~~MODIFIED DRAFT~~

BEFORE THE NATIONAL GREEN TRIBUNAL,
PRINCIPAL BENCH,
AT NEW DELHI

O.A. No. 597/2019.

IN THE MATTER OF:

RAJENDRA TYAGI & ANOTHER ...APPLICANT

VERSUS

UNION OF INDIA AND OTHERS ...RESPONDENT(S)

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Through

ARDHENDUMAULI KUMAR PRASAD
Standing Counsel, Union of India
A-52, Sector 17-A, NOIDA, U.P. 201301
mail@ardhendumauli.com
0120-2488800/01/02

Place: NEW DELHI.
Dated: 22.06.2020.

BEFORE THE NATIONAL GREEN TRIBUNAL,
PRINCIPAL BENCH,
AT NEW DELHI

O.A. No. 597/2019

IN THE MATTER OF:

RAJENDRA TYAGI & ANOTHER ...APPLICANT

VERSUS

UNION OF INDIA AND OTHERS ...RESPONDENT(S)

COUNTER AFFIDAVIT / REPLY FOR AND ON BEHALF OF THE RESPONDENT NO.1 / MINISTRY OF JAL SHAKTI, DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION.

MOST RESPECTFULLY SHOWETH:

1. I, Vinod Kumar, aged about 50 years, employed / appointed as Under Secretary, National Water Mission, Ministry of Jal Shakti, Department of Water Resources, River Development & Ganga Rejuvenation, New Delhi, functioning / officiating at New Delhi, do hereby solemnly affirm and declare as under:-
2. That I am well conversant with the facts of the case, and duly authorized and competent to swear this affidavit on behalf of Department of Water Resources, River Development & Ganga Rejuvenation in the above matter.
3. That I have read and understood the orders dated 24.7.2019 and 15.10.2019 of this Hon'ble Tribunal and filing this Counter Affidavit in compliance thereto.
4. That the contents of the original application that have not been specifically admitted hereunder shall be deemed to have been denied.
5. That the deponent craves liberty to raise additional submission or file additional affidavits in case need arises during the course of arguments.

BRIEF SUBMISSIONS

6. That the applicant under his application has sought orders from this Hon'ble Tribunal to direct respondent No. 1 (Ministry of jal Shakti) and 2(Delhi Jal Board) to take measures under section 3 and 5 of the Environment (Protection) Act, 1986; to identify and recognize various kinds of modes of water wastage/misuse including Ganga water; to frame regulations and constitute multi-tier implementation enforcement mechanism to curb water wastage/misuse; to set up task force, monitoring committee and over-sight committee; to issue directions to States and UTs, Local Bodies, Development Authorities and Agencies to curb wastage and misuse of water; to direct on water harvesting systems and to constitute water cells in each Department; to levy heavy penalties against water harvesting failures and to collect water tax; to direct on recycle/reuse; to direct on waterless urinals and to restrain use of flushing systems; to direct on de-concretization; to direct on revival of storm water drains; to direct on revival of ponds/water bodies and to pass any other or further orders as deemed fit and proper in the facts and circumstances of the case.

7. That the applicant has also sought directions to various States/UTs, Public Authorities and Local Bodies to implead them as necessary parties for meaningful adjudication.

8. That the Hon'ble Tribunal vide order dated 24.07.2019 has sought factual and action taken report from respondent No. 1, M/o Jal Shakti and respondent No. 2, Delhi Jal Board, New Delhi.

9. That the Secretary (WR,RD&GR) has requested all the States/Union Territories, to initiate urgent steps to improve water conservation/water use efficiency in the country, vide D.O. Letter No. T-29011/6/2019-GW Section dated 21.08.2019 and an affidavit containing various measures taken by the Respondent No.1, also was filed on 21.8.2019.

10. That the Hon'ble Tribunal however vide order dated 15.10.2019, has directed that apart from writing letters to states, there has to be specific time bound action plans and monitoring which should include coercive measures for enforcement, invocation of 'polluter pays' principle, recovery of costs for wastage of water for restoration of environment. The Hon'ble Tribunal has

directed the respondent No.1 and 2 to plan for further appropriate measures and furnish action taken reports by e-mail to judicial-ngt@nic.in .

11. That in compliance of directions of this Hon'ble Tribunal the Secretary, Department of Water Resources, River Development & Ganga Rejuvenation has invited the plan of action and action taken reports from all the States and UTs vide Letters dated 7.1.2020, 19.2.2020, and 22.4.2020. Copies of letters written by Secretary, WR,RD&GR are enclosed as **Annexure-R/1 to R/4** for kind perusal. But due to delay in submission of action taken reports from States/UTs, the answering respondent has filed a short affidavit dated 2.3.2020 seeking further extension of time. The Hon'ble Tribunal has kindly granted time and fixed the next date of hearing on 26.06.2020.

12. That the plan of action/action taken reports received from States/UTs are enclosed herewith as **Annexure R/5 to R/21** for kind perusal of this Hon'ble Tribunal. This Hon'ble Tribunal is requested to accept the reports including the report of Government of Jharkhand in Hindi, as received from the concerned States/UTs. The States of Assam, Chhattisgarh, Haryana, Jharkhand, Karnataka, Meghalaya, Mizoram, Odisha, Punjab, Rajasthan, Telangana, West Bengal, Jammu & Kashmir UT of Delhi, Chandigarh, Andaman and Nicobar and Lakshadweep have furnished reports which are enclosed for kind perusal.

13. That the reports received from Department of Drinking Water and Sanitation, Ministry of Housing & Urban Affairs, Central Water Commission and the report of National Water Mission also are enclosed as **Annexure-R/22 to R/25** for kind perusal.

14. The respectful submission of the answering respondent is that the MOEF&CC has empowered the States/UTs including the Statutory Bodies and District Administration to take necessary measures under Environment (Protection) Act, 1986 and Water (Prevention and Control of Pollution) Act, 1974 for the purposes envisaged under these Laws. This Hon'ble Tribunal also has passed orders/directions to statutory bodies constituted under Environment (Protection) Act, 1986 and Water (Prevention and Control of Pollution) Act, 1974, to take coercive measures for invocation of 'polluter pays' principle and for recovery of costs/Environmental Compensation for violations under the above Acts in accordance with law.

NOTARY R.V. SINGH Advocate Regn.No.2282 Commission Expire on 24-10-2022 Area-Delhi GOVT. OF INDIA

15. That as per the provisions of section 15 of NGT Act, 2010, this Hon'ble Tribunal is empowered to grant relief, compensation and restitution, by an order. Under section 24(1) of the NGT Act, 2010, the amount of compensation for damage to environment is payable to collector in terms of provisions under sub-section(3) of section 7A of the Public Liability Insurance Act, 1991, for being credited to Environmental Relief Fund established under section 7A of the Public Liability Insurance Act, 1991. The respectful submission is that in several cases of violations, related to water conservation and water use efficiency, under Environment (Protection) Act, 1986, , this Hon'ble Tribunal has awarded environmental compensation. Under Water (Prevention and Control of Pollution) Act, 1974, this Hon'ble Tribunal in several cases has applied the 'polluter pays' principle to impose and recover environmental compensation. The Public Authorities constituted under these laws, the Expert, Monitoring and Over-Sight Committees also have been assisting this Hon'ble Tribunal in assessing the compensation and for ensuring compliances. There could be delay in recovery of compensation in few instances, because of parties approaching higher judicial forums against orders of this Hon'ble Tribunal.

At present the orders dated 20.7.15 in OA 9/2014; 31.5.16 in OA 478/2015; 29.2.16 in OA 133/2016; 10.7.18 in OA 108/2013, 179/2013 and Appeal 67/2015; 13.7.18 in OA 333/2016; 16.10.18 in OA No. 765/2018; 5.9.2019 in OA NO. 1005/2018; 25.2.19 in EA No. 5/2018; 24.1.19 in OA.283/2018; 25.3.19 in OA No. 378/2016; 24.7.19 in OA No. 667/2018; 29.4.19 in OA 116/2014; 27.2.19 in OA 105/2018; 30.1.19 in OA 217/2016; 13.3.19 in IA 173/19; 25.3.19 in OA 101/2017; 24.4.19 in OA 24/2014(MA.107/14); 24.7.19 in OA 667/2018; 26.11.19 in Appeal No. 98 & 99/19, of this Hon'ble NGT, have been challenged before Hon'ble Apex Court.

NOTARY R.V. SINGH Advocate Regd. No. 2282 Commission Expire on 24-10-2022 Area-Delhi GOVT. OF INDIA

16. It is respectfully submitted that most of the grievances of the applicant raised under the OA were in fact getting addressed in accordance with law under due process of law. The issues like constitution of task force, monitoring committees, over-sight committees are being considered by this

Hon'ble Tribunal on need basis; the power to give directions under section 5 of Environment(Protection) Act, 1986 and under Section 15 and 18 of the Water (Prevention and Control of Pollution) Act, 1974 is vested in Central Government, State/UT Governments and Statutory Authorities; for implementation of rain water harvesting/artificial recharge to ground water, the directions/advisories have already been issued by CGWA/MoH&UA; The concerned Pollution/Municipal/Civic Bodies are dealing with wastewater recycle and reuse practices in the country; For Identification, Protection and Restoration/Revival of water bodies, this Hon'ble Tribunal has granted time to States/UTs till 31.07.2020 and the CPCB has been directed to file report by 31.10.2020 under OA. 325/2015. Due to corona Pandemic the Central Government had to announce nationwide lock down and to order relief packages for affected parties. This situation is unforeseen and likely to impact life at least for some time. Therefore the States/UTs which are unable to file action taken reports may kindly be granted time, as considered necessary, for filing the action taken reports. The details of States/UTs which could not provide action taken reports are enclosed as **Annexure-R/26** for kind perusal. It may not be out of place to submit that some States/UTs have enacted legislations for ground water management in their respective States/ UTs. These legislations also prescribe water conservation practices including Rain Water Harvesting and penal provisions for violations. At present the following Enactments/GOs are addressing the Ground Water Management in the concerned States/UTs:

1. The Andhra Pradesh Water, Land and Trees Act and Rules, 2002 (for AP and Telangana States)
2. The Assam Ground Water Control and Regulation Act, 2012.
3. The Bihar Groundwater (Regulation and Control of Development and Management) Act, 2006.
4. The Delhi Groundwater Regulation Direction, 2010.
5. The Goa Ground Water Regulation Act, 2002.
6. The Gujarat Irrigation and Drainage Act, 2013.
7. The Himachal Pradesh Ground Water (Regulation and Control of Development and Danagement) Act, 2005.
8. The Karnataka Ground Water (Regulation and Control of Development and Management) Act, 2011.
9. The Kerala Ground Water (Control and Regulation) Act, 2002.

10. The Lakshadweep Ground Water (Development and Control) Regulation, 2001.
11. The Maharashtra Groundwater (Development and Management) Act, 2009.
12. The Madhya Pradesh Peya Jal Parirakshan Adhiniyam, 1986.
13. The Pondicherry Ground Water (Control and Regulation) Act, 2002.
14. The Punjab Preservation of Subsoil Water Act, 2009.
15. The Rajasthan Soil and Water Conservation Act, 1964.
16. The Tamil Nadu Municipal Laws and the Chennai Metropolitan Area Groundwater (Regulation) Amendment Act, 2014.
17. The Chennai Metropolitan Area Groundwater (Regulation) Act, 1987.
18. The Tamil Nadu GO Ms No.51/11.2.2004; GO Ms. 52/2.3.2012; GO Ms.142/23.7.2014.
19. The Uttar Pradesh Groundwater (Management and Regulation) Act, 2019.
20. The Uttarakhand Ground Water (Regulation and Control of Development and Management) Act, 2016.
21. The West Bengal Ground Water Resources (Management, Control and Regulation) Act, 2005.
22. The Jammu and Kashmir Water Resources (Regulation and Management) Act, 2010.
23. The UT of Chandigarh Water Supply Bye-Laws, 2011.(Amendment, 2018)

The States of Chattisgarh, Haryana, Odisha, Punjab and Rajasthan are in the process of enactments.

24. The Chhattisgarh Ground Water (Regulation and Control of Development and Management) Bill, 2012.
25. The Haryana State Groundwater Management & Regulation Bill, 2013.
26. The Odisha Groundwater (Regulation, Development and Management) Bill, 2011
27. Punjab Water Resources (Management and Regulation) Ordinance, 2019.
28. The Rajasthan Water (Conservation, Protection and Regulation) Bill.

17. In order to control wastage or misuse of ground water a draft public notice containing directions under section 5 of the Environment (Protection) Act, 1986 has been formulated and enclosed as **Annexure-R/27** for kind perusal. If the same is approved by this Hon'ble Tribunal, the public notice can be issued under section 5 of the Environment (Protection) Act, 1986.

18. In view of above submissions and as per the directions of this Hon'ble Tribunal, the action taken reports received from States/UTs are being filed along with this affidavit through e-mail at judicial-ngt@nic.in . The application may kindly be disposed on the basis of reports from the

concerned States/UTs. The Answering respondent may kindly be exempted from appearance.

DEPONENT

विनोद कुमार/VINOD KUMAR
अवर सचिव/Under Secretary
राष्ट्रीय जल मिशन/National Water Mission
भारत सरकार/Government of India
ब्लाक–3, केन्द्रीय कार्यालग परिसर, नई दिल्ली
Block-3, CGO Complex, New Delhi

VERIFICATION:

Verified at New Delhi, on this the 22nd day of June, 2020 that the contents of the above Affidavit are true and correct to my knowledge. No part of it is false and nothing material has been concealed there from.

NOTARY
R. V. SINGH
Advocate
Regn.No.2282
Commission
Expire on
24-10-2022
Area-Delhi
GOVT. OF INDIA

DEPONENT

विनोद कुमार/VINOD KUMAR
अवर सचिव/Under Secretary
राष्ट्रीय जल मिशन/National Water Mission
भारत सरकार/Government of India
ब्लाक–3, केन्द्रीय कार्यालग परिसर, नई दिल्ली
Block-3, CGO Complex, New Delhi

Place : New Delhi
Dated : 22.06.2020

Through:

Solemnly affirmed before me, read over & explained to the deponent.

Notary Public, DELHI 22 JUN 2020

(ARDHENDUMOULI KUMAR PRASAD)
Advocate,

Place: New Delhi.
Dated: 22.06.2020

Item No. 07 Court No. 1

BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

Original Application No. 597/2019

Rajendra Tyagi & Anr. Applicant(s)

Versus

Union of India & Ors. Respondent(s)

Date of hearing: 15.10.2019

CORAM: **HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON**
HON'BLE MR. JUSTICE S.P WANGDI, JUDICIAL MEMBER
HON'BLE MR. JUSTICE K. RAMAKRISHNAN, JUDICIAL MEMBER
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER

For Applicant (s): Mr. Akash Vashishtha, Advocate

For Respondent(s): Mr. Ardhendumauli Kr. Prasad, Advocate for Dept. of Jal Shakti, UOI
Ms. Sakshi Popli, Advocate for DJB

ORDER

1. The issue for consideration is the remedial measures to prevent wastage and misuse of groundwater *inter*-alia on account of overflow from overhead tanks in residential and commercial areas. Apart from the said issue, the applicant has also pointed out various other methods by which the potable drinking water is wasted. Having regard to the alarming situation of shortage of potable water, as shown by the Composite Water Index Report prepared by the Niti Ayog, this Tribunal sought response of the Ministry of Jal Shakti and the Delhi Jal Board (DJB) vide order dated 24.07.2019.

2. Though response has been filed both by the Ministry of Jal Shakti as well as DJB, it does not show clear enforceable policy to check such

misuse and wastage. The affidavit is vague and general. It is stated that letters have been written to the States. This step by itself can hardly be enough to discharge the public trust reposed in the Ministry of Jal Shakti. Apart from writing letter, there has to be specific timebound action plans and monitoring which should include coercive measures for enforcement.

3. The affidavit filed by the DJB is also wholly inadequate to address the problem. A very meagre amount is said to have been recovered inspite of acknowledged problem of wastage of potable water. The environment law is not complied by recovery of some token amount from the violators. Overriding environmental law principle of 'Polluter Pays' must be invoked by all the regulators to ensure that wastage of water is not profitable and cost of such wastage is recovered which is necessary for restoration of the environment without merely limiting to statutory changes which are no substitute to 'Polluter Pays' principle.

4. Let further appropriate measures be planned and action taken reports furnished by the Ministry of Jal Shakti and the DJB before the next date by e-mail at judicial-ngt@gov.in.

List for further consideration on 20.12.2019.

Adarsh Kumar Goel, CP

S.P Wangdi, JM

K. Ramakrishnan, JM

Dr. Nagin Nanda, EM

October 15, 2019
Original Application No. 597/2019
DV

Annexure-R-1

यू. पी. सिंह, आई. ए. एस.
U.P. SINGH, IAS
सचिव
SECRETARY
Tel. : 23710305
Fax : 23731553
E-mail : secy-mowr@nic.in

सत्यमेव जयते

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन, नदी विकास
और गंगा संरक्षण विभाग
श्रम शक्ति भवन
रफी मार्ग, नई दिल्ली-110 001
GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA REJUVENATION
SHRAM SHAKTI BHAWAN
RAFI MARG, NEW DELHI-110 001
http://www.mowr.gov.in

D.O. No. T-39011/6/2019-GW Section

August 21, 2019

Subject: Initiation of urgent steps to improve water conservation/water use efficiency in the country - regarding

Dear

You may be aware that as per Report of National Commission on Integrated Water Resources Development (NCIWRD), the total water availability of India received through precipitation is about 4000 billion cubic-meter (BCM) per annum. After evaporation, 1869 BCM water is available as natural runoff. Due to topographical and other factors, the utilizable water availability is limited to only 1122 BCM. It has been estimated that the average annual per capita water availability in the years 2001 and 2011 were 1820 and 1545 cubic meter respectively. This may likely to reduce further to 1341 cum and 1140 cum in the year 2025 and 2050 respectively.

Further, as per the 2017 assessment of dynamic ground water resources, the total annual extractable ground water resource in the country is 432 BCM. Out of 6881 assessment units (Blocks/ Mandals/Talukas/Firkas) in the country, 1186 units have been categorized as 'over-exploited'.

In view of the decreasing availability of water resources in the country, there is a growing need to improve the water use efficiency in all sectors including the irrigation sector, which is considered to be the biggest user of ground water resources. Further, it has been observed that there is general lack of awareness on the part of general public in using the ground water efficiently which has resulted in wastage of the precious resource through the overflowing overhead tanks, excessive use in flushing cisterns in toilets, wastage of water in bathing/hand-wash basins/kitchens etc. Apart from this there is substantial loss of water due to leakage/seepage during transmission/distribution of water from source upto the consumer end.

Further, there is a need to sensitize all concerned through mass media communication/radio jingles/TV commercials etc about judicious use of water resources. In addition to this, there is a need to work out appropriate mechanism for formulating water pricing policies including exploring the feasibility of putting water meters etc (where the supply is through Govt. developed sources), reduce non-revenue losses and to issue suitable directions to general mass through involvement of local municipal authorities for reducing the wastage through overflowing tanks, flushing cisterns etc.

....2/-

I would be happy if appropriate action as brought out in above paras may kindly be initiated and action taken report may kindly be forwarded to us for record.

With regards,

Yours sincerely,

(U.P.Singh)

To

Chief Secretary (States/UTs) – As per List

Copy to:

1. Secretary, Ministry of Housing & Urban affairs
2. Secretary, Department of Drinking Water & Sanitation
3. Secretary, Ministry of Agriculture Cooperation & Farmers' Welfare
4. Chairman, Central Water Commission
5. Mission director, National Water Mission
6. Chairman, Central Ground Water Board

Annexure-R/2

यू. पी सिंह, आई. ए. एस
U.P. SINGH, IAS
सचिव
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सत्यमेव जयते

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन, नदी विकास
और गंगा संरक्षण विभाग
श्रम शक्ति भवन
रफी मार्ग, नई दिल्ली-110 001
GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA REJUVENATION
SHRAM SHAKTI BAHWAN
RAFI MARG, NEW DELHI-110 001
http://www.mowr.gov.in

D.O. No.T-39011/6/2019-GW/56-95

7th January, 2020

Dear

Please refer to my D.O. letter of even number dated 21.08.2019 regarding urgent steps to improve water conservation/water use efficiency in the country.

2. It is reiterated that there is a growing need to improve the water use efficiency in all sectors including irrigation sector. Further, an appropriate mechanism is required to be formulated for water pricing policies, reducing non-revenue losses and to sensitise the masses for reducing water wastage.

3. It is brought to the notice that in a case (O.A. No.0597/2019 of Shri Rajendra Tyagi & Anr. vs Union of India & Ors.) in the Hon'ble NGT regarding preventing water wastage and misuse of ground water, NGT has directed for specific time bound action plans and monitoring which should include coercive measures for enforcement.

4. I shall be grateful if an action taken report to the aforesaid DO letter dated 21.08.2019 may be furnished in the matter to this Department **by 17th January 2020 positively** so as to enable us to submit a suitable response to the NGT.

With regards,

Yours sincerely,

Sd/-

(U.P. Singh)

To

Chief Secretary (All States/UTs)

Copy for similar action to:

1. Secretary, Ministry of Housing & Urban Affairs
2. Secretary, Department of Drinking Water & Sanitation
3. Secretary, Ministry of Agriculture Cooperation & Farmers' Welfare
4. Chairman, Central Water Commission
5. Chairman, Central Ground Water Board

(U.P. Singh)
Secretary (WR, RD & GR)

जल संरक्षण - जीवन संरक्षण
Conserve Water - Save Life

O/C Issued 9/01/2020

Annexure-R/3

593

यू. पी. सिंह, आई. ए. एस
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सत्यमेव जयते

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन, नदी विकास
और गंगा संरक्षण विभाग
श्रम शक्ति भवन
रफी मार्ग, नई दिल्ली-110 001
GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA REJUVENATI
SHRAM SHAKTI BAHWAN
RAFI MARG, NEW DELHI-110 001
http://www.mowr.gov.in

D.O. No.T-39011/6/2019-GW/NWM/515-518

February 19, 2020

Dear

Kindly refer to my DO letter dated 21.08.2019 (copy enclosed) regarding urgent steps to improve water conservation/water use efficiency in the country with reference to OA No. 597/2019 - Sh. RajendraTyagi V/s Ors in the Hon'ble NGT followed by another D.O. letter dated 07.01.2020 with the request to furnish action taken report on the matter.

2. It is brought to the notice that comments are awaited despite reminders dated 07.01.2020 & 30.01.2020 and telephonic requests by NWM officials. The case is listed for 05.03.2020 in the NGT for furnishing action taken reports on its direction dated 15.10.2019.

3. I shall be grateful if action taken report is expedited in the matter and send to this office latest by 25.02.2020 positively so as to enable us to submit a suitable response to NGT.

With regards,

Yours sincerely,
Sd/-
(U.P. Singh)

To

Chief Secretary/ Administrator of States/ UTs (as per list enclosed)

Copy for similar action to:

1. Secretary, Ministry of Housing & Urban Affairs
2. Secretary, Ministry of Agriculture Cooperation & Farmers' Welfare
3. Chairman, Central Ground Water Board
4. DG, NMCG

(U.P. Singh)
Secretary (WR, RD & GR)

Annexure-R/4.

591

D.O. No.T-39011/6/2019-GW

Dated 22.04.2020

Dear

Kindly refer to my DO letter dated 21.08.2019 regarding steps to improve water conservation/water use efficiency in the country with reference to OA No. 597/2019 - Sh. Rajendra Tyagi V/s UOI & Ors in the Hon'ble NGT followed by D.O. letter dated 07.01.2020 with the request to furnish action taken report in the matter.

2. Comments in the matter are awaited despite reminders dated 07.01.2020, 30.01.2020 & 19.02.2020. I shall be grateful if action taken report is expedited in the matter so as to enable us to submit timely and suitable response to NGT.

Yours Sincerely,

(U.P. Singh)

To

Chief Secretary/ Administrator of States/ UTs (as per list enclosed)

Copy for similar action to:

1. Secretary, Ministry of Agriculture Cooperation & Farmers' Welfare
2. DG, NMCG

Annexure-R/5

Dy. No. 154/NWM 13/2/2020

Urgent
NGT

OFFICE OF SECRETARY (WR, RD&GR)
Date.....

GOVERNMENT OF ASSAM
ENVIRONMENT AND FOREST DEPARTMENT
DISPUR, GUWAHATI-6

No. FRM.177/2019/59 Dated Dispur, the 21st January, 2020

From : Shri I. Kalita, ACS
Joint Secretary to the Government of Assam
Environment & Forest Department
Dispur, Guwahati-6.

e Off. No. 624662 /MoWR/CR
Date 10/02/20

To : 1. The Chairman
Ministry of Jal Shakti, Govt. of India
Department of Water Resources
River Development and Ganga Rejuvenation
2nd Floor, Block-III, CGO Complex, Lodhi Road
New Delhi-110003.

2. The Member Secretary
Central Pollution Control Board,
Ministry of Environment, Forest & Climate Change, Govt. of India
Parivesh Bhawan, East Arjun Nagar, New Delhi-110032

Sub : Submission of additional compliance report in Hon'ble National Green Tribunal Order dated 11.09.2019 passed in O.A. No. 496/2016 in the matter of News Item published in " Hindustan Times" dated 19.06.2015.

Ref : This Department's letter No. FRM. 177/2019/52 dated 28/11/2019

Sir,

With reference to the above, I am directed to enclose herewith a copy of additional compliance report in Hon'ble National Green Tribunal Order dated 11.09.2019 passed in O.A. No. 496/2016 in the matter of News Item published in " Hindustan Times" dated 19.06.2015 received from the Public Health Engineering Department, Assam vide their letter No. PHED. 392/2018/257 dated 21.11.2019 (copy enclosed) for your kind necessary action.

Enclosure : As above.

Yours faithfully,

Joint Secretary to the Government of Assam
Environment & Forest Department

Memo No. FRM.177/2019/59-A Dated Dispur, the 21st January, 2020

Copy to:

1. The Adviser(PHEE), CPHEEO, Ministry of Housing & Urban Affairs, Nirman Bhawan, New Delhi.
2. P.S. to the Principal Secretary to the Govt. of Assam, Environment & Forest Department, Dispur, Guwahati-6 for kind appraisal of the Principal Secretary.
3. P.S. to the Commissioner & Secretary to the Govt. of Assam, Environment & Forest Department, Dispur, Guwahati-6 for kind appraisal of the Commissioner & Secretary.

By order etc.,

Joint Secretary to the Government of Assam
Environment & Forest Department

(303) (53)

(489)

URGENT
NGT Matter

GOVERNMENT OF ASSAM
PUBLIC HEALTH ENGINEERING DEPARTMENT
DISPUR ::GUWAHATI- 6.

No. PHED-392/2018/257 Dated Dispur, the 21st November 2019

From : Shri M.K. Das
Deputy Secretary to the Govt. of Assam
Public Health Engineering Department.

To : 1) Dr. M. Dhinadhayalan
Adviser (PHEE)
Ministry of Housing and Urban Affairs
Government of India
Nirman Bhawan, New Delhi.

2) The Commissioner & Secretary to the Govt. of Assam
Environment & Forest Department
Dispur, Guwahati-6.

Sub : Status on Hon'ble NGT Order dated 11.09.2019 in OA.496/2016 regarding Rain Water Harvesting System for Water conservation.

Ref : 1) Q-15014/1/2016-CPHEEO, dtd 25.10.2019.
2) No. FRM.177/2019/37, dtd 15.11.2019.

Sir,

With reference to the subject cited above, I am directed to furnish herewith the status of Rain Water Harvesting for conservation of water as submitted by Chief Engineer (PHE) Water Assam for favour of your information and necessary action.

Enclo.:-As stated above

Yours faithfully

Deputy Secretary to the Govt. of Assam
Public Health Engineering Department

Memo No. PHED-392/2018/257-A Dated Dispur, the 21st November 2019
Copy forwarded to :-
1) The Chief Engineer (PHE) Water Assam, Hengrabari, Guwahati-36.

By order etc.,

Deputy Secretary to the Govt. of Assam
Public Health Engineering Department

6492
31/12/19

29.11.19

****

GOVERNMENT OF ASSAM
OFFICE OF THE CHIEF ENGINEER (PHE), WATER, ASSAM
HENGRABARI, GUWAHATI, ASSAM – 781036

No. PHE-2093/TB/2019 T-15,500 Dated: 21-11-2019

To,

The Secretary to the Govt. of Assam PHE Department.
Dispur, GUWAHATI – 36.

Sub : - Status on Hon'ble NGT Order dtd. 11-09-2019 in O.A. No. 496/2016 (Earlier O. A. No.253/2015).

Ref : - No. FRM.177/2019/37 dtd. 15-11-2019. ——— Sl. 250.

Sir,

With reference to the above I have the honour to inform you that, Rain Water Harvesting Structures either for water conservation are not regular features in PHE Department and no Action Plan has been prepared so far with a proper planning to construct RWS with budgetary provision. However, during 2011-12, 2012-13, 2013-14 & 2014-15 some roof top RWH structures were installed in some Schools and Public Institutions in piecemeal manner utilizing fund from NRDWP (Sustainability Component). Another scheme of roof top RWH was sanctioned by NEC in the year 2015-16 for the benefit of beneficiaries under Bhishmupriya Manipuri Autonomous Council, which is being implemented through Assam Housing Development Board. The present status of all those structures is shown in Annexure I.

Further, it is learnt that water conservation features will be an integral part of a Water Supply Scheme to be implemented under Jal Jeevan Mission and we are waiting for a comprehensive guideline from the Ministry to undertake new Schemes where Water Conservation Measures, mostly by Rain Water Harvesting Structures will be incorporated in systematic manner.

This is for favour of information and kind necessary action.

Yours faithfully,

Enclo : - Annexure I.

Chief Engineer (PHE), Water, Assam,
Hengerabari, Guwahati-36.

491

256

ANNEXURE – I

STATUS OF RAIN WATER HARVESTING STRUCTURES FOR WATER CONSERVATION UNDER PHE DEPARTMENT, ASSAM.

Sl. No.	Name of the Scheme	Year of sanction	Years of implementation	Nos. of RWH Structures installed	Functionality
1	Roof top Rain Water Harvesting Structure in LP School under Sustainability Component of NRDWP	2010-11	2011-12	2000	Functionality to be verified
2		2012-13	2012-13	1000	Functionality to be verified
3		2013-14	2013-14	2500	Functionality to be verified
4		2014-15	2014-15	700	Functionality to be verified
5	Roof top Rain Water Harvesting Structure in Gaon Panchayat / Block Office under Sustainability Component of NRDWP	2010-11	2011-12	500	Functionality to be verified
6	**Under NEC Fund** Promotion of an Environmentally sound approach for Sustainable Water Management optimizing usage Rural Rain Water Harvesting from Roof Top in Institution, Health Centers, Community Centers in Assam in 4 Districts				
	a)Type I	2015-16	2016-2017	78	Functioning
	b)Type II	2015-16	2016-2017	147	Functioning

Chief Engineer (PHE), Water, Assam,
Hengerabari, Guwahati-36.

Annexure - R/6.

Dy.No. 63/NWM/2020
OFFICE OF SECRETARY (WR, RD&GR)
622117
Date 23/1/2020

Government of Chhattisgarh
Water Resources,
Religious Trusts and Endowments Department

No. 305/F-1-88/31/S-2/2019 Atal Nagar, Date : 22-1-2020

To.

Shri U.P.Singh,
Secretary,
Government of India,
Department of Water Resources,
RD&GR, Ministry of Jal Shakti,
Shram Shakti Bhawan,
Rafi Marg, New Delhi-110001

Sub. :-
1. **Initiation of urgent steps to improve water conservation/water use efficiency in the country –reg.**
2. **O.A. No. 597/2019- Rajendra Tyagi and Another Vs. UOI and Others filed in Hon'ble NGT, New Delhi-reg**

Ref :-
1. Govt. of India, Ministry of Jal Shakti, Deptt. of WR, RD& GR, New Delhi D.O. letter No.T-39011/6/2019-GW Section, dated 21.08.2019.
2. Govt. of India, Ministry of Jal Shakti, Deptt. of WR, RD& GR, New Delhi D.O. letter No.T-39011/6/2019-GW/59, dated 07.01.2020.

MD, NWM

****

With reference to the letters cited above the steps taken by Govt. of Chhattisgarh to improve water conservation/water use efficiency and preventing water wastage and misuse of water are enclosed for kind information and further needful action.

Encl:- As above.

197/DS(NWM)/20
29/1/20
US(NWM)
28-1-20

23/1/2020

22.1.20

(Avinash Champawat)
Secretary
Govt. of Chhattisgarh
Water Resources Department

Room No. S-1/15, First Floor, Mahanadi Bhawan, Mantralaya, Atal Nagar, District Raipur (C.G.) - 492002
Tel : 0771-2510838 Fax : 2510839, E-mail : secy-wrd.cg@gov.in (Water Resources)
secy-religious.cg@gov.in (Religious Trust)

Govt. of Chhattisgarh
Water Resources Department

Subject :- Initiation of urgent steps to improve water conservation/water e efficiency in the country (O.A. No. 597/2019- Rajendra Tyagi and Another Vs. UOI and Others filed in Hon'ble NGT, New Delhi).

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1. **Water Pricing Policies, Reducing Non-Revenue Losses and Reducing Water Wastage:** - Govt. of Chhattisgarh has taken steps for fixing water prices for ground water use in a holistic manner. Chhattisgarh Water Sustainability bill has been framed and the process for its approval/implementation is in progress. This will help in reducing water wastage as well as non-revenue losses as the person misusing water will be penalised as per the provisions of the bill. Water Resources Deptt. has taken a drive for recovery of revenue pertaining to the water allocated to the industries etc. in a mission mode and regular monitoring is being done. Enforcement of this will help stake holders to use the commodity economically with optimum efficiency.

   Govt. of Chhattisgarh, Water Resources Deptt. vide notification dated 16.01.2020 (copy enclosed) has raised the rate for drawal of ground water for industrial use, thermal power plants and also hiked the tariff for drawal of ground water for Cold drinks, Mineral water and Liquor industries using water as a raw material. This will help in control of drawal of ground water and its wastage in industries, which are primary users of ground water after irrigation use.

2. **Improving Water Use Efficiency** : - Govt. of Chhattisgarh, Water Resources Deptt. is taking steps for improving the water use efficiency by adopting micro irrigation and solar micro irrigation projects, renovation of canals and construction of water courses to grow more crop per drop as per the demand of the hour. Co-ordinated efforts of all the departments such as urban/rural development, PHE, industries etc. are being done for conservation of water through rain water harvesting, recycling etc. Regular monitoring is being done in the irrigation sector to prevent the water wastage.

3. **Preventing Misuse of Ground Water** : - Govt. of Chhattisgarh has initiated the process for enacting a holistic bill for preventing misuse of water and better overall Water Management. A special drive has also been taken up to assess the water consumed by various industries for tapping the industries drawing the ground water, unauthorisedly to prevent misuse of water.

4. **Improving Water Conservation** : - The Govt. had adopted a unique scheme Narwa, Garuwa, Ghurawa and Bari, in which under the Narwa component, Water Resources Deptt. had on scientific basis proposed various water conservation structures on small and big nallas of all the 146 blocks of the State for recharging ground water. The basis of selection is past Ground Water Trends of the decade, site selection, G.I.S. technique, miliwatershed, linament, lithology, soil texture and soil depth. The works are being proposed in 03 stages depending upon the depth of ground water 9 to 12 m., 6 to 9 m. and 3 to 6 m. and being carried out involving the participation of local village bodies ie. Gram Panchayats etc.

   The Govt. of Chhattisgarh has very keenly concerned with the mission of water conservation as desired by the Hon'ble Prime Minister of India and had constituted a Governing Body for the same. Regular meetings are being taken with various stake holders of the state and the decisions are being enforced and monitored by Hon'ble Chief Minister and Chief Secretary of the State.

Keshni Anand Arora, IAS

Chief Secretary, Haryana,
Chandigarh - 160 001.
E.mail : cs@hry.nic.in

D.O. No. 919/Project/PoE

Dated 24/02/2020

Subject: Initiation of urgent steps taken to improve water Conservation/ water use efficiency in the country- regarding

Reference: DO No.t-39011/6/2019-GW Section dated 21.08.2019 and demi official No. T-39011/6/2019-GW/62 dated 07.01.2020.

Dear Ch Singh,

With reference to your D.Os under reference, it is intimated that Irrigation & Water Resources Department has taken a series of steps to improve water conservation and improve water efficiency. Action taken report giving the brief of these steps is enclosed herewith which includes the following:-

1. Establishment of Haryana Pond and Waste Water Management Authority for development, protection, rejuvenation, conservation, construction and management of ponds in all respects.
2. For conservation of water and to improve water use efficiency in the State, Command Area Development Authority (CADA) has taken following projects:-
   a. Pilot projects on micro irrigation at 14 different canal outlets of 13 districts of the State covering 2231 ha area being undertaken for encouraging farmers to adopt micro irrigation.
   b. Demonstration of new technology of micro irrigation on paddy crop so that farmers start using micro irrigation on paddy crop to conserve water.
   c. Micro irrigation pilot projects using Treated Waste Water (TWW) in STPs of Ladwa, Shahbad and Pehowa towns of Kurukshetra district are operationalized successfully.
   d. Micro irrigation projects on 11 overflowing village ponds using solar power to address twin purpose of cleanliness in villages and water conservation have been completed and another 55 overflowing village ponds in various districts of Haryana have been taken up on pilot basis.
3. Treating Waste Water Irrigation Project proposal for using all spare treated waste water of 207 STPs in the State costing Rs.1098.00 crores for implementing it in five years has been approved by the Government. This will help in conserving surface and ground water resources and will help in addressing environment and river pollution issues.
4. Projects are also in pipeline under Incentivization Scheme For Bridging Irrigation Gap (ISBIG) costing Rs.1232.00 crore covering about 2.0 lakh ha area.

5. Ground Water Recharge Schemes were executed by installing 82 injection wells in Sirsa, Fatehabad and Mahindergarh district of the State to enhance availability of ground water.
6. Haryana Irrigation Management and Research Institute is conducting capacity building and mass awareness programs on water related issues. These programs have been very useful and more and more farmers are coming forward for using micro irrigation.
7. Under the National Water Mission (NWM), State Specific Action Plan is being prepared and a State Level Steering Committee has been constituted under the chairpersonship of Chief Secretary to monitor the progress of the same.

All the above steps taken by the State Government will go a long way to improve water conservation and water use efficiency in the state.

Warm regards,

Yours sincerely

(Keshni Anand Arora)

Sh. U.P. Singh, IAS
Secretary
Govt. of India, Ministry of Jal Shakti,
Department of Water Resources, RD&GR
Shram Shakti Bhawan, Rafi Marg,
New Delhi-110001

Annexure-R/7

Action Taken by Irrigation & Water Resources Department, Haryana to improve water conservation and water use efficiency in Haryana

It is intimated that Irrigation & Water Resources Department Haryana has taken urgent steps to improve water conservation and water use efficiency in the state and the same are described in brief as under:-

1. Govt. of Haryana has established "Haryana Pond and Waste Water Management Authority (HPWWMA) in 2018 for the development, protection, rejuvenation, conservation, construction & management of pond, utilization of pond water & treatment and for management & utilization of treated effluent of sewage effluent treatment plants for the purpose of irrigation. HPWWMA has taken-up 18 Ponds on 1st priority for their development/ rejuvenation/ restoration in the 1st phase. Apart from this, during FY 2020-21, HPWWMA will take-up 200 Ponds under 3 categories i.e. Mahagram ponds, Religious/ Historical ponds & Ponds having their areas 25 acre and above. HPWWMA has initiated steps which go a long way in water conservation and improving cleanliness in rural areas.

2. For conservation of water in the state Command Area Development Authority (CADA) Haryana, has taken following projects/steps:

   a) Pilot Project on Micro-Irrigation at different canal outlets

      To meet the growing water requirements and to produce more food per drop of water, it has become essential to adopt water efficient irrigation methods instead of the conventional flood irrigation. To increase the field application water use efficiency and to enhance crop productivity, a pilot project has been undertaken by CADA costing Rs.30.60 crore with provision for installation of community based micro-irrigation schemes in commands of 14 different canal outlets spread over 13 different districts of the state covering 2231 ha command area. In this scheme, canal water is otherwise being provided to the farmers will be use in micro irrigation

system. This scheme is first of its kind in which the solar power systems have been installed and the project has also been connected to the utility power grid for bidirectional flow of power. All the 14 schemes are in operation and 2231 ha area has been covered. In July 2017, one scheme of this project was inaugurated by Hon'ble Chief Minister at Pehowa. After the successful implementation, this scheme is also being implemented in other districts. These pilot projects will be helpful to encourage farmers to switch to micro irrigation for water conservation and to use water efficiency.

b) Demonstration of micro-irrigation on paddy crop

Demonstration farm for using micro-irrigation on paddy crop had been taken up at 25200-L Sandhola Minor to motivate the farmers for adopting micro irrigation technology. One acre was irrigated through flood irrigation methodology and two acres through micro irrigation.

A joint study was carried out by farmers, CADA, agronomists of JISL on paddy crop of variety PR-126 by transplanting it in the three acres. Micro irrigation was used for a specified period as and when required by fixing the time. Constant monitoring was done by the farmers and the specialists. Harvesting of crop was done in the presence of farmers and specialists on dt. 11.10.2017. After harvesting of paddy crop appreciable results were obtained towards saving of water and increase in yield. Total 42.02% water was saved and there was increase of yield as 0.29 tonne per acre. On getting successful results of this study, State Government had directed CCS Agricultural University, Hisar to collaborate with CADA Haryana in the next season to study the results of micro irrigation on paddy, so that the results could be verified and implemented through farmers. Haryana government directed CADA to run this experiment on at least 9 acres using different irrigation methods and transplanting techniques. In view of this, the experiment plot had been extended to 9 acres in which 3 acres were sown by direct seeding rice (DSR), 3 acres by mechanical trans-planter and 3 acres by traditional manual methods. Irrigation was done in every three

acres of plot by using methods of sprinkler irrigation, drip irrigation and flood irrigation methods.

The results have shown that:-

There is appreciable amount of saving of water which is more than 50% and there is also marginal increase in yield in all types of transplanting and irrigation methods. Therefore, it is concluded that micro irrigation technology would be very helpful in extensive saving water while maintaining the yield even in case of guzzling paddy crop.

c) Pilot project for micro irrigation infrastructure on sewage treatment plants (STP) for utilizing treated water for irrigation

For augmenting irrigation water, a new intervention has been proposed for reuse of treated waste water from the existing sewage treatment plants for irrigation of agricultural crops. Working on these lines a pilot project was prepared by CADA in the over exploited & critical blocks by selecting STPs of Ladwa, Shahabad and Pehowa towns of Kurukshetra district for irrigation covering 290 ha area. Farmers have formed Water User Associations and also given undertaking for using the treated waste water for irrigation of their fields. All the sites have been completed and are operational and CADA plans to replicate such projects in other small towns and big villages.

d) Installation of solar powered micro irrigation infrastructure on overflowing village ponds in various district of Haryana

Command Area Development Authority (CADA) has initiated a pilot project for utilizing surplus water from overflowing ponds in the villages. It has been conceptualized that after testing of water and calculation of daily available runoff, the area which can be irrigated from this surplus water will be planned on the basis of crop water requirement. The farmers of the area to be benefited from this water have formed Water User Associations for taking benefits from this pilot project. The sedimentation chamber will be

constructed to separate the coarse sediments thereby providing clear water. At the initial stage, 55 overflowing village ponds in various districts of Haryana have been taken up on Pilot basis. Total cost of the project is approximately Rs.7.15 crore and it will cover 1095 ha. In the first instance, work on 11 no. ponds in various districts of Haryana state covering 383 ha. CCA has been completed.

3. Haryana Treated Waste Water Irrigation Project:

There are 142 Sewage Treatment Plants (STPs) of PHED, HSVP, ULB, GMDA and Panchayats and total treatment capacity of these existing STPs is 1798.4 MLD. In addition to this, there are 45 under construction and 53 proposed STPs of these departments with treatment capacity of 321.3 MLD and 675.5 MLD respectively. Thus total availability of treated waste water from the existing, under construction and planned STPs will be as 2795.2 MLD or 1142 cusecs. Treated water from these STPs is being discharged into nearby drains which either join river Yamuna or river Ghaggar. In this way, large network of drains in the state get polluted in spite of best efforts of the state Government to install STPs.

It is in this context that it has been proposed to use this treated waste water for irrigation purpose through Irrigation and W.R. Department and CADA. Thus the **'Project Report for Haryana Treated Waste Water Irrigation Project'** (Haryana TWW IP) has been prepared covering almost all the existing, under construction and proposed STPs of the state. This is a gigantic work and will be covered in phases, firstly covering those towns which are causing major pollution to river Yamuna and Ghaggar. Firstly, treated waste water irrigation schemes for Panipat, Yamuna Nagar and Karnal will be taken up. Thereafter irrigation schemes for other towns in Yamuna basin such as Sonipat, Faridabad, Palwal, Gurgaon, Jhajjar, Rohtak, Rewari and Jind can be taken up. Thereafter smaller town can be taken up which are otherwise not major contributors of treated waste water. Treated waste water irrigation schemes for major towns in Ghaggar basin will include Ambala City, Ambala Cantonment,

Kurukshetra, Kaithal, Narwana, Fatehabad and Sirsa. Then in the second phase, towns of Bhiwani, Hisar, Hansi and other nearby towns can be taken up.

The Haryana TWW IP proposes to include 207 STPs with treatment capacity of 1828 MLD or 747 cusecs. This project will cover new and existing commands with intensity of irrigation as 66% (21.0% in Kharif and 45.0% in Rabi) for new commands and as 44% (14% in Kharif and 30% Rabi) for existing commands. It will provide actual irrigation to about 4.00 lakh acres (1.28 lakh acres in Kharif and 2.72 lakh acres in Rabi). Total cost of the scheme has been estimated to be **Rs.1098.25 crores** at current prices and its BC ratio has been worked out as **1.69:1**. This project is being planned to be executed in 5 years with annual outlay of about 220.0 crores at current prices.

4. Projects under pipeline under ISBIG scheme:

In the month of December, 2016, GoI, MoWR, RD&GR stopped the scheme of "Command Area Development & Water Management (CADWM)" and decided for taking up Command Area Development & Water Management (CADWM) works / projects through Incentivisation Scheme for Bridging Irrigation Gap (ISBIG). Government of India also advised the States to submit the project proposals for approval and inclusion under ISBIG. Accordingly, Haryana state has prepared and submitted 6 projects with an estimated cost of Rs. 374261.45 lakh pertaining to CADWM works to the concerned Ministry in GOI i.e. MOWR, RD&GR vide letter dated 08.02.2018 for approval and inclusion under ISBIG. The scheme of ISBIG is under the process of approval with GoI. The brief detail of the projects submitted to GoI under ISBIG scheme is as under:-

Sr.No.	Name of Projects	Physical Target (CCA in Ha.)	Estimated cost of the Project (Rs. in lakh)	Districts to be covered
A	On-going Projects			
1	BCC-II	1,07,675	72984.18	Hisar, Sirsa, Fatebahad, Ambala, Kaithal, Kanal, Kurukshetra & Jind
2	WJC-VI	73,144	49238.55	Hisar, Rohtak, Jhajjar, Sonepat, Jind, Bhiwani & Panipat.

3	JLN-II	88,704	59495.00	Jhajjar, Rewari, Mehandergarh, Bhiwani & Gurgaon
B	New Projects			
4	BCC-III	1,71,852	111141.06	Hisar, Sirsa, Fatebahad, Ambala, Kaithal, Kanal, Kurukshetra & Jind
5	WJC-VII	75,341	49567.71	Hisar, Rohtak, Jhajjar, Sonepat, Jind, Bhiwani & Panipat.
6	Siwani Project	49,899	31834.95	Bhiwani
	Total	5,66,615	374261.45	

The above proposal also include about 2 lakh ha area with an estimated cost of Rs.1232.37 crore has been proposed to cover under micro irrigation in Haryana. In addition to above, micro-irrigation project with on farm micro-irrigation system are also proposed to be implemented with the financial assistance of NABARD. For this purpose, CADA has prepared micro-irrigation project by making the provision of on farm micro-irrigation system on the farmers field with an estimated cost of Rs. 18946.20 lakhs with physical target of 9022 hectares, the abstract of which is given as under:-

Sr. No.	Particulars	Details
1.	Total cost of Project	Rs. 189.46 Crore
2.	CCA to be covered in Ha	9022
3.	Rate per Ha with on farm MI System	Rs. 2,10,000
4.	Total Number of schemes	51
5.	Number of Districts/ Blocks	13/27
6.	Project period	2020-21 to 2022-23

The above project has been submitted to the Nodal Department i.e. Agriculture and Farmers Welfare Department Haryana for getting approval from NABARD. The work on this project shall be started after receiving approval from NABARD.

5. Ground water recharging injection wells:

   82 Injection wells were installed in 2017 (7 in Rewari, 14 in Sirsa, 16 in Fatehabad & 45 in Mahindergarh- Hamidpur Bund – Krishnawati & Dohan) & all are working successfully to replenish the groundwater.

6. Capacity building and mars awareness programs:

   Haryana Irrigation Management and Research Institute (HIRMI) are conducting capacity building and mass awareness programs on the issues related to water. The programs have proved to be great success as more and more farmers are coming forward for adopting micro irrigation techniques.

7. State Specific Action Plan under National Water Mission:

   Under the National Water Mission (NWM) Haryana Irrigation Research & Management Institute (HIRMI) has been entrusted to ensure security, safety, sustainable development & management of water resources for the Haryana state. Under State Specific Action Plan, State Level Steering Committee has been constituted under the chairpersonship of Chief Secretary, Haryana to oversee the preparation of SSAP for water sector.

Annexure - R/8

Dy. No. 197/NWM 25/2/2020

Government of Jharkhand
Water Resources Department

Letter No.-2/PMC/vividh/779/2019 123 / Ranchi, Dated 19/02/2020

From

Er. Rajendra Prasad,
Deputy Secretary (Engg.)

To,

Sri Vinod Kumar,
Under Secretary,
National Water Mission,
2nd Floor, Block No. III,
CGO Complex Lodhi Road,
New Delhi-3
E-mail- usnwm-mowr@gov.in

Sub.:- **OA No.- 597/2019- Shri Rajendra Tyagi V/S UOI & Ors before NGT.**

Ref.:- **Your letter no. T-39011/6/2019-GW Section/265/299 dt. 30.01.2020**

Sir,

With reference to subject mentioned above, Action Taken Report to improve water conservation has been submitted to Central Pollution Control Board, New Delhi vide letter no. 991 dated 14.11.2019 by Water Resources Department, Jharkhand (Copy enclosed).

In case of O.A. No. 0597/2019 of Shri Rajendra Tyagi & Anr. V/S Union of India & ors before Hon'ble NGT, the regulation framework to check wastage of fresh ground water from overflowing overhead tanks is to be enacted by Urban Development and Housing Department, Govt. of Jharkhand.

Thanking You.

Your's Faithfully

19/02/2020
(Rajendra Prasad)
Deputy Secretary (Engg.)

Encl.:- As mentioned.

बजट शीर्ष : 4702-101(OSP)-24-नई योजनाओं का भू–गर्भ जल सर्वेक्षण / कृत्रिम पुर्नभरण एवं जल संरक्षण–07–59 अंतर्गत प्रस्तावित कार्य की विवरणी –

Sl. No	Name of division	Name of Site	No. of Recharge Pit/ Monitoring wells/Geo Physical Survey Site	Name of Work	Estimated Cost	Remarks
1	2	3	4	5	6	7
41	Ground Water Investigation Division, Hazaribag	Madhya Vidyalaya Karnpura, Giridih	1	Geo-Physical Survey, Construction of Recharge Pits and Construction of Monitoring wells of 57 No. Sites		
42		Sariya Inter College, Sariya, Giridih	1			
43		Aadarsh College Rajdhanwar, Giridih	1			
44		Konar Nahar Pramandal, Bagodar, Giridih	1			
45		Ramkrishna Viveknad Mahavidyalaya, Bagodar, Giridih	1			
46		Uchh Vidyalaya, Bagodar, Giridih	1			
47		Rajkiya Mahila Polytechnic, Bokaro	1			
48		Path Nirman Vibhag, Path Pramandal Bokaro	1			
49		Awar Pramandal Pashupalan Padadhikari, Chas, Bokaro	1			
50		BDO office, Gomiya, Bokaro	1			
51		Gomiya College, Swaag, Gomiya, Bokaro	1			
52		Rajkiya Polytechnic, Khurri, Bermo, Bokaro	1			
53		BDO office, petarwar, Bokaro	1			
54	Ground Water Investigation Division, Hazaribag	Pariyojna Balika Uchh Vidyalaya, Koderma	1			
55		Civil Surgeon, Sadar Hospital, Koderma	1			
56		Rajkiya Polytechnic, Koderma	1			
57		Jagannath Jain Mahavidyalaya, Jhumri Tilaiya	1			
Sub total (Hazaribag):-			57		245.162	

पत्रांक – 32/19-20 प्र० स्वी०, दिनांक - 26.08.19

26-8-19
(सत्येन्द्र नारायण उपाध्याय)
सरकार के संयुक्त सचिव
जल संसाधन विभाग, झारखण्ड, राँची।

बजट शीर्ष : 4702-101(OSP)-24-नई योजनाओं का भू–गर्भ जल सर्वेक्षण / कृत्रिम पुर्नभरण एवं जल संरक्षण–07–59 अंतर्गत प्रस्तावित कार्य की विवरणी :–

Sl. No	Name of division	Name of Site	No. of Recharge Pit/ Monitoring wells/Geo Physical Survey Site	Name of Work	Estimated Cost	Remarks
1	2	3	4	5	6	7
21	Ground Water Investigation Division, Hazaribag	Samudayik Sawasthya Kendra, Vishnugarh, Hazaribag	1	Geo-Physical Survey, Construction of Recharge Pits and Construction of Monitoring wells of 57 No. Sites		
22		Van Bhawan, Ramgarh	1			
23		Minor Irrigation Division Ramgarh	1			
24		Ramgarh College, Ramgarh	1			
25		Zila Udyog Kendra, Ramgarh	1			
26		Sadar Hospital, Ramgarh	1			
27		Civil Surgeon, Ramgarh	1			
28		Krishna Vallabh Uchh Vidyalaya Lari, Ramgarh	1			
29		CCL Kujju, Ramgarh	1			
30		Utkramit Uchh Vidyalay, Morangi, Mandu, Ramgarh	1			
31		Gola Polytechnic, Ramgarh	1			
32		Samudayik Swasthya Kendra, Gola, Ramgarh	1			
33		Niyojnyalaya Bhawan, Shram Niyojan Prashikchan Vibhag (Labour Employment n Tranining dept.) Dhanbad	1			
34		Mishrit Karyalaya Bhawan, Dhanbad	1			
35		Jharkhand Khaniz Chetra Pradhikar, Dhanbad	1			
36		Polytechnic Dhanbad	1			
37		ITI Dhanbad	1			
38		Mines Rescue Station, Dhanbad	1			
39		BDO office, Topchanchi, Dhanbad	1			
40		Samudayik Swasthya Kendra, Topchanchi. Dhanbad	1			

पत्रांक - 32/15-20 प्र०स्की०, दिनांक - 26.08.19

बजट शीर्ष : 4702-101(OSP)-24-नई योजनाओं का भू–गर्भ जल सर्वेक्षण / कृत्रिम पुर्नभरण एवं जल संरक्षण–07–59 अंतर्गत प्रस्तावित कार्य की विवरण :–

Sl. No	Name of division	Name of Site	No. of Recharge Pit/ Monitoring wells/Geo Physical Survey Site	Name of Work	Estimated Cost	Remarks
1	2	3	4	5	6	7
1	Ground Water Investigation Division, Hazaribag	Public High School Kujju, Ramgarh	1	Geo-Physical Survey, Construction of Recharge Pits and Construction of Monitoring wells of 57 No. Sites	245.162	
2		Sub Divisional Hospital Bermo, Bokaro	1			
3		B.D.O. Office, Padma Hazaribag	1			
4		10+2 High School, Bishnugarh, Hazaribag	1			
5		10+2 High School, Bagodar, Giridih	1			
6		Balika Uchch Vidyalay, Saria, Giridih	1			
7		B.D.O. Office, Barhi, Hazaribag	1			
8		Amrit Nagar High School Hazaribag	1			
9		Swawlambi Institute of Dental Science, Block Sadar Hazaribag	1			
10		Meru BSF Camp, Block Sadar Hazaribag	1			
11		Uchh Vidyalaya, Maherara, Block Sadar Hazaribag	1			
12		Kshitiz Hospital, Hazaribagh	1			
13		Indira Gandhi Girls School, Hazaribag	1			
14		KB Women's College, Hazaribag	1			
15		GM cum Chief Engg. Vidyut Apurty Chetra, Hazaribag	1			
16		St. Columbus College, Hazaribag	1			
17		Executive Engg. Water ways division, (Irrigation Colony) Hazaribag	1			
18		Rajkiya Aadarsh Madhya Vidyalaya, Block-Daru, Hazaribag	1			
19		Uchh Vidyalaya, Tatijhariya, Block- Tatijhariya, Hazaribag	1			
20		Vishnugarh Inter College, Vishnugarh, Hazaribag	1			

पत्रांक – 32/19-20 प्र० स्वी०, दिनांक – 26.08.19

वित्तीय वर्ष 2019–20 में बजट शीर्ष : "4702-796(TSP)-24-नई योजनाओं का भू–गर्भ जल सर्वेक्षण / कृत्रिम पुर्नभरण एवं जल संरक्षण–07–59" अंतर्गत प्रस्तावित कार्य की विवरणी :–

Sl. No	No	Name of division	Name of Site	No. of Recharge Pit/ Monitoring wells/Geo Physical Survey Site	Name of Work	Estimated Cost	Rem...s
1	2	3	4	5	6	7	8
	9	Ground Water Investigation Division, Dumka	District High School, Dumka	1	Geo-Physical Survey, Construction of Recharge Pits and Construction of Monitoring wells of 24 No. Sites		
	10		Office of the Chief Engineer, Minor Irrigation Dumka	1			
	11		Water ways circle office, Dumka	1			
	12		Aadiwasi Kalyaan Chhatrawas National School dumka	1			
	13		District Control Room, Dumka	1			
	14		District Board office Dumka	1			
	15		Primary School Mahuadangal Dumka	1			
	16		Distict Cow Development office, Godda	1			
	17		District Agriculture office, Godda	1			
	18		High School Godda	1			
	19		Parisadan Godda	1			
	20		Sadar Hospital Godda	1			
	21		Community Building cum Kalyan Mandap Godda	1			
	22		Head post office Godda	1			
	23		BSNL office Godda	1			
			Total :-	*24*		*82.248*	
			Grand Total (Ranchi+Dumka):-	*87*		*344.386*	

पत्रांक – 32/19–20 प्र०स्वी०, दिनांक – 26.08.19

26.8.19

(सत्येन्द्र नारायण उपाध्याय)
सरकार के संयुक्त सचिव
जल संसाधन विभाग, झारखण्ड, राँची।

वित्तीय वर्ष 2019–20 में बजट शीर्ष : "4702-796(TSP)-24-नई योजनाओं का भू–गर्भ जल सर्वेक्षण / कृत्रिम पुर्नभरण एवं जल संरक्षण–07–59" अंतर्गत प्रस्तावित कार्य की विवरणी :–

Sl. No	No	Name of division	Name of Site	No. of Recharge Pit/ Monitoring wells/Geo Physical Survey Site	Name of Work	Estimated Cost	Remarks
1	2	3	4	5	6	7	8
	25	Ground Water Investigation Division, Ranchi	Agriculture College Kanke, District-Ranchi	4			
	26		Kanke Police Station, District-Ranchi	1			
	27		Rinpas Hospital, District-Ranchi	2			
	28		Krishi Vibhag, District-Ranchi	2			
	29		Utkramit Vidhyalaya Kanke, District-Ranchi	2			
	30		Govt. Teachers Training, District-Ranchi	1			
	31		Rajkiya Ucch Vidhyalaya, District-Ranchi	2			
	32		Angara Block office, District-Ranchi	2			
	33		Gumla Block office	2			
	34		SS High School Gumla	2			
	35		Lohardaga Block Office	2			
	36		Kisko Block office, District-Lohardaga	2			
		Sub total (Ranchi):-		63		262.138	
2	1	Ground Water Investigation Division, Dumka	Polytechnic College Dumka	2	Geo-Physical Survey, Construction of Recharge Pits and Construction of Monitoring wells of 24 No. Sites	82.248	
	2		Engineering College Dumka	1			
	3		Godda college Godda	1			
	4		Mahila college Godda	1			
	5		AS College, Deoghar	1			
	6		Court Campus Deoghar	1			
	7		Deoghar College Deoghar	1			
	8		Panchayat Training Institute, Deoghar	1			

पत्रांक - 32/19-20 प्र०स्वी०, दिनांक - 26.08.19

परिशिष्ट–I

वित्तीय वर्ष 2019–20 में बजट शीर्ष : "4702-796(TSP)-24-नई योजनाओं का भू–गर्भ जल सर्वेक्षण / कृत्रिम पुर्नभरण एवं जल संरक्षण–07–59" अंतर्गत प्रस्तावित कार्य की विवरणी :–

Sl. No	No	Name of division	Name of Site	No. of Recharge Pit/ Monitoring wells/Geo Physical Survey Site	Name of Work	Estimated Cost	Remarks
1	2	3	4	5	6	7	8
1	1	Ground Water Investigation Division, Ranchi	Kanke Block, District-Ranchi	1	Geo-Physical Survey, Construction of Recharge Pits and Construction of Monitoring wells of 63 No. Sites	262.138	
	2		Nagri Block, District-Ranchi	1			
	3		Ormanjhi Block, District-Ranchi	1			
	4		Itki Block, District-Ranchi	1			
	5		Bero Block, District-Ranchi	1			
	6		Central School HEC Dhurwa, District-Ranchi	2			
	7		Jagarnathpur Mahavidyalaya, District-Ranchi	2			
	8		Doranda College ranchi	2			
	9		Sardar patel High School New Building Dhurwa, District-Ranchi	1			
	10		District Center Khunti, Opposite Khunti Block Office, District-Khunti	2			
	11		Kuru Block, District-Lohardaga	2			
	12		Senha Block, District-Lohardaga	1			
	13		Sadar Hospital Gumla	2			
	14		K.O. College Gumla	1			
	15		JAC office, Ranchi	2			
	16		JSSC Office, Ranchi	2			
	17		RIADA Namkum, Ranchi	2			
	18		Panchyat Bhawan, Ranchi	2			
	19		Kendriya Vidjyalaya, Ranchi	2			
	20		LAC Institute, Ranchi	2			
	21		Law College, Ranchi	2			
	22		Bunyadi Madhya Vidhalaya, Ranchi	2			
	23		Namkum Police Station, Ranchi	1			
	24		Palandu Agriculture Insititute, District-Ranchi	2			

पत्रांक– 32/19–20 प्र०स्वी०, दिनांक– 26.08.19

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लघु सिंचाई प्रक्षेत्राधीन प्रस्तावित सिंचाई योजना के जीर्णोद्धार कार्य की सूची :

(सिंचन क्षेत्र हे० में)

क्र०	योजना का नाम	जिला	प्रखंड	प्राक्कलित राशि (लाख रू० में)	वर्तमान सिंचन क्षमता	पुनर्जीवित सिंचन क्षमता			Incidence of Cost	शीर्ष	अभि०
						खरीफ	रबी	कुल			
1	2	3	4	5	6	7	8	9	10	11	12
202	त्रिशूलवा बांध म०सिं०यो० का जीर्णो०	दुमका	रामगढ़	56.508	12	28	22	50	113016	TSP	
203	गोखनपुर म०सिं०यो० का जीर्णो०	दुमका	जामा	87.812	10	65	28	93	94422	TSP	
204	दुमनी मध्यम सिंचाई योजना का जीर्णो०	दुमका	जामा	74.234	10	50	32	82	90529	TSP	
205	भागलपुरी बांध म०सिं०यो० का जीर्णोद्धार	दुमका	सरैयाहाट	55.699	10	50	23	73	76300	TSP	
206	पैढा बांध म०सिं०यो० का जीर्णोद्धार	दुमका	सरैयाहाट	93.588	10	65	28	93	100633	TSP	
207	पत्नी बांध का जीर्णोद्धार	दुमका	सरैयाहाट	102.467	10	81	41	124	82615	TSP	
208	बड़ा बांध म०सिं० योजना का जीर्णो०	दुमका	मसलिया	44.442	10	30	10	40	111105	TSP	
209	गाडी बांध म०सिं० योजना का जीर्णो०	दुमका	मसलिया	42.957	10	30	10	40	107418	TSP	
210	बड़ा काठीकुण्ड म०सिं० योजना (नीम बांध) का जीर्णो०	दुमका	काठीकुण्ड	78.922	10	42	42	84	93955	TSP	
211	बड़ा बांध म०सिं०यो० का जीर्णोद्धार	दुमका	दुमका	79.841	10	39	26	65	122832	TSP	
212	मदनमड़िया बांध म०सिं०यो० का जीर्णोद्धार	दुमका	दुमका	39.582	10	18	16	34	116418	TSP	
213	लाल पोखर म०सिं० योजना का जीर्णो०	दुमका	रानेश्वर	75.234	10	35	9	44	170986	TSP	
214	मोंगा बांध म०सिं० योजना का जीर्णो०	दुमका	रानेश्वर	33.054	10	15	6	21	157400	TSP	
				1339.812	172	904	481	1385			
	सकल योग			18508.977	2461	10826	3745	14571			

पत्रांक 51/19-20 प्र० स्वी०/राँची दिनांक 24.09.19

लघु सिंचाई प्रक्षेत्राधीन प्रस्तावित सिंचाई योजना के जीर्णोद्धार कार्य की सूची –

(सिंचन क्षेत्र हे० में)

क्र०	योजना का नाम	जिला	प्रखंड	प्राक्कलित राशि (लाख रु० में)	वर्तमान सिंचन क्षमता	पुनर्जीवित सिंचन क्षमता			Incidence of Cost	शीर्ष	अभि०
						खरीफ	रबी	कुल			
1	2	3	4	5	6	7	8	9	10	11	12
	लघु सिंचाई प्रमण्डल, पाकुड़										
163	हीरणपुर मध्यम सिंचाई योजना का जीर्णोद्धार	पाकुड़	पाकुड़	91.517	15	55	25	80	114396	TSP	
164	बड़ा गोलपुर मध्यम सिंचाई योजना का जीर्णोद्धार	पाकुड़	पाकुड़	77.130	15	59	30	89	86663	TSP	
165	कन्हैया मध्यम सिंचाई योजना का जीर्णोद्धार	पाकुड़	पाकुड़िया	88.860	10	50	20	70	126943	TSP	
				257.507	40	164	75	239			
	लघु सिंचाई प्रमण्डल, गोड्डा										
166	राहेत बांध मध्यम सिंचाई योजना का जीर्णोद्धार	गोड्डा	सुन्दरपहाड़ी	74.098	8	62	25	87	85170	OSP	
167	बड़हरा बांध का जीर्णोद्धार	गोड्डा	पोड़ैयाहाट	34.563	10	35	20	55	62842	OSP	
168	मौजा देवरुणा में लघका पोखर का जीर्णोद्धार	गोड्डा	पोड़ैयाहाट	31.436	5	30	20	50	62272	OSP	
169	भतीगोड़ा मध्यम सिंचाई योजना का जीर्णोद्धार	गोड्डा	बोआरीजोर	118.120	65	80	21	101	116950	OSP	
170	चंदना बांध म०सिं०यो० का जीर्णो०	गोड्डा	बोआरीजोर	44.846	17	41	3	44	101923	OSP	
				302.763	105	248	89	337			
	लघु सिंचाई प्रमण्डल, गिरिडीह										
171	ग्राम टोलाटांड़ में विशुन आहर का जीर्णो०	गिरिडीह	देवरी	81.814	5	35	15	50	163628	OSP	
172	जिरानो म०सिं०यो० का जीर्णोद्धार	गिरिडीह	देवरी	102.937	5	65	10	75	137249	OSP	
173	छोटीटांड़ आहर का जीर्णोद्धार	गिरिडीह	धनवार	39.233	12	28	5	33	118888	OSP	
174	पुरना नगर ग्राम में दूलो आहर म०सिं०यो० का जीर्णोद्धार	गिरिडीह	धनवार	80.072	[illegible]	42	6	48	168067	OSP	
175	करमा (करमा) आहर मध्यम सिंचाई योजना का जीर्णो०	गिरिडीह	बगोदर	116.787	5	60	10	70	166839	OSP	
176	धरगुली मध्यम सिंचाई योजना का जीर्णो०	गिरिडीह	बगोदर	129.328	20	80	6	86	150381	OSP	
177	गरगी म०सिं०यो० का जीर्णोद्धार	गिरिडीह	बिरनी	79.749	8	46	4	50	159498	OSP	
178	सबपुरी म०सिं०यो० का जीर्णोद्धार	गिरिडीह	बिरनी	75.134	9	47	6	53	141762	OSP	
179	मौजा-पान्डो में सोहरा आहर का जीर्णोद्धार	गिरिडीह	जमुआ	99.436	15	55	12	67	148412	OSP	
180	बिरसानियाडीह आहर का जीर्णोद्धार	गिरिडीह	जमुआ	58.208	5	25	10	35	166309	OSP	
181	मधवा ग्राम में बुढ़वा आहर का जीर्णोद्धार	गिरिडीह	गिरिडीह	137.297	11	69	12	81	169502	OSP	
182	ग्राम चुगलो में बड़ा आहर का जीर्णो०	गिरिडीह	गिरिडीह	219.918	40	95	35	130	169168	OSP	
183	ग्राम प्रधानडीह में मेजरा सिंघा आहर का जीर्णोद्धार	गिरिडीह	डुमरी	44.827	8	22	13	35	128077	OSP	
184	जीतपुंडी आहर का जीर्णोद्धार	गिरिडीह	डुमरी	245.530	5	115	35	150	163687	OSP	
185	उर्री म०सिं०यो० का जीर्णोद्धार	गिरिडीह	सरिया	87.334	3	47	5	52	167950	OSP	
186	चिलगी म०सिं०यो० का जीर्णोद्धार	गिरिडीह	सरिया	53.306	5	30	11	41	130015	OSP	
187	जमुआ आहर का जीर्णोद्धार	गिरिडीह	पीरटांड़	68.215	4	31	10	41	166378	OSP	
188	खुखरा ग्राम में बुढ़वा आहर का जीर्णोद्धार	गिरिडीह	पीरटांड़	112.823	10	52	15	67	168393	OSP	
189	मायकाडीह म०सिं०यो० का जीर्णोद्धार	गिरिडीह	गाण्डेय	96.067	10	50	12	62	154947	OSP	
190	काटकोको मध्यम सिंचाई योजना का जीर्णोद्धार	गिरिडीह	तिसरी	35.320	1	15	5	20	176600	OSP	
191	महुआर म०सिं०यो० का जीर्णोद्धार	गिरिडीह	बेंगाबाद	89.800	2	43	10	53	169434	OSP	
192	लखाटांड़ आहर का जीर्णो०	गिरिडीह	बेंगाबाद	54.280	10	30	10	40	135700	OSP	
193	बुढ़वा आहर का जीर्णोद्धार	गिरिडीह	गावाँ	111.390	20	40	20	60	185650	OSP	
194	भोगरायडीह म०सिं०यो० का जीर्णोद्धार	गिरिडीह	गावाँ	45.785	9	9	8	17	269324	OSP	
				2265.190	222	1131	285	1416			
	लघु सिंचाई प्रमण्डल, दुमका										
195	सहारा बांध मध्यम सिंचाई योजना का जीर्णोद्धार	दुमका	जरमुण्डी	87.729	10	70	28	98	89519	TSP	
196	नावाडीह बांध मध्यम सिंचाई योजना का जीर्णो०	दुमका	जरमुण्डी	104.330	12	88	45	133	78444	TSP	
197	दुन्दुवा मध्यम सिंचाई योजना का जीर्णो०	दुमका	गोपीकान्दर	61.593	2	51	27	78	78965	TSP	
198	बड़ा पाथर म०सिं० योजना का जीर्णो०	दुमका	गोपीकान्दर	43.249	3	36	18	54	80091	TSP	
199	लताबेड़ा म०सिं० योजना का जीर्णो०	दुमका	शिकारीपाड़ा	64.127	2	39	27	66	97162	TSP	
200	असना म०सिं० योजना का जीर्णो०	दुमका	शिकारीपाड़ा	57.143	1	40	22	62	93134	TSP	
201	पुरनिया (जरमल्ली) बांध का जीर्णोद्धार	दुमका	रामगढ़	56.691	10	30	31	61	111159	TSP	

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लघु सिंचाई प्रक्षेत्राधीन प्रस्तावित सिंचाई योजना के जीर्णोद्धार कार्य की सूची :-

(सिंचन क्षेत्र हे० में)

क्र०	योजना का नाम	जिला	प्रखण्ड	प्राक्कलित राशि (लाख रु० में)	वर्तमान सिंचन क्षमता	पुनर्स्थापित सिंचन क्षमता खरीफ	रबी	कुल	Incidence of Cost	शीर्ष	अभि०
1	2	3	4	5	6	7	8	9	10	11	12
	लघु सिंचाई रूपांकण प्रमण्डल, दुमका शिविर–देवघर										
133	खारा नदी पर जौरा मध्यम सिंचाई योजना का जीर्णोद्धार	देवघर	देवघर	89.704	70	180	150	130	27201	OSP	
134	तेलाईजोर मध्यम सिंचाई योजना का जीर्णोद्धार	देवघर	सारठ	215.777	18	62	38	100	215777	OSP	
135	अराजोरी मध्यम सिंचाई योजना का जीर्णोद्धार	देवघर	सारठ	71.060	5	25	10	35	203029	OSP	
136	सिंगाटांड मध्यम सिंचाई योजना का जीर्णोद्धार	देवघर	पालोजोरी	95.642	5	60	10	70	136631	OSP	
137	कमलिया मध्यम सिंचाई योजना का जीर्णोद्धार	देवघर	करौं	63.631	13	27	26	53	120058	OSP	
138	दासडीह मध्यम सिंचाई योजना का जीर्णोद्धार	देवघर	करौं	56.384	8	27	20	47	119966	OSP	
139	तेतरिया मध्यम सिंचाई योजना का जीर्णोद्धार	देवघर	मोहनपुर	48.065	5	35	15	50	96130	OSP	
140	फतेहपुर मध्यम सिंचाई योजना का जीर्णोद्धार	देवघर	मोहनपुर	36.241	5	22	12	34	106591	OSP	
141	नवाबांध मध्यम सिंचाई योजना का जीर्णोद्धार	देवघर	सारवाँ	91.200	45	160	25	185	49297	OSP	
142	लखरडीह मध्यम सिंचाई योजना का जीर्णोद्धार	देवघर	सारवाँ	105.685	15	105	25	130	81296	OSP	
143	केन्दुआ मध्यम सिंचाई योजना का जीर्णोद्धार	देवघर	देवीपुर	24.213	15	35	20	55	44024	OSP	
144	महुवरिया मध्यम सिंचाई योजना का जीर्णोद्धार	देवघर	देवीपुर	82.552	18	32	18	50	165104	OSP	
145	किशनपुर मध्यम सिंचाई योजना का जीर्णोद्धार	देवघर	मारगोमुण्डा	52.037	5	25	8	33	157688	OSP	
146	जभागुड़ी मध्यम सिंचाई योजना का जीर्णोद्धार	देवघर	मधुपुर	30.984	2	16	10	26	119169	OSP	
147	नवकट्टा मध्यम सिंचाई योजना का जीर्णोद्धार	देवघर	सोनारायठाढ़ी	22.083	5	22	12	34	64950	OSP	
				1085.318	234	833	399	1232			
	लघु सिंचाई प्रमण्डल, जामताड़ा										
148	हथवांसा मध्यम सिंचाई योजना का जीर्णोद्धार	जामताड़ा	करमाटांड	69.933	5	30	15	45	155407	TSP	
149	पूरूकंदी मध्यम सिंचाई योजना का जीर्णो०	जामताड़ा	करमाटांड	74.810	13	52	18	70	106871	TSP	
150	साहेबगंज म०सिं०यो० का जीर्णोद्धार	जामताड़ा	फतेहपुर	103.860	10	50	20	70	148371	TSP	
151	शंकरपुर मध्यम सिंचाई योजना का जीर्णोद्धार	जामताड़ा	नारायणपुर	57.022	8	42	25	67	85107	TSP	
152	गैयाडीह मध्यम सिंचाई योजना का जीर्णोद्धार	जामताड़ा	नारायणपुर	34.442	7	28	12	40	86105	TSP	
153	मायानन्द मध्यम सिंचाई योजना का जीर्णोद्धार	जामताड़ा	जामताड़ा	88.727	12	58	14	72	123232	TSP	
154	परसोई मध्यम सिंचाई योजना का जीर्णोद्धार	जामताड़ा	जामताड़ा	52.450	9	43	15	58	90431	TSP	
155	कुरुकेदार मध्यम सिंचाई योजना का जीर्णोद्धार	जामताड़ा	नाला	44.728	10	20	15	35	127794	TSP	
156	तालबाक मध्यम सिंचाई योजना का जीर्णोद्धार	जामताड़ा	कुण्डहित	91.309	10	45	20	65	140475	TSP	
157	गरजोरी मध्यम सिंचाई योजना का जीर्णोद्धार	जामताड़ा	कुण्डहित	47.435	10	25	15	40	118588	TSP	
				664.716	94	393	169	562			
	लघु सिंचाई प्रमण्डल, साहेबगंज										
158	मयुरकोला मध्यम सिंचाई योजना का जीर्णोद्धार	साहेबगंज	बरहवा	81.382	15	30	20	50	162764	TSP	
159	बड़ाप्यासी मध्यम सिंचाई योजना का जीर्णोद्धार	साहेबगंज	बोरियो	112.177	5	55	15	70	160253	TSP	
160	सीतपुर मध्यम सिंचाई योजना का जीर्णोद्धार	साहेबगंज	बोरियो	98.728	5	45	15	60	164547	TSP	
161	पगरा बीयर का जीर्णो०	साहेबगंज	बरहरवा	38.989	30	5	10	15	259927	TSP	
162	सिमलाऊडा मध्यम सिंचाई योजना का जीर्णोद्धार	साहेबगंज	पतना	117.081	15	55	15	70	167259	TSP	
				448.357	70	190	75	265			

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लघु सिंचाई प्रक्षेत्राधीन प्रस्तावित सिंचाई योजना के जीर्णोद्धार कार्य की सूची :-

(सिंचन क्षेत्र हे० में)

क्र०	योजना का नाम	जिला	प्रखण्ड	प्राक्कलित राशि (लाख रु० में)	वर्तमान सिंचन क्षमता	पुनर्जीवित सिंचन क्षमता			Incidence of Cost	शीर्ष	अभि०
						खरीफ	रबी	कुल			
1	2	3	4	5	6	7	8	9	10	11	12
	लघु सिंचाई प्रमण्डल, गढ़वा										
102	पिरहा नाला मध्यम सिंचाई योजना का जीर्णोद्धार	गढ़वा	बरगड़	74.557	5	50	20	70	106510	OSP	
103	मलुही नाला का जीर्णोद्धार	गढ़वा	रंका	20.200	5	15	5	20	101000	OSP	
104	सुगही मध्यम सिंचाई योजना का जीर्णोद्धार	गढ़वा	गढ़वा	42.841	5	35	12	47	91151	OSP	
				137.598	15	100	37	137			
	लघु सिंचाई प्रमण्डल, कोडरमा										
105	नावाडीह आहर का जीर्णोद्धार	कोडरमा	चन्दवारा	36.366	5	20	5	25	145464	OSP	
				36.366	5	20	5	25			
	लघु सिंचाई प्रमण्डल, बोकारो										
106	राम सागर बांध मध्यम सिंचाई योजना का जीर्णोद्धार	बोकारो	नावाडीह	55.174	5	25	10	35	157640	OSP	
107	चिरूडीह बड़का बांध मध्यम सिंचाई योजना का जीर्णोद्धार	बोकारो	नावाडीह	47.678	5	20	10	30	158927	OSP	
108	बड़का बांध मध्यम सिंचाई योजना का जीर्णोद्धार	बोकारो	चन्द्रपुरा	101.116	0	65	20	85	118960	OSP	
109	काला पत्थर बड़ा बांध मध्यम सिंचाई योजना का जीर्णो०	बोकारो	[illegible]	192.120	19	102	28	130	147785	OSP	
110	नूतन बांध का जीर्णोद्धार	बोकारो	चन्दनकियारी	74.323	5	35	10	45	165162	OSP	
111	दयाल बांध का जीर्णोद्धार	बोकारो	चन्दनकियारी	55.556	5	35	10	45	123458	OSP	
				525.967	39	282	88	370			
	लघु सिंचाई प्रमण्डल, धनबाद										
112	सेवकिया मध्यम सिंचाई योजना का जीर्णोद्धार	धनबाद	पूर्वी टुण्डी	200.110	20	50	35	85	235424	OSP	
113	रानी बांध तालाब का जीर्णोद्धार	धनबाद	तोपचांची	222.045	3	87	45	132	168216	OSP	
114	तांतरी ठाकुर बांध (तालाब) का जीर्णोद्धार	धनबाद	तोपचांची	88.054	12	33	19	52	169335	OSP	
115	बरवापुरा पुराना तालाब का जीर्णोद्धार	धनबाद	गोविन्दपुर	85.300	5	25	16	41	208049	OSP	
116	मकपुरैया मध्यम सिंचाई योजना का जीर्णोद्धार	धनबाद	गोविन्दपुर	123.937	2	53	22	75	165249	OSP	
117	पुराना बांध का जीर्णोद्धार	धनबाद	गोविन्दपुर	41.136	1	17	8	25	164544	OSP	
118	कालीपुर बांध का जीर्णोद्धार	धनबाद	बलियापुर	142.134	1	49	35	84	169207	OSP	
119	बाघलिया तालाब का जीर्णोद्धार	धनबाद	धनबाद	59.348	3	22	15	37	160400	OSP	
120	रतुलिया तालाब का जीर्णोद्धार	धनबाद	निरसा	55.381	10	20	15	35	158231	OSP	
121	तिलुआ बड़ा बांध तालाब का जीर्णोद्धार	धनबाद	निरसा	91.439	3	37	20	57	160419	OSP	
122	लखीपुर बांध का जीर्णो०	धनबाद	कलियासोल	58.391	5	25	11	36	162197	OSP	
123	तिलतोरिया बांध का जीर्णो०	धनबाद	एगारकुण्ड	101.626	10	40	20	60	169377	OSP	
				1268.901	75	458	261	719			
	लघु सिंचाई प्रमण्डल, चतरा										
124	अनगड़ा आहर का जीर्णोद्धार	चतरा	पत्थलगड़ा	36.126	2	18	7	25	144512	OSP	
125	चंदरपुआ आहर का जीर्णोद्धार	चतरा	पत्थलगड़ा	32.380	1	15	6	21	154190	OSP	
126	घटगाड़ी आहर का जीर्णोद्धार	चतरा	कुन्दा	38.507	1	22	8	30	128357	OSP	
127	बड़की आहर का जीर्णोद्धार	चतरा	लावालौंग	41.710	5	19	7	26	160423	OSP	
128	डाडी आहर का जीर्णोद्धार	चतरा	लावालौंग	65.647	1	29	10	39	168326	OSP	
129	बगहा आहर का जीर्णोद्धार	चतरा	कान्हाचट्टी	33.919	1	18	3	21	161519	OSP	
130	गोबे आहर का जीर्णोद्धार	चतरा	हंटरगंज	55.477	1	29	13	42	132088	OSP	
131	[illegible] एवं नहर का जीर्णो०	चतरा	हंटरगंज	39.253	1	19	10	29	135355	OSP	
132	सुखाई आहर का जीर्णोद्धार	चतरा	प्रतापपुर	32.682	2	18	7	25	130728	OSP	
				375.703	15	187	71	258			

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लघु सिंचाई प्रक्षेत्राधीन प्रस्तावित सिंचाई योजना के जीर्णोद्धार कार्य की सूची :–

(सिंचन क्षेत्र हे० में)

क्र०	योजना का नाम	जिला	प्रखंड	प्राक्कलित राशि (लाख रु० में)	वर्तमान सिंचन क्षमता	पुनर्जीवित सिंचन क्षमता खरीफ	रबी	कुल	Incidence of Cost	शीर्ष	अभि०
1	2	3	4	5	6	7	8	9	10	11	12
	लघु सिंचाई प्रमण्डल, जमशेदपुर										
66	पलाशरा मध्यम सिंचाई योजना का जीर्णोद्धार	पू० सिंहभूम	चाकुलिया	160.742	0	66	30	96	107449	TSP	
67	भीम बांधी राज बांध का जीर्णोद्धार	पू० सिंहभूम	चाकुलिया	34.070	5	31	18	49	69429	TSP	
68	फलापार मध्यम सिंचाई योजना का जीर्णोद्धार	पू० सिंहभूम	पटमदा	95.432	5	45	13	58	164538	TSP	
69	हरियाडीह मध्यम सिंचाई योजना का जीर्णोद्धार	पू० सिंहभूम	बोड़ाम	33.056	4	14	6	20	165280	TSP	
70	जूड़ी मध्यम सिंचाई योजना का जीर्णोद्धार	पू० सिंहभूम	पोटका	15.416	3	7	6	13	118585	TSP	
71	छोटा तिरलडी मध्यम सिंचाई योजना का जीर्णोद्धार	पू० सिंहभूम	पोटका	94.017	10	40	24	64	146902	TSP	
72	झाटीरा मध्यम सिंचाई योजना का जीर्णोद्धार	पू० सिंहभूम	घाटशिला	53.034	6	24	8	32	165731	TSP	
73	पुनगोरा मध्यम सिंचाई योजना का जीर्णोद्धार	पू० सिंहभूम	घाटशिला	64.490	3	32	10	42	153548	TSP	
74	अरांग मध्यम सिंचाई योजना का जीर्णोद्धार	पू० सिंहभूम	बहरागोड़ा	39.527	8	16	10	26	152027	TSP	
76	पथरा मध्यम सिंचाई योजना का जीर्णोद्धार	पू० सिंहभूम	बहरागोड़ा	43.042	8	16	10	26	165546	TSP	
76	ग्राम दन्दामोदो में सितला तालाब का जीर्णोद्धार	पू० सिंहभूम	बहरागोड़ा	48.277	10	10	4	14	344836	TSP	
77	डिगरदा सरकारी तालाब का जीर्णोद्धार	पू० सिंहभूम	बहरागोड़ा	70.795	5	20	5	25	283180	TSP	
78	जगन्नाथपुर मध्यम सिंचाई योजना का जीर्णोद्धार	पू० सिंहभूम	धालभूमगढ़	40.140	3	17	10	27	148667	TSP	
79	गाण्डेडार म०सिं०यो० का जीर्णो०	पू० सिंहभूम	गुड़ाबांधा	30.842	3	13	6	19	162326	TSP	
				832.830	73	351	160	511			
	लघु सिंचाई प्रमण्डल, सिमडेगा										
80	टांगर टोली मध्यम सिंचाई योजना का जीर्णोद्धार	सिमडेगा	ठेठईटांगर	91.073	80	80	45	125	72858	TSP	
81	कुरुमडेगी मध्यम सिंचाई योजना का जीर्णोद्धार	सिमडेगा	ठेठईटांगर	113.252	15	40	26	66	171594	TSP	
82	कोलेबिरा मध्यम सिंचाई का जीर्णोद्धार	सिमडेगा	कोलेबिरा	166.113	60	116	60	176	94382	TSP	
83	लचडेरा मध्यम सिंचाई योजना का जीर्णोद्धार	सिमडेगा	कुरडेग	224.576	20	80	22	102	220173	TSP	
84	मनझरिया मध्यम सिंचाई योजना का जीर्णोद्धार	सिमडेगा	कुरडेग	121.994	10	90	12	102	119602	TSP	
85	छाताकाटू मध्यम सिंचाई योजना का जीर्णोद्धार	सिमडेगा	कुरडेग	63.454	20	30	6	36	176261	TSP	
				780.462	205	436	171	607			
	लघु सिंचाई प्रमण्डल, रामगढ़										
86	धोनियाडीह आहर म०सिं०यो० का जीर्णोद्धार	रामगढ़	गोला	77.560	2	35	13	48	161583	OSP	
87	कुरूमकनारी आहर मध्यम सिंचाई योजना का जीर्णोद्धार	रामगढ़	गोला	60.602	2	25	12	37	163789	OSP	
88	केशरगढ़ा आहर का जीर्णोद्धार	रामगढ़	दुलमी	193.529	5	115	16	131	147732	OSP	
89	छाटधोरिया मध्यम सिंचाई योजना का जीर्णोद्धार	हजारीबाग	विष्णुगढ़	126.718	2	56	22	78	162459	OSP	
90	ठाकुर बांध आहर मध्यम सिंचाई योजना का जीर्णोद्धार	रामगढ़	गोला	102.978	2	35	17	52	198035	OSP	
91	पारना दोहर आहर का जीर्णोद्धार	रामगढ़	मांडू	43.454	5	22	5	27	160941	OSP	
92	बेतुलखुर्द ग्राम में सरकारी आहर का जीर्णोद्धार	रामगढ़	गोला	116.741	2	53	20	73	159919	OSP	
93	बांका भद्दा आहर मध्यम सिंचाई योजना का जीर्णोद्धार	रामगढ़	गोला	111.485	2	40	17	57	195588	OSP	
				833.067	22	381	122	503			
	लघु सिंचाई प्रमण्डल, सरायकेला										
94	सेपाटांड़ तालाब बांध का जीर्णोद्धार	सरायकेला खरसावाँ	ईचागढ़	151.846	5	75	15	90	168718	TSP	
95	ग्राम–पतपुर में रानी बांध का जीर्णोद्धार	सरायकेला खरसावाँ	ईचागढ़	102.226	5	65	10	75	136301	TSP	
96	ग्राम–कृष्णपुर में बगुला बांध का जीर्णोद्धार	सरायकेला खरसावाँ	खरसावाँ	161.520	10	90	10	100	161520	TSP	
97	बापु बांध (संटका) का जीर्णोद्धार	सरायकेला खरसावाँ	खरसावाँ	89.233	20	45	10	55	162242	TSP	
98	रांजाड बांध का जीर्णोद्धार	सरायकेला खरसावाँ	राजनगर	120.365	20	80	15	95	126700	TSP	
99	कृष्णापुर मध्यम सिंचाई योजना का जीर्णोद्धार	सरायकेला खरसावाँ	राजनगर	62.105	10	35	7	42	147869	TSP	
100	तिरला मध्यम सिंचाई योजना का जीर्णोद्धार	सरायकेला खरसावाँ	गम्हरिया	57.030	20	30	10	40	142575	TSP	
101	उज्जालपुर (तिरला) बांध का जीर्णोद्धार	सरायकेला खरसावाँ	गम्हरिया	72.819	20	30	15	45	161820	TSP	
				817.144	110	450	92	542			

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पत्रांक 51/19-20 ए०सी०ए० / रांची, दिनांक 24.09.19

714 24.07.19

लघु सिंचाई प्रक्षेत्राधीन प्रस्तावित सिंचाई योजना के जीर्णोद्धार कार्य की सूची

(सिंचन क्षेत्र हे० में)

क्र०	योजना का नाम	जिला	प्रखंड	प्राक्कलित राशि (लाख रु० में)	मौलिक सिंचन क्षमता	पुनर्जीवित सिंचन क्षमता			Incidence of Cost	शीर्ष	अभि०
						खरीफ	रबी	कुल			
1	2	3	4	5	6	7	8	9	10	11	12
	लघु सिंचाई प्रमण्डल, मेदिनीनगर										
28	मजदा आहर का जीर्णोद्धार	पलामू	तरहसी	23.279	8	17	8	25	91116	OSP	
29	बसमार मध्यम सिंचाई योजना का जीर्णोद्धार	पलामू	तरहसी	77.190	15	95	10	125	91752	OSP	
30	मनवारी आहर का जीर्णो०	पलामू	तरहसी	35.632	8	22	15	37	96303	OSP	
31	बखनपुरवा आहर का जीर्णोद्धार	पलामू	पांकी	38.974	7	23	10	33	118103	OSP	
32	सितवा आहर का जीर्णोद्धार	पलामू	पांकी	34.472	8	22	15	37	93168	OSP	
33	गुड़गाँवडीह आहर का जीर्णो०	पलामू	पांकी	31.110	6	14	10	24	129625	OSP	
34	ग्राम-चन्द्रपुरा में बड़की आहर का जीर्णो०	मेदनीनगर	पांकी	25.662	5	20	8	28	91650	OSP	
35	सिकनिया मध्यम सिंचाई योजना का जीर्णोद्धार	पलामू	लेस्लीगंज	71.210	60	70	30	100	71210	OSP	
36	कोसियारा बांध का जीर्णोद्धार	पलामू	लेस्लीगंज	30.542	10	50	15	65	46988	OSP	
37	लाल बांध आहर का जीर्णो०	पलामू	तरहसी	26.226	6	14	10	24	109275	OSP	
38	बहेर बांध का जीर्णोद्धार	पलामू	चैनपुर	40.959	6	24	15	39	105023	OSP	
39	सिवाखाड़ आहर का जीर्णोद्धार	पलामू	चैनपुर	12.751	4	11	5	16	79694	OSP	
40	सतार मध्यम सिंचाई योजना का जीर्णोद्धार	पलामू	मनातू	22.607	15	35	5	40	56518	OSP	
41	दुगराहा मध्यम सिंचाई योजना का जीर्णोद्धार	पलामू	पड़वा	19.570	16	12	2	14	139786	OSP	
42	रामपुरी पहाड़ मध्यम सिंचाई योजना का जीर्णोद्धार	पलामू	सतबरवा	63.761	68	65	17	82	77757	OSP	
				553.945	242	494	195	689			
	लघु सिंचाई प्रमण्डल, हजारीबाग										
43	राम सागर मध्यम सिंचाई योजना का जीर्णोद्धार	हजारीबाग	ईचाक	179.659	5	115	35	150	119773	OSP	
44	जगुआरी डैम का जीर्णोद्धार	हजारीबाग	ईचाक	121.748	5	79	20	99	122978	OSP	
45	बेलकप्पी आहर का जीर्णोद्धार	हजारीबाग	बड़कट्ठा	160.746	3	62	23	85	189113	OSP	
46	बुचई म०सिं०यो० का जीर्णो०	हजारीबाग	बरकट्ठा	127.614	5	77	25	102	125112	OSP	
47	जोरदाग मध्यम सिंचाई योजना का जीर्णोद्धार	हजारीबाग	केरेडारी	121.605	5	77	10	87	139776	OSP	
48	जगुआ बेलतु आहर का जीर्णोद्धार	हजारीबाग	केरेडारी	125.418	5	60	6	66	190027	OSP	
49	सलगा नाला मध्यम सिंचाई योजना का जीर्णोद्धार	हजारीबाग	केरेडारी	179.443	5	85	20	105	170898	OSP	
50	श्रीनगर मध्यम सिंचाई योजना का जीर्णोद्धार	हजारीबाग	बरही	125.782	5	79	10	89	141328	OSP	
51	मैगरवा डैम का जीर्णोद्धार	हजारीबाग	बरही	291.314	10	135	48	183	159188	OSP	
52	पेटुला आहर का जीर्णोद्धार	हजारीबाग	चौपारण	74.537	5	55	5	60	124262	OSP	
53	चपरी आहर का जीर्णोद्धार	हजारीबाग	चौपारण	98.132	5	58	10	68	144312	OSP	
54	दोनई खुर्द मध्यम सिंचाई योजना का जीर्णोद्धार	हजारीबाग	पदमा	88.981	5	55	10	65	136894	OSP	
55	बड़की आहर का जीर्णोद्धार	हजारीबाग	कटकमसांडी	88.469	5	55	15	70	126.184	OSP	
56	बाबु मलिया आहर का जीर्णोद्धार	हजारीबाग	बड़कागाँव	81.098	5	50	6	56	144818	OSP	
57	दुनदुनवा आहर का जीर्णोद्धार	हजारीबाग	बड़कागाँव	74.532	5	47	10	57	130758	OSP	
58	फुटला आहर का जीर्णोद्धार	हजारीबाग	चलकुशा	61.499	5	37	7	44	139770	OSP	
59	चंदनी आहर का जीर्णोद्धार	हजारीबाग	चलकुशा	69.834	5	42	8	50	139668	OSP	
				2070.431	88	1168	268	1436			
	लघु सिंचाई प्रमण्डल, चाईबासा										
60	पारसी मध्यम सिंचाई योजना का जीर्णोद्धार	प० सिंहभूम	तांतनगर	121.732	10	70	12	82	148454	TSP	
61	बड़पोस मध्यम सिंचाई योजना का जीर्णोद्धार	प० सिंहभूम	मनोहरपुर	118.671	8	82	17	99	119870	TSP	
62	कुरथा बेडा मध्यम सिंचाई योजना का जीर्णोद्धार	प० सिंहभूम	मनोहरपुर	48.167	8	37	7	44	109470	TSP	
63	नन्दीपोस मध्यम सिंचाई योजना का जीर्णोद्धार	प० सिंहभूम	सोनुआ	95.408	8	72	12	84	113581	TSP	
64	भरनिया-01 मध्यम सिंचाई योजना का जीर्णोद्धार	प० सिंहभूम	[illegible]	23.181	8	12	6	18	126894	TSP	
65	बिहारटुटी मध्यम सिंचाई योजना का जीर्णो०	प० सिंहभूम	कुमारडुंगी	27.806	5	13	4	17	163565	TSP	
				435.165	47	286	58	344			

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पत्रांक 51/19-20 पु०प्रति/रांची, दिनांक 24.09.19

/14_24.07.19

Letter No-2/PMC/Vividh/736/2019-991
Government of Jharkhand
Water Resources Department

From,

Er. R.S. Tigga
Engineer-in-Chief-II

To,

FAX/
E-mail

Sri A. Sudhakar
DH, WQM-I Division
Central Pollution Control Board, MoEF& CC, GoI.
Parivesh Bhawan, CBD cum office complex,
East Arjun Nagar, Delhi-110032.
Fax No-033-24418725,

Ranchi/Dated-14/11/19

Sub:- **Hon'ble NGT, order dated-11.09.2019 passed in O.A. No-496/2019 in the matter of News Item Published in "Hindustan Times" Dated 19.06.2015 Titled " Dirty flows your drinking water" authored by Ritam Haldar.**

Ref:- **Central Pollution Control Board letter no-A-14011/325-2015/2019-WQM-I, dated-21.10.2019 .**

Sir,

With reference to the subject and letter mentioned above, as directed, the status of implementation of Action Plan in O.A. No. 325/2015 and construction of Rain Water Harvesting (RWH) Structure are as below:-

i. 214 nos. restoration of the water bodies has been sanctioned for Rs. 185.08 crores, which is under progress and targetted to be completed by March,2021.

ii. 144 nos. Rain Water Harvesting (RWH) Structure has been sanctioned for Rs. 5.89 crores, which is under progress and targetted to be completed by June,2020.

The list of water bodies taken up for restoration is being enclosed at Annexure –I and list of Rain Water Harvesting (RWH) Structuretaken up for execution is being enclosed at Annexure –II.

Thanking You.

Yours faithfully,

Encl:- As mentioned.

14/11/19
(R.S. Tigga)
Engineer-in-Chief-II

Letter No-2/PMC/Vividh/736/2019-991 Ranchi/dated:-14/11/19

Copy to :- Deputy Secretary, office of the Chief Secretary, Ranchi with a copy of enclosure for information and necessary action.
Encl:- As mentioned.

14/11/19
(R.S. Tigga)
Engineer-in-Chief-II

Letter No-2/PMC/Vividh/736/2019-991 Ranchi/dated:-14/11/19

Copy to :- The Member Secretary, Jharkhand Pollution Control Board, T.A. Building, HEC, PO-Dhurwa, Ranchi-834004. FAX No.-0651-2400850/2400851/ 2400852/2401847 with a copy of Action Plan for information and necessary action.
Encl:- As mentioned.

14/11/19
(R.S. Tigga)
Engineer-in-Chief-II

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Annexure-R/9.

Dy.No.112/NWM 4/2/2020

OFFICE OF SECRETARY (WR, RD&GR) 623645 Date 3/2/20

Government of Karnataka
Department of Agriculture

No:DDA/FM&MI/MI/PMKSY/MI/GOI/2018 Commissionerate of Agriculture,
Sheshadri Road, Bangalore.
Date: 22-01-2020.

To,

Sri. U.P.Singh,
Secretary, Government of India,
Ministry of Jal Shakti,
Department of water Resources,
River Development & Ganga Rejuvenation,
Shram shakti Bhawan, Rafi Marg,
New Delhi – 110 001.

Respected Sir,

Subject: Steps to improve water conservation / Water use efficiency in the State reg.

Ref: Your D.O.Letter No: T-39011/6/2019-GW/56-25 Dated:07.01.2020.

****

With reference to above subject, it is to bring to your kind notice that, Karnataka State Department of Agriculture is implementing Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) – Per Drop More Crop (PDMC) programme , in which both Drip and Sprinkler Units are distributed to farmers by providing 90% subsidy upto 2.00 hactares to all Categories of farmers (by providing top up subsidy in addition to GOI subsidy). Wide publicity is being given to farmers through mass media and Departmental Krushi Abhiyana programme and other Departmental Farmers Training Programmes.

Apart from PMKSY-PDMC, the Department of Agriculture is also implementing a special package scheme named Krushi Bhagya Scheme, in which the farmers are encouraged to construct Farm Ponds with Polythene lining to harvest the rain water which is being utilized to give protective irrigation through sprinkler/Drip

during critical crop growth stages. For this , Karnataka state Government is providing subsidy to farmers for construction of Farm Ponds, Polythene lining, Diesel Motors and Sprinkler/ Drip irrigation units.

Thanking you,

Yours sincerely,

Commissioner for Agriculture

Copy To:

- Shri.Harit Kumar Shakya, Under Secretary (RFS), Ministry of Agriculture and Farmers Welfare, Department of Agriculture, Co-Operation & Farmers Welfare , Shastri Bhawan, New Delhi – 110001 for kind information.

GOVERNMENT OF KARNATAKA

No. UDD 54 CSS 2020 Dated: 3.02.2020

To

The Under Secretary to GoI
Department of WR, RD&GR,
2nd Floor, Block no.03,
CGO Complex, Lodhi Road,
New Delhi-3

Sir,

Sub: Submission of ATR with respect to OA no. 597/2019 of Sri Rajendra Tyagi & Anr v/s Union of India & Ors

Ref: Your office Letter no. 39011/6/2019-GWSection/265-299 dated: 30-01-2020.

******

This is with reference to your letter cited above seeking Action Taken Report (ATR) pertaining to OA No. 597/2019. There are 281 Urban Local Bodies in the State including Bruhat Bengaluru Mahanagarapalike. The relevant information has been collected from the concerned Department/Organisation and the same is submitted as Annexure-I, for further needful action.

Yours Faithfully,

3/02

(Rakesh Singh)
Additional Chief Secretary to GOK
Urban Development Department

Copy to:

1. The Additional Chief Secretary, Water Resource Department, for information.
2. The Principal Secretary, Urban Development Department, for information.
3. The Personal Secretary to Chief Secretary, GoK, requesting to bring to the kind notice of Chief Secretary.

Annexure -I

Action Taken Report with regard to NGT OA no. 597/2019 by Urban Development Department, Government of Karnataka

<table>
<tr><th>Sl no</th><th>Directions</th><th colspan="2">Action Taken Report</th></tr>
<tr><td>1</td><td>Preparation of appropriate mechanism for Water Pricing Policies</td><td>
Directorate of Municipal Administration (278 municipalities excluding BBMP)
The Government vide G.O.No.UDD 07 UWS 2011, dated 20.7.2011 has given directions to fix the water rates for all the urban local bodies as below:-
(i)Water Rate as per water usage:-
<table>
<tr><th rowspan="2">Consumer</th><th colspan="3">Every month rate to be fixed as per usage</th><th rowspan="2">Minimum charges for every connection</th></tr>
<tr><th>Minimum KL</th><th>Maximum KL</th><th>Rs./KL</th></tr>
<tr><td rowspan="4">Domestic</td><td>0</td><td>8</td><td>7.00</td><td rowspan="4">Rs.56/-</td></tr>
<tr><td>8</td><td>15</td><td>9.00</td></tr>
<tr><td>15</td><td>25</td><td>11.00</td></tr>
<tr><td colspan="2">More than 25</td><td>13.00</td></tr>
<tr><td rowspan="4">Non-Domestic</td><td>0</td><td>8</td><td>14.00</td><td rowspan="4">Rs.112/-</td></tr>
<tr><td>8</td><td>15</td><td>18.00</td></tr>
<tr><td>15</td><td>25</td><td>22.00</td></tr>
<tr><td colspan="2">More than 25</td><td>26.00</td></tr>
<tr><td rowspan="4">Commercial/ Industrial</td><td>0</td><td>8</td><td>28.00</td><td rowspan="4">Rs.224/-</td></tr>
<tr><td>8</td><td>15</td><td>36.00</td></tr>
<tr><td>15</td><td>25</td><td>44.00</td></tr>
<tr><td colspan="2">More than 25</td><td>52.00</td></tr>
</table>
</td><td>
Bengaluru Water Supply and Drainage Board
The Water charges already in place at BWSSB and around 9.90 lakhs water supply & UGD connections are billed monthly by handled devices through SAJALA online application based on the consumption of water. The category wise & slab wise tariff details are as below;
WATER TARRIF
<table>
<tr><th>Sl. No.</th><th>Slab-wise Consumption of water (in Litres)</th><th>Tariff (in Rs.) KL</th></tr>
<tr><td>1</td><td>Domestic Water (Section-36(i)</td><td></td></tr>
<tr><td></td><td>Minimum</td><td>56.00</td></tr>
<tr><td>a.</td><td>0-8,000</td><td>7.00</td></tr>
<tr><td>b.</td><td>8,001-25,000</td><td>11.00</td></tr>
<tr><td>c.</td><td>25,001-50,000</td><td>26.00</td></tr>
<tr><td>d.</td><td>50,001 & above</td><td>45.00</td></tr>
</table>
SANITARY CHARGES FOR DOMESTIC CONNECTION
1. Rs.14.00 at Flat Rate for consumption of 0 to 8,000 litres.
2. 25% of water supply charges per month for consumption of above 8,000 litres.
</td></tr>
</table>

(ii) Minimum rate for water supply connections without meter:-

Sl. No.	Consumer Category	Minimum rate for every connection in Rs.		
		City Corporation	CMC	TMC/TPs
1)	Domestic	175	120	80
2)	Non-Domestic	350	240	160
3)	Commercial/ Industrial	700	480	320

If the consumer refuses to install the water meter, the ULBs have been directed to impose penalty of 25% after 6 months of notice and 50% after 1 year in order to encourage the consumer for installing meters.

The ULBs are at liberty to fix the water rates as per the usage and based on the O&M cost of the water supply system.

The ULBs are directed to revise the water rates once in 3 years based on the cost of electricity and O&M cost.

A proposal for imposing the revised water rates proportionally to the quantity of water consumption is under process at the Government level.

2. Non-Domestic :Section 36(iv)		**3. Bulk Water Charges sectio**
Slab-wise Consumption of water (in Litres)	**Tariff (in Rs.) KL**	**Category**
Minimum	**500.00**	a) Industries, Swimming pool
a) 0-10,000	50.00	b) Flats Group housing, multi-storied domestic building
b) 10,001-25,000	57.00	
c) 25,001-50,000	65.00	
d) 50,001-75,000	76.00	
e) Above 75,000	87.00	

Sanitary charges for non-domestic connection : 25% of water supply month

4. Sanitary charges : Section 2 (I&II)

1. For premises having water supply & UGD connection but supplementing water supply by borewells a) Domestic per individual house or per flat b) Partial non-domestic, non-domestic and all other categories per HP of borewell	100/- per month 500/- per month
2. For premises not having water supply connection from BWSSB but having UGD connection	500/- per month

Revenue billing and Collection system (SAJALA)

a. No. of Metered House Service connections - 9.83 lakhs

			b. Centralized Billing and Collection system (SAJALA) is citizen centric application and it is designed in a financially, legally and technologically sustainable manner. c. As per the distribution network the Centralized billing system provides very important feed back as far as water demand managements/revenue losses are concerned and helps in decision making. d. Resolving the issues / complaints registered by the public through SAKALA & CPGRAMS. e. Online Facility for obtaining the new water & sanitary connection is provided through the OWC Portal. f. Quick MIS for on the spot analysis of important parameters like online Category wise Consumption pattern analysis, list of defaulters and total working and Non-working meters and Demand collection Balance statements etc., can be taken out area wise / ward wise / Constituency wise / sub division wise / Division wise for better decision making. g. Spot billing facility is implemented. h. Performance indicators for Monitoring and fixation of targets for billing and to improve Collection efficiency. i. Total KIOSKs for Revenue Collection : 74 Nos. j. Online Payment can be made through 5 gateways. k. Six months bill details can be viewed through online. l. ECS option is available for collection of payment. m. Payment can be made through Bangalore One centers. n. Payment can be made through BBPS. o. Payment can be made through Karnataka mobile apps / PayTM. p. 835 Bulk flow meters are fixed in the distribution network for Water accounting. Further, BWSSB has submitted the proposal for revision of tariff to the Government and the approval is awaited. The details are as below;

WATER TARRIF

Sl. No.	Slab-wise Consumption of water (in Litres)	Tariff (in Rs.) KL
1	Domestic Water (Section-36(i)	
	Minimum	80.00
a.	0-8,000	10.00
b.	8,001-25,000	25.00
c.	25,001-50,000	45.00
d.	50,001 & above	65.00

SANITARY CHARGES FOR DOMESTIC CONNECTION

3. Rs.14.00 at Flat Rate for consumption of 0 to 8,000 litres.
4. 25% of water supply charges per month for consumption of above 8,000 litres.

2. Non-Domestic :Section 36(iv)		**3. Bulk Water Charges section 36(iv)**	
Slab-wise Consumption of water (in Litres)	**Tariff (in Rs.) KL**	**Slab-wise Consumption of water (in Litres)**	**Tariff (in Rs.) KL**
Minimum	**850.00**	a) Industries, Swimming pool	125.00
f) 0-10,000	85.00	**b) Flats Group housing, multi-storied domestic building**	
g) 10,001-25,000	100.00	i) 0-25,000	25.00

			crores. The work of laying pipes is under progress. Work of Construction of New Two Tier RCC GLR of 25 ML Capacity has been taken up at CJF, Malleshwaram at an evaluated cost of Rs.24.02 Crores and work is scheduled to be completed by July 2021. 1) In order to reduce unaccounted flow of water the bulk flow meters are fixed at inlets & outlets of every division / sub division. The receipt of water and billed consumption are continuously monitored for each division / sub division. 2) All the water meters are maintained in working condition and the Defective meters and 7 years old meters are being replaced in order to record the water consumption accurately. 3) Random Check readings of water meters are being taken at different level to watch the correctness of recording of the water meters. 4) Two vigilance team has been formed, to inspect and identify unauthorized / illegal water supply connection. The team has conducted several inspections & action have been taken either to regularize the connection or to lodge criminal case against the defaulter. 5) Old PSC / CI pipelines are being replaced. 6) Pipelines running in the middle of the road are shifted to footpaths to avoid leakages / damages due to vehicle movement. 7) Old Ground Level Reservoirs are being taken up for rejuvenation.
3	Information to public for efficient use of water and avoiding un-necessary use and wastage of water in order to improve the water use efficiency	Wide publicity and awareness campaign/programme through IEC activities are made regarding proper usage of water. The public are encouraged to use treated waste water for toilet flushing purpose, gardening, vehicle washing etc. The Model Code of Building Bye-laws 2017 mandates Rain Water Harvesting system in all the buildings in the urban limits exceeding the area of 1200 sq.ft., thereby encouraging reuse and recycling of natural available rain water. Under 'Jal Shakti Abhiyan', 56 ULBs have deliberately conducted public awareness programme on water conservation and efficient usage of water.	**I) To avoid wastage of water by overflowing from over head tanks BWSSB has proposed to install automatic water control system. To amend the following BWSSB regulation proposal has been submitted to the Government for approval.** *1) Insertion of Regulation 43(B):-* It is obligatory on the part of every owner or occupier of the building to install Automatic water control system or any other suitable devices to prevent the over flow of water automatically from overhead tanks. The punishment for breaching the Regulation penalty shall be imposed as per Regulation 55. Further, if the breach is continued action shall be taken as per Regulation 44.

			h) 25,001-50,000 | 120.00 | ii) 25,001-50,000 | 45.00 i) 50,001-75,000 | 130.00 | iii) 50,001 & above | 65.00 j) Above 75,000 | 130.00 | | **Sanitary charges for non-domestic connection : 25% of water supply charges per month** **4. Sanitary charges : Section 2 (I&II)** 1. For premises having water supply & UGD connection but supplementing water supply by borewells: 100/- per month c) Domestic per individual house or per flat d) Partial non-domestic, non-domestic and all other categories per HP of borewell: 500/- per month 2. For premises not having water supply connection from BWSSB but having UGD connection: 500/- per month
2	Reducing non-revenue losses (NRW)	To reduce the non-revenue water in the urban limits, the leakages are plugged, public taps are being dismantled and citizens who are dependent on public taps are being encouraged to take water supply connections to their houses. Under 14th FC, Service Level Benchmarking (SLB) is adopted in each city. Reducing non-revenue water is one of the agenda under SLB. The ULBs are constantly reducing non-revenue water using the available funds. The actions are being taken to install water meters to all the household connections in order to bill the water supplied as per the volumetric use. There are initiatives taken up to digitize the metering system and monitoring through central controlled command centre.	The UFW project is already been implemented in South, West and central divisions of BWSSB jurisdiction for an area covering 154.50 sq.km at a cost of Rs 557.45 Crores. The total UFW during the year 2013 was 49.5%. With the implementation of this project the commercial and technical losses is reduced to 36%. It is estimated that approximately 167 MLD of unaccounted water has been accounted. Presently the new UFW Project has been taken up in High Grounds, Coles Park, Indiranagar 2nd Stage, Jeevan Bheema Nagar, HAL 2nd Stage, Yelahanka Old town, BEL Layout, HMT Layout, Sahakaranagar for an area covering 26.00 sq. km. along with Rejuvenation and Reconstruction of Ground Level Reservoirs in Basavanagudi area at a cost of Rs.212.63

			2) ***Amendment to Regulation 55 :-*** *Punishment for breach of certain regulations - **In Regulation 55, the figure '43(B)'** shall be added after figure '27' as shown below;* **II) <u>Installation of Rain Water Harvesting (RWH) systems</u>** In order to recharge ground water and improve ground water level in Bangalore city, BWSSB has already made mandatory to adopt Rain Water Harvesting System in the existing buildings constructed on a sital dimension measuring 2400 sqft. and above and also for new building constructed on a site measuring 1200 sqft and above vide Government Order No. UDD 19 MNI 2009, dated 27th August 2009 by Amendment of BWSS Act 72(A). **Capacity designing of rain water storage structure** (1) While designing the roof based rain water harvesting the capacity of a storage structure or for artificial recharge structures to ground water, a provision at the rate of **20 ltrs. or more** capacity per Sq.mtr. of the roof area shall be adopted. (2) While designing the Land based rain water harvesting the capacity of a storage structure or for artificial recharge structure to ground water a provision at the rate of **10 ltrs. or more** capacity per sq. mfrs. of the land surface shall be adopted. Further BWSSB is proposed to increase the Capacity designing of rain water storage structure and implementation of Rain water Harvesting in the building as below which was placed before the Board meeting and after obtaining the clearance, the proposal is submitted to Government for approval. (1) While designing the roof based rain water harvesting the capacity of a storage structure or for artificial recharge structures to ground water, a provision at the rate of 60 liters or more capacity per Sq.mtr. of the roof area shall be adopted.

			(2) While designing the Land based rain water harvesting the capacity of a storage structure or for artificial recharge structure to ground water a provision at the rate of 30 ltrs. or more capacity per sq. mfrs. of the land surface shall be adopted. (3) Every owner who propose to construct a building on a sital area of not less than 1200 square feet shall provide rain water harvesting structure for storage for use or ground water recharge in such manner and subject to such conditions as may be provided in the regulations and guidelines issued by the Board (4) Every owner who propose to construct a building on sital area of not less than 2400 square feet shall provide dual piping system and rain water harvesting structure for storage for reuse based on roof area and ground water recharge based on paved and unpaved areas in such manner and subject to such conditions as may be provided in the regulations and guidelines issued by the Board (5) In case any owner or occupier of a building who has not implemented rain water harvesting as per Bangalore Water Supply and Sewerage (amendment) Act, 2011 shall hereinafter implement the rain water harvesting as per above conditions (a) and (b) of this section. **Penalty clause for non-implementation of Rain water harvesting structure** The Owner or Occupier of a residential building fails to provide rain water harvesting structure in the building the additional charges of 50% of the total water and sanitary charges for the first 3 months and thereafter an additional charges of 100% of the total water and sanitary charges till the rain water harvesting structure is provided to the building is being levied. The Owner or Occupier of a non-residential building fails to provide rain water harvesting structure in the building the additional charges of 100% of the total water and sanitary charges for the first 3 months and thereafter an additional charges of 200% of the total water and sanitary charges till the rain water harvesting structure is provided to the building is being levied.

			By establishing Sewage Treatment Plant in premises the treated water shall be used for non-potable purpose such as toilet flushing, gardening, cleaning the open spaces, washing the vehicles, air chillers and firefighting purposes thereby reducing the dependency on pure water. **IV) Waste Water Management** On an average around 1440 MLD sewage is generated in the Bangalore city. The Board is at present having 27 STPs of total 1112.5 MLD capacity. The construction works of 9 STPs of total capacity 475 MLD are under progress. 2 STPs of 12 MLD capacity are under tendering stage. The capacity will be enhanced to 1587.50 MLD by 2020 and by 2023 the capacity will be around 1723.50 MLD. At present BWSSB is supplying tertiary treated water to an extent of around 10 MLD to various Government complexes, Golf courses, BIAL etc., another 80 MLD has been committed to industrial areas and 15 MLD for Karnataka Power Corporation plants at Yelahanka. Other than this around 700 MLD of secondary treated water is committed for filling up of the tanks in the rain deficient districts of Kolar, Chikkaballapur and parts of Bangalore urban. At present 430.50 MLD of water is being supplied to these areas.

Source: DMA & BWSSB

			Total 1, 26,838 no of buildings have implemented RWH in the Bangalore city and for 62,261 No. of connections for which penalty is raising for non-implementation of RWH. **Helpdesk - Rain Water Harvesting Theme Park** BWSSB has established Rain Water Harvesting theme park at Jayangara, Bangalore, demonstrating 26 different types of Rain Water Harvesting models along with the Water conservation tips. The Theme Park has an auditorium wherein the video clips about the RWH and conservation of water displayed to educate the Students as well as general public. Karnataka State Council for Science and Technology and BWSSB have jointly established RWH helpdesk at Indian Institute of Science and RWH theme park of BWSSB, for providing information about RWH and conservation of water. RWH helpdesk is also providing technical training to the stake holders such as architects, engineers, contractors, plumbers, masons etc through several Training Programmes. Awareness Camps are arranged to bring in awareness among the general public regarding Rainwater Harvesting. Information on technical details of RWH and ground water recharge are being provided at RWH helpdesks for those who visit personally or contact through telephone, web or email. **III) <u>Installation of Sewage Treatment Plant (STP) in high rise residential / commercial building</u>** BWSSB has made mandatory for installation of STP and Dual Piping System for the following buildings vide notification No.BWSSB/C/CAO-S/4138/2015-16, Bengaluru Dated 25.02.2016 for the following building. i) Building having 20 and above residential apartments or residential buildings measuring 2,000 sq.Mtrs. and above whichever is lower; ii) Commercial building measuring 2,000sqmtrs and above; and iii) Buildings of educational institutions measuring 5,000 sqmtrs and above

Annexure-R/10

BY SPEED POST
Dy. No. 214/NWM
28/2/2020

GOVERNMENT OF MEGHALAYA
WATER RESOURCES :: DEPARTMENT

503

No. WR(G)57/2019/336 Dated Shillong, the 25th February, 2020.

From: Shri.W.Nongsiej
Joint Secretary to the Govt. of Meghalaya.

To,

The Secretary to the Govt. of India
Ministry of Jal Shakti
Department of Water Resources
River Development & Ganga Rejuvenation
Shram Shakti Bhawan, Rafi Marg, New Delhi-110001.

Subject: **Initiation of urgent steps to improve water conservation/water use efficiency in the country.**

Ref: **1. D.O. No.T-39011/6/2019-GW Section Dated 21.8.2019.**
2. D.O. No.T-39011/6/2019-GW/56-95 Dated 7.1.2020.

Sir,

With reference to the subject cited above, I am directed to furnish herewith the following information with regard to the steps being taken by the Department on the above subject matter.

1. Water conservation- The Department implements Water Harvesting Schemes by construction of ponds in the agriculture field of farmers in rural areas where harvested water is used during dry season. Some rooftop rainwater harvesting projects was also implemented in some schools and government building for direct use of the stored water.
2. (i) Water use efficiency in irrigation sector- The Department undertakes improvement of existing irrigation projects whereby earthen canal are being lined to prevent losses of water due to seepage in the conveyance system.
   (ii) New Schemes in places where traditional bamboo drip irrigation is being used are replaced by pipe system to prevent loss of water due to spillage from bamboo channel, evaporation losses and uncontrolled distribution of water.
   (iii) Public awareness in some part of the State has been conducted sensitizing water use efficiency in irrigation sector.
3. Water pricing in irrigation sector has not been implemented in the State at present.
4. Regarding underground water efficiency use, the Department has made wide publication for installation of electronic tank alarm system to prevent wastage of water from overflow of the overhead tank.
5. The Department has also taken up with all the Deputy Commissioner in the State to take necessary action/steps on the matter.

This is for favour of your kind information and necessary action.

Yours faithfully,

Joint Secretary to the Govt. of Meghalaya,
Water Resources Department.

Memo No. WR(G)57/2019/336-A **Dated Shillong, the 25th February, 2020.**

Copy forwarded to:

1. The Under Secretary to the Govt. of India, Ministry of Jal Shakti, Department of Water Resources RD & GR, National Water Mission 2nd Floor Block No III, CGO Complex, Lodhi Road, New Delhi-3.
2. The Administrator, Central Ground Water Authority, Gallery No. 18/11, Jamnagar House, Mansing Road, New Delhi-110011. With reference to Letter No. 22-436/CGWA/OA-597/2019 Dated 16.8.2019.
3. The Superintending Hydrogeologist, Central Ground Water Board, Ministry of Jal Shakti, Department of Water Resources, RD & GR, NH-IV, Faridabad-121001(Haryana).
4. The Chief Engineer(B&BBO), Central Water Commission, Govt of India, Rebeka Ville, Near Barik

GOVERNMENT OF MEGHALAYA
OFFICE OF THE CHIEF ENGINEER WATER RESOURCES DEPARTMENT

No. CE/WR-Estt/248/2019-20/258 Dated Shillong, the 20th Feb. 2020

From Shri W M M Law
Chief Engineer (WR)
Meghalaya, Shillong

To,
The Joint Secretary to the Government of Meghalaya
Water Resources Department.

Subject: **Initiation of urgent steps to improve water conservation / water use efficiency in the country.**

Ref: No. D.O No. T-39011/6/2019 GW Section Dated 21st Aug. 2019.

Sir,

In continuation to the Office Letter No.CE/WR/Estt-248/2019-20/257 Dated Shillong the 18th Feb. 2020. I have the honour to furnish herewith the following information with regard to the steps being taken by the Department on the above subject matter.

1. Water Conservation- The Department implements Water Harvesting Schemes by construction of ponds in the agriculture field of farmers in rural areas where harvested water is used during dry season. Some rooftop rainwater harvesting projects was also implemented in some schools and government building for direct use of the stored water by the School.
2. (i) Water use efficiency in irrigation Sector- The department undertakes improvement of existing irrigation projects whereby earthen canal are being lined to prevent losses of water due to seepage in the conveyance system

   (ii) New Schemes in places where traditional bamboo drip irrigation is being used are replaced by pipe system to prevent loss of water due to spillage from bamboo channel, evaporation losses and uncontrolled distribution of water.

   (iii) Public awareness in some part of the State has been conducted sensitizing water use efficiency in irrigation sector.
3. Water Pricing in irrigation sector has not been implemented in the state at present.
4. Regarding underground water efficiency use, the department has made wide publication for installation of electronic tank alarm system to prevent wastage of water from overflow of the overhead tank.

Yours faithfully,

Chief Engineer (WR)
Meghalaya, Shillong.

Memo. No. CE/WR-Estt/248/2019-20/258-A **Dated Shillong, the 20th Feb. 2020**

Copy to :-
1. The Principal Secretary to the Govt. of Meghalaya, Water Resources Department for favour of information.
2. The Officer incharge, Central Ground Water Board State Unit Office, Shillong, Keating Road for favour of information.

Chief Engineer (WR)

Annexure - R/11

Dy. No. 60/NWM 23/01/2020

No.C.18015/61/2013-UD&PA
GOVERNMENT OF MIZORAM
URBAN DEVELOPMENT & POVERTY ALLEVIATION DEPARTMENT
MIZORAM NEW CAPITAL COMPLEX (MINECO)

Office No. 0389-2323257 E-mail-udpamizoram@gmail.com

*****

Dated Aizawl, the 16th January, 2020

To,

1. Sh.A. Sudhakar,
   DH, WQM-I Division, CPCB
   East Arjun Nagar, Delhi-110032

2. Sh. Suneel Kumar Arora,
   Adviser (C&M)
   Ministry of Jal Shakti,
   2nd Floor, Block –III, CGO Complex
   Lodhi Road, N.Delhi-110003

Subj: ***Status of implementation and Action Taken Plan on Rainwater Harvesting in the Hon'ble NGT order dated 11.09.19 passed in O.A No 496/2016 in the matter of News Item Published in "Hindustan Times" dated. 19.06.2015***

Sir,

With reference to the above subject, the following are Action Taken Plan in the state of Mizoram:-

1. Under SIPMIU, Rainwater Harvesting Tanks have been constructed at 11 locations under ADB funded NERCCDIP project namely **Construction of Water Reservoirs** at Aizawl for a combined total capacity of 10 lakhs litres. The commencement of the work began on 09.05.2016 and completed on 08.11.2018.

2. Provisions of Rainwater Harvesting facility and discharge of rainwater are incorporated in AMC Building Regulation 2012, No.5 (6) and No. 37 respectively and are stringently followed for issuing of building permission. It may also be kindly noted that 14 parameters of MBBL-2016 is adopted in AMC Building Regulation 2012 which was a milestone for Reform Implementation (2016-17) under AMRUT and incentive was awarded to the State.

186/US (NWM)/20 28/1

Yours faithfully

(ZORAMSIAMA HMAR)
Under Secretary to the Govt. of Mizoram
Urban Development & Poverty Alleviation Department

Memo No.C.18015/61/2013-UD&PA : Dated Aizawl, the 16th January, 2020

Copy to:-

Shri. Dr.M.Dhinadhayalan, Adviser (PHEE) Tel: 011-23061926, MoHUA (CPHEEO).

Sd/-

US (NWM) 28.1.20.

Under Secretary to the Govt. of Mizoram
Urban Development & Poverty Alleviation Department

Annexure-R/12

Regd Post

e-Off. No. 629209 Dt 9/03/20

GOVERNMENT OF ODISHA
DEPARTMENT OF WATER RESOURCES

****

No. 6176 /WR Bhubaneswar; Date. 02/03/2020

WR-LI-CASEOP-0022-2019

From

Shri Surendra Kumar, IAS
Principal Secretary to Government.
Department of Water Resources,
Rajiv Bhawan, Odisha

To

The Secretary,
Government of India, Ministry of Jal Shakti,
Department of Water Resources, RD & GR,
Shram Shakti Bhawan
Rafi Marg, New Delhi-110 001

Sub: Action taken report on steps to improve water conservation/water use efficiency in the country with reference to OA No. 597/2019 – Shri Rajendra Tyagi V/s Union of India & Others in the Hon'ble NGT

MD, NWM

Ref: D.O. No. T-39011/6/2019-GW/NWM/501

Sir,

In inviting a reference to your above D.O. letter under reference, the action taken report regarding urgent steps taken in the state of Odisha to improve water conservation/ water use efficiency in the country with reference to OA NO. 0597/2019 – Shri Rajendra Tyagi V/s Union of India & Others in the Hon'ble NGT is hereby submitted for necessary action at your end.

With regards,

Yours sincerely,

2/3/2020

Principal Secretary to Govt.

Memo No. 6177 /WR Bhubaneswar, Date. 02/03/2020

Copy with enclosure forwarded to OSD to Chief Secretary, Odisha for kind information of Chief Secretary.

Special Secretary to Govt.

STATE- ODISHA

MEASURES TAKEN BY DEPARTMENT OF WATER RESOURCES ODISHA FOR WATER CONSERVATION & IMPROVEMENT OF WATER USE EFFICIENCY IN IRRIGATION SECTOR :

1. Mukshyamantri Adibandha Tiari Yojana (MATY)

This scheme was started during 2010-11. Under this scheme, Check dams are being constructed in small streams & nallahs for conservation of water to meet the domestic need of people of nearby villages, recharging ground water and for providing incidental irrigation to the crops in the nearby agriculture land. Priority is being given to Blocks having less irrigation coverage, areas where farmers are using traditional method of irrigation by constructing temporary cross bunds on streams and where farmers are willing to take up operation & maintenance of the structure. Minor Irrigation Organisation & Drainage Organisation are implementing the scheme.

During current financial year (2019-20), there is a target to complete 2000 Check dams for which an outlay of ₹333.84 crore has been made in the budget. Out of this, 343 Check dams have been completed & 738 Check dams are under construction up to end of January 2020 with an expenditure of ₹287.93 crore. Since inception of this scheme, 14931 Check dams (Major & Medium sector -1391 nos. & Minor Irrigation Sector-13,540 nos) have been completed up to end of January 2020. For the financial year 2020-21, programme has been made to complete the ongoing Check dams for which an outlay of ₹70.00 crore (Maj & Med- ₹38.00 cr, Minor Irr.- ₹32.00 cr) has been proposed in the budget.

2. Odisha Integrated Irrigation Project for Climate Resilient Agriculture (OIIPCRA)

OIIPCRA aims at increasing farmer's yield by diversifying and improving agricultural production, fostering climate-resilient agriculture practices and improving water productivity and access to reliable irrigation. The project will be implemented by three line-departments, i.e., (1) Department of Water Resources, (2)

Department of Agriculture and Farmers Empowerment, and (3) Department of Fishery and Animal Resource Development.

Under this scheme, it is planned to renovate 538 MIPs with designed kharif command of 56,293 hectares and designed rabi command area of 6,543 hectares in 15 districts namely Bolangir, Balasore, Bargarh, Bhadrak, Boudh, Gajapati, Ganjam, Jajpur, Kalahandi, Kandhamal, Keonjhar, Mayurbhanj, Nabarangpur, Nuapada & Subarnapur. The estimated cost of the project is US $ 235.00 million (INR 1,640.10 crore approx.) of which US $ 165 million will be funded by World Bank & US $ 70.00 million will be borne out of state fund . The project will be implemented over a period of six years from 2019 to 2025. The Loan agreement has been signed with the Donor Agency during 24th October 2019.

From the above, tender process has been initiated in respect of 163 MIPs for an estimated cost of ₹241.84 crore of which agreement has been signed for 36 MIPs and work started. Budgetary outlay of ₹150.00 crore has been made during 2020-21 for implementation of this project.

3. Renovation of Panchayat Tanks in KBK District

There is a long standing demand from Public Representatives for renovation of large tanks and ponds located mostly in KBK districts which are not under the control of Department of Water Resources. Majority of the tanks are not providing irrigation and a few tanks have irrigation potential below 40 hectares. Those tanks come under the purview of Panchayati Raj & Drinking Water Department. In the Pre-Budget Scrutiny review meeting, it is decided that DOWR to formulate a new scheme and renovate the large tanks of PR&DW Department to augment their storage capacity which will cater to the domestic needs and to provide irrigation wherever feasible. PR&DW department will identify the tanks for renovation in-consultation with MI organization of DOWR. The ownership & maintenance will remain with PR&DW department. Budgetary outlay of ₹130.00 crore has been made during 2020-21 for implementation of this scheme.

4. Improvement to Minor Irrigation Tanks & MIPs

The storage capacity of many tanks and MIPs are silted up above the DSL during course of its use. These projects are now operating below their designed

capacity. Therefore, de-silting of these reservoirs is necessary to restore designed live storage. Department of Water Resources have taken up renovation of some MIPs under OIIPCRA, RRR & other Schemes. Due to limitation of fund, de-silting of some tanks/MIPs could not be taken up in these schemes. To address the problem in holistic manner, a new scheme namely " Improvement to Tanks &MIPs" have been taken up. 451 tanks with an outlay of ₹245 crore have been identified for implementation over a period of 4 years i.e. from 2018-19 to 2021-22. Out of the above, work of 188 MIPs have been taken up under this scheme. Budgetary outlay of ₹10.00 crore has been made during 2020-21 for implementation of this scheme.

5. Rooftop Rainwater harvesting & Groundwater recharge in urban areas

This scheme has been formulated during 2014-15 to sensitize urban people to adopt rooftop rainwater harvesting and ground water recharge practice to meet their domestic water needs. The scheme is presently implemented in 11 urban local bodies (ULBs) namely Bhubaneswar, Berhampur, Titilagarh, Jharsuguda, Bolangir, Puri, Cuttack, Angul, Talcher, Sambalpur & Rourkela. Private buildings up to three storied with roof area less than 200 square meters are eligible under this scheme. Incentives to the extent of ₹45000 /- (Rupees Forty Five thousand) and technical assistance are being provided to private buildings owners interested to implement the scheme. Besides, Government buildings are also being taken up under this scheme. As of January-2019, Roof Top rain Water Harvesting structure has been installed in 358 Government building 9,438 private buildings.

During 2019-20, an outlay of ₹24.79 crore has been made with a target to construct roof top rainwater harvesting structure in 5500 private buildings and 65 Government buildings. Besides, departmet have prepared one new scheme to take up ground water recharge in 49 water stressed block for which an outlay of ₹20.00 crore has been made during 2019-20. Since the objective of two schemes are similar, it was decided to club up both the schemes and formulate one new scheme namely "Roof Top Rain Water Harvesting and ground water recharge in 27 Urban Local Bodies & 49 water stressed blocks". Accordingly, the new scheme has been formulated with an estimated outlay of ₹246.00 crore to be implemented over a

period of five years from 2019-20 to 2023-24. Budgetary outlay of ₹37.00 crore has been proposed during 2020-21 under the new scheme.

6. **Command Area Development & Water Management (CAD&WM)**

Command Area Development Programme is being implemented in the State since 1976-77 with an aim of optimum use of water to enhance agricultural production and productivity. The main activities under CAD&WM are construction of field channels & field drain. Besides, topographical survey and investigation, reclamation of water logged areas, farmers' training, crop demonstration & formation of Pani Panchayats (WUAs) etc are also being taken up by Command Area Development Organisation.

Total 38 major & medium irrigation projects have been taken up under this programme. Out of which, 19 projects are presently in progress and 19 projects have been completed and field channel of 938.609 Th. hectares have been constructed up to end of January 2020. From 2016-17, funding from MOWR has been ceased and State fund is being utilized to complete all the ongoing projects. During 2019-20, there is a target to construct field channel covering 45206 hectares. Budgetary outlay of ₹300.00 crore has been proposed during 2020-21 with a target to construct 77,143 hectares of field channel.

7. **Ground Water Recharge and Solar micro irrigation to ensure food security and enhance resilience in vulnerable tribal areas of Odisha under Green Climate Fund (GCF):**

This project will be implemented through Odisha Community Tank Development and Management Society (OCTDMS). Construction of ground water recharge structures in 10,000 tanks (PR&DW Deptt-9000 Nos, MI Tanks-1000 nos) in 15 water stressed districts of Odisha, i.e. Nuapada, Kandhamal, Kalahandi, Koraput, Rayagada, Gajapati, Malkanagiri, Sambalpur, Bargarh, Bolangir, Boudh, Sonepur, Nabarangpur, Mayurbhanj and Keonjhar shall be taken up under this scheme. The financial outlay of this project is 141.63 million USD out of which 31.63 million USD is proposed as a grant from Green Climate Fund (GCF). Remaining 110 million USD will be co-financed by DoWR through lead financial institution as IBRD loan and from MGNREGS. The tank renovations shall be done by respective Departments with funding from MGNREGS. 500 JEs/AEs/Officers of Implementing Departments

working at Block level will be trained to construct/ maintain/ monitor the proposed 10,000 Ground Water Recharge Systems (GWRS) including preparation of DPRs. Directorate of Ground Water Survey and Investigation (GWS&I) will be responsible for geo-physical tests, monitor ground water table and water quality. NABARD has been requested to move GCF for accepting the change in the Implementing Agency from Ground Water Directorate to OCTDMS. All required clarification have been communicated to NABARD for facilitating the decision at GCF/GoI level.

Engineer-in-Chief, WR 23/2020

Annexure-R/13

Dy. No. 149/NWM
11/02/2020

No: 11/63/14-PJ(3)/
Government of Punjab
Department of Water Resources
(Project Branch)

Dated, Chandigarh:

To

Sh. U.P. Singh,
Secretary to Government of India,
Ministry of Jal Shakti,
Department of Water Resources, River Development
and Ganga Rejuvenation,
Shram Shakti Bhawan, Rafi Marg,
New Delhi.
E-Mail ID. secy-mowr@nic.in

Subject:- Initiation of urgent steps to improve water conservation/water use efficiency in the country-regarding.

Sir,

I am directed to refer to your letter No:-T-39011/6/2019-GW/76, Dated: 7th January, 2020 on the subject cited above and to enclose herewith the Action Taken Report elaborating initiatives taken by the State of Punjab to improve water conservation/water use efficiency in the State for your kind penusal and further necessary action please.

Your Sinceraly
Sd/-
Deputy Secretary Water Resources

Endst.No.11/63/2014-PJ(3)/233 Dated Chandigarh: 31/01/2020

A Copy alogwith enclosures as above is forwarded to the Under Secretary to the Government of India (Email-usnwm-mowr@gov.in), Ministry of Jal Shakti, Department of Water Resources, National Water Mission, 2nd floor Block No. 111, CGO Complex, Lodhi Road, New Delhi-3, w.r.t. their letter No. T-39011/6/2019-GW Section/265-299, Dated: 30.01.2020 for information and necessary action.

Your Sinceraly
Deputy Secretary, Water Resources
SK

12/2/2020

Endst.No.11/63/2014-PJ(3)/ Dated Chandigarh:

A Copy alogwith enclosures as above is forwarded to the Chief Secretary to Government of Punjab w.r.t. their D.O. No. CSO/2020/1622305/2, Dated 27.01.2020 and letter No. CSO/2020/1620664/1, Dated 15.10.2020 for information please.

Your Sinceraly

Sd/-

Deputy Secretary, Water Resources

Endst.No.11/64/2017-PJ(3)/ Dated Chandigarh:

A Copy alogwith enclosures as above is forwarded to Superintendent Engineer/Policy, Department of Water Resources, Punjab, Water Resources Bhawan, Sec-68, Mohali w.r.t. their U.O. No.42/SE/PE &EC, Dated 24.01.2020 for information.

Sd/-

Deputy Secretary, Water Resources

(72)

ACTION TAKEN REPORT BY GOVERNMENT OF PUNJAB TO IMPROVE WATER CONSERVATION/WATER USE EFFICIENCY IN THE STATE

Punjab's water needs for agriculture have been assessed as 52 MAF out of which contribution of river waters is to the extent of 27% only while73% of its water needs are met through ground water. Limited allocated surface water resources to the State, which are further reducing with climatic variations are further aggravating the problem. Out of 34.34 MAF availability of Sutlej, Beas and Ravi waters (inclusive of 0.26 MAF losses) assessed on the basis of 1921-60 flow series, a total of 14.22 MAF Water was allocated in favour of Punjab, 11.14 MAF to Rajasthan, 7.83 MAF to Haryana 0.69 MAF to J&K and 0.2 MAF of Delhi. The availability of surplus Ravi-Beas waters based on 1921-60 series i.e. 17.17 MAF has reduced to 14.37 MAF and 13.38 MAF, based on 1981-2002 and 1981-2013, flow series respectively.

As a result, water scarcity in the State is causing a great strain on ground water resources, which are being over-exploited. The extraction of such ground water has come to be more than the net availability of ground water recharge resulting in a sharp decline of underground water levels in nearly 85% area of the State of Punjab. Of the 138 blocks under study for ground water, 109 of such blocks have become over exploited. Therefore, water is the life line of the Punjab specially farmers.

Punjab is extremely conscious of the limited water resources in the State and has taken numerous steps to reduce extraction of groundwater in Punjab, as under:-

1. CREATION OF NEW DIRECTORATE OF GROUND WATER MANAGEMENT:

Punjab Government has set up a new Directorate as approved by the Council of Ministers in its meeting dated 04.08.2017 in the Department of Water Resources (formerly Department of Irrigation). The Directorate was formulated keeping in view the need to focus on designing policies, programs, and strategies for the conservation, utilization and management of ground water resources of the state in a judicious, equitable and sustainable manner and to ensure optimal utilization of surface water resources with the objective of conserving ground water.

The main functions to be performed by the Directorate of Ground Water Management shall include the following:

A) Strategy, policy, plans for Ground Water Management:

I. Strategy, vision & mission of the Directorate is to conserve and manage Ground Water, including innovations.
II. To devise strategies and methods to increase water use efficiency of surface water resources in order to decrease the stress on Ground Water.
III. Design policies and plans to conserve, utilize and manage ground water in a judicious equitable and sustainable manner.

B) Implementing plans, programs and schemes for Ground Water Management:

I. Planning and implementation of Schemes/Projects for Ground Water improvement including recharge of Ground Water.
II. To implement Canal Sector Schemes of National Hydrology Project, to upgrade hydrological data collection system, to real time data collection system and creation of water Resources Information System.

C) Studies surveys and estimations:

To scientifically collect and analyse Hydrological data and to monitor distribution/use of Canal water by applying suitable information technology tools for coherent, scientific planning and optimum utilization of water.

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E) Estimation of Ground Water Resources and preparation of Isohyetal, Ground Water depth and rise-fall Maps.

F) To create awareness and provide training to the farmers and other stake-holders and staff for conservation of water in co-ordination with various Government departments including Departments of Agriculture, Soil Conservation, Local Government and Housing & Urban Development.

G) To coordinate with Departments of Agriculture and Soil Conservation and other departments for better management of Ground Water Resources.

H) Perform any other functions necessary for achieving the objectives of the Directorate.

2. PREPERATION OF WATER CONSERVATION AND MANAGEMENT MASTER PLAN (WCMMP) FOR THE STATE OF PUNJAB:

In order to deal with the problems of falling water table, increasing surface water pollution and water logging in the south-west Punjab etc., an MoU between PWRMDC, Punjab and Mekorot, National Water Company, Israel was signed during the visit of Hon'ble Chief Minister to Israel on 23rd October, 2018 to formulate Water Conservation and Management Master Plan (WCMMP) for the State of Punjab. Subsequently, a Consulting Agreement was signed on 14th March 2019, which is effective from 15th April 2019.

Mekorot, National Water Company, Israel will carry out the necessary study and analysis for preparation of the WCMMP for mitigation of water scarcity in the State.

The final recommendations by M/s Mekorot are to be submitted by December, 2020. The various reports to be submitted and their objectives are as under:

Report Number	Name of Report	Objective
Part-1	Study of current situation of the Water Sector	The main objective of the first part of the study is to deeply understand the magnitude of the water shortage and depletion of ground water level. Understanding the cause of the current situation with emphasis on the availability and demand of diverse types of water. It will be a key to understand for regional water shortage. All types of resources will be considered and be analyzed to their potential for future sustainable water balance
Part-2	Water-based economy regulations	Introducing water economy concept and regulations. Recommend the necessary regulation steps needed to undertake in order to accomplish and maintain a sustainable supply and demand water economy. Also, recommend the steps in which such regulation should be implemented.
Part-3	Projections of the Water Resources	For any future long-term planning ,the potential of water resources is a crucial stage in building a long-term sustainable water balance. In order to regulate future water demand, an allocation system must be defined. That will be done after the true potential of the current water resources will be clear and robust for the continuation of the study.
Part-4	Projection of water demand (Urban, rural, livestock and irrigation)	The water demand chapter is of high importance due to the intense use of water. The idea is to create an allocation system that will enable decision makers to regulate water demand and to prioritize use of water according needs, sectors and importance.The current chapter will deal not only with a volumetric calculation of the demand but rather will create a system of sectors, priorities, use pattern etc., in order to create a whole new approach in water use as a function of the

		2040 and 2050.Focus will be on irrigation demand.
Part-5	Alternative Water Supply Schemes	For the given water resources, it is assumed that several supplies option for the BWS (Bulk Water Supply) will be possible. Engineering skills combined with financial and techno-economic considerations will be implemented in order to find the least cost most advanced solution for the sustainable system to convey the water from the sources to the area of demand. The alternatives will be for the Bulk Water System (BWS). Planning of the Local secondary and tertiary water distribution systems is not a part of this study. Based on the feasible options to sustain the water balance, several options will be created and proposed as the project key alternatives.
Part-6	Economic Analysis, Master Plan, Summary and Recommendations	Financial study will be needed in order to look for the water cost as results from the project. All infrastructures component requires massive and significant investment as well as operation and maintenance cost for smooth operation. All those will be calculated regarding the water supply to evaluate the economic and financial value of the project.

3. SUMMARY OF "THE PUNJAB WATER RESOURCES (MANAGEMENT AND REGULATION) ACT 2020"

Punjab is brining Punjab Water Resources (Management and Regulation) Act,2020 soon. The objective of the Act is:-

"to provide for the management and regulation of water resources of the State for ensuring the judicious, equitable and sustainable utilization and management thereof and for matters connected therewith or incidental thereto."

Main provisions of the Act are as follows:-

- There shall be Punjab Water Regulation and Development Authority (PWRDA).
- The Authority shall consist of a Chairperson, with experience in the field of water and its management and possessing sound understanding of law and economics, and two Members with ability and demonstrable experience in dealing with management of Water Resources or are experts in the fields of Water Resources Engineering, Environment, Agriculture, Law, Finance, Management, Public Administration or Economics.
- There shall be an Advisory Committee on Water Resources to be notified by the Government, consisting of up to **five experts.**
- The Authority shall consult the Advisory Committee on major questions of policy and regarding regulatory directions.
- The Authority may, if required, seek advice on any matter under its consideration from any expert body or set up such committees of experts to be nominated by the Authority, as may be considered necessary.

- **STATE WATER COUNCIL:** The Act provides for a State Water Council headed by CM who will approve the State Water Plan to be used by the Authority as base for regulation of water. The state is working on State Water Plan. The Draft is likely to come in six months. Exercise being done by Mekorot will also help in this regard.

POWERS OF THE AUTHORITY:

- The State Government may, divide the State into different categories based on the stage of groundwater development, the trend of groundwater level depletion, the level of water table, quality of groundwater, availability of surface water or other relevant criteria, as it may deem appropriate in view of the local conditions.
- The State Water Plan may be reviewed every three years from the date of its approval by the State Government.

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- To implement the State Water Plan, the Authority may issue directions regarding the management of water.
- The Authority shall ensure the management and conservation of water resources of the State in accordance with the State Water Plan, as specified.
- Evaluates availability of water regularly; works out its cost; and will help conserve water: a common and limited resource by bringing in professionalism in its management.

POWER TO ISSUE TARIFF ORDERS:

- The Authority will periodically issue tariff orders, as prescribed for industrial and commercial use. For drinking, domestic and agricultural use tariff will be prescribed by Government policy.
- Tariff shall be based on volumetric measurement of water consumption and shall be designed to convey the scarcity value of water and ensure economy in its use.
- The Authority will also have the power to penalize the offenders.

4. ALTERATION OF CROP CALENDAR FOR PADDY- Punjab Preservation of Sub-soil Water Act, 2009 :-

The Department of Agriculture, Punjab enacted *"Punjab Preservation of Subsoil Water Act, 2009"* to alter the crop calendar for transplantation of paddy. Delaying paddy transplantation has helped in arresting the alarming decline of Groundwater Level. As per studies conducted by Punjab Agricultural University (PAU), Ludhiana, the annual rate of decline before 2009 was 75cm, which was arrested due to alteration of crop calendar of paddy and the same decrease to 45 cm from 2008 to 2013. This period was followed by erratic and deficient Monsoon years. The monsoon rainfall in Punjab was deficient by 50%, 31% and 29% in the years 2014, 2015 and 2016, respectively. Due to this the rate of groundwater decline again has been computed as 55 cm per year for the period 2013 to 2016. The PAU, Ludhiana has recommended that the transplantation of paddy may further be delayed by a week, so as to commensurate with on setting of monsoon period. This would further decrease the evapo-transpiration, thus resulting in saving of precious irrigation water resources and rest of decline in groundwater level.

5. MEDIUM/SHORT DURATION RICE CULTIVARS (PR VARIETIES):-

Medium/short duration rice cultivars are preferred over long duration ones, thereby saving more than 10% water. The Department of Agriculture, Punjab is propagating adoption of medium/short duration rice cultivars for conserving irrigation water. Information regarding the same is being disseminated at district, block and village level camps. Moreover, these varieties are being popularized through demonstration plots etc. Now about 80 % area under paddy is under these varieties.

6. <u>Crop Diversification Plan (CDP):</u>

Department of Agricultural & Farmers Welfare, Punjab is promoting diversification by shifting area from paddy to alternate less water consuming crops like Cotton, Basmati, Maize and Pulses etc. The increase in areas under these crops during 2019 viz-a-viz 2018 is as under :

Sr. No.	Crop	Areas (in lac ha)	
		2018	2019
1.	Cotton	2.68	4.00
2.	Basmati	5.11	6.29
3.	Maize	1.09	1.60
4.	Pulses	0.314	0.570

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Efforts are being made to wean away farmers from paddy to less water consuming crops under Crop Diversification Programme (CDP), by incentivising alternate crops in 27 blocks having withdrawal of groundwater in excess of 200% than that of percolation (Annexure-III). An area of about 6.46 ha in these blocks needs to be brought under alternate less water consuming crops like maize, cotton and basmati etc. For success of this program, support from GoI is required for providing equivalent economic returns to the farmers @ Rs. 5000/acre for which the funds of Rs. 810 crore will be required.

7. **RESOURCE CONSERVATION TECHNOLOGY (RTC):-**

RCT technologies for Direct Seeder Rice (DSR) like Zero till rice, Bed Planting, Paddy Transplanter etc. are being used in the State. Implements like Happy seeder, Super SMS etc. are also being used to conserve water in addition to tackling with Paddy straw burning problem.

8. **"PANNI BACHO, PAISA KAMAO" DIRECT BENEFIT TRANSFER FOR ELECTRICITY (DBTE):**

Punjab is facing a serious challenge of depleting groundwater level and growing electricity consumption by the farmers. Almost, 85% of the blocks of Punjab are considered to have fallen under the dark zone due to over-exploitation of groundwater. To address this issue, a scheme for Direct Benefit Transfer of Electricity (DBTE) to Agriculture has been designed. This scheme is centered on the farmer. Under this scheme, farmers are provided with incentives to reduce water and electricity consumption coupled with various agro-economic practices to reduce water consumption while keeping the economic potential intact. The Government of Punjab has decided to field test DBTE scheme in six pilot feeders across Punjab. A scheme design of "Paani Bachao Paisa Kamao" was notified on 14th June 2018. Government of Punjab has set up a Steering Committee under the Chairmanship of Chief Secretary with Principal Secretary (Power), Principal Secretary Water Resources, Principal Secretary Planning and Finance, CMD PSPCL, Punjab Agriculture University and Punjab State Farmers Commission as members. Implementation teams comprising of district officials, ag-extension workers and PSPCL officials have also been constituted. Support from the World Bank and Jameel Poverty Action Lab (JPAL) has also been requested. The Government of Punjab allocated three feeders to each entity, to provide support during their DBTE implementation.

In phase 2 of PBPK, scheme has been extended to 250 more feeders. M/S J-PAL has been allocated 150 feeders out of total 250 feeders to provide support during DBTE implementation.

District	**Feeders**
Bathinda	12
Fatehgarh Sahib	28
Firozpur	26
Hoshiarpur	4
Jalandhar	41
Ludhiana	21
Kapurthala	15
Moga	39
Patiala	25
Rupnagar	15
SBS Nagar	24
	250

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As this is a voluntary scheme, PSPCL officials launched the program of customer contact and have been successful in enrolling a total of 283 consumers in the phase 1 and 1548 consumers in ha 2 of the pilot of PBPK till 1st Jan 2020.

For calculation of subsidy payable to farmers, a fixed entitlement of energy has been worked out for each month. If the farmer consumes less energy than entitlement they are eligible for subsidy payment. Till date, about Rs. 15 Lac have been paid to farmers for saving water and electricity. Another 21 Lac is pending for want of funds from Punjab Govt.

9. EFFORTS BEING MADE BY PAU FOR JUDICIOUS USE OF WATER FOR HIGHER WATER USE EFFICIENCY

- The Punjab Agricultural University has been making consistent efforts to develop technologies for higher water use efficiency in the agriculture. Recently, PAU established "North Zone Water Technology Centre" with support from Department of Science & Technology (GOI). This Centre in collaboration with other departments in the university is working for:

a. Refinement of existing and development of new technologies for optimal and economic utilization of on-farm and regional water resources.
b. Identification and prioritization of the water balance components to be managed for rational use of surface and ground waters.
c. Development and performance evaluation of composite radial filter for artificial recharge with agricultural runoff.
d. Development and performance evaluation of filter for desalination of water for micro-irrigation.

- Apart from this, the university has been popularizing the existing water saving techniques through demonstrations at Krishi Vigyan Kendras.
- The techniques of laser leveling, micro-irrigation, intermittent irrigation in paddy, mulching with crop residues, etc. are being popularized at a large scale by Directorate of Extension Education of PAU.
- The technique of conjunctive use of poor quality groundwater in southwest Punjab with good quality canal water is being popularized in the region.

Annexure - R/14.

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Government of Rajasthan
Public Health Engineering Department

S.No.:- 2224

Date:- 28.02.2020

Member Secretary
Rajasthan State Pollution control Board
Jaipur

Sub:- Action taken Report in NGT OA No. 124/2015 and 127/2016 Smt. Sumitra Devi v/s CPCB & Ors and Dr Laxman Raghav v/s State of Rajasthan & Ors.

Ref:- Your letter no. 666 dated 27.01.2020 and this office earlier letter no. 2166-67 dated 17/02/2020

With reference to above cited subject, the revised action taken report on the order given by Hon'ble NGT on 12/12/2017 in NGT OA No. 124/2015 and 127/2016 Smt. Sumitra Devi v/s CPCB & Ors and Dr Laxman Raghav v/s State of Rajasthan & Ors. is as under:

Para No.	Directions given by NGT	Action taken by PHED upto 13.02.2020
12	The potable water shall be provided to all villagers is the prime responsibility of the state through tankers or by fixation of RO systems.	Department issued necessary sanction for installation of ROs in the 8 nos. villages namely Rampura, Mundana Meo, Milkpur Gujar, sahadod, Khijuribas, Harchandpur, Nagaliya and Kharani and also started supplying of potable water through tankers in identified villages. RO plants were installed at 7 locations namely Rampura, Mundana Meo, Milkpur Gujar, sahadod, Harchandpur, Nagaliya & Kharani. RO plant in village Khijuribas was not installed due to site dispute.
13	The money paid by the industry would be utilized for installation of RO systems in all the villages at Bhiwadi surrounded by industrial complex, to maintain them shall be	After installation of ROs, the firm did not perform the O&M work, due to this presently these RO's are non functional. Therefore, under clause 2&3 action against firm M/s Fontus has been taken and work has been rescinded from this firm. New tenders have been floated to execute balance work

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Details of Tanker Transportation in Bhiwadi

S.No.	Name of Village	No. of Tanker (4000 ltr. Capacity)	LPCD	Remarks
1	Ghatal	3	10	
2	Alampur	2	10	
3	Mundana Meo	1	10	
4	Godhan	1	10	
5	Bilahedi	1	10	
6	Amlaki	1	10	
7	Nangaliya	1	10	
8	Harchandpura	1	10	
9	Kahrani	1	10	
10	Rampura	1	10	
11	Shadod	1	10	
12	Milakpur Gurjar	1	10	
13	Khijuribas	1	10	
14	Santhalka			Potable
15	Khijarpur			Potable

Gonai
ACE PHED ALWAR

No. 1257
Date: 17/02/2020
Section: WRG/GRC

Government of Telangana
Irrigation and CAD Department

From
Sri.C. Muralidhar,
Engineer-In-Chief (Irrigation),
2nd floor, Jalasoudha Buildings,
Errumanzil, Hyderabad 500 082.

To
The Secretary,GoI,
Ministry of Jalshakti,
Department of Water Resources, RD&GR,
Shram Shakti Bhavan,
Rafi Marg, New Delhi-110 001.

Lr. No. COM/CAD/EE/WC/2020 **Date: 03 -02-2020**

Sir,

Sub: I&CAD department-Initiation of urgent steps to improve water conservation/water use efficiency in the country-Reg.

Ref: From the Secy, MoJS, Dept of WR,RD&GR,GOI,New Delhi, Lr.No.T- 39011/6/2019-GW/80Section, Dt:07-01-2020.

*****

In the Government of India letter cited, it is requested to submit urgent steps to be taken for water conservation/ water use efficiency in the country. In response to the above a report on water conservation measures of Telangana state is here with submitted for information and further necessary action.

Encl: As above.

Yours faithfully,
Sd/- Dt:03-02-2019
Engineer-In-Chief(I)

Copy submitted to the Special Chief Secretary to Government, I&CAD Department with ref.to Memo No: I&CAD(WRG-GRC)DeptMemoNo:6096/WRG/2019, Dated:13-01-2020.

//T.C.F.B.O//

Executive Engineer

By.No.347/NWM/15/6/2020

Annexure-R/15

GOVERNMENT OF TELANGANA
IRRIGATION & CAD (WRG-GRC) DEPARTMENT

Letter No.6096/WRG-GRC/2019-5, **Dated:22-05-2020**

From
The Principal Secretary to Govt.
I&CAD Department, TS Secretariat,
BRKR Bhavan, Hyderabad.

15/6/2020

To
The Secretary,
Deptt of Water Resources,
RD & GR, Ministry of JalShakthi,
Govt. of India,
Shram Shakthi Bhavan,
Rafi Marg, New Delhi – 110 001.(w.e)

The Under Secretary to GOI,
National Water Mission,
Deptt of Water Resources,
RD & GR, Ministry of JalShakthi,
Govt. of India
2nd Floor, Block No.3,
CGO complex, Lodhi Road,
New Delhi – 3. (w.e)

Sir,

Sub: Irrigation & C.A.D Department – Telangana – Initiation of urgent steps to improve water conservation/ water use efficiency in the country – Report - submitted – Reg.

Ref:
1. From the Secretary, MoJS, Deptt of WR, RD & GR, GOI, New Delhi, Lr.No. T-39011/6/2019-GW Section, Dt.21.08.2019.
2. Government Memo 6096/WRG-GRC/2019,Dt.18-09-2019, Dt.13.01.2020, 07.02.2020, 02.03.2020,
3. From the Secy, MoJS, Deptt of WR, RD & GR, GOI, New Delhi,Lr.No.T-39011/6/2019-GW/80Section, Dt.07.01.2020.
4. From the Under Secretary, MoJS, Deptt of WR, RD & GR, GOI, New Delhi, Lr.No.T-39011/6/2019-GWSection/265-299, Dt.30.01.2020.
5. From the Secy, MoJS, Deptt of WR, RD & GR, GOI, New Delhi,Lr.No.T-39011/6/2019-GWSection/NWM, Dt.19.02.2020.
6. From the Engineer–in-Chief (Irrg), I & CAD Dept., Hyderabad, Lr No.COM/CAD/EE/WC/2020, Dt:03.02.2020 addressed to the Secy, GOI, DoWR, RD &GR, Ministry of Jalshakthi.
7. From the Secy, MoJS, Deptt of WR, RD & GR, GOI, New Delhi, Lr.No.T-39011/6/2019-GW/NWM, Dt.22.04.2020.
8. From the Under Secy, NWM, DoWR, RD &GR, Ministry of Jalshakthi, Mail Dated:27.04.2020.

@@@

I am to invite your attention to the subject and references cited and to inform that a report on initiation of urgent steps to improve water

(P.T.O)

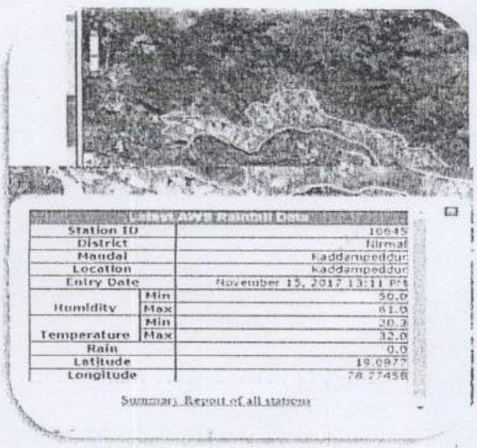
conservation/ water use efficiency in respect of Telangana State was already furnished in the reference 6th cited. However a copy of the same is herewith enclosed for taking further action in the matter.

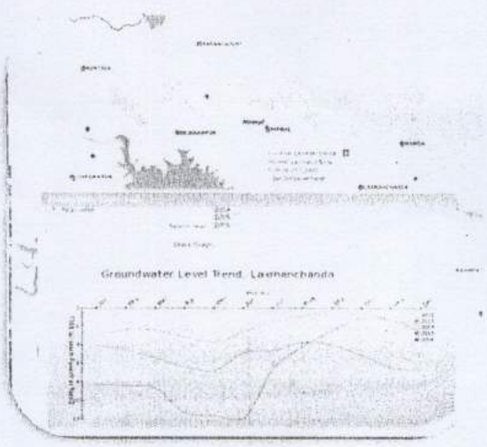
Yours faithfully,

Smitha T

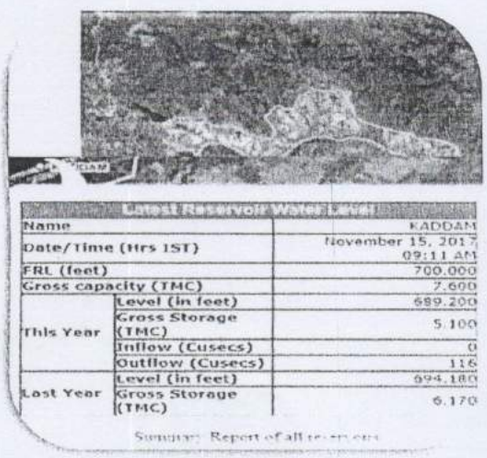
For Principal Secretary to Government

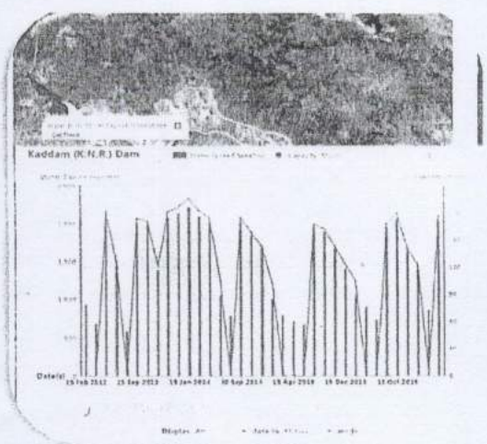
5. Dynamic rainfall level and monthly ground water levels in command areas are being monitored by integrating 857 AWS stations and 850 peizometer stations on a single GIS platform to promote conjunctive use.





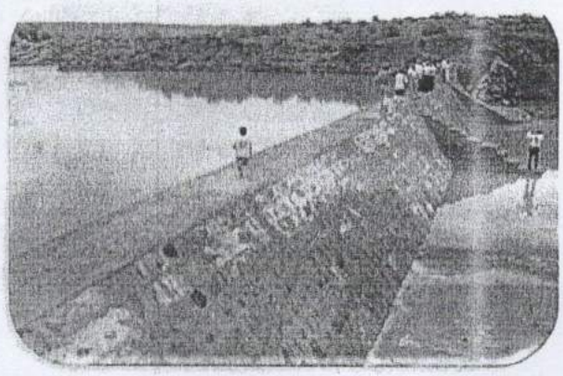
6. Daily reservoir levels, inflows and outflows are being monitored online with the help of a mobile app which is useful for better water management.





government in forest areas in the past 3 years. Some of them are:

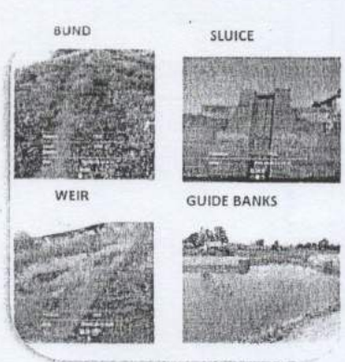
- Waterholes were created for the benefit of wild animals during the pinch period by dividing entire state forest area into 4 km^2 grids.
- Mapping of 1234 Natural water bodies and 1821 artificial water bodies is done to facilitate planning of artificial water bodies for animals.
- 5960 Km of continuous peripheral trenches is dug all around the reserve forest which helps to **impound 2.0 Crore cubic metres of rain water**. The CPT will also protect the forest area from encroachment, prevent cattle entry, minimise human disturbances, and encourage regeneration growth apart from conserving Soil and Moisture more efficiently.



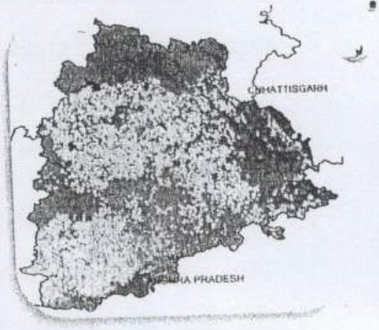
10.2Geo tagging (Telangana Water Resources Information System):

- I&CAD, Government of Telangana has entered into an MoU with "National Remote Sensing Centre (NRSC)" to develop a comprehensive geo-spatial database "**Telangana Water Resources Information System (TWRIS)**" to better manage the water resources of the state.
- An exhaustive database is created in the past 2 years, with the following components :

1. 45000 tanks and other water bodies are geo-tagged with their attribute information and geo-tagged photos and their water spread areas are being monitored through satellite imagery.

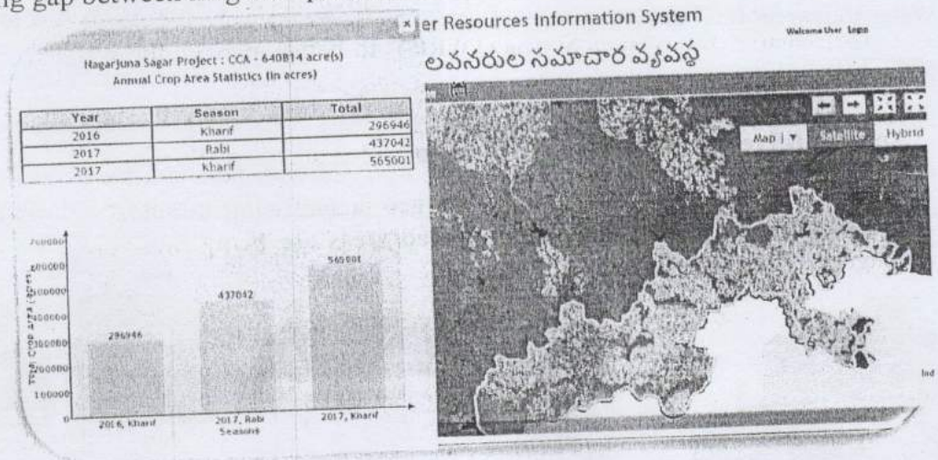


2. All the major, medium and minor irrigation project command area boundaries are digitised .



3. The entire project canal network (23000 Km) is digitized up to 1m level accuracy on GIS.

4. Satellite imagery based cropping pattern analysis is being done for every season for identifying gap between irrigation potential created and utilized on a broad basis.



9.3.1 Hyderabad:

About 22000 Rainwater Harvesting Structures are constructed by different departments like HMWSSB, GHMC, TSIIC, CDMA, HMRL, ORR and citizens after formation of Telangana State from 2014 to 2019 creating a volume of about 206138 Cubic meters. The Volume of about 660.66 Million Gallons of Rainwater can be recharged per Annum through the above constructed Rainwater Harvesting Structures in Hyderabad.

9.4 Construction of Rainwater Harvesting Structures in 73 Urban Local Bodies :

In addition to Hyderabad, 17034 rain water harvesting structures are constructed in 73 ULBS creating a volume of 136272 Cum with an annual rainwater recharge capacity of 1,09,018 cum.

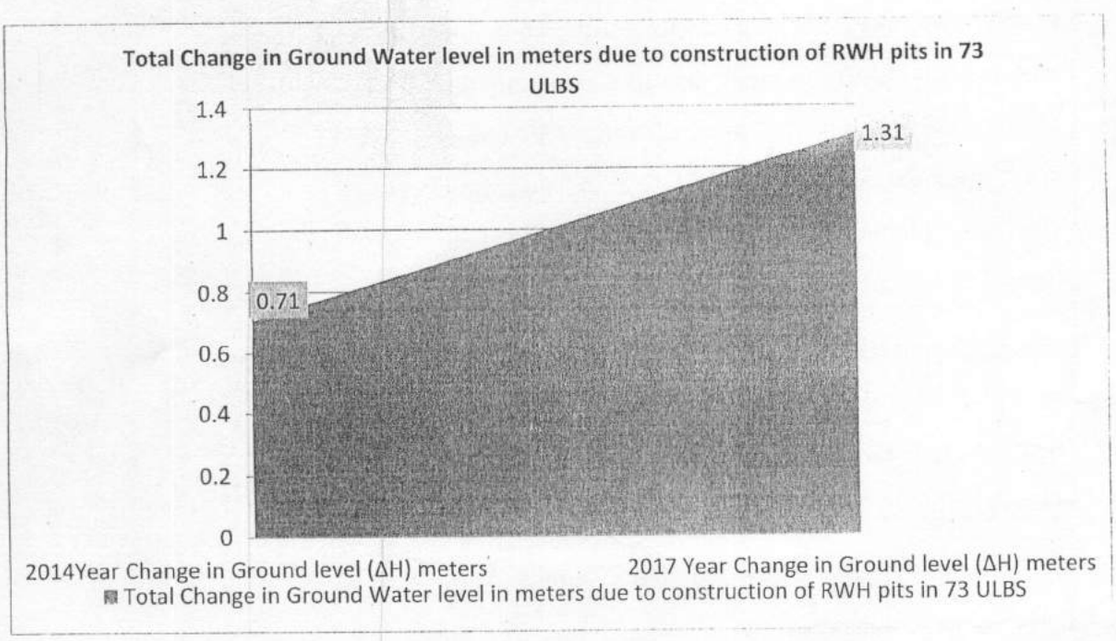
No. of Rainwater Harvesting Structures constructed by the ULBs from 2014 to 2018

Period	No.of RWH Structures constructed	Volume created to recharge the rainwater (Cum)	Volume of Rainwater to be recharged per Annum (Cum)
CDMA(Jalam jeevam)	1230	9840	7872
CDMA (73 ulbs before jalamjeevam)	15804	126432	101145.6
Total	**17,034**	**1,36,272**	**1,09,018**

Ground Water Scenario in ULBs:

It is observed that the average ground water levels in 73 ULBs in May 2014 is 11.63mbgl whereas it is 11.033mbgl in May 2017 indicating an average raise of 0.6m in ground water table which could be attributed to the water conservation initiatives.

Total Change in Ground Water level in meters due to construction of RWH pits in 73 ULBS	
2014Year Change in Ground level (ΔH) meters	2017 Year Change in Ground level (ΔH) meters
0.707402207	1.307402



9.4.1 Legal Provisions for rain water harvesting in Urban Bodies:

Government issued Comprehensive Building Rules and other related rules in G.O.Ms.No.168 MA., dt.7.4.2012, which are applicable to Municipal Corporations, Municipalities, Nagar Panchayats and areas covered by Urban Development Authorities in the State.

Under Rule 3 of the above said rules, restrictions are imposed for building activities for protection of water bodies like river, nala and FTL of any lake, pond, cheruvu or kunta / shikam lands.

Under Rule 22 of said rules, incentives provided in terms of 10% rebate in Property Tax by local authority for owners or their successors who "undertake both recycling of waste water and rain water harvesting structures".

In compliance to National Building Code, provision is made in the rules making RWHS mandatory in all categories of buildings and also Terrace Water Collection and open grounds.

9.4.2. Encroachments On Water Bodies:

Restrictions are imposed for building activities for protection of water bodies like river, nala and FTL of any lake, pond, cheruvu or kunta / shikam lands.

Accordingly, encroachment on water bodies are identified and issued directions to all ULBs for removal of the same.

No. of encroachments identified within FTL limits : 981

No. of encroachments removed within FTL limits : 236

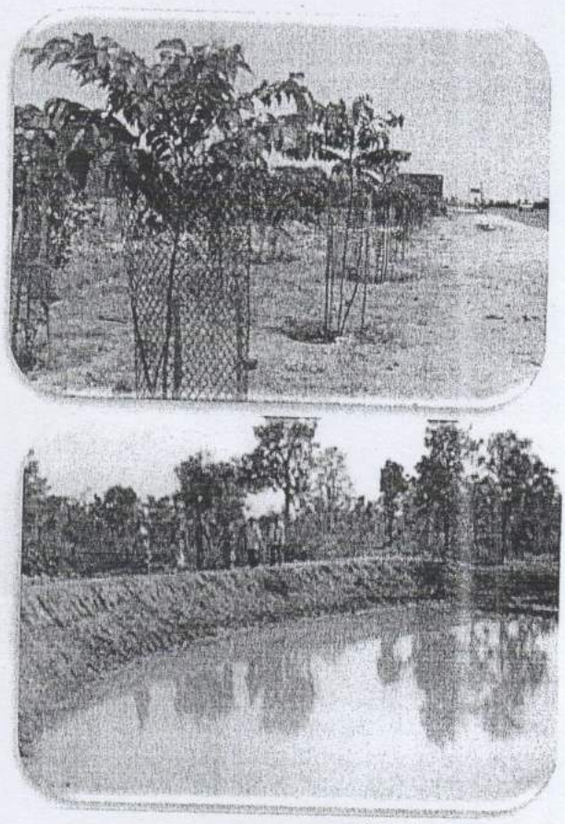
10.Haritha Haram :

Government of Telangana has taken up a flagship programme under "Telangana ku Haritha Haaram" which proposes to increase the tree cover in the state to 33% which includes planting 130 Crore seedlings outside the Reserve forest and nurturing 100 Crore plants / rootstock to trees inside notified forests.

During the past 3 years over 81 Crore seedlings have been planted under TKHH involving all stakeholders.

10.1 Water Conservation Measures in Forest Areas:

Many soil conservation and water conservation activities were taken up by the



Water Conservation Measures

- The Government of Telangana has taken up restoration of all the Minor Irrigation Sources in the State in phased manner under Mission Kakatiya.
- One of the objective of Mission Kakatiya programme is rainwater harvesting in a decentralized manner and also increasing the water holding capacity of Minor Irrigation tanks by desilting.

Impact of Mission Kakatiya :

Mission Kakatiya works so far created an additional storage capacity of 8.42 TMC and stabilized an ayacut of 15.05 lack acres

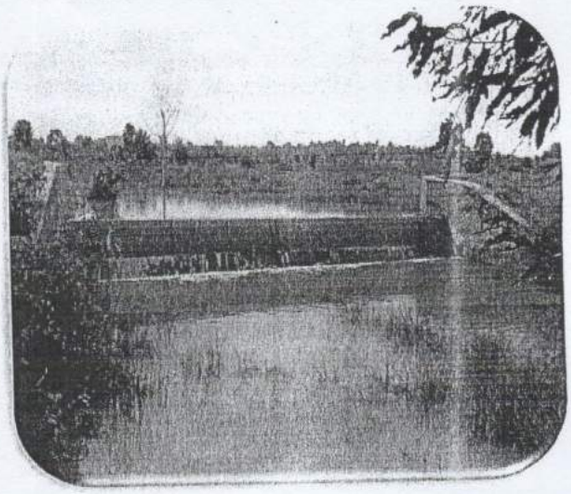
In order to assess its impact on groundwater regime, Ground water Department has taken up pilot study in 9 over-exploited basins in 9 districts by establishing 567 monitoring wells (influence zone of tank:406 and non-influence zone:161). From these tanks ~1.32 MCM of silt is removed and this created additional surface storage of water.

9.2 Construction of water harvesting structures :

A number of water conservation activities like construction of new water harvesting structures, renovation of existing structures, de-silting and waste water management structures are being taken up under MGNREGS& PMKSY-WDC. PMKSY-WDC is implanted in 2974 Gram Panchayats where as MGNREGS scheme is implemented in entire state except Hyderabad. Under PMKSY-WDC works, wage incentive is being met from MGNREGS by convergence of the 2 schemes.

The following works are being taken up for rain water conservation:

- Farm ponds
- Percolation Tanks / Mini Percolation Tanks (MPT)
- Check Dams/Check Walls
- Continuous Contour Trenches (CCT) / Staggered Contour Trenches (SCT)
- Gabion Structures



- Water Absorption Trenches (WAT)
- Recharge of dried up open wells/bore wells
- Surface storage ponds
- Dugout ponds
- Bore well Recharge Structures.
- Earthen Bunding Desiltation of Tanks, Percolation Tanks, Check Dams, Open Wells and other Water bodies.
- Repairs to existing water Harvesting structures
- Following works are being taken up for waste water conservation:
    a) Magic Soak Pits for Individual Households.
    b) Community Soak Pit

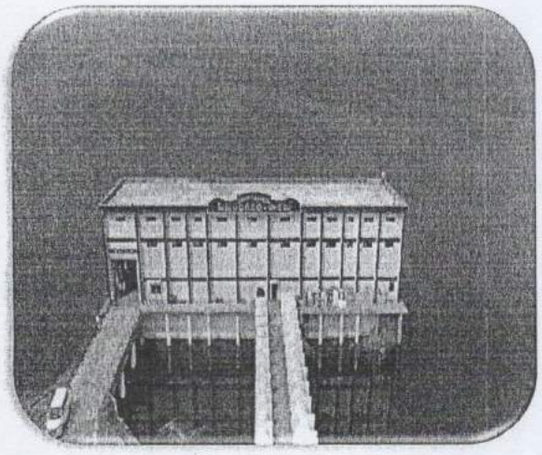
So far **619337** water harvesting structures are constructed benefiting 10,52,005 farmers and creating a pounding capacity of **600.5M.cum**

9.3 Water Conservation Measures In Hyderabad and 73 Urban Local Bodies:

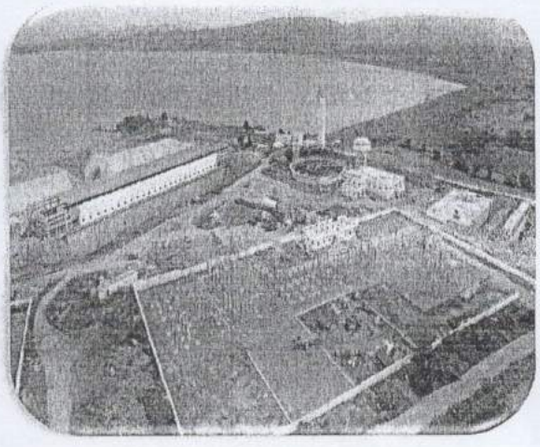
Government has initiated a new programme called **Jalam-Jeevam** in the month of January, 2018 aimed at raising the level of ground water by tapping the rain water and routing it to Rain Water Harvesting pits.

Some of the initiatives are :

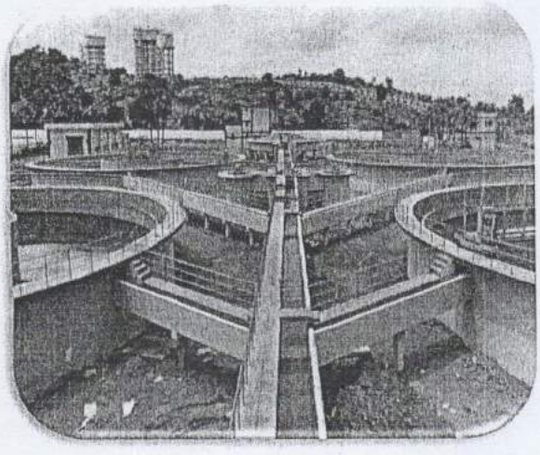
- Construction of rain water harvesting structures in common places.
- Insisting RWHS while giving building permissions and water supply connections under GHMC
- Levying 3 times more tariff for plots over 200sqm without RWHS.
- Removal of encroachments.
- Trainings to municipal commissioners of ULBs
- Awareness campaigns and door to door campaigns to promote importance of water conservation.
- Incentives like 10% rebate in property tax for those who under take waste water re-cycling.



Intake well (55m x 12m x 14m) at Palair segment

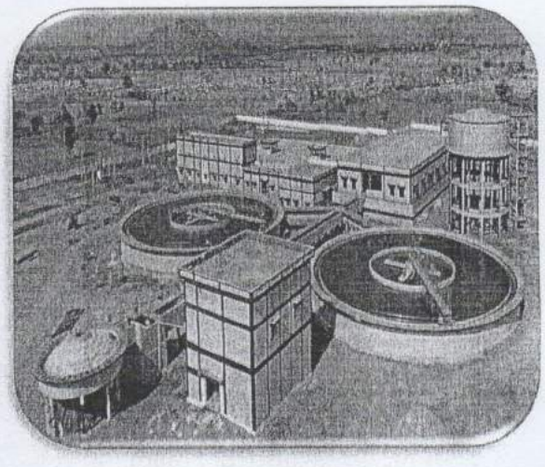


Intake Well (130.25 x 36m) at Yellore Yellore Segment



90 MLD WTP @ Jeellacheruvu at Palair segment

25 MLD at Borupatla Narsapur segment-NABARD



70 MLD WTP @ Batlapally-AKBR segment

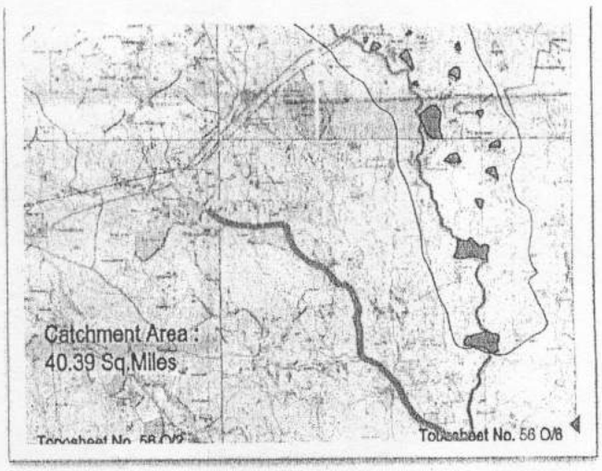
9. Short Term Measures:

9.1 Mission Kakatiya:

Telangana state is traditionally served with minor tanks in every village which is traditional way of conservation and efficient use of water dating back to several centuries during the reign of Sathavahanas and Kakatiyas.

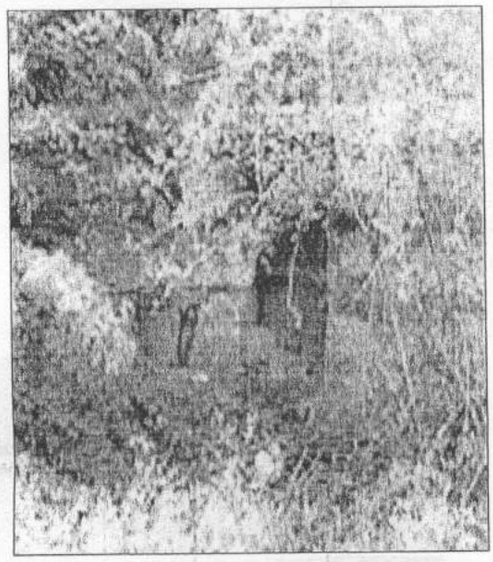
Tanks are located in hydrologically favourable sites, some of them in sequential chains or cascades, effectively capturing the rainfall and serving different functions like irrigation, soil and water conservation, flood control, drought mitigation, livestock, domestic uses, recharge of ground water, microclimate and protection of environment of surroundings. The entire rural economy was based mostly on the tanks systems.

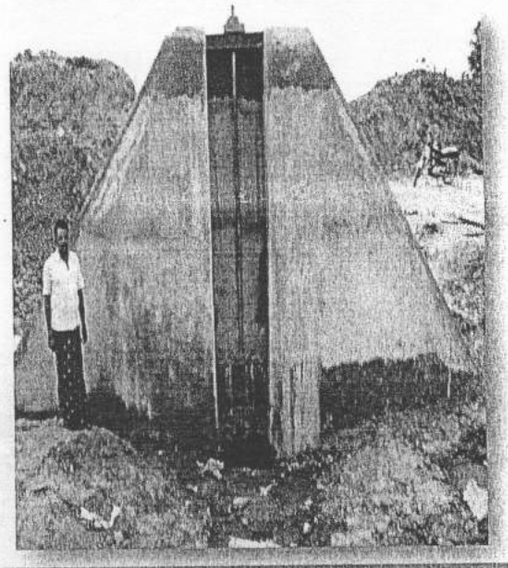
Mission Kakatiya aims at restoration and rehabilitation of all the tanks in the state in a phased manner.



The following components are taken up in the program:

- De-silting
- Restoration of Feeder Channels
- Re-sectioning of Irrigation Channels
- Repairs to cross masonry and cross drainage structures.
- Repairs to Bund , Weir & Sluices
- Rising of Full Tank Level, wherever possible to increase tank capacity.





Restoration/ Reconstruction of damaged sluices, damaged/non-existent screw gear shutters (water controlling arrangement),.

- Demand side includes reducing the area under paddy cultivation, raising the groundwater levels, increasing the area under pulses, ID crops and horticultural crops, Use of micro irrigation etc.

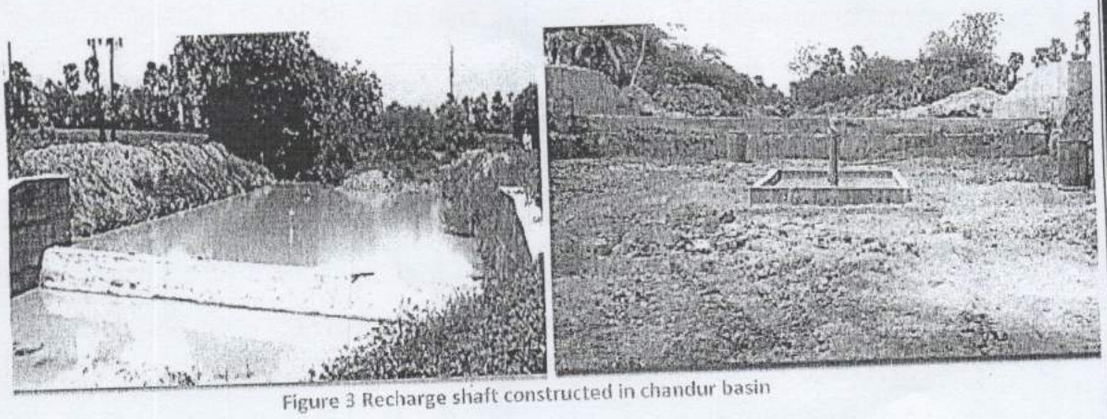
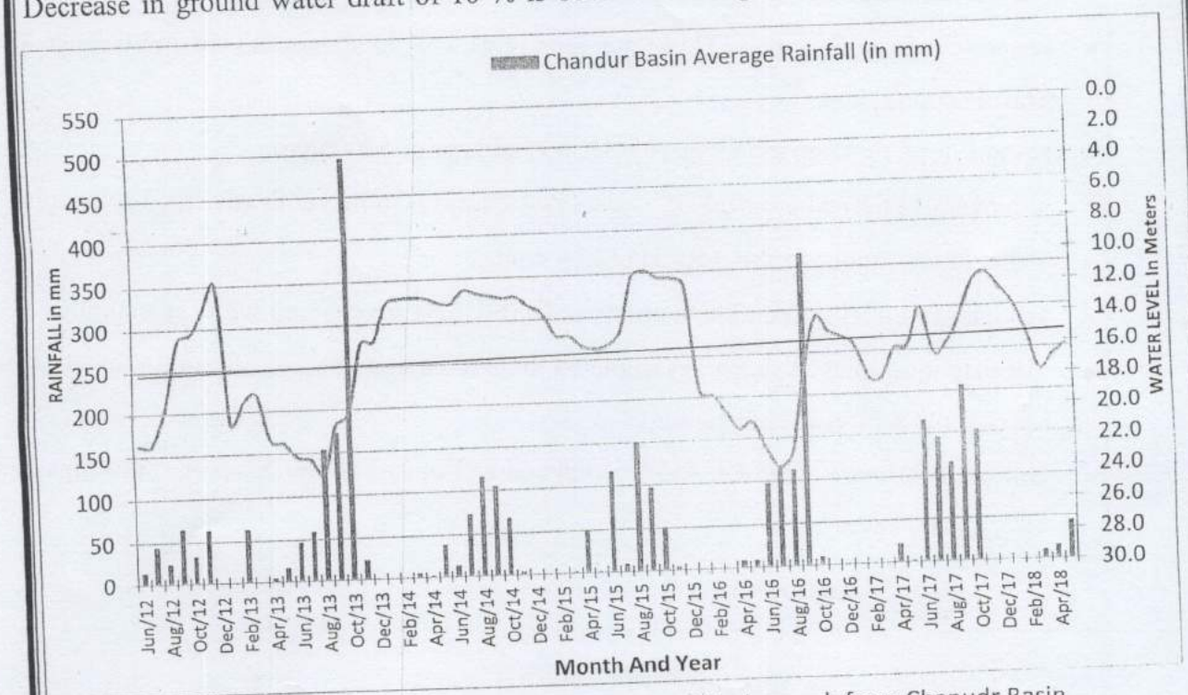


Figure 3 Recharge shaft constructed in chandur basin

Impact/Observations:

- The hydrograph of the average water level in the pilot area indicates a rise of groundwater level by 8.25 meters during the period of August-September 2016 out of which 7.19 m of sharp rise took place within a short period of 30 days from 1st-30th September, 2016 where as the rise in previous year with similar rainfall was only 2.15 meters. Rising trend continues beyond post monsoon period of 2017 , where as the previous year before intervention raise in ground water sustained for a very short time.

Decrease in ground water draft of 10 % is observed during the study period (i.e., from 93%-



critical category to 83% semi-critical category. Figure 4 Hydrograph from Chanudr Basin.

8.4 Mission Bhagiratha : Safe Treated Drinking Water:

Normally only about 18% of total drinking water demand was being met from surface water sources and the balance 82% was mainly from ground water sources in the state of Telangana. The gound water is contaminated with fluoride and other pollutants making it unsafe for citizens. Government of Telangana has taken up Telangana Drinking Water Supply Project named "Mission Bhagiratha" as one of the flagship programmes of the State with a commitment to provide safe, adequate, sustainable and treated drinking water for the entire rural and urban areas of the State by 2019.

It is a unique and most comprehensive project to cover all households on a saturation mode. It envisages treated drinking water to every household at their door step at the rate of 100 LPCD in rural areas, 135 LPCD in Municipalities/ Nagar Panchayats and 150 LPCD in Municipal Corporations. 10% of total water is earmarked to meet the Industrial needs which in turn will create employment and catalyse economic growth.It contemplates to draw about 59.94 TMC of water in 2018 (86.11 TMC @ year 2048) from rivers Krishna and Godavari and major reservoirs fed by these rivers.

The scheme is completed to a maximum extent.

Project Status:

- **Intake arrangements:** Out of total (19) intake structures, all (19) are completed.
- **Water treatment Plants:** Out of 50 WTPs, all (50) Water treatment plants are completed.
- **Major Structures:** Out of (1171) Major Structures, (1171) are completed and balance are nearing completion
- **Pipeline:** total pipeline of length 51141Km is laid out of 52005Km.
- The overall Physical progress of works (98% comp) is in line with advanced action plan.
- Value of work done is about Rs 31114.16 crores.
- Till date about 23968 rural habitations and 118 ULBs are covered with Bulk supply.
- Till date intravillage system is completed in 5530 habitations and 3866 rural habitations are covered with household supply.
- Out of 18921 new OHSRS, 5514 completed and out of 54480 Kms of Intra pipeline, 19711 Kms laid.

7.4 WARABANDI:

More crop per drop is ensured by systematic planning and monitoring of ON/OFF system of water releases.The water use efficiency increased from irrigating on an average of 6000 acres per TMC (for wet crop) to irrigating an average of 10000 acres per TMC of water. All the large projects of NSP, SRSP, Nizamsagar etc are being operated with on /off rotation resulting in better yields and large saving in water.

7.5 Tail to Head Releases:

Tail to Head release is followed in majority of distributaries in all projects ensuring water supply to tail end fields.

7.6 Conjunctive use:

It is of utmost importance to utilize the full potential of the projects by reducing the gap between the irrigation potential created vis-à-vis irrigation potential utilized. In order to reduce the gap it is important to supplement the crop with rainfall and groundwater in addition to water releases from canal waters.

For Kharif 2017-18, only 87.62 TMC of water was available in the reservoirs which had an irrigation potential of only 10.32 Lakh acres out of the total 36.87 lakh acres of irrigation potential created (under major and medium projects) leaving a gap ayacut of 72%. However by encouraging conjunctive use of rainfall, ground water and project canal waters it is estimated from satellite analysis that the actual gap ayacut (CCA – cropped area) under the projects is only around 12.5 %.

Similarly, for Rabi 2017-18, 183.15 TMC of water was available with a potential to irrigate 17.8lakh acres of ayacut leaving a gap of 51.6%, where as the actual crop gap with conjunctive use is found to be only 41.14%.

The satellite crop results of 25 projects in Kharif and 38 projects in Rabi are below :

Crop Analysis For the Year 2017-18

S.No	Title	Major		Medium		Total	
		Kharif	Rabi	Kharif	Rabi	Kharif	Rabi
1	No. of Projects	9	18	16	20	25	38
2	IPC	2,096,003	3,446,840	159,541	229,399	2,255,544	3,676,239
3	IPU Satellite	1,853,799	2,023,226	119,789	140,757	1,973,588	2,163,983
4	IPU as per reservoir water availability	638,895	1,656,379	70,556	123,222	709,451	1,779,601
5	GAP as per Satellite	242,204	1,423,614	39,752	88,642	281,956	1,512,256
6	GAP as per Satellite in %	**11.56%**	**41.30%**	**24.92%**	**38.64%**	**12.50%**	**41.14%**
7	Gap As per reservoir water availability	1,457,108	1,790,461	88,985	106,177	1,546,093	1,896,638
8	GAP as per reservoir water availability in %	**69.52%**	**51.94%**	**55.78%**	**46.28%**	**68.55%**	**51.59%**
9	Water Util.-TMC 2017	37.39	166.882	8.25	15.267	45.64	183.149

8. Medium Term measures:

8.1. New tanks and New Checkdams:

Taking rainfall into consideration Government of Telangana is constructing lot of MI tanks and Check dams especially in Asifabad, Jayashankar Bhupalpally, Kothagudem and Khammam Districts. After 2014, 67 new check dams were sanctioned for an amount of 211.81 crores, of which 35 check dams are already constructed. Additional 551 check dams are under consideration of the Government for an amount of 1677.52 crores.

8.2. AIBP:

All ongoing AIBP are proposed to be completed by December 2020 in all aspects. At present, head works of all projects are completed and water is impounded in all the Reservoirs. L.A. bottlenecks and delays are affecting the completion of the projects.

8.3. Aquifer Level Ground Water Management Plan :

After successful results of Pilot studies, Ground water Department has taken up construction 181 Recharge shafts on the upstream side of existing check dams in 65 Over Exploited villages in (5 OE Mandals) from 5 districts Siddipet, Sangareddy, Karimnagar, Jangaon and Nagarkurnool districts. So for 42 structures are completed in Siddipet and Nagarakurnool mandals.

8.3.1 Case Study : Chandur Basin

World Bank funded Aquifer level groundwater management plan has been successfully implemented in 14 villages from Chandur basin of Nalgonda district with an objective to develop an institutional model with processes and procedures for the sustainable use and management of ground water resources for various purposes by the community at the aquifer level, and test its acceptability by the community.

Salient features of the study

- Both supply side and demand side management strategies were adopted.
- The supply side includes construction of 23 check dams with recharge shafts.
- Local communities are involved in planning and managing the resources.
- Communities are motivated through various IEC activities.

Enhancement of productivity:

Micro irrigation has generated benefits to the farmers in terms of enhancement of the Production & Productivity. The average productivity of fruits and vegetables has increased about **42% and 100%** respectively due to crop spacing, judicious use of water and other inputs.

S. No.	Name of the Crop	Area in acres	Average Production kgs/per acre		Additional production with M.I (kgs/acre) (4-5)	Per(%) of increase of productivity with Drip	Average Rate per Kg	Total addl. Income generated with M.I (Rs. in lakhs)
			Flood	Drip				
1	2	3	4	5	6	7	8	9
1	Vegetables	333791	6000	12000	6000	100	3	60082.35
2	Fruits	426809	3000	6000	3000	100	7	89629.87
3	Chillies	114378	2500	3500	1000	40	45	51470.1
4	Sugarcane	112554	25000	50000	25000	100	23	647186.79
5	Spices	199543	2000	4000	2000	100	60	239451.63
6	Agriculture	78784	22000	35000	13000	59	22	225322.1
7	Oil Palm	16445	8000	12000	4000	50	7	4604.52
8	Medicinal & Aromatic Plants	1321	60	85	25	42	25	8.26
9	Flowers	1407	2000	3200	1200	60	5	84.41
10	Sprinklers (Pluses)	469086	1200	1630	430	36	40	80682.8
Total		**1754118**						**1398522.8**

7.3.Modernization of Major & Medium Irrigation Projects:

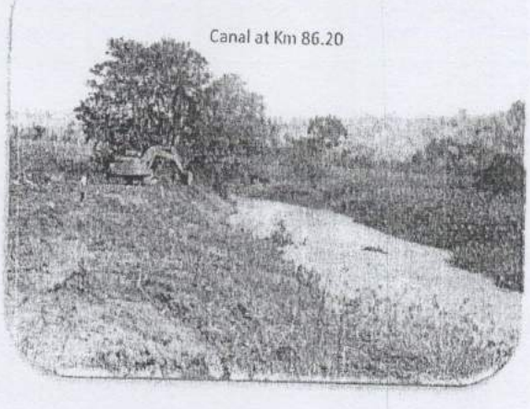
The existing major irrigation projects like a) Nizamsagar b) Sriram Sagar and c) Nagarjuna Sagar were taken up for modernization. Nizamsagar Project was completed in the year 1931 with an ayacut of 2,75,000 acres. Nagarjuna Sagar project in the year 1967 and Sriram Sagar Project in the year 1977. The canal system of all these projects are old and due to insufficient O&M funds not able to carry the designed discharge. In many cases, the canals and bunds are either damaged or breached. The structures and gates on these canal system are damaged leading to a lot of leakages and seepages. Hence, these projects are not able to serve the designed localized ayacut resulting in to large gap ayacuts. The canal conveyance efficiency

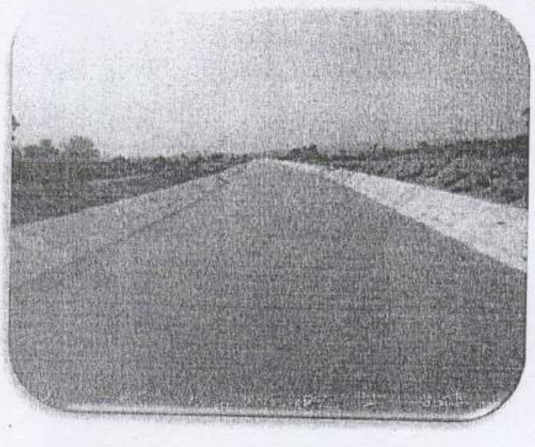
has been reduced because of lack of regular maintenance and the damages caused by the farmers.

To overcome this problem and to reduce the gap ayacut, the modernization of above three projects were taken up by the Government. The major works taken up includes strengthening of the canal system by way of bund strengthening, lining of canals, re-construction of structures and sluices, repair to gates and drops. This helped in increasing the canal conveyance efficiency and reduction in the seepage and leakages thereby resulting in reduction of gap ayacut to a significant extent.

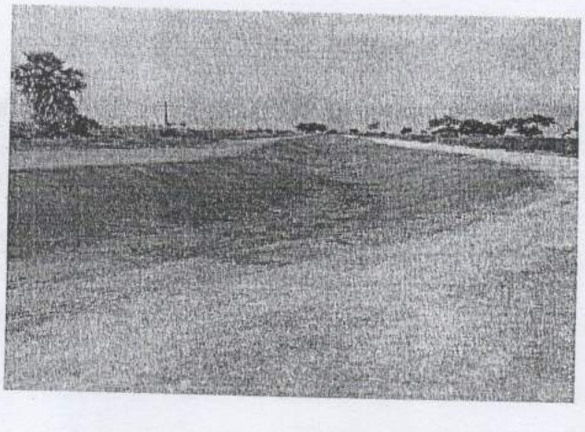
The modernization of these projects increased the water use efficiency not only by way of reduction in seepages and leekages but also by way of proper 'on farm application of water' and change in the cropping pattern from water intensive crops to ID crops.

Nizamsagar Canal Before Modernization





Nagarjuna sagar project Minor canal before Modernization



6.0 Challenges and Water Conservation Measures :

Telangana state, in spite of the advantage of having most of the east flowing rivers in the heart of the state bringing in copious supplies, is in a disadvantageous position to be provided with Irrigation in view of the undulating terrain. Godavari river flows below 100m but irrigable areas are at levels ranging from +150m to +600m . Krishna flows at 100 to 300m but irrigable areas are at +150 to +600m. Further, located in rain-shadow region of deccan plataue, a large extent of the state is drought prone.

To cope with the geo-graphical challenges and lop-sided planning prior to formation of Telangana, the state adopted a multi-pronged approach to conserve and utilize the limited water resources like accelerated completion of Major Lift Irrigation projects and ongoing Major & Medium irrigation projects, revival of tank irrigation system, modernization of existing projects, construction of water harvesting structures like check dams, farm ponds, rain water harvesting structures, increasing tree cover through Haritha Haram, Mission Bhagiratha to provide safe drinking water, promoting conjunctive use of surface and ground water, construction of artificial recharge structures, building a GIS based master data base for the entire irrigation system etc;.

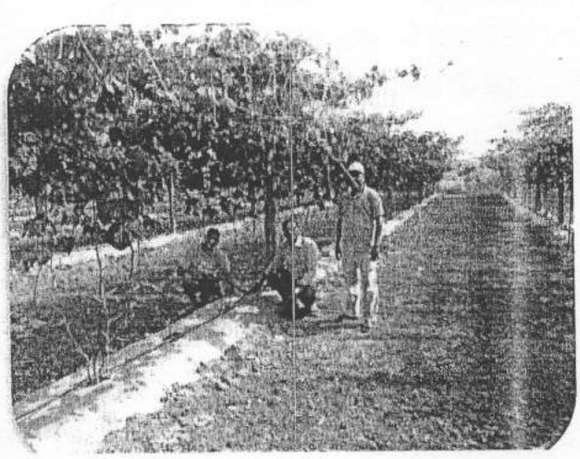
7. Long term Measures:

7.1 Construction of New reservoirs / Projects:

At the formation of Telangana, the state had 50 reservoirs with a capacity to store 260.47 TMC of water and additional 3 reservoirs are shared between Telangana and A.P with a capacity of 573.57 TMC. After formation of Telangana, the government accorded highest priority to Irrigation & accelerated the completion of many ongoing projects including re-engineering the projects wherever necessary.

7.1.1 Ayacut Added under the new projects:

As on 2014, Telangana had an irrigation potential of 57.9 Lakh acres of ayacut from its Major, Medium and Minor irrigation sources inclusive of IDC. An additional ayacut of 13.12 Lakh acres is added from 2014 to 2019 and an additional 17.36 lakh acres is stabilized under the existing projects. Through various ongoing and contemplated projects, an additional 53.71 Lakh acres is proposed



Water Conservation Measures

to be added by 2022 to create a total irrigation potential of 1.25 Cr acres in the state. An additional 32.79 lakh acres is proposed to be stabilized under the existing projects in the next 4 years.

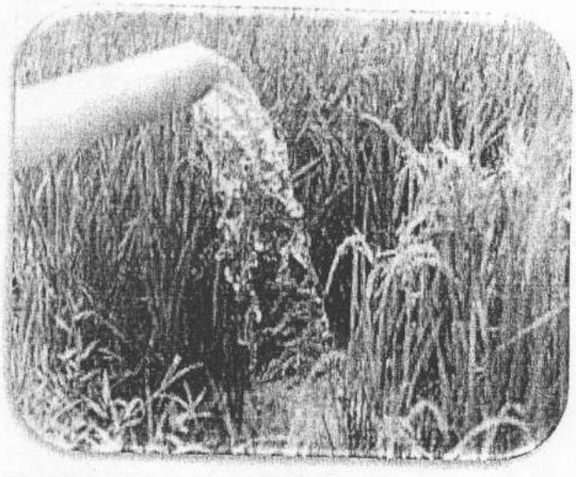
7.2 Increasing Water Use Efficiency:

7.2.1 Micro Irrigation Project (PMKSY):

Government of India has been implementing Centrally Sponsored Scheme on Micro Irrigation with the objective to enhance water use efficiency in the agriculture sector by promoting appropriate technological interventions like drip & sprinkler irrigation technologies and encouraging the farmers to use water saving and conservation technologies / activities.

Typical Water use efficiency for different irrigation application systems are shown here under:

Type of Irrigation System	Efficiency (%)
Drip Irrigation	90
Micro Sprinkler Irrigation	80
Semi-Permanent Sprinkler Irrigation	75
Portable Sprinklers Irrigation	70
Flood Irrigation (piped supply)	80
Flood Irrigation (earth channel supply)	60



Telangana State is implementing Micro Irrigation Programme as a flag ship programme by providing 100% subsidy to SC,ST, and 90% Subsidy to BCs. The programme is being implemented under PMKSY - Per Drop More Crop with a funding pattern of 60:40. The irrigated area in the state under Wells & Borewells is 20.48 lakh ha, out of which the area covered under micro irrigation is 7.02 lakh ha (17.54 lakh acres) i.e., (>35%).

Particulars	Area covered with M.I (in lakh acres)	Financial outlay (Rs. in cr)
Before formation of T.S	11.99	2074.72
After formation of T.S	5.55	1630.52
Total	**17.54**	**3705.24**

7.2.1.1 Impact of Micro-Irrigation:

Water Conservation:

Installation of drip and sprinkler systems accounted for an estimated water savings of **279.48 TMC** so far in the state.

Telangana Mean Annual Precipitation (1960-2013)

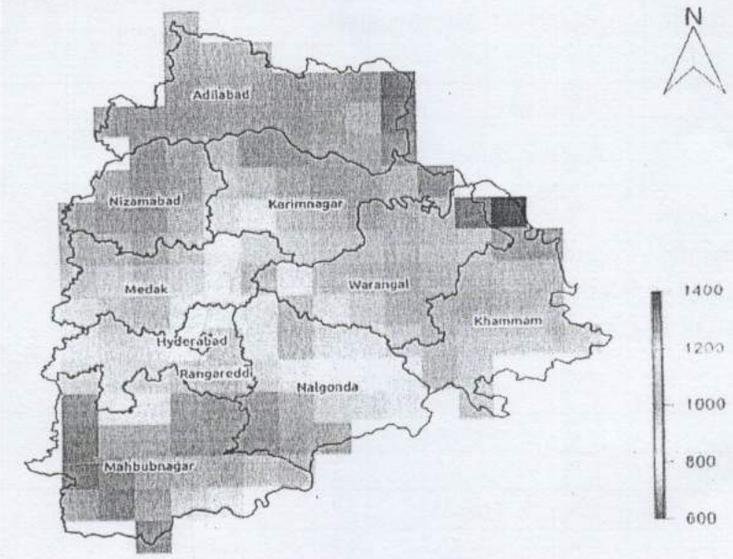
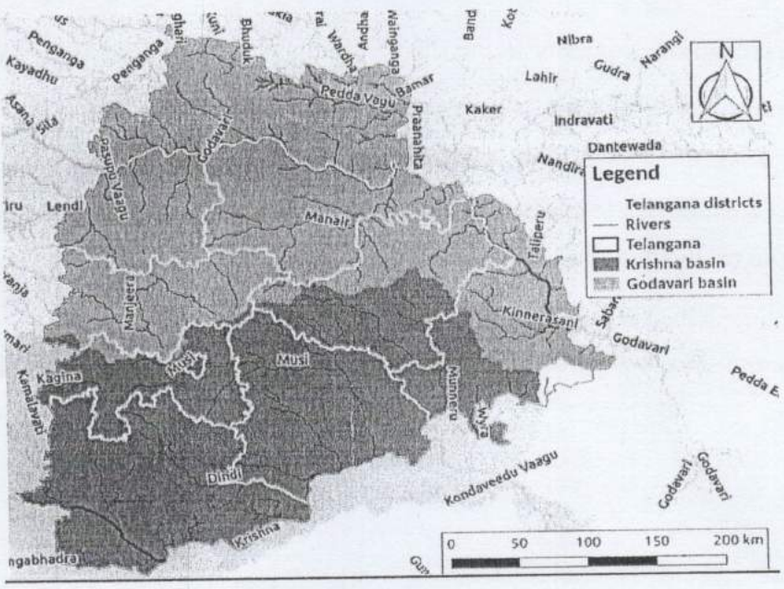


Figure 1 Showing the Telangana Mean Annual Precipitation

2.2 Surface Water Resources:

State's territory is covered by the basins of two major rivers – Godavari in the north and Krishna in the south.46.6% of the state is covered by Krishna river and 52.64% by Godavari river & 0.76% by other minor basins (Yerrakalva & Tammileru).Apart from the major rivers, there are other tributaries as Bhima, Dindi, Kinnerasani, Manjeera, Manair, Penganga, Praanahita, Musi, Taliperu etc.

Figure 2 Showing River network and Basin coverage of Telangana State



Surface water availability and planned utilization

S. No	Name of the Basin	Area in Ha	% in the Geographical area	75% dependable Yield in TMC (Basin/state)	Planned Utilisation of Telangana TMC
1	Godavari	58,99,713	52.64	3216/485	954.23
2	Krishna	52,23,258	46.60	2130/224	718.32 (Inclusive of envisaged Irrigation potential)
3	Minor Basins (Part)	84,839	0.76		

While majority of water is planned to be utilized for irrigation, considerable share has been allocated to industries and drinking water.

Sector wise planned utilization

(In TMC)

S. No	Description	Godavari	Krishna	Total
1	Major	689.90	564.91	1254.81
2	Medium	55.45	22.60	78.05
3	Minor	165.35	89.15	254.5
4	DW & Indust.	43.53	41.66	85.19
	State Total	954.23	718.32	1672.55

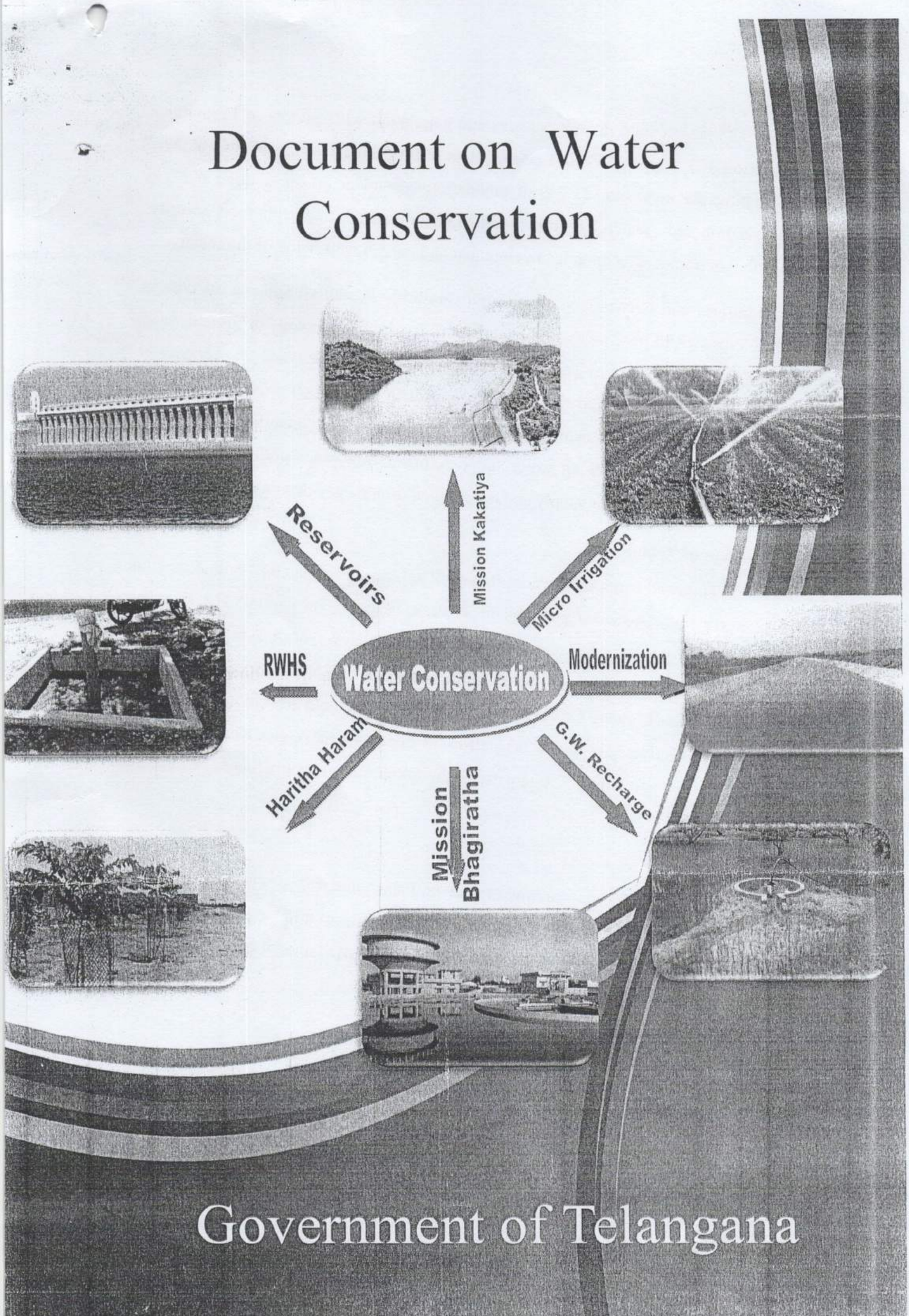
3.0 Topography: The Deccan Plateau, north of river Krishna is an extensive plateau with elevation of 237'_- 680'_ above MSL.

4.0 Agro-climatic features: The cropped area in Telangana state is divided into three distinct agro-climatic zones. The classification mainly concentrates on the range of rainfall received, type and topography of the soils. The three agro-climatic zones are as follows:

1. Northern Telangana Zone : Adilabad, Nizamabad and Karimnagar districts.
2. Central Telangana Zone: Khammam, Warangal and Medak districts.
3. Southern Telangana Zone: Nalgonda, Ranga Reddy and Mahabubnagar districts.

5.0 Crops: The state has widely diversified farming base with large variety of crops, which include food, horticulture and cash crops. About 60% of the cultivated area of the state is under food crops. Paddy is the predominant food crop and is sown over about 25% of the cultivated area. Other important food crops are sorghum and maize accounting for about 14% of the cultivated area. Pulses are grown over about 18% of the area. Oil seeds like groundnut, castor, sunflower and sesamum etc are sown over about 9% of the cultivated area. Among the commercial crops most important are cotton, chillies, turmeric and sugarcane.

Document on Water Conservation



Government of Telangana

1. Background :

Telangana is the 12th largest state in terms of area and population with an area of 114,840 sq. km and a population of 3, 52, 86,757 (2011 census). Out of the total geographical area, 60.29% of the area is cultivable area with 55.7% of population dependent on agriculture. 62% of cultivable area is rain fed. Water security, therefore, is intimately tied with food security, livelihood, health, environment, economic development and overall well-being of the society.

Telangana is semi-arid and is characterized by high variability in rainfall and run-off both in space and time. Presence of hard rock aquifier in large areas limits the scope of ground water exploitation and thus large extent of Telangana is drought prone putting stress on economy of the state. Rapid industrialization and urbanization resulted in further increase in demand for limited water resources. The water challenges for the state are, therefore, manifold – improving and safeguarding the existing drinking water supplies, preventing water pollution, managing water for irrigation, industry, power supply and ensuring environmental sustainability.

2. Water Resources of Telangana:

Telangana State is endowed two major river systems of Godavari, Krishna and 19 other medium and minor river systems. The water potential in all these basins is substantial. The abundant river flows also help in substantial ground water recharge. However, the available water resources are unevenly distributed, both in time and space. Bulk of the flows in the rivers takes place during the months of June to October under the influence of south west monsoon. Most of the water flows in these rivers are due to rain fall in the upper riparian states like Maharashtra, Karnataka, Chhattisgarh and Orissa. Large parts of the Southern Telangana State are subjected to frequent droughts.

2.1 Rainfall :

The State gets rainfall both from southwest and northeast monsoons. The average annual rainfall in the state is 927.58 mm and ranges from 604 mm in semi-arid belt in Mahabubnagar district to 1157 mm in the north of the state. About eighty percent of annual monsoon rainfall in the state is from south western monsoon.

Annexure-R/16

Email **usnwm-mowr@gov.in**

Report in connection with OA No. 597/2019- Sh Rajendra Tyagi vs UoI & Others in the Hon'ble NGT from WRI&D Department GoWB

From : Engineer-in-Chief, WRI&DD <eicdwrid@gmail.com> Fri, Mar 06, 2020 06:17 PM

2 attachments

Subject : Report in connection with OA No. 597/2019- Sh Rajendra Tyagi vs UoI & Others in the Hon'ble NGT from WRI&D Department GoWB

To : usnwm-mowr@gov.in

Cc : secy-mowr@nic.in, mishrapk168@gmail.com, soumendra pathak <wridd.wb@gmail.com>, Joint Secretary (MI) WRIDD <jsmiwridd.wb@gmail.com>

Sir,
I am directed to submit herewith the report sought in connection with OA No. 597/2019- Sh Rajendra Tyagi vs UoI & Others in the Hon'ble NGT in respect of Water Resources Investigation & Development Department, Government of West Bengal for favour of your kind perusal please.
With regards,
Yours faithfully,

Debashis Ray
Engineer-in-Chief in Charge (Additional)
Department of Water Resources Investigation & Development
Government of West Bengal
Tel: +91 33 2252 1127/ 2252 0536 (FAX)

NGT OA No 597 2019 Rajendra Tyagi Report WR&DD GoWB0-5032020.docx
25 KB

ANNEXURE-I JDJV 31.01.2020.xlsx
25 KB

Intervention on rain water harvesting is being made by this Department in the State through various Programmes besidesJalatirtha. Reference may be made to **Annexure-I** which depicts the Assets [Water Bodies in terms of number by Panchayat&Rural Development Department (P&RD) and Equivalent Tank of Standard Size (40m x30mx3m) Created by WRI&D Department under various programmes] created till 31.01.2020 since 2011-12 along with approximate Culturable Command Area (CCA)/ Irrigation Potential (IP) in Hectare.

All these interventions towards surface water conservation is part of programme **'JalDharo-JalBharo'**which was launched during 2011-12 with the objective for conservation of rain water in all kinds of water bodies viz. tanks, ponds, reservoirs, canals etc. for sustainable development of water resources and its convergence with agriculture and allied activities. In addition, there has been a unique convergence with agriculture and pisciculture.

Action Taken for Improving Water Use Efficiency by WRI&D Department

This Department provides minor irrigation to small and marginal farmers of West Bengal through construction of various types of minor irrigation schemes implemented under different programmes, utilizing both surface as well as ground water resources. Simultaneously, increasing Water Use Efficiency in Minor Irrigation Sector is being given special importance by this Department. Since 2011-12, 692 Sprinkler Irrigation System have been installed by this Department having Irrigation Potential of 3,496 Ha. In addition, 143.6 KM masonry field channel have been constructed in the command area of different Minor Irrigation Schemes for reduction of water loss during conveyance of Irrigation Water& proper distribution in the Agricultural Field with an aim to enhance irrigation efficiency which has about 2,872 Hectare of Irrigation Potential.

Actions taken as indirect measures for improvement groundwater conservation and its efficient use in irrigation, domestic and industrial sector in the state of West Bengal

In connection with the subject cited above under references the following actions have been taking as indirect measures for improvement groundwater conservation and its efficient use in irrigation, domestic and industrial sector in the state of West Bengal:

Sl No.	Action Taken	Remarks
1.	Implemented GW Resources (regulation, control and management) Act and measures have been taking by the end of State Water Investigation Directorate (SWID) under WRI&DD, GoWB since 2006.	**GW Resources (regulation, control and management) Act, 2016:** Blocks (in whole state) – 341 nos.
2.	GW withdrawal has been restricted in semi-critical and critical category blocks in West Bengal to arrest declining GW Table to some extent as indirect measures of GW reserve in sub-surface.	**GW Resources Estimation (2016-2017):** (*approved in SLGWREC, WB and yet to be notified*) Blocks (Semi-Critical)- 42 nos. Blocks (Critical)- 30 nos.
3.	GW withdrawal has been controlled in blocks where GW is Arsenic (As) and Fluoride (F) affected, and also salinity infested as indirect measures of fresh GW reserve in sub-surface.	**GW Contamination:** Blocks (As affected GW)- 81 nos. Blocks (F affected GW)- 49 nos. Blocks (Salinity infested GW)- 59 nos.
4.	Roof-Top rainwater harvesting cum artificial recharge to GW (RTRWH&ARGW) in urban areas have been implementing preferably in GW stressed blocks w.r.t. quantity & quality to augment GW resources and reduce geogenic contamination e.g. concentration of As, F and salinity of GW in localized pockets as indirect measures of fresh GW conservation in sub-surface.	**RTRWH&ARGW** schemes: Blocks (semi-critical category)- 3 no. Blocks (semi-critical category & As affected)-3 Blocks (critical category)- 7 nos. Blocks (critical category & As affected)- 4 nos. Blocks (As affected GW)-8 nos. Blocks (F affected GW)-8 nos.
5.	More attention has been drawn to give clearance for Surface Flow Minor Irrigation Schemes (SFMIS), River/Water Tank Lift Irrigation Schemes in lieu of GW irrigation schemes in GW stressed blocks as indirect measures of GW preservation thereof.	**GW Resources Estimation (2016-2017):** (*approved in SLGWREC, WB and yet to be notified*) Blocks (Semi-Critical)- 42 nos. Blocks (Critical)- 30 nos.

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Information in respect of OA No. 597/2019 in the case of Sh Rajendra Tyagi Vs. Union of India & Ors. (WRI&D Department, GoWB)

Annexure-I

ASSETS CREATED UNDER "JAL DHARO JAL BHARO" BY WRDD & UNDER THE CONVERGENCE PROGRAMME WITH P&RD DEPTT. GOVT OF WEST BENGAL AS ON 31.01.2020.

SL NO	District	Convergence with P&RD										WRI&DD																							
		FY 11-12	FY 12-13	FY-13-14	FY-14-15	FY-15-16	FY-16-17	FY-17-18	FY-18-19	FY-19-20 (Upto January)	Total no of Water Bodies	Equivalent tank 11-12	Equivalent tank 12-13	Equivalent tank 13-14	Equivalent tank 14-15	Equivalent tank 15-16	Equivalent tank 16-17	Equivalent tank 17-18	Equivalent tank 18-19	Equivalent tank 19-20(Upto January)	Total Equivalent tank	Volume (Ha-M)	MGNREGA Pond11-12	MGNREGA Pond12-13	MGNREGA Pond13-14	MGNREGA Pond 14-15	MGNREGA Pond15-16	MGNREGA Pond16-17	MGNREGA Pond17-18	MGNREGA Pond18-19	MGNREGA Pond19-20(Upto Januar	MGNREGA Total	Volume (Ha-M)	
1	24 Parganas(N)	3736	2110	3940	4016	2116	3714	4900	5842	2568	32942	663	0	0			45			411	1119	246	0	0	0				0	0		0	0		
2	24 Parganas(S)	704	2654	2294	302	5866	2642	4264	3773	1640	24139	6786	4649	0	360	783	1001	399	957	2199	17134	3769	0	4	2				0	0		6	1		
3	Alipurduar					157	394	394	686	261	1892	0	0	0	0	0	0	0			0	0							0	0		0	0		
4	Bankura	1859	995	2288	103	63	282	298	548	217	6653	1412	2807	420	943	3653	3322	1497	1669	4831	20554	4522	0	0	0				0	0		0	0		
5	Birbhum	6123	6414	3909	1680	1860	2958	2597	2506	677	28724	0	0	224	0	654	390	336	67	1310	2981	656	0	4	12	2			0	0		18	4		
6	Coochbehar	54	100	99	50	215	135	545	444	124	1766	0	0	0				264			264	58	0	0		26			0	0		26	6		
7	Dargeeling (DGHC)			6	0	30	3	400	146	56	641	0	0	0	0	0	0	0	188	37	225	50	0	120		120			0	0		240	53		
8	Dakshin Dinajpur	291	366	263	67	121	84	537	920	286	2935	0	0	0							0	0	0	0	0				0	0		0	0		
9	Uttar Dinajpur	324	378	55	7	29	206	374	798	387	2558	0	0	0							0	0	0	0	0				0	0		0	0		
10	Hooghly	736	942	532	196	440	157	364	324	100	3791	0	0	0				7			7	2	0	0	0				0	0		0	0		
11	Howrah	53	156	51	30	215	258	311	285	322	1681	1989	0	0	90	621	134	891	482	244	4451	979	0	0	0	2	1		0	0		3	1		
12	Jalpaiguri	1201	745	314	200	127	276	1024	1753	614	6254	0	0	0							0	0	0	0	0				0	0		0	0		
13	Jhargram							1074	1840	411	3325	0	0	0	0	0	0	224	83	605	912	201							0	0		0	0		
14	Kalimpong	0	0	0	0	0	0	16	62	1	79	0	0	0	0	0	0		111	155	266	59	0	0	0	0	0	0	0	0		0	0		
15	Malda	423	274	89	43	48	101	177	554	373	2082	0	0	0							0	0	0	0	0				0	0		0	0		
16	Murshidabad	1328	1835	321	113	298	758	1396	558	103	6710	0	0	57						18	75	17	0	0	0				0	0		0	0		
17	Nadia	212	205	57	348	343	223	718	1407	829	4342	0	770	0						64	834	183	0	0	0				0	0		0	0		
18	Paschim Burdwan							158	958	336	1452	0	0	0	0	0	0	39			39	9	0	0	0	0	0	0	0	0		0	0		
19	Pas. Midnapore	3242	2583	1476	1046	1368	3442	2522	4527	945	21151	324	1419	664	285	2763	2430	1049	1379	1161	11474	2524	0	0	0				0	0		0	0		
20	Purba Burdwan	1852	2495	4945	980	1063	1738	917	735	270	14995	442		587	130				148		1307	288	0	5	0				0	0		5	1		
21	Purba Midnapore	1845	3340	3674	3097	4054	5757	5357	8372	7739	43235	0	748	1392	218	598	937	686	138	75	4792	1054	0	0	14			65	0	0		79	17		
22	Purulia		2004	2200	2156	141	3399	2504	1530	304	14238	5287	1191	325	570	2290	3517	943	502	3531	18156	3994	0	0	0				0	0		0	0		
23	Siliguri Mahakuma Parishad			12	9	11	30	40	32	12	146	0	0	0	0	0	0	0			0	0	0	0	0				0	0		0	0		
	TOTAL	23983	27596	26525	14443	18565	26557	30887	38600	18575	225731	16903	11584	3669	2596	11362	11776	6335	5724	14641	84590	18610	0	133	28	150	1	65	0	0	0	377	83		

	P&RD	WRI&D	TOTAL	P&RD	WRI&D	TOTAL	P&RD	WRI&DD	TOTAL
	No.	No.	No.	Approx. CCA (Ha)	Approx. CCA (Ha)	Approx. CCA (Ha)	Approx. IP (Ha)	Approx. IP (Ha)	Approx. IP (Ha)
2011-12	23983	16903	40886	11992	16903	28895	15589	21974	37563
2012-13	27596	11717	39313	13798	11717	25515	17937	15232	33170
2013-14	26525	3697	30222	13263	3697	16960	17241	4806	22047
2014-15	14443	2746	17189	7222	2746	9968	9388	3570	12958
2015-16	18565	11363	29928	9283	11363	20645	12067	14771	26839
2016-17	26557	11841	38398	13279	11841	25120	17262	15393	32655
2017-18	30887	6335	37222	15444	6335	21779	20077	8236	28312
2018-19	38600	5724	44324	19300	5724	25024	25090	7441	32531
2019-20 (Up to January)	18575	14641	33216	9288	14641	23929	12074	19033	31107
Total	225731	84967	310698	112866	84967	197832	146725	110456	257182
Volume(Ha-m)		18693							

Schemes completed upto March, 2017 at Paschim Burdwan,Jhargram,Kalimpong have been incorporated in Purba Burdwan,Paschim Medinipur & Darjeeling respectively.

NOTE:- P&RD Report prepared on 03/02/2020 from MGNREGA Website. (i)For 19 districts report obtained from MGNREGA WEB site>MIS REPORT>ASSET CREATED. Here the fig. of remaining 4 districts is shown nil. So(ii) For remaining 4 districts i.e. Purba- Burdwan,Kalimpong,Jhargram & Alipurduar MGNREGA Web Site> State>Districts.>ASSET CREATED. This is done in consultation with P&RD deptt. on 16/10/19.

Annexure-R/17

Government of Jammu & Kashmir
PHE, I&FC Department
Civil Secretariat, Jammu.

Under Secretary to GoI,
(National Water Mission),
Ministry of Jal Shakti, DoWR, RD&GR,
Shram Shakti Bhawan, Rafi Marg, New Delhi.

No: PW/PHEJ/129/2019-WP Dated: 13.02.2020

Sub: O.A No. 597/2019 titled Rajinder Tyagi & Anr Vs U.O.I & Ors.

Sir,

Kindly refer to your letter No. T-39011/6/2019-GW Section/265-299 dated 30-01-2020 regarding the above subject. In this connection, the undersigned is directed to intimate that the Government of UT of J&K has taken the following steps to improve water conservation/water use efficiency:-

(i) An Act known as "State Water Resources (Regulation & Management) Act, 2010" has been enacted to consolidate the laws related to the use of water, measurement, construction, control and management of works with respect to water storage, conservation and protection, irrigation, water supply, flood control and prevention, improvement in the flow of water, protection and improvement in the physical integrity of water courses, lakes and springs and safety and surveillance of dams etc.

(ii) Besides, the UT has also constituted Jammu and Kashmir State Water Resources Regulatory Authority (JKSWRRA) in the year 2012 which is essentially responsible for regulating water resources, ensuring judicious, equitable and sustainable management, allocation and utilization of these resources, fixing the rates for use of water and all matters connected therewith or incidental thereto;

(iii) Under irrigation sector, modernization of irrigation canals & khuls is being undertaken as a regular activity to prevent seepages and leakages. To strengthen the embankments of canals, lining walls are being constructed to prevent wastage of water. The J&K UT is spending about Rs. 280.00 crore annually for construction, modernization, strengthening of irrigation canals and khuls with a view to ensure judicious utilization of irrigation water;

(iv) As regards utilization of Ground Water Resources, the whole of the UT of J&K has been categorized as "Safe" as per the recently released Ground Water Resources Assessment, 2017 report of the Central Ground Water Board. The report inter-alia mentions that:-

(a) There is no notified block of ground water in J&K;

(b) There is no significant variation in quality of ground water since last survey;

(c) For all usage, the J&K is not drawing more than 30% of ground water and there is further scope of drawal of ground water to another 50%;

(d) Even arterian conditions exists in some parts of the UT and
(e) There is no depleting trend of ground water and it does not show any alarming or over-exploitation stage.

(v) All the District have been asked to prepare District Water Conservation Plans for efficient and judicious use of water;

(vi) Installation of Water meters for commercial users has already been started and most of the commercial installations are getting metered water supply. Moreover, the UT Government is contemplating to get 100% water meter system for domestic users in due course;

(vii) Standard Operating Procedures (SOP) has been issued by the Chief Engineers of PHE Jammu/Kashmir for leak water detection system and its immediate rectification. All concerned PHE functionaries have been advised to adhere to the SOP.

(viii) Extensive awareness campaigns to sensitise the general public about judicious use of water and preventing its wastage are being carried out through Communication & Capacity Development Unit (CCDU) of PHE, I&FC Department J&K via media sources like mass communication, social media and through NGOs, field functionaries, District Administration etc.

(ix) Rural Development and Housing & Urban Development Department have been requested to sensitise the PRIs/Urban Local Bodies about judicious use of water.

Yours faithfully,

13.2.20

Director Planning
PHE, I&FC Department

Copy to the:

1. Special Secretary to Chief Secretary, J&K for information.
2. Public Law Officer, PHE/I&FC Department for information.
3. Pvt. Secy. to Comm./Secy. to Govt. PHE, I&FC Department for information of Comm./Secy.

Annexure R/18

Office of the Divisional Commissioner (Revenue)
(Coordination Branch)
Govt. of NCT of Delhi
5-Sham Nath Marg, Delhi-54

F.36 (124)/Coord./Div. Comm./2019/ 26 dated 17/01/2020

To,

Sh. Vinod Kumar,
Under Secretary,
National Water Mission,
Department of Water Resource, RD & GR,
Ministry of Jal Shakti,
Shram Shakti Bhawan,
Rafi Marg, New Delhi-1110001.

Sub: - O.A. No. 0597/2019 of Shri Rajendra Tyagi & Anr. Vs Union of India & Ors.

Sir,

Kindly refer to the email along with its enclosures received from the Under Secretary, National Water Mission, Department of Water Resource, RD & GR, Ministry of Jal Shakti on the above cited subject.

In this regard, time bound action plans and monitoring is desired by Hon'ble NGT regarding preventing water wastage and misuse of ground water.

In this regard, it is stated to avoid misuse of Ground Water the Delhi Jal Baord has provided list of illegal borewells in all 11 Revenue District of NCT of Delhi for sealing, prosecution under Environment Protection Act and Penalty as per Polluters Pay Priciple. In this regard Hon'ble NGT has passed its order in matter of Abdul Farukh vs GNCT of Delhi (OA NO. 25/2019) regarding illegal installation of Tube-well or borewells. In this matter an action plan has been prepared which was reviewed in a meeting held by the Chief Secretary, Delhi with the officials of DPCC, Delhi Jal Board and Revenue Department. The action is being taken by District Level Officials of Revenue Department and Delhi Jal Board.

Yours faithfully,

17/1/2020

SDM-IV (HQ)/LINK OFFICER

21/1/2020

Annexure - R/19

Dy. No. 348/NWM
15/6/2020

No.C-30099/D-445-FII(9)-2020/ 6553

CHANDIGARH ADMINISTRATION
LOCAL GOVERNMENT DEPARTMENT

4 ½ th Floor, Deluxe Building, U.T. Secretariat Sector 9-D, Chandigarh - 160009

Dated: 21-5-2020

To

The Under Secretary,
Govt. of India, M/o Jal Shakti,
Department of WR, RD & GR,
National Water Mission, 2nd Floor Block No. III,
CGO Complex, Lodhi Road,
New Delhi - 110011.

Dmp 15/4/2020
Mailed

Subject: **O.A. No. 597/2019 – Sh. Rajendra Tyagi Vs. UOI and Ors. Before NGT.**

******

Sir,

I am directed to refer to your letter no. T-39011/6/2019-GW Section/265-299 dated 30.01.2020 and to state that the reply received from the Commissioner, Municipal Corporation, Chandigarh vide Memo no. CE/MC/1736 dated 17.03.2020 along with its enclosures are sent herewith, which is self-explanatory.

Yours faithfully,

Ramesh Kumar

Superintendent Local Govt.,
For Principal Secretary Local Govt.,
Chandigarh Administration.

LOCAL GOVT. DEPTT.
Diary No. 445
Dated 18/03/2020

From

The Commissioner,
Municipal Corporation,
Chandigarh.

To

The Principal Secretary,
Local Government Department,
Chandigarh,
U.T., Chandigarh.

Memo No.CE/MC/ 1736
Dated: 17/3/2020

Subject: OA NO. 597/2019- Sh, Rajendra Tyagi Vs. UOI and ors. before NGT.

Please refer your letter no. C-30099/D/229-FII(9)-2020/3021 dated 19.02.2020 vide which a copy of letter no. T-39011/6/2019/GW Section/265/299 dated 30.01.2020 recevied from Ministry of Jal Shakti, GOI has been to this office to send the action taken report in the matter cited in subject.

I have been directed to intimate that the reply in the matter has been already been sent to the Secretary, Ministry of Jal Shakti, Department of Water Resources, River Development and Ganga Rejuventation, Government of India vide this office memo no. 497 dated 29.01.2020 (Copy enclosed).

This is for your kind information and necessary action please.

DA/As Above

for Executive Engineer(W&E),
Commissioner,
M.C., Chandigarh.
Dated. 16/3/2020

Endst NO.

A Copy of above is forwarded to PS to CMC for kind information o W/Commissioner, Municipal Corporation Chandigarh please.

DA/Nil

for Executive Engineer(W&E),
Commissioner,
M.C., Chandigarh.

(2)

W-83

From

The Commissioner
Municipal Corporation
Chandigarh

To

The Secretary
GOI Ministry of Jal Shakti
Department of Water Resources
River Development & Ganga Rejuvenation
New Delhi

Memo No. 494
Dated: 29/11/2020

Subject: Regarding urgent steps to improve water conservation/ water use efficiency in the country- regarding

Please refer to your D.O. No T-39011/6/2019-GW/86 dated 07.01.2019 on the subject.

Municipal Corporation Chandigarh is taking all the necessary steps and measures to improve water conservation/ water use efficiently in the city. The following measures are being taken in this regard:

1. **For improvement of ground water level:** There are approximately 300 number deep bore tubewells in the city, which are being used for extraction of ground water to be used for drinking purpose in the city. Recently, a scheme of bringing 29 MGD of canal water has been commissioned. Now, all the tubewells shall be phased out in a time bound manner to stop withdrawal of ground water, which will eventually help in improving the ground water level.
2. **Rain water harvesting:** Rain water harvesting is being installed in all Govt Buildings, Private Institutes. As per Building Bye Laws, it is mandatory for all houses having area 500 square yard are required to install rain water harvesting in their premises before NOC is issued to it.
3. **Reduction in NRW/ leakages:** To stop wastage of water, all the water connections in the city are metered and in case of non replacement of defective water meter by the occupant of premises, penal rate is charged in the water supply bill. At present, Chandigarh is having approximately 26% NRW. A Project for 24x7 Water Supply Scheme in the city is being undertaken under Chandigarh Smart City Private Limited with an aim to reduce the NRW less than 15%.
4. **Public awareness:** Public awareness meetings, rallies, route march, poster/slogan/essay/debate competitions, nukkad nataks for public and students in Schools are conducted regularly to sensitize all to use water efficiently in their daily use and to stop wastage of water. Recently during "Jal Shakti Abhiyan", 1450 number of such mass awareness rallies as above was held with the help of Resident Welfare Association/ Market Welfare Association and in all Schools with total participation of nearly 1.8 Lakh number of residents.
5. **Use of waste water:** Approximately 60 MLD of waste water (tertiary treated) is being used in all the Green Belts, Parks, Golf Club and School/ Colleges grounds for irrigation purpose. As per Water Supply Bye Laws, is mandatory for all the houses having area more than 500 square yard to have tertiary treated water connection in their premises.
6. **Use of Dual Piping System:** Dual piping system is being used in newly constructed Govt buildings to save precious potable water.

DA/- Nil

Commissioner
Municipal Corporation
Chandigarh

Annexure R/20

चेतन बी. संघी, भा. प्र. से
CHETAN B. SANGHI, IAS
मुख्य सचिव
CHIEF SECRETARY

सत्यमेव जयते

फोन / Phone : 03192-233110 / 234087
फैक्स सं. / Fax No.: 03192-232656
ई-मेल / E-mail: cs-andaman@nic.in
अण्डमान तथा निकोबार प्रशासन
ANDAMAN AND NICOBAR ADMINISTRATION
सचिवालय / SECRETARIAT

P 11/3

MD, NDM

D.O.No.2-2(96)/Tech/SE(P)/CE/2019-20

Port Blair, dated the 12th March, 2020

Dear Sir,

This has reference to your letter D.O.No.T-39011/6/2019-GW Section dated 21.8.2019 and D.O.No.T-39011/6/2019-GW/NWM/492 dated 19.6.2020 regarding urgent steps to improve water conservation/water use efficiency with reference to OA No.597/2019 – Sh. Rejendra Tyagi Vs Ors in the Hon'ble NGT.

A&N Islands receive a fairly high rainfall of about 3100 mm annually distributed over 7-8 months from May to November/December. The majority of the water, however remains untapped due to very limited ground water recharge potential on account of local geological conditions. Further there are no major rivers or streams in the island and the water requirements of the islands throughout the year are met by small dams, check weirs and collection wells near small springs. There is thus an issue of round the year availability of water in the islands, particularly in the dry months.

UT Administration has taken a number of steps and initiatives to improve water conservation/water use efficiency in the islands. Rain water harvesting systems of appropriate capacities have now been made mandatory for all new constructions in both the rural and the urban areas of the Islands. Further, the Port Blair Municipal Council (where around 40% of the population of the islands resides) has made it mandatory for all households to install water meters under the Smart City initiative. The same will also be replicated in all the rural areas of the UT.

South Andaman district of the UT actively participated in the recently concluded Jal Shakti Abhiyan and achieved a National rank of 2 (two) amongst the districts UT/NE and Hilly states category.

The Nodal department for water, Andaman Public Works Department has formulated an Action Plan to improve water conservation/promotion of water use efficiency which is enclosed for reference. Further, the Administration has been regularly corresponding with the CGWB to expedite the preparation of the Ground Water Conservation Action Plan which is yet to be submitted by them (references enclosed).

A&N Administration is fully committed towards water conservation and to enhance water use efficiency in the Islands. The Ground Water Conservation Action Plan will be submitted to the Ministry immediately on receipt from the CGWB.

With regards,

Yours sincerely

(Chetan B. Sanghi)

Shri U.P. Singh, IAS
Secretary, Ministry of Jal Shakti
Department of Water Resource, Govt. of India
Jal Shakti Bhawan
Rafi Marg, New Delhi - 110001

Action plan to improve water conservation/water use efficiency

Domestic water use efficiency

a. **Minimization of transmission loses:** - Installation of SCADA (Supervisory Control and Data Acquisition) for identifying daily losses along the transmission as well as distribution route of main pipe line. Auto Over flow control system is also planned to reduce wastages at domestic level.

Action plan:

i)Being implemented in PBMC area under Smart City for monitoring distribution and losses.

ii) APWD undertaking installation of SCADA to monitor water transmission losses from Dhanikahri Dam to Port Blair treatment plan.

iii) System is planned to be replicated in water supply scheme in North and Middle Andaman and Nicobar subsequently

b. **Dual Water Supply System:-** Domestic Water Supply efficiency can be improved by adopting dual water supply system with Rain Water Harvesting. It shall allow use of domestic Waste from Kitchen/Bath for flushing of toilets and saving precious drinking water. In combination of Rain water harvesting dual water supply system can be utilised to meet all other demand except drinking, cooking and household need.

Action plan:

i) Made mandatory in all new residential and Non-residential government building.

ii) Retrofitting in existing buildings will be taken up in phased manner.

c. **Treatment and re-use:-** About 85% of water supplied to house hold became part of sewage. Therefore through integrated approach of collection, transportation and treatment a large amount of sewage water can be treated and reused in various sectors like irrigation, agriculture and construction work saving huge quantum of potable water being used in secondary sector.

Action Plan

i) Sewerage system for Port Blair is being taken up under smart city with total install capacity of about 28 MLD.

ii) Sewerage system in coastal area has been proposed under Integrated Coastal Zone management Plan of Ministry of Forest and Environment.

iii) In Rural area Department of RD has taken up grey water management.

d. **Rainwater Harvesting:** - Rain water Harvesting is important in A & N Island. Due to limited river system most of water supply system is focused on rainwater Harvesting. But due to Lithological characteristics of ground there is limited potential for ground water recharge. Hence option for more rain water harvesting in increasing quantum of storage capacity in house hold as well as promote community rain water harvesting to ensure availability of water for local requirement from balance rain water reserve.

Action Plan:

i) Rain water harvesting made compulsory in all residential and Nonresidential building.

ii) All New Buildings (Residential/Non-Residential) are planned to have in-built rain water harvesting storage tank with capacity to meet water demand of 4-5 Months.

iii) Installation of additional rain water storage tanks has been planned in line with all Single village rural water supply scheme.

e. **Development of river /Spring Valley**: In A&N Island river valley are shallow and short with heavy silt load during rainy season. Construction of check weir results in rapid sedimentation and loss of storage capacity. A better option of construction of barrage type structure will allow sediment flow during rainy season and improve storage capacity of spring and river valley.

Action plan:

i) Central Island Agriculture Research Institute has taken up preparation of state specific action plan for A&N Island with funding from national water Mission. CIARI has been suggested for evaluation of such structure and suggest potential site for ensuring sustainable water supply.

(12)

February
6, 2020
11:48
AM

From: Shri Arun Kumar

To: AMLANJYOTI KAR

Attachmentscan0003.pdf (594.1 KB) Download | Briefcase

Sir,

Kindly find attached herewith a copy of D.O. letter on Report on Ground Water Extraction with the request to immediately send the report.

With Regards!

Arun Kumar

Annexure-R/21

04896262262(o)
263367(Fax)
Email:selpwd@gmail.com
Email: lk-pwd@nic.in

सत्यमेव जयते

GOVERNMENT OF INDIA/भारतसरकार

LAKSHADWEEP ADMINISTRATION/लक्षद्वीपप्रशासन

(LAKSHADWEEP PUBLIC WORKS DEPARTMENT)/लक्षद्वीपलोकनिर्माणविभाग

CIRCLE OFFICE/सर्किलकार्यालय

KAVARATTI – 682555

F.No.101/05/2019-S2 /636 दिनांक/Date: 06.03.2020

To/ सेवामे

✓The Secretary
Department of Water Resources,
River Development & Ganga Rejuvenation
Ministry of Jal Shakti
Shram Shakti Bhawan, Rafi Marg
New Delhi - 110 001
secy-mowr@nic.in

Sub / विषय: OA No.597/2019 - Shri. Rajendra Tyagi Vs Ors before NGT - Reg.

Ref/ संदर्भ : No.T-39011/6/2019-GW/NWM/490 dated 19.02.2020.

Sir/ महोदय,

Kindly refer to the reference cited on subject mentioned. The action taken report on OA No.597/2019 - Sh. Rjendra Tyagi V/s Ors regarding the steps to improve water conservation/ water use efficiency in the country has already been submitted vide letter even number dated 07.02.2020 (coy enclosed for ready reference). This is for kind information.

Encl: As above

Yours faithfully/ आपकाआभारी

ओ.पी. मिश्रा

O.P. Mishra/ ओ.पी. मिश्रा
Secretary (Works)/ सचिव (निर्माण)

Copy to/कोकॉपी

PA to the Hon'ble Administrator for kind information

सत्यमेव जयते

04896262262(o)
263367(Fax)
Email:selpwd@gmail.com
Email: lk-pwd@nic.in

GOVERNMENT OF INDIA/भारतसरकार

LAKSHADWEEP ADMINISTRATION/लक्षद्वीपप्रशासन

(LAKSHADWEEP PUBLIC WORKS DEPARTMENT)/लक्षद्वीपलोकनिर्माणविभाग

CIRCLE OFFICE/सर्किलकार्यालय

KAVARATTI – 682555

F.No.101/05/2019-S2 दिनांक/Date:07.02.2020

To/ सेवामे

The Secretary
Department of Water Resources,
River Development & Ganga Rejuvenation
Ministry of Jal Shakti
Shram Shakti Bhawan, Rafi Marg
New Delhi - 110 001
usnwm-mowr@gov.in

Sub / विषय: OA No.597/2019 - Shri. Rajendra Tyagi Vs UOI & Ors before NGT - Reg.

Ref/ संदर्भ : No.T-39011/6/2019-GW Section/265-299 dated 30.01.2020.

Sir/ महोदय,

In inviting reference to the subject mentioned, the action taken report in this regard is hereby submitted.

1. The Regional Director, Central Ground Water Board requested the UT Administration to provide inputs/ action taken on the representation about wastage of precious ground water with respect to the NGT case vide letter No.11/T36/19-20/-1064 dated 18.08.2019. The reply in this regard has already been provided to the CGWB vide F.No.118/02/2017-S4 dated 18.09.2019 (copy enclosed).
2. Lakshadweep islands have a delicate ecosystem with limited fresh water resources. The only source of freshwater is groundwater which is very limited, even though islands receive high rainfall the lack of surface storage and the limited groundwater storage capacity, where fresh water occurring as small lens floating over salt water, make fresh water a precious commodity.
3. Open dug wells are the traditional methods used by the islanders to obtain fresh water for their basic needs. All the households are having a dug well which is mainly used for domestic purposes. Usage of ½ HP pumps came in practice in the islands.
4. There is no minor or major irrigation projects in UT of Lakshadweep.

5. In Govt. buildings aducate measures have been taken to prevent the wastage of groundwater from overflowing overhead tanks, in the private buildings the Administration has made aware the public on the scarcity and awful usage of precious groundwater by means of public announcements and distributions of leaflets (copy enclosed). No such wasting of groundwater from overflowing overheads tanks is being noticed nor received any complaint regarding such wastages.
6. State Ground Water Authority has been constituted and notified for the regulation of groundwater extraction.

Encl: As above

Yours faithfully/ आपकाआभारी

Vijendra Singh Rawat IAS/विजयेंद्र सिंह रावत IAS
Secretary (Works)/ सचिव (निर्माण)

04896262262(o)
263367(Fax)
Email:selpwd@gmail.com
Email: lk-pwd@nic.in

GOVERNMENT OF INDIA/ भारत सरकार
LAKSHADWEEP ADMINISTRATION/ लक्षदवीप प्रशासन
(LAKSHADWEEP PUBLIC WORKS DEPARTMENT)/ लक्षदवीप लोक निर्माण विभाग
CIRCLE OFFICE/ सर्किल कार्यालय
KAVARATTI - 682555

F.No.118/02/2017-S4

दिनाक/Dated: 18.09.2019

To/ सेवा मे

The Regional Director,
Dept. of Water Resources, RD & GR
Ground Water Board, Kerala Region
Kedaram, Kesavadasapuram
Thiruvananthapuram - 695 004
rdkr-cgwb@nic.in

Sub / विषय: Representation about wastage of precious groundwater from overflowing overhead tanks across the country - Reg.

Ref/ संदर्भ : No.11/T36/19-20/-1064 dated 18.08.2019.

Sir / महोदय,

Please refer to your letter cited on the subject mentioned. Lakshadweep islands have a delicate ecosystem with limited fresh water resources. The only source of freshwater is groundwater which is very limited, even though islands receive high rainfall the lack of surface storage and the limited groundwater storage capacity, where fresh water occurring as small lens floating over salt water, make fresh water a precious commodity.

Open dug wells are the traditional methods used by the islanders to obtain fresh water for their basic needs. All the households are having a dug well which is mainly used for domestic purposes. Usage of ½ HP pumps came in practice in the islands. In Govt. buildings educate measures have been taken to prevent the wastage of groundwater from overflowing overhead tanks, in the private buildings the Administration has made aware the public on the scarcity and awful usage of precious groundwater by means of public announcements and distributions of leaflets (copy enclosed). No such wasting of groundwater from overflowing overheads tanks is being noticed nor received any complaint regarding such wastages.

Encl: As above

Yours faithfully/ आपका आभारी

C.N. Shajahan / सि.एन.शाजहान
Superintending Engineer/ अधीक्षण अभियंता

'Conserve water for tomorrow'

It is noticed that a lot of pump-sets have been installed in almost all islands and pumping of water is done indiscriminately. As everybody is aware, we have limited quantity of ground water to be used by us which is also required to be conserved for future generation. Therefore pumping is to be discouraged. In unavoidable situations when pumping is required, following precautions may be taken :

1. Foot valve may be kept only 6 inches below water surface.
2. Pumping may be done maximum for 10 minutes in one stretch.
3. Next pumping can be done after a break of at least half an hour.
4. Low horse-power pump-sets, preferably, 0.25/0.5 HP may be used.
5. Avoid installation of more than one pump set in a single well.

Lakshadweep Public Works Department

LGP. Kvt. O-40(1)/5 2002/1000

179874/2020/Water-II

Annexure-R/22

365

450

W-11048/6/2019-JJM-II
Government of India
Ministry of Jal Shakti
Department of Drinking Water & Sanitation
National Jal Jeevan Mission

4th Floor Pt. Deendayal Antyodaya Bhawan
CGO Complex, Lodi Road
New Delhi-110 003
Dated 20th January, 2020

OFFICE MEMORANDUM

Subject: Urgent steps to improve water conservation/water use efficiency in the country, reg...

The undersigned is directed to refer to D.O. letter No. T-39011/6/2019-GW/91-95 dated 07.01.2020 of Secretary, DoWR on the above cited subject and to say that the action taken report in respect of this Department is enclosed at Annex.

2. The undersigned is also directed to inform that DDWS, as part of the approval of Annual Action Plans and during the review meetings with the States would be undertaking compliance of the measures mentioned in the Annex for efficient water-use.

Encl: As above

20/1/2020

(Vikas Srivastava)
Under Secretary to Government of India
E-mail: vikas.sri@nic.in

Secretary,
Department of Water Resources,
River Development & Ganga Rejuvenation,
Shram Shakti Bhawan, New Delhi

360 451

179874/2020/Water-II

Annex

Points highlighted in 21.08.2019 letter	Response of Department of Drinking Water and Sanitation based on Jal Jeevan Mission Guidelines
1. There is general lack of awareness on the part of general public in using the ground water efficiently which has resulted in wastage of the precious water through the overflowing overhead tanks, excessive use in flushing cisterns in toilets, wastage of water in bathing/ hand-wash basins/ kitchens etc	Under Jal Jeevan Mission (JJM) guidelines, the following specific measures have been included as part of the IEC Campaign to generate awareness on efficient water use: i.) drive positive behavioral changes among stakeholders with respect to judicious use of water, safe handling and storage, ownership of water supply system, etc.; ii.) create awareness and motivate people to take up affirmative action for protection of drinking water sources and against misuse of water; iii.) create awareness and motivate people to conserve water resources; iv.) encourage community to measure water and promote water tariff/ user charges.
2. There is substantial loss of water due to leakage/ seepage during transmission/ distribution of water from source up to the consumer end.	JJM envisages (para 8.7 of guidelines) water audit of identified water supply systems to reduce the water losses as per the prevailing standards in bulk water supply systems for multi-villages (15% as per CPHEEO norms). States would be required to identify such systems for carrying out water audits.
3. There is a need to sensitize all concerned through mass media communication/ radio jingles/ TV commercials, etc. about judicious use of water resources'	JJM envisages a paradigm shift in the approach to drinking water provision from Departmental approach to Utility based approach by focusing on water management instead of infrastructure development. Further, recovery of user charges to meet the full O&M is vested with Village Water and Sanitation Committee. To reduce non-revenue water, water audits would be undertaken for Identified schemes.
4. There is a need to work out appropriate mechanism for, formulating water pricing policies including exploring the feasibility of putting water meters etc (where the supply is through Govt. developed sources) reduce non-revenue losses and to issue suitable directions to general mass through involvement of local municipal authorities for reducing the wastage through overflowing tanks, flushing cisterns etc.	

20/11/2

Annexure-R/23

Dy. No. 192/NWM
24/2/2020

No.K-16011/09/2020-AMRUT-1A
Government of India
Ministry of Housing & Urban Affairs
(AMRUT Division)

Nirman Bhawan, New Delhi,
the 19th February, 2020.

OFFICE MEMEORANDUM

Sub: O.A. No. 597/2019 – Shri Rajendra Tyagi Vs UOI & Others before NGT - Initiation of urgent steps to improve water conservation / water use efficiency in the country - Reg.

The undersigned is directed to refer to Secretary, Department of Water Resources, River Development & Ganga Rejuvenation's D.O. letter No.T.39011/6/2019-GW of 21.8.2019 and 07.01.2020 and O.M. No.T.39011/6/2019-GW dated 30.01.2020 on the subject mentioned above and to send herewith requisite action taken report on improving water conservation / water use efficiency in the urban area.

R Kumar

(Rajesh Kumar)
Under Secretary to the Govt. of India
Tel. No.011- 23061407

Encl: as above.

To,

Ministry of Jal Shakti,
D/o Water Resources, River Development & Ganga Rejuvenation,
[Kind Attn: Shri Vinod Kumar, Under Secretary]
National Water Mission, CGO Complex,
2nd Floor, Block No.III, Lodhi Road,
New Delhi – 3.

24/2/2020

Reminder

MINISTRY OF HOUSING AND URBAN AFFAIRS – ACTION TAKEN NOTE ON IMPROVING WATER CONSERVATION / WATER USE EFFICIENCY IN THE URBAN AREA:

Ministry of Housing and Urban Affairs lunched Atal Mission for Rejuvenation and Urban Transformation (AMRUT) on June 25, 2015 in selected 500 cities and towns across India covering about 22.50 crore population (60% of the Urban Population) as per census 2011. The Mission period is 5 years i.e. from FY 2015-2016 to FY 2019-2020. The Mission focuses on, inter alia, development of basic urban infrastructure in the Mission cities, such as water supply, sewerage & septage management, storm water drainage, green spaces & parks, non-motorized urban transport. Out of total State Annual Action Plans (SAAPs) of ₹77,640 crore approved for the entire mission period, ₹39,011 crore has been allocated for water supply sector. Water supply component of the Mission allows States/UTs to taken water supply systems including augmentation of existing water supply, water treatment plants and universal metering; rehabilitation of old water supply systems, including treatment plants; rejuvenation of water bodies specifically for drinking water supply and recharging of ground water.

2. In order to promote recharge of ground water, Ministry of Housing & Urban Affairs (MoHUA) has formulated guidelines for the States to adopt measures suitable to local conditions. Adequate focus has been given on requirement of rainwater harvesting and water conservation measures in Unified Building Bye Laws (UBBL) of Delhi, 2016, Model Building Bye Laws (MBBL), 2016 and Urban and Regional Development Plan Formulation and Implementation (URDPFI) Guidelines, 2014. As per MBBL, "all buildings having a plot size of 100 sq.m. or more, while submitting the building plans for sanction, shall mandatorily include the complete proposal of rainwater harvesting". This feature has been adopted by 33 States/ UTs.

3. Ministry of Housing & Urban Affairs (MoHUA) also participated in Jal Shakti Abhiyan (JSA) launched by Ministry of Jal Shakti (MoJS) in two phases, Phase 1 from 1st July 2019 to 15th September 2019 and Phase 2 from 30th September 2019 to 30th November 2019, for the States which receive retreating monsoon to spread awareness among masses about compelling need of water conservation. Extensive Information, Education and Communication (IEC) drive was launched in water stressed cities across the country. In order to ensure door to door outreach of the campaign, Ministry has engaged RWAs, schools, Civil Society Organizations (CSOs), Nehru Yuva Kendras (NYKs), NCC cadets, SHGs etc. In addition, leading personalities in film industry and sports have also been roped in. The activities undertaken for water conservation mainly include Rain Water Harvesting (RWH), reuse of treated waste water, rejuvenation of water bodies and intensive plantation for which detailed guidelines was issued by MoHUA and available at mohua.gov.in/ amrut.gov.in.

4. JSA guidelines states that RWH needs to be implemented as per the provisions of Model Building Bye-Laws (MBBL) 2016 shared with all States/UTs for adoption. Thereafter, an effective enforcement mechanism should be put in place for providing RWH structures in all buildings as stipulated under BBL of the city or State/UT. Urban Local Bodies (ULBs) should constitute a Rain Water Harvesting Cell which will be responsible for effective monitoring of RWH in the city. Urban Local Bodies (ULBs) should check that all public buildings, group housing societies etc have got RWH structures. If they are found non-functional during the drive, then they should be made functional. ULBs should ensure that in future all building permissions granted must have RWH structures incorporated, as per BBLs, and same should be checked before issuing Occupancy-cum-Completion Certificate (OCC). Also, ULBs should undertake de-concretizing of pavements around trees.

5. As per guidelines, to ensure optimum use of water, it is important to undertake treatment of waste water and reuse it for toilet flushing, agriculture/horticulture, fire hydrants, industries, construction activities, power plants, etc. Provision of dual piping under Building Bye-Laws should be checked in all government (Central/State/UT/ULB) buildings, commercial complexes, public buildings like educational institutions, hospitals, and Group Housing Societies, whether the same is available, so that the treated waste water can be used. Further, as per directions of Ministry of Power, Tariff Policy Circular dated 28 January, 2016, it is mandatory that power plants within 50 kms from Sewage Treatment Plants have to develop a system for conveyance and use treated waste water.

6. Moreover, guidelines urges every city to initiate action to revive at least one water body during JSA. As per guidelines, water body should be cleaned through bio-remediation measures, de-silting, aeration, removal of floating and other invasive aquatic plant-species or any other technology suiting local conditions. Shore-line of the water bodies should be properly fenced to protect them from encroachment, inflow of domestic/ industrial sewage into the water body should be arrested, water front development and catchment area treatment via afforestation, storm water drainage management, silt traps, etc. may be undertaken.

7. Ministry has published Manual on Storm Water Drainage Systems, 2019 to provide necessary guidance towards all aspects of sustainable design, planning and management of storm water drainage systems in urban areas of the Country. The Manual also proposes various methods of water conservation, control of flooding and necessary measures to be taken for flood response in urban areas. The various options / techniques for rainwater harvesting and recharge, suitable for integration with storm water drainage system design, are also listed in the Manual. Central Public Works Department has also bought out a Manual on "Rain Water Harvesting & Conservation" in June 2012.

Ministry has also published Manual on Sewerage and Sewage Treatment Systems, 2013, wherein a separate Chapter on Recycling and Reuse of sewage indicates the overview of the current practices in India & World and different case studies in recycling and reuse of sewage.

Annexure-R/24

File No.T-39075/3/2019-BP-I DTE-Part(1)

भारत सरकार Government of India
केन्द्रीय जल आयोग Central Water Commission
बेसिन आयोजन एवं प्रयोजन संगठन Basin Planning & Management Organisation
बेसिन आयोजन-I निदेशालय Basin Planning-I Directorate
*****
पंचम तल (दक्षिण), सेवा भवन 5th Floor, Sewa Bhawan
रामकृष्ण पुरम, नई दिल्ली- 66 Ramakrishna Puram, New Delhi-110066
दूरभाष:011-26100802
ईमेल: bpdte@nic.in

Date: 07.02.2020

To
Shri Vimal Kumar
Under Secretary
National Water Mission
Department of Water Resources, RD&GR
Ministry of Jal Shakti
Email- usnwm-mowr@gov.in

Subject: NGT Order in OA No 597/2019 in the matters of Rajendra Tyagi & Anr versus Union of India & others- Reg

Ref: 1. Email from NWM on 09.01.2020
2. CWC Letter No T-57078/1/2019-WP&P- Coordination dated 15.01.2020
3. DO Letter No T-39011/6/2019-GW/91-95 dated 07.01.2020
4. DO Letter No T-39011/6/2019-GW Section 21.8.2019

Sir,

Kind reference is invited to your mail dated 09.01.2020 on the subject mentioned above. Desired information does not pertain to CWC. However, a gist of the initiatives and interventions in this regard is enclosed herewith.

This is issued with the approval of Chief Engineer, BPMO, CWC.

Signature Not Verified
Digitally signed by ARKAPRABHA MAJUMDER
Date: 2020.02.14 11:27:17 IST

Enclo: As mentioned above

(A.Majumder)
Deputy Director

Copy for information to:

i. PPS to CE, BPMO, CWC, Sewa Bhawan, New Delhi
ii. Director WP&P- Coordination Dte, CWC, Sewa Bhawan, New Delhi
iii. Director, Economic Dte, CWC, Sewa Bhawan, New Delhi
iv. Director, WM Dte, CWC, Sewa Bhawan, New Delhi
v. Director IPO Dte, CWC, Sewa Bhawan, New Delhi
1. **Improving Water Use Efficiency**

India has about 18% of the world's population, but has only 4% of world's renewable water resources. With ever increasing population to support food requirement of more than 1.2 billion people irrigation water demand is increasing. The concomitant rapid urbanisation and industrialisation are also taking a heavy toll on the overall water demand scenario. In the result, the gap between water demand and availability has been progressively increasing. Achieving high water use efficiency is thus the first step along the path towards sustainable water development and management. The National Water Policy, 2012 also lays stress on conservation of water. One way to ensure rapid sustainable development is to attempt highest standards of efficiency in water use besides demand side optimal management through mass awareness. It should be our endeavour to achieve the low demand scenario for which it is imperative that considerably higher level of efficiency is brought about in water use in all the three sectors namely Irrigation, Domestic and Industrial sector. Measures of increasing water use efficiency in irrigation, domestic and industrial sector is enclosed at **Annexure-I.**

2. Provisions under National Water Policy 2012 related to Demand Management and Water-use Efficiency

Para 6.1 A system to evolve benchmarks for water uses for different purposes, i.e., water footprints, and water auditing should be developed to promote and incentivize efficient use of water. The 'project' and the 'basin' water use efficiencies need to be improved through continuous water balance and water accounting studies. An institutional arrangement for promotion, regulation and evolving mechanisms for efficient use of water at basin/sub-basin level will be established for this purpose at the national level.

Para 6.2 The project appraisal and environment impact assessment for water uses, particularly for industrial projects, should, inter-alia, include the analysis of the water footprints for the use.

Para 6. 3 Recycle and reuse of water, including return flows, should be the general norm.

Para 6.4 Project financing should be structured to incentivize efficient & economic use of water and facilitate early completion of ongoing projects.

Para 6.5 Water saving in irrigation use is of paramount importance. Methods like aligning cropping pattern with natural resource endowments, micro irrigation (drip, sprinkler,etc.), automated irrigation operation, evaporation-transpiration reduction, etc., should be encouraged and incentivized. Recycling of canal seepage water through conjunctive ground water use may also be considered.

Para 6.6 Use of very small local level irrigation through small bunds, field ponds, agricultural and engineering methods and practices for watershed development, etc, need to be encouraged. However, their externalities, both positive and negative, like reduction of sediments and reduction of water availability, downstream, may be kept in view.

Para 6.7 There should be concurrent mechanism involving users for monitoring if the water use pattern is causing problems like unacceptable depletion or building up of ground waters, salinity, alkalinity or similar quality problems, etc., with a view to planning appropriate interventions.

campaign was carried out between October 01 to November 30, 2019. During the campaign, officers, water experts and scientists from the Government of India have worked together with State and district officials in India's water-stressed districts for water conservation and water resource management. Jal Shakti Abhiyan made water conservation a Jan Andolan through asset creation and extensive communication.

5. RRR of water bodies

5.1 Ministry of Jal Shakti (erstwhile Ministry of Water Resources, RD & GR), Government of India is implementing the scheme "Repair, Renovation & Restoration (RRR) of water bodies". This scheme is a continuing scheme since X Plan. Under this Scheme RRR of water bodies, one of the main scope of work is de-silting of tank bed along with other multiple objectives like comprehensive improvement and restoration of water bodies thereby increasing tank storage capacity, Ground Water Recharge, increased availability of drinking water, Improvement in agriculture/horticulture productivity, Improvement of catchment areas of tank commands by providing Central Grant to State Governments. At present, the scheme RRR of water bodies is directly linked to irrigation. Thus irrigation is the main component and water bodies eligible as per guidelines shall be included in the scheme. The scheme "RRR of water bodies" is now part of PMKSY (Har Khet Ko Pani,HKKP). Urban water bodies having water spread area from 2 hectares to 10 hectares are eligible to be included under the scheme. Rural water bodies having minimum water spread area of 5 hectares will be included under the scheme.

5.2 So far, since XII Plan, 2219 (Andhra Pradesh: 100, Bihar:93, Gujarat:61, Madhya Pradesh:125,Manipur:4,Meghalaya:9,Odisha:863,Rajasthan:68,Tamil Nadu:242, Telangana:575, Uttar Pradesh:74, Uttarakhand:5) number of water bodies have been included under the scheme of RRR of water bodies for Central assistance. Out of which, works on 1262 (Madhya Pradesh:121, Meghalaya:4,Odisha:734, Rajasthan:52,Tamil Nadu:104, Telangana:239,Uttar Pradesh-8) water bodies have been completed. Further, an Irrigation potential of 0.89 lac ha has been restored out of target Irrigation potential of 1.82 lac ha.

Annexure-R/25

Steps taken by National Water Mission to improve Water Conservation/ Water Use Efficiency in the country

The Government of India had launched National Action Plan on Climate Change (NAPCC) which inter-alia identified the approach to be adopted to meet the challenges of impact of climate change through eight National Missions including National Water Mission (NWM).

2. The Comprehensive Mission Document for NWM identified five goals and strategies which are being implemented by the Mission. Goal 2 of NWM envisages 'promotion of citizen and state action for water conservation, augmentation and preservation'. NWM has taken up the issue of water conservation as one of the most important activity in implementing its goals. In the recent time, following steps have been taken up by NWM in the direction of conservation of water:

(i) NWM has launched the 'Sahi-Fasal' campaign on 14.11.2019 to nudge farmers in the water stressed areas to grow crops which are not water intensive, but use water very efficiently; and are economically remunerative; are healthy and nutritious; suited to the agro-climatic and hydrological characteristics of the area; and are environment friendly. Creating awareness among farmers on appropriate crops, micro-irrigation, soil moisture conservation etc.; weaning them away from water intensive crops like paddy and sugarcane to crops like corn and maize, which require less water; assisting policy makers to frame policies that make effective pricing of inputs (water and electricity); improve procurement and market for these alternate crops, create appropriate storage them among other things, ultimately leading to an increase in the income of farmers are the key elements of "Sahi-Fasal".Under Sahi-Fasal, four workshops have been organized in Amritsar on 14.11.2019, New Delhi on 26-27.11.2019, Aurangabad on 13.01.2020 and Kurukshetra on 14.02.2020.

(ii) One of the strategies includes incentivization of organisations through awards for water conservation and efficient use of water. Accordingly, NWM has initiated National Water Mission Awards to recognize excellence in water conservation, efficient use of water and sustainable water management practices. First National Water Mission Awards, 2019 were held on 25th September, 2019 during which 23 winners were awarded in various categories.

(iii) A nationwide campaign to create awareness amongst citizens on water conservation has been initiated with Hon'ble Prime Minister in his 'Mann Ki Baat' on 30.06.2019, urging the citizens to join hands to create Jan-Andolan to save water. Recently, this Ministry has launched 'Jal Shakti Abhiyan' with the intent of participatory water management as a way forward to achieve sustainable water availability and management.

(iv) National Water Mission envisaged developing State Specific Action Plans (SSAP) for Water Sector covering Irrigation, Industry, domestic and waste water of a State/UT. The State Specific Action Plans for water sector would essentially consist of present

situation of water resources development and management. NWM is providing financial assistance of Rs. 50 lakh to major states and Rs. 30 lakh to small states/UTs as a grant for formulation of SSAPs for water sector. Five States (Arunachal Pradesh, Chhattisgarh, Uttarakhand, Tamil Nadu and West Bengal) have completed first phase of the SSAPs.

(v) National Water Mission has advised all central Ministries / Departments to install water saving aerators in the taps in toilets of these offices. They have also been advised to build rain water harvesting structures like dug wells, bore wells, recharge trenches, recharge pits, etc. in every premises to ensure that rain water is conserved and used to recharge the ground water aquifers.

(vi) A massive mass awareness programme has been undertaken on various aspects of water including water conservation. In this direction, training programmes have been undertaken in collaboration with reputed institutions. Besides, workshops have been held in water stressed areas for awareness building. Meetings have also been organised as a part of one of these strategies to interact and encourage corporate sectors / industries to take up, support and promote water conservation activities as a part of their Corporate Social Responsibility (CSR) wherein about 75 CPSEs participated from across the country.

(vii) National Water Mission has initiated a monthly seminar series 'Water Talk' in March, 2019 to stimulate awareness, build capacities of stakeholders and encourage people to become active participants to sustain life by saving water on earth. 12 Water Talks have held so far. Also, two jingles have been produced for sensitizing citizens about the importance of water conservation.

(viii) NWM had organized a workshop on "Increasing Water Use Efficiency in Industries", on 5th March 2020. This workshop formed a part of the series of national workshops which will be organized to nudge Indian businesses to manage their water use, and the business-risks emanating from this dependency on water, in a more efficient and responsible manner.

(ix) As a fallout of the decision in the meeting of the 'Inter–Ministerial Committee on Water Conservation' held on 16.01.2020 and chaired by Secretary, Department of Water Resources, River Development & Ganga Rejuvenation, National Water Mission organised a workshop on "Catch the Rain : Rain Water Harvesting and Artificial Recharge Structures for Water Conservation" on 13th March, 2020.

(x) The second meeting with empanelled 13 lead agencies & 49 field agencies was held under the Chairmanship of Additional Secretary& Mission Director, National Water Mission on 9th March 2020 with the objective of exchanging information and ideas on water management and water sustainability in vulnerable areas and to encourage participation of NGOs in various activities related to the five identified goals of NWM. During the meeting, it was noted that contribution of NGO's is paramount in bridging the gap between government and the targeted beneficiaries as they work in close proximity with the communities at the grass root level.

(xi) Deptt. of Water Resources, River Development & Ganga Rejuvenation will be the nodal Deptt. fo Jal Shakti Abhiyan-II (JSA-II) and National Water Mission will be the Implementing Agency. This abhiyan will cover all 720 districts of all States/UTs of India.

(xii) This Ministry also plans to set up 'National Bureau of Water Use Efficiency (NBWUE)' for improving water use efficiency across various sectors, namely, irrigation, drinking water supply, power generation, industry, etc.

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597505/2019/NWM

G. ASOK KUMAR,IAS
Mission Director
National Water Mission

भारत सरकार
GOVERNMENT OF INDIA
जल शक्ति मंत्रालय
MINISTRY OF JAL SHAKTI
जल संसाधन, नदी विकास और
गंगा संरक्षण विभाग
DEPTT. OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA REJUVENATION
राष्ट्रीय जल मिशन
NATIONAL WATER MISSION
द्वितीय तल, ब्लाक न. तृतीय
2nd FLOOR, BLOCK No. III
सी.जी.ओ. कॉम्प्लेक्स, लोधी रोड, नई दिल्ली-110003
CGO COMPLEX, LODHI ROAD, NEW DELHI-110003

D.O. No M.65022/11/2019–NWM | 1003-1086 Dated: 13.08.2019

Dear

As you are aware, water -a vital, finite resource-is getting depleted fast and becoming scarce in many parts of our country. Realizing its implications, Government of India had launched National Water Mission (NWM). Promotion of citizen and state actions for water conservation, augmentation and preservation is one of the important goals of NWM and creating mass awareness is one of its strategies.

2. A nation-wide campaign to create awareness among citizens on water conservation has been initiated with Hon'ble Prime Minister in his "Mann-Ki-Baat" on 30/6/2019, urging the citizens to join hands to create a *Jan-Andolan* to save water. Participatory water management should be the way forward to achieve sustainable water availability and management. "**Jal Sakthi Abhiyan**" has been launched by the **Ministry of Jal Sakthi** with this intent. With the arrival of monsoons, it would be appropriate that **"Rain Water Harvesting Structures"** (RWHS) like dug wells, bore wells, recharge trenches, recharge pits etc. are built in every premises to ensure that rainwater is conserved and used to *recharge the groundwater aquifers*. **Aerators** may be installed in taps to save water as requested vide NWM's OM dated 19th June, 2019 (copy enclosed).

3. Keeping in view the above, may I request you to kindly **issue directions** to ensure that **RWHS are built in the premises of all offices** of your department and **Aerators installed in all taps** in the toilets in these offices. NWM is willing to provide any technical assistance on matters related to RWHS and Aerators.

With regards,

Yours sincerely,

(G. Asok Kumar)
13/8/19

Copy to : all Secretaries of Govt. of India

(408)

M-65022/11/2019-NWM
Government of India
Ministry of Jal Shakti
Department of Water Resources, RD & GR
(National Water Mission)

2nd Floor, Block No.3
CGO Complex, Lodhi Road, New Delhi
Dated: 19th June, 2019

Office Memorandum

Sub: - Citizen and State actions for water conservation, augmentation and preservation.

The undersigned is directed to say that water is not an infinite resource and sources of water will dwindle due to global warming, over-exploitation, human errors etc. Water table is going down day-by-day and in some of the areas in India have come into the category of severe to critical. Some of the areas are over-exploited and soon those areas may reach the level of "Day Zero". Hence there is an urgent need to conserve every drop of water.

2. A lot of water is being used in toilets and canteens of Govt. Offices. It is noticed that many times water taps used there are not closed properly resulting in the wastage of a large quantity of water due to free flow of water these open taps. It should be ensured that leakages from these taps are plugged.

3. We can reduce the water usage while washing hands in toilets and canteens, If a contraption called "Aerator" Which is easily available in the open market and Through online shopping is attached to the taps (as enclosed). We can save upto 80% of tap water in every use this way. In total million liters of water can be saved all over the country if this intervention is implemented.

4. It is requested that awareness for Water Conservation water may be spread among officials of your Ministry/Department by issuing directions to keep water taps closed when they are not in use. Directions may also be issued to all concerned to install a water saving device i.e. "Aerator" at the outlet of water taps as a contribution towards Water Conservation.

5 This issues with the approval of Mission Director, National Water mission.

Encl: As above

Vinod

(Vinod Kumar)
Under Secretary to the Govt. of India
Ph. 24368985

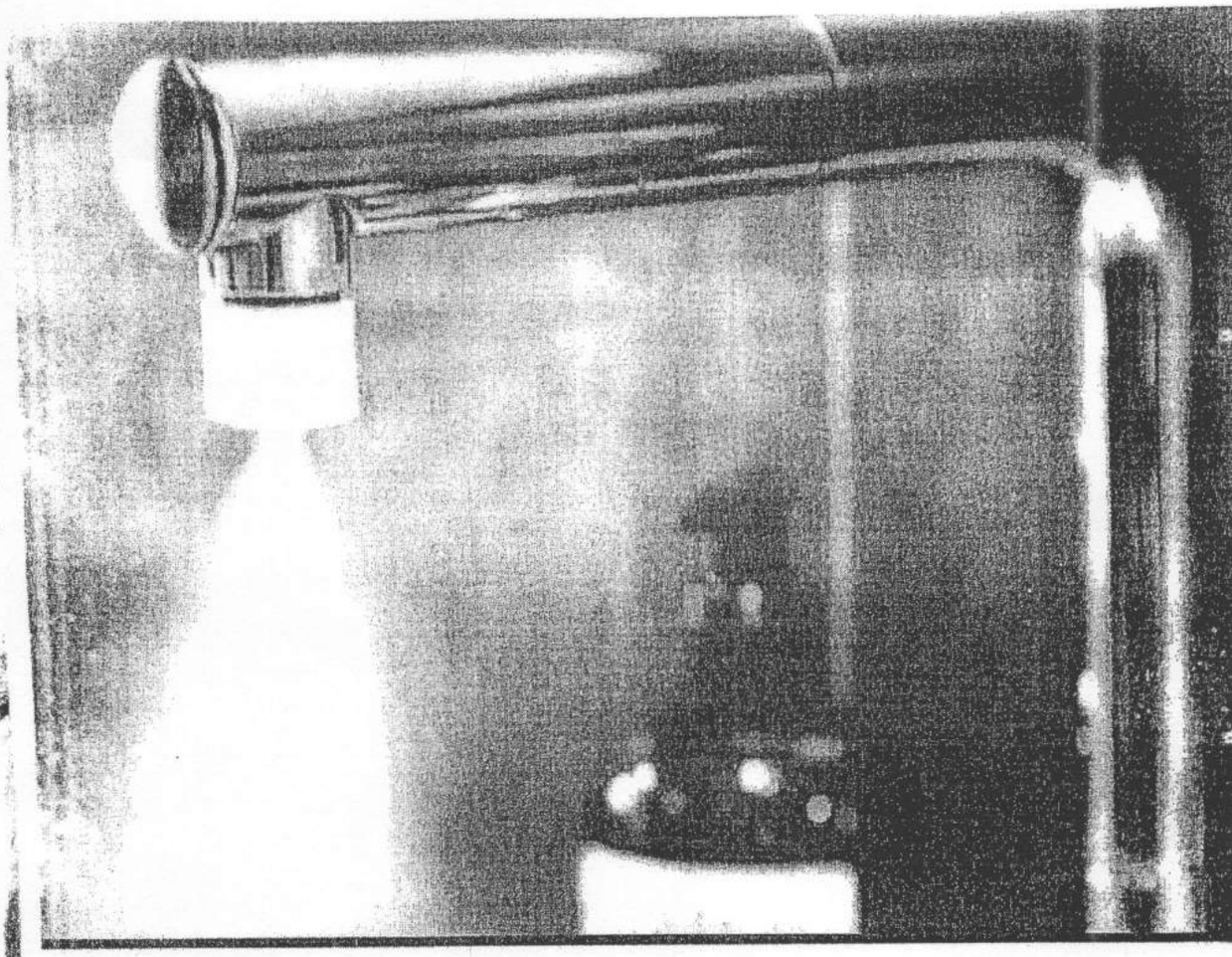
To all Ministries/Departments.

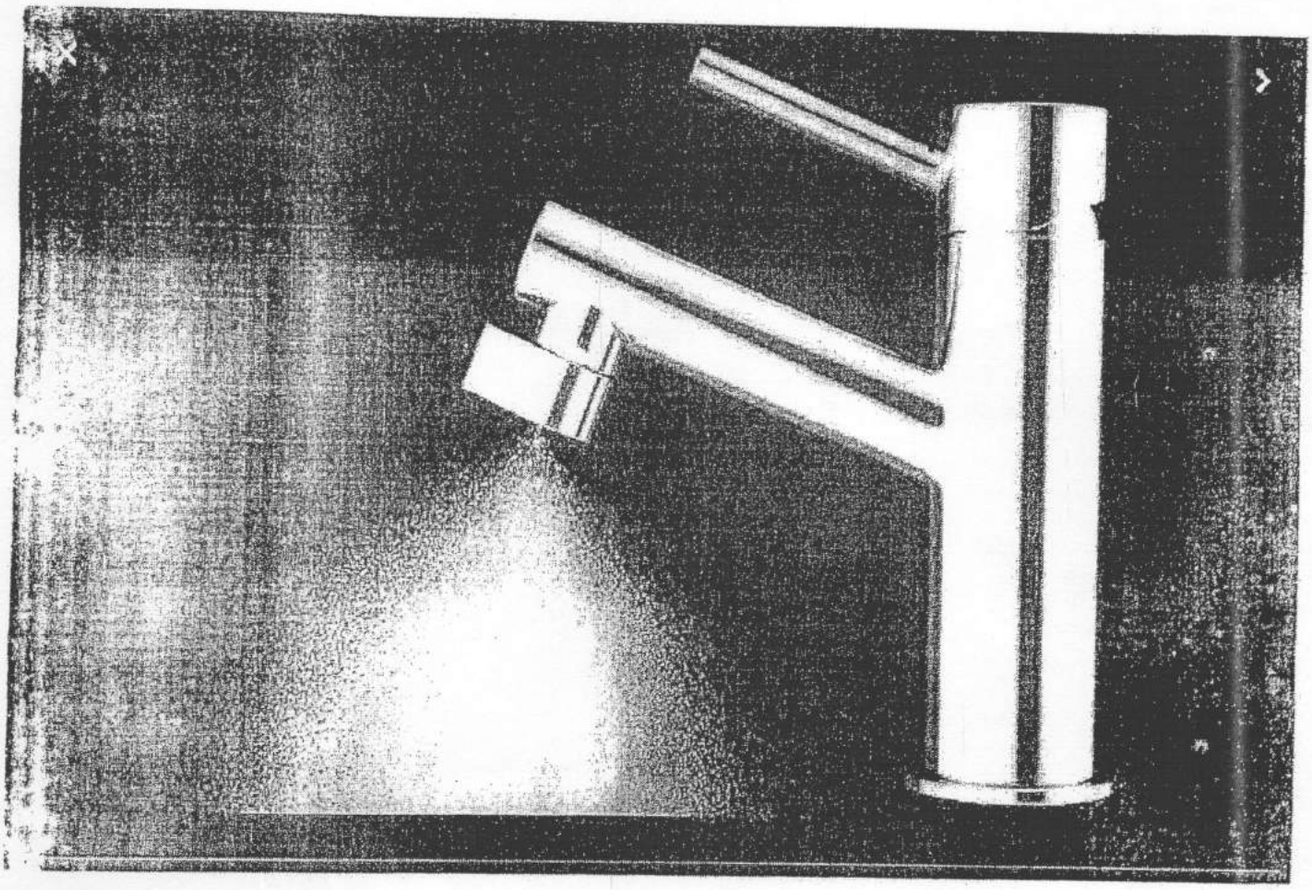
Copy for information to:

1. O/o Hon'ble Minister for Jal Shakti, Shram Shakti Bhawan, New Delhi.
2. O/o Hon'ble MoS, Jal Shakti, Shram Shakti Bhawan, New Delhi.
3. O/o Secretary, Department of WR, RD&GR, Shram Shakti Bhawan, New Delhi.
4. O/o Addl. Secretary, Department of WR, RD&GR, Shram Shakti Bhawan, New Delhi.
5. MD(NWM), Block-3, CGO Complex, New Delhi.

(409)

586195/2019/NWM





Annexure-R/26

Details of States/UTs which could not submit action taken reports.

S.No	States/UT
1.	Andhra Pradesh
2.	Arunachal Pradesh
3.	Bihar
4.	Goa
5.	Gujarat
6.	Himachal Pradesh
7.	Kerala
8.	Madhya Pradesh
9.	Maharashtra
10.	Manipur
11.	Nagaland
12.	Sikkim
13.	Tamil Nadu
14.	Tripura
15.	Uttar Pradesh
16.	Uttarakhand
17.	Daman and Diu
18.	Puducherry
19.	Dadra and Nagar Haveli

Annexure-R/27

Government of India
Ministry of Jal Shakti
Department of Water Resources, River Development and Ganga Rejuvenation
CENTRAL GROUND WATER AUTHORITY

PUBLIC NOTICE

New Delhi, dated the ... June, 2020

Whereas the Central Government constituted the Central Ground Water Authority (hereafter referred to as the Authority) *vide* notification number S.O. 38 (E), dated the 14th January, 1997, followed by notification number S.O. 1124(E), dated the 06th November, 2000 and S.O. 1121(E), dated the 13th May, 2010, of the Government of India in the Ministry of Environment and Forest, for the purposes of regulation and control of groundwater development and management in the whole of India and to issue necessary regulatory directions;

And whereas, the Authority has issued regulatory directions in exercise of powers under section 5 of the Environment (Protection) Act, 1986 under different public notices in different areas/blocks and also regulating in accordance with the provisions under guidelines issued in this connection from time to time (for directions/ guidelines refer to website: www.cgwb@nic.in;

And whereas, the Hon'ble NGT, New Delhi under its order dated 15.10.2019 in OA No. 597/2019 observed that in order to control wastage of potable drinking water there has to be specific time bound action plans and monitoring which should include coercive measures for enforcement.

Now therefore, in exercise of the powers conferred by section 5 of the Environment (Protection) Act, 1986 (29 of 1986), read with paragraph 2(i) of the notification of the Government of India in the Ministry of Environment and Forests number S.O. 38(E) dated 14th January, 1997, the Authority, with a view to protect and preserve the ground water resources, hereby issues the following directions, namely:-

DIRECTIONS

1. On and from the date of this direction, -- the concerned Civic Bodies dealing with water supply network in the States/Union Territories, whether called as Jal Board, Jal Nigam, Water Works Department, Municipal Corporation, Municipal Council, Development Authority, Panchayat or by any other name, shall ensure that there shall be no wastage or misuse of potable water tapped from underground and evolve compliance mechanism with coercive measures for violations.

2. No person in the country shall waste or misuse potable water resources tapped from underground.

Chairman
Central Ground Water Authority