There was a time when it believed that the people who had access to tapped water supply were either very rich people or had political reach. But today, Chamba, Lahaul Spiti and Kinnaur are the first in Himachal to have 100% tap water coverage under the ‘Har Ghar Jal’ Abhiyan. For these districts, the earlier governments used to make an excuse that these were inaccessible districts. So development was not possible. The convenience of water supply is not only reaching the women but also the new-born babies whose lives are being saved with potable drinking water.

- PM’s address at launch of development initiatives in Chamba, Himachal Pradesh, 13 October, 2022

We have been working on a vision of Antyodaya, which means empowering the last person at the last mile, in a mission mode. It is this vision that has guided us in last mile empowerment at a massive scale. Banking 450 million un-banked people, a population greater than that of the USA, insuring 135 million un-insured people, about twice the population of France, taking sanitation facilities to 110 million families, and tap water connections to over 60 million families, India is ensuring no one is left behind.

- PM’s address at United Nations World Geospatial International Congress, 11 October, 2022

Today 8 projects have been inaugurated and their foundation stones have been laid here. Heartiest congratulations to all of you for these projects related to water, electricity and connectivity!

We have received the blessings of our mothers and sisters because the entire burden of looking after the water related issues at home is on the women. If guests are coming in the house, then there is an issue of water and my mothers and sisters had to face this biggest concern. And who would have removed the water pitchers from the heads of these mothers and sisters? This very son will take that responsibility! Today we are supplying water completely through the pipes. Har Ghar Jal Abhiyan is going to get a boost from this.

- PM’s address at the launch of multiple development works in Jamnagar, Gujarat, 10 October, 2022
Prime Minister on Jal Jeevan Mission

Narendra Modi
Prime Minister

There was a time when it believed that the people who had access to tapped water supply were either very rich people or had political reach. But today, Chamba, Lahaul Spiti and Kinnaur are the first in Himachal to have 100% tap water coverage under the ‘Har Ghar Jal’ Abhiyan.

For these districts, the earlier governments used to make an excuse that these were inaccessible districts. So development was not possible. The convenience of water supply is not only reaching the women but also the new-born babies whose lives are being saved with potable drinking water.

- PM’s address at launch of development initiatives in Chamba, Himachal Pradesh, 13th October, 2022

We have been working on a vision of Antyodaya, which means empowering the last person at the last mile, in a mission mode. It is this vision that has guided us in last mile empowerment at a massive scale. Banking 450 million un-banked people, a population greater than that of the USA, insure 135 million un-insured people, about twice the population of France, taking sanitation facilities to 110 million families, and tap water connections to over 60 million families, India is ensuring no one is left behind.

- PM’s address at United Nations World Geospatial International Congress, 11th October, 2022

Today 8 projects have been inaugurated and their foundation stones have been laid here. Heartiest congratulations to all of you for these projects related to water, electricity and connectivity!

We have received the blessings of our mothers and sisters because the entire burden of looking after the water related issues at home is on the women. If guests are coming in the house, then there is an issue of water and my mothers and sisters had to face this biggest concern. And who would have removed the water pitchers from the heads of these mothers and sisters? This very son will take that responsibility! Today we are supplying water completely through the pipes. Har Ghar Jal Abhiyan is going to get a boost from this.

- PM’s address at the launch of multiple development works in Jamnagar, Gujarat, 10th October, 2022
Two pieces of news have had me captive under their spell over the past few days. The first is a promotion video from the film PSI, where the lead actor, Chiyyan Vikram, highlights the magnificent deeds of an almost divine king. The second is about a non-descript samadhi marked by an oblong Shiva lingam in Udayalur, Tamil Nadu. Being the Jal Shakti Minister, what struck me was this king’s relationship with water, so much so that the novel this film is based on is called *Ponniyin Selvan* (PS), or “Son of the Cauvery’. This king’s genius shines resplendently in the Brihadisvara temple (Thanjavur district, Tamil Nadu) and his humility seems so endearing in his simple samadhi.

The king that we are talking about - radiant as the sun and as majestic as the seas that he had mastered - is Raja-Dhi-Raj, ‘Rajakesari’ 'Arulmoli Raja Raja Chola-I. The renewed interest in him is yet another instance of the Indic revolution; of our forefathers who ruled by the principles laid down by our Dharma Shastras and who considered themselves mere servants of god and his disciples.

Raja Raja Chola-I was not the first Chola King to focus on water. The illustrious Karikala Chola created the great anicut of Kallanai (Tamil Nadu), one of the oldest water regulatory structures and a heritage irrigation structure that is still in use today. The
great/ grand anicut with its multiple channels still ensures that the waters of the Cauvery reach the fields. But what Raja Raja Chola did that stood out against the sheer daring of his ancestors was the establishment of an astute governance model.

In 2020, Prime Minister Narendra Modi during the foundation stone laying ceremony of Parliament highlighted “historical evidence in the village of Uttaramerur in Tamil Nadu” and how “stone inscriptions on the panchayat system prevalent during the Chola empire” explained how “every village was categorized as Kudumbu, which we call the ward today. One representative from these kudumbus was sent to the General Assembly, as it happens today”.

The people had the right to recall if any candidate/ representative failed to declare details of his property. The Chola kings granted autonomy to village councils to make decisions about their villages while the kingdom held the power of audit. One of the most remarkable strategies of the great king to unify the land under him was to convert landlords into dependent government servants which give the kingdom stability and made the king and his central cabinet the fulcrum around which the kingdom operated.

Water management of the highest order

As dictated by Vinu and Vasistha’s Dharma Shastras as well as Chanakya’s Arthashastra, instructions on water management were followed by him closely. The king’s focus on water conservation and rainwater harvesting were such that his kingdom had thousands of ancient tanks serving communities, there were well-laid-down rules for planning and the management of water.

These tanks were never large as they were built according to the topography of the Deccan plateau. Surprisingly, every village had a Neerkatti, in charge of irrigation, who supplied water from these tanks to the fields by following a schedule. All these activities were under the watchful eye of the village council who planned and managed the resources judiciously.

The Parakesararman inscriptions highlight the punishment for unauthorized withdrawal of water. One of the amending facts is the parameter for utilisation of the water against the capacity of the tank that they tried to maintain. This minimum parameter, of 2.5 times, is still used by the Government when it comes to planning and building dams. When it came to governance, Raja Raja Chola was not only a micro manager of the highest order but also an ambitious planner and an executor-par-excellence like his forefathers. In his lifetime, he built over 5,000 dams and set up a water ministry. Some such as a Uyyakondan channel (985-1013 AD) are still functional. During the time of the Cholas, the work of water and flood management was considered to be a pious duty; a myth is that Lord Shiva himself descended to strengthen flood banks following the prayers of an old woman. One more aspect of the sophistication of his methods was the provision to effect the cost equivalent to labours for various works of irrigation and water management which is followed under the Mahatma Gandhi National Rural Employment Guarantee Act. Inscriptions have shown that the government and people used to work together for water conservation—again followed by the Jal Shakti Abhiyan.

Other examples

We really do not look for new theories and practices in water conservation. We just have to revisit the past. Our great kings have been wiser than most of us can even begin to comprehend. When Kempegowda began to work on his dream city of Bengaluru, his mother only had two pieces of advice—Kerouala Kittu, and Manangaliem Nedu (Build lakes, plant trees’). The Pallavas had a separate body for lake management called the "Eri Varyam”. King Rudradaman of Junagadh, Gujarat, spent all of his personal fortune repairing the embankments of Lake Sadarshana when it was destroyed in a cloud burst. We all know that Shah Jahan built the Taj Mahal in memory of his wife, but not many know what the Rani Ki Vav (or the peen’s stepwell in Gujarat is; it was built by queen Udayamati which some say was in memory of King Bhimdev—also a symbol of love,. Wherein a heritage structure quenches the thirst of millions.

What does a great kingdom mean? Does being powerful and prosperous count as greatness? Or is it something else? For me, one vital ingredient is empathy—a kingdom living it along with the above is truly great. Be it water or something else, empathy lies at the beating heart of a great empire. And empathy is something that our great ancestors practiced. Our ancestors were a super generation ahead of its times, but tightly fastened to the techniques of the past. As the great king’s wide-eyed audience, may his life serve as a reminder of the same virtues that course in our veins.

The original article was published by The Hindu on 24th October, 2022.
This year again, to commemorate the occasion of Gandhi Jayanti on 2 October, 2022 we celebrated Swacchh Bharat Diwas. Hon’ble President of India, Smt. Droupadi Murmu graced the event and encouraged the efforts of States/ UTs in accelerating the ODF Plus and Har Ghar Jal momentum by presenting them with awards for excellence. She expressed confidence that India will set an example in the fields of water management and sanitation for the developing world and the significance of this transformational change in the lives of tribal, scheduled caste, backward, and economically weaker sections of rural communities.

The mission accords top priority to water quality. 100-days water quality campaign “Swachh Jal Se Suraksha” was also announced on 2nd October, focusing on awareness creation about the importance of water quality among the people through Information, Education, and Communication (IEC), training activities and capacity building of villagers using citizen science approach. The campaign will also help to monitor the quality of water supplied in rural households through a reporting system and the States/ UTs must ensure immediate corrective measures to ensure water service delivery of prescribed quality. Identification and training of at least 5 women in every village, preferably including at least one ASHA worker and one Anganwadi worker, for water quality testing using FTKs should be prioritized as this will not only help in ensuring the prescribed quality of tap water supply, it will also have a huge impact on the health outcomes of rural families, especially women and children.

Jal Jeevan Survekshan (JJS) Toolkit and JJS-2023 Dashboard was released by the Vice President of India on 21st October, 2022. The modalities of the Jal Jeevan Survekshan were introduced to the States/ UTs in the recently held National Workshop in Mohali, Punjab. Ensuring long-term functionality of water supply systems and regular tap water supply to households, is one of the focused areas of the mission, for which functionality assessment is carried out every year, the results of which were also disseminated in the workshop, and States/ UTs must take prompt corrective measures in identified areas.

To bring in more transparency in public procurement as well as to expedite various planned activities under JJM, use of GeM portal is promoted. A new service category viz. ‘System integration service to implement IoT sensor-based measurement and monitoring of rural water supply systems’ has been introduced in the GeM portal and State/ UTs are encouraged to make use of it. Sensor-based IoT pilots were handed over to the communities in a few States which has made remote monitoring possible for various service delivery parameters.

With the conclusion of the monsoon season and after the festivities of October, it is time to capitalize on the next 5 months of the financial year, by putting in serious efforts to expedite last-mile connectivity of water supply. For this, all pending approvals and tendering of works must be expedited and in all certainty be completed by 31 December, 2022 in order to adhere to the timeline of successful completion by the year 2024. It is heartening to see that most of the States, barring a few, have completed all SLSCC approvals in due time. Going forward emphasis should be on expediting the pace of works along with enhanced focus on outreach activities, water quality testing, source sustainability measures, greywater management, training and skilling of the local village community, etc.

I am sure that every stakeholder will continue to work with passion and energy to ensure that potable tap water reaches every rural home by 2024.

[Vikas Sheel]
This year again, to commemorate the occasion of Gandhi Jayan on 2 October, 2022 we celebrated Swacchh Bharat Diwas. Hon’ble President of India, Smt. Droupadi Murmu graced the event and encouraged the efforts of States/ UTs in accelerating the ODF Plus and Har Ghar Jal momentum by presenting them with awards for excellence. She expressed confidence that India will set an example in the fields of water management and sanitation for the developing world and the significance of this transformative change in the lives of tribal, scheduled caste, backward, and economically weaker sections of rural communities.

The mission accords top priority to water quality. 100-days water quality campaign “Swachh Jal Se Suraksha” was also announced on 2 October, focusing on awareness creation about the importance of water quality among the people through Information, Education, and Communication (IEC), training activities and capacity building of villagers using citizen science approach. The campaign will also help to monitor the quality of water supplied in rural households through a reporting system and the States/ UTs must ensure immediate corrective measures to ensure water service delivery of prescribed quality. Identification and training of at least 5 women in every village, preferably including at least one ASHA worker and one Anganwadi worker, for water quality testing using FTKs should be prioritized as this will not only help in ensuring the prescribed quality of tap water supply, it will also have a huge impact on the health outcomes of rural families, especially women and children.

Jal Jeevan Survekshan (JJS) Toolkit and JJS-2023 Dashboard was released by the Vice President of India on 21 October, 2022. The modalities of the Jal Jeevan Survekshan were introduced to the States/ UTs in the recently held National Workshop in Mohali, Punjab. Ensuring long-term functionality of water supply systems and regular tap water supply to households, is one of the focused areas of the mission, for which functionality assessment is carried out every year, the results of which were also disseminated in the workshop, and States/ UTs must take prompt corrective measures in identified areas.

To bring in more transparency in public procurement as well as to expedite various planned activities under JJM, use of GeM portal is promoted. A new service category viz. ‘System integration service to implement IoT sensor-based measurement and monitoring of rural water supply systems’ has been introduced in the GeM portal and State/ UTs are encouraged to make use of it. Sensor-based IoT pilots were handed over to the communities in a few States which has made remote monitoring possible for various service delivery parameters.

With the conclusion of the monsoon season and after the festivities of October, it is time to capitalize on the next 5 months of the financial year, by putting in serious efforts to expedite last-mile connectivity of water supply. For this, all pending approvals and tendering of works must be expedited and in all certainty be completed by 31 December, 2022 in order to adhere to the timeline of successful completion by the year 2024. It is heartening to see that most of the States, barring a few, have completed all SLSCC approvals in due time. Going forward emphasis should be on expediting the pace of works along with enhanced focus on outreach activities, water quality testing, source sustainability measures, greywater management, training and skilling of the local village community, etc.

I am sure that every stakeholder will continue to work with passion and energy to ensure that potable tap water reaches every rural home by 2024.
As on 31st October, 2022

India | Status of tap water supply in rural homes

<table>
<thead>
<tr>
<th>Total number of households (HHs)</th>
<th>19,14,90,269</th>
</tr>
</thead>
<tbody>
<tr>
<td>Households with tap water connections as on 15th Aug 2019</td>
<td>3,23,62,838 (16.90%)</td>
</tr>
<tr>
<td>Households with tap water connections as on date</td>
<td>+62,011 10,44,05,652 (54.52%)</td>
</tr>
</tbody>
</table>

Households provided with tap water connection since launch of the Mission

7,20,42,814 (45.27%)

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

- 100% FHTC States/UTs
- Goa, Telangana, A & N Islands, Puducherry, D&NH and D&D, Haryana

<table>
<thead>
<tr>
<th>100% FHTC Districts</th>
<th>125</th>
</tr>
</thead>
<tbody>
<tr>
<td>100% FHTC Blocks</td>
<td>1,352</td>
</tr>
<tr>
<td>100% FHTC Panchayats</td>
<td>76,854</td>
</tr>
<tr>
<td>100% FHTC Villages</td>
<td>1,60,618</td>
</tr>
</tbody>
</table>

As on 15th August, 2019

As on 31st October, 2022

Flagship programmes of the Central government i.e., Swachh Bharat Mission Grameen (SBM-G) and Jal Jeevan Mission (JJM). SBM-G was launched on 2nd October, 2014 with the aim to put an end to Open Defecation by accelerating the efforts to achieve universal sanitation coverage. Under the mission, all villages, Gram Panchayats, Districts, States, and Union Territories (UTs) declared themselves Open Defecation-Free (ODF) on 2nd October 2019, after 5 years from the date of its launch. Thereafter, to ensure that the open defecation-free behaviour is sustained, and that solid and liquid waste management facilities are accessible, the Mission marched ahead towards Phase-II of SBM-G i.e., ODF-Plus activities.

Hon'ble President of India, Smt. Droupadi Murmu, graced the event and encouraged the efforts of the States/ UTs in accelerating the ODF mission. On 2nd October, 2022, the Department of Drinking Water & Sanitation (DDWS), Ministry of Jal Shak celebrated Swachh Bharat Diwas (SBD) at Vigyan Bhawan, New Delhi. Every year, the Swachh Bharat Diwas is celebrated to commemorate the birth anniversary of the Father of the Nation, Mahatma Gandhi. The Swachh Bharat Diwas is inspired by one of Bapu's quotes, 'Cleanliness is next to godliness'. The Department is implementing two
On 2nd October, 2022, the Department of Drinking Water & Sanitation (DDWS), Ministry of Jal Shakti celebrated Swachh Bharat Diwas (SBD) at Vigyan Bhawan, New Delhi. Every year, the Swachh Bharat Diwas is celebrated to commemorate the birth anniversary of the Father of the Nation, Mahatma Gandhi. The Swachh Bharat Diwas is inspired by one of Bapu’s quotes, ‘Cleanliness is next to godliness’. The Department is implementing two flagship programmes of the Central government i.e., Swachh Bharat Mission Grameen (SBM-G) and Jal Jeevan Mission (JJM). SBM-G was launched on 2nd October, 2014 with the aim to put an end to Open Defecation by accelerating the efforts to achieve universal sanitation coverage. Under the mission, all villages, Gram Panchayats, Districts, States, and Union Territories (UTs) declared themselves Open Defecation Free (ODF) on 2nd October 2019, after 5 years from the date of its launch. Thereafter, to ensure that the open defecation-free behaviour is sustained, and that solid and liquid waste management facilities are accessible, the Mission marched ahead towards Phase-II of SBM-G i.e., ODF-Plus activities.

Hon’ble President of India, Smt. Droupadi Murmu, graced the event and encouraged the efforts of the States/ UTs in accelerating the ODF

Hon’ble President, MoJS and MoS at SBD-2022
Since the launch of SBM-G, more than 11 Crore toilets have been constructed, and about 60 Crore people have changed their habit of open defecation. She further said that through this mission, India has achieved the Sustainable Development Goal 6.2 (SDG-6.2) set by the United Nations in 2015, years ahead of the deadline of 2030.

Talking about Jal Jeevan Mission, she stated that at the time of the announcement of the Mission in 2019, only 3.23 Crore rural households in the country had provisions for tap water connections which has now increased to 10.27 Crore in the last 3 years. Due to the facility of water supply in homes, there has been a significant decrease in water-borne diseases. She further added that we must set an example in the fields of water management and sanitation for the developing world.

The Hon’ble President said that today after 75 years of independence we have entered Amrit-Kaal, thus our resolve should be—to build a healthy, clean, and self-reliant India. In achieving this goal, we will face huge challenges as providing basic facilities to such a large population will require modern technology and abundant resources. She expressed confidence that we will be successful in making India a developed and self-reliant nation with the joint efforts of our political leadership, scientists, doctors, engineers, teachers, and above all conscious citizens.

In his address, Union Minister Shri Gajendra Singh Shekhawat said that Gandhiji has given more priority to sanitation and cleanliness than freedom and celebrating his birth date as Swachh Bharat Diwas is a tribute to him in the true sense. Swachh Bharat Mission became more than just a government programme and transformed into a people’s movement, which has completely transformed the sanitation illustration of rural India. The MoJS thanked...
the people for their participation and ‘shramdaan’ in the Swachhta Hi Sewa (SHS) 2022 fortnight campaign and congratulated the best-performing states in SHS 2022. On Jal Jeevan Mission (JJM), he said that our aim is not only to provide tap water, but also to ensure appropriate quality and prescribed quantity on regular basis. Commending the efforts of States/UTs, he congratulated Andaman & Nicobar Islands for becoming the first Swachh and Sujal UT i.e., all the villages of the UT are now ‘Har Ghar Jal’ certified and ODF plus verified. He congratulated all the awardees and said that the water and sanitation history of India will always remember their contribution and they will be the role model and inspirations for other States/UTs. He reiterated the Prime Minister’s “4 Ps mantra” of Political Will, Public Funding, People’s Participation, and Partnership for making any programme successful.

Also present at the occasion, Union Minister for Rural Development & Panchayati Raj, Shri Giriraj Singh, said, to realize Mahatma Gandhi’s dream, the Government has launched various schemes like Swachh Bharat Mission, Ujjwala yojana, and Jal Jeevan Mission which have benefitted the scores of rural people and have also become Jan Andolan with Jan Bhagidari.

Shri Prahlad Singh Patel, MoS for Jal Shakti and Food Processing Industries in his speech exhorted the people to make Swachhita a resolution and goal of their lives. He further stressed on judicious use of water and the importance of greywater management in rural areas.

Shri Bishweswar Tudu, MoS for Jal Shakti and Tribal Affairs in his address appreciated the good works being done under various Government programmes. He stressed that community participation and better coordination among the various stakeholders is the key to making welfare schemes successful.

The Hon’ble President gave the Swachh Survekshan Grameen 2022 awards under the large States category to Telangana, Haryana & Tamil Nadu; under Small States & UT category to A&N Islands, DNH & DD, Andhra Pradesh, Rajasthan, and Tripura; and under Har Ghar Jal momentum category to Telangana, Haryana, and Tamil Nadu. He congratulated the best-performing States/UTs in the large States category and the best-performing Districts in the large States category. He also thanked the stakeholders for their support and coordination in making the Swachh Bharat Mission successful.

Categories of awards presented at the event

Swachh Survekshan Gramin, 2022

It aims to undertake a ranking of States and Districts based on their performance attained on key quantitative and qualitative parameters of SBM-G phase-II. The survey covered 17,559 villages in 709 Districts in 33 States/UTs (excluding the 3 UTs of Chandigarh, Delhi, and Lakshadweep). More than 1.75 lakh households were interviewed for their feedback on SBM (G) related activities.

Swachhta Hi Sewa (SHS), 2022

States/UTs which conducted and reported the maximum number of activities i.e., people’s participation in ‘shramdaan’ and cleaning activities carried out in public places and institutional buildings, legacy waste sites etc., plantation around water bodies, GPs passed the resolution for banning ‘single-use plastic’, participation of Sarpanches in ‘Sarpanch Samvaad’ on ODF Plus elements, people’s participation in awareness activities, waste collection and construction of segregation sheds and people’s participation in other SHS activities, were selected as winners.

Functionality assessment under Jal Jeevan Mission

Under JJM, to assess the performance of various local water utilities in States/UTs, a functionality assessment exercise is undertaken every year to assess the status of water service delivery to households. Tap water connection is referred to as functional if it meets 3 basic parameters i.e. (i) Supply of adequate water @55 lpcd or more; (ii) Supply of potable water/prescribed quality (BIS:10500); (iii) Supply of water on a regular basis, i.e. daily basis or as per the schedule decided by respective State government. The functionality assessment exercise was conducted for all 33 States/UTs in 712 districts covering 3.01 lakh households and 22,596 village level institutions in 13,299 sample villages randomly chosen.
Har Ghar Jal States/ UTs & Districts

A campaign was conducted to certify 100% household tap water connection villages, GPs, Districts, and States/ UTs as Har Ghar Jal. Awards were given to 31 districts that had certified all its villages as ‘Har Ghar Jal’, i.e., people from all the villages have declared their village as ‘Har Ghar Jal’ through a resolution passed by Gram Sabha, certifying that all households in the villages have access to safe drinking water through taps, ensuring that ‘No one is left out’. A special award is given to district Burhanpur, Madhya Pradesh for being the first ‘Har Ghar Jal’ certified district in the country.

Start-up Grand Challenge

was carried out to scout technologies that could support sustainable, affordable, scalable, and responsive solutions to the solid and liquid waste management challenges in rural areas. The crowdsourcing challenge was launched on 10th September, 2021 and hosted live on the DDWS website up to 1 month after the launch. A total of 372 applicants had registered, of which 62 applications were selected.

Sujlam 1.0 & 2.0

Sujlam was a 100-day campaign launched to manage greywater through soak pits, leach pits, and magic pits to ensure minimal stagnation of wastewater and check its discharge in the village pond. States/ UTs had to report the number of household and community soak pits constructed during the campaigns, on the national portal. A total of 23.04 lakh pits were constructed and the top-performing States were felicitated.

National film competition

National Level Competition for making films at Gram Panchayat-level, was held from 15th December, 2021 to 15th May, 2022 on various components of ODF plus. 33 films were recommended by States. Awards were given in 3 different categories i.e., hilly terrains, islands, and UTs and States.

National Wall painting competition

A competition on wall painting was held on ODF Plus themes in rural areas, from 15th August 2021 to 15th October 2021. 3 best performing States were awarded for each of the 5 themes (Bio-degradable Waste Management (BWM), GOBARdhana, Plastic Waste Management (PWM), Grey Water Management (GWM) & Faecal Sludge Management (FSM) from each of the 6 zones (North Zone, Northeast Zone, Central Zone, East Zone, West Zone, and South Zone).

and Sikkim in that order and to Bhiwani (Haryana) as overall ‘top performing district’. This was followed by the President conferring the awards for Jal Jeevan Mission Functionality Assessment. In more than 60% tap water coverage category, Puducherry and Goa were felicitated; in less than 60% tap water coverage category Tamil Nadu and Meghalaya secured the first and second position. Smt. Murmu also gave a special award to Burhanpur District, Madhya Pradesh for being the first ‘Har Ghar Jal’ certified district in the country, where all the villages through Gram Sabhas declared themselves as ‘Har Ghar Jal’.

The rest of the awards under various categories for both Swachh Bharat - Gramin and Jal Jeevan Mission were presented by the MoJS along with MoS for Jal Shakti. During the event, the Union Minister of Jal Shakti announced Swachh Survekshan Grameen (SSG) 2023 and Jal Jeevan Survekshan (JJS) 2023 survey. The Department also launched two other campaigns viz. 'Retrofit to Twin Pit Abhiyan' for promoting twin pit toilets in households towards improved faecal sludge management and 'Swachh Jal Se Suraksha', the campaign on water quality to create awareness on the importance of clean and safe drinking water and to help in monitoring the quality of water supplied in rural households.
**“Swachh Jal Se Suraksha” campaign**

Good public health and socio-economic development are dependent on access to clean drinking water and improved sanitation services. The importance of clean water and sanitation has also been fused into the United Nation’s Sustainable Development Goals (SDG 6) with specific targets and indicators for safe drinking water. For many years, drinking water quality issues have emerged as a significant challenge, especially in rural regions of India, while providing regular water supply.

About 85% of the rural water supply is dependent on groundwater. Growing demand for food and water due to population growth has pressurized the existing water resources to provide a regular water supply of adequate quantity and prescribed quality. As a result, geogenic contaminants like Arsenic, Fluoride, Iron, heavy metals, etc. pose serious health issues. Now-a-days, there is a growing concern about the deterioration of groundwater quality due to geogenic and anthropogenic activities. Long-term consumption of contaminated water and heavy metals may lead to Arsenic poisoning, cancer of the skin, kidney, etc. and bacteriological contamination of drinking water leads to diseases like cholera, dysentery, diarrhoea, typhoid, etc., which have an immediate impact on the human body.

To tackle the issues of water scarcity and ensure water security in rural regions of India for the current and future generations, the Government of India launched a flagship programme ‘Jal Jeevan Mission’ which seeks to not only provide household tap water connection in rural areas with adequate quantity and prescribed quality but also seeks to promote the holistic management of local water resources by the Gram Panchayats through people’s participation. Since then, the Department of Drinking Water & Sanitation (DDWS), in partnership with State Governments, has been working to ensure that every household gets tap water supply in adequate quantity and prescribed quality on a regular and long-term basis. JJM stresses on the provision of potable water of adequate quantity and good quality as prescribed by the Bureau of Indian Standards (BIS). The IS

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Testing of all drinking water sources for chemical as well as biological contamination through laboratories in 100% villages with a special focus on water quality testing in all quality-affected habitations, especially those with Arsenic and Fluoride contamination;</td>
</tr>
<tr>
<td>b.</td>
<td>Testing of water quality using FTKs and H₂S vials in 100% schools and Anganwadi centers and at least three samples in each village at the household level, for residual chlorine, bacteriological contamination, and for other parameters through women trained for FTKs testing;</td>
</tr>
<tr>
<td>c.</td>
<td>To undertake prompt remedial measures in all such cases where a water source from which piped water supply is being given, or where the water supply at the household level, is found contaminated;</td>
</tr>
<tr>
<td>d.</td>
<td>Wherever the remedial action cannot be taken through disinfection at a local level, suitable temporary measures, such as installation of Community Water Purification Plants, etc., must be taken latest by the end of the campaign period;</td>
</tr>
<tr>
<td>e.</td>
<td>Marking of all contaminated sources other than the safe source, through which water is being supplied, as ‘not fit for drinking purpose’, and geotagging of such sources too on the JJM-IMIS;</td>
</tr>
<tr>
<td>f.</td>
<td>Identification and training of at least 5 women in every village, preferably including at least one ASHA worker and one Anganwadi worker, for water quality testing using FTKs/ H₂S vials;</td>
</tr>
<tr>
<td>g.</td>
<td>Display of water quality testing results using FTKs, H₂S vials, and lab testing on board, in 100% villages at prominent places i.e., schools, GP buildings, AWCs, health centers, etc.; and</td>
</tr>
<tr>
<td>h.</td>
<td>Improvement of the lab infrastructure i.e., availability of manpower, lab equipment, the material for testing, and accreditation of labs.</td>
</tr>
</tbody>
</table>
10500:2012 is formulated with the objective of assessing the quality of water resources and checking the effectiveness of water treatment and supply by the concerned authorities.

A drastic incremental change in coverage of households with tap connections was observed from 16.9% to 53.8% with a service level of 55 liters per capita per day (lpcd) as reported in JJM-Integrated Monitoring Information System (IMIS). In this context, water quality monitoring and surveillance (WQMS) are critical in ensuring safe water in villages.

WQMS involves laboratory and field testing of water samples collected from water sources and delivery points, whereas water quality surveillance is undertaken by the local community using Field Testing Kits (FTKs). States are also encouraged to share the water quality monitoring results with the community. Five women from every village are identified, trained, and engaged in water quality surveillance to use FTKs. In 2022-23, more than 6.93 lakh water quality samples have been tested using Field Testing Kits by the community, whereas 1.87 lakh samples have been tested in a laboratory at the village level for both chemical and bacteriological contaminants.

On 2nd October 2022, DDWS, MoJS announced the 100 days water quality campaign "Swachh Jal Se Suraksha" focusing on awareness creation about water quality seriousness and importance among the people through Information, Education, and Communication (IEC), training activities and capacity building of villagers using citizen science approach for long term water quality assurance at water sources and delivery points.

The period of the campaign shall be from 2nd October, 2022 to 26th January, 2023. The States are directed to plan and implement the campaign, by actively involving all the stakeholders viz. Gram Panchayat and prepare an implementation strategy to achieve the following objectives:

Rigorous efforts are required for the successful implementation of the "Swachh Jal Se Suraksha" campaign, in a time-bound manner. This will lead to increased confidence, morale, and awareness among people about the quality of water being supplied through the piped water supply scheme. Also, it will help in realizing a broader vision i.e., developing 'Water enlightened villages/ 'Jal Prabudh Gaon' so that paucity of clean drinking water does not become a limiting factor in the socio-economic development and our quest for high economic growth.

<table>
<thead>
<tr>
<th>S. No</th>
<th>Characteristic</th>
<th>Unit</th>
<th>Requirement (Acceptable limit)</th>
<th>Permissible limit in the absence of alternate source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>pH</td>
<td>-</td>
<td>6.5-8.5</td>
<td>No Relaxation</td>
</tr>
<tr>
<td>2.</td>
<td>TDS</td>
<td>Milligram/ litre</td>
<td>500</td>
<td>2000</td>
</tr>
<tr>
<td>3.</td>
<td>Turbidity</td>
<td>NTU</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>4.</td>
<td>Chloride (as Cl)</td>
<td>Milligram/ litre</td>
<td>250</td>
<td>1000</td>
</tr>
<tr>
<td>5.</td>
<td>Total Alkalinity as Calcium Carbonate</td>
<td>Milligram/ litre</td>
<td>200</td>
<td>600</td>
</tr>
<tr>
<td>6.</td>
<td>Total Hardness (as CaCO3)</td>
<td>Milligram/ litre</td>
<td>200</td>
<td>600</td>
</tr>
<tr>
<td>7.</td>
<td>Sulphate (as SO4)</td>
<td>Milligram/ litre</td>
<td>200</td>
<td>400</td>
</tr>
<tr>
<td>8.</td>
<td>Iron (as Fe) *</td>
<td>Milligram/ litre</td>
<td>1.0</td>
<td>No Relaxation</td>
</tr>
<tr>
<td>9.</td>
<td>Total Arsenic (as As) *</td>
<td>Milligram/ litre</td>
<td>0.01</td>
<td>No Relaxation</td>
</tr>
<tr>
<td>10.</td>
<td>Fluoride (as F) *</td>
<td>Milligram/ litre</td>
<td>1.0</td>
<td>1.5</td>
</tr>
<tr>
<td>11.</td>
<td>Nitrate (as NO3)</td>
<td>Milligram/ litre</td>
<td>45</td>
<td>No Relaxation</td>
</tr>
<tr>
<td>12.</td>
<td>Total coliform bacteria</td>
<td>Shall not be detectable in any 100 ml of sample</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>E.coli/ Thermotolerant coliform bacteria</td>
<td>Shall not be detectable in any 100 ml of sample</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>Free residual Chlorine</td>
<td>Milligram/ litre</td>
<td>0.2</td>
<td>1</td>
</tr>
<tr>
<td>15.</td>
<td>Colour</td>
<td>Hazen units</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>16.</td>
<td>Odour</td>
<td>Agreeable</td>
<td>Agreeable</td>
<td></td>
</tr>
</tbody>
</table>

*region specific contaminations
Jal Jeevan Mission (JJM) is on course towards assuring water supply at 55 lpcd (litres per capita per day), of prescribed quality (BIS 10500: 2012) on regular and long-term basis to every rural household in India by 2024. As infrastructure creation is progressing rapidly towards achieving the mission goal of ensuring piped water supply connection in all rural households, the mission is equally committed towards ensuring service delivery of requisite standards. This necessitates the creation of a robust system for continuous and remote monitoring of the service levels in an objective and accurate manner. To develop such a system, the recent technological advancements (such as Internet of Things (IoT), Big Data Analytics, Artificial Intelligence (AI)/ Machine Learning (ML), Cloud) should be leveraged. Along with these developments, the declining costs of mobile data, hardware (sensors), and software provide an opportunity to digitise water supply infrastructure in rural India and monitor the service level parameters automatically at affordable costs.

To facilitate this, the Department of Drinking Water & Sanitation (DDWS) constituted a Technical/ Expert Committee, that has charted out a roadmap for measurement and monitoring of water service in rural areas using sensor based IoT solutions. An Information and Communication Technology (ICT) Grand Challenge was conducted to kickstart the deployment of pilot sensor based IoT solutions across water supply schemes in 100 villages in 9 States across India, covering diverse archetypes of geology and climatic conditions. These solutions are enabling remote monitoring of daily water supply (in LPCD), residual Chlorine level, pressure level and other service parameters. This is enabling the respective States/ UTs to monitor the quantity, quality and regularity of water supply remotely in these villages and take necessary corrective actions wherever applicable. These efforts are expected to lead to the intended outcomes of equitable and adequate

**Master System Integrator (MSI) for smart measurement and monitoring of water supply systems on the GeM**

**Jal Jeevan Mission (JJM) is on course towards assuring water supply at 55 lpcd (litres per capita per day), of prescribed quality (BIS 10500: 2012) on regular and long-term basis to every rural household in India by 2024. As infrastructure creation is progressing rapidly towards achieving the mission goal of ensuring piped water supply connection in all rural households, the mission is equally committed towards ensuring service delivery of requisite standards. This necessitates the creation of a robust system for continuous and remote monitoring of the service levels in an objective and accurate manner. To develop such a system, the recent technological advancements (such as Internet of Things (IoT), Big Data Analytics, Artificial Intelligence (AI)/ Machine Learning (ML), Cloud) should be leveraged. Along with these developments, the declining costs of mobile data, hardware (sensors), and software provide an opportunity to digitise water supply infrastructure in rural India and monitor the service level parameters automatically at affordable costs.**

To facilitate this, the Department of Drinking Water & Sanitation (DDWS) constituted a Technical/ Expert Committee, that has charted out a roadmap for measurement and monitoring of water service in rural areas using sensor based IoT solutions. An Information and Communication Technology (ICT) Grand Challenge was conducted to kickstart the deployment of pilot sensor based IoT solutions across water supply schemes in 100 villages in 9 States across India, covering diverse archetypes of geology and climatic conditions. These solutions are enabling remote monitoring of daily water supply (in LPCD), residual Chlorine level, pressure level and other service parameters. This is enabling the respective States/ UTs to monitor the quantity, quality and regularity of water supply remotely in these villages and take necessary corrective actions wherever applicable. These efforts are expected to lead to the intended outcomes of equitable and adequate.
water supply at prescribed quality standards, reduction in water borne diseases through water quality monitoring, and improvement in lives of the rural community, especially women and girls.

Based on the learnings of these pilot projects, DDWS is now encouraging States to roll out IoT-based rural water supply monitoring solutions across all villages. However, the scale of such implementation is huge (i.e., scaling up from current level of 100 pilots to 6,00,000 villages) and would be the first of its kind, globally. To achieve this scale, it is necessary to have a developed marketplace for such technology-enabled data management/decision support system consisting of Original Equipment Manufacturers (OEMs) of sensors and IoT hardware, IoT solution providers, and maintenance service providers, who may cater to these huge requirements from the States/UTs. However, the current marketplace for such solutions for rural water supply in India is limited. Furthermore, this kind of solution being the first of its kind, there is limited know-how of the implementation processes amongst the State/UT departments.

To resolve this challenge, the DDWS and Government e-Marketplace (GeM) team, conducted a series of interactions with related service providers in this space and the implementing States/UTs to understand the current procurement challenges and solutions to eradicate these. DDWS and GeM team then collaborated to develop a new service category viz 'System integration service to implement IoT sensor-based measurement and monitoring of rural water supply systems' in the GeM portal (The States/UTs may access this service category in the GeM portal using this link [https://mkp.gem.gov.in/services#!/browse/services_home_syst/open].)

This will enable all the qualified vendors in the market to register their products and services in the GeM portal and will thus help the States/UTs to procure these solutions at ease. This service category is expected to create a ~ USD 5 Billion worth marketplace for sensors, related hardware, and services, and provide a fillip to the numerous startups and MSME firms working in this space with an expected registration of more than 50 OEMs & system integrators in the GeM portal.

Some of the key features of this service category are listed below:

1. Availability of the entire bouquet of sensors, along with their standard technical specifications;
2. Based on their site-specific requirements, States may choose from the diverse set of networking technologies (fixed broadband/Wi-Fi/local area RF/cellular technology);
3. Availability of the entire gamut of related services starting from cloud services to application development;
4. Standard service level agreements (SLAs) and indicative penalties for non-compliances are listed;
5. The buyer will have a choice to select desired years of Operation & Maintenance (O&M) services;
6. To ensure proper functioning of these devices on long-term basis, innovative payment terms like 'hybrid model' are also provided. Under the 'hybrid model', a fixed portion of the CapEx will be paid to the service provider in equated instalments during the O&M phase, subject to fulfilment of the prescribed SLA parameters; and
7. The States/UTs may customize the evaluation criteria based on their needs and procurement guidelines.

Through these features and related inputs, a bid document, with all the standard clauses, can be automatically generated. Thus, along with the creation of a marketplace for IoT solutions in rural water supply, this solution will also empower the States/UTs in easy procurement of these services. A few intended benefits are listed below:

1. The listed bouquet of related products and services provides a wide array of choices to the buyers;
2. Detailed standard specifications of all devices are provided which is expected to bridge the existing technical gap, if any, among the implementing agencies;
3. The current procurement time of 1 to 2 months (for creation of bid documents after finalization of bill of quantities (BoQ)) can be squeezed to a day; and
4. It ensures standardization of the technical specifications, SLAs and other clauses; this will facilitate in rapid scaling up of the solutions and their subsequent integration into a centralized platform.

This initiative marks an important milestone in creating a digital ecosystem for online monitoring and measurement of service levels in rural water supply schemes. This will greatly empower the implementing agencies and the VWSCs/Pani Samitis in transitioning towards operating like water utilities through proper maintenance of the schemes, ensuring service delivery of highest standards & long-term sustenance of the assets.
India is one of the fastest-growing economies in the world, accounting for about 16% of the global population. With more than half of the Indian population living in rural areas, the need for accessibility, availability, and affordability of basic necessities gets emphasized, including the basic need for safe drinking water.

To address the challenge of drinking water scarcity, Hon’ble Prime Minister, Shri Narendra Modi, on 15th August 2019 announced the Jal Jeevan Mission (JJM), designed to build an integrated approach to the drinking water supply sector with the objective to provide safe and adequate drinking water to all rural households by 2024 through tap connections. To monitor and ensure the potability of water, and detect any contamination for remedial action, NJJM developed a Water Quality Management Information System (WQMIS). Water samples are collected by the community using field test kits (FTKs), and the test results are uploaded in the WQMIS for remedial action where necessary in improving access to potable water. However, most of the available kits are manual in their functionality, which increases the scope of error in the process.

With a vision to ease the process of water quality testing, the Department of Drinking Water and Sanitation, in collaboration with Invest India launched the 'Innovation Challenge to Develop Portable Devices for Testing Drinking Water Quality' in December 2020. Invest India is the National Investment Promotion and Facilitation Agency of India under the aegis of the Department for Promotion of Industries and Internal Trade, Ministry of Commerce and Industry, Government of India.

The Innovation Challenge was envisaged to facilitate and empower people to test drinking water quality in their homes and assure the potability of water through digital portable water quality testing devices. The challenge invited solutions from startups, MSMEs, individual innovators, and corporates, that focused on building innovative, modular, and cost-effective devices that could test the water for important parameters instantly, easily, and accurately.

Participants were encouraged to bring solutions that were portable, easy to carry, handle and calibrate, and provided the output from testing digitally (with a provision to transfer data online). Over 35 applications were received from across the nation to aid the Department in meeting the defined objectives. After due evaluation of the applications, ten startups and MSMEs were identified as beneficiaries of the programme.

These companies were then provided with an opportunity to work under this programme and develop their devices for commercialization. With the help of the Incubation partner, Kalinga Institute of Industrial Technology – Technology Business Incubator (KIIT-TBI), they were provided with dedicated support to
give shape to their ideas and convert them into ready devices for water quality testing in the field. Additionally, to support the development of these devices, each beneficiary was provided a seed grant of up to Rs. 25 lakh along with a cash grant of Rs. 2 lakh. The beneficiaries were mentored as part of the programme by industry experts and academicians from notable research institutes to guide them in the process.

The prototypes developed under the programme were required to apply for necessary certifications and licenses to ensure safety for end-consumers. The devices were tested in state-owned laboratories carrying expertise in the domain and provided analysis on the performance of each kit. Repeatability tests were conducted to ensure coherence in results and identify the margin of deviation with each subsequent test. If the device met the requirements and performed adequately in all tests, it was taken to nearby villages for field testing wherein a comparative study was conducted against the manual FTKs available in the market. In many of the field visits, the FTK users commended the digital devices that were easy to use and provided the result instantly on their smartphones.

To ensure that the data from sample water testing gets captured on the WQMIS portal, each device and its mobile application were integrated to allow direct upload of the results on the portal. This mitigates the possibility of errors incurred earlier as the FTK users uploaded the results on the portal manually. This also allows the Department to keep a check on the water quality from tap connections across Indian villages and take remedial actions wherever required.

Today, three beneficiaries have successfully developed the devices and passed the various stages and tests for validation of performance. The devices use proprietary technologies and test different sets of parameters making each solution novel and unique. The digital field test kits and devices are available for procurement on the Government e-Marketplace where a dedicated category, 'Digital Water Quality Testers/Analyzers (Jal Jeevan Mission)' has been created to showcase the products under this programme.

As the Jal Jeevan Mission progresses in its journey, the solutions identified and developed under the ambit of this innovation challenge will provide a great impetus to the Department in helping Indian households access quality drinking water from their tap connection.

Jal Jeevan Awards 2022

Burhanpur

to receive special recognition for being the 1st Har Ghar Jal Certified District
Andhra Pradesh

JJM: life changing mission for Anganwadi children

While many would have believed that providing tap water connections in households would end the drudgery of women as they get water within the comfort of their homes, then there is need to pause and see the daily tasks performed by a woman. She not only takes care of elders in the family but also the children and animals, which many a times add revenue to the family income. A typical day in a rural woman's life begins very early in the morning, and she happens to be the last one to sleep. The lady of the house manages to rest only when all other family members including children are put to bed. Throughout the day, she runs from one place to another. To add to her work is the task of fetching water to quench the thirst of the family members and requirements towards other household chores.

This routine was followed in Jannavalasa Gram Panchayat in Vizianagaram district, which has 835 households. The women spent their mornings collecting water from the wells and borewells. As the prime occupation in the village was farming, the only way to earn was to till the land either on your own field or that of others. The work of farming starts early morning, but as the women were busy fetching water in the wee hours, they could not find time to work on the farmlands or under MGNREGA. Even dropping infants and toddlers at the anganwadi centre on time seemed a huge task. Children who could walk with their mothers went with them and helped carry small bottles of water. It meant a loss of livelihood, education, and daycare for the children.

Jal Jeevan Mission has not just brought water in the household but has ensured that tap water connection reaches every school, anganwadi centre, ashramshala, health centre and Panchayat office.

B. Satyavathi, an Anganwadi worker, is happy to be getting the tap water in the Gram Panchayat. On the one hand, it has eased the life of the anganwadi worker and the helper, who are getting clean and safe tap water. While on the other hand, it has improved the attendance of the children at the centre. Now the children are brought to the centre on time by the mother. They are no longer running against time to meet the timing. Many women have gone back to work as their morning tasks are completed well in time. With consumption of safe water, the ailments related to water have considerably reduced especially among infants and children.

Provision of water in the household has brought about a remarkable change in the social life of the villagers. Earlier in many houses, the young women would go to work as earning money was important to meet the domestic needs while the elder women would be seen carrying water. The children were left at home without supervision while the grandparents were out collecting water. But now the scene in the village has completely changed.

The change is welcomed specially by the women as they happen to be the primary water managers and caregivers in the family. Today all 835 households, 4 anganwadi centres and 2 schools in the Gram Panchayat are getting tap water regularly.

People in the village are happy to pay the user charges for getting the services of tap water in the household. A monthly charge of Rs. 50 is collected from every household to meet the recurring expenditure towards honorarium to pump operator, electricity charges and minor repair.
Solar power-based water supply using innovative technique

Today more than 54% of rural families in India are getting potable water through household tap connections, which was a mere 17% at the time of the inception of the Jal Jeevan Mission. To provide tap water in various geographical challenging conditions, States and UTs are using many innovative solutions. Recently, engineers from the Water and Sanitation Management Organization (WASMO), Gujarat have come up with a unique water supply project for Sada village in the Narmada district. Today, more than 99% of rural households in Gujarat are connected with a tap water supply and 24 districts out of 33 are reported as 'Har Ghar Jal'.

Challenges of Sada village
The tribal-dominated Narmada district is identified as an Aspirational District by NITI Aayog due to its poor socio-economic indicators. The Sada village of Dediapada Tehsil is situated on the bank of the Karjan reservoir and is accessible only by boat. The village is re-established after rehabilitation as the perennial village submerged due to the reservoir. About 247 people of 45 tribal families live in Sada in scattered manner.

People of Sada village used to fetch water from the village hand pump but the water has a high turbidity level hence to meet the paucity of drinking water local people used to dig small pits at a distance from Karjan River and wait for some time for sweet water to seeps into the pit and after that women and girls collect it to meet their family's drinking water demand. Being an inaccessible remote area, implementation of the water supply scheme posed quite a challenge.

Innovative technology – a floating platform
As Jal Jeevan Mission emphasizes the need for tap water connections in Aspirational districts and last mile connectivity ensuring 'no one is left out', WASMO planned to connect the households of Sada with tap water in its annual implementation plan of
2022-23 and planned to construct a surface-based in-village water supply scheme using renewable energy as the village is also deprived of regular electricity supply.

A solar-powered surface floating platform has been installed in the middle of the Karjan River. Two small interconnected submersible pumps are also installed under the surface of the river having a capacity of 3 HP to lift the water up to a height of 110 meters. As the village has no road connectivity all the construction materials have been transported by boats. Looking at the geographical location and scattered houses, the village was divided into two zones for this project. One solar panel each with a capacity of 3 KW has been installed at the highest point of these zones to operate the pumps. The electricity received from these solar panels is carried through a copper cable to the floating platform present in the river and thus operates both the submersible pumps.

For filtration, the river water is channelled through a set of sand filters that is installed near the solar panels located in both zones. These sand filters purify river water with a capacity of 2,400 litres per hour per filter and then transfer the purified water to the overhead water tanks of 5,000 litres capacity installed to the solar panels. The water in the tank is then chlorinated using bleaching powder and potable water reaches each of the 45 families through household tap connections.

It is also worth mentioning that 5 taps have also been installed with the water tanks as a mitigation strategy viz. if any day water does not flow from the tap of any household, then that family can fetch water from these taps until the problem is resolved by the department.

Despite various challenges, this project was completed in just 15 days. A total of Rs. 16.67 lakh was spent. Now the residents of Sada village are getting 24x7 hour water at their doorstep flowing from taps from 9th September 2022. The village water and sanitation committee (VWSC) has been handed over the scheme for its overall operation & maintenance with technical assistance from WASMO. WASMO and VWSC together plan to store the excess electricity generated from the solar panels after utilizing for the water supply to resolve the challenge of power cuts in the village.
On the occasion of Gandhi Jayanti, a 30-day campaign ‘Jal Jeevan Maah’ was launched by Shri Ajeet Kumar Sahu, Commissioner/ Secretary, Public Health Engineering Department (PHED), Ladakh at Spituk Farkha Panchayat in Leh district.

The Commissioner appreciated the joint efforts of the PHED and the public representatives in taking forward the programme with a bottom-up approach and rigorous involvement at the community level. Through “Jal Jeevan Maah” the administration aims to strengthen the implementation and improve the progress made under Jal Jeevan Mission by spreading awareness among the public.

At the event, the Secretary, PHED, reiterated the importance of community ownership to make Jal Jeevan Mission a Jan Andolan in the true sense. He stressed on the need for technical interventions required for sub-zero temperature. Frequent water quality tests are needed to ascertain the quality supplied. It is equally essential to keep the water sources and reservoirs free of litter and any type of contamination. The village action plan must incorporate greywater management to ensure that it is treated, recycled, and reused. Judicious use of water is crucial for long term sustenance which requires social, and behaviour change in the community. He urged the need for a social audit so that the programme is properly evaluated. During the course of the campaign, a dialogue was held to deliberate on the payment of water user charges.

The focus of the campaign is to conduct certification of ‘Har Ghar Jal’ villages. Special incentives are given to best performing villages and those who are progressing at speed in provisioning tap water connections in every household. A special drive was undertaken to ensure that the water supply infrastructure developed under JJM is being properly maintained, water quality tests are carried out and remedial action is undertaken wherever so required.

During the occasion, the team of Implementing Support Agency (ISA) performed a skit (nukkad natak) on various aspects of JJM, such as community partnership, operation and maintenance (O&M) and water management among others.

Several videos on the impact of JJM, grievance redressal and solar pump training were screened. An refresher training/demo on the field-testing kit (FTK) was also presented on the occasion. Similarly, a pledge on water conservation and JJM was also administered to all.
Hon’ble Vice President, Shri Jagdeep Dhankhar released Jal Jeevan Survekshan (JJS) Toolkit – 2023 and JJS-2023 Dashboard at Upa-Rashtrapati Nivas on 21st October, 2022 in the presence of Union Minister, Jal Shakti, Secretary, DDWS, AS&MD-NJJM and DDWS officials. While thanking the Vice-President, Minister of Jal Shakti briefed him about the progress made under Jal Jeevan Mission and how Govt. of India is working in partnership with States to ensure ‘Har Ghar Jal’ in a time-bound manner.

During the event, Hon’ble Vice President hoped that these initiatives by the Department of Drinking Water & Sanitation, Ministry of Jal Shakti would prove to be an important medium to ensure transparency and accountability in the scheme.

While speaking at the launch, he described “quality, quantity and continuity” as the core principles for the success of Jal Jeevan Mission and called for ensuring a strong and credible accountability mechanism in implementation of this people centric program.

The toolkit has been developed by the DDWS to help the States/ UTs understand the assessment criteria and the overarching purpose of the Survekshan is to incentivize the States/ District functionaries to strive for better performance and improve water service delivery in rural households.

On this occasion, the Vice President appreciated the progress made by Jal Jeevan Mission over the last three years and expressed confidence that every rural household will have tap water connection. Terming access to safe drinking water and sanitation as critical to inclusive growth, Shri Dhankhar said that programs like Swachh Bharat Mission and Jal Jeevan Mission are fulfilling the Gandhian dreams of ‘Antyodaya’ i.e. uplift of the last man. Stressing the need to focus on our Fundamental Duties, Shri Dhankhar asked all public representatives at local, regional and national level to ensure the success of this program through community participation and by providing constructive feedback on the scheme. The Vice President also urged the media to focus more on such people-centric programs by highlighting the achievements of better performing districts, NGOs and officials. “Such recognition will go a long way in motivating all stakeholders,” he added.

Shri Sunil Kumar Gupta, Secretary to the Vice President, Smt. Vini Mahajan Secretary, DDWS, Shri Vikas Sheel Additional Secretary and Mission Director (NJJM), Shri Manoj Kumar Sahoo, Joint Secretary, Shri Pradeep Singh, Director and Shri Arun Kembhavi, Deputy Secretary, Jal Jeevan Mission and others attended the event.

The Vice President of India along with Union Minister of Jal Shakti, and the NJJM team, releasing the JJS Toolkit
Webinar, Conference and Meetings

Home Minister inaugurates JJM schemes

Union Home and Cooperation Minister, Shri Amit Shah inaugurated and laid foundation stones of several drinking water projects under Jal Jeevan Mission worth Rs. 4,200 Crore in Gwalior, Chambal division, Madhya Pradesh on 17th September, 2022. During the event, he said “Modi ji is bringing a change in the lives of the poor by giving them pure drinking water under the Jal Jeevan Mission.”

Minister of Jal Shakti visits Tamil Nadu

Union Minister of Jal Shakti, Shri Gajendra Singh Shekhawat visited the State of Tamil Nadu on 13th October, 2022, to participate in a review meeting on the Jal Jeevan Mission and Swachh Bharat Mission- Grameen. Secretary, DDWS, Ms. Vini Mahajan also attended the meeting along with senior officers of the department. The meeting was attended by the State Minister for Municipal Administration, State Minister for Rural Development and Panchayati Raj, Additional Chief Secretary, Principal Secretary, and other State officials. Post the review, a brief meeting was also held with the Chief Minister of Tamil Nadu to discuss the way forward for the Jal Jeevan Mission and Swachh Bharat Mission- Grameen.
Visit of MoJS to Australia

In his recent visit to Australia, the Union Minister of Jal Shakti, Government of India, Shri Gajendra Singh Shekhawat met the Minister for Environment and Water, Government of Australia, Ms. Tanya Plibersek. Discussions were held on river rejuvenation, Murray Darling River authority, Jal Jeevan Mission, Namami Gange Mission, water use efficiency, environmental impacts and importance of maintenance of ecological flow of water.

During his visit, he also met with the Saudi Arabian delegation and discussed about bilateral cooperation on water. Various issues specifically pertaining to groundwater recharge, desalination & reuse of treated water, water quality & community involvement in water management were pondered upon.

Further, to expand the bilateral relationship between two countries, he also interacted with CEOs and representatives of companies working for innovative technologies and solutions in the water sector. “It was indeed an enriching discussion during which I also invited them to participate in the journey that India is leading to create environment friendly water secure communities under the leadership of our PM”, he said during the meeting.

MoS visits States to review JJM

Union Minister of State, Shri Prahlad Singh Patel, inaugurated 148 water supply schemes of Damoh District, Madhya Pradesh on 25th September, 2022. During the event, he interacted with members of Pani Samiti/ VWSC and received their feedback regarding the works going on in the villages. Just before that, on 18th September, 2022 flagged-off the awareness vehicle on Jal Jeevan Mission prepared by Singrampur District authority to sensitise local community about the 'Har Ghar Jal' programme and other important aspects under the mission. This van spreads plans to awareness in Jabera and Tandukhera area of the Singrampur District in Madhya Pradesh. He recently also visited the State of Manipur, wherein he reviewed the status of ongoing activities of implementation in the Aspirational District Chandel. He also visited a remote village called Penching which is situated in a hilly area and interacted with local village community. To assure the people about quality of water being supplied under JJM, he drank a glass of water directly from the tap. Many local people shared stories of the mission and how it has brought joy and relief to the community by transforming their lives.
A day-long national conference was held on 8th October 2022 at Mohali, Punjab to disseminate the results of the Functionality Assessment for the year 2021-22. The Conference was chaired by Smt. Vini Mahajan, Secretary Department of Drinking Water and Sanitation. The conference was attended by Additional Chief Secretaries, Principal Secretaries, Secretaries from the States in-charge of rural drinking water supply, Mission Directors, Engineers-in-Chief, Chief Engineers, heads of Water and Sanitation Support Organization etc. 149 participants attended the conference.

As per the Functionality Assessment report, 62% households have overall functionality of quantity, regularity and potability. The Secretary emphasized the need to empower the Pani Samitis so that community participates in the development of the village and finally takes ownership of the water supply infrastructure. To ensure long-term availability of water, the role of community is crucial. Source sustainability measures and greywater management have to be made a part of the Village Action Plan (VAP). As a village declares itself Har Ghar Jal, the States must verify the status to ensure that water is being supplied in every household including the tail-end households, regularly and of prescribed quality. The Secretary expressed her concern over operation and maintenance of the infrastructure as non-availability of staff will impact its sustenance.

The framework of Jal Jeevan Sarvekshan 2023 was presented at the conference highlighting the evaluation criteria on service delivery and functionality viz. physical progress, water quality, institutional arrangements etc. States were directed to carry out pre-functionality assessment before start of the survey by Jal Jeevan Mission on 1st October 2022. The States/ UTs were directed to verify the entry of data on IMIS because any over reporting would lead to disqualification.

The participants were informed about the launch of ‘Swachh Jal se Suraksha’ campaign which began on 2nd October 2022 and shall continue till 26th January 2023. States/ UTs were encouraged to deploy engineering students as interns who would after training undertake water quality testing and assess functionality of schemes built under Jal Jeevan Mission.

The States were informed that Har Ghar Jal certification has been simplified. The server speed of the portal has been increased to allow quicker uploading of videos. Notable progress was observed in certification of HGJ villages during the ‘HGJ Utsav’ campaign.

Progress made by the States was also reviewed.
The Secretary expressed her concern over operation and water is being supplied in every household including the greywater management have to be made a part of the participates in the development of the village and finally need to empower the Pani Samis so that community regularity and potability. The Secretary emphasized the households have overall functionality of quantity, Organizaon etc. 149 parcipants aended the Engineers, heads of Water and Sanitaon Support Addional Chief Secretaries, Principal Secretaries, and Sanitaon. The conference was aended by A National conference held at Mohali on Functionality Assessment October 2022 at Mohali, Punjab to disseminate th Progress made by the States was also reviewed. Notable progress was observed in cerficaon of HGJ been increased to allow quicker uploading of videos. The States were informed that Har Ghar Jal cerficaon water quality tesng and assess funconality of schemes students as interns who would aer training undertake ‘Swachh Jal se Suraksha’ The parcipants were informed about the launch of Mission on 15 October 2019 out of a total of 2.64 Crore rural households in Uttar Pradesh (UP) only 5.16 lakh i.e., 1.95% had access to tap water connection. After three years of continuous work today, 49.62 lakh (18.78%) rural households of the State are getting potable water.

Uttar Pradesh engages field engineers for JJM ‘Har Ghar Jal’ is a mission-mode flagship programme of the Government of India which aims to reach every rural household with tap water connection by 2024. At the time of launch of the Mission on 15th August 2019 out of a total of 2.64 Crore rural households in Uttar Pradesh (UP) only 5.16 lakh i.e., 1.95% had access to tap water connection. After three years of continuous work today, 49.62 lakh (18.78%) rural households of the State are getting potable water. Uttar Pradesh is commited to timely execution of the goal of Jal Jeevan Mission, but despite working relentlessly to achieve the target, Uttar Pradesh has still a long way to go. The State has areas like Bundelkhand and Vindhyachal which face acute water shortage in summers. Due to limited water sources, multi-village schemes were planned so that water could be brought from far away distance for which large sums of money and detailed planning was required. A number of multi-village schemes have been launched which are at various stages of implementation. Today, more than 3500 multi-village schemes are being implemented in Uttar Pradesh. Through these schemes the State aims to provide tap water connection in nearly 30 lakh rural households. Speed and scale are the essence of the programme for which technically qualified human resource is required. The lack of capacity was another grave challenge that the State encountered that hindered the pace of programme implementation. Infrastructure restoration could not be accomplished in the absence of skilled and trained manpower. In order to over-come this challenge, the State went ahead and employed 580 Junior Engineers to carry out water supply development works across the region.

To ensure that the newly recruited staff is well versed with Jal Jeevan Mission guidelines a three-day orientation programme was organized by the State Water and Sanitation Mission. A four round training was held at Deen Dayal Upadhyay Village Development Institute, Lucknow in the month of September. The main purpose of the workshop was to sensitize and acquaint the engineers about the objectives of the Mission, their roles, responsibilities and desired outcomes of the mission. The engineers were familiarized with the district & village action plans, financial prerequisites & its management, data availability on IMIS portal and requirement of water quality testing to

Training on Water Quality Management in Chandigarh

A two-day training programme on water quality management was conducted by the Department of Water Supply and Sanitation (DDWS), Government of Haryana in collaboration with Quality Council of India (QCI) on 29th and 30th September 2022. The training was held at NITTTR Chandigarh and was attended by Level 2 officials i.e., DDWS officials, superintendent engineers, executive engineers, water utility managers and water testing laboratory personnel. A total of 32 people, 17 from Haryana and 15 from Punjab attended the training and the participants were trained on standard ISO/IEC 17025:2017 along with issues related to water quality monitoring and best practices which can be replicated in other places.

QCI has been empanelled as a Key Resource Centre by the Jal Jeevan Mission. It is an autonomous body under the Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry, Gol. QCI aims to transform drinking water supply sector through capacity building initiatives and dissemination of knowledge, development of educational materials, documentation of best practices.

Jal Jeevan Mission believes in not just provisioning tap water connection but also ensuring that the water provided is of prescribed quality as per 10500 BIS. Providing accurate and ethical water quality testing is important for monitoring the water supply and verification of safety of drinking water. Frequent tests are conducted. Water samples are collected from source and delivery points. Special care is undertaken in case of disease outbreak be it water-borne or due to vector-spread. A validation process is put in place which also provides for preventive measures. In order to secure NABL accreditation, it is important that the laboratories are aligned with the international standard ISO/IEC 17025-2017 ‘General Requirements of Competence of Testing and Calibration Laboratories’. The water testing laboratory personnel were apprised on the processes for alignment with standards.
make sure that the task is not just limited to providing water but making sure that the water is of the prescribed quality and quantity and supplied regularly. The State Water and Sanitation Mission, UP, understand the need for both hardware and software components of the Programme which includes construction of in-village water supply infrastructure, ensuring distribution network, water quality testing & monitoring as well as community engagement via Implementing Support Agencies.

The SWMS now has a valuable resource of 580 trained Junior Engineers, who are placed in 75 districts of the State. The aim is to provide technical assistance and ensure cent percent coverage within the targeted period.

Technical Committee Meeting

The Technical Committee of Jal Jeevan Mission met for the 6th time on 10th October, 2022 under the Chairmanship of Professor Ajay Kumar Sood, Principal Scientific Advisor, Government of India wherein 8 innovative technologies - 5 on Water and 3 on Sanitation were deliberated upon. Jal Jeevan Mission is a mission of huge scale and opportunity. While implementing it, States are likely to encounter many challenges like inhospitable terrain, groundwater sources, in-situ geogenic contamination, etc. To address these challenges, it is necessary to identify new cost-effective technical solutions/innovations for adaptation. Some specific challenges would require R&D for enabling customized solutions. The Technical Committee tries to address these challenges.

Secretary, DDWS inspects work done under Special Campaign 2.0

The Secretary, Department of Drinking Water and Sanitation, Smt. Vini Mahajan visited various sections in the department to inspect the cleanliness drive/ scrap disposal/ freeing space/ beautification work being done under the Special Campaign 2.0 - Swachhta. The Secretary inspected the renovation work undertaken by the Ministry. It was observed that the arrangements made after the renovation are very good and the working space provided to the employees is appropriate.
Jal Jeevan Mission (JJM) is under implementation in full swing and the success of the mission is largely dependent on long-term institutional sustainability. To attain this, capacity building of the stakeholders is one of the critical aspects in the entire process especially for Level-3 i.e., community level stakeholders. The Level-3 training is imparted by Key Resource Centres (KRCs) under JJM to the PRI members. It will ensure institutional sustainability and therefore, the trainers for these participants should have thorough subject knowledge and on-hand experience of JJM context and training. Further, to have uniformity and consistency in training methodology across the country to deliver a uniform message, a series of Training of Trainers (ToT) regional workshops (5-day residential) have been conducted to train master trainers from the Level-3 KRCs. So, far 3 such workshops have been conducted in Raipur, Hyderabad, and Chandigarh. These workshops are supported by UNICEF in terms of the design of the course, arrangement of resource persons, venue of the workshop, and accommodation for the participants. The participants have been master trainers from KRCs, concerned officials from State/UTs and SIRDs working on Capacity Building & IEC of JJM. 155 master trainers have been trained during these workshops.

Secretary, DDWS participates in sustainability summit

Ms. Vini Mahajan, Secretary, DDWS, has attended the 4th edition of Time for Action: Sustainability and Beyond-Ideas to Solutions SDG summit on 28th September, 2022, at New Delhi organised by Economic Times, IBM and Lenovo India. "We are working on the twin mission - Swachh Bharat Mission and Jal Jeevan Mission focusing on achieving Swachh Sujal Gaon - a circular water and sanitation village. This is improving the living index of rural people and boosting their economy", she said during the session. She also recently participated in special plenary session at the 8th CII - Water Innovation Summit- “Being Future Ready: Water for All” on 29th September, 2022. In a session of National Awards for ‘Excellence in Water Management’, she said “With the growing population and climate change challenges, it is necessary to harness water in an efficient way and conserve it ... Improving water security requires collective efforts of all. Industry leader should show their good practices on water management as it would help other industries also to emulate these good practices not only within their units but their entire value chain. Our ambition is not only to provide tap water connections but to also provide quality water to all on sustainable basis.”

Handover of IoT pilot schemes to States

National Jal Jeevan Mission (NJJM) in collaboration with the Centre for Development of Advanced Computing (CDAC) conducted ICT Grand Challenge, under which IoT sensor-based monitoring solutions were implemented in 100 villages across India. Further, NJJM sector partners, the Tata Community Initiatives Trust (TCIT) and Tata Trust have deployed IoT based smart monitoring solutions in 17 villages. These solutions are enabling remote monitoring of daily water supply (in LPCD), residual Chlorine level, pressure level and other service parameters and enabling the respective PHE/ RWS departments and VWSC/ Paani Samitis to monitor the quantity, quality and regularity of water supply remotely in these villages and take necessary corrective actions wherever applicable.
Pursuant to these developments, the NJJM team in collaboration with CDAC and TCIT conducted handover programmes for these pilot projects in the States of Rajasthan on 14th September and Gujarat during 16th to 17th September, 2022. The programmes were aimed to handover the deployed IoT assets to the VWSCs/ Paani Samitis and PHED/ RWS departments, so that they continue to use and manage these IoT devices and systems to remotely monitor various service level benchmarks and ensure proper service delivery in villages.

Site visits were conducted to a few of the sites in these two States, wherein the respective technology IoT solution providers demonstrated the functioning of the IoT systems to the participating VWSC/ Paani Samiti members. Overall functionality of the systems and its benefits were explained to the community members. Various nitty-gritties of the operation and maintenance of the systems were also discussed, and site-specific technology manuals were shared.

In September 2022, 14 teams of NWEs were deployed in field who visited 228 villages to verify the progress of implementation of JJM in 13 priority States. The villages have been divided into 3 categories namely; Har Ghar Jal with 100% tap water coverage, villages where the work is ongoing and villages where work is yet to start. Based on percentage of progress of implementation of JJM at ground level, the NWEs are providing Star Rating to villages taking into consideration the various parameters of JJM operational guidelines. The star rating is provided in the scale of 1 to 5 with 1 as lowest and 5 as highest percentage of achievement in implementation of JJM in a particular village.

The rating criteria is based on various aspects including but not limited to quality of execution of work, service delivery, operation and maintenance, TPIAs, trainings, ISA and IEC, water testing, greywater management, water conservation measures, grievance redressal etc.

23 villages were found to be in 2-star category, 89 villages were in 3-star category and 80 villages were in 4-star category as per the assessment of the experts. The progress of the work was found to be satisfactory in 45 villages, in 138 villages it was assessed to be satisfactory with need of improvement, and in 9 villages progress was unsatisfactory. Feedback was provided to the State authorities along with suggestions and remedial actions wherever needed.

National Centre for Drinking Water, Sanitation and Quality (NCDWSQ) has been entrusted with the task of empanelment and deployment of National WASH Experts (NWE) for ground truthing and technical assistance to States in the implementation of Jal Jeevan Mission (JJM).

In September 2022, 14 teams of NWEs were deployed in field who visited 228 villages to verify the progress of implementation of JJM in 13 priority States. The villages have been divided into 3 categories namely; Har Ghar Jal with 100% tap water coverage, villages where the work is ongoing and villages where work is yet to start. Based on percentage of progress of implementation of JJM at ground level, the NWEs are providing Star Rating to villages taking into consideration the various parameters of JJM operational guidelines. The star rating is provided in the scale of 1 to 5 with 1 as lowest and 5 as highest percentage of achievement in implementation of JJM in a particular village.

The rating criteria is based on various aspects including but not limited to quality of execution of work, service delivery, operation and maintenance, TPIAs, trainings, ISA and IEC, water testing, greywater management, water conservation measures, grievance redressal etc.

23 villages were found to be in 2-star category, 89 villages were in 3-star category and 80 villages were in 4-star category as per the assessment of the experts. The progress of the work was found to be satisfactory in 45 villages, in 138 villages it was assessed to be satisfactory with need of improvement, and in 9 villages progress was unsatisfactory. Feedback was provided to the State authorities along with suggestions and remedial actions wherever needed.

Visit of National WASH Experts to States

N National Centre for Drinking Water, Sanitation and Quality (NCDWSQ) has been entrusted with the task of empanelment and deployment of National WASH Experts (NWE) for ground truthing and technical assistance to States in the implementation of Jal Jeevan Mission (JJM).

In September 2022, 14 teams of NWEs were deployed in field who visited 228 villages to verify the progress of implementation of JJM in 13 priority States. The villages have been divided into 3 categories namely; Har Ghar Jal with 100% tap water coverage, villages where the work is ongoing and villages where work is yet to start. Based on percentage of progress of implementation of JJM at ground level, the NWEs are providing Star Rating to villages taking into consideration the various parameters of JJM operational guidelines. The star rating is provided in the scale of 1 to 5 with 1 as lowest and 5 as highest percentage of achievement in implementation of JJM in a particular village.

The rating criteria is based on various aspects including but not limited to quality of execution of work, service delivery, operation and maintenance, TPIAs, trainings, ISA and IEC, water testing, greywater management, water conservation measures, grievance redressal etc.

23 villages were found to be in 2-star category, 89 villages were in 3-star category and 80 villages were in 4-star category as per the assessment of the experts. The progress of the work was found to be satisfactory in 45 villages, in 138 villages it was assessed to be satisfactory with need of improvement, and in 9 villages progress was unsatisfactory. Feedback was provided to the State authorities along with suggestions and remedial actions wherever needed.
JJM: Action on the ground

Maharashtra

A team consisting of two National WASH expert and a PMU professional visited 32 villages in Satara and Ahmednagar districts of Maharashtra during 19 – 24 September, 2022 for ground truthing and providing technical assistance to the State.

It was observed that the State was making great efforts for participatory rural groundwater management. The Groundwater Surveys and Development Agency (GSDA), that is also a part of the source finding committee, thoroughly ensures that the groundwater sources are sustainable. In most villages, water user charges were being collected for proper operation and maintenance of schemes. Certain issues as observed by the team like reconciliation of IMIS data need to be carried out on immediate basis. FTK trainings were conducted, however FTK kits were yet to be distributed to the members trained, failing which regular testing at the village level is affected. Appointment of ISAs is crucial for proper awareness generation and IEC activities. Assessment of retrofitting schemes is critical and must be ensured.

Uttar Pradesh

4 members from NJJM visited the State of Uttar Pradesh during 6 - 8 October, 2022. The team visited 17 villages in 3 districts of Gorakhpur, Basti, and Siddharth Nagar to understand the key issues, challenges and suggest measures to speed up the implementation of JJM.

Keeping sustainability in mind the State has planned nearly 70% of their schemes based on renewable energy which was appreciated. To achieve the target of the mission in a time bound manner, the State must ensure that planning and approvals of the remaining tap connections must be completed at the earliest. VWSCs are yet to be constituted in certain villages. Training and skilling of local village level functionaries is also key to the success of the project and must be prioritized. Awareness of GP members and local community about JJM seemed to be lacking. It was emphasized that IEC activities must be prioritized. ISAs have been deployed recently for the same. Tap water connections at many places need to be provided with proper pedestal support and platform.

Uttarakhand

A 4-member multidisciplinary team from the NJJM visited 14 villages in 4 districts of the hilly State of Uttarakhand to understand the challenges of implementation of schemes under JJM, to provide potential solutions and to document good practices during 21-24 September, 2022. The team has visited the Jakh Saura water source point inside the Reserve Forest and Kausani (G.O.V. Pumping MVS) water supply source point. In addition, NJJM team members has also visited the district water quality testing lab of Tehri Garhwal and Haridwar.

It was observed that the quality of construction of the schemes and the tap connections was good, however pedestal support and platforms must be ensured. In some areas, pipes were observed to be laid above ground, while sufficient cover is a necessity to enhance the longevity of the pipes’ lives. Disinfection arrangements were found to be lacking and must be ensured. Villagers have shown willingness to pay water user charges, and collection must be prioritized for O&M. Source finding committee reports were found to be lacking in DPRs, which are crucial for source sustainability which is a pillar of JJM. IMIS data needs also needs to be reconciled. IoT implementation is being undertaken by an NGO ‘Himmothan’ on pilot basis. The team emphasized on the requirement of public awareness and behavioral change communication to be carried out by ISAs.