



Har Ghar Jal
Jal Jeevan Mission

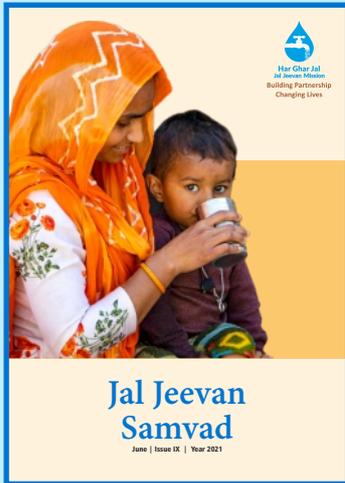
Building Partnership
Changing Lives



Jal Jeevan Samvad

June | Issue IX | Year 2021

Jal Jeevan Samvad



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Prime Minister
on
Jal Jeevan Mission: Har Ghar Jal

Mann ki baat

Narendra Modi
Prime Minister



अभी कुछ दिन पहले ही मुझे गाँव से एक परिवार ने 'जल जीवन मिशन' के तहत घर में लगे पानी के नल की एक फोटो भेजी। उन्होंने उस फोटो का *caption* लिखा था- 'मेरे गाँव की जीवनधारा' ऐसे कितने ही परिवार हैं। आज़ादी के बाद 7 दशकों में हमारे देश के केवल साढ़े तीन करोड़ ग्रामीण घरों में ही पानी के कनेक्शन थे। लेकिन पिछले 21 महीनों में ही साढ़े चार करोड़ घरों को साफ पानी के कनेक्शन दिये गए हैं। इनमें से 15 महीने तो कोरोनाकाल के ही थे!

(30 मई, 2021 के 'मन की बात' कार्यक्रम से)

हमारे देश में अब मानसून का सीजन भी आ गया है। बादल जब बरसते हैं तो केवल हमारे लिए ही नहीं बरसते, बल्कि बादल आने वाली पीढियों के लिए भी बरसते हैं। बारिश का पानी जमीन में जाकर इकट्ठा भी होता है, जमीन के जलस्तर को भी सुधारता है, और इसलिए मैं जल संरक्षण को देश सेवा का ही एक रूप मानता हूँ।

(27 जून, 2021 के 'मन की बात' कार्यक्रम से)



Union Minister on Jal Jeevan Mission



Gajendra Singh Shekhawat
Union Minister, Jal Shakti

Gajendra Singh Shekhawat @gssjodhpur

It is great to see what our PM @narendramodi Ji's vision has achieved in the last 22 months.

In 117 Aspirational Districts with low development indicators, only 7% families had tap water supply in 2019. Today with #JalJeevanMission it stands at 30%.

#HarGharJal

सबका साथ
सबका विकास
सबका विश्वास

Date	Percentage of Rural Households with Tap Water Supply
15. अगस्त, 2019	26.39%
15. जून, 2021	106.95%

Gajendra Singh Shekhawat @gssjodhpur · Jun 18

While over the last decades only 3.23 cr rural homes had tap water connections, whereas in the last 22 months we have been able to provide the same to another 4.29 cr households.

And by 2024, we aim to ensure no villager needs to struggle to fetch water.

#JalJeevanMission

Date	Number of Rural Households with Tap Water Supply (in Crores)
15 th August, 2019	3.23
14 th June, 2021	7.53

Out of total 13.19 Crore rural households, 7.53 Crore (58.22%) have started getting tap water in their homes.

Rural households with tap water supply

You and 2 others

Gajendra Singh Shekhawat @gssjodhpur · Jun 19

From less than 50,000 schools in Oct 2020 to more than 6.5 lakh schools within 8 months, we have provided piped water at an accelerated pace.

This access to clean tap water will ensure that our young generation grow healthy and disease-free.

#JalJeevanMission

Date	Number of Schools with Piped Water Supply
2 nd October, 2020	48,772
15 th June, 2021	6,55,309

Progress Piped water supply to schools (from October, 2020 till date)

You and 3 others



Union Minister, Jal Shakti discussing the progress of JJM with Chief Minister, Haryana

Note from the desk of Additional Secretary & Mission Director...



New Delhi
30th June, 2021

This year, April – May, have certainly been the most testing time of our lifetime as CoVid–19 pandemic spread far and wide, impacting people from all walks of life and in every part of the country. It took a heavy toll in terms of lives and livelihoods. It left a lasting scar on people's minds. To mitigate the pandemic, in many parts of the country, lockdowns were imposed, which brought many economic activities to a virtual halt. Water supply and sanitation being essential services, frontline workers from public health engineering/ water supply departments, Panchayats and urban local bodies, kept on working, ensuring water supply and sanitation services. However, project execution work, especially in villages got adversely impacted. During this period, people started realizing the value of 'tap water supply' in their homes as collecting water from a public source or a stand post posed a risk of spread of infection.

This period also showed us the bravery and courage of our people. So many Indians came to help those who were suffering. Doctors, paramedics, frontline workers, Government officials, essential service providers, social workers worked day and night. This pandemic brought out innate goodness of individuals. With the determination of people and exemplary leadership, today we are in a better state. With the firm resolve made by Prime Minister Shri Narendra Modi to provide vaccine to each and every adult citizen free of cost, and with the present scale of vaccination, normalcy has returned. I am sure that this will not only help in saving lives but will also help in containing the spread of the virus. However, we can't afford to lower our guards and must continue to practice CoVid–19 appropriate behaviour.

In the month of June with CoVid–19 cases coming down, public health engineers, Panchayat functionaries and members belonging to implementation support agencies, NGOs, UN agencies, key resource centres, etc. have been showing exemplary determination to make up for the lost time. As a result, not only planning and various processes involved in the execution of work picked up speed, the actual work on ground has also gained momentum. Teams from National Jal Jeevan Mission have started visiting various parts of the country and are going to villages. Work related to providing tap water connections to households, schools, AWCs, ashramshalas, etc. has started in full swing. This determination of people working to achieve the goal of Jal Jeevan Mission is truly inspiring. It is heartening to see that JJM district teams in every State are trying to do their best.

In the first quarter of 2021-22, about 28 lakh households have been provided with tap water connections. Good progress was noted in the last few days and we have to continue and build on this momentum. We have to ensure that various works planned for the year 2021-22 are implemented with a sense of urgency.

Out of 6.04 lakh villages in the country, as of now, more than 95 thousand villages (16%) have already achieved 100% tap water supply to rural households. In another 1.25 lakh villages, water supply works are at different stages of completion. Similarly, out of 19.20 Crore rural households, now more than 7.63 Crore households have tap water supply. In these 22 months, despite CoVid -19, the coverage has increased from 17% to 39.78% by providing tap water connections to 4.39 Crore households. Under Jal Jeevan Mission, priority areas have been identified for providing tap water supply. As a result, in 117 Aspirational districts, out of total 342.46 lakh rural households, tap water supply increased from 26.39 lakh (7.7%) to 109.67 lakh (31.91%) households, i.e. four-fold increase. Similarly, in 61 JE-AES affected districts spread across 5 States, out of 310.48 lakh rural households, tap water connection increased from 8.02 lakh (2.5%) to 105.33 lakh (33.92%) households i.e. more than 13 times in a short span of 22 months, changing the lives of people, especially women and children.

Safe water to children has a profound impact on their health and well-being, and therefore last year, Prime Minister Shri Narendra Modi announced to make provision of 'clean tap water in schools, ashramshalas and anganwadi centres (AWCs)' on priority. This led to the launch of a campaign on Gandhi Jayanti. Under this campaign, so far provision of tap water supply has been made in 6.63 lakh (64.3%) schools and 6.67 lakh (58.1%) AWCs, including hand washing facility and piped water supply in urinals and toilets.

In about 4.19 lakh (69%) villages, water supply systems are to be augmented/ retrofitted to provide tap water connections to the remaining households. However, work is yet to start in about 3.86 lakh villages, mainly in Uttar Pradesh, West Bengal, Madhya Pradesh, Rajasthan, Odisha, Maharashtra, Tamil Nadu, Andhra Pradesh, Jharkhand, Karnataka, Chhattisgarh and Assam. This is a huge task and to ensure 'Har Ghar Jal' by 2024, work must start in the next few months in every village of the country. In respect of multi-village schemes or regional water supply systems, all preparatory activities need to be completed in the next 3 months so that the work gets started after the monsoon.

For ensuring transparency and accountability, several steps have been taken. One of those is 'third party inspection' to check the quality of water supply works and materials used before payment is made to the vendors/ agencies. This critical aspect of quality assurance needs to be given the top-most priority. The other significant measure is the strengthening of the JJM grievance redressal system. This online system has an interface with State/ district level water supply authorities. However, with the management, operation and maintenance of water supply schemes to be carried out by GPs/ VWSCs/ Pani Samitis, the redressal system will resolve complaints at the local level and departments are to monitor the same on a real-time basis.

Not only for expeditious JJM implementation but also for long-term assured service delivery, support activities like capacity building, training, skilling, community mobilization, IEC, WQMS are vital. For capacity building, NJJM has identified 104 Key Resource Centres (KRCs) across the country that will play a key role in the capacity building of different stakeholders. Last month, we had a webinar with these agencies along with officials from various States/ UTs, urging them to prepare the action plan for training to be commenced at the earliest.

The mission has launched the nation-wide Water Quality Management Information System (WQMIS). It will have water quality test results at a village level done by village level water quality testing person using field testing kits as well as the test results from water quality laboratories. In case of quality issues, the data will be analysed and uploaded, and concerned authorities are alerted for immediate remedial action. States/ UTs have been advised to start testing water samples for quality using WQMIS and all data is available online. This will not only help in ensuring the prescribed quality of tap water supply, it will also have a huge impact on the health outcomes of rural families, especially children and women.

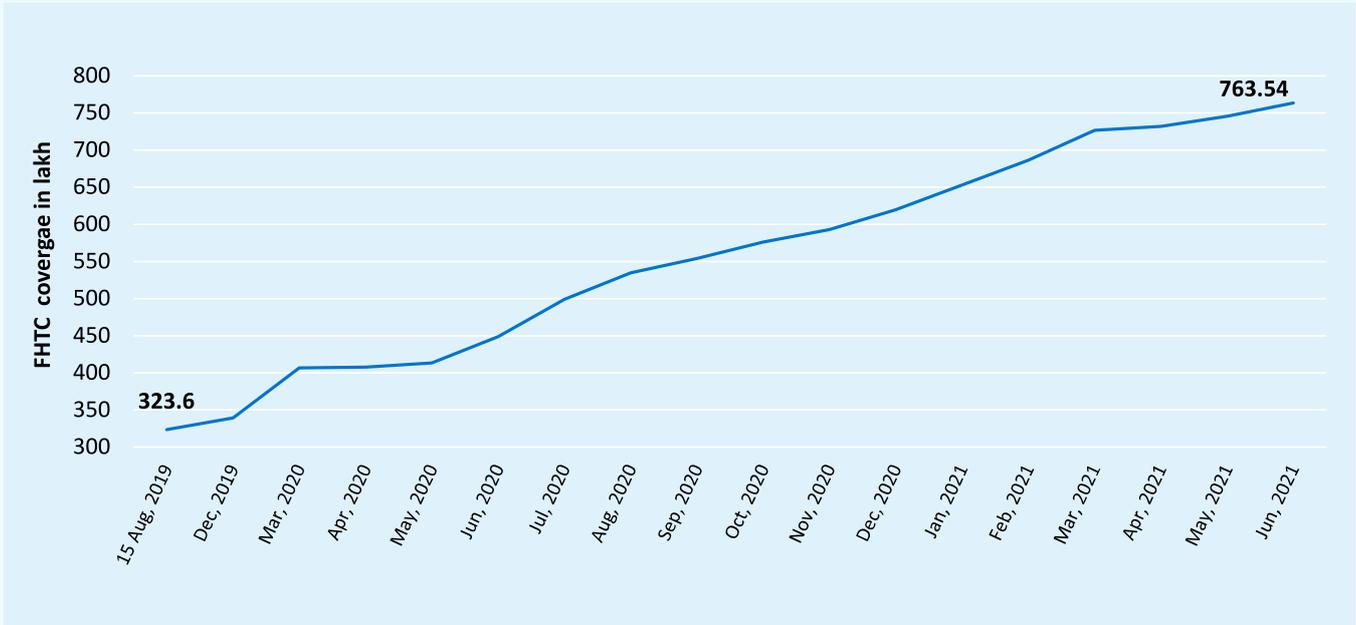
Since household tap water supply will generate more greywater, its safe collection, treatment and reuse is absolutely necessary, which will help in maintaining our villages clean and free from water-borne diseases. In villages where water supply work has either been completed and/ or under implementation, schemes for greywater collection, treatment and reuse are to be taken up on priority. While planning for such a scheme, population and edapho-climatic conditions of the village are key to design the scheme. Such treated water is to be used for agriculture, horticulture, agroforestry, plantations, industry, etc. It is expected that during this year, about 1.50 lakh villages will undertake greywater collection, treatment and reuse the grey water by dovetailing resources from MGNREGS, 15th FC tied grant to PRIs for water & sanitation, SBM, DMDF, etc. In case of shortage of funds, on case to case basis, funds from JJM too can be used with the approval of the State Level Scheme Sanctioning Committee (SLSSC).

With very exciting time ahead to bring transformational change in the lives of people, I am sure that every stakeholder will continue to work with firm resolve to ensure potable tap water to every home.

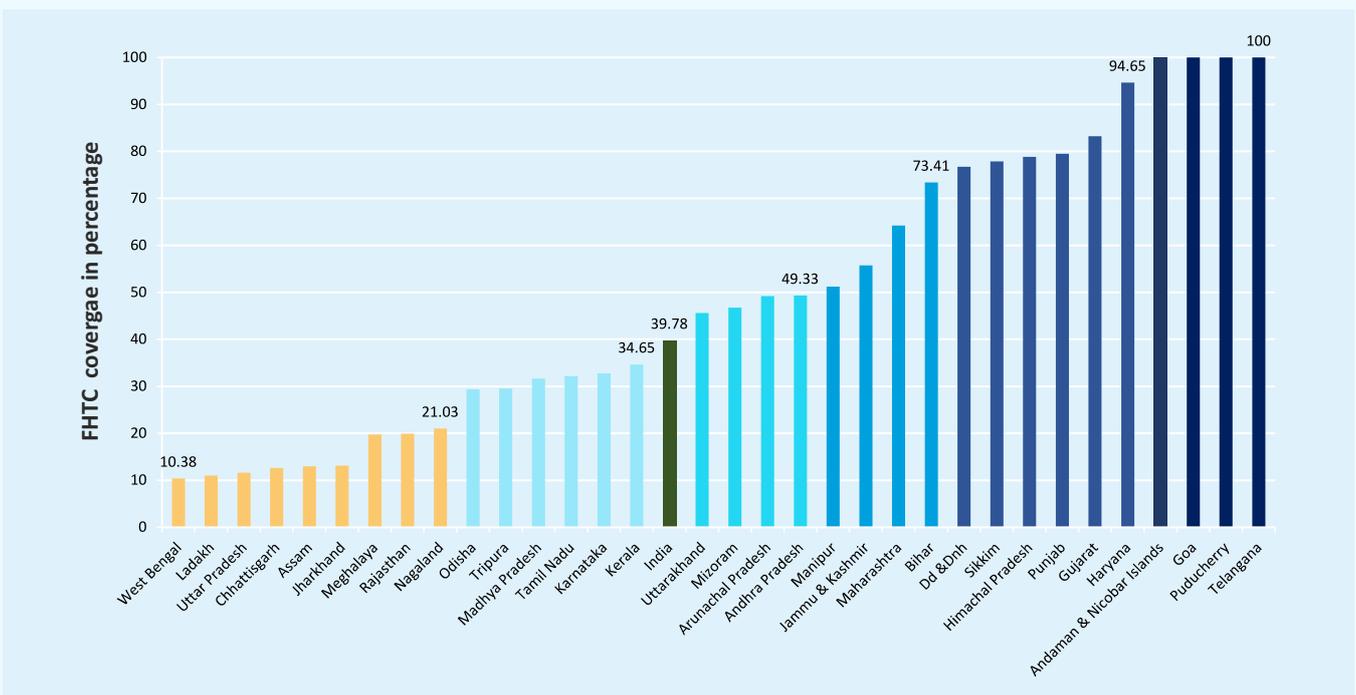
[Bharat Lal]

Additional Secretary & Mission Director
National Jal Jeevan Mission

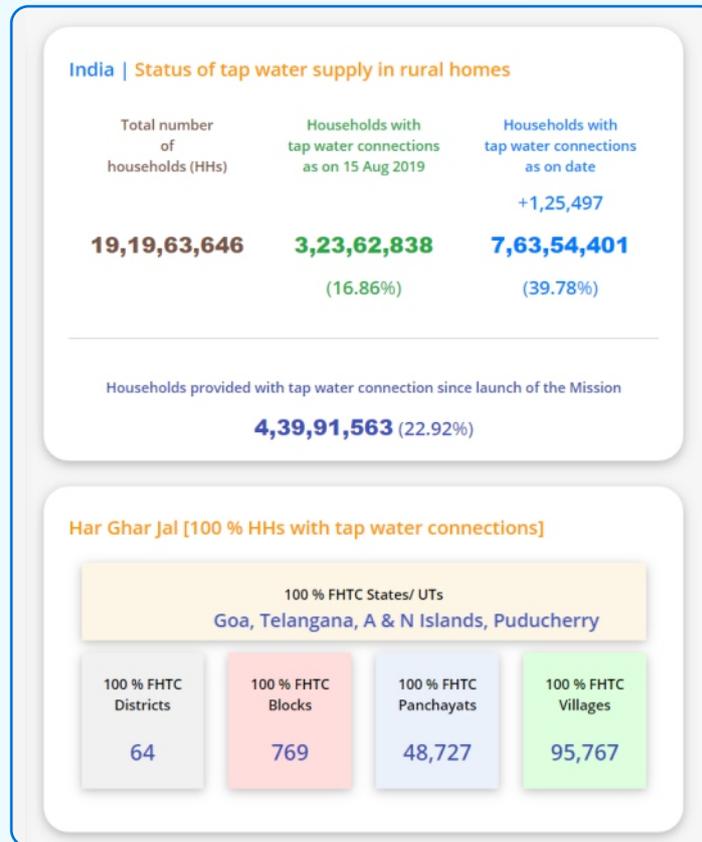
Progressive coverage-Functional Household Tap Connection (FHTC) (as on 30.06.2021)



Comparative FHTC coverage status of States/ UTs (as on 30.06.2021)

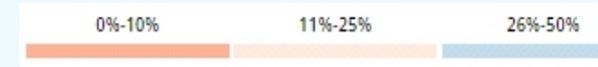
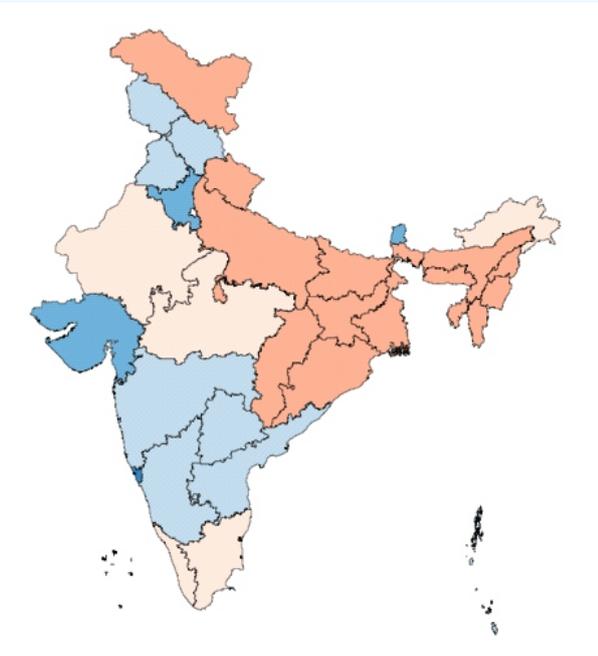


As on 30th June, 2021

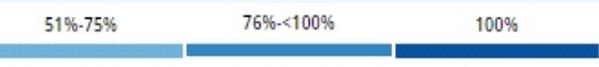
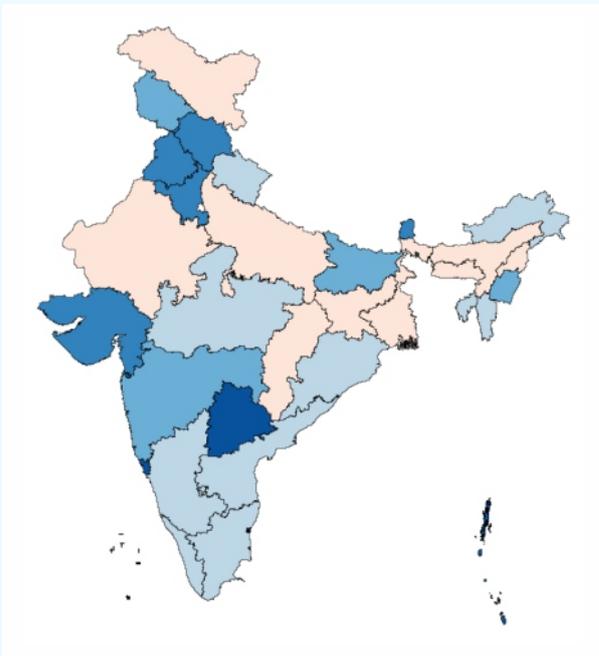


Source: JJM-IMIS

As on 15th August, 2019



As on 30th June, 2021



Jal Jeevan Mission: States/ UTs need to act fast

- NJJM

India's water demand has shot up with its growing population, industrialisation and other economic activities. The limited resource and competing demands make drinking water management a complex issue. Other challenges like groundwater depletion due to over-extraction, insufficient recharge, low storage capacity, erratic rainfall, water pollution, poor operation and maintenance (O&M) of water supply systems, etc. further compound the demand and supply gap.

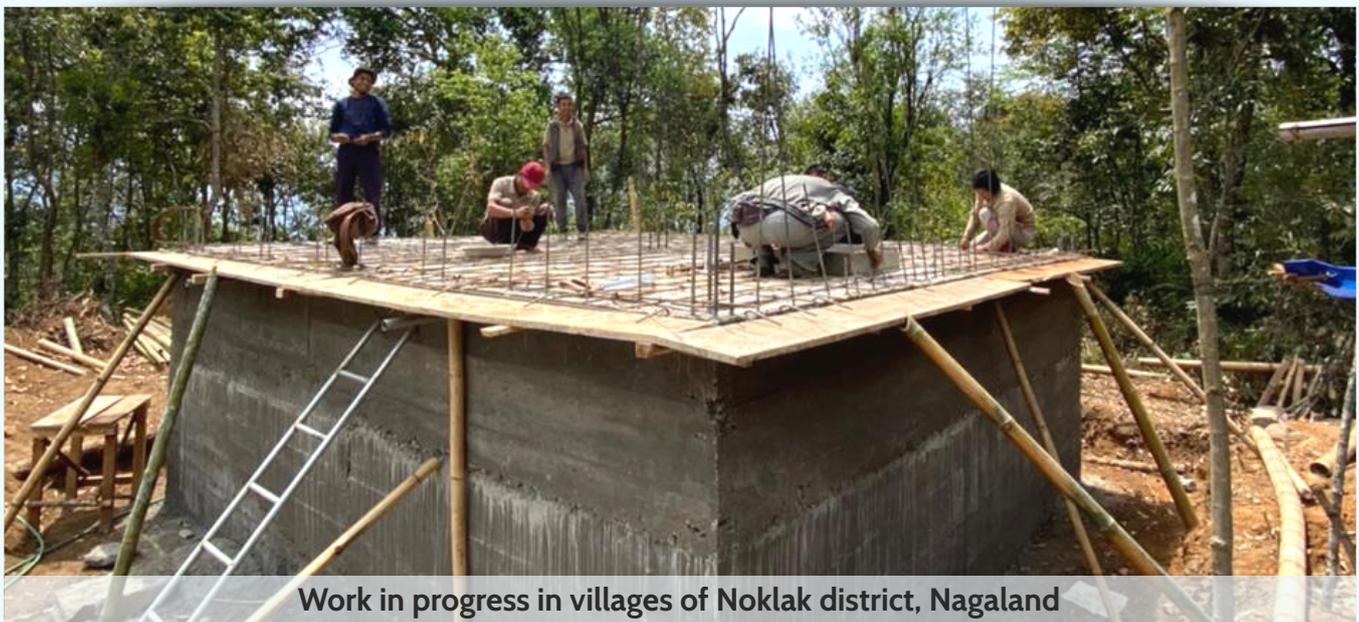
These challenges have particularly affected the rural communities, manifesting as water-borne diseases and other health conditions, undue

hardship for women, poor learning uptake among girl students, poor socio-economic conditions, and like concerns. Therefore, safe piped water supply in rural areas is for long-overdue to improve the health and socio-economic conditions of the communities and bring down the drudgery of rural women and girls.

On 15 August, 2019, piped water supply covered about 17% of rural households, when the Prime Minister had announced potable tap water supply to every household by 2024 under Jal Jeevan Mission. The mission emerged from a realization that reliable access to potable water is the cornerstone of sustainable

rural development. It has been 22 months since the announcement of the mission, and tap water supply has increased from 3.23 Crore (17%) to 7.63 Crore (39.7%), Covid-19 pandemic limitations notwithstanding. In spite of this good progress made so far, still about 11.56 Crore rural households to be provided with tap water supply in next 3 years, a gigantic task by any measure.

However, the mission without the collaboration of all stakeholders cannot ensure a sustainable supply of drinking water in rural India haunted by the 'slippage' problem. Of 6.04 lakh revenue villages, 95 thousand villages (16%) have already achieved 100% tap water supply. In 1.25 lakh villages water supply works for 100% coverage are under different stages of completion. About 4.19 lakh (69%) villages have an existing water supply system that can be scaled to cover the remaining households in those villages. Work is yet to be started in about 3.86 lakh (63%) villages, mainly in Uttar Pradesh, West Bengal, Madhya Pradesh, Rajasthan, Odisha, Maharashtra, Tamil Nadu, Andhra Pradesh, Jharkhand, Karnataka, Chhattisgarh and Assam.



Work in progress in villages of Noklak district, Nagaland



To meet the mission objective, States/ UTs need to expedite the implementation of following planned activities.

1. DPR preparation, approval, tendering, award of works and actual implementation on ground in respect of remaining villages for all SVSs as well as MVSs to be completed in next 2-3 months;
2. Saturation of all the villages having more than 70% coverage and make them 'Har Ghar Jal' in next few months;
3. provision of tap water connections on priority in quality-affected areas, villages in drought-prone and desert areas, SC/ ST majority villages, Sansad Adarsh Gram Yojana (SAGY) villages, etc.;
4. 100% piped water supply in the remaining school, Anganwadi centre, GP building, health centre, wellness centre and community building, etc.;
5. Discussion and approval of in-village water supply infrastructure works in respective Gram Sabhas;
6. voluntary ownership of in-village water supply infrastructure by the local community by way of contribution in cash, kind and/ or labour and voluntary labour (shramdaan);
7. Constitution/ strengthening of VWSCs/ Pani Samitis in all villages in a campaign mode;
8. Preparation and uploading of Village Action Plans for all villages;
9. Accreditation/ upgradation of water testing laboratories;
10. Bacteriological and chemical testing of all drinking water sources;
11. Training of 5 persons especially women in every village for the use of FTKs and data updation in WQMIS;
12. skill development and capacity building to support the demand for construction, plumbing, electrical work, water quality management, water treatment, catchment protection, O&M, etc., over the short and long term; and
13. awareness creation on various aspects and significance of potable drinking water through the involvement of all stakeholders in a manner to make 'water everyone's business'.

These activities must be scheduled and completed in a time-bound manner. It is expected that the in remaining 3.86 lakh villages piped water supply work will start immediately start to get the cover every rural household by 2024. The officials concerned must take all measures to check any possible 'slippages'.

Political leadership, People's Participation and concrete action, both at the Centre and State/ UT level, achieved 'Open Defecation Free' status under Swachh Bharat Mission (Gramin). With concerted efforts of all stakeholders, the objectives of Jal Jeevan Mission to be accomplished by 2024, for which every entity involved in the mission works to work with dedication and determination to ensure 'Har Ghar Jal'.



Work in progress

JJM: Progress and Planning

(As on 19/06/2021)

S. No.	State/ UT	Total households	Tap water connections		
			Provided till 31/03/2021	Remaining	Planned for 2021-22
1.	A&N Islands	62,037	62,037	0	-
2.	Goa	2,63,013	2,63,013	0	-
3.	Puducherry	1,14,908	1,14,908	0	-
4.	Telangana	54,06,070	54,06,070	0	-
5.	Haryana	31,03,078	26,93,526	4,09,552	2,61,047
6.	Gujarat	92,92,151	77,16,409	15,75,742	10,00,000
7.	Punjab	34,73,254	25,86,162	8,87,092	8,87,092
8.	Sikkim	1,05,063	80,623	24,440	20,332
9.	Himachal Pradesh	17,03,626	13,01,681	4,01,945	2,26,945
10.	D&D and D&NH	85,156	24,592	60,564	39,607
11.	Bihar	196,87,628	135,60,127	61,27,501	61,27,501
12.	Maharashtra	142,36,135	91,03,747	51,32,388	27,45,349
13.	Jammu & Kashmir	18,15,909	9,98,339	8,17,570	4,90,583
14.	Manipur	4,51,566	2,26,532	2,25,034	2,25,034
15.	Arunachal Pradesh	2,17,623	1,01,271	1,16,352	65,956
16.	Andhra Pradesh	95,66,332	44,91,099	50,75,233	34,47,498
17.	Mizoram	1,26,827	58,869	67,958	40,000
18.	Uttarakhand	14,61,910	6,49,426	8,12,484	2,63,935
19.	Kerala	67,14,823	21,54,031	45,60,792	29,37,564
20.	Karnataka	91,19,106	28,15,745	63,03,361	25,17,000
21.	Tamil Nadu	126,89,045	38,06,002	88,83,043	*
22.	Madhya Pradesh	123,05,452	37,62,054	85,43,398	22,00,805
23.	Tripura	8,00,997	2,12,469	5,88,528	3,82,365
24.	Odisha	85,66,513	22,94,803	62,71,710	22,11,074
25.	Nagaland	3,85,699	63,421	3,22,278	2,06,363
26.	Rajasthan	101,32,274	19,57,183	81,75,091	30,00,000
27.	Meghalaya	5,89,888	93,634	4,96,254	3,38,903
28.	Jharkhand	58,95,843	7,40,183	51,55,660	9,50,000
29.	Assam	63,35,015	6,67,354	56,67,661	22,62,735
30.	Chhattisgarh	45,48,080	5,66,614	39,81,466	22,14,986
31.	Uttar Pradesh	263,38,776	28,97,932	234,40,844	*
32.	Ladakh	44,059	3,726	40,333	28,788
33.	West Bengal	163,25,859	14,67,168	148,58,691	43,10,528
	Total	19,19,63,715	7,29,40,750	11,90,22,965	

*AAP awaited

Uninterrupted drinking water supply during monsoon

- A. Muralidharan, Deputy Advisor (PHE)

”

“For nine months drawing through sun’s rays, the sky drank the waters of the ocean, and the time now to give birth to a liquid offspring, the elixir of life.”

- Adi Kavi Valmiki, in Ramayan.

”

Indian culture accords immense importance to monsoon season and is always waited for, by everyone. *Varsha ritu* (rainy season) as it is called, is preceded by scorched earth that breathes hot, with its eyes passionately looking up, for the monsoon clouds to arrive. As the liquid elixir falls, earth embraces rain, paving way to the lush green environment, fruiting, flowering, vegetation indicative of abundance, prosperity and fertility that define it.

Water sustains earth. Reaching this liquid gold to every one's home, every day, through a Functional Household Tap Connection is the cherished goal of Jal Jeevan Mission. States and Union Territories are committed to make this cherished goal, a reality on ground.



Resource mapping exercise

Rains replenish groundwater, the major source for drinking water in most parts of the country. It fills up ponds, farm ponds, dams, reservoirs, wetlands and every depression on earth and gets stored as a surface water source, making itself available for drinking water service delivery. Uninterrupted service delivery during monsoon season requires meticulous preparation by institutions and personnel responsible for it. As we read this article, the monsoon has already covered two-thirds of the country. This article would give a picture of preparatory activities required, and is to be treated as indicative and not exhaustive.

The activities are broadly classified in to four headings. Precautionary measures, alternative arrangements at times of failure, cleaning and disinfection activities, institutional arrangements & reporting and follow-up system.

I. Precautionary measures

- i.) Ensure access pathways inside the water treatment plants/ pump houses, over-head/ under-ground storage facilities are clear of vegetation/ obstructions/ debris;
- ii.) In case of villages/ locations where source and storage at separate places, repairing the damages to access roads to them may be taken up with maintenance authorities/ GPs;
- iii.) In case of infiltration wells/ collector wells in rivers, the sand removed portion near them needs to be filled up with sand;
- iv.) Exposed electrical cables and connecting main should be fully covered with sand in the river bed.
- v.) For headworks, based on experience, carry out flood protection works so that water

does not enter the pump houses/ sumps. This is mandatory for headworks in low lying areas.

- vi.) If necessary, lift the pump-sets and other electro-mechanical equipments (above the expected HFL) to avoid their submergence. Also identify risks of flood water (in case of flooding) entering into the distribution network/ water treatment units to mitigate the risks.
- vii.) Remove the clogged sand filters and refill them with fresh sand;
- viii.) Based on experience, identify and inventorize possible pipeline damages in vulnerable areas and ensure availability of spare parts like pipes and joining materials required for carrying out repairs in very short notice or stocked up in stores;
- ix.) Check the earthing cables of electrical connections and repair them, if necessary. Also, ensure the electrical connections points are not exposed to rain/ excess moisture. Check insulation of all the joints in the electrical cables and repair them, if necessary;
- x.) In case of metal ladders affixed to over-head water tanks, pumps houses, etc. check the fasteners/ welding to ensure their stability;
- xi.) Ensure handpumps in villages are repaired and can be used as a standby, in case of failure of local source; quality test the water from these pumps for their potability;
- xii.) Repair of Broken Handpump platforms and surroundings of the Ground Level reservoirs and other structures where there is threat of rainwater/ wastewater contaminating the ground/ surface water sources;
- xiii.) Repair of damaged components of water supply infrastructure wherever there is threat of contamination, pipelines, ground level water storage structures etc.;
- xiv.) Check the working of the chlorinators and keep stock of the chlorine for regular chlorination;
- xv.) Identify alternate sources of water to use at the time of failure of functional sources due to any reason;
- xvi.) Be vigilant to ensure non-stagnation of rain water in pipe stacks;
- xvii.) Train the VWSC/ Pani Samiti for cleaning of water storage structures and their disinfection;

- xviii.) Ensure removal of silt/ debris etc from soak-pits/ community soak pits around stand posts/ hand pumps;
- xix.) Make sure lightening arrangement in place or in working condition (proper earthing is available) in all overhead tank/reservoir; and
- xx.) Reviving and cleaning of traditional water structures to facilitate optimum collection of rainwater, to help providing alternative arrangements and long-term sustainability of groundwater resources.

II. Alternative arrangements in case of failures

- i.) Ensure that departmental generator sets are functional and adequate stock of diesel for running them;
- ii.) Fill up sumps and overhead tanks to their full capacities, to meet exigencies due to power failure;
- iii.) Prepare contingency plans to meet any failure situation. This plan, to be prepared by executive engineers of maintenance divisions, consists of identifying the concurring vendors/ suppliers along with their address and mobile numbers for immediate hiring of
 - a. generator sets with different capacities;
 - b. tanker lorries with different capacities;
 - c. tractors with trailers;
 - d. earth work equipment;
 - e. diesel pump sets for dewatering;
 - f. technicians/ labour for handling electro-mechanical equipment and other works; and
 - g. List of fuel outlets who concur for supplying diesel without any interruption.



Field test kit for water quality testing

- iv.) Supply water from alternate sources in case of source failure due to any reason.

III. Cleaning and disinfection activities

Effect of monsoon on drinking water quality depends upon source of water supply. If source is surface water body, it may have increased total suspended solids, increase in bacteriological contamination, increase in presence of pesticides, fertilizers due to surface runoff, if source is surrounded by agricultural field. Change in Total Dissolved Solids (TDS) will depend upon the characteristics of top soil and land use in the catchment area. If source is groundwater, then significant changes in bacteriological contamination do not take place unless groundwater table is very high (within 5 metres below ground level). If high TDS in groundwater is already a problem, monsoon rain may lead to its slight reduction. Also, change in presence of pesticides and fertilizers would be not as significant as in the case of surface water. But, bacteriological contamination has always been a major issue, as increase in water-borne diseases are reported every year in various parts of the country during monsoon. The following activities are suggested.

- i.) Ensure cleaning and disinfection of all water retaining structures; train VWSCs/ Pani Samitis wherever possible;
- ii.) Cover all air vents in sumps and overhead tanks with mosquito nets to prevent entry and breeding of mosquitoes;
- iii.) Stock adequate quantity of bleaching powder for disinfection and water quality testing kits (eg. Chloroscopes for residual chlorine);
- iv.) Ensure online chlorinators are functional with adequate chemicals;
- v.) Make at least twice a month chlorination of handpump during the monsoon;
- vi.) Avoid stagnation of water around sumps, OHTs, water treatment plants and public stand posts;
- vii.) Create awareness to avoid water storage more than two days to avoid mosquito breeding;
- viii.) Awareness about household drinking water handling and treatment;
- ix.) Ensure availability of FTK kits with VWSCs/ Pani Samitis for testing, reporting and treatment of water supplied;

- x.) Sanitary survey of all the water sources of community and institutions to check and stop all contamination points/ pathways; and
- xi.) Bacteriological testing of all water sources/ terminal points (preferably local level using H₂S vials), conveying results to community/ institutions for facilitating corrective measures.

IV. Institutional arrangements

- i.) Set up a monsoon emergency service cell at headquarters, for coordination of activities/ emergencies;
- ii.) Set up a toll-free number/ whatsapp number/ e-mail ids and give them wide publicity for receiving the complaints from public and have dedicated teams to monitor them on 24 x 7 basis;
- iii.) Encourage local officers to create social media groups to be in touch with GPs/ VWSC members for receiving emergency messages;
- iv.) Active coordination with Health Department for provision of services through ASHA/ ANMs, for awareness on water handling practices, testing, treatment and active surveillance of water-borne diseases;
- v.) Divide State into convenient operational areas and post nodal officers for taking up field inspections periodically for identifying the vulnerable areas/ equipments/structures;
- vi.) Develop formats for sending the inspection reports of nodal officers and the tour programme of these officers to be shared with the emergency cell for monitoring and follow-up;
- vii.) Senior officers at the level of Chief Engineers/ Superintending Engineers to ensure remedial measures based on inspection reports;
- viii.) Sanctioning of leave at the time of monsoon period may be done judiciously without hindrance to day to day operations.

While the above preparations are indicative, the situation may vary from State to State and the preparations have to be customised to suit them. Such preparations would help to ensure continuous service delivery, prevent outbreak of diseases and maintain the ease of life during the monsoon. ■

Emergency response to super cyclone Amphan

Managing Rural Water Supply in Emergencies – Disaster Preparedness and Response Planning, and Documentation

- **Animesh Bhattacharya**, Chief Engineer, PHED HQs, Govt of West Bengal, **Pragyan Bharati**, WASH Specialist, Viji John, Consultant and **Anwesa Dutta**, UNICEF, Kolkata Field Office

In May 2020, super cyclone *Amphan* wreaked havoc in West Bengal, causing significant loss of lives and property. Ensuring adequate potable water supply to communities is a challenge for authorities even in normal circumstances; COVID-19 lockdown made it more difficult as it impeded response affecting the supply of emergency goods, deployment of additional human resource for relief activities etc. Despite these challenges, West Bengal Public Engineering Health Department (PHED) improved

disaster response with better reach to affected communities with essential supplies.

As a key partner of the Government, and in all humanitarian aid, UNICEF facilitated the PHED with portable water chlorinators and pump sets to provide drinking water in remote villages of North and South 24 Parganas districts, where piped water supply was disrupted due to cyclone. In addition to critical water, sanitation, and hygiene (WASH) supplies, UNICEF trained local self-

help groups and the youth in tube well repairs, water safety surveillance, village cleanliness drives, COVID-19 appropriate behaviour, and reusable masks manufacturing scalable business model.

West Bengal is a multi-disaster-prone State, and PHED has prior experience of effectively managing and responding to disasters. In the aftermath of the super cyclone in 2020, a State-level workshop on resilience and disaster preparedness in rural water supply management, facilitated by UNICEF, recommended a) more robust preparedness and planning response to natural disasters; b) mainstreaming of climate-resilient water and sanitation services and infrastructure provisions; and c) systematic emergency preparedness and response.

“In a changing climate, with increased risks of extreme weather and disasters, PHED will need to have a greater awareness of the risks they face and what they can do to be well prepared.”

- **Additional Chief Secretary**,
PHED, GoWB



Amphan response 2020 in West Bengal



Putting in place a formal and functional plan, and maintaining and updating the record of prepositioned stocks, essential items, vendors and suppliers can strengthen planning and enhance the efficiency of a Department in managing the impact of disasters.

Disaster management is one of the key elements envisaged under Jal Jeevan Mission. Extreme climatic events can pose challenges in the supply and access of potable water. In this context, the PHED, Government of West Bengal, and UNICEF have collaborated in developing the State and District level Disaster Preparedness and Response Plan templates for identifying, mapping and coordinating existing infrastructural and human resources. The template

also helps in analysing the capacity building gaps. Best practices from super cyclone *Amphan* response are available: [Managing Rural Drinking Water Supply in Emergencies](#).

RedR, a humanitarian aid and not-for-profit organization was also engaged by UNICEF to support the PHED with the requisite technical documents, including scenario-based district disaster preparedness and response plan for demonstration purpose. Following a series of remote interviews with PHED officials, the documents, including the plan templates, were developed. A webinar on 'PHED's Disaster Preparedness and Response Planning' was organized by UNICEF in partnership with RedR India and World Vision India (WVI) on World Water Day,

2021 to demonstrate the use of the plan templates at the district and State levels. The best practices document and the State and district level disaster preparedness and response plan templates are disseminated for PHED's use across the State. West Bengal PHED is using these documents and templates for better planning and response towards disasters.

Climate change poses a significant threat to humankind as we experience natural disasters with increased frequency, degree, and scale. It is more important now than ever that we value water and are prepared for the vagaries of weather. Jal Jeevan Mission provides the perfect launchpad for this. ■



Potable water provided to community during the cyclone

Tamil Nadu: Tapping greywater

- Ambarish Karunanidhi, WASH Institute

Water is an essential and fast depleting resource. Groundwater comprises about 20% of freshwater. Approx. 85% of freshwater is used for irrigation. Population explosion and overexploitation of aquifers, combined with variability in its availability over time and region, demand sustainable development of water resources.

India is a large country facing changing monsoon patterns. Areas across the nation have water scarcity, creating drought-like conditions for varying periods. Added to this, the mindset that water is an infinite resource further aggravates its shortage.

In agricultural productivity, Tamil Nadu has always performed well. In the year 2011-12, it produced a record 10.1 million food grains, the highest productivity of sugarcane and other essential crops such as oilseeds and maize. However, over the past decade, the agricultural growth rate in the State has taken a dip due to rainfall deficit and irrigation inadequacy. Figure 1 explains the decrease in both annual and south-west monsoon trend shortfall over the previous two decades in Tamil Nadu.

Extreme weather irregularities and climate change have made rainfall erratic as a result water availability is declining rapidly, which ultimately reduces groundwater availability. The

water crisis has resulted in its limited availability for irrigation purposes, about four to six months a year. This has forced farmers in Tamil Nadu to buy water for agriculture purposes, exorbitantly raising the input costs. The challenge has demanded the State for efficient and innovative methods in irrigation.

The State has turned to greywater for groundwater recharge, alongside rainwater harvesting, through soak pits and vertical filters. About 65% of the supplied water comes out as greywater. If every village household taps greywater for groundwater recharge with rainwater harvesting practices, the aquifer level can substantially rise. This, in turn, will help farmers draw good crops even during dry periods and be competitive in the market.

Jal Jeevan Mission, announced on 15th August 2019 by the Hon'ble Prime Minister, has stemmed from a realisation that reliable access to clean water and water conservation are the cornerstones of sustainable development in rural areas. Besides providing 55 litres per capita per day of potable water to all rural households, the mission also provides an enabling framework to institute a circular water economy by planning for greywater management and its inclusion in water budgeting.

This flagship programme of the Ministry of Jal Shakti has helped Tamil

Nadu create a paradigm shift from linear extract-use-dispose model to circular extract-use-treat-reuse model. Under the mission leadership, greywater management structures of 8,01,500, covering 12,525 villages in the State, are sanctioned. The cost of these structures is drawn from the convergence with MGNREGS and the 15th Finance Commission tied grant for water and sanitation. The technical and economic aspect of various greywater recharge structures in Tamil Nadu are detailed as follow:

1. Individual Soak Pit for Households

Individual soak pit is provided for every household wherever sufficient space for construction is available.

The specification details are as below:

- i.) Drain water from bathroom and kitchen collects in a platform of 1.20m x 1.20m with kerb wall;
- ii.) The size of the soak pit is 1.20m(L) x 1.20m(B) x 1.80 m(D);
- iii.) Through a pipe, greywater from the platform passes in the inspection chamber;
- iv.) In the inspection chamber, solid wastes settle at the bottom and floating materials are arrested by placing grating sieve at the outlet pipe;
- v.) Filtered greywater from the inspection tank is passed through a pipe in the concrete tub inside the filter bed of the soak pit;
- vi.) In the concrete tub, remaining suspended solids settle at the bottom;
- vii.) The filtered water from the tub flows into the soak pit filter media through the holes provided at the top but below the tub inlet pipe;

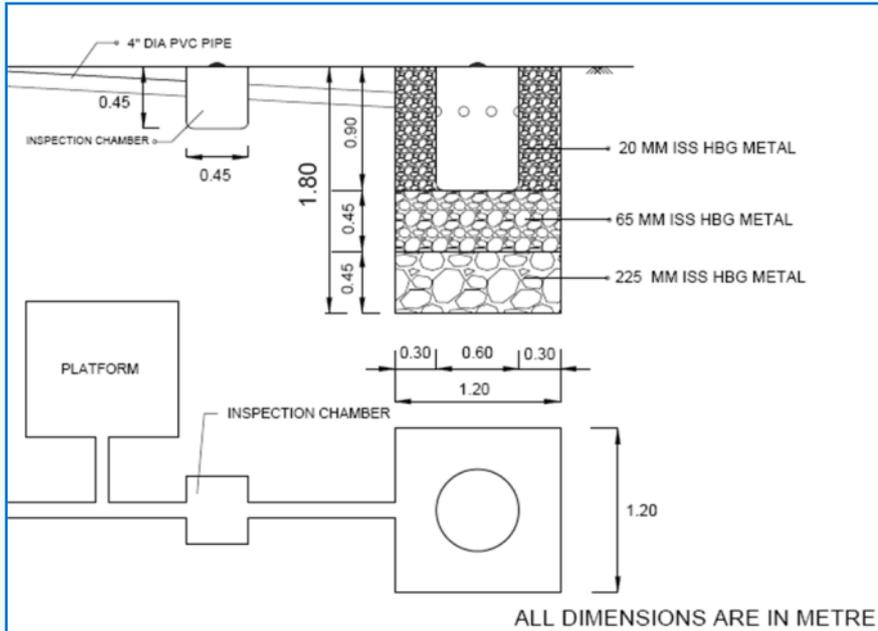


- viii.) The joints of the pipe, inspection chamber and soak pit must be leakproof;
- ix.) A sheet made of cement bags is placed over the metal layer at ground level in the soak pit before filling with earth. This will facilitate the recharge of stormwater into the ground;

2. Community Soak Pits

For community soak pits three models are available, namely;

- a) Common Soak Pit
- b) Horizontal Infiltration Soak Pit
- c) Vertical Infiltration Soak Pit



a) Common Soak Pit

- i.) Common soak pits are ideal for locations like public fountains, hand pumps, OHTs etc., where water usually stagnates;
- ii.) Community soak pits are similar to individual soak pits explained above;
- iii.) A cement concrete platform is constructed around public fountains, hand pumps, OHTs etc., and connected to the chamber through pipes.

The specifications:

- i.) A platform of 1.50m x 1.50m with kerb wall provision is provided outside the house to collect the greywater;
- ii.) The size of the soak pit is 1.50m(L) x 1.50m(B) x 1.80m(D);
- iii.) The functioning mechanism is similar to individual soak pit;

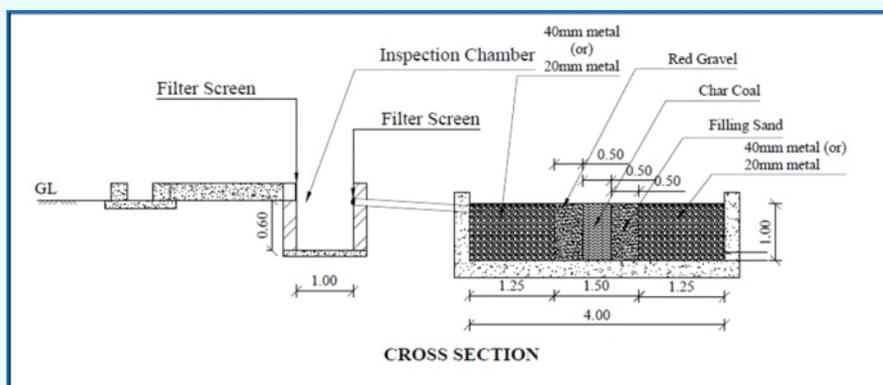
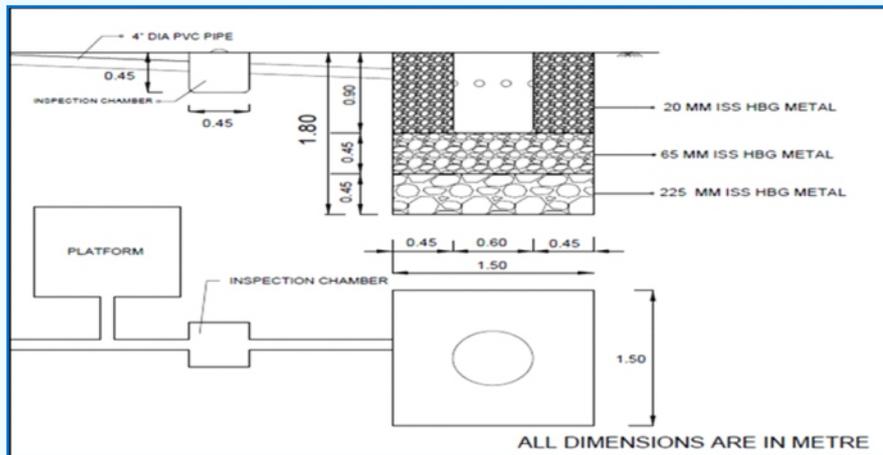
b) Horizontal Infiltration Soak Pit

The specifications:

- i.) Greywater from the drains is passed through the inspection chamber where solid particles settle down;
- ii.) Grate filters at the inlet and outlet retain solid particles and floating materials;
- iii.) The soak pit is constructed for size 4.46m x 3.46m x 1.45m;
- iv.) Filtration media consists of 20mm metal, red gravel, charcoal, filling sand and 40mm metal;
- v.) The treated water is let out through PVC pipes for farm irrigation.



Grey water management in Tamil Nadu



c) Vertical Infiltration Soak Pit

The specifications:

- i.) Greywater is collected from the drains and passed through the inspection chamber where solid particles settle down. It is then let into the soak pit through a PVC pipe (180mm diameter);
- ii.) A grate filter at inlet and outlet retains solid particles and floating materials;
- iii.) The soak pit is constructed for size 4.45 m(diameter) x 2.25 m (Depth);
- iv.) Cement rings with perforations on top are placed at the centre of the soak pit;
- v.) Filtration media consists of 20mm metal, red gravel, charcoal, filling sand and 40mm metal;
- vi.) The treated water filters into the ground recharging ground-water.

Tamil Nadu is the leading State in tapping the greywater. In 2021-22, NJJM is pushing States to plan for greywater schemes in about 1.5 lakh villages so that greywater management can start in bigger villages. This will certainly keep our villages clean and the freshwater

demand will reduce as the treated greywater can be put to use for productive uses like agriculture, horticulture, forestry and industry. All States/ UTs should come forward to plan to reap the benefit of greywater management.



Before



After

Potable tap water reaches border areas of Gujarat

- PHED, Gujarat



Desalination plant provides potable water at BSF check post

Kutch and Banaskantha district lie in northeast of Gujarat. Kutch is the largest district in India while Banaskantha is famous for Ambaji temple and draws large number of tourists. Due to its topography the supply of potable water is a major concern in the region.

The groundwater available here is not conducive for drinking as it contains >10,000 mg/ l of TDS. As both the districts share a 200 km international border, a large Border Security Force (BSF) contingent is stationed in the area. BSF check posts have for years faced challenge to secure safe drinking water for it's personnel. The water here is supplied from the Narmada basin which travels more than 500 Km coupled with pumping at 7-8 stages. There are instances of breakdown of pipeline resulting in serious maintenance issues at the vital points.

With the launch of Jal Jeevan Mission, the flagship programme of Union Government, to provide tap water in adequate quantity of prescribed quality on regular and long-term basis, the Gujarat Water Supply & Sewerage Board (GWSSB) in partnership with Bhabha Atomic Research Centre (BARC), Mumbai and Central Salt & Marine Chemicals Research Institute (CSMCRI), Bhavanagar planned to install water desalination plant. The technical design and installations are taken up by BARC in Kutch. CSMRI is responsible for work in Kutch and Devbhumi Dwarka while the civil work including survey, digging of deep bore is carried out by GWSSB.

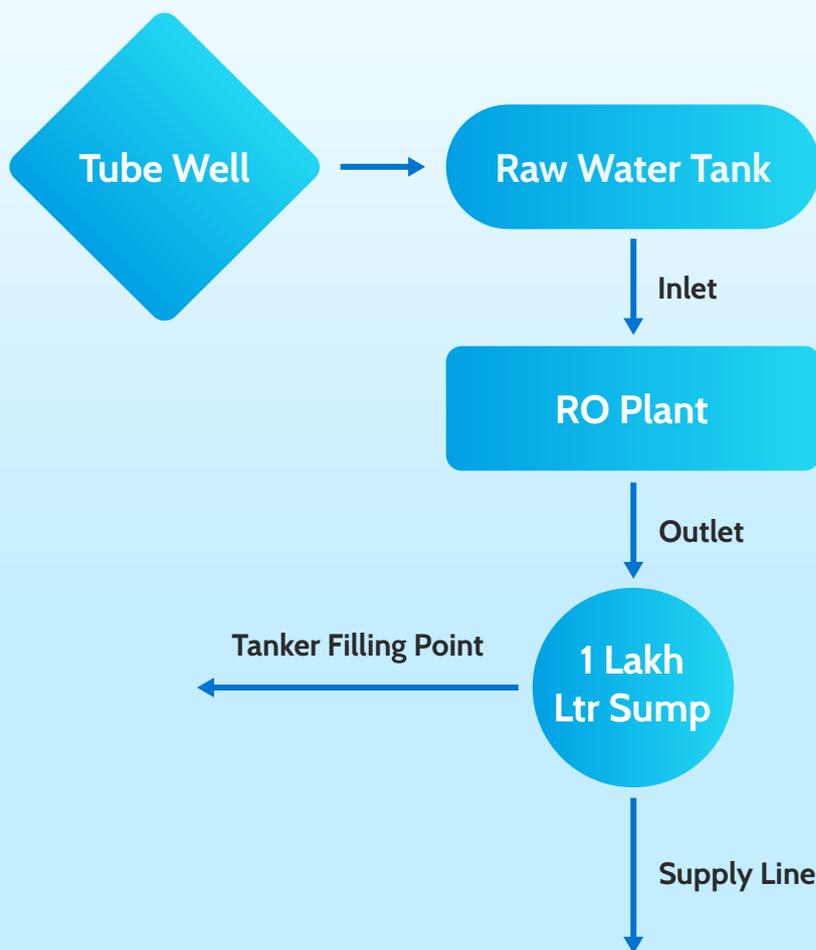
Flow diagram for Tube-well based water treatment plant at BOP-Banaskantha

Five plants of 0.1 MLD capacity are being set up for three districts in Gujarat out of which work for two sites has been completed. The first plant is installed as BOP area of Kutch. The reject water after desilting the

brackish water is disposed off in Rann of Kutch. The second plant is installed at Mota Asota, a coastal village in Dwarka. CSMRI will be providing free maintenance service for the next five years for these plants. The work for remaining three sites is underway and will soon be completed by BARC.

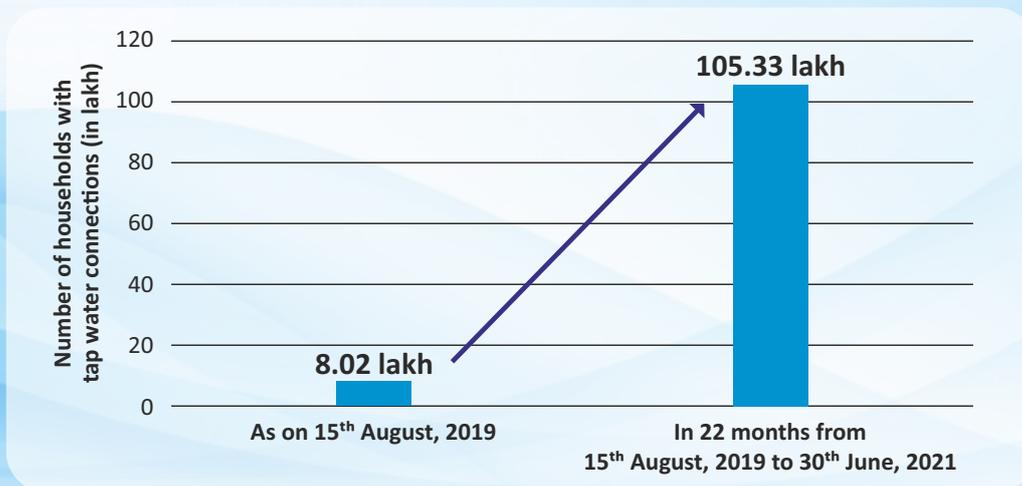
The initiative taken up under Jal Jeevan Mission by GWSSB is not just addressing the challenge faced by the security forces who defend our borders to keep the nation and its citizens safe and secure but it will also help end the drudgery faced by 1,078 rural households. The women in the region were daily travelling nearly 8 Km one way to fetch water to meet their daily household needs. The time saved in collecting water can be used to upgrade one's skill, educate the children, carry out economic activities thereby enhancing 'Ease of Living'.

The project demonstrates the use of cost-effective indigenous technology to provide potable water in remote border location in collaboration with multiple agencies of international repute. It begins a new chapter of providing safe drinking water in the coastal region of the country. ■



De-Salination Flow Diagram

Progress during last 22 months in making provision of tap water supply to households in JE/ AES affected districts



Assam leverages skill training

- Devina Srivastava, Consultant, UNICEF

The Government of Assam is diligently working amidst Covid-19 pandemic to provide rural households safe drinking water.

A total of 4,790 Village Water & Sanitation Committees (VWSCs) and water users' committees are formed and their registration initiated. Also, 13,278 Village Action Plans are prepared to date. However, the O&M and sustainability activities will be initiated post-construction of Piped Water Supply system and provision of FHTCs. Their capacity building training in book-keeping, Water Quality Monitoring and Surveillance, etc. are under process. Women FTK

groups are formed and trained for periodic assessment of water quality.

In Assam on 15th August 2019, at the time of the launch of Jal Jeevan Mission, only 1.11 lakh (1.76%) households out of a total of 63.35 lakh households in 25,335 villages, had tap water supply. In the last 22 months, 7.12 lakh households (11.24%) in the State have been provided tap water connections, thus 8.23 lakh households (13%) are having tap water supply. The State has to provide tap water supply to the remaining 55.11 lakh households in the next three years. To achieve this task, the State has planned to provide

tap water connections to 22.63 lakh households in 2021-22, 20.84 lakh households in 2022-23, and 13.20 lakh tap water connections in 2023-24.

PHED Assam conducted the first round of skill development training through its 12- hour-programme spread over three days '**Recognition of Prior Learning' (RPL)** - in December, 2020 targeting the uncertified skilled plumbers and masons covering all the divisions under PHED across the State's 33 districts. A total of 1,348 plumbers and 1,241 masons were trained.

After completion of the first round of skill development training, an **RPL & Bridge Course of 10 days (80 hrs)** was conducted in all the divisions from February to April 2021 in the second round of skill development training under JJM, Assam targeting the uncertified semi-skilled plumbers in the State. **A total of 1,707 plumbers were trained in the 10-day training.**

The State has trained a total of 3,055 plumbers and 1,241 masons since December 2020. The training was



conducted by subject experts empanelled with Assam Skill Development Mission (ASDM), Government of Assam. In the divisions, the training was coordinated and supervised by District Mission Management Units (DMMUs).

Assam had anticipated that through the skill development training of uncertified skilled and semi-skilled local-level plumbers and masons, it can create the pool of skilled human resource whose services can be utilized by the department in running the water supply schemes as well as be available to contractors/ Gram Panchayats/ Village Water & Sanitation Committees (VWSCs) etc. on need basis.

Assam-JJM is also planning to conduct short-term skill development training for the unskilled local youth in the job roles of plumbing and masonry shortly.

Assam has also trained a total of 16,148 Women in water quality monitoring using the FTKs and a total of 368,012 tests using FTK performed as of March 2021. The Women Groups in all Districts are doing remarkable work and among them, the Women Groups of Adalbari Village and Child Development Committee (VCDC) and Narayanpur VCDC in Baksa District are worth mentioning.

The five women groups under these VCDCs were trained in water testing using FTK. They not only followed the instructions to tee but also reported their findings to the laboratory staff as per the pinpoint list provided to them. This action of theirs has an impact on data entry for FTK in IMIS. The samples of contaminated water (ph, hardness, and iron above permissible limits) were referred to the district laboratory and Guwahati State Referral laboratory for further testing and the tests reports were submitted to the

District Office for further action as per requirement. The women's groups, in the meantime, went forward and alerted the community about the water quality. Sanjita Sutradhar, Ronima Ramchiary, Dipti Koiborto of Adalbari VCDC and Pratima Narzary, Jaya Basumatary, Kanika Basumatary of Narayanpur VCDC deserve to be applauded for their dedication to work assigned to them.

Apart from skill training and other field level activities, Assam-JJM is expanding the reach of its programmes through advertisements, hoardings, billboards, glow signs etc., at Railway stations, Inter-district bus terminals, Airports, Doordarshan, etc.

Assam-JJM has successfully provided 100% FHTC in 394 villages. These villages are now getting safe drinking water in their households and are happy with the provision. ■



Practical mason training provided to local youth in Assam

Potable water to reach Rarrain Gram Panchayat of Samba district in J&K

For the team of Jal Jeevan, providing water transcends the lines of being only a policy to be implemented, for the Public Health & Engineering Department (PHED) in Jammu Division it is an act of bringing God into people's home, an act in the service of humanity.

2,700 people living in Rarrain Gram Panchayat for years had been relying on shallow handpumps to meet their daily household needs. The water used for drinking and cooking by the 540 households in Sambha district is not potable, but the residents are left with no other option other than taking water from these handpumps. Digging individual borewells is neither feasible nor cost effective.

Samba, is situated at 1,259 feet above sea level in the foothills of Shivalik range on the bank of Basantar river around 40 km from Jammu. It is bound on the north by Udhampur and shares 55 km international border. It is the most industrialized district in the UT.

In order to provide adequate quantity of prescribed quality water on regular and long-term basis, under Jal Jeevan Mission programme the Department is executing a single village scheme for Rarrain Gram Panchayat. The engineering work of digging a 600 feet deep tube well was initiated on 31st May 2021. The work will complete in next 6-months. The future demand for water in the GP will be 1,40,000 gallons, which can be met through this tube well. A sump tank with a capacity of 20,000 gallons and an overhead tank with a storage capacity of 50,000 gallons is under construction. ■



Bihar PHED continues with water quality testing drive

As Bihar is gripped with heavy rain and floods, its Public Health and Engineering Department, has decided to use Field Test Kits (FTKs) for testing water quality instead of regular testing which was undertaken by water testing laboratory technicians. During heavy rain it gets difficult to travel to villages especially those which are affected by flood. Nonetheless, testing of water is important as the ground water sources get contaminated and checking of water sources gets crucial.

For both chemical and bacteriological tests, FTKs are being used in Bihar. As per the Mission guidelines it is mandatory to undertake tests for bacterial contamination twice a year i.e., pre-and-post monsoon while chemical contamination is carried out once a year. Ward Implementation Management Committee (WIMC) is assigned the responsibility by the Gram Panchayats for water quality monitoring and surveillance using FTKs at sources and delivery points.

Involvement of WIMC in water testing will go a long way in building their confidence and taking onus for community engagement. WIMC members are assigned the responsibility to test the water sources and delivery points, to ensure that water supplied in every rural home is of prescribed standard and is safe for drinking and cooking. In case any contamination is detected, the matter is immediately reported to the department for corrective action. Field Test Kits are helping in testing fluoride, arsenic, excess iron as well as bacteria.

Bihar has 3,814 fluoride, 5085 arsenic and 21,598 iron affected wards. Five parameters (pH, total hardness, total alkalinity, chloride and nitrate) will be tested in non-quality affected areas and six parameters (Arsenic/ Fluoride/ iron and 5 common parameters) in quality affected area. The drive will help reduce spread of water-borne diseases.

As of date, 1.45 Crore (74%) rural homes in the State of Bihar are getting tap water supply in their homes. The State plans to become "Har Ghar Jal" this year. ■

Training VWSCs in inaccessible rural Barmer

- PHED, Rajasthan

For the people of arid and semi-arid areas of Rajasthan, who have since ancient times lived with the water crisis, Jal Jeevan Mission — Har Ghar Jal, a Centre sponsored collaborative programme with the State governments, has come as a boon.

The desert State has scanty rainfall and high summer temperature, making it very difficult for the locals to access water in all seasons. The 'Har Ghar Jal' programme under Jal Jeevan Mission ensures 55 lpcd drinking water of prescribed quality on a regular and long-term basis to all the rural households.

The State Water and Sanitation Mission (SWSM) is leaving no stone unturned in ensuring every rural household gets water supply for

drinking, cooking, and other household chores.

Considering the searing summer temperature in the State and inaccessibility of certain regions either due to the poor road connectivity or because the roads are filled with sand posed sticky challenges. The undeterred Public Health Engineering Department (PHED)

officials and IEC experts from the State, however, travelled on camels from one habitation to the next to train 2,477 VWSC in the Barmer region.

As mandated under the Mission guidelines, they trained Village Water & Sanitation Committees (VWSC), formed in every Village Panchayat, in various aspects of in-village water

supply schemes to build their capacity for supporting the mission's village-level objectives.

The VWSCs, in turn, are now raising community awareness about the mission objectives, its village-level planning and implementation of in-village water supply infrastructure, and the community role in its operation and maintenance.

The VWSCs have also undertaken community awareness drives on the importance of safe drinking water, need for water source strengthening, regular testing of water quality, surveillance of water quality at the source and user points by VWSC sub-committee of five women members, greywater management, measures in water conservation and proper operation and maintenance of in-village water supply infrastructure.

In Rajasthan on 15th August 2019, at the time of launch of Jal Jeevan Mission, only 11.74 lakh (11.59%) households out of a total of 1.01 Crore lakh households in 43,323 villages, had tap water supply. In the last 22 months, 8.45 lakh households (8.35%) in the State have been provided tap water connections, thus 20.19 lakh households (19.94%) are having tap water supply. ■



PHED Engineers reaching to unreachable population in Rajasthan

Push for capacity building and training: Key Resource Centres

- Rachna Gahilote Bisht, NJJM

On 16th June 2021, a webinar was organized by the National Jal Jeevan Mission, Department of Drinking Water & Sanitation (DDWS), Ministry of Jal Shakti with 104 Key Resource Centres (KRCs) empaneled for building the capacity of various stakeholders at national, State, district and community level. The KRCs are expected to play a key role in capacity building to support the implementation of Jal Jeevan Mission by working closely with the community, district and State level. National Mission/ States 'Building Partnerships and Changing Lives' is the essence of Jal Jeevan Mission, which envisages knowledge-building with support from government training institutes, civil society, universities and deemed universities of repute to function as KRCs.

Additional Secretary & Mission Director, NJJM, Shri Bharat Lal spoke

about the objective and philosophy of JJM in detail and urged the KRCs to develop high quality customized training programmes for different stakeholders. Addressing more than 280 representatives of 104 KRCs, he said, "since the States in India are at various levels of saturation there is a need to develop capacity building modules catering to their requirement. States which have achieved 100% saturation require training on water source sustainability, grey water management, addressing the grievance of the people, payment of user charges and judicious use of water at all times. Few States lagging in programme implementation as compared to national pace need handholding support through training to address the various challenges encountered, technical knowledge, quality control, etc." It was stressed upon that Jal Jeevan Mission is a service delivery

programme. Therefore, the agencies should design training modules to re-orient both the engineering and other human resources through proper orientation programme, exposure visits and leadership programmes to enable them to discharge the role as envisaged under JJM for providing tap water supply to every rural household on regular and long-term basis.

Capacity building is an important component of Jal Jeevan Mission. Under JJM, water quality monitoring & surveillance activities are to be given top priority, for which anganwadi workers, ASHA workers, members of Self-Help Groups, PRI members, school teachers, etc. are being trained so that they can test water samples for contamination by using Field test Kits (FTKs). Under JJM, 'bottom up' approach is followed, wherein community plays a pivotal role starting from planning to implementation, management, operation and maintenance. To achieve this, State Governments undertake support activities like strengthening the Village Water & Sanitation Committee (VWSC)/ Pani Samiti, developing of Village Action Plan for the next five years, engaging Implementing State Agencies (ISAs) to handhold and support village communities, carry out awareness among people. Such handholding and capacity building play a critical role in



ensuring long-term sustainability and operation & maintenance of the water supply infrastructure for assured water supply to every home.

Key Resource Centres (KRCs) have been empaneled to build the capacity of various stakeholders such as officers, PHED engineers, technicians,

members of PRIs, community members at State, District and community levels. More than 600 applications were received by the Mission out of which 104 agencies have been selected for capacity building. These agencies are spread across 22 States. KRCs will be provided funding from JJM.

During the interactive webinar, queries from the KRCs were responded. The KRCs were advised to revisit the Annual Action Plans submitted to the Mission based on the discussion held during the webinar. It has been planned that the training in both online and offline mode to commence from August 2021.

UNICEF and Jal Jeevan Mission

Department of Drinking Water and Sanitation, Ministry of Jal Shakti, Government of India is implementing Jal Jeevan Mission (JJM) in partnership with States, which aims at providing household tap connection to every rural household by 2024. The motto of JJM is 'Building partnerships, changing lives' and with this spirit various domestic and international organizations proactively working in the water sector with wide outreach and impact, are working as Sector partners for Jal Jeevan Mission.

United Nations Children's Fund (UNICEF), a UN agency actively working across the world for Water, Sanitation and Health (WASH), is one such Sector partner of Jal Jeevan Mission. UNICEF's core areas of work are in social and behavior change communication, water quality monitoring and surveillance, etc. especially focusing on children and women. Towards this end, UNICEF country office has been working closely with National Jal Jeevan Mission in design, planning, implemen-

tation, monitoring, review and knowledge management activities of JJM.

NJJM and UNICEF National and State teams hold regular interactions regarding priorities of Jal Jeevan Mission and the expected role of UNICEF for its roll out and implementation. One such most recent interaction was held in June 2021 where in Additional Secretary and Mission Director, National Jal Jeevan Mission interacted with the UNICEF teams on actionable priority areas and sought feedback on ground performance of the mission. AS & MD shared the vision of JJM and elaborated on the various works UNICEF teams can take up on the ground - like advocacy & awareness generation about water, sanitation and public health implications, knowledge sharing with SWSMs, PHEDs, KRCs, organizing roundtable meeting with NGOs/ ISAs and thus contributing to transfer of knowledge at local levels. He also solicited suggestions from UNICEF ground teams on what they think is important and how challenges can be addressed. He emphasized that no institution can alone bring results and building partnerships is important for all.

At the national level, UNICEF is closely working with NJJM UNICEF also has been supporting the State Governments in contextualizing these mission guidelines to the State specific conditions. Further, UNICEF has been playing an important role in capacity building of Implementation Support



Agencies (ISAs) and their monitoring and review. ISAs are NGOs/ VOs/ women SHGs/ CBOs/ Trusts/ Foundations that are being empanelled under JJM as field level partners in mobilizing and engaging the communities to plan, design, implement, manage, operate & maintain in-village water supply infrastructure. UNICEF has also supported the national mission in development of guidelines for Key resource centres and is handholding State Governments for effective management and coordination of KRCs. They have also regularly been supporting DDWS and National Jal Jeevan Mission in gathering insights and evidences from the field in form of

case studies, learning documents, etc and sharing the same at State and national level to improve program outcomes.

At the State level, UNICEF has also been providing technical assistance for community led village level action planning, supported districts and States in developing District and State level Action plans respectively with a focus on Capacity building and IEC. The UN agency has also been extending support to States to strengthen Water Quality laboratories with specific focus on NABL accreditation and community driven water quality management and surveillance.

Overall, it has been playing a key role in demonstrating and supporting States in source and system sustainability of schemes under JJM. Having supported the design of guidelines for Jal Shakti Abhiyan, UNICEF is also actively supporting States in source sustainability measures like structure design, rain water and grey water harvesting, etc.

UNICEF State representatives apprised of the works taken up and areas where push is needed like community contribution, constitution and strengthening of VWSCs, VAP preparation, impact assessment of 100 days campaign, etc. ■

JJM lauded at WSDS-2022 curtain-raiser

A virtual curtain-raiser on World Sustainable Development Summit 2022 was organised on 4th June 2021, ahead of World Environment Day. The curtain raiser was organised by The Energy and Resources Institute (TERI).

The keynote address at the event was given by the Union Minister of Environment, Forest and Climate Change, Shri Prakash Javadekar. He emphasized on 'Save, Reuse and Repurpose Water'. He mentioned about the dwindling per capita availability of water was 5,000 m³ in 1950s to 1,100 m³ due to increasing population, over-extraction of water for use in agriculture, domestic and commercial purposes.

Highlighting the urgent need to conserve water both in agriculture and domestic use, the Union Minister appealed for judicious use of water and making it accessible for everyone. He also urged for bringing about social and behaviour change by making roof top rainwater harvesting compulsory for individual and housing societies.

The Minister added that a historic decision was taken by the Hon'ble Prime Minister Shri Narendra Modi in 2019 and since then 4.5 Crore households have been provided with tap water connection. The remaining households will get piped water connections in the next three years. Efforts are to promote use of recycled

water in toilet closet, gardening, etc. Many power plants have reduced the intake of water by using sustainable practices. The Minister desired setting up of a Water Bank.

The Additional Secretary and Mission Director, National Jal Jeevan Mission Shri Bharat Lal, gave policy perspective at the Summit highlighting the importance of water with depleting per capita availability of freshwater due to increasing population, expanding economic activities and aspirations of the public. Since, groundwater is a major source of drinking water in India and its depletion is a serious cause of concern, he said, water conservation, rainwater harvesting and water storage are keys to achieve water security.

He mention that Jal Jeevan Mission was announced in August 2019 to ensure tap water of prescribed quantity and assured quality is provided regularly on a long-term basis to all rural households by 2024. In the past two-and-half years, modest progress is made. Out of 19 Crore households, 7.5 Crore households, covering 39% of the total rural



teacher, are trained in water quality tests and provided water quality testing devices to check the quality of water supplied.

The mission believes in building partnership. At the national level, sector partners including NGOs, trusts, foundations and UN agencies are coming together to work with NJJM. At the State, district and village level, NGOs wishing to participate in the programme are engaged as Implementing Support Agencies. Under the 'Har Ghar Jal' programme, every village prepares a 5-year Village Action Plan covering source strengthening, drinking water supply, greywater management and operation and maintenance. Sensor-based IOT solution is piloted in 11 villages under the first phase. In the second phase, it will be set up in 100 villages.

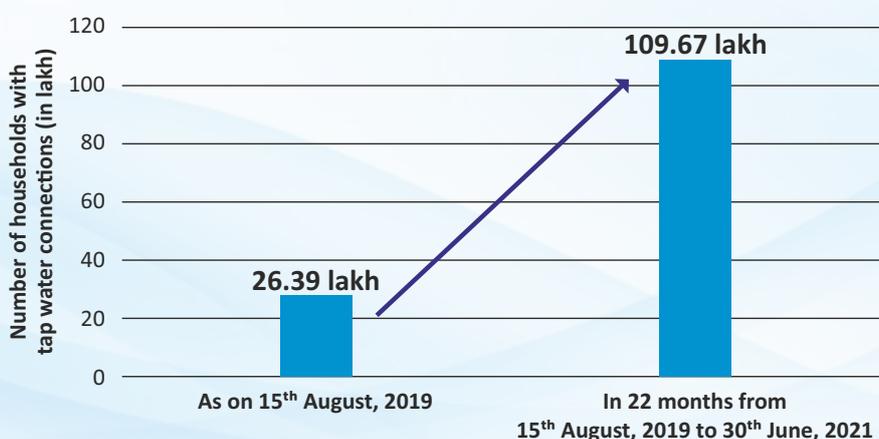
In the end, Shri Lal urged all to work on increasing the water storage capacity, developing aquifer recharge, restoration of the water bodies, putting an end to water wastage by improving water use efficiency, and keeping rivers and other water bodies safe and clean. ■

population, are getting piped water supply. Out of over 6 lakh villages in the country, tap water is accessible in every rural household of 93,894 villages. Four States/ UTs and 62 districts have 100% coverage of piped water supply. The mission will cover every rural household by 2024.

The most important aspect of the Mission is that the Gram Panchayats and their sub-committee i.e., Village Water & Sanitation Committee (VWSC) or Pani Samiti are empowered to plan, implement, operate,

maintain and manage their in-village water supply system. The 15th Finance Commission has recommended tied-grant for water and sanitation to the Gram Panchayats. Every year, roughly Rs 30,000 Crore will be given to the Panchayats for water supply and sanitation. VWSC, a body of 10-15 members drawn from the community, is formed in every village. About 50% of the committee members are women with proportional representation from the weaker section. Five people in the village, preferably ASHA worker, anganwadi worker, school

Progress during last 22 months in making provision of tap water supply to households in Aspirational districts



MoS Jal Shakti seeks support from Members of Parliament for rainwater harvesting

Minister of State for Jal Shakti, Shri Rattan Lal Kataria has written to Member of Parliaments urging them to support the ongoing “Jal Shakti Abhiyan: Catch the Rain” campaign in their respective Parliamentary constituencies. The Abhiyan with the theme - “Catch the Rain where it falls, when it falls’ was launched by Hon'ble Prime Minister, Shri Narendra Modi on the occasion of World Water day - March 22, 2021.

The campaign aims at tapping rainwater by constructing artificial recharge structures, revitalizing

existing ponds and water bodies, creating new water bodies, provisioning check dams, rejuvenating wetlands and rivers before the onset of monsoon. A database of all water bodies of the country will be prepared through geo tagging. The collected data will be used to create scientific district-level water conservation plans.

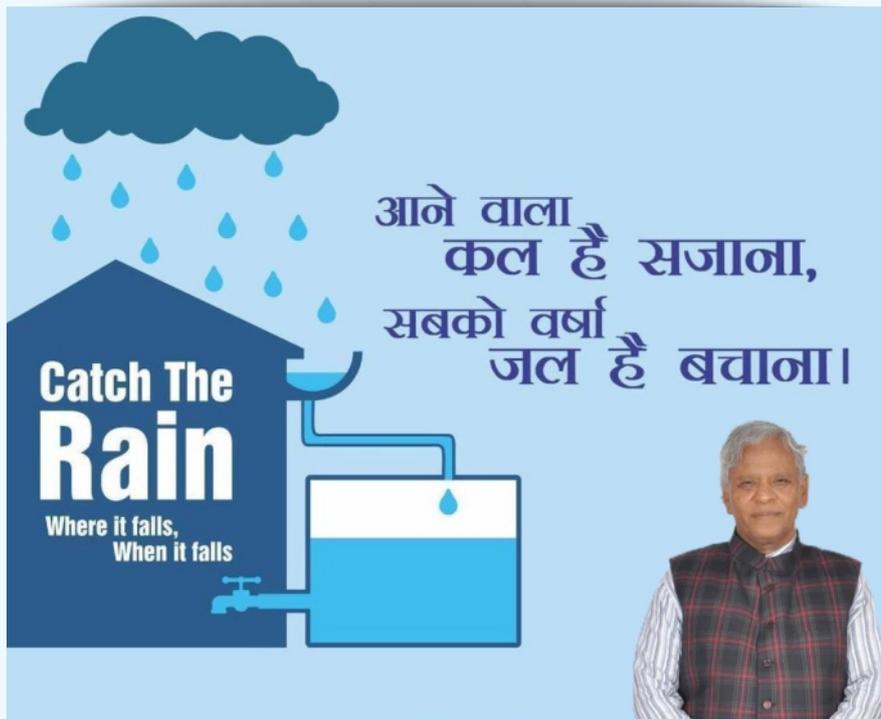
Support is sought from the MPs in sensitizing people to conserve rainwater during the ensuing monsoon season. Shri Kataria urged each Member of Parliament to be the brand ambassador in their respective constituency.

Jal Shakti Abhiyan covers both rural and urban areas of all districts, unlike Jal Shakti Abhiyan-1 launched in 2019, which covered only 1,592 water stressed blocks out of 2,836 blocks of the country. National Water Mission, under the Ministry of Jal Shakti, is the nodal agency for its implementation and is tirelessly working involving all State governments and Public and Private enterprises to synergize their actions in this direction.

Since its launch, the Abhiyan has made noticeable progress, despite disruptions posed by the Covid-19 pandemic. Construction of 1.64 lakh water conservation and rainwater harvesting (RWH) structures has been completed, while work is in progress on 1.82 lac additional structures. 37,428 traditional structures and existing water bodies have been renovated till date with an expenditure of Rs 2,666 crore and 42,000 additional structures are expected to be rejuvenated shortly.

A total of Rs 14,000 Crore worth water conservation related work is being undertaken by MNREGS. Ministry of Housing and Urban Affairs has renovated 1,258 RWH structures while adding 1.02 lac new RWH structures. The Abhiyan has gone further to include crop diversification, afforestation and disseminating information on water use efficiency (WUE) under its mandate.

Shri Kataria added that “the Prime Minister is leading from the front. He has written letters to all Chief Ministers as well as 2.5 lakh Sarpanchs to actively participate and contribute towards the success of this campaign. His efforts speak volumes about the firm resolve to work in the field of water conservation. With these sincere efforts, supported by public participation, I am confident that soon we will be able to transform “Jal-Aandolan” into a “Jan-Aandolan.”





Har Ghar Jal
Jal Jeevan Mission

Jal Jeevan Samvad



Women led Pani Samiti

Women are playing leadership role through VWSC/ Pani Samiti to ensure tap water supply to every home under Jal Jeevan Mission

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