water reclamation and water reuse. Gray water is reusable waste water for residential, commercial and industrial bathroom sinks, bath tub shower drains, and clothes washing equipment drains. Gray water is reused onsite, typically for landscape irrigation.

Through the natural water cycle, the earth has recycled and recused water for millions of years. Water recycling though, generally refers to projects that use technology to speed up these natural processes. Water recycling is often characterized as "unplanned" or "Planned".

3. Why Water Recycling

Recycled water can satisfy most water demands, as long as it is adequately treated to ensure water quality appropriate for the use.

4. Uses for Recycled Water

The recycled water can be used in various ways, the major among them are listed below. The recycled water can also be used for drinking purposes.

a. Landscaping

b. Public parks

c. Cooling water for power plants and oil refineries

d. Processing water for mills, plants

e. Toilet flushing

f. Dust control

g. Construction activities

h. Concrete mixing

i. Artificial lakes

j. Car, Cloth & floor washing

k. Garden and irrigation using a hose spray or drip irrigation.

Although most water recycling projects have been developed to meet non-potable water demands, a number of projects use recycled water indirectly for potable purposes. These projects include recharging ground water aquifers and augmenting surface water reservoirs with recycled water. In ground water recharge projects, recycled water can be spread or injected into ground water aquifers to augment ground water supplies, and to prevent saltwater intrusion.

5. Environmental Benefits of Water Recycling

In addition to providing a dependable, locally controlled water supply, water recycling provides tremendous environmental benefits. By providing an additional source of water, water recycling can help us find ways to decrease the diversion of water from sensitive ecosystems. Other benefits include decreasing wastewater discharges and reducing and preventing pollution. Recycled water can also be used to create or enhance wetlands and riparian habitats.

Recycling Water Can Save Energy

As the demand for water grows, more water is extracted, treated, and transported sometimes over great distances which can require a lot of energy. If the local source of water is ground water, the level of ground water becomes lower as more water is removed, and this increases the energy required to pump the water to the surface. Recycling water on site or nearby reduces the energy needed to move water longer distances or pump water from deep within an aquifer. Tailoring water quality to a specific water use also reduces the energy needed to treat water. The water quality required to flush a toilet is less stringent than the water quality needed for drinking water and requires less energy to achieve. Using recycled water that is of

lower quality for uses that don't require high quality water saves energy and money by reducing treatment requirements.

6. Jharkhand Waste Water Policy, 2017

The main purpose of the work is to strengthen/ promote reuse of wastewater in the wake of increase in demand for water from increased urbanization, climate change among others. The sector needs to be guided and regulated effectively so that it can meet the overall objective.

Accordingly, Urban Development & Housing Department, Government of Jharkhand has framed **'JHARKHAND WASTE WATER POLICY, 2017'**. Attached hereto as **Annexure-1.**

The Vision of **'Jharkhand Waster Water Policy 2017'** is **"All Jharkhand cities and towns achieve the water recycling capability from STPs, household, commercial and industrial areas in a sustainable manner and reduce the fresh water demand to a sizeable extent".**

7. Goal of the Jharkhand Waste Water Policy, 2017

This policy is to ensure increase use of recycled water for other purposes apart from drinking, through the provision of appropriate technologies for water recycling and protection of environment.

The policy specifically will endorse the following core principles:

- To protect the environment and the ULB/City water resources.
- To promote proper functioning of network based sewerage systems and ensure connections of household so as to prevent dry weather flow in drains & streets.
- Treatment of sewage, sludge and grey water and recycle it for other uses.
- Promoting recycle & reuse of household, commercial and industrial grey water.
- To make waste water project economical and environmentally sustainable.
- Inclusive and participatory decision making in waste water recycling.
- Transparent decision making processes to achieve socio-environmental as well as economic financial objectives.
- Capacity building for enhanced institutional ability to govern the sector effectively.
- Ensuring, protecting and optimizing investments.

- Public Private Partnership (PPP) in the most appropriate manner.
- Public outreach for environmental and health related outcomes.
- Establishment of an efficient, effective, affordable and accountable system for managing the water recycling form urban sewerage and Septage management.

8. Objectives of the Jharkhand Waste Water Policy, 2017

The objective of making this policy is to overcome the shortage of water by recycling and using it for different purposes so that the use of potable water should mostly be for drinking purposes. The re-use of water in a sizeable quantity up to a certain quality after proper treatment of water for non-drinking purpose and for scientific disposal of the remaining wastewater is the main object behind formulating this policy.

- To ensure 100 percent wastewater recycling in cities /towns.
- To improve wastewater supply service focusing on customer satisfaction, coverage, frequency and reliability.
- Supply of potable water that incurs large amount of money to be reduced and waste water to be used in non-drinking purposes.
- Promoting and augmenting waste water used for ensuring environmental sustainability by reducing burden on already stressed basin and aquifers and preventing their depletion.
- Promoting wastewater reuse from sewage discharge leading to reduction in environmental costs and health hazards.
- Wastewater reuse by ensuring resources conservation & preservation of sensitive eco-system and reducing pollutant loading.

  All cities and towns of Jharkhand become totally sanitized, healthy and ensure sustain good public health and environmental outcomes for all their citizens with a special focus on hygienic and affordable sewerage facilities for the urban poor and women. All urban dwellers will have access to and use safe and hygienic sewerage or sludge facilities and arrangements.

9. Wastewater Reuse and Opportunities

Urban Reuse

While there are several major categories of water reuse, urban water reuse is only now emerging in India. Some important components of the reclaimed water portfolio of many emerging urban reuse plans are:

- Landscape irrigation
- Fire protection and toilet flushing
- Recreational opportunities without human contact

Urban reuse is often divided into the following categories:

- ✓ Unrestricted: The use of reclaimed water for non-potable applications in municipal settings where public access is not restricted.
- ✓ Restricted: The use of reclaimed water for non-potable applications in municipal settings where public access is controlled or restricted by physical or institutional barriers, such as fences or timings of application of the reuse water or temporal access restriction.

When treated, wastewater is used to irrigate residential areas, public parks and related sports etc. or is used for toilet flushing and washing, it has to receive significant treatment and high-level disinfection so as to be not considered a threat to public health.

Agricultural Reuse

Use of wastewater in agriculture has a long history and currently represents a significant percentage of use worldwide, especially in emerging economies such as India. With increasing population and sanitation, more treated wastewater is available. The cost of treating wastewater to secondary (and sometimes even higher) standards is generally lower than the cost of pumping potable water from distant sources or for producing it from unconventional water sources (e.g., desalination).

The option of allocating treated wastewater to irrigation is often the preferred and least expensive alternative for municipalities. Irrigation of crops (both food and non-food) with untreated wastewater is widely practiced in many parts of the developing world with accompanying adverse public health outcomes. Nonetheless, this practice represents an economic necessity for many farming communities and for the rapidly expanding population at large, much of which is dependent on locally grown crops.

The WHO guidelines (WHO, 2006) for irrigation with treated wastewater have been successfully applied to irrigation reuse applications throughout the world.

Environmental/Recreational Reuse

Environmental reuse primarily includes the use of treated wastewater to support wetlands and to supplement stream and river flows. Aquifer recharge

also may be considered environmental reuse, but because this practice is integral to management of many complex issues it is recommended as an area of future study.

Industrial Reuse

The industrial use of treated wastewater has grown in a variety of industries ranging from electronics to process industries, food processing, as well as a broader adoption by the power-generation industry. Over the past few years, these industries have embraced the use of such water for purposes ranging from process water, boiler feed water, and cooling tower. Since industry can control water quality within their processes, specific standards for industrial use are not being provided here.

Reuse by Construction Industry

The construction industry is the newest entrant to the industrial category and many urban utilities are now supplying treated wastewater for construction activities.

Ground Water Recharge

Groundwater recharge to aquifers not used for potable water, has been practiced for many years but has often been viewed as a disposal method for treated wastewater effluent. In addition to providing a method of treated effluent disposal, groundwater recharge of treated wastewater can provide a number of other benefits, including the following:

- Recovery of treated water for subsequent reuse or discharge
- Recharge of adjacent surface streams
- Seasonal storage of treated water beneath the site with seasonal recovery for agriculture.

In many cases, groundwater can be recharged in a manner that also utilizes the soil or aquifer system where such water is applied as an additional treatment step to improve the quality.

10. Actions taken/To be taken by the State of Jharkhand

Urban Development and Housing Department, Government of Jharkhand, considering the substantial need to bridge the gap of demand and supply of fresh water and resource conservation & preservation of sensitive eco-system, plans to re-use the wastewater by setting up treatment plants across the ULBs of the State. Government of Jharkhand is committed to ensure 100 percent

waste water recycling in cities / towns. Currently 4 Municipal Waste Water Projects and 4 Municipal Septage Management Projects are under implementation in the State and city wise re-use of the treated water of these towns will be planned based on the ***Jharkhand Waste Water Policy, 2017*** and the ***best suited option for the town*** will be implemented.

10.1 Time line of various on-going Municipal Sewerage Project in different ULBs of Jharkhand.

Sr. No.	Name of Project	Unit	Total STP Capacity (MLD)	Stage (Under Construction/ Completed)	Scheme under which STPs are proposed	Target date of Completion
1	Sewerage scheme for Zone I, Ranchi under Ranchi Municipal Corporation	1	37	Under Construction	State	31.12.2021
2.	Sewerage scheme for Adityapur under Adityapur Municipal Corporation	4	36	Under Construction	AMRUT	20.05.2021
3.	Sewerage scheme for Sahibganj under Sahibganj Nagar Parishad	2	12	Construction completed under trial stage.	Namami Gange	Completed
4.	Sewerage scheme for Rajmahal under Rajmahal Nagar Panchayat	1	3.5	Under Construction	Namami Gange	30.06.2020

10.2 Time line of various on-going Municipal Septage Management Project in different ULBs of Jharkhand.

Sr. No.	Name of Project	Septage Treatment Plant Capacity (SeTP) (KLD)	Design year of SeTP	Stage (Under Construction / Completed)	Scheme under which SeTP are proposed	Target date of Completion
1	Septage Management Scheme for Chas Municipal Corporation	89	2032	Under Construction	AMRUT	March,2021
2.	Septage Management Scheme for Deoghar Municipal Corporation	101	2032	Under Construction	AMRUT	December, 2020
3.	Septage Management Scheme for Hazaribagh Municipal Corporation	64	2032	Under Construction	AMRUT	January, 2021
4.	Septage Management Scheme for Giridih Municipal Corporation	52	2032	Under Construction	AMRUT	March,2021

10.3 Sewerage scheme for Ranchi under Ranchi Municipal Corporation

Ranchi is the capital of the State of Jharkhand and one of the largest cities of the State. Ranchi has been divided into 4 zones for implementation of the sewerage project. Ranchi Sewerage project (Zone I) was awarded in the estimated cost of INR 359 crores but due to the poor performance of the Executing Agency, the agreement with the agency has been terminated by Ranchi Municipal Corporation on dated 14.10.2019. Further, the target date of completion of remaining work will be December 2021.

The Ranchi Sewerage Project (Zone I) covers the total sewerage network of 192 Kms and one unit of Sewerage treatment plant with capacity of 37 MLD. The project is funded under State Budget.

10.3.1 Present & Projected Sewage Generation and Treatment Capacity of all Four Zones of Ranchi City

- The total sewage generation and Treatment Capacity from the **Zone -I** of the Ranchi city is as follow:

Sr. No.	Year*	Total Wastewater generation (MLD)*	Treatment Capacity (MLD)
1	2009 (Base year)	25.16	• At Present, No Treatment Plant is operational in Zone -1, Ranchi. • 42% of the STP work has been completed and the remaining work will be completed by December 2021.
2	2024 (Intermediate year)	42.97	
3	2039 (Ultimate Year)	71.83	

*As per the DPR of Ranchi Sewerage System Scheme prepared by Meinhardt considering base year 2009.

- The total sewage generation and Treatment Capacity from the **Zone -II** of the Ranchi city is as follow:

Sr. No.	Year*	Total Wastewater generation (MLD)*	Treatment Capacity (MLD)
1	2009 (Base year)	82.74	• At Present, No Treatment Plant is operational in Zone -II, Ranchi.
2	2024 (Intermediate year)	141.32	
3	2039 (Ultimate Year)	236.23	

*As per the DPR of Ranchi Sewerage System Scheme prepared by Meinhardt considering base year 2009.

- The total sewage generation and Treatment Capacity from the **Zone -III** of the Ranchi city is as follow:

Sr. No.	Year*	Total Wastewater generation (MLD)*	Treatment Capacity (MLD)
1	2009 (Base year)	24.97	• At Present, No Treatment Plant is operational in Zone -III, Ranchi.
2	2024 (Intermediate year)	42.65	
3	2039 (Ultimate Year)	71.29	

*As per the DPR of Ranchi Sewerage System Scheme prepared by Meinhardt considering base year 2009.

- The total sewage generation and Treatment Capacity from the **Zone -IV** of the Ranchi city is as follow:

Sr. No.	Year*	Total Wastewater generation (MLD)*	Treatment Capacity (MLD)
1	2009 (Base year)	24.73	• At Present, No Treatment Plant is operational in Zone - IV, Ranchi.
2	2024 (Intermediate year)	42.24	
3	2039 (Ultimate Year)	70.61	

*As per the DPR of Ranchi Sewerage System Scheme prepared by Meinhardt considering base year 2009.

10.3.2 Potential Usage of Treated wastewater for Ranchi City.

Sr. No.	Potential Options available for reuse of treated waste water	Remarks
1	Industrial processes	• Ranchi Municipal Corporation (RMC) has identified an upcoming Super Thermal Power Plant (STPP) at Patratu i.e. within the 50 km distance from the STP plant as one of the potential user of treated water water from the upcoming 37 MLD STP plant. • Patratu Vidyut Utpadan Nogam Ltd. (PVUNL) (A subsidiary of NTPC in JV with JBVNL) intend to use entire 37 MLD treated sewage water from the upcoming STP at Bargai, Ranchi for its under-
2	Metro Rail	
3	Indian Railways	
4	Infrastructure Projects	

5	Agriculture	construction Power Plant at Patratu for Non-potable water applications. • PVUNL agree to bear all the cost (both Capex & Opex) of creating necessary infrastructure (like laying of pipeline from STP to STPP, Installation of Tertiary treatment Plant at STPP) for taking the secondary treated water from the STP. • On the meeting dated 18.07.2019 in this regard under the Chairman ship of Secretary, UD&HD, GoJ, PVUNL will submit the draft agreement format and after taking approval form the Competent Authority, the further process of agreement signing will take place. • The Correspondence in this matter is attached hereto as **Annexure -2.** • No Metro Rail is currently operational in Ranchi City. • At present there is no Sewage Treatment Plant is operational under RMC. • City level Action Plan for utilization of treated waste water from the STP is under preparation and that will be prepared within three months from the date of final commissioning of STP.
6	Bus Depots	
7	Horticulture	
8	Lake/River Rejuvenation	

10.4 Sewerage scheme for Adityapur under Adityapur Municipal Corporation. (AMC)

The Ministry of Urban Development, Government of India has launched Atal Mission for Rejuvenation and Urban Transformation (AMRUT) Scheme with an objective to provide basic services (e.g. water supply, sewerage, parks) to households and build amenities in cities that will directly improve the quality of life, especially the poor. Under the AMRUT project Sewage Treatment Plants (STPs) are being constructed in various ULBs to treat the sewage water. The Adityapur sewerage scheme has been selected under the AMRUT funding. The scheme was awarded in Nov 2017 with project components ranging from building a total of 4 units of treatment plants with a total capacity of 36 MLD and covering entire town with the total sewerage network of 134 Kms. The project is expected to be completed by May 2021.

10.4.1 Present & Projected Sewerage Generation and Treatment Capacity

- The total amount of waste water generated from the Adityapur Municipal Corporation area and Treatment Capacity are as follows:

Sr. No.	Year*	Total Wastewater Generation (MLD)*	Treatment Capacity
1	2017 (Base year)	27.33	• At Present, No Treatment Plant is Operational under Adityapur Municipal Corporation Area. • STP of total 37 MLD Capacity is under Construction.
2	Year 2027	35.63	
3	2032 (intermediate year)	40.27	
4	2047 (Ultimate year)	56.15	

*As per the DPR of Adityapur Sewerage System Scheme prepared by TCE, March 2017

- Considering the Sewerage generation for the intermediate year (i.e. year 2032) 4 units of STPs of capacity **4 MLD in Zone-1, 20 MLD in Zone-2, 10 MLD in Zone-3 and 2 MLD in Zone-4 respectively,** are under construction and expected to be completed by **May 2021.**

10.4.2 Potential Usage of Treated wastewater for Adityapur City.

Sr. No.	Potential Options available for reuse of treated waste water	Remarks
1	Industrial processes	• At present there is no Sewage Treatment Plant operational under AMC. • No Metro Rail is currently operational in Adityapur City. • Proposed Strategy for reuse of treated waste water in AMC is attached hereto as **Annexure-3.**
2	Metro Rail	
3	Indian Railways	
4	Infrastructure Projects	
5	Agriculture	
6	Bus Depots	

7	Horticulture	• Letter to the executing agency (JUIDCO) to organize meeting with Industries under Adityapur industrial Cluster to aware them on utilization of treated waste water for its industrial purposes has been given and the same is attached hereto as **Annexure-4.** • City level Action Plan for utilization of treated waste water from the STP is under preparation and that will be prepared within three months from the date of final commissioning of STP.
8	Lake/River Rejuvenation	

10.5 Sewerage scheme for Sahibganj under Sahibganj Nagar Parishad

The Sahibganj town was selected for the Municipal Wastewater Project under the National Mission for Clean Ganga (NMCG) programme (Namami Gange) with the objective of effective abatement of pollution, through which we can achieve the aim of conservation and rejuvenation of the National River Ganga.

The Project was awarded at INR 132.59 Cr. in April 2016 and its completed. Two (2) Sewerage Treatment plant with capacities of 5 MLD and 7 MLD respectively have been constructed as part of the Project. The Project have a total of 53 Kms of sewerage network and household service connections will be provided.

10.5.1 Present & Projected Sewerage Generation and Treatment Capacity

- The total amount of waste water generated from the Sahibganj Nagar Parishad area and Treatment Capacity are as follows:

Sr. No.	Year*	Total Wastewater Generation (MLD) *	Treatment Capacity
1	2015 (Base year)	10	• STP of total 12 MLD Capacity has been completed.
2	Year 2025	11.50	
3	2030 (intermediate year)	12	
4	2045 (Ultimate year)	14	

*As per the DPR of Sahibganj Sewerage System Scheme prepared by Wapcos, December 2013.

- Considering the Sewerage generation for the intermediate year (i.e. year 2030), 2 units of STP of capacity 5 MLD in Zone-1 and 7 MLD in Zone-2 is constructed and currently under trial stage.

10.5.2 Potential Usage of Treated wastewater for Sahibganj Town.

Sr. No.	Potential Options available for reuse of treated waste water	Remarks
1	Industrial processes	• The Construction of Sewage Treatment Plant of total 12 MLD capacity has been completed and under trial stage. • Proposal for giving treated water to Power Plant to Kahalgaon (55 km away from Sahibganj) has been explored but doesn't find feasible. • No Metro Rail is currently operational in Sahibganj town. • As Sahibganj is situated on the bank of river Ganga, therefore, the land is highly fertile, so strategy for reuse of treated waste water in Agriculture, Environmental/Recreation, avenue plantation, Construction, Dual Water supply system in houses/offices/Business Establishments, Lake/pond rejuvenation purposes are explored by Sahibganj Nagar Parishad. • Proposed Strategy for reuse of treated waste water in Sahibganj NP is attached hereto as **Annexure-5.** • Accordingly, City level Action Plan for utilization of treated waste water from the STP is under preparation and that will be prepared within three months from the date of final commissioning of STP. • Letter to the Executing Agency (JUIDCO) to prepare the City Level Action Plan for Sahibganj has been issued and the same is attached hereto as **Annexure-6.**
2	Metro Rail	
3	Indian Railways	
4	Infrastructure Projects	
5	Agriculture	
6	Bus Depots	
7	Horticulture	
8	Lake/River Rejuvenation	

10.6 Sewerage scheme for Rajmahal under Rajmahal Nagar Panchayat

The Rajmahal town was selected for the Municipal Waste Water Project under the National Mission for Clean Ganga (NMCG) programme (Namami Gange) with the twin objective of effective abatement of pollution, conservation and rejuvenation of National River Ganga.

The project was awarded at INR 52.97 Cr. in August 2018 and is expected to be completed by June 2020. One Sewerage Treatment Plant with capacity of 3.5 MLD will be constructed under the project. The project will have a total of 34.21 Kms of sewerage network and household service connections will be provided.

10.6.1 Present & Projected Sewerage Generation and Treatment Capacity

- The total amount of waste water generated from the Rajmahal Nagar Panchayat area and Treatment Capacity are as follows:

Sr. No.	Year*	Total Wastewater Generation (MLD)*	Treatment Capacity
1	2011 (Base year)	2.4	• At Present, No Treatment Plant is Operational under Rajmahal Nagar Panchayat Area. • STP of total 3.5 MLD capacity is under Construction.
2	Year 2017	2.7	
3	2032 (intermediate year)	3.4	
4	2047 (Ultimate year)	4.0	

*As per the DPR of Rajmahal Sewerage System Scheme prepared by Wapcos, April 2016

- Considering the Sewerage generation for the intermediate year (i.e. year 2032), STP of capacity 3.5 MLD is under construction and expected to be completed by June 2020.

10.6.2 Potential Usage of Treated wastewater for Rajmahal Town.

Sr. No.	Potential Options available for reuse of treated waste water	Remarks
1	Industrial processes	• At present there is no Sewage Treatment Plant operational under Rajmahal Nagar Panchayat. • As Rajmahal is situated on the bank of river Ganga, therefore, the land is highly fertile, so strategy for reuse of treated waste water in Agriculture, Environmental/Recreation, avenue plantation, Lake/pond rejuvenation purposes are explored by Rajhamal Nagar Panchayat. • Proposed Strategy for reuse of treated waste water in Rajmahal NP is attached hereto as **Annexure-7.** • Accordingly, City level Action Plan for utilization of treated waste water from the STP is under preparation and that will be prepared within three months from the date of final commissioning of STP.
2	Metro Rail	
3	Indian Railways	
4	Infrastructure Projects	
5	Agriculture	
6	Bus Depots	
7	Horticulture	
8	Lake/River Rejuvenation	

10.7 Potential Usage of Treated wastewater from their upcoming Septage Treatment Plant for Chas, Deoghar, Hazaribagh, & Giridih towns.

Sr. No.	Potential Options available for reuse of treated waste water	Remarks
1	Industrial processes	• **At present there is no Septage/Sewerage Treatment Plant operational under these four towns.** • Due to small quantity of treated waste water from the upcoming Septage Treatment Plant of capacity 89 KLD, 101 KLD, 64 KLD & 52 KLD at Chas, Deoghar, Hazaribagh & Giridih respectively, the proposal for reuse of Water for industrial,
2	Metro Rail	
3	Indian Railways	
4	Infrastructure Projects	

		Railways, Infrastructure, Agriculture are not found feasible. • Feasible options for reuse of treated waste water in these four towns are toilet flushing, gardening, landscape irrigation, washing of vehicles, road washing, and horticulture. • City level Action Plan for utilization of treated waste water from the SeTP is under preparation and that will be prepared within three months from the date of final commissioning of SeTP in the respective Urban Local Bodies.
5	Agriculture	
6	Bus Depots	
7	Horticulture	
8	Lake/River Rejuvenation	

11. Way Forward

Urban Development & Housing Department plans to take up the below initiatives going ahead:

- Detailed Project Report (DPR) for Sewerage Scheme of 3 cities of Jharkhand namely (Mango, Jugsalai, Jamshedpur) is under preparation.
- DPR for Interception & Diversion (I&D) of drains to STP scheme, for Dhanbad and Phusro town is prepared and sent to National Mission for Clean Ganga (NMCG) for its approval. Consultant for preparation of DPR of I&D of drains to STP scheme, for Ramgarh town has been selected and DPR preparation is in progress.
- DPR for Septage Management Scheme for 3 towns (namely Medininagar, Chaibasa, & Dumka) is under preparation.
- DPR for Fecal Sludge Management Scheme for 26 towns of Jharkhand is under Preparation.
- City level action plans will be prepared for reuse of the treated wastewater within three months form the date of final commissioning of STPs/SeTPs in the towns.
- Water Bodies at Adityapur, Rajmahal and Sahibganj have been identified for restoration and rejuvenation, The details are attached hereto as **Annexure-8.**
- Water Bodies at all the ULBs of Jharkhand will be identified for restoration and rejuvenation.
- Institutional Development and Capacity Building Initiatives for reuse of treated waste water.

12. Monitoring the Mechanism of UD&HD with ULBs

12.1 At the state level, State Urban Development Agency (SUDA)/Jharkhand Urban Infrastructure Development Corporation (JUIDCO) will adopt San-Benchmark framework for revised service level benchmark for sanitation that assess performance of citywide waste water recycling and sewage water treatment.

12.2 SUDA/JUIDCO will develop a Monitoring & Evaluation (M&E) framework to measure cities performance, and also devise data collection and reporting systems using indicator framework developed for San-Benchmark. This will be aligned with the 14th Finance Commission condition of publishing the service level benchmark to avail performance grant. ULBs will develop robust reporting format to track compliance of the various stakeholders with outcomes and process standards.

12.3 A cell will be created inside JUIDCO for monitoring and evaluation of the waste water management operation. The cell will be created by funds from external agency funding or from the funds of 14th Finance commission or through the State Budget. Proposed Organogram of the cell is attached hereto as **Annexure-9.**

12.4 A Management Information System (MIS) will be developed accordingly to monitor the progress.

List of Annexures

Sr. No.	Annexure Number	Details
1	Annexure-1	Jharkhand Waster Water Policy 2017
2	Annexure-2	Correspondence between PVUNL, RMC and UD&HD regarding utilization of treated waste water from the under Construction STP of RMC.
3	Annexure-3	Strategy for reuse of treated waste water by Adityapur Municipal Corporation.
4	Annexure-4	Letter to the executing agency (JUIDCO) to organize meeting with Industries under Adityapur industrial Cluster.
5	Annexure-5	Strategy for reuse of treated waste water by Sahibganj Nagar Parishad.
6	Annexure-6	Letter to the Executing Agency (JUIDCO) to prepare the City Level Action Plan for Sahibganj Nagar Parishad.
7	Annexure-7	Strategy for reuse of treated waste water by Rajmahal Nagar Panchayat.
8	Annexure-8	Details of Water bodies identified at Adityapur, Rajmahal and Sahibganj.
9	Annexure-9	Proposed Organogram for Monitoring & Evaluation of the waste water management operation Cell.

Annexure - 1

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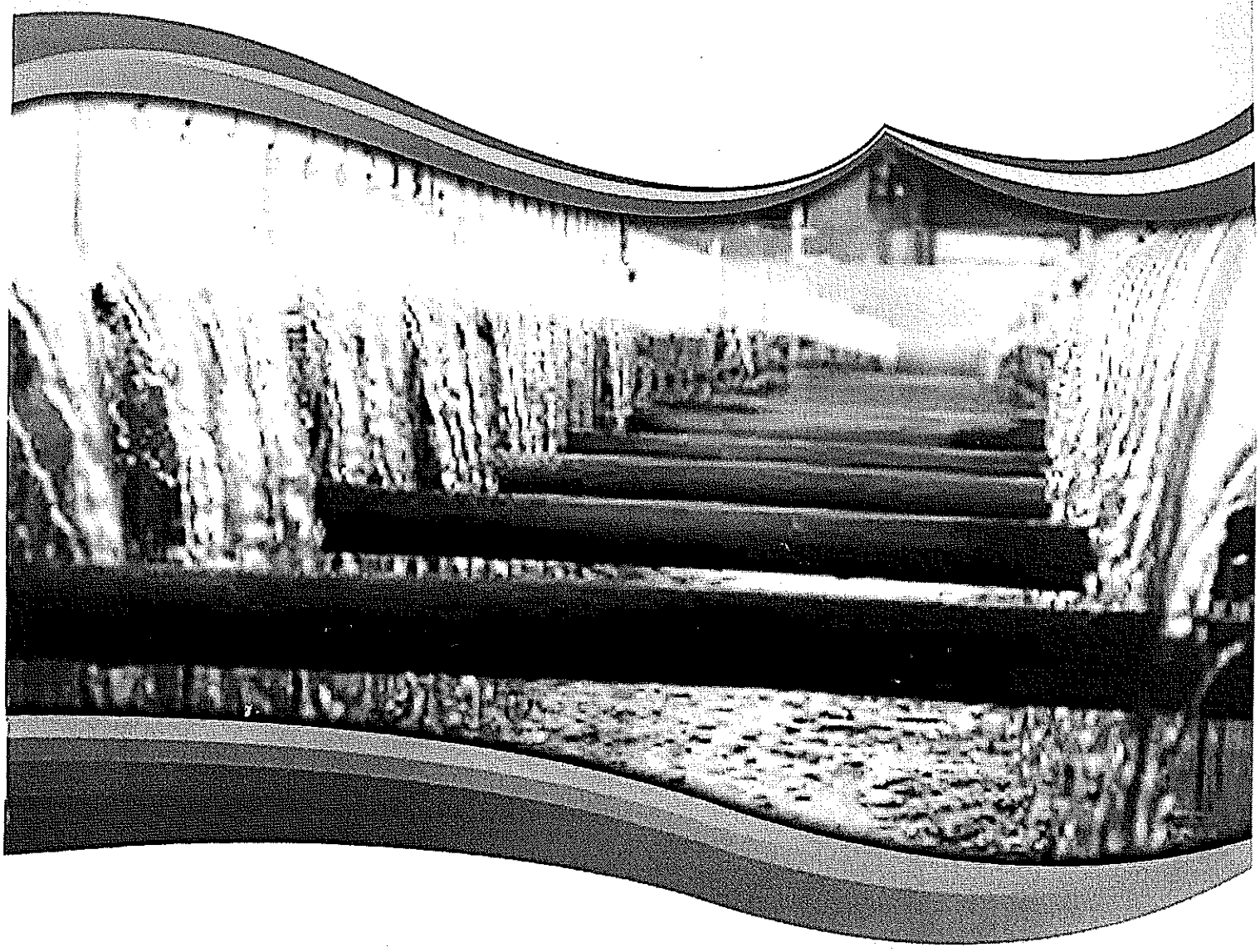
अमृत
Atal Mission for Rejuvenation and Urban Transformation

Government of Jharkhand

स्वच्छ भारत
एक कदम स्वच्छता की ओर...

Jharkhand Waste Water Policy, 2017



Urban Development & Housing Department

Government of Jharkhand

4th Floor, Project Building, Dhurwa, Ranchi

Government of Jharkhand

Urban Development & Housing Department

RESOLUTION

No.- SUDA/AMRUT/Wastewater Policy/38/2017/2899 Ranchi, Dated 27/4/17

Subject:- Jharkhand Waste Water Policy, 2017

1. BACKGROUND

Water recycling is reusing treated wastewater for beneficial purposes such as agricultural and landscape irrigation, industrial processes, toilet flushing, and replenishing a ground water basin (referred to as ground water recharge). Water recycling offers resource and financial savings. Wastewater treatment can be tailored to meet the water quality requirements of a planned reuse. Recycled water for landscape irrigation requires less treatment than recycled water for drinking water. A common type of recycled water is water that has been reclaimed from municipal wastewater, or sewage. The term water recycling is generally used synonymously with water reclamation and water reuse. Gray water is reusable wastewater from residential, commercial and industrial bathroom sinks, bath tub shower drains, and clothes washing equipment drains. Gray water is reused onsite, typically for landscape irrigation.

Through the natural water cycle, the earth has recycled and reused water for millions of years. Water recycling, though, generally refers to projects that use technology to speed up these natural processes. Water recycling is often characterized as "unplanned" or "planned."

2. WHY WATER RECYCLING

Recycled water can satisfy most water demands, as long as it is adequately treated to ensure water quality appropriate for the use. Recycled water can satisfy most water demands, as long as it is adequately treated to ensure water quality appropriate for the use.

2.1 Uses for Recycled Water

2.1.1 Landscaping
2.1.2 Public parks
2.1.3 Cooling water for power plants and oil refineries
2.1.4 Processing water for mills, plants
2.1.5 Toilet flushing
2.1.6 Dust control
2.1.7 Construction activities
2.1.8 Concrete mixing
2.1.9 Artificial lakes
2.1.10 Car, Cloth & floor washing
2.1.11 Garden and irrigation using a hose spray or drip irrigation.
2.1.12 Construction.
2.1.13 Artificial lakes

Although most water recycling projects have been developed to meet nonpotable water demands, a number of projects use recycled water indirectly for potable purposes. These projects include recharging ground water aquifers and augmenting surface water reservoirs with recycled water. In ground water recharge projects, recycled water can be spread or injected into ground water aquifers to augment ground water supplies, and to prevent salt water intrusion.

2.2 What are the Environmental Benefits of Water Recycling?

In addition to providing a dependable, locally-controlled water supply, water recycling provides tremendous environmental benefits. By providing an additional source of water, water recycling can help us find ways to decrease the diversion of water from sensitive ecosystems. Other benefits include decreasing wastewater discharges and reducing and preventing pollution. Recycled water can also be used to create or enhance wetlands and riparian habitats.

2.3 Recycling Water Can Save Energy

As the demand for water grows, more water is extracted, treated, and transported sometimes over great distances which can require a lot of energy. If the local source of water is ground water, the level of ground water becomes lower as more water is removed and this increases the energy required to pump the water to the surface. Recycling water on site or nearby reduces the energy needed to move water longer distances or pump water from deep within an aquifer. Tailoring water quality to a specific water use also reduces the energy needed to treat water. The water quality required to flush a toilet is less stringent than the water quality needed for drinking water and requires less energy to achieve. Using recycled water that is of lower quality for uses that don't require high quality water saves energy and money by reducing treatment requirements.

3. TITLE

This policy shall be called as Jharkhand Waste WaterPolicy, 2017

4. VISION

"All Jharkhand cities and towns achieve the water recycling capability from STPs, household, commercial and industrial areas in a sustainable manner and reduce the fresh water demand to a sizeable extent"

5. GOAL

Jharkhand Waste Water Policy, 2017 is to ensure increase use of recycled water for other purposes apart from drinking, through the provision of appropriate technologies for water recycling and protection of environment.

The policy specifically endorses the following core principles:

5.1 To protect the environment and the State's water resources.

5.2 To promote proper functioning of network based sewerage systems and ensure connections of household so as to prevent dry weather flow in drains & streets.

5.3 Treatment of sewage, sludge andgrey water and recycle it for other uses.

5.4 Promoting recycle & reuse of household, commercial and industrial grey water

5.5 To make waste water project economical and environmentally sustainable.

5.6 Inclusive and participatory decision making in waste water recycling.

5.7 Transparent decision making processes to achieve socio-environmental as well as economic financial objectives.

5.8 Capacity building for enhanced institutional ability to govern the sector effectively.

5.9 Ensuring, protecting and optimizing investments.

5.10 Public Private Partnership (PPP) in the most appropriate manner.

5.11 Public outreach for environmental and health related outcomes.

5.12 Establishment of an efficient, effective, affordable and accountable system for managing the water recycling form urban sewerage and septage management

6. OBJECTIVES

To overcome the shortage of water by recycling it and putting them for different purpose, so that the use of potable water should mostly be for drinking purposes. The re-use of water in a sizeable quantity up to a certain quality after proper treatment of water for non-drinking purpose and last but not the least scientifically disposal of the remaining waste is the object behind formulating this policy.

6.1 To ensure 100 percent wastewater recycling in cities/towns

6.2 To improve waste water supply service focusing on customer satisfaction, coverage, frequency and reliability

6.3 Supply of potable water that incurs large amount of money to be reduced and waste water to be used in non-drinking purposes.

6.4 Promoting and augmenting wastewater reuse for ensuring environmental sustainability by reducing burden on already stressed basin and aquifers and preventing their depletion.

6.5 Promoting wastewater reuse from sewage discharge leading to reduction in environmental costs and health hazards.

6.6 Wastewater reuse by ensuring resource conservation & preservation of sensitive eco-system and reducing pollutant loading.

All cities and towns of Jharkhand become totally sanitized, healthy and liveable and ensure sustain good public health and environmental outcomes for all their citizens with a special focus on hygienic and affordable sewerage facilities for the urban poor and women. All urban dwellers will have access to and use safe and hygienic sewerage or sludge facilities and arrangements.

7. COMPOSITION OF GREYWATER

7. Greywater from Bathroom

Water used in hand washing and bathing generates around 50 60% of total greywater and is considered to be the least contaminated type of greywater. Common chemical contaminants include soap, shampoo, hair dye, toothpaste and cleaning products.

7.2 Greywater from Cloth Washing Water

It is used in cloth washing generates around 25 - 35% of total greywater. Wastewater from the cloth washing varies in quality from wash water to rinse water to second rinse water. Greywater generated due to cloth washing can have faecal contamination with the associated pathogens and parasites such as bacteria.

7.3 Greywater from Kitchen

Kitchen greywater contributes about 10% of the total greywater volume. It is contaminated with food particles, oils, fats and other wastes. It readily promotes and supports the growth of microorganisms. Kitchen greywater also contains chemical pollutants such as detergents and cleaning agents which are alkaline in nature and contain various chemicals. Therefore kitchen wastewater may not be well suited for reuse in all types of greywater systems.

8. LEGISLATION AND GUIDANCE DOCUMENTS

The Waste water Policy should be read in accordance with the most current versions of the following: Legislation and document

8.1 Environmental (Protection) Act, 1986

8.2 The Environment (Protection) rules,1986

8.3 The water (Prevention and Control of Pollution) Act,1974

8.4 The water (Prevention and Control of Pollution) cess, Act,1974

8.5 The water (Prevention and Control of Pollution) Amended rules, 2011

8.6 The water (Prevention and Control of Pollution) Cess rules, 1978

8.7 The water (Prevention and Control of Pollution) Rules, 1975

8.8 National Urban sanitation Policy 2008

8.9 National Water Policy 2012

8.10 Quality standards suggested by Central Pollution Control Board and Jharkhand State Pollution Control Board.

8.11 Standards set by Bureau of Indian Standards (BIS)

9. WHAT NEEDS TO BE DONE

9.1 A Separate System: STPs water reuse and grey water reuse to encourage.

9.2 Water reclamation centers to reclaim water after treatment of domestic sewage and greywater.

9.3 Where water Reclamation centers are situated in the midst of residential area, these can be built under ground to avoid the problem odour and parks can be maintained on the roof of treatment facility.

9.4 One of the Scheme of treatment may be Grit chamber, Primary sedimentation tank, Reaction Tank, Secondary sedimentation tank, Chlorination Tank followed by sand filtration.

9.5 Reverse osmosis filtration may be used for tertiary treatment.

9.6 100% households, commercial area and industrial area to be covered for wastewater recycling

9.7 Sewerage and water supply activity should be coordinated.

9.8 Water tariff should be such as to discourage the people from wasteful use of water.

9.9 Provision of adequate wastewater collection and treatment facilities for all the cities and towns in Jharkhand.

9.10 Protection of the environment and public health in the areas affected by the proposed systems, especially, surface water and ground water.

9.11 Consideration of treated effluents as a source for reuse (irrigation/ industrial).

10. THE POLICY

10.1 On Resource Development

Wastewater is a perennial water source and shall form an integral part of renewable water resources and the State water budget. Each local body will consider it as a resource and make the plan for reuse as per the site conditions with the help of experts. All local bodies will make city wastewater reuse plan (CWP) for a period of 20 years considering future development and city development in line with city Master plan to avoid any conflicts in developing the city in the future.

Existing levels of wastewater services shall be maintained and upgraded where necessary to enhance public health and the environment and separate plan is to be prepared by local body as per their requirement. Treatment of wastewater shall be targeted towards producing an effluent fit for reuse in irrigation in accordance with WHO guidelines as a minimum. Reuse of treated wastewater in other purposes shall be subject to appropriate specifications. Coordination shall be maintained with the official bodies in charge of urban development to account for the treatment and disposal of their liquid wastes. Central treatment plants shall be built to serve semi-urban areas, and collection of wastewater can be made initially through trucking until collection systems are justified. Specifications and minimum standards as stipulated by CPHEEO shall be applicable for the use of septic tanks in urban areas. Particular attention shall be paid to the protection of underlying aquifers.

10.2 On Resource Management

It is highly imperative that Urban Local Body shall develop and manage wastewater systems as well as the treatment and reuse of the effluent.

A basin management approach shall be adopted where possible. The use of treated wastewater from sewerage, households, commercial and from industrial application shall be given the highest priority and shall be pursued with care. Effluent quality standards shall be defined based on the best attainable treatment technologies, and calibrated to support or improve ambient receiving conditions, and to meet public health standards for end users. Key factors will include the location of the discharge, its proximity to wells, the type of receiving water, and the nature and extent of end uses. Industries shall be encouraged to recycle part of its wastewater and to treat the remainder to meet standards set for ultimate wastewater reuse or to meet the regulations set for its disposal through the collection systems and/or into the receiving environment. Wastewater from industries with significant pollution should be treated separately to standards allowing its reuse for purposes identified by the city or to allow its safe disposal or water recharging. Consideration shall be given to isolating treated wastewater from surface and ground waters used for drinking purposes, and to the blending of treated effluent with relatively fresher water for suitable reuse. Urban Local Bodies can engage Experts from Government Engineering Colleges of Jharkhand NITs/Engineering colleges.

10.3 On Wastewater Collection and Treatment

10.3.1 **City Plan :** A proper and updated city plan is an essential pre-requisite for proper planning and design of all utilities and more so for the Sewerage Systems and water recycled from houses. The State shall endeavor to have proper digital city maps showing the levels prepared through modern available technology. The digital city maps should clearly show the city feature over ground and underground including all utilities. Geographical Information System (GIS), Ground Penetrating Radar (GPR), Total station etc. tools may be used for preparation of city map. The city maps should be updated for every 5 years. An effective and comprehensive GIS based data base and Management Information System correctly mapping the assets, user base and status of operations shall be established.

10.3.2 **Design Period:** Every city has to prepare a City Wastewater Recycling Plan (CWP) for next 20 years along with 5 year short term plan. The CWP for the city should take into account the likely changes in the city in next 20 years and plan for them and will be according to city Master plan. The Detailed Project Report (DPR) for recycling should be in accordance to CWP. The design of the sewers and planning of space should be for the 30 year projection requirements and for recycling from households and commercial establishments. However, the units which can be developed in modules (e.g. Sewage Treatment Facility, sewerage Pumping machinery, on site treatment facilities, etc.) can be designed for appropriate shorter period. Earmark of land for Sewage Pumping Station (SPS) and Sewage Treatment Plant (STP) should be done for all Urban Local Bodies (ULBs) and appropriate land allotment shall be done by Development Authority/Urban Improvement Trust/State Govt. on priority.

10.4 On Reuse of Treated Effluent and Sludge

10.4.1 Treated wastewater effluent is considered a water resource and is added to the water stock for reuse.

10.4.2 Blending of treated wastewater with fresh water shall be made to improve quality where possible.

10.4.3 Crop nutrient requirements shall be determined taking into consideration the prevailing effluent quality. Overuse of nutrients shall be avoided.

10.4.4 Accumulation of heavy metals and salinity shall be monitored, managed and mitigated. Leaching of soils shall be advocated by the irrigation authorities.

10.4.5 Treated effluent quality should be monitored and users alerted to any emergency causing deterioration of the quality so that they will not use such water unless corrective measures are taken.

10.4.6 Studies should be conducted and projects designed and implemented to store the excess treated wastewater in surface reservoirs but artificial recharge is not permitted. Due attention shall be given to the quality of treated and groundwater and the characteristics of the strata.

10.5 Industry:

Industrial reuse of reclaimed wastewater represents major reuse next only to irrigation in both developed and developing countries. Reclaimed wastewater is ideal for many industrial purposes. Where effluent is to be used in the industrial processes, it should be the responsibility of the industry to treat it to the quality standards required. Wastewater is to achieve adequate quality for reuse as cooling water.

The membrane filtration system can remove all suspended solids, faecalcoli forms, and giardia cysts. It could also significantly reduce human enteric viruses such as reovirusand enterovirus.

10.6 Industrial uses for reclaimed water include:

10.6.1 Evaporative cooling water:

10.6.1.1 once-Through cooling system

10.6.1.2 Re-circulating cooling system

10.6.1.3 cooling water quality requirements

10.6.2 Boiler –Feed water- The use of reclaimed water differs little from use of conventional public supplies for boiler-feed water,as both require extensive additional treatment quality requirement for boiler feed make up water are dependent upon pressure at which boiler is operated.

10.6.3 Industrial process water- Suitability of reclaimed water for use in industrial process depends upon particular use like-

10.6.3.1 Pulp and paper

10.6.3.2 chemical industry

10.6.3.3 Textile industry

10.6.3.4 Petroleum and coal

10.7 Re-use Options:

The following options or re–use of effluent have been identified: In general, public health concern is the major issue in any type of reuse of wastewater, be it for irrigation or non-irrigation utilization, especially long term impact of reuse practices. It is difficult to delineate acceptable health risks and is a matter that is still hotly debated. Potential reuse of wastewater depends on the hydraulic and biochemical characteristics of wastewater, which determine the methods and degree of treatment required. While agricultural irrigation reuses, in general, require lower quality levels of treatment, domestic reuse options (direct or indirect potable and non-potable) reuses need the highest treatment level. Level of treatment for other reuse options lie between these two extremes. The reuse options may be (artificial recharge of aquifers is not permitted):

10.7. Irrigation

10.7.1.1 Agriculture and forestry

10.7.1.2 Landscaping

10.7.2 Fish – farming

10.7.3 Industry

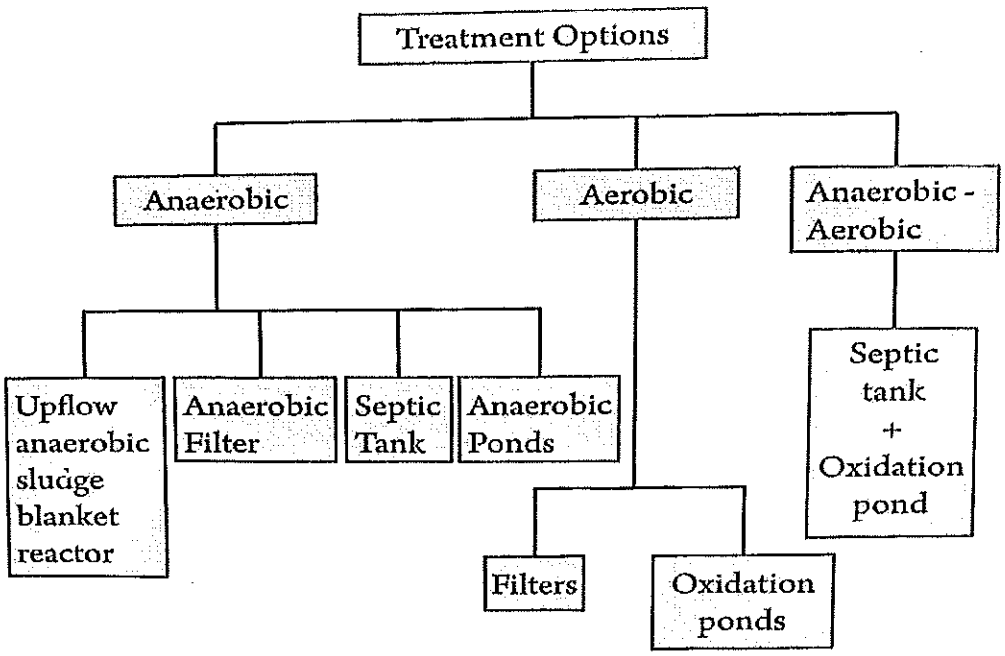
10.7.4 Non-potable Domestic Reuse:

The detailed project report should clearly define the best reuse option particular to town and strategy to obtain it. Action plan with clarity should be the part of Detailed Project Report (DPR), while preparing sewerage Projects. Before deciding the reuse of treated waste water authority must full fill the water quality norms and its legal implications.

Governing local body can sell the treated waste water and digested sludge to generate the revenue.

11. GREYWATER TREATMENT OPTIONS

Greywaterreuse methods can range from low cost methods such as the manual bucketing of greywater from theoutlet of bathroom, to primary treatment methods thatcoarsely screen oils, greases and solids from the greywater before other uses, to more expensive secondary treatment systems that treat and disinfect the greywater to a high standard before using it further. The choice of system will depend on a number of factors including whether a new system is being installed or a disused wastewater system is being converted because the household is connected to sewer.



11.1 Components of Greywater Treatment Systems

A number of technologies have been applied for greywater treatment worldwide varyingin both complexity and performance. The following in general greywater systems considered :-

11.1.1 Primary treatment pre-treatment to secondary treatment:

11.1.1.1 Screening

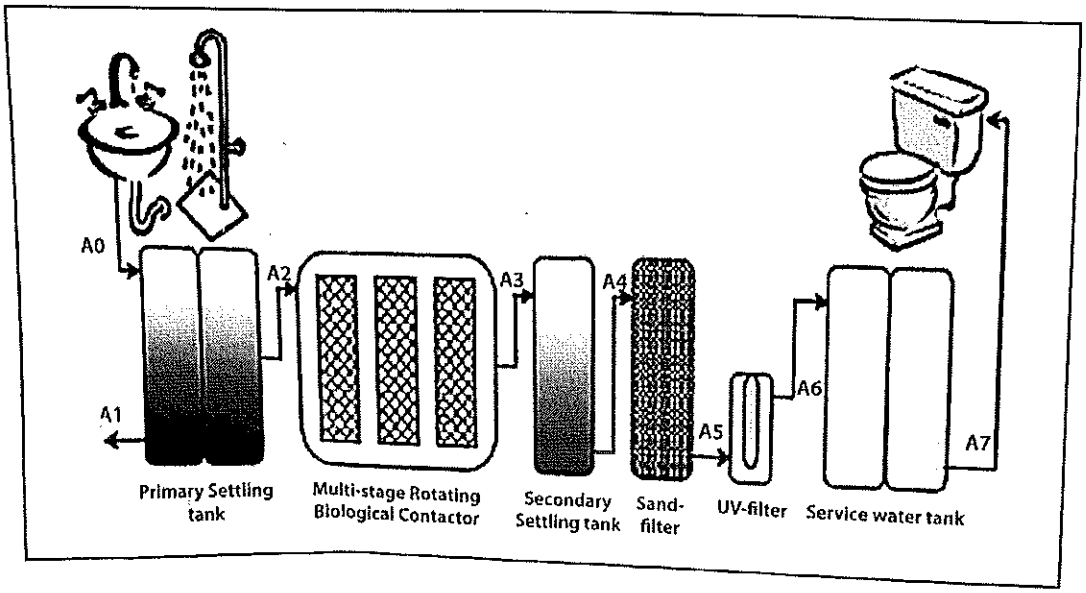
11.1.1.2 Equalization

11.1.2 Secondary treatment -1

11.1.2.1 Gravel filtration

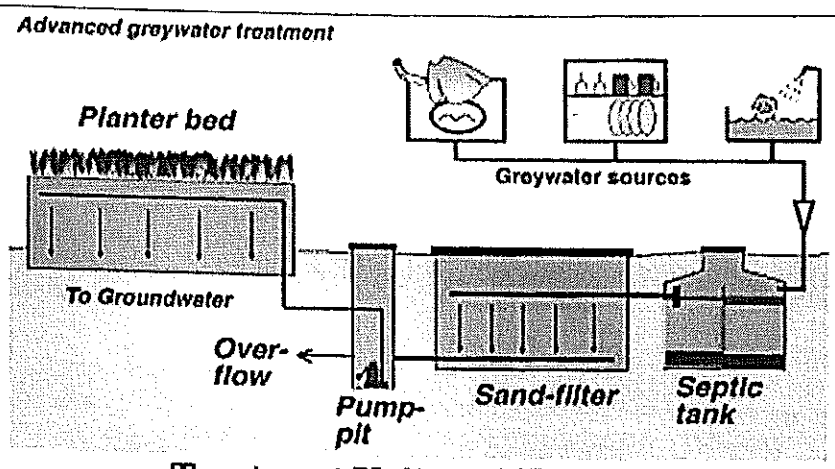
11.1.2.2 Sand filtration

11.1.2.3 Chlorination



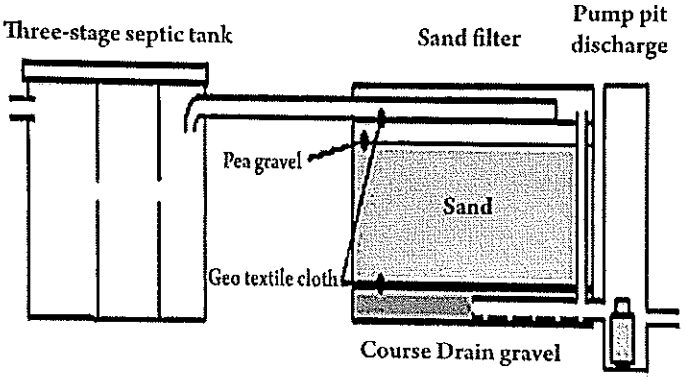
11.1.3 Secondary treatment -II.

Broken brick, Charcoal, Chlorination, Treated greywater

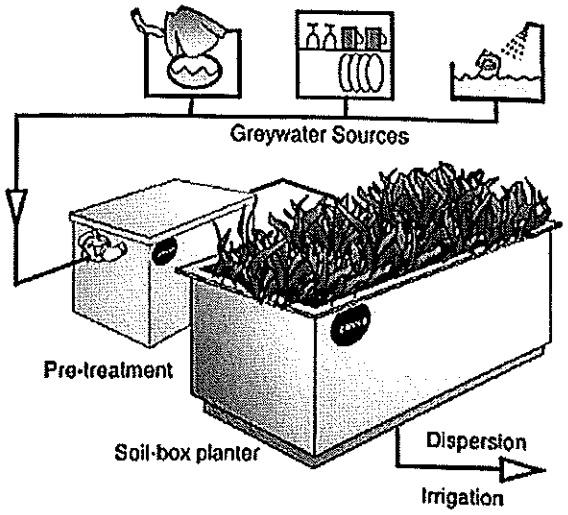


Treatment Units and Functions

Anaerobit to aerobic treatment



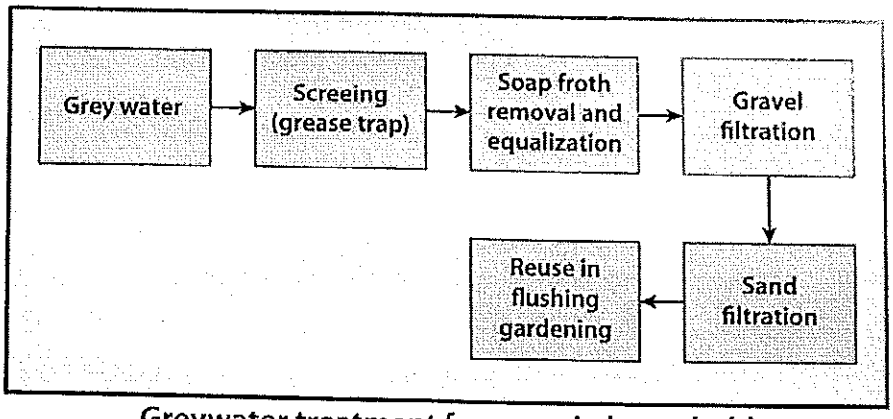
Aerobic Pre-treatment -- suitable for showers, hand-washing and laundry* water treatment.



11.2 Household level Greywater Treatment and Reuse System

In water scarce areas, with specific treatment the greywatercan be cleaned and reused not only for gardening but for other use also.

Technological processGreywater treatment process at the household level involves screening (grease and silt removal), soap froth removal, equalization and filtration. Flow diagram of hcusehold based greywater treatment system is shown below



Greywater treatment for reuse in household

Advantages:

11.2.1 Reduces fresh water requirement

11.2.2 Prevents greywater stagnation

11.2.3 Prevents vector breeding

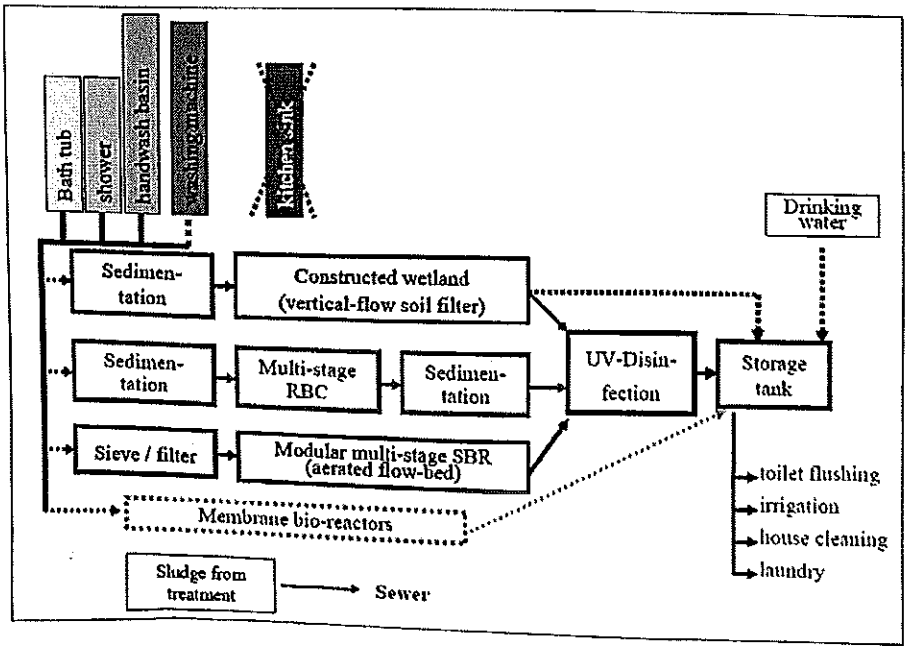
11.2.4 Use in flushing toilets to make toilets functional

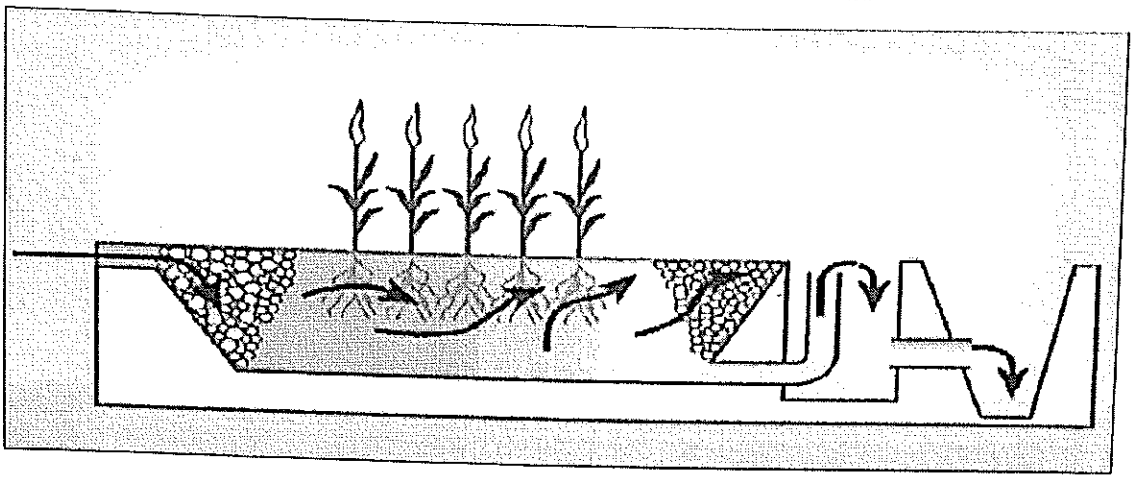
11.2.5 Use of greywater in gardening

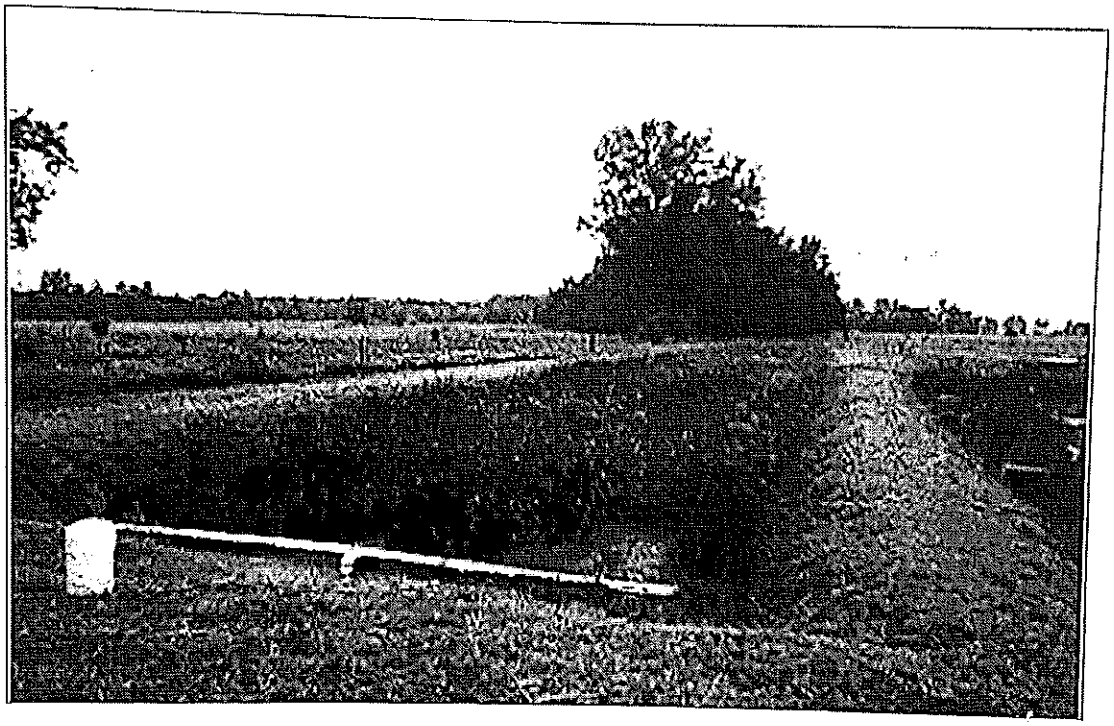
11.2.6 Minimal risk to users of greywater as it incorporates principles of water safety.

11.3 Constructed wetlands:

Constructed wetlands have been used successfully in the past for the treatment of wastewaters. Physical, chemical, and biological processes combine in wetlands to remove contaminants from wastewater. Greywater treatment is achieved by soil filtration in reed-bed systems which reduces the organic load of the greywater considerably, in addition to decreasing the concentrations of faecal bacteria. If properly designed, these systems would produce a clear and odourless effluent, which can be stored for several days without the need for disinfection.







12. ON PRICING FINANCING AND INVESTMENT

12.1 In view of increasing marginal cost of wastewater collection and treatment, wastewater charges, connection fees, sewerage taxes and treatment fees shall be set to cover at least the operation and maintenance costs. It is also highly desirable that part of the capital cost of the services shall be recovered. The ultimate aim is for a full cost recovery.

12.2 Appropriate criteria in order to apply the "polluter pays" principle shall be established.

12.3 Different charges for different areas may be applied. This shall be assessed for each geographical area as a function of end uses and effluent quality and will be subject to economic and social considerations.

12.4 Because of the limited financial resources available to Government of Jharkhand, setting investment priorities in wastewater will be compatible with government investment plans.

12.5 Criteria for prioritizing investments in the wastewater sector shall take into account the current and future needs of the state, needs to expand wastewater systems in urban areas and to provide wastewater systems to smaller towns and villages.

12.6 Priorities of wastewater projects shall not be disconnected from water supply projects and urbanization in general. Decisions will be made concerning them to attain optimum solutions to the need for services, availability of finance and availability of trained manpower.

12.7 Treated effluent shall be priced and sold to end users at a price covering at least the operation and maintenance costs of delivery.

12.8 It is the intention of the Government, through private sector participation, to transfer management of infrastructure and services from the public to the private sector, in order to improve performance and upgrade the level of service.

12.9 The role of the private sector will expand with management contracts, concessions and other forms of private sector participation in wastewater management.

12.10 The concepts of Built Operate Own/Built Operate Transfer shall be entertained, and the impact of such concepts on the consumers shall be continually addressed and negative impacts mitigated.

12.11 The private sector role in reuse of treated effluent shall be encouraged and expanded.

12.11.1 The costs will depend on the system/technology adopted for collection of sewerage and treatment and the administration costs. It is important that the full cost of the service is assessed for each urban area instead of adopting a typical cost assessment. The full cost shall cover the following:

12.11.1.1 Institutional aspect of the sanitation service e.g. the management information systems, accountancy and finance management, billing and collection, customer services, etc. and oversight activities.

12.11.1.2 Operating, maintaining (on a planned maintenance basis), repairing replacing and extending sanitation service physical infrastructure.

12.11.1.3 Keeping updated infrastructure and customer data on a GIS base.

12.11.1.4 Managers, staff, vehicles, equipment and consumables associated with above.

12.11.1.5 Consumable like chemicals etc.

12.11.1.6 Power charges.

12.11.1.7 Spare Parts.

12.11.1.8 Any other O&M contract amount

12.11.2 The urban local bodies are proposed to have following sources funds for O&M :-

12.11.2.1 The O&M cost will be met from the Government grants and contribution of the beneficiaries.

12.11.2.2 Revenue from sale of treated waste water.

The government in town policy shall include the provision of the recovery of full capital cost of lying sewerage system and prorate cost of STP for new colonies. It shall be mandatory for the ULBs to adhere to minimum 20% reuse and recycling of treated waste water. The treated waste water may be sold at a rate as decided by adopting transparent procedure as decided by State Government.

12.12 Public Private Partnership (PPP)/Engineering Procure Construct (EPC) and Operational &Maintenance (O&M) Contract

As there is budget constraint from the Central and the state side the option of the Sewerage Project through Public Private Partnership (PPP) will be explored. In case the PPP mechanism is not workable then the EPC mechanism will be explored and long term O&M Contract will be done.

13. ON STANDARDS, REGULATIONS AND QUALITY ASSURANCE

13.1 Particular attention shall be focused on adopting and enforcing effluent and sludge standards for municipal and industrial wastewater treatment plants and for discharges from industries, laboratories, hospitals, slaughterhouses and other businesses.

13.2 Extensive and comprehensive monitoring programs shall be developed. Influent to and effluent from the plants and throughout watercourses shall be measured and monitored against all appropriate parameters to ensure that public health objectives and treatment efficiency goals are attained.

13.3 Observation wells shall be installed near the treatment plants to monitor groundwater quality where necessary, and to mitigate adverse impacts where and when needed.

13.4 Data collected from the monitoring process shall be entered and stored, processed and analyzed through computer software, and results published periodically.

13.5 Roof and storm water connections to public sewers shall be prohibited. Collection of storm water shall be done separately and will be the subject of water harvesting.

13.6 Effluent and sludge standards for the disposal of hazardous liquid wastes shall be defined to ensure the safe disposal of such wastes.

13.7 State Pollution Control Board/ Central Pollution Control Board regulations for disposal norms shall be mandatory.

13.8 Industrial waste water is not allowed to disposed off in the sewer line. ULB can issue notification for penalties to be imposed on the such industrial units.

13.9 Laboratories shall be maintained and properly equipped to provide services and reliable data needed to ensure enforcement of and adherence to standards and regulations.

14. ON LEGISLATION AND INSTITUTIONAL ARRANGEMENTS

14.1 Legislation and institutional arrangements for the development and management of wastewater shall be periodically reviewed. Gaps shall be filled, and updating of the institutional arrangements with parallel legislation shall be made periodically to cope with varying circumstances and for this government shall notify an agency giving full power to take necessary action in this matter.

14.2 The role of the Government shall be fine-tuned and its involvement reduced to be regulatory and supervisory. Involvement of the stakeholders in wastewater management and support shall be introduced and expanded.

14.3 On Public Awareness

14.3.1 The public shall be educated through various means about the risks associated with the exposure to untreated wastewater and the value of treated effluents for the different end uses.

14.3.2 Programs on public awareness shall be designed and conducted to promote the reuse of treated wastewater.

14.3.3 Public awareness campaigns shall also be waged to educate the public on the importance of domestic hygiene, wastewater collection, treatment and disposal.

14.3.4 It is observed that the system is dependent on the appreciation of the beneficiaries to the advantages and importance of the system to them and thereby working together towards making it successful. The co-operation is vital for following areas:

14.3.4.1 Protecting the system from getting choked due to entry of extraneous material in the sewer system. A vigilant public will help prevent this.

14.3.4.2 The sewerage system yield full benefits or disease protection when there is 100% connectivity.

14.3.4.3 It is important that the beneficiaries appreciate the benefits and pay for their upkeep. The systems require proper upkeep and the cost associated with maintenance and upkeep should at least be recovered from the beneficiaries. The principal of the polluter pays will be adopted only by an enlightened and participating public.

14.3.5 A conscious campaign has to precede the planning and implementation of the sewerage Systems. ULB, Non Government Organizations and local neighborhood committees could give the process a thrust.

14.3.6 A public participation process will not only aid in identifying potential consumers but also serve as a public education program. Potential users will be mainly concerned with the quality of reclaimed water and reliability of its delivery and the constraints in using reclaimed water. Also, connection costs or additional sewerage treatment cost might affect their ability to use the product. Consultations with various stake holders will aid in structuring of tariff and discounts for adopting reuse technologies, awareness on dual piping system, water conservation and safety issues.

14.3.7 Municipal Bodies should decide and pass resolution regarding sewer connection charges. The provision should be widely publicized

14.3.8 Series of 'Sewer connection camps' may be organized. The time and venue should be publicized widely to inform residents. The days, time and venue should be to suit the convenience of public.

14.3.9 Ensure that all Government offices and schools are connected.

14.4 On the Human Resources Development & On Research and Development:

14.4.1 Capabilities of human resources in the management of wastewater shall be enhanced through training and continuous education. Work environment shall be improved and incentives provided.

14.4.2 Establishment of State Water & Waste water Training Center at state level. It will help in training of human resources in this sector.

14.4.3 Human resources performance will be continually appraised in order to upgrade capabilities, sustain excellence and provide job security and incentives to qualified individuals with excellent performance.

14.4.4 Applied research on relevant wastewater management topics shall be adopted and promoted. Topics such as the transfer of wastewater treatment technologies, low cost wastewater treatment technologies, reduction of energy consumption and others will receive adequate support.

14.4.5 Cooperation with specialized centers in the country and abroad shall be advanced, and raising of funds for this purpose shall be supported.

14.4.6 Transfer of appropriate technology suited for local conditions will be a primary target for the development activities and for adaptive research.

14.5 On Selected Priority Issues

14.5.1 To the extent that design capacities of wastewater treatment plants permit, priority of collection and house connections shall be accorded to expansion of urban areas served by treatment facilities. Users willing to contribute to the cost of the services in addition to fees and charges set by laws and regulations shall also be given priority.

14.5.2 Where design capacities of treatment facilities and of conveyance systems are approached or exceeded, priority shall be given to the expansion of such capacities.

14.5.3 Priority shall be accorded to situations and locations where waste-water disposal practices threaten the environmental integrity of freshwater resources, and where performance of cesspools and percolation pits pollute underground water aquifers.

More awareness campaigns will help to spread the work. The civic body should make it mandatory for new constructions to have a separate system to collect grey water.

15. OPERATION AND MAINTENANCE

There are several important factors that need to be considered when planning wastewater plants and options which will have a direct impact on O&M and monitoring. Since O&M aspects are important for the overall long-term success of the programme, O&M planning, including the financial provision of funds, should be included in the terms of references for the design of each plant. Furthermore, the O&M plan should be reviewed and approved alongwith engineering designs and specifications, including the operation and maintenance cost:

15.1 location of the wastewater treatment plants and its proximity to residential areas;

15.2 volumes and schedules of wastewater collection;

15.3 degree of mechanisation of technologies; and

15.4 final enduse or disposal of reuse

15.5 running it on PPP mechanism and charging the different users

16. STATE-LEVEL IMPLEMENTATION STRATEGY

16.1 State Urban Development Agency will develop and issue a Wastewater Implementation Strategy and Plan Guidelines. These Guidelines will provide an overall state-level framework, objectives, timelines and implementation plans to the ULBs. The Implementation Strategy will cover aspects such as implementation targets, framework for engagement of the private sector, training and capacity building, behavior change and social communication, M&E framework, specific roles and responsibilities of various entities, guidelines to develop ULB-level plans, and funding mechanisms.

16.2 ULB-specific Wastewater Strategy and Action Plan conforming to the State Policy will be developed by each ULB based on the State Faecal Sludge & Septage Management Implementation Strategy and Plan Guidelines.

16.3 How the policy will be executed in the in the cities/towns. Three phase approach will be designed to implement the policy.

16.3.1 In the financial year 2017-18 it will be implemented in all the notified Nagar Nigam.

16.3.2 In the financial year 2018-19 it will be implemented in all the notified Nagar Parisad.

16.3.3 In the financial year 2019-20 it will be implemented in in all the notified Nagar Panchayat.

All efforts will be done to follow the execution method outlined above for the cities towns, however, depending upon the centre/state programme and budget availability the cities/ towns might be chosen from any category in any financial year. Due to environmental factors the cities/towns may also be chosen out of these to implement the plan.

17. MONITORING & EVALUATION

17.1 At the state level, State Urban Development Agency (SUDA)/ Jharkhand Urban Infrastructure Development Corporation (JUIDCO) will adopt San-Benchmark framework for revised service level benchmark for sanitation that assess performance of citywide waste water recycling and sewage water treatment.

17.2 State Urban Development Agency (SUDA) / or JUIDCO will develop an M&E framework to measure cities' performance, and also devise data collection and reporting systems using indicator framework developed for San-Benchmark. This will be aligned with the 14th Finance Commission condition of publishing the service level benchmark to avail performance grant. UI.Bs will develop robust reporting format to track compliance of the various stakeholders with outcomes and process standards.

17.3 A cell will be created inside JUIDCO to monitor and evaluate the wastewater management operation. The cell will be created by funds from external agency funding or from the funds of 14th finance commission or through the state budget.

17.4 A Management Information System (MIS) will be developed accordingly to monitor the progress.

18. TAX INCENTIVE

The tax incentive will apply in following conditions:

18.1 All the Individual Households of RWAs will treat their waste water in a decentralised manner and reuse it inside their colonies as permissible will get a rebate of 10% in the property tax.

18.2 All the new apartments which will be constructed and compulsory treat and reuse the treated waste water in their apartment, will get a 10% rebate of 10%of the construction permit fee, or Rs. 2,00,000/- (Two lakhs) whichever is less.

18.3 All the new malls, big hotels, industries, clubs, colleges, universities, hospitals, sports stadiums etc. which will be constructed will compulsory treat and reuse the treated water. In doing so they will get a rebate of 10 % of the construction permit fee, or Rs. 2,00,000/- (Two lakhs) whichever is less.

18.4 A separate head of the tax namely called 'Waste Water Tax' will be created which may be levied in the property tax for the operation and maintenance of the sepatge.

19. POLICY EVALUATION:

19.1 Policy may be reviewed as and when required for assessing its effectiveness and making changes if necessary.

19.2 This policy shall come into force from the date of issue of this resolution.

20. POWER OF THE STATE GOVERNMENT

20.1 Notwithstanding anything contained in the foregoing paragraphs of the Jharkhand Waste Water Policy, 2017 the State Government by issuance of notification in the official gazette may amend or withdraw any of the provisions and / or the schemes mentioned herein above.

20.2 Interpretation - Should any doubt arise as to the interpretation of any of the provisions of these Rules, the matter shall be referred to the Urban Development and Housing Department, whose decision thereon shall be final.

Order: It is hereby ordered that the copy of this resolution be published in the Special Gazette and wide publicity be given and circulated among all Department/ Head of the Department.

By the order of the Governor of Jharkhand,

(Arun Kumar Singh)
Principal Secretary to Government

Memo No-Suda/Amrut/ Waste Water-Policy/38/2017/1899 Ranchi, Dated...27/4/17

Copy to : Copy of the resolution forwarded to the Superintendent, Government Press, Jharkhand, Ranchi for publication in the forthcoming issue of Government Gazette/Nodal officer, E-Gazette, Urban Development and Housing Department, Government of Jharkhand for information and necessary action.

Principal Secretary to Government

Memo No-Suda/Amrut/ Waste Water-Policy/38/2017/1899 Ranchi, Dated...27/4/17

Copy to : P.S to Minister, Urban Development and Housing Department/ All Additional Chief Secretary/ Principal Secretary/Secretary, Govt of Jharkhand/All Divisional Commissioners, Jharkhand/Director, SUDA / Director DMA/All Deputy Commissioners, Jharkhand / All Officers, UD&HD/ Municipal Commissioners/ Executive Officers/ Special Officers, urban local bodies for information and necessary action.

Principal Secretary to Government

Annexure – 2

RANCHI MUNICIPAL CORPORATION, RANCHI

{ENGINEERING SECTION}
KUTCHERY ROAD, RANCHI, PIN – 834001
e-mail :- support@ranchimunicipal.com

LETTER No.- 350(S&D) DATED :- 02/08/19.

From,

Municipal Commissioner
Ranchi Municipal Corporation,
Ranchi.

To,

Secretary to Government
Urban Development & Housing Department.

Sub:- **Regarding Submission of the action plan for utilization of treated sewage water from the under construction STP under RMC.**

Ref:- Your Letter No- 237 date-25-07-2019

Sir,

This has the reference of the said letter No- 237 date- 25-07-2019 through which we have been directed to submit the action plan for utilization of treated sewage water from upcoming 37 MLD Capacity STP under zone-I
The following is the status and proposed action plan for the treated sewage water from 37 MLD STP under construction.

(a) Status of Present construction of STP including SPS & Sewer lines - 45% Completed
(b) Expected date of completion - March 2020
(c) Regarding utilisation of treated sewage water, several round of meetings with NTPC Patratu has been held.

NTPC has requested for getting the entire 37 MLD treated water for their project at NTPC site patratu.

(d) On last meeting with them on 18-07-2019 following action plan was decided.
(e) NTPC will request JUIDCO for carrying deposit work in laying pipe line from, existing STP site to their plant site.
(f) NTPC will appoint a consultant of repute for DPR work and accordingly they will deposit the money with JUIDCO.
(g) NTPC requirement for this water will be after 2 to 3 years, all infrastructure will be readied in this period.
(h) RMC will ensure secondary treated water for which tariff will be decided and paid to RMC by NTPC.
(i) NTPC will be responsible for tertiary treated water required for their plant.

This is for your information and action please.

Yours faithfully

Municipal Commissioner
Ranchi Municipal Corporation, Ranchi

स्वच्छ भारत
एक कदम स्वच्छता की ओर

Government of Jharkhand
Urban Development and Housing Department

Minutes of Meeting of discussion on Patratu Vidyut Utpadan Nigam Ltd. (PVUNL) proposal of utilization of the entire 37.5 MLD of treated sewage water produced from the under construction STP at Ranchi under RMC held on 18.07.2019 at 12:00 Hrs. under the Chairmanship of Secretary, UD&HD, Govt. of Jharkhand.

Attendance: Enclosed.

The Meeting started with a welcome note from the Secretary, UD&HD.

1. GM (Projects), NTPC has briefed the proposal of PVUNL of intending to use treated sewage water from RMC's upcoming 37.5 MLD STP at Bargai, Ranchi for its under-construction Power Plant at Patratu for Non-potable water applications.

2. PVUNL requires tertiary treated sewage water in place of secondary treated sewage water for which the current under construction STP is designed.

3. PVUNL requested the RMC/UD&HD to do the laying of pipeline and installation of Tertiary Treatment Plant on behalf of PVUNL and all the cost (both Capex & Opex) involved in installation of tertiary treatment plant and laying of pipeline for supply of treated sewage water from STP to the Plant shall be borne by PVUNL.

4. Municipal Commissioner, RMC informed that pipeline from the STP site to Patratu Thermal Power Plant involves laying outside the Ranchi municipal boundary therefore he suggested to involve JUIDCO in the planning and execution of all the necessary infrastructures required to supply treated sewage water from STP to the Plant. It was agreed upon by everyone.

5. Secretary directed PVUNL, RMC & JUIDCO to jointly prepare the Terms of Reference (ToR) that should cover the complete planning, topographical survey, land identification, land acquisition plan, assistance in applying for various clearances (like Environmental, Railway, Road, Forest), Impact assessments, detailed estimate, BOQ etc. based upon which JUIDCO can appoint the Consultant for preparation of DPR and to take action for all approvals for its execution.

   (Compliance: PVUNL, RMC and JUIDCO)

6. PVUNL wants to sign a formal agreement with RMC and JUIDCO in which Secretary directed the PVUNL to discuss with RMC & JUIDCO and accordingly submit the draft agreement format that should be inline with the agreements that has already been done by NTPC with other Municipal Corporations.

   (Compliance: PVUNL)

7. Secretary informed PVUNL that after submission of Draft Agreement format, the approval of Hon'ble Minister, UD&HD on the proposal will be taken and thereafter further necessary action may be taken in this regard.

The meeting ended with vote of thanks.

19/7/19

(Ajoy Kumar Singh)
Secretary to Govt.

SMCG/UD&HD/Supply of treated water to PVUNL/2019/25...229.....date: 19/07/19

Copy To:- Municipal Commissioner, RMC/ DC, Ramgarh/ DC, Ranchi/Project Director (Technical), JUIDCO Ltd./GM (Project), NTPC/ All the representatives present in the Meeting.

19/07/19

Deputy Director, SUDA

पतरातु विद्युत उत्पादन निगम लिमिटेड
PATRATU VIDYUT UTPADAN NIGAM LTD.
(A subsidiary of NTPC in Joint Venture with JBVNL)
पतरातु / PATRATU

सुदर्शन चक्रबर्ती
मुख्य कार्यपालक अधिकारी
Sudarsan Chakrabarti
Chief Executive Officer, PVUN

Ref: 9585\999\STP-01/

Date: 22.06.2019

27 JUN 2019
1433

To,
The Secretary,
Urban Development
Govt. of Jharkhand, Ranchi

Subject: Supply of Treated Sewage water from STP, Ranchi of RMC to Patratu (3x 800 MW) STPP Plant of PVUNL

Dear Sir,
Patratu Vidyut Utpadan Nigam Ltd (PVUNL), a Joint Venture Company of NTPC Ltd. & JBVNL (Jharkhand Bijli Vitran Nigam Ltd) is constructing a 3 x 800 MW Coal Fired Power Plant at Patratu (PSTPP) situated in the Ramgarh District of State Jharkhand.

The water requirement of 27 Cusecs for the proposed Power plant is envisaged to be met from Patratu Dam on Nalkari River and the related work for the same is under way.

However, as per Government of India Guidelines and also one of the conditions made in Environment Clearance for Patratu Super Thermal Power Project at Patratu, PVUNL needs to explore the possibilities of using Treated sewage water from the Sewage Treatment Plant of Municipality / local bodies / similar organizations located within 50 km radius of the Power project to minimize the water drawl from surface water bodies.

In view of the above, NTPC / PVUNL approached Ranchi Municipal Corporation (RMC) in Oct-2016 to explore the possibility of using Treated sewage water from its upcoming 37.5 MLD STP at Bargai Ranchi.

RMC in the said meeting agreed to supply the secondary Treated sewage water to PVUNL.
Subsequently, a few rounds of discussions (the latest discussions held in February 2019 and in first week of June 2019) between PVUNL and RMC have taken place regarding detailed modalities / formal agreement with respect to the said work. However, since the cross-country pipeline from the said STP at Ranchi to Patratu Thermal Power Plant involve considerable length (approx. 50 Kms which will need a survey) criss-crossing various municipal / civic areas & districts, it is thought prudent to approach your good office regarding the matter.

Contd. page ..2/-

Office: Patratu Vidyut Utpadan Nigam Limited, Patratu, P.O: PTPS Patratu, Distt. Ramgarh, Pin - 829119 (Jharkhand) Tel. No. 06553-286031, Email: sudarsanchakraborty@ntpc.co.in

The salient points of PVUNL's proposal regarding the said work are brought out below for your kind consideration:

- PVUNL intends to use treated sewage water from RMC's upcoming 37.5 MLD STP at Bargai (Ranchi) for its under construction Power Plant (3X800 MW) at Patratu for Non-potable water applications.
- Further, in line with Draft Model Agreement prepared by CEA (Central Electricity Authority), Ministry of Power, GOI for use of Municipal sewage treated water for non-potable use by power industry/plant, PVUNL requested RMC to look in to the possibility of providing Tertiary treated sewage water to PVUNL in place of secondary Treated sewage water. It may also be noted that cost of Tertiary treatment plant (which is an additional requirement for use of treated water in power plant and can be installed at either at STP end or at Power plant end) both Capex and Opex would be borne by PVUNL.
- PVUNL is to consume the entire 37.5 MLD of treated water from the STP.
- PVUNL request RMC/ Ministry of Urban development (MOUD), GOJ to provide treated water to PVUNL at our Plant's door-step. We request RMC/ MOUD(GOJ) to do this job on behalf of PVUNL on deposit work basis i.e. entire cost (both Capex and Opex) towards transportation of treated sewage water to our plant premises shall be borne by PVUNL.
- The cost of supply of treated water (Capex and Opex) associated with entire work pertaining to transportation of treated sewage water to plant end will be duly approved from CERC (Central Electricity Regulating Authority). The cost will be discovered through transparent bidding process by RMC/MOUD(GOJ) either in EPC mode or PPP mode in line with the model followed in Municipalities already in other states for NTPC.
- The minimum period of agreement for supply of treated sewage water shall be for 25 years from the date of start of operation & commencement of supply of treated sewage water to PVUNL by RMC. Renewal of agreement beyond 25 years shall be on mutually agreed terms.

Kindly note since the construction of the project has already been started since March 2018, the transmission pipeline works needs to be started at the earliest.

In view of the above, we request your kind support and direction for execution of the transmission pipeline works by RMC/MOUD(GOJ) on deposit work and an early confirmation in this regard will be highly appreciated.

Subsequently, a formal agreement between RMC/MOUD(GOJ) and PVUNL can be signed at any convenient time as has been done with other States.

With Warm Regards.

(Sudarsan Chakrabarti)
Chief Executive Officer, PVUNL

RECORD NOTES OF DISCUSSION

Apreliminary discussion was held between Ranchi Municipal Corporation, Ranchi and NTPC limited on 14th October 2016 at the office of Municipal Commissioner RMC -Ranchi on the issue of providing Sewage treated Water from Ranchi City Sewage Treatment Plant for NTPC - Patratu STPP (3x800 MW) project.

Presence

Ranchi Municipal Corporation, Ranchi	NTPC limited
Shri Prashant Kumar, IAS,	Soumitra Bhattacharyya,
Municipal Commissioner	AGM(PE – C&I), Proj Manager(Engg)
	EOC NOIDA
Shri Suresh Paswan, Chief Engineer	M.K. Asthana,
	AGM(PE-Mech, WS), EOC NOIDA
Shri Bijay Kumar Bhagat, Superintending Engineer	
Shri U.N. Tiwary, Executive Engineer	

Followings are the record notes of discussions in brief

1 NTPC informed that as per the Government guidelines, NTPC needs to explore the possibilities of using Sewage Treated Water from STPs in Ranchi City for the upcoming 3x800 MW Patratu STPP.

2 The preliminary date sought by Municipal Comissioner, RMC- Ranchi about quantity of water, expected water quality (chemistry), preliminary source of water etc. for the proposed units (3x800MW) was provided by NTPC.

3 Municipal Commissioner, RMC-Ranchi informed that they have already awarded the contract of sewage treatment work to M/s Jyoti buildtech – Lucknow and work on several fronts in different parts of Ranchi is in progress.

The land where the Sewage Treatment Plant will come is already acquired. It will come at Bargai (near Booty Road) and demarcation of land is already done. The proposed location was visited by NTPC along with engineers of Municipal Corporation of Ranchi

Municipal Commissioner, RMC, Ranchi further informed that the proposed Sewage Treatment Plant is of 37.5 MLD capacity and expected to be ready by 2018 and they are ready to provide Sewage Treated Water (after Secondary Treatment) to desired chemical quality to NTPC. They further informed that the economics of water treatment will be further worked out by them and the same shall be further discussed with NTPC

4 NTPC requested RMC to set up the tertiary treatment plant as required based on the secondary treatment plant output quality for meeting the water quality requirement of power plant make up at STP complex only and also requested RMC to lay the cross country pipeline of tertiary treated water from STP complex to the doorstep of Patratu Station of NTPC necessary CAPEX and OPEX towards the same will be borne by NTPC. Further economics regarding this will be discussed between NTPC and RMC for drawing up the final agreement and terms and conditions.

Hence NTPC requested RMC to float a separate open tender for TTP and associated delivery pipelines and pumping also to arrive at the discovered rate of water per KL basis to be charged by RMC to NTPC. (NTPC needs this for taking up suitably subsequently with CERC as per the gazette notification for granting pass 'through in the electricity tariff to be charged from the consumer)

5 Municipal Commissioner, RMC suggested that it will be better if NTPC takes the secondary treated water through pipeline to their premises and do the tertiary treatment in their premises. Otherwise, the population on the way will tap tertiary treated water for drinking purpose causing loss to NTPC. Also it will be proper that NTPC does the pipeline laying work and erection of TTP on its own as it has better project handling and O&M capabilities.

RMC would like to charge NTPC for secondary treated sewage water based on mutual understanding and financial modelling.

Municipal Commissioner
Ranchi Municipal Corporation, Ranchi

Annexure - 3

कार्यालय, नगर निगम, आदित्यपुर

पत्रांक 2206

प्रेषक,

कार्यपालक पदाधिकारी
नगर निगम, आदित्यपुर।

सेवा में,

श्री अमीत कुमार
परियोजना निदेशक,
एस0एम0सी0जी0, झारखण्ड।

दिनांक 16.7.19

विषय : Regarding submission of the action plan or utilization of treated waste water from the STPs.

प्रसंग : भवदीय पत्रांक 1185 दिनांक 25.06.19।

महाशय,

उपर्युक्त प्रासंगिक विषय के संबंध में कहना है कि action plan for utilization of treated waste water from the STPs से संबंधित मांगी गई प्रतिवेदन तैयार कर पत्र के साथ संलग्न कर भेजी जा रही है।

सादर सूचनार्थ समर्पित।

अनु0 : यथोक्त।

विश्वजीत मुखर्जी
16/7/19
कार्यपालक पदाधिकारी
नगर निगम, आदित्यपुर

16-7-19

PROPOSED STRATEGY FOR REUSE OF TREATED SEWAGE WATER IN ADITYAPUR MUNICIPAL CORPORATION

Sewerage System in Adityapur Municipal Corporation

In the absence of a sewerage system, the mode of disposal of waste water consists of septic tanks followed by soak pits or open drains for release of septic tank effluent. The surface drains are basically storm water drains and indiscriminate disposal untreated septic tank effluent in to the storm water drainage system results in pollution of the surface water bodies and ground water. The Adityapur Municipal Corporation is proposing to construct STPs under AMRUT Scheme for effective abatement of pollution of River Swarnarekha and Kharkai and its ecological rejuvenation through release of minimum flows in the river. The designs conform to the NGRBA guidelines.

After a techno-economic feasibility study, a partly decentralized system is adopted consisting of 4 MLD STP for Zone-1, 20 MLD STP for Zone-2, 10 MLD STP for Zone-3 and 2 MLD STP for Zine-4. Sequential Batch Reactor (SBR) technology is adopted for the STPs.

Reuse of Treated sewage

As per the SLBMs defined by MoHUA, 20% reuse or recycling of the treated sewage is to be attained. In the present project it is proposed to reuse/ recycle up to 80% of the treated sewage. The estimated capacity of treated water reuse is 3200 cu.m at 4 MLD, 16000 cu.m at 20 MLD, 8000 cu.m at 10 MLD and 1600 cu.m at 2 MLD plant. The recycling is proposed to be done through water tankers for which a pumping station and 20 water tankers are required along with adequate manpower to operate the facility. The O&M revenue model indicates that by pricing the recycled water at reasonable rate, the maintenance expenditure of the STPs can be fully recovered.

The targeted application of recycled water is as follows :

1. Adityapur Municipal corporation for watering parks and gardens within the Municipal Corporation limits. The supply will be through water tankers of 5000/10000 liter capacity.
2. Local residential communities and institutions for gardening of their landscape zones. These include playgrounds, educational institutions, commercial establishments and residential colonies. The supply will be through water tankers of 5000/10000 liter capacity.
3. For flushing of toilets and urinals at public place, commercial establishments, educational and goverement institution. The supply will be through water tankers 5000/10000 liter capacity into specifically constructed sumps at the sites.
4. For industrial processes and construction activities the supply will be through a specially laid pipeline or water tankers.

Supply of recycled water to various sectors is likely to be as shown below:

1. Commercial establishments : 5%
2. Parks and Gardens: 10%
3. Government establishments: 5%
4. Educational establishment: 5%
5. Educational establishment : 5%
6. Industries: 70%

15-1-19

Annexure – 4

Letter No.: SPMG/UD&HD/NGT/REUSE/2019/16/.342.

Govt. of Jharkhand

Urban Development & Housing Department

From,

Ameet Kumar, IAS
Director, SUDA,
Jharkhand.

To,

Project Director (Technical),
JUIDCO Ltd., 3rd Floor, Pragati sadan,
Ranchi-834001, Jharkhand

Ranchi/Date 22/10/19...

Sub: Regarding preparation of Action Plan for utilization of treated waste water from the under construction STPs of Adityapur Sewerage Project.

Ref: Hon'ble NGT Case OA No. 148/2016 (MA no. 686/2017) matter of Mahesh Chandra Saxene Versus South Delhi Municipal Corporation &Ors. order dated 27.08.2019.

Sir,

With reference to the above-mentioned subject, in the matter OA No. 148/2016 (MA no. 686/2017) on the Hon'ble NGT Court regarding **"Utilization of treated waste water from the STPs"**. The State has submitted the Action Plan, that was taken up by the Hon'ble Court on dated 27.08.2019.

As you are aware with the fact that, under AMRUT scheme, the construction of 4 units of total 36 MLD capacity STPs at Adityapur is under construction and Since, JUIDCO is involved in the construction of Sewerage system at Adityapur from the beginning of the project and a full fledge team has also been deputed at site for the successful execution of work at site.

Therefore, It is requested to give necessary directions to your team to coordinate with the ULB, executing agency, PMC team of M/s TCE Ltd. & Industry Department and organize a meeting with the Industrial units currently operational in Adityapur Industrial Cluster and aware them on usage of treated waste water from the STPs in their respective Industrial units.

The response of the Industrial units will be submitted to the undersigned within one month.

This may please be given top most priority.

Enclosure: A/A

Yours faithfully,

22/10/19

(Ameet Kumar)
Director.

Memo No.:- SMCG/UD&HD/NGT/REUSE/2019/16/342 Ranchi, Date:- 22/10/19

Copy to:-Executive Officer, Adityapur Municipal Corporation / PMC Team of M/s TCE Ltd./Executing Agency directed to assist JUIDCOon arranging the meeting.

22/10/19

Director

Annexure – 5

साहिबगंज नगर परिषद् कार्यालय, साहिबगंज।

Email :- nagarparishadsahibganj@yahoo.in

पत्रांक 1861 /न0प0,

प्रेषक,

कार्यपालक पदाधिकारी,
साहिबगंज नगर परिषद्।

प्रेषित,

परियोजना निदेशक,
एस0एम0सी0जी0,
नगर विकास एवं आवास विभाग,
झारखण्ड सरकार, रांची।

साहिबगंज, दिनांक 30/07/2019

विषय :– STP से उपचारित अपशिष्ट जल के उपयोग की कार्य योजना समर्पित करने के संबंध में।

प्रसंग :– भवदीय पत्रांक – SMCG/UD&HD/NGT/REUSE/2019/16/183 Ranchi, Date - 25.06.2019

महाशय,

उपर्युक्त विषयक प्रासंगिक पत्र के आलोक में साहिबगंज नगर परिषद् क्षेत्रान्तर्गत STP से उपचारित अपशिष्ट जल के उपयोग की कार्य योजना इस पत्र के साथ संलग्न कर समर्पित की जा रही है।

भवदीय को आवश्यक कार्रवाई हेतु समर्पित।

विश्वासभाजन

30/7/19

कार्यपालक पदाधिकारी,
साहिबगंज नगर परिषद्।

D/: S.hari Office order प्लास्टिक की नहीं कोई शान!! मित्र दो इसका नाम निशान !!

PROPOSED ACTION PLAN FOR UTILIZATION OF TREATED MUNICIPAL WASTE WATER

1. **Agricultural Reuse:**
   - i. Availability of suitable irrigation fields in the vicinity of the 5MLD and 7MLD capacity plants,
   - ii. Survey of the agricultural area and crops to be irrigated,
   - iii. Construction of reservoir for the storage of treated water,
   - iv. Supply of Water to agricultural Area through drain/pipeline/tankers.
   - v. Prior to allocation of treated water for irrigation purposes in any area, soil hydraulic tests for those areas, water requirements for the crops/vegetation in the respective area and water quality of irrigation water to be used in those respective areas according to these tests should be computed. *(Treated Water Parameters attached)*

2. **Environmental/Recreational Reuse:**

   The treated water shall be used by Sahibganj ULB for the following applications in their administrative boundaries:
   - i. Maintenance of parks, gardens and developing landscaping. (Ganga Vihar Park and Sidhu Kanu Stadium),
   - ii. Rejuvenation of ponds and streams for recharging ground water during lean seasons,
   - iii. Water Supply for emergency purposed like Fire Brigade etc.

3. **Construction Purposes:**

   Sahibganj ULB may propose to use the treated water for the following construction activities:
   - I. Supply of treated water to the new construction sites/developing area through tankers against a fixed predetermined charge,
   - ii. Location for setting up filling stations for treated water in tankers/lories shall be developed after assessment of the demand at local level.
   - iii. Laying of special supply line for treated water in developing areas/new localities if found feasible,
   - iv. Stop supply of fresh water once the above infrastructure is functional and found satisfactory by the user.

4. **Dual Water Supply System in Houses/Offices/Business Establishments:**
   - i. Provision of dual water pipeline; independent of each other, one for potable water supply and another for supplying treated water,
   - ii. Treated water shall be used for flushing and watering the lawns/gardens,
   - iii. Local ULB shall make and endeavor to create conveyance network for supplying treated water to institutional areas, business districts or areas having large numbers of such users to cater to their need.

PROPOSED USES OF TREATED WATER IN SAHIBGANJ

Sahebganj is the only district in Jharkhand through which River Ganges flow. The National Thermal Power Corporation(NTPC) Ltd. plant at Kahalgaon was identified for using the Treated Waste Water, however the plant is located more than 50 Kms away from the Sahebganj town hence was not viable.

It has been planned by the state government to use the treated water for the below identified areas:

Railway Junction: Sahibganj is on the Sahibganj Loop of Eastern Railway.[6] This loop line branches off the main line from Howrah at Khana Junction, goes through Bolpur (Shantiniketan), Rampurhat, Pakur, Sahibganj, Bhagalpur, Jamalpur before meeting the main line again at Kiul Junction. It has been planned to re-use the treated water for the water requirments such as washing, flushing, maintenance of the railway junction

Crusher Units: Sahebganj and its periphery has many stone crushers. The treated water shall be used against the water requirements of theses crusher such as sprinkling of the dust in the crusher.

Urban Local Bodies(ULBs): A large portion of the treated water is planned to be used for against the water requirements of the ULBs. The treated water shall be used for Solid Waste Management(SWM) plant, horticulture, maintenance of parks, public toilet flushing and other construction activities in the town.

Annexure - 6

Letter No.: SPMG/UD&HD/NGT/REUSE/2019/16/.343

Govt. of Jharkhand

Urban Development & Housing Department

From,

Ameet Kumar, IAS
Director, SUDA,
Jharkhand.

To,

Project Director (Technical),
JUIDCO Ltd., 3rd Floor, Pragati sadan,
Ranchi-834001, Jharkhand

Ranchi/Date 22/10/19

Sub: Regarding preparation of Action Plan for utilization of treated waste water from the STPs of Sahibganj NP.

Ref: Hon'ble NGT Case OA No. 148/2016 (MA no. 686/2017) matter of Mahesh Chandra Saxene Versus South Delhi Municipal Corporation & Ors. order dated 27.08.2019 and Letter no. 193 dated 03.07.2019

Sir,

With reference to the above-mentioned subject, in the matter OA No. 148/2016 (MA no. 686/2017) on the Hon'ble NGT Court regarding **"Utilization of treated waste water from the STPs"**. The State has submitted the Action Plan, that was taken up by the Hon'ble Court on dated 27.08.2019.

Since, JUIDCO is involved in the construction of Sewerage system at Sahibganj from the beginning of the project and a full fledge team has also been deputed at site and currently assisting the agency.

As already requested earlier vide letter no. 193 dated 03.07.2019 on which no compliance is received till date, It is once again requested to give necessary directions to your team to coordinate with the ULB, executing agency & PMC team of M/s Tractabel and prepare the action plan on utilization of treated waste water from the STPs at various possible options viz. Horticulture, Agriculture, rejuvenation of water bodies, Industrial, Railways, Infrastructure projects etc. including the financial implication involved within **one month**, so that the same will be implemented on site after taking necessary approvals.
This may please be given top most priority.

Enclosure: A/A

Yours faithfully,

22/10/19

(Ameet Kumar)
Director.

Memo No.:- SMCG/UD&HD/NGT/REUSE/2019/16/.343. Ranchi, Date:- 22.10.19

Copy to:- Executive Officer, Sahebganj Nagar Parishad / PMC Team of M/s Tractabel /Executing Agency directed to assist JUIDCO team on preparation of Action Plan.

22/10/19

Director

(23)

Letter No.: SPMG/UD&HD/PMSK/110/2016/193.

Govt. of Jharkhand

Urban Development & Housing Department

From,

Ameet Kumar, I.A.S
Project Director,
SMCG, Jharkhand

To,

Shri R.K. Vasudev,
Project Director (Technical),
JUIDCO Ltd., 3rd Floor,
Pragati Sadan, Near Kutchery Chowk,
Ranchi-834001

Ranchi/Date. 03/07/19

Sub: Regarding Sahibganj Municipal waste water project the treated water reuse .
Ref: NMCG Do no. I-19012/10/2012-NMCG dated 17.06.2019 .

Sir,

The Sahibganj Municipal waste water project the treated water is to be discharged in the river Ganga as per approved DPR . To discharge treated effluent in the river Ganga through effluent channel currently the work was missing in current scope of work . You are requested to propose a cost effective effluent channel construction for the aforesaid project , which can be used to discharge the treated water in near by drain .

As per Jharkhand Waste water policy 2017, how the treated water can be reused in Sahibganj municipal area detail report is also required .

You are requested to direct the PMC of Namami Gange and the JUIDCO officials to comply the NMCG direction and propose a feasible work plan with details report for effluent channel construction and reused of treated water at Sahibganj municipal area .

Enclose- A/A.

Yours faithfully,

03/07/19

(Ameet Kumar)
Project Director.

Annexure-7

कार्यालय नगर पंचायत, राजमहल

पत्रांक : 685 /न0 पं0 दिनांक : 02/08/19

प्रेषक,

कार्यपालक पदाधिकारी,
नगर पंचायत,
राजमहल।

सेवा में,

सरकार के सचिव,
राज्य शहरी विकास अभिकरण
नगर विकास एवं आवास विभाग,
झारखंड, राँची।

विषय : NGT एवं न्यायालय से सम्बंधित मामलों में प्रतिवेदन समर्पित करने के संबंध में।

प्रसंग : भवदीय पत्रांक :– 1334 दिनांक :– 25.07.2019

महाशय,

उपर्युक्त प्रासंगिक विषयक कहना है कि नगर पंचायत, राजमहल का कोई मामला न्यायालय में लंबित नहीं है। NGT सम्बंधित प्रतिवेदन तैयार कर इस पत्र के साथ संलग्न कर सादर सूचनार्थ समर्पित।

अनु0 :– यथोक्त।

विश्वासभाजन

2.8.19

कार्यपालक पदाधिकारी
नगर पंचायत
राजमहल।

officiating in
02/08/19

NAGAR PANCHAYAT RAJMAHAL

Under the 'Mission clean Ganga' no untreated municipal sewage or industrial effluent would be allowed to be discharged into the river Ganga by the year 2020. In Rajmahal, total estimated sewage generation of the town in the year 2027 is expected to be 3.0 mld and in the year 2047 it is 4.35 mld. Currently, the sewerage and storm water system in Rajmahal is under-construction. It aims to provide a complete sewerage facility in the town for which required trunk/ branch/ lateral sewer network has been taken in this proposal.

To achieve the desired BOD & TSS levels the treated effluent from conventional Activated Sludge process, Moving Bed Bio Reactor and Extended aeration shall need further Treatment in the shape of sand filtration. To reduce the coliform level, disinfection of treated effluent through chlorination is proposed.

PROPOSSED ACTION PLAN FOR UTILIZATION OF TREATED WASTE WATER FROM THE STP

1. AGRICULTURAL REUSE:
   - i) Availability of suitable irrigation fields in the vicinity of the 3.5 MLD capacity plants;
   - ii) Irrigation of agricultural areas and in farming;
   - iii) Construction of reservoir for the storage of treated water;
   - iv) Supply of Water to agricultural areas through drain/pipe line/ tankers;
   - v) Prior to allocation of treated water for irrigation purposes in any area, soil hydraulic tests for those areas, water requirements for the crops/vegetation in the respective area and water quality of irrigation water to be used in those respective areas according to these tests should be computed. (Treated Water Parameters attached)

2. ENVIRONMENTAL/RECREATIONAL REUSE:
   The treated water shall be used by Rajmahal ULB for the following applications in their administrative boundaries:
   - i) Maintenance of parks, gardens and developing landscaping. (Sanghi Dalan Park And Sharan Park).
   - ii) Rejuvenation of ponds and streams for recharging ground water during lean seasons,

3. CONSTRUCTION PURPOSES:
   Rajmahal ULB may propose to use the treated water for the following construction activities:
   - i) Supply of treated water to the new construction sites /developing area through tankers against a fixed Pre-determine charge,
   - ii) Location for setting up filling stations for treated water in tankers/lories shall be developed after assessment of the demand at local level.
   - iii) Laying of special supply line for treated water in developing areas /new localities if found feasible,
   - iv) Stop supply of fresh water once the above infrastructure is functional and found satisfactory by the user.

4. DUAL WATER SUPPLY IN HOUSES/OFFICES/BUSINESS ESTABLISHMENTS:
   - I. Provisions of dual water pipeline; independent of each other, one for potable water supply and another for potable water supply and another for supplying treated water,
   - II. Treated water shall be used for flushing and watering the lawns/gardens,
   - iii. Local ULB shall make endeavour to create conveyance network for supplying treated water to institutional Areas having large numbers of such users to their need

5. URBAN LOCAL BODY (ULBs):
   A large portion of the treated water is planned to be used for against the water requirements of the ULBs. The treated water shall be used for Solid Waste Management (SWM) plant, horticulture, maintenance of parks, public toilet flushing and other construction activities in the town.

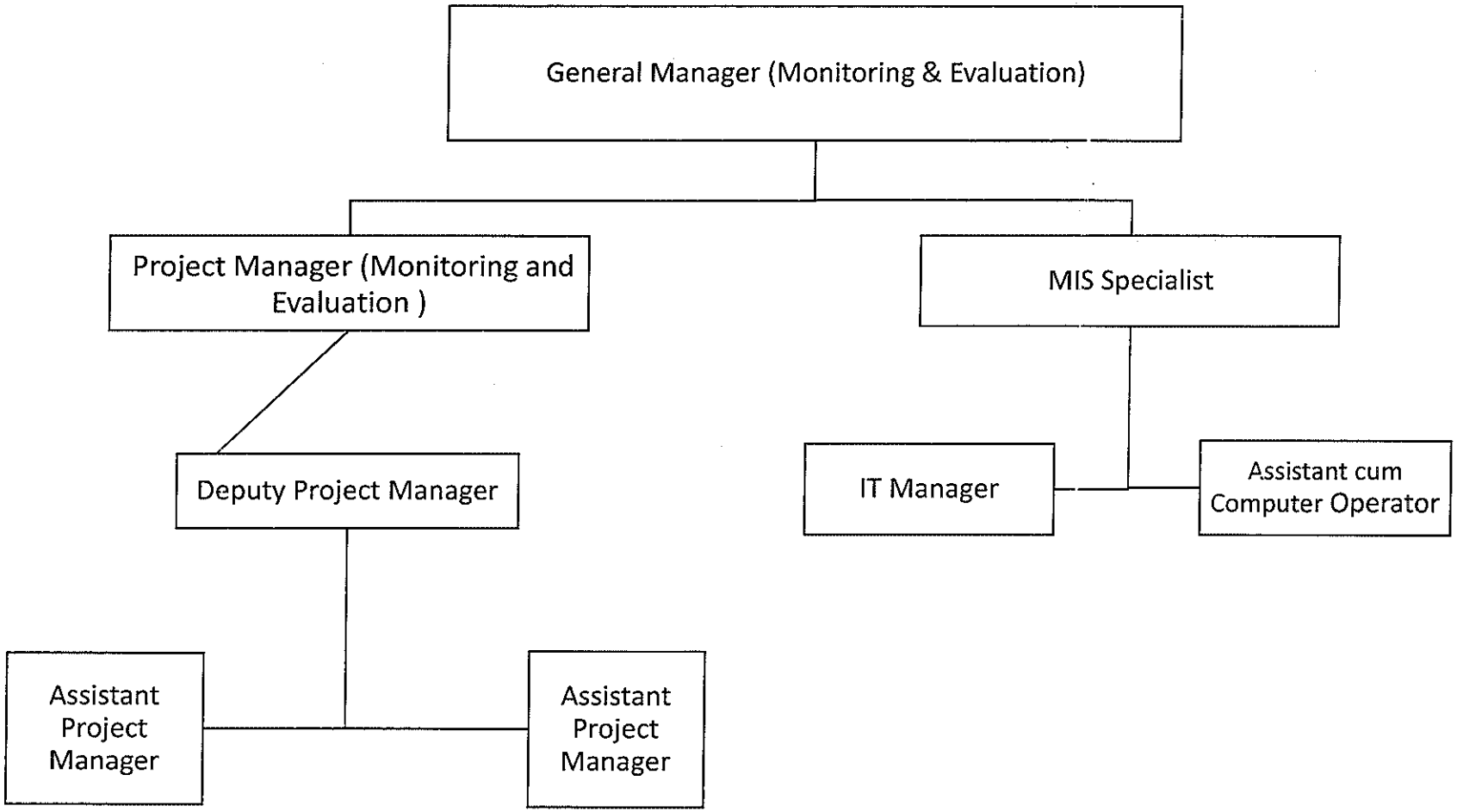
Annexure - 8

Details of Water Bodies at Adityapur, Rajmahal and Sahibganj Municipal area

S.No	Name of ULBs	Name of Village	Name of Block/District	Types of water Bodies	Whether restoration required or not
1	Adityapur	Gorai Pada	Gamharia/Saraikela Kharsawa	Pond	required
2	Rajmahal	Rajmahal	Rajmahal	Pond	required
3	Sahebganj	Sakrogarh Tank-1	Sahebganj	Talab(Pond)	required
		Madanshai tapuaa, Purani sahibganj	Sahebganj	Talab(Pond)	required
		Sakrogarh Tank-2	Sahebganj	Talab(Pond)	required
		Chota Sakrogarh Tank	Sahebganj	Talab(Pond)	required
		Chamargariya Tank	Sahebganj	Talab(Pond)	required
		Bara jirwabari	Sahebganj	Talab(Pond)	required

Annexure-9

Proposed Organogram for Monitoring & Evaluation of the waste water management operation Cell.



Letter No.-2/PMC/Vividh/754/2019 ....348.....

Water Resources Department
Government of Jharkhand

From,

Rajendra Prased
Deputy Secretary (Engg.)

To,

Sri Vinay Kumar Choubey
Seretary,
Urban Development& Housing Department
Government of Jharkhand, Ranchi.
E-mail- jhspmgngrba@gmail.com

/Ranchi, Dated 29/09/2020

Subject:- **Regarding latest progress report on various directions issued by Tribunal required for compliance of Hon'ble NGT Court order related to River Ganga & its tributary river Damodar.**

Ref.:- **Your letter no. SMCG/UD & HD/NGT/2019/17(Part-2)/44/2020-196 dated 14.09.2020**

Sir,

With reference to subject and letter mentioned above, I am directed to convey that, the progress report during last two quarters in the year 2020-21 regarding "Conservation of ground water and Restoration of water bodies" in the matter of Hon'ble NGT Case O.A. No.- 200/2014, under Water Resources Department is enclosed herewith for your kind information and further action.

Your's faithfully

29/09/2020

(Rajendra Prasad)
Deputy Secretary (Engg.)

Encl.:- As mentioned.

Report in the matter of Hon'ble N.G.T. Case O.A. No.- 200/2014

Sl. No.	Activity to be monitored	Compliance report as per direction	Progress during 1st Qtr. (April-20 to June-20)	Progress during 2nd Qtr. (July-20 to Sep.-20)	Remarks
(iv)	Steps for conservation of ground water particularly with reference to critical, Semi critical or over-exploited areas.	144 nos. Rain Water Harvesting (RWH) Structure has been sanctioned for Rs. 5.89 crores, which is under progress and targeted to be complete by June, 2021.	NIL	NIL	Earlier due to COVID-19 pandemic situation in the country and later on due to rainy season, work of these schemes has been delayed.
(v)	Restoration of water bodies	By Water Resources Department, 214 nos. restoration of water bodies has been sanctioned for Rs. 185.08 crores, which is under progress and targeted to be complete by March 2021.	NIL	NIL	

OFFICE OF NAGAR PANCHAYAT RAJMAHAL

Near New Bus Stand, Matiyal, Rajmahal, Sahibganj 816108
Email ID: nprajmahal@gmail.com

Letter No.-.....733...../NPR

From,

Executive officer,
Nagar Panchayat, Rajmahal.

To,

Vinay Kumar Choubey, I.A.S
Secretary to Govt.

Rajmahal, Dated: 24 Sep'2020

Sub: **Regarding latest progress report on various directions issued by the Tribunal required for compliance on Hon'ble NGT Court Order related to river Ganga.**

Ref: SMCG/UD&HD/NGT Lt. 199, Dated: 14.09.2020 & Hon'ble NGT Case OA No. 200/2014 matter of M.C. Mehta Versus Union of India & Ors. Order Dated: 18.12.2019 and 13.08.2020

Sir,

With reference to the above-mentioned subject & as per the Hon'ble NGT Court Order dated 18.12.2019 and 13.08.2020 in the matter O.A. 200/2014, M.C. Mehta Versus Union of India & Ors. the Hon'ble NGT court is monitoring few points related to river Ganga which has been compiled by the ULB and prepared as a report. The report is henceforth attached for your review.

Thanking You.

Yours faithfully,

24.9.2020

Executive officer
Nagar Panchayat, Rajmahal

christina.k
24/09/2020

Compliance of Progress Report in the matter OA No. 200/2014 matter of M.C. Mehta Versus Union of India & Ors. order dated 18.12.2019 and 13.08.2020 related to River Ganga:

Name of the ULB: Rajmahal Nagar Panchayat, Jharkhand			
Sl. No.	Directions issued by Tribunal in the matter order dated 18.12.2019 and 13.08.2020	Compliance report as per direction	Current progress in the last three months (June-August, 2020)
1	Preventing dumping of solid and other waste in and around Ganga in the ULB.	Dumping of solid waste and other waste in and around river Ganga within the ULB is stopped. Door to Door waste collection is active in these ghat areas catering all the residentials.	Pictorial evidences attached.
2	Clearing old legacy waste dumpsites near river Ganga.	Legacy waste dumpsites near river Ganga are cleared. A complaint mechanism is implemented & fine provision is there for people littering in & around the ghat areas.	Pictorial evidences attached.
3	Public awareness and involvement for prevention and control of pollution of Ganga.	Public awareness and involvement of various stakeholders- like Social workers, Student Organisations, SHG members, Elected Representatives, ULB Officials, Staffs etc, has been done by the ULB to keep river Ganga and Ghats clean.	Pictorial evidences attached.
4	Regulating activities on and around river Ganga including Ghats and other establishments.	Activities are being regulated & monitored by the ULB.	Pictorial evidences attached.

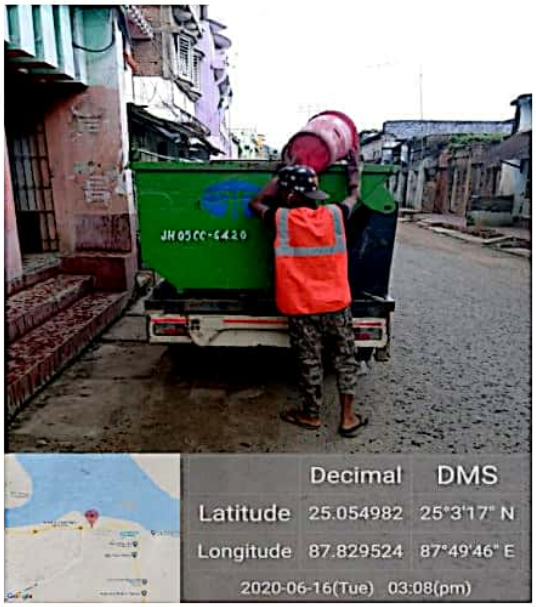
24.9.20

christina.k
24/09/2020

Executive Officer
Nagar Panchayat Rajmahal

Pictorial Evidence of the activities and work under taken with regard to keep River Ganga and ghats clean:

1) **Regular waste collection from waste bins & twin bins installed in ghat areas & attached residential areas:**

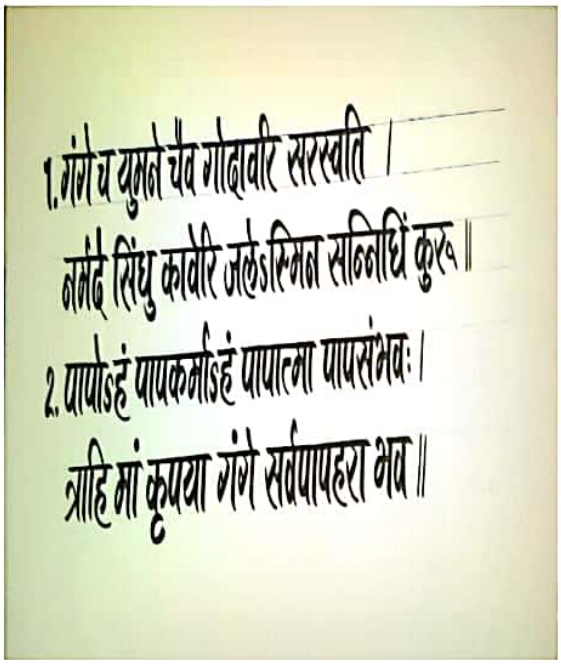


2) **Regular miking regarding no dumping of waste near ghat areas & Training of Sanitation Staffs to carry cleaning activities in a better way for the city & all Ganga Ghats:**

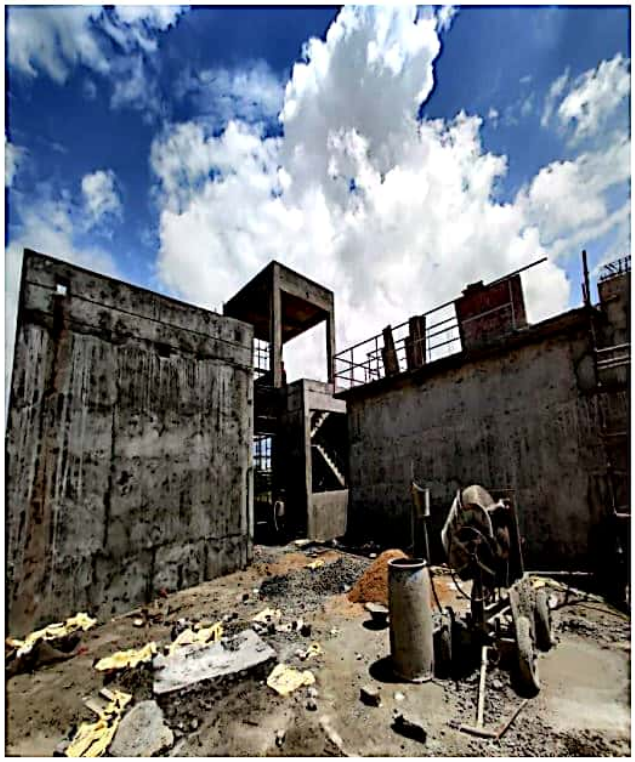

3) **Regular Sweeping, removal of dead animals & drain cleaning of drains leading to ghats:**



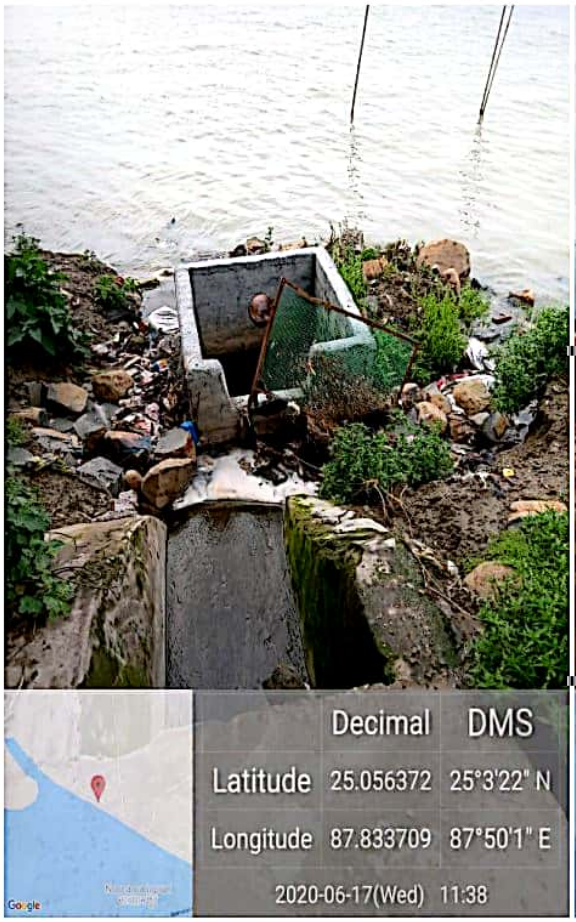
4) **Beautification of Ghats by developing bathing spaces, selfie points, messages & wall paintings:**

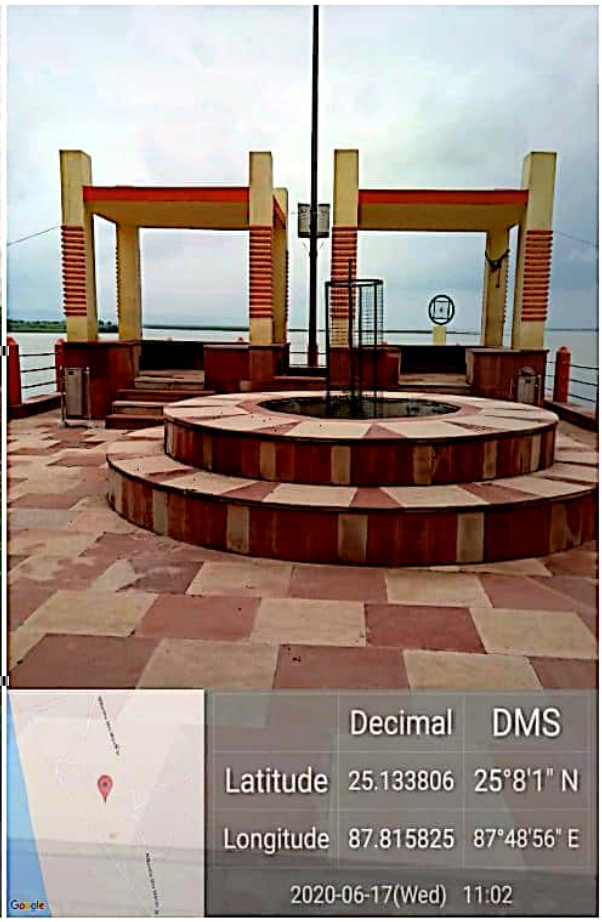


5) **3.5 MLD STP (Sewerage Treatment Plant with 3 SPS- Sewerage Pumping Stations) construction work is in progress in the city to tackle 2.6 MLD waste water (Acc. Waste water DPR), currently achieved 78% completion till Date: 24/09/2020, the work is in progress, the Fortnightly reports are attached:**



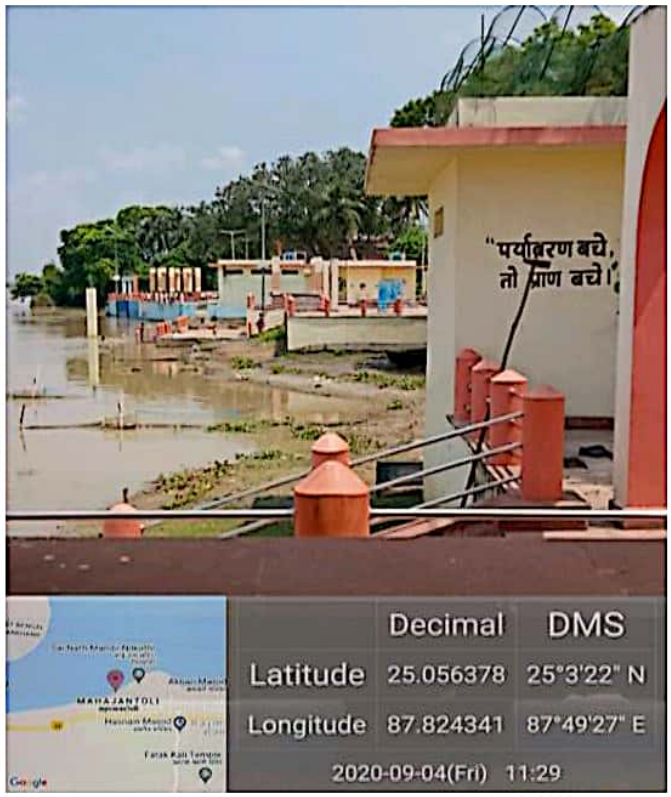
6) **Development of Filtration points near drains opening to ghats to segregate sediments and solid waste directly flowing into river & Plantation of trees with gabion:**



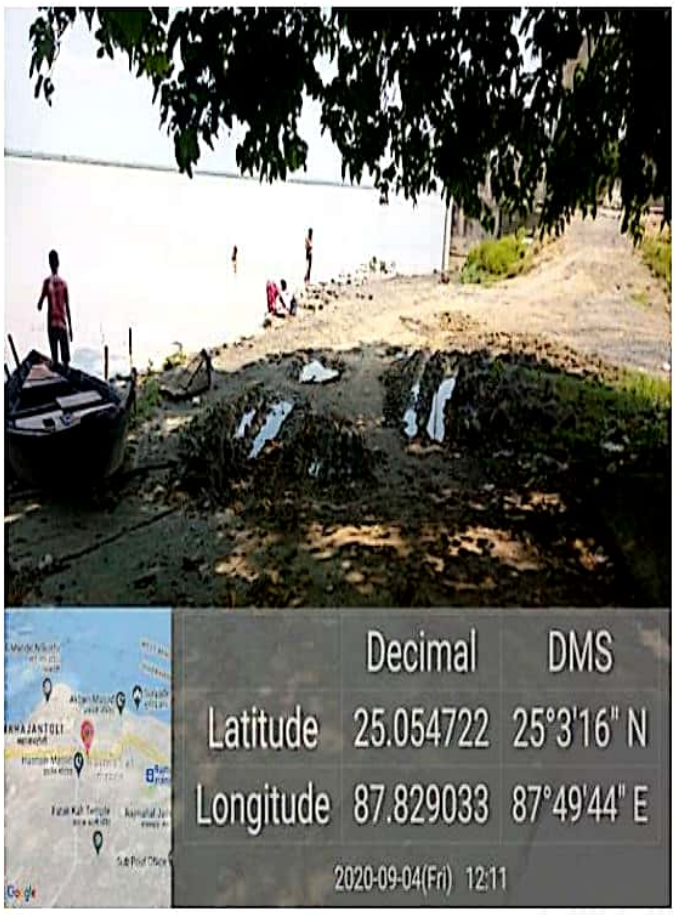


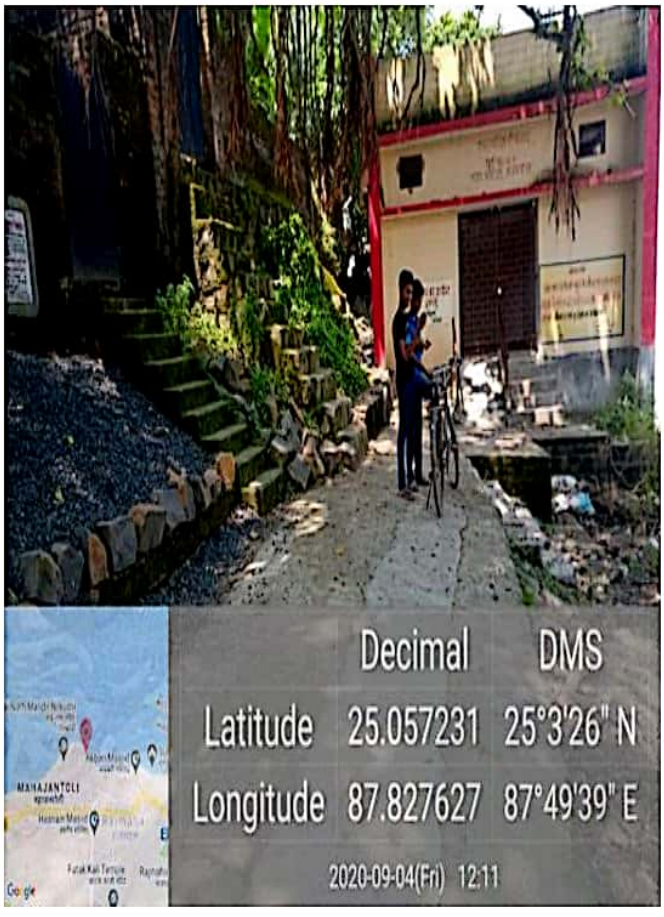
Pictorial Evidence of all the Ghats are as under:

1) MAHAJANTOLI GHAT, Ward 2

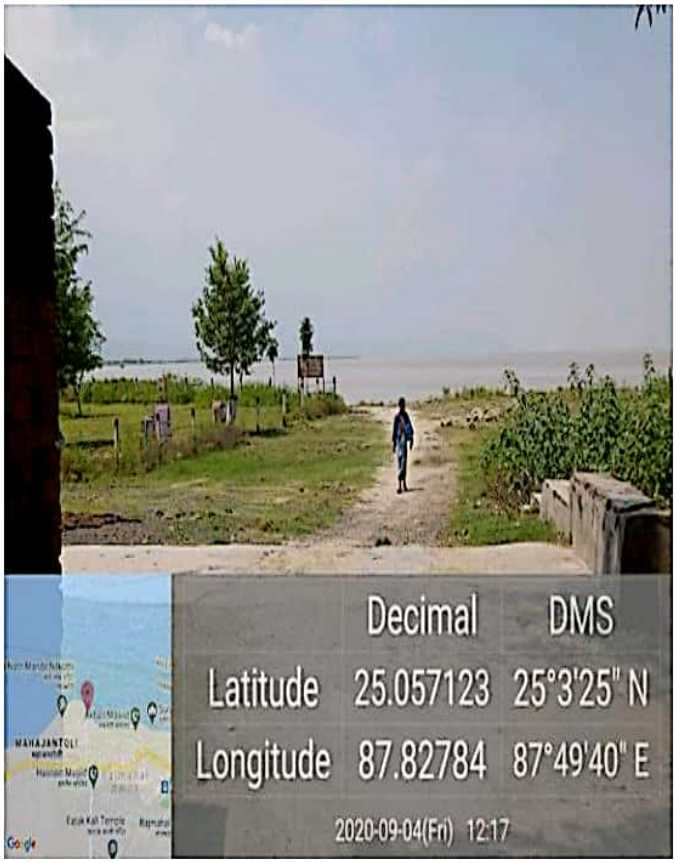


2) NILKOTHI GHAT, Ward 2

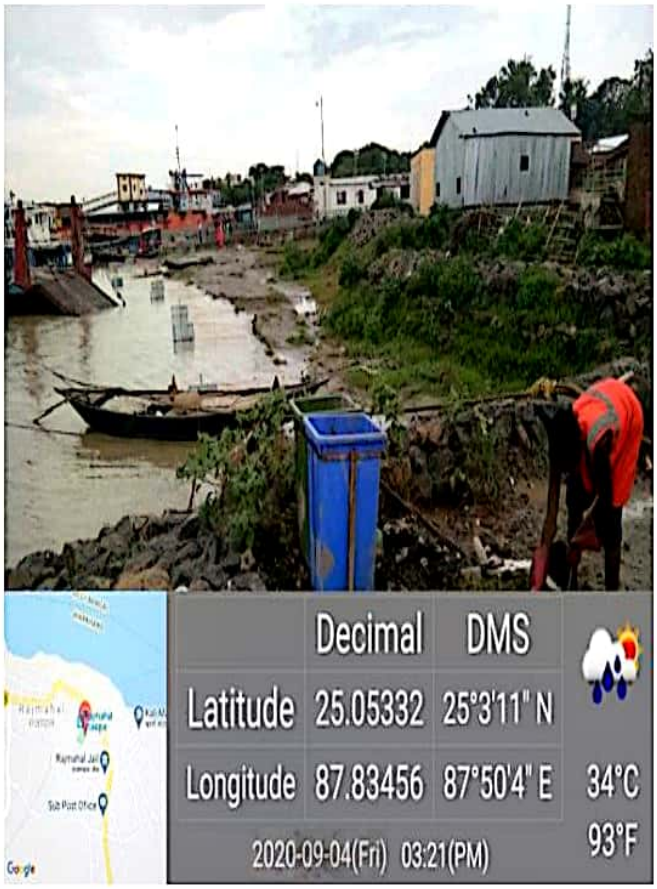




3) KASIM BAZAR GHAT/SURYADEV GHAT, Ward 3



4) LCT/LAUNCH GHAT, Ward 6



TRACTEBEL ENGIE

1st Fortnightly Report @ September - 2020

Client : Jharkhand Urban Infrastructure Development Company (JUIDCO) & States Programme Managemnent Level Group (SPMG).

Project Management Consultant : Tractebel Engineering Pvt.Ltd.

Name of Contractor : Annu Infra Construct (India) Pvt.Ltd.

Name of the District/ULB	Name of the Project	Total Project cost in Rs Crore / Approval Order No. / Date/ Head	Agreement No./ Date/Contract Price in Rs Crore	As per Agreement, Project Start Date / Total Duration / Completion Date	Component wise physical progress											Reason for slippage (if any)
					Till last fortnight						Current fortnight			Cumulative Progress		
					Major Project Components	Unit	Revised Estimate Quantity Agreement	Qty As per site	Achieved Quantity	Achieved %	Planned Quantity as per milestones set for the project + slippage during last fortnight	Achieved Quantity	Achieved %	Quantity	Percentage	
1	2	3	4	5	6	7	8		9	10	11	12	13	14	15	16
Sahibganj / Rajmahal Nagar Parishad	Rajmahal Municipal Waste Water Project	Rs. 60.04 Cr - NMCG(NGRBA)- Rajmahal Sewerage	283(JUIDCO) / 02.07.2018 / Rs. 52,97,09,224. As per 1st Revised amount Rs= 60,04,95,135.42	02.07.2018 / 21 months / 02.04.2020 Extension of Time Upto- 31.10.2020.	**1. Sewerage Treatment Plants**	lumsum										1.SBR tank Center wall Shuttering work in progress. 2.HT room brick work. 3.PTU Slab shuttering work. 4.E & M work in progress.
					STP (3.5 MLD)	%	100%		66%	66%	100%	1%	1%	67%	67%	
					2. UPVC & RCC Pipe network	Mtr	35464									Work in progress.
					(A) UPVC Pipe network	M	24131		18143.4	75.19%	100%	23	0.09%	18165.9	75.28%	
					(B) HDPE Pipe network	M	9112		7975.9	87.53%	100%	0	0.00%	7975.9	87.53%	
					(B) RCC Pipe network	M	2221		257.00	11.57%	100%	0	0.00%	257.00	11.57%	
					3. House service connections	NOS.	2107	1924								Percentage Consider as per site quantity
					Zone 1	nos.										
					Zone 2	nos.			987.00	51.30%	100%	27	1.28%	1014.00	52.70%	Work in progress.
					Zone 3	nos.										
					4. Construction of manholes	NOS.	1429		820	57.38%	100%	4	0.28%	824	57.66%	Work in progress.
					5. Road Restoration Work. (Sub Base+Pucca Road)	CUM	6510.92		2210.86	33.96%	100%	79	1.22%	2290.21	35.17%	Work in progress.
					Zone 1,Zone-2 & Zone-3											
					(WBM)	SQM.	2525.72									
					Zone 1,Zone-2 & Zone-3											
					6. SPS & MPS	lumsum	4									
					SPS-01 (Zone-1)	%	1		62%	62%	100%	1%	1%	63%	63%	Work in progress.
					SPS-02 (Zone-2)	%	1		64%	64%	100%	1%	1%	65%	65%	Work in progress.
					SPS-03 (Zone-3)	%	1		55%	55%	100%	0%	0%	55%	55%	Work in progress.
					MPS (Zone-3)	%	1		62%	62%	100%	0%	0%	62%	62%	Work in progress.
					7. Raising Main	Mtr	1450		979	88%	100%	0%	0%	979	88%	
					8. Low Cost Sanitation	NOS.	14									2 nos of New LCS handed over , 2 nos LCS completed .
					New work	nos.	5		79%	79%	100%	0%	0%	79%	79%	
					Renovation work	nos.	9		87%	87%	100%	0%	0%	87%	87%	7 nos of Renovation LCS handed over , 1nos LCS completed
					9.Nallah Restoration Work	SQM.	319.2									
					10.Electromechanical Works Zone-1, Zone-2 & Zone-3	NOS.			47%	47%	100%	2%	2%	49%	49%	Work in progress.

Overall Physical Progress																
									Planned %	Achieved %				No. of appended photographs (Showing progress during current fortnight)		
									100%	70%	-			-		

Financial Progress (Amount spent in Rs Crore)			Time spend (Year & Month)	Indicating reason for delay in the project time schedule and the issues, if any	Instruction given during the last meeting	Follow up action taken
Spent till last month Amount (in crores)	Spent in current month Amount (in crores)	Total Amount Spent Amount (in crores)				
17	18	19	20	21	22	23
₹ 23.38	₹ 0.00	₹ 23.38	25	Upto RA#13	-	-
Overall Financial Progress		Planned %	Achieved %	Including Mobilization advance+RA bill paid	Note : Financial Progress is consider as per Revised BOQ Amount.	-
		100%	49.22%			

TRACTEBEL ENGIE

1st Fortnightly Report @September - 2020

River Front Development (RFD) – Rajmahal

Name of the Agency/Contractor : M/S Sri Ram Enterprises

Agreement No : 277-JUIDCO

Contract Value : Rs 9, 35, 48,010.

Date of start of work : 16.05.2018

Date of Completion of work : 15.04.2019 (EOT upto 31st December-2019)

Physical progress : 100%

Financial progress : 100 % (8.73 Cr.)upto final bill

S. No	Name of Sub-work	Status	Total Physical Progress (%)	Cum. Physical Progress (%)	Remarks
1	**Singhi Dalan Ghat**	**Completed**	**100%**	**100%**	
A	Chatri				Completed .
B	Ghat str.				
C	Toe wall				
D	Miscellaneous				
E	Planter				
2	**Ferry Ghat**	**Completed**	**100%**	**100%**	
A	RORO				
3	**Madhusudan Cremation Ghat**	**Completed**	**100%**	**100%**	
A	Toe wall				
B	Miscellaneous				
C	Planter				
D	Boundary Wall				
E	River Diversion				
F	Ghat Structure				
G	Water Spot				

TRACTEBEL

Client : Jharkhand Urban Infrastructure Development Company (JUIDCO) & States Programme Management Level Group (SPMG).

Project Management Consultant : Tractebel Engineering Pvt.Ltd.

Name of Contractor : Annu Infra Construct (India) Pvt.Ltd.

1st Fortnightly Report @ September - 2020

Name of the District/ULB	Name of the Project	Total Project cost in Rs Crore / Approval Order No. / Date/ Head	Agreement No./ Date/Contract Price in Rs Crore	As per Agreement, Project Start Date / Total Duration / Completion Date	Component wise physical progress											Reason for slippage (if any)
					Till last fortnight						Current fortnight			Cumulative Progress		
					Major Project Components	Unit	Revised Estimate Quantity Agreement	Qty As per site	Achieved Quantity	Achieved %	Planned Quantity as per milestones set for the project + slippage during	Achieved Quantity	Achieved %	Quantity	Percentage	
1	2	3	4	5	6	7	8		9	10	11	12	13	14	15	16
Sahibganj) / Rajmahal Nagar Parishad	Rajmahal Municipal Waste Water Project	Rs. 60.04 Cr - NMCG(NGRBA)- Rajmahal Sewerage	283(JUIDCO) / 02.07.2018 / Rs. 52,97,09,224. As per 1st Revised amount Rs= 60,04,95,135.42	02.07.2018 / 21 months / 02.04.2020 Extension of Time Upto- 31.10.2020.	1. Sewerage Treatment Plants	lumsum										1.SBR tank Center wall Shuttering work in progress. 2.HT room brick work. 3.PTU Slab shuttering work. 4.E & M work in progress.
					STP (3.5 MLD)	%	100%		66%	66%	100%	1%	1%	67%	67%	
					2. UPVC & RCC Pipe network	Mtr	35464									Work in progress.
					(A) UPVC Pipe network	M	24131		18143.4	75.19%	100%	23	0.09%	18165.9	75.28%	
					(B) HDPE Pipe network	M	9112		7975.9	87.53%	100%	0	0.00%	7975.9	87.53%	
					(B) RCC Pipe network	M	2221		257.00	11.57%	100%	0	0.00%	257.00	11.57%	
					3. House service connections	NOS.	2107	1924								Percentage Consider as per site quantity
					Zone 1	nos.			987.00	51.30%	100%	27	1.28%	1014.00	52.70%	Work in progress.
					Zone 2	nos.										
					Zone 3	nos.										
					4. Construction of manholes	NOS.	1429		820	57.38%	100%	4	0.28%	824	57.66%	Work in progress.
					5. Road Restoration Work. (Sub Base+Pucca Road)	CUM	6510.92		2210.86	33.96%	100%	79	1.22%	2290.21	35.17%	Work in progress.
					Zone 1,Zone-2 & Zone-3											
					(WBM)	SQM.	2525.72									
					Zone 1,Zone-2 & Zone-3											
					6. SPS & MPS	lumsum	4									
					SPS-01 (Zone-1)	%	1		62%	62%	100%	1%	1%	63%	63%	Work in progress.
					SPS-02 (Zone-2)	%	1		64%	64%	100%	1%	1%	65%	65%	Work in progress.
					SPS-03 (Zone-3)	%	1		55%	55%	100%	0%	0%	55%	55%	Work in progress.
					MPS (Zone-3)	%	1		62%	62%	100%	0%	0%	62%	62%	Work in progress.
					7. Raising Main	Mtr	1450		979	88%	100%	0%	0%	979	88%	
					8. Low Cost Sanitation	NOS.	14									2 nos of New LCS handed over , 2 nos LCS completed .
					New work	nos.	5		79%	79%	100%	0%	0%	79%	79%	
					Renovation work	nos.	9		87%	87%	100%	0%	0%	87%	87%	7 nos of Renovation LCS handed over , 1nos LCS completed .
					9.Nallah Restoration Work	SQM.	319.2									
					10.Electromechanical Works Zone-1, Zone-2 & Zone-3	NOS.			47%	47%	100%	2%	2%	49%	49%	Work in progress.

Overall Physical Progress						Planned %	Achieved %		No. of appended photographs (Showing progress during current fortnight)	
						100%	70%			

Financial Progress (Amount spent in Rs Crore)			Time spend (Year & Month)	Indicating reason for delay in the project time schedule and the issues, if any	Instruction given during the last meeting	Follow up action taken
Spent till last month Amount (in crores)	Spent in current month Amount (in crores)	Total Amount Spent Amount (In crores)				
17	18	19	20	21	22	23
₹ 23.38	₹ 0.00	₹ 23.38	25	Upto RA#13		

Overall Financial Progress	Planned %	Achieved %	Including Mobilization advance+RA bill paid	Note : Financial Progress is consider as per Revised BOQ Amount.
	100%	49.22%		

christina.k 24/09/2020

24.9.2020

Executive Officer
Nagar Panchayat
Rajmahal

TRACTEBEL ENGIE

1st Fortnightly Report @September - 2020

River Front Development (RFD) – Rajmahal

Name of the Agency/Contractor : M/S Sri Ram Enterprises
Agreement No : 277-JUIDCO
Contract Value : Rs 9, 35, 48,010.
Date of start of work : 16.05.2018
Date of Completion of work : 15.04.2019 (EOT upto 31st December-2019)
Physical progress : 100%
Financial progress : 100 % (8.73 Cr.)upto final bill

S. No	Name of Sub-work	Status	Total Physical Progress (%)	Cum. Physical Progress (%)	Remarks
1	Singhi Dalan Ghat	Completed	100%	100%	
A	Chatri				Completed .
B	Ghat str.				
C	Toe wall				
D	Miscellaneous				
E	Planter				
2	Ferry Ghat	Completed	100%	100%	
A	RORO				
3	Madhusudan Cremation Ghat	Completed	100%	100%	
A	Toe wall				
B	Miscellaneous				
C	Planter				
D	Boundary Wall				
E	River Diversion				
F	Ghat Structure				
G	Water Spot				

24.9.2020
Executive Officer
Nagar Panchayat
Rajmahal

christina.k
24/09/2020

NAGAR PARISHAD OFFICE, SAHIBGANJ

Ref. No. ..... 1509 ..... Date. 21/9/2020

From,

Executive Officer,
Nagar Parishad,
Sahibganj.

To,

Vinay Kumar Chaubey, IAS
Secretary to Govt.

Subject :- Regarding latest progess report on various directions issued by the tribunal required for compliance of Hon'ble NGT court order related to river Ganga.

Ref. :- Hon'ble NGT Case no. 200/2014 matter of M.C. Mehta versus Union of India & ors. order dated 18.12.2019 and 13.08.2020.

Sir,

With reference to above as per the Hon'ble NGT court order dated 18.12.2019 and 13.08.2020 in the matter O.A2 200/2014, M.C. Mehta versus union of India & Ors. the hon'ble NGT court is monitoring the following points related to river ganga for your reference.

Enclosed : Current updated report
& Ganga Town report.

Your's faithfully,

Executive Officer,
Nagar Parishad, Sahibganj.

E/Nagar Parishad/Namami Ganga Letter

Format for preparation of compliance report in the matter O.A no. 200/2014 matter of M.C Mehta versus union of India & Ors. Order dated 18/12/2019 and 13/08/2020.

Name of department /board/ULB/ company: sahibganj nagar parishad

s.no.	direction issued by tribunal in the matter order dated 18.12.2019 and 13.08.2020	Compliance report as per direction	Current progress in the last three months(June-august 2020)
1	Preventing dumping of solid and other waste in and around ganga in the ULB.		Two I&D installed near connecting drain for preventing solid waste and nearby dumping has been cleared.
2	Clearing old legacy waste dump sites near river ganga		SWM concessionaire has been appointed to remove legacy waste and work is in under progress.
3	Public awareness and involvement for prevention and control of pollution of ganga		Miking for cleaning activity, painting etc., seminar with district committee.
4	Regulating activities on and around river ganga including ghats and other establishment		daily drain cleaning, ghat cleaning, muni -cipal waste water treatment plant in working condition

15:09
21/9/2020

15/09/2020

City Manager

nagar parishad sahibganj

15/9/20

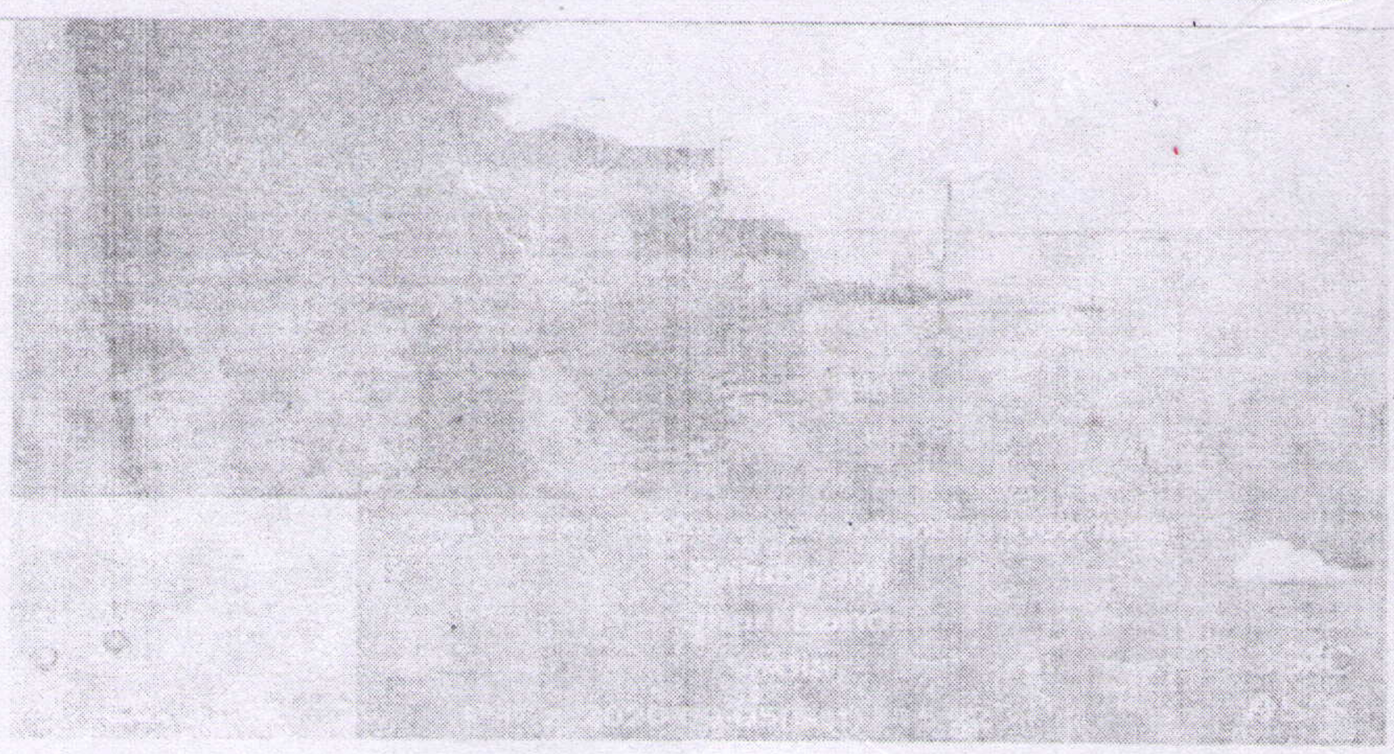
कार्यपालक पदाधिकारी
नगर परिषद् साहेबगंज

NAGAR PARISHAD SAHIBGANJ

Ganga town report

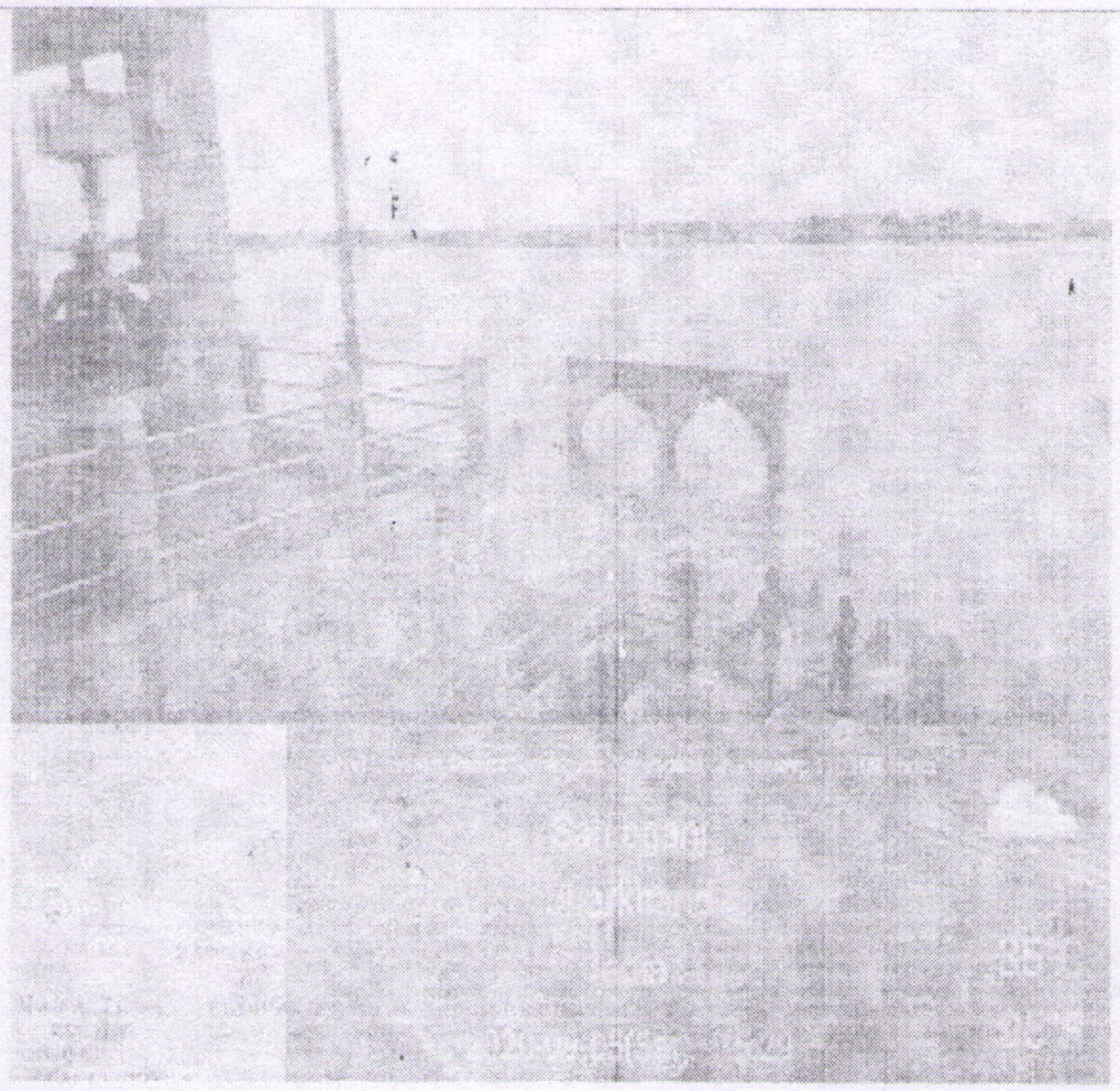
DATE :05/09/2020

finding	NO. of ghats	Solid waste spotted on river	GVP on or around ghats	open dump site around river	REMARKS
As per assessment report	4	1	2	4	
As per compliance report by ULB	4	0	0	0	Cleaning of surface area, GVP has been removed, dumpsite cleaned.

s.no.	ward	name of ghats	Pictorial evidence of compliance by ULB
1	18	Sakuntla sahai ghat	
2	18	Bijli ghat	

			
3	18	Mukteshwar dham ghat	

Office Sahibganj Nagar Parishad
Estd.-1883
Sahibganj Jharkhand

4	18	Pt. madan mohan Malviya ghat	

city manager

nagar parishad sahibganj

Office Sahibganj Municipal Corporation
Estd.-1869
Sahibganj, Jharkhand

GOVERNMENT OF JHARKHAND

DEPARTMENT OF MINES & GEOLOGY

Letter No:- Kha. Ni. (Baithak) - ~~08/2020~~ 01/2019- 1275 Date: 24-09-2020

From,

Secretary,
Department of Mines & Geology,
Jharkhand

To,

Shri Vinay Kumar Choubey, I.A.S.,
Secretary, Urban Development & Housing Dept.,
Jharkhand

Sub: Regarding latest progress report on various directions issued by Tribunal required for compliance of Hon'ble NGT Court Order related to River Ganga & its Tributary Damodar.

Ref: Letter No. SMCG/UD&HD/NGT/2019/17(Part-2)/44/2020-197 dated 14/09/2020

Sir,

With reference to the above-mentioned letter and as per Hon'ble NGT Court Order dated 18.12.2019 and 13.08.2020 in the matter of O.A. 200/2014, M.C. Mehta vs Union of India and Others, please find enclosed herewith a report in tabular format on prevention of illegal sand mining in Jharkhand for your perusal.

Thanking you,

Encl.: As Above

Yours Faithfully,

24/9/2020

Secretary, Department of Mines & Geology

Compliance report in matter of OA No 200/2014, M.C. Mehta vs Union of India and Others Order dated 18.12.2019 and 13.08.2020

S. No.	Direction issued by Tribunal in the matter order dated 18.12.2019 and 13.08.2020	Compliance Report as per direction	Current progress in the last three months (June-August 2020)
1	Preventing and regulating illegal sand mining.	1. Government of Jharkhand has also constituted a State Level and District Level Task Force for prevention and monitoring of illegal mining and transportation of the mineral in the State. 2. Govt. of Jharkhand has formulated "The Jharkhand Minerals (Prevention of Illegal Mining, Transportation and Storage) Rules, 2017 in order to curb illegal mining, transportation and storage of minerals in the State. The said Rule provides the provision for search, seizure and confiscation of minerals being mined or transported illegally in the State and prohibits	1. The total no. of District level Task Force Meetings conducted in FY 2018-19 were 150 and in FY 2019-20 were 49. 2. The rule has already been implemented and provides for provisions related to prevention of illegal mining in the State

		any commercial dealing which includes buying, selling, processing, transporting of minerals without being a dealer or mining lease holder. 3. Govt. of Jharkhand has also formulated Jharkhand Minor Mineral Concession (Amendment) Rules 2017 wherein its Rule 54 states that in case during transportation of mineral any person unable to show valid challan shall be punishable with an imprisonment of one year/ shall pay a penalty of double the value of mineral/ both as the case may be. 4. State Govt. is also implementing star rating framework for minor mineral blocks on similar lines as that of major minerals wherein ~50% weightage is on the parameters, i) Systematic and Sustainable Mining, and ii) Protection of Environment and Conservation of Water. With implementation of the star rating of minor mineral block, pollution	3. Govt. of Jharkhand is implementing Rule 54 of Jharkhand Minor Mineral Concession Rules, 2017. 4. Star Rating has been included in Jharkhand Minor Mineral Concession Rules, 2019. As per Rule 34L of JMMC (Amendment) Rules, 2019 every mining lease holder in the state shall submit an evaluation report based on template shared for the Star Rating by the Stat Govt. The template's ~50% weightage is on the parameters; Systematic and Sustainable Mining, Protection of Environment and Conservation of Water. With implementation of the star rating of minor mineral blocks, environmental impact due to mining of minor minerals is expected to be controlled.

		due to minor mineral block is expected to be controlled. 5. JSMDC Ltd. has implemented Sand Management System (SMS) to ensure efficient monitoring of sand mining operations at sand ghats and for sale of sand at stockyards. The Sand Management System shall be able to validate the permitted quantity of sand to be dispatched to the buyers (data from Permit) and also validate customer vehicles through its integration with JIMMS portal. SMS will also provide reconciliation features and audit functionalities of the transported quantity of sand.	5. Sand Management System has been implemented and currently monitoring sand mining operations at Sand Ghats in Jharkhand.
		Action taken against Illegal Mining of Sand in Jharkhand	A report detailing actions taken by the State Government during FY 19-20 for prevention of illegal mining and transportation of sand in the districts related to River Ganga and its tributary Damodar is as follows: **Data related to Actions against Illegal Mining of Sand**

S.No.	District	FIRs Registered	Total Vehicles Seized	Fines Realized (Rs)
1	Hazaribagh	40	179	32,86,000
2	Dhanbad	32	269	10,97,500
3	Sahebganj	14	34	15,85,000

				4	Dumka	7	90	10,19,400
				5	Giridih	20	89	3,88,000
				6	Koderma	37	74	3,58,200
				7	Palamu	43	-	10,15,171
				8	Ranchi	13	80	72,96,000
				9	Ramgarh	29	114	7,00,600
				10	Chatra	13	489	2,83,820
				11	Bokaro	37	110	15,14,000
				12	Lohardaga	2	27	1,97,200
				TOTAL		**287**	**1,555**	**1,87,40,891**
2	Sustainable Sand Mining	Govt. of Jharkhand has formulated an environmentally sustainable and social centric comprehensive sand mining policy, the Jharkhand State Sand Mining Policy 2017, and same has been already implemented. This is also in compliance with the judgement of Hon'ble Supreme Court in the matter of Deepak Kumar v/s State of Haryana etc. and subsequent notifications of MoEF&CC, GoI,	The said policy mandated for preparation of District Survey Report (DSR) by the committee headed by Deputy Commissioner-cum-Chairman, DEIAA as envisaged in Para 7(ii) of Part- II- Section- 3 Sub Section (ii) of Extraordinary Gazette of MoEF&CC, GoI dated 15/01/2016. Based on the DSR, Sand Ghats are to be categorized under two different categories namely Category- I and Category- II. Category- I sand ghats shall be used only for non- commercial purposes and shall be maintained and supervised by Gram Panchayat/ Local Self Govt. Category- II sand ghats shall be allocated to Jharkhand State Mineral Development Corporation (JSMDC) Ltd. for a minimum period of 5 years. Mining shall be carried out by JSMDC Ltd. following all statutory provisions of guidelines/ rules/ acts. JSMDC Ltd. shall adopt scientific and sustainable mining practices and shall ensure transparent, fair and effective delivery system. Further, the said policy also mandated JSMDC Ltd. for adaptation of appropriate technology such as RFID/ GPS tracking of vehicles, CCTV surveillance, central monitoring, cashless online sale etc. to prevent illegal mining and transportation of sand.					

Annexure -6

Letter No. SPMG/UD&HD/NMCG/EC/149/2017-135

Govt. of Jharkhand

Urban Development & Housing Department

From;

Vinay Kumar Choubey, IAS
Secretary to Govt.

To,

Shri Rajiv Ranjan Mishra, IAS
Director General,
National Mission for Clean Ganga,
Major Dhyan Chand National Stadium,
First Floor, National Stadium,
India Gate, New Delhi-110002

Ranchi, Date 16/6/20

Sub.: **Submission of "Arth Ganga" proposal under Namami Gange programme.**

Ref.: **Your letter no. D.O. No. C-14/2014-15/830/NMCG (Vol-II), Dated-28.05.2020**

Respected Sir,

Jharkhand state "Arth Ganga" proposal for Sahibganj district for your kind approval. The "Arth Ganga" proposal consist of following activities:

i. Capacity Building and skilled training.
ii. Agriculture/Horticulture/Forestry/Fishery
iii. Livelihood and value addition activity
iv. Water conservation activities.
v. Three years road map and action plan

With regards,

Yours faithfully

16/6/2020

(Vinay Kumar Choubey)
Secretary to Govt.

Encl. As above.

उपायुक्त कार्यालय,साहेबगंज
(जिला विकास शाखा)

पत्रांक– 169 /जि0वि0.

प्रेषक,

उपायुक्त–सह–अध्यक्ष,
जिला गंगा समिति,
साहेबगंज ।

सेवा में,

परियोजना निदेशक,
राज्य स्वच्छ गंगा मिशन,
नगर विकास एवं आवास विभाग,
झारखंड, राँची ।

साहेबगंज, दिनांक– 18-6-2020

विषय :– नमामि गंगे परियोजनान्तर्गत "Arth Ganga" हेतु समग्र विकास के लिए समिति द्वारा अनुमोदित कार्य योजना तैयार कर भेजने के संबंध में ।

प्रसंग :– विभागीय पत्रांक–124 / राँची, दिनांक–12.06.2020 एवं वन प्रमंडल पदाधिकारी, साहेबगंज के पत्रांक–1242 / दिनांक–17.06.2020

महाशय,

उपर्युक्त विषयक प्रासंगिक पत्र के संबंध में कहना है कि नमामि गंगे परियोजनान्तर्गत साहेबगंज जिला के तटीय क्षेत्रों में अवस्थित कुल–33 (तैंतीस) पंचायतों के 78 (अठहत्तर) गांवों के समग्र विकास के लिए "Arth Ganga" से संबंधित Concept Note में निहित प्रावधान के अनुरूप कार्य योजना तैयार किया गया है, जो अधोहस्ताक्षरी की अध्यक्षता में दिनांक–12.06.2020 को आहूत जिला गंगा संरक्षण समिति की बैठक में सर्वसम्मति से पारित किया गया है।

प्रासंगिक पत्र के संदर्भ में गंगा नदी के तटीय क्षेत्रों में अवस्थित ग्रामो / पंचायतों के समग्र विकास हेतु जिला गंगा संरक्षण समिति, साहेबगंज द्वारा अनुमोदित कार्य योजना संलग्न कर भेजा जाता है।

विश्वासभाजन

अनुलग्नक :– यथोक्त।

18/6/2020

उपायुक्त–सह–अध्यक्ष,
जिला गंगा समिति,
साहेबगंज ।

D:\DRDA\2019-20\F A\DEVELOPMENT\Namami Gange\Letter Namami Ganga (Govt) doc

कार्यालय :– वन प्रमंडल पदाधिकारी, साहेबगंज वन प्रमंडल, साहेबगंज।
E-Mail – dfo-sahebganj@gov.in, Ph. No. – 06436-222065
पत्रांक :– 1242 साहेबगंज / दिनांक :– 17-06-2020

सेवा में,

वन प्रमंडल पदाधिकारी,
–सह– सदस्य व संयोजक,
जिला गंगा समिति,
साहेबगंज।

सेवा में,

उपायुक्त–सह–
अध्यक्ष,
जिला गंगा समिति,
साहेबगंज।

विषय :– नमामि गंगे परियोजना अन्तर्गत "Arth Ganga" का प्रस्ताव एवं कार्य योजना अनुमोदनोपरान्त उपलब्ध कराने के संबंध में।

प्रसंग :– परियोजना निदेशक, एस0एम0सी0जी0, नगर विकास एवं आवास विभाग, झारखण्ड, राँची के पत्रांक–SPMG/UP & HD/Sahibganj/Site/Reports/01-2017-124 दिनांक–12.06.2020

महाशय,

उपरोक्त विषयक एवं प्रासंगिक पत्र के संदर्भ में सूचित करना है कि नमामि गंगे परियोजना अन्तर्गत गंगा नदी के तट पर बसे हुए पंचायत एवं गाँवों के समग्र विकास के लिए "Arth Ganga" का प्रस्ताव एवं कार्य योजना जिला गंगा समिति, साहेबगंज द्वारा अनुमोदनोपरान्त इस पत्र के साथ संलग्न कर दो प्रति में भेजी जा रही है।

अतः अनुरोध है कि आवश्यक अग्रेतर कार्रवाई करने की कृपा की जाय।

अनुलग्नक–यथोक्त।

विश्वासभाजन,
16/6/2020

वन प्रमंडल पदाधिकारी,
–सह–सदस्य व संयोजक,
जिला गंगा समिति,
साहेबगंज।

Hp Data/File 2020/Malto

दिनांक–12.06.2020 को श्री वरूण रंजन, (भा0प्र0से0), उपायुक्त–सह–अध्यक्ष, जिला गंगा समिति, साहेबगंज की अध्यक्षता में जिला गंगा समिति की आयोजित बैठक की कार्यवाही।

उपस्थिति :– पंजी के अनुसार।

सर्वप्रथम उपायुक्त द्वारा इस बैठक में उपस्थित सभी पदाधिकारियों/सदस्यों का स्वागत किया गया। तत्पश्चात् बैठक की कार्यवाही प्रारंभ करते हुए "जिला गंगा समिति" द्वारा कार्यान्वित विभिन्न बिन्दुओं की प्रगति की समीक्षा की गयी। समीक्षा के क्रम में साहेबगंज जिला अन्तर्गत गंगा नदी के तट पर बसे हुए पंचायत एवं गाँवों के समग्र विकास के लिए "Arth Ganga" का प्रस्ताव रखा गया जिसको जिला गंगा समिति के सदस्यों द्वारा विमर्शोपरान्त सर्वसम्मति से निर्णय लेते हुए "Arth Ganga" कार्य योजना को अनुमोदित किया गया।

अन्त में धन्यवाद ज्ञापन के साथ "जिला गंगा समिति" की आहूत बैठक की कार्यवाही समाप्त की गयी।

उप विकास आयुक्त,
साहेबगंज।

वन प्रमंडल पदाधिकारी
–सह–सदस्य व संयोजक,
जिला गंगा समिति,
साहेबगंज।

12/6/2020
उपायुक्त–सह–अध्यक्ष,
जिला गंगा समिति,
साहेबगंज।

कार्यपालक अभियंता,
पेयजल एवं स्वच्छता प्रमंडल,
साहेबगंज

जिला योजना पदाधिकारी,
साहेबगंज।

ज्ञापांक – 1224 दिनांक – 12-06-2020

प्रतिलिपि :– वन प्रमंडल पदाधिकारी, साहेबगंज/उप विकास आयुक्त, साहेबगंज/अध्यक्ष, नगर परिषद, साहेबगंज/अध्यक्ष, नगर पंचायत, राजमहल/कार्यपालक पदाधिकारी, नगर परिषद, साहेबगंज/कार्यपालक पदाधिकारी, नगर पंचायत, राजमहल/कार्यपालक अभियंता, पेयजल एवं स्वच्छता प्रमंडल, साहेबगंज/जिला योजना पदाधिकारी, साहेबगंज/प्रो0 रंजीत सिंह, साहेबगंज महाविद्यालय, साहेबगंज/श्री प्रणव शंकर, साहेबगंज/श्री चन्द्रेश्वर प्रसाद, सिन्हा, एल0सी0रोड, साहेबगंज को सूचनार्थ एवं आवश्यक कार्रवाई हेतु प्रेषित।

12/6/2020
उपायुक्त–सह–अध्यक्ष,
जिला गंगा समिति,
साहेबगंज।

झारखण्ड सरकार

कार्यालय :– वन प्रमंडल पदाधिकारी, साहेबगंज वन प्रमंडल, साहेबगंज।
E-Mail – dfo-sahebganj@gov.in Ph. No. – 06436-222065
पत्रांक :– 981 साहेबगंज / दिनांक :– 14-05-2020

सत्यमेव जयते

प्रेषक,

वन प्रमंडल पदाधिकारी,
साहेबगंज वन प्रमंडल,
साहेबगंज।

सेवा में,

वन संरक्षक,
प्रादेशिक अंचल,
दुमका।

विषय :– नमामि गंगे योजनान्तर्गत गंगा तटवर्तीय क्षेत्रों के विकास हेतु Agro Forestry एवं Bamboo Mission से संबंधित योजना की अद्यतन स्थिति एवं प्रतिवेदन समर्पित करने के संबंध में।

प्रसंग :– अपर प्रधान मुख्य वन संरक्षक, विकास, झारखण्ड, राँची का पत्रांक – 219 दिनांक – 22.04.2020

महाशय,

उपर्युक्त विषयक प्रासंगिक पत्र के संदर्भ में सूचित करना है कि नमामि गंगे योजनान्तर्गत गंगा तटवर्तीय क्षेत्रों के विकास हेतु Agro Forestry एवं Bamboo Mission से संबंधित योजना को Organic Agriculture Department एवं Horticulture Department के साथ एकत्रित (Integrated) करते हुए योजना इस पत्र के साथ संलग्न कर भेजी जा रही है।

कृपया प्राप्ति स्वीकार की जाय।

अनुलग्नलक–यथोक्त।

विश्वासभाजन,

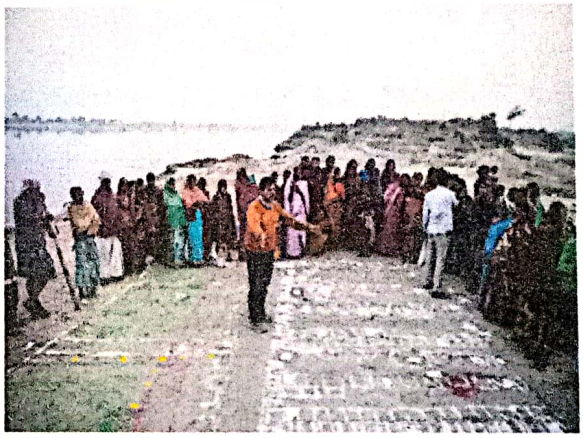
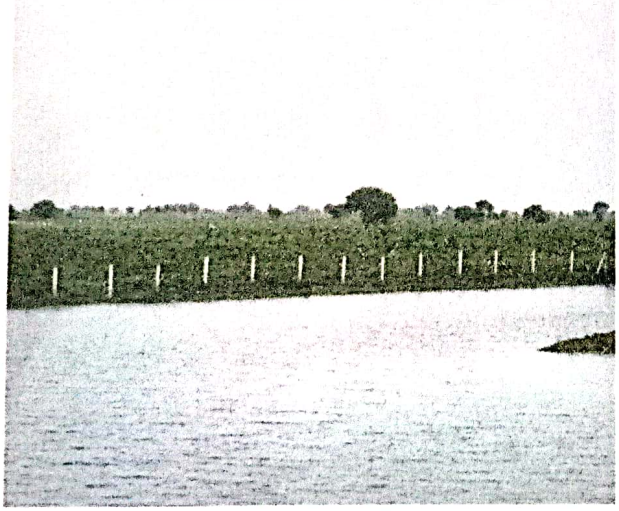
V.K.R.O 14/5/2020

वन प्रमंडल पदाधिकारी,
साहेबगंज वन प्रमंडल,
साहेबगंज।

A Project Proposal on

ARTH GANGA

SUSTAINBLE AND VIABLE ECONOMIC DEVELOPMENT FRAMWORK FOR THE GANGA BASIN


Submitted By:
Divisional Forest Officer,
Sahibganj Forest Division,
Sahibganj, Jharkhand

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Executive Summary

1. Present Status and Situation analysis of the Area:

The Namani Gange Project lies in the block of Sahibganj, Borio, Taljhari, Rajmahal, Udhwa and Barharwa in Sahebganj, Jharkhand. The Project treatment covering area 5376.70 hec of 78 villages and 30 Panchayat of Sahibganj, Borio, Taljhari, Rajmahal, Udhwa and Barharwa block of Sahebganj district.

The Project area is located under Longitude 87^0 35' 55" to 87^0 40' 80 East and Latitude 24^0 54' 15" to 24^0 59' 55" North. The elevation of the project area ranges from 918 ft.

The Namami Gange Project Area covering 45098 Ha has total population of 166863 out of which ST Constitutes – 0.5%, SC – 9.5%, OBC – 59% and Others 31%. Literacy rate being 56% and has 28638 BPL families. The land holding comprises 45% marginal, 30% small, 7% large and 18% landless. Constituting average of 0.43 hectare of land. The Landuse pattern of Project Area covers forest land 0.034 Ha, rain fed agriculture 5213.16 Ha, irrigated 197.26 Ha, Cultivable and Non Cultivable Waste land 163.50 Ha and 233.68 Ha respectively. In Project villages more than 30% of the arable land is rain fed. The rain fed condition, absence of irrigation facilities, absent of dry land farming & unscientific farming system cause food insecurity among marginal farmers (45%) and small farmers (30%).

The topography of the area is rolling and undulating. The water level goes below 10-12 mts during lean period leading to acute water scarcity problem. The annual average rain fall of the area is 1320 mm (Last Year). with 55 to 60 rainy days. May and June are the hottest months (40-42 deg. Cent.) and the lowest in December / January with 5 to 6 degree Centigrade. Around 93% people in the project area depends upon agriculture, allied livelihood system and Small Industry Labour (Stone Crusher). Erratic rainfall & subsequent drought had resulted in lower income for farmers from agriculture. The present agriculture scenario is unable to provide either sustenance or employment opportunities round the year due to low land holding capacity, poor soil productivity, lack of irrigation facility and absence of proper agricultural practices. The food security is only for 4-8 months annually. Ultimately it leads to unemployment and distress migration about 10% families

2. Vision Statement

- Project has been formulated with specific vision within the stipulated time frame of 3 Years.
- Greenery environment creation through Horticulture/Forestry Activity for 3 years.

- Ecosystem stability and income generation through Value Addition and Livelihood Activity.
- Increase in income level of landless farmers through various alternative Livelihood activities in project.
- Through implementation of Natural Resource Management Activity, the irrigated area will lead towards increase in crop productivity.
- The rainfed agriculture project area comes under Organic Agriculture through proper management of water and new techniques, where crop productivity will be increase 2 times than the present productivity.
- Increase in irrigation command area will increase the 2nd cropping area through proper management of water resources.
- Maximum percentage of population will attain food security after implementation of the project.
- Most of households of the project area will have access to safe and hygienic drinking water.
- The capacity building program will enhance enough awareness, so as to sustain development of villages after 3 years.
- The overall vision of the project is to uplift the socio economic condition of the community through interventions of Arth Ganga project.

3. Institutional Arrangements

The Divisional Forest Office (PIA), is one of the reputed Government Organizations working in the field of Forest development & Management, Natural Resource Based and forest based Livelihood project implementation. The Organization is under the aegis of Ministry of Environment, Forest and Climate Change Department, Govt. of Jharkhand. The Organization has Implementing Office in each districts of Jharkhand, headed by Van Bhawan at Ranchi. The Organization is working successfully since its establishment & has implemented many project in respect to forest & rural development as well as Eco Sensitive zone for helping poor community and forest dependent community.

The role of Divisional Forest Office (PIA) is to facilitate the program by supporting Community Based Organization (CBO) like Farmers Groups, Self Help Group (SHG), JFMCs and User's Group (UG).

4. Salient Project Activities

Rapport building and awareness generation of community members is the first stage for building self confidence to take decisions for implementation of activities. The broad head includes Capacity Building, EPA, Horticulture, Forestry, Agriculture, Value Addition Activity Natural Resources Management, Livelihood promotion, Productivity Enhancement and Micro Enterprises, Exit protocol etc. The major proposed activities are Entry point Intervention (cost = Rs. 10.15 lakhs), Capacity Building (Cost = Rs. 20.86500 Lakh), Agriculture, Horticulture, Fishery, Floriculture, Forestry Activity (cost = Rs. 795.89 lakhs), Livelihood and Value Addition Activity for asset less section (cost = Rs. 56.52500 lakhs) and Natural Resource Management (cost = Rs. 72.24 lakhs). A comprehensive training and Capacity building Plan (which constitutes project fund) have been designed for various CBO like SHG, Farmers Group, UG, and Other. The basic aim of this training programme will be for Project Orientation as well as Skill Improvement.

5. Convergence with Various Schemes

The aim of the Convergence is to saturate the possible Agriculture, Horticulture, Forestry, Livelihood and NRM activities in the project area which is planned under Arth Ganga concepts. The activates for some of the intervention like Check Dam special proposals will be made and submitted at Soil Conservation / Irrigation Deptt etc. other line departments.

CHAPTER 1

Introduction and Background

Introduction

Background of the Self-Sustaining Village under ARTH Ganga Concepts

Bhagirathi is the source stream of Ganga. It emanates from Gangotri Glacier at Gaumukh at an elevation of 3, 892 m (12,770 feet). Many small streams comprise the headwaters of Ganga. The important among these are Alaknanda, Dhauliganga, Pindar, Mandakini and Bhilangana. At Devprayag, where Alaknanda joins Bhagirathi, the river acquires the name Ganga. It traverses a course of 2525 km before flowing into the Bay of Bengal. It has a large number of tributaries joining it during this journey.

Namami Gange programme is an integrated Ganga conservation mission with a vision to restore the wholesomeness of the Ganga River by ensuring *Aviral Dhara* and *Nirmal Dhara*, and maintaining geo-hydrological and ecological integrity of the river. This programme focuses on several aspects such as sustainable agriculture, basin management and ecological restoration in order to conserve the Ganga River as one whole river ecosystem.

The *Arth Ganga* Programme envisage to improve the overall human well-being in Ganga Basin through sustainable economic development and equitable resource allocation. The Programme aims to garner people's participation for Ganga conservation by promoting sustainable development so as to contribute about 3% to the GDP from the Ganga basin. It is proposed to achieve this by working on the following objectives, (a) Strengthen the local economy in the basin, (b) Enhancing resource use efficiency, (c) Sustainable forestry, (d) Water Conservation, (e) Biodiversity conservation, (f) Strengthening capacity and public awareness, and (g) Promote multi-sectoral coordination. The focus areas of intervention will be (a) agriculture, including horticulture and floriculture, (b) fisheries, (c) tourism and culture, (d) handicrafts, including artisans in village subsistence industries, (e) renewable energy, (f) sustainable forestry, and (g) biodiversity and wetland conservation.

The ideal village concept is a community village with a self sustaining income producing project/s, independent electrification system generated from non-fuel based device, clean water facility for drinking including water for irrigation, quality but affordable housings, school, medical facilities for human beings and animals, proper sanitation system, information center, bank,

police station, retail outlet for household and agriculture needs, phone facility, connecting roads to nearby villages and towns, legal councilor. Such community villages can contribute to the economic growth of a province and even at national level. A prosperous village can result in less political problems for governments and enhance the standard of living of the people. On the surface, it looks like we need multi-millions of dollars to implement such a program but in reality this is not. The funding for developing such a concept must first come from the government in the beginning after one such community is successfully implemented funds from other sources such as aids organizations, charitable foundations, development banks, the world bank, donor countries as well as private donors will flow in because these organizations will know that the government is committed to provide good management and proper governance. Conceptually, such a village is very ideal, it will be quite a task but it is not impossible. The concept must be tailored to available resources in the project area but the most important criteria that will make the project a success is that there must be commitment and good management from the sponsor of the project as well as full support from village residents to maintain these.

VISION

Improve the overall human well-being in Ganga River Basin through sustainable economic development.

Global studies and experiences indicate that health of the river in a country is a mirror-image of the economic condition of the vast population inhabiting the basin. Among several other techno-social factors responsible for the present state of the river, it is the high incidence of poverty and lack of economic opportunities for the people of Ganga. In spite of the US$ 700 billion of GDP accounted for by the basin, this fertile Ganga basin is also home to some of the poorest sections of India's population, with more than 200 million people living below the national poverty line (World Bank, 2016). To sustainably improve the health of the river and the basin, we must strive to substantially improve the economic condition of the vast population of the farmers and agricultural labourers, industrial workers and artisans, youth and women and casual labourers and even presently unemployed people inhabiting the basin. There is an urgent need to realise the economic potential of the river and the basin, while maintaining or even improving the spirituality of the Ganga and its entire ecosystem and the landscape. Fortunately, the new environment of economic dynamism, high aspirations of the youth, good success rate of the new start-ups, greater role being played by the technology and innovations both in industry and agriculture and strong commitment of the government to the cause, all present good

opportunities to transform the economic condition of the people of Ganga through the Prime Minister's visionary concept of "Arth Ganga".

PROGRAMME OBJECTIVES

• Strengthen the local economy and human well-being

- Promote sustainable agricultural practices such as organic farming, agroforestry, and fish farming.
- Promote value added products and skill development for subsistence based industries (e.g. such as handloom, handicrafts, *agarbatti* making, etc. from locally sourced products).
- Develop protocol for food processing and regional branding.
- Establish market linkages for floricultural, horticultural, and value-added products.
- Enhance local livelihood through eco-tourism and other innovative interventions.

• Enhancing resource use efficiency

- Promote renewable energy (wind, solar and biogas) for powering agricultural practices, rural households and cottage industries.
- Creating awareness among communities for sustainable resource use.
- Minimize solid waste generation and use of plastics.

• Sustainable forestry

- Increase forest cover and green belts around human habitations.
- Raising nurseries as a source of saplings.
- Plantation drives promoting native species.

• Water Conservation

- Restoring water bodies - wetlands, rivers and streams.
- Improving watershed management.
- Groundwater recharge by increasing riparian forest cover.

• Biodiversity conservation

- Biodiversity assessment to identify priority areas.
- Habitat improvement for aquatic species by minimising anthropogenic disturbances in priority areas.
- Create a platform for interaction and dialogue with the dependent communities on the model of *Ganga Prahari*.
- Site specific strategies to align income generation with conservation priorities.
- Estuarine flows for protecting estuaries aquaspecies

• Strengthening capacity and public awareness

- Village Development Committee, Eco-development Committees, Forest Protection Committees, Panchayat Samitis.
- Target universities and research institutions.

• Promote multi-sectoral coordination

- Strengthen rural institutions and local governance.
- Strengthen dialogue among multiple sectors.
- Leverage knowledge, expertise, reach and resources through Community Facility Centres (CFCs).

CHAPTER 2

Project Area Background

Background of the project implementation area

STATE

The newly constituted state of Jharkhand has a predominant population comprising of tribal & the backward class community. The state comes under the purview of the 5th Scheduled of the constitution. The villages are scattered in the hilly and dense forest cover. The people are simple, peace loving and hard working and are attached to their societal structure and 'Jal, Jungle and Jameen' form the base of their existence.

Background under Namami Gange Project (District).

The River after traversing a distance of 2525 Kms. from its source, meets the Bay of Bengal at Ganga Sagar in West Bengal. During the course of its journey from the Hill to sea. It covers 83 Kms total length traversing. 6 Blocks, 30 Panchayat and 78 Villages situated on the bank of River Ganga has been identified to be covered under Arth Ganga Project.

DISTRICT PROFILE

Set within the lush green region, the district of Sahibganj, with a predominantly tribal population is a part of Santhal Pargana division and forms the eastern most tip of the division. The Rajmahal and Pakur subdivisions of old Santhal Pargana district were carved out on 17th May, 1983 to form Sahibganj district. Subsequently Pakur sub-division of Sahibganj district was carved out on 28th January, 1994 to constitute Pakur District.

GEOGRAPHICAL LOCATION:-

The district of Sahibganj lies approximately between $24^0$42' north and $25^0$21' north lattitude and between $87^0$25' and $87^0$54 east longitude. Sahibganj is the administrative headquarter of the district and situated on the bank of the river Ganges at $25^0$15' north lattitude and $87^0$38' east longitude . The geographical area of the district is 1599.00 sq. km.

It is bounded on north by the river Ganges and district of Katihar, on the south by the district Godda, on the east by Maldah and Murshidabad districts of the state of West Bengal, and on the west by Bhagalpur and Godda districts.

The total number of Block 9 Namely Barharwa, Barhait, Pathna, Udhwa, Rajmahal, Mandrao, Sahebganj, Taljhari & Borio, 166 Panchayat and villages in the district is 1819. Of these, 1307 are inhabited (chiragi) and 512 uninhabited (bechiragi).

PHYSICAL ASPECTS :-

A large part of the district is hilly. The vast tract of land enclosed between hill ranges had been assigned a name- Damin-I-koh, which is a Persian word means Skirts of the hills. The region on the bank of the Ganges is fertile and richly cultivated. The district may be divided into two natural divisions on the basis of its geographical location and cultivable land.

First region consists of Borio, Mandro, Barhait, Pathna and Taljhari blocks and lies under Damin-I-koh area. The hills and slopes are covered with forests, once dense but scanty now. The valleys have cultivable lands, yielding mostly paddy. The inhabitants of this region are generally Paharias, Mal Paharias and Santhals. The inhabitants on the hill top cultivate Barbatti and maize using rain water.

The second region consists of Sahibganj, Rajmahal, Udhwa and Barharwa blocks. This plain region consists of the uplands, undulation along ridges and depressions. The Ganges, Gumani and Bansloi rivers flow through this region. This area has plenty of fertile lands and is richly cultivated. The inhabitants of this region are mainly middle class people of different castes, Paharias and Santhals.

Rivers:-

The river Ganges forming the northern boundary of the district enters at its north western corner and journeys eastward up to Sakrigali where it takes a turn to the south and forms the southern boundary of the district up to a little beyond Radhanagar in Rajmahal subdivision. The river has been drifting gradually to the north and the Sahibganj town, which was once on the riverbank, is now about a mile away. The average width of the Ganges in the district is about 4 and half kilometers. It generally swells during the rains and inundates the lowlands lying east of the Railway loop line. There are ferry services across the river between Sahibganj ghat in the Sahibganj district on this side and Manihari ghat in the Katihar district on the other side and

Rajmahal ghat in the Sahibganj district and Manikchak ghat in the Maldah district of West Bengal. Country boats also ply in the river.

River Gumani emerges from the southern region of the Rajmahal hills. It flows in a north-easterly direction up to Barhait valley where it is joined by the river Mural. The joint stream takes a south-eastern turn and joins the Ganges a little beyond the district boundary.

FOREST:-

Owing to large scale unscrupulous felling the region once known for its thick and extensive forests is now bereft of much of its jungle wealth. The Forest department has undertaken afforestation of these areas. The most common tree found in the district is sal (Shorea Robusta). Some teak, though not of good quality, is also found. Some other trees found in the district are Jackfruit, Murga, Simal, Bamboo, Asan and Satsal. Sal and Simal logs and Jackfruit are exported in large quantities to the neighboring districts and also to the places outside Jharkhand.

LIVESTOCK :-

Despite a large population of cattle, yield of milk in the district is very poor. In order to grade up the cattle quickly and also at low cost, artificial insemination centers and sub-centers have been opened at various places in the district.

FISHERIES:-

The extensive bed of the Ganges at Sahibganj and Rajmahal offers one of the best fields in the state for collection of fish spawn and fishing. The spawn of Rohu, Katla, Mirga, Catfish and Hilsa is collected from the Barhait valley.

MINES AND MINERALS:-

The Rajmahal Hills are the source of building and road stones. Most of the quarrying is done by the side of the loop line of the Eastern Railway. Pakur chips are quite well known and are used extensively all over Jharkhand, Bihar and parts of West Bengal. Kaolin is found near Mangal Hat in Rajmahal subdivision. Bentonite available in some places is used by women-folk as hair washing material and now a days it is getting popular among urban ladies as Multani Mitti.

INDUSTRY :-

The traditional cottage and village industries practiced by the Santhals and the Paharias constitute tasar rearing, village black-smithy, carpentry, handloom weaving, rope making, bidi making, earthen ware making, stone ware making, etc. There is no large-scale industry available in the area mainly due to lack of infrastructure support. A number of small-scale industries have been set up in the district. Most of these are based on mining and related querrying activities. There is a good potential for setting up china clay industries.

TRADE AND COMMERCE:-

Sahibganj is by far the most important place for trade and commerce in the district. Wholesale trading in foodgrains is mostly carried on in Sahibganj. The main imports of the districts are linseed, mustard seed, tobacco, raw cotton, sugar, refined and unrefined molasses, salt, kerosene oil, coal, coke, gunny bags, gram, wheat and maize. The main exports are paddy, jawar, sabai, grass, stone chips, hides, fibers, kaolin and bentonite.

COMMUNICATION:-

a) Roads :- The district has good network of roadways. The river Ganges provides water link also for such purposes. No important place in the district is left unconnected by a metalled road. The Jamtara-Dumka-Sahibganj road provides a link with Assam after ferry across the Ganges. The road between Farakka and Bhagalpur has been upgraded as National Highway.

b) Railways :- The district is deprived of adequate railway communication as it lies on the Howrah-Bhagalpur loop line. Both the sub-divisional headquarters have railway stations. Presently there is rail connection for Howrah, New Delhi and Patna.

c) Waterways :- The only navigable waterways is the river Ganges. There are ferry services across the river Ganges between Sahibganj ghat to Manihari Ghat in Katihar district of Bihar, which is directly linked to the Guwahati highway and between Rajmahal ghat to Manikchak ghat in Maldah district of West Bengal.

ELECTRICITY AND POWER :-

The district receives most of the power supply from the Super Thermal Power Station at Kahalgaon. While all the main areas of the district have been electrified still the supply of power in the rural areas is not yet sufficient and is an area of major concern.

Topography

The topography of the watershed area reveals undulating topography with Laterite capping the ridge potion. The altitude of the watershed project region varies from 2234 ft to 2255 ft above mean sea level. Down the gentle slope the soil depth increases with changes in soil types. Down to the valley fill area the soil having fine texture. Some places along the river banks, gullies are seen. All throughout the area there is the coverage of agriculture land except the Ridge where either wasteland or forest cover is present. There is absence of any rocky outcrop in the project area. It is mainly the denuded region of Ranchi Plateau with a height of 600 to 900 mts above sea level.

The topography of the area is rolling and undulating and moderate to steep slope. Presiding 5 years on an average ,the average rainfall in mm is 1240 only. The water level goes below 10-14 mts during lean period leading to acute water scarcity problem. With 55 to 60 rainy days. May and June are the hottest months (40-42 deg. Cent.) and the lowest in December / January with 5 to 6 degree Centigrade. Around 95% people in the project area depends upon agriculture and allied livelihood system. Due to erratic rainfall, subsequent drought the farmers are getting least interested in agriculture. The present agriculture scenario is unable to provide either sustenance or employment opportunities round the year due to low land holding capacity, poor soil productivity, lack of irrigation facility and absence of proper new techniques for the agricultural practices. The food security is only for 4-8 months annually. Ultimately it leads to unemployment and distress migration about 12% of families.

Soil type of the area is sandy,sandy loam and laterite type.Major crops cultivated are Paddy in an area of 3250ha,Wheat in 1500ha , Pulses of 250 ha and Vegetables of 750 ha only.

The topography of the Project area can be divided into the following terrain classification

The land structure of the watershed area is as follows:

Land Structure	**Characteristics**
Don-I	It is swampy land and continually wet throughout the year, with slope less

	than 2%. Kharif rice, Summer rice, vegetables, and pulses are produced here.
Don – II	It is moderately wet land with moisture availability for 9 months above the Don – I land. The slope is generally 2% to 3 %. The winter crops, such as wheat, vegetables etc. along with kharif paddy are produced here.
Don – III	The land higher to don – II with availability of moisture for 7 months an annually, with slope of 3 to 4 %. Horticulture and timber plantation site with interculture of upland crops (ol, Sweet Potato, Potato, Onion etc). Where the gravels are present the soil and moisture conservation activity must be implemented to increase land productivity.
Tanr	The region represents the rocky and Laterite formation mainly wasteland and the highest point in the terrain cross section, no soil cover.

Climate

The Watershed project area falls under Central and North eastern Plateau Agro Climatic Region. The climatic characteristic reveals that of the Project area represents salubrious climate. Temperature ranges from maximum 37 to 20 °C during summer, and minimum of 22 to 10 °C during winter. The annual rainfall is about 1320 mm. About 80% of rainfall falls between July to September every year.

Landuse

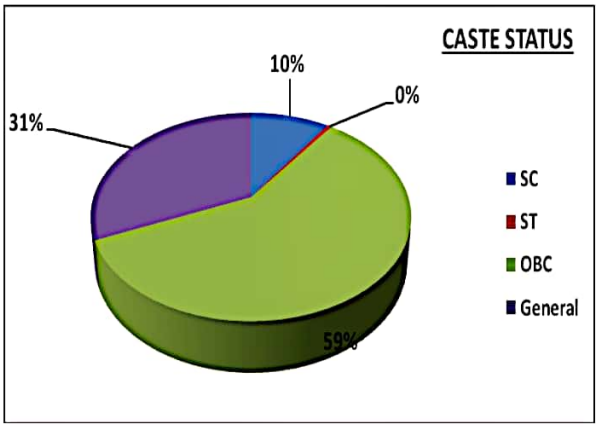
The Land use represents mostly agricultural land unirrigated, where Kharif paddy is done. Other major landuse includes small patches of irrigated agricultural lands along the rivers. The wasteland is found in patches where the is presence of Lateritic soils. There is forest cover mixed deciduous type in the project area mainly in the ridge section.

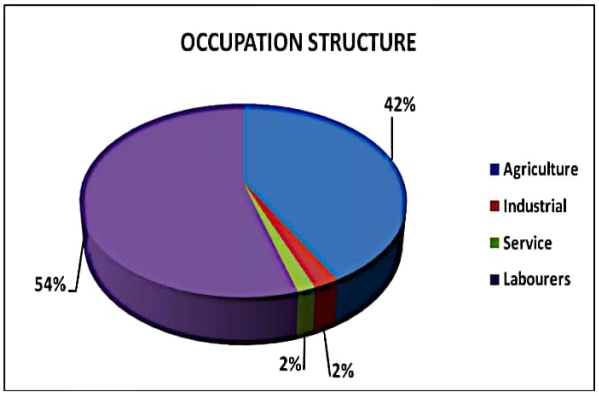
CHAPTER 3

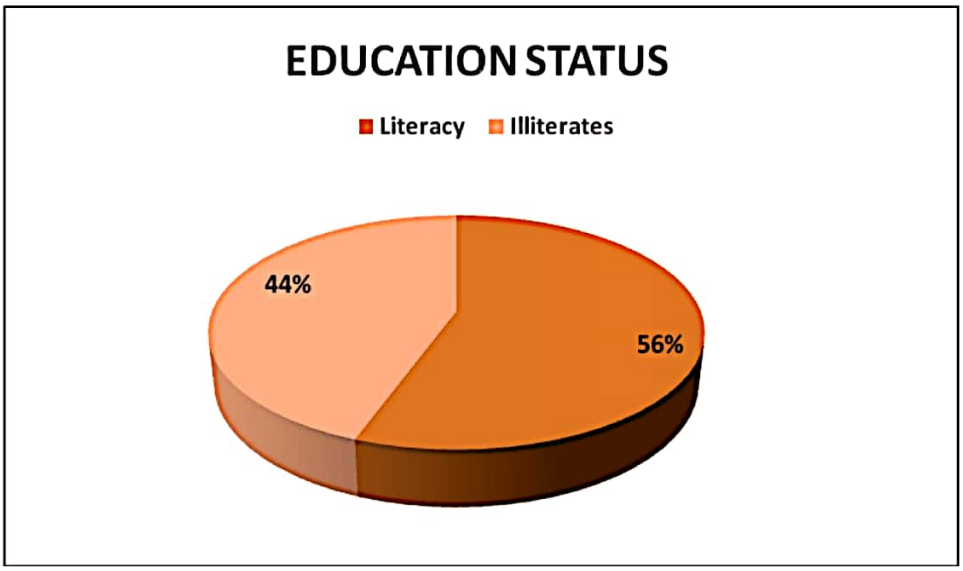
General Description of Project Area

PROJECT AREA DEMOGRAPHY DETAILS

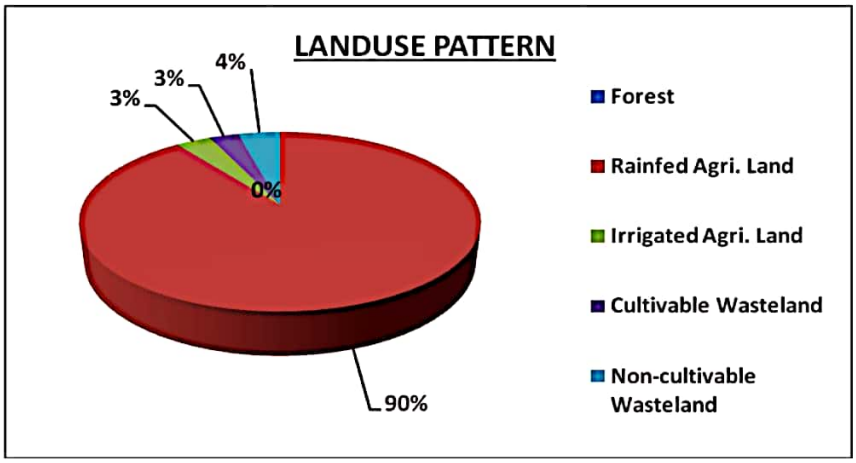
1	2	3	4	5
S.No	**Feature**	**Male**	**Female**	**Total**
1	**Population**			
	SC	8719	7133	15852
	ST	459	375	834
	OBC	47636	49979	97615
	General	28909	23652	52561
	Total	**85722**	**81140**	**166862**
2	**Children(0-14 years)**	15318	14717	30035
3	**Literacy**			
	Literates	50576	42193	92769
	Illiterates	35146	38947	74093
4	**Work Force**			
	Agriculture	19716	12982	32698
	Industrial	857	811	1669
	Service	771	406	1177
	Labourers	22288	20285	42573



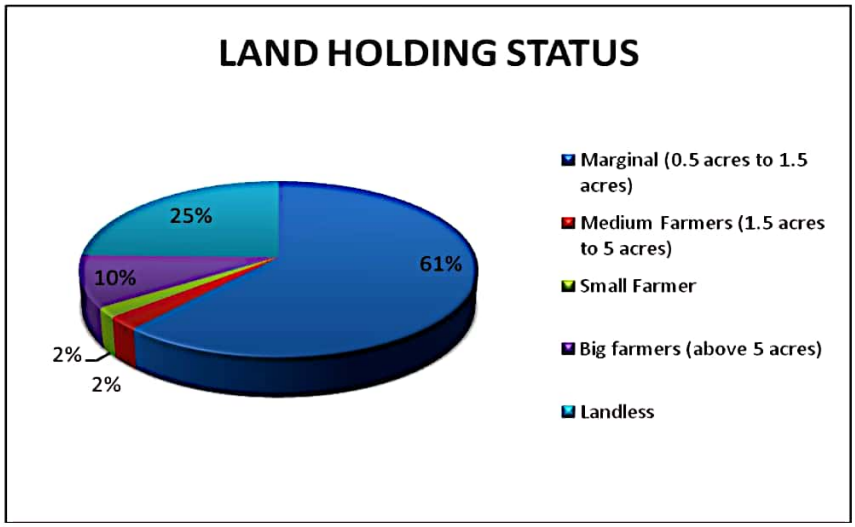


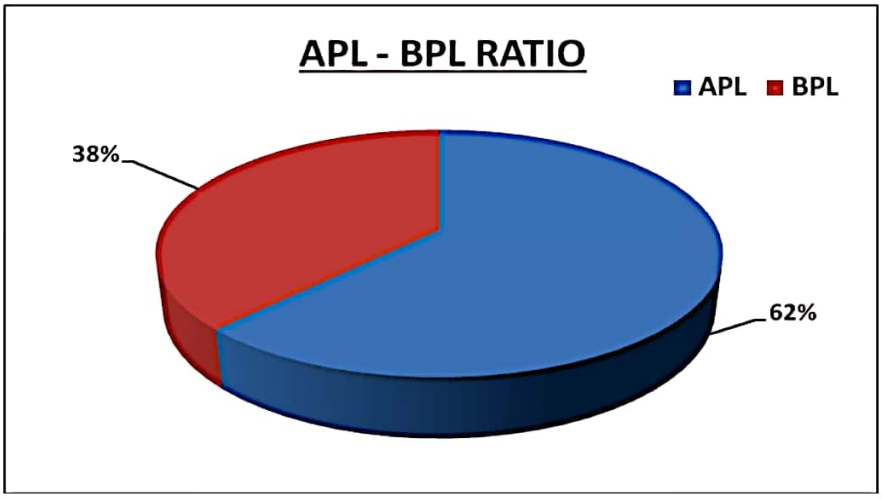


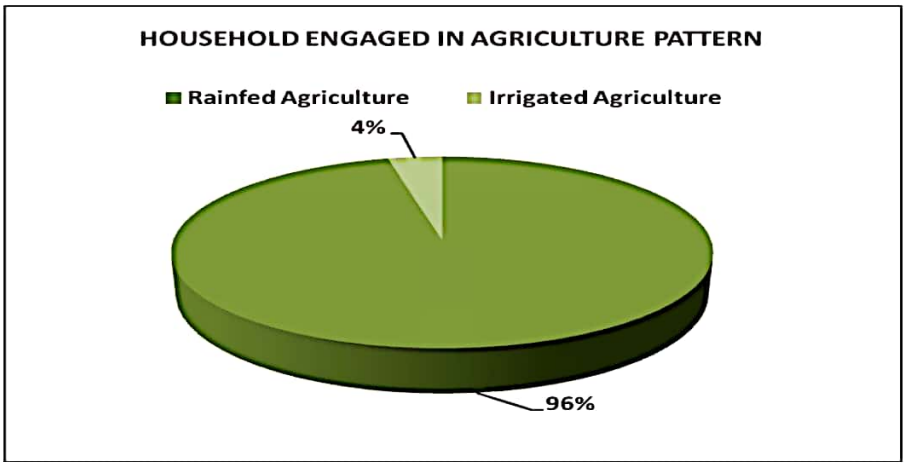
Sl. No	Area	Area under Arth Ganga Project Geographical area	Area under Treatable area	Forest Area	Rainfed Agri land	Irrigated Agri Land	Wasteland	
							Cultivable	Non-cultivable
1	All 78 Village	5807.6481	5376.701	0.034	5213.16	197.26	163.5073	233.68



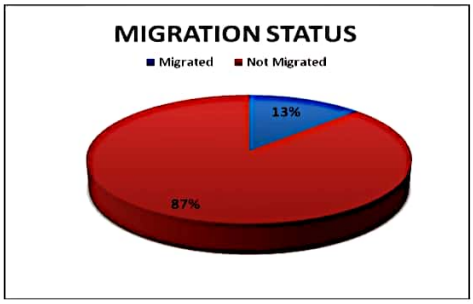
1	2	3	4	5					
S. No	Type	Total HHs	No. of BPL HHs	Land Holding (Ha)					
				Rain fed			Irrigated		
				SC	ST	Others	SC	ST	Others
1	Marginal (0.5 acres to 1.5 acres)	20294	8726	938	626	1564	16	4	20
2	Medium Farmers (1.5 acres to 5 acres)	13529	219	469	313	782	24	6	30
3	Big farmers (above 5 acres)	3157	0	156	104	261	39	10	49
4	Landless	8118	8118	0	0	0	0	0	0
	Total	45098	17063	1564	1043	2607	79	20	99







1	2			3	4	5	6	7
Sl. No.	No. of persons migrating			No. of days per year of migration	Major reason(s) for migrating	Distance of destination of migration from the village (km)	Occupation during migration	Income from such occupation (Rs.)
	M	F	Total					
1	12148	9545	21692	180	Drought, Landless, poverty	300 - 4000	Agriculture labour, Masonary labour, Mistry, Small Business	780918840



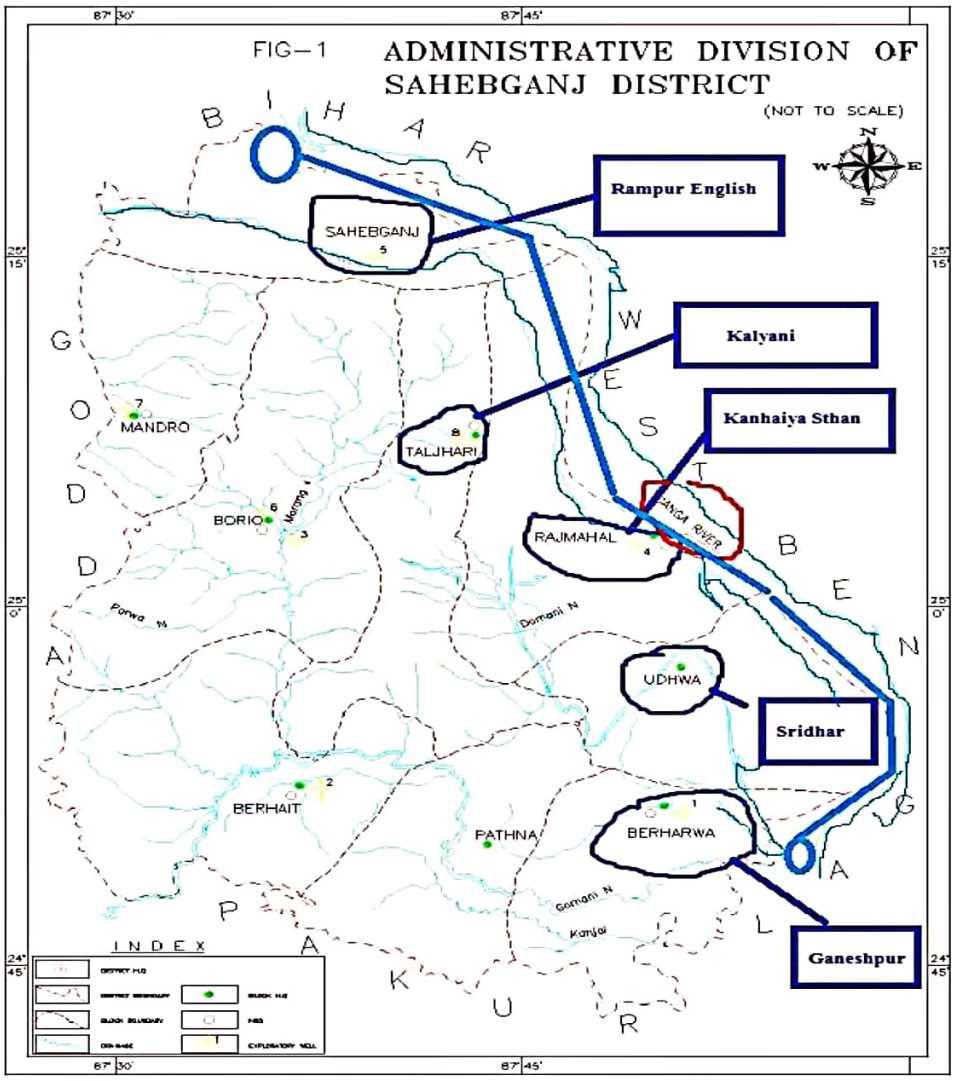
Season	Crop Type	Crop	Area Coverage (Ha.)	Production in Qu,/yr.	Productivity Rate Qu./Ha*	Cost of Cultivation Rs./Ha *
Kharif	Cereals	Paddy	4327	52356	12	25000
		Maize	261	2867	11	15000
Rabi	Cereals	Wheat	69	967	14	20000
	Pulses	Urad	24	76	3.2	8000
		Arhar	51	180	3.5	8000
	Vegetables	Potato	47	10415	220	40000
		Gourd	11	4004	350	10000
		Cucumber	12	3787	320	12000
		Others	30	8285	280	15000
Summer	Cereals	Maize	39	395	10	15000
**** As per local project area***						

1	2	3
S. No	**Crop classification**	**Area (Ha)**
1	Single crop	4171
2	Double crop	197
3	Multiple crop	118

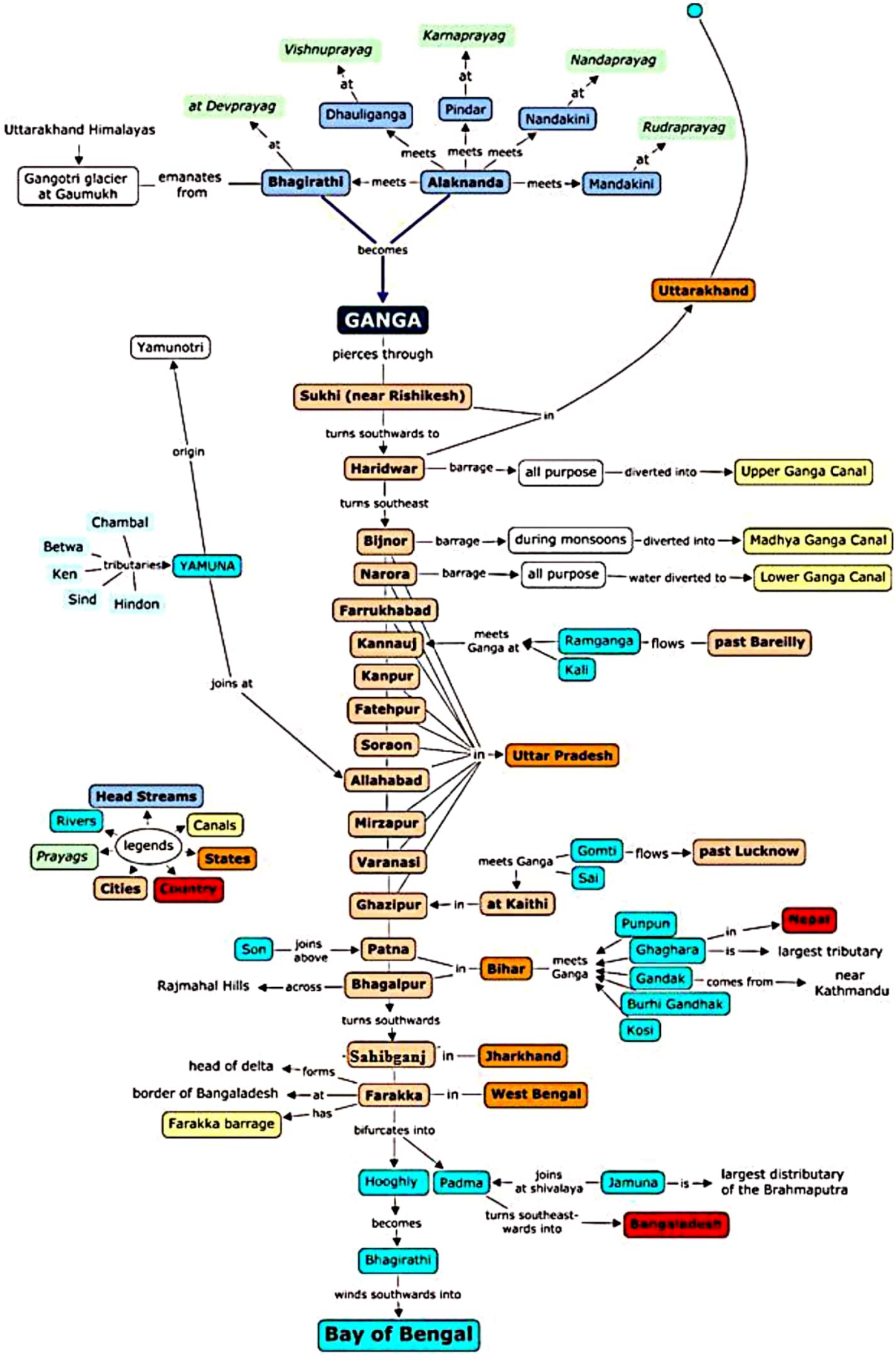
Crops						
Rain fed						
Season	**Crop Type**	**Crop**	**Area Coverage (Ha.)**	**Production in Qu,/yr.**	**Productivity Rate Qu./Ha***	**Cost of Cultivation Rs./Ha ***
Kharif	Cereals	Paddy	4327	52356	12	25000
		Maize	261	2867	11	15000
Rabi		Wheat	69	967	14	20000
	Pulses	Urad	24	76	3.2	8000
		Arhar	51	180	3.5	8000

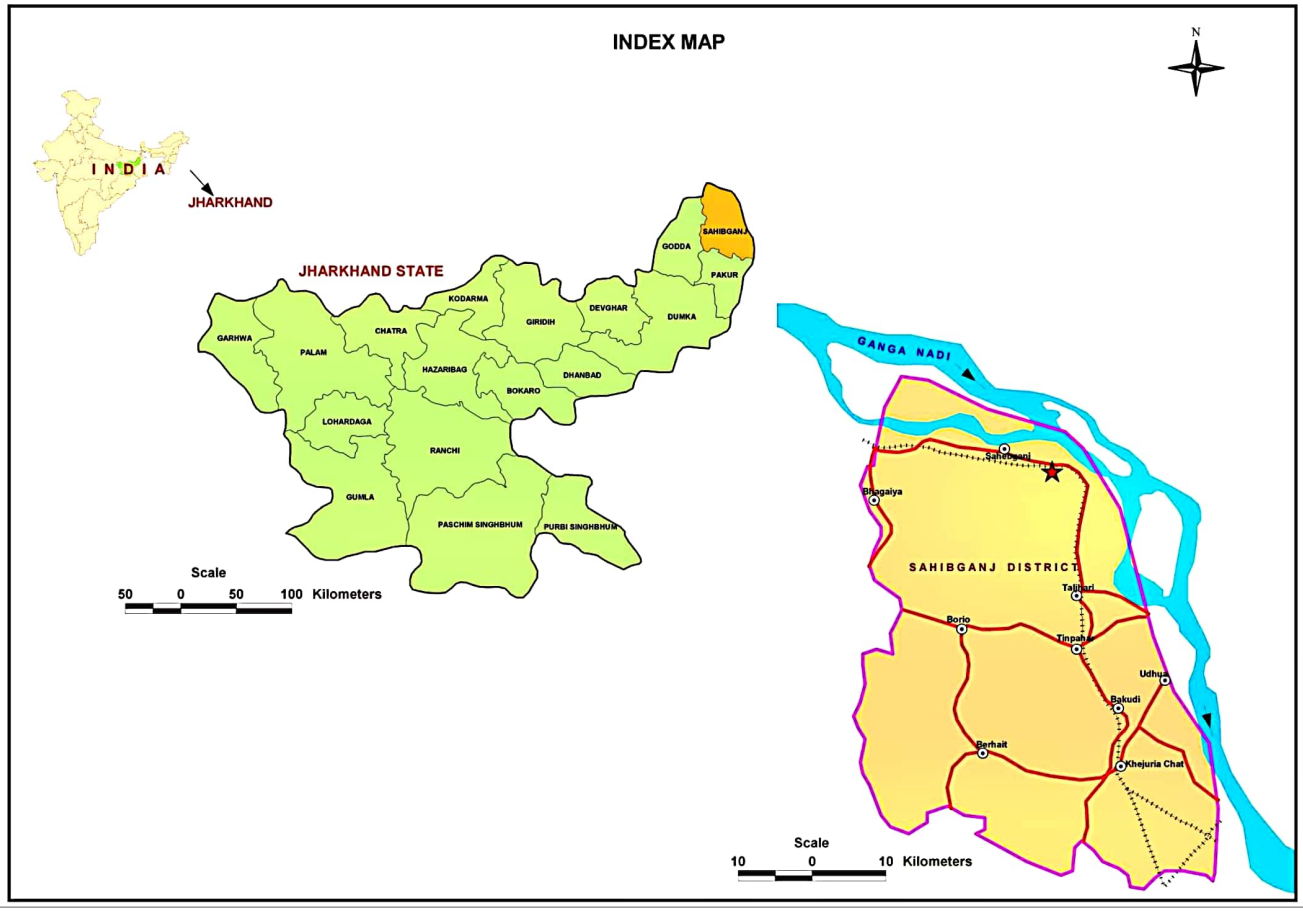
Crops						
Irrigated						
Season	**Crop Type**	**Crop**	**Area Coverage (Ha.)**	**Production in Qu,/yr.**	**Productivity Rate Qu./Ha***	**Cost of Cultivation Rs./Ha ***
Rabi	Cereals	Wheat	69	967	14	20000
	Pulses	Urad	24	76	3.2	8000
		Arhar	51	180	3.5	8000
	Vegetables	Potato	47	10415	220	40000
		Gourd	11	4004	350	10000
		Cucumber	12	3787	320	12000
		Others	30	8285	280	15000
Summer	Cereals	Maize	39	395	10	15000

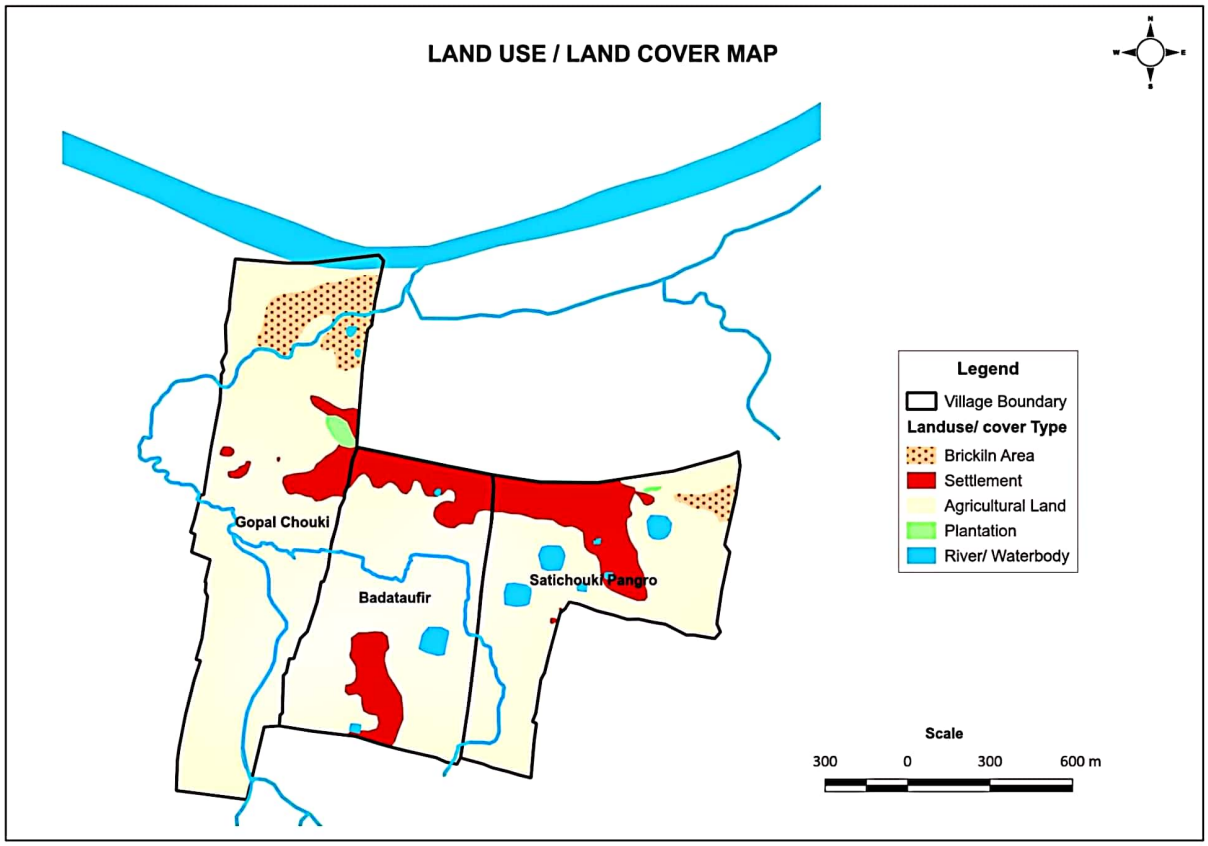
LOCATION MAP OF THE PROJECT AREA

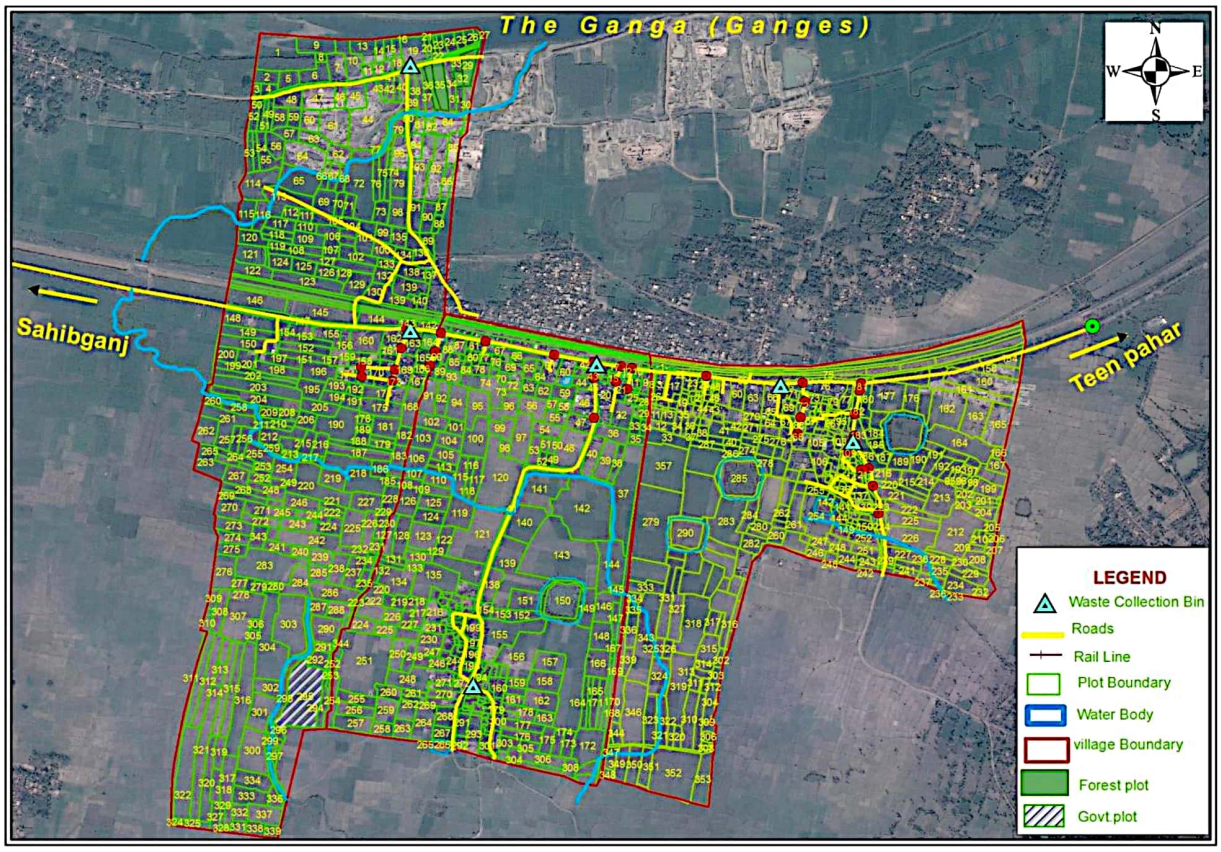


Project Area









Details of 78 Village wise Data

Sl.	S. No.B	Block	S. No.P	Panchayat	S. No.R.V	RevenueVillage	Total BPL HH	Total APL HH	Total HH	Total MGNREGA Registered Worker	Total Farmers	Total SHG Groups
1	1	Borio	1	Bara Madansahi	1	Bara Madanshahi	318	343	661	129	1091	3
					2	Sitachoki khuthari	205	197	402	219	663	2
					3	Chota Madanshahi	167	198	365	80	602	4
					4	Chota Pangro	90	143	233	117	384	3
			2	Bara Taufir	5	Bara Taufir	173	127	300	58	495	3
					6	Sitachoki Pangro	221	115	336	50	554	2
					7	Gopal chouki	0	40	40	8	66	1
						Sub Total	**1174**	**1163**	**2337**	**661**	**3856**	**18**
2	2	Barharwa	3	Barari	8	Barari	595	200	795	121	1312	1
					9	Ganeshpur	105	79	184	72	304	2
					10	Paharpur	109	39	148	106	244	3
					11	Bhagwanpur	168	52	220	40	363	5
					12	Pipra	131	62	193	7	318	3
					13	Mahattapur	32	38	70	5	116	4
					14	Maslandpur	64	30	94	5	155	3
						Sub Total	**1204**	**500**	**1704**	**356**	**2812**	**21**
3	3	Rajmahal	4	Ghatjamni	15	Ghatjamni	206	183	389	26	642	4
					16	Yogichak	185	263	448	245	739	3
					17	Ghat salempur	142	135	277	66	457	2
					18	Bhudwariya	123	88	211	162	348	3

			5	East Narayanpur	19	East Narayanpur	668	594	1262	467	2082	5
			6	Middle Narayanpur	20	Middle Narayanpur	977	541	1518	488	2505	3
			7	West Narayanpur	21	West Narayanpur	956	96	1052	327	1736	4
			8	Kasba	22	Kasba	802	112	914	436	1508	2
					23	Arizi Mokimpur	150	54	204	58	337	2
					24	Sayeed Bazar	65	18	83	9	137	3
					25	Ray Bazar	77	23	100	24	165	4
			9	Saidpur	26	Saidpur Bajrang	290	89	379	48	625	5
					27	Kanhai Aasthan	168	348	516	304	851	6
					28	Derghama	275	31	306	109	505	2
					29	Sobhapur	100	81	181	100	299	6
					30	Malahi Tola	150	51	201	52	332	4
			10	Mokimpur	31	Sobhapur	297	637	934	325	1541	3
					32	Jayrampur	82	48	130	33	215	2
					33	Panchkathiya	57	109	166	11	274	1
						Sub Total	**5770**	**3501**	**9271**	**3290**	**15297**	**64**
4	4	Udhwa	11	Sridhar	34	Sridhar	947	224	1171	783	1932	2
			12	South Plasgachi	35	South Plasgachi	1424	640	2064	445	3406	3
			13	West Pranpur	36	West Pranpur	619	651	1270	357	2096	4
					37	Khasmahal	417	416	833	69	1374	4
			14	Middle Piyarpur	38	Middle Piyarpur	700	100	800	396	1320	3
			15	North Plasgachi	39	North Plasgachi	1100	700	1800	661	2970	2
			16	South Piyarpur	40	South Piyarpur	1056	200	1256	773	2072	2
			17	Aamanat Diara	41	Aamanat Diara	892	570	1462	347	2412	3
			18	East Pranpur	42	East Pranpur	227	177	404	408	667	2
					43	Jalbalu	96	66	162	70	267	3
					44	Jeet Nagar	101	35	136	2	224	4
					45	Hussainabad	123	104	227	1	375	3

					46	Hamidpur	152	125	277	0	457	2
			19	North Piyarpur	47	North Piyarpur	1200	250	1450	336	2393	2
						Sub Total	**9054**	**4258**	**13312**	**4648**	**21965**	**39**
5	5	Taljhari	20	Bari Bagiamari	48	Paltanganj	75	23	98	23	162	2
			21	Kalyani	49	Kalyani	283	204	487	189	804	3
					50	Dhanbad	52	285	337	155	556	3
					51	Mehdipur	76	77	153	37	252	2
					52	Maharajpur Bazar	108	74	182	76	300	3
			22	Maskalia	53	Maskalia	151	156	307	44	507	2
					54	Balapokhar	225	169	394	158	650	4
					55	Fatehpur	119	13	132	30	218	2
						Sub Total	**1089**	**1001**	**2090**	**712**	**3449**	**21**
6	6	Sahibganj	23	Ganga Pd.East Middle	56	Mahadevganj	887	590	1477	233	2437	3
			24	Ganga Pd. West Middle	57	Ganga pd. Part	1088	562	1650	134	2723	2
			25	Hajipur East	58	Bholiya Tola	321	211	532	410	878	2
					59	Bari Kodarjanna	558	450	1008		1663	4
					60	Naya Tola	150	33	183		302	3
			26	Ganga Pd. East	61	Ganga pd. East	1062	326	1388	115	2290	2
			27	Hajipur West	62	Diyara	333	147	480	260	792	4
					63	Dihari	234	143	377	69	622	3
					64	Rajgaon	165	53	218	46	360	5
			28	Ganga Pd. West	65	Ganga pd. West	871	595	1466	168	2419	3
			29	Makhmalpur North	66	Chausa Makhmalpur	392	359	751	498	1239	4
					67	Makhmalpur	412	372	784		1294	5
			30	Makhmalpur South	68	Makhmalpur Part	740	558	1298	164	2142	3
					69	Lalbathani	293	56	349	127	576	2
			31	Kishan prasad	70	Kishan prasad	725	383	1108	373	1828	3
			32	Sakrigali	71	Rampur	218	231	449	182	741	3

					72	Samda Siz	249	169	418	130	690	4
					73	Samda Nala	152	165	317	15	523	3
					74	Gopal River Block 7	637	315	952	474	1571	3
					75	Sakri Bazar	116	45	161	5	266	2
			33	Har Prasad	76	Topra Rampur	101	181	282	1	465	3
					77	Rampur	346	67	413	210	681	2
					78	Haji Nagar	297	26	323	1	533	3
						Sub Total	**10347**	**6037**	**16384**	**3615**	**27034**	**71**
						Total	**28638**	**16460**	**45098**	**13282**	**74412**	**234**

CHAPTER 4

Project Implementation Overview

Implementation of alternate energy linked livelihoods initiatives for Ganga Rejuvenation in Sahibganj district of Jharkhand.

The primary objective of the project is to reduce dependency on mono cropping and diversify their income by enabling them through SHG formation, productivity enhancement by promotion of semi intensive rearing, strengthening vet care services and promoting Livestock activity.

- It will create a platform for effective implementation of NAMAMI Gange and other initiatives.
- Ease accessibility of the community to government and other schemes through SHG platform.
- Reduce animal mortality and morbidity by strengthening vet care infrastructure and accessibility.

Emphasis on Sustainable Livelihoods

The main aim of the project is to reduce dependency on mono cropping and diversify their income by enabling them through SHG formation, productivity enhancement by promotion of semi intensive rearing strengthening vet care services and promoting Livestock activity. The department along with the community members/SHGs will focus on comprehensive and inclusive health, education and livelihood training in order to promote sustainable economic well being, equality and basic human rights of the community regardless of gender, age and ability. Improve the lives of women and children by providing them clean cooking technologies and reducing health hazards like TB caused due to indoor pollution arising from traditional cooking practices. The project will promote cost-effective, appropriate local, low cost, easy to manage, technologies using local resources to ensure improved access, sustained use and maintenance of infrastructure created for effective management of cow dung as alternate energy and solid and liquid waste.

Gender Focus

The project will promote the participation of both men and women from the target village. Community participation is an integral part of the project. Community members will actively participate in all the phases of the project initiation from project planning and designing till its monitoring and evaluation. The project will ensure active participation of women members in

decision making. 243 SHGs will be formed with 95% bank linkages at the end of the project. Women SHGs will also be involved in planning implementing and managing the project activities.

OBJECTIVES OF THE PROPOSED PROJECT-

1. To improve the level of participation of the community members in All selected activities initiative and in decision making for its further development of the village or tola.
2. To develop Green infrastructure (Horticulture/Forestry/Floriculture and etc.) in the village so as to increase the Environment/Social/Economic development.
3. To increase the income level of the land less family /poor farmers / agricultural labours through livelihood activities /production system & micro enterprises.
4. To ensure all resource availability to the farmers in need for agricultural purposes round the year. To improve the employment in the village or Tola through development of primary and agro- based activities
5. To utilize west land and develop fallow land for agriculture purpose through NRM activity and enhance land capability.
6. To ensure Need based Skill development training for unemployed youth in the village or Tola so as to increase the rate of employment.

METHODOLOGY

Need assessment in the village and mapping out strategy for all respective activities is implementation on the project area by the community members themselves.

Department is very close to the reality of the life of the rural people and hence it can prioritize the actual needs of the village people.

(Dron View of Namami Gange Project village Madansahi with Community)

CHAPTER – 5

PROPOSED PROJECT ACTIVITIES

Sl. No.	Budget Head	Sub Head	Details of Activities
1	**Entry Point Intervention**		PRA and Meeting
			Village Wise/Activity wise Survey
			Motivation exercise Plan
			Plants Distribution and Home Garden Plantation
			Total
2	**Capacity Building and Skilled Based Training**		a) Preparatory Phase Awareness & Orientation Program for 1 day @150/Person/day
			b)Training to SHG members or Landless farmers on Livestock for 03 Days @Rs400.00/Person/Day
			c)Agricultural Literature For Farmers as IEC Materials
			d) Farmers exposure and demonstration on Agriculture Crops & Organic Farming And other instrument used in new agriculture technology@(600/person)for 2 days
			e) Training on Mushroom Cultivation for 3 day @ 200 / person
			f)Skill Development training to SHG members Account Keeping for 02 Days @Rs200.00/Person/Day
			g) Skill Development training to farmers on Organic Agriculture Activity for 03 Days @Rs400.00/Person/Day
			h) Training on Vermicomposting for 3 day @ 200 / person
			i) Training on Floriculture for 3 day @ 200 / person
			j) Training on Bamboo Craft Making for 3 day @ 200 / person
			k) Training on Agarbati Making for 3 day @ 200 / person
			l) Training on Pattal Plate Making for 3 day @ 200 / person
3	**Agriculture/Horticulture/Forestry/Fishery**	Horticulture	Mango Plantation
			Papaya Plantation
			Guava Plantation
			Sahjan Plantation
			Jack Fruits Plantation
			Custard Apple Plantation
			Sub total

		Forestry Activity	Agro Forestry Plantation
			Bamboo Plantation
			Forestary Plantation (Arjun/Karanj/Gamhar/Sisam/Sagwan/Semal and etc)
			Nusery Raising
			Sub total
		Medicinal Plantation	Alovera
			Tulsi
			Geloy
			Ashwagandha
			Neem
			Sub total
		Floriculture	Mary Gold
			Gulmohar
			Amaltash
			Palash
			Lily
			Other Flower Cultivation
			Sub total
		Fisheries Activity	Pond Renovation
			Fish Jira Distribution
			Fish Production Unit
			Fish Market Unit through Group
			Sub total
		Agriculture Activity	Vegetable Cultivation (Barwati/Parwal/Brinjal/Sim and etc.)
			Vegetable Cultivation by Organic Farming
			Pulses Cutivation (Urad/Mung/Arhar/Chana)
			Chili Cultivation
			Sub total
4	**Livelihood and Value Addition Activity**	Livelihood activity	Goatry
			Piggery
			Poultry
			Duckery
			Sub total
		Production and Value Addition Activity	Patal Making Unit
			Mushroom
			Vermi Composting
			Bamboo Handicraft Making
			Fish Market Unit through Group
			Agarbati Making
			Vegetable Marketing Mandi
			Food Processing Unit (Jam/Jelly/pickel/Hurbs Processing)
			Total
5	**Water Conservation Activity**		Field Bunding
			Trench Cum Bund
			New Pond
			Nala Repairing

Strategy for Project Implementation

1. Need Based assessment through different survey.
2. Prepared Need Based Activities Report of the Project area.
3. Project Staff Recruitment & Training
4. Awareness & Mobilization of the Project area
5. Formation of SHG, UG & Unemployed youth group
6. Capacity building Training for every group
7. Net Planning for Activities through PRA
8. Implement NRM Activities through rich to valley process in every year
9. Implement Livelihood activities through SHG & land less.
10. Implement Production system & Micro enterprises through farmers
11. Implement Community based activities on the basis of needs.
12. Monitoring & evaluation Process in every year by the funding agency as well as other organization

Exit strategy and sustainability of the programme

A Group of SHG, UG, Unemployed youth and Entrepreneurs would be formed before completion of the programme. This group with capacitated will provide substantial support to the upcoming projects. These units of group will work as resource community group for the future. Department will coordinate the function of group & provide supplementary support to them. This is 3 years project with an aim to develop self-sustaining model village of the country.

Self Sustaining Model village

Proposed activity budget (Year wise)

Three Years budget Abstracts of Physical, Financial (Rs. In Lakhs) Plan of Arth Ganga Project (Namami Gange)

Sl. No.	Budget Head	Sub Head	Details of Activities	Unit	Unit Cost	Grand Total (Physical)	Grand Total (Financial)	Year 1		Year2		Year3	
								Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Entry Point Activity		PRA and Meeting	No	500	78	3.90000	78	3.90000	0	0.00000	0	0.00000
			Village Wise/Activity wise Survey	No	500	78	3.90000	78	3.90000	0	0.00000	0	0.00000
			Motivation exercise Plan	No	200	20	0.40000	20	0.40000	0	0.00000	0	0.00000
			Plants Distribution and Home Garden Plantation	No	5	3900	1.95000	3900	1.95000	0	0.00000	0	0.00000
			Total				**10.15000**		**10.15000**		**0.00000**		**0.00000**
2	Capacity Building and Skilled Based Training		a) Preparatory Phase Awareness & Orientation Program for 1 day @150/Person/day	No	150	300	0.45000	100.00	0.15000	100	0.15000	100	0.15000
			b)Training to SHG members or Landless farmers on Livestock for 03 Days @Rs400.00/Person/Day	No	1200	150	1.80000	50.00	0.60000	50	0.60000	50	0.60000
			c)Agricultural Literature For Farmers as IEC Materials	No	25	1500	0.37500	500.00	0.12500	500	0.12500	500	0.12500
			d) Farmers exposure and demonstration on Agriculture Crops & Organic Farming And other instrument used in new agriculture technology@(600/person)for 2 days	No	1200	220	2.64000	70.00	0.84000	100	1.20000	50	0.60000
			e) Training on Mushroom Cultivation for 3 day @ 200 / person	No	600	300	1.80000	100	0.60000	100	0.60000	100	0.60000
			f)Skill Development training to SHG members on Account Keeping for 02 Days @Rs200.00/Person/Day	No	400	300	1.20000	100	0.40000	100	0.40000	100	0.40000
			g) Skill Development training to farmers on Organic Agriculture Activity for 03 Days @Rs400.00/Person/Day	No	1200	300	3.60000	100	1.20000	100	1.20000	100	1.20000
			h) Training on Vermicomposting for 3 day @ 200 / person	No	600	300	1.80000	100	0.60000	100	0.60000	100	0.60000
			i) Training on Floriculture for 3 day @ 200 / person	No	600	300	1.80000	100	0.60000	100	0.60000	100	0.60000
			j) Training on Bamboo Craft Making for 3 day @ 200 / person	No	600	300	1.80000	100	0.60000	100	0.60000	100	0.60000
			k) Training on Agarbati Making for 3 day @ 200 / person	No	600	300	1.80000	100	0.60000	100	0.60000	100	0.60000
			l) Training on Pattal Plate Making for 3 day @ 200 / person	No	600	300	1.80000	100	0.60000	100	0.60000	100	0.60000
			Total			**4570**	**20.86500**	**1520**	**6.91500**	**1550**	**7.27500**	**1500**	**6.67500**
		Horticulture	Mango Plantation	Ha.	70000	70.00	49.00000	20.00	14.00000	30.00	21.00000	20.00	14.00000
			Papaya Plantation	Ha.	52000	30.00	15.60000	10.00	5.20000	15.00	7.80000	5.00	2.60000
			Guava Plantation	Ha.	52000	63.00	32.76000	20.00	10.40000	25.00	13.00000	18.00	9.36000
			Sahjan (Moringa oleifera) Plantation	Ha.	52000	95.00	49.40000	30.00	15.60000	40.00	20.80000	25.00	13.00000
			Jack Fruits Plantation	Ha.	70000	45.00	31.50000	15.00	10.50000	20.00	14.00000	10.00	7.00000
			Custard Apple Plantation	Ha.	52000	70.00	36.40000	30.00	15.60000	20.00	10.40000	20.00	10.40000
			Sub total			**373.00**	**214.66000**		**71.30000**		**87.00000**		**56.36000**
		Forestry Activity	Agro Forestry Plantation	Ha.	60000	45.00	27.00000	15.00	9.00000	20.00	12.00000	10.00	6.00000
			Bamboo Plantation	Ha.	68000	20.00	13.60000	5.00	3.40000	10.00	6.80000	5.00	3.40000
			Forestary Plantation (Arjun/Karanj/Gamhar/Sisam/Sagwan/Semal and etc)	Ha.	45000	85.00	38.25000	30.00	13.50000	40.00	18.00000	15.00	6.75000
			Nusery Raising	Ha.	71000	85.00	60.35000	30.00	21.30000	40.00	28.40000	15.00	10.65000
			Sub total			**235.00**	**139.20000**	**80.00**	**47.20000**	**110.00**	**65.20000**	**45.00**	**26.80000**

3	Agriculture/Horticulture/Forestry/Fishery	Medicinal Plantation	Alovera	Ha.	72000	30.00	21.60000	15	10.80000	10	7.20000	5	3.60000
			Tulsi	Ha.	58000	30.00	17.40000	10	5.80000	15	8.70000	5	2.90000
			Geloy	Ha.	28000	30.00	8.40000	15	4.20000	10	2.80000	5	1.40000
			Ashwagandha	Ha.	61000	35.00	21.35000	10	6.10000	15	9.15000	10	6.10000
			Neem	Ha.	45000	30.00	13.50000	10	4.50000	15	6.75000	5	2.25000
			Sub total			**155.00**	**82.25000**	**60.00**	**31.40000**	**65.00**	**34.60000**	**30.00**	**16.25000**
		Floriculture	Mary Gold (Tagetes erecta)	Ha.	82000	30.00	24.60000	10	8.20000	15	12.30000	5	4.10000
			Gulmohar (Delonix regia)	Ha.	50000	45.00	22.50000	20	10.00000	15	7.50000	10	5.00000
			Amaltash (Cassia fistula)	Ha.	50000	40.00	20.00000	15	7.50000	20	10.00000	5	2.50000
			Palash (Butea monosperma)	Ha.	50000	60.00	30.00000	20	10.00000	25	12.50000	15	7.50000
			Lily (Lilium)	Ha.	75000	18.00	13.50000	10	7.50000	5	3.75000	3	2.25000
			Other Flower Cultivation	Ha.	65000	55.00	35.75000	20	13.00000	20	13.00000	15	9.75000
			Sub total			**248.00**	**146.35000**	**95.00**	**56.20000**	**100.00**	**59.05000**	**53.00**	**31.10000**
		Fisheries Activity	Pond Renovation	No	210000	13.00	27.30000	4	8.40000	7	14.70000	2	4.20000
			Fish Jira Distribution	No	6500	135.00	8.77500	50	3.25000	65	4.22500	20	1.30000
			Fish Production Unit	No	62200	35.00	21.77000	10	6.22000	15	9.33000	10	6.22000
			Fish Market Unit through Group	No	10000	30.00	3.00000	10	1.00000	10	1.00000	10	1.00000
			Sub total			**213.00**	**60.84500**	**74.00**	**18.87000**	**97.00**	**29.25500**	**42.00**	**12.72000**
		Agriculture Activity	Vegetable Cultivation (Barwati/Parwal/Brinial/Sem and etc.)	Ha.	23000	300.00	69.00000	100	23.00000	130	29.90000	70	16.10000
			Vegetable Cultivation by Organic Farming	Ha.	41200	55.00	22.66000	20	8.24000	25	10.30000	10	4.12000
			Pulses Cutivation (Urad/Mung/Arhar/Chana)	Ha.	30500	125.00	38.12500	40	12.20000	50	15.25000	35	10.67500
			Chili Cultivation	Ha.	38000	60.00	22.80000	20	7.60000	25	9.50000	15	5.70000
			Sub total			**540.00**	**152.58500**	**180.00**	**51.04000**	**230.00**	**64.95000**	**130.00**	**36.59500**
4	Livelihood and Value Addition Activity	Livelihood activity	Goatry	No	28500	90.00	25.65000	30	8.55000	30	8.55000	30	8.55000
			Piggery	No	27600	30.00	8.28000	10	2.76000	10	2.76000	10	2.76000
			Poultry	No	25000	125.00	31.25000	40	10.00000	50	12.50000	35	8.75000
			Duckery	No	25000	60.00	15.00000	20	5.00000	25	6.25000	15	3.75000
			Sub total			**305.00**	**80.18000**	**100.00**	**26.31000**	**115.00**	**30.06000**	**90.00**	**23.81000**
		Production and Value Addition Activity	Patal Making Unit	No	75000	30.00	22.50000	10	7.50000	10	7.50000	10	7.50000
			Mushroom	No	17500	55.00	9.62500	20	3.50000	15	2.62500	20	3.50000
			Vermi Composting	No	17500	30.00	5.25000	10	1.75000	10	1.75000	10	1.75000
			Bamboo Handicraft Making	No	17500	30.00	5.25000	10	1.75000	5	0.87500	15	2.62500
			Fish Market Unit through Group	No	10000	24.00	2.40000	7	0.70000	10	1.00000	7	0.70000
			Agarbati Making	No	15000	15.00	2.25000	5	0.75000	5	0.75000	5	0.75000
			Vegetable Marketing Mandi	No	10000	60.00	6.00000	20	2.00000	10	1.00000	30	3.00000
			Food Processing Unit (Jam/Jelly/pickel/Hurbs Processing)	No	25000	13.00	3.25000	3	0.75000	5	1.25000	5	1.25000
			Total			**257.00**	**56.52500**	**85.00**	**18.70000**	**70.00**	**16.75000**	**102.00**	**21.07500**
5	Water Conservation Activity		Field Bunding	Ha.	28000	90.00	25.20000	30	8.40000	30	8.40000	30	8.40000
			Trench Cum Bund	Ha.	18500	75.00	13.87500	25	4.62500	30	5.55000	20	3.70000
			New Pond	No	297800	30.00	89.34000	10	29.78000	10	29.78000	10	29.78000
			Nala Repairing	No	18000	22.00	3.96000	7	1.26000	5	0.90000	10	1.80000
			Total				**132.37500**		**44.06500**		**44.63000**		**43.68000**
6	Administrative Cost (10%)		Salary of 3 Staffs for 3 years and PIA other Expences	Month		0.00	21.60000		7.20000		7.20000		7.20000
			Total			**0**	**21.60000**	**0**	**7.20000**	**0**	**7.20000**	**0**	**7.20000**
Grand Total							**1117.58500**		**389.35000**		**445.97000**		**282.26500**

14/5/2020

Divisional Forest Officer,
Sahibganj Forest Division,
Sahibganj

Annexure -7

कृषि निदेशालय, झारखण्ड, राँची

पत्रांक: 1510 राँची, दिनांक: 23.06.2020

प्रेषक,

कृषि निदेशक,
झारखण्ड, राँची।

सेवा में,

सरकार के अपर सचिव,
कृषि पशुपालन एवं सहकारिता विभाग, झारखण्ड, राँची।

विषय: माननीय राष्ट्रीय हरित अधिकरण, नई दिल्ली में दायर वाद O.A. No. 606/2018 में विभिन्न पारित आदेशों के अनुपालन के संबंध में।

प्रसंग: विभागीय पत्रांक 997 दिनांक 19.06.2020, वन, पर्यावरण एवं जलवायु परिवर्तन विभाग का पत्रांक 1547 दिनांक 15.06.2020 एवं 1620 दिनांक 22.06.2020, नगर विकास एवं आवास विभाग, झारखण्ड का पत्रांक 129 दिनांक 15.06.2020 तथा झारखण्ड राज्य प्रदूषण नियंत्रण बोर्ड, राँची का पत्रांक 877 दिनांक 11.03.2020।

महाशय,

उपर्युक्त प्रासंगिक विषयक माननीय राष्ट्रीय हरित अधिकरण, नई दिल्ली में दायर वाद OA No 606/2018 में विभिन्न पारित आदेशों के आलोक में राज्य में विभिन्न नदियों के विस्तार क्षेत्रों में पड़ने वाले प्रखण्डों में Good Irrigation Practices का adoption से संबन्धित प्रतिवेदन इस पत्र के साथ संलग्न कर सूचनार्थ एवं आवश्यक कार्रवाई हेतु भेजी जा रही है।

साथ ही कहना है कि दिनांक 04.03.2020 को मुख्य सचिव की अध्यक्षता में आहूत बैठक की कार्यवाही झारखण्ड राज्य प्रदूषण नियंत्रण बोर्ड, राँची का पत्रांक 877 दिनांक 11.03.2020 (प्रति संलग्न) की पारा 4 में कृषि, पशुपालन एवं सहकारिता विभाग से नोडल पदाधिकारी नामित करने हेतु निदेशित किया गया है। उक्त के आलोक में विभाग स्तर से नोडल पदाधिकारी नामित करने की कृपा की जाय।

विश्वासभाजन

अनुलग्नक: यथोक्त।

23/6/2020

कृषि निदेशक,
झारखण्ड, राँची।

Achievement of NGT Action Plan under PMKSY 2019-2020

Rivers	Approx Lenth of the stretch	Catchment District	Physical Achievement	Financial Achievement
Ganga	-	Sahibganj		
Damodar	12 K.M.	Bokaro	31.41	36.926502
		Dhanbad	0.186	0.37158
Subarnrekha	120 K.M.	Ranchi	30.432	40.268346
		Seraikela-Kharsawan	0	0
		East Singhbhum	184.008	233.933088
Konar	-	Bokaro	14.676	18.262356
Garga	8 K.M.	Bokaro	18.534	23.615094
Jumar	10 K.M.	Ranchi	67.398	93.902232
Nalkari	-	Ramgarh	21.582	28.27662
Sankh	10 K.M.	Palamu	6.024	7.453554
		Gumla	18.36	23.596848
		Simdega	67.362	85.444236
North Koyal	-	Latehar	101.838	114.408222
		Palamu	4.32	5.077914
Grand Total			**566.13**	**711.536592**

1510
23.06.2020

कृषि निदेशालय, झारखण्ड, राँची

पत्रांक: 01/NMSA/Misc-09/2015 1759 **राँची, दिनांक:** 10-07-19

प्रेषक,

कृषि निदेशक,
झारखण्ड, राँची।

सेवा में,

सरकार के सचिव,
कृषि पशुपालन एवं सहकारिता विभाग,
झारखण्ड, राँची।

विषय: वित्तीय वर्ष 2019-20 में केंद्र प्रायोजित PMKSY-PDMC योजनान्तर्गत कार्ययोजना के संबंध में।

प्रसंग: सचिव, नगर विकास एवं आवास विभाग, झारखण्ड, राँची का पत्रांक-196 दिनांक-08/07/2019।

महोदया,

उपरोक्त प्रासंगिक विषय के संबंध में कहना है कि झारखण्ड राज्य में वित्तीय वर्ष 2019-20 में केंद्र प्रायोजित PMKSY-PDMC योजनान्तर्गत सभी जिलों में सूक्ष्म सिंचाई योजना के कार्यान्वयन हेतु कार्ययोजना स्वीकृत है। गंगा नदी एवं दामोदर नदी के सिंचित क्षेत्रों में किसानो को Good Irrigation Practices अपनाने हेतु सूक्ष्म सिंचाई योजना का कार्यान्वयन प्राथमिकता के आधार पर किया जाएगा।

विश्वासभाजन

अनुलग्नक: PMKSY-PDMC की स्वीकृत कार्ययोजना।

10/7/19

कृषि निदेशक,
झारखण्ड, राँची।

ज्ञापांक: 01/NMSA/Misc.09/2015 1759 **राँची, दिनांक:** 10-07-19

प्रतिलिपि: सरकार के सचिव, नगर विकास एवं आवास विभाग, झारखण्ड, राँची की सेवा में सूचनार्थ एवं आवश्यक कार्रवाई हेतु समर्पित।

10/7/19

कृषि निदेशक,
झारखण्ड, राँची।

दिनांक-18/06/2019 को 12:00 बजे मुख्य सचिव, झारखण्ड, राँची की अध्यक्षता में प्रोजेक्ट बिल्डिंग, धुर्वा, राँची स्थित सभा-कक्ष में प्रधानमंत्री कृषि सिंचाई योजनान्तर्गत राज्य स्तरीय स्वीकृति समिति (State Level Sanctioning Committee-SLSC) की आहूत बैठक की कार्यवाही:-

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दिनांक-18/06/2019 को 12:00 बजे मुख्य सचिव, झारखण्ड, राँची की अध्यक्षता में प्रोजेक्ट बिल्डिंग, धुर्वा, राँची स्थित सभा-कक्ष में प्रधानमंत्री कृषि सिंचाई योजनान्तर्गत राज्य स्तरीय स्वीकृति समिति (State Level Sanctioning Committee-SLSC) की आहूत बैठक सम्पन्न हुई।

उपस्थिती:- उपस्थिती संलग्न।

प्रस्ताव संख्या-1

(क) प्रधानमंत्री कृषि सिंचाई योजना अंतर्गत गठित राज्य स्तरीय स्वीकृति समिति (State Level Sanctioning Committee-SLSC) की दिनांक-25/06/2018 को आहूत बैठक की कार्यवाही की संपुष्टि की गई।

प्रधान मंत्री कृषि सिंचाई योजना - प्रति बूंद अधिक फसल (PMKSY-PDMC) अवयव

दिनांक-14/05/2019 को विकास आयुक्त, झारखण्ड, राँची की अध्यक्षता में अंतर विभागीय कार्य समूह (Inter Departmental Working Group-IDWG) की बैठक में लिए गए निर्णय पर स्वीकृति प्रदान की गई है।

प्रस्ताव संख्या-2 :

(क) वित्तीय वर्ष 2018-19 में प्रधानमंत्री कृषि सिंचाई योजना-प्रति बूंद अधिक फसल (सूक्ष्म सिंचाई) योजना का भौतिक एवं वित्तीय उपलब्धि तथा उपयोगिता प्रमाण-पत्र की स्थिति:-

क्र०	अवयव	भौतिक लक्ष्य (हे०)	भौतिक उपलब्धि (हे०)
1	ड्रिप सिंचाई प्रणाली	9218	2621.45
2	मिनी स्प्रिंकलर सिंचाई प्रणाली	9218	1356.03
	कुल योग:-	**18436**	**3977.48**

वर्ष	पिछले वर्ष की अवशेष राशि (लाख रू०)	विमुक्त राशि (लाख रू०)	उपयोगिता (लाख रू०)	अवशेष राशि (लाख रू०)	उपयोगिता प्रमाण-पत्र की स्थिति
2018-19	1921.00	1000.00	1258.34743	1662.65257	निर्गत

कुल केंद्रान्श - 1258.34743 लाख + कुल राज्यान्श - 2101.92682 लाख।

कुल व्यय रू० 3360.27425 लाख।

प्रस्ताव संख्या-3 :

(क) प्रधानमंत्री कृषि सिंचाई योजना-प्रति बूंद अधिक फसल (सूक्ष्म सिंचाई) योजना अंतर्गत दिनांक 01/04/2018 के बाद अनिवार्य सहायता का स्वरूप लघु एवं सीमांत कृषकों के लिए सूक्ष्म

सिंचाई प्रणाली के ईकाई लागत का 55% तथा अन्य कृषकों के लिए 45%, जिसमें केंद्रान्श एवं राजयांश का अनुपात 60:40 तथा अतिरिक्त राजयांश 35%, जो निम्न प्रकार है:-

कृषक का प्रकार	दिनांक 01/04/2018 के बाद सहायता का स्वरूप			
	केंद्रान्श	अनिवार्य राज्यान्श	अतिरिक्त राज्यान्श	कुल अनुदान
लघु एवं सीमांत	33%	22%	35%	90%
अन्य	27%	18%	35%	80%

कृषक अंशदान के रूप में वित्तीय वर्ष 2019-20 में लघु एवं सीमांत कृषकों द्वारा ईकाई लागत का केवल 10% तथा अन्य कृषकों द्वारा ईकाई लागत का केवल 20% ही वहन किया जाएगा पर स्वीकृति प्रदान की गई।

प्रस्ताव संख्या-4 :

(क) वित्तीय वर्ष 2019-20 में भारत सरकार पत्रांक-17-3/2019-RFS-III दिनांक-02/05/2019 द्वारा द्वारा प्रधानमंत्री कृषि सिंचाई योजना-प्रति बूंद अधिक फसल अवयव के कार्यान्वयन हेतु रु० 45.00 करोड़ केंद्रान्श का उपबंध किया गया है।

(ख) भारत सरकार पत्रांक-11-7/2017-RFS-III दिनांक-30/04/2019 द्वारा प्रधानमंत्री कृषि सिंचाई योजना-प्रति बूंद अधिक फसल अवयव अंतर्गत वित्तीय वर्ष 2018-19 में व्यय हेतु विमुक्त केंद्रान्श में से अवशेष राशि का पुनर्वैधीकरण वित्तीय वर्ष 2019-20 के कार्ययोजना में व्यय हेतु तथा गत वर्ष के दायित्यों के भुगतान हेतु किया गया है। वित्तीय वर्ष 2018-19 में रु० 10.00 + रु० 19.21 = रु० 29.21 करोड़ केंद्रान्श तथा रु० 50.8450 करोड़ राज्यान्श आवंटित किया गया था जिसमें रु० 16.6265257 करोड़ केंद्रान्श तथा रु० 29.8257318 करोड़ राज्यान्श अवशेष रहा। वित्तीय वर्ष 2018-19 में रु० 4.1621967 करोड़ केंद्रान्श तथा रु० 7.0855337 करोड़ राज्यान्श कुल रु० 11.2477304 करोड़ कोषागार द्वारा xml नहीं होने के कारण व्ययगत हुआ। वित्तीय वर्ष 2019-20 में व्यय तथा गत वर्ष के दायित्वों के भुगतान हेतु स्वीकृति प्रदान की गई।

(ग) वित्तीय वर्ष 2019-20 में केंद्र प्रायोजित प्रधानमंत्री कृषि सिंचाई योजना-प्रति बूंद अधिक फसल अवयव के कार्यान्वयन हेतु वार्षिक कार्ययोजना निम्न प्रकार है:-

कार्यकलाप	संख्या	हेक्टेयर	कुल लागत (लाख रू०)	केंद्रान्श (लाख रू०)	अनिवार्य राज्यान्श (लाख रू०)	अतिरिक्त राज्यान्श (लाख रू०)	कृषकांश (लाख रू०)
Drip Irrigation System	14180	5670	7318.46	2327.32	1551.48	2561.48	878.18
Mini Sprinkler Irrigation System	14165	5664	6124.60	1947.70	1298.49	2143.60	734.81
Administrative Expenses	-	-	622.64	224.98	150.00	247.64	-
Grand Total	**-**	**11334**	**14065.70**	**4500.00**	**2999.97**	**4952.72**	**1612.99**

कुल केंद्रान्श 4500.00 लाख, कुल राज्यान्श- 7952.68 लाख एवं कुल अनुदान रू० 12452.68 लाख

वित्तीय वर्ष 2019-20 की जिलेवार कार्ययोजना **परिशिष्ट-1** पर है, जिसमें:

1) नदी जीर्णोद्धार समिति (RRC) द्वारा नदियों यथा गरगा, संख, स्वर्णरेखा दामोदर, जुमार, कोनार एवं नलकरी के चिन्हित प्रदूषित विस्तार क्षेत्रों के संबन्धित जिलों में जल संरक्षण के तहत किसानों को सूक्ष्म सिंचाई प्रणाली अपनाने के लिए प्राथमिकता के आधार पर कार्यान्वयन किया जाएगा।

2) जल संसाधन विभाग द्वारा Accelerated Irrigation Benefit Programme (AIBP) के तहत पूर्ण परियोजनाओं के सिंचन-क्षेत्र में सूक्ष्म सिंचाई योजना प्राथमिकता के आधार पर किया जाएगा।

3) वित्तीय वर्ष 2018-19 में xml नहीं होने के कारण व्ययगत राशि का भुगतान वित्तीय वर्ष 2019-20 में आवंटित राशि से प्राथमिकता के आधार पर किया जाएगा।

4) गत वर्ष के दायित्वों का भुगतान वित्तीय वर्ष 2019-20 में आवंटित राशि से किया जाएगा।

उपरोक्त प्रस्ताव पर एवं वित्तीय वर्ष 2019-20 की जिलावार कार्ययोजना **परिशिष्ट-1** पर स्वीकृति प्रदान की गई।

प्रस्ताव संख्या-5 :

(क) वित्तीय वर्ष 2018-19 में सूक्ष्म सिंचाई योजना के तहत व्यय की गई राशि का कृषि निदेशालय अंतर्गत सूचीबद्ध अंकेक्षकों में से किसी एक से अंकेक्षण कराने की स्वीकृति प्रदान की गई।

प्रस्ताव संख्या-6 :

(क) योजना अंतर्गत प्रशासनिक मद से निम्नलिखित व्यय की स्वीकृति प्रदान की गई:-

क्र०	अवयव	अनुमानित लागत (लाख रु०)
1	राष्ट्रीय कृषि और ग्रामीण विकास बैंक परामर्शी सेवाएँ प्राइवेट लिमिटेड द्वारा किए जा रहे योजनाओं के भौतिक सत्यापन में व्यय @ रु० 1100.00 + 18% GST:-	367.92
2	योजना के ऑनलाइन कार्यान्वयन के तहत स्तर-1 तकनीकी सहायता, अनुकूलन, वार्षिक-अनुरक्षण-लागत, सर्वर किराया एवं सर्वर स्पेस पर व्यय:-	40.00
3	विविध: तृतीय पक्ष के द्वारा प्रभाव अध्ययन, अंकेक्षण, विडियो शंशा-पत्र, सफलता की कहानी, कार्यालय संचालन, कार्यालय उपस्कर/उपकरण, वाहन, ईंधन, योजना अंतर्गत राज्य एवं राज्य के बाहर किए जाने वाले यात्रा आदि में व्यय:-	214.69
	कुल योग:-	**622.61**

अंत में धन्यवाद ज्ञापन के साथ बैठक की कार्यवाही समाप्त की गई।

18/6/19

कृषि निदेशक,
झारखण्ड, राँची।

19/6/19

सचिव,
कृषि, पशुपालन एवं सहकारिता विभाग,
झारखण्ड, राँची।

19/6/19

मुख्य सचिव,
झारखण्ड, राँची।

ज्ञापांक: 02/06/NMSA-10/2014 (I) 1532 **राँची, दिनांक:** 21.06.2019

प्रतिलिपि: सभी सदस्यगण, राज्य स्तरीय स्वीकृति समिति (SLSC) को सूचनार्थ एवं आवश्यक कार्रवाई हेतु प्रेषित।

21/6/19

उप कृषि निदेशक (यो०),
कृषि निदेशालय, राँची।

ज्ञापांक: 02/06/NMSA-10/2014 (I) 1532 **राँची, दिनांक:** 21.06.2019

प्रतिलिपि: संयुक्त सचिव, आर०एफ०एस० डिविजन, कृषि सहकारिता एवं किसान कल्याण विभाग, कृषि मंत्रालय, भारत सरकार, नई दिल्ली की सेवा में सूचनार्थ एवं आवश्यक कार्रवाई हेतु प्रेषित।

21/6/19

उप कृषि निदेशक (यो०),
कृषि निदेशालय, राँची।

ज्ञापांक: 02/06/NMSA-10/2014 (I) 1532 **राँची, दिनांक:** 21.06.2019

प्रतिलिपि: मुख्य सचिव, झारखण्ड, राँची/सचिव, कृषि पशुपालन एवं सहकारिता विभाग, झारखण्ड, राँची की सेवा में सूचनार्थ एवं आवश्यक कार्रवाई हेतु समर्पित।

21/6/19

उप कृषि निदेशक (यो०),
कृषि निदेशालय, राँची।

झारखण्ड सरकार

कृषि, पशुपालन एवं सहकारिता विभाग

आज दिनांक-18/06/2019 को 12:00 बजे मुख्य सचिव, झारखण्ड, राँची की अध्यक्षता में प्रोजेक्ट बिल्डिंग, धुर्वा, राँची स्थित सभा-कक्ष में प्रधानमंत्री कृषि सिंचाई योजनान्तर्गत गठित राज्य स्तरीय स्वीकृति समिति (State Level Sanctioning Committee-SLSC) की आहूत बैठक की उपस्थिती विवरणी:-

क्र०	पदाधिकारी का पदनाम	हस्ताक्षर
1	मुख्य सचिव, झारखण्ड -अध्यक्ष	
2	अपर मुख्य सचिव, योजना-सह-वित्त विभाग, झारखण्ड - सदस्य	18/6/19
3	अपर मुख्य सचिव, वन पर्यावरण एवं जलवायु परिवर्तन विभाग, झारखण्ड - सदस्य	18.6.19
4	अपर मुख्य सचिव, जल संसाधन विभाग, झारखण्ड - सदस्य	
5	प्रधान सचिव, ग्रामीण विकास विभाग, झारखण्ड - सदस्य	18/6/19
6	सचिव, कृषि, पशुपालन एवं सहकारिता विभाग, झारखण्ड - सदस्य सचिव	18/6/19
7	कृषि निदेशक, झारखण्ड - सदस्य	18/6/19
8	निदेशक, उद्यान, झारखण्ड - सदस्य	18/6/19
9	डॉ० वाय० आर० मीणा, अपर आयुक्त (प्रसार), कृषि, सहकारिता एवं किसान कल्याण विभाग, कृषि मंत्रालय, भारत सरकार, नई दिल्ली	18/06/19
10	कुलपति, बिरसा कृषि विश्वविद्यालय, कांके, राँची For - सदस्य	18/6 Head Ag. Engg
11	निदेशक, केन्द्रीय जल आयोग, राँची -	18/6/19
12	निदेशक, भूमि संरक्षण, झारखण्ड - सदस्य	18/6/19
13	निदेशक, मत्स्य, झारखण्ड - सदस्य	18/6/19
14	निदेशक, गव्य विकास, झारखण्ड - सदस्य	18/06/2019
15	निदेशक, पशुपालन, झारखण्ड - सदस्य	18/6/19
16.	CEO - JSWM	18/6/19.
17.	एन.पी. सिंह आ.मु.मु.व.प्र. विशेष परियोजनाएँ, वन, पर्यावरण एवं जलवायु परिवर्तन विभाग	18/6/2019

परिशिष्ट-1

Pradhan Mantri Krishi Sinchai Yojana (PMKSY)-Per Drop More Crop

Annual Action Plan 2019-20

State: Jharkhand (Micro Irrigation)

(Rs. in Lakh)

SN	District	Crop	Micro Irrigation	Category of	Number of Farmer	System Cost/ha	Area (ha)	Total Cost	Mandatory Assistance		Additional State Govt.	Total Assistance	Farmer Contribution
									Central Govt.	State Govt.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Ranchi	Horticulture	Drip	S&M	1250	1.29073	500.00	645.37	212.97	141.98	225.88	580.83	64.54
			Drip	Others	313	1.29073	125.00	161.34	43.56	29.04	56.47	129.07	32.27
		Agriculture	Mini	S&M	1250	1.08132	500.00	540.66	178.42	118.95	189.23	486.60	54.06
			Mini	Others	313	1.08132	125.00	135.17	36.50	24.33	47.31	108.14	27.03
		Sub-Total			**3126**		**1250.00**	**1482.54**	**471.45**	**314.30**	**518.89**	**1304.64**	**177.90**
2	Khunti	Horticulture	Drip	S&M	720	1.29073	288.00	371.73	122.67	81.78	130.11	334.56	37.17
			Drip	Others	180	1.29073	72.00	92.93	25.09	16.73	32.53	74.35	18.58
		Agriculture	Mini	S&M	720	1.08132	288.00	311.42	102.77	68.51	109.00	280.28	31.14
			Mini	Others	180	1.08132	72.00	77.86	21.02	14.01	27.25	62.28	15.58
		Sub-Total			**1800**		**720.00**	**853.94**	**271.55**	**181.03**	**298.89**	**751.47**	**102.47**
3	Lohardaga	Horticulture	Drip	S&M	610	1.29073	244.00	314.94	103.93	69.29	110.23	283.45	31.49
			Drip	Others	153	1.29073	61.00	78.73	21.26	14.17	27.56	62.99	15.74
		Agriculture	Mini	S&M	610	1.08132	244.00	263.84	87.07	58.04	92.34	237.45	26.39
			Mini	Others	153	1.08132	61.00	65.96	17.81	11.87	23.09	52.77	13.19
		Sub-Total			**1526**		**610.00**	**723.47**	**230.07**	**153.37**	**253.22**	**636.66**	**86.81**
4	West Singhbhum	Horticulture	Drip	S&M	340	1.29073	136.00	175.54	57.93	38.62	61.44	157.99	17.55
			Drip	Others	85	1.29073	34.00	43.88	11.85	7.90	15.36	35.11	8.77
		Agriculture	Mini	S&M	340	1.08132	136.00	147.06	48.53	32.35	51.47	132.35	14.71
			Mini	Others	85	1.08132	34.00	36.76	9.93	6.62	12.87	29.42	7.34
		Sub-Total			**850**		**340.00**	**403.24**	**128.24**	**85.49**	**141.14**	**354.87**	**48.37**
5	Seraikela-Kharsawan	Horticulture	Drip	S&M	590	1.29073	236.00	304.61	100.52	67.01	106.61	274.14	30.47
			Drip	Others	148	1.29073	59.00	76.15	20.56	13.71	26.65	60.92	15.23
		Agriculture	Mini	S&M	590	1.08132	236.00	255.19	84.21	56.14	89.32	229.67	25.52
			Mini	Others	148	1.08132	59.00	63.80	17.23	11.48	22.33	51.04	12.76
		Sub-Total			**1476**		**590.00**	**699.75**	**222.52**	**148.34**	**244.91**	**615.77**	**83.98**
6	East Singhbhum	Horticulture	Drip	S&M	550	1.29073	220.00	283.96	93.71	62.47	99.39	255.57	28.39
			Drip	Others	138	1.29073	55.00	70.99	19.17	12.78	24.85	56.80	14.19
		Agriculture	Mini	S&M	550	1.08132	220.00	237.89	78.50	52.34	83.26	214.10	23.79
			Mini	Others	138	1.08132	55.00	59.47	16.06	10.70	20.81	47.57	11.90
		Sub-Total			**1376**		**550.00**	**652.31**	**207.44**	**138.29**	**228.31**	**574.04**	**78.27**
7	Gumla	Horticulture	Drip	S&M	1220	1.29073	488.00	629.88	207.86	138.57	220.46	566.89	62.99
			Drip	Others	305	1.29073	122.00	157.47	42.52	28.34	55.11	125.97	31.50
		Agriculture	Mini	S&M	1220	1.08132	488.00	527.69	174.14	116.09	184.69	474.92	52.77
			Mini	Others	305	1.08132	122.00	131.92	35.62	23.75	46.17	105.54	26.38

Pradhan Mantri Krishi Sinchai Yojana (PMKSY)-Per Drop More Crop
Annual Action Plan 2019-20

State: Jharkhand (Micro Irrigation)

(Rs. in Lakh)

SN	District	Crop	Micro Irrigation	Category of	Number of Farmer	System Cost/ha	Area (ha)	Total Cost	Mandatory Assistance		Additional State Govt.	Total Assistance	Farmer Contribution
									Central Govt.	State Govt.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
		Sub-Total			**3050**		**1220.00**	**1446.96**	**460.14**	**306.75**	**506.43**	**1273.32**	**173.64**
8	Simdega	Horticulture	Drip	S&M	390	1.29073	156.00	201.35	66.45	44.30	70.47	181.22	20.13
			Drip	Others	98	1.29073	39.00	50.34	13.59	9.06	17.62	40.27	10.07
		Agriculture	Mini	S&M	390	1.08132	156.00	168.69	55.67	37.11	59.04	151.82	16.87
			Mini	Others	98	1.08132	39.00	42.17	11.39	7.59	14.76	33.74	8.43
		Sub-Total			**976**		**390.00**	**462.55**	**147.10**	**98.06**	**161.89**	**407.05**	**55.50**
9	Dumka	Horticulture	Drip	S&M	390	1.29073	156.00	201.35	66.45	44.30	70.47	181.22	20.13
			Drip	Others	98	1.29073	39.00	50.34	13.59	9.06	17.62	40.27	10.07
		Agriculture	Mini	S&M	390	1.08132	156.00	168.69	55.67	37.11	59.04	151.82	16.87
			Mini	Others	98	1.08132	39.00	42.17	11.39	7.59	14.76	33.74	8.43
		Sub-Total			**976**		**390.00**	**462.55**	**147.10**	**98.06**	**161.89**	**407.05**	**55.50**
10	Jamtara	Horticulture	Drip	S&M	100	1.29073	40.00	51.63	17.04	11.36	18.07	46.47	5.16
			Drip	Others	25	1.29073	10.00	12.91	3.49	2.32	4.52	10.33	2.58
		Agriculture	Mini	S&M	100	1.08132	40.00	43.25	14.27	9.52	15.14	38.93	4.32
			Mini	Others	25	1.08132	10.00	10.81	2.92	1.95	3.78	8.65	2.16
		Sub-Total			**250**		**100.00**	**118.60**	**37.72**	**25.15**	**41.51**	**104.38**	**14.22**
11	Sahibganj	Horticulture	Drip	S&M	100	1.29073	40.00	51.63	17.04	11.36	18.07	46.47	5.16
			Drip	Others	25	1.29073	10.00	12.91	3.49	2.32	4.52	10.33	2.58
		Agriculture	Mini	S&M	100	1.08132	40.00	43.25	14.27	9.52	15.14	38.93	4.32
			Mini	Others	25	1.08132	10.00	10.81	2.92	1.95	3.78	8.65	2.16
		Sub-Total			**250**		**100.00**	**118.60**	**37.72**	**25.15**	**41.51**	**104.38**	**14.22**
12	Pakur	Horticulture	Drip	S&M	120	1.29073	48.00	61.96	20.45	13.63	21.69	55.77	6.19
			Drip	Others	30	1.29073	12.00	15.49	4.18	2.79	5.42	12.39	3.10
		Agriculture	Mini	S&M	120	1.08132	48.00	51.90	17.13	11.42	18.17	46.72	5.18
			Mini	Others	30	1.08132	12.00	12.98	3.50	2.34	4.54	10.38	2.60
		Sub-Total			**300**		**120.00**	**142.33**	**45.26**	**30.18**	**49.82**	**125.26**	**17.07**
13	Latehar	Horticulture	Drip	S&M	420	1.29073	168.00	216.84	71.56	47.70	75.89	195.15	21.69
			Drip	Others	105	1.29073	42.00	54.21	14.64	9.76	18.97	43.37	10.84
		Agriculture	Mini	S&M	410	1.08132	164.00	177.34	58.52	39.01	62.07	159.60	17.74
			Mini	Others	100	1.08132	40.00	43.25	11.68	7.79	15.14	34.61	8.64
		Sub-Total			**1035**		**414.00**	**491.64**	**156.40**	**104.26**	**172.07**	**432.73**	**58.91**
14	Palamu	Horticulture	Drip	S&M	430	1.29073	172.00	222.01	73.26	48.84	77.70	199.80	22.21
			Drip	Others	108	1.29073	43.00	55.50	14.99	9.99	19.43	44.41	11.09
		Agriculture	Mini	S&M	430	1.08132	172.00	185.99	61.38	40.92	65.10	167.40	18.59
			Mini	Others	108	1.08132	43.00	46.50	12.56	8.37	16.28	37.21	9.29

Pradhan Mantri Krishi Sinchai Yojana (PMKSY)-Per Drop More Crop
Annual Action Plan 2019-20

State: Jharkhand (Micro Irrigation)

(Rs. in Lakh)

SN	District	Crop	Micro Irrigation	Category of	Number of Farmer	System Cost/ha	Area (ha)	Total Cost	Mandatory Assistance		Additional State Govt.	Total Assistance	Farmer Contribution
									Central Govt.	State Govt.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
		Sub-Total			**1076**		**430.00**	**510.00**	**162.19**	**108.12**	**178.51**	**448.82**	**61.18**
15	Garhwa	Horticulture	Drip	S&M	380	1.29073	152.00	196.19	64.74	43.16	68.67	176.57	19.62
			Drip	Others	95	1.29073	38.00	49.05	13.24	8.83	17.17	39.24	9.81
		Agriculture	Mini	S&M	380	1.08132	152.00	164.36	54.24	36.16	57.53	147.93	16.43
			Mini	Others	95	1.08132	38.00	41.09	11.09	7.40	14.38	32.87	8.22
		Sub-Total			**950**		**380.00**	**450.69**	**143.31**	**95.55**	**157.75**	**396.61**	**54.08**
16	Hazaribagh	Horticulture	Drip	S&M	750	1.29073	300.00	387.22	127.78	85.19	135.53	348.50	38.72
			Drip	Others	188	1.29073	75.00	96.80	26.14	17.42	33.88	77.44	19.36
		Agriculture	Mini	S&M	750	1.08132	300.00	324.40	107.05	71.37	113.54	291.96	32.44
			Mini	Others	188	1.08132	75.00	81.10	21.90	14.60	28.39	64.89	16.21
		Sub-Total			**1876**		**750.00**	**889.52**	**282.87**	**188.58**	**311.34**	**782.79**	**106.73**
17	Ramgarh	Horticulture	Drip	S&M	500	1.29073	200.00	258.15	85.19	56.79	90.35	232.33	25.82
			Drip	Others	125	1.29073	50.00	64.54	17.43	11.62	22.59	51.64	12.90
		Agriculture	Mini	S&M	500	1.08132	200.00	216.26	71.37	47.58	75.69	194.64	21.62
			Mini	Others	125	1.08132	50.00	54.07	14.60	9.73	18.92	43.25	10.82
		Sub-Total			**1250**		**500.00**	**593.02**	**188.59**	**125.72**	**207.55**	**521.86**	**71.16**
18	Chatra	Horticulture	Drip	S&M	580	1.29073	232.00	299.45	98.82	65.88	104.81	269.51	29.94
			Drip	Others	145	1.29073	58.00	74.86	20.21	13.47	26.20	59.88	14.98
		Agriculture	Mini	S&M	580	1.08132	232.00	250.87	82.79	55.19	87.80	225.78	25.09
			Mini	Others	145	1.08132	58.00	62.72	16.93	11.29	21.95	50.17	12.55
		Sub-Total			**1450**		**580.00**	**687.90**	**218.75**	**145.83**	**240.76**	**605.34**	**82.56**
19	Dhanbad	Horticulture	Drip	S&M	400	1.29073	160.00	206.52	68.15	45.43	72.28	185.86	20.66
			Drip	Others	100	1.29073	40.00	51.63	13.94	9.29	18.07	41.30	10.33
		Agriculture	Mini	S&M	400	1.08132	160.00	173.01	57.09	38.06	60.55	155.70	17.31
			Mini	Others	100	1.08132	40.00	43.25	11.68	7.79	15.14	34.61	8.64
		Sub-Total			**1000**		**400.00**	**474.41**	**150.86**	**100.57**	**166.04**	**417.47**	**56.94**
20	Bokaro	Horticulture	Drip	S&M	530	1.29073	212.00	273.63	90.30	60.20	95.77	246.27	27.36
			Drip	Others	133	1.29073	53.00	68.41	18.47	12.31	23.94	54.72	13.69
		Agriculture	Mini	S&M	530	1.08132	212.00	229.24	75.65	50.43	80.23	206.31	22.93
			Mini	Others	133	1.08132	53.00	57.31	15.47	10.32	20.06	45.85	11.46
		Sub-Total			**1326**		**530.00**	**628.59**	**199.89**	**133.26**	**220.00**	**553.15**	**75.44**
21	Giridih	Horticulture	Drip	S&M	400	1.29073	160.00	206.52	68.15	45.43	72.28	185.86	20.66
			Drip	Others	100	1.29073	40.00	51.63	13.94	9.29	18.07	41.30	10.33
		Agriculture	Mini	S&M	400	1.08132	160.00	173.01	57.09	38.06	60.55	155.70	17.31
			Mini	Others	100	1.08132	40.00	43.25	11.68	7.79	15.14	34.61	8.64

Pradhan Mantri Krishi Sinchai Yojana (PMKSY)-Per Drop More Crop
Annual Action Plan 2019-20

State: Jharkhand (Micro Irrigation)

(Rs. in Lakh)

SN	District	Crop	Micro Irrigation	Category of	Number of Farmer	System Cost/ha	Area (ha)	Total Cost	Mandatory Assistance		Additional State Govt.	Total Assistance	Farmer Contribution
									Central Govt.	State Govt.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
		Sub-Total			**1000**		**400.00**	**474.41**	**150.86**	**100.57**	**166.04**	**417.47**	**56.94**
22	Deoghar	Horticulture	Drip	S&M	370	1.29073	148.00	191.03	63.04	42.03	66.86	171.93	19.10
			Drip	Others	93	1.29073	37.00	47.76	12.90	8.60	16.72	38.22	9.54
		Agriculture	Mini	S&M	370	1.08132	148.00	160.04	52.81	35.21	56.01	144.03	16.01
			Mini	Others	93	1.08132	37.00	40.01	10.80	7.20	14.00	32.00	8.01
		Sub-Total			**926**		**370.00**	**438.84**	**139.55**	**93.04**	**153.59**	**386.18**	**52.66**
23	Godda	Horticulture	Drip	S&M	100	1.29073	40.00	51.63	17.04	11.36	18.07	46.47	5.16
			Drip	Others	25	1.29073	10.00	12.91	3.49	2.32	4.52	10.33	2.58
		Agriculture	Mini	S&M	100	1.08132	40.00	43.25	14.27	9.52	15.14	38.93	4.32
			Mini	Others	25	1.08132	10.00	10.81	2.92	1.95	3.78	8.65	2.16
		Sub-Total			**250**		**100.00**	**118.60**	**37.72**	**25.15**	**41.51**	**104.38**	**14.22**
24	Kodarma	Horticulture	Drip	S&M	100	1.29073	40.00	51.63	17.04	11.36	18.07	46.47	5.16
			Drip	Others	25	1.29073	10.00	12.91	3.49	2.32	4.52	10.33	2.58
		Agriculture	Mini	S&M	100	1.08132	40.00	43.25	14.27	9.52	15.14	38.93	4.32
			Mini	Others	25	1.08132	10.00	10.81	2.92	1.95	3.78	8.65	2.16
		Sub-Total			**250**		**100.00**	**118.60**	**37.72**	**25.15**	**41.51**	**104.38**	**14.22**
		Horticulture	Drip	S&M	11340	1.29073	4536.00	5854.77	1932.09	1288.04	2049.17	5269.30	585.47
			Drip	Others	2840	1.29073	1134.00	1463.69	395.23	263.44	512.31	1170.98	292.71
		Agriculture	Mini	S&M	11330	1.08132	4532	4900.55	1617.18	1078.13	1715.19	4410.50	490.05
			Mini	Others	2835	1.08132	1132.00	1224.05	330.52	220.36	428.41	979.29	244.76
		Sub-Total			**28345**		**11334.00**	**13443.06**	**4275.02**	**2849.97**	**4705.08**	**11830.07**	**1612.99**
		Training Programme											
		Administrative						622.61	224.98	150.00	247.64	622.61	0.00
		Grand Total			**28345**		**11334.00**	**14065.67**	**4500.00**	**2999.97**	**4952.72**	**12452.68**	**1612.99**

परिशिष्ट-1

Pradhan Mantri Krishi Sinchai Yojana (PMKSY)-Per Drop More Crop

Annual Action Plan 2019-20

State: Jharkhand (Micro Irrigation)

(Rs. in Lakh)

SN	District	Crop	Micro Irrigation	Category of	Number of Farmer	System Cost/ha	Area (ha)	Total Cost	Mandatory Assistance		Additional State Govt.	Total Assistance	Farmer Contribution
									Central Govt.	State Govt.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Ranchi	Horticulture	Drip	S&M	1250	1.29073	500.00	645.37	212.97	141.98	225.88	580.83	64.54
			Drip	Others	313	1.29073	125.00	161.34	43.56	29.04	56.47	129.07	32.27
		Agriculture	Mini	S&M	1250	1.08132	500.00	540.66	178.42	118.95	189.23	486.60	54.06
			Mini	Others	313	1.08132	125.00	135.17	36.50	24.33	47.31	108.14	27.03
		Sub-Total			**3126**		**1250.00**	**1482.54**	**471.45**	**314.30**	**518.89**	**1304.64**	**177.90**
2	Khunti	Horticulture	Drip	S&M	720	1.29073	288.00	371.73	122.67	81.78	130.11	334.56	37.17
			Drip	Others	180	1.29073	72.00	92.93	25.09	16.73	32.53	74.35	18.58
		Agriculture	Mini	S&M	720	1.08132	288.00	311.42	102.77	68.51	109.00	280.28	31.14
			Mini	Others	180	1.08132	72.00	77.86	21.02	14.01	27.25	62.28	15.58
		Sub-Total			**1800**		**720.00**	**853.94**	**271.55**	**181.03**	**298.89**	**751.47**	**102.47**
3	Lohardaga	Horticulture	Drip	S&M	610	1.29073	244.00	314.94	103.93	69.29	110.23	283.45	31.49
			Drip	Others	153	1.29073	61.00	78.73	21.26	14.17	27.56	62.99	15.74
		Agriculture	Mini	S&M	610	1.08132	244.00	263.84	87.07	58.04	92.34	237.45	26.39
			Mini	Others	153	1.08132	61.00	65.96	17.81	11.87	23.09	52.77	13.19
		Sub-Total			**1526**		**610.00**	**723.47**	**230.07**	**153.37**	**253.22**	**636.66**	**86.81**
4	West Singhbhum	Horticulture	Drip	S&M	340	1.29073	136.00	175.54	57.93	38.62	61.44	157.99	17.55
			Drip	Others	85	1.29073	34.00	43.88	11.85	7.90	15.36	35.11	8.77
		Agriculture	Mini	S&M	340	1.08132	136.00	147.06	48.53	32.35	51.47	132.35	14.71
			Mini	Others	85	1.08132	34.00	36.76	9.93	6.62	12.87	29.42	7.34
		Sub-Total			**850**		**340.00**	**403.24**	**128.24**	**85.49**	**141.14**	**354.87**	**48.37**
5	Seraikela-Kharsawan	Horticulture	Drip	S&M	590	1.29073	236.00	304.61	100.52	67.01	106.61	274.14	30.47
			Drip	Others	148	1.29073	59.00	76.15	20.56	13.71	26.65	60.92	15.23
		Agriculture	Mini	S&M	590	1.08132	236.00	255.19	84.21	56.14	89.32	229.67	25.52
			Mini	Others	148	1.08132	59.00	63.80	17.23	11.48	22.33	51.04	12.76
		Sub-Total			**1476**		**590.00**	**699.75**	**222.52**	**148.34**	**244.91**	**615.77**	**83.98**
6	East Singhbhum	Horticulture	Drip	S&M	550	1.29073	220.00	283.96	93.71	62.47	99.39	255.57	28.39
			Drip	Others	138	1.29073	55.00	70.99	19.17	12.78	24.85	56.80	14.19
		Agriculture	Mini	S&M	550	1.08132	220.00	237.89	78.50	52.34	83.26	214.10	23.79
			Mini	Others	138	1.08132	55.00	59.47	16.06	10.70	20.81	47.57	11.90
		Sub-Total			**1376**		**550.00**	**652.31**	**207.44**	**138.29**	**228.31**	**574.04**	**78.27**
7	Gumla	Horticulture	Drip	S&M	1220	1.29073	488.00	629.88	207.86	138.57	220.46	566.89	62.99
			Drip	Others	305	1.29073	122.00	157.47	42.52	28.34	55.11	125.97	31.50
		Agriculture	Mini	S&M	1220	1.08132	488.00	527.69	174.14	116.09	184.69	474.92	52.77
			Mini	Others	305	1.08132	122.00	131.92	35.62	23.75	46.17	105.54	26.38

Pradhan Mantri Krishi Sinchai Yojana (PMKSY)-Per Drop More Crop
Annual Action Plan 2019-20

State: Jharkhand (Micro Irrigation)

(Rs. in Lakh)

SN	District	Crop	Micro Irrigation	Category of	Number of Farmer	System Cost/ha	Area (ha)	Total Cost	Mandatory Assistance		Additional State Govt.	Total Assistance	Farmer Contribution
									Central Govt.	State Govt.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
		Sub-Total			**3050**		**1220.00**	**1446.96**	**460.14**	**306.75**	**506.43**	**1273.32**	**173.64**
8	Simdega	Horticulture	Drip	S&M	390	1.29073	156.00	201.35	66.45	44.30	70.47	181.22	20.13
			Drip	Others	98	1.29073	39.00	50.34	13.59	9.06	17.62	40.27	10.07
		Agriculture	Mini	S&M	390	1.08132	156.00	168.69	55.67	37.11	59.04	151.82	16.87
			Mini	Others	98	1.08132	39.00	42.17	11.39	7.59	14.76	33.74	8.43
		Sub-Total			**976**		**390.00**	**462.55**	**147.10**	**98.06**	**161.89**	**407.05**	**55.50**
9	Dumka	Horticulture	Drip	S&M	390	1.29073	156.00	201.35	66.45	44.30	70.47	181.22	20.13
			Drip	Others	98	1.29073	39.00	50.34	13.59	9.06	17.62	40.27	10.07
		Agriculture	Mini	S&M	390	1.08132	156.00	168.69	55.67	37.11	59.04	151.82	16.87
			Mini	Others	98	1.08132	39.00	42.17	11.39	7.59	14.76	33.74	8.43
		Sub-Total			**976**		**390.00**	**462.55**	**147.10**	**98.06**	**161.89**	**407.05**	**55.50**
10	Jamtara	Horticulture	Drip	S&M	100	1.29073	40.00	51.63	17.04	11.36	18.07	46.47	5.16
			Drip	Others	25	1.29073	10.00	12.91	3.49	2.32	4.52	10.33	2.58
		Agriculture	Mini	S&M	100	1.08132	40.00	43.25	14.27	9.52	15.14	38.93	4.32
			Mini	Others	25	1.08132	10.00	10.81	2.92	1.95	3.78	8.65	2.16
		Sub-Total			**250**		**100.00**	**118.60**	**37.72**	**25.15**	**41.51**	**104.38**	**14.22**
11	Sahibganj	Horticulture	Drip	S&M	100	1.29073	40.00	51.63	17.04	11.36	18.07	46.47	5.16
			Drip	Others	25	1.29073	10.00	12.91	3.49	2.32	4.52	10.33	2.58
		Agriculture	Mini	S&M	100	1.08132	40.00	43.25	14.27	9.52	15.14	38.93	4.32
			Mini	Others	25	1.08132	10.00	10.81	2.92	1.95	3.78	8.65	2.16
		Sub-Total			**250**		**100.00**	**118.60**	**37.72**	**25.15**	**41.51**	**104.38**	**14.22**
12	Pakur	Horticulture	Drip	S&M	120	1.29073	48.00	61.96	20.45	13.63	21.69	55.77	6.19
			Drip	Others	30	1.29073	12.00	15.49	4.18	2.79	5.42	12.39	3.10
		Agriculture	Mini	S&M	120	1.08132	48.00	51.90	17.13	11.42	18.17	46.72	5.18
			Mini	Others	30	1.08132	12.00	12.98	3.50	2.34	4.54	10.38	2.60
		Sub-Total			**300**		**120.00**	**142.33**	**45.26**	**30.18**	**49.82**	**125.26**	**17.07**
13	Latehar	Horticulture	Drip	S&M	420	1.29073	168.00	216.84	71.56	47.70	75.89	195.15	21.69
			Drip	Others	105	1.29073	42.00	54.21	14.64	9.76	18.97	43.37	10.84
		Agriculture	Mini	S&M	410	1.08132	164.00	177.34	58.52	39.01	62.07	159.60	17.74
			Mini	Others	100	1.08132	40.00	43.25	11.68	7.79	15.14	34.61	8.64
		Sub-Total			**1035**		**414.00**	**491.64**	**156.40**	**104.26**	**172.07**	**432.73**	**58.91**
14	Palamu	Horticulture	Drip	S&M	430	1.29073	172.00	222.01	73.26	48.84	77.70	199.80	22.21
			Drip	Others	108	1.29073	43.00	55.50	14.99	9.99	19.43	44.41	11.09
		Agriculture	Mini	S&M	430	1.08132	172.00	185.99	61.38	40.92	65.10	167.40	18.59
			Mini	Others	108	1.08132	43.00	46.50	12.56	8.37	16.28	37.21	9.29

Pradhan Mantri Krishi Sinchai Yojana (PMKSY)-Per Drop More Crop
Annual Action Plan 2019-20

State: Jharkhand (Micro Irrigation)

(Rs. in Lakh)

SN	District	Crop	Micro Irrigation	Category of	Number of Farmer	System Cost/ha	Area (ha)	Total Cost	Mandatory Assistance		Additional State Govt.	Total Assistance	Farmer Contribution
									Central Govt.	State Govt.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
		Sub-Total			**1076**		**430.00**	**510.00**	**162.19**	**108.12**	**178.51**	**448.82**	**61.18**
15	Garhwa	Horticulture	Drip	S&M	380	1.29073	152.00	196.19	64.74	43.16	68.67	176.57	19.62
			Drip	Others	95	1.29073	38.00	49.05	13.24	8.83	17.17	39.24	9.81
		Agriculture	Mini	S&M	380	1.08132	152.00	164.36	54.24	36.16	57.53	147.93	16.43
			Mini	Others	95	1.08132	38.00	41.09	11.09	7.40	14.38	32.87	8.22
		Sub-Total			**950**		**380.00**	**450.69**	**143.31**	**95.55**	**157.75**	**396.61**	**54.08**
16	Hazaribagh	Horticulture	Drip	S&M	750	1.29073	300.00	387.22	127.78	85.19	135.53	348.50	38.72
			Drip	Others	188	1.29073	75.00	96.80	26.14	17.42	33.88	77.44	19.36
		Agriculture	Mini	S&M	750	1.08132	300.00	324.40	107.05	71.37	113.54	291.96	32.44
			Mini	Others	188	1.08132	75.00	81.10	21.90	14.60	28.39	64.89	16.21
		Sub-Total			**1876**		**750.00**	**889.52**	**282.87**	**188.58**	**311.34**	**782.79**	**106.73**
17	Ramgarh	Horticulture	Drip	S&M	500	1.29073	200.00	258.15	85.19	56.79	90.35	232.33	25.82
			Drip	Others	125	1.29073	50.00	64.54	17.43	11.62	22.59	51.64	12.90
		Agriculture	Mini	S&M	500	1.08132	200.00	216.26	71.37	47.58	75.69	194.64	21.62
			Mini	Others	125	1.08132	50.00	54.07	14.60	9.73	18.92	43.25	10.82
		Sub-Total			**1250**		**500.00**	**593.02**	**188.59**	**125.72**	**207.55**	**521.86**	**71.16**
18	Chatra	Horticulture	Drip	S&M	580	1.29073	232.00	299.45	98.82	65.88	104.81	269.51	29.94
			Drip	Others	145	1.29073	58.00	74.86	20.21	13.47	26.20	59.88	14.98
		Agriculture	Mini	S&M	580	1.08132	232.00	250.87	82.79	55.19	87.80	225.78	25.09
			Mini	Others	145	1.08132	58.00	62.72	16.93	11.29	21.95	50.17	12.55
		Sub-Total			**1450**		**580.00**	**687.90**	**218.75**	**145.83**	**240.76**	**605.34**	**82.56**
19	Dhanbad	Horticulture	Drip	S&M	400	1.29073	160.00	206.52	68.15	45.43	72.28	185.86	20.66
			Drip	Others	100	1.29073	40.00	51.63	13.94	9.29	18.07	41.30	10.33
		Agriculture	Mini	S&M	400	1.08132	160.00	173.01	57.09	38.06	60.55	155.70	17.31
			Mini	Others	100	1.08132	40.00	43.25	11.68	7.79	15.14	34.61	8.64
		Sub-Total			**1000**		**400.00**	**474.41**	**150.86**	**100.57**	**166.04**	**417.47**	**56.94**
20	Bokaro	Horticulture	Drip	S&M	530	1.29073	212.00	273.63	90.30	60.20	95.77	246.27	27.36
			Drip	Others	133	1.29073	53.00	68.41	18.47	12.31	23.94	54.72	13.69
		Agriculture	Mini	S&M	530	1.08132	212.00	229.24	75.65	50.43	80.23	206.31	22.93
			Mini	Others	133	1.08132	53.00	57.31	15.47	10.32	20.06	45.85	11.46
		Sub-Total			**1326**		**530.00**	**628.59**	**199.89**	**133.26**	**220.00**	**553.15**	**75.44**
21	Giridih	Horticulture	Drip	S&M	400	1.29073	160.00	206.52	68.15	45.43	72.28	185.86	20.66
			Drip	Others	100	1.29073	40.00	51.63	13.94	9.29	18.07	41.30	10.33
		Agriculture	Mini	S&M	400	1.08132	160.00	173.01	57.09	38.06	60.55	155.70	17.31
			Mini	Others	100	1.08132	40.00	43.25	11.68	7.79	15.14	34.61	8.64

Pradhan Mantri Krishi Sinchai Yojana (PMKSY)-Per Drop More Crop
Annual Action Plan 2019-20

State: Jharkhand (Micro Irrigation)

(Rs. in Lakh)

SN	District	Crop	Micro Irrigation	Category of	Number of Farmer	System Cost/ha	Area (ha)	Total Cost	Mandatory Assistance		Additional State Govt.	Total Assistance	Farmer Contribution
									Central Govt.	State Govt.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
		Sub-Total			**1000**		**400.00**	**474.41**	**150.86**	**100.57**	**166.04**	**417.47**	**56.94**
22	Deoghar	Horticulture	Drip	S&M	370	1.29073	148.00	191.03	63.04	42.03	66.86	171.93	19.10
			Drip	Others	93	1.29073	37.00	47.76	12.90	8.60	16.72	38.22	9.54
		Agriculture	Mini	S&M	370	1.08132	148.00	160.04	52.81	35.21	56.01	144.03	16.01
			Mini	Others	93	1.08132	37.00	40.01	10.80	7.20	14.00	32.00	8.01
		Sub-Total			**926**		**370.00**	**438.84**	**139.55**	**93.04**	**153.59**	**386.18**	**52.66**
23	Godda	Horticulture	Drip	S&M	100	1.29073	40.00	51.63	17.04	11.36	18.07	46.47	5.16
			Drip	Others	25	1.29073	10.00	12.91	3.49	2.32	4.52	10.33	2.58
		Agriculture	Mini	S&M	100	1.08132	40.00	43.25	14.27	9.52	15.14	38.93	4.32
			Mini	Others	25	1.08132	10.00	10.81	2.92	1.95	3.78	8.65	2.16
		Sub-Total			**250**		**100.00**	**118.60**	**37.72**	**25.15**	**41.51**	**104.38**	**14.22**
24	Kodarma	Horticulture	Drip	S&M	100	1.29073	40.00	51.63	17.04	11.36	18.07	46.47	5.16
			Drip	Others	25	1.29073	10.00	12.91	3.49	2.32	4.52	10.33	2.58
		Agriculture	Mini	S&M	100	1.08132	40.00	43.25	14.27	9.52	15.14	38.93	4.32
			Mini	Others	25	1.08132	10.00	10.81	2.92	1.95	3.78	8.65	2.16
		Sub-Total			**250**		**100.00**	**118.60**	**37.72**	**25.15**	**41.51**	**104.38**	**14.22**
		Horticulture	Drip	S&M	11340	1.29073	4536.00	5854.77	1932.09	1288.04	2049.17	5269.30	585.47
			Drip	Others	2840	1.29073	1134.00	1463.69	395.23	263.44	512.31	1170.98	292.71
		Agriculture	Mini	S&M	11330	1.08132	4532	4900.55	1617.18	1078.13	1715.19	4410.50	490.05
			Mini	Others	2835	1.08132	1132.00	1224.05	330.52	220.36	428.41	979.29	244.76
		Sub-Total			**28345**		**11334.00**	**13443.06**	**4275.02**	**2849.97**	**4705.08**	**11830.07**	**1612.99**
		Training Programme											
		Administrative						622.61	224.98	150.00	247.64	622.61	0.00
		Grand Total			**28345**		**11334.00**	**14065.67**	**4500.00**	**2999.97**	**4952.72**	**12452.68**	**1612.99**

JHARKHAND URBAN INFRASTRUCTURE DEVELOPMENT COMPANY LIMITED
(A Government of Jharkhand Undertaking)
3rd Floor, Pragati Sadan, Kutchery Chowk, Ranchi-834001
E-Mail Id - pdt.juidco@gmail.com, juidcolimited@gmail.com
Ph no. - 0651-2243203; **CIN:** U45200JH2013SGC001752

Letter no: JUIDCO/NIT*/SBGJ/STP/2014-16/173/Part-VIII/2018/2624 Date: 22/09/2020

To,

Secretary,
Urban Development & Housing Department,
Government of Jarkhand, 4th Floor, Project Building,
Dhurwa, Ranchi, Jharkhand.

Ranchi, Date ....22/09/2020....

Sub.: **Regarding latest progress report on various directions issued by Tribunal required for compliance of Hon'ble NGT Court Order related to River Ganga & Its tributary river Damodar.**

Ref: Hon'ble NGT Case OA No. 200/2014 matter of *M.C. Mehta Versus Union of India &Ors*. and UD&HD letter no. SMCG/UD&HD/NGT/2019/17 (Part-2)/44/2020/201 dated 14.09.2020.

Sir,

With reference to above, the latest progress report on various directions issued by the Hon'ble NGT court in the case OA No. 200/2014 related to JUIDCO is hereby enclosed with this letter.

Enclosure: A/A

Yours faithfully,

22.9.2020

(Ramesh Kumar)
Project Director (Technical)

Annexure

Sr. No	Direction issued by a tribunal in the matter order dated 18.12.2020 and 13.08.2020	Compliance report as per the direction	Current progress in the last three months (June-August-2020)
1	Setting up of STP's Interception and Division (I&D) up drains preventing untreated sewerage and effluents in the River Ganga for Sahibganj	• MWW Project Sahibganj is comprises of two Sewerage Treatment Plant (STP) of 5 and 7 MLD capacity each, 5 nos. of Sewerage Pumping Stations (SPS), 2 nos. of Main Pumping Stations (MPS), 3 nos. of I&D Structure and 55 km. of Sewerage Network. • The construction of the project started from April 02, 2016 and completed on August 31, 2019. • The Project is under operation and maintenance phase from September 01, 2019.	• Both STP's O&M is in process. • Regular maintenance of sewer line, O&M structures, pumping stations are done by O&M agency. (i.e. M/s Toshiba Water Solutions Pvt. Ltd.) • Sewage collected from the I&D structure is diverted to the nearest manhole chamber, through the pipeline to both STP for further treatment.
2	Setting up of STP's Interception and Division (I&D) up drains preventing untreated sewerage and effluents in the River Ganga for Rajmahal.	• MWW Project Rajmahal is comprises of one Sewerage Treatment Plant (STP) of 3.5 MLD capacity, 3 nos. of Sewerage Pumping Stations (SPS), 1 no. of Main Pumping Stations (MPS), 4 nos. of I&D structures and 34 km. of Sewerage Network. • The construction of the project started from July 02, 2018 and the construction work is under progress. • The timeline for completion of the project as per agreement is 24 months i.e. 02.07.2021. • Approximately 69% of physical progress have been achieved till 15.09.2020. • Due to Covid-19 Pandemic Nation wide lockdown, the work at site was stopped for almost 2-3 months.\ • The work at site has been started and the expected date of completion of the project is 31.10.2020.	• Preliminary treatment unit constructed and under operational for primary treatment at 4 nos. of Nalla sewerage. • Direction for construction of Permanent I&D structure given to the agency and survey work of the same will be done once flood water subsides in river Ganga.
3	Use of treated water from STPs of Sahibganj.	• Propsed action plan for utilization of treated Municipal wastewater from the STPs under opearational at Sahibganj is under preparation in coordination wih Sahibganj Nagar Parishad.	• Action plan for utilization of treated waste water from operation STPs at Sahibganj is under preparation in consultation with Sahibganj nagar Parisahd. • Treated water is presently discharge into river Ganga

		• As per the discussion with Sahibganj Nagar Parishad, based upon the geographical location of the area and current activities/infrastructure developments going on in the nearby areas of ULB following possible areas are identified in which treated waste water from STP can be utilised:- **1. Agriculture.** As per the discussion with ULB, prior to allocation of treated water for irrigation purposes in any area, soil hydraulic tests for those areas, water requirements for the crops/vegetation in the respective area and water quality of irrigation water to be used in those respective areas according to these tests should be computed. **2. Railway junction.** Re-use treated water shall be used for washing, flushing, maintenance of the Railway junction. **3. Crusher unit.** The treated water shall be used against the water requirement of crusher such as sprinkleing of the dust. **4. Urban local bodies.** The treated water shall be used for solid waste management plant, horticulture, maintenance of the park, puplic toilet flushing and other construction activites in the town. **5. Enviromental/Recreational reuse.** Maintenance of parks, gardens and developing landscaping **6. Construction Purpose.** Supply of treated water to the new construction sites/developing area through tankers against a fixed predetermined charge	through the Outfall structure as per specified norms.
4	Use of sludge manure from the STPs of Sahibganj.	• Sludge manure is not yet generated in STPs.	• Sludge manure is not yet generated in STPs. • As per DPR, sludge will be used as manure and accordingly proposal is under preparation by O&M agency.

5	Installing Continuous Online Monitoring System (OCEMS)	Vide CPCB letter no. B-190200 dated 10.08.2020 following directions are received from CPCB. • The OCEMS system at outlet of STPs parameter flow, pH, BOD, COD, TSS, Ammoniacal Nitrogen and Nitrate and provide connectivity of the same with SPCB and CPCB servers for 24X7 data transmission shall be installed within six months from the date of issuance of the direction i.e. before 10.03.2021. ***Compliance: Necessary direction to the agency (i.e. M/s Toshiba Water Solutions) currently doing the O&M of STPs has been given in which proposal to install OCEMS is requested from Agency.*** ***Relevant correspondence between JUIDCO & agency is enclosed as Annexure -1*** • Environmental lab shall be set up at STPs within six months from the date of issuance of the direction for daily analysis of pH, BOD, COD, TSS, Total Nitrogen and Faecal coliform and MLSS and DO, in case STPs having aerobic treatment process, and for total Phosphorus in case of discharge into ponds of lakes. ***Compliance: Environmental lab has been already installed at both the STP plants of 5 MLD and 7 MLD capacity respectively at Sahibganj and regular effluent monitoring of various parameters like pH, BOD, COD, TSS, total Nitrogen, Faecal Coliform etc. has been ensured by the O&M agecy and JUIDCO.*** • Logbook of analysis results shall be duly maintained. ***Compliance: Logbook is duly maintained by O&M agency M/s Toshiba Water solutions Pvt.Ltd.*** • Action plan for setting up on environmental lab, installation and	In compliance of CPCB letter no. B-190200 dated 10.08.2020 in which various directions are received from CPCB. Necessary direction has given from the competent authority of JUIDCO via *letter no. JUIDCO/NIT/SBG/STP/MWW/2014-16/173/part.VIII/2008/2348. Dated-28.08.2020 enclosed as Annexure-1.*

		connectivity of OCEMS shall be submitted to CPCB within 30 days. ***Compliance: Necessary direction to the agency (i.e. M/s Toshiba Water Solutions) currently doing the O&M of STPs has been given in which proposal to install OCEMS is requested from Agency.*** ***Relevant correspondence between JUIDCO & agency is enclosed as Annexure -1*** • Documentary evidence regarding status of installation on online continuous Effluent monitoring system and its connectivity to CPCB/SPCB servers. ***Compliance: That will be shared with CPCB and JSPCB after installation.***	

JHARKHAND URBAN INFRASTRUCTURE DEVELOPMENT COMPANY (JUIDCO) LIMITED
(A Government of Jharkhand Undertaking)
3rd Floor, Pragati Sadan, Kutchery Chowk, Ranchi-834001
Ph no.- 0651-2243203, E-Mail Id- juidcolimited@gmail.com
CIN: U45200JH2013SGC001752,

Letter no.: JUIDCO/NIT/SBGJ/STP/MWW/2014-16/173/Part-VIII/2018 10348 Date: 28/08/2020

To,

1. **Toshiba Water Solutions Pvt.Ltd.**
   Municipal waste water projects Sahibganj, Jharkhand.

2. **Annu Infra Constract India Pvt.Ltd.**
   Municipal waste water project Rajmahal, Jharkhand.

Subject: - Regarding Under section 5 of the Environment (Protection) ACT,1986 for installation of online continuous effluent monitoring system (OCEMS) at sewerage treatment plants (STP) for Municipal waste water projects Sahibganj and Rajmahal.

Dear Sir,

With reference to the above subject the project "**Municipal waste water projects** in Sahibganj and Rajmahal under Namami Gange in Jharkhand'' in location of sahibganj 2 nos STPs completed and Rajmahal 1 nos STP is under construction and further as per the order from Central Pollution Control Board reference File no B-190200/STP/WOQ-II/CPCB/2020-21 dated on 10.08.2020. The requesting is need to inculcate habit of self-monitoring within the sewerage treatment plant for complying with the prescribed standards and this can be achieved by the methods like installing online continuous Effluent Monitoring System (OCEMS) and for strengthening the monitoring and compliance through self-regulatory mechanism, OCEMS need to be installed and operated by the agencies responsible for operation management of STPs on polluter payed principle.

Therefore, you are instructing to here to submit a proposal of online monitoring system (OCEMS),

- The proposal of OCEMS system at outlet of STPs parameter flow, pH, BOD, COD, TSS, Ammoniacal Nitrogen and Nitrate and provide connectivity of the same with SPCB and CPCB servers for 24X7 data transmission within six months from the date of issuance of the direction.
- Environmental lab shall be set up at STPs within six months from the date of issuance of the direction for daily analysis of pH, BOD, COD, TSS, Total Nitrogen and Faecal coliform and MLSS and DO, in case STPs having aerobic treatment process, and for total Phosphorus in case of discharge into ponds of lakes. Logbook of analysis results shall be duly maintained.
- Action plan for setting up on environmental lad, installation and connectivity of OCEMS shall be submitted to CPCB within 30 days.
- Documentary evidence regarding status of installation on online continuous Effluent monitoring system and its connectivity to CPCB/SPCB servers shall be submitted to CPCB.

above the points to following when you going to be designed OCEMS system for CPCB. and for your more information and reference I attached here the order file (letter) CPCB and the revised Guidelines for Real-time Effluent Quality Monitoring System.

I expect you to submit the proposal of OCEMS and show a professional attitude and offer solutions to fix the discussed issues.

Please treat this as urgent so that the balance works to complete at the earliest.

28/08/2020

(Radhakant Singh)

Project Manager

Copy to:
1.Alok Mandal (DGM)
2.Sudipta Surya Sengupta (GM)

Gmail **prabhjot singh <dpm.ps.juidco@gmail.com>**

Fwd: Regarding Under section 5 of the Environment (Protection) ACT,1986 for installation of online continuous effluent monitoring system (OCEMS) at sewerage treatment plants (STP) for Municipal waste water projects Sahibganj and Rajmahal

1 message

ABHISHEK DEY <dpm.ad.juidco@gmail.com> Fri, Sep 18, 2020 at 12:57 PM
To: dpm.ps.juidco@gmail.com

---------- Forwarded message ---------
From: **Radhakant singh** <pm.rk.juidco@gmail.com>
Date: Fri, 28 Aug 2020, 12:48 pm
Subject: Regarding Under section 5 of the Environment (Protection) ACT,1986 for installation of online continuous effluent monitoring system (OCEMS) at sewerage treatment plants (STP) for Municipal waste water projects Sahibganj and Rajmahal
To: Rajan Nandlal <rajannandlal@gmail.com>, Dilip Kumar Shrivastava <shrivastavadilipkumar@gmail.com>, Anwar <anwar@toshiba-water.com>
Cc: anil kumar Mandal <anilkumarmandal210690@gmail.com>, <dgm.juidco@gmail.com>, Sudipta Surya Sengupta <gm.wss.juidco@gmail.com>, dpm.ad.juidco <dpm.ad.juidco@gmail.com>, ANIL KUMAR <apm.ak.juidco@gmail.com>, Rajesh Yadav RE PMC <rajesh1700@rediffmail.com>, Serma Kumar <serma.kumar@tractebel.engie.com>

Dear Sir,

With reference to the above subject the project "**Municipal waste water projects** in Sahibganj and Rajmahal under Namami Gange in Jharkhand'' in location of sahibganj 2 nos STPs completed and Rajmahal 1 nos STP is under construction and further as per the order from Central Pollution Control Board reference File no B-190200/STP/WOQ-II/CPCB/2020-21 dated on 10.08.2020. The requesting is need to inculcate habit of self-monitoring within the sewerage treatment plant for complying with the prescribed standards and this can be achieved by the methods like installing online continuous Effluent Monitoring System (OCEMS) and for strengthening the monitoring and compliance through self-regulatory mechanism, OCEMS need to be installed and operated by the agencies responsible for operation management of STPs on polluter payed principle.

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Please treat this as urgent so that the balance works to complete at the earliest.

Thanks and Regards
Radhakant Singh
pm.rk.juidco@gmail.com|
M +919582277075

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3 attachments

OCEMS.pdf
778K

Revised Guidelines for Real-time Effluent Quality Monitoring System.pdf
864K

Jharkhand Urban Infrastruture Development.pdf
3545K