

Planning for universal, adequate and safe access of drinking water for rural households in Madhya Pradesh

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“Why would I go out now? I used to walk a larger distance to collect water when we had a handpump. But now it reaches at my home. It’s so convenient!!

- Kirti, Sagdi village, Dhar



The testimonial was a surprised yet satisfied explanation from Kirti, a 13-year-old girl from Sagdi village, Dhar district, in Madhya Pradesh, as she recited her old days about the banal task to fetch water from a hand pump at the end of the habitation, a task of a couple of hours including waiting time. This is the relief that the Jal Jeevan Mission (JJM) is bringing to many girls and women in far and remote villages like Sagadi. Launched in 2019, the JJM being accelerated through the State with hundreds of PHED engineers, functionaries and villagers to achieve the task of providing functional household tap connections (FHTC) for every household, by putting together building blocks and overcoming bottlenecks.

In just two years, Madhya Pradesh has gone from a mere coverage of 13% household tap water connections in 2019 to 32% FHTC coverage. For a state with the second-largest geography and fifth-largest population in India, while it is indeed a daunting task, piped water supply for all is not impossible anymore.

Numerous attempts have been made in the past to provide each household with piped water supply, however, with a lesser focus on involving the community. The result was evident. A few water supply schemes could provide water for the entire year and sustain the whole project design period. The launch of the Jal Jeevan Mission, however, came as a gamechanger with opportunities to look ahead.

Political Leadership and People’s Participation

The state government ensured equitable participation of all parts of the community, especially in facilitating women’s role in the decision making process by enforcing equal representation in village Water and Sanitation Committee (VWSC). Three-fourths of the members also belong to the user group, with one-fourth members from elected bodies. The VWSC Gazette notification also ensured adequate representation from vulnerable and disadvantaged communities like Scheduled Castes (SC), Scheduled Tribes (ST) with a minimum representation of 25% in Committees. To date, 13,992 members have been inducted as VWSC members under the programme.

Top leadership played a crucial role in shaping the programme with active guidance from Honourable Chief Minister Shri Shivraj Singh Chouhan setting a target to achieve universal access to FHTC by 2023, a year earlier than the national target. In addition, honourable State Minister PHED Shri Brijendra Singh Yadav reviews progress periodically and provides strategic direction. The executive arm further strengthens the process, with Additional Chief Secretary Malay Srivastava syncing up with the implementation body almost every week, through video conferences to review the progress and provide strategic guidance and support to accelerate the progress. High stakes from top leadership facilitate in creating a common platform for District Collectors, Chief Executive Officers of Zila Panchayat and representatives of Panchayati Raj and Rural Development Department, and the Public Health Engineering (PHE) Department to work hand-in-hand.

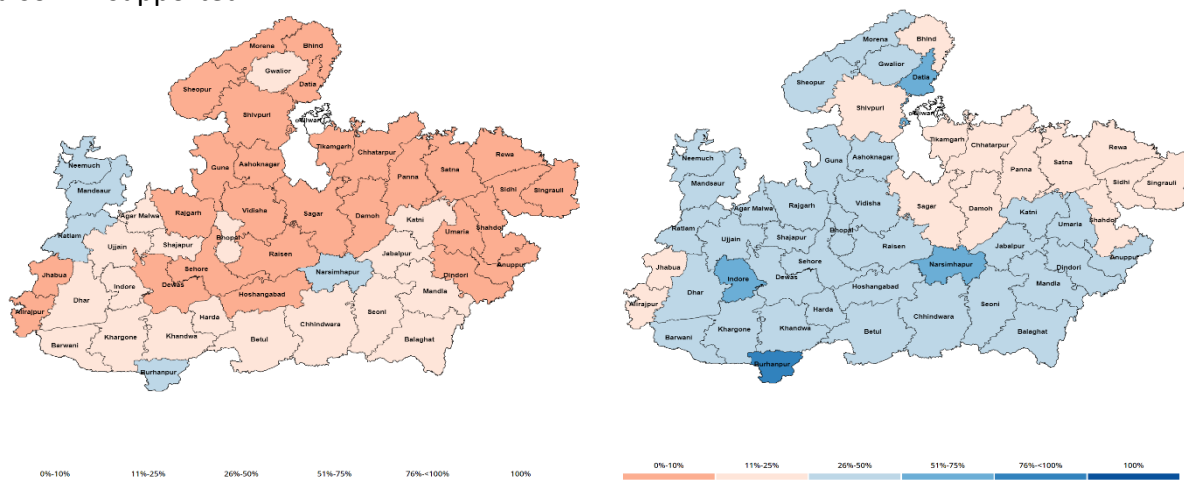


Hon. State PHED minister M.P. Shri BrijendraSingh Yadav attends review meeting with ISAs and TPIs

Strategic Implementation Approach

At the outset of programme implementation, the PHED directed District arms to identify villages with retrofitting and extension issues during the first phase. Opting such villages offered a base for quick FHTC coverage with assured water availability and systematically leveraged new schemes. This also provided critical experience to identify the key gaps and bottlenecks in implementation to support scale and speed of the JJM. Utilizing the window, the department arranged key blocks to upscale the operation. This included creating a team of field mobilizers by engaging ISAs (Implementation Support Agencies) and TPI (Third Party Inspection) agencies for effective programmatic and structural supervision, enhancing in-house capacity, escalating construction agency base, streamlining policies such as VWSC framework, dovetailing of the 15th Finance Commission funds, promoting inter-departmental convergence modality, and developing SOPs and ready-to-use field reference documents.

It was imperative to provide technical information related to steps necessary to establish sustained community-managed water supply schemes to the community and the departmental functionaries. Thus, the PHED, with technical assistance from development partner UNICEF, developed SOPs and six handbook modules in both English and Hindi language on developing Detailed Project Reports (DPRs), Participatory Rural Appraisal (PRA), Water Quality (WQ), Information Education Communication (IEC), Village level Planning (VAP) process, Construction Supervision and Trial Run, and Source Sustainability. UNICEF also supported in



FHTC Coverage as on 15th August 2019

FHTC Coverage as on 2nd August 2021

demonstrating community-led water supply and safety programming in fifteen pilot villages of Barwani, Indore and Guna districts. Water-Aid, meanwhile, supported in demonstrating the m-Water app for developing the village action plan (VAP) in villages of seven intensive supported districts.

Prioritizing community involvement and building ownership

JJM in Madhya Pradesh has embedded community involvement as the programme's core value, from planning to implementation to monitoring and management, by involving villagers in all stages of the programme. The key features include a needs assessment using Participatory Rural Appraisal (PRA), community approved quality construction supervision with Third Party Inspection (TPI), collection of community contribution for installation of the piped water supply scheme (PWSS), the promotion for collection of continued user charges with effective IEC and community-led water quality surveillance system, and sustainability of infrastructure created.



PRA and VWSC Meeting for assessing Water situation in Bheslai village, Dhar

Planning process:

PRA forms the basis for informed decision making by the community and makes them aware of the key bottlenecks to achieve the objective. In addition, the department offers technical assistance in selecting the best technology solutions possible out of three in the given scenario. The planning process also involves a practical on-field mathematical calculation of community contribution, both in cash and kind. In turn, it sensitizes the members to adopt and own the solution. So far, 12,550 community-led village action plans (VAPs) have been prepared and rolled out.



Orientation of Sarpanchs and GP Secretaries in Dhar

Mainstreaming the Village Water and Sanitation Committee (VWSC):

VWSC formation and strengthening is a key step in the process and results into an effective community-led planning process. The community chooses their representatives to manage the day-to-day operations of the Water Supply Scheme. With assistance from

Women members of Rampuria village of Ratlam district took charge of implementing JJM under the leadership of VWSC president Smt. Ramkunwar Dewada for planning. The group went on to collect Rs.70,000 as community contribution within a week of planning and continues to support in implementation of the programme.

its ISAs, the PHE Department supports the formation and strengthening of VWSC, builds the capacity of members, assists in linking with the formal banking system, handholds during the planning and implementation stage and lays the foundation for convergence modalities.



Female members from Rampuria village of Ratlam district participate in the PWS planning process

"I needed water at my home. But it was bound to be a system for all. I alone could not have afford it. I had to convinve others and make it happen."

- Smt. Ramkunwar Dewada, VWSC President, Rampuria village, Ratlam

Engagement of Implementation Support Agencies (ISAs)

The department selected 55 NGOs/CBOs of national repute with a competitive merit system and engaged them as Implementation Support Agencies (ISAs) in 52 districts to provide handholding support to the community for eighteen months for JJM implementation. District units formed clusters of 50 villages to deploy ISA teams, including one cluster coordinator, one sociologist, four community mobilizers and an environmental engineer, for all clusters in operation. ISAs have been entrusted with the task to handhold the community during the entire planning, implementation and commissioning phase.

Engagement of Third Party Inspection (TPI) agencies

The department engaged 19 water sector expert organizations as TPIs to supervise the quality of materials and construction workin all 52 districts. TPIs visit the project village area at the periodic interval and inspects the compliances involving community members. The TPIs were selected with a competitive tender based merit system.

Building Capacity of Key implementation Stakeholders

The state department organized capacity building sessions for 433 field functionaries and representatives from ISAs, in 5 sessions, on processes and field approaches, and continues to do so. Alongside, the department also trained 1371 engineers, masons, electricians, wiremen, plumbers to ensure quality construction, continued operation and maintenance for sustained service delivery. In addition, 497 Staff from construction agencies were also oriented on construction modality and quality compliances. 68 personnel from TPIs have been trained on supervision modalities. In addition, district-level PHE units conduct orientation of allied department functionaries such as PRD, MGNREGA, SBM on JJM.

Streamlining Water Quality and Surveillance

Recognizing the significance of water safety, the department pursues a two-fold approach for ensuring drinking water quality. On one hand, five women from each village have been trained on the use of Field Test Kits (FTK) to



"The time I spare for water testing ensures safety for my family, and others also benefit from it."

- Kali Bai, Member, Ambedi village Water Quality Surveillance Team



Members of Ambedi village Water Quality Surveillance Team tests sample at source

form a Village Water Surveillance Team. ISAs and departmental functionaries have built their capacity on the usage of FTKs and continue to do so. The team periodically tests different sources and reports to VWSCs, informing the departments if an anomaly is detected. The department has also streamlined the procurement process for the continued availability of FTK in thousands of villages. With continued capacity building and streamlined procurement processes, the department's enhanced accommodation and quality of labs meet NABL standards. As a result, NABL has accredited 49 labs (1 state, 47 district level and one sub-divisional) of the State, highest in the country.

Convergence for Source Sustainability and Greywater Management

As part of its regular programming, the PHED coordinates with Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) and the Swachh Bharat Mission (SBM) arms of the Panchayati Raj Department and other allied departments, to strengthen convergence, focusing on the mainstreaming of source strengthening and greywater management components. The Panchayati Raj Department has also issued a circular earmarking 30% of 15th finance commission fund allotted to Gram



Rain water harvesting structure constructed as part of the "catch the rain" campaign at GP building in MP

Panchayat to prioritise and supplement Jal Jeevan Mission, water conservation and operation and maintenance components of Water Supply Schemes. The respective departments have also directed its implementation units to inculcate such activities as part of District, Block and Gram Panchayat Development plans, with instruction to District Collectors and CEO Zilla Panchayats to hold convergence meetings keeping Executive Engineers PHE as functional members. The PHED has also focused on consolidating the "Catch the Rain" campaign promoted by the Government of India, and has been reviewing district unit initiatives.

Accelerating structural engineering

The State PHED has constantly reviewed and pushed district units to engage more construction agencies to increase FHTC coverage. Currently, sufficient contracting agencies are involved in the state, a significant up from the pre-JJM era, resulting in increased capacity for sub-units. For example, the Dhar division had employed around four agencies before JJM, and now have engaged 59 agencies for Single Village Schemes (SVS) and 23 agencies for tap water connections to institutions. The Department has also adopted a satellite imagery based geo-morphology technology scientific approach to identify water sources, that has resulted in increased number of successful efforts. The Districts are guided to put their best foot forward to create harmony for roles and responsibilities assigned at all levels, by bringing community, construction agencies, VWSC members,



Overhead tank and sump tank under construction in Chilur village in MP

and TPIs on the same platform that ensures community participation during scheme development with clear accountability.



Tap connection provided under the 100 days campaign in a rural school in MP

Running water availability in institutions

The state is steadily making progress in providing tap water connection to institutions (Schools, Anagwadi Centres, GP Offices, HCFs) in rural areas under the Government of India's 100 Days campaign. Owing to limited existing capacity and absence of a workable implementation strategy, the state faced initial set backs in accelerating at par with national average growth. At the outset of 12% in schools and 9% in Anganwadi Centres coverage, the department has now ensured adequate human resources and construction agencies engaged for the objective. Currently, the coverage has increased to 33% in Schools, 26% in Angawadi Centres and 65% in Health Care Facilities. The state has provided 37,644 tap water connections for toilet/urinal use, 66,191 tap water connections for hand washing facilities, 1467 rain water harvesting provisions, and 6551 grey water reuse provisions.

Bringing Development Partners on Board

The PHED is constantly making efforts to consult and cooperate with developmental partners on comprehensive issues. Long term partnership with institutions such as UNICEF, Water Aid and Water.org, have involved multiple instruments including grant-in-aid, line of credit, capacity building and technical assistance that has constantly brought strategic and expert directions for JJM in the state. These partnerships further assist in creating a platform where government, civil societies, and corporates come together, plan and work coherently, demonstrate expertise.

Moving Forward

Madhya Pradesh is on track to achieve safe tap water availability to each household and institution much before the national deadline. The state currently stands at 32.74% FHTC coverage. It aims to add 18,81,476 households under the net to provide functional tap water connection by the end of March 2022 with an overall coverage of 47.85%. With the momentum built on the target installed for the department is 75% by March, 2023 and 100% by end of 2023. The following actions are on priority for the State Government to move forward and realise the dream:-

- 1- The state currently has covered 3,055 villages with 100% FHTCs. It aims to increase it to 13,560 by end of March 2022. It also aims to achieve 35,000 villages with 100% FHTC coverage by the end of 2023.
- 2- Tap water connection to institutions in rural areas is an area that M.P. looks at as an opportunity to focus on in the coming months, increasing coverage from 33% schools, 26% AWCs and 65% GPs/CHCs. The department also plans to create a cadre of technicians who will provide in-house capacity for villages to maintain the water system.

- 3- To ensure community managed water supply systems running, a total of 13,560 VWSCs will be formed and strengthened with the existing approach.
- 4- The department aims to build capacity of 45, 482 personnel and community members by end of 2021. This includes 600 SWSM/DWSM officials, 300 contractual staffs, 500 engineers, 13,560 VWSC members, 3130 key stakeholders in villages, 27,120 key stakeholders at GP level and other key players. M.P. state is due for Gram Panchayats election. The capacity building of GP functionaries will include the newly elected members once the exercise is complete.
- 5- The department also plans to create a cadre of technicians who will provide in-house capacity for villages to maintain the water system