Har Ghar Jal
Jal Jeevan Mission
Building Partnerships
Changing Lives

Jal Jeevan
Samvad

November, 2020

Note from the desk of Mission Director…

New Delhi
November 27, 2020

India is committed to ensure piped water supply to every home in the country by 2024 and to realize this goal, Jal Jeevan Mission is being implemented in partnership with States to provide functional household tap connections to every rural household. This will help in improving the quality of lives especially of women and girls as quite often, fetching water for drinking, cooking and other household needs, is their responsibility.

Jal Jeevan Mission focuses on functionality of tap connections i.e. assured supply of potable water in every home in adequate quantity of prescribed quality on regular and long-term basis. In last 15 months, despite CoVid 19 pandemic, tremendous progress has been made. Since announcement of Jal Jeevan Mission on 15th August, 2020, about 2.67 Crore households have been provided with new tap water connections. As of now, about 5.90 crore households, which is about 31% of the total rural households of the country, have tap water supply. Jal Jeevan Mission focuses on universal coverage and thus, Goa became the first State in the country to provide 100% tap water connections to all the rural households. So far, 18 districts and more than 400 blocks, 31 thousand Gram Panchayats and 56 thousand villages in the country, have tap water supply to every home.

Our children are most susceptible to water-borne diseases. So, to provide piped water supply in all schools, anganwadi centres and ashramshalas, on 2nd October, 2020 a 100-day campaign was launched with the aim to ensure potable water for drinking and cooking of mid-day meals, and tap water for hand washing and use in toilets. All States/ UTs are working hard to ensure that our children have access to safe piped water in these places. Our public health engineers and village functionaries are making huge efforts to make provision of safe water in quality-affected villages by end of this year.

National Jal Jeevan Mission is also extending technical support to the States/ UTs by deputing multi-disciplinary teams. The issues faced by the State like water supply in drought-prone/ cold desert/ hard rock/ hilly/ coastal areas are deliberated upon and solutions are found out. Its all about building partnerships and working together to bring change in lives of people.

A mid-year review was undertaken. The detailed review revealed that challenges vary from States to States, and regions to regions. National Jal Jeevan Mission States/ UTs are working together to meet the goal of providing water to every rural household by 2024.

To help the States/ UTs, a functionality assessment is underway spread across 7,000 villages in the country. Sample households are being surveyed to assess the regular supply of potable water in adequate quantity of prescribed quality to the rural homes.

The district administration headed by the District Collector/ Deputy Commissioner is the backbone of this programme. District's performance depends on the leadership and guidance provided by the DMs/ DCs by ensuring meticulous planning to ensure drinking water security for the district. They are to draw a road map and coordinate with the different line departments associated under the programme for effective convergence of resources available under different programmes to realize the goal of the mission i.e. long-term drinking water security.

Jal Jeevan Mission - Har Ghar Jal programme calls for a 'Jan Andolan' with behaviour change across societies and communities. The mission aims to partner with the non-government organizations, corporates, self-help groups, voluntary organizations in mobilizing the community, enhancing the capacity of the field level functionaries and help achieve 100% FHTC by 2024.

While working to achieve the goal of Jal Jeevan Mission, let's not forget to use mask, washing hands and maintain physical distance to ward off Corona virus. At present, this is the only effective way to stop the spread of this global pandemic.

[**Bharat Lal**]
Additional Secretary & Mission Director
Jal Jeevan Mission

Jal Jeevan Mission

On 15th August, 2019, during his Independence Day address to the nation, the Prime Minister announced the Jal Jeevan Mission. The Mission has been designed with an integrated approach with end-to-end measures: from source to supply to reuse and recharge. The 'Har Ghar Jal' programme has been envisioned as a 'Jan Aandolan' - people's movement.

Jal Jeevan Mission is implemented in partnership with States to enable every rural home in the villages to have Functional Household Tap Connections (FHTC) by 2024. JJM is a programme to end the drudgery faced by women and young girls in rural India who walk distance everyday to fetch potable water for their daily household needs.

Vision

Every rural household to receive drinking water supply **in adequate quantity of prescribed quality on regular and long-term basis** at affordable service delivery charges leading to improvement in living standards of rural communities.

Current Scenario:

- Goa becomes the first State to provide 100% tap water connections in rural areas;
- The State of Telangana with 98% coverage is inching closer to achieving 100% FHTC coverage;
- At present, 31% of the rural households in India have tap water connections;
- 13 States/ UTs have an above-average percentage of 31% rural FHTC;
- 19 States/ UTs fall below the national average.

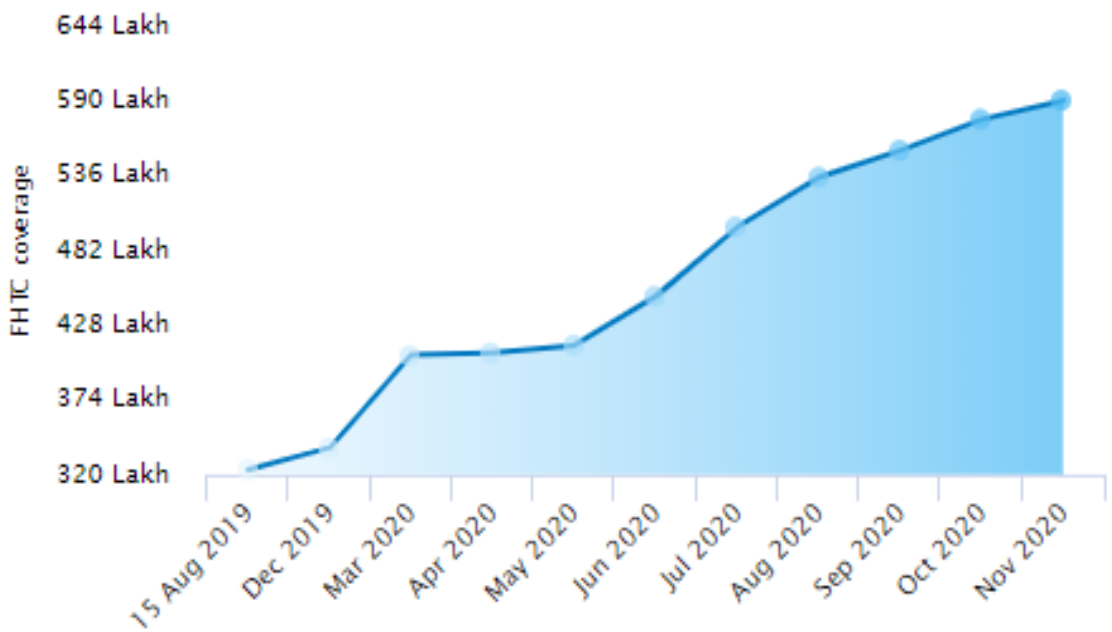
States reaching the magical number:

- Puducherry, Gujarat, Haryana, and Sikkim have recorded considerable progress with more than 70% FHTCs in rural households.

States which need to push harder:

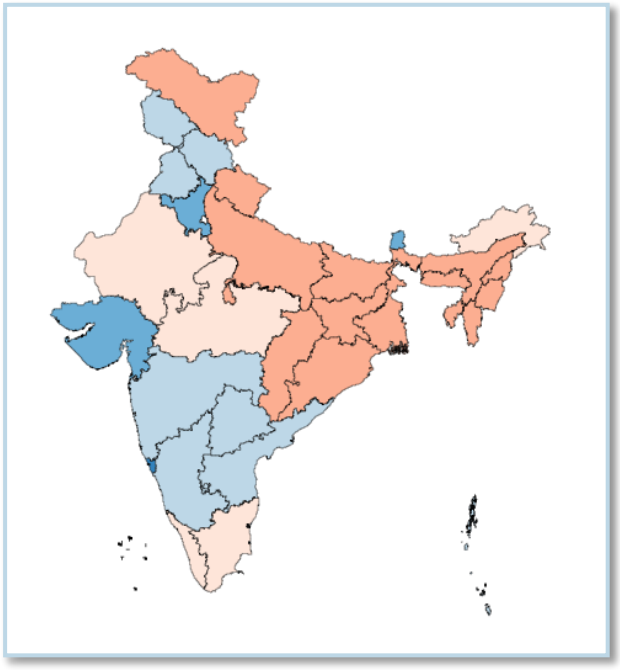
- The major States with a large landmass and population which need to gear up to match the much-needed pace to achieve 100% FHTC by 2024 are Karnataka, Madhya Pradesh, Odisha, Rajasthan, Tamil Nadu, Uttar Pradesh, and West Bengal.

Progressive FHTC coverage in the country

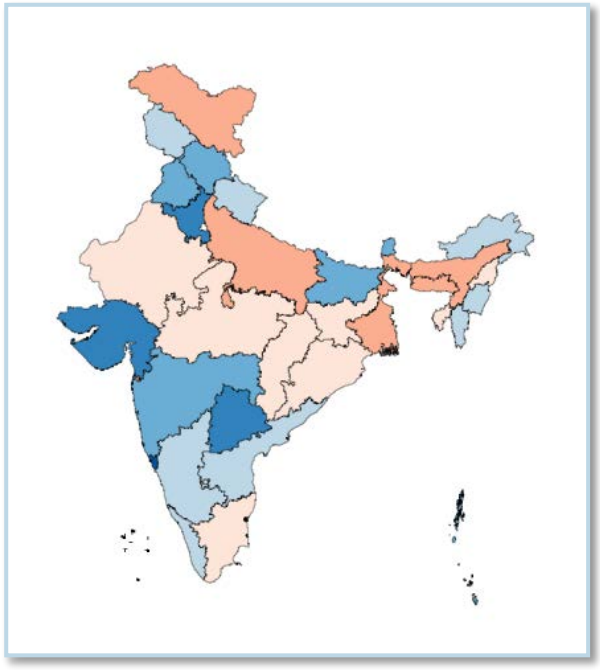


Status of Household Tap Water Connections

As on 15th August, 2019



As on 27th November, 2020



Source: JJM - IMIS

Hon'ble Prime Minister lays foundation stone for rural drinking water projects in Vindhyachal region

The Prime Minister Shri Narendra Modi, in the presence of the Chief Minister of Uttar Pradesh, Shri Yogi Adityanath laid the foundation stone rural water supply projects to benefit 2,995 villages of Mirzapur and Sonbhadra districts on November 22, 2020.

Governor of Uttar Pradesh Smt Anandiben Patel, Union Minister of Jal Shakti, Shri Gajendra Singh Shekhawat, Union Minister of Housing and Urban Affairs, Shri Hardeep Singh Puri and Minister of State, Jal Shakti and Namami Gange Dr Mahendra Singh also graced the occasion. The project worth is Rs 5,555.38 Crore with the objective to provide household tap water connections in 2,995 villages benefitting 42 lakh population in Mirzapur and Sonbhadra.

Addressing the gathering, the Prime Minister said, "For decades after independence, if any area had fallen prey to neglect, then it was this area. Be it Vindhyachal or Bundelkhand, this entire area despite having resources became an area of scarcity. Despite having so many rivers, this area was identified as the most drought-affected area. This was the reason, which forced many people to migrate… it is a moment of happiness for mothers, sisters and daughters that scheme will assuage the pain and suffering of the people."

The Prime Minister on the occasion said, " In the past year and a half from the start of Jal Jeevan Mission, over 2.60 Crore families have been provided with piped drinking water in the country… the life of mothers and sisters is getting better due to easy water access. A major benefit of this scheme has been the reduction of many diseases like cholera, typhoid and encephalitis caused by drinking dirty water. Once piped water reaches thousands of villages in Vindhayachal, the health of children would improve and their physical and mental development will be better."

He said, Village Water and Sanitation Committees have been constituted in all these villages. These committees will be responsible for operation and maintenance of the infrastructure created under the programme. The Prime Minister interacted with the woman SHG member on the occasion. As he spoke with the member, he requested her to spread the message of conserving water since piped water in every household also means bringing about behavior change to ensure water security.

Under the Jal Jeevan Mission (JJM), 14 projects worth Rs 3,200 Crore for Sonbhadra district and 9 Projects worth Rs 2,355 Crore for Mirzapur are taken up to provide tap water connections to rural homes of the region. The programme was relayed through LED screens installed in all the Gram Panchayats receiving the benefits of the projects. The projects will be completed within two years i.e. by 2022.

The provision of household tap connection in rural areas will help in removing 'drudgery' of women and girls as fetching water is their responsibility. It will also improve the 'ease of living' for people living in rural areas. Since the objective of the mission is universal coverage, every family in the habitation/ village is to get tap water connection and 'no one is left behind'. **'Improving the quality of life'** and enhancing 'ease of living' of people of our country is the highest priority of the Government. Jal Jeevan Mission is working tirelessly to ensure the basic amenity of drinking water reaches every rural home of the country. In the last 15 months, despite the COVID pandemic, 2.63 Crore households have been given tap water connections and at present, about 5.86 Crore (30.67%) rural households are having tap water connections.

India | Status of tap water supply in rural homes

Total number of households	Households with tap connections as on 15 Aug 2019	Households with tap connections as on date +71,073
19,10,85,542	3,23,62,838 (16.94%)	5,89,57,635 (30.85%)

100 % FHTC States/ UTs			
Goa			
100 % FHTC Districts	100 % FHTC Blocks	100 % FHTC Panchayats	100 % FHTC Villages
16	402	31,009	56,314

"जब विंध्यांचल के हजारों गांवों में पाइप से पानी पहुंचेगा तो इससे भी इस क्षेत्र के मासूम बच्चों का स्वास्थ्य सुधरेगा, उनका शारीरिक और मानसिक विकास और बेहतर होगा। इतना ही नहीं, जब शुद्ध पानी मिलता है तो कुपोषण के खिलाफ जो हमारी लड़ाई है, पोषण के लिए हम जो मेहनत कर रहे हैं, उसके भी अच्छे फल इसके कारण मिल सकते हैं।"

Narendra Modi
Prime Minister

For the in-village water supply infrastructure, the local communities through their Gram Panchayats or its sub-committees namely Village Water & Sanitation Committees (VWSCs)/ Paani Samitis, etc., to plan, implement, approve, operate and maintain their own water supply systems. This will ensure that all families including those of marginalized, weaker sections of society, SC/ STs are also provided with assured drinking water supply, thereby upholding the principle of 'no one is left out'. This will also instill a 'sense of ownership' and pride among the local community.

Goa becomes first State in the country to achieve 100% FHTC

Goa became the first State in the country to provide 100% Functional Household Tap Connections (FHTCs) in rural areas. The State has provided piped drinking water to all the rural households in its two districts.

Goa being a coastal region has the advantage of very good water availability. The people of the State acknowledge its importance and understand the role of water in the economy by attracting domestic and international tourists. Habitations and villages besides hotels in Goa provide lodging to tourists, and regular supply of water through a piped connection in all the rural houses helps the community provide 'stay home' facilities to the visitors. Although Goa had set the target of providing, 100% piped water supply by the year 2021 under its annual action plan, but the speed, scale, and meticulous work done by the PHED officials and Gram Panchayats have helped them achieve the goal ahead of schedule. Goa dovetailed the existing resources under MGNREGA for strengthening the drinking water sources, water supply management, and Swachh Bharat Mission (Garmin) funds for grey water management.

In Goa, all water supply connections are fitted with water meters, and the water billing is computerized. Every consumer receives a computerized bill with an easy payment option. Goa has also started the service improvement facility for the rural community by introducing 'on the spot billing', which may also increase revenue collection and regular potable water supply on long-term basis.

Goa plans to implement IoT based sensor monitoring system to assess the discharge & functionality of drinking water supply, thereby ensuring that potable water in adequate quantity and of prescribed quality is supplied on a regular and long-term basis to every rural household. The State to set up NABL accredited laboratories and open the water testing facilities for the general public. Five persons in every village, preferably women, will be trained to use Field Test Kits (FTKs) to check the quality of water supplied in the villages. Regular testing will help in building a sense of ownership as well as the demand for better service delivery.

This small State has set an example for others for assured service delivery of potable water to every rural home. National Jal Jeevan Mission expects this kind of commitment from all States.

100-day campaign to provide piped water supply in schools, anganwadi centres and ashramshalas

On the call of Prime Minister Shri Narendra Modi, a 100-day campaign was launched on 2nd October, 2020 to provide piped water supply in all schools, anganwadi centres and ashramshalas of the country. Ensuring the availability of safe water to children is a priority for the Government and this will improve the health and well-being of children and their all-round development. This campaign is an opportunity to provide assured piped water supply in these institutions for drinking and for cooking of mid-day meals and hand washing & toilet use. It also provides for grey water treatment & in-situ reuse and rainwater harvesting in all such places, especially in drought-prone and water-stressed areas.

"

.....जल जीवन मिशन इस 2 अक्टूबर, गांधी जयंती से एक और अभियान शुरू करने जा रहा है।

100 दिन का एक विशेष अभियान, जिसके तहत देश के हर स्कूल और हर आंगनबाड़ी में नल से जल को सुनिश्चित किया जाएगा। मैं इस अभियान की सफलता की शुभकामनाएं देता हूं।

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- Narendra Modi,
Prime Minister

State Governments/ UTs have been requested to dovetail funds in convergence with 15th Finance Commission Grants to PRIs, MGNREGS, SBM, as well as various Central and State Government's programmes/ schemes for accomplishing the target of this noble initiative.

The physical environment and cleanliness of educational and healthcare institutes have a profound impact on health, capacity to learn, and well-being of children. Poor sanitation, potable water scarcity, use of contaminated water, and inappropriate hygiene practices are major causes of child morbidity and mortality among infants and young children.

The campaign requires support from Public Health Engineering Department/ Rural Water Supply Department/ Gram Panchayat/ Village Water & Sanitation Committee/ local community/ NGOs/ SHGs. The results will be visible only when the campaign turns to a 'Jan Andolan'.

Good WASH behavior prevents human-to-human transmission and helps contain the spread of the CoVid-19 virus. Ensuring proper sanitation facilities, providing potable drinking water, and safe, hygienic practices is a national priority to fight the Corona virus. When the children return to school and provide them with a safe environment as the schools reopen.

From October to January, the three-month period will be used to prepare, plan and sanitize the schools, ashramshalas, and anganwadi centres so that children have a safe and secure learning experience upon their return after months of home-stay. To ensure that safe water reaches all the schools, ashramshalas, and anganwadi under the 100-day campaign period, the Gram Panchayats are required to ensure that Gram Sabhas are held community deliberates and prepares a plan.

Through this campaign, Jal Jeevan Mission aims cover 15 lakh schools and 14 lakh anganwadi centres with potable drinking water. Further this institution can be used as centres for learning of water related aspects viz; water conservation, rainwater harvesting, water supply, grey water management, sanitation, hygiene, etc.

Sensor-based IoT system for measurement and monitoring of drinking water supply in villages

- Shri. Siddhant Mason
(Senior Programme Manager, TCIT)

Jal Jeevan Mission (JJM) aims to provide 'Functional Household Tap Connection' to every rural home by 2024. The mission is working tirelessly for assured supply of potable water at a service level of 55 liters per capita per day (lpcd) regularly on long-term basis. The objective of the mission is universal coverage i.e. every family in the habitation/ village to get tap water connection and 'no one is left behind'.

JJM emphasizes on integrated demand and supply side management of water at the local level, including the creation of local infrastructure for source sustainability like groundwater aquifer recharge, rainwater harvesting and grey water treatment & reuse, etc. So, the focus is not only on the creation of infrastructure to provide tap connections; it's about 'service delivery', for which the 'functionality' of the taps is to be ensured.

Recent technological advancements (such as IoT, Big Data Analytics, AI/ML, Cloud) and declining costs of mobile data, hardware (sensors), and software, provide an opportunity to digitize water supply infrastructure in rural India. There is an opportunity to deploy a frugal IoT based system to monitor quantity, quality, and periodicity of water supply. Digitization of water supply infrastructure has the potential to solve many of the problems related to the water supply. More importantly, it will help anticipate and address future challenges.

In order to track service delivery of rural water schemes as per Jal Jeevan Mission, an 'IoT sensor-based monitoring system' can be developed that collects data from field locations and can be accessed by engineers, officials, and the community to monitor water supply schemes in near real-time. This will enable quick response, minimum service delivery outage, minimum water loss, and monitor quantity and quality. The additional advantage of this data would be to analyse the demand pattern of the user groups over time and use this information for demand management at an aggregate level, ensure data-driven planning and effective operation & maintenance of water supply systems in the villages.

National Jal Jeevan Mission has constituted a Technical Expert Committee to develop a framework for sensor-based measurement and monitoring system. It has further launched the ICT Grand Challenge in partnership with MeitY to encourage start-ups, academia, as well as corporates to develop an innovative solution for smart water management for rural India. Besides these initiatives, several NGOs and Foundations have initiated pilots in remote rural villages (e.g. Tata Community Initiatives Trusts, Tata Trusts, Gram Vikas, etc.). Gujarat government is currently conducting a pilot in 500 villages and Arunachal Pradesh government has recently launched a public tender to deploy IoT based solution for rural water supply. Similarly, Govt of Bihar has also started installing IoT bases sensors in water supply schemes.

This IoT sensor-based rural water monitoring system will help communities in "developing a utility mindset" by tracking KPIs to ensure its long-term sustenance. IoT based remote monitoring is likely to benefit all stakeholders (government, utility, and citizens) across multiple dimensions like economic, social, environmental and health & safety.

It is expected that States can save a lot through reduced operations and maintenance costs, scheme failure avoidance, and reduced cost burden on the community (healthcare expenses and lost wages). This IoT based solution has an enormous potential to influence rural livelihoods and become a key enabler in success of Jal Jeevan Mission.

Building Partnership, Changing Lives : Sector Partners

Jal Jeevan Mission is a time-bound and mission-mode programme of the Government of India. While addressing the nation on 73rd Independence Day, Prime Minister, Shri Narendra Modi exhorted that "the campaign on water conservation should not just remain a government initiative. It should become a people's movement."

For the successful implementation to achieve the stated goal of providing potable water to every rural household of the country by 2024, the mission is in the process of partnering with organizations working in the water and allied sector.

An Expression of Interest was sought from organizations which are working in the water sector having wide outreach and impact to become Sector Partners. 63 organizations had shown their keen interest. A video conference was chaired by the Additional Secretary & Mission Director with these organizations on 28 October, 2020. It was organized to explore the possibility of a partnership to achieve the goal of the Mission. During the orientation, the philosophy, ethos, and fundamentals of Jal Jeevan Mission were shared. The mission will partner with the organizations based on their geographic presence, area of operation, and thematic preferences for collaboration.

The organizations shared details about their area of work, activities carried out in the field, presence in specific regions and specialization on different themes e.g. community mobilization, capacity building, skill-based training, baseline survey, water conservation, water quality testing, monitoring, and advocacy.

Jal Jeevan Mission aims to harness the huge potential of voluntary organizations, social service organizations, NGOs, charity organizations, and professionals working in the drinking water sector, who are willing to mobilize the public, enhance their capacity and help achieve the goal of 100% FHTCs in every rural household. For the success of the mission, the government and private sector, corporate houses including voluntary and charity organizations have to join hands to develop synergy for efficient output. To make water 'everyone's business', the mission strives to build partnerships and work together to improve the lives of people.

Functionality Assessment

Jal Jeevan Mission has engaged a research and survey firm to carry out functionality assessment of household tap connections spread across 7,000 villages in the country during November-December, 2020. As per the JJM-IMIS, 30.70 % of rural households i.e. 5.87 Crore out of a total of about 19 Crore households in the country, have piped water connections. The mission focuses on functionality of the tap connections, rather than only provision of household taps.

Functionality is defined as:

i.) Having the infrastructure to provide FHTC to every rural household;

ii.) Providing water regularly on a daily basis in adequate quantity i.e. 55 lpcd of prescribed quality (BIS:10500); and

iii.) Long-term source and system sustainability which means that the focus is on O&M.

The survey will be based on probability proportional to size technique. 10 villages from each selected district will follow PPS sampling method to cover the entire village habitation.

From each selected village, 15 households will be sampled. Under single village water supply scheme, 5 households will be selected randomly within 50 meters from the source of the scheme, 5 households from the tail end of the village and 5 samples could be randomly collected from rest of the village.

In the case of a survey of MVS, the distance will be calculated from the pumping point or from the entering point of the main pipe of the scheme to the village. While selecting the households if the village comprises of different hamlets inhabited by specific caste and creed, then all the hamlets may be represented in the selected household for assessment. If any district has more than 25% SC/ST population, then at least 4 out of 10 villages will be selected to have more than 50% SC/ST population.

The assignment is taken up under the overall guidance of Jal Jeevan Mission. The profile of places to be visited is shared with the agency by the department well in advance. The work of carrying out the survey begun in November and will continue for the entire month across the country. Based on the assessment, performance grants will be provided to better performing States/ UTs.

Conference of Ministers of States/ UTs on Jal Jeevan Mission

The Union Minister of Jal Shakti, Shri Gajendra Singh Shekhawat chaired a virtual conference on 3rd November, 2020 with all States/ UTs Ministers in-charge of rural water supply and reviewed the progress made under the Jal Jeevan Mission.

The Minister of State for Jal Shakti, Shri Rattan Lal Kataria, Chief Ministers of Haryana and Tripura also participated in the virtual conference. Senior officers from the States/ UTs were in attendance. This Conference was organized to collectively discuss various issues i.e., planning, implementation and progress made so far and the way forward so that the remaining households in villages get tap water connections at the earliest. The Conference served as a platform to discuss important issues to expedite the implementation as well as to learn good practices from better performing States/ UTs.

Relevant issues were discussed at length to give the desired pace and sustain the momentum for implementation of the life-changing mission to ensure every rural home gets safe water in their homes regularly and on a long-term basis.

National Jal Jeevan Mission presented the progress of the Mission in all States/ UTs and urged them to speed up the implementation to accomplish the goal of the Mission in a time-bound manner so that every rural household gets tap water connection. The guidelines on Knowledge Resource Centre was released by the Union Minister which will help in engaging institutes of repute to impart training to various officials in the States/ UTs.

National Water Quality Sub-Mission

Potable water supply to water quality-affected habitations is a top priority under the Jal Jeevan Mission. National Water Quality Sub-Mission (NWQSM) is being implemented since March, 2017 to provide safe drinking water to identified 27,544 Arsenic/ Fluoride affected rural habitations by March, 2021. The NWQSM has been subsumed under Jal Jeevan Mission.

Physical progress under NWQSM as on 23.11.2020 is as below:

Details (in no.)	No. of habitations
Identified habitations as on 18.08.2016	27,544
Habitations covered	15,857
Habitations covered through State schemes/ quality improved	8,077
Habitations being covered	3,468
Balance habitations	142

Arsenic-affected Habitations: Out of the 13,819 Arsenic-affected habitations having population of 1.57 Crore had been taken up under NWQSM, 11,480 habitations with population 1.40 Crore have been covered. After subsuming NWQSM under JJM, 4,826 Arsenic-affected habitations are provided with safe drinking water benefitting 43.85 lakh population. The balance 2,339 Arsenic-affected habitations having population 16.97 lakh are being covered.

Fluoride-affected Habitations: Out of the 13,725 Fluoride affected habitations having population of 1.21 Crore had been taken up under NWQSM, 12462 habitations with population of 1.13 Crore have been covered. After subsuming NWQSM under JJM, 3,706 Fluoride affected habitations are provided with safe drinking water benefitting 29.46 lakh population. The balance 1,263 Fluoride-affected habitations having population 8.12 lakh are being covered.

Grand Challenge for development of "Smart Water Supply Measurement and Monitoring System"

Jal Jeevan Mission (JJM), the flagship programme of Union Government is under implementation in partnership with States, focuses on 'service delivery' at the household level, i.e. regular water supply in adequate quantity and of prescribed quality on a long-term basis. This necessitates the use of modern technology in monitoring the programme and to capture service delivery data automatically for ensuring the quality of services. Digitization of water supply infrastructure has the potential to solve the problems as well as it will help anticipate and address future challenges.

The Ministry of Electronics & Information Technology (MeitY) in partnership with National Jal Jeevan Mission (NJJM), Department of Drinking Water and Sanitation, Ministry of Jal Shakti announced to develop a 'Smart water supply measurement and monitoring system' via an ICT Grand Challenge. Also, Jal Jeevan Mission would be the user agent of the Grand Challenge. C-DAC, Bangalore is the implementing agency of the Grand Challenge and would provide technical support for the challenge. C-DAC will also provide technical support for Proof of Concept (PoC) development to the shortlisted candidates. It would also provide mentoring support, technical guidance to them.

Enthusiastic participation received from all over India. Total of 218 applications received from various States. These applications were received from various sectors like LLP Companies, Indian Tech start-ups, Individuals etc., as per the following statistics. Applications were received from 46 individuals, 33 companies, 76 Indian Tech start-ups, 15 LLP Companies and 43 MSMEs.

The evaluation of the applications is in progress. Shortlisted submissions will be invited for presentation in front of a Jury duly constituted, which would conduct these online presentations and review the applications for identifying the top 10 for the next round of prototype development.

Way forward in the challenge, the next steps include Ideation to Prototype Stage, Prototype to Product Stage, Product Deployment Stage, and the announcement of three winners. All these stages would be carried out with funding support from MeitY and National Jal Jeevan Mission. Based on evaluation throughout these steps, one winner and two runners-up will be selected and awarded with Rs. 50 Lakh, for the winner and Rs. 20 Lakh for each runner-up.

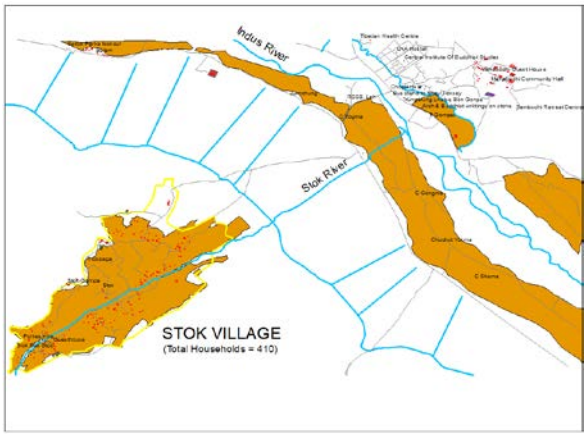
This Grand Challenge will harness the vibrant IoT eco-systems of India for creating smart rural water supply eco-system to measure and monitor the service delivery of the water supply in rural areas. This Challenge will provide an opportunity to work for Jal Jeevan Mission and to assure potable water supply through Functional Household Tap Connections to every rural household.

Voices from field

Planning for assured tap water in rural homes of Ladakh

Stok village, Leh, situated at an altitude of 3,500 meters above sea level nestled in famous Himalayan glacier track route and palace of the king of Ladakh, has resolved to solve the issue of freezing surface water faced by the locals in winters a thing of past.

The village with 410 households is spread across 7 km. The main source of water supply for the village is a stream flowing in the middle, which gets frozen in winters forcing the villagers to look for alternate arrangement.



A multi-disciplinary team of National Jal Jeevan Mission travelled to Leh to understand the field issues and challenges faced by the rural people of Leh. While interacting with the Gram Pradhan, Sub Pradhan of Panchayat, and Paani Samiti members, the villagers of Stok raised their concern for the non-availability of surface water consecutively for three months in the winter and demanded technological intervention to ensure water throughout the year from Indus river, which is just 3 km away. The habitation in Stok village is scattered, making it difficult to provide centralised water supply system. The cost of laying the infrastructure is too high at the given altitude.

Brainstorming and detailed deliberations by the national team led to exploring various Gram Panchayat members' various options. Finally, cost-effective decentralised water supply scheme that reduces the dependency on the surface source as the sub-surface water below the frost line could be taken up.

National JJM team discussed three options and in consultation with villagers proposed to develop an infiltration gallery structure that helps in capturing the sub-surface water. The village has 28 hand pumps, and 11 submersible pumps located close to 33 public stand posts. The sub-surface water below 1.5 meter of frost line and ground water did not freeze in winters; therefore the 17 handpumps could be converted into submersible pumps. The existing 10 submersible pumps require up-gradation, and 10 new bore wells are needed to cater to the requirement of all the 410 households in the village.

All the handpumps and submersible pumps were located close to the public stand post (PSPs). They will be connected to the PSPs which will in turn provide water during summers, and ground water will cater to the community needs in winter. The source augmentation through the infiltration gallery will help tap the sub-surface water below the frost level and make it source sustainable throughout the year.

The decentralised system will create 31 localised network zones with individual sources (bore wells) catering to a cluster of households. Household owners of individual clusters will operate and maintain its own network. It will develop a sense of responsibility and co-ownership of the infrastructure developed among the villagers.

Dedicated helpline for rural water supply

For Padmini Suar, it was a surprise that a simple phone call could help resolve her tap water issue, which was lingering for so long. It was much more than what she could have asked for. Coming from a not very developed mining district of Keonjhar in Odisha, she has not witnessed this kind of proactive and speedy action in the past.

She is a resident of Baunsagada Gram Panchayat, Keonjhar with a population of 18 lakh, out of which 86% live in rural areas having the highest concentrations of mines. 31% of the total mining employment in the State is concentrated in Keonjhar.

Padmini faced intermittent tap water supply for the past 2-3 days. Clueless of any solution amidst the pandemic scenario, she dialled the toll-free water helpline, without expecting much help from the other side. However, to her utter surprise the response was prompt. Through an SMS alert, she received a complaint ticket, and it was just a matter of time for the PHED official of Anandpur block to visit the spot and clean the valve, which was blocking the flow of water. Soon after, the flow of water resumed, and so was Padmini's trust in the government system, that too without paying a single penny.

The Government of Odisha focuses on maintaining water quality and service delivery standards. Now their effort is accelerated with the implementation of Jal Jeevan Mission. Addressing water quality is important under the mission while striving towards universal coverage of FHTC. In a first of its kind initiative in the country, a dedicated toll-free helpline number 1916 for rural water supply has been set up to receive and address citizens' concerns in a time-bound manner.

The 5T (transparency, teamwork, technology, and time leads to transformation) mantra of Odisha Government is used as the guiding framework for the sectoral transformation. Jal Jeevan Mission aims to turn the water infrastructure into a public utility service. The way shown by Odisha is worth replication by other States so that faith of the public strengthens in the government system of transparency, accountability and timely responsiveness.

Community managed drinking water programme: Experience of AKRSP

- Shri Apoorva Oza
(Chief Executive, AKSRP)

Started its operations in 1985 in Gujarat, Aga Khan Rural Support Programme (India) is now active in 24 districts and 3 States of Gujarat, Madhya Pradesh, and Bihar. AKRSPI's initial focus was on community management of the natural resources in diverse contexts i.e. in coastal Junagadh, drought-prone Surendranagar, and tribal Bharuch/ Narmada. Much work on watershed and irrigation, surface and groundwater recharge was taken up. As its work with rural women expanded, drinking water emerged as a major priority.

Gujarat

Women in coastal Gujarat, and drought-prone Surendranagar would travel many kilometers to fetch water. Young daughters would miss school often if the mothers were unwell, or when the younger sibling needed more attention. There was a heart-breaking story of an infant who died, falling into a dry well, when the mother had gone to the rivulet to fetch water. While AKRSPI had initiated rooftop rainwater harvesting structures (RRWHS)[1] with its donor funds, scaling up required a different partnership.

1 Rooftop Rain Water Harvesting is the technique through which rainwater is captured from the roof catchments and stored in reservoirs. The size of the tank is generally decided based on roof area, amount of rainfall and the family size; however, 7,000 liters to 10,000-liter capacity storage tanks are suggested. The underground tank is normally round in shape covered with RCC slab and a potable hand pump is installed to draw water from the tank. A manhole cover of 2 feet X 2 feet is provided at the top of covering slab to allow space for its cleaning operations. The structure supports the drinking water needs of a beneficiary household during the summer season.

Water and Sanitation Management Organization (WASMO) initiated operations in 2002, and AKRSPI collaborated scaling up from 15 villages to 100 villages.

The women groups promoted by AKRSPI embraced the new intervention with enthusiasm, and supported the Panchayats in community contribution, village action plan preparation, and maintenance after implementation. Because of this, their voice becomes powerful in the traditional male-dominated Panchayats, and many become Panchayat leaders also. With the support from Government, a 1,000 village programme was launched to address the unique problems of the saline coastal villages, with many others joining this Coastal Area Development Programme (CADP), successfully bringing together the Tata Trusts, Local NGOs and WASMO. AKRSPI also collaborated with another NGO network called 'Pravah' to persuade the Government to fund RRWHS, as it's the only technology suitable for remote houses and saline ground water regions. Again, WASMO supported, and thousands of such RRWHS were installed. Gujarat is the only state in the country which financially supports villagers to construct their own RRWHS.

Bihar

The availability of safe drinking water has been a major problem in many parts of Bihar. In rural northern Bihar, shallow hand pumps are the predominant source (around 87% of the total stock) of drinking water. Due to the low water absorption capacity of soil, wastewater of the hand pump is pooled near the source itself, making it highly contaminated. Stagnant surface water, poor sanitation conditions, and the absence of drainage around water sources lead to permanent ground water contamination.

In this backdrop, AKRSP (India) in 2009-10, examined water sources in its intervention areas in both Samastipur and Muzaffarpur districts. The results revealed bacterial contamination in nearly 85 percent of the sources. Based on these results, both curative and preventive interventions were undertaken such as awareness creation and sensitization among communities, construction of concrete platforms near hand pumps, and establishing mini water testing laboratories to provide potable drinking water.

Subsequently, working with the community, AKRSPI felt to develop an alternative model that shall provide safe and potable drinking water to the ultra-poor with a view to bringing down their health expenses. In this context, AKRSP (India) piloted two different models of community-owned mini drinking Water Supply System (COMDWSS) in two different Gram Panchayats of Samastipur and Muzaffarpur districts. This intervention aimed at providing potable water 24x7 with the least wastage. Hence, a model was designed for hamlets with high-density population having scattered settlements. Herein, various stand posts were erected in different settlements and connected through PVC pipelines. Each stand post was equipped with two auto-lock taps and a specially designed platform to collect water, optimally. This model of erecting stand posts was promoted and accepted.

The community paid 10% of the total estimated cost upfront in form of cash and workers contribution, and agreed to pay Rs. 100/ month per household. This covered the cost of water operator, replacement of taps, etc. and the electricity bill. A small water committee, which had the local ward representative as well as women from the self-help groups, managed the entire scheme. The first community-owned mini drinking water supply scheme was commissioned in May,

2013 at Dhobi tola in Mohamadpur, Kouri Panchayat of Pusa block. After successful demonstration of model, AKRSPI established many such schemes in different hamlets to meet the community demand and emphasis was laid on the quality of water also.

RRWHS at Kamlapur village, Surendranagar

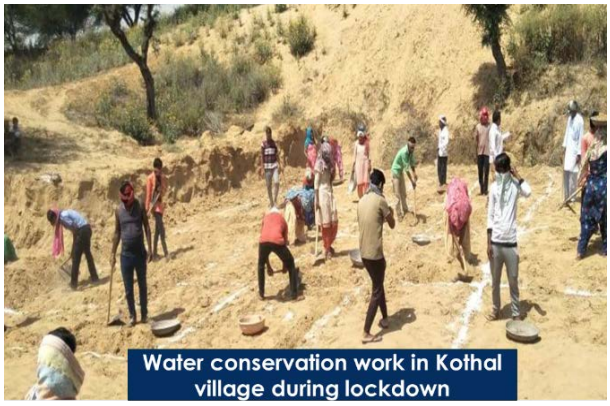
This model was shared with the Panchayati Raj Department of the Government of Bihar, and elements of these were adopted for the State government's universal coverage programme. Subsequently, AKRSPI was appointed as a resource agency to provide training on this model to various Panchayats and officials on this model.

Water Quality Testing: Since water quality was the main reason for the ineffectiveness of the hand pump, testing the new water source regularly and sustainably was critical. The district laboratory was too far away to send village samples, and results were not available speedily. Hence, AKRSPI decided to start a mini-water testing laboratory in a small room at its office. Standard equipment was procured for 13 parameters, and a qualified local youth was employed. A huge awareness campaign on health impacts of poor water quality at the village level, and spearheaded by the water committee leadership, created a demand for testing, and villagers agreed to pay Rs. 35/ test. Women were also trained in making H2S vials for biological testing.

JJM COVID warriors provide safe water during the lockdown

As India fights Covid-19 pandemic, the government is making sustained efforts **for 'provision of safe drinking water in rural areas'** by providing tap connections in households so that people get water in their homes. It is taken as a measure to avoid public gathering at public stand-posts to fetch water for drinking and to meet their daily household needs.

The water warriors are working relentlessly to provide the convenience of potable water at home for hand washing, which is the only possible solution to fight Corona virus and promote social distancing, as fewer people will end up gathering at public water sources.



Water conservation work in Kothal village during lockdown

Under the Gareeb Kalyan Rozgar Yojna, Jal Jeevan Mission promotes employment of local people and returnee migrants in water supply related works. There are thousands of people who returned from the cities to their villages/ habitations during the lockdown. JJM extended support by hiring the migrant workers who were back to the villages and were in search of work. It was a win-win situation for both Jal Jeevan Mission officials who got skilled labour to carry out construction, retro-fitting and repair, while the migrants received payment for water works. The programme is turning this crisis into a mutually beneficial opportunity both for the programme and for the labour force. States have initiated upskilling programmes to train the public for relevant works under JJM like masonry, plumbing, and fittings.

Commissioning of water supply schemes in remote villages of Arunachal Pradesh

India's first solar-based integrated multi-village water supply project (IMVWSP) was launched in Arunachal Pradesh. An amount of Rs 28.50 crore utilized on the project benefitting 39 villages in the Lower Dibang Valley. This is a 'first of its kind' project in the entire country. The project will provide drinking water to a population of 17,480. It is designed as an integrated project with elements of drinking water, green energy and tourism.

The project uses Green Solar Grid, SCADA automation system, pre-fabricated zinc alum storage tank and HDPE conduit for mains, sub-mains and distribution networking system. The project also includes amusement park including swimming pool, amphi-theatre, fountains and sit-outs. The project envisages promotion of tourism in the area which would enhance the living standard of the people and thus help in boosting the rural economy.

In order to ensure sustainability of the water project park, local villagers have agreed to share responsibility in the management of the assets in the park.

The Union Minister, Shri Gajendra Singh Shekhawat also dedicated drinking water scheme to Pathergaon, Kaisu, Enten and Enthem village in the presence of Chief Minister of Arunachal Pradesh. The 0.17 MLD drinking water project is constructed under Jal Jeevan Mission benefitting 167 households.

The Union Minister said, "Namsai is the lone Aspirational district of Arunachal. The Prime Minister, Shri Narendra Modi holds the aspirational districts which are lagging in socio-economic indicators close to his heart, therefore the implementation of all flagship programmes in such districts is directly monitored by the Prime Minister and the Prime Minister's Office."

Shri Singh hoped that in the next nine months, Namsai district would ensure 100 percent coverage of potable drinking water facilities for all households.

The Chief Minister requested support from the Union Minister, for districts like Namsai, which face recurring floods during monsoons.

The Union Minister also visited the under-construction lift water supply project on the banks of Teang river, near Marua bridge in Chongkham at Namsai district. The 1.7 MLD capacity treatment plant aims to provide safe drinking water to 22,695 people, covering 1,285 households in 10 habitations in Chongkham.

Mission in News

पानी से छूटी रिश्तों में मिठास

मीठा पानी पहुंचा तो बरसों बाद बेटियों ने जोड़ा पीहर से नाता

हरिभूमि

भोपाल - मुख्य संस्करण
6 Nov 2020

अरुणाचल के दूरदराज गांव तक पहुंचा जल जीवन मिशन

हरिभूमि ब्यूज ▶▶ | नई दिल्ली

- गांव की सामुदायिक भागीदारी में मार्च 2021 तक 'हर घर जल' पहुंचाने के लक्ष्य

चीन सीमा के नजदीक अरुणाचल प्रदेश के पूर्वी हिस्से में नामसाई जिले के चौखाम ब्लॉक के तहत जिला मुख्यालय से लगभग 40 किमी दूर स्थित हरे-भरे ंघान के खेतों के बीच एक छोटी सी जल धारा के किनारे एक निर्मल छोटा सा गांव माइली बसा हुआ है। महज 42 परिवार वाले इस गांव के ग्रामीण समुदाय ने भागीदारी का निर्णय

तक पूरा करने का लक्ष्य रखा है।

केंद्रीय जल शक्ति मंत्रालय ने यह जानकारी देते हुए बताया कि अरुणाचल प्रदेश के गांव माइली में सभी ग्रामीण शांतिप्रिय और बौद्ध धर्म के अनुयायी हैं, जिनका मुख्य व्यवसाय कृषि है। हालांकि उनमें से कुछ लोग सरकारी सेवा और अन्य

जल जीवन मिशन: इस साल 20.69 लाख घरों तक पहुंचेगा नल से जल

स्कूलों और आंगनबाड़ी केंद्र में देंगे नल से पानी

जयपुर | जल जीवन मिशन से इस साल प्रदेश में 20 लाख 69 हजार घरों तक पाइपलाइन डालकर नल से पीने का पानी पहुंचाया जाएगा। इसका काम चल रहा है। वहीं चुरू जिले के सभी ग्रामीण घरों तक नल से जल पहुंचाने का काम इस वित्तीय साल के अंत तक पूरा हो जाएगा। जल जीवन मिशन में प्रदेश के करीब 88.57 लाख घरों में 2023-24 तक पाइपलाइन डालकर पेयजल सप्लाई करने का लक्ष्य है।

फिलहाल इन घरों में रहने वाले लोगों व महिलाओं को दूरदराज के हैंडपंप, ट्यूबवेल, बावड़ी या कुओं से पानी भरकर लाना पड़ता है। जल जीवन मिशन में केंद्र व राज्य सरकार की बराबर की वित्तीय हिस्सेदारी है। मिशन में वर्ष 2024 तक हर ग्रामीण आवास में नल कनेक्शन देकर प्रति व्यक्ति प्रतिदिन 55 लीटर पीने योग्य पानी सप्लाई करने का प्रावधान है। केंद्र ने इस वित्तीय साल के लिए प्रदेश को 2 हजार 522 करोड़ रुपए का आवंटन किया है। केंद्रीय जलशक्ति मंत्रालय ने जल जीवन मिशन की मध्यावधि समीक्षा की। समीक्षा में सामने आया है कि 44 हजार 641 बस्तियों में पेयजल सप्लाई (पीडब्ल्यूएस) योजनाओं से एक भी कनेक्शन नहीं दिया है।

Government launches 100-day campaign under Jal Jeevan Mission to ensure potable water supply in schools

PTI | Oct 2, 2020, 15:54 IST

A- A+

NEW DELHI: The ministry of jal shakti on Friday launched a 100-day campaign to ensure potable water supply in all schools and anganwadi centers across the country.

Union jal shakti minister Gajendra Singh Shekhawat requested the states and

जल, जीवन, मिशन व शुद्ध जल

पंजाब की महिला सरपंच ने सभी के लिए पानी आंदोलन का किया नेतृत्व

जल जीवन मिशन' की योद्धा ने बदल दिया गांव को

सोलर लाइट लगाने को बन रही है योजना

Adobe Spark

flower show today as part of #AarogyaVan near Statue of Unity, #Gujarat. PM @narendramodi inaugurated the flower show and dedicated it to the nation.

@souindia

Solar-based lift water supply system is designed to provide drinking water to 39 census villages.

@PMOIndia
@ArunachalCM0
@PemaKhanduBJP

#HarGharJal

Translate Tweet

'हर घर जल' प्रदान करने वाला देश का पहला राज्य बना गोवा

Tweet your reply

पीने के पानी के क्षेत्र में भी शानदार काम किया है।

इस कार्यक्रम में जुड़े हम सभी जानते हैं कि गुजरात में पानी की क्या स्थिति थी।

बीते दो दशकों के प्रयासों से आज गुजरात उन गांवों तक भी पानी पहुंच गया है, जहां कोई पहले सोच भी नहीं सकता था: PM

Translate Tweet

11:25 · 24 Oct 20 · Twitter Web App

is our duty for their proper growth and holistic development. Let's work together to improve the lives of children and our future.

12:14 · 15 Oct 20 · Twitter Web App

5 Retweets 10 Likes

Mission is glad to be able to join hands with locals and put their indigenous knowledge, and experience to greater use.

#HarGharJal
#JalJeevanMission

Translate Tweet

पीएम ने जल जीवन मिशन को सराहा

A Kamnadi village in Tehri Garhwal district of Uttarakhand, 68-year-old farmer Rai Chand Kandola walks to a community tap at a stone's throw from his home to fill his vessels. His eyes light up as water fills the warns. Kamnadi has 80 families. Most residents are engaged in farming. Each tap is shared by seven to eight families, but their problems appear to evaporate every new year when the tap turns dry till May as the ground-water starts depleting. "Can you see that mountain?" he asks, pointing to a mountain range in the distance. "We walk for 4 km and two hours to bring water from Bonai natural spring in vessels," chimes in his elder brother Kunwar Chand, who says bears and leopards have crossed his path on such walks.

19:41 · 23 Oct 20 · Twitter Web App

Tweet your reply

Gajendra Singh Shekhawat
@gssjodhpur

Together we will be setting up a decentralised water supply system that will remain functional even during sub-zero temperature.

@jaljeevan_

The #ICTGrandChallenge2020 launched by @jaljeevan_ in partnership with @GoI_MeitY received impressive response. This opportunity will harness vibrant IoT eco-system of India to measure and monitor the service delivery of the water supply in rural areas.

pib.gov.in/Press...

Adobe Spark

Har Ghar Jal
Jal Jeevan Mission

Best Tableau Republic Day Parade, 2020 on

Jal Jeevan Mission

Har Ghar Jal

Har Ghar Jal
Jal Jeevan Mission

Har Ghar Jal Samvad

आज सबका साथ, सबका विकास, सबका विश्वास, ये मंत्र देश के हर हिस्से, हर नागरिक के विश्वास का मंत्र बन चुका है। आज देश के हर जन, हर क्षेत्र को लग रहा है कि उस तक सरकार पहुंच रही है और वो भी देश के विकास में भागीदार है।

नरेंद्र मोदी
प्रधानमंत्री

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