

**How  
Participatory  
Approach,  
Role Played by Village  
Water & Sanitation Committee  
and District Administration  
Ensured Magnificent Outcome  
of the Scheme at the  
Ground Level.**

# Transforming Lives in Burhanpur of Madhya Pradesh Through Har Ghar Jal Scheme

*This report has been prepared under the guidance and supervision of Prof. Sachin Chaturvedi, Honorable Vice Chairman of the Madhya Pradesh Rajya NITI Aayog*

**Madhya Pradesh Rajya NITI Aayog**

Knowledge Document on social, economic & governance aspects for policy makers, researchers, academicians and stakeholders.



## Preface

This analytical report published by Madhya Pradesh State Policy Commission, demonstrates progress of Har Ghar Jal scheme in Burhanpur district of Madhya Pradesh; and captures real time data of Jal Jeevan Mission. The study has conducted using primary data, data available over Jal Jeevan Mission portal of Gol. Interaction at the ground performed with community, administrative officials, department officials etc., during visit of Burhanpur district. This report encompasses finding from the field considering community voice, best practice, FTK technique adopted for ensuring high quality potable water, district statistics as well as cater implementation status at schools and Anganwadi centres.

I would like to convey my sincere gratitude to Professor Sachin Chaturvedi, Honourable Vice Chairman MP Rajya NITI Aayog, for providing his vision, insight & guidance for writing this analytical document and articulating glimpses from the field.

I believe this document will provide a comprehensive understanding of the tangible outcomes of scheme Har Ghar Jal being implemented in Burhanpur Madhya Pradesh and will be useful for government, counterparts, development partners, other stakeholders and policy/research fellows in evidence-based analysis, defining more ways for operationalization and evident strategies according to requirements. We welcome suggestions from stakeholders to further improve this document.





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*\* Views of author is his own, general disclaimer may apply. Hindi edition is available also; however, readers are encouraged to refer to the English version for any data or language clarification.*

स्वच्छ भारत दिवस  
Swachh Bharat Diwas  
2022



भारत सरकार  
जल शक्ति मंत्रालय  
पेयजल और स्वच्छता विभाग



## जल जीवन पुरस्कार 2022

### ज़िला बुरहानपुर मध्य प्रदेश

को जल जीवन मिशन के अंतर्गत सभी ग्रामीण परिवारों को  
क्रियाशील घटेलू नल कनेक्शन प्रदान करने व  
ग्रामसभाओं के माध्यम से सभी ग्रामों को  
'हर घर जल' प्रामाणित कर ज़िले को

### 'हर घर जल' प्रामाणित ज़िला

घोषित करने के लिए सम्मानित किया जाता है।

  
विनी महाजन  
सचिव,  
पेयजल एवं स्वच्छता विभाग

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## Abbreviations

AWC	Anganwadi Centres
CTR	Catch The Rain
FHTC	Functional Household Tap Connection
FPC	Farmer Producer Company
GIS	Geographical Information System
GM	General Manager
HDPE	High Density Polyethylene
HH	Household
ICMR	Indian Council for Medical Research
IMIS	Integrated Management Information System
IoT	Internet of Things
ISA	Implementation Support Agency
JJM	Jal Jeevan Mission
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MOU	Memorandum of Understanding
MPCOST	Madhya Pradesh Science and Technology Council
MVS	Multiple Virtual Storage
NABL	National Accreditation Board for Testing and Calibration Laboratories
NGO	Non-Governmental Organization
O & M	Operation and Maintenance
PHE	Public Health Engineering Department
PIB	Press Information Bureau
PRA	Participatory Rural Appraisal
PVTG	Particularly Vulnerable Tribal Groups
SACDA	Supervision Control and Data Access

SGSITS	Shri Govindram Seksaria Institute of Technology and Science
SGSY	Sansad Aadarsh Gram Yojana
SLSSC	State Level Scheme Sanctioning Committee
STA	State Technical Agency
THH	Total Households
VAP	Village Action Plan
VWSC	Village Water & Sanitation Committee
WQMS	Water Quality Monitoring & Surveillance
WRD	Water Resource Department

# Chapter 1

## 1.1 Introduction

Honorable Prime Minister, Shri Narendra Modi announced the 'Har Ghar Jal' mission on 15<sup>th</sup> August 2019 from the ramparts of Red Fort. It is a key social welfare intervention aimed at ensuring 'Ease of Living' for the rural community. According to a published booklet<sup>1</sup>, in August 2019, out of 18.93 crore rural households in India, only 3.23 crore (17%) had tap water connections. With remarkable efforts by the Government of India, this percentage increased to 45.56% by December 2021. Out of 19.22 crore<sup>1</sup> rural households, 8.75 crore (45.56%)<sup>1</sup> households across India have access to tap water connections [MoJS, 2021]. This achievement is the result of countless cumulative efforts by the government, stakeholders, and the community. Noteworthy to mention, the water supply system has undergone significant transformations over the years. Up until 2017, the rural population's drinking water was primarily sourced from hand pumps, protected wells, piped water, or public standposts. Notably, India mark II hand pumps played a crucial role particularly during the period from the 1970s to the 1990s in this journey. However, it's crucial to highlight that specific regions within the country still grapple with water contamination issues, characterized by the presence of contaminants such as arsenic, iron, nitrates, heavy metals, and salinity. In 2017, a significant shift occurred as the focus turned towards supplying water via piped systems under the National Rural Drinking Water Program.



*Picture 1 Flow of Life*

### **A Snap Shot of Madhya Pradesh: -**

In water-stressed areas of Madhya Pradesh, especially during summers, the availability of potable water was remained a challenge, which significantly impacting the every day lives of people. Under the Jal Jeevan Mission (JJM), there is a provision for the constitution of the State Level Scheme Sanctioning Committee (SLSSC) to consider and approve schemes for providing tap water supply to rural households. The SLSSC acts as a State Level Committee to review water supply schemes/projects, and the nominee of the National Jal Jeevan Mission (NJJM), Government of India, is a member of the Committee. In the state of Madhya Pradesh, there is a total of 1,22,27,914<sup>2</sup> households. At the time of the scheme's launch on 15th August 2019, total 13,53,151<sup>2</sup> houses (11%) had tap water connections. According to the data available (JJM Dashboard, 2023) of July 13<sup>th</sup>, 2023, total 60,91,717 households (50.91%) have access to Functional Household Tap Connection (FHTC) saturation. This indicates that 47,38,556 (44.65%) households have been provided with FHTC since the scheme's inception. Regarding

schools, total 6,824 schools were saturated with tap water supply by October 2020. This number has increased to 24,282 schools in June 2021, and as on 14<sup>th</sup> July 2023 total 73,821 schools achieved saturation with tap water supply. In terms of Anganwadi saturation, as on 14<sup>th</sup> July 2023, the state had achieved saturation in 42,815 Anganwadi Centres (64%).

## 1.2 Jal Jeevan Mission, Key Features:

The Jal Jeevan Mission aims to provide people with the basic necessity of safe, clean, and potable drinking water through tap water connections. This has been made possible through the adoption of a strategy focused on speed and scalability. Another significant impact of the scheme is the elimination of the long-standing practice where women and girls had to undertake arduous journeys to fetch water for their daily household needs.

The key objectives of the Jal Jeevan Mission are as follows:

- I. To provide FHTC to every rural household.
- II. To prioritize provision of FHTCs in quality affected areas, villages in drought prone and desert areas, Sansad Aadarsh Gram Yojana (SAGY) villages, etc.
- III. To provide functional tap connection to Schools, Anganwadi centres, Gram Panchayat buildings, Health centres, wellness centres and community buildings
- IV. To monitor functioning of tap connections.
- V. To promote and ensure voluntary ownership among local community by way of contribution in cash, kind and/or labour and voluntary labour (Shramdaan).
- VI. To assist in ensuring sustainability of water supply system, i.e., water source, water supply infrastructure, and funds for regular Operation & Maintenance (O&M).
- VII. To empower and develop human resource in the sector such that the demands of construction, plumbing, electrical, water quality management, water treatment, catchment protection, O&M, etc. are taken care of in short and long term.
- VIII. To bring awareness on various aspects and significance of safe drinking water and involvement of stakeholders in manner that make water everyone's business.

The efforts of the Jal Jeevan Mission have resulted in a significant improvement in the quality of life for rural people, fulfilling their aspirations of accessing clean and safe water for their daily household and basic needs. This mission is being implemented in partnership between the Government of India and the states, with the goal of providing tap water supply of prescribed quality, in adequate quantity, and with sufficient pressure, to every rural home by 2024.

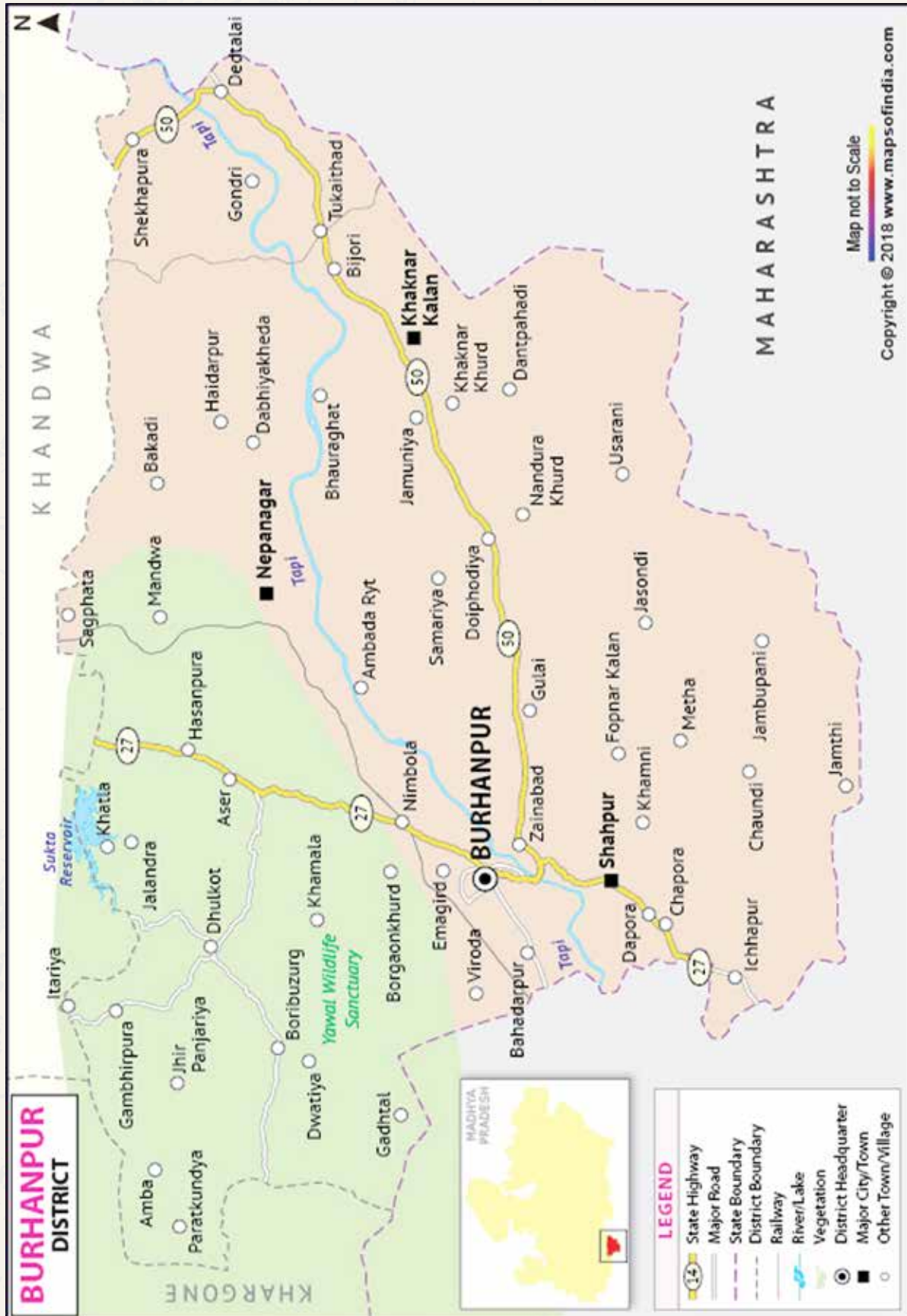
The mission has brought numerous positive changes in the lives of people, like promoting "Ease of Living" and creating healthier and more hygienic conditions in rural areas. It has put an end to the burdensome task of women and girls having to walk long distances every day to fetch water for their households. Additionally, the mission is fostering local leadership based on Mahatma Gandhi's philosophy<sup>3</sup> of "Gram Swarajya" (village self-governance), through active community participation at the village level. This community involvement is crucial for the long-term sustainability of water sources.



The Jal Jeevan Mission (JJM) is committed to the principle of "Leave No One Behind" (LNOB), ensuring that even the poorest, marginalized, and previously unreached communities have access to tap water supply. In the scheme, there has no demarcation among poor or medium/rich people and slaking the thirst of their family people uniformly.

### 1.3 Jal Jeevan Mission – Key Characteristics

- JJM will benefit more than one Crore rural households across Madhya Pradesh, ensuring that more than 4.5 Crore rural people will directly benefit from the mission. This will help reduce the division between rural and urban areas by providing basic amenities to all.
- JJM will especially benefit women by eliminating the age-old drudgery. It will also be a game changer in improving rural public health especially for the children. Potable drinking water at their Home, Schools and at Anganwadi centres, etc. greatly reduce the chance of water born disease in children.
- The mission has shifted the focus of water supply 'form village/habitation to household' with provision of tap water supply to every household so that every family get potable water in adequate quantity and of prescribed quality on regular and long-term basis.
- Emphasis of the mission is on efficient 'service delivery & functionality'.
- The water supply scheme planned and implemented as per a Village Action Plan, prepared with the participation of village community, and approved by the Gram Sabha.
- Role of women and weaker section to be central in managing the water supply, and special focus is for children - piped water supply on priority basis in schools, Anganwadi centers and Aashramshalas.
- Provision of potable drinking water in quality-affected habitation.
- Surveillance of water quality by the local community involving women.
- Making water everyone's business: JJM is implemented in a participatory manner, and self-help groups, NGOs, community-based organizations, voluntary organizations etc. to play a key role in awareness generation among community and raise the level of participation.
- Latest technologies being utilized for ensuring transparency, accountability and for the redressal of public grievances.
- For implementation of Jal Jeevan Mission in Madhya Pradesh, Rs 12609.54 crore was allocated by the Central Government and Rs 9513.52 crore was released from the financial year 2019-21 to June 2023 [MoJS, JJM Reports, 2023].



Picture 2 Map of Burhanpur District

# Chapter 2

## 2.1 Baseline of District Burhanpur, Madhya Pradesh

The Burhanpur district is situated on the north bank of the Tapti River and is located 340 km southwest of the state capital. It is a hub of power loom industries and is one of the oldest districts in the state. The district has two blocks, 167 Gram Panchayats, 254 villages, and 504 habitations. According to the 2011 census<sup>4</sup>, the literacy rate of Burhanpur district is 64.4 percent. The female literacy rate in the district is 56.6 percent. There were 97,842 rural households in two blocks of Burhanpur<sup>4</sup>. Burhanpur block has 56,424 households, while Khaknar block has 41,418 households. Burhanpur block has a Scheduled Caste (SC) population of 31,774 and a Scheduled Tribe (ST) population of 91,621. Khaknar block, on the other hand, has a Scheduled Caste population of 9,898 and a Scheduled Tribe population of 1,30,511. The total rural population of the district is reported as 4,97,560. This includes 41,672 (8.38%) Scheduled Caste population and 2,22,132 (44.64%) Scheduled Tribe population. Burhanpur block has a higher number of SC population, while Khaknar block has a higher number of ST population in the district. Overall, in the rural area of Burhanpur, a total of 53.02% of the population belongs to the SC and ST categories. This is spread across approximately 151 villages, and the district falls under the minority district category under the categorization of Jal Jeevan Mission.

**TABLE 1 STATUS OF HH WITH PWS CONNECTION**

Sl. NO.	Block	Total HH	Household Connections with PWS
1	Burhanpur	57171	25167
2	Khaknar	42377	12074

*Data Source – JJM Dashboard as on 1<sup>st</sup> April 2019*

Out of the total 1,01,905 households in Burhanpur, only 37,241 rural households<sup>5</sup> (36.54%) had access to potable drinking water through tap connections at the launch of the Jal Jeevan Mission on August 15, 2019.

The initial planning phase started with visits to villages by the team of the Public Health Engineering Department (PHED), discussions with public representatives, Sarpanch, Panchayat Secretary, and the rural community for higher & active involvement in the village action plan. During the exercise, it was resolute that 39 villages were already equipped with piped water connections. For the remaining 215 villages, a Detailed Project Report (DPR) worth Rs. 12,942.78 Lakh<sup>6</sup> was prepared and submitted for administrative approval. A total of 214 schemes had been proposed to ensure 100% Functional Household Tap Connection (FHTC) coverage.

In the case of the Burhanpur block, a total of 103 schemes were proposed, with a value of Rs. 7124.06 Lakh. Out of these, 78 retrofitting schemes were worth Rs. 5049.82 Lakh, and 25 new schemes were valued at Rs. 2074.24 Lakh. Similarly, in the case of the Khaknar block, 111 schemes with a total



value of Rs. 5818.72 Lakh were proposed. Among them, 83 retrofitting schemes were valued at Rs. 3077.73 Lakh, and 28 new schemes were valued at Rs. 2740.99 Lakh.

## 2.2 District Burhanpur, 1st Certified District Across Nation

Burhanpur district has performed exemplarily in the implementation of the Har Ghar Yojana scheme. Burhanpur district Madhya Pradesh became the 1st “Har Ghar Jal” certified district of the country on 23rd July 2022<sup>7</sup> followed by Diu district on 3<sup>rd</sup> August 2022. It is the first certified district across the nation ensured 100% Functional Household Tap Water Connections (FHTC) and, people from each of 254 villages in Burhanpur have declared their villages as ‘Har Ghar Jal’ through a resolution passed by Gram Sabhas<sup>8</sup>. One of the components of the mission is to provide Functional Household Tap Connections (FHTCs) at a minimum service level of 55 LPCD (Liter per capita per day). The Jal Jeevan Mission has an institutional structure consisting of four strata, including the National Jal Jeevan Mission (NJJM), State Water and Sanitation Mission, District Water and Sanitation Mission, and the Gram Panchayat and/or its subcommittees such as Village Water and Sanitation Committee (VWSC), Pani Samiti, and User Groups, etc. The detailed statistics of the district's achievements are as follows:

**TABLE 2 BURHANPUR STANDS 1<sup>ST</sup> - 100% ACHIEVEMENT**

S. No.	District	No. of Har Ghar Jal Block	No. of Har Ghar Jal Panchayat	No. of Har Ghar Jal Village	No. of Har Ghar Jal Habitations
1	Burhanpur	2	167	254	504

*Data Source – JJM Dashboard as on 17<sup>th</sup> May 2022*

Burhanpur and Khaknar both blocks have achieved saturation with Har Ghar Jal -Functional Household Tap Water Connections. All the 254 villages have been saturated.

## 2.3 Factors accounting for success of Burhanpur

There are several factors that contributed to the achievement of Burhanpur. It's due to the extraordinary ownership of the administration and departments, levels of awareness among the community, and fanatical community mobilization efforts, quality of Village Water and Sanitation Committee (VWSC) etc. Despite the various disruptions and challenges posed by the COVID-19 pandemic, the continuous efforts of Burhanpur Panchayat representatives, water committees, department officials, and district administrative officials have resulted in the provision of functional tap water connections in the remaining 66,664 households out of a total of 101,905 (100%) rural households within a period of 34 months. Important steps have been taken to reduce the time required to obtain various types of permissions from other departments. The below-mentioned initiatives have helped in eliminating obstacles, reducing time during the rollout and implementation, and accelerating the overall process. The details are as follows:

*The forest covers 38% of the geographical area of Burhanpur, which necessitates obtaining permission from the forest department for construction on forest land. This includes construction activities such as laying down pipes, installing water tanks, and digging tube wells. To obtain these permissions, it usually takes a standard time of one to two months. However, this process was completed within an average of 15 days.*



*MPEB (Madhya Pradesh Electricity Board):* The process of estimating electrical work, paying supervision charges, forming work orders, carrying out electrical work, obtaining electrical safety charging certificates, and fulfilling electricity connection requests from the Gram Panchayat used to be a lengthy process. It would typically take around one to two months to complete. However, this process has been streamlined, and the aforementioned tasks are completed in approximately 15 days. A WhatsApp group was created where the PHE (Public Health Engineering) department would post requirements for immediate action by electricity department officials. Based on these requirements, the department officials prioritized and completed the necessary tasks for the specified villages.

*PWD/PMGSY (Public Works Department/Pradhan Mantri Gram Sadak Yojana):* In cases where it was necessary to cross roads for the pipelines, these departments waived off the regular process of paying fees. This way, the contractors were made responsible for the reconstruction of those roads that had damaged during the pipeline laying process.

*Pipe certification:* Central Institute of Plastic Engineering and Technology (CIPET) supported in expediting the certification process of the HDPE pipes.

*Motor and GI Pipe inspection:* Discussions were held with relevant departments and Additional Chief Secretary PHE to expedite the process of third-party inspection for Galvanized Iron Pipes and Motors.

*Construction of HDPE Pipes:* Discussions took place with the Managing Director of Texmo Pipes and Products Ltd. to prioritize the supply of HDPE pipes to Burhanpur.

*Survey:* Three surveys were conducted at different time intervals to assess the progress of the mission. The feedback obtained from these surveys was then utilized to expedite mission activities.

### **Community Participation – Key for Sustainability**

Community participation is crucial in the context of the "Har Ghar Jal" to achieve excellence through community-driven initiatives. The community has been involved in the decision-making process from the inception of the scheme. Various activities such as preparation of Village Action Plans and Village Assemblies (Gram Sabha) have been carried out to ensure active participation of the community in proposing and making decisions about raw water sources, overhead tanks (OHTs), etc. This process of decision-making in the village development promotes ownership within the community. In addition to this, every household in the community contributes 5% or 10% of the execution cost, which can be in cash, kind, or labour. This contribution helps strengthen their ownership and commitment to the scheme. Local opinion leaders and active members of the society have played an important role in overcoming local barriers and gaining community support and confidence. In some cases, community members extended their support for the scheme by allowing "wall writing" on their homes' or premises' walls. Implementation Support Agency (ISA) is ensuring higher influences in community mobilisation activities. ISA has involved in mobilizing the community by activities such as street plays, distributing pamphlets and posters, organizing rallies, using advertising vehicles (propaganda chariots), and promoting community contributions. The involvement of the ISA has served as a catalyst for community participation. The Self-Help Groups (SHGs) in the village contribute to the collection of user fees from the community, ensuring easy collection and subsequently significant increase in revenue. Moreover, the operators recruited for the scheme are from the vicinity of the village, further fostering a sense of community ownership and involvement. These factors collectively contribute to a higher level of community ownership and ensuring the long-term sustainability of the Har Ghar Jal scheme.

*Meetings with contractors:* Regular and timely meetings were held with contractors to motivate them, address their concerns, and overcome any obstacles they faced.

From the beginning, fraction of the community remained active, some remains active due to previous experiences of water scarcity, and the continuous efforts of the district administration contributed to making this huge success possible. Efforts for mobilizing community also backed the implementation expressively. The achievement of Burhanpur clearly reflects the distinct leadership of Shri Praveen Singh Adhayach, IAS, District Collector acting as the key figure behind the remarkable results for the community. The focus included far-flung isolated rural areas, and marginalized populations. Under the leadership of the District Collector, close monitoring of progress was conducted on a weekly basis, in collaboration with key department officials. This diligent monitoring played a significant role in the pronounced success, as stated by Shri Rohit Sissonia, IAS, CEO of Zila Panchayat. Shri Sissonia also elaborated on the forthcoming steps towards water security, conservation, and sustainability efforts undertaken by the district administration, alongside peer departments. Department officials, particularly from the Public Health Engineering, Electricity, and Panchayati Raj departments, demonstrated ownership and dedication in ensuring the success of the program. During the visit, the Public Health Engineering officer highlighted the ardent dedication and full commitment of all staff and officers involved in the implementation, with their minds set on 100% success of the scheme in the district.

**TABLE 3 VILLAGE ACTION PLAN - BURHANPUR & VILLAGE WATER AND SANITATION COMMITTEE (VWSC)**

District	Total No. of Villages	VAP Made	Villages where VWSC formed	% of villages where VAP & VWSC formed
Burhanpur	254	254	254	100

*Data Source – JJM Dashboard as on 17<sup>th</sup> May 2023*

Village Action Plans (VAPs) have been prepared for all 254 villages in Burhanpur district, which has been instrumental in ensuring immense success. Previously, there was a top-down approach that was target-based and did not focus on community involvement or sustainability. However, in the current scenario, a bottom-up participatory approach was adopted, which is also a contributing factor to the scheme's success. The completion of VAPs was supported by the Department of Panchayat and Rural Development, Gram Pradhan, Panchayat Secretary, Opinion Leaders, the community, and other key administrative officials of Burhanpur district. Previously, the National Committee had advised the state to prioritize extending coverage to more districts, with special attention to important areas such as SC/ST settlements, areas affected by water quality issues, water-deficient areas, aspirational districts, and Particularly Vulnerable Tribal Group (PVTG) habitations. The rural population of Burhanpur district comprises approximately 53.02% of the SC and ST categories, spread across around 151 villages. The state followed the suggestions, which led to significant achievements at the implementation level of the scheme. Functional Household Tap Connections (FHTCs) have been provided to all households, including those from minority and general categories. The objective of incorporating the rural community in the Village Action Plan is to strengthen their opinion and promote ownership. The source of water in the Village Action Plan has also been determined through community participation, with the technical aspects assessed by the Public Health Engineering department. The decision-making process regarding the construction of overhead tanks in the villages ensures community

involvement. With a focus on long-term sustainability, the participation of the rural community has also been ensured in the process of water collection, considering a sustainable model.

Schemes are handed over to the Village Water & Sanitation Committee/Pani Samiti for further implementation, including operation and maintenance. The Village Water & Sanitation Committee/Pani Samiti is responsible for providing uninterrupted water to the village community and is also accountable for ensuring minor repair works. The Village Water & Sanitation Committee/Pani Samiti is a key component in the success of the scheme and plays a crucial role in ensuring its long-term sustainability. There is a provision for depositing 5% by SC / ST / Tribal / BPL households and 10% by general community households of the total execution cost, known as 'Jan Sahyog Rashi'. Community contributions can be made in the form of cash, kind, or even labor. So far, the community has contributed 30% to 50% of the community's contribution<sup>9</sup>, and the remaining amount is borne by the government, as per the provisions. There is a provision for the refund of the accumulated community contribution's amount as an incentive to VWSC in five installments on a yearly basis. This amount can be spent on new development, expansion, etc. for the scheme in the village by the VWSC. It has been decided by the VWSC to ensure the provision of FHTC (Functional Household Tap Connection) to the 5% poor households who cannot afford any cost. The decision for this has been taken by the VWSC. This ensures community involvement in terms of their contribution for the execution and results in ownership.

The Village Action Plan and Pani Samiti played a significant role in ensuring functional tap water connections for the village community. The training of VWSC (Village Water and Sanitation Committee) members has proven to be effective, and the committee members have demonstrated ownership towards the scheme during field interactions.

The below table 4 illustrates achievement of Burhanpur in terms of FHTC coverage considering saturation of all households under Har Ghar Jal scheme; the details are as follows:

**TABLE 4 DISTRICT BURHANPUR, OVERALL COVERAGE OF THE REMAINING HH, SINCE THE LAUNCH OF MISSION**

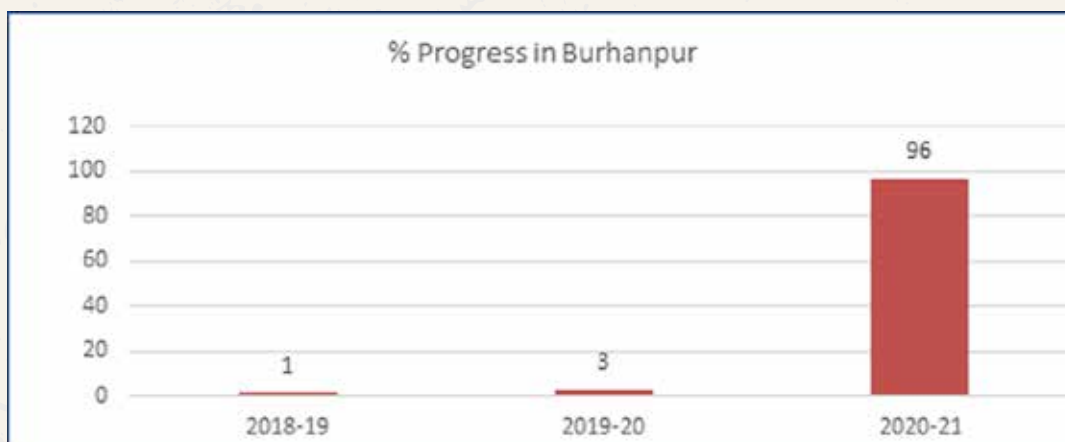
District	Total Households (HH)	HH With FHTC (As on 15th Aug. 2019)	Remaining HH (As on 15 Aug 2019)	HH with FHTC (On 17 May 2022)	HH Provided FHTC (Since launch of scheme)	% HH Covered since Launch (Of remaining HH)
Burhanpur	101905	37241	64664	101905	64664	100

*Data Source - JJM Dashboard*

The above statistics exhibit that residual 64,664 households has been saturated out of 1,01,905 households under the umbrella of scheme, such outstanding achievement of Functional Household Tap Connections is the result of dedication, planning, monitoring, evaluation, and consistent efforts by the district administration, stakeholders, and community participation.

When we analyze the progress based on the details available on the JJM portal, it is evident that in Burhanpur district, a majority of the remaining households have been provided with Functional Household Tap Connections (FHTC) in the financial year 2020-21. A detailed analysis shows that 33,400 households was saturated from December 2020 to March 2021. Overall, the progress in different financial years is depicted in the graphic below:





Since the inception of the mission, approximately 1 Lakh population in the state has been provided with this facility every month. Through rounds of dialogue among various organizations working on water issues in the central tribal belt of India, a common understanding emerged that the prosperity of rural households is heavily reliant on water.

Source-to-sink is a GIS-based selection of groundwater recharging structures. This approach ensures a continuous water supply system. The district has a plan to recharge sources starting from the most vulnerable areas with low water levels. Structures are being built under the 'Catch The Rain' (CTR) initiative of MGNREGA and Swachh Bharat Mission. All these structures will help slow down water flow and facilitate its percolation into the ground, thereby recharging groundwater and improving the water table. Burhanpur has sufficiently supportive lineaments for water drainage. District has planned different structures for different zones of the terrain. The details are as follows: A. Ridge Zone: it refers to the higher elevation area where water sources are more vulnerable and have low water levels. In this zone, various structures are implemented to recharge groundwater and improve the water table. These structures include Contour Trench, Gabion and Percolation Tank. B. Middle Zone: The Middle Zone is the intermediate zone between the Ridge Zone and the Sink Zone. In this zone, the focus is on water conservation and management. The structures implemented in this zone include Ponds, Farm Ponds, Stop Dam and Nala Trenching. C. Sink Zone refers to the lower elevation area where water naturally drains or sinks into the ground. In this zone, the focus is on facilitating groundwater recharge. The structures implemented in this zone include- Soak pits and Recharge Pits. Under MNREGA, CTR is the source augmentation scheme to collect the rain water and improve the water table. Renovation work under MNREGA viz. already existing ponds, check dams and stop dams, is also being undertaken to reduce the cost of building new structures in terms of source. In SBM (Sink) soak pits constructed near the tap connection to collect the water and that allows slowly percolating back into the ground. Tapti River is provisioning good water table to the near areas of Burhanpur whereas there are low water table in the areas away from Tapti River in Burhanpur. Burhanpur has good lineament which helps in percolation of surface water downwards. There are 198 sources in case of Burhanpur block and 207 sources in case of Khaknar block.

"Kundi Bhandara" is famous for its archaic water management system dating back to the Mughal



period (1526-1857). This system was developed in the 17th century during the time of Mughal Subedar Abudul Raheem Khakhana. It serves as a significant example of an ancient engineering model for water management. During periods of low rainfall, the Persians developed a technique involving man-made underground water conduits known as Kanehat (now called Qanat) (Gobot 1979; Behnia 1988)<sup>10</sup>. This technique was later expanded to other Middle Eastern countries, including India. The structure of Kundi Bhandara includes functions such as an air valve, underground water channels, and a Jali Karanj for water storage. There are approximately 100 Kundis aligned and linked by an approximately 4 km long tunnel from the water source. In the current scenario, Kundi Bhandara is under the possession of Nagar Nigam Burhanpur and supplies water to 50-60 households. Other structures like Sakar Talab and Chintaharan are no longer active and have dried up. Nowadays, Kundi Bhandara is primarily considered a tourist destination. A proposal has been submitted to UNESCO to consider it as a 'World Heritage Site,' but it has not been accepted yet. It was initially developed by the Archaeological Survey of India and was later handed over to Nagar Nigam.

## 2.4 District Progress Card of Burhanpur, Madhya Pradesh

Burhanpur district stands 1st across the Madhya Pradesh state and at 5th rank across the nation in April 2023<sup>11</sup> and it's in front runner category (Tap connection coverage 100%). The total marks 90.0390 obtained over different parameters. The detail progress card is appended below:

Indicator		Maximum Marks	Obtained Marks
Physical Progress	% Of HGJ certified villages against total villages	50	50
Water Quality	% of villages where household tap water sample is tested using FTKs or in Labs	10	10
	% of villages where PWS source water sample (taken after WTP) is tested using FTKs or in Labs	10	10
	% of villages having women trained for FTK testing	10	10
Institutional Arrangements	% of villages where atleast one JJM scheme handed over to VWSCs/ GPs	10	0.039
	% of villages with skilling done	10	10
<b>Total</b>		<b>100</b>	<b>90.0390</b>
Total number of villages 254		Total number of households 1,01,905	
		FHICs as on 01 Oct 2022 1,01,905	
Parameters	Plan till month of April 2023	Progress till date after 01 Oct 2022	% Progress
Villages where household tap water sample is tested using FTKs or in Labs *	84	248	100
Villages where PWS source water sample (taken after WTP) is tested using FTKs or in Labs *	84	247	100
Villages having women trained for FTK testing as per norms	254	(176)+78	100.00
Har Ghar Jal certified villages	254	(254)+0	100.00
Villages where atleast one JJM scheme handed over to VWSCs/ GPs	254	(0)+1	0.39
Villages where human resources is identified and skilled for O&M	254	(0)+254	100.00

\* Pre monsoon testing targets for 01.04.2023 on wards

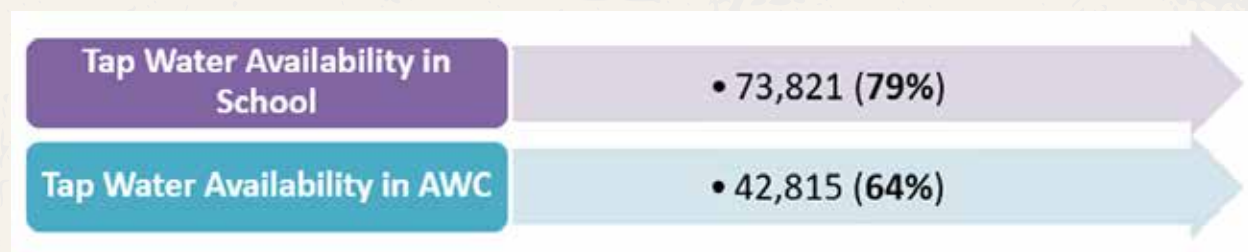
Picture 3 District Progress Card Burhanpur

According to the report card of Burhanpur, district achieved absolute percentage in almost each of the indicator/parameter; viz. in case of physical progress, Water Quality - percentage of villages where tap water samples tested using FTKs or in labs score and percentage of villages having women trained for FTK testing is completely achieved. Additionally, Institutional Arrangements, such as the percentage of villages where skilling of manpower has been done, have also been achieved absolute successfully in Burhanpur. In the current scenario, almost all the schemes (excluding 3-4 schemes) have been handed over to the VWSC/Pani Samiti/Users group after execution for further implementation.

The mission emphasizes the availability of infrastructure such as the construction of overhead tanks, pump houses, pipelines, and taps. It also focuses on maintaining the water structures developed on the ground to ensure proper functioning of scheme in the long run. Additionally, the mission prioritizes service delivery, aiming to provide villagers with clean drinking water in sufficient quantity and quality on a regular basis, with appropriate water pressure. To provide support to the Pani Samiti, Village Implementation Support Agencies (ISA) have been engaged, which may include NGOs, trusts, etc. These agencies play a crucial role in generating awareness among the people. In Burhanpur, the Village Implementation Support Agency (ISA) named "Arunodaya Sarveshwari Lok Kalyan Samiti Ujjain (Madhya Pradesh)" has been assigned responsibilities for various tasks, including HH survey, public meetings (Jan Sabha), VWSC formation facilitation, village meetings (Gram Sabha), VAP, application of PRA, community mobilization by pledge (Saptah), school rally conduction, wall writing, poster and pamphlet distribution, street play conduction, advertising vehicle (Prachar Rath), VWSC training, and ensuring village contribution. All these components contribute to strong strategic behavior change communication and have contributed to the success of Burhanpur. This initiative has come a long way in developing responsible and responsive leadership at the grassroots level.

## 2.5 Status of School and Anganwadi, Burhanpur, Madhya Pradesh

All 52 districts of Madhya Pradesh have above 93,000 schools and 66,896 Anganwadi centre (AWC) in government premise, the statistics according to the real time data (14 July 2023) is appended in following flow chart:



The details of availability of tap water connection in the schools of district Burhanpur is presented in table no. 5: -

TABLE 5 STATUS OF SATURATION OF SCHOOLS AND AWC IN DISTRICT BURHANPUR

District	Total Schools	Schools with Tap Water Supply	% Saturated School	Total AWC	AWC with Tap Water Supply	% AWC Saturated
Burhanpur	640	640	100	549	549	100

Data Source - JJM Dashboard as on 15<sup>th</sup> June 2022

In the state, at the beginning of the campaign in October 2020, 6,824 schools were equipped with tap water supply, whereas this number increased to 24,282 in June 2021 and 73,821 in mid of July 2023. Significant achievement has been observed in the case of ensuring tap connections in the schools of Madhya Pradesh. In case of district Burhanpur there are 640 schools, and all have been saturated with the functional tap water connection. In Burhanpur, an appropriate number of taps have been installed, along with being placed at suitable locations within the schools. The platform and surrounding area have appropriate drainage systems and signage. During an interaction, the children expressed their satisfaction with the new tap water connections and mentioned the cleanliness at the connection point due to the tile fitting. They also mentioned that their clothes no longer get wet due to the well-structured platform at the water dispensing point.

In the case of Anganwadi Centers (AWCs), Burhanpur block has 256 centers, and Khaknar block has 293 centers, and all AWCs in both blocks saturated with Functional Household Tap Connections (FHTCs).

**TABLE 6 STATUS OF ASHRAM SHALA AND OTHER PUBLIC INSTITUTION BURHANPUR**

S I . No.	Name of Block	Nos. of Ashram Shala & Other Public Institutions											
		No. of GP Building/ Panchayat- ghar		No. of Health Centre		No. of Community Centre		No. of Ashram Shala		No. of Community Toilet		No. of Other Govt. Office	
		Total	Availability of Tap Connection	Total	Availability of Tap Connection	Total	Availability of Tap Connection	Total	Availability of Tap Connection	Total	Availability of Tap Connection	Total	Availability of Tap Connection
1	BURHANPUR	89	89	31	31	101	101	16	16	1	1	30	30
2	KHAKNAR	78	78	19	19	8	8	29	29	1	1	37	37
<b>Total</b>		<b>167</b>	167	<b>50</b>	50	<b>109</b>	109	<b>45</b>	45	<b>2</b>	2	<b>67</b>	67

Data Source - JJM Dashboard as on 15<sup>th</sup> June 2022

The table above reflects the saturation of functional tap connections in various public institutions in Burhanpur district. A total of 440 premises/institutions is saturated, including 167 Gram Panchayat Buildings, 50 Health Centres, 109 Community Centres, 45 Ashramshalas, 2 Community Toilets, and 67 other government offices. This demonstrates the exceptional commitment and progress of the district in the implementation of the Har Ghar Jal scheme.



*As per the guideline of the Jal Jeevan Mission, a bottom-to-top participatory approach has been adopted in our state, which is also a reason for the success of the scheme. This approach will result in sustainable drinking water supply scheme.*

By: Shri Sanjay Kumar Shukla, Principal Secretary, Public Health Engineering GoMP



## Chapter 3

### 3.1 Quality of Water

Madhya Pradesh has the third highest number of accredited laboratories by the National Accredited Board for Testing and Calibration Laboratories (NABL)<sup>11</sup> in India. Out of 155 laboratories in Madhya Pradesh, 150 are accredited by NABL<sup>12</sup>. Some other geographically and demographically similar states, like Uttar Pradesh, have 26 accredited labs out of 82. Rajasthan has 30 accredited labs out of 54. Maharashtra has 173 accredited labs out of 177, and Odisha has 34 accredited labs out of 77. This reflects the remarkable achievement of Madhya Pradesh in terms of having a significant number of NABL-accredited labs. There are two NABL accredited laboratories in Burhanpur - one at the district level and another at the sub-division level in Neapanagar. Name of parameters accredited by NABL are Total hardness, Calcium hardness, Magnesium hardness, Total alkalinity, Chloride, pH, Color, Oduor, Taste, Total dissolve solids (TDS) and Turbidity.

**TABLE 7 STATISTICS OF FIELD-TESTING KITS BURHANPUR (2022-23)**

District	Number of Villages where FTK test done	Number of FTK test done	Remedial action taken
Burhanpur MP	254	7771	38

*Data Source - PHE Burhanpur (collected in May 2023)*

In Burhanpur district, there are 254 villages, and water samples have been tested in all of them, with a total of 7,771 tests conducted in the last financial year 2022-23. Remedial action has been taken in 38 cases according to the established norms. In case of chlorination, bleaching powder / Sodium Hypochlorite solution is being used. The Har Ghar Jal Yojana emphasizes the importance of ensuring the quality of tap water supplied to rural communities. It provides an opportunity for local communities to monitor the water quality in their villages. Previously, the state was advised to prioritize water testing for bacteriological and chemical contamination. The community should be encouraged to participate in the surveillance of water quality.

Under the Jal Jeevan Mission (JJM), local communities have to take responsibility for monitoring the water quality in their villages to ensure the potability of tap water. The Public Health Engineering (PHE) Department is continuously working to empower the community and facilitate their engagement in this regard. An action plan should be prepared to incorporate various planned activities, such as timely procurement and supply of testing kits, identification and training of at least five women in every village to use Field Test Kits (FTKs), and reporting and collating the findings with the laboratory-based results. In the villages of District Burhanpur, five rural women have been trained to use FTKs to test the quality of water supplied, conduct sanitary surveys, and upload the data on the JJM portal. Regular testing of drinking water is ensured, both at the source (raw water) and at the treated water/ tap end, along with sanitary surveys. According to the JJM Guidelines, the Sub-divisional/Block-level laboratory should test water from all drinking water sources within its jurisdiction once a year for chemical parameters and twice a year for bacteriological parameters (pre- and post-monsoon), covering 13 basic water quality parameters for disease-causing organisms or contaminants. If any sample tests positive, the concerned authorities are alerted, and immediate remedial measures are



taken. In Burhanpur district, 269 members of a total of 141 self-help groups from 134 villages have been trained for FTK testing. A detailed breakdown is appended below:

**TABLE 8 DETAILS OF FTK BASED TRAINING OF DISTRICT BURHANPUR**

SL. No.	Block	No. of SHG Group	No. of Village	No. of Members Trained
1	Burhanpur	77	69	149
2	Khaknar	64	65	120

*Data Source PHE Burhanpur (collected in May 2023)*

Earlier, Anganwadi workers, helpers, VWSC members, ASHA workers, and other active members of the villages have also been trained in FTK testing. This means that in approximately 120 villages, AWW, helpers, ASHA, etc., are ensuring FTK tests. An equally important goal of the scheme is to protect the health of the rural community by providing them with clean and safe water, free from any disease-causing organisms or contaminants. The supply of non-contaminated water is crucial for children and the elderly, who are otherwise prone to waterborne infections such as diarrhea, dysentery, cholera, etc. The rural population should visit these laboratories to get the quality of water checked, which will be beneficial for them. The test report titled "Drinking Water Quality Testing Using Field Test Kit" is enclosed as Annexure A. The report includes results of nine key indicators, including Biological Contaminations, Chloride, Fluoride, and Nitrate as NO<sub>3</sub>. The reporting template has been designed and developed by the BMI Division at ICMR, with copyright belonging to NJJM2020.

Nitrate contamination in drinking water is prevalent in agricultural areas of many countries. Ingested nitrate can lead to the endogenous formation of N-nitrosocompounds (NOC), which are potent animal carcinogens. According to case-control studies conducted in Iowa and Nebraska<sup>12</sup>, community-supplied drinking water was evaluated for nitrate levels to assess the probable risks of cancer in the stomach, esophagus, bladder, brain, colon, rectum, pancreas, and kidney. Increased risks of colon, kidney, and stomach cancer were observed among individuals with higher nitrate ingestion and higher meat intake compared to those with low intake of both. This dietary pattern leads to increased formation of N-nitrosocompounds (NOC). Thus, the Jal Jeevan Mission (JJM) ensures the availability of quality potable water to the rural community, aiming to reduce the risk of cancer in the future. If a study is conducted in the scheme areas regarding infections caused by contaminated water (such as nitrate), it is more likely that the above gauging will be confirmed in the study report.

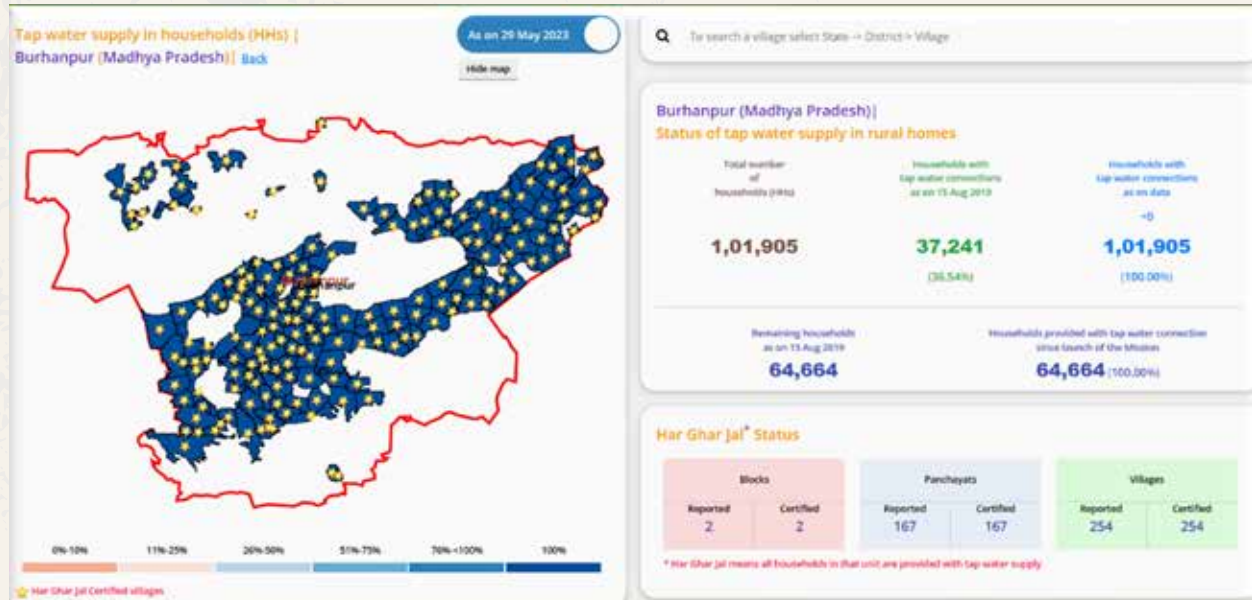
### 3.2 Real Time Monitoring

Technology has played an important role in planning and monitoring for the efficient implementation of the mission. The use of Geographic Information System (GIS) and the internet has resulted in smart management and better services. It has also been helpful for policy interventions required for welfare measures. The Geographic Information System is used for identifying and locating exact water sources. Additionally, the monitoring technology features include the following:

- Use of sensor for monitoring water level, discharge, automatic motor operation, data logger for capturing the data etc.
- Use of Supervision Control and Data Access (SCADA) system in MVS for monitoring treatment

plant (parameters like pressure, water quality, flow rate etc.) and distribution system etc.

- Use of internet of things (IoT) for capturing and transmitting the above data using mobile networks for analysis and use as decision tools;



Picture Source - JJM Dashboard

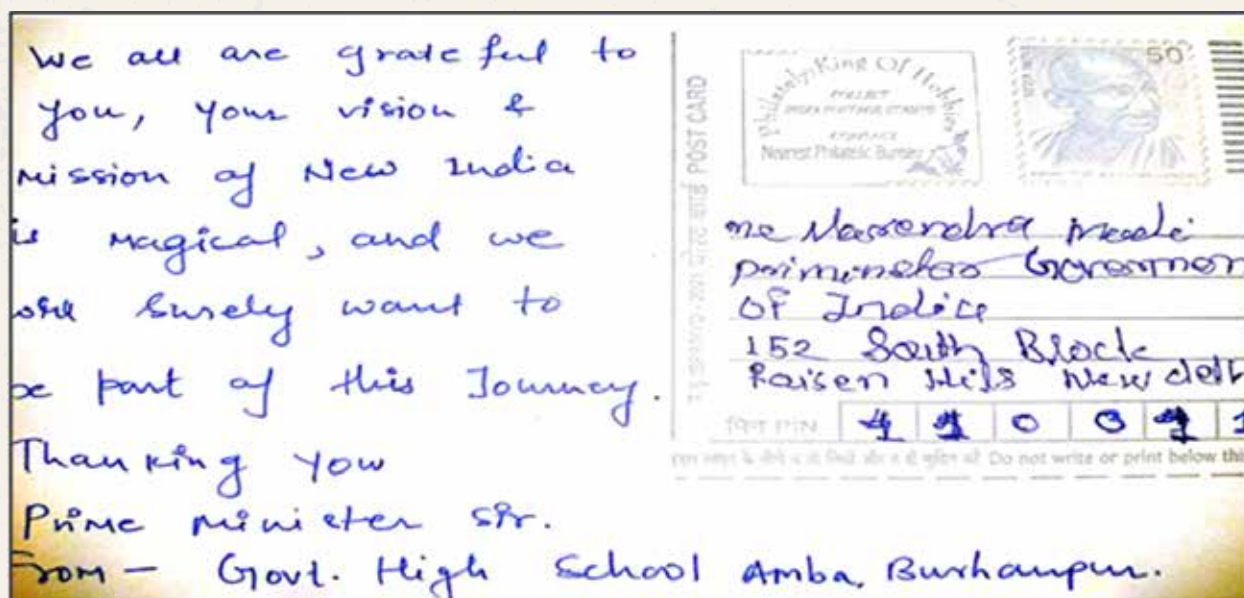
Picture 4 District Burhanpur Map

- Department / National Mission to maintain IMIS of JJM to capture real time physical and financial progress. This is available in public domain for social monitoring, and data also has been used in the report;
- Real time dashboard to constantly monitor the functionality of households taps connection;
- GIS & internet-based sensors to monitor the functionality of assets

There are other key features of the scheme, such as the exemplary overall impact of real-time monitoring. The denominators adhere to the norms and mandates of the Ministry of Jal Shakti, and there is no shortage of funds under the Jal Jeevan Mission for program implementation. The Union Government partners with states/UTs for the implementation of Jal Jeevan Mission - Har Ghar Jal, aiming to provide a household tap water connection to every rural home in the country by 2024. According to the JJM Dashboard<sup>11</sup>, for Burhanpur, there were 318 schemes with a central expenditure of Rs. 524.955 lakh and a state expenditure of Rs. 536.926 lakh, resulting in a total expenditure of Rs. 1061.881 lakh reported in the financial year 2022-23 for the PWS-type supply. The funds allocated under the Jal Jeevan Mission (Coverage Fund) were utilized in the Burhanpur Block, accounting for Rs. 523.9 lakh, and in Khaknar, accounting for Rs. 537.9 lakh during the specified period.

According to a news article published in 'The Pioneer'<sup>13</sup>, during a review of the activities of the Public Health Engineering Department in Mantralaya, the Honorable Chief Minister, Shri Shivraj Singh Chouhan, emphasized the importance of completing the task of providing pure drinking water to both the urban and rural population of the state within the designated time limit. According to the targets set in the roadmap prepared for self-reliant Madhya Pradesh, the works of all the tap water

schemes in the state should be completed. The Chief Minister said that engineers should be posted in villages for better maintenance of the schemes. He directed to encourage the concerned agency and officers-employees for timely completion of works in mega project works. He also said that strict steps would be taken against the guilty for delay in the work. After the completion of the work of tap water schemes, special Gram Sabhas will be organized in the villages and the village will be declared as "Har Ghar Jal" category village. On completion of the construction works of the scheme; the scheme will be transferred to the concerned Panchayat. The officials of the Village Water and Sanitation Committee also interact with the villagers. Letters of gratitude were sent to Honorable Prime Minister Shri Narendra Modi by the villagers for implementing such an ambitious and useful scheme<sup>14</sup>. Chief Minister Shri Chouhan also said that the engineers of the department should visit their workplace regularly and there should be a continuous review of the implementation.



Picture 5 Thank You Letter To Honourable Prime Minister

According to Department of Public Health Engineering Madhya Pradesh, the Quality Control Unit section of the DPHE has been recognized as the R&D unit<sup>15</sup>. The Mission also coordinates the selection of State Technical Agencies and the testing, sanction and implementation of departmental schemes. Maulana Azad National Institute of Technology (MANIT), Bhopal; Madhya Pradesh Council of Science and Technology (MAPCOST), Bhopal; Shri Govindram Seksaria Institute of Technology and Science (SGSITS) Indore have been selected as State Technical Agencies (STAs). The community is aware of the scheme and is taking complete advantage.

All-embracing details are available on the JJM Dashboard, providing comprehensive information for each village of the Burhanpur district. As an example, village named "Khatla" has been elaborated here. The village profile information for Khatla village is as follows: It consists of 3 habitation areas with a total population of 3,147. The SC (Scheduled Caste) population is 79, the ST (Scheduled Tribe) population is 2,632, and the general category population is 436. There are 637 households as of April 2020, with all 637 households having tap connections available. The information related to the 'Water Quality status' indicates that no contamination was found as of April 2020. Detailed information regarding 'Balwadi/Aganwadi/School' is available, including the habitation name, category of the



premise, classification (standard), availability of tap water through tap connection (Yes/No), availability of running water in toilets and urinals, installation of rainwater harvesting structures (Yes/No), and availability of storage tanks (Yes/No). The details of 'Ashramshala' and other public institutions include information such as the habitation, location, and category. Regarding 'Water Source' information, it includes the source type, habitation name, landmark, scheme name, sanction year, estimated cost, expenditure, status (completed or ongoing), and whether it falls under the category of a central scheme (Yes/No). Furthermore, information regarding 'Household Connection Planned/Provided' is available based on habitation. In the case of Khatla, there are 3 habitations. Ambadas Faliya has 15 household connections planned and 15 provided. Similarly, in habitation Khatla, 582 household connections were planned and 582 provided, while in habitation Sendrawadi, 40 house connections were planned and 40 provided. In addition to the aforementioned information, contact details of 'Village Level Functionaries' are available, including the name, designation, functional designation, mobile number, email, address, and gender. The contact details of 'VWSC member/Pani Samiti/Users Group' can be found on the JJM Dashboard. Furthermore, contact details of O&M staff and details of women identified for WQMS (Water Quality Monitoring and Surveillance) are also available for each village on the portal. The dashboard is exemplary, as it provides access to exhaustive details that are in the public domain.

### 3.3 Best Practice - District Burhanpur Madhya Pradesh

#### Women Led Employment – Strengthening Women's Self Reliance

District Administration innovated a methodology for water tax collection by the community women from the village. A member of the woman SHG group been trained; further identifies 3/4 women who shows interest are being oriented and accompanied her to reach household for water tax collection. Approval from the Gram Sabha is sought for the Self-Help Group (SHG) to collect water tax. Memorandum of Understanding (MoU) document is available between women Self-Help Group and Gram Panchayat. A monthly water tax of only Rs. 60/- (average) is collected from every household in the village. A printed receipt (in 3 copies) is provided to the household for their payment towards water tax. A minimum commission of 10% has been fixed for women of SHG group for the purpose of collection of water tax for the current and previous financial year. Additionally, if they recover old water tax dues, they may



Picture 6 Women Self-Reliance



receive a commission of up to 20%, depending on the period of the tax payable for payment. The collected payment should be deposited in the bank account of the Gram Panchayat/Village Water and Sanitation Tadarth Committee by the 10th of every month. During the visit to Burhanpur, discussions were held with representatives from the NGO/ISA regarding their significant role in creating awareness among the community and increasing community participation. During the interaction with representatives of the 'Radhe Radhe' SHG group, namely Smt. Durga, Smt. Munni, and Smt. Priyanka from Fhopnarkalan Village, Tehsil Burhanpur on August 4, 2022, it was evident that these women are educated up to graduation level and are actively engaged in water tax collection with great enthusiasm. The education of these women is proving to be valuable to the community today. Previously unemployed and spending their time chatting with other women in their surroundings, they are now engaged in meaningful work through water tax collection, earning money that provides valuable support and unique contributions to their families, particularly their husbands. Some women mentioned that their husbands work as laborers to earn a living. The collection of water tax by the rural Self-Help Group (SHG) contributes to maintaining a continued water supply, regular maintenance of mission components, elevated trust of the community in the mission/scheme, and an eagerness of the public to contribute. This initiative not only helps to reduce the burden on the Gram Panchayat but also ensures the sustainability of the scheme. The scheme has created employment opportunities and has empowered women financially at the grassroots level. The initiative has significantly contributed to enhancing the self-reliance of rural women.

### **3.4 Community Entrepreneurship– Way to Success**

The active participation and ownership of the community are essential for the success and sustainability of several government schemes. Achieving this can be facilitated by incorporating community entrepreneurship. There are cases where community entrepreneurship is playing a significant role viz. in the case of ASHA workers (health), with a total of 67,547 (NHSRC, 2023) women involved and motivating community to avail services in a larger framework. Additionally, there is notable participation from self-help groups (SHGs) in the weaving of school uniforms, as well as in MNREGA schemes. Furthermore, in the realm of financial inclusion, there are agriculture-based income generation programs such as FPCs, and initiatives like the preparation of Take-Home Ration by SHG groups. SHGs (State Rural Livelihood Mission) involvement in Mid-Day Meal. The Nishtha Vidyut Mitra Yojana is associated with electricity connection and bill payment collection, highlights the involvement of rural women in entrepreneurship. There are many examples available to further demonstrate the entrepreneurial spirit of rural women and their inclusion. Departments envision, create positions and have institutionalize mechanisms within the department; for strengthening and ensuring higher participation of the community. This aims to actively engage them in decision-making processes, fostering their ownership and accountability in the governance of their own community. For e.g., health department has post of 'Deputy Director – Community Process' which ensure higher participation of the community, through Accredited Social Health Activist (ASHA) workers in most of the health services. MP Water Corporation Ltd, has the post of 'General Manager-Community Participation'. The designation of 'Project Manager- Gender Equity & Community Development' exists in PM POshan SHakti Nirman (PM POSHAN) Yojana. In case of Covid 19 (health) Jan Bhagidari model<sup>16</sup>, there are culturally sensitive element (Peela Chawal), bridging the access gap, Crisis Management Committees and effective use of technology were the key [Ghose, 2022]. All the efforts are aimed at making the scheme a game-changer, with extraordinary benefits for women and girls in the rural

community. The concept of the 'Participatory Approach' has existed since its inception and is now being empowered in a structured manner at the grassroots level.

### 3.5 Community Voices, District Burhanpur

An interaction was conducted in August 2022 with the community to gain insights about the scheme. The community expressed complete satisfaction with the provision of functional household tap water connections at their doorstep. They expressed gratitude towards the government and administration for promoting and ensuring this remarkable initiative for rural communities with enthusiasm. Shri Kailash, a resident of Khatala 1 village in Burhanpur, shared that previously they struggled to access water, often traveling long distances and spending a significant amount of time and energy to bring and collect water at home. This resulted in wage losses and hindered their ability to manage their family's daily water needs. Smt. Rekha, Smt. Kusum, and Smt. Bharati shared that previously they used to spend nearly two hours every day managing water for their daily lives from another hamlet within the village. However, now they are able to utilize the same amount of time as quality time with their family members, and they can also dedicate more attention to their children's education. One woman mentioned, 'One day, while I was heading towards a new water source for collection, I felt scared because I was unfamiliar with the area since I didn't go there regularly.

An elderly woman mentioned that in the past, she used to carry a small quantity of drinking water in a utensil while going to work in the field. However, now she carries an ample amount of water in a 'Kundi' (water container), and she also expressed that the taste of the water is pleasant.

In Fhopnarkalan Village, the community is aware and contented to share that there is a functional household tap connection in each household. The community considers this to be a part of the development process. Some families are extensively involved in banana cultivation and express that the government has provided an opportunity to progress by ensuring basic necessities like water and electricity are available for all. Children also have access to clean and safe water throughout the village, whether it's at their homes, schools/AWCs, or other applicable premises. Scheme has benefited women and girls of rural community in a larger framework. The successful implementation of the 'Har Ghar Jal' scheme is a clear reflection that not only water-related issues but also other problems within the community have been resolved. This beneficiary-oriented scheme has made the lives of the common rural population easier. This is the result of the insights and efforts of the administration and the government for the holistic development of the beneficiaries.

### 3.6 SDG Upshot:

The impact and outcome of the scheme align with Sustainable Development Goal 6, which aims to ensure access to clean water and sanitation for all. The illustrated Burhanpur portrays sustainability over a longer time period, whether it involves community mobilization and participation or the sustainable management and conservation of water sources. Access to clean water is crucial for health and well-being. The scheme not only provides tap connections but also promotes improved sanitation and hygiene practices. It emphasizes the construction of household toilets and encourages behaviour change to promote proper hygiene practices. By addressing sanitation, the scheme contributes to the target of achieving adequate and equitable sanitation for all under SDG 6. The Har Ghar Jal scheme prioritizes the most vulnerable and marginalized communities, such as Scheduled Castes, Scheduled Tribes, and women, in providing tap connections. This focus on equity and inclusion aligns with SDG 6's commitment to leaving no one behind and ensuring equal access to water and sanitation services for all, irrespective of their social or economic status. The scheme aims to ensure the sustainability and efficiency of water supply systems. It focuses on using appropriate technologies, rainwater harvesting, and groundwater recharge measures to conserve water resources. By promoting sustainable water management practices, the scheme supports SDG 6 objective of sustainable use and management of water resources. The implementation of the Har Ghar Jal scheme involves strengthening the institutional capacity of water supply agencies, village-level committees, and other stakeholders. This capacity building helps in the efficient operation and maintenance of water supply systems, ensuring the long-term functionality of tap connections and sustainability of water services. It aligns with SDG 6's target of strengthening water governance and institutional capacity for water-related issues.

Overall, the Har Ghar Jal scheme in Burhanpur, Madhya Pradesh contributes significantly to SDG Goal 6 by providing access to clean water, promoting sanitation and hygiene, ensuring equity and inclusion, focusing on sustainability, and building institutional capacity for water management.



*"The role of Village Water and Sanitation Committee is colossal for the sustainability of the scheme."*

**Shri Mukesh Chand Gupta** Principal Secretary, Planning, Economics & Statistics, GoMP



 **जल जीवन मिशन**  
ग्राम - खालना  
क्षमता - 150,000 ली. स्टेजिंग + 15 मि.

सप्लाय - पी.एच.  
शक्ति 35,000ली.  
जल कालव

क्र.सं.	नाम	पता	सं.सं.
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# Chapter 4

## 4.1 Challenges During Roll Out, Execution & Implementation

'Har Ghar Jal' is a large-scale program implemented at the geographical and community levels. However, occasional operational challenges exist in rolling out and implementing the program. The project implementation was significantly impacted by the COVID-19 pandemic, resulting in a slowdown of work on a broader scale. However, the adverse effects of COVID-19 were overcome through strategic programming, seamless coordination among departments, and effective leadership. One of the challenges was the lack of skilled labour for the construction of new water tanks, which was addressed by sourcing labour from Chhattisgarh, Bihar, and Uttar Pradesh through labour contractors. Another challenge arose from a shortage of water supply pipes from the manufacturing company in Burhanpur. Apart from that, there are distant villages such as Nananagari, Pachori, and Garhi that are located more than 50 kilometres away from the district headquarters. Additionally, some of these villages are divided into multiple habitations, which further complicates the task of connecting them with pipelines. Despite the distance, there were certain stretches where villages were not properly connected by roads for approximately two kilometres, which created difficulties in the transportation of construction materials and equipment. The forest area and lack of three-phase electricity connection in the villages were additional areas of concern. The District Collector of Burhanpur implemented strategic measures to address these issues. Department officials, stakeholders, opinion leaders, active members from the villages and others also played substantial roles in resolving the challenges. The geographical conditions of Burhanpur, characterized by uneven terrain across the village, required additional efforts, labour, and time to ensure functional household tap connections (FHTCs), particularly for houses situated at higher elevations. The water pressure should be such that the water rises to a height of seven meters, according to norms. The functioning of the Tadarth Committee, which oversees the implementation of the scheme in villages, also faced some concerns due to recent elections and subsequently the appointment of new representatives. As a result, the committee members are currently being oriented on various aspects of the scheme.

## 4.2 Key Recommendations to Fortify the Program

- Re-orientation/ refresher training of Pani Samiti/Tadarth Samiti across the state (committees/ Samiti members have changed after the election) is necessary to enhance their participation at a higher level. This will ensure effective operation, maintenance, and timely minor repairs in case of breakdowns or small leakages, among other tasks. The high-quality training should ensure incredible ownership among the members of the VWSC / Pani Samiti / User Groups, etc., so that members should have a concrete aim of ensuring the sustainability of the scheme.



*"Regular evaluation of water tax collection is crucial for promoting sustainability and implementing required remedies."*

By: Shri Praveen Singh Adhayach IAS, Former District Collector Burhanpur M.P.

- The capacity building of masons, motor mechanics, plumbers, and solar energy technicians should be prioritized based on the needs of each district and completed within the specified timeline.
- Promoting advanced-level community ownership is essential to ensure the long-term sustainability of the scheme, with significant contributions from civil society organizations during initial phase.
- There should be a portal that reflects the amount collected from water tax, and regular reviews should be conducted at the block/district/state level.

### 4.3 Conclusion

As of 14 July 2023, Madhya Pradesh state has achieved saturation with 60,91,717 (50.91%) household tap water connections (FHTC)<sup>11</sup>. Overall, 44.65% of households have been provided with tap water connections since the launch of the Jal Jeevan Mission. This remarkable achievement was accomplished despite the global COVID-19 pandemic, including in case of Burhanpur. Various disruptions and lockdowns during the crisis impacted the implementation on the ground. However, through close partnerships among the central, state, and district governments, tap water connections were ensured, leading to an improvement in the quality of life for rural people.

It's worth acknowledging that large-scale implementation programs like this involve scope of work. In Burhanpur, it has been observed that the PHE Department has installed water tanks on the roofs of buildings in schools and Anganwadi centres, along with water pumps for filling them. Furthermore, the PHE Department has ensured the installation of tiles to maintain cleanliness in schools, as per the requirements. Additional taps have also been installed in certain Anganwadi centres as needed.

Burhanpur district has made significant progress during the implementation period and has achieved a remarkable first position across the country in ensuring 'Har Ghar Jal' under the mission. One important aspect of the mission is the creation of new employment opportunities for rural people residing in remote villages, and this aspect has been effectively demonstrated at the grassroots level in Burhanpur. Skilled professionals are required to maintain the water supply infrastructure, and they play a crucial role in monitoring, operating, and maintaining the system established under the program. A high level of community ownership is essential for the effective operation and maintenance (O&M) of the water supply system, including the timely payment of water taxes. This will help in regular maintenance of the mission components & continued water supply. We have success stories from districts, viz. women in Burhanpur district are now contributing to the family income through the collection of water taxes. Another example, in Khatla 1 village, Vijay, whose father works as a daily wage laborer, serves as a water pump operator. Vijay is married and lives in a joint family. He hands over his monthly payment to his father, who then provides him with Rs. 1000/- to meet expenses beyond the basic needs of his own family. Touching this milestone is not just an achievement, but also an objective that has brought the district to a unified platform. The Public Health Engineering, Panchayati Raj department and District Administration, working in coordination, played a crucial role in accomplishing the objectives of the scheme, including community ownership and functional

household tap connections. In Mohkhed block of Chindwada, there are 32 villages where 100% water tax is being received from households<sup>9</sup>. Village Water & Sanitation Committee's ownership is key to the long-term sustainability of the scheme. The quality of training results in a better understanding of their roles, responsibilities, and the functioning of the VWSC. Other important aspects for the sustainability of the scheme include the uninterrupted supply of water on a daily basis and in the desired quantity with adequate water pressure. Key factors that contributed to making Burhanpur district a star performer certified district across India may play a fundamental role in evidence-based programming. Har Ghar Jal Yojana has successfully resolved various problems for millions of people. While including improvements in economic well-being for rural residents, we aspire to achieve a comprehensive impact and outcomes through the implementation of this ambitious scheme.

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# Annexure A



## Drinking water quality testing using Field Test Kit

### Drinking water sample test report

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**Source description**

**Source of sample:** Individual house tap water      **Address:**

**Latitude:**      **Longitude:**

**Remarks:**

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**Water sample test results**

**Date & Time of Sample Collection-** 2022-07-15 13:25:31      **Report Generation Date-** 2022-08-24 15:25:35

Sr.	Parameters tested	Unit of measurement	Requirement (Acceptable Limit)	Permissible limit in absence of alternate source	Whether the sample is within Safe range (Yes/ No)
1	Turbidity	NTU	1	5	yes
2	pH	NA	6.5-8.5	No Relaxation	yes
3	Total Alkalinity (as Calcium Carbonate)	Milligram/liter	200	600	not_tested
4	Chloride (as Cl)	Milligram/liter	250	1000	yes
5	Fluoride (as F)	Milligram/liter	1	1.5	yes
6	Ammonia (as Total Ammonia- N)	Milligram/liter	0.5	No Relaxation	not_tested
7	Nitrate (as NO3)	Milligram/liter	45	No Relaxation	yes
8	Total Hardness (As CaCO3)	Milligram/liter	200	600	yes
9	Iron (As Fe)	Milligram/liter	1	No Relaxation	yes
10	Free residual Chlorine	Milligram/liter	0.2	1	yes
11	Biological contaminations	NA	Presence or Absence	Presence or Absence	yes

**Test done by**

**Name:** Rekha Mhajan

**Mobile Number:** 9589946496

**Village:** PHOPNARKALA

**GP:** PHOPNARKALA

**Block:** BURHANPUR

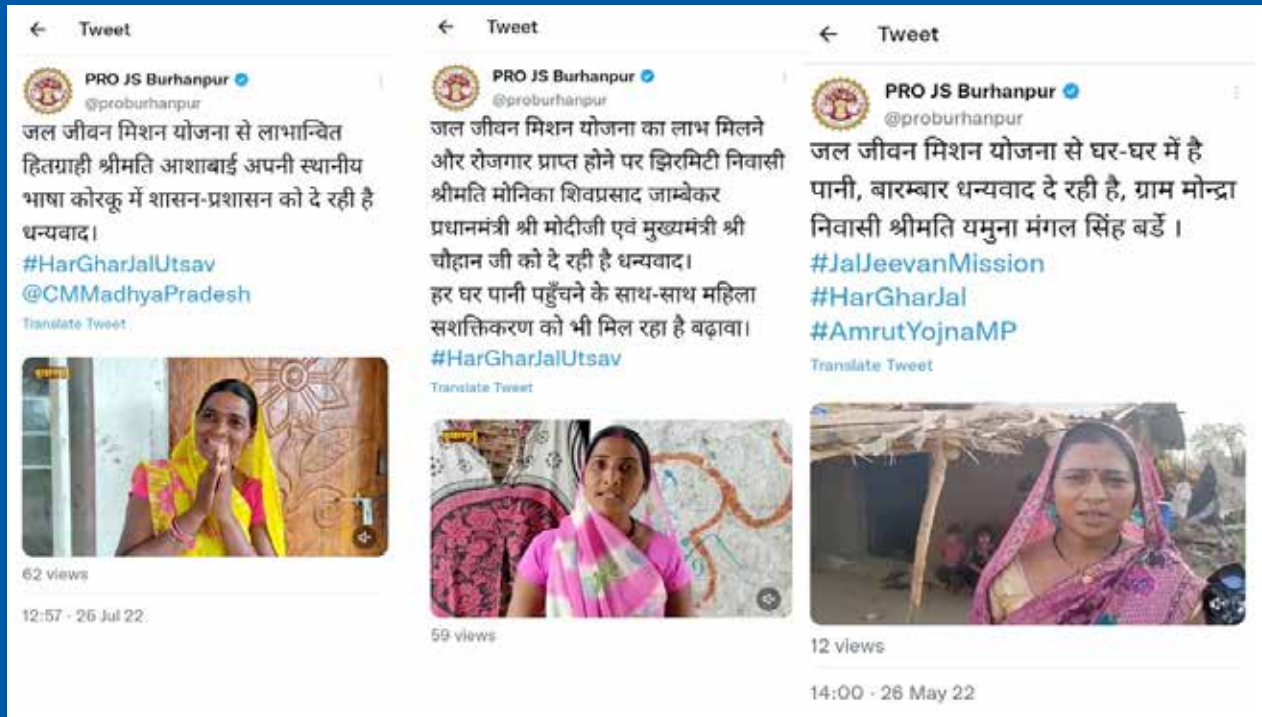
**District:** BURHANPUR

**State:** MADHYA PRADESH

**Note:**

1. If the results are found to be contaminated, the FTK user is advised to contact the concerned VWSC/ Paani samiti/ Rural water supply department immediately for possible remedial action.
2. This is an auto generated report and no signature is required





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