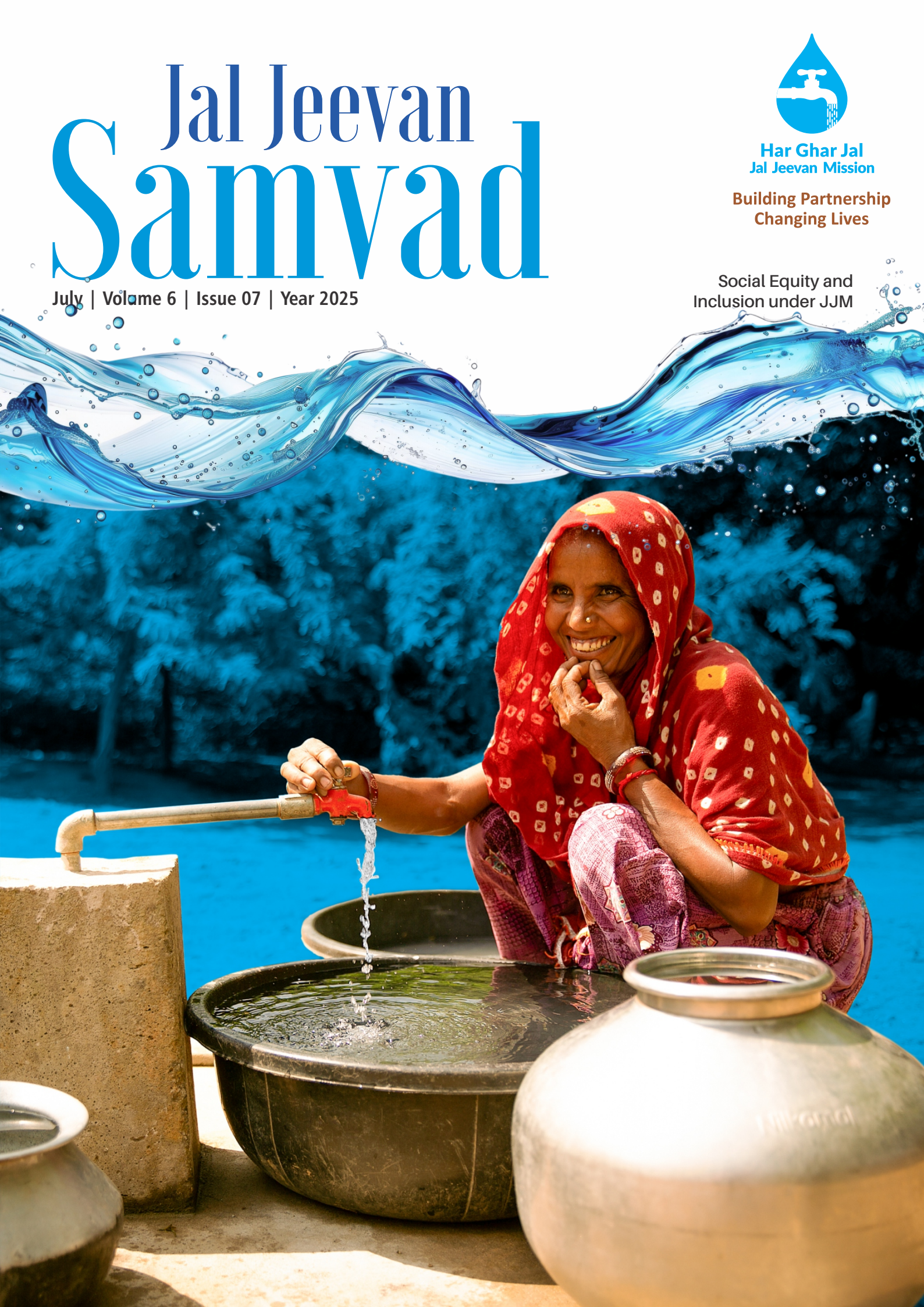
Jal Jeevan Samvad

July | Volume 6 | Issue 07 | Year 2025

Har Ghar Jal
Jal Jeevan Mission

Building Partnership
Changing Lives

Social Equity and
Inclusion under JJM



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Prime Minister on Jal Jeevan Mission

Narendra Modi
Prime Minister

'Green Roing Initiative' was started and then an entire park was created from recycled waste. Similarly, many new examples of water management have been set in Karad; in Vijayawada. The cleanliness at the River Front in Ahmedabad has also caught everyone's attention.

- PM's address in the 124th Episode of 'Mann Ki Baat' on 27.07.2025

Minister of Jal Shakti on Jal Jeevan Mission

C R Patil
Minister of Jal Shakti

एक वो भी दौर था जब गाँव की बेटियाँ सुबह की पहली किरण के साथ
सिर पर मटके रखकर निकलती थीं...
मीलों दूर चलकर पानी लाना उनकी किस्मत बन गयी थीं।

घर में पानी नहीं, स्कूल में समय नहीं, और सपनों के लिए जगह नहीं।
लेकिन अब माननीय प्रधानमंत्री सर के नेतृत्व में वो कहानी बदल गई है।
'हर घर जल' सिर्फ एक योजना नहीं, बल्कि हर उस महिला की ज़िंदगी
का नया अध्याय है जिसने बरसों से प्यास और परिश्रम दोनों झेले हैं।

अब वो मटके नहीं ढोतीं... अब वो सपने बुनती हैं।

Source: Shri C R Patil's X handle

Foreword

The strength and resilience of Jal Jeevan Mission lie in its ability to integrate inclusive governance with sustained service delivery. By anchoring the Mission in principles of decentralisation, transparency, and participation, it has moved beyond infrastructure targets to enable a more equitable model of rural transformation, one that places communities at the centre and leaves no one behind.

The theme for this month's edition, 'Social Equity and Inclusion', captures the core commitment of the Mission: ensuring that access to safe drinking water is not limited by geography, gender, caste, or economic standing. This is not simply a matter of coverage, it is a question of fairness, dignity, and agency.

Across India's villages, the most visible changes are in the lived experiences of women who no longer walk miles to fetch water; girls who are able to attend school regularly; the marginalised who now have equal access to household tap connections. These shifts are the result of a design that embeds equity in every layer, from planning and implementation to monitoring and grievance redressal.

Operationally, inclusion has taken form through structured mechanisms: the mandatory representation of women and marginalised groups in Village Water & Sanitation Committees, training and deployment of women pump operators and water quality testers, and participatory planning processes that reflect local needs and priorities. These efforts are measurable, scalable, and replicable interventions that make the system work better for everyone.

This edition of *Jal Jeevan Samvad* brings together field narratives from across the country, stories that illustrate how equity is not an outcome, but a process. They reflect how Gram Panchayats are taking ownership, how frontline workers are being empowered, and how communities once on the margins are now shaping their own water futures.

As the Mission progresses, the challenge is not just to expand the reach of services, but to deepen the fairness of delivery. True equity is achieved not when everyone receives the same, but when everyone receives what they need to thrive.

The Jal Jeevan Mission is helping make that shift steadily, and with purpose.

Ashok K. K. Meena
Secretary,
Department of Drinking Water & Sanitation

Note from the desk of

Additional Secretary & Mission Director...

Every drop of water that now flows from a household tap in rural India carries with it a deeper story – of dignity, inclusion, and justice. It reflects the transformation of lives and the narrowing of long-standing social gaps. The Jal Jeevan Mission, with its vision of *Har Ghar Jal*, is indeed about bringing change where it is needed the most.

Across India's vast rural landscape, there are homes tucked away in forested hills, in drought-prone blocks, and in isolated habitations. These include households of tribal communities, particularly vulnerable tribal groups (PVTGs), nomadic groups, and the poorest of the poor – many of whom had never imagined water coming through a tap inside their homes. The Mission has reached these corners, turning a promise into a lived reality.

Whether it is the 4-year-old girl in Odisha's Kalahandi, the elderly tribal woman in Jharkhand's Gumla, or the children from a PVTG community in Andhra Pradesh, access to water has brought new hope and restored dignity. In schools and Anganwadi centres, children who once stayed away due to waterborne illnesses or long water-fetching routines are now coming back, healthier and happier. For many girls, this has meant freedom from missing school during menstruation. For women, it has meant reclaiming time, opportunity, and voice.

This edition of *Jal Jeevan Samvad* brings together a few of these stories.

In Masantola, a tribal village in Madhya Pradesh, water now reaches all 48 households thanks to a collective effort involving the community, the Panchayat, and the Public Health Engineering Department. Each household contributes to maintenance, and sanitation has improved dramatically. In Roshna, another village in Balaghat, a women's group led the entire implementation process under JJM. What started with doubts ended in transformation; children now attend school regularly, women have started businesses, and the community manages its own water governance with pride and clarity. A story from Bihar, highlights how water has eased emotional suffering and reduced seasonal migration.

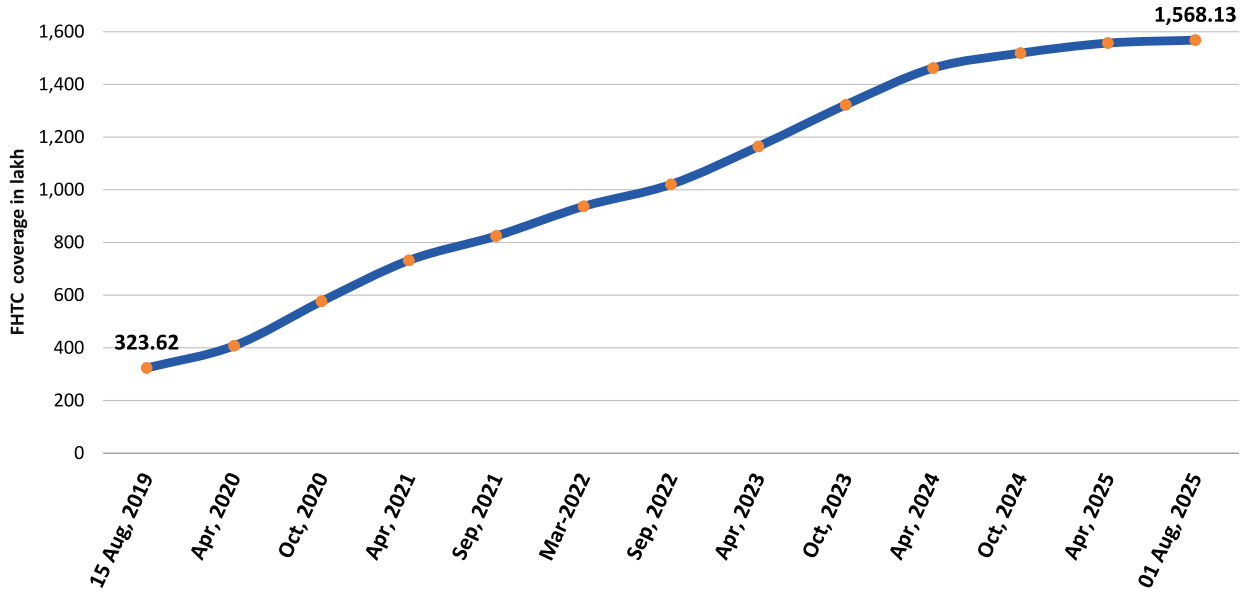
And a powerful poem in this issue titled *Walked Miles for Water, Now Runs for Dreams* captures the voice of a woman who broke the cycle of generational hardship. This shift, simple as it may seem, is the very heart of what inclusion looks like.

Of course, this progress brings with it a responsibility. Ensuring sustainability of services is now the key challenge. To address this, the Department of Drinking Water & Sanitation organised a two-day National Stakeholder Consultation Workshop on the Policy Framework for Operation & Maintenance (O&M) of rural piped water supply systems. The workshop brought together senior government officials, engineers, Panchayati Raj members, partners, and sector experts to chart a roadmap for making water services reliable, accountable, and future-ready through community institutions, digital platforms, and convergence.

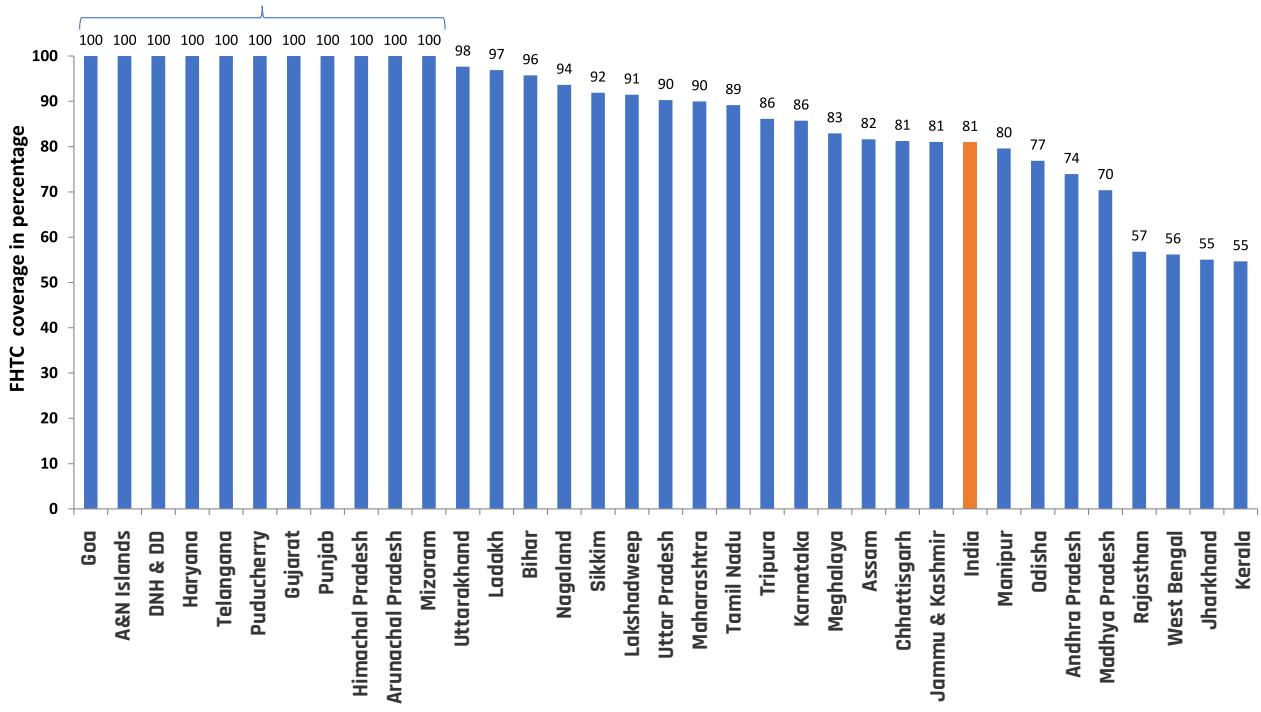
As we continue to expand the Mission's footprint, we must stay committed to those who are often last in the line – children, women, tribal groups, persons with disabilities, and the poorest communities. Inclusion is not a separate goal; it is the very foundation of a people-led water movement. Let us keep walking this path – steadily, mindfully, and together.

Kamal Kishore Soan
Additional Secretary & Mission Director (NJJM)
Department of Drinking Water & Sanitation

Progressive coverage - Functional Household Tap Connection (FHTC) (as on 31.07.2025)



Comparative FHTC coverage status of States/ UTs (as on 31.07.2025)



Har Ghar Jal
Jal Jeevan Mission

As on 31st July, 2025

Source: JJM-IMIS

India | Status of tap water supply in rural homes

Total number of households (HHs)	Households with tap water connections as on 15th Aug 2019	Households with tap water connections as on date
19,36,43,624	3,23,62,838 (16.71%)	+5,095 15,68,13,735 (80.98%)

Households provided with tap water connection since launch of the Mission

12,44,50,897 (77.16%)

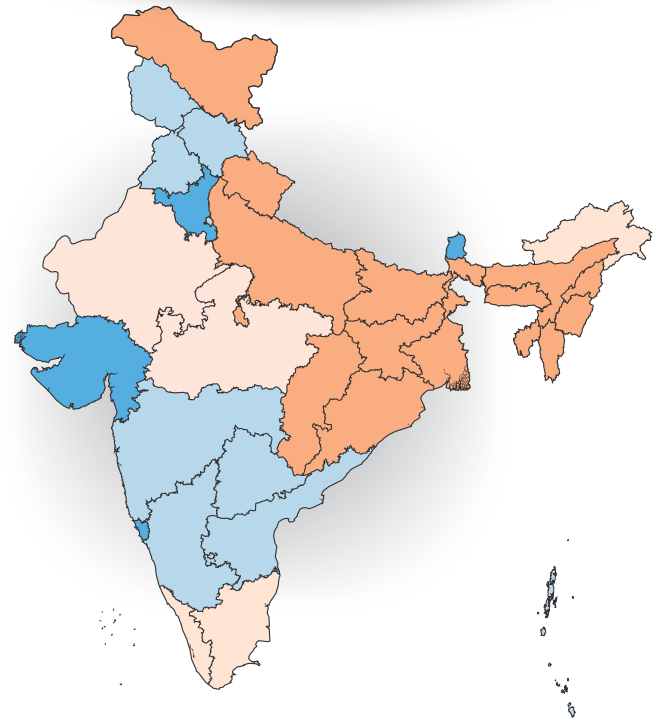
Har Ghar Jal [100% HHs with tap water connections]

100% FHTC States/ UTs

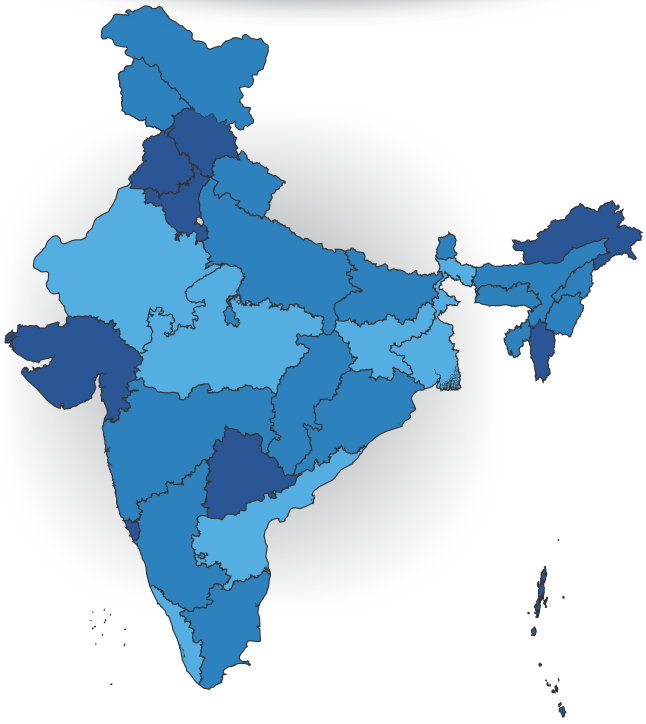
Goa, A & N Islands, Puducherry, D&NH and D&D, Arunachal Pradesh, Haryana, Punjab, Telangana, Mizoram, Himachal Pradesh, Gujarat

100% FHTC Districts	100% FHTC Blocks	100% FHTC Panchayats	100% FHTC Villages
191	1,908	1,23,758	2,63,005

As on 15th August, 2019



As on 31st July, 2025



0 to <10% | 10% to <25% | 25% to <50% | 50% to <75% | 75% to <100% | 100%

Two-Day National Workshop on "Policy Framework for Operation & Maintenance of Rural Piped Water Supply Schemes" in New Delhi

- **Lopamudra Panda**, NPMU-NJJM

Figure 1: Sri C R Patil, MoJS with senior officials of DDWS/State/UTs | *Source: NJJM*

In a significant stride towards sustainable rural water governance, Department of Drinking Water & Sanitation (DDWS), Ministry of Jal Shakti, convened a two-day National Stakeholder Consultation Workshop on Operation & Maintenance (O&M) of Rural Piped Water Supply Schemes on 10–11 July 2025 at Bharat Mandapam, New Delhi. This workshop marked a pivotal moment in the evolution of the Jal Jeevan Mission (JJM), transitioning from infrastructure creation to sustained service delivery.

The workshop brought together a diverse and influential group of stakeholders, Hon'ble Minister Shri C.R. Patil, Secretary Shri Ashok K.K. Meena, AS&MD Shri Kamal Kishore Soan, senior officials from DDWS, representatives from Ministry of Panchayati Raj, Mand representatives from States and Union Territories (Mission Directors, PHED engineers, district administrators--DC/DMs, WASH sector partners). Their collective presence underscored the urgency and importance of building robust, community-led, and technology-enabled O&M systems to ensure Har Ghar Jal becomes a sustained reality and reflected the government's commitment to decentralised and data-led water governance.

In his inaugural address, **Hon'ble Minister Shri C.R. Patil** emphasized the urgent need for robust O&M systems as the Mission enters a new phase. He said that this is the first time a mission of such magnitude has been taken up anywhere in the world and reiterated how JJM has made a holistic impact on rural life in terms of improving health, boosting the economy, reducing inequalities, and saving time and money while reducing disease burden.

He concluded by emphasising that the true measure of success lies in whether these taps continue to deliver clean water to every household, every single day, in the years to come. For that, sustainable O&M is non-negotiable. He underlined the importance of granting accountability along with rights, and called for targeted interventions, especially during challenging periods such as the monsoons.

> *C R Patil said, **"We all have to work in tandem to realise the goal of Har Ghar Jal as envisioned by the Hon'ble Prime Minister to ensure that no one is left behind. We must act together now to make our nation water secure."***

Figure 2: Sri C R Patil, MoJS delivering his address | *Source: NJJM*

Figure 3: Sri K K Meena, Secretary DDWS setting the context of workshop | *Source: NJJM*

Figure 4: Sri Kamal Kishore Soan delivering welcome address | *Source: NJJM*

Setting the context for the two-day national workshop, **Shri Ashok K.K. Meena, Secretary, DDWS,** highlighted India's historic progress under JJM, with over 15.66 Crore rural households now having access to tap water, representing over 81% national coverage. He stressed that the real challenge now lies in ensuring reliable and safe water supply for the future.

> ***"The next phase of JJM is about shifting from infrastructure creation to sustainable service delivery. Operation and Maintenance is no longer a back-end activity, it is the core of water security in villages,"*** Secretary, DDWS noted.

He also mentioned that the JAM trinity can be leveraged for effective O&M, especially mobile technology, which can be used effectively to streamline various processes, and to enhance transparency, efficiency, and accountability.

Shri Kamal Kishore Soan,AS&MD, NJJM, in his welcome speech, reaffirmed the need for a comprehensive policy framework that enables robust, community-led, and technology-supported O&M practices.

> ***"This workshop is a platform to listen, co-create, and collectively shape the next phase of the Mission. The aim is to strengthen policies, institutional mechanisms, and service delivery models for long-term sustainability,"*** AS & MD, NJJM said.

The inaugural session was followed by **thematic roundtable discussions** that formed the core of Day 1. Representatives from States and UTs participated in **7 (seven) focused** group discussions covering critical aspects of O&M:

i. Pipes to People: Strengthening Institutional frameworks for Rural Water Governance

ii. Water as a Service: Bringing Utility Thinking to Rural Governance

iii. Beyond Construction: The Lifecycle Lens: Protocols for Asset Ownership, Handover and and Lifecycle Management

iv. Money that Sustains the Flow: Exploring Innovative Financing Models for Sustainable O&M

v. From Tap to Talent: Fostering the Rural WASH Economy: Skilling, Enterprises, and Livelihoods

vi. Safe Drop Counts: Building Trust, Drink from Tap

vii. Regulate to empower: Evolving Legal and Regulatory Mechanisms for Rural Water Services

Each group shared insights and field experiences, contributing practical ideas and innovative models. An open house session enabled cross-learning and reflection, allowing participants to share both challenges and replicable solutions.

The workshop reaffirmed the Mission's four pillars:

- People's Participation (*Jan Bhagidari*),
- Stakeholder Collaboration,
- Political Will, and
- Optimal Resource Use.

JJM continues to catalyze a shift toward local ownership and community stewardship of rural water services.

Day 1 of the workshop also saw the release of the 1st edition of ***Niwas Vartika***, the quarterly newsletter of SPM NIWAS.

The deliberations of Day 1 lay the foundation for Day 2, which focuses on technological interventions, leveraging AI, GIS, space technology, and digital platforms to drive O&M of rural water governance.

Following the rich deliberations of Day 1, focused on institutional frameworks, financing, and community engagement, Day 2 turned the spotlight on technology as a key enabler of efficient, accountable, and future-ready O&M systems. The day focused on Policy Framework for O&M of Rural Water Supply Schemes under JJM Focuses on Technology, Transparency, and Data-led Governance

Setting the tone for the day, **Secretary, DDWS, Shri Ashok K.K. Meena**, highlighted the potential of leveraging digital tools to overcome challenges in rural and remote contexts. He emphasized that mobile phones are perhaps the best IoT sensors already in human hands and stressed the need to capture data from both consumers and service providers on a daily basis. Citing the JAM Trinity, PM Gati Shakti, Meri Panchayat App, and the JJM Dashboard, he underlined the growing momentum of data-led governance and praised States/UTs for their innovations in the digital water ecosystem.

A presentation by **Shri Vipul Ujjwal, Director - Ministry of Panchayati Raj** reinforced the importance of attitude-behaviour consistency in rural transformation, citing the MAP model (Motivation, Ability, Prompt) for ensuring behavioural change at the grassroots. It was reiterated that Panchayats are the true fulcrum of sustainable and accountable service delivery.

During the course of the day, participants engaged in thematic sessions covering a wide spectrum of digital innovations and institutional strategies.

The first session – **'From Data Streams to Decision Engines'**, showcased how technologies like real time monitoring, technology backed Decision Support System (DSS), AI-based predictive maintenance, IoT sensors, SCADA, etc. are helping in rural water supply governance, anticipate breakdowns, detect faults in real-time, ensuring equity in distribution, and optimize energy usage in water pumping systems.

Figure 5: Sri Vipul Ujjwal, Director - Ministry of Panchayati Raj presenting his insights | *Source: NJJM*

Discussions emphasized that technology is not a supplement, but the spine of governance in O&M. India-specific frugal engineering innovations and app-based dashboards highlighted for their cost-effectiveness and scalability in rural contexts. States like **Uttar Pradesh** and **Karnataka** showcased their **O&M policies**, **SCADA systems**, and **solar-based schemes**. The **World Bank** emphasized the need for **financial self-sufficiency**, accurate cost estimation, and citizen engagement. **Kerala** presented its **Pravahak portal**, **Aqualoom software**, and **alert systems** for efficient service delivery.

Next was a thematic presentation on **'Harnessing GIS and Space Technology for Data-Driven Rural Water Governance'.** Teams from **Madhya Pradesh (PHED), BISAG-N, NRSC–ISRO, and AIILSG** showcased pioneering **applications of GIS, satellite imagery, and AI-driven tools**. Madhya Pradesh demonstrated its integrated **Jal Rekha platform** for real-time monitoring, while BISAG-N highlighted the **PM Gati Shakti** framework for gap analysis and asset mapping. NRSC–ISRO shared innovations in **groundwater sustainability**, and AIILSG presented **GIS solutions** for predictive maintenance and citizen engagement in rural water services.

The topic for the third session was – **'Securing the Source'**. It focused on ensuring long-term functionality through source sustainability. A multi-tier institutional model, from the State to the village level, was proposed for effective implementation of Integrated Water Resource Management (IWRM) and community-centric governance. States like **Tripura focuses on groundwater recharge using dug and injection wells approved by CGWB,** rainwater harvesting under Catch the Rain, and inter-agency coordination for recharge structures. **Uttarakhand's SARRA** initiative targets **spring rejuvenation through scientific, community-led planning,** backed by the Jal Sanrakshan Abhiyan 2024. Nationally, NWIC promotes Water data One Data FAIR data sharing, while CGWB supports source sustainability via inventories and DPRs. NGOs like the Aga Khan Foundation strengthen efforts through CSR-based community engagement and capacity building under JJM.

The fourth session was on **'Bridging Citizens, Utilities & Panchayats through Digital Access'**. This session illustrated the growing ecosystem of digital applications across Indian States/ UTs. From geotagging and digital billing systems to grievance redressal platforms and water quality dashboards, several States have shown significant progress. States like **Assam**, **Gujarat**, **Haryana**, and **Bihar** showcased digital platforms for **grievance redressal**, **real-time dashboards**, and **citizen engagement**. nowledge partners emphasized the need for **user-centric design**, **interoperability**, and **inclusive governance.**

Each session was followed by question-and-answer rounds, providing a platform for cross-learning, field-level experience sharing, and contextual discussions. Experts from across sectors showcased pilot programmes and shared successful cases of digital and spatial interventions in water governance. The overarching message was clear: technology is not a choice but a necessity for the next phase of Jal Jeevan Mission.

In his **closing remarks, Shri Kamal Kishore Soan, AS&MD-DDWS**, congratulated all participants for their active engagement and insightful contributions over the two days. He acknowledged the collaborative spirit of the workshop and expressed confidence that the deliberations, learnings, and innovations shared would shape a robust and future-ready O&M framework.

The workshop concluded with a collective call to action, to make transparency, accountability, and real-time monitoring the backbone of rural water service delivery. As Jal Jeevan Mission transitions into its next phase, it is evident that a synergistic blend of policy, people, and technology will be critical to ensuring that every tap delivers clean drinking water, every single day.

Figure 6: Various dignitaries presenting his insights | *Source: NJJM*

Inauguration of the First Edition of SPM NIWAS' Quarterly Newsletter *Niwas Vartika*

- **Chetana Thakur Chakraborty,** Junior Editor, SPM NIWAS

Figure 7: Inauguration of Niwas Vartika by C R Patil, Minister of Jal Shakti | *Source: SPM-NIWAS*

The Dr. Syama Prasad Mookerjee National Institute of Water and Sanitation (SPM NIWAS) has launched the first edition of its official quarterly newsletter, *Niwas Vartika*, marking a significant milestone in the institute's outreach initiatives.

The newsletter was inaugurated on July 10th, 2025, by Shri C.R. Patil, Hon'ble Union Minister, Ministry of Jal Shakti, Government of India, during the National Workshop on Policy Framework for Operation and Maintenance of Rural Water Supply Schemes, held in New Delhi.

As a newly established institute under the Department of Drinking Water and Sanitation, Ministry of Jal Shakti, SPM NIWAS has positioned the newsletter as a key tool for strengthening institutional branding and stakeholder engagement.

The inaugural issue features a message from Shri Priyatu Mandal (IAS, JS cum Director & Head, SPM NIWAS) and a featured article by Shri Vinay Harswal (Consultant, SPM NIWAS) titled 'Evolution of Rural Water Supply Systems in India - From Drudgery to Functional Household Tap Connections'.

The publication includes a dedicated 'WASH Perspectives' section providing updates on Water, Sanitation, and Hygiene developments from India and around the world. Additionally, it showcases training programmes conducted during the first quarter of 2025-26 under the Jal Jeevan Mission and Swachh Bharat Mission (Grameen), along with the institute's significant achievements, special workshops, and strategic collaborations aimed at enhancing capacity and expanding impact in the water and sanitation sector.

Har Ghar Jal
Jal Jeevan Mission

Strengthening sustainability of Gujarat's Rural Water Supply Systems by ensuring functionality and community-led O&M of Water Supply System

- **Nageshwar Patidar,** UNICEF Gujarat

Introduction

Access to safe and sustainable drinking water is a fundamental right, recognized globally through frameworks like Sustainable Development Goal (SDG) 6, which targets universal water and sanitation access by 2030. In India, the National Water Policy (2012) and Jal Jeevan Mission (JJM), launched in 2019, aim to provide functional household tap connections (FHTC) to all rural households. Despite progress, challenges persist in rural water management for long term sustainability.

In Gujarat, the Gujarat Water Supply and Sewerage Board (GWSSB), Water and Sanitation Management Organisation (WASMO), and UNICEF have partnered to address these challenges through a collaborative initiative in two districts **(Narmada and Mehsana)**. This joint effort focuses on three pillars: ***functionality assessments, community-led operation and maintenance (O&M) plans, and sustainable tariff systems***. The collaborative approach has a positive impact, and lessons learnt for scaling safe and sustainable drinking water management.

Context

Though Gujarat has significantly improved its water supply infrastructure and service delivery, still social equity and inclusion of all rural populate especially the tribal regions. Jointly GWSSB, WASMO and UNICEF did the following analysis:

- Functionality Gaps: Aging infrastructure, inadequate maintenance, and reliance on borewells without recharge measures lead to unreliable water supply.
- Community Engagement: Limited community ownership hinders sustainable Operation and Management (O&M) of Water Supply system.
- Financial Sustainability: Outdated tariffs fail to cover O&M costs, causing scheme breakdowns.

The GWSSB-WASMO-UNICEF partnership focuses on addressing these issues through a participatory, climate-resilient, and financially sustainable framework.

Collaborative Framework

The initiative employs a cyclical framework integrating functionality assessments, community-led O&M plans, and tariff revisions:

1. Functionality Assessments: Evidence-based data-driven assessments identify technical issues (e.g., leaking pipelines, unreliable power) to guide interventions, aligning with SDG 6.1's focus on reliable water access.
2. Community-Led O&M Plans: The technical knowledge of Gram Panchayats and Pani Samitis on the operation and maintenance (O&M) of water supply systems was enhanced to develop comprehensive O&M Action Plans. These plans outline repair, maintenance, and resource needs, promoting community ownership and aligning with Jal Jeevan Mission (JJM) guidelines.
3. Tariff Revisions: The current water tariff in most villages is insufficient to cover operation and maintenance (O&M) costs. Revised tariffs promote financial sustainability, empowering communities to support O&M activities and ensure the functionality of water supply schemes.

This interconnected approach creates a self-reinforcing system for sustainable water supply.

Pilot Interventions: Functionality Assessments

UNICEF developed a functionality assessment tool with technical partner PriMove, in the **"mWater" App**. To contextualize the tool, the state and district team of WASMO provided the technical inputs. The assessments were facilitated jointly by UNICEF, PriMove, and district WASMO team in 20 villages across Narmada and Mehsana district.

- Technical Evaluations: Teams inspected pumps, pipelines, and storage tanks, assessing water quality, quantity, and reliability.

Figure 8: Functionality assessment using mWater tool | *Source: UNICEF Gujarat*

- Community Feedback: Surveys and focus group discussions captured user experiences, identifying issues like irregular supply.
- Use of Digital Tool: The mWater platform facilitated data collection and analysis, ensuring evidence-based planning.

Key findings included groundwater depletion risks, irregular supply due to maintenance delays, and limited water quality monitoring, inefficient use of water, limited community ownership, and absence of informed, targeted O&M plans.

Community-Led O&M Plans

In half of the pilot villages, Community led O&M plans were developed using the application, jointly designed by UNICEF and WASMO, through Participatory Rural Appraisal (PRA) tools over three-day workshops:

- Inclusive Participatory approach: Through a collaborative process, resource mapping and focus group discussions were conducted to ensure inclusive decision-making. These efforts engaged diverse community members, leading to the identification of local solutions that prioritized critical infrastructure improvements, such as pipeline repairs and regular pump maintenance, to enhance the efficiency and reliability of water supply systems.
- Strategic Financial Planning: Detailed financial plans were developed to align water management activities with sustainable funding sources, including contributions from the Jal Jeevan Mission (JJM) and local community resources, ensuring long-term financial viability, enabling consistent maintenance and operation of water infrastructure.

This approach build ownership and accountability, aligning with JJM's community-driven focus.

Figure 9: Assessment of water supply scheme as part of community-led O&M plan | *Source: UNICEF Gujarat*

Figure 10: Demonstration of FTK to ensure safe water quality | *Source: UNICEF Gujarat*

Water Tariff Revisions

To ensure financial sustainability and becoming self-reliant is essential for water management in rural areas. Specific activities were undertaken:

- Plan for mobilizing finance: The O&M plan is structured to mobilize funds from diverse sources to sustain water management initiatives. Any funding gaps are covered through community contributions via a water user charge (tariff), promoting shared accountability and ensuring the long-term financial sustainability of water infrastructure upkeep and operations.
- Gram Sabha Engagement: The O&M plans for water management, along with proposed tariff revisions, were thoroughly discussed and approved during Gram Sabha meeting. These gatherings ensured active community participation, fostering transparency and collective decision-making it also encourages ownership and accountability for sustainable water infrastructure maintenance and operations.

Through comprehensive capacity building, Pani Samitis have been equipped to meticulously maintain and publicly display detailed expenditure records, promoting accountability and building greater trust among community members and stakeholders.

Challenges and Lessons Learned

- **Tariff Resistance**: In tribal areas of Gujarat, cultural sensitivities and economic constraints posed significant barriers to implementing water tariff revisions.
- **Building Trust:** Demonstrate the value of sustainable water management practices through extensive community engagement, including dialogues and awareness campaigns, to build trust.
- **Addressing Climate Risks**: Water scarcity, particularly in districts like Mehsana, emphasized the urgent need for climate-resilient strategies. Erratic rainfall and depleting ground water sources highlighted the importance of integrating adaptive measures, such as efficient water storage and distribution systems, to mitigate the impacts of climate variability

Conclusion

This partnership to pilot the initiative in Narmada and Mehsana offers a scalable model for sustainable water supply by ensuring social equity and inclusion. By integrating functionality assessments, community-led O&M plans, and tariff revisions, the initiative empowers communities to manage water resources effectively. Continued collaboration, climate-resilient strategies, and inclusive governance will ensure Gujarat's progress toward water security, aligning with JJM and SDG 6 goals.

- Copy edited by Lopamudra Panda

A Stream of Dreams: How Nal Se Jal Transformed Roshna Village

- **Shailika Sinha,** NJJM inputs from **PHED, Madhya Pradesh**

Roshna, a village with a population of approximately 1,500 people, lies 21 kilometres from the heart of Balaghat district. Verdant fields and swaying foliage paint an idyllic rural tableau, yet beneath this serenity lay a pressing crisis: the absence of a reliable water supply. Scattered throughout the settlement were some 56 traditional wells, many of them shallow and prone to drying, and a handful of communal hand pumps. Come summer, water tables would recede, wells would crack and hand pumps would sputter, forcing long, weary queues at each available source.

At the crack of dawn, Roshna's women embarked on their daily pilgrimage. Balancing earthen pots atop their heads, they traversed dusty footpaths that sometimes stretched two kilometres or more. Others lingered for hours in the same spot, hoping a delayed hand pump might at last yield its life-sustaining flow. By mid-day, the scorching heat turned these waiting lines into endurance tests, and yet there was no alternative: without water, sustenance remained beyond reach.

The consistent scarcity of water disrupted lives in many ways. Contaminated groundwater seeped into drinking vessels, causing a persistent burden of diarrhoeal diseases, jaundice and cholera. On average, ten to twelve villagers per month sought treatment at the nearby sub-health centre, their ailments tracing back to contaminated water.

Children suffered most acutely. At Roshna's Anganwadi Centre, where three decades of service had once nurtured young minds, attendance declined sharply. Manju Khobragade, who has devoted twenty years of her life to that centre, recalls the toll: *"Until 2022, only 14-15 children would attend regularly. Mothers, exhausted by the dawn-to-dusk struggle for water, barely found the energy to prepare their little ones. Even when children did arrive, they often carried the weight of illness – diarrhoea, stomach infections, before their first lesson could begin."*

A New Dawn with Jal Jeevan Mission

In early 2023, the village ushered in a transformative in the form of Jal Jeevan Mission. Its objective was straightforward and profound, to ensure every rural household across India received a dependable piped water connection. Roshna, with its 300 households, was selected for immediate inclusion.

Responsibility for on-ground implementation was entrusted to the **Nayi Roshni Mahila Mandal**, a women's collective already woven into Roshna's social fabric. While initial phase was full of doubts as villagers, acquainted with the revolving door of government schemes, wondered whether yet another promise would go unfulfilled. But the Mandal's female coordinators persisted, and with each house visit, each community gathering, they garnered trust through action rather than words.

A multipronged outreach campaign ignited Roshna's collective energy.

Figure 11: Water comes as a blessing to schools and Anganwadi Centres | *Source: PHED, Madhya Pradesh*

Public meetings convened, where coordinators outlined the scheme's benefits and fielded questions. Street plays spread awareness about the perils of contaminated water, illustrating how piped supply could safeguard health. Door-to-door campaigns brought the message to every household.

The consistent efforts emerged led to the formation of VWSC in Roshna, democratically constituted and inclusive of all castes and age groups. A dedicated bank account was opened to collect and manage the newly instituted water tax. Simultaneously, existing self-help groups were linked with the committee, providing financial oversight and enabling transparent governance. Training sessions acquainted women and youth with daily operations, preventive maintenance, and bookkeeping. The villagers slowly recognised that sustainable water security demanded local stewardship.

Holistic Transformation

The moment the first drop of treated water spurted from an indoor tap, jubilation swept through Roshna. Ease of living became a reality. Children danced in the yard; women exchanged embraces of relief; elders, their faces etched by years of toil, shed grateful tears. In the ensuing weeks, as line after line of white PVC pipe were laid in each home, that single drop blossomed into a continuous flow embracing every household.

Dawn treks to distant pumps became a memory. Children awoke leisurely, mothers prepared meals without haste, and domestic routines settled into a harmonious rhythm.

Attendance at the Anganwadi Centre climbed steadily to 21-22 children. Manju noted with satisfaction that youngsters arrived alert and ready to learn, their health visibly improved. Diarrhoeal cases at the sub-health centre plummeted.

Figure 12: Empowering rural women through hands-on training in water safety and testing | Source: PHED, Madhya Pradesh

> Manu says,
>
> ***"Mothers are now able to prepare their children on time. Household chores are done on schedule. And most importantly, the children are no longer falling sick - they get clean water now."***

At Roshna's primary school, the sight of girls walking through the gates, once a rarity, became common. With water chores lifted from their shoulders, they embraced their studies with newfound zeal. Teachers reported marked progress in enrolment and concentration, especially among students who had previously missed days due to water-related illnesses.

Freed from the daily burden of water collection, women redirected their energies toward income-generating activities. Beauty parlours and tailoring centres opened in modest shops, creating both livelihoods and local services. Household hygiene improved markedly; latrine use rose, open defecation declined, and overall community sanitation advanced.

But perhaps the greatest transformation was psychological. Villagers who once viewed themselves as passive recipients of aid now regarded themselves as architects of their destiny.

Jal Jeevan Mission laid pipes; Roshna's people infused them with purpose. Today, women who began as coordinators have become decision-makers, empowered to plan, execute and sustain progress. As Manju reflects with confidence, ***"Earlier, we fetched water. Now, we orchestrate schemes. No one can mislead us anymore."***

Roshna stands transformed, stating the fact that infrastructure alone cannot deliver sustainable progress. It is the empowerment of community members, especially women, that ensures pipes deliver more than water; they deliver hope, health and prosperity. As Manju reflects, *"We have moved from fetching water to carving our own future."*

Roshna today is a model of self-reliance, where each drop flows with the promise of strengthened livelihoods, improved well-being and an unwavering belief in collective action.

From Struggle to Strength:

How Masantola a Tribal Village in Madhya Pradesh Secured Its Water, Sanitation, and Hygiene Future

- **Monideepa Das,** WaterAid India

In the heart of Damoh district, Madhya Pradesh, lies a tribal village-Masantola, that once struggled with severe water shortages and poor sanitation. Life in this remote settlement was shaped by daily hardships. Women walked long distances to fetch water from unreliable sources, and the absence of toilets made open defecation a part of everyday life. During monsoon, streams would overflow, blocking the village from the outside world and making access to essential services even more difficult. But Masantola's story has since transformed powered by community-led action, women's leadership, and a shared commitment to building a more healthy and dignified future.

Located in Salaiya Gram Panchayat, Masantola is home to 48 Gond tribal households spread across two habitations, separated by a seasonal stream. The community depends on daily wage labour and rain-fed farming for survival. In the intense summer heat, water scarcity became a major concern. Families had to rely on distant dug wells for drinking water. Women and the elderly bore the brunt of this daily task, walking for kilometers under the sun. With limited opportunities, many young people migrated in search of work, leaving behind a community facing multiple vulnerabilities.

It was in this context that WaterAid India initiated a community mobilisation and engagement-based approach, working closely with the community, the Gram Panchayat, PHED and departments. The intervention focused not just on providing infrastructure, but on building awareness, community ownership, and long-term sustainability. Through a series of community consultations and joint planning, WaterAid supported Masantola in identifying locally feasible solutions and mobilizing collective action.

Figure 13: Woman fetching water from her tap connection | *Source: NJJM*

Recognising the persistent need, in 2024, WaterAid India being a partner of Rural WaSH Partners Forum (RWPF) adopted a broader approach under the aegis of JJM prioritising not only infrastructure but also sustainability and community engagement. Drawing water from a perennial, government-owned dug well, two 5,000-litre PVC tanks were installed on a 20-ft RCC platform to ensure sufficient water storage and pressure for distribution. A new pipeline network was laid, supplying water to all 48 households for 40 minutes daily and meeting the norm of 55 litres per capita per day. This regular and reliable access to water has significantly reduced the physical burden on women, allowing them to

Figure 14: Pump Operator collecting water tariff from a woman beneficiary
Source: WaterAid India state team

spend time on activities of their choice, including income-generating work, while contributing to a cleaner, healthier living environment.

While WaterAid India contributed ₹8.5 lakh toward the intervention, the people of Masantola played a central role in making it happen. The community collectively raised ₹32,000 and provided labour and locally available materials to lay pipelines, install stand posts, and connect household taps. The Gram Panchayat extended its support by facilitating the power connection needed to operate the motor for water distribution to each household. Additionally, further support is being planned in the form of a solar pump and an auto-chlorinator to enhance the system's efficiency and ensure safe water access.

Beyond access, ensuring water quality became a shared responsibility. Five local women were trained to conduct monthly water quality tests using Field Test Kits provided by the Public Health Engineering Department (PHED). With assistance from the Anganwadi Worker, test results are uploaded on the government portal. These efforts have promoted a culture of vigilance. If water quality is found to be poor, the community promptly stops using the source and informs the Panchayat. Households now regularly strain and boil water before use, reflecting their growing awareness and commitment to safety.

Parallel efforts were made to address sanitation. Until recently, open defecation was widespread, posing serious health risks and depriving women and the elderly of privacy and dignity. With support from WaterAid India, every household constructed a toilet. Community members took charge by digging pits and assisting masons, which reflected strong ownership and pride. This shift has significantly improved living conditions, particularly for women, children and the elderly, who now enjoy the safety and dignity of using private facilities.

Recognizing the importance of hygiene and waste management, nearly half of the households also constructed bathing-cum-washing platforms with WaterAid's support. These platforms are connected to kitchen gardens or leach pits, allowing for safe greywater disposal and promoting environmental cleanliness.

To ensure continued maintenance and transparency, a Village Water and Sanitation Committee (VWSC) was formed. Each household contributes ₹100 per month to a common fund used to pay a pump operator and meet maintenance needs. This model of decentralized governance reflects the community's commitment to keeping the water system functional and sustainable.

In addition to household-level improvements, WaterAid also focused on strengthening institutional WASH infrastructure. At the village school and Anganwadi Centre, separate toilets for girls and boys were constructed, along with dedicated stations for handwashing and drinking water. These developments have directly benefited 27 children and 3 staff members by enhancing cleanliness and encouraging healthy hygiene practices. The Anganwadi Centre, which serves pregnant women, lactating mothers, and adolescent girls, was equipped

with a new handwashing station, and its existing toilet was retrofitted to ensure safe and dignified sanitation access. This has ensured dignified and safe sanitation for around 20 children and 15 women who regularly visit the centre.

At every step, women have led from the front. They were active participants in pipeline installation, contributed labour, tested water quality, and advocated for safe practices within the community. Their involvement has not only transformed infrastructure but also shifted gender dynamics, giving them a stronger voice and more recognition within the village.

The success of the Masantola intervention lies in its integrated, community-led approach. By strengthening local leadership, ensuring regular tariff collection and maintaining close coordination with the Panchayat and government bodies like PHED, the village has laid the foundation for long-term sustainability. Masantola now continues to engage with departments such as Jal Nigam and PHED to revive older infrastructure and independently maintain its new systems.

Masantola's transformation is not only about access to water and sanitation, but also a story of dignity, confidence and resilience. Through collective effort, women's leadership and sustained collaboration, this once-overlooked tribal village has emerged as a beacon of change. Where there was once hardship, there is now hope. Where there was silence, there is now a collective voice securing a healthier, brighter future.

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Figure 15: Water quality testing at community level | *Source: WaterAid India state team*

Healing Through Water: Bihar's Har Ghar Nal Ka Jal – Promoting Psychological Well-Being and Social Change

- **Pawan Kumar,** Coordinator (Source Sustainability O&M) - WASH, H&N, Bihar, Aga Khan Foundation

Introduction

Water is not only a basic necessity for life but also deeply intertwined with emotional well-being, cultural identity, and social relationships. In rural Bihar, water scarcity—especially during the dry summer months—has long been a source of anxiety, uncertainty, and psychological distress for many families. The frequent failure of handpumps and the drying up of wells placed an enormous burden on poor and marginalized households, particularly women. This led to social inequality, loss of dignity, and even forced migration.

However, with the implementation of the *Har Ghar Nal Ka Jal* (HGNKJ) initiative under the Saat Nischay Yojana of the Government of Bihar, is transforming this reality. The construction of ward-level piped water supply schemes started in 2016, and since then, 1.60 crore households have been provided with access to tap water. Beyond the infrastructure of taps and pipelines, the scheme has brought visible psychological relief and restored social confidence among villagers. This article explores how household-level water access has helped reduce '*solastalgia*'—a term used to describe the *emotional pain caused by environmental degradation* and has positively contributed to climate resilience, migration reduction, and community well-being.

The Emotional Impact of Water Scarcity: Understanding Solastalgia

In many villages of Bihar, prolonged water scarcity has led to feelings of anxiety, helplessness, and emotional distress. People were forced to alter their daily lives, including household work, farming activities, and religious or cultural practices. Women and girls had to walk long distances to collect water. When handpumps failed, poorer families often had to

Figure 16: Chanda Khatoon engaging with a ward resident, happily discussing the functioning and benefits of the drinking water supply scheme
Source: Aga Khan Foundation

depend on more affluent households for water. This unequal relationship caused a sense of shame and social inferiority among the less privileged families.

Many elderly villagers also expressed sorrow over the loss of traditional village customs related to water, such as rituals near ponds, seasonal festivals, and other water-related traditional customs traditions. The environmental change caused by climate stress—especially recurring droughts and falling groundwater—disconnected people from their cultural roots and created emotional pain. This condition, referred to as solastalgia, reflects the psychological suffering caused by the loss of one's familiar environment.

Water Access as a Path to Emotional Recovery

The Har Ghar Nal Ka Jal scheme has made a significant difference in these villages. With drinking water now available at the doorstep, women no longer need to wait in long queues or depend on others. This has reduced daily stress and improved self-respect among rural families.

Some visible emotional and social shifts include:

- **Reduction in emotional stress**: Families feel more secure and confident because they have reliable access to clean water.
- **Improvement in social dignity**: Poorer families no longer have to request water from richer households, which has helped reduce feelings of inferiority.
- **Support to women and children**: Time spent on collecting water is now used for studying, working, or resting.
- **Revival of cultural activities**: Traditional rituals and festivals that were fading away due to water unavailability are now being celebrated again.

Reducing Migration and Building Climate Resilience

In earlier times, the absence of reliable water sources forced families to migrate during summer, particularly when agriculture was no longer viable. Such displacement, often unplanned and urgent, created internal ***"climate refugees."***

With the consistent water supply provided under the scheme, migration has reduced significantly. Families are staying back, resuming agricultural activities, and even starting kitchen gardens. This has strengthened local livelihoods and enhanced climate resilience.

> A teacher from Lato Yadav Inter School, Meskaur Block, Nawada district remarked: ***"Earlier, by May, most houses were locked as people migrated. Now, people are staying back. Children are coming to school regularly." The teacher further observed that the attendance percentage of girl students has also shown a noticeable increase, as the burden of fetching water - once a major reason for absenteeism among girls - has significantly reduced due to household-level tap water access."***

Figure 17: Water Conservation Awareness Session in school | *Source: Aga Khan Foundation*

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Access to water is helping villages become more climate-resilient. It provides the foundation for people to adapt to climate challenges without abandoning their homes.

Promoting Social Equity and Inclusion under JJM

The rural water supply initiative has emerged as a powerful instrument for advancing social equity and inclusion, aligning with the larger goals of Jal Jeevan Mission (JJM). By ensuring universal and equal access to tap water, the initiative has helped dismantle long-standing social hierarchies and water-based discrimination.

Households from Scheduled Castes, Scheduled Tribes, and economically weaker sections—who were once dependent on wealthier families for water—now enjoy equal access and autonomy. The appointment of women pump operators, active involvement of Ward Implementation and Management Committees (WIMCs), and a strong focus on community ownership have ensured participatory governance. This inclusive model has empowered women, built leadership capacities among the marginalized, and fostered a sense of dignity and equality in everyday life.

Community Participation and Local Leadership

One of the key reasons behind the success of the Har Ghar Nal Ka Jal scheme is the role of local communities. WIMCs and Women pump operators are actively involved in managing water supply systems.

> Md. Mashuk Alam, Ward Member, Ward No.9, Gram Panchayat Bhusaula Danapur, Block Phulwarisharif in Patna district, explained:
>
> ***"WIMC manage everything now. Earlier, we were dependent on the department for any minor repair works. Now, we decide, collect money, and get work done ourselves."***

They collect monthly user fees, carry out minor repairs, and ensure cleanliness of the water sources.

This community ownership has not only made the systems more sustainable but has also increased the confidence and leadership skills among the rural population.

Health, Environment, and Water Quality

Access to safe drinking water has significantly reduced the incidence of water-borne diseases like diarrhea, typhoid, and skin infections. In some blocks, communities are trained to use Field Testing Kits (FTKs) to regularly monitor water quality. When contamination is detected, they coordinate with Public Health Departments and NABL-accredited labs for corrective action.

Linking water testing labs with environmental monitoring is becoming a key strategy for protecting both human health and the ecosystem. It also creates awareness among villagers about the relationship between land use, pollution, and water quality.

Figure 18: Meeting of WIMC members chaired by Md. Mashuk Alam, focused on discussing the operation and maintenance of drinking water supply schemes | *Source: Aga Khan Foundation*

Figure 19: Community awareness activities by AKF team members | Source: Aga Khan Foundation

Water, Culture, and Psychological Well-being

In rural Bihar, water is more than a resource—it is a part of culture, religion, and social life. When water becomes unavailable, these traditional practices start disappearing, leading to emotional loss and psychological suffering. Har Ghar Nal Ka Jal has helped in restoring these connections. People can now perform rituals, festivals, and social gatherings with ease. This has brought joy and a renewed sense of belonging among villagers.

Moreover, poster competition, discussion and essay competition in schools and awareness campaigns through folk media are also spreading knowledge about the importance of water conservation and environmental protection. Rural population are being engaged in village-level activities that promote sustainable living. The Aga Khan Foundation is playing a key role in this process by providing technical support, facilitating community engagement, and building local capacities to ensure that these awareness initiatives lead to long-term behavioural change. Through its integrated approach, the Foundation is helping rural communities become more informed, empowered, and resilient in the face of growing environmental and climate-related challenges.

Conclusion

This initiative has shown that access to water is not just about infrastructure—it is about dignity, health, emotional well-being, and cultural identity. In water-scarce villages of Bihar, it has helped address solastalgia, reduced climate-driven migration, and restored hope among people. With continued convergence with schemes like MGNREGA and stronger community engagement, this initiative can further strengthen climate resilience in rural areas. Water, environment, and life are deeply connected. Ensuring water security at the household level is a powerful step toward building sustainable and emotionally healthy rural communities.

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Figure 20: Sunita Devi, Pump Operator from Nawada, in discussion with a village resident about the drinking water supply scheme and the importance of safe water storage | Source: Aga Khan Foundation

From Contamination to Clean Water: The Journey of No. 1 Nimualatima

- **Sweet Talukdar,** District IEC Co-ordinator, Nalbari District, Assam

No. 1 Nimualatima, a remote village in the Nalbari district of Assam, has undergone a significant transformation in recent years with the implementation of Jal Jeevan Mission (JJM). Once grappling with acute challenges related to water quality and access, the village now benefits from a reliable and safe drinking water supply scheme that has significantly improved public health and the quality of life of its residents.

The turning point came in 2022, when No. 1 Nimualatima was brought under a Single-Village Scheme (SVS) as part of JJM. This initiative aimed to provide functional household tap

connections to every rural household, thereby reducing dependence on unsafe sources such as hand pumps. The official handing over of the water supply scheme on June 28, 2024, marked the beginning of a new chapter for the community.

Prior to this intervention, the village's primary source of drinking water was hand pumps, many of which delivered water with high iron content, resulting in an unpleasant metallic taste and reddish discoloration. The lack of proper platforms around these pumps often led to water stagnation, creating unhygienic conditions and contributing to bacteriological contamination. As a result, the community faced recurring outbreaks of waterborne illnesses, posing a serious threat to public health.

Figure 21: Nimualatima PWSS | *Source: Nalbari District, PHED Assam*

In the absence of formal water treatment facilities, villagers, especially women, relied on traditional purification methods such as sand filters. While widely used, these methods are often time-consuming and ineffective in eliminating harmful contaminants. The burden of

Name of the Scheme	No 1 Nimualatima PWSS
Scheme Type	New
Village	No 1 Nimualatima
Gram Panchayat	13 no ghograpar
Development Block	Borigog Banbhag Block
Total Household	284
Scheme Start to Construction	2022
Scheme Handover	2024
Active Water User Committee	Yes
Name Of the Swajalmitra	Minakshi Lahkar

fetching, filtering, and managing water largely fell on women, limiting their time for childcare, education, and income-generating activities, and further reinforcing gender-based disparities.

A critical component of JJM is ensuring that the supplied water meets quality standards as defined by BIS:10500. To achieve this, a Field Test Kit (FTK) women's group was constituted in the village. This group plays a pivotal role in regularly monitoring water quality and building community trust in the piped water system.

Alongside infrastructure development, significant emphasis was placed on community engagement and capacity building. The focus of their engagement has been to promote community-led water governance through awareness generation, participatory planning, and capacity enhancement. In No. 1 Nimualatima, the implementing team worked closely with the Water User Committee (WUC), providing structured training and continuous support to strengthen their ability to manage and maintain the village's water infrastructure. As a result, the WUC developed a strong sense of ownership and accountability, ensuring the long-term sustainability of the water supply scheme.

Today, No. 1 Nimualatima serves as a compelling example of how the convergence of infrastructure, community participation, and institutional support can bring about transformative change. The village's progress under JJM, underscores the potential of community-driven approaches in achieving safe and sustainable rural water supply systems.

This article highlights several interesting and inspiring initiatives undertaken by various members of the community, all aimed at contributing to the success of the Mission. These collective efforts reflect the community's strong commitment and active participation, showcasing how unity and local involvement can drive meaningful and sustainable change.

Active Water User Committee:

The Water User Committee (WUC) is actively led by its committed women members, under the able leadership of Sri. Harinath Lahkar, the president of the No. 1 Nimualatima Water Supply Scheme and a social activist. The committee has been regularly conducting meetings, ensuring timely monthly tariff collection, and ensuring prompt action is taken towards operational and maintenance issues. It also addresses community grievances through an innovative mechanism. The Water user committee has set up a group of women who do not just collect the monthly tariff but also act as a spoke in the wheel of grievance redressal as they regularly report any issues to the Water User Committee. The WUC immediately responds to the complaint by fixing it contributes to development activities in both the scheme and the village. WUC members maintain records efficiently and ensure the smooth functioning of the system.

Figure 22: Meeting of WUC members | *Source: Nalbari District, PHED Assam*

"The installation of the water supply has significantly reduced the hardships faced by the village women and saved them a great deal of time in their daily lives."

Mamani Deka
WUC/PRI member/FTK woman

Focus on Women's Empowerment:

The community members play a crucial role in the empowerment of women and in nurturing women's leadership. The Water User Committee has selected women to take leadership roles in managing and running the scheme.

There are three key indicators that reflect women's empowerment and leadership at the village level:

- **Active female leadership in the Water User Committee (WUC):** Women are not just members, but they take on leading roles, guiding the decision-making process related to water management.
- **Formation of an all-women subcommittee**: The Water User Committee has established a subcommittee responsible for collecting the monthly water tariff and maintaining records. This subcommittee consists of eight female members, showing trust in women's ability to manage finances and administration.

Figure 23: IEC messaging in and around water supply infrastructure | *Source: Nalbari District, PHED Assam*

- **Appointment of a female pump operator**: The Water User Committee has selected a woman to operate the water pump for the scheme. This not only challenges traditional gender roles but also highlights the growing acceptance of women in technical and operational roles.

Ensuring Adequate Water Supply with 100% FHTC Coverage

Nimualatima Village has achieved a significant milestone in water accessibility by providing 100% Functional Household Tap Connection (FHTC) coverage. A total of 149 households in the village flaunt an individual tap connection, ensuring regular and adequate supply of water to all residents. Beyond infrastructure, the community has also shown commendable awareness with regard to the proper use and conservation of water. Villagers actively monitored their water usage and promptly took necessary steps to address any issues related to leakage or wastage. This collective effort reflects the village's commitment to sustainable water management and responsible resource utilization.

Regular Monitoring of Water Quality by FTK Women's Group:

Water quality in the village is regularly monitored through the active involvement of the FTK (Field Testing Kit) Women's Group. Every month, the group conducts water quality testing using FTKs to detect any possible contamination in the water supply. Their timely and consistent efforts help ensure that the drinking water remains safe and free from harmful pollutants. This initiative not only safeguards public health but also empowers local women by involving them in an important aspect of community well-being and water resource management.

Today, No. 1 Nimualatima has emerged as a shining example for other villages to follow. Through the strength of collective action, active community participation, and the vital leadership of women, the village has achieved remarkable progress in water management and overall development. The journey of No 1 Nimualatima highlights how unity, awareness, and empowerment, especially of women, can bring about meaningful and sustainable change. It stands not just as a success story but as an inspiration for all those striving to build resilient and self-reliant rural communities.

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Har Ghar Jal
Jal Jeevan Mission

Drinking Water: An Interlinked Journey of Evolution, Depletion, and Sustainable Revival

- Chanchal Kumar Modi, NJJM

From Streams and Sacred Ponds to Piped Water: A Historical Connect Between Community, Source, and Nature

The relationship between drinking water and the environment is as old as human civilization itself. Across cultures and geographies, traditional societies evolved indigenous ways to harness, conserve, and share water resources in harmony with local ecosystems. Streams, rivers, ponds, stepwells, and rainwater harvesting structures were not just physical assets but also carried profound cultural and spiritual significance. Community-managed tanks and village ponds were common across ancient India, ensuring water security even in arid regions through collective effort and ecological prudence.

Villagers knew the catchment areas, seasonal flow patterns, and the sacredness of maintaining vegetation cover to keep springs alive. Sacred groves around water sources symbolized the community's unwritten covenant with nature — an understanding that human well-being was inseparable from environmental stewardship. Traditional water custodians — whether the '*panch*' in villages, local temple trusts, or indigenous water diviners — nurtured a sense of shared responsibility. This deep-rooted connection ensured that drinking water systems were resilient, adapted to local conditions, and sustained for generations.

However, this organic synergy began to weaken with rapid urbanization, population growth, and technological advances that gradually centralized and mechanized water supply systems.

Human Intervention and the Overexploitation of Drinking Water Resources

The 20th century witnessed an unprecedented push for modern piped water supply. While this transformation brought undeniable improvements in public health and convenience, it often ignored the carrying capacity of local ecosystems. As settlements expanded and industrial activity intensified, groundwater extraction soared, rivers were dammed and diverted, wetlands drained, and pollution of freshwater bodies became rampant.

The traditional wisdom of living within ecological limits gave way to a perception of water as an infinite commodity. Tube wells and borewells penetrated deeper aquifers, ignoring recharge rates. Urban stretch consumed catchment areas. Contaminants — both chemical and biological — infiltrated rivers and lakes, rendering once-pristine water sources unsafe.

Humans, through unsustainable agriculture, deforestation, indiscriminate waste disposal, and industrial effluents, have systematically undermined the very natural systems that sustain drinking water. The tragedy is not just ecological but social: marginalized communities and rural households often face acute scarcity and poor quality drinking water, despite being closest to natural sources.

Reimagining Drinking Water Management for Environmental Sustainability

Recognizing the intertwined fate of drinking water security and environmental health is now more critical than ever. The Jal Jeevan Mission (JJM) in India is an example of how governments can hinge back to principles of sustainability and community engagement. However, technology alone cannot revive depleted aquifers or restore polluted rivers. A holistic approach must guide operations and management.

- **Source Sustainability:** Local governments and communities must prioritize watershed management, afforestation, wetland restoration, and rainwater harvesting to recharge aquifers and rejuvenate springs. Scientific tools like hydrogeological mapping and participatory water budgeting should be mainstreamed.
- **Efficient Operations:** Piped water systems should minimize

wastage through leak detection, real-time monitoring, and energy-efficient pumps. Treatment plants must be designed to handle local contamination profiles without harming aquatic ecosystems downstream.

- **Nature-Based Solutions:** Urban areas can adopt green infrastructure — bio-swales, urban wetlands, and permeable surfaces — to manage stormwater and reduce runoff pollution. Rural landscapes need check dams, farm ponds, and contour trenches to retain rainwater and support drinking water supply.
- **Institutional Strengthening:** Village Water and Sanitation Committees (VWSCs), Panchayats, and District Water and Sanitation Missions (DWSMs) must be capacitated to plan, implement, and monitor drinking water schemes with an ecological lens.

Way Forward: A Strategy for a Healthy Connect Between Drinking Water and Environment

To secure safe and sustained drinking water for all, while maintaining ecological balance, the following strategy must guide policy and practice:

- **Integrate Source Sustainability into Planning**: Every drinking water scheme must have a robust Source Sustainability Plan. This involves scientific assessment of recharge zones, groundwater potential, and vulnerability mapping. Communities should be trained to develop and enforce local water security plans, which blend traditional knowledge with modern science.
- **Promote Community Ownership and Stewardship**: True sustainability demands that people reconnect with their water sources. Gram Sabhas should discuss water budgets, seasonal availability, and user responsibilities. Cultural revival of traditional water festivals or rituals can reinforce the value of clean and abundant sources. Incentivizing communities for good catchment management through Payment for Ecosystem Services (PES) can also be explored.
- **Build Capacity Across Governance Levels:** At the national and state level, training modules for engineers and planners must emphasize environmental safeguards. District officials should be equipped to handle inter-departmental convergence — aligning drinking water goals

with soil conservation, forest management, and agriculture. At the village level, VWSCs should receive practical training in operation, maintenance, leak detection, chlorination, and source monitoring.

- **Encourage Behavioral Change and Water Literacy**: Community awareness campaigns should highlight the link between individual behavior and collective water security. Educating households on rainwater harvesting, greywater reuse, and safe sanitation reduces stress on drinking water sources. School programs can nurture future custodians of water and environment.

- **Strengthen Monitoring and Adaptive Management**: Digital tools like Decision Support Systems (DSS), IoT sensors, and mobile-based citizen reporting can bridge gaps between ground realities and administrative action. Regular water quality testing by trained community volunteers ensures accountability and empowers villagers to demand timely corrective action.

- **Promote Climate Resilience**: Climate change intensifies water stress through erratic rainfall and extreme events. Drinking water management must incorporate climate risk assessments. Nature-based storage, drought-resistant crops, and flexible supply systems can buffer communities against shocks while protecting ecosystems.

Conclusion: Rebuilding the Sacred Covenant Between Water and Nature

The story of drinking water is ultimately the story of our relationship with nature. As we confront the twin crises of water scarcity and ecological degradation, the answer lies not merely in technology or funding but in reawakening a sense of collective responsibility.

A resilient future demands that communities become true custodians of their water sources, that governance systems embed sustainability at every level, and that operations respect the delicate balance between human need and ecological health. By marrying traditional wisdom with modern science, and by nurturing a culture of stewardship, we can secure safe drinking water for generations — not by conquering nature, but by living in harmony with it.

The journey ahead is not simple. It calls for sustained political commitment, cross-sectoral collaboration, and the unwavering participation of every household. But as the old proverb says, *"When we protect our water, water protects us." Let us honor this timeless truth and build a Sujalam Bharat — a water-secure, environmentally thriving India — together.*

Community led water governance: A transformation pioneered by women

- **Stuti Charan,** IAS, Chief Executive Officer, MD JJM, WASMO, Water Supply Department, Gujarat

Figure 24: SHG & Aanganvadi Worker Member training about O&M | *Source: WASMO Gujarat*

Under the Har Ghar Jal program of the Jal Jeevan Mission, all rural households in Gujarat have been provided with tap connections. To meet this target, in-village water supply schemes were completed and handed over to Gram Panchayats for operation and maintenance (O&M).

To enhance service delivery, the Government of India encouraged states to involve Self Help Groups (SHGs) and Primary Agricultural Credit Societies (PACS) in O&M, focusing on efficient service, timely repairs, regular water supply, and tax collection. In Gujarat, WASMO (Water Supply Department) undertook the task of implementing this initiative under the guidance of Principal Secretary of Water Supply, Gujarat.

Figure 25: Training of women on water quality using FTK | *Source: WASMO Gujarat*

205 training sessions organized for 10,255 SHG members, covering O&M, repairs, leak management, water tax collection, FTK use, and health implications of unsafe water. After the training MoUs were signed between Gram Panchayats and SHG for O&M work, total 75 SHGs have signed MoU and work started varied in scope like repair, water tax collection etc.

To streamline the efforts and providing guidance for PACS/SHGs/Pani Samitis women members in water supply scheme O&M, WASMO developed a comprehensive SOP / Guidelines covering implementation, role of stakeholder, repair and maintenance work, grievance management, scheme management, technical guidance and pumping or electrical work.

"Gender empowerment through water: Key efforts and initiatives undertaken by the Department include the following:"

- WASMO has introduced a performance-based incentive scheme for SHG/PACS, notified via GR No. BUD/102024/10779/Kh-3 dated 19/04/2025. Under this scheme, SHG or PACS engaged in O&M can receive annual incentives ranging from ₹30,000 to ₹50,000. The scheme is valid for two years.
- Training for 80 women bore operators at Block-level ITI centers in plumbing, electrical, and mechanical aspects.
- Village-level women operators were provided with handholding support and training at the water supply headworks."
- With a special focus on women in tribal areas, training sessions were organized, covering a total of 481 women Sarpanches, Pani Samiti, and VWSC members to strengthen their role in sustainable operation and maintenance (O&M)."
- 20581 women members covered in 29 exposure visits & 54 block/district workshops
- Awareness program conducted in 207 schools where 32598 students and teachers participated.
- FTK training was provided to 1,118 women, including SHG members, Anganwadi and ASHA workers in 72 villages.

Gujarat is also promoting women's involvement in water management through the 'Mukhya Mantri Mahila Pani Samiti Protsahan Yojana,' under which 120 Women Pani Samitis have been rewarded ₹50,000 annually based on their performance in tax collection and scheme management.

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Figure 26: Incentive cheque (Rs. 50,000) Given to Women pani samiti of Bharuch district | *Source: WASMO Gujarat*

From Thirst to Triumph: The Water Story of Pandui Village

- **Ashish Kumar Singh** & **Charu Shukla**, UP Jal Nigam, UNOPS Banda team

"Water is life", this isn't just a saying; it carries countless stories that reflect the collective sensitivity towards water. Water is a priceless heritage and resource for humanity, villages thrive or vanish because of it. Even migration patterns are deeply influenced by the availability and quality of water.

In the water stressed hilly region of Bundelkhand, under Barokhar Khurd development block, lies Pandui village of Pandui Gram Panchayat, home to 570 families and a population of around 3,200, of which 40% belong to Scheduled Castes. The primary occupations here are agriculture, livestock rearing, and labor.

Chandanpuri pond is the only public water body in the village, centrally located and serving as the sole rainwater harvesting unit of the Gram Panchayat. In recent years, with support from the Soil Conservation Department, farmers have built farm ponds under the Farm Pond Scheme.

Drinking water availability and quality have always been a serious challenge.

Figure 27: Ram Bharosi with her tap she received under JJM | *Source: District Consultant Banda*

Ram Bharosi, a member of the Village Water and Sanitation Committee (VWSC) and elected representative from Ward No. 4, says,

"Earlier, many wells were dug in the village, but all had salty water, suitable only for farming and animals. Around 100 years ago, people built a well outside the village which have sweet water. That sweet-water well helped the village, and was the main source of drinking water for everyone. Later, under a government program, 65 handpumps and 15 tube wells were installed, but getting clean water remained a challenge. Out of the 20 wells in the village, only 10 are still working."

Though the sweet-water well still exists, its distance from the village discourages regular use. The irregular and insufficient distribution of handpumps forced women to spend excessive time fetching water, often leading to disputes. Poor drainage systems caused contamination during monsoons, resulting in waterborne diseases. A significant portion of agricultural income was spent on medical treatment.

In 2021, tap water supply under the central flagship programme Jal Jeevan Mission accelerated water supply activities. Pandui village was included in the Amlikaur Gram Group Piped Water Scheme, covering 202 villages dependent on the Yamuna River. A VWSC was formed, a bank account opened, and with support from SWSM/UNOPS representatives, a Village Action Plan (VAP) was prepared. A Water Quality Monitoring Committee of five women was trained on water quality to test chemical and bacteriological contamination using FTKs. Thirteen technical personnel were identified, trained, and equipped with toolkits. Land was marked for an Overhead Tank (OHT) and Clear Water Reservoir (CWR), and underground pipelines were laid under the supervision of UP Jal Nigam and the District Water and Sanitation Mission.

The VWSC held regular meetings and, with UNOPS support, organized CLNOB (Community Leave No One Behind) activities to ensure inclusive participation. The women's water quality team conducted regular testing using Field Test Kits, especially before and after monsoon. Through CLASS (Community Led Action for Sanitary Surveillance) and IPC (Interpersonal Communication), they sensitized the community especially women about the health and economic impacts of contaminated water.

In June 2023, a team visit to a hamlet revealed two handpumps with fluoride-contaminated water, affecting 22 families and causing yellowing of children's teeth. The village head, Puran Lal Prajapati, reported the issue to the district administration. Lab tests confirmed fluoride contamination, and the handpumps were shut down. Despite attempts to drill new borewells, the rocky terrain proved challenging. Tanker supply was arranged but was insufficient, forcing families to rely on the contaminated source again. However, the under-construction piped water scheme brought new hope. In January 2024, the project was completed, providing clean, safe, regular, and sufficient drinking water to the entire village. The infrastructure included a 125-kilolitre overhead tank and a 100-kilolitre underground reservoir.

Today, Pandui is moving toward prosperity. The VWSC played a vital role in ensuring 100% household tap connections. Through water panchayat activities, they now promote responsible water use and discourage wastage. The committee has even drafted a bylaw imposing fines for misuse and honouring those who conserve.

Pandui has become a model for neighbouring villages. As the last village in the Amlikaur Gram Group Piped Water Scheme, it now leads Banda district toward becoming a water-secure and thriving region.

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Figure 28: Newly constructed overhead tank which is supplying water to people | *Source: District Consultant Banda*

Monsoon Session of Parliament: Questions related with Jal Jeevan Mission: Har Ghar Jal and Press Releases

Sr No	Topic	Date	Link/ QR code to access
1	FLUORIDE IN DRINKING WATER	28 Jul 2025	
2	EXTENSION OF JAL JEEVAN MISSION TILL 2028	28 Jul 2025	
3	IMPLEMENTATION OF HAR GHAR JAL SCHEME	24 Jul 2025	
4	CHALLENGES UNDER JAL JEEVAN MISSION	24 Jul 2025	
5	INSPECTION UNDER JAL JEEVAN MISSION	21 Jul 2025	
6	REVIEW OF JJM	21 Jul 2025	

Press Release is in descending order

"Walked Miles for Water. Now Runs for Dreams."

(A Journey from Burden to Dignity – with Jal Jeevan Mission)

- **Mr Vinay Harshwal,** Senior Consultant, SPM NIWAS

Five years old, tiny hands held tight
Water's weighty burden, daily fight
Miles walked, with calloused feet
Childhood lost on dusty street

Ten years old, school's iron gate
Thirst and absence - dreams must wait
Books closed tight, minds left dry
Hope wilted beneath a blazing sky

Fifteen now, menstruation's tide
With whispered shame, I try to hide
Water's need, so private, so deep
Through silent pain, I do not weep

Twenty years old, a bride, a round belly
Six months in, still walk the valley
Fetching water, and carrying life too
Worn, exhausted - yet pushing through

Twenty-five, child in belly sways
Another in arms, same weary ways
She clutches tight, just like I did
The past reborn in a girl so small, so hid

Alas! Same, painful sight I see
Five-year-old mine, fetching water, just like me
Schoolbooks dropped, the pattern set
My own lost youth, I can't forget

Years passed by, the road remained,
No sign of change, just loss ingrained

But then at thirty, a light broke through,
Jal Jeevan Mission came into view.
A tap was laid inside my house, my door
No morning march, no pain to store.

No longer did I see that sight
No five-year-olds bowed to water's plight.
Books now stayed in her little hand,
She walked to school, not across the land.
The pattern cracked, the past undone,
A battle lost, but a brutal invisible war won.

Thirty-five, and waters flow free,
Jal Jeevan Mission brings new life to me.
No more burdened steps at dawn,
No more dreams forever gone.

My daughter's hands are clean and dry,
No need to chase a distant sky.
She writes, she learns, she laughs with grace,
Not a pot, but a pencil she now holds in place.

Let every tap that sings and flows
Tell stories every mother knows—
Of chains unlinked, of voices raised,
of futures earned and girls now praised.
Of lives once parched, now fully seen,
rising strong on hope and dream.

"जहाँ नल बहता है, वहाँ ज़िंदगी मुस्कुराती है।"

(सम्मान की ओर एक यात्रा – जल जीवन मिशन के संग)

पाँच बरस की, नन्हीं मुट्ठी में भार,
पानी का बोझ, हर दिन की मार।
नंगे पाँवों, मीलों राह,
धूल में खोया बचपन का चाह।

दस की हुई, स्कूल की चौखट न देखी,
प्यास थी भारी, किताबें रखीं।
सपने सूख गए, मन भी थमा,
तपते सूरज में ग़ुम हुआ उजाला।

पंद्रह की उम्र में बदली थी रीत,
फिर भी चली मैं मीलों, पानी की प्रीत।
मासिक की पीड़ा, नज़रों से बचाई,
पानी की खातिर, हर पीड़ा दबाई।

बीस की दहलीज़ पर, दुल्हन बनी,
गोद में जीवन, पर चाल वही।
एक हाथ में घड़ा, दूजे में साँस,
थकी थी बहुत, पर ना रुका प्रयास।

पच्चीस पर एक और जनम का भार,
गोद में बच्चा, आँखों में ज्वार।
उसकी मुट्ठी भी वैसे ही जकड़ी,
जैसे मैंने कभी ज़िंदगी थी पकड़ी।

वर्ष 2015, शौचालय से लौटी खोई आस,
बढ़ी राहत, बढ़ा स्वाभिमान हर सांस।
अब नहीं जाना खेतों की ओर,
रात की चुप्पी में ना डर का शोर।

फिर वही मंज़र, वही पीड़ा की रेखा,
अपनी पाँच साल की बच्ची,
पानी के पीछे देखा।
गिर गई किताबें, बिखर गए ख्वाब,
बचपन की परछाईं घर आई बेहिसाब।

शौच की चिंता अब नहीं सताती,
भीड़ में नज़रों से घबराहट न आती।
पानी की राह में अब भी है दूरी,
सूखी बाल्टी, आँखों में नमी पूरी।

गरिमा तो लौटी, पर अधूरा अरमान,
सूखी हांडी, बिन पानी हर सामान।
साल बीते, रास्ता वही,
न कोई नई सुबह, ना ही रोशनी।

पर तीस की होते जगी एक किरण,
वर्ष 2020, जल जीवन मिशन बना
जीवन का चरण।

नल लगा दरवाज़े पर, जीवन झूम उठा,
भोर की दौड़ अब सपना बन चुका।
झुकी नज़रों में अब झुकाव नहीं,
पानी के बोझ का अब हिसाब नहीं।

किताबें अब उसकी हथेली में बसीं,
वो स्कूल चली, उम्मीदें चलीं।
टूटी बेड़ियाँ, बदली कहानी,
अब जीता जीवन, हारी पीढ़ी।"

पैंतीस की अब मुस्कान है गहरी,
वर्ष 2025, नल से बहती है
ज़िंदगी की धारा सुनहरी।
ना बोझ, ना थकन, ना रोती सुबहें,
अब सिर्फ़ सपनों की खुलती राहें।

अब ना खेत, ना अंधेरे की राह,
घर के आँगन में जल की है चाह।
शौचालय भी अब है अपने पास,
स्वच्छ जीवन का मिला हमें एहसास।

बेटी के हाथ अब पेन से भरे,
किसी घड़े से नहीं, वो उजालों से घिरे।
अब लिखती है, गुनगुनाती है वो,
ना दर्द, ना बोझ, बस उड़ान है जो।

हर नल जो गीत सुनाता है,
हर माँ की दास्ताँ दोहराता है—
बंधन टूटे, आवाज़ें उठीं,
बेटियाँ अब खुले गगन में झूमें।

जो ज़िंदगी कभी प्यास में सिसकी, थी गुम,
जल जीवन मिशन से चमकी,

आई उसमें रौशनी और उमंग।

Visit of MP's of Nepal

Shri Ashok K. K. Meena, Secretary, Department of Drinking Water and Sanitation (DDWS), chaired a meeting with a delegation of Members of Parliament from Nepal at the CGO Complex, New Delhi on July 29, 2025. The purpose of the meeting was to brief the delegation on the Government of India's two flagship missions — Swachh Bharat Mission (Grameen) and Jal Jeevan Mission.

During the meeting, Joint Secretary (Water) welcomed the Nepalese delegation, and a comprehensive overview of both missions was done by Additional Secretary & Mission Director, DDWS; on behalf of the Government of India. Representatives from the Ministry of External Affairs (MEA) and officials from the department were also present.

Secretary DDWS highlighted the significance of both missions, their operational frameworks, provisions made under the 15th Finance Commission, progress achieved so far, and the vital role of communities in program implementation. He emphasized the importance of strengthening India-Nepal relations through infrastructure development, cross-learning, knowledge exchange, capacity-building initiatives, etc to support Nepal in achieving the targets of Sustainable Development Goal 6 (SDG-6).

Figure 29: Secretary, DDWS highlighting significance of JJM & SBM-G to Nepal MPs | *Source:NJJM*

Figure 30: In frame DDWS and Nepal team | *Source: NJJM*

Glimpses of Jal Jeevan Samvad with DM/ DCs

Figure 31: AS&MD-DDWS chaired a meeting to review of implementation of #JalJeevanMission in PM-JANMAN villages on 25.07.2025 through VC with State PHED/ Rural Water Supply and Tribal Welfare Department.

Figure 32: In continuation of #JJMSamvad series, AS&MD-NJJM chaired 24th meeting with DMs/ DCs of 20 districts of #UttarPradesh, #Sikkim, D&D and D&NH, and #Goa held on 24.07.2025 via VC to review the progress and implementation of the #JalJeevanMission

Figure 33: AS&MD-NJJM chaired 23rd #JJMSamvad meeting with DMs/ DCs of 25 districts of #Rajasthan and #TamiNadu, held on 24.07.2025 via VC to review the progress and implementation of the #JalJeevanMission.

Har Ghar Jal
Jal Jeevan Mission

Jal Jeevan Samvad

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