Jal Jeevan Sebruary | 41st Edition | Year 2024

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Building Partnership Changing Lives

Special Feature Capacity Building

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Prime Minister on Jal Jeevan Mission

Narendra Modi Prime Minister

Our government is continuously working to improve the standard of living of the people, to reduce their problems. We have provided pucca houses to more than four crore families. We have provided water connections to more than 10 crore families.

> PM Shri Narendra Modi's address at the Ahlan Modi Event in Abu Dhabi, UAE, 13th February 2023

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

New Delhi 29th February, 2024

In the fleeting span of February, a month brief in days yet vast in aspirations, Jal Jeevan Mission (JJM) has written new chapters of achievements and insights, a narrative that resonates with India's unwavering commitment to Sustainable Development Goals. Since its inception in 2019, JJM has been a ray of hope and an agent of change for the rural population, symbolising a dynamic journey towards well-being and progress. This month Arunachal Pradesh has attained 100% coverage, and with this the total number of States/ UTs with 100% saturation is now 10.

Central to the mission's ethos is the provision of piped water supply — consistent in flow and as per prescribed in quality. This formidable task necessitates an unyielding focus on capacity building and skill development, the twin pillars that uphold the promise of quality and regularity in water supply.

The spotlight of this month's Samvad focuses on 'Capacity Building', which is an all-encompassing approach to strengthen the institutional framework and equip communities with requisite skills and knowledge.

Merely constructing water infrastructure is not sufficient. For these systems to be effective and sustainable, equal emphasis must be placed on their operation and maintenance (O&M). This aspect is pivotal and requires a dedicated, skilled workforce. To ensure longevity and efficiency, the systems must be overseen by individuals who are not only technically proficient but also they understand the unique needs and dynamics of the rural communities they serve.

In this issue, we delve deep into the heart of this vital element, in strengthening the mission's objectives through a series of write-ups and success stories that give the readers an insight into how capacity building is propelling the mission forward on the ground.

In Madhya Pradesh, a trailblazing pilot project in the Jhabua and Sehore districts exemplifies this commitment. The project concentrates on enhancing drinking water quality monitoring and surveillance, interweaving community training, phased implementation, and the establishment of a robust emergency response system.

In Karnataka's Hoskote, villages like Chinandhalli confront the challenge of declining groundwater levels. Here, WaterAid India, in collaboration with its partner organisation, has embarked on water recharge and replenishment ventures in 10 Gram Panchayats since 2021. This integrated approach, combining technology with community engagement and resource mapping, serves as a multifaceted strategy in addressing groundwater challenges.

The efforts of the Centre for Microfinance and Livelihood (CML), an associate of Tata Trusts, in improving water resource management in the states of Assam and Tripura under JJM is commendable. CML's work is particularly focused in Assam's Kamrup district and Tripura's Dhalai district, impacting over 1,00,000 households across these regions.

The ethos of JJM has always been rooted in community-led initiatives, with a firm belief in the power of community involvement to ensure the quantity and quality of water. Our continued efforts in community engagement are yielding tangible results, reinforcing their commitment to safeguard our invaluable water resources. The ultimate aim remains steadfast – to deliver water of prescribed quality from source to tap.

A landmark event this February was the National Conference on Jal Jeevan Mission and SBM-G, organised by DDWS, held in Lucknow on 16th and 17th February. The conference was not merely a congregation of officials and





stakeholders, but a culmination of ideas, experiences, and best practices aimed at propelling JJM towards its sustainable future. The conference, attended by Shri Gajendra Singh Shekhawat, the Hon'ble Union Minister of Jal Shakti along with other dignitaries, led to impactful discussions on drinking water, public health, and the path forward for enhancing water sustainability and quality in rural areas.

Over two days, discussions spanned the critical aspects of JJM – sustainability, skill development, water quality, operation and maintenance (O&M), and citizen feedback mechanisms. It was heartening to witness the commitment of States/ UTs and their multiple initiatives of every front that account for JJM's success. The conference also marked the launch of significant documents and the Citizen Corner, a new section on JJM Dashboard to further enhance transparency, ease, and accountability.

The tangible actions on the ground and the inspiring success stories highlight JJM's profound impact on daily lives, liberating women from the shackles of water scarcity and enabling children to pursue education.

In a significant interaction this month, Smt. Vini Mahajan, Secretary – DDWS engaged with journalists from 19 Latin American and Caribbean (LAC) countries at CGO Complex, Pandit Deendayal Antyodaya Bhawan. This meeting was a pivotal moment to showcase the strides made under JJM. I was also a part of this eventful meeting and delivered a presentation, detailing the journey of the mission thus far, touching upon other important verticals of the mission, namely water quality aspects, source sustainability, capacity building, community participation, use of technology in monitoring and management, and ensuring the financial sustainability of water supply systems.

Following the presentation, a Q&A session was held, allowing for a rich exchange of ideas and insights. The interaction was not just a display of India's commitment to solving its water challenges but also a platform for sharing experiences and lessons with a global audience, particularly with representatives from the LAC countries, who may face similar challenges in water management.

This month, Secretary – DDWS, and under her guidance, I, undertook field visits in the villages of West Bengal, Assam and Meghalaya. These visits offered a hands-on evaluation of JJM's progress and implementation, enriched by interactions with diverse community members and assessments of water quality testing parameters.

As we bid farewell to February, JJM stands proud, having reached the remarkable milestone of providing tap water connections to 14.36 crore rural households. This achievement is indeed a narrative of empowerment, sustainability, and transformative change. As we edge closer to universal coverage in rural areas, our vision grows clearer. JJM is not just altering landscapes; rather, it is reshaping lives, steering India towards a future brimming with growth and socio-economic development. Armed with the lessons, experiences, and inspirations from this month, let us advance towards our ultimate goal – Jal Jeevan for every rural household.

[Dr. Chandra Bhushan Kumar]



National Conference on Jal Jeevan Mission and Swachh Bharat Mission Confluence of Ideas for Sustainable Rural Development

he National Conference on Jal Jeevan Mission and Swachh Bharat Mission – Grameen was held in Lucknow on 16th-17th February 2024 in which senior officers from 31 States/ UTs participated. The conference was graced by the distinguished presence of Hon'ble Union Minister of Jal Shakti Shri Gajendra Singh Shekhawat, Shri Swatantra Dev Singh, Hon'ble Minister of Water Resources – Uttar Pradesh, Hon'ble MP Shri Ravi Kishan Shukla from Gorakhpur Constituency, Shri Vini Mahajan, Secretary, Government of India, Department of Drinking Water and Sanitation, Shri Chandra Bhushan Kumar, AS&MD JJM, Gol, Shri Anurag Srivastava, Principal Secretary, Government of Uttar Pradesh and Shri Jitendra Srivastava, JS&MD SBM-G, Gol.

Special Chief Secretary/ ACS/ Principal Secretaries/ Secretaries, Mission Directors/Engineer-in-Chief/ - NJJM



Chief Engineer and select DMs/ DCs participated in the conference and deliberated on the achievements made, challenges encountered, and suggested possible solutions for the problems raised during the conference. The Two-day National Conference was witness to an interesting mix of sessions – the first day of the National Conference was centered on convergence and both JJM and SBM-G presented unified approaches towards Sustainable Solutions in the Rural WASH Sector. Day 2 of the conference, focused on thematic discussions on ODF plus





components of SBM-G and water components of JJM.

Distinguished guests spoke about their experiences in the two missions and shared their guidance. Shri Swatantra Dev Singh, Hon'ble Cabinet Minister Jal Shakti, Uttar Pradesh highlighted the good work being done in the state, thanks to the leadership at the National and State level which has ensured a conducive policy environment that places public health at the forefront making UP the state with the highest number of FHTC in India. MP, Gorakhpur, Shri Ravi Kishan, spoke about the sanitation journey of India which has witnessed phenomenal progress in both the JJM and the SBM-G especially in far flung areas which has enabled people and communities to get access to the essentials, which were ignored for the longest time. He spoke specially about the far-flung villages in Gorakhpur which have piped water connections and functional toilets in schools and households as well as solid and liquid waste management arrangements.

Union Minister of Jal Shakti, Shri Gajendra Singh Shekhawat highlighted the critical time of this conference which comes when both JJM and SBM-G have achieved significant programme milestones achieving great outputs. He spoke about the way forward, which should entail continued engagement with the public and making it a people's movement which not only enhances programme uptake but also ensures sustainability. Both transformative missions - JJM & SBM need to continue the work for Sampooran Swachhata which must look at programme convergence; enhanced guality control measures for procurement and implementation; and a passionate commitment from all involved with the work to be the change we want to see in this country.

Secretary DDWS, Smt. Mahajan discussed the work done in JJM and SBM-G across 6 lakh villages of this country which impacts the lives of the weakest and the most disempowered. She reiterated that the focus needs to be on maintaining the water supply systems and working out systems that build the capacities of the utilities that have been already created. She established the importance of effective O&M policies where the focus is on empowering local communities for sustained infrastructure management. She called for interdepartmental convergence and shared learning. With regard to Sanitation she talked about the importance of having an O&M policy in which a crucial role is allocated to women SHGs, the necessity of constantly reviewing and ensuring ODF sustainability, the need to have a profit centre concept around PWMUs and segregation sheds, use of plastic waste in road construction, importance of individual SLWM assets to ensure saturation of SLWM assets, requirement of setting up call based feedback mechanisms, the SGLR system, the necessity of introducing community interventions in Menstrual Hygiene management etc.

The Day 1 of the conference saw the release of five books, 3 from SBM-G and 2 from JJM.

 Swachhata Chronicles: Transformative Tales from India-Vol. II: Swachhata Chronicle Volume 2 is a compilation of best practices from the community where impactful change continues to unfold for SBM-G. These stories transcend statistics, as they showcase the impactful journey of rural sanitation and environmental sustainability, serving as a testament to the ongoing transformation of villages into ODF Plus Model.

 Swachhata Green Leaf Rating (SGLR)' System Booklet that is a benchmark index which exemplifies the spirit of responsible







tourism, encompassing responsible sanitation practices across various core components of SBM-G. It is a voluntary rating system for both public and private hospitality facilities across India.

- 3. Compendium on Liquid Waste Management (LWM) Technologies: A consolidated booklet of approved technologies, operational guidelines, and successful case studies, providing a knowledge bank for stakeholders on LWM, serving as a guide, fostering a cleaner and healthier rural environment.
- 4. Jal Jeevan Mission Compendium of Behavioural Best Practices: A Comprehensive Insight into Progress and Achievements.
- 5. Behavior Change Communication Strategy: Shaping the Future through Awareness.

The participants in the National Conference unanimously acknowledged the success of the JJM in a short span of 54 months since August 2019 vis-à-vis the status at the time. SBM-G was also acknowledged for sustaining the ODF status and achieving new milestones in both solid and liquid waste management arrangements across the country with a whopping 87% of India's villages being declared in the ODF plus category (sustaining ODF and having arrangements of either solid or liquid waste management arrangements) which is remarkable progress from the 7% status in April 2022, which is a testament to the commendable work being done across all States/UTs. This has placed the country on a path to achieve the SDG goals relating to water and sanitation well ahead of 2030. These two missions would also play a key role to achieve Vikasit Bharat status bv 2047¹.

In the conference, the States shared their captivating success stories and showcased the efforts that have gone into making the programme a success, despite worldwide pandemic in the initial two years; supply chain disruptions due to global developments affecting the Indian markets leading to price rise; limitations due to non-availability of adequate construction agencies; mobilising implementation agencies for work that was at least four hundred percent more per annum in both size and scale i.e US \$ 43 billion investment to cover balance 160 million households.

The brainstorming sessions in the conference also acknowledged the importance of sustaining both the drinking water services as well as the sanitation services as more and more of the rural populace gets habituated to better water supply and sanitation services, and any disruption or shortcomings would have social and economic costs. To overcome these challenges, the conference broadly identified the following outcomes on which all stakeholders i.e. Government of India, States, International Agencies, WASH partners, community, academic/ partnership institutions, industries and other private sector entities have to work for sustaining the success.

With regard to JJM, the following KRAs were identified as the way forward.

1. Operation and Maintenance (O&M)

As we reach the last mile of mission implementation, sustaining the *Har Ghar Jal* would require meticulous operation and maintenance of all types of schemes viz Single Village Schemes, Multi-village schemes, spring-based schemes, etc. This would require

- All States to have O&M policy prepared and notified with the approval of competent authority.
- The policy to inter alia have clear 2. demarcation of roles and responsibilities of different stakeholders, clarity on the approach for different types of schemes, imparting skill sets required for the HR, handing over of the schemes, approach to metering, involving the community and women in O&M, defined service delivery charges based on volumetric consumptions by different users duly incorporating the inflationary and subsidy (wherever required)







aspects; technological inputs for preventive and breakdown maintenance; and institutional arrangements for implementation of the policy.

- Commitment to finance for O&M by the State Finance Department and convergence of funds from different sources (revenue generated through service delivery chares paid by the public; State contribution, State & Union Finance Commission funds, GPs own revenue, CSR funds etc) to be ensured for continuous O&M of schemes.
- 4. Have a benchmarking system with measurable indicators to monitor the performance of i.) schemes covering *inter alia* power consumption, Non-Revenue Water, Water Quality aspect, Water audit etc., and ii.) GPs/O&M implementing agencies (tariff collection, response to grievance redressal, water supply management, conservation efforts etc).
- Follow up actions by States on agreed KPIs in the Chief Secretaries conference relating to O&M and monitoring from both National and State level.

2. Skilling

The requirement to continuously capacitate stakeholders systematically for sustaining the water supply scheme functionality was agreed. This is to be done by

- 1. Implement Nal Jal Mitra programme throughout the State with increased pace.
- 2. Mapping skill set requirements at scheme level with skilled human resources.
- 3. Recognition of Prior Learning of trainees to save on training period from 510 total hours.

 Follow up actions by States on agreed KPIs in the Chief Secretaries conference relating to skilling.

3. Grievance Redressal and Citizen feedback

The conference emphasises the requirement to have a system to receive the grievance and resolve the same in a time bound manner and a feedback mechanism to self-evaluate the grievance redressal mechanism. Some states like Punjab (m-Gram s e va), Haryana, Karnataka (PARIHARA) have systematised the mechanism to resolve the public grievances. The States have to

- 1. Set up 24 x 7 call centre to receive and track the grievance with an escalation mechanism.
- Leverage technology to have web/ app-based system for grievance redressal.
- 3. Including the water supply services under the public service delivery guarantee act or in citizen charter.

4. Water Quality Aspects

Supply of safe water has close link to health, school attendance, productive livelihood etc and hence under







the JJM it is the one of the functionality parameters of a tap connection provided. The participants agreed to

- Ensure that water` quality testing of sources (chemical and microbiological contamination) and household samples are followed as per the Standard Operation procedure discussed in the conference and results entered in the WQMIS portal of DDWS.
- NABL accreditation of labs each district has at least one NABL accredited lab.
- 3. Have robust chlorination systems (Andhra example) for protection against the biological contamination till last house.
- Involve and capacitate the community (Students, SHGs, VWSC members etc) for use of FTKs as part of community surveillance of water quality and sanitation aspects around the sources.

- Ensure the O&M of water quality labs (AMC of equipment's, availability of consumables, power charges, timely payment to staff, etc) utilising the ringfenced water quality funds available under JJM.
- Share the water quality results with public (at GP, Block, District levels) through digital public boards and SMS to create trust to 'drink from the tap', avoiding use of bottled RO water or use RO treatment households' units.

5. Sustaining the schemes and sources

Sustaining the schemes and sources have close link with operation and maintenance and concerted efforts to conserve/ recharge the sources. The participants agreed that massive investment and infrastructure created can be sustained only if States/agencies focussed on

1. Inventorying and geo-tagging all drinking water sources for

undertaking recharge/ water harvesting/ conservation works to benefit them.

- 2. Mandatory construction of at least one borewell recharge structure with a groundwaterbased schemes. Funds can be availed under JJM for this.
- 3. Delineating spring shed areas; carrying out spring shed management works for sustaining the springs in hilly areas.
- 4. Location of water conservation/ harvesting works based on hydro-geomorphological characteristics of the area.
- 5. Converge with schemes at ground level (MGNREGA, IWMP, Jal Shakti Abhiya, Amrut Sarovars etc) for access to funds.
- Leverage the institutional strengths of District Water and Sanitation Mission and State Water and Sanitation Mission for convergence.

6. Legislative Tools

Some of the States have enacted legislations for protection of water supply schemes and sources. The ones mentioned in the conference are

- I.) Arunachal Pradesh Protection of Drinking Water Catchment Areas Act, 2023
- ii.) Gujarat Domestic Water Supply Protection Act 2019.

States can study these acts and see whether such legislative tool is required and if so take up with State for drafting them for enactment for sustaining both the sources and schemes.





Sr. No.	Outcomes of National Conference	Action to be taken by	Remarks
	Operation & Maintenance		
I (a)	All States to have O&M policy prepared and notified with the approval of competent authority.	All States/ UTs	To adhere to the timeline as per the CS the Conference
I (b)	The policy to inter alia have clear demarcation of roles and responsibilities of different stakeholders, clarity on the approach for different types of schemes, imparting skill sets required for the HR, handing over of the schemes, approach to metering, involving the community and women in O&M, defined service delivery charges based on volumetric consumptions by different users duly incorporating the inflationary and subsidy (wherever required) aspects; technological inputs for preventive and breakdown maintenance; and institutional arrangements for implementation of the policy.	-do-	
l (c)	Commitment to finance for O&M by the State Finance Department and convergence of funds from different sources (revenue generated through service delivery chares paid by the public; State contribution, State & Union Finance Commission funds, GPs own revenue, CSR funds etc) to be ensured for continuous O&M of schemes.	All States/ UTs and DDWS	
I (d)	Have a benchmarking system with measurable indicators to monitor the performance of i.) schemes covering inter alia power consumption, Non- Revenue Water, Water Quality aspect, Water audit etc., and ii.) GPs/ O&M implementing agencies (tariff collection, response to grievance redressal, water supply management, conservation efforts etc).	-do-	DDWS to prepare suggestive benchmarks for States.
l (e)	Follow up actions by States on agreed KPIs in the Chief Secretaries conference relating to O&M and monitoring from both National and State level.	States/UTs	DDWS to monitor.
	Skilling		
II (a)	Implement Nal Jal Mitra programme throughout the State with increased pace.	States/UTs	
II (b)	Mapping skill set requirements at scheme level with skilled human resources.	-do-	
II (c)	Recognition of Prior Learning of trainees to save on training period from 510 total hours.	-do-	
II (d)	Follow up actions by States on agreed KPIs in the Chief Secretaries conference relating to skilling.	-do-	DDWS to monitor.

Matrix showing the outcomes of National Conference and responsibility matrix - JJM

6.0

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Sr. No.	Outcomes of National Conterence		Remarks
	Grievance Redressal and Citizen feedback.		
III (a)	Set up 24 x 7 call centre to receive and track the grievance with an escalation mechanism.		DDWS to monitor as these are part of CS conference KPIs.
III (b)	Leverage technology to have web/ app-based system for grievance redressal.	-do-	-do-
III (c)	Including the water supply services under the public service delivery guarantee act or in citizen charter.	-do-	-do-
	Water Quality Aspects		
IV (a)	 a) Ensure that water` quality testing of sources (chemical and microbiological contamination) and household samples are followed as per the Standard Operation procedure discussed in the conference and results entered in the WQMIS portal of DDWS. 		DDWS to monitor.
IV (b)	NABL accreditation of labs – each district has at least one NABL accredited lab.	-do-	-do-
IV (c)	Have robust chlorination systems (Andhra example) for protection against the biological contamination till last house.	-do-	
IV (d)	Involve and capacitate the community (Students, SHGs, VWSC members etc) for use of FTKs as part of community surveillance of water quality and sanitation aspects around the sources.	-do-, WASH Partners	-do-
IV (e)	Ensure the O&M of water quality labs (AMC of equipment's, availability of consumables, power charges, timely payment to staff, etc) utilising the ring fenced water quality funds available under JJM.	-do-	-do-
IV (f)	Share the water quality results with public (at GP, Block, District levels) through digital public boards and SMS to create trust to 'drink from the tap', avoiding use of bottled RO water or use RO treatment households units.	-do-, WASH Partners	-do-
	Sustaining the schemes and sources		
V (a)	Inventorying and geo-tagging all drinking water sources for undertaking recharge/ water harvesting/ conservation works to benefit them.	States/UTs	DDWS to monitor.
V (b)	Mandatory construction of at least one borewell recharge structure with a groundwater-based schemes. Funds can be availed under JJM for this.	-do-, WASH Partners	
V (c)	Delineating spring shed areas; carrying out spring shed management works for sustaining the springs in hilly areas.	States, WASH partners	





Sr. No.	Outcomes of National Conference	Action to be taken by	Remarks
V (d)	Location of water conservation/ harvesting works based on hydro-geomorphological characteristics of the area.	States, WASH partners	DDWS to roll out the APP for source sustainability assisted by GIZ, India.
V (e)	Converge with schemes at ground level (MGNREGA, IWMP, Jal Shakti Abhiya, Amrut Sarovars etc) for access to funds.	States, WASH partners and DWSM	
V (f)	Leverage the institutional strengths of District Water and Sanitation Mission and State Water and Sanitation Mission for convergence.	-do-	
	Legislative Tools		
VI (a)	Arunachal Pradesh - Protection of Drinking Water Catchment Areas Act, 2023	States/UTs	
VI (b)	Gujarat - Domestic Water Supply Protection Act 2019.	States/UTs	

Key Outcomes of the National Conference pertaining to Swachh Bharat Mission -Grameen are as follows:

1. ODF Sustainability

In the National Conference, it was emphasized that how Swachh Bharat Mission (Grameen) programme has transformed the lives of people by bringing significant improvement in terms of their economic, environmental, health and social benefits, along with enhanced safety and dignity of women and have become the world's largest behavior change sanitation programme. More than 10 crore toilets had been built across all States/UTs during the period of 2014 to 2019 and as of 2nd October 2019, all villages in States across India have declared themselves ODF and rural sanitation coverage increased from 39 per cent in 2014 to 100 per cent in the year 2019. The Swachhata Journey continues with the Phase II of the programme where the focus is on sustaining and maintaining ODF

status. It was highlighted during the National Conference how the continued usage of toilets is necessary for sustaining safe sanitation practices and hence the priority focus should be given for Repair of old and De-funct toilets and IEC and Behavior Change Communication activities to sensitize people. In view of this, all States/UTs were requested to take immediate priority action on:

- Allow state funds either as grants or as loans for repair of old and defunct toilets.
- II. Ensure the utilization of the network of SHGs under NRLM for effective IEC and BCC for continued usage of toilets.
- III. Training and Skill development programme for sanitation workers for construction of IHHLs.







- IV. Ensure proper O&M of CSCs through tied funds under Fifteenth finance Commission
- V. Ensure the construction of IHHLs through convergence for eligible HHs under PMAY- G.
- VI. Ensure that labour component (40% Share) is utilized for Repair of old and defunct Toilets under MGNREGS
- VII. Retrofitting of Single pit toilets to Twin Pit Toilets through MGNREGS/FFC

2. Safely Managed Sanitation (Faecal Sludge Management)

The Conference highlighted the significance of planning and implementation for Faecal Sludge management for delivering safe sanitation in rural areas due to the considerable number of single pit and septic tank toilets that have been constructed across the various States/ UTs. The overflow from filledup septic tanks and indiscriminate disposal of emptied faecal sludge to open areas, water bodies, irrigation fields, open drains, areas outside the village, etc. has a negative impact on public health and the environment. The key takeaways from the session are reiterated below:

I. Reverification of reported toilet typologies Baseline

- All the States/UTs were encouraged to reverify the structures reported as septic tanks/single pits for any leakage and ensure upgradation of the toilet typology baseline if required.
- II. Prioritizing retrofitting of reported Single Pits where feasible
- States were advised to prioritize retrofitting of Single pits where feasible
- It should be ensured that Single pits which are not yet filled/emptied be retrofitted to twin pits and/or construction of additional pit before the first one fills up.
- Resources under 15th FC and in convergence with MGNREGS upto Rs 5000/- for retrofitting of toilets as per the SBMG guidelines.
- III. FSM Compliant Villages 100% Twin Pit /Others – Ecosan etc.
- It was conferred that as per SBM(G) Phase II guidelines, Twin pit toilets are considered not only low cost but are also totally safe onsite treatment system

that converts faecal sludge directly into manure and negates the need for FSM planning and desludging.

 It was emphasized that State should reverify the reported villages with twin pits and upload the GP resolution for these villages on priority.

IV. FSM planning for villages reported with Septic Tanks/ Single Pits

It was stressed upon that in SBM (G) guidelines provision for Faecal Sludge Management (FSM) has been made for the toilets (septic tanks and single pits) which needs offsite treatment of faecal matters in the order of preference as mentioned below:

a. Co treatment at STP/FSTP

- It was recommended that cotreatment in existing Sewage Treatment Plant (STP)/Faecal Sludge Treatment Plant (FSTP) facilities in nearby urban/rural areas should be preferred for linkage of villages reported with Septic Tanks/Single Pits.
- State should assess the cotreatment potential of the STP/ FSTP in coordination with Urban Department. Financial provision for SBM(G) funds @ 230 per capita is available for co treatment where upgradation/ retrofitting of existing urban STPs is required for treatment of faecal sludge carried from septic tanks/ single pit toilets in rural areas.
- In the presentation of successful PoC of FSM service delivery in Punjab, States/UTs were encouraged to plan such innovative initiatives on digitization of the FSM service delivery.



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b. Assessment of villages requiring New FSTPs

- State should assess the residual villages where co treatment in existing/proposed STP/FSTP is not feasible and plan new FSTP for these villages at district level for cluster of villages ensuring economy of scale.
- Financial provision for SBM(G) funds @230 per capita is available for FSTP based on Planted Drying Beds technology or any other technology where retrofitting or co treatment is not possible.

Accordingly, it should be ensured that mechanical cleaning of septic tanks/pits and transportation of faecal sludge to the STP/FSTP preferably by adopting business model through existing desludging operators should be adopted.

3. Greywater Management (GWM)

The conference highlighted the significance of managing greywater near its source whenever possible. To have the efficacy of interventions in greywater management States/ UTs must ensure:

- Prioritize individual HH soak pits / kitchen gardens for low cost replicability across States/UTs.
- II. Proper handling of greywater at discharge endpoints of existing drains either through planted beds along the drains or through community GWM structures before discharge points.
- III. Ensure all government / public institutions like Schools, hospitals etc have proper GWM structures.
- IV. Plan for the O&M of these community structures.

4. Plastic Waste Management (PWM)

In the national conference the session on Plastic Waste Management featured several speakers who shared insights and experiences on different aspects of the topic: Following are the key takeaways for all states/UTS :

- Ensure operations and maintenance (O&M) of waste management especially by involving women SHGs. Empower them for collecting fees from households while allowing them to retain a portion of the same as an incentive. Use differential user charges on the basis of nature of waste and nature of property.
- II. Emphasised the use of shredded plastic in road construction, leading to significant savings in bitumen.
- III. State may use the Farmer Producer Companies for managing plastic waste for the economic benefits, job creation, and community development resulting from the initiative. State may explore various plastic recycling option and scopes as presented during the national conference i.e.including benches, tables, floor tiles, and roof sheets from waste plastic
- IV. Emphasis to be laid on the profit centre concept with regard to segregation sheds and PWMUs
- V. Urban rural convergence to be practiced to the extent feasible while setting up PWMUs etc

5. Menstrual Hygiene Management (MHM)

Discussion session under MHM presented the effective implementa-

tion of menstrual hygiene practices under SBM(G) in convergence with key departments & technical support partners. In this context all states/UTs are required to have:

- Effective MHM implementation under SBM(G) at Villages and Schools and Development of Menstrual Waste Management initiatives as part of SWM.
- II. Departmental collaboration for comprehensive MHM service delivery by adoption of the 4 A's approach: Awareness, Access, Availability, and Absorbents
- III. Develop and implement initiatives like "Chuppi Todo Swasth Raho" campaign and MHM labs in schools

IV. All districts/blocks of all state/ UTs must allocate resources and funding for MHM programmes, ensuring product availability with regular convergence meetings among departments facilitate collective action for improving MHM outcomes

6. Operation and Maintenance (O&M)

Keeping in mind, the current status of SBM-G Phase II where the focus is on sustaining the ODF status and on progressing towards ODF Plus Model. The States/UTs needs to focus not only on infrastructure development activities of building toilets and building Solid and Liquid Waste Management (SLWM) assets but on an effective Operation and Maintenance (O&M) of these facilities.

SBMG Phase II has been uniquely designed to leverage the capacity of individuals and communities in rural India to create a people's movement to ensure that the ODF status of rural areas is sustained, people continue to practice safe hygienic behaviour and



that all villages have solid and liquid waste management arrangements. Achieving this goal requires not only infrastructure development like building toilets and Solid & Liquid Waste assets but also effective Operation and Maintenance (O&M) of these facilities.

DDWS has issued a Guidance note to all States/ UTs to formulate an O&M policy for SLWM assets created under SBM- G, with clear directions to align the policy to the guidance note. Even though Sanitation is a State subject all States/UTs should consider developing:

- The O&M policy for sanitation assets that outlines the Objectives, Scope, Policy Statements, and Strategic Actions to operationalize the policy, Governance, and Institutional aspects, besides providing Formats, Finance Management (Income & Expenditure). The policy must provide guidance on technical, institutional, and financial sustainability of rural sanitation assets.
- II. All States/UTs must have O&M policy prepared and notified with the approval of the competent authority.
- III. The robust O&M Policy for all permissible sanitation assets under SBMG Phase-II guidelines for rural areas must cover:
- IHHLs/CSCs
- SWM assets for Individuals and Community including infrastructure and vehicle
- PWMU assets including vehicles
- GOBARdhan Plants
- GWM assets for Individual and Community
- FSM assets

7. Grievance Redressal and Citizen feedback:

The conference emphasized the requirement to have a system to receive the grievance and resolve the same in a time-bound manner and a feedback mechanism to self-evaluate the grievance redressal mechanism. It was emphasized in the National Conference that on ground issue redressal of complaints needs to be promptly reverted to concerned officials at various levels, ensuring timely redressal of issues in a timebound manner.

Some states like Punjab (m-Gram seva), Haryana, Karnataka (PARIHARA) have systematized the mechanism to resolve the public grievances. The States/UTs must:

- I. Set up 24x7 call centre to receive and track the grievance with an escalation mechanism.
- Leverage technology to have web/ app-based system for grievance redressal.
- III. Establish a clear and transparent mechanism for addressing grievances related to sanitation services.
- IV. Provide multiple channels for people to register complaints and seek assistance.
- V. Mechanism to ensure timely resolution of grievances to maintain community trust and satisfaction.

8. Sustainability of the Schemes

Sustaining the schemes has close link with ODF Sustainability and the operation and maintenance of SLWM assets. All participants agreed that massive investment and infrastructure created can be sustained only if States/UTs agencies focussed on

- Self-sustainability of the Sanitation/SLWM assets, - through the provision of fees, user charges etc. Emphasis should be on a revenue generation model, establishing backward and forward linkages.
- II. Promoting household-level assets for the management of liquid and solid waste and creation of community assent based on local context, technology and demography.
- III. Engagement of SHGs, preferably women, either directly or through Panchayats for management and O&M. Alternately, CBOs / NGOs may be brought in but with adequate safeguards.
- IV. Provision of the Capacity building of GPs/ VW SCs, SHGs and community members to ensure proper segregation at source, usage and maintenance of sanitation facilities
- V. Regular functionality assessment and work on gap areas
- VI. Formulation and enactment of O&M policy by States/ UTs for SLWM assets
- VII. Inventorying and geo-tagging all sanitation assets for monitoring.
- VIII. Converge with schemes at ground level (FFC, MGNREGA, JJM etc) for access to funds.
- IX. Leverage the institutional strengths of the District Water and Sanitation Mission and State Water and Sanitation Mission for convergence.

9. Swachhata Green Leaf Rating (SGLR) System

To address the sanitation challenges within the hospitality facilities, DDWS, in collaboration with the Ministry of Tourism, launched the



Swachhata Green Leaf Rating (SGLR) to revolutionize and elevate the standard and the perception of responsible tourism. SGLR broadly addresses three focused themes -Solid Waste Management, Faecal Sludge Management, and Greywater Management which are also the pillars of SBM-G, Phase II. The Parameters and indicators on these focused themes of sanitation aspect are in place that are meticulously categorized into infrastructure, practices, support for awareness generation, and innovations, contributing to a holistic evaluation of SGLR system. The SGLR rating system adopts a meticulous threephase approach - Orientation, Voluntary Declaration, and Verification. This tiered recognition system of '1 Leaf,' '3 Leaf,' and '5 Leaf' certification reflects the commitment to continuous improvement and sustainable sanitation practices.

All States/UTs are request to:

Take forward SGLR system by ensuring the active participation of hospitality facilities that includes Resorts, Homestays, and Dharamshalas and to all public and private categories of tourist facilities by conducting the following activities.

- Convening CS level meeting & decide the areas for roll out by 5th March 2024.
- Committees to be convened/enabling guidelines to be issued by 5th March 2024
- All districts to complete the orientation workshops by 31st March 2024.
- Roll out in the highest tourist footfall areas of at least 15 to 20 hospitality facilities to voluntarily submit rating 5th March 2024.

10. Scaling up of Capacity Building Initiatives through Regional Workshops / Cross Visits

The National conference provided a unique platform for cross-learning through detailed presentations and digital displays of innovative solutions, technologies, and best practices in the rural WASH sector.

It allowed for discussions for States/UTs to scale up capacity building initiative through well planned regional workshops and cross visits that will enable discussions on key issues pertaining to sanitation, sharing best practices, and outlining the way forward by ensuring collaborative planning and innovation in SBM (G). Workshops (national and regional) would help bring together a diverse array of stakeholders across States/ UTs for discussions on ideas, experiences, and best practices, to promote innovation and collaboration among participants, and to sustain the success of the mission.

11.IEC interventions

The conference allowed for discussions on IEC that also helped establish and understand the challenges and the way forward. All States/ UTs must:

- Establish a formal collaborative mechanism between state and district officials that ensure dissemination of joint initiatives and dissemination of grassroot best practices that are replicable.
- Develop a comprehensive communication strategy with a multi-stakeholder approach that includes a focused SBCC campaign with advocacy and community engagement activities all developed with the objective of enhancing program awareness and uptake.
- Develop and implement strategies that empower citizens on Jan Bhagidari including capacity building programmes, and Gram Sabhas.

Sr. No.	Outcomes of National Conference	Action to be taken by	Remarks
1	ODF Sustainability		
a.	Utilization of the network of SHGs under SRLM/NRLM for effective IEC and BCC for continued usage of toilets	National and State Rural Livelihood	Convergence to be done at State Level with SRLM for utilizing SHG group resources
b.	Training and Skill development programme for sanitation workers for construction of IHHLs	Mission Departments (NRLM/ SRLM)	for Activities under 1(a), 1(b) and 1(c).
C.	Allow Repair of Toilets as a mandatory activity under Intra group lending Scheme for repair of old and defunct toilets	under State Rural Department	

Matrix Showing the Outcomes of National Conference and Responsibility Matrix – SBM-G



Sr. No.	Outcomes of National Conference	Action to be taken by	Remarks
d.	Utilisation of the labour component (40% Share) for Repair of old and defunct Toilets	State Rural Development Department dealing with Rural Sanitation and MGNREGS.	In Convergence with the State RD department for utilizing MGNREGS
e.	Construction of IHHLs through convergence for eligible Households under PMAY- G so that all HHs have access to toilet		State Rural Development Department dealing with Rural Sanitation and Rural Housing under PMAY G
f.	Proper O&M arrangements of CSCs so that CSCs are functional at all time of need.	State Panchayati Raj Dept. dealing with 15th FC.	
2.	Faecal Sludge Management		
a.	Reverification of Toilet Typologies	States/UTs	Any change required should be communicated to DDWS
b.	Prioritize retrofitting of reported Single Pits where feasible	States/UTs	Ensure BCC/IEC for Single pits which are not yet filled/emptied for retrofitting and/or construction of additional pit before the first one fills up.
c.	FSM planning for villages reported with Septic Tanks /Single Pits	-do-	Immediate action by all States/UTs
d.	Co treatment at STP/FSTP	-do-	Co-treatment in existing Sewage Treatment Plant (STP)/Faecal Sludge Treatment Plant (FSTP) facilities in nearby urban/rural areas
e.	Assessment of villages requiring New FSTPs	-do-	Plan new FSTP for these villages at district level for cluster of villages ensuring economy of scale
3.	Greywater management		
a.	Proper handling of greywater discharge endpoints and encouraging individual household drainage systems are crucial for effective management.	States/UTs	DDWS has prepared a suggestive guideline for the same.
b.	Managing greywater at its point of origin enhances efficiency while installing settling tanks before community soak/leach pits retains solids and ensures cleaner drainage.	States/UTs	-do-
C.	Periodic cleaning of settling tanks prevents buildup, and adopting Nahanni traps in every household reduces contaminants.	States/UTs	-do-





Sr. No.	Outcomes of National Conference	Action to be taken by	Remarks
d.	Conveying greywater through pipes from households to community pits and incorporating pre-treatment facilities like screen chambers and grit removal improves system efficiency.	States/UTs	-do-
e.	Allowing excess greywater to flow back into drains for community pits prevents overflow issues and ensures smoother operation.	States/UTs	-do-
4	Plastic Waste Management	States/UTs /RWPF	DDWS to monitor.
a.	Organizing IEC/Awareness activities on 4R principle for plastic waste management (Refuse, Reduce, Reuse & Recycle)	States/UTs /RWPF	
b.	Issuing GO in all States using waste plastic in bituminous road construction	States/UTs /RWPF	
C.	Linking all villages in a block with Plastic Waste Management Units (PWMU) and establishing forward linkages of PWMUs	States/UTs /RWPF	
5	Menstrual Hygiene Management		
a.	Effective MHM implementation under SBM(G) with regular monitoring of safe disposal practices adopted at village level & school level	States/UTs /RWPF	
b.	Departmental collaboration for comprehensive MHM service delivery	States/UTs /RWPF	
C.	Adoption of the 4 A's approach: Awareness, Access, Availability, and Absorbents	States/UTs /RWPF	
d.	Success of initiatives like "Chuppi Todo Swasth Raho" campaign and MHM labs in schools	States/UTs /RWPF	
e.	Allocation of resources and funding for MHM programs, ensuring product availability	States/UTs /RWPF	
f.	Regular convergence meetings among departments facilitate collective action for improving MHM outcomes	States/UTs /RWPF	
g.	Adoption of the 4 A's approach: Awareness, Access, Availability, and Absorbents	States/UTs /RWPF	
6	Operation & Maintenance		
a.	DDWS O&M have been prepared and circulated to all states, all states are requested to review that document and initiate working on developing their state O&M Policy aligned to the DDWS directive	States/UTs	DDWS has prepared a suggestive guidelines for the same and disseminated to the States.

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Sr. No.	Outcomes of National Conference	Action to be taken by	Remarks
b.	 The O&M sanitation policy for must outlines the Objectives Scope Policy Statement Strategic Actions needed to operationalize the policy The policy should also provide Formats, Finance Management (Income & Expenditure). The policy must provide guidance on technical, institutional, and financial sustainability of rural sanitation assets 	All States/ UTs and DDWS	-do-
C.	O&M policy to be notified with the approval of the competent authority	-do-	-do-
d.	 State O&M policy must cover IHHL. CSC SWM assets for Individuals and Community including infrastructure and vehicle PWMU assets including vehicles GOBARdhan Plants GWM assets for Individual and Community FSM assets 		-do-
7	Grievance Redressal and Citizen feedback.	States/UTs	
a.	Set up 24 x 7 call centre to receive and track the grievance with an escalation mechanism.	-do-	-do-
b.	Leverage technology to have web/ app-based system for grievance redressal.	-do-	-do-
C.	Establish a clear and transparent mechanism for addressing grievances related to sanitation services.	-do-	-do-
d.	Provide multiple channels for people to register complaints and seek assistance.	-do-	-do-
e.	Mechanism to ensure timely resolution of grievances to -do- maintain community trust and satisfaction.		-do-
8	Sustaining the schemes		
a.	Conduct capacity building of GPs/ VW SCs, SHGs and community members to ensure proper segregation at source, usage and maintenance of sanitation facilities	-do-	-do-
b.	Engage woman SHGs through panchayat or not for O&M management	-do-	-do-





Sr. No.	Outcomes of National Conference	Action to be taken by	Remarks
c.	Manage Inventorying and geo-tagging all sanitation assets for monitoring	-do-	-do-
9.	Swachhata Green Leaf Rating System		DDWS to monitor.
a.	Review the SGLR booklet launched during the conference	States/UTs	
b.	Convening CS level meeting & decide the areas for roll out	States/UTs 5th March, 2024	-do-
c.	Constitute committees to enable guidelines are issued	States/UTs 5th March, 2024	-do-
d.	All districts complete orientation workshops	States/UTs 31st March, 2024	-do-
e.	Roll out in of at least 15 to 20 hospitality facilities (those with the highest tourist footfall areas) and those that voluntarily submit rating	States/UTs 5th March, 2024	-do-
10	Scale up of Capacity Building Initiatives through Regional Workshops / cross visits	States/UTs /RWPF	DDWS to monitor.
a.	Plan regional workshop/cross visits plans	-do-	
11.	IEC		DDWS to monitor.
a.	Establish a collaborative mechanism between state and district officials for driving joint initiatives	States/UTs	
b.	Prioritize regular training programmes for sanitation workers	States/UTs /RWPF	
C.	Develop a comprehensive communication strategy with a multi-stakeholder that includes a focused SBCC campaign with advocacy and community engagement activities all developed with the objective of enhancing programme awareness and uptake.	States/UTs /RWPF	
d.	Develop and implement strategies that empower citizens on Jan Bhagidari including capacity building programmes, and Gram Sabhas	States/UTs /RWPF	

One can conclude, JJM and SBM-G are gearing up to fillip the journey of rural transformation – it's only the start of an expedition toward a flourishing, sustainable, and sanitation-conscious future with secure access to water!



Progressive coverage - Functional Household Tap Connection (FHTC) (as on 29.02.2024)





Source: JJM-IMIS

As on 29th February, 2024

India | Status of tap water supply in rural homes





Arunachal Pradesh and Mizoram Respectively become 1st and 2nd Northeast State to Achieve 100% 'Har Ghar Jal'

Amit Ranjan, IEC Specialist, NJJM & PHED Arunachal Pradesh

runachal Pradesh has become the first state in Northeast India and 10th in the country to achieve 100 percent saturation of 'Har Ghar Jal' under Jal Jeevan Mission on 15th February 2024 and Mizoram becomes 11th Northeast State to become Har Ghar Jal on 29th February, 2024.

Sharing the Achievement of Arunachal Pradesh on social media, Hon'ble Chief Minister, Shri Pema Khandu said that it exemplifies the total dedication and commitment of Team Arunachal in meeting the goals that was set. He expressed his gratitude towards the Hon'ble Prime Minister Shri Narendra Modi for guiding and supporting them in every endeavor in building a self-reliant Arunachal Pradesh. Furthermore, Hon'ble Chief Minister of Mizoram, Sh. Pu Lalduhoma announced on Social Media Platform (X) that "Mizoram celebrates achieving 100% Functional Household Tap Conncetion (FHTC) under the Jal Jeevan Mission, providing FHTC to all **1,33,060** rural households." He also appreciated the Mizoram team and PHED department for overcoming challenges. At the time of launch of the mission, only 7 percent coverage was there in State and in just 4 years, State provided remaining i.e, 93 percent new tap water conncetion covering 11 Districts and 633 villages.

On the other hand, while making announcement on Arunahcal Pradesh saturation, Sh. Pema Khandu, Hon'ble Chief Minister said on 15th February, 2024 "A landmark accomplished in our collective efforts as Arunachal Pradesh logs 100 percent saturation of '*Har Ghar Jal*' under Jal Jeevan Mission! It exemplifies total dedication and commitment of Team Arunachal in meeting the goals they set for themselves." He also informed that the Centre's share for the scheme in the state was ₹3,965.41 Crore, while the state contributed ₹455.51 crore to complete the project, ensuring every household gets clean and safe piped water.

"First in the Northeast to fully implement JJM, we are determined to make an all-round improvement in our people's ease of living. Odds and challenges are being surmounted in serving them. Proud of Team Arunachal!" the chief minister added. Hon'ble Union Minister, Ministry of Jal Shakti, Union Minister of Earth Sciences and other dignitaries also congratulated States for this great feat.

Gajendra Singh Shekhawat (मोदी का परिवार) 🍲

atulations to the people of the beautiful state of Mizoram led by



Lalduhoma @Lal_Duhoma

Mizoram celebrates achieving 100% Functional Household Tap Connections (FHTC) under the Jal Jeevan Mission, providing FHTCs to all 133,060 rural households. Kudos to the Mizoram Team and the PHE Dept. for overcoming challenges. #JalJeevanMission









Odisha Experience

Gautam Patnaik, State Rural Water Supply Consultant, UNICEF Odisha

Background

he RWS&S, Panchayati Raj & Drinking Water Department, Government of Odisha has a promise for the rural citizen of Odisha to make rural water supply decentralized service delivery with active participation by the Gram Panchyats (GPs) and Village Water & Sanitation Committee (VWSCs) for effective management of the operation & maintenance under Jal Jeevan Mission & BASUDHA¹. This community led approach will ensure community-wide demand for higher water supply services.

Institutional Capacity Experiences So Far

 Gram Panchayats & VWSCs are not carrying out the full range of

- roles needed to implement and sustain community managed rural water supply programme. The deficit can be narrowed with constant handholding and dialogue.
- Even though GPs/ VWSCs lack capacity in some areas, nevertheless, they remain the only structure in the state to implement JJM/ BASUDHA at scale. There have been many cases, where GPs/ VWSCs have demonstrated community managed system with their indigenous local knowledge.

Management Model for JJM/ BASUDHA in Odisha

The management model of JJM/ BASUDHA mostly consists of supporting existing structures.

- State level coordination. Rural Water Supply & Sanitation(RWS&S) department provides support for the Communication and Capacity Development for districts and sub-districts level. Further, RWS&S, Odisha is closely associated with UNICEF, Odisha. Through support from UNICEF, RWS&S, Odisha has been able to organise various capacity building programmes on water quality, water security, institutional management etc.
- Agency (ISA). Six state level NGOs, were selected as resource agencies. Their roles are to facilitate VAP, VWSC and social mobilization and train master trainers from the district and



¹ BASUDHA scheme ensures universal access to potable piped water supply to households in rural and urban areas. The scheme provides adequate safe water for drinking and domestic purposes on a sustainable basis and further improves the drinking water supply in State



block level governments and local NGOs.

- Zilla Parishad. Districts are the primary implementation unit for JJM/BASUDHA. The Executive Engineers, RWS&S along with Chief Development Officer (CDO), Zilla Parishad (ZP) are responsible for implementation of the water supply programmes. The WASH PMU at district level is responsible for compiling action plans from blocks, hiring local support organizations, managing financial resources, compiling progress reports, and reporting.
- Local Support Organisations (LSO). Districts hire local LSOs at the district level for facilitating capacity building programme for JJM/ BASUDHA at the block level. They provide their own personnel and hire local motivators.
- Blocks. BDOs are responsible for monitoring LSO/ NGO activities and reporting to the districts. The LSO works under the supervision of the district and block to coordinate with communities directly.
- Community Resource Persons. The local Community Resource Persons included the SEM, SHG Coordinators, Motivators etc for providing local mobilization and facilitation.

Functions	RWS&S
Earlier Role	es
Ownership/ Financing	
Regulation	
O&M & Tariff	
Replacement	
Water Quality	
Capacity Building	



Multi Stakeholder Approach: Stakeholder Analysis

In the new paradigm, community management envisages not only RWS&S but a host of other stakeholders with an articulated roles and responsibilities. The key functions related to the management of water supply services and stakeholder categories are represented in the following matrix.

Programming Approach

Strategy and Planning

Gram Panchayat Development Plan (GPDP) shapes the financial management of water supply programme pertaining to O&M. To facilitate preparation of GPDP, Blocks take the services of Master Trainers/ Resource Persons who facilitate GPs in preparation of GPDPs.

Promotion and Advocacy test through FTK

Many Gram Panchayats & VWSCs are self-starters and first among the equals who have shown encouraging trends in community managed operation and management of water supply projects. The services of these GPs/ VWSCs are sought as part of advocacy for other adjoining GPs/ Villages. Exposure visits are conducted to these VWSCs/ GPs for others to emulate such good practices. Promotion of good water supply practices at the household level are being done through the Community.

Resource Persons (CRPs) for water supply and water safety. These promoters integrate both water & sanitation aspects. District and Block officers in their field visits ensure such issues on water and sanitation are covered.

RWS&S	Household	VWSC	GP	SHG		
	New Roles					





Odisha Capacity Building Approach for Rural Water Supply

- Multi-pronged and multi-platform approach to develop the capacity of local government in the full range of roles from GPDP to Gram Sabha.
- Facilitated through SIRD for development of GPDP.
- Developed a package of standardized tools and training materials for each level of the cascading TOT.
- Produced training materials with a separate trainer's guide and participant manual that are adapted for use at each level.
- Developed a more rigorous approach to training master trainers and increase the emphasis on training skills.
- Institutionalize mechanisms for districts to share experiences and lessons learned with one another.

Capacity Building

SIRD & PR, Odisha is the apex Key Resource Centre for all water and sanitation interventions capacity building initiatives. The SIRD & PR is responsible for many capacitybuilding activities—all of them aimed at supporting the decentralization process, including some that cover specific water and sanitation activities. The institute has a dedicated UNICEF supported WASH Cell that prepares all training modules, manuals, training strategy etc. The capacity-building strategy is based on a cascading TOT approach: SIRD \rightarrow Master Trainers \rightarrow CRPs.

Monitoring & Supervision

Districts hire the local NGO/ LSO for JJM/ BASUDHA capacity building programmes. The BDO informs the district about the achievements of the LSO in their block. In addition to the routine supervision by the BDO, supervision takes place though monthly meetings at the district level with the WASH Cell. The state strongly implements other programmes like Aspirational Block Programmes (ABP), Localisation of SDGs which has opportunity to connect with GPs/ VWSCs on the sustainable indicators of WASH. Data are collected in the field by GPs with the help of the local LSO. An M&E report is issued at the GP level and then submitted to the BDO and the district.

Coordination

Bi-monthly cross-sector meetings are held at the district level for coordination of JJM/ BASUDHA. Participants in the cross-sector meetings include representatives from the departments of Health and Family Welfare, Odisha Livelihood Mission, Missions Shakti, RWS&S, ORMAS etc.

Human Resources at Community Level

Gram Panchayats/ VWSCs manage the water supply projects specifically skilling and water quality by taking support of various local resources. For example, Odisha has massively undertaken multi- skilling of rural youth on Plumbing, Pump Operation, Solar Water Supply and Electricals. The GPs/ VWSCs use the services of these skilled youth for operation and management of the water supply programmes. To support such demands RWS&S, Odisha with technical support of ORMAS is skilling approximately 10,000 youth as per the norms of WMPSC.

For water safety programme, the services of SHGs (SHG GP Coordinator along with village level Community Resource Person) is trained and provided with FTK and other aids. More than 60,000 women SHG from OLM have been trained and provided with FTK. GP and SHGs, all of whom mobilise communities and train local community members for follow up. Instead of creating parallel structures it was strategic to leverage on an existing platform.

Lessons Learned

 Despite having capacity gaps, Gram Panchayats/ VWSCs are best suited institutions to practice community-based water





supply management. However, consistent handholding support is required.

Scaling up community managed water supply requires the mobilization of quality external human resources in addition to those of Gram Panchayat & VWSC. To increase the quality and availability of regional resources, one option is to create a "Center of Excellence" at the state level. SIRD & PR, Odisha and UNICEF have started the initiative to have a dedicated WASH Cell in SIRD & PR.

Layering capacity building of water supply programme within other allied programmes namely SBM (G), NHM, OSDMA & Odisha Livelihood Mission (OLM), tribal programmes has enhanced the reach of JJM/ BASUDHA through other networks and thereby entrenched repeated and coherent messaging.





Empowering Communities through Capacity Building

Transforming Water Management in Assam and Tripura

Lopamudra Panda, NJJM & CML Tata Trust

ater is the essence of life, a basic need that billions around the world struggle to access. In the Indian states of Assam and Tripura, where clean water is a pressing issue, initiatives like the Jal Jeevan Mission (JJM) are leading the charge for change. One such organisation at the forefront of this transformation is the Centre for Microfinance and Livelihood (CML), an associate of Tata Trusts. Through collaborative efforts with local governments, CML is empowering communities by building their capacity to manage water resources effectively.

In collaboration with the governments of Assam and Tripura, CML has embarked on a journey to empower communities under the Jal Jeevan Mission (JJM) programme. In Assam's Kamrup district and Tripura's Dhalai district, CML's interventions are making a tangible difference. Covering over 67,000 households in Assam and 38,000 households in Tripura, the project focuses on establishing sustainable, communitymanaged drinking water supply schemes. From forming Village Water & Sanitation Committees (VWSC) to piloting Internet of Things (IoT) solutions for smart water management and Iron Removal Plants, CML's efforts are extensive and impactful.

CML - Tata Trusts undertook interventions in villages across Kamrup District, including Rampur, Chaygaon, Boko, Bongaon, and Chamaria Block. The project aims to alter societal perceptions regarding safe water and promote its optimal utilisation. The trust also providing technical assistance to the State-level Jal Jeevan Mission's Project Management Unit (PMU).

At the heart of CML's approach lies capacity building. By empowering individuals and communities with the knowledge, skills, and resources necessary to address water-related challenges, CML is fostering longterm sustainability. In Assam, extensive awareness campaigns and training sessions have equipped stakeholders with the skills for water supply system upkeep and quality testing. From introduction meetings to participatory rural appraisal sessions, CML has actively engaged community members in discussions on water management strategies. Moreover, targeted training sessions have equipped stakeholders with the skills for water supply system upkeep and water quality testing, ensuring the sustainability of interventions.

Similarly, in Tripura, partnerships with CML-Tata Trusts with PWD (DWS) and local agencies have focused on training of VWSCs, promoting behavioural change, and implementing technological solutions for water infrastructure.

Key strategies

- Encompassed end-user training for VWSCs
- Establishing linkages between users and suppliers

- Social Behavioural Change Communication
- Developing technological solutions for water infrastructure, and
- Strengthening VWSCs for longterm maintenance

The interventions include formation of VWSCs, conducting Focused Group Discussions (FGDs), developing Village Action Plans (VAPs), spreading WaSH awareness, Piloting of two) Iron Removal Plants (IRP) with Automated backwash system & two IoT systems and conducting training and capacity-building programmes. These initiatives have focused on enhancing the capabilities of local stakeholders to implement water management strategies and promote behavioural change within their communities thereby empowering communities to take ownership of their water supply infrastructure and address challenges independently.

Two compelling case stories of Assam and Tripura exemplify the transformative impact of CML's capacity-building efforts In Assam's, enchanting village Gamerimura, nestled within the heart of 75 No Dakhin Luki Gaon Panchayat, Boko Block, Kamrup District, Goelson Marak's journey from adversity to empowerment serves as a beacon of hope and unfolds as a testament to resilience and dedication. Despite serving diligently as the Pump Operator for the Gamerimura water supply scheme since 2014, Goelson





Under the Jal Jeevan Mission (JJM) in Tripura, capacity building efforts have been instrumental in empowering communities to manage their water resources effectively. Through partnerships with organisations like the Centre for Microfinance and Livelihood (CML) - Tata Trusts, initiatives such as forming Village Water and Sanitation Committees (VWSCs), conducting training programmes, and implementing technological solutions have equipped local stakeholders with the skills and knowledge needed for sustainable water management. These efforts have led to increased community engagement, improved water quality, and enhanced resilience in addressing water-related challenges, aligning with the broader goals of the JJM programme.

Shri Rajib Majumder Additional Chief Engineer PWD (DWS), West Tripura

faced a significant obstacle – the absence of his official engagement letter and financial compensation. Recognizing the urgency of the situation, the CML stepped in, rallying support from the Water User Committee president and Gram Panchayat President. Together, they advocated for Goelson, approaching the Sub-Divisional Officer (SDO) of the Public Health Engineering Department (PHED) to expedite the matter. Through relentless efforts and persistent follow-ups, December 2023 marked a turning point for Mr Goelson Marak. With the receipt of his longawaited engagement letter, Goelson's dedication was not only acknowledged but also served as a beacon of hope for the entire community. This success story underscores the transformative impact of CML's intervention in community development, highlighting Goelson's journey from adversity to empowerment and his readiness to contribute to the Jal Jeevan Mission programme, symbolising hope for a brighter future.

In Tripura's Marachara region in Durgachowmuhani block, the formation of the Marachara Village Water and Sanitation Committee showcases how empowered communities can overcome challenges and achieve sustainability. The "Dudnath Water Users Committee" encountered challenges in providing clean water to its 883 households. With intervention from the CML-Tata Trusts, a transformative journey began, culminating in the formation of the Marachara Village Water and Sanitation Committee under Jal Jeevan Mission. Through awareness campaigns, focus group discussions, and Social Behaviour Change Communication (SBCC) activities, the community was sensitised about the importance of JJM and its role in maintaining water supply schemes. The formation of Water Users Committees, including the proactive "Dudnath Water User Committee", further strengthened community-led efforts. When faced with a dysfunctional water source, the WUC's self-reliance shone through as they undertook repairs, funded by community contributions. This story epitomises the capacity building facilitated by the CML, showcasing how empowered communities can overcome challenges, achieve sustainability, and serve as models for positive change in water management and access.

Both Assam and Tripura's case stories illustrates the significant impact of the capacity-building efforts. In Assam, the CML team empowered individuals like Mr Goelson Marak, leading to his official recognition as a Pump Operator, fostering pride and confidence within him and his community. Similarly, in Tripura, CML's assistance empowered the "Dudnath Water Users Committee" to take control of their water supply infrastructure, shifting from external reliance to community-led initiatives. These successes highlight capacity building at both individual and





community levels, equipping members with the necessary tools and confidence to contribute meaningfully to local development and sustainable resource management.

A significant undertaking involved in organizing Operation and Maintenance (O&M) and Social and Behaviour Change Communication (SBCC) training sessions for key stakeholders, including Implementation Support Agency (ISA) partners, young professionals, District Project Managers, Block Project Managers of Assam State Rural Livelihoods Mission (ASRLM), District ISA and IEC coordinators for JJM Assam. Over 200 participants were trained as Master Trainers, equipped with the expertise to cascade their knowledge and skills across the state of Assam. Likewise, in Tripura, CML collaborated with PWD (DWS) and seven (07) ISA partners covering all 8 districts to provide training in SBCC and O&M modules developed by Tata Trusts, reaching out to more than 60 participants. These training sessions aimed to enhance the capacity of local stakeholders in Tripura to effectively implement water management strategies and promote behavioural change within their communities.

In conclusion, the transformative role of capacity building in water resource management cannot be overstated. Through its comprehensive approach, CML has empowered individuals and communities in both states to address water-related challenges, advocate for their rights, and drive positive change at the grassroots level. As we strive towards a more water-secure future, such initiatives serve as shining examples of how capacity building can empower communities to create sustainable and resilient societies.



As a VWSC member and ward member of No. 75 Dakhin Luki Gaon Panchayat, I can proudly say that capacity building in Gamerimura PWSS under Bamunigaon Revenue Village is crucial for the successful implementation of Jal Jeevan Mission (JJM) and the efforts made by the Centre for Microfinance and Livelihood (CML) in this regard are commendable. Capacity building involves enhancing the skills, knowledge, and abilities of individuals and communities to effectively manage water resources and infrastructure. In the context of JJM, this could include training programmes on water conservation, maintenance of water supply systems, and understanding the importance of safe drinking water. This could lead to improved access to safe drinking water, better health outcomes, and overall development of the community.

I appreciate the efforts of CML involved in capacity building initiatives in Gamerimura PWSS, and I am committed to supporting and facilitating these efforts as a responsible member of the VWSC and the local Panchayat.

> **Smt. Sadhana Rabha** Ward Member and VWSC Member, No. 75 Dakhin Luki GP, Kamrup, Assam





Mitigating Groundwater Challenges through Collective Endeavour in Karnataka

Aswati Warrier, City Coordinator, WaterAid India, Bengaluru

uniraju from Chinandhalli village has been a pump operator for his village for the past 17 years. His village, which is part of Doddanallala Gram Panchayat, Hoskote taluk, Bangalore Rural, Karnataka, has been facing falling levels of groundwater, affecting the public water supply borewells in the area. In September 2022, Muniraju was a happy man, owing to the higher-than-usual rainfall that monsoon, leading to improved water supply in the borewells of the village. However, this was short-lived. At the start of 2023 onwards, the water levels saw a drop and the villagers had to deal with the supply of water only on alternate days.

Muniraju and the story of Chinandahalli is similar to that experienced by many of the villages across Hoskote taluk in Karanataka. As per the Central Ground Water Board's Aquifer Mapping and Management of Ground Water Resources Report 2020, Hoskote Block of the Bangalore Rural district falls in the 'Over Exploited' category with a groundwater development stage of 138 percent. Recognizing this issue, WaterAid India in collaboration with partner organisation -Outreach, initiated work on water recharge and replenishment in 10 Gram Panchayats in Hoskote across from 2021 onwards.

A multi-pronged approach to water replenishment was adopted here.



Harnessing technology for ensuring maximum impact of water recharge:

Using Google Earth and Surfer software and data collected from the community, contour maps were created for intervention villages to understand the aquifers in the area as well as the slope. This is essential to identify the site of maximum impact for groundwater recharge.

Participatory rural appraisal (PRA) and community meetings:

While technology has developed, the power of human lived experience and verbal knowledge is vital. During the PRA exercises and community meetings, the community borewells especially the public water supply sources which have depleted levels of water over the years were identified and discussed.

Identification of existing and abandoned sources

The existing water bodies and borewells that supplied water for the public drinking water system but were abandoned once dried were mapped out.

Based on all three parameters, across nine Gram Panchayats of Hoskote, WaterAid with help of the implementing partner Outreach, piloted the following different types of groundwater recharge structures:

1. Field Pond restoration: The natural ponds in the village which had dried up over the years and filled with silt were restored, removing silt and building channels into the pond to harvest the rainwater from surrounding discharge zones.







2. Injection shaft/ borewell with pond: An injection shaft, in the context of aquifer recharge, refers to a vertical structure or bore well that is used to inject water or other types of treated water into an aquifer. This structure will enable that surface runoff water will be captured and replenish the shallow aquifer at a greater speed. In the case of areas where large areas of community land cannot be taken up, injection borewells are suitable recharge structures with a high volume of impact. Especially important are abandoned borewells which are excellent examples of existing resource which can be used to create a recharge structure. Since the borewells are usually dug deep into the ground, converting them into recharge structures ensures

> In many villages where it was identified that the borewell connected to the piped water supply system was facing falling water levels during the monsoon. Abandoned borewells near this area with a depth of around 120 ft depth were identified to convert to recharge structures and filled with filter media. Around the injection borewell, a pond was constructed to ensure further rainwater from surround

ing channels gets collected and seeps into the injection shaft.

3. Restoration of check dams and abandoned borewells: A check dam is a structure built across a river or a small stream to control the flow of water and reduce erosion. It is designed to temporarily store water and allow it to percolate into the ground, thereby recharging the groundwater and conserving water resources. Small check dams of upto 200 m length were restored so as to channel the rain water in areas where the velocity will be higher. Check dams help slow down the flow of water, thus allowing for better infiltration of water into the ground, promoting groundwater recharge.

Behaviour Change and Scaling Up

While piloting structures for recharge in the community can create an impact. For a long-term solution to the groundwater problems in Hoskote, it is essential that communities and local self-governments take the lead for adopting water conservation and recharge measures. For the same, local self-government members were trained and best practices from the project's intervention were shared, thus encouraging them to adopt suitable models in their gram panchayat development plans.

Most importantly, a set of 54 women master trainers have been trained across Hoskote on water conservation and water quality testing using Field testing Kits (FTK). The women, many of whom have gone forward and adopted recharge mechanisms in their own houses, are now taking up water issues in their community.

As Karnataka faces impending water scarcity, the collaborative efforts of Outreach and WaterAid in Hoskote present a replicable model for addressing groundwater challenges. The results from the project underscores the significance of community-led approaches, technological interventions, and behavioural changes in achieving sustainable water management practices.



Abandoned borewell converted into recharge structure



- "



Rathnamma of Guguttahalli puts it

"The training has helped me understand the importance of saving water. I am now implementing water-saving practices in my home, ensuring that every drop of water is conserved. Moreover, I have taken the initiative to educate my family members and neighbors about the valuable lessons I acquired during the training."

Bharathi, Chinandhalli village trained on water quality testing using Field testing Kit (FTK)



Kalyani's testifies that,

"Before the training, I wasn't fully aware of the impact I could have on water conservation. The comprehensive sessions opened my eyes to the varies possibilities. Inspired by what I learned, I acted and installed a rooftop rainwater harvesting structure on my house. Now, with a 360 square feet rooftop, I can harvest nearly 30kal,000 litres of water annually. It's incredible to witness the tangible difference and to contribute to securing our water sources for our community's future."

Rain water harvesting structure incorporated by Master Trainer Kalyani in her house



Strengthening Water Quality Testing and Remediation System Role of Training and Capacity Building

Jagdish Kumar, Vivek Narayan Singh and Mukul Das - Shriram Institute for Industrial Research, Delhi¹

Introduction

ccess to safe and wholesome water is essential for sustenance of life. Consumption of unsafe water leads to human illness and children are affected to larger extent if water is not fit for drinking. Contamination of water resources may be geo-genic or due to human activities or both. The adverse health effects of the prolonged intake of contaminated water are well known. Improving access to safe drinking water can result into tangible benefits to health. As the population continues to grow, the water contamination problem is likely to worsen and consequently more pressure will be added to the already stressed water resources. That is why addressing problems associated with water safety have

become of highest priority for the government and civil society. The target 6.1 of Sustainable Development Goal 6 of 2030 agenda adopted by United Nations General Assembly in year 2015 entails achievement of universal and equitable access to safe and affordable drinking water for all. Jal Jeeven Mission (JJM), being implemented by the Government of India since August 2019, has objectives to provide Function Household Tap Connection (FHTC) so that safe and adequate quantity of potable water is supplied to each rural household.

Need for Institutional Strengthening

The Public Health Engineering/ Rural Water Supply (RWS) Departments

are the nodal institutions of State Government/ Union Territory (UT) Administration for implementation of JJM in the State/ UT. Within the operational mechanism of JJM, the water quality monitoring and surveillance of newer or existing sources, aims to protect water resources to the greater extent. The results provided by laboratory are the basis for implementing of effective water quality management with an objective to eliminate or reduce the undesirable constituents in the water supplies by feasible means to make the water fit for human consumption. Hence, water quality monitoring is being considered as an important part of the government programme and has been accorded a higher prerogative. Monitoring of water guality involves laboratory and field



¹ Shriram Institute for Industrial Research (SRI) is a not-for-profit contract research organization empanelled as Key Resource Centre by Jal Jeevan Mission, Ministry of Jal Shakti. SRI's thrust areas are Environmental Sciences, Material Sciences, Biological Sciences, Civil & Building Material, Metals & Minerals, Calibrations and Radiations. Major verticals of SRI are Research, Testing and Training.



testing of water samples collected from water sources and FHTC. Facility of laboratories for water quality monitoring of rural areas has already been set up at State/ District/ Subdivision/ Block/ level. There are more than 2100 operational water quality testing laboratories of PHE/ RWS Departments located in State/UTs.

The chemists, microbiologists and other technical staff of water quality testing laboratories, are engaged in water quality testing on regular basis. A thorough understanding of sampling procedures, analytical techniques, particularly interferences and problems that can occur, instrumental techniques, etc. are essential pre-requisite towards obtaining accurate and reliable analysis results. Hence, theoretical and practical training of the staff of water quality testing laboratories is the essential pre-requisite to build their capacity to generate reliable, accurate and dependable data on continual basis. Based on the water quality data, technological interventions are envisaged to produce safe and potable drinking water. The raw water normally available from the sources is, however, not directly suitable for drinking purposes. Hence, water treatment is also a very crucial process in delivering safe water from FHTC. The water source availability and the quality of raw water govern the selection of treatment technology to be adopted, so as to comply with the requirements of Indian Standard Specification of Drinking Water IS 10500-2012 amended to date.

Keeping in view of above, there is an intense need for institutional strengthening of PHE/ RWS Departments of States/ UTs in two prominent sectors (i) Water Quality Testing and (ii) Water Treatment Process Optimisation.

Training Needs and Implementation

The National Jal Jeevan Mission (NJJM), Ministry of Jal Shakti (MoJS), Government of India empanelled Shriram Institute for Industrial Research (SRI) as Key Resource Centre for the period 2021-24 to build the capacity of middle management level of PHE/ RWS Departments of various State/ UTs of India. The annual action plans define following themes of training:

a) Theme-1 (Strengthening Water Quality Monitoring and Surveillance to optimally utilize resources and produce reliable water quality data): On this theme, SRI conducted 10 online training programmes during 2021-22 to train 300 middle management level personnel of water quality testing laboratories of 15 States & UTs of India, whereas during 2022-23 and 2023-24, residential training and handholding programmes have been conducted to train 550 numbers of laboratory staff from 28 States/ UTs.

- b) Theme-2 (Training of Chief Chemists and Supervisory Staff of Water Testing Laboratories in Advanced Testing Procedures involving the use of state-ofthe-art instrumentation): Two training programmes on this theme have been organized during 2023-24 to train Chief Chemists and Supervisory Staff of Water Quality Testing Laboratories of 15 States/UTs.
- c) Theme-3 (Strengthening Water Treatment Process to provide Safe Drinking Water: Training of Engineering Staff of PHED, RWS etc. on "Optimisation of Water Treatment Technologies together with sharing of Best Practices"): Two training programmes on this theme have been conducted till January 2024, in which over 80 Engineers & Laboratory staff have






participated. Three more programmes on this theme will be conducted during February-March 2024.

Training Methodology and its Impacts

Training methodology included classroom pedagogy; experimental pedagogy in laboratory; site demonstration; mentor-mentee interactive sessions and group work. The impacts of training are analyzed based on pre and post training evaluations as well as feedback received from beneficiaries. In general, impact is classified as follows:

(a) Impacts of Training on Water Quality Testing

Enhanced knowledge and understanding (both theoretical & practical aspects) in the areas of

- Physico-chemical and microbiological testing procedures;
- Water stoichiometric balancing to check correctness of analysis;
- Error estimations and Measurement Uncertainty;
- Quality Management System
- Validation of water quality field test kits to strengthen community-based water quality

monitoring & surveillance;

- State-of-the-art testing procedures to analyse toxic metals; pesticides residue etc.
- Water quality standards;
- Water quality data interpretation.

(b) Impacts of Training on Water Treatment

Enhanced knowledge and understanding in the areas of optimisation and alignment of treatment technologies such as

- A e r a ti o n, c o a g u l a ti o n, flocculation, sedimentation and chlorination;
- Microfiltration, ultrafiltration, nanofiltration and reverse osmosis;

- Defluoridation; denitrification; degasification; iron & arsenic removal etc.;
- Desalination;
- Overview of emerging technologies;

During training programmes, challenges and gaps are also being discussed to suggest best possible troubleshooting as well as creation of enabling environment for learning to maximise the impacts.

Way Forward

Training and capacity building is a continual and recurring process to ensure upgradation of skill and enhancement of knowledge in specific domains like water testing and treatment, where competency of staff plays important role to generate reliable and accurate water quality data to envisage necessary corrective and preventive actions well in time. Continual skill development of staff will ensure institutional strengthening to address challenges associated with water safety and security by creation of resilient and robust systems of water management. Main areas for further action are (i) strengthening water quality testing laboratories to undertake microbiological analysis and (ii) institutional strengthening to scale-up water treatment and purification.







Seema Joshi's Remarkable Journey Empowering Her Village through Water Management

Anshul Meshram, District Associate, Jal Jeevan Mission, UNICEF (WCEE)

n the heart of Chhattisgarh, nestled in the village of Murra under the Panchayat Murra in Block Dhamdha of Durg, resides Seema Joshi — a 33-year-old woman whose unwavering commitment to her community has transformed the landscape of water accessibility and safety.

Seema's journey began when Jal Jeevan Mission reached her village, a mission dedicated to providing tap connections to every rural household across India. Seema, residing in a village where water scarcity was a persistent challenge, became a beneficiary under this ambitious initiative. Her life took a remarkable turn as she gained access to a tap connection, bringing clean and safe drinking water directly to her home.

However, Seema's commitment to her community did not stop there.

Empowered by Jal Jeevan Mission, she took on the role of a *Jal Bahini* — a water warrior dedicated to ensuring the sustainable management of water resources. Seema actively participated in community initiatives and training programmes to enhance her knowledge and skills. Her enthusiasm led her to undergo specialised training in water testing using Field Testing Kits (FTK), an essential skill in ensuring the quality of water.

Armed with her newfound expertise, Seema emerged as a leader in the field of water management. She not only monitored the quality of water in her village but also organised awareness campaigns to educate her fellow villagers about the importance of safe water practices. Seema, with her cadre of women, took charge of spreading awareness on the safe use of water, emphasising the significance of hygiene and its direct impact on the health and well-being of the community. With the availability of clean water, the instances of waterborne diseases decreased significantly, and the community experienced a positive shift in their quality of life.

Seema's success story is not just about her personal journey but a testament to the transformative power of community-driven initiatives. Her journey from a beneficiary under Jal Jeevan Mission to a proactive Jal Bahini has not only ensured the sustainable use of water resources in her village but has also inspired many others to actively participate in creating a healthier and more resilient community.

Seema Joshi, with her indomitable spirit and commitment, stands as a beacon of change, proving that one person's dedication can indeed make a profound impact on the lives of many.







Capacity Building The Driving Force Propelling Jal Jeevan Mission towards Success Efforts by State/UTs

Utkarsha Rathi and Punam Singh, NJJM

o ensure the success of the mission, skill development and capacity-building emerge as crucial elements. In the realm of contemporary progress, acquiring additional skills becomes imperative to bridge the gap between common knowledge and the supplementary expertise required. Jal Jeevan mission (JJM) is dedicated to securing water in rural India. Remarkable progress has been made in achieving this objective, with over 14 crore functional tap connections established across the country.

Operating and maintaining these tap connections, monitoring water quality, managing source sustainability and maintenance, and promoting water harvesting are diverse facets of the mission that demand specialized training and capacity enhancement. However, the mission extends beyond technical aspects; it involves a transformative approach towards water, urging individuals to take ownership not only of the taps but also of the sources and the resource, in general.

The mission has adopted unique approaches to capacitate individuals, supplementing these with conventional methods such as workshops and conferences. The aim is to instill a shift in the overall attitude towards water, fostering a sense of responsibility and ownership. This multifaceted strategy is geared towards empowering communities to contribute actively to the mission's objectives.

In the pursuit of ensuring water security for rural India, the Jal Jeevan Mission has strategically placed capacity building as a central pillar in its quest for success. This modern development endeavor recognizes the essential role of skilling and capacitating individuals to bridge the gap between common knowledge and the specialized expertise required for its various objectives. Here are several examples which can showcase the improvement in water quality due to surveillance training, better O&M, technical training, auxiliary training and community participation. To state a few:

Bihar: Water Quality Surveillance Training

The Public Health Engineering Department (PHED) in Bihar conducted a three-day training programme on Water Quality Monitoring and Surveillance earlier this month. In collaboration with the Indian Institute for Human Settlement, this initiative reflects a commitment to empowering professionals with the skills necessary for effective water quality management.

Patna, Bihar: IT in Water Quality Surveillance

The Development Management Institute organised a two-day training







programme mid-January in Patna focusing on 'Use of IT in Water Quality Surveillance, Reporting, and Follow-Ups.' This modern approach leverages information technology to enhance water quality management skills among assistant engineers.

Jammu and Kashmir: Public Darbar

The Additional Chief Secretary of the Jal Shakti Department led a Public Darbar in Jammu and Kashmir recently, emphasising direct government-public interaction. The event highlighted the significance of capacity building, as departmental stalls provided information about various schemes, reinforcing the commitment to Jal Jeevan Mission.

Puducherry: O&M Capacity Training

In Puducherry, the Jal Jeevan Mission capacity training was held on "O&M of Multi Village Scheme with special reference to Water Auditing and Budgeting and IOT to the Officials of LAD, Community Panchayats, PHED and PWD, Puducherry" for 3 days from 23rd-25th January 2024 at Puducherry by Gramalaya- Key Resource Centre. KRC Gramalaya's role as a Knowledge Resource Center becomes pivotal in providing resources, expertise, and guidance for capacity building.



Karnataka: O&M Technical Training

Karnataka's focus on O&M Technical Training for watermen/plumbers exemplifies the mission's commitment to comprehensive training, ensuring efficient functioning of water supply infrastructure and aligning with the broader mission objectives. The training programme was organised on 22nd January 2024

Haryana: State-Level Workshop

A 'One-Day State-Level Workshop' on 'Auxiliary Activities and Water Quality' in Haryana, organised on 9th January 2024, emphasised the importance of sustainability. SHG members played a crucial role in championing the mission in rural Haryana, fostering a collaborative approach towards sustainability.

These examples showcase the diverse methods employed for capacity building within Jal Jeevan Mission. Whether through traditional workshops, modern IT-focused training, or community engagement activities, the mission recognises the multifaceted nature of skilling and capacitating individuals. This deliberate effort to enhance skills not only ensures the success of specific mission objectives but also fosters a broader societal shift towards responsible water stewardship. Capacity building emerges as the linchpin that propels Jal Jeevan Mission towards its commendable goal of providing clean and accessible water to every household across India.







Empowering the Panchayats for WASH Service Delivery

An initiative by Rural Development Department and Directorate of Panchayati Raj, Government of Maharashtra¹

P. T. Badgujar, Executive Engineer (Retired), MJP, Nasik; Madhukar Deshmukh, Block Development Officer (Retired), Sangli; Sanjay Misal, Communication Expert, Zilla Parishad, Beed; Dishana Wasava, Master Trainer, Nandurbar

Background

ustainable water supply and sanitation service delivery, with an approach focused on environmental protection and climate resilience, is non-negotiable for achieving clean, green, and watersufficient villages. In Maharashtra, JJM is leading the way in achieving programme goals with the ultimate objective of functional household tap connections and service delivery in rural households. Significant assets for water have already been created, and infrastructure is reaching previously unreached areas at a phenomenal speed.

The changing climate presents a unique and different challenge, necessitating that the infrastructure be climate resilient. This requires an approach where communities prepare themselves for the impacts of climate change.

India is a signatory to the United Nations 2030 Agenda for achieving inclusive, people-centric, and holistic Sustainable Development through identified Goals. Incentivisation of Panchayats under Water Supply, Water Resource Management and Environmental Sanitation shall be informed by achievements under SDG 6 goals by respective Gram Panchayats.

Against this backdrop, it is crucial to ensure that GP-level institutions are motivated and capacitated to take up effective and climate-resilient management of the schemes and ensure sustainable service delivery post-handover.

To reach out to 28,813 GPs in Maharashtra and build their capaci-

ties in a time-bound manner, the Rural Development & Panchavati Raj Department (RD&PR) of Maharashtra is implementing a capacity-enhancing and communication initiative on sustainable water service delivery for Village Resource Groups (VRGs). Overall institutional strengthening is the motif of the initiative. So far, 10 batches of 4-day trainings of Master Trainers (MTs) on 'Aspirations for sustainable service delivery of water supply and sanitation' have been organized. Through these trainings, 492 MTs from 34 districts of Maharashtra were trained. These MTs will now train all Gram Panchayat officials like Sarpanchs, Gram Sevaks, Jal Surakshaks, VWSC members, and so on from 14,000 Gram Panchayats in the State this year. Officials from the remaining GPs will be trained in a similar way next year.



¹ With technical support from UNICEF Mumbai and PriMove





2. Objectives

Following are the objectives of this initiative:



3. Scope

Key focus areas/ elements of Water Sufficient Village:

An adequate and regular supply of safe drinking water as per stipulated BIS standards (IS 10500 (2012): Drinking water) is contingent upon the Gram Panchayat being a Water Sufficient Village. Also, GP which aspires to focus on becoming a Clean and Green Village, would need to have clarity regarding the preservation and maintenance of the components that cover water resources, its link to rivers and streams, land and soil health.

Key focus areas/ elements of Clean and Green Village

"Clean" refers to access to safe & adequate drinking water and sanitation services, a low-pollution, low-emission world in which cleaner air, water, and oceans enable people to lead healthy and productive lives. Effective maintenance of Open Defecation Free (ODF) status attained in 2019 with safe containment of feces, efficient and effective

functioning of solid and liquid waste management practices and systems, grey water treatment, prevention of water source contamination, etc., are the key elements of the clean component under a clean village.

"Green" refers to a Gram Panchayat in which natural resources, are sustainably managed and conserved to improve livelihoods and ensure food security, and most importantly protect the environment for future generations. In order to become a clean and green Village, the GP would need to address ecological, eco-



Scope of the initiative

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nomic, and equity issues by bringing about changes through communitylevel social regulations, cooperation, and proactive participation for a green, clean, non-toxic, low carbon, self-reliant, eco-resilient. A letter was issued to the districts through the RGSA on 24th May, 2023 to determine the physical target for the stakeholders in Gram Panchayats to be trained across the State. According to this, information was obtained from each GP on no. of water supply schemes completed in 2022-23 and 2023-24. It was decided that out of these, 84,000 VRG members from 14,000 GPs will be trained in first phase of the initiative in 2023-24.













5. Resource material developed under the initiative

Following resource material was developed under the initiative

Training outline: Based on the findings from the Training Needs Assessment Report, the training

outlines of 4-day training for master trainers and 3-day training for village resource groups were developed.

Facilitator's (FT) Guidebook: After approval of the training outline, two guidebooks for trainers were prepared –one for the 4-day training for master trainers at state level and 3-day block level training. These training guidebooks mainly included training background, outline, schedule, session facilitation process and pre-post training questionnaire etc. Majorly, participatory training methods were proposed in the said training such as sharing success stories, brainstorming, poetry readings, quizzes, group work, games, audio-visual presentations, etc.



Resource material: Previously, UNICEF Mumbai had prepared resource materials on related topics for Government of Maharashtra. The necessary materials/sections were selected from these documents to develop the manuals.

Presentations: After preparation of guidebook and resource material, presentations related to related sessions were prepared.





Table 1: QR codes for the resource material developed under the initiative

Details	Training module		Resource material		PPTs
	4 days <u>ToT</u>	3 days training of Village Resource Group (VRGs)	Master trainer	VRGs	
QR code					



6. Key outputs achieved

Following are the key outputs achieved so far under the initiative.

















Group Activity, Bori Harisal, Dharani, Dist. Amravati





7. Key achievements

Key achievements of the initiative are as follows:





8. Convergent planning and training



9. Enabling factors

- Successful roll-out of the initiative can be attributed to the following enabling factors-
- The central and state governments are implementing the Jal Jeevan Mission which entails the provision for the installation of seven types of schemes including retrofitting and augmentation of the existing water supply schemes. These schemes are being executed based on the village action plans prepared by the GPs
- Various water conservation s c h e m e s a n d a w a r d programmes; many GPs in Maharashtra have participated in the water cup and similar types of government programmes
- Villages with abundant water availability can earn money by selling additional water that has been stored in the village area after ensuring GP/village have sufficient water for their need.
- Abundant water availability has helped people to start livelihood

activities e.g., shell cultivation, fishery, etc.

- Head of the village and local stakeholders have the responsibility and right to know detail of the respective panchayats water supply schemes on real time basis. This is specifically applicable to JJM schemes
- The youth have potential to manage the village water and sanitation systems effectively and focusing green skilling and clean energy. They can also bring in new technologies and reduces the costs
- GPs and Communities have shown interest in attaining carbon neutral status. They need proper guidance and support from the respective sectors
- 15th Finance Commission, state finance commission, own funds, user fees are the different sources of funds for undertaking routine and innovative activities.
- Positive and supportive attitude of RGSA officials during the entire initiative was the key enabling factor, which helped in

timely decision making, better liaisoning and coordination and smooth implementation of the process. The entire roll out process was monitored rigorously by the officials and neces sary follow up was done which helped to expedite the process.

- RGSA, YASHADA-SIRD and UNICEF provided valuable inputs to the training design, resource material and training delivery which helped in improving the quality of training delivery and knowledge transfer process
- Guidelines and process protocol was issued by RGSA to the districts which helped them to efficiently plan VRG trainings and support the MTs in training facilitation
- Logistic arrangements by YASHADA (SIRD) were up to mark which helped in proficient facilitation of the trainings
- Close monitoring of the trainings by Third Party agency and their inputs helped in enhancing the training quality



10. Non Negotiables

Few challenges were faced during the roll out of this initiative; which are as follows-

- Ensuring the timely availability of resource and training materials at the venue for many ToTs will greatly enhance the participants' understanding and revision of the training content.
- Active participation of WSSD-PHED officials during the training will be instrumental in enhancing the understanding of local ground-level needs and districtspecific scenarios regarding water supply arrangements

- The involvement of representatives from PRI training institutes will significantly improve the facilitation of logistic arrangements for the VRG trainings
- Once the letter is issued to the districts, a timely and effective response from the districts in selecting Master Trainers and communicating their names and availability to the state will streamline the implementation of ToTs
- Full-time participation/attendance of a YASHADA representative will ensure timely logistics arrangements at the venue
- A key challenge of the process is the potential loss of knowledge during the cascading trainings. However, by developing resource material for revisions and repeated readings, preparing presentations for VRG trainings to ensure all key contents are covered during the sessions, and providing monitoring and handholding support by UNICEF-PriMove to ensure required guidance to the MTs, we can minimize this loss
- Encouraging the full-time participation of the VRG members (especially Sarpanch and Gramsevaks) during the 3day trainings will be beneficial.

11. Monitoring mechanism

Monitoring of ToTs

- Entire process and trainings monitored by RGSA
- Monitoring indicators-
 - Training facilitation subject knowledge, communication skill, facilitation skill, training methods used during the sessions, knowledge transfer
 - Logistic arrangements food and stay arrangement , vehicle arrangements during field visit
 - Material, aids hall and seating arrangements, projector, AV system etc.
 - Profile and number of participants per district
 - Participation of the MTs





12. Insights from the trainings on community of practices

During the trainings, participants shared their experiences/ thoughts about sustainable and reliable service delivery at ground level. This provided realistic ground level insights about issues, operational aspects and key factors which contribute to effective WASH management. Key such insights are presented below-

The participants repeatedly emphasized that a sustainable source is a crucial aspect of assured service delivery. A few participants mentioned that some Gram Panchayats (GPs) are implementing measures to strengthen their water sources based on the characteristics of the aquifers, water availability, geological formations, and hydrological features within their villages, in consultation with Groundwater Surveys and Development Agency (GSDA) officials. This approach has shown positive results in ensuring a reliable water supply.

- Several participants shared their experiences on how community involvement from the planning stage has contributed to sustainable water service delivery. This involvement has led to regular monitoring of scheme implementation, timely resolution of complaints, and prompt payment of water tax.
- Some participants highlighted that convergence with Corporate Social Responsibility (CSR) initiatives can reduce waste management costs, generate local employment, decrease open dumping, and promote visual cleanliness. For instance, Vasind GP from Palghar district of Maharashtra shared their success story of a sustainable plastic waste management system, which has resulted in the recycling of over 2 tons of dry waste, including plastic.
- In line with the training focus on efficient Solid and Liquid Waste Management (SLWM) partnerships, Ghanekunth GP in Ratnagiri district highlighted the positive outcomes of its collaboration with the Nisarga organization. The GP reported significant improvements in plastic waste management, successfully addressing issues like the open burning of plastic waste.
- Furthermore, one village highlighted their initiative to install underground drainage lines for a habitation where 80-90 households discharged wastewater from septic tanks directly into fields without treatment. To improve greywater management, they proposed soak pits for septic tank toilets to separate black water entering into drainage lines. They also proposed constructing a greywater treatment plant (3pond system) in the remaining two habitations.

13. Opportunities

This entire initiative is anticipated to play a crucial role in building the capacities of the VRGs in a timely manner. This will empower them to manage infrastructure responsibly and diligently, delivering high-quality and climate-resilient services in the long run. The outcomes and achievements of the process are significant, and creation of capable human resources at all levels can aid in effective service delivery, not just in the WASH sector, but also in other development fields and state flagships on Water Resources Management, Climate Change, and Adaptations, among others. The pool of resource persons developed in each district of the state can assist in future capacity-building initiatives. Similarly, the training package developed for ToTs and VRG trainings can serve as resource material or reference material for other sector professionals, trainers, implementers, etc. The initiative also holds great potential for upscaling in other states and sectors.



Strengthening Water Quality Monitoring and Surveillance in Madhya Pradesh: Insights from an initiative

Shri K.K. Songaria, Engineer in Chief, Public Health Engineering Department, Madhya Pradesh; Shri Narendra Singh Chouhan, WASH Officer, UNICEF, Bhopal; Shri Navneet Mishra, Partnership Coordinator, INREM Foundation, New Delhi

Introduction

n Madhya Pradesh, Jal Jeevan Mission (JJM) has initiated a comprehensive pilot project aimed at strengthening drinking water quality monitoring and surveillance. This initiative is a collaboration involving various stakeholders, including state Public Health Engineering Department (PHED), INREM Foundation, UNICEF, and district line departments. The project focuses on enhancing drinking water quality by increasing community awareness, participation and establishing a robust water quality surveillance mechanism.

Objectives of Project

The pilot project covers geographical areas primarily in the Jhabua (Tribal District) and Sehore (Urbanised

District) districts of Madhya Pradesh. It aims to address the challenges related to water quality and provide a sustainable solution through a community-based approaches. The project leverages partnerships and stakeholder engagement at state, district, and ground levels to create a model that can be replicated across the State.

Role of Different Stakeholders

The success of the pilot project hinges on the active involvement of various stakeholders. The State PHED play a crucial role in providing technical expertise and resources for water quality monitoring. Organisations like the INREM Foundation contribute valuable research insights and methodologies, while UNICEF's

involvement ensures bringing the community perspective, providing overall coordination support and integrating best practices in water, sanitation, and hygiene (WASH) interventions. District line departments act as facilitators, bridging the gap between policy implementation and ground-level execution. Together, these stakeholders form a cohesive network driving the project forward.

Key Strategies

Empowered Community

Community representatives have been trained and empowered to contribute to ongoing monitoring and surveillance efforts. This facilitates the effective linkage between PHED Laboratories, Field level WQ testing and linking results



Community awareness and WQ testing at School by CHO at Vill. Bolasa, Petlawad, Jhabua, MP





for a community action for mitigation. This has contributed for establishing a sustainable model for community-led water quality management. The project has successfully raised awareness among community members about the importance of water quality and the health risks associated with water contamination. This has led to increased participation and ownership among the community members.

Phased Implementation and Coverage

The project advances in stages, commencing with a comprehensive baseline assessment with water quality testing of vital sources and at household level. Following the assessment, the project incorporates provisions and strategies for future interventions, including course corrections, gap filling, resource mobilization and the formulation of village water safety plans. Continuous data collection ensures ongoing monitoring. Establishing a community-operated water quality monitoring mechanism involves surveillance and regular testing using Field Test Kits (FTK), supplemented by accessing water samples at the nearest laboratory. Leveraging local resources facilitates sustainable solutions and fosters long-term water quality management.

Capacity Building and Training

The project conducts comprehensive training programmes for Community Health Officers (CHOs) and members of Village Water and Sanitation Committees (VWSCs), aiming to equip them with essential skills for water quality testing and surveillance. Additionally, it includes the development of Information, Education, and Communication (IEC) materials and safe water learning cards, designed to facilitate community training sessions and raise awareness about safe water practices. A total of 300 CHOs from Jhabua district underwent training on water quality testing using Field Test Kits (FTK) and survey tools' operational procedures.

Departmental Convergence and Community Empowerment

The project aims to ensure seamless coordination and resource allocation for water quality initiatives through departmental convergence at various administrative levels. This involves active participation and support from key stakeholders such as the District Chief Medical and Health Office and District Livelihood Mission Office. These offices provide essential coordination and resourceful support in assessment, testing, monitoring, and awareness efforts. Through the collaboration and the active involvement of Self-Help Groups (SHGs) and Community Health Officers (CHOs), the project endeavors to empower communities to take ownership of water quality issues and implement sustainable solutions.

Emergency Response System

The programme prioritises the development of an emergency response plan through comprehensive analysis. This plan outlines protocols and procedures to address sudden water quality issues, ensuring swift and effective responses. Additionally, proactive measures are integrated into the analysis to prevent and mitigate emergency situations, utilizing data insights to anticipate and address potential issues beforehand. By adopting this holistic approach, the programme emphasises continuous provision of safe drinking water to communities, highlighting proactive preparedness alongside reactive responses.



Achievements and Outcomes

The pilot project has so far achieved following key milestones:

Water Quality and Sanitary Survey tools

Mobile based survey tools developed and implemented for water quality assessment and sanitary survey in project districts. Key water quality parameters for FTK usage and community survey questionnaires are defined. Additionally, sanitary survey components covering sanitation practices, infrastructure, and contamination sources are being developed. Standard Operating Procedures (SOPs) ensure accurate survey and FTK test execution.

Leveraging Information Technology

Information Technology (IT) are pivotal in modernizing water quality assessment, monitoring, reporting, and awareness generation. Utilising dedicated mobile applications, Community Health Officers (CHOs) conduct real-time water quality assessment and sanitary surveys, seamlessly submitting water quality testing results in real-time. Integration of IT solutions streamlines data contributions, enhancing accuracy and timeliness. By harnessing technology, the project aims to establish a comprehensive framework for water quality management in Jhabua.

Survey and assessment:

The survey, led by CHOs in Jhabua districts, has made significant progress. A total of 254 CHOs, 30 ASHA workers, 17 other department functionaries, 4 Anganwadi Workers, and 2 INREM Foundation staff have successfully assessed over 307 villages in 6 blocks of Jhabua districts. The survey is being initiated in Sehore district in February 2024.

Effective Response System:

Developed protocols and procedures have enabled a prompt response to sudden water quality issues, ensuring that risks are mitigated swiftly and efficiently. Communities are now being made aware of where and how the water quality system functions, gaining an understanding of the importance of water quality through the piped water supply scheme.

Human Interest Linkage

Due to waterborne diseases and contamination, the villagers faced numerous health challenges resulting from poor water quality. This project emphasizes rallying the community together to address these issues. Through active participation in water quality monitoring and surveillance activi-



Household level WQ testing by CHO at Vill. Kadwali, Petlawad, Jhabua, MP

ties, they will gain valuable knowledge and skills, empowering them to take charge of their own health and well-being. This human-interest narrative highlights the tangible benefits of the project and underscores the importance of community engagement in achieving lasting change.

Strengthened Stakeholder Collaboration

The project has fostered stronger collaboration and coordination among various departments and stakeholders. This has led to a more integrated and effective approach to water quality management.

Challenges and Recommendations

While the pilot project has shown promising results, it faces several challenges that need to be addressed for its sustained success:

Resource Allocation and Infrastructure Development

Ensuring consistent resource allocation and infrastructure development is crucial for the longterm sustainability of the project. This includes providing advanced testing equipment and continuous capacity building for community members.

Integration with Broader Water Quality Frameworks

Embedding water quality management within line departments at the district and higher levels facilitates cohesive governance and coordination, pooling resources and expertise for a more systematic response to water quality challenges. This collaborative approach enhances monitoring, regulation, and remediation efforts, ultimately leading to improved water quality and public health outcomes.





Household level WQ testing by CHO at Vill. Kadwali, Petlawad, Jhabua, MP

Continuous Monitoring and Evaluation

Regular monitoring and evaluation are essential to assess the impact of the project and make necessary adjustments. This will help in adapting the project to changing needs and circumstances.

Way Forward

Integrating Health & Wellness Centres as Water Quality Testing Hub

Health and Wellness Centres are being established as hubs for water quality testing. Trained Community Health Officers with Field Test Kits (FTK) will assist the public during designated hours. This initiative aims to ensure accessibility to trained personnel and raise awareness about health-water quality connections. This integrated approach fosters proactive health management and water quality vigilance within communities, advancing the project's goals.

Further mechanism for establishing linkages between Health Centres and Water Quality Labs will be developed to create a seamless pathway for transmitting test results. This enables CHOs to quickly submit water samples for laboratory analysis, with results promptly relayed back to the Health Centres. Such efficient coordination ensures timely response measures, allowing for swift interventions in case of water quality concerns.

Uninterrupted availability of FTK to CHOs

Continues availability of Field Test Kits (FTK) at Health Centres will be ensured with linkage between Health Centres and Water Quality (WQ) labs to facilitate immediate testing of water samples submitted by Community Health Officers (CHOs), enabling prompt action.

Community based Protocols

Community protocols will be further reinforced the process of water sample collection, handling, and transport. This may include training community members on proper sampling techniques, sample labeling, and ensuring sample integrity during transport. Clear guidelines will be developed to streamline these processes and minimize the risk of sample contamination or degradation.

Resource Mobilisation for Transportation of Samples at Water Quality Labs

Infrastructure improvements will be strengthened the sample transport system. This could involve providing communities with appropriate sample containers, packaging materials, and transportation vehicles or arrangements. Establishing designated collection points or drop-off locations within villages can help centralise sample collection and streamline the transport process. Furthermore, developing efficient communication channels between villages and laboratory facilities is essential for coordinating sample pick-up and delivery schedules.

Enhancing Water Quality Monitoring through WhatsApp Bot (OurWater Bot)

Integrating OurWater Flow with WhatsApp Bot involves onboarding all CHOs in Jhabua, streamlining data contributions for water quality information. This strategic move aims to create an efficient platform for regularising information flow towards community. The WhatsApp bot becomes a vital tool for CHOs to contribute real-time data on water quality, ensuring a dynamic monitoring system. Beyond data contributions, the programme envisions enhancing knowledge-sharing platforms to increase community awareness about water quality.

Potential for Scalability of Intervention

One of the most promising aspects of this pilot project is its potential for scalability. By establishing a robust community feedback loop and leveraging existing partnerships, the project sets a precedent for replicating its success in other district of State. The community-based approach not only fosters ownership and empowerment but also lays the foundation for sustainable water quality management practices that can be adapted and implemented across different contexts.



Digital Platform for Capacity Building Initiatives – Participatory Digital Attestation (PDA)

Banasree Das, Sujata Tripathi and Ravikant Kumar, Water For People India¹

midst the serene landscapes and bustling communities of Birbhum district, a quiet digital revolution took root, promising to transform the way capacity building initiatives were carried out. It all started with a visionary collaboration between Water For People India and its esteemed technical partner, SOCION². The objective was guite clear: using a groundbreaking digital platform called Participatory Digital Attestation (PDA), the objective was to improve governance, empower communities, and encourage participation. With the District Administration's unwavering support, this platform became a ray of hope, ushering in a new era of digital empowerment. 1,297 frontline workers in Birbhum's vast network came to light as the unsung heroes, their potential unlocked by PDA's transformative power. Beside them were 19 Block-level data managers, who had the means to easily traverse the vast expanse of information, and 19 Block-level master trainers, whose skills had been refined and magnified via digital channels. Eight carefully created digital materials were uploaded to the platform to serve as the



foundation for knowledge, empowering and enlightening users alike. However, PDA was about more than just instruction; it was also about openness, instantaneous insights, and feeling the pulse of the community.

Village profiling evolved into more than just gathering data; it became a story of advancement, a story of access to clean water and sanitary conditions that was ingrained in each and every public institution and household. This story came to life via the Power BI Dashboard, shedding light on the data of 4,045 public institutions, 3,74,990 households, and 1,661 villages. When PDA expanded into new areas, the momentum only got stronger. A total of 19 junior engineers from the Public Health Engineering Department (PHED) set out on a two-day journey that would change their perspectives and sharpen their skills at the Birbhum Zilla Parishad Meeting Hall. The Jal Jeevan Mission's (JJM) Implementation Support Agency's (ISA) Block-level data managers and Block Project Managers (BPMs) stood with them, their combined efforts

¹ Water For People began working in India in 1996, and in 2008, the organisation developed a locally registered arm to work in tandem on projects funded by Indian corporations, foundations, and individuals. To date, the organisation reached over one million people in India through water and sanitation solutions. To further promote sustainability, Water For People India work with local water and sanitation committees that oversee the operation and maintenance of their local systems.

² SOCION, a social enterprise on a Mission to amplify the impact of societal development at scale. The organisation is based in Bangalore, India and works around the world to digitally reimagine the way programmes operate to accomplish societal development outcomes at scale. It works with philanthropic organizations and NGO's that are partnering with multiple states across India to enable water security and Natural Resource management outcomes at scale. The PDA platform has been built by SOCION. The platform and digitally reimagined approach are currently in use by programmes across multiple states including Meghalaya, Karnataka, Rajasthan, and Odisha, and has demonstrated substantial benefits; and Software as a Service.



Overview of Household & Public Institutions Survey						
Total Villages 2293	Total Households	Block All	GP V All	~	Village AII	
			н	ousehold	(Blank) Do not OBC Others SC ST	
# of Household (HH) Surveyed	# of HH who have Functional Tap Connection	# of HH who have Functional Toilets	# of HH who have operational Soakpit	# of HH who practices Waste Segregation	HH with Function Tap. Functional Toilets. Operational Soakpit and who Practices Waste Segregation	
374990	59618	193701	136377	199632	Dhanbad	
374990	21%	52%	36%	53%	Kanke HARKHAND BMOWSHEN Jamshedpur, Kolkata, sono door Khulna Calentina Calentina	
			Publi	c Institutions	Angandwadi GP Office Health Others Public Tollet School	
# of Public nstitution (PI's) Surveyed	# of PI's where Drinking water source is availa	# of PI's which has Functional toilets	# of PI's where Sanitary Pads & Menstrual Mana	# of PI's which has provision for both Solid & Liq	Pl's with Drinking water Source. Toilets. Menstural Management Facility and Waste Management available	
	2349	2510	256	1980	Giridih Baharampur	
4045	71%	49%	6%	49%	Jamtara City: Dhanbad Chas Asansol	

propelling the mission ahead with unwavering determination.

But the story did not end there; in Illambazar Block, the pulse of community engagement beat louder as Community Resource Person (CRPs), Self Help Group (SHG) members, and Village Water Sanitation Committee (VWSC) members gathered to embrace the power of PDA. From Illambazar to Bolpur Sriniketan Block, task submission became more than just a routine, it became a symbol of collective action, a testament to the strength of community driven initiatives. Through the lens of PDA, Birbhum district was not just a map of geographical boundaries, but it was a tapestry of stories, of resilience, and of hope. And as the digital revolution continued to unfold, one thing became abundantly clear: the future of capacity building had arrived, and its name was Participatory Digital Attestation (PDA).







Empowering Women Drudgery Reduction and Livelihoods Promotion through Access to Water under Jal Jeevan Mission

Ajaya Mohapatra, CEO, We The People⁵ - Key Resource Centre under NJJM

Introduction

al Jeevan Mission (JJM) in India aims to provide safe and clean drinking water of 55 litre per capita per day (LPCD) through functional household tap connection to all rural households. One significant aspect of this mission is its profound impact on women, particularly in reducing their drudgery associated with water collection and improving their livelihoods. Besides, beyond its primary goal of ensuring access to potable drinking water with adequate quantity, the mission also addresses socio-economic issues, including reduction of drudgery of women. This article delves into the transformative effects of the Jal Jeevan Mission on women's lives, focusing on alleviating drudgery and improving their livelihoods through improved access to clean and safe drinking water. It also highlights how the JJM contributes to empowering women in reducing the drudgery of water collection and management in rural communities.

Background

Before the execution of Jal Jeevan Mission, access to potable drinking water in rural India was a daunting task, especially for women. Women and girls often spent several hours



Access to safe drinking water is essential for human health, economic development, and environmental sustainability. He added that in rural India, women shoulder responsibility in fetching water for the household needs. This task entails long walks to distant water sources, carrying heavy containers while spending hours each day collecting water from distant sources. Such drudgery impacts physical health and well-being of women and limits their opportunities for education, employment, and personal development.

Rajesh Kumar Jain, CEO, Zilla Panchyat, Shahdol

each day fetching water from distant sources, which consumed their precious time and subjected them to physical exertion, health risk, limited their opportunities for education and economic participation.

Post the launch of JJM on 15th August, 2019 by the Hon'ble Prime Minister

Shri Narendra Modi and the initiation of the '*Har Ghar Jal*' by the Ministry of Jal Shakti, Government of India in collaboration with States/ UTs of India to provide every rural household with a functional household tap connection has improved the quality of lives of millions of rural households especially women with an access to

¹ We the People is an empanell ed Key Resource Centre (KRC) under National Jal Jeevan Mission offering training to L2 and L3 functionaries on JJM in India. Since 2021, We the People- KRC trained over 10,000 Level-3 functionaries and 1000 Level 2 functionaries under JJM. Besides, it offers livelihood promotion services in India. It works in 21 States/ UTss in partnerships with the union and state governments, industries, international agencies and civil society organisations.





potable drinking water with adequate quantity of 55 lpcd. It has not only brought in lasting happiness amongst the rural households but also helped in drudgery reduction of rural women and girls who used to cover long distances fetching water. Further, the mission has created economic opportunities for millions of women in the rural hinterland.

However, Gohparu Multi Village Rural Water Supply Scheme (GMVRWSS) under JJM supplies clean and safe drinking water through functional household connections to 28 villages of Gohparu Panchayat Samiti that has transformed the lives of the rural population, especially women and children living in these villages. This scheme has adopted multi-pronged strategies reducing drudgery of women associated with water collection by providing potable drinking water connections by extending piped water supply networks to rural households, as a result, need for long-distance water collection has minimised, significantly reduced the burden of women. Besides, the mission encouraged community participation in water management, empowering women to take active roles in decisionmaking processes related to water supply, sanitation, and hygiene. Moreover, leveraging technology such as solar-powered water pumps and water purification systems reduces the manual effort required for water extraction and treatment. easing the workload on women. Additionally, training programmes were conducted by empanelled Key Resource Centres of Ministry of Jal Shakti, Govt. of India and Madhya Pradesh Public Health Engineering Department (MPPHED) viz. We The People in Shahdol division, educated women about water conservation, efficient water usage, operation and maintenance of water infrastructure. enhancing their skills and confidence in managing water resources.

Jal Jeevan Mission Reduced Drudgery of Women in Rural India

The success story of the mission is clearly visible in one such village of Shahdol district of Madhya Pradesh. Barelli of Gohparu Panchayat Samiti is around 25 km from the district headquarters, situated 466 meters above sea level. Md. Niyaz, vice president of the Village Water and Sanitation Committee (VWSC) of Barelli village, while narrating the journey of the struggle of fellow women folks in his native-village doing the arduous task of fetching water from distant places, said that during peak summer in May and June, two out of three dug-wells in his village would get dry as a result, women and girls had to cover long distances, stand in a long queue and wait for their turn to fetch water from the only functional well. Women and girls often spent long hours each day fetching water from distant sources in the village around the year. It further constrained women from participating in economic activities and limited girls from continuing

their education, resulting in school dropouts.

The transformation has happened in his village in July 2020, he says. "Our village started receiving potable drinking water through piped water connection under the Gohparu Multi Village Rural Water Supply Scheme planned and executed by Madhya Pradesh Jal Nigam Corporation under JJM. Since then, there is no looking back. The quality of lives of the villagers, especially women, have drastically improved due to access to potable drinking water through piped rural water supply networks with adequate quantity supplied under Jal Jeevan Mission. Henceforth, number of hours women used to spend collecting water for household chores overcome through the mission. Women folks in our village are now spending such quality time in various productive activities at home and outside," says Md. Niyaz.

He expressed his gratitude to the present government in the state and the centre and was thankful to the Prime Minister while acknowledging



Md. Niyaz, Vice-President and Poonam Viswakarma, member of VWSC of Barelli village and Gram Panchayat, Gohparu Panchayat Samiti sharing their experience regarding JJM at Bareli village with Plant Head GMVRWSS, Gohparu and We The People team, dated 10th February 2024





Rajkumari Singh of Sontola village, Harrhatola Gram Panchayat taking water from the household tap installed in front of her home under GMVRWSS, dated 10th February 2024

his visionary leadership of providing 'Har Ghar Jal' to every rural household in the country, empowering women, reducing their hardships and creating economic opportunities.

Rohit Mishra, the Plant Head of Gohparu Multi Village Rural Water Supply Scheme, highlighted the persistent efforts undertaken by his team and VWSCs, which resulted in the provision of clean and safe drinking water to rural households across the 28-project intervened piped water supply villages. Mishra emphasised that prior to the implementation of this scheme, women in these villages had to endure the burden of traveling long distances to fetch water, leading to the wastage of their time, energy, and resources that could have been invested in more productive endeavours. However, the Gohparu Multi Village Scheme has significantly improved the lives of women by reducing their physical labour, creating income-generating opportunities through time savings, and enhancing overall quality of life.

Jal Jeevan Mission Opens Up Income Opportunities for Women

While expressing her joy and happiness about the success of Jal Jeevan Mission in bringing transformative changes impacting lives of millions of women across the country, Rajkumari Singh, a resident of Sontola, a cent percent tribal village of Gohparu Panchayat Samiti in Shahdol district, said that her daily routine had to revolve around fetching water for her family needs. She would wake up before dawn, rushing to the nearest well to fill her pots before the well would get surrounded with other fellow women folks. This task consumed nearly two to three hours of her day, leaving her exhausted and unable to pursue other socio-economic activities.

She said that after her village received functional household tap water connections through the Gohparu Multi Village Scheme, planned and executed by Madhya Pradesh Jal Nigam Corporation under Jal Jeevan Mission, transforming the life of women in Harrhatola Gram Panchayat. Now, the fellow women folk in her Gram Panchayat have access to potable drinking water at home through rural piped water connections. No longer burdened by the arduous task of water collection, women are able to reallocate their time and energy to income generation activities promoted by the selfhelp groups in the village through National Rural Livelihood Mission (NRLM). The women started contributing to monthly family income as a result. Sail Kumari Singh, President of Jagriti Village Organisation of Barmania Gram Panchayat promoted under the NRLM, said that Jal Jeevan Mission has not only addressed the crucial issue of water scarcity but has also played a significant role in promoting livelihoods of women in rural areas. Like many fellow women of her village, she said that befo JJM, women and girls in rural households often spent a significant amount of time fetching water from distant water sources, sometimes multiple



Group discussion with Rajkumari Singh and other women of Sontola village, Harrhatola Gram Panchayat about the impact of JJM on women's drudgery reduction, dated 10th February 2024



times a day. This task not only consumed their time but also required strenuous physical labour. With the provision of piped water supply to households, the burden of water collection has significantly reduced. Women and girls can now effectively invest this time for other productive activities, including pursuing income-generating opportunities.

Malti Singh, member of the Jagriti Village Organisation of Barmania Gram Panchayat of Gohparu Panchayat Samiti said that JJM focuses on community participation and encourages the involvement of women in decision-making processes related to water management and infrastructure development. By actively participating in VWSCs, community meetings, and planning discussions, women gain a voice in shaping water-related policies and projects that directly impact their lives. This empowerment enhances their confidence and leadership skills, contributing to their overall socioeconomic development. She also added that access to reliable water supply opens up opportunities for women to engage in incomegenerating activities within their communities. For instance, with consistent access to water, women can initiate small-scale enterprises such as vegetable gardening, tailoring, running beauty parlours, or small-scale food processing, thus have helped additional income for the households and contributed to local economic growth and selfsustainability.

While sharing her experience, she said that the improved access to water has enhanced the overall wellbeing of her family. With potable drinking water readily available in the village, hygiene practices have improved, reducing the incidence of water-borne diseases. Children from her village now attending school more regularly, as they no longer need to assist their mothers in water collection and storage.

The case of Rajkumari Singh has demonstrated the transformative impact of the JJM on women in rural India. By reducing the drudgery associated with water collection, the mission has liberated women from the confines of traditional gender roles, empowering them to pursue education, employment, and community engagement.

Jal Jeevan Mission addresses the basic need for potable drinking water with adequate quantity also serves as a catalyst for gender equality and women empowerment. While recognising and addressing the disproportionate burden of water collection on women, the mission contributes to their socio-economic advancement and overall well-being. As India strive towards universal access to water, it is imperative to focus on initiatives that uplift and empower women, ensuring their rightful place as equal participants in society.

Afjal Amanullah, Executive Engineer, Public Health Engineering Department (PHED), Shahdol Division, Madhya Pradesh, added that Jal Jeevan Mission execution has brought about transformative changes in rural communities, particularly for women. He said that with access to piped water supply, women no longer spend hours each day fetching water, allowing them to pursue other productive activities, including education and incomegenerating opportunities. The mission has reduced physical exertion from water collection and lowers the risk of injuries and health complications among women, contributing to improved overall well-being. By relieving women of water-related chores, the mission enables them to participate more actively in community development initiatives, decision-making processes, and economic activities, as a result enhancing their socioeconomic status and empowerment.

Jal Jeevan Mission Reduced Water-Borne Diseases and Improved Human Health in Rural India

Jal Jeevan Mission importantly plays a pivotal role in reducing water-borne diseases and improving human health in rural areas. The mission



Children of Sontola Primary School, Harrhatola Gram Panchayat, Gohparu Panchayat Samiti drinking potable water from the tap water provided under GMVRWSS, dated 11th February 2024





Resident of Harrhatola village, Gohparu Panchayat Samiti fetching water from the tap provided under GMVRWSS, dated 10th February 2024

focuses on providing functional household water tap connections to every household, ensuring access to potable drinking water. As a result, the mission has significantly reduced the dependence of the rural households on contaminated water sources like ponds, rivers, or open wells, which are often breeding grounds for water-borne diseases.

The medical staff of the Community Health Centre (CHC), Gohparu Panchayat Samiti has accepted the fact that access to potable drinking water by the rural population of Gohparu Panchayat Samiti drastically reduced various water-borne diseases such as diarrhoea, typhoid, jaundice and dysentery. By ensuring the supply of safe drinking water, JJM contributed to the reduction of these diseases. Santosh Kumar Choudhurv. Pharmacist of Community Health Centre (CHC) of Gohparu Panchayat Samiti said that prior to the launch of the Jal Jeevan Mission, 30-40 cases of water-borne diseases such as diarrhoea, typhoid, jaundice and dysentery reported in their hospital, reduced to around 5-8 cases per month. He owes the credit to the success of the Mission in providing clean and safe drinking water to rural households.

Divyanshu Sharma, a woman Counsellor working under Rashtriya Kishore Swasthya Karyakram at the CHC, Gohparu, said that the Jal Jeevan Mission focuses on the importance of sanitation and hygiene practices, including grey water and black water management, maintaining cleanliness in and around water sources. This holistic approach to water supply and sanitation helps preventing the spread of diseases and promoting overall health and well-being of rural population especially women and children. She said that along with infrastructure development, JJM conducts awareness programmes on water, sanitation, and hygiene (WASH). These programmes educate communities about the importance of clean water, proper sanitation practices, and personal hygiene, empowering them to take preventive measures against water-borne diseases.

Sushila Kashyap, Senior Staff Nurse Officer at CHC Gohparu, said that women and children, who are often responsible for fetching water in rural households, benefit significantly from the availability of piped water supply. It has substantially reduced the burden on women and girls, allowing them to invest time in education and other productive activities. Moreover, overall health and well-being of children improves as they consume safe drinking water, leading to better growth and development outcomes. She added that no doubt Jal Jeevan Mission is instrumental in addressing the water crisis in rural India and improving the health and well-being of millions by ensuring access to clean and safe drinking water.

Jal Jeevan Mission Encouraged Convergence for Source Sustainability and institutional Sustainability

One of the critical objectives o JJM is to ensure the sustainability of water sources and institutional arrangements for effective operation, maintenance and management of rural water supply systems. The convergence of different central govt government schemes, include the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), Swachh Bharat Mission (SBM), and the National Rural Drinking Water Programme (NRDWP) under Jal Jeevan Mission allows for integrated planning and resources optimisation. For instance, MGNREGS has significantly contributed for water conservation activities like watershed management, and rejuvenation of traditional water bodies, and afforestation, replenishing water sources and improving their sustainability. JJM facilitates collaboration between different government departments and agencies involved in water management, including the Ministry of Jal Shakti, Ministry of Rural Development, and Ministry of Environment, Forest and Climate Change. Through interdepartmental coordination, synergies created to address waterrelated challenges comprehensively, such as groundwater depletion, pollution, and infrastructure development.





Leveraging technology for water resource management is a cornerstone of JJM. Geographic Information System (GIS) mapping has used to identify potential water sources, assess groundwater quality and quantity, and plan infrastructure development. At the same time, remote sensing techniques aid in monitoring changes in water levels and land use patterns, facilitating informed decision-making for sustainable water management.

Local community involvement under the JJM considered vital for ensuring the sustainability of water sources and infrastructure. Through participatory approaches like the preparation of Village Action Plan (VAP) for the rural water supply schemes and formation of Village Water and Sanitation Committees (VWSCs) and Pani Samitis, communities have engaged in the planning, implementation, and operation, maintenance and management of water supply systems. It fosters a sense of ownership, leading to better operation and maintenance of rural water supply infrastructure created under the JJM and sustainable use of water resources.

Despite the convergence of multiple schemes, adequate funding remains a challenge for sustaining water supply infrastructure and management mechanisms. While government allocations have made, they may not always be sufficient to meet the diverse needs across different regions. Therefore, exploring innovative financing mechanisms, promoting local contributions while collecting new water connection charges, security deposits for the new connection, water tariff, fines and penalties from the domestic and non-domestic users, and leveraging public-private partnerships could alleviate funding constraints and ensure long-term sustainability.

Conclusion

The collaborative efforts of the Government of India, states, and the civil society organisations under Jal Jeevan Mission serves as a transformative intervention in drudgery of women in rural India. By ensuring access to safe and reliable water supply, the mission has improved health and hygiene and empowered women by freeing them from the time-consuming and physically demanding task of water collection. As India progresses towards achieving its universal goal of access to potable drinking water, women empowerment remains central to the success of Jal Jeevan Mission, fostering sustainable development and gender equality in rural communities.

The convergence of government schemes under JJM has led to significant progress in providing piped water supply to rural households. By leveraging resources from various programmes, infrastructure development has accelerated, resulting in increased coverage and access to safe drinking water. Efforts towards water conservation, recharge, and rejuvenation of traditional water bodies have contributed promoting source sustainability. By integrating watershed management practices with water supply projects, the dependence on groundwater has reduced, leading to more resilient water sources. The formation of VWSCs and Pani Samitis has strengthened institutional mechanisms for community-based rural water supply operation, maintenance and management. These institutions play a vital role in the operation, maintenance, and regulation of rural water supply systems, ensuring their sustainability beyond the project lifecycle. He added that various government schemes convergence under the Jal Jeevan Mission presents a promising approach to achieve source and institutional sustainability in providing safe drinking water to rural communities. By integrating planning, leveraging technology, promoting community participation, and addressing challenges effectively, significant progress has made towards achieving the vision of sustainable water supply for all. However, sustained efforts are needed to overcome remaining challenges and ensure the long-term viability of water sources and infrastructure.

Rajesh Kumar Jain, CEO, Zilla Panchyat, Shahdol



Tapping Potential Capacity Building in Jal Jeevan Mission

- NJJM

al Jeevan Mission (JJM) is an ambitious initiative by the Government of India, aimed at ensuring safe and adequate drinking water supply through individual household tap connections to every rural household. To effectively meet its objectives, JJM is not only focusing on infrastructure development but is also significantly investing in capacity-building measures. These measures are foundational in ensuring the programme's success both in the present and for the future.

A key aspect of JJM's approach to capacity building involves leveraging the expertise and experience of academic institutions in areas related to water supply, sanitation, and hygiene. Some of the capacity building efforts described below are crucial for the successful implementation and sustainability of the mission.

Capacity Building through Key Resource Centre

The National Jal Jeevan Mission (NJJM) recognises the importance of effective planning, strategy, and sustainable water supply systems, emphasizing the need for systematic human resource development and capacity building at all levels. To this end, NJJM has empanelled 99 institutions, including prestigious ones like the Indian Institute of Technology, Bombay, and the Centre for Science and Environment, Delhi, as Key Resource Centres (KRCs). These KRCs are tasked with training stakeholders across three levels - Senior Management, Middle Management, and Community Level (delegated to States / UTs) in implementing the JJM in various States and Union Territories.

The role of KRCs extends to driving 'change management' in the sector, aiming to provide and maintain longterm, reliable water supply systems. They are responsible for designing and delivering training programmes tailored to specific target groups, employing modern learning tools and a blend of informative, participative, and experiential methods. The focus is on practical application of skills learned.

For the 2023-24 financial year, the KRCs' Annual Action Plan includes 23 Level-1 training, 167 Level-2 training programmes and additional 35 programmes which were awarded subsequently upon the request of the interested KRCs. These programmes cover a range of topics crucial to JJM, such as water accounting, aquifer recharge, operation and maintenance of water systems, water quality monitoring, participatory planning in rural water supply, public utility approaches, innovative technologies, institutional strengthening, rainwater harvesting, groundwater recharge, and the use of IT in water quality surveillance







Level	Target Group	No. of KRCs Empaneled*
Level – 1(L-1) Senior management level	Senior Policy Makers, Senior SWSM Officials, Administrators, Chief Engineers/ Engineers-in-Chief, etc.	10
Level – 2(L-2) Middle management level	DWSM officials, Superintending Engineers, Executive Engineers, Junior Engineers, Water Utility Managers and Water Testing laboratory personnel from Public Health and Engineering Departments (PHEDs)/Rural Water Supply (RWS) Departments/Public Works Departments (PWDs), etc.	27
Level – 3(L-3) Community level	Elected Panchayati Raj Institution (PRI) Members, Gram Panchayat (GP) Officials, VWSC Members, Members of Implementation Support Agencies (ISAs),etc.	84

*03 KRCs have been empaneled for all levels, 07 KRCs for L-1 & L-2; 09 KRCs for L-2 & L-3 Community level





Dr Syama Prasad Mookerjee National Institute of Water and Sanitation (SPM-NIWAS) – NJJM

Dr. Syama Prasad Mookerjee National Institute of Water & Sanitation (SPM-NIWAS), formerly known as the National Centre for Drinking Water Sanitation & Quality (NCDWSQ), is an autonomous institution under the Department of Drinking Water and Sanitation (DDWS) of the Ministry of Jal Shakti, Government of India. Located in Joka, Kolkata, it was inaugurated by the Prime Minister on 30th December 2022. Spanning 8.72 acres and established with an approximate cost of Rs 100 Crore, SPM-NIWAS serves as a premier institute in Water, Sanitation, and Hygiene (WASH) with both rural and urban focus.

The institute's mission encompasses a broad range of activities, including training and capacity building, education, innovation, research and development, consultancy, outreach, and developing a technology and solutions bank. It aims to drive n ation al and internation al programmes in water and sanitation, providing solutions that are viable and sustainable. The Institute also focuses on developing higher education in water and sanitation management, ranging from Masters to Post-Doctoral levels, and supports states in implementing, monitoring, and evaluating water and sanitation programmes.

SPM-NIWAS has conducted various training sessions and workshops, such as offline orientation training for National WASH Experts on the implementation of the Jal Jeevan Mission (JJM), a National Conference on Drinking Water Quality, and a workshop on IoT sensor-based measurement and monitoring of rural water supply systems. These events are integral to the institute's goal of enhancing expertise and supporting effective water and sanitation management.





Professor Chairs and Centre of Excellence

Through the establishment of Jal Jeevan Mission-Professor Chairs at eminent institutions, JJM is tapping into a rich vein of academic knowledge and research capabilities to enhance the programme's efficacy. Given the evolving objectives and requirements of the Mission, Jal Jeevan Mission - Professor Chairs have been established, with the guidelines to provide domain specific support to National Jal Jeevan Mission and State Water and Sanitation/ Rural Water Supply/ PHE Departments so as to achieve the objectives of Jal Jeevan Mission as well as the Swachh Bharat Mission. The new initiative aligns with the vision, mission and objectives of Jal Jeevan Mission and Swachh Bharat Mission.

To have wide consultations for an informed view on effective engagement of the national programmes with academic institutions through the mechanism of the Professor Chairs, following five Professor Chairs have been set up as detailed in table below:

Table: Five focus area and Institutes for hosting JJM – Professor Chair

S.No.	Focus area	Institute	JJM Professor Chair
1.	Utility development & water economics	Indian Institute of Management (IIM), Bangalore	Prof. Gopal Naik
2.	Sustainability of drinking water sources	Indian Institute of Technology (IIT), Jodhpur	Prof. Pradip Kumar Tewari
3.	Water treatment technology	Indian Institute of Technology (IIT), Guwahati	Prof. Mihir Kr. Purkait
4.	Decentralized governance for water & sanitation services	Tata Institute of Social Sciences (TISS), Mumbai	Prof. Amita Bhide
5.	IT and data science for service delivery	Indian Institute of Technology (IIT), Kanpur	Prof. Amit Mitra

DDWS has sanctioned ₹30.59 Crore for 5-year term of 5 JJM-Professor Chairs and released ₹8.60 Crore in two years of operationalisation of office of JJM-Professor Chairs. The JJM-Professor Chairs are to undertake functions like training & capacity building, outreach & consultancy, academic programmes, research & innovation in their assigned focus area. A meeting was held under the chairpersonship of Hon'ble MoJS on 6th March 2023 to review the activities under JJM-PC. In the meeting, it was suggested that Professor Chairs may undertake the studies to assess impact of the progress made under JJM.

A study undertaken by Professor Chair IIM-Bangalore, with technical support from the International Labour Organisation (ILO), has estimated an immense employment generation potential of JJM to the tune of 2.82 crore person-year employment. This includes 59.93 lakh person-year of direct employment during the construction phase of JJM and an additional 2.22 crore person-year of indirect employment in the country through manpower engaged in production of the materials such as pipes, valves, pumps etc. Almost 40% of the direct employment created i.e., 23.8 lakh person-year, is estimated to be on account of engagement of engineers, managers, plumbers, electricians, motor mechanics and chemists etc. Additionally, 11.84 lakh person-years of direct employment has been estimated during the Operations & Maintenance (O&M) phase every vear.

WASH Digital Academy

WASH Digital Academy, an online training platform, was launched by

the Union Minister of Jal Shakti, Shri Gajendra Singh Shekhawat. This initiative, supported by ECHO India, a rural WASH partner, is a significant step by the Department in enhancing the skills and knowledge of various stakeholders involved in water supply programmes. These include administrators, engineers, local government functionaries, technicians, sanitation workers, and ground-level workers. The Academy focuses on equipping these individuals with the essential tools and understanding necessary to effectively contribute towards the goals of the Mission.

One of the notable features of the Academy is its commitment to building a comprehensive knowledge base. This is achieved by recording all training sessions, thereby creating a valuable resource for current and future learners. WASH Digital Academy platform has successfully



integrated Key Resource Centres (KRCs) and Implementing Support Agencies (ISAs) in its training processes. Additionally, there is active participation from central and state governments, which contribute by sharing best practices in their sessions.

The Academy has also garnered support from a diverse range of

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organisations, including various United Nations and bilateral agencies, RWPF partners, trusts, foundations, academic institutions, and civil society organisations. These collaborators are instrumental in providing rich and diverse content for the programme. They actively publish their training schedules and engage with field officers and Gram Panchayat functionaries, ensuring

that the right knowledge is delivered to the right people at the right time. This holistic approach adopted by JJM Digital Academy harnesses digital technology and innovative methods to facilitate effective training and capacity building across different levels of stakeholders in the water supply sector.







Capacity Building Leads to Har Ghar Jal for a Tribal Village in Andhra Pradesh

By Rachna Gahilote Bisht, NPMU with inputs from B. Veeraswamy, State Coordinator, SPMU

fforts made the community of Gudem Golugula Valasa (G G Valasa) a tribal village in Srikakulam district of Andhra Pradesh has resulted in making it a Har Ghar Jal certified village. G G Valasa dominated by 79% tribal population is located 26 km from the district headquarter. Of the 506 people residing in the village, 462 belong to the scheduled tribe community.

For decades, the people of G G Valasa were dependant on hand pumps and wells for water. Hours were spent daily in just fetching water to meet their household needs. The situation would become grave in summers as many water sources would dry up due to extreme heat and secondly the daily consumption of water would also increase. It meant loss of precious day-time towards collection of water. As the main source of livelihood for the people in the village was agriculture, the women could not never find time in the morning to work as labour in the field. Their morning routine was limited to multiple rounds around the water body.

K Paradesamma, the Anganwadi teacher in G G Valasa tells the story of the women in her village, "the young mothers found it very difficult to drop their children to the Anganwadi centre on time, as mornings were occupied with fetching of water, rearing cattle and cooking. They would either drop them very late at the centre or skip sending them many







days in a row. This meant loss in learning opportunities for the toddlers. Many a times the reason for not sending them to the Anganwadi was dysentery and diarrhoea, reason being direct consumption of unclean water. There was very little hope for us and we were forced to manage life in what was available to us."





But the launch of Jal Jeevan Mission in August 2019, sowed seeds of hope for a better future. The villagers joined hands, collective efforts were made by the community to get water within the household. 42-years old Urlapu Lakshmi, the Sarpanch of G G Valsa led the movement from the front.

Soon after learning about 'Jal Jeevan Mission', she organised a Gram Sabha and explained to public in detail about the central government '*Har Ghar Jal*' programme which aimed to provide every rural household, learning centre and public institution with tap water connection. Under the leadership of the Sarpanch a 14member

Village Water and Sanitation Committee was constituted. Urlapu Lakshmi ensured that there was more than 50 percent representation by women in the VWSC. Of the 14 members, 8 nominated members were women. Women were now planning and executing a programme which impacted their daily life.

During various Panchayat and VWSC meetings, the community was sensitized on the importance of safe drinking water. A Village Action Plan (VAP) was prepared and submitted to the District Administration. Soon the proposal was approved, and it was decided to provide tap water connection in all the 127 households of G G Valasa.

A five-member women surveillance committee was formed, and training was imparted to them for testing the quality of water using Field Test Kits (FTKs). The women led committee frequently tests water sources and delivery points thereby ensuring that the water supplied is safe for direct consumption. Today all the 127 rural households, school and anganwadi centre in the tribal village are getting water through tap for drinking.



As per the advisory issued by national Jal Jeevan Mission, post implementation of the rural water supply programme, a Gram Sabha must be held to declare the village 'Har Ghar Jal'. Following the instructions, a Gram Sabha meeting was held wherein the community confirmed



Tap water reaching Anganwadi Centre

supply of clean drinking water within their premises in adequate quantity, of prescribed quality with required pressure on regular basis. A resolution was passed in the presence of all and the village was declared 'Har Ghar Jal certified. A certificate of the same is uploaded on IMIS portal of Jal Jeevan Mission for record.

Since the time the village has declared 100 percent tap water coverage the life in the village has seen a marked change, especially for women. According to K. Paradesamma, the Anganwadi teacher, "the women are no longer limited to house work. There is marked difference in their daily routine. They now begin the day with dropping the toddlers at the anganwadi centre in the morning and leave for the field to work as daily labour. Most of the them work in the kaju plantation and earn between Rs 3,000/- to 5,000/- every month. The earnings has not just provided them better spending capacity but has also earned them respect within the household resulting in their empowerment. With supply of safe drinking water there are far less cases of ailment among children. The drop out rate in schools has seen improvement as mothers are able to send the children to school on time."









The villagers are involved in monitoring the water supply infrastructures created under the programme. With capacity building initiative undertaken by the administration from time-to-time the villagers provide 'shramdan' and check any breakdown or leakage in pipelines. They collectively clean the debris lying around the catchment area of the water source. An amount of Rs 5,000/- has been collected by the community and deposited in the account of VWSC towards maintenance and minor repair work.

To ensure sustainability and O&M an amount of Rs 50/- is collected monthly from every household as User Charge. The amount is kept aside towards maintenance of water supply infrastructure and payment to the salary of the Pump Operator. Tap water is supplied twice daily water in every household.

The villagers are delighted to receive water within their premises as it has ended their century old drudgery. Women have played a pivotal role in its implementation which was possible only through the trainings imparted by the administration with support from the implementing support agencies engaged by the state government. The prestige of the women has improved as they have become the earning member in the family.



When You Take Care of Nature, Nature Takes Care of You!

Utkarsha Rathi, NJJM

n a world where environmental consciousness is becoming increasingly vital, Jal Jeevan Mission (JJM) emerges as a pacemaker, a beacon of hope and action. This ambitious initiative envisions not just providing water to every rural household but also emphasises the critical role of capacity building in achieving sustainable and effective outcomes.

JJM, with its forward-looking vision, recognises the need for skilled personnel to implement its goals effectively. Capacity building becomes the basis of this mission, ensuring that the workforce is equipped with the knowledge and expertise required for successful execution.

One significant aspect of capacity building under JJM is the training in



Status of water testing as per WQMIS. Over One Crore samples have been tested using FTKs (Red highlight). Source: JJM Dashboard as on 21st February 2024

Field Testing Kits (FTK). More than one crore FTK tests have been conducted as a result of this initiative, showcasing the tangible impact of skill development. These tests play a pivotal role in maintaining water quality, timely grievance redressal, and overall improvement in public health.

But why is testing water quality so crucial? Water is a fundamental resource for life, and its contamination can have severe consequences on human health. Regular water








testing ensures that the water we consume is free from harmful pollutants and pathogens, preventing waterborne diseases and promoting a healthier community.

Water quality monitoring & surveillance activities are given top priority under Jal Jeevan Mission. Five women in each village are trained to test water samples of any kind of contamination by using Field test Kits (FTKs). FTKs are procured and handed over to Panchayats. FTKs help to test water on nine parameters viz; pH, alkalinity, chloride, nitrate, total hardness, fluoride, iron, residual free chlorine and H₂S. More than 23.73 lakh women have been trained so far to test water quality through FTKs.

Water testing plays a pivotal role in ensuring water sustainability by serving as a proactive measure to safeguard this precious resource. Through regular assessments of water quality, communities can identify potential contaminants, prevent waterborne diseases, and implement corrective measures, thereby contributing to the longterm health and viability of water sources.

By integrating water testing into sustainable practices, we not only address immediate concerns but also establish a foundation for responsible water management, fostering resilience and equilibrium with nature.

The emphasis on capacity building extends beyond water testing to include water harvesting techniques. Campaigns like 'Catch the Rain' aim to create awareness and educate communities on sustainable water management practices. By building capacities in water harvesting, communities learn to be in harmony with nature, maintaining water sources and fostering conscious, healthy living.

In conclusion, Jal Jeevan Mission's holistic approach emphasises the symbiotic relationship between humanity and nature. By investing in capacity building, testing water quality, and promoting sustainable practices, the mission not only fulfills its objectives but also paves the way for a healthier, more harmonious coexistence with the environment. After all, when you take care of nature, nature takes care of you!



Jal Jeevan Mission A Collaborative Effort Towards Achieving SDGs

- Amit Pawar, National Lead - RWPF

Introduction

In a concerted effort to address the global water crisis and advance sustainable development goals, various stakeholders have rallied behind India's ambitious Jal Jeevan Mission. Recognising the imperative of partnerships in achieving lasting impact, a diverse array of entities including development partners, sector partners, UN agencies, governments, and corporates have stepped forward as Rural WASH Partners Forum to bolster capacitybuilding initiatives. Their collaborative endeavors underscore a shared commitment to ensuring access to safe and sustainable water resources for all, while simultaneously advancing broader development objectives.

Development Partners

Development partners, comprising international organisations, donor agencies, and non-governmental organisations, played a pivotal role in providing financial support, technical expertise, and knowledge exchange. Their contributions facilitate the implementation of innovative solutions and best practices in water management. Partnerships with organisations such as the BMGF, WHO, UNICEF and various bilateral aid agencies have enabled the scaling up of infrastructure projects and the adoption of cutting-edge technologies, thereby enhancing the efficiency and efficacy of water supply systems.

Sector Partners

Collaboration with sector partners like AIILSG, Centre for Environment and Education, WASH Institute, INREM Foundation, Aga Khan Foundation including academic institutions, research organizations like BIU, and civil society groups, enriches Jal Jeevan Mission with a wealth of insights and specialised knowledge. These partnerships facilitate research and development initiatives, data analysis, and community engagement efforts. By leveraging the expertise of diverse stakeholders, the mission can tailor interventions to local contexts, promote behavioral change, and foster grassroots participation in water conservation and management activities.





UN Agencies

United Nations agencies, including UNICEF and UNOPS, serve as invaluable allies in advancing Jal Jeevan Mission's objectives on a global scale. Through their technical assistance, advocacy efforts, and coordination mechanisms, UN agencies bolster the capacity of national and local authorities to deliver sustainable water services. Moreover, their involvement ensures alignment with international frameworks such as the Sustainable Development Goals (SDGs), thereby reinforcing India's commitment to achieving universal access to safe drinking water and sanitation by 2030.

Government – State and Centre

At the governmental level, partnerships between central, state, and local authorities are indispensable for the successful implementation and governance of water-related initiatives. Through policy formulation, regulatory oversight, and institutional strengthening, governments provide the essential framework for sustained progress. By fostering multi-level cooperation and decentralised decision-making processes, these partnerships enhance accountability, transparency, and responsiveness to the needs of marginalised communities.

Corporates

Private sector engagement, exemplified by corporate entities like Tata Trusts, Piramal Foundation, India Sanitation Coalition spanning various industries, brings additional resources, expertise, and innovation to the table. Corporate partnerships contribute to technology transfer, capacity development, and publicprivate collaborations in water infrastructure development and management. By investing in sustainable business practices, corporate stakeholders contribute to environmental stewardship and social responsibility, aligning their interests with broader development objectives and the principles of corporate sustainability.

Sustainability and SDG Achievement

The collective efforts of development partners, sector partners, UN agencies, governments, and corporates converge towards the overarching goals of sustainability and SDG achievement. By fostering synergies, sharing responsibilities, and leveraging each other's strengths, these partnerships amplify the impact of Jal Jeevan Mission and pave the way for transformative change. Through enhanced access to safe water, improved sanitation facilities, and strengthened water governance systems, the mission contributes not only to SDG 6 (Clean Water and Sanitation) but also to interconnected goals such as poverty alleviation, health promotion, gender equality, and environmental sustainability.

Conclusion

As Jal Jeevan Mission enters a new phase of implementation covering more than 74% of rural households with tap water connections, the role of partnerships assumes heightened significance in shaping its trajectory and ensuring its long-term success. By harnessing the collective wisdom and resources of diverse stakeholders, India reaffirms its commitment to realising the human right to water and sanitation while advancing the broader agenda of sustainable development. In embracing collaboration as a cornerstone of progress, the journey towards water security and inclusive growth gains momentum, offering hope for a future where every individual has access to the life-sustaining gift of clean water.





Reflecting on the National Symposium on Safe Water and Disinfection/ Chlorination Initiatives

he 'National Symposium on Safe Water and Disinfection/ Chlorination Initiatives' was held on 2^{nd} February 2024, as a collaborative effort by the SPM-NIWAS under the Department of Drinking Water and Sanitation, Evidence Action, EAII Advisors, and Development Innovation Lab. This significant gathering brought together over 90 Senior Officials from States/ UTs, around 30 participants from the private sector, including device manufacturers, O&M contractors, representatives from Development Innovation Lab (DIL), Tata Trusts. INREM Foundation and esteemed academic institutions like IIT Kanpur, IIT Guwahati, and CSIR-NEERI.

The primary objective of the symposium was to disseminate the outcome & finding of Safe Water programme carried out by the Evidence Action in the states of Andhra Pradesh, Madhya Pradesh & Rajasthan.

The event successfully facilitated knowledge sharing, disseminated findings from the Evidence Action Safe Water In-Line Chlorination (ILC) Pilot Project, established a National Working Group, and set the groundwork for a sustained Safe Water Ecosystem. The Jal Jeevan Mission aimed at providing potable water to rural households, has achieved a commendable milestone with over 73.9% of rural households having access to tap water. This reflected the

- NJJM

mission's commitment to safe water provision through various measures. The symposium was held to seek inputs from States/ UTs on their experience in implementing Safe Water initiatives and strategies and the way forward to scale up the most effective and easier-to-operate solutions and models.

A key aspect of the symposium was to comprehend and understand the pilot studies conducted, reflecting on the results and efficacies of various methods incorporated in the study for effective implementation.

The major highlights during the Symposium included, opening remarks by Shri Pradeep Singh, Director – NJJM setting the tone, and emphasising the mission's daily commitment to delivering safe water through disinfection or chlorination initiatives. Shri Chandra Bhushan Kumar, AS&MD-NJJM, provided an overview of Jal Jeevan Mission, highlighting the commitment to connect every household with tap water.

To further grace the occasion, Nobel Laureate, Prof Michael Kremer, in a special video message, commended Jal Jeevan Mission's strides in improving access to safe water. He presented his research findings, emphasising that, through provision of safe water to all rural households in India, will save 1.36 lakh lives of children under five years of age every year in rural India.

He discussed his studies done in Odisha, in collaboration with the University of California, Berkeley, and ICMR Regional Medical Research Institute, Bhubaneswar. The study focused on the impact of water treatment on child mortality, emphasising the health benefits of chlorination. He shared strong evidence supporting the reduction of childhood diarrhoea through water





treatment, stating that one in four child deaths in low and middleincome countries could be prevented by treating water. These studies exemplify the importance of disinfection with chlorination, which was an important part of the discussion during the symposium.

Further, under the guidance of National Jal Jeevan Mission, Evidence Action conducted a comprehensive pilot study on ILC technologies in Andhra Pradesh, Madhya Pradesh, and Rajasthan. This study assessed installation feasibility, operational feasibility, and the efficacy of different chlorination technologies. The EAII team shared key findings from the pilot, that the pilot study on in-line chlorination technologies demonstrated that among the three models tried, tablet-based passive inline chlorination devices proved to be the most cost-effective and scalable. They required no electricity, had no moving parts, utilise long-lasting consumables (chlorine tablets), were easier to maintain, and had easily controlled dosing with open-source designs.

Six state namely; Assam, Maharashtra, Himachal Pradesh, Punjab, Telangana, and West Bengal presented their innovative initiatives. They show-cased innovative interventions for Safe Water and Disinfection/ Chlorination. Each state focused on specific themes, as under:

- Assam: Usage of NaDCC Chlorination during Emergency
- Himachal Pradesh: Dashboard for Monitoring Waterborne Diseases and Remedial Action
- Maharashtra: Chlorination Initiatives for Single Village Scheme
- Punjab: IoT System for Monitoring
- Telangana: Supply Chain of Poly Aluminum Chloride (PAC)
- West Bengal: ChlorStock Mobile Application for stock management, requirement, and fixing of disinfect dosage

Shri Pradeep Singh, Director, Department of Drinking Water and Sanitation discussed the recommendations of the committee constituted for developing Standard Operating Procedures for drinking water quality testing at source & delivery points through labs & FTKs and communication of results to community including remedial action. Later in the afternoon, there was a panel discussion on Safe Water and Disinfection/ Chlorination, moderated by Shri Jeremy Lowe, who provided insights into real-world applications, community engagement, and operations and maintenance for safe water infrastructure.

The symposium concluded with remarks by Smt. Vini Mahajan expressed gratitude for valuable inputs, highlighting promising results, and stressed the importance of technically appropriate, economically viable, and low-cost treatment solutions. She emphasized the importance of annual chemical and bi-annual biological testing to ensure environmental safety. Regular evaluation of these results is vital for prompt issue identification and timely remedial actions.

The National Symposium on Safe Water and Disinfection/ Chlorination Initiatives, stands as a pivotal moment where collaborative efforts laid the foundation for addressing challenges and scaling up effective solutions, with an unwavering commitment in providing safe water to every household through innovation, community engagement, and sustainable practices.





Journalists/ Editors from 18 countries of Latin America and the Caribbean (LAC) interacted with DDWS Officials to Showcase Jal Jeevan Mission

delegation comprising 35 journalists/ editors from 18 countries of Latin America and the Caribbean (LAC) visited India from 17th to 24th February 2024 as part of the familiarisation programme organised by the Ministry of External Affairs. The familiarisation programmme is aimed at exposing the visiting delegates to different aspects of India. The programme for the LAC journalists included engagements with Ministers/ Senior Government Officials, followed by field visits highlighting India's success in the area of trade, tourism, technology, industry, electoral democracy, women empowerment among others. As part of their familiarisation tour, the media delegation from LAC countries were briefed about Jal Jeevan Mission as the success of the Mission has drawn appreciation from far and wide. Based on the interaction and field visit, the visiting media team would be publishing articles in their home countries to showcase Jal Jeevan Mission.

On 20th February 2024, LAC delegates visited DDWS, Ministry of Jal Shakti (MoJS) to exchange ideas, experiences, learnings and to learn about how world's largest water supply initiative – Jal Jeevan Mission is being implemented in India inspite of vast geographical diversities and the outbreak of Covid pandemic right after its launch by the visionary Prime Minister.

At the onset, Dpt. Secretary, Ministry of External Affairs, set the context of

- NJJM

the visit and introduced the team of media representatives from LAC countries and the Secretary – DDWS, Additional Secretary & MD–JJM.

Smt. Vini Mahajan, Secretary -DDWS, MoJS, in her opening remark, said that JJM is the most ambitious programme to provide potable water of definite standards to the entire rural population of India. The nature of the geographical strength has spread across more than 6,000 villages of 34 States/ UTs. The programme faced many issues and challenges in its implementation, like pandemic outbreak right after the launch of the scheme which affected the pace of work, vast geographic variations, huge population, water issues like geogenic contamination, water shrinkage in hot season, difference in the quantity of water availability from place to place, and so on..

Inspite of all the challenges, there was a need to provide quality water to every family. The mission was announced by the Prime Minister on 15th August 2019 and it took around six months to actually start the work. Many rounds of stakeholder consultations with States/ UTs and other partners happened as in the Indian Constitution, water and sanitation is a subject of states. Operational Guidelines for the mission was developed and issued in December 2019 and it was then that the work started.

Shri Chandra Bhusan Kumar, AS&MD - JJM made a brief presentation on the progress made so far, challenges, water quality aspects, source sustainability efforts, and other verticals of the mission. He said that ever since independence, attempts have been made in the country to provide drinking water to the citizens focusing the community targeting habitations. But JJM is a paradigm shift as for the first-time partnership has been made with the local community and local governance to safeguard the water supply infrastructures developed in villages. The unit of coverage shifted from habitation to household. The delivery standard enhanced to 55 lpcd, standard water of Bureau of Indian Standard (BIS) 10500 focusing on functionality, regularity, adequate pressure of water supply. The mission ensures community participation in planning, implementation, operation and maintenance of water supply schemes and for this skill development of community is one of the core activities. Sustainability of schemes and drinking water sources is also focused under the mission.

Inspite of many challenges, on an average, almost 1 new household tap connection is being provided every day in each second since 1st January 2023. Today more than 14 crore tap connections, catering to 75% rural households have been made available inside their premises, which was merely 16% at the time of the launch of the mission.



The mission is the highest ever water supply programme. What sets the JJM apart is its speed and scale of implementation. Every year, on an average 25 million tap connections are provided catering to a population of around 120 million, almost equivalent to that of Mexico. In just about 4 years, more than 111.03 million rural households with more than 555.2 million people have been benefitted under the JJM. This is more than twice that of population of Brazil. Even Uttar Pradesh (the largest State) has provided three times as many tap connections as the population of world's 6th largest country Australia. In Uttar Pradesh in just about 4 years, more than 20.19 million rural households with more than 100.96 million people have been provided tap water.

Not only households but the mission is also ensuring potable tap water in schools and day care centres. The mission is taking remedial actions and WQMIS to ensure quality of water supplied. In India a network of 2,118 water quality testing laboratories has been established at state, district and block level. The laboratories are opened for general public to test their water quality by paying a nominal charge. Around 2.37 million women have been trained for water testing through Field Test Kits (FTKs). In one year (2023-24), 6.4 million water samples tested in laboratories and 10.55 million water sample tested by trained women using FTKs. Today clean drinking water is being provided in all Arsenic and Fluoride affected habitations.

Shri Chandra Bhushan further added that transparency is a cornerstone of Jal Jeevan Mission. Information regarding water quality, supply, and expenditure is readily available to the public through various technological platforms. This ensures accountability and fosters trust between the government and the citizens. The impacts of Jal Jeevan Mission extend far beyond providing access to clean drinking water. It has improved the quality of life for millions, particularly women and girls who no longer have to trek long distances to fetch water. The mission has empowered women by involving them in decision-making processes and ensuring their active participation in water management.

As Jal Jeevan Mission continues its journey, sustainability remains a key focus. Efforts are underway to ensure source sustainability through rainwater harvesting and recharge initiatives, as well as financial and institutional sustainability through user charges and community ownership.

Jal Jeevan Mission represents a monumental effort to transform the lives of millions of rural Indians by providing them with access to clean drinking water. It is a testament to the power of collective action, innovation, and unwavering determination. As the mission moves forward, it holds the promise of a brighter, healthier future for rural India.

The presentation on Jal Jeevan Mission (JJM) and its progress and impacts was followed by a questionand-answer session, where the Secretary – Department of Drinking Water and Sanitation (DDWS) addressed various queries from media delegates. The discussion highlighted JJM's commitment to transparency and inclusivity, with a focus on several key areas like quality, quantity of drinking water, source sustainability, use of green energy, gender perspective in programme management and transparency in programme management through participation of Rural Wash Partner's Forum.

- 1. Water Quality and Safety: JJM places a strong emphasis on ensuring the quality of drinking water, adhering to the BIS 10500 standards. Regular testing is conducted not only at distribution points but also at the source. This is facilitated by a network of laboratories and trained personnel, including women, who play a significant role in water quality monitoring. Several states in India have initiated 'drink from the tap' campaigns, reflecting aggressive measures towards providing safe drinking water.
- 2. Climate Change and Water Resource Management:

Recognising the impact of climate change, particularly in the context of altered rainfall patterns and groundwater recharge, JJM is focused on sustainable water source management. Groundwater, being the most cost-effective and familiar source, forms the primary supply, complemented by river and surface water. In regions where groundwater is scarce, alternative sources like river water are utilised. Upon completion of JJM, it is projected that approximately two-thirds of household water supply will be derived from groundwater, with the remainder from surface sources. In the Himalayan regions, spring water will also be utilised.

3. Groundwater Recharge and Greywater Management: Efforts are underway to build adequate recharge structures for groundwater extraction areas. Additionally, the Rural Sanitation Mission is working towards effective greywater management, ensuring its safe utilisation for groundwater recharge.



- 4. Collaboration and Experience Sharing: JJM collaborates with various organisations, community-based organisations (CBOs), academic institutions, and development organisations in the WASH (Water, Sanitation, and Hygiene) sector. Global partners like UNICEF and WHO share experiences, aiding in knowledge exchange. The World Bank, for example, shared JJM's experiences in a North African event, highlighting the benefits of international learning exchanges.
- 5. Gender Perspective and Women's Leadership in Water Management: The mission acknowledges the pivotal role of women in water management, given their traditional responsibilities in household chores. JJM mandates at least 50% female membership in each village water and sanitation committee. These committees are integral to planning, overseeing, and maintaining village water supply systems. Women are also engaged in self-help groups (SHGs) that manage the operational and maintenance aspects of water supply, including billing and chlorination processes. States are encouraged to train women in water quality testing, positioning them as key stakeholders and leaders in water governance.
- 6. Use of Green Energy: JJM strongly advocates for the use of solar energy, especially for powering water pumping and treatment systems. Many states have successfully implemented solar-based water supply systems, aligning with the mission's commitment to sustainable and renewable energy sources.

Jal Jeevan Mission, through its multifaceted approach, aims to ensure the provision of safe and sustainable water resources, while incorporating gender inclusivity and green energy solutions. The mission's success hinges on collaboration, community engagement, and adapting to environmental challenges, with a significant emphasis on quality control and sustainable management of water resources.

Journalists from LAC Countries also visited Tillorkhurd Village of Indore District, Madhya Pradesh on 24th February, 2024 to see the actual ground work of Jal Jeevan Mission and to interact with local village community members. Upon arrival of foreign delegation, Sarpanch Smt. Priya Dharmendra Thakur and other dignitaries of the village welcomed them with floral tributes and local folk song. The foreign delegation was overwhelmed by the reception.

Public Health Engineering Department's Executive Engineer, Sh. C. Radhakrishnan was present on the occasion. He said- water Supply Scheme of this village has been implemented at a cost of Rs 323.66 lakh and now clean drinking water is being supplied 1461 households benefitting 7,369 people of this area.





Snippets

Hon'ble Union Minister

he Hon'ble Union Minister, Ministry of Jal Shakti, Shri Gajendra Singh Shekhawat met Ms Anna Bjerge, Managing Director for Operations, World Bank & the delegation on 22nd February 2024 at Shram Shakti Bhawan, New Delhi.

They discussed issues of water use efficiency and security, wastewater management along with India's Swachh Bharat Mission & Jal Jeevan Mission, River Cities Alliance as well as global challenges & co-operation with the World Bank especially with regard to Dam Safety. The delegation appreciated the efforts in this sector and lauded India's Hybrid Annuity model in particular & expressed hope that India's experience will serve as a positive influence on other nations to ensure better water management globally.

Hon'ble Union Minister, participated in **ICC Water and Waste Water Innovation Summit** in Delhi on 21st February, 2024. During his address, he said, "Modi Government had a vision in this area. Today, the policy with which India is working in the water sector has the spirit of public welfare. Its best aspect is that it also has a special arrangement to provide relief to mothers and sisters. It is commendable in context of Modi ji's vision of a developed India in 2047." The theme of this event is Eco-Friendly Water Secure India.







Review Meeting

 Secretary, DDWS chaired a review meeting of Jal Jeevan Mission to assess the progress & implementation status in State/ UTs on 8th February 2024 through VC. During the meeting, a presentation was made by AS&MD-NJJM on key deliverables of CS Conference, pending approvals & awards of work, issues & challenges in implementation, coverage in schools and AWCs, saturation plan, HGJ certification, WQ monitoring, financial progress, O&M Policy, geotagging, skilling, etc.

States were asked for use of JJM dashboard data for ground truthing by DCs/ DMs and source sustainability to ensure regular water supply in upcoming summer season.

The meeting was attended by Spl. Chief Secy., ACS, Pr. Secy., Secretaries, Mission Directors, JS, E-in-Cs, and other senior officials from all State/ UTs. From NJJM- Directors, DS, Addl. Advisor were present.

 Secretary, DDWS and Secretary, Ministry of Power chaired a joint meeting through VC 12th February 2024, for early resolution of the pending electricity connections for rural water supply schemes/ projects.

The meeting was attended by Joint Secretary, MoP; ACS/ Pr. Secy; Secy., In-charge from Assam, Jharkhand, Kerala, Ladakh, Manipur, Meghalaya, Tamil Nadu, Tripura, Uttar Pradesh and Uttarakhand along with State officials from Ministry of power. From NJJM, AS&MD-NJJM, Directors were present.







JJM Review Meetings and on the Ground Action

Secretary, Additional Secretary and Mission Director, and other Senior Officials of DDWS Boost JJM and SBM-G Initiatives

In a series of impactful engagements, Smt. Vini Mahajan, Secretary - Department of Drinking Water and Sanitation (DDWS), , and Dr Chandra Bhushan Kumar, Additional Secretary and Mission Director (AS&MD), National Jal Jeevan Mission (NJJM), have been actively overseeing the progress and implementation of Jal Jeevan Mission (JJM) across various states. These visits and meetings emphasise their collective dedication towards ensuring a safe water supply and sustaining the momentum of efforts by the State/UTs.

The officials continue their commitment to overseeing the implementation of JJM through joint review meetings with Chief Secretaries of different states and site visits. These visits spread across the month form a vibrant kaleidoscope, reflecting sheer dedication and commitment. A brief overview of their engagements during this period is outlined below:

Uttarakhand (Dehradun)

On 14th February 2024, Secretary, DDWS and AS&MD chaired a joint review meeting with the Chief Secretary of Uttarakhand, showcasing a collaborative effort to expedite the implementation of JJM and SBM-G in the state.



West Bengal

A joint review meeting was held with the Chief Secretary of West Bengal to evaluate progress and strategise the way forward, accompanied by AS&MD. The visit to Donnagar Village and other villages in North 24 Parganas District, West Bengal, on 2nd February 2024, aimed to assess the progress and implementation status of the initiatives.

Smt. Mahajan directly interacted with piped water users and children in the region, accompanied by a delegation including Dr Chandra Bhushan Kumar, AS&MD, NJJM. The Secretary has been actively involved in on-site assessments, visiting villages, and interacting with the local communities. Notably, the visit to Donnagar village in North 24 Parganas District, West Bengal, showcased her commitment to understanding ground-level challenges and progress in implementing the mission. She also enquired about the water quality, FTK testing and about the initiative's last mile connectivity, ensuring no one is left out.



AS&MD-NJJM also visited the Dakshin Raipur and Bayaria villages of South 24 Parganas District, West Bengal, to assess the success and implementation of Jal Jeevan Mission. There, he interacted with the locals and enquired about the water quality provided through the taps.





AS and MD, NJJM interacting with the beneficiaries during his visit to Dakshin Raipur and Bayaria Village in West Bengal. Date: 2nd February, 2024

Tamil Nadu

Secretary-DDWS, and the Chief Secretary of Tamil Nadu, chaired a joint review meeting along with AS&MD-NJJM senior officers of the Municipal Administration and Water Supply Department (MA&WS) and Rural Development and Panchayati Raj Department (RD&PR) departments to expedite the implementation of JJM in the state. The review meeting focused on the implementation of the best practices to ensure the quality of water.



Assam

Another joint review meeting on 21st February 2024 along with the Chief Secretary of Assam. She chaired a joint review meeting accompanied with the AS&MD-NJJM and other senior officials of the concerned departments (PR, RD, Finance, Urban Affairs, Tourism & Education) to see the status & expedite implementation of JJM in the State, highlighting the commitment of Secretary-DDWS, and Chief Secretary towards ensuring the success of Jal Jeevan Mission. During his visit to Assam, AS&MD-NJJM visited Mohbondha Grant village of Madhya Thengal Khongia Panchayat, Bijoy Bahoni village of Rajoi Badulipukhuri, Panchayat in Jorhat District,Assam to see the progress and implementation status of Jal Jeevan Mission. AS&MD-NJJM visited Namdoloni Chuk, Panchayat-Paschim Missamara, Goriajan Bagicha, Panchayat-Badulipar and Koliakhat Borachuk, Panchayat-Dakhin Kazironga of Golaghat District, Assam to see the progress and implementation status of Jal Jeevan Mission.



Meghalaya

Smt. Mahajan, Secretary – DDWS, Dr Chandra Bhushan Kumar, AS&MD, senior government officials and department heads convened at Ri Kynjai, Umiam, Ri-Bhoi, Shillong, Meghalaya, on 21st February 2024 for a review meeting on the implementation of Jal Jeevan Mission. Umiam Lake (locally known as Dam sait) is a reservoir in the hills 15 km (9.3 mi) north of Shillong in the state of Meghalaya. It was created by damming the Umiam River, and hence an important water source for the locals. The Secretary emphasised quality, sustainability, and community involvement in water supply projects. District Collectors shared strategies, and the district representatives attended the meeting virtually. The meeting was aimed to expedite this life changing mission.

During the visit, AS&MD had a one-to-one interaction with VWSC members and the locals at Diengpasoh Village, East Khasi Hills, Meghalaya. During his interaction, he enquired about the existing tap connections. This visit celebrated the recently achieved 75% FHTC coverage by the State and is likely to encourage and motivate them to achieve 100% target with utmost dedication and hard work.









locals at Diengpasoh Village, East Khasi Hills, Meghalaya. Date: 22nd February, 2024

Nagaland

During the visit to Aoyimti village in Nagaland on 23rd February 2024, Smt. Mahajan actively engaged with both villagers and VWSC members. Accompanied by key officials from the water supply department, discussions centered around crucial aspects such as water quality, usage of the FTKs, user tariff collection. The Secretary's presence not only demonstrated a commitment to assessing the implementation progress of the JJM initiatives in the region but also emphasised the importance of active engagement and oversight in advancing the goals of the mission.

Live Interaction on DD Kisan Channel

In a bid to reach a wider audience and share valuable insights, Smt. Vini Mahajan, Secretary - DDWS participated in an exclusive live programme on DD Kisan Channel. The programme covered discussions on the JJM, GOBARdhan, and Swachh Bharat Mission, providing viewers with a comprehensive understanding of the ongoing initiatives.



https://youtube.com/live/n8YvKzM4wmY?si=M80etX-hXojBm6go

Secretary-DDWS, Smt. Vini Mahajan, and AS&MD, Dr Chandra Bhushan Kumar, continue to play pivotal roles in steering Jal Jeevan Mission to greater heights. Their onsite visits and review meetings bring forth the importance of collaborative efforts in achieving the mission's objectives.



Secretary-DDWS interacting with the locals during her visit to Aoyimti village, Nagaland



Jal Jeevan Survekshan

n the month of **February-2024**, Unnao from Uttar Pradesh, Dharmapuri from Tamil Nadu, Moradabad from Uttar Pradesh, Nilgiris from Tamil Nadu & Porbandar from Gujarat have secured first rank in Aspirants, Performers, Achievers, High Achievers, and Front Runners sub-categories respectively under "Best Performing Category".

Followed by districts Deeg & Neem Ka Thana from Rajasthan, Moradabad from Uttar Pradesh, and Namsai from Arunachal Pradesh have secured first rank in Aspirants, Performers, Achievers, and High Achievers sub-categories respectively under "Fastest Moving Category".





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National WASH Experts' Visits

n the month of February -2024, National Wash Expert visits were conducted in 13 priority states to observe the groundlevel situation and provide suggestions to improve the quality of work done in the villages, total 26 teams consisting of two wash experts visited these States to evaluate the quality of work done/ on-going in 416 villages. Star rating of villages visited by them is attached herewith.

S. No.	States	No. of villages rated under				
		1 Star	2 Star	3 Star	4 Star	5 Star
1.	Andhra Pradesh	0	0	3	13	0
2.	Assam	0	0	1	31	0
3.	Chhattisgarh	0	0	6	26	0
4.	Jharkhand	0	2	15	15	0
5.	Karnataka	0	0	1	18	0
6.	Kerala	0	0	5	11	0
7.	Madhya Pradesh	0	3	20	25	0
8.	Maharashtra	0	0	0	33	0
9.	Odisha	0	0	16	0	0
10.	Rajasthan	0	1	31	16	0
11.	Tamil Nadu	0	0	1	15	0
12.	Uttar Pradesh	0	0	16	31	17
13.	West Bengal	0	0	16	16	0





Social Media Wall



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JJM in News





Jal Jeevan Samvad



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