Jal Jeevan Samvad

November | Volume 6 | Issue 11 | Year 2025

Har Ghar Jal
Jal Jeevan Mission

Building Partnership
Changing Lives

Theme: Peyjal Samvad
A Cross-Learning &
District/ Village Dialogues Series

Articles by Deputy Advisor, NJM
and DC/DMs of 5 districts

Contents

Hon'ble President of India on Jal Jeevan Mission.....1

Minister of Jal Shakti on Jal Jeevan Mission.....2

Minister of State, Jal Shakti on Jal Jeevan Mission.....3

Foreword by the Secretary, DDWS 4

Note from the desk of Additional Secretary & Mission Director.....5

JJM Progress

Progressive coverage - Functional Household Tap Connection (FHTC).....6

Comparative FHTC coverage status of States/ Uts.....6

Articles

Sujalam Bharat: Strengthening Rural Water Systems From infrastructure creation to integrated, sustainable service delivery
- *Shailika Sinha, NJJM & Lopamudra Panda, NJJM*.....8

The RWPF Workshop on Communication & PRA Tools for Jan Bhagidari: A Strategic Inflection in Rural Water Governance
- *Shailika Sinha, NJJM* 13

Sujal Gram samvad: A Multilingual Dialogue on Rural Water Supply
- *Lopamudra Panda, NJJM*.....23

3rd District Collectors' Peyjal Samvad, Strengthening Rural Water Governance Through Grassroots Leadership
- *Lopamudra Panda, NJJM*.....39

Commissioning and Handover Protocol for Rural Water Supply Schemes under Jal Jeevan Mission Transforming infrastructure into reliable, people-owned services in rural India
- *Sumit Priyadarshi, Deputy Advisor, NJJM*.....44

Matho Water Supply Scheme: A Freeze-Proof, Equitable and Innovative Model under Jal Jeevan Mission in Leh
- *Romil Singh Donk, District Magistrate/ Deputy Commissioner Leh District, Ladakh*.....49

How Drinking Water Supply has Transformed Rural Life in Mizoram Under JJM
- *K. Laltlawmlova, Deputy Commissioner, Mamit District, Mizoram* 55

SAS Nagar, Punjab Sets a Benchmark in Drinking Water Security
- *Komal Mittal, Deputy Commissioner, SAS Nagar District, Punjab*.....60

From Grassroots to Forefront Innovations in Rural Drinking Water Delivery in Alluri Sitharama Raju (ASR)
- *A. S. Dinesh Kumar, Collector & District Magistrate, Alluri Sitharama Raju District, Andhra Pradesh*.....62

The Nexus of Decentralization and Sustainable Water Governance: Lessons from Ri-Bhoi's Implementation of the Jal Jeevan Mission
- *Abhilash Baranwal, Deputy Commissioner & Chairman DWSM, Ri-Bhoi District, Meghalaya*.....67

Meetings and Workshops 71

Field Visit.....72

Editor: **Yogendra Kumar Singh,** Director, NJJM

Editorial Team: Chanchal Kumar Modi, Lopamudra Panda, Amit Kumar Ranjan, Arpan De Sarkar, Shailika Sinha

Design: Arif Khan

Edition: 62nd (November 2025)

Publisher: **Arun Kumar,** Under Secretary (DDWS)
National Jal Jeevan Mission, Ministry of Jal Shakti, New Delhi - 110 003
E-mail: rnd-ddws@gov.in

Hon'ble President of India on Jal Jeevan Mission

Smt. Droupadi Murmu
President of India

मुझे ये जान कर प्रसन्नता हुई है की पिछले 6 वर्षों के दौरान, नल से जल की सुविधा वाले ग्रामीण घरों की संख्या 81% तक पहुंच गई है। यह बदलाव जल जीवन मिशन के तहत चलाए जा रहे हर घर जल अभियान से संभव हो चुका है।

- महामहिम राष्ट्रपति महोदया, राष्ट्रीय जल पुरुस्कार कार्यक्रम के दौरान
18th November, 2025

Minister of Jal Shakti on Jal Jeevan Mission

C R Patil
Minister of Jal Shakti

माननीय प्रधानमंत्री सर के दूरदर्शी नेतृत्व में जल जीवन मिशन के अंतर्गत गांव और पंचायत स्तर पर जल आपूर्ति की बेहतर निगरानी और सुदृढ़ निर्णय-प्रणाली के लिए बड़े सुधार किए जा रहे हैं।

डिसिशन सपोर्ट सिस्टम System (DSS) के माध्यम से अब भू-जल स्तर, जल स्रोत, वर्षा और भौगोलिक संरचनाओं पर आधारित जल उपलब्धता व उपयोग

सभी का एक ही प्लेटफॉर्म पर एकीकृत डेटा-One Water, One Data उपलब्ध है।

इससे जल से जुड़ी योजनाओं का निर्माण सही डेटा के आधार पर, समस्याओं की तेज पहचान, जल स्रोतों की बेहतर सुरक्षा, और 'हर घर जल' को टिकाऊ बनाए रखने में मदद मिल रही है।

- Post mentioned on X handle
28th November, 2025

Minister of State, Jal Shakti on Jal Jeevan Mission

V. Somanna
Minister of State for Jal Shakti

I am confident that with collective effort, scientific management, and sustainable practices, we will make strong progress towards building a water-secure India.

- Post mentioned on X handle
25th November, 2025

Foreword

November has been a month that strengthened our resolve and sharpened our purpose. As we advance on this transformative journey, it becomes evident that meaningful change demands conviction, continuity, and the ability to reimagine possibilities with clarity and courage.

Throughout the month, a series of workshops, dialogues, and field engagements reaffirmed the foundational philosophy with which the Jal Jeevan Mission was conceived – a people-led, community-owned movement built from the ground up. The rollout of Sujal Gram Samvad, conducted in local languages and rooted in local contexts, has emerged as a strong platform for authentic dialogue. It is enabling communities to engage more deeply, build ownership, and participate in shaping their own water-secure futures.

Our conversations on source sustainability, operations and maintenance, and Jan Bhagidari underscore a shared understanding: that long-term water security can only be achieved when communities, institutions, and systems move in unison. The commitment displayed by engineers, village water and sanitation committees, local leaders, and frontline teams reflects the resilience and spirit that have always propelled India's development story.

It takes unwavering resolve to challenge established norms, navigate complexity, overcome setbacks, and demonstrate that a nation as diverse as ours can innovate, adapt, and lead with equity at its core.

The progress we see today is a direct outcome of this resolve. Every dialogue convened, every capacity strengthened, and every community mobilized brings us closer to realising Har Ghar Jal, not merely as an infrastructure milestone, but as a sustained, community-driven achievement.

As we move forward, the learnings and momentum of this month will continue to guide us. The Jal Jeevan Mission has evolved into a Jan Andolan, powered by the participation and leadership of rural communities. Its success will ultimately be measured in the dignity, health, and resilience it brings to every rural household.

Let us continue on this path with commitment and compassion, ensuring that safe, reliable drinking water becomes a lasting promise fulfilled for generations to come.

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

Note from the desk of

Additional Secretary & Mission Director...

In many ways, the past month has reaffirmed how powerful meaningful engagement can be. The third edition of the District Collectors' Peyjal Samvad, and the first-ever Sujal Gram Samvad, marked a significant milestone for Jal Jeevan Mission. These conversations, held in simple, familiar language, helped us connect closely with the communities we serve. Listening to communities narrate their journey toward safe drinking water, in language of their own hearts and region, reaffirmed that true transformation begins with dialogue.

Another key moment this month was the one-day workshop on "Communication and PRA Tools to Promote Community Engagement (Jan-Bhagidari)" under the Mission. The workshop has called Participatory Rural Appraisal (PRA) representation of Rural WaSH Partners Forum, and in-charge of IEC in State/UTs. This workshop saw the unveiling of several critical initiatives – a Decision Support System (DSS) for source sustainability, a Panchayat Dashboard under JJM, a new community radio programme, and importantly, the release of the hand-book titled *"Jan-Bhagidari se Har Ghar Jal"*.

The handbook offers a comprehensive guide on commissioning and handing over for Gram Panchayats, Village Water & Sanitation Committees (VWSCs) and self-help groups on community-managed piped water systems, empowering them to take ownership and manage water supply sustainably. This is the juncture where engineering meets empathy, where pipelines cease to be inert lines beneath the earth and become systems in the care of communities. Commissioning is not the end of construction, it is the beginning of trust. Similarly, Handing over signifies the structured transfer of responsibility, ensuring that communities are equipped and empowered to manage and sustain the system effectively. It is here that sustainability takes root.

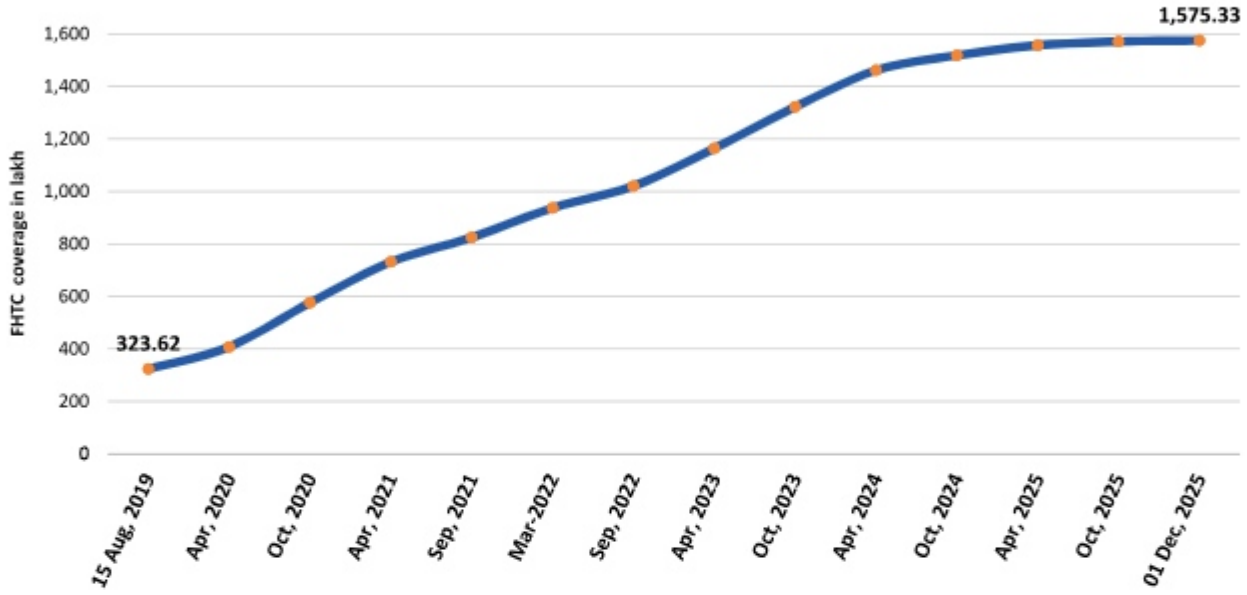
Parallel to these engagements, the Sujalam Bharat Summit served as yet another catalyst – a platform for leaders, practitioners, and stakeholders to reaffirm their shared commitment to a water-secure rural India. Change does not happen by accident. It emerges when intention is clear, action is aligned, and purpose remains unwavering.

Today, Jal Jeevan Mission stands as one of the Government's most ambitious flagship initiatives, and its progress is both inspiring and instructive. From a vision that once seemed distant, we have now reached 81% coverage of rural households with tap water connections. This achievement has been possible because the Mission has steadily evolved – from focusing on infrastructure creation to emphasizing service delivery, sustainability, and citizen-centric governance. As we shift from building systems to ensuring those systems serve people reliably, every village, every gram panchayat, and every frontline worker becomes a crucial partner in shaping this journey. The commitment of communities, the dedication of field teams, and the resolve of state and district administrations continue to drive the Mission forward.

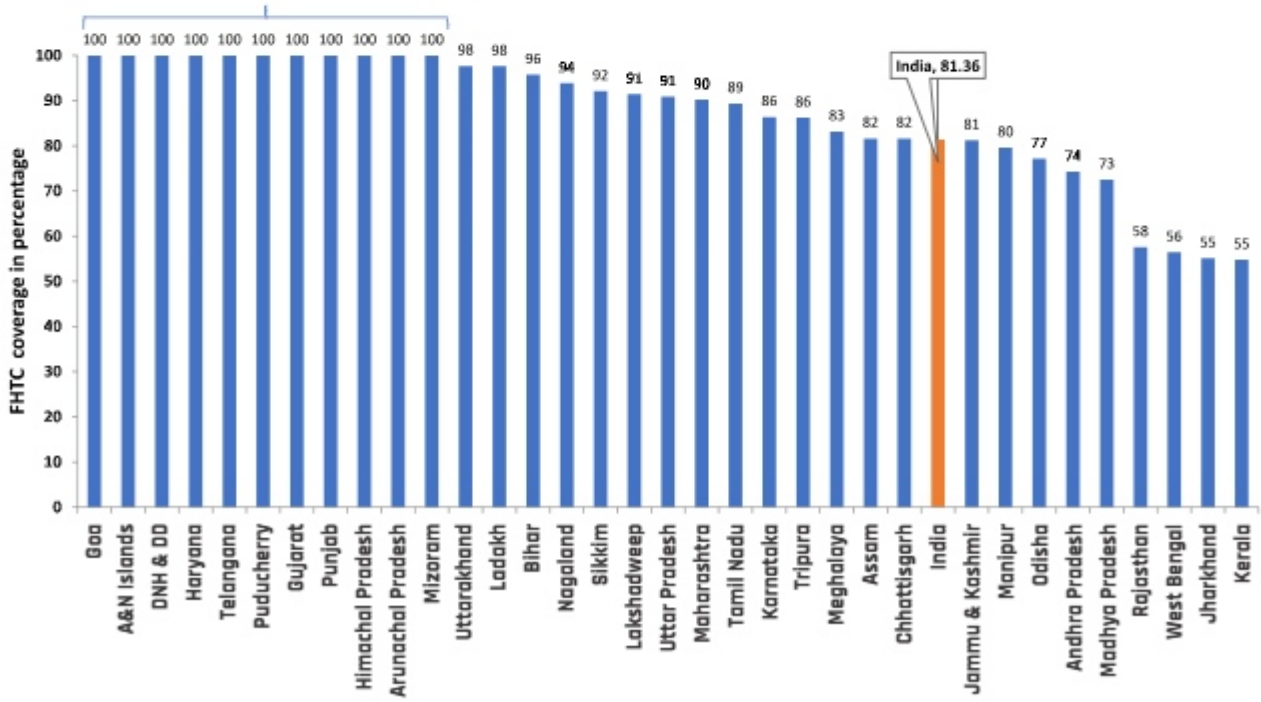
We move forward driven by purpose, guided by the belief that every rural household has the right to clean drinking water, and confident that together, we can make this vision a lasting reality.

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

Progressive coverage - Functional Household Tap Connection (FHTC) (as on 30.11.2025)



Comparative FHTC coverage status of States/ UTs (as on 30.11.2025)



As on 30th November, 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
19,36,20,912	3,23,62,838 (16.71%)	+2,505 15,75,32,772 (81.36%)

Households provided with tap water connection since launch of the Mission

12,51,69,934 (77.62%)

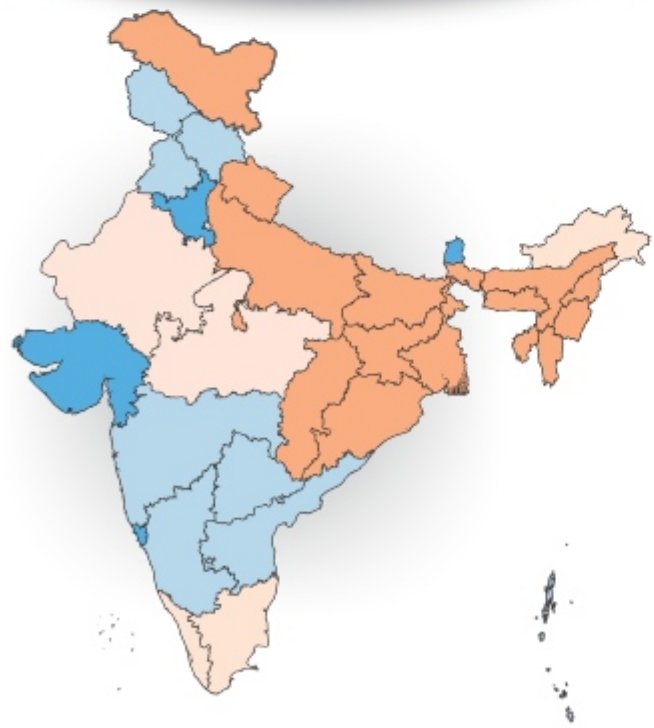
Har Ghar Jal [100% HHs with tap water connections]

100% FHTC States/ UTs

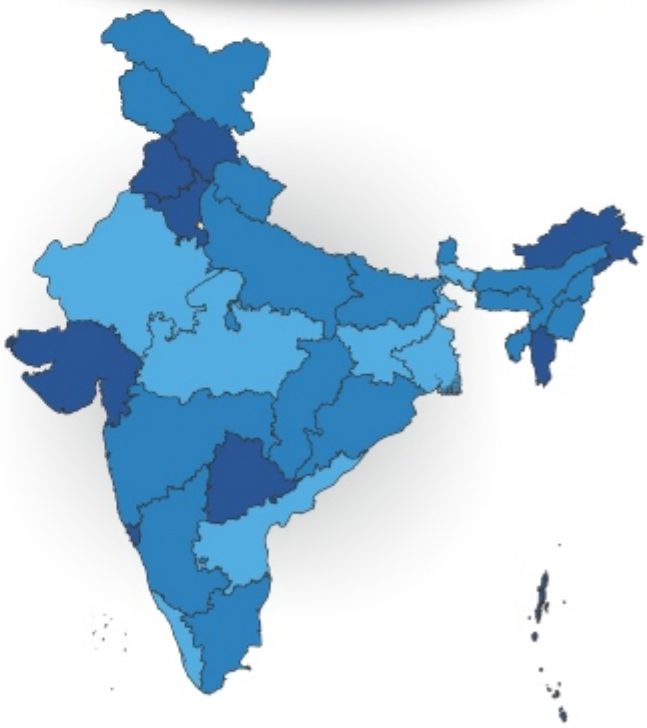
Goa, A & N Islands, Puducherry, D&NH and D&D, Arunachal Pradesh, Haryana, Punjab, Telangana, Mizoram, Himachal Pradesh, Gujarat

100% FHTC Districts	100% FHTC Blocks	100% FHTC Panchayats	100% FHTC Villages
192	1,916	1,26,036	2,68,214

As on 15th August, 2019



As on 30th November 2025



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

Sujalam Bharat: Strengthening Rural Water Systems

From infrastructure creation to integrated, sustainable service delivery

– Shailika Sinha, N.J.J.M & Lopamudra Panda, NPMU-N.J.J.M

Sujalam Bharat represents the next stage in India's rural water journey. It captures how the country is moving from building infrastructure to ensuring daily, dependable water services for every citizen. What began as a nationwide effort to expand access has now grown into a comprehensive approach that links community participation, data-driven planning and long-term sustainability. This also calls for sharper implementation strategies across source security, O&M, technology integration, water conservation and community-led governance to ensure services remain reliable over time.

Figure 1: Hon'ble Minister of Jal Shakti Shri C. R. Patil delivering his inaugural address | Source: N.J.J.M

Figure 2: Hon'ble Minister of Jal Shakti, Shri C. R. Patil, leading the Jal Kalash ceremony at the Vision for Sujalam Bharat Summit | Source: N.J.J.M

At the **"Vision for Sujalam Bharat" Summit** held on 28-29 November 2025, the Department of Drinking Water & Sanitation (DDWS) presented this evolution clearly. The discussions held emphasised a decisive shift: from departmental delivery to **citizen-centric governance**, where local institutions, field insights and village-generated data shape the system. The Summit's recommendations underscored that sustainability must be operationalised through clear policies, measurable functionality outcomes, transparent disclosure, and strong convergence across schemes and ministries.

Leadership, Commitment and a Shared Vision

The Summit was inaugurated by the **Hon'ble Minister of Jal Shakti, Shri C.**

R. Patil, who led the symbolic **Jal Kalash Ceremony** with Hon'ble Ministers of State **Shri V. Somanna** and **Dr. Raj Bhushan Choudhary**. Senior officials, state representatives and partner institutions joined the ceremony, collectively reaffirming India's commitment to water security and climate resilience.

Minister emphasised that **Jal Sanchay Jan Bhagidari** must evolve into a **Jan Andolan** – a people's movement for water security. He highlighted that long-term sustainability requires community participation, convergence with **MGNREGA**, watershed programmes and other flagship schemes, and the continued strengthening of JJM and SBM(G). This whole-of-government approach also aligns with the Summit's cross-cutting convergence priorities: integrating technology, strengthening inter-ministerial coordination, deepening community engagement, ensuring financial sustainability and scaling capacity building with behaviour change.

Secretary DDWS Sets the Direction

Shri Ashok K. K. Meena, Secretary, DDWS, defining Sujalam Bharat within India's broader **Amrit Kaal** vision, stated Sujalam as assurance of **safe, affordable and reliable water every day**.

Drawing on the Prime Minister's direction at the 4th National Conference of Chief Secretaries, he urged **evidence-based decision-making, cooperative federalism and field-driven problem solving** as the Summit's guiding principles. He underlined the need to treat **'Water as One Data'**, integrating village-level observations, hydrological datasets, groundwater information and digital service records into a single, interoperable platform. **"The next phase of work must shift from one-off infrastructure delivery to continuous service assurance, built on decentralisation, community ownership, behaviour change and strong, data-backed decision making,"** he said. This direction directly supports the Summit's recommendation to unify water data systems for real-time, coordinated decision-making while mainstreaming climate variability and disaster risk mitigation in water-sector planning.

Shri Ashok K.K. Meena highlighted that the Sujalam Bharat Framework is the outcome of an **extensive national consultative process**, including six thematic workshops and inputs from more than **2,800 stakeholders** across States, PRIs, VWSCs, engineers, SHGs, NGOs and development partners, reflecting a strong collective commitment to water security. He stressed that India's long-term water resilience must be built from the grassroots through decentralisation, community ownership, behaviour change and robust, data-backed decision-making. Underscoring the principle that **"the smaller the loop, the lower the carbon footprint – and the better the management of the system,"** he noted that local sourcing, local treatment, local reuse and local accountability lead to more efficient, climate-resilient and community-owned water services. The consultations also brought forward implementation priorities that go beyond drinking water supply to broader water security outcomes: rejuvenation of rivers and springs, greywater management and reuse, conservation and recharge and technology-led governance linked to community institutions.

Figure 3: Shri Ashok K. K. Meena, Secretary, DDWS, outlining the Sujalam Bharat framework | Source: NJJM

Over the years, DDWS has built extensive experience in rural water supply, from creating infrastructure to establishing village institutions such as VWSCs (Pani Samitis). Sujalam Bharat builds on this foundation by strengthening the following:

- empowered local institutions
- sustainable financing and O&M practices
- climate-resilient assets
- and secured water sources supported by convergence with programmes like MGNREGA and watershed development.

These pillars reflect a system that is not static, but growing. To make these pillars actionable, the Summit further recommended structured O&M policies, integrated functionality assessment with citizen feedback and

Figure 4: A presentation on Sujalam Bharat Database by AS&MD-N.J.J.M, Shri Kamal Kishore Soan | Source: N.J.J.M

public disclosure, stronger skilling pathways and systematic mapping of schemes and assets on the Sujalam Bharat platform using Sujal Gaon IDs for accountability.

The Themes of the Summit

The summit covered thematic sessions on six core themes, namely:

i. Rejuvenation of Rivers and Springs

ii. Sustainability of Drinking Water

iii. Technology for Efficient Water Management

iv. Water Conservation and Recharge

v. Greywater Management and Reuse

vi. Community & Institutional Engagement for Behaviour Change

Across these themes, the Summit emphasised that water security depends on integrated planning: river basin approaches linked with groundwater management, enforceable conservation measures such as rooftop rainwater harvesting and circular water pathways through treated-water reuse and greywater management aligned with local livelihoods and agriculture.

Figure 5: Smt. Swati Meena Naik, Joint Secretary, National Jal Jeevan Mission, elaborating on drinking water sustainability | Source: N.J.J.M

Sustainability of Drinking Water

The second thematic session, **"Sustainability of Drinking Water,"** was led by **Shri Kamal Kishore Soan, Additional Secretary and Mission Director, National Jal Jeevan Mission**, who presented DDWS' operational architecture for sustainable drinking water. He outlined the technical, digital and institutional building blocks that will convert village observations into national intelligence and community ownership into durable, long-term services.

Smt. Swati Meena Naik, Joint Secretary, National Jal Jeevan Mission, introduced the **four-pillar sustainability framework**, focusing on:

1. **Institutions** – strengthening VWSCs, PRIs and District Technical Units;
2. **Finances** – O&M policies, tariffs and sustainable funding models;
3. **Infrastructure Resilience** – long-term asset viability and climate-resilient systems;
4. **Source Security** – groundwater recharge planning, source protection and convergence with complementary programmes.

She emphasised the need to shift from departmental-led approaches to **citizen-centric systems**, with community-owned water service utilities at the heart of the Sujalam Bharat vision.

In the implementation strategy discussed at the Summit, a key next step is to notify and operationalise **structured O&M policies** across States/UTs and firm up State Sustainability Frameworks with aligned action plans for resilient, reliable service delivery. The recommendations also called for **integrated functionality assessment systems**

The session also featured field and state perspectives, illustrating the practical challenges and solutions across regions:

- **Ms. Isha Kalia**, JS, MoHUA (AMRUT) – urban-rural water management insights.
- **Ms. Preeti**, Addl. Mission Director, PHED Assam – source sustainability and resilient systems.
- **Shri David Chaturvedi**, Joint Director, PHED Bihar – service-level improvements and O&M strategies.
- **Shri D. K. Singh**, Chief Engineer, UP Jal Nigam (Rural) – infrastructure resilience approaches.
- **Ms. Rashmi N.**, PDO, Hiremalali GP, Karnataka and **Shri Vijinaik**, VWSC President, Hiremalali GP, Davanagere District, Karnataka – community-led solutions and local water governance innovations, acknowledged by Hon'ble MoS Shri V. Somanna.

These presentations collectively highlighted best practices in groundwater management, greywater reuse, digital monitoring, and community-driven O&M.

Figure 6-9: Presentations by delegates at Sujalam Bharat workshop | Source: NJJM

that incorporate citizen feedback, with periodic public disclosure of service outcomes to strengthen accountability and trust.

The discussions further highlighted the need to **align National Water Policy and State regulatory frameworks for long-term drinking water security planning,** while building institutional capacity through structured skilling programs to ensure a capable local O&M workforce across villages and GP clusters.

Sujalam Bharat Database and Sujal Gaon ID

The Summit also highlighted Sujalam Bharat Database, along with a unique Sujal Gaon ID for every rural habitation. This is basically a full, transparent record of each village's water system – where the water comes from, how reliable it is, how the infrastructure is holding up, water quality reports, citizen feedback, everything.

For the first time, rural water systems will have one unified, national registry. This means problems can be spotted faster, and support can be targeted better. As part of the Way Forward, the Summit recommended **mapping all schemes and assets** on the **Sujalam Bharat platform with Sujal Gaon IDs** to strengthen trans-

Figure 10: Hon'ble MoS Shri V. Somanna and Hon'ble MoS Shri Raj Bhushan Chaoudhary with DDWS officials and other delegates | Source: N.J.J.M

parency, traceability and accountability across the full lifecycle of rural water services.

To support planning, DDWS has also developed a unified **Decision Support System (DSS)** that brings together local groundwater observations, seasonal data, and scientific datasets from CGWB, NWIC, Agriculture, and BISAG-N. The idea is simple: planning based on facts, not guesses. This directly reflects the recommendation to unify water data systems for real-time, coordinated decision making, supported by AI, GIS and data analytics for predictive planning and targeted interventions.

Building Capacity Where It Matters: In Villages

DDWS aims to expand training programmes like Nal Jal Mitras, trainings and internships so that villages have their own technicians who can keep systems running. A village-level self-check system called Jal Seva Ankalan will also become routine. Villages will evaluate their own scheme performance, water quality and user satisfaction. These results will go straight into dashboards and the Sujalam Bharat Database. In short: villages will not just receive services, they will help run them.

The Summit's cross-cutting recommendations further proposed structured training programs with certifications, exposure visits and strengthened IEC and behaviour change communication to build lasting community ownership. A dedicated Skill Council on Water was also proposed to help create a trained workforce for O&M of water efficiency and rainwater harvesting systems across rural and peri-urban contexts.

Digital Governance: Transparency, Traceability and Better Decision-Making

DDWS is building a unified digital governance system that strengthens transparency and improves service delivery across every level of rural water management. Through the **Panchayat Dashboard**, Gram Panchayats and VWSCs can now view real-time information on household coverage, supply hours, asset condition, O&M activities and water quality results, helping them plan repairs and respond quickly to issues. At the district level, the **DWSM Dashboard** aggregates data from all GPs, enabling District Water & Sanitation Missions to monitor disruptions, track scheme performance, review Jal Seva Ankalan findings and prioritise technical support. State-level dashboards offer an integrated view of physical progress, fund utilisation, sustainability indicators and convergence activities across districts, strengthening oversight and planning. All these, coupled with **Meri Panchayat App** and **Citizen Corner**, provides easy access to water quality information and records. Together, these digital tools establish a transparent, data-backed governance framework where village teams, district missions and state authorities can monitor performance, identify risks early and make informed decisions, strengthening accountability and building community confidence in long-term water service reliability.

A Whole-of-Government Approach for Scalable Impact

Sujalam Bharat adopts a clear whole-of-government approach, bringing together policymakers, technical experts, state teams, district officials, Gram Panchayats and frontline implementers on one shared platform. The framework aligns national directions with state systems and village realities, ensuring that strategies are not limited to policy documents but translated into coordinated, on-ground action. By connecting institutions at every tier and promoting continuous dialogue between field insights and national planning, Sujalam Bharat

reflects a clear direction: reliable, equitable, climate-resilient and accountable rural water services, built through Jan Bhagidari and advanced digital systems, fully aligned with India's vision for Viksit Bharat 2047.

The RWPF Workshop on Communication & PRA Tools for Jan Bhagidari:

A Strategic Inflection in Rural Water Governance

– Shailika Sinha, N.J.JM

India's rural water sector is entering a new era, one marked by not just infrastructure deployment, but also by **value creation through community-led governance**. For decades, the equation was simple: connect more villages to piped water. Today, the challenge is more profound: ensure those water systems operate reliably, equitably and sustainably, so that every rural household receives safe water today, and also tomorrow and beyond.

Across sectors, forward-thinking organisations recognise that systems endure not simply because they are built, but because they are **owned, operated and sustained by communities**.

It is against this backdrop that the Department of Drinking Water & Sanitation (DDWS) convened the one-day workshop of the Rural WASH Partners' Forum (RWPF) on 12th November 2025, themed **"Communication and PRA Tools to Promote Community Engagement (Jan Bhagidari)"**.

Leadership, Intent & Context

The workshop brought together key leaders, including Hon'ble Union Minister of Jal Shakti, Shri C.R. Patil; Secretary-DDWS, Shri Ashok K.K. Meena; Additional Secretary and Mission Director – National Jal Jeevan Mission (NJJM), Shri Kamal Kishore Soan; Joint Secretary – NJJM, Smt.

Figure 1: Hon'ble Union Minister Shri C.R. Patil receives a welcome sapling from Secretary-DDWS, Shri Ashok K.K. Meena | Source: N.J.JM

Figure 12: Hon'ble Union Minister of Jal Shakti, Shri C. R. Patil addressing the gathering | Source: N.J.J.M

Swati Meena Naik, Joint Secretary and Mission Director of Swachh Bharat Mission (Grameen), Smt. Aishvarya Singh, alongside officers from DDWS. Their presence was complemented by experts from across India's water and governance ecosystem: the Ministry of Agriculture and Farmers Welfare, Department of Water Resources, National Water Mission, Ministry of Panchayati Raj, CGWB, IMD, NWIC, BISAG-N and NRSC. Representatives from States and UTs, RWPF organisations and development partners added grounded insights, turning the event into a vibrant platform for collective learning and collaboration.

Referring to the impact of Jal Jeevan Mission, Shri C.R. Patil shared that the initiative has profoundly changed lives across rural India. 9 crore women have been freed from the daily drudgery of fetching water, enabling them to participate actively in agriculture and allied sectors. Quoting findings from the World Health Organization (WHO), he said that rural India saves 5.5 crore person-hours daily, improving productivity and empowering women to contribute more effectively to their families and communities.

In his address, Shri Patil underscored the government's continuous efforts to empower Gram Panchayats through transparency and digital innovation. He reiterated that **water conservation** must remain central to the country's development narrative, aligning with the broader vision of *"Har Ghar Jal, Har Khet Pani."* He urged for innovation, sound financial management, and time-bound project execution to sustain the momentum achieved under Jal Jeevan Mission.

Concluding his remarks, Shri Patil expressed that every effort, from **"Karmabhoomi se Matribhoomi"**, the Prime Minister's call inspiring citizens to contribute to their native land through water conservation and recharge efforts, to **"Jal Sanchay Jan Bhagidari"**, reflects the government's deep commitment to conserving water, empowering communities, and ensuring sustainable progress. He also reiterated the Prime Minister's guiding vision – **"Gaon ka paani gaon mein, khet ka paani khet mein"** – emphasizing local water conservation through **groundwater recharge, rainwater harvesting, and borewell rejuvenation**, ensuring that groundwater remains a sustainable resource for future generations.

In his inaugural address, **Shri Ashok K.K. Meena**, Secretary, DDWS, emphasised that *Jan Bhagidari* is not a slogan but the very philosophy of the Mission. He said that JJM was designed as a **bottom-up programme** built on community ownership, local decision-making, and sustainability. "People are not beneficiaries; they are guardians of their water systems," he said.

Figure 13: Secretary-DDWS, Shri Ashok K.K. Meena delivering his address at the workshop | Source: N.J.J.M

Figure 14: AS&MD-NJJM setting the context for the workshop | Source: NJJM

> AS&MD-NJJM set the context for the workshop, saying, ***"Systems endure only when people make them their own. Jan Bhagidari is a way of working – from infrastructure to involvement, from delivery to dialogue"***

Highlighting the **importance of communication and behavioural change**, the Secretary said that the workshop aims to design tools that translate participation into tangible action. He further said that **technology and transparency** have become the twin pillars of progress under JJM.

Key Launches

1. A **Decision Support System (DSS) for Source Sustainability** – a digital platform integrating datasets to support **data-driven decisions for source sustainability**. At present, the DSS is operational in **234 districts**, with the remaining districts scheduled for onboarding within the current financial year. The system integrates a wide range of technical layers, including:
   - **Rainfall** (CGWB – Decadal Mean)
   - **Groundwater levels** (CGWB – Decadal Mean)
   - **Slope and terrain** (Digital Elevation Model – BISAG-N)
   - **Drainage and aquifer maps** (NWIC)
   - **Recharge potential zones** (CGWB)
   - **Land use and land cover** (NRSC–NWIC)
   - **Water quality parameters** (CGWB)

   In its upcoming phase, the DSS will be strengthened with additional layers such as **Springshed data, criticality assessment of water sources, existing artificial recharge structures**, and **district-level rainfall datasets** from IMD and State Agriculture Departments.

   Recent revisions to the **MGNREGA guidelines**, which mandate dedicated expenditure on water-related works, such as groundwater recharge, rainwater harvesting, and source protection, will further complement this system. With this convergence, district authorities will be better equipped to plan and implement long-term water resource management strategies.
2. The **"JJM Panchayat Dashboard"**, accessible via the e-Gram Swaraj

"Women in my village faced severe water scarcity, which affected their own health as well as their children's health and education. To address this, we formed a Pani Panchayat Samiti, and women were identified as Jal Sahelis and given orientation. Under Jal Jeevan Mission, we received tap water connections at homes. However, people were initially reluctant to drink the water due to the smell and taste caused by chlorination. As Jal Sahelis, we discussed the issue with them, conducted water quality testing using FTKs, shared the test results, and explained the importance of drinking safe water. Now, they are directly consuming it.

We also rejuvenated a dried lake, constructed check dams through shramdaan (voluntary labor), and the water is now being used for irrigation. Additionally, we built borewell recharge structures and implemented rainwater harvesting to recharge groundwater."

- Smt. Rajni Ahiriwar, Jal Saheli, Chatarpur, Madhya Pradesh

portal, that provides Gram Panchayats with **real-time data and visualization tools.**

Designed to be both interactive and enabling, the dashboard allows Panchayats not only to view data available on the State Water and Sanitation Mission (SWSM) and District Water and Sanitation Mission (DWSM) dashboards, but also to directly upload on-ground updates, ensuring timely action and greater local accountability.

To date, **67,273 Sarpanch and Panchayat Secretaries** have logged in through the e-Gram Swaraj portal. With the upgraded dashboard, Panchayats will now be able to:

- Provide real-time updates on functionality aspects, including **water supply status, quality monitoring**, and **community participation**
- View **pipelines and assets** mapped under PM Gati Shakti
- Update details of **Water Supply Operators**
- Access **IEC materials, water quality data**, and information on **women trained in FTK testing**

3. The first episode of a community radio programme: ***"Swachh Sujal Gaon Ki Kahani: Radio Ki Zubani"***, to be aired via 100 community radio stations in 13 national and 34 local dialects. Real stories. Real people. Real voices.

   Featuring two engaging characters – **Sujal Kumar and Swachhika Kumari**, the programme takes listeners on an inspiring WASH journey across rural India, sharing real stories of transformation. To make it interactive, the show will also include **quiz segments** and **community-focused features**, encouraging participation, awareness, and a sense of local ownership.

Figure 15: Hon'ble Union Minister Shri C. R. Patil unveils new initiatives and document at the RWPF workshop, alongside senior DDWS officials | Source: NJJM

4. A handbook: ***"Jan Bhagidari se Har Ghar Jal"*** – a guide for Gram Panchayats, VWSCs (Village Water & Sanitation Committees), SHGs (Self-Help Groups) and community leaders detailing commissioning and handing over of rural piped supply schemes.

   The handbook is a first-of-its-kind comprehensive guide designed for **Gram Panchayats, VWSCs, SHGs and community leaders**. It outlines clear instructions on **commissioning** and **handover protocols** for rural water supply schemes, helping communities manage and sustain their systems effectively.

   A key component of the handbook is the introduction of the **District Technical Unit (DTU)** – a specialized technical institution intended to bridge the gap

"I consider myself blessed to work as a Jal Saheli. I organized Jal Chaupals with my fellow Jal Sahelis, where we regularly discuss with the community the importance of safe drinking water, water conservation, proper use of drinking water, avoiding wastage, and utilizing rainwater and greywater.

In our village, there was a river, but the old check dam was damaged. So, 20 Jal Sahelis raised this concern with the Panchayat, discussed it with the community, and got the proposal approved in the Gram Sabha. Together, we constructed a new check dam with community participation. Beyond water-related issues, we also motivate people to use toilets and maintain cleanliness."

Smt. Laxmi Khushwaha, Jal Saheli, Niwari, Madhya Pradesh

between policy frameworks and implementation on the ground. DTUs will help ensure that significant public investments translate into **sustainable water supply services**.

While VWSCs remain responsible for day-to-day operation and maintenance, the handbook provides a mechanism for escalating challenges beyond village capacity to the DTU through the **Gram Panchayat Dashboard**. District Collectors will review DTU performance during **DWSM meetings**.

The handbook also emphasizes the importance of **community-led ceremonies** marking the transfer of ownership of water systems. Events such as **"Jal Arpan," "Jal Bandhan," and "Jal Utsav"** are encouraged as symbolic occasions celebrating water as a shared responsibility. These ceremonies transform the handover process into a **festival of trust**, where community members collectively affirm their role in ensuring the sustainability of their village water system for generations to come.

Figure 16: Hon'ble Minister and the Secretary present the newly released document to the Jal Sahelis – the women water champions from Madhya Pradesh | Source: NJJM

Break-out Sessions

A central feature of the workshop was a series of eight break-out sessions, where participants, including RWPF partners, State IEC teams and district-level officials – worked together to design practical, community-friendly tools. Each session focused on a real operational challenge and sought to translate field experiences into scalable solutions.

Figure 17-18: Break-out sessions in progress, with participants analysing field challenges and shaping community-focused action tools | Source: NJJM

1. Commissioning & Handover Tools

This group explored how the transition from project completion to community management can be made smoother and more empowering. Participants discussed the use of simplified, visual PRA tools that explain system components, roles and responsibilities, enabling VWSCs and Panchayats to take confident, informed charge of newly commissioned water systems from day one. The idea was clear: handover is not a ceremony; it is the starting point of local ownership.

Figure 19-20: Shri Sumit Priyadarshi, Deputy Adviser – PHE & WQ, Jal Jeevan Mission, along with his team, presents the key findings and PRA tool outcomes from the session | Source: NJJM

2. Preventive Maintenance and Grievance Redressal

Recognising that day-to-day functionality determines user experience, this session focused on how villages can build simple, reliable maintenance systems. Participants designed community-led monitoring formats, reporting mechanisms and quick-response protocols. Field representatives shared how accessible, hands-on training can enable frontline women workers to run piped-water systems effectively – reinforcing that when knowledge is demystified, capability grows.

Figure 21-22: Smt. Ankita Chakravarty, Deputy Secretary, Jal Jeevan Mission, along with her team, presents the key findings and PRA tool outcomes from the session | Source: NJJM

3. VWSC Enterprise Modules

This group emphasized turning VWSCs into local "micro-utilities." The discussions centred on a structured module that blends training and practical exercises, covering operations, maintenance, tariff setting, financial management and record-keeping. Participants agreed, must be community conversations on water use, supported by tools like village water budgeting. When people understand their own consumption patterns, they begin to recognise the value of managing water as a shared community service.

Figure 23-24: Shri Umesh Kumar Bhardwaj, Deputy Secretary, Jal Jeevan Mission, along with his team, presents the key findings and PRA tool outcomes from the session | Source: NJJM

4. Safe Water Awareness and Trust-Building

This session outlined participatory approaches for water testing, awareness drives and household-level demonstrations. From using field test kits to explaining treatment processes in simple language, the group emphasised that transparency builds trust – and trust, in turn, builds long-term acceptance of piped water systems.

Figure 25-26: Shri Ashish Pandey, Deputy Adviser, Jal Jeevan Mission, along with his team, presents the key findings and PRA tool outcomes from the session | Source: NJJM

5. Source Sustainability & Water Conservation

Participants engaged deeply with techniques for protecting village water sources. Using participatory mapping, recharge planning and local water-budgeting exercises, the group designed PRA tools that enable communities to visualise their aquifers, drainage pathways and seasonal flows. The goal was to help villages move from reactive water management ("fix when it breaks") to proactive stewardship of their water sources.

Figure 27-28: Shri Hari Narayanan, Director, Jal Jeevan Mission, along with his team, presents the key findings and PRA tool outcomes from the session | Source: NJJM

6. Functionality Assessment by VWSC and Gps

This group focused on empowering communities to assess their own service quality. They discussed formats such as scorecards, simple rating scales and visual dashboards that any village resident can understand. These tools help VWSCs and Panchayats monitor water supply hours, pressure, quality, grievances and user satisfaction – creating a feedback loop that strengthens accountability at the local level.

Figure 29-30: Shri Ananjay Tiwari, Deputy Secretary, Jal Jeevan Mission, along with his team, presents the key findings and PRA tool outcomes from the session from the session | Source: NJJM

7. Jan Bhagidari Through Jal Lok Utsav

Recognising the cultural dimension of water, this session explored ways to embed water governance into local traditions. Ideas like Jal Arpan and Jal Bandhan – water-focused rituals that celebrate community responsibility, were highlighted. By turning water management into a collective emotional experience, these events help villages reinforce pride and long-term stewardship.

Figure 31-32: Shri Yogendra Singh, Director, Jal Jeevan Mission, along with his team, presents the key findings and PRA tool outcomes from the session | Source: NJJM

8. Greywater Management

The group examined practical, low-cost ways to handle and reuse greywater at household and community levels. Solutions discussed included small drainage channels, simple treatment pits, soak structures and reuse for horticulture. By promoting circular water practices, the session underscored how greywater management improves cleanliness, supports groundwater recharge and complements JJM's broader sustainability goals.

Figure 33-34: Smt. Kritika Kulhari, DS, Swacchh Bharat Mission (G), along with her team, presents the key findings and PRA tool outcomes from the session | Source: NJJM

Across all eight thematic discussions resulted in not just analysing of challenges but also designing solutions shaped by real field conditions, lived experiences and community voices. The insights generated will now help DDWS refine a national set of PRA tools that can be adapted, customised and scaled across States and Union Territories.

Figure 35: Smt. Swati Meena Naik, Joint Secretary – NJJM, summarizing the learnings of the break-out sessions | Source: NJJM

Way Forward

The workshop reflects a pivotal moment in India's rural water journey, where meeting the challenge of "every household a tap" begins to meet the challenge of "every household tap sustained by people". Infrastructure without community custodianship is at risk of falling into neglect; conversely, community without tools, data and institutional support struggles to manage.

The workshop marks a turning point in India's rural water journey, shifting from the goal of providing a tap in every household to ensuring those taps are sustainably managed by the people. Infrastructure without community ownership risks neglect, while communities without adequate tools, data, and institutional support face challenges in managing the system effectively.

> ***"Systems endure only when people make them their own. Jan Bhagidari is a way of working, from infra-structure to involvement, from delivery to dialogue."***
>
> – Shri Kamal Kishore Soan, AS&MD-NJJM

Figure 36: Representatives of RWPF with DDWS officials in the workshop | Source: NJJM

Sujal Gram samvad: A Multilingual Dialogue on Rural Water Supply

– Lopamudra Panda, NPMU-N.J.JM

When India's Villages Spoke in their own language, the Nation Listened

On the morning of 18 November 2025, something unprecedented unfolded across India's rural drinking water supply landscape. From the hills of Mizoram to the coasts of Tamil Nadu, from the vast plains of Uttar Pradesh to the forests of Odisha, village voices-spoken in Odia, Manipuri, Marathi, Telugu, Rajasthani, Mizo, Punjabi, Gujarati, Magahi, Tamil, Bundelkhandi and Hindi, resonated together on a single national platform.

This was the first-ever *Sujal Gram samvad*, a multilingual grassroots dialogue hosted by Department of Drinking Water & Sanitation (DDWS) under Jal Jeevan Mission (JJM). This is a first of it's kind initiative where the policy makers connects with grassroot and converse with them in their own dialect.

The *Sujal Gram samvad* was not just an event. It was a moment of collective listening, a bridge between governance levels, and a reaffirmation that India's water revolution is truly community-led.

Nearly 1,500 people joined live digitally both through interactive mode and via YouTube. The allied participants include Gram Panchayat representatives, VWSC/Pani samiti members, frontline workers, SHG members, students, teachers, operators, water warriors, village youth, district administrators, and State Mission Directors. What connected them was not just technology, but a shared purpose: to understand, learn, and celebrate how villages are transforming water governance and sustaining Har Ghar Jal. For the first time, the department truly understood what water means to India: health, dignity, time, opportunity, and hope from people's prospective. For the first time, villages spoke in the languages closest to their hearts. For the first time, Samvad enabled communities to engage in their own regional languages, breaking communication barriers and fostering comfort, clarity, and openness in sharing ground realities.

- A First-of-its-Kind Multilingual Grassroots Dialogue
- Direct interaction between villages/ Gram Panchayats and DDWS
- Conversations held in 12 regional languages to ensure comfort, clarity, and honesty

The Vision Behind *Sujal Gram samvad*

In six years of implementation, more than 15 crore rural households in

Figure 37: Community from Odisha interacting in Odia | Source: N.J.JM

India today have tap water connections. Through this journey of JJM, lakhs of villages have created their own stories of innovation, resilience, community-led management, and women's leadership.

The Ministry believed it was time to bring those stories to the center. The idea of *Sujal Gram samvad* emerged from a simple yet profound principle: Development is strongest when those at the frontline shape the dialogue.

This is the first platform of its kind where local communities interact directly with national leadership in their own regional languages — not through intermediaries, not through reports, but through authentic voices and lived experiences.

The inaugural *Sujal Gram samvad* brought together **12 States/UTs**, each represented by one Gram Panchayat headquartering village, shortlisted by the State Missions in consultation with NJJM's area officers.

The *Sujal Gram samvad* aims to:

- Showcase functional grassroots practices from State/UTs straight from the voices of village/ panchayat stakeholders;
- Strengthen communication between villages, districts, States, and DDWS;
- Highlight the leadership of Gram Panchayats, women, SHGs, and VWSCs;
- Build transparency, ownership, and sustainability in rural water supply systems;
- Capture real-time feedback to refine policies;
- Celebrate the transformative impact of JJM on rural lives.

Details of Village interacted

Sr. No.	State	District	Village	Language
1	Odisha	Ganjam	Belagam	Odia
2	Madhya Pradesh	Seoni	Beohari	Hindi
3	Manipur	Imphal West	Lairenjam	Manipuri
4	Rajasthan	Dausa	Nirjharana	Rajasthani
5	Tamil Nadu	Tiruvallur	Alinjivakkam	Tamil
6	Andhra Pradesh	Eluru	Enamadala	Telugu
7	Punjab	Gurdaspur	Paracha	Punjabi
8	Gujarat	Sabarkantha	Takhatgadh	Gujarati
9	Maharashtra	Pune	Sarola	Marathi
10	Mizoram	Aizawl	Khawruhliian	Mizo
11	Bihar	Nawada	Kachariyadih	Magahi
12	Uttar Pradesh	Jhansi	Banka Pahari	Bundelkhandi

Each village received a 15-minute interaction window. 4–5 mins: stakeholder dialogue on achievements, innovations, and community practices (in regional language). 4–5 mins: Direct dialogue between DDWS and village representatives in regional language. 3 mins: Brief from District Collector/Magistrate and 2 mins: Brief from State Mission Director.

This ensured that every level of governance — village, district, State, and national are part of the same continuous conversation.

The design of the *Sujal Gram samvad* ensured full community ownership. Each village joined from its local institution, a school, Panchayat Bhawan, Anganwadi Centre, or community hall with banners, standees, and branding provided by DDWS showcasing uniformity in diversity.

Leadership Speaks: Setting the Tone for India's Grassroots Dialogue

The interactions by higher authorities during *Sujal Gram samvad* demonstrated a powerful truth: when

officials speak in the people's own language, trust deepens, and voices grow more confident. This approach transforms dialogue from a formal exercise into a genuine conversation, where communities feel heard and respected.

Speaking in local languages bridges cultural gaps, dismantles barriers, and creates an environment of openness. It signals empathy and inclusivity, reinforcing that governance is not distant but deeply connected to the lives of the people. Such efforts inspire participation, strengthen accountability, and lay the foundation for sustainable change at the grassroots level.

When leadership communicates in the language of the people, it does more than convey information, it builds a bridge of trust and belonging. It transforms governance into a shared journey, where communities feel empowered to voice their aspirations and challenges. This inclusive approach not only accelerates decision-making but also ensures that solutions are rooted in local realities, making them sustainable and widely accepted.

While designing *Sujal Gram samvad*, the Department mapped the regional language proficiency of all DDWS officials and support staff and aligned them with the concerned states and villages. This strategic mapping ensured that conversations happened in local languages, fostering comfort, clarity, and cultural resonance. By doing so, the initiative broke communication barriers and strengthened the authenticity of grassroots engagement.

Shri Ashok K.K. Meena, Secretary, DDWS, set the context for the discussions. He highlighted that Jal Jeevan Mission was launched with the ambitious goal of providing tap water connections to every rural household, marking a significant shift from the earlier habitation-level approach to household-level water service delivery currently covering 81% of rural households with tap connections.

> ***"The mission is now entering its most important phase - sustainability. The framework of Sujal Gram Samvad has been designed to listen to Gram Panchayats, understand their challenges, learn from their good practices, and recognise their leadership on the ground."***
>
> - Shri Ashok K.K. Meena, secretary, DDWS

He emphasized:

- The crucial role of Gram Panchayats, VWSCs, and SHGs in sustaining water supply systems
- The need to protect water sources for long-term supply
- The importance of community-owned O&M, user charges, and local monitoring
- The value of listening to villages to shape policy and support mechanisms

Following each village's interaction, Shri Kamal Kishore Soan, Additional Secretary & Mission Director (AS&MD), NJJM, engaged in detailed interactions with the village team, the District Collector/District Magistrate, and the State MD. During these discussions, he emphasized critical aspects such as the operation and maintenance of rural water supply systems, convergence with MGNREGA, source sustainability and water conservation, regulated and equitable water supply, water quality testing and monitoring, grievance redress mechanisms, utilization of the Panchayat Dashboard, user-charge collection, and commissioning and handover protocols.

In his concluding remarks, the AS&MD highlighted three important and critical action points that all GPs must prioritize:

1. **Use of the Panchayat Dashboard:** Gram Panchayats must regularly log in, track all water supply details, and submit feedback or issues.
2. **Training of village youth, especially girls:** GPs should identify youth through Gram Sabhas for technical training to manage village assets independently.
3. **Protection of all drinking water sources:** He emphasized long-term sustainability, referencing the Revised MGNREGA Guidelines (Gazette Notification S.O. 4288(E), 23 Sept 2025), which mandate water-related expenditure for recharge, harvesting, and source protection.

This future-focused roadmap underscored that responsibility now rests with villages, and the Mission will stand with them as a partner in every step.

Voices from the Ground: Stories of Transformation from Villages Across 12 States

Perhaps the most powerful part of the Samvad were the voices from villages, emotional, honest, rooted in lived experience. Each village shared how Jal Jeevan Mission changed everyday life, strengthened community bonds, and shaped a more confident, healthier rural India.

Odisha

Village Belgam, ODISHA

- Regular user-fee collection mechanism
- Regular water quality testing using FTKs & O&M
- Active involvement of women and SHGs
- Community-level monitoring of supply timings
- Use of 15FC grant
- Water accessibility established toilet use

The interaction during *Sujal Gram samvad* began with **Belagam village in Ganjam district**. Secretary, DDWS, conversed with the community in **Odia**, appreciating their leadership and the active involvement of women. His use of the local language created an instant rapport, making the dialogue warm, inclusive, and deeply engaging.

The Samvad's first village set the tone. Speaking in Odia, **Nilanchal Panigrahi, a VWSC member** from Belagam, shared their journey. The Gram Panchayat was initially served by only 32 standposts, which were insufficient to meet the community's needs. With the implementation of the Jal Jeevan Mission, tap connections have now been provided to all 718 households, ensuring clean and quality water supply at 70 LPCD. Tap connections have also been extended to three schools and five anganwadi centers.

To ensure proper operation and maintenance of the water supply infrastructure, a **user fee of ₹60 per month** per family has been introduced. After collection the households are given a money receipt. A local woman has been appointed to collect the fee and receives 10% of the collection as an honorarium. The funds are utilized for minor repairs, the pump operator's honorarium, and monthly electricity charges. If additional resources are required, the **15th Finance Commission** tied grant allocated to the Panchayat is used.

At the block level, Master Book Keeper (MBK), Community Resourece Person (CRP), and SHG members have been trained in water quality testing using FTKs. Water quality is tested at all sources twice a month and at standposts once a month by these trained women.

This initiative stands as a testament to **Jan Bhagidari**-people's participation-supported by regular community awareness and capacity-building efforts, which have ensured the sustainability of the water supply system.

Figure 38: Community from Odisha interacting in Odia | Source: NJJM

> ***"Earlier, women relied on wells and ponds for water. Then came standposts, where we waited in long queues for our turn. It was tiring and time-consuming. Now, we have tap connections at home. This has not only quenched our thirst but also reduced our drudgery and helped us become self-reliant. The availability of water has also enabled us to use toilets regularly. Earlier our mornings went in collecting water, now we use that time to earn, to rest, to take care of our home. Our children are healthier, and our village feels dignified. We are thankful to the government for this noble initiative."***
>
> Said Mamata Dei a VWSC member of Belagam

Madhya Pradesh

Village Beohari, MADHYA PRADESH

- Regular user-fee collection
- Organize awareness campaigns on water use
- Active involvement of women
- resilience and teamwork
- transparent O&M system

AS & MD, NJJM interacted in Hindi with the community of Beohari village in Seoni district. During the interaction, Rashi Patel, an Anganwadi worker, shared that they are receiving timely water supply through taps. She highlighted that the VWSC of the village comprises all women members. Every month, the committee collects ₹80 per household as user charges, a fee collectively decided through the Gram Sabha. If any family is unable to pay, the Samiti takes responsibility to cover the cost.

ASHA worker Madhavi added that she has been trained to conduct water quality testing using FTKs. She noted that earlier, waterborne diseases were quite frequent, but with access to safe water, such cases have significantly reduced.

AS&MD urged schools to take up water quality testing in laboratories and orient students on its importance. He also stressed that in Anganwadi centers, pregnant and lactating mothers and adolescent girls should be shown water quality testing demonstrations and oriented on safe water practices.

> ***"The quality and quantity of the supplied water is quite good. It is sufficient for all students. With easy access to water through taps, saving water has become most important, and we are spreading the message of water conservation and source sustainability."***
>
> said a teacher from the higher secondary school.

Figure 38: Community from Madhya Pradesh interacting in Hindi | Source: NJJM

Manipur

Village Lairenjam, MANIPUR

- Restoring pipelines disrupted by landslides
- Regular testing
- Strong community norms about water use

Speaking in **Manipuri**, representatives of **Lairenjam village in Imphal West district Shri Marjit Singh, Panchayat Secretary**, shared how Jal Jeevan Mission has transformed lives, improving health, reducing drudgery, and restoring dignity to women. The Gram Panchayat operates three water supply schemes: Lairenjam WSS and Wakching Khullen WSS under JJM, and Irom Meijrao WSS funded by NDB. Two schemes are fully completed, and one is ongoing.

"With the introduction of JJM, all households now enjoy an abundant and reliable water supply. The scheme was handed over to the VWSC," said **Shri Marjit Singh, Panchayat Secretary**, said that, water is supplied every morning for two hours. The VWSC, comprising trained members, manages minor repairs and employs a lineman and pump operator. Five women trained using FTK conduct regular water quality tests.

User charges of **₹200** per household are collected monthly, with exemptions for widows and persons with disabilities. As they receive water abundantly, villagers willingly pay, Shri Singh informed. Funds are used for O&M, electricity, and honorarium for staff.

"Health awareness is also a priority. I have pasted information on the wall about the benefits of good water quality. There is no adverse health impact on children now," shared **Smt. Achoubi Devi**, Anganwadi worker at Lairenjam Makha Leikai, highlighting the positive change.

This success story reflects Jan Bhagidari, community ownership, women-led governance, and capacity building-ensuring sustainability and trust in rural water systems.

Figure 40: Community from Manipur interacting in Manipuri | Source: NJJM

Rajasthan

Village Nirjharana, RAJASTHAN

- Women no longer walk miles for water
- Convergence with MGNREGA
- Plantation and anicuts & check dams for water conservation

Joint Secretary, NJJM, interacted in **Rajasthani** with the community of **Nirjharana village of Dausa district,** appreciating their traditional practices, water conservation measures, and community-led management of the water supply system.

Sarpanch, Nirjharana shared that all 715 households now receive timely and adequate water through taps. Earlier, due to water scarcity, people used to migrate a lot. But with the availability of water, this problem has been resolved. He further explained that **under MGNREGA,** 15,000 plants have been planted, and four anicuts and check dams have been constructed in Nirjharana to capture runoff. The village is now creating awareness about the importance of user charges for timely O&M, and soon, the community will take full responsibility for managing the system.

> ***"Our village is on elevated land. Earlier, we walked long distances carrying water pots on our heads. Now, with the arrival of JJM, life has become easier. Time is saved, children are clean and healthy, and they are attending schools and Anganwadi centers,"*** shared anganwadi worker, reflecting the transformative impact of the mission.

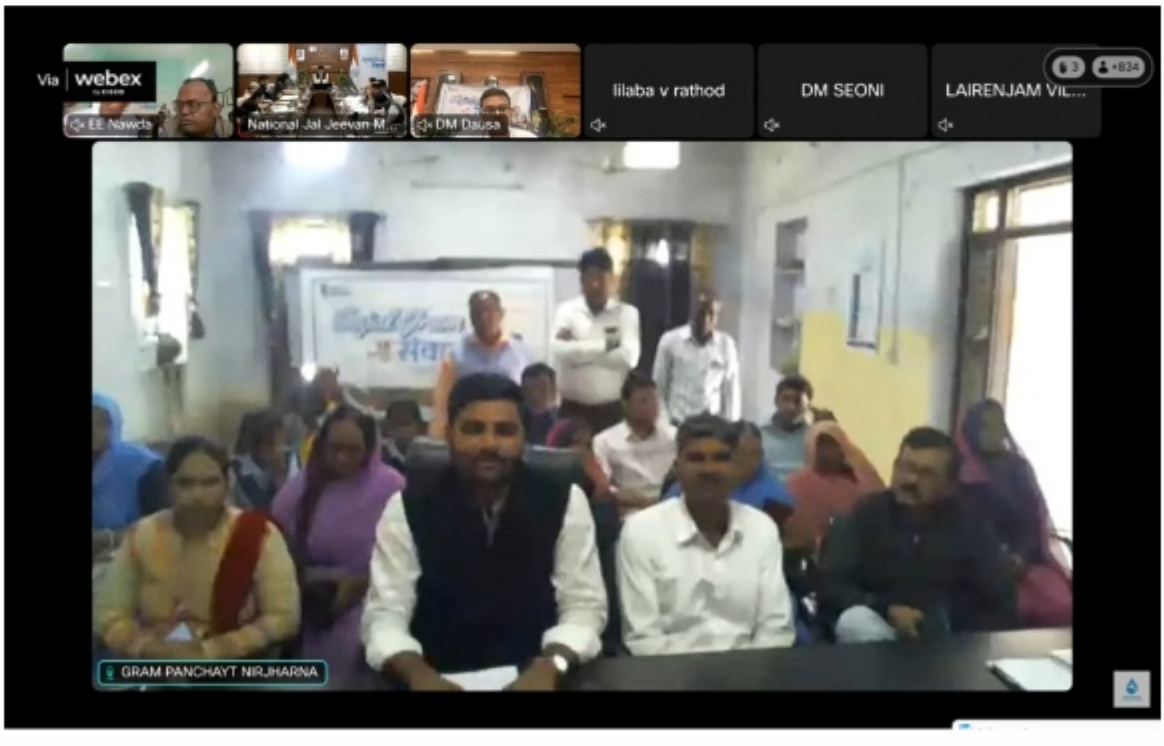


Figure 41: Community from Rajasthan interacting in Rajasthani | Source: NJJM

Tamil Nadu

Village Alinjivakkam, TAMIL NADU

- A model of community-led service delivery
- Coordination between VWSC, AWW, and ASHA workers
- High participation of women in decision-making
- Consistent supply contributing to improved health

For **Alinjivakkam Village in Tiruvallur district**, ASHA worker **Kalvinathan** presented in **Tamil,** the village is consisting of four habitations with a total of 480 households. Before JJM, the village had only four public posts. In 2020, under JJM, every household received a Functional Household Tap Connection, ensuring the prescribed supply of 55 LPCD with proper quality standards.

Water quality is maintained through systematic measures, cleaning tanks twice a month, testing water at both starting and tail-end beneficiaries using FTKs twice a month, and continuous chlorination monitoring. The village earned the **Best Operation and Maintenance Village Award in 2023,** reflecting its commitment to sustainability.

Each household contributed a onetime deposit of **₹1,000**, and the water tariff is fixed at **₹50** per month (₹600 annually), collected monthly, quarterly, or half-yearly. ASHA and other VWSC members personally visit households to collect charges. The village school and Anganwadi centers also have tap connections, ensuring safe water for children and mothers.

> ***"Earlier, we had to skip school often, carry water from far away, and it was exhausting. Now, water comes to our home taps and in school. I have more time to study, and I feel healthy and clean every day,"***
>
> said a girl student.

Figure 42: Community from Tamil Nadu interacting in Tamil | Source: NJJM

Andhra Pradesh

Village Enamadala, ANDHRA PRADESH

- Routine testing for physical, chemical, and bacteriological parameters
- Immediate corrective action on leaks
- Improved lives and better health
- Aware and empowered community

The village representatives of **Enamadala Village of Eluru District** interacted in **Telugu. Shri Varikuti Venkateswara Rao**, Sarpanch shared the Journey of JJM in Varikuti village marking a turning point in rural water governance. With ₹1.20 crore sanctioned and ₹1 crore worth of works completed, the village now boasts a robust water infrastructure: 5 km of pipeline, 555 household tap connections, five overhead tanks (OHSRs), and chlorination devices installed in two tanks. Borewell water serves as the source, and its quality is consistently monitored using Field Testing Kits (FTKs).

Smt. Bhavani, Pump Operator, explained her role in operating chlorination devices and refilling tablets regularly. She said with pride, she refills chlorination tablets regularly, chlorinated water flows into tanks and reaches every household through taps, ensuring safe drinking water for all.

Community members echoed their satisfaction, the water is clean, safe, and reliable. **Smt. Param Jyothi,** an ASHA worker said, she conducts 8 types of water quality tests i.e pH, alkalinity, hardness, nitrate, chloride, fluoride, iron, and residual chlorine ensuring safety at every step. She further said, schools and Anganwadi centers now have tap connections with daily supply, and teachers educate children on handwashing and safe water practices.

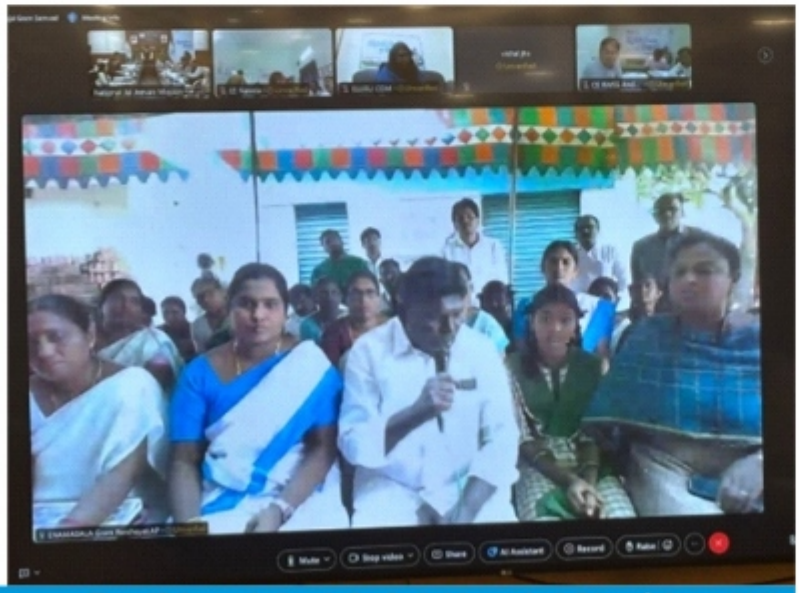


Figure 43: Community from Andhra Pradesh interacting in Telugu | Source: NJJM

The VWSC, led by **Smt. Vaheena**, conducts monthly meetings to address pipeline repairs, motor maintenance, and chlorination status. User charges of **₹360 per tap annually** are collected and managed through a joint account with the Village Secretary for O&M expenses. Before JJM, each tap connection cost ₹3,000; today, they are provided free of cost, achieving 100% household coverage.

With continuous supply of safe, chlorinated water, Varikuti stands as a model of **Jan Bhagidari**, sustainability, and community-led governance.

> ***"Earlier, children suffered from waterborne diseases. Now children are consuming chlorinated water at home and school which came from taps under JJM, now children and mothers are healthy and safe,"*** said **Smt. Venkateswaramma, Anganwadi teacher,** capturing the true essence of this transformation.

Punjab

Village Paracha, PUNJAB

- Community-led water governance
- Strong grievance redressal mechanism
- Proper coordination among all stakeholders
- Active GPSC

Interacting in **Punjabi,** a member of the Gram Panchayat and Sanitation Committee (GPSC) from **Paracha village in Gurdaspur district** shared the journey of transformation under JJM. Earlier, villagers relied on a distant handpump, which caused significant hardship. When JJM was introduced, the community came together, discussed with officials, and prepared a village plan to construct an overhead tank. An **11-member committee** was formed, and work began under direct supervision. A pump operator was appointed, and the struggle for water ended with **tap water connections in every home**.

For the past three years, Pracha has enjoyed **uninterrupted, safe drinking water**. If any issue such as leakage occurs, the committee addresses it promptly. The pump operator collects user charges every month, maintains a cash book, and deposits the amount in the GPSC's bank account. All households have the contact numbers of the pump operator, Sarpanch, and GPSC members. Grievances are resolved within **2–4 hours**, and a grievance register is maintained for transparency.

Figure 44: Community from Punjab interacting in Punjabi | Source: NJJM

To ensure water quality, **five committee members regularly test water using Field Testing Kits (FTKs)** at sources, homes, schools, and Anganwadi centres. There is strong coordination among all stakeholders, ensuring smooth operations and community trust.

Pracha stands as a shining example of **community-led governance, sustainability, and Jan Bhagidari under Jal Jeevan Mission**.

> ***"Our Anganwadi Centre now has a tap water connection, and children receive clean water every day. This has improved hygiene and health for mothers and children. We thank JJM and the village committee for making this possible."***
>
> Charanjit Kaur
> Anganwadi worker

Gujarat

Village Takhatgarh, GUJARAT

- 24x7 water supply
- A robust user-charge collection system
- 100% water metering
- Water conservation & source sustainability is being prioritized

Speaking in **Gujarati,** Smt. Bhagvatiben Ramanbhai Patel, Sarpanch of **Takhatgarh village, Sabarkantha district**, presented an overview of the village's demographic profile and highlighted its exemplary achievements in rural water supply management. She shared details about the successful implementation of 100% household tap connections, complete water metering, regular water tax collection, and assured supply to public institutions such as schools and Anganwadi centres. User charges are collected **online at ₹8 per unit (1 unit = 1,000 litres)**, ensuring transparency and efficiency. The village was showcased as one of Gujarat's best performers in water service delivery.

The Deputy Sarpanch elaborated on initiatives under the Atal Bhujal Yojana for groundwater recharge, while a female committee member highlighted the national-level recognitions and awards received, including Best Panchayat and National Water Awards, reflecting strong community participation and effective governance.

> ***"Gram no Pani Gram ma, ne sim no pani sim ma' is our motto. We are not only responsible for the operation and maintenance of water supply assets but also accountable for source sustainability, groundwater recharge, and saving water resources."***
>
> Former Sarpanch Nishankbhai Patel proudly stated

Figure 45: Community from Gujarat interacting in Gujarati | Source: N.JJM

Maharashtra

Village Sarola, MAHARASHTRA

- Improved health and reduced water-borne diseases
- Time savings enabling women to pursue livelihoods
- Use of renewable energy-electricity cost saving

Sarola village in Pune district has set a benchmark in rural water governance through innovation and community participation. Speaking in **Marathi, Smt. Rupali Sainath Dhadve**, the Sarpanch, shared that the solar energy-based water supply scheme, launched in September 2024, has transformed lives by ensuring sustainable and uninterrupted access to water.

She said, under JJM, all 600 households in the village now have Tap Connections, eliminating the drudgery of fetching water from distant sources. The system is fully automated, equipped with electro-chlorination technology, and managed by trained Gram Panchayat workers—Jal Surakshyaks—under the supervision of VWSC. Water supply is scheduled and monitored digitally, and a onetime tariff of **₹500** per household is collected to ensure smooth operation and maintenance.

She further added that the scheme has not called for any repairs so far, reflecting its robust design and efficient management. New families applying for connections receive tap water within a month, reinforcing the village's commitment to universal coverage. Schools and Anganwadi centers are also connected to the system, ensuring safe water for children and mothers.

Sarola's success story is powered by Jan Bhagidari, technology, and strong local governance—proving that sustainable water solutions are possible when communities lead the way.

Figure 46: Community from Maharashtra interacting in Marathi | Source: NJJM

> *"We have a tap water connection in the Anganwadi centre, and children receive regular water supply every day. This has improved hygiene and health in our centre"*
>
> said **Smt. Manda Dhananjay Dhadve, an Anganwadi worker,** highlighting the social impact of the initiative.

Mizoram

Village Khawruhlian, MIZORAM

- Hilly terrain narrated a story of collective action Time savings enabling women to pursue livelihoods
- Protecting springs with traditional norms
- Community-led O&M despite distance

The village representatives of **Khawruhlian Village in Aizawl District** interacted in their local **Mizo** language. **Shri Lalsiamliana Ralte**, Secretary of VWSC, shared the remarkable journey of JJM in the village. Before, the village faced severe water scarcity, forcing residents to fetch water from distant springs. With the implementation of the JJM Gravity Water Supply Scheme, the situation changed dramatically. The scheme was handed over to the VWSC in October 2024, and since July 2025, the village is enjoying 24/7 water supply, ensuring reliability and convenience for all households.

Currently, all households are connected, including 6 Anganwadi centres and 5 schools. Billing follows the Mizoram Water Supplies (Control) Rules, 2023: **₹220** for up to 5,000 litres and ₹0.06 per litre for consumption between 5,000–10,000 litres. Collections are made monthly, averaging **₹1.5 lakh**, with a 90% payment compliance rate. To support families with limited income, the VWSC introduced concessions and, since June 2025, offered a 30% discount. Despite this, the committee maintained a healthy balance of ₹7.3 lakh after expenses for the year.

Figure 47: Community from Mizoram interacting in Mizo | Source: N.JJM

Operations and maintenance are managed by five staff members, including one female worker for billing and accounts and four male staff for technical operations and water distribution. Water quality is monitored regularly using FTKs and by experts from Mizoram University, ensuring safe drinking water from the pristine Chalfilh Mountain source.

Community voices reflected deep appreciation. **Smt. Malsawmzuali**, Anganwadi worker, said the Anganwadi Centre now has a free water connection, and all six centres in the village enjoy the same benefit. This has improved hygiene and health for mothers and children.

> ***"Not only Anganwadi Centres but all five schools have received free water connections under JJM. This has made a significant difference in ensuring safe drinking water for students and staff. We are truly grateful to DDWS and PHED, Mizoram, for this transformative initiative."***
> Said **Shri Laldinpuia**, teacher at the Government Middle School

Bihar

Village Kachariyadih, BIHAR

- A visible reduction in illnesses
- Improved quality of life
- Safe water safe lives

The community of **Kachariyadih Village** in **Nawada District** interacted in **Magahi** language during the *Sujal Gram samvad*. The Sarpanch described how access to safe tap water has significantly reduced water-borne illnesses and improved the lives of children and mothers. Earlier, due to high fluoride content in water, villagers suffered from skeletal and non-skeletal fluorosis, causing severe health issues. With the introduction of treated tap water under Jal Jeevan Mission (JJM), life has changed dramatically, health has improved, and the burden of fetching water from distant sources has ended.

> ***"In our village, we receive two hours of water supply each in the morning, noon, and evening. There is no shortage of water as before. Every month, trained women test water quality twice. Earlier, fluoride intoxication caused serious health problems, but now, as treated tap water reaches homes, life has changed and health is good."*** shared **Sunita Kumari**, ASHA worker

Figure 48: Community from Bihar interacting in Magahi | Source: N.J.J.M

Uttar Pradesh

Village Banka Pahari, UTTAR PRADESH

- Inspiring story of women's leadership
- Active network of Jal Sahelis
- Community mobilization for conservation

Community representatives of **Banka Pahari Village**, **Jhansi District**, concluded the *Sujal Gram samvad* while interacting in **Bundelkhandi**. The village leader shared that the community now enjoys regular water supply twice a day for two hours each, a major improvement from earlier hardships. The village has also constructed a community soak pit connected to every household, enabling greywater collection, treatment, and reuse for farming and groundwater recharge.

Jal Sahelis play a pivotal role in water conservation and river rejuvenation. They lead behavior change campaigns, educating villagers on the importance of consuming chlorinated water and preventing misuse of tap water. Initially, villagers were reluctant to drink chlorinated water and often misused tap water, but thanks to Jal Sahelis' efforts, the community now consumes safe water and uses it responsibly. ***"Our Jal Sahelis are our backbone, they ensure no household is left behind."*** said the Panchayat representative.

Figure 49: Community from Uttar Pradesh interacting in Bundelkhandi | Source: N.J.J.M

> ***"Earlier, we used to fetch water from a distant well. Half of our day was spent fetching water, and children often missed school. The water was hard and fluoride-contaminated, but we had no choice. Now, the scenario has changed - we have quality water, we have time, and children go to school on time. Earlier, many of us suffered from waterborne diseases like diarrhoea and stomach upsets. Today, our health status has improved, and there is no financial burden due to illness. We are healthier than before."***
> Shared a female beneficiary

Sujal Gram Samvad: A New Chapter in Participatory Rural Water Governance

The first *Sujal Gram samvad* was not just an event, it was the dawn of a movement. A structured, periodic, multilingual engagement platform will now convene every month, creating a rhythm of dialogue that speaks the language of the people and strengthens **Jan Bhagidari** at its core.

This continuous conversation will build a vibrant community of practice, fostering vertical and horizontal coordination so States can learn from each other. It will create real-time feedback loops, promote transparency and accountability, and celebrate local champions whose leadership lights the path to a water-secure future.

At its heart, *Sujal Gram samvad* is a platform of listening, empathy, and partnership. The inaugural edition was a mirror reflecting the soul of India's rural transformation, showcasing the pride of Gram Panchayats, the leadership of women, the energy of youth, the commitment of district and State missions, the vision of national leadership, and innovations born in the field.

It also revealed India's unity in diversity through conversations in 12 regional languages. When villages spoke, the nation listened with respect and resolve. The Samvad reaffirmed that the true strength of Jal Jeevan Mission lies not in pipelines or pumps, but in people, their ownership, discipline, commitment, and dreams.

India's rural water governance will be shaped not only by policy but by stories, experiences, and wisdom from the ground. A water-secure India will be built one conversation at a time. A Sujal India will emerge one empowered village at a time driven by **Jan Bhagidari**.

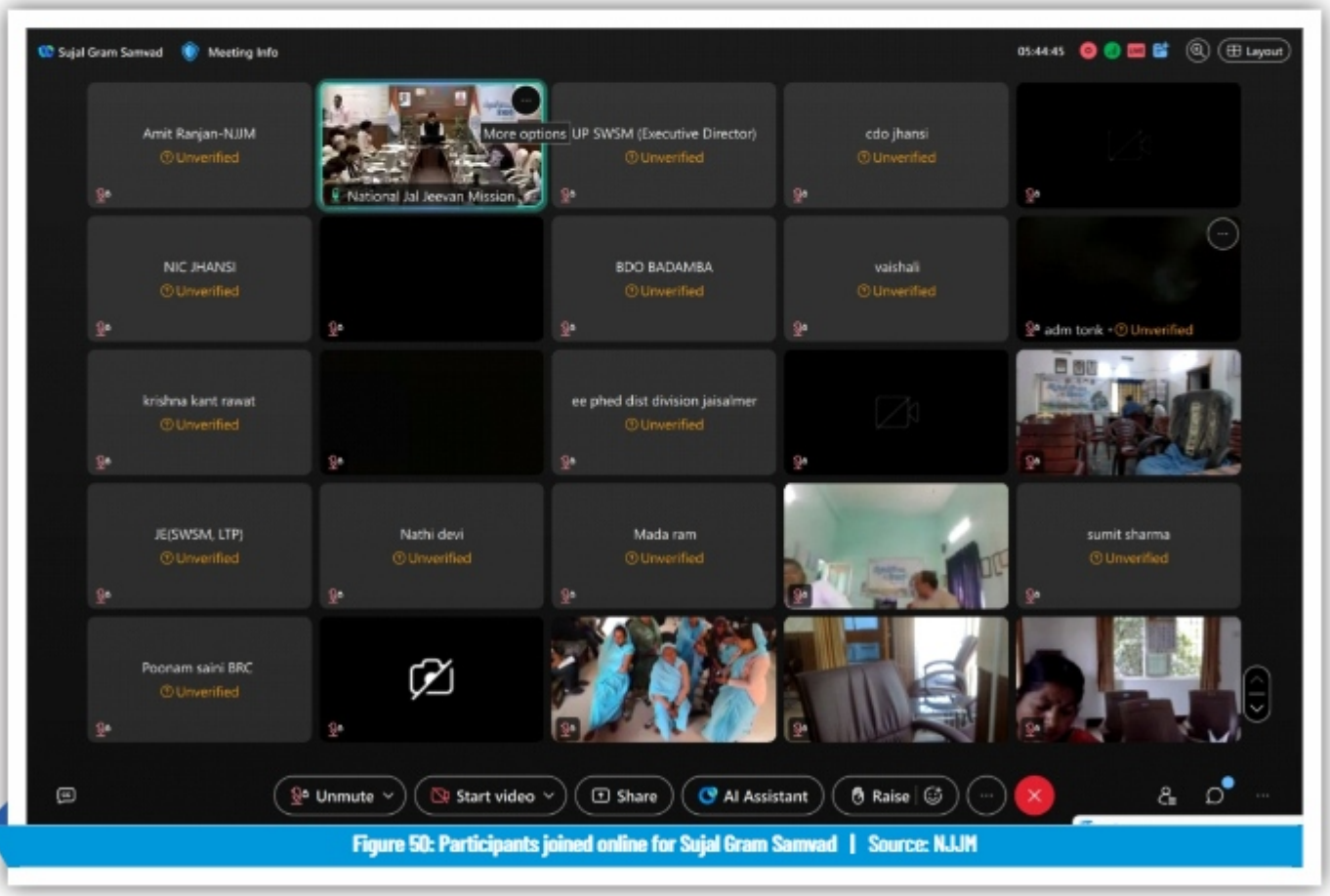


Figure 50: Participants joined online for Sujal Gram Samvad | Source: NJJM

3rd District Collectors' Peyjal Samvad, Strengthening Rural Water Governance Through Grassroots Leadership

– Lopamudra Panda, NPMU-N.J.JM

On 27th November 2025, the Department of Drinking Water and Sanitation (DDWS), Ministry of Jal Shakti, convened the 3rd District Collectors' Peyjal Samvad—a nationwide platform where district leadership and national policymakers came together for a direct, outcome-driven dialogue on the future of rural water governance in India.

Built around the central theme ***"From Grassroot to Forefront,"*** this edition placed a strong focus on real-time service delivery performance, sustainability of schemes, water quality assurance, and the role of Gram Panchayats and Village Water & Sanitation Committees (VWSCs) as custodians of India's drinking water systems.

At a time when India is advancing rapidly towards the goal of Har Ghar Jal, the Samvad served as a timely reminder: infrastructure creation is just the beginning; sustained, quality service delivery is the real milestone.

A Platform for Evidence-Based Governance

The virtual conference, chaired by Secretary, DDWS, Shri Ashok K.K. Meena, demonstrated how district administrations are not only implementing the mission's guidelines but actively shaping innovative local solutions grounded in data and community ownership.

Figure 51: Shri Ashok K.K. Meena setting the context | Source: N.J.JM

Setting the context, the Secretary emphasised that the journey of Jal Jeevan Mission (JJM) has now entered a crucial phase. With most districts substantially completing coverage, the focus must now shift from mere infrastructure creation to ensuring that water flows every single day—reliably, safely and sustainably.

He reiterated that the trust of rural communities is built not on announcements but on service delivery. *"The real test of Jal Jeevan Mission lies in effective operation and maintenance (O&M),"* he said, underscoring the pivotal role of Gram Panchayats as the institutions closest to people, uniquely positioned to manage, monitor and sustain water supply systems.

In her welcome remarks, Smt. Ankita Chakravarty, Deputy Secretary (NJJM), highlighted how district-level engagement has deepened over the past year due to strengthened monitoring mechanisms such as DWSM meeting recordings and Panchayat Dashboards.

530+ District Collectors have shared their DWSM meeting recordings, enabling DDWS to understand ground realities related to source sustainability, O&M gaps, leakages, tariffs and water quality issues.

85,000+ Panchayats have accessed their data on the Panchayat Dash-

board, reviewing functional status, household coverage and water quality reports.

She told that access to data has empowered Panchayats to identify issues, plan solutions and take greater ownership. The Sujal Gram Samvad campaign further demonstrated that when communities are supported with information and training, they willingly step forward to take responsibility.

Commissioning & Handing Over Protocol: Ensuring Quality Before Service Delivery Begins

A major highlight of the Samvad was a detailed presentation by Shri Sumit Priyadarshi, Deputy Advisor (NJJM), on the newly defined Commissioning Protocol and Handing Over Protocol, which are central to the long-term sustainability of water supply systems.

A **Four-Phase Commissioning Framework** - The framework ensures that every Rural Piped Water Supply Scheme (RPWSS) is technically sound, thoroughly tested and verified before being declared operational. The stages include:

i) Pre-Commissioning Documentation - Verification of as-built drawings, defect assessment, design compliance and documentation.

ii) System Testing - Pressure testing, disinfection, flow and capacity testing, as well as BIS-compliant water quality testing.

iii) Trial Operations (14 Days) - Continuous observation under real-life conditions to ensure the system performs reliably.

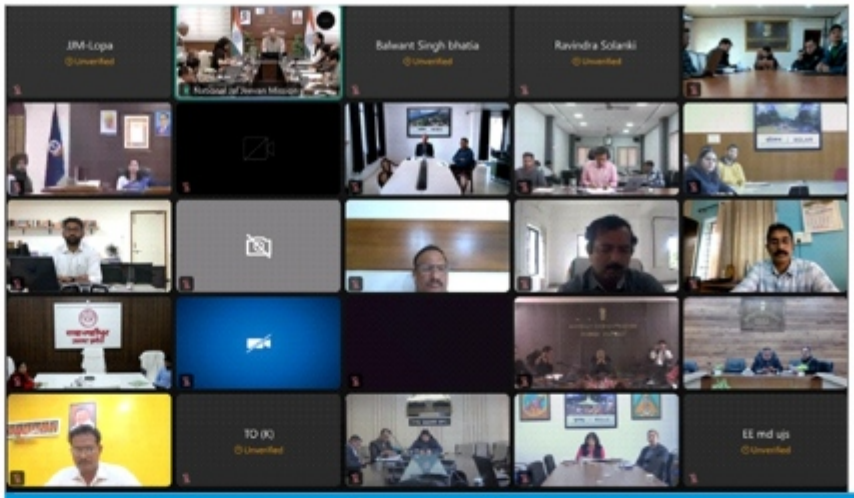


Figure 52: Participants of 3rd Peyjal Samvad with DC/DMs | Source: NJJM

iv) Final Documentation & Digital Integration - Commissioning reports, O&M manuals, certifications, and integration with JJM-WQMIS and PM Gati Shakti for real-time monitoring.

The protocol also institutionalises "Jal Arpan Diwas," where villages celebrate the formal handover through community-driven activities such as Jal Bandhan, Pledge Ceremonies, and cultural events. These practices reinforce collective responsibility and long-term custodianship.

District Presentations: Showcasing Innovation & Local Solutions

Deputy Commissioners/ District Magistrates from five districts across the country shared their field experiences, achievements, and strategies for strengthening rural water service delivery. Their presentations illustrated how varied geographies, cultures and governance environments influence water service delivery—and how local leadership can transform constraints into opportunities.

Details of Districts Made Presentations

State	District	Presenter
Mizoram	Mamit	Sh. K. Laltlawmlova, Deputy Commissioner
Andhra Pradesh	Alluri Sitharama Raju	Sh. A. S. Dinesh Kumar, Collector & District Magistrate
Punjab	SAS Nagar	Smt. Komal Mittal, Deputy Commissioner, SAS Nagar
Ladakh	Leh	Sh. Romil Singh Donk, Deputy Commissioner
Meghalaya	Ri Bhoi	Sh. Abhilash Baranwal, Deputy Commissioner

Mamit, Mizoram – Innovation in the Hills

Shri K. Laltlawmlova, District Collector, shared the remarkable progress in villages like Lallen, where a combination of:

- community-led renovation of old gravity-fed systems,
- replacement of aging pipelines,
- creation of new intake alignments, and
- adoption of solar-powered pumping

has enabled 24×7 water supply in a challenging terrain. Local leaders played a crucial role in mobilising communities, ensuring vigilance against leakages, and promoting a culture of shared responsibility.

Figure 53: Slide from Mamit PPT | Source: N.J.J.M

Alluri Sitharama Raju, Andhra Pradesh

Presenting the unique challenges of a predominantly tribal, geographically fragile aspirational district, Shri A. S. Dinesh Kumar, District Collector & Magistrate, highlighted:

- high dependence on foot-access-only areas,
- seasonal fluctuations in groundwater, and
- loose-soil mountainous terrain.

To respond to these conditions, the district adopted gravity-fed spring systems, solar dual-pump mechanisms, community-driven FTK monitoring, and extensive spring-shed management under MGNREGA to stabilise sources.

With 7,000+ JJM works completed and 1.8 lakh household tap connections, the district is now focusing on strengthening its multi-village schemes and building local O&M capacities.

Figure 54: Slide from Alluri Sitharama Raju PPT | Source: N.J.J.M

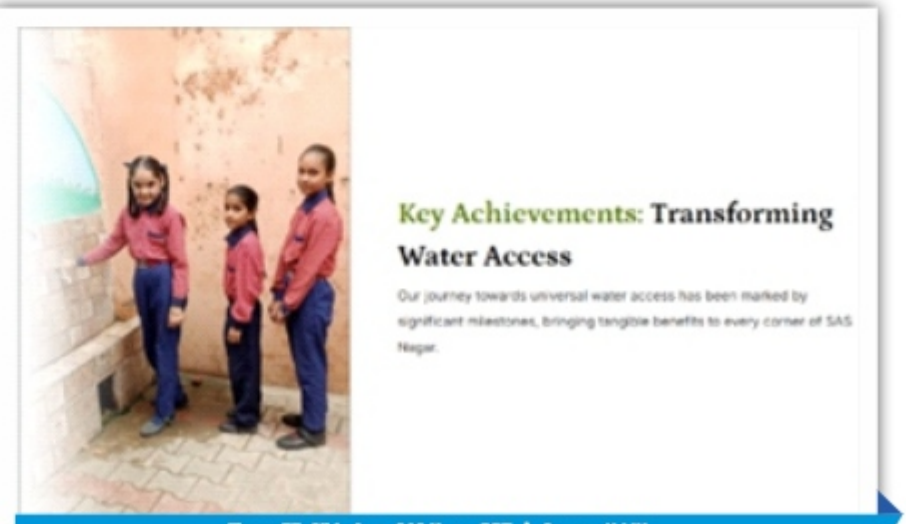


Figure 55: Slide from SAS Nagar PPT | Source: N.J.J.M

SAS Nagar, Punjab

Smt. Komal Mittal, Deputy Commissioner, highlighted the district's milestone achievement of 100% Functional Household Tap Connections, covering 82,000+ households, all schools, and all anganwadis.

The district's governance model integrates:

- rigorous planning through Village and District Action Plans,
- strong GP-led implementation, and
- robust water quality monitoring through labs and periodic service-level reviews.

SAS Nagar's systematic approach ensures that households receive safe and consistent water supply, backed by institutional discipline.

Leh, Ladakh

Shri Romil Singh Donk, Deputy Commissioner, showcased an extraordinary example of adaptation from Matho village, where innovative pressure-regulated dripper technology ensures 24×7 water supply even in sub-zero temperatures.

The district's approach rests on:

- Innovative technology for sub-zero temperature
- ground-level verification,
- transparency mechanisms,
- social accountability, and
- community participation.

The design of frost-resistant, controlled-flow drippers demonstrates how innovation can flourish even in the harshest terrains.

Ri Bhoi, Meghalaya

In Ri Bhoi, Shri Abhilash Baranwal, Deputy Commissioner, highlighted the strength of over 580 functional VWSCs, supported by strong community participation.

A notable achievement is the training of 2,600+ women in FTK-based water quality surveillance, with five women from every village taking on this critical responsibility.

The district also shared success stories in source sustainability, including the community-driven rejuvenation efforts in Pahamjri village.

Figure 56: Slide from Leh PPT | Source: NJJM

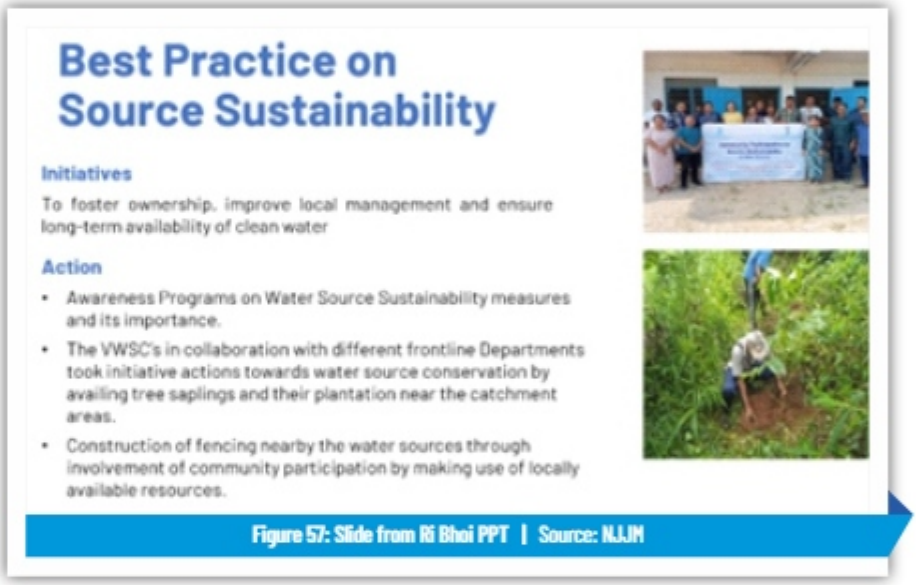


Figure 57: Slide from Ri Bhoi PPT | Source: NJJM

Strengthening Institutions: The Road Ahead

In his closing remarks, AS&MD, NJJM, Shri Kamal Kishore Soan, urged states and districts to:

- familiarise themselves with the new commissioning and handing over guidelines,
- disseminate them widely in regional languages,
- strengthen monitoring frameworks,

- prioritise source sustainability works, especially in hilly and water-stressed regions, and
- deepen Jan Bhagidari through community-led governance.

He emphasised that source rejuvenation is an urgent priority, especially in regions facing groundwater depletion and seasonal scarcity. Convergence with MGNREGA and other programmes is essential to protect springs, recharge groundwater and ensure long-term water security.

A Collaborative Path to Har Ghar Jal

The 3rd District Collectors' Peyjal Samvad brought together nearly 300 participants, including senior officials, District Collectors, Mission Directors, state teams, and partners. It reaffirmed that achieving and sustaining Har Ghar Jal is not merely an infrastructural challenge, it is a governance transformation driven by collaboration, innovation and community ownership.

As India continues its journey as a global leader in rural drinking water service delivery, platforms like the Samvad serve as powerful catalysts connecting national leadership with district insights, strengthening institutions, and placing communities at the heart of governance.

Ultimately, the Samvad demonstrated a simple truth, when Gram Panchayats, VWSCs and communities take ownership, water systems don't just get built—they endure.

And that is how rural India moves from "grassroot to forefront," shaping a future of assured, equitable and sustainable drinking water for all.

Watch the recorded Samvad here: *https://www.youtube.com/live/7c8SLN1moOk?si=gM9bcxJeAOy7bLfP*

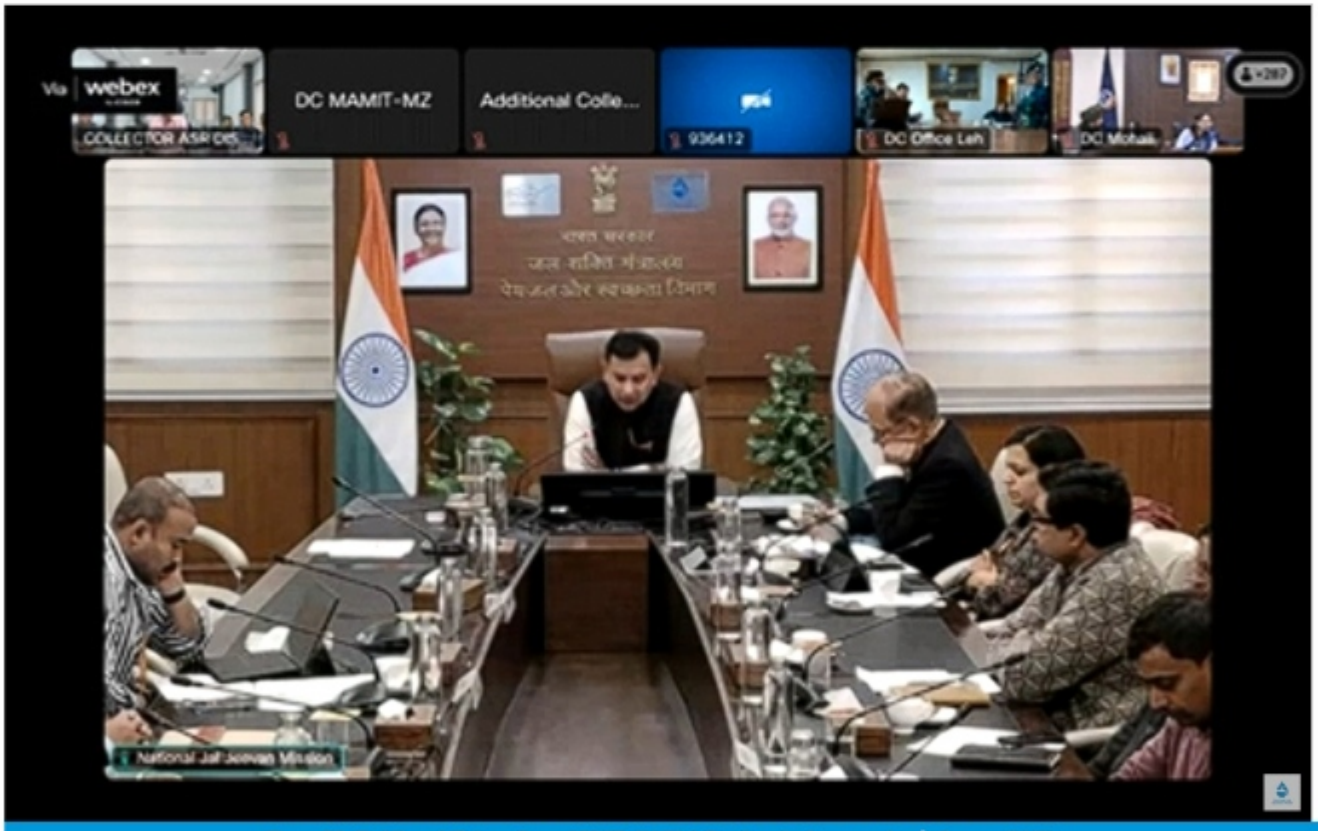


Figure 58: Shri Kamal Kishore Soan, AS&MD, N.J.J.M delivering closing remarks | Source: N.J.J.M

Commissioning and Handover Protocol for Rural Water Supply Schemes under Jal Jeevan Mission

Transforming infrastructure into reliable, people-owned services in rural India

– Sumit Priyadarshi, Deputy Advisor, NJJM, DDWS

Sumit Priyadarshi

India's **Jal Jeevan Mission (JJM)** has fundamentally reshaped the way rural drinking water supply is imagined and implemented. What was once largely a construction-driven programme is on the way to evolve into a **service-delivery, governance- and community-centered mission**. At its heart is a simple but powerful commitment: to provide every rural household with a **Functional Household Tap Connection (FHTC)** delivering at least **55 litres per capita per day** of safe, BIS-compliant drinking water on a regular and sustainable basis.

Between the completion of physical infrastructure and the realization of this promise lies a critical bridge: the **Commissioning and Handover Protocol**. This protocol offers a **structured, time-bound and transparent pathway** for moving schemes from project mode into **community-owned, sustainably managed village utilities**, fully aligned with the ethos of *Har Ghar Jal*.

Phased Validation Framework: From Assets to Assured Service

The commissioning protocol is organized into a **four-phase validation framework**, typically covering a period of two to three months between construction completion and full operational readiness. Rather than treating technical checks, operational readiness, documentation and community involvement as separate tasks, it **integrates them into a single coherent sequence**.

This approach directly reflects key national principles under Jal Jeevan Mission:

- **Assured quantity and quality** of water as per 55 lpcd and BIS 10500 standards.
- **Continuous service delivery**, not one-time asset creation.
- **Decentralized, community-managed systems**, led by Gram Panchayats and Village Water and Sanitation Committees (VWSCs).

Each phase builds on the outcomes of the previous one. No scheme is handed over until it is **demonstrably ready, safe and functional**. This is more than good engineering. It is a **governance imperative** under JJM – ensuring that when a village is declared *Har Ghar Jal*, the service is real, reliable and sustainable, not merely notional.

Pre-Commissioning Documentation and Defect Assessment

The first phase lays the **foundation of technical and institutional accountability**.

As-built drawings are finalized and carefully matched against approved designs. Design compliance is verified in line with BIS standards and Jal Jeevan Mission's operational guidelines. Every critical component is independently checked:

Intake structures, pumping stations, rising and distribution mains, storage reservoirs, treatment units, and distribution networks.

Crucially, this validation is carried out by **independent technical personnel**, avoiding the conflict of interest that can arise from contractor self-certification. Any deviation from the approved design or specifications is systematically documented.

In parallel, **digital asset mapping with geo-tagging** is undertaken for all major assets. These are integrated with platforms such as **PM Gati Shakti**/ Sujalam Bharat App and relevant rural water supply information systems, creating a national, spatially referenced record of drinking water infrastructure. Simplified versions of these maps are shared in the village, reinforcing

transparency and building community trust.

The entire process is **diagnostic**. A detailed component-wise visual inspection is done for pumps, valves, storage tanks, treatment units, meters, electrical panels and control systems. Every defect—leaks, misalignments, rusting, poor finishing or incomplete work—is captured. These findings feed into a **preventive maintenance register**, helping address minor issues before they turn into major breakdowns or chronic service disruptions.

In the context of Jal Jeevan Mission, this rigorous pre-commissioning documentation translates the Mission's emphasis on **"quality infrastructure, not quick infrastructure"** into day-to-day practice. It protects public investment and reassures communities that the system they are inheriting is both sound and well-documented.

System Testing, Flushing and Capacity Validation

If previous phase established what has been built, **next phase proves how it performs hydraulically**.

It begins with **hydrostatic pressure testing** of pipelines. In large, multi-village regional schemes, sectional testing is adopted to manage scale and complexity. This testing ensures that joints are strong, connections are secure and the network is structurally robust under pressure.

Once the mains and distribution pipelines are validated, attention turns to the **last-mile**. Every tap connection—household, community and institutional—is checked to ensure it functions properly and is free of leaks. This reflects a core insight of Jal Jeevan Mission: it is **not enough for water to reach the reservoir**; it must **reliably reach the last household tap**.

After structural integrity is confirmed, the entire network is thoroughly **flushed** to remove debris, sediments and construction residues. This is followed by **disinfection**, usually through chlorination in keeping with CPHEEO and WHO norms, typically in the range of 0.2 to 0.5 mg/L. The objective is to ensure that the system begins operations in a hygienic and microbiologically safe condition.

The final step in this phase is **flow and capacity testing**. Here, engineers verify that all distribution points can supply at least **55 litres per capita per day** at a **minimum residual pressure of 7 metres**, aligning precisely with Jal Jeevan Mission's national service benchmarks. In effect, this exercise links engineering design to the Mission's central promise: a **reliable, adequate and pressurized supply** in every rural home.

Quality Assurance, Equipment Validation and SCADA

This **Phase validates water quality and mechanical reliability**, echoing the Mission's strong emphasis on **quality assurance and continuous monitoring**.

Water quality testing covers a comprehensive range of **chemical parameters** such as pH, turbidity, fluoride, arsenic, iron, nitrate and other locally relevant contaminants. Samples are collected from multiple points across the system—source, treatment plant, key distribution nodes and household taps. These are analysed in **ISO/IEC 17025-accredited laboratories**, in line with the national thrust to strengthen rural water quality testing networks and standard protocols.

Residual chlorine levels are checked at the tail-end of the network to ensure at least **0.2 ppm** for microbial safety, while staying below **0.5 mg/L** to maintain palatability. Physical attributes such as colour, odour and taste are assessed to build user confidence in piped water as the **preferred drinking source**.

Simultaneously, all **mechanical and electrical equipment**—pumps, motors, switchgear, panels, valves and actuators—are tested under realistic load conditions. Critical parameters such as voltage, current draw, vibration, noise and alignment are measured. Field instruments including flow meters and pressure gauges are **calibrated** to support accurate, ongoing monitoring.

Wherever **SCADA** or other digital control and monitoring systems are provided, their sensors, communication links, remote-command capabilities and cyber-security features are validated. This aligns with Jal Jeevan Mission's vision of integrating rural water schemes with **IoT-based monitoring** and national information systems such as the **Water Quality Management Information System (WQMIS)**, enabling data-driven governance and **predictive maintenance** rather than ad hoc repairs.

Bacteriological testing-particularly for *E.coli* and total coliforms-confirms microbiological safety, which is non-negotiable under national drinking water norms. By the end of the phase, the scheme is not just physically robust; it is reasonably expected to supply safe, quality-compliant drinking water as mandated under **BIS 10500**.

Operational Validation and Community Integration

With the physical system validated, **the focus shifts to real-world performance and community engagement**.

A **continuous trial run** of around 14 days is carried out. During this period,

water flow, pressure, quality and even **energy consumption** are monitored closely. This trial functions like a "live stress test", revealing intermittent problems that may not surface in short tests—such as voltage fluctuations, pump cycling issues or unnoticed leaks under variable demand. Defects identified at this stage are rectified before the scheme is formally handed over, preventing chronic disruptions later.

Equally important is the **participatory dimension**. Joint inspections are conducted with engineers, representatives of the Gram Panchayat, VWSC/Paani Samiti members and other community stakeholders. Walking through infrastructure together and observing operations first-hand helps build a **shared understanding** of the system's layout, key control points and routine O&M tasks.

Community awareness activities are central to this phase. Structured sessions involving ASHA workers, schools, self-help groups and women's collectives help:

- explain how the water supply system works,
- clarify why chlorination is necessary and address concerns about taste,
- promote household-level water conservation and safe storage, and
- introduce the roles and responsibilities of the VWSC, including grievance redress and local monitoring.

This approach resonates deeply with Jal Jeevan Mission's philosophy that **village communities, not departments, are the primary custodians of rural water systems**. By this time, the community's role has evolved from that of "beneficiaries" to **informed, active partners** in managing their own water supply.

Compliance, Documentation and Long-Term Monitoring

This Phase brings together the technical, managerial and institutional strands into a **comprehensive commissioning dossier**.

All testing protocols—from hydraulic to mechanical, chemical and bacteriological—along with their results, corrective measures and final validations, are compiled into a **formal commissioning report**. Certificates demonstrating compliance with water quality norms, pipeline pressure tests and electrical safety are included.

User-friendly **operation and maintenance manuals** are prepared for VWSCs and Gram Panchayats. These often include diagrams, photographs and instructions in local languages to guide daily operations, troubleshooting and **preventive maintenance routines**.

Every scheme is then fully **digitally integrated** into national and state-level systems such as RPWSS databases, **PM Gati Shakti** and Jal Jeevan Mission's **Water Quality Management Information Systems**. Each scheme is assigned a **unique identifier**, enabling performance tracking, targeted support and analytics over the long term.

Where IoT-based monitoring is available, alerts and dashboards are configured to support **predictive maintenance**—allowing teams to anticipate problems before they lead to breakdowns. Thus, by the time the scheme moves to the handover stage, it rests on complete technical documentation, digital visibility and a clear roadmap for long-term oversight.

Handover Protocol: From Implementing Agencies to Community Institutions

The **Handover Protocol** provides a **standardized, transparent process** for transferring completed Rural Piped Water Supply Schemes from implementing agencies to **Gram Panchayats and VWSCs**, in full alignment with Jal Jeevan Mission guidelines.

Its key objectives are to:

- transfer all physical assets and financial records,
- establish robust village-level O&M mechanisms,
- enable evidence-based monitoring of quantity, quality and continuity,
- ensure a time-bound, structured transition, and
- foster genuine community stewardship of water infrastructure.

Before handover, the village must be formally declared **Har Ghar Jal**—that is, 100 per cent of households have tap connections, and the scheme is fully functional with adequate pressure, flow and verified water quality. The VWSC must have received **O&M training** and demonstrated the ability to operate and supervise the system.

Key documents—asset registers, as-built drawings, preventive maintenance schedules, standardized O&M records and water quality monitoring logs—constitute the **institutional memory** that underpins resilient, long-term operations.

When these conditions are met, handover yields tangible outcomes:

- Legally constituted community institutions take control of infrastructure.

Readiness is assessed across seven dimensions:

1. Complete and leak-free infrastructure.
2. Verified water quality clearance.
3. Completion of O&M training.
4. A functional VWSC with clear roles and responsibilities.
5. A detailed and updated asset inventory.
6. Community awareness and system walk-throughs conducted.
7. Financial readiness, including an operational VWSC bank account and a locally appropriate user-charge plan.

- Regular, community-led monitoring of service continuity and water quality is established.
- GPs and VWSCs gain practical capacity to manage O&M, guided by defined technical standards.
- Strong institutional linkages with higher-level agencies ensure ongoing technical backstopping and regulatory compliance.
- Financial sustainability is strengthened through better revenue collection, reduced wastage and transparent accounting.

Jal Arpan Diwas: Ritualizing Ownership and Stewardship

To embed this technical and institutional transition in the life of the village, the Handover Protocol culminates in **Jal Arpan Diwas**—a formal village-level event that serves as both symbolic and practical "Handover Day".

Typical activities on Jal Arpan Diwas include:

- a **transect walk** of the entire water infrastructure,
- formal signing of handover documents and Memoranda of Understanding,
- sensitization workshops for GP and VWSC members,
- confirmation of VWSC bank accounts and financial arrangements,
- planning and discussion of user charges and revenue-generation mechanisms,
- joint inspections, orientation sessions and self-assessment exercises,
- focus group discussions, and
- a **Special Gram Sabha** to endorse and publicly record the transition.

Cultural and participatory elements deepen the emotional connection:

- **Jal Bandhan** – tying a protective thread around key water assets as a symbol of collective commitment.
- **Jal Arpan** – ceremonial offering of water from the source by village elders, marking the formal transfer of responsibility to the Gram Panchayat and VWSC.
- Pledge ceremonies where community members commit to safeguarding and wisely using the scheme.
- Songs, plays and performances celebrating water security and the community's achievement.

Figure 59: An OHT made under JJM for water supply | Source:NJJM

These practices transform handover from a routine administrative step into a **community milestone**, reinforcing accountability and long-term stewardship. They are fully in tune with Jal Jeevan Mission's vision of rural water governance as a **Jan Andolan**—a people's movement.

Before, During and After Handover: A Continuous Governance Cycle

The protocol clearly demarcates responsibilities across three stages:

- **Before handover**: all technical works are completed; staff and VWSC members are trained; documentation is ready; and technical assessments and quality checks are finalized.
- **During handover**: the Gram Sabha reviews and approves the process; formal agreements are executed; and Jal Arpan Diwas is celebrated as the public marker of transfer.
- **After handover**: regular community-led monitoring, continuous training, technical support from higher tiers and systematic performance tracking continue, often supported by national and state MIS and digital dashboards.

This framing ensures that commissioning and handover are viewed not as an endpoint but as the **beginning of a new phase**—one of community-led, government-supported service management.

From Projects to People-Owned Services

The **Commissioning and Handover Protocol** for rural water supply schemes is much more than a set of technical checklists. It is the operational backbone of **Jal Jeevan Mission – Har Ghar Jal**, translating its core principles—assured quantity and quality, decentralized governance, community ownership and long-term sustainability—into practice on the ground.

By adhering to the four-phase validation framework-encompassing rigorous documentation, technical and quality checks, real-world operational trials and digital integration—schemes are commissioned not merely as physical assets but as **reliable, monitored services**. The structured Handover Protocol and the celebration of **Jal Arpan Diwas** then ensure that these services are handed over transparently to empowered Gram Panchayats and VWSCs, with the community both emotionally and institutionally invested in their success.

In doing so, India is not just building pipelines and treatment plants. It is **nurturing a new culture of rural water governance**, where local communities, supported by robust national standards and systems, safeguard their own water security-for themselves and for generations to come.

Figure 60: An adolescent girl drinking water from tap | Source: N.J.J.M

Matho Water Supply Scheme: A Freeze-Proof, Equitable and Innovative Model under Jal Jeevan Mission in Leh

– Romil Singh Donk, IAS, District Magistrate/ Deputy Commissioner Leh District, Ladakh

Romil Singh Donk

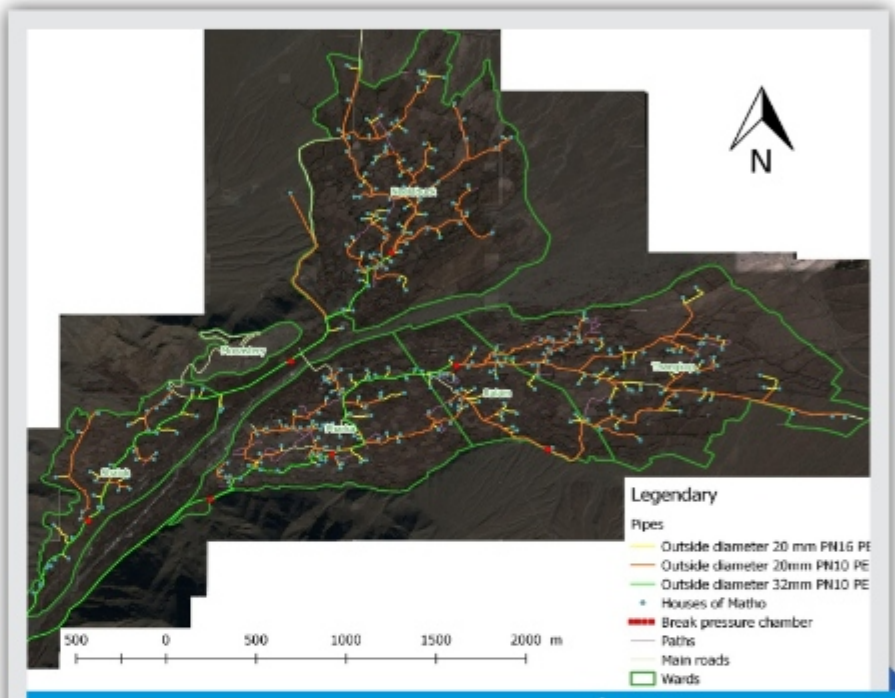


Figure 61: The network of Mahto water supply scheme | Source: PHE Leh

High up in the rugged mountains of Ladakh, where temperatures plunge to –30°C and winters stretch for months, ensuring uninterrupted drinking water has historically been a challenge. Yet, in this unforgiving terrain, the Matho Water Supply Scheme in Chuchot Block, Leh, stands today as a breakthrough, one of the most innovative, climate-resilient, and community-driven water supply systems implemented under Jal Jeevan Mission (JJM).

Commissioned in 2022, this scheme represents a unique blend of scientific engineering, local leadership, and global expertise delivering 24×7 safe drinking water to 357 households and institutions in Matho village, all through a gravity-fed, freeze-proof network that runs without any pumping costs. It has emerged as a model for high-altitude water management not only for Ladakh, but for cold desert regions across the world.

A Vision Rooted in Community Leadership

The story of the Matho Water Supply Scheme began much before JJM was launched. In 2015, Matho's village leadership realised the urgent need for a water supply system that could withstand their distinct geography and extreme winters. Rather than opting for a conventional design, the community sought a more scientific and sustainable solution.

A French NGO collaborated with engineering experts from ENGEES University, who conducted detailed hydrological and environmental studies of the region. After months of technical assessments, they proposed a custom-designed gravity-based distribution network tailored to the terrain and climatic conditions of Matho.

In 2020, the community formally approached the Public Health Engineering Department (PHED) to include this innovative design under Jal Jeevan Mission. PHED engineers reviewed the proposed system, validated its technical feasibility, and prepared the Detailed Project Report. The final design was also evaluated and approved using EPANET software, with validation again provided by ENGEES University.

Coverage, Capacity and Key Outputs

The Matho scheme is designed to ensure equitable, reliable, and safe drinking water for the entire village. It covers:

- 357 household and institutional connections, including schools, health centres, and the local monastery.
- 63 km of pipeline network
- Source discharge: 1.5 litre per second
- Supply standard: 70 litres per person per day
- Project cost: ₹6.64 crore

The system provides round-the-clock water availability, ensuring households have sufficient water stored every day even during peak winter periods.

A Unique, Gravity-Fed and Reservoir-Free System

What makes this scheme stand out is its engineering ingenuity. Instead of using pumps and service reservoirs, the Matho network follows a tree-branch gravity distribution system, which eliminates dependency on electricity, ensures consistent flow even in freezing temperatures and minimises maintenance and operational costs.

The network has been designed with a continuous gradient, allowing gravitational force to regulate both flow and pressure naturally.

Key Technical Features

The Matho Water Supply Scheme incorporates a tree-branch gravity network, eliminating the need for a service reservoir. Pressure-regulated drippers installed at every household ensure controlled and equitable water flow. Water remains inside the network for less than eight hours,

Dripper Colour Coding System:

Red Drippers: 2 liters per hour = 48 liters in 24 hours

Green/Grey Drippers: 8 liters per hour = 192 liters in 24 hours

Green Drippers: 8 liters per hour = 192 liters in 24 hours

Figure 62: A Child with tap water connection in sub-zero temperature | Source: PHE Leh

Figure 63: The colour-coded dripper mechanism | Source: PHE Leh

maintaining freshness. The system uses high-grade HDPE pipes with appropriate pressure ratings throughout. The system uses a simple yet intelligent colour-coded dripper mechanism, calibrated to meet household water needs.

Based on family size and requirement, PHED assigns the dripper type to each household, ensuring equity and transparency in water distribution. Household storage tanks receive their full quota within 24 hours.

Advanced Freeze-Proofing Techniques for Harsh Winters

Water systems in Ladakh face their biggest threat during winter when pipelines quickly freeze. The Matho scheme overcomes this through carefully planned interventions:

- Pipelines are buried 5 feet below the frost line, preventing freezing even at extremely low temperatures.
- A continuous-flow design ensures water is always in motion, reducing chances of ice formation.
- Household storage tanks are placed indoors or in greenhouses, protecting them from winter damage.
- No electric heaters, warming wires or external winterising systems are needed—making the scheme energy-efficient and sustainable.

These features collectively make Matho one of the very few villages in the world with a fully winter-proof rural water supply network.

Source Sustainability: The Ata Chumik Spring

The water source, Ata Chumik, was selected after technical evaluations for:

Figure 64: Women testing water quality with FTK | Source: PHE Leh

- Stable geology
- Reliable discharge
- Pristine water quality
- Ideal altitude for gravity flow

The spring site has been secured with fencing, a catchment chamber and protective boulder structures to prevent soil erosion and ensure long-term sustainability.

From the source, a 3.8 km transmission line transports water to the distribution system, supported by two break-pressure chambers to regulate the gradient and prevent pipe stress.

Robust Distribution Network for Reliable Delivery

The distribution system was designed after a detailed survey confirming 357 delivery points. Key features include:

- Eight break-pressure chambers to maintain safe pressure
- PN16 HDPE pipes (20mm & 32mm) for durability and freeze resistance
- A meticulously engineered continuous gradient
- Mechanisms to prevent dripper clogging
- Seamless flow across undulating mountain terrain

This ensures that every household, from the lowest to the highest altitude receives its fair and consistent share of water.

Household Delivery System - A Breakthrough in Sustainable High-Altitude Water Governance

The Household Delivery System represents a breakthrough in sustainable high-altitude water governance. Under this system, each household receives water through a calibrated dripper, which is adjusted based on family size to ensure fair distribution. These drippers are designed to fill the household storage tank within 24 hours, effectively eliminating issues such as unequal supply, pressure damage, and water wastage. The gravity-fed network further ensures minimal operational costs and low maintenance requirements, making it highly efficient and sustainable.

The Matho Water Supply Scheme

Matho Water Supply Scheme – Fact Sheet

1. Total Project Cost: **₹6.64 crore under JJM.**
2. Total Connections Covered: **357 Beneficiaries.**
3. Pipeline Length: **63 km distribution network across the village.**
4. Source to Village Transmission Line: **3.8 km, supported with 2 break-pressure chambers.**
5. Water Supply Rate: **24×7 supply at 70 litres per person per day.**
6. System Capacity: **Gravity-fed supply delivering 1.5 litres per second.**
7. Distribution Components: **08 break-pressure chambers + HDPE PN16 (20 mm & 32 mm) pipes.**
8. Freeze-proof Design: **Pipelines buried 5 feet below frost line, ensuring uninterrupted winter flow.**
9. Innovative Technology: **Household-level pressure-regulated drippers for equitable water distribution.**
10. Water Source: ***Ata Chumik* spring — protected with fencing, catchment chamber, and riverbed stabilization.**

Figure 65: The colour-coded dripper mechanism | Source: PHE Leh

stands as a model for high-altitude rural water engineering, equitable distribution through dripper-based flow control, freeze-proofing innovations, community-led planning, and sustainable service delivery with minimal operational cost. It truly reflects the spirit of the Jal Jeevan Mission—Har Ghar Jal, ensuring that every family, even in the cold desert of Ladakh, enjoys the dignity of assured drinking water at home.

Overall Impact

The Matho Water Supply Scheme has emerged as a model system for high-altitude rural water supply, particularly in regions facing harsh winter conditions. It successfully combines advanced engineering solutions with community-driven planning, ensuring both technical efficiency and social acceptance. The scheme demonstrates sustainability and freeze-proofing while guaranteeing fair distribution through innovative dripper technology. By strengthening the implementation of the Jal Jeevan Mission in Leh, it advances the national goal of Har Ghar Jal, bringing assured drinking water to every household in one of India's most challenging terrains.

Monitoring & Implementation of Jal Jeevan Mission in Leh District

Institutional Framework and Strengthening

The effective implementation of Jal Jeevan Mission in Leh District is supported by a strong institutional structure. Block Level Water and Sanitation Committees have been formed to decentralise planning, monitoring, and oversight of all water supply works. Alongside this, targeted training programmes were conducted for Panchayati Raj Institutions to enhance their capacity so they could play an active role in ensuring quality implementation. This institutional backing created a foundation where planning and supervision are shared responsibilities of both the administration and local governance bodies.

Physical Verification and Ground-Level Monitoring

Physical inspections were carried out in all villages to verify the real-time status and quality of work undertaken under JJM. These inspections ensured that the schemes were progressing as per the approved design and standards. To strengthen transparency, the details and

Figure 66: The colour-coded dripper mechanism | Source: PHE Leh

outcomes of these ground verifications were uploaded to an online portal accessible to the public. The involvement of trained PRIs in monitoring activities fostered a sense of community ownership in safeguarding the quality of the works.

Grievance Redressal Mechanism Systems

Leh District adopted a multi-channel grievance redressal mechanism to ensure accessibility and prompt resolution of public concerns. An online portal was launched, complemented by a toll-free number and WhatsApp service, allowing beneficiaries from even remote villages to register and track complaints easily. This system ensured that issues related to water supply, quality, or implementation could be addressed efficiently, strengthening trust from the community.

Figure 67: IEC activity with students | Source: PHE Leh

Figure 68: Meeting with community as a part of social audit | Source: PHE Leh

Social Accountability and Audits

To further enhance transparency, village-level social audits were made mandatory. During these audits, community members reviewed implementation progress, expenditures, and final outcomes, ensuring that the mission remained accountable to the people it serves. The reports generated from social audits, along with physical verification reports, were uploaded to a public portal. This open-data approach strengthened public confidence and community oversight in the mission's delivery.

Intensive IEC and Behavioural Change – Planning and Implementation

Grassroots-Level Awareness Campaigns

Village-level awareness programmes were carried out to ensure that communities were well-informed about the mission's objectives, benefits, and the responsibilities associated with maintaining water supply systems. These activities helped communities understand key aspects such as water quality monitoring, responsible usage, and source protection.

Month-Long Special Campaign – *Jal Jeevan Maah*

A dedicated month-long campaign, *Jal Jeevan Maah*, was carried out to promote *Jan Bhagidari* (people's participation). Through community meetings, events, and outreach programmes, the campaign reinforced the importance of HGJ certification, social Audits, water conservation, quality management, and local involvement in operations and maintenance of schemes.

Multi-Channel Communication Approach

A diverse range of communication tools was used to maximise outreach, including:

- Wall paintings carrying key messages
- Hoardings and banners in public places
- Quiz and debate competitions in schools
- Short informational videos
- TV and radio programmes
- Newspaper advertisements
- Distribution of brochures and pamphlets

This multi-pronged strategy ensured that water-related messages reached children, youth, adults, and vulnerable groups alike.

- copy edited by Lopamudra Panda, NPMU-NJJM

Figure 69: Intensive IEC campaign | Source: PHE Leh

How Drinking Water Supply has Transformed Rural Life in Mizoram Under JJM

– K. Laltlawmlova, Deputy Commissioner, Mamit District, Mizoram

K. Laltlawmlova

The impact of JJM in Mizoram is not just infrastructural – it ripples across health, education, sanitation, daily convenience, and community life. Some of the ways JJM has catalyzed real development include:

Reliable daily drinking water supply at home

Before JJM, many rural households depended on springs, seasonal streams, community taps or distant sources, often involving long walks and a heavy water-fetching burden. Under JJM, with piped water reaching homes, daily water needs *viz.* drinking, cooking, cleaning have become much easier and more reliable.

Better hygiene and sanitation leading to improved health

With consistent access to clean piped water, households can maintain better hygiene: washing hands, cleaning utensils, bathing, and keeping surroundings clean. This reduces dependence on unsafe or distant water sources, lowering the risks of waterborne diseases. The Mission's emphasis on "safe and adequate" water ensures both quality and quantity.

Moreover, villages like Sailam, highlighted in official reports have transformed into 24×7 water supply habitations with 55 litres per capita per day (lpcd) and have also earned recognition as Open Defecation Free (ODF) Plus villages.

Supporting education & childcare institutions - influencing future generations

With schools and Anganwadi centres now connected, children in rural areas have access to safe drinking water and sanitation. This not only safeguards their health but also supports regular school attendance (particularly for girls), reduces water-related illnesses, and enables schools to maintain hygiene more effectively.

Facilitating multi-dimensional rural development & community empowerment

JJM's approach is not only about laying pipelines – it emphasizes community engagement, sustainable water-source management, recharge and reuse (rainwater harvesting, greywater management), and long-term sustainability.

In villages with difficult terrain or scarce natural springs, innovative solutions have been adopted: rainwater harvesting structures, gravity-fed pipelines from catchment areas, and solar-powered pumping systems during dry seasons—all showcasing adaptability and community-driven water governance.

This transforms water supply from temporary relief into a sustainable resource, building resilience in rural communities.

Enhancing quality of life & reducing drudgery, especially for women and girls

In many rural households, fetching water used to be a daily chore borne mainly by women and girls-consuming time and energy that could have been spent on education, livelihood activities, or rest. With tap water at home, this burden is significantly reduced. This contributes to gender equity, child welfare, improved health, and broader socio-economic well-being.

Laying foundation for future livelihood, health and development initiatives

Access to reliable water is a foundational need. With JJM ensuring consistent supply, rural communities can now better leverage programmes on agriculture, livestock, sanitation, public health, and cottage industries—creating a virtuous cycle of development.

Figure 70: Solar Panel in Lallen village for water supply | Source: DWSM Mamit

What JJM has achieved so far in Mamit district (and Mizoram) - tangible water-supply outcomes

- According to the Functionality Assessment 2021–22, in Mamit district (population ~90,529; 84 villages), 39 villages (≈46%) were classified as Har Ghar Jal (all households with functional tap connections).
- Among surveyed households, 99.9% reported that their tap connection was working—much higher than the national average—showing strong system maintenance and reliable functionality.
- Lallen village is aiming for 24×7 water supply powered by solar energy and constructed under JJM. It has demonstrated exemplary cooperation with government departments, making it one of the best performers in Mamit district.
- Lallen also benefits from a gravity-fed system and community-constructed rainwater harvesting structures over a reservoir built under JJM. This is expected to ensure long-term water self-sufficiency.
- However, with global warming and climate change reducing water sources, the district administration, under the Deputy Commissioner, has initiated Source Sustainability Plans. PHED has been tasked to submit proposals to the District Level Committee on conserving sources and preventing pollution in upstream catchment areas.
- Overall, for many villages in Mamit, JJM has delivered: households now have reliable tap connections, reducing dependence on distant or manual water sources.

How water supply under JJM has translated into broader development and quality-of-life improvements in rural Mamit

Access to safe, on-premise tap water is more than a convenience - it can reshape rural livelihoods, health, gender roles, and community capacities.

Figure 71: Rain water harvesting tank at Lallen village | Source: DWSM Mamit

Key outcomes include:

Reduced drudgery, especially for women and girls: Traditionally, fetching water - often from streams, springs or remote sources - consumed considerable time and effort. With tap connections, that burden is relieved. According to JJM documentation, rural India saves "5.5 crore hours a day" previously spent on water fetching. Freed time can be reallocated for education, livelihood, care work, rest.

Improved health & hygiene: Safe drinking water reduces exposure to water-borne diseases. Nationwide, JJM is projected to prevent many tens of thousands of deaths annually from diarrheal diseases. For Mamit (and Mizoram generally), reliable piped water would mean cleaner water for drinking, cooking, washing - critical in hilly, remote terrain where natural water sources may be variable, contaminated or seasonal.

Empowerment and community involvement: Under JJM's model, local communities (villages, Gram Sabhas or equivalent tribal bodies) are responsible for planning, operation & maintenance, often through water & sanitation committees (WATSAN / "Pani Samitis"). This builds local capacity, accountability, sense of ownership.

Institutional strengthening and rural employment: JJM includes training of local people as masons, pump operators, plumbers, technicians - generating rural employment and skill development. In Mamit's context, this can help engage local tribal youth, reduce outmigration for labor, and build base of skilled manpower for maintenance.

Support for social infrastructure - schools, anganwadis, health-centres: JJM's aim extends beyond homes: ensuring piped water supply to public institutions (schools, health centres, Anganwadis) improves sanitation, hygiene, child health, and education outcomes.

Sustainability and water-resource management: Especially in a region like Mizoram/Mamit with fragile ecosystems and seasonal rainfall, JJM's emphasis on source sustainability (rainwater harvesting, greywater reuse, recharge structures) and community-managed maintenance is pivotal for long-term resilience.

Thus, JJM strengthens rural development, dignity, gender equity, health, and environmental sustainability in Mamit.

Figure 72: Rain water harvesting tank at Lallen village | Source: DWSM Mamit

Challenges, Gaps & Lessons - The Way Ahead- What remains to be addressed in Mamit (and more broadly in Mizoram)

While JJM has made impressive strides in Mizoram, some challenges and issues remain - offering lessons for sustaining and deepening the benefits, While progress in Mamit under JJM is commendable, several challenges and gaps remain (some general to JJM, some particular to hilly/tribal areas):

- In a few villages earlier, there were difficulties due to drying up of local water sources and degradation of forest catchments - highlighting the need for careful water-source management, recharge and conservation.
- The shift from infrastructure (pipes, taps) to sustainability (source recharge, water-quality maintenance, community management) is critical and needs continued vigilance. JJM envisions not just "water supply" but "sustainable water and sanitation" including reuse, recharge, greywater management.
- Ensuring that "tap connections" translate into "safe, reliable, year-round water supply" requires functioning pumps, sources, local management, and periodic maintenance - especially in remote or hilly areas.
- As per the 2021–22 district-level functionality assessment: out of 84 villages in Mamit, only 39 villages (≈ 46%) were "Har Ghar Jal"; remaining villages still lacked full coverage. Even in connected villages, there may be issues related to **quantity, continuity, and source sustainability** — particularly given Mizoram's terrain, seasonal rainfall, and dispersed villages. The state-level guidelines emphasize that long-term sustainability requires reliable source-recharge mechanisms and robust O&M.
- The dispersed tribal villages, scattered habitations, and difficult terrain mean **higher cost per household**, and more logistical/technical challenges in laying pipelines or gravity-fed networks. This was noted as a general challenge for JJM in hilly/remote areas. Long-term **operation & maintenance (O&M)**: while many households have functional taps now, sustaining supply demands regular maintenance, local capacity, finances (for pump operation, repairs, cleaning, pump-house management) - which depends on community commitment and institutional support. As per JJM philosophy, communities are expected to contribute (in cash, labour or kind) and manage water systems. **Monitoring & Water Quality Assurance:** While JJM guidelines call for regular testing (through Field Test Kits, water sample testing) and quality monitoring, remote and tribal areas like Mamit may face challenges in consistent testing, contamination detection, and corrective action.

However, success stories from villages and the overall coverage in Mizoram show that when communities, government departments and sustainable practices combine, even challenging geographies can achieve remarkable progress. Thus — establishing tap-water connections is only the first step; ensuring sustainable, safe, high-quality, continuous water supply in every village remains a work in progress.

Path Ahead - Recommendations & the Way Forward for Mamit district

To fully realise the objective of JJM in Mamit, and to transform water supply into sustainable rural development, the following steps / focus areas are important:

1. "Har Ghar Jal" Coverage

- Continue efforts to extend functional household tap connections to all remaining villages (and households) in the district. Prioritise villages currently "Not-Har Ghar Jal."
- Undertake detailed village-level water audits: check for gaps in distribution network, pipeline connectivity, missing tail-end households, etc.

2. Strengthen Water Source Sustainability & Resource Management

- Given Mizoram's geography, invest in **spring-shed protection, watershed management, recharge structures, rainwater harvesting**, especially in lean season.
- Promote community-based water conservation, catchment protection, and sustainable use practices. Given the importance of source sustainability even Mamit District is preparing Source Sustainability Plan.
- Ensure coordination with environmental protections (forests, wildlife) since many water sources may be in or near sensitive zones.

3. Institutional & Community Capacity Building

- Empower local Water & Sanitation Committees (or equivalent tribal/community bodies) with training and resources for regular O&M, maintenance, billing (if any), record-keeping, water-quality monitoring.
- Train local youth as plumbers, pump operators, technicians to reduce dependency on external manpower; build a local "water-workforce."

4. Water Quality Monitoring & Hygiene / Sanitation Integration

- Regular testing of water - chemical & microbiological - especially during monsoons or seasonal changes; use FTKs and other tools.
- Integrate water supply with sanitation and hygiene awareness: ensure safe disposal of waste/greywater, promote hygiene practices, especially in schools, health centres, Anganwadis, community spaces.
- Link with other sanitation programmes (if any) for wastewater treatment, solid waste management, etc.

5. Focus on Institutionalizing Sustainability: Funding, Policy & Governance

- Ensure state-level implementation of policies like the Mizoram Rural Water supply and Sanitation Operation and Maintenance Policy, 2025 - to guarantee long-term governance, funding, transparency, accountability.
- Encourage community cost-sharing (cash, labour or kind) to foster ownership; even nominal water tariff or periodic community contributions could help maintain infrastructure.
- Strengthen convergence with other programmes (watershed development, MGNREGS for labour, rural sanitation schemes, forestry/watershed protection) to maximize impact. JJM's model advocates such convergence.

6. Focus on Equity - Reach Remote, Small, or Scattered Hamlets

- Give priority to remote, small villages, SC/ST populations, or habitations that are geographically difficult or sparsely populated, to avoid leaving out "hardest-to-reach" people.
- Employ innovative approaches (spring-fed gravity systems, solar-pump systems, decentralized mini- schemes) suitable for hilly terrain instead of one-size-fits-all. The state's water-supply scheme list already includes solar pumping systems for remote water schemes.

7. Transparency & Community Awareness ("Jan Andolan for Water")

- Conduct awareness campaigns: importance of safe water, hygiene, water conservation. JJM emphasises Information, Education & Communication (IEC) as core component. Use community-level monitoring, reporting mechanisms; involve Gram Sabhas / equivalent tribal community bodies for verifying claims before "Har Ghar Jal" certification.

Why success of JJM in Mamit (and Mizoram) matters - broader significance

- For a district like Mamit which is tribal, rural and hilly; success under JJM signals that national-level flagship programmes **can be adapted for North-Eastern and tribal areas**, overcoming geographic and demographic challenges.
- Reliable water supply is foundational: it enables better health, supports livelihoods (less time fetching water, more time for farming, education, small enterprise), enhances school/health-centre functioning, women's empowerment, and social development.
- Community-management and decentralised governance under JJM can strengthen local institutions, build capacity, and foster long-term sustainability - aligning with aspirations of self-reliant, self-governed rural communities.
- Environmental sustainability: In ecologically fragile areas like Mizoram, water-source conservation, recharge, watershed management along with water supply, ensures that development doesn't come at the cost of environmental degradation.

JJM is transforming rural water supply in Mizoram, from a condition of hardship and scarcity to one of reliability, dignity, and opportunity. For households, it means safe drinking water from the tap for children in schools and AWCs; for women-freedom from drudgery; and for villages-a foundation for sustainable development.

Mizoram's journey under JJM shows that water is more than a basic need, it is the bedrock of holistic rural progress. As more villages move toward Har Ghar Jal, the state moves closer to a future where water, health, governance, and development advance together.

- Copy edited by Lopamudra Panda, NPMU-NJJM

SAS Nagar, Punjab Sets a Benchmark in Drinking Water Security

– Komal Mittal, IAS, Deputy Commissioner, SAS Nagar District, Punjab

Komal Mittal

SAS Nagar district stands out as a model for effective planning, community engagement, technological integration, and a strong commitment to providing safe and sustainable drinking water to every household. Under the leadership of IAS Komal Mittal, the District Water & Sanitation Mission (DWSM) has achieved a remarkable milestone by ensuring **100% Functional Household Tap Connections (FHTC)** across the district. Today, **82,024 households** have access to safe and regular piped drinking water, making SAS Nagar the **first district in Punjab** and the **sixth in India** to reach this achievement.

The district's universal water coverage extends across **340 Gram Panchayats**, **731 schools**, and **438 Anganwadis**, each equipped with functional tap water connections. This comprehensive outreach reflects not only infrastructural progress but also a deeper commitment to community well-being, dignity, and improved public health.

Figure 73: District officials and community members with AS&MD-N.J.J.M, Shri Kamal Kishore Soan, during a visit to review rural water supply infrastructure | Source: DWSM, Punjab

To achieve this scale of success, SAS Nagar prepared detailed **District Action Plans (DAPs)** and **Village Action Plans (VAPs)**. The active involvement of **Gram Panchayat Water and Sanitation Committees (GPWSCs)**, supported by the technical expertise of the Department of Water Supply, ensured smooth, sustainable implementation. Looking ahead, **34 new water supply schemes** have been planned for FY 2025-26 to ensure continued access to potable water.

For long-term water security, the district has also developed a comprehensive **District Water Conservation Plan** focusing on source sustainability. Through convergence with **Jal Shakti Abhiyan, MGNREGA, the Forest Department**, and **Swachh Bharat Mission**, initiatives such as recharge pits, check dams, rainwater harvesting systems, and greening activities (including **Nanak Bagichi** development) have strengthened the district's resilience.

A robust monitoring system supports these efforts. Monthly review meetings, IMIS-based real-time tracking, and a 24×7 grievance redressal mechanism through **SNK**, WhatsApp groups, and field visits ensure timely response and sustained functionality. A key asset in this structure is the **Regional Water Testing Laboratory**, equipped with advanced analytical capabilities. The lab conducts pre- and post-monsoon testing, bacteriological and chemical analyses, and also operates a mobile testing van, ensuring water quality across all areas. Its ISO-compliant protocols reinforce transparency and safeguard community health.

Figure 74: Regional Advance Water Testing Laboratory | Source:DWSM, Punjab

In addition, SAS Nagar has introduced a new initiative using the **Internet of Things (IoT)**. IoT-based monitoring systems have been successfully installed across **29 villages**, enhancing real-time oversight of essential services such as water supply and community infrastructure. By enabling quick response and informed decision-making, this technology ensures more reliable and transparent public service delivery, ultimately contributing to an improved quality of life for residents in these villages.

- Copy edited by Shailika Sinha


Figure 75: Regional Advance Water Testing Laboratory, SAS Nagar | Source: DWSM, Punjab

From Grassroots to Forefront

Innovations in Rural Drinking Water Delivery in Alluri Sitharama Raju (ASR)

– A. S. Dinesh Kumar, IAS, Collector & District Magistrate, Alluri Sitharama Raju District, Andhra Pradesh

A. S. Dinesh Kumar

Alluri Sitharama Raju (ASR), an aspirational district, presents one of the most difficult rural-water supply landscapes in India marked by hilly terrain, fragile geology, unreliable groundwater and isolated tribal habitations accessible only by foot. Under Jal Jeevan Mission (JJM), the District Water and Sanitation Mission (DWSM) has implemented terrain-appropriate, low-energy and community-led approaches including gravity-fed spring systems, solar dual-pump schemes, VWSC strengthening and multi-village water supply corridors. This paper outlines the district's challenges, innovations, outcomes and strategic roadmap for sustainable drinking water access in tribal and remote geographies.

Figure 76: Tribal women with Tap connection | Source: DWSM Alluri Sitharama Raju

Ensuring safe drinking water for every rural household is the core mandate of Jal Jeevan Mission. However, in geographically complex, socio-economically backward, tribal districts such as Alluri Sitharama Raju (ASR), the challenges are amplified.

ASR is characterized by steep hills, remote settlements, weak groundwater and high logistical barriers. Nearly 30% of the habitations are only accessible by foot, while groundwater reliability varies seasonally by 50%. Due to its terrain, infrastructure establishment costs in ASR are nearly 40% higher than in regular districts.

Despite these constraints, ASR has completed 3,959 water supply works

District Context and Challenges

- Geographical and Environmental Challenges
- Irregular power supply limiting conventional pumping systems.
- Low population density impacting scheme viability.
- High O&M expenditure (approx. 19% of capital cost).

and provided 1.8 lakh Functional Household Tap Connections (FHTCs), demonstrating a scalable model for other hilly regions.

This article documents the district's innovations, and the integrated approach used to overcome technical, operational and institutional challenges.

Methodology and Approach

Confronted with this reality, the District Water and Sanitation Mission (DWSM) opted not for a single technology or template, but for a set of principles and interventions shaped by terrain, local knowledge and community stewardship.

ASR District Initiatives and Strategy for JJM Implementation

- Gravity-Fed Water Systems;
- Solar Pumping; Tribal Habitations;
- VWSC Strengthening;
- Multi-Village Scheme;
- Community Ownership;
- Water Governance

Figure 77: Layout map of Neredubanda habitation | Source: DWSM Alluri Sitharama Raju

The district's response is rooted in four core ideas. Engineering must be appropriate to hill terrain; perennial springs and gravity systems should be prioritized; power dependency must be reduced through solar solutions where feasible; and last-mile governance must rest with strong, trained Village Water and Sanitation Committees (VWSCs). These principles guided a series of field-tested interventions that together constitute a replicable model for hilly and remote regions.

The ASR experience offers lessons in marrying low-energy engineering with community governance to achieve resilient, sustainable water services in tribal geographies.

Case Study 1. Field-Tested Interventions on Gravity-Fed Spring Water Systems

One of the most striking successes has been the adoption of **gravity-fed spring systems** in settlements with no road access in remote hilltop villages and weak groundwater. In villages such as Neredubanda in G. Madugula mandal, perennial springs were protected and fitted with simple roughing filters (0.5–1 LPS). HDPE pipelines were laid along natural contours to minimize excavation and disturbance, while small, elevated storage reservoirs constructed from PE or RCC provided immediate distribution buffering. The result has been continuous, **zero-energy supply that reliably delivers** more than 55 litres per capita per day to every household. The community's role in protecting the spring head, operating valves and participating in routine monitoring has been central; local ownership turns infrastructure into a living public asset rather than a disconnected installation.

Case Study 2. Field-Tested Interventions on Spring Water Systems: Gravity cum pumping

Where springs lie below habitations, ASR has successfully combined **gravity collection with modest pumping**. A gravity-fed collection well receives spring discharge after primary filtration; a low-capacity submersible pump then lifts treated

Figure 78: Solar Based water supply scheme at Bangaramma peta | Source: DWSM Alluri Sitharama Raju

water to hilltop storage tanks. This hybrid model, implemented in hamlets such as Chinaporlu and Seethabanda, has converted otherwise marginal sources into dependable supplies. The technology is deliberately simple, one-horsepower pumps and small reservoirs, so that **operational complexity remains low**, and community technicians can be trained to maintain the system.

Case Study 3: Solar Dual Pump Systems in Off-Grid Habitants

In **off-grid settlements** where electricity supply is unreliable, **solar dual-pump schemes** have emerged as a transformative solution. These systems use small solar arrays to power 1–2 horsepower pumps, delivering a **daily yield of 8,000 to 12,000 litres** of water. The water is stored in intermediate reservoirs with capacities ranging from 5 to 10 kilolitres, ensuring service levels of 55 litres per capita per day (LPCD). This design guarantees uninterrupted water supply even in areas where grid power is erratic, a common challenge in remote tribal regions.

The intervention involved installing **1–2 HP solar pumps** supported by **2–3 kW solar panels** in a dual-pump configuration. This setup provides redundancy and continuous operation, while eliminating dependence on grid electricity. By leveraging solar energy, the scheme not only ensures reliable water availability but also removes recurring electricity costs, making it a sustainable and cost-effective solution for off-grid habitations.

The Bangarammapeta scheme in Ananthagiri Mandal exemplifies the success of this approach. It has delivered **24×7 reliable water supply** to the community, completely eliminating electricity bills and reducing operational challenges. This initiative demonstrates how solar-powered pumping systems can address critical infrastructure gaps in remote areas while promoting eco-friendly and sustainable practices.

Case Study 4: Community Engagement, FTK Monitoring & Jala Devalayam

Water quality and community confidence in its safety are as critical as ensuring adequate supply. To address these concerns, ASR introduced the concept of **Jala Devalayam**, where headworks are physically treated as community assets. These sites are designed as small public spaces with neat fencing, plantations, and murals that communicate water-safety messages. At these nodal points, the district team institutionalized bi-weekly field-testing using kits to monitor parameters such as pH, turbidity, and residual chlorine. By making testing visible and local, Jala Devalayams not only protect water quality but also foster civic pride and a culture of vigilance.

Figure 79: Head Works made as a park for the community to own in MVS Ananthagiri | Source: DWSM Alluri Sitharama Raju

The intervention combined multiple strategies. A gravity-fed stream source was utilized to design a multi-village scheme (MVS), reducing dependency on energy-intensive pumping. A pressure-filtration unit with a capacity of **0.5 million litres per day**, strategically sited to exploit natural elevation differences, was installed to ensure safe water delivery. Alongside, bi-weekly water quality testing was institutionalized, and Jala Devalayam structures were developed with fencing, plantations, and IEC murals to reinforce awareness and ownership.

The outcomes have been significant. In one MVS near Ananthagiri, the system now serves **529 households**, delivering safe water with **zero energy cost**. Contamination incidents have sharply declined, and community ownership has strengthened, creating a sustainable model for water safety management. This initiative demonstrates how technical solutions combined with social design can transform water governance in rural areas.

Case Study 5: Multi-Village Schemes for Long-Term Sustainability

For long-term resilience and sustainability, ASR has scaled up multi-village corridors that draw water from perennial springs with capacities ranging from two to five litres per second. These corridors primarily rely on gravity-fed conveyance systems, which significantly reduce operational and maintenance costs. Where necessary, intermediate storage and pressure filtration units are incorporated to ensure water safety and reliability. By leveraging natural elevation differences, these systems eliminate dependence on grid energy, making them both cost-effective and environmentally sustainable.

The Araku Valley–Sunkarammetta corridor is a notable example of this approach. Serving thirty habitations, the scheme guarantees a consistent supply of more than 55 litres per capita per day (LPCD) throughout the year, even during peak summer. The design includes pressure filtration units with a capacity of 0.5 million litres per day and ground-level service reservoirs (GLSRs) of 20–50 kilolitres strategically placed at altitude advantage points. This careful profiling and reservoir siting maintain adequate pressure without the need for pumping, resulting in zero energy cost.

The outcomes have been remarkable. The corridor approach not only ensures uniform and stable water supply but also reduces per-unit costs, lowers O&M burdens, and distributes risk—so a failure at a single node is far less likely to cause system-wide breakdown. Implemented successfully in the Araku Valley–Sunkarammetta corridor, this model demonstrates how gravity-fed multi-village schemes can deliver sustainable, reliable water services to remote communities.

Case Study 6: VWSC Strengthening & Institutional Capacity Building

Technical design is only half the story. Institutional work with VWSCs has

Figure 80: RWS Team explaining community about the use of the Solar energy for the water supply | Source: DWSM Alluri Sitharama Raju

Figure 81: VWSC Training on O&M and user charges collection | Source: DWSM Alluri Sitharama Raju

Figure 82: VJNNS workshop in Narsipatnam | Source: DWSM Alluri Sitharama Raju

provided the scaffolding for operation, maintenance and local financing. ASR partnered with NGOs and field teams to deliver hands-on plumbing demonstrations, pump repair workshops and training in chlorine dosing and leak detection. VWSCs were formalized with committees of eleven to fifteen members, ensuring at least fifty percent women's participation. Training emphasized practical competencies—valve operation, meter reading, O&M registers, financial bookkeeping and transparent tariff collection. Field-based, local-language IEC materials reinforce learning and ensure that technical vocabulary is not a barrier. The result is faster, community-led repairs, better tariff recovery and a visible improvement in maintenance discipline, an institutional multiplier that transforms individual projects into durable services.

ASR's experience shows that terrain-specific engineering combined with strong community participation can overcome seemingly insurmountable rural water supply challenges. Gravity-fed systems and MVS corridors reduce dependence on power, while solar pumping addresses off-grid needs. Institutional strengthening ensures long-term sustainability.

The district's approach challenges conventional population (habitation)-based norms, making a strong case for **unit (settlement)-based project design** in low-density tribal regions.

ASR District demonstrates a pioneering model of how engineering innovation, community participation and administrative commitment can converge to deliver drinking water in difficult tribal terrains. The district's experience provides valuable insights for other hilly and remote districts across India aiming to strengthen resilience and sustainability under the Jal Jeevan Mission.

- Copy edited by Lopamudra Panda, NPMU-NJJM

Strategic Way Forward

- Expand Multi-Village Schemes (MVS) and develop a District Water Grid
- Shift from population (habitation)-based to unit (settlement)-based design norms
- Provision of dedicated funds for IEC, VWSC training and Jala Devalayam
- Strengthen spring-shed protection and watershed-based source sustainability
- Institutionalize community roles in O&M

The Nexus of Decentralization and Sustainable Water Governance:

Lessons from Ri-Bhoi's Implementation of the Jal Jeevan Mission

– Abhilash Baranwal, IAS, Deputy Commissioner & Chairman DWSM, Ri-Bhoi District, Meghalaya

Abhilash Baranwal

Figure 83: Community with their tap connection | Source: DWSM Ri-Bhoi

Introduction

Peyjal Samvad As a Platform of Collaborative and Decentralized Governance.

The Collectors' Peyjal Samvad is more than a periodic review mechanism; it is an epistemic, collaborative forum that transforms the administrative landscape of rural water governance in India. Rooted in the decentralization principles championed by Elinor Ostrom, the Samvad recognizes that durable solutions to common-pool resource challenges emerge not from central directives alone, but from empowered local institutions capable of adaptive problem-solving.

By bringing Deputy Commissioners together to exchange operational insights, community engagement models, and sustainability practices, the Samvad has become a crucible of innovation—where governance ideas are tested, refined, and replicated. It is a living example of collaborative federalism applied at the district level.

Ri-bhoi's Presentation at The 3rd Peyjal Samvad (2025)

At the 3rd Collectors' Peyjal Samvad held on 27 November 2025, Ri-Bhoi District highlighted its progress under the Jal Jeevan Mission (JJM), illustrating how deft administrative planning, guidance, decentralization and community stewardship can drive sustainable water governance even in complex terrain and sensitive socio-political environments.

Key achievements included:

- 85.40% Functional Household Tap Connections **(FHTC)**, covering more than 53,730 households, reflecting both administrative commitment and community trust.
- 581 active Village Water & Sanitation Committees **(VWSCs)**- the frontline institutions ensuring planning, implementation, and long-term sustainability through subsidiarity-based governance.
- 2,905 trained women volunteers, five from every village, conducting rigorous water quality testing using FTKs- mainstreaming ***gendered leadership*** in public service delivery.
- Community-led source sustainability models-for

example in **Pahamjri**-where collective action protects water sources through watershed maintenance, afforestation, and controlled land use.

- Such examples can serve as beacons for rest of the country where vigilant citizenry can contribute through **participative development**.

Ri-Bhoi's success demonstrates that ***"last-mile governance"*** thrives when citizens shift from being beneficiaries to custodians.

Governance Challenges In Ribhoi:

Despite its progress, Ri-Bhoi grapples with an intricate landscape shaped by topography, traditional institutions, and land ownership complexities unique to Meghalaya. The district's administrative context requires nuanced handling, balancing statutory authority with customary legitimacy.

1. Source Scarcity & Quality Degradation

Agricultural pressures, industrial effluents, and natural contaminants periodically threaten water sources. The district's large number of small, scattered streams makes integrated hydrological planning difficult. While in other parts of the country, the same stream may power multiple villages; in RiBhoi, sometimes number of streams match up the number of villages they are serving leading to logistical challenges. Multiple isolated water sources, hilly terrain, flood-prone habitations, and long pipeline alignments significantly increase the complexity, time, and cost of infrastructure execution.

2. Unique Land Ownership & Traditional Institutional Authority

Meghalaya's Sixth Schedule governance framework vests substantial resource control in traditional institutions (dorbars) and private landholders. Negotiating access to water sources requires trust-building, diplomacy, and deep respect for customary practices. This management of human resource often surpasses the engineering management and complexities of the project.

Figure 84: Community driven afforestation | Source: DWSM Ri-Bhoi

3. Limited Technical Capacity & Remote Access

Many VWSCs require continuous handholding in technical, financial, and administrative management, especially in hard-to-reach villages dependent on distant or fragile water sources.

Together, these challenges require administrative dexterity and culturally sensitive statecraft.

Administrative Innovations: The Ribhoi Model

Ri-Bhoi's governance approach is defined by foresight and participatory depth.

1. Standard Operating Procedures for Water Rationing

Ri-Bhoi has pioneered the creation of clear, context-specific Standard Operating Procedures (SOPs) for water rationing, tailored to the district's unique hydrological challenges. These SOPs outline criteria for equitable distribution in times of scarcity, prioritizing critical needs such as drinking, sanitation, and livestock. The protocols are developed in close consultation with local leaders, technical experts, and VWSCs, ensuring that rationing decisions reflect both scientific assessments and community priorities.Implementation of these SOPs is decentralized, empowering village committees to monitor consumption, enforce schedules, and mediate disputes. Periodic reviews and feedback mechanisms enable dynamic adjustments based on rainfall, source yields, and community feedback. The SOPs also incorporate contingency plans for extreme events, such as droughts or floods,

and encourage water-saving practices through awareness campaigns. By embedding transparency and collective decision-making, Ri-Bhoi's approach minimizes conflict and fosters resilience, setting a benchmark for other districts facing similarly fragmented hydrological conditions.

2. Community Involvement from Project Genesis

From the very inception of water supply projects in Ri-Bhoi, community participation is not just encouraged—it is foundational. Initial planning stages actively engage villagers through inclusive consultations, allowing local voices to shape the priorities, design, and operation of water schemes. This early involvement helps build a sense of shared responsibility and ownership, leading to higher levels of commitment and cooperation throughout the project lifecycle. Community members are invited to identify challenges, propose solutions, and even contribute labor or resources, fostering a collaborative spirit that persists beyond project completion. By integrating traditional knowledge and respecting local customs, the program ensures that interventions are both practical and culturally resonant, laying the groundwork for long-term sustainability and adaptability in water management.

Strategies For Stakeholder Engagement In Meghalaya's Unique Context

Effective governance in Ri-Bhoi requires diplomacy, cultural literacy, and institutional empathy.

Formal Dialogue with Traditional Institutions

Central to this approach is the formal dialogue with traditional institutions, which serve as pillars of community life and custodians of local customs. By involving village councils, headmen, and elders in structured conversations about water management priorities, the district administration ensures that policies resonate with local values and historical precedents. These dialogues foster mutual respect and create space for traditional wisdom to inform modern solutions, bridging generational divides and cultural differences.

Such engagement is not just symbolic; it translates into practical collaboration on project planning, dispute resolution, and resource allocation. Traditional leaders often act as mediators during conflicts and help mobilize collective action for maintenance and repair of water infrastructure. Their endorsement lends credibility to government initiatives and increases community buy-in, reducing resistance to change and facilitating smoother implementation of schemes. In addition,

Figure 85: Community awareness on Source Sustainability | Source: DWSM Ri-Bhoi

regular consultations with these institutions provide valuable feedback loops, enabling administrators to adapt strategies in response to evolving needs and local perceptions.

Participatory Decision-Making

Participatory decision-making in Ri-Bhoi is a cornerstone of inclusive water governance, designed to ensure that all voices—especially those from marginalized groups—are heard and valued. The district administration actively facilitates open forums, workshops, and village-level meetings where stakeholders can express concerns, propose solutions, and collaboratively set priorities for water management. These platforms not only empower citizens by giving them a direct role in shaping policies but also build transparency and trust between the government and local communities.

Special attention is given to balancing traditional authority with democratic participation. While elders and customary leaders are respected for their historical knowledge, younger generations, women, and other community members are encouraged to contribute fresh perspectives and innovative ideas. This approach reduces the risk of exclusion and ensures that interventions reflect the diverse needs and aspirations of the population.

Importantly, participatory decision-making helps to legitimize policies and programs, making it easier to mobilize community resources and resolve disputes. When communities are involved from the outset, there is a greater sense of ownership and accountability, which translates into more effective maintenance, equitable use of resources, and long-term sustainability.

As Cicero wrote, "The public welfare is the highest law." This ethos underpins Ri-Bhoi's administrative philosophy.

Conclusion: Towards A New Paradigm of Decentralized Water Governance

The Peyjal Samvad represents a quiet revolution in India's approach to rural water governance—where data meets dialogue, innovation meets context, and administration meets community wisdom.

Ri-Bhoi's experience demonstrates that:

- decentralization is not an administrative choice but a sustainability imperative;
- community ownership is the strongest insurance for the longevity of public infrastructure;
- traditional institutions, when engaged respectfully, become powerful allies; and
- women's leadership strengthens both technical and social systems.The district's journey affirms that sustainable water security emerges not merely from engineering projects but from governance systems grounded in trust, participation, and ecological stewardship.

Ri-Bhoi's story is therefore not just a success of implementation-it is a beacon for how decentralized, culturally attuned, collaborative governance can deliver transformative public outcomes across India.

- Copy edited by Lopamudra Panda, NPMU-NJJM

Figure 86: A functional household tap with storage tank | Source: DWSM Ri-Bhoi

Meetings and Workshops

1. Secretary, DDWS at NCA-F: Secretary, DDWS delivered a speech on "Viksit Bharat: Role of Decentralised Institutional Mechanism for Implementation of Schemes" at the National Communications Academy – Finance (NCA-F) during the Special Foundation Course attended by 176 Group-A Officer Trainees, 2025 batch of 15 All India & Central Civil Services. He highlighted the role of decentralised governance structures and institutions in the success of JJM and SBM-G and emphasized that "smaller the loop, lower the carbon footprint, better the management of system.

Figure 87: Secretary DDWS addressing Officer Trainees | Source: NJJM

2. State Review Meeting: The Secretary, DDWS chaired a review meeting with States/UTs on 07.11.2025 to assess the progress and implementation of JalJeevanMission. During the meeting Director from Ministry of Agriculture presented on the WINDS platform for real-time weather data to aid water-related decision-making at the grassroots level.

Figure 88: Secretary DDWS addressing in the review meeting | Source: NJJM

Shri Ashok K. K. Meena urged States/UTs to involve DWSM headed by DMs/ DCs as WINDS Local Guardians to help identify suitable location for rain gauge stations at Gram Panchayat level. This will empower VWSCs to make evidence-based decisions for source sustainability & water management.

Further, AS&MD-NJJM taken forward the review meeting, highlighting high-performing States, pending ATRs, reply of 3rd CS Conference, notification of O&M Policy, irregularities, overview of commissioning protocols, RPWSS ID creation, upcoming Sujal Gram Samvad, monitoring mechanisms through TPIAs and multi-dimensional training under NJMP. The meeting was attended by States/ UTs and field functionaries through VC and Officials from NJJM and NPMU was also present.

Field Visit

Visit of Shri Ashok K.K. Meena, Secretary, DDWS to Odisha

On 30 November 2025, Shri Ashok K.K. Meena, Secretary, Department of Drinking Water and Sanitation (DDWS), visited Rural Water Supply and Sanitation (RWSS) schemes in Sarabapada, Bayakuda, and Erabanga villages of Puri District, Odisha. During the visit, he inspected village water supply systems, reviewed working hours and monitoring processes, and assessed the overall functioning of the schemes.

He also interacted with beneficiaries and members of the Pani Samiti to understand their experiences and gather feedback on service delivery. The visit emphasized community participation and accountability in ensuring safe and sustainable drinking water for rural households.

Figure 89: Interaction of villagers and Pani Samiti members with Shri Ashok K.K. Meena Secretary DDWS | Source: RWSS Odisha

Visit of Deputy Advisor to Gujarat from 26th to 28th November

To strengthen community-led service delivery under Jal Jeevan Mission, a team from NJJM, DDWS comprising Shri Ashish Pandey, Deputy Advisor, and Shri Arpan De Sarkar, Economist, NPMU-PMCB undertook a three-day field visit to Gujarat to understand the successful PACS-, SHG-, and VWSC-led O&M models of rural piped water supply schemes. Another three Teams from Maharashtra, Madhya Pradesh, and Karnataka also joined the exposure visit.

Over three days, the teams visited 11 villages across 4 blocks in Kutch (Anjar, Bhuj) and Junagadh (Vanthali, Navagam). The field interactions highlighted Gujarat's strong practices in preventive maintenance, energy-efficient operations, user charge recovery, and transparent governance, especially in PACS-managed schemes.

These insights will support DDWS and the Ministry of Cooperation in designing a scalable, incentive-based framework for involving PACS in rural water supply O&M ensuring sustainability, accountability, and community ownership across states.

Figure 90-91: Interaction with different PACs by the visiting team | Source: NJJM

Visit of Under Secretary to Gujarat

A three-member team headed by Sh. Sumit Jha, Under Secretary, NJJM, DDWS visited Gujarat from 11th to 12th November. The team visited the state established Central Control and Command Centre. This Centralised Flow Monitoring System monitors real-time/ near real-time drinking water supply data across Gujarat from the location of the Source/ BWS point to the last head works post which water is delivered to the villages. The system integrates data from bulk flow meters and online water quality sensors, enabling continuous supervision and data-driven management of the State's drinking water distribution network.

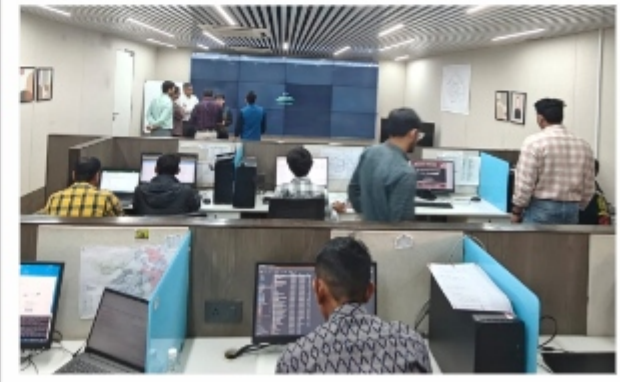


Figure 92-93: NJJM team understanding the functioning of Central Control and Command Centre | Source: NJJM

Har Ghar Jal
Jal Jeevan Mission

Jal Jeevan Samvad

Follow, like and subscribe

Jal Jeevan Mission, India | @jaljeevan_ | Jal Jeevan Mission
@jaljeevanmission | jjm.gov.in | Jal Jeevan Mission

Government of India
Ministry of Jal Shakti
Department of Drinking Water & Sanitation
National Jal Jeevan Mission
New Delhi - 110 003
e - mail: rnd-ddws@gov.in