

# Jal Jeevan Samvad

March | 42<sup>nd</sup> Edition | Year 2024



Har Ghar Jal  
Jal Jeevan Mission

Building Partnership  
Changing Lives



Special Feature  
Operation and Maintenance

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## 42<sup>nd</sup> Edition

March 2024

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# Prime Minister on Jal Jeevan Mission



**Narendra Modi**  
Prime Minister

*“Over the last decade, India has moved forward with the mantra of ‘सबका साथ, सबका विकास, सबका विश्वास, सबका प्रयास’ – that is, collective efforts for inclusive growth. Reaching out to all sections of society, particularly the poor, women, youth, and farmers has been our top priority in the true spirit of inclusivity. We have transitioned to a performance-based governance, where shortages, corruption and discrimination have been replaced by transparency, accountability and opportunity.”*

- PM's remarks at Summit for Democracy 2024 in Seoul,  
South Korea on 20<sup>th</sup> March 2024

”



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



New Delhi  
31<sup>st</sup> March, 2024

At the core of Jal Jeevan Mission beats a profound belief in the centrality of the people in governance. Our mission is unequivocally, recognised as the intricate link between community well-being and the availability of sustainable water resources. It transcends infrastructure development, aspiring to bring holistic well-being by harnessing the transformative power of water.

Women have played a pivotal role in the success of Jal Jeevan Mission, embodying an unwavering commitment to strengthen our mission of providing water in every rural household. Through their invaluable contributions, they have brought about a positive change and ensured community engagement.

On 9<sup>th</sup> March 2024, celebrating International Women's Day, at the launch of Jal Shakti Abhiyan 2024 – Nari Shakti se Jal Shakti, we released a book titled '101 Glimpses of Women Power: Through the Prism of JJM'. The book pays homage to the invaluable contributions of womenfolk in rural India, celebrating their dedication, resilience and leadership for the impact that they have brought about.

Another piece of good news for this month is that two of our states – Assam and Karnataka have achieved 75% coverage. Our commitment to progress, is not just rhetoric; it is substantiated through action. I also visited Kodihalli and Poojanahalli villages of Chikkaballapura District in Karnataka, where I got a chance to interact with VWSC members & local community to understand the impact of JJM in their lives and to know the status of drinking water schemes handed over to VWSCs. Field visits provide invaluable insights into how JJM is progressing and impacting at the grassroot level. These visits strengthen our resolve and guide us in crafting targeted strategies that resonate with local needs.

Sustainability is not just a buzzword for us; it is a guiding principle. Our people, the driving force behind our purpose and values, are being empowered and capacitated to lead change effectively. Operation and Maintenance (O&M) is a crucial pillar in our journey towards sustainable water management, as highlighted in our March issue focused on Operation and Maintenance. This edition delves into the intricacies of sustaining infrastructure, ensuring long-term functionality, and maximising community benefits through a series of interventions and initiatives at the grassroot level.

Our Development Partners have been undertaking multiple initiatives to promote community ownership, financial sustainability through user fees, regular maintenance, grievance redressal, and waste water management. These collaborative efforts showcase the transformative power of inclusive planning and active community engagement, benefiting rural people, underscored by JJM's commitment to leaving no one behind in the quest for water for all.

During the National Conference in February 2024, focus was on ensuring O&M policy and structures in every State/ UT. It is heartening to note that by March 2024, 10 States/ UTs (Assam, Bihar, Madhya Pradesh, Mizoram, Odisha, Arunachal Pradesh, Tripura, Uttarakhand, Tamilnadu and A&N Islands) have already notified their O&M policies for JJM. However, the work has just begun. States/ UTs need to work hard consistently to streamline and mainstream O&M in JJM with full ownership at the level of village Panchayats.

One of the integral components of O&M is availability of a multi skilled person in every Gram Panchayat. With the introduction of 'Nal Jal Mitra' by Department of Drinking Water and Sanitation in collaboration with the Ministry of Skill Development & Entrepreneurship (MSDE), National Skill Development Corporation (NSDC), Water Manage-



ment, Plumbing Skill Council (WMPSC) and skill regulator – National Council for Vocational Education and Training (NCVET), the guidelines were issued. Local people residing in the villages are being trained to be multiskilled, so as to operate and maintain the in-village piped water supply infrastructure especially in the field of plumbing, electrical works and masonry. The guideline details out the long-term and short-term training programmes. Recognition of Prior Learning (RPL) and Up-Skilling programme was started as an alternative pathway for skilling and certification of existing workforce which have gained experience over the years and are working in the informal sector without certification.

Assam has pioneered the initiative 'Jal Doot' programme recognising the role of students from Class VIII to XII in the area of water conservation, its execution and outreach. Looking at the success of the programme it is decided to extend the 'Jal Doot' programme across diverse landscape of India creating student champions to provide an assessment on the state of piped water supply schemes in their locality and undertake activities on drinking water, water quality and water conservation. Through the programme, the Department intends to reap manifold increase in sustainable water use, environmental conservation, climate resilience involving young minds in *Jan Andolan* for fresh idea and youthful energy. A letter in this regard was issued by the Ministry of Education to government schools, government-aided schools, private schools and educational institutions throughout the country to furnish the details of the activities undertaken and progress made by 31<sup>st</sup> May 2024.

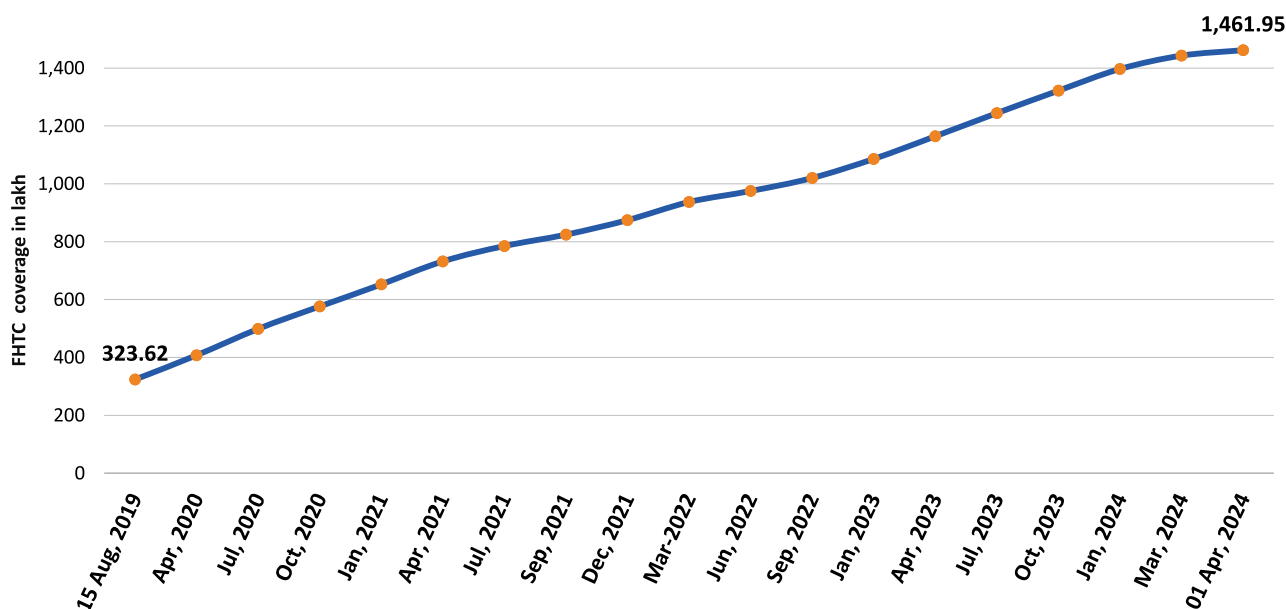
Capacity building is mainstay of the programme through workshops and incentives, people are being equipped in skills like plumbing, masonry, water quality testing, tariff collection and so on to ensure the mission's long-term sustainability. Most of these workshops are giving the desired results and their success is leading to plans for replication, aligning with Jal Jeevan Mission's goal of sustainable water supply.

This edition covers several such stories and interventions that depict, how, with systematic planning and approach, a mission as broad as Jal Jeevan Mission can be carried out successfully at the ground level.

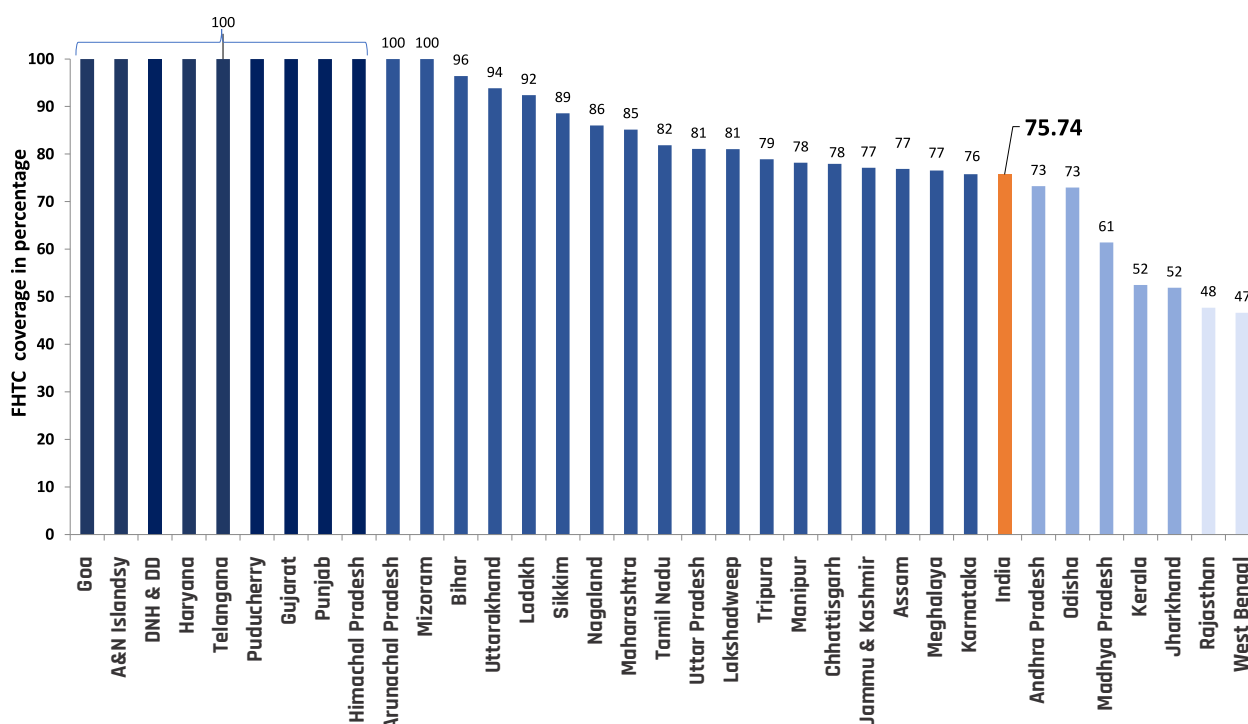
As we march forward, we reaffirm our purpose, ambition, and values. We continue to invest in the future, guided by a steadfast commitment to creating a sustainable and equitable world where trust, inclusivity, and impact define our collective efforts.

**[Dr. Chandra Bhushan Kumar]**

## Progressive coverage - Functional Household Tap Connection (FHTC) (as on 31.03.2024)



## Comparative FHTC coverage status of States/ UTs (as on 31.03.2024)



As on 31<sup>st</sup> March, 2024

Source: JJM-IMIS

India | Status of tap water supply in rural homes



Households provided with tap water connection since launch of the Mission

**11,38,32,065** (70.85%)

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

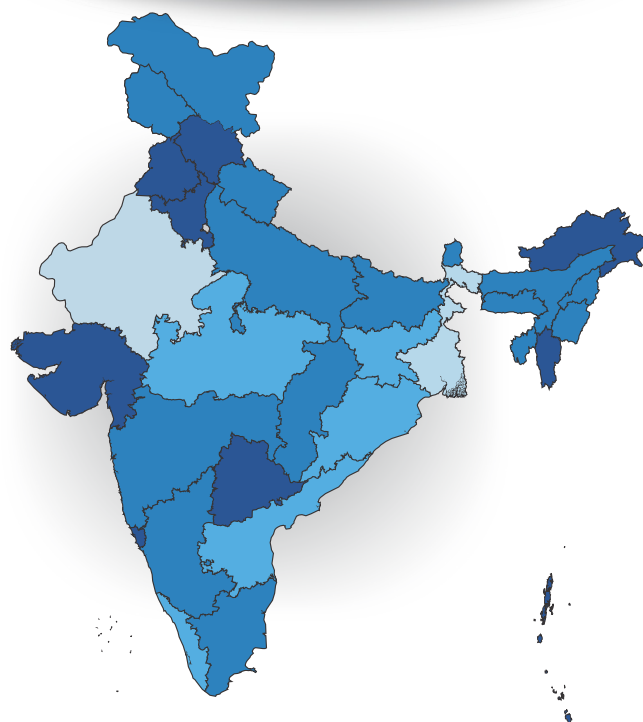
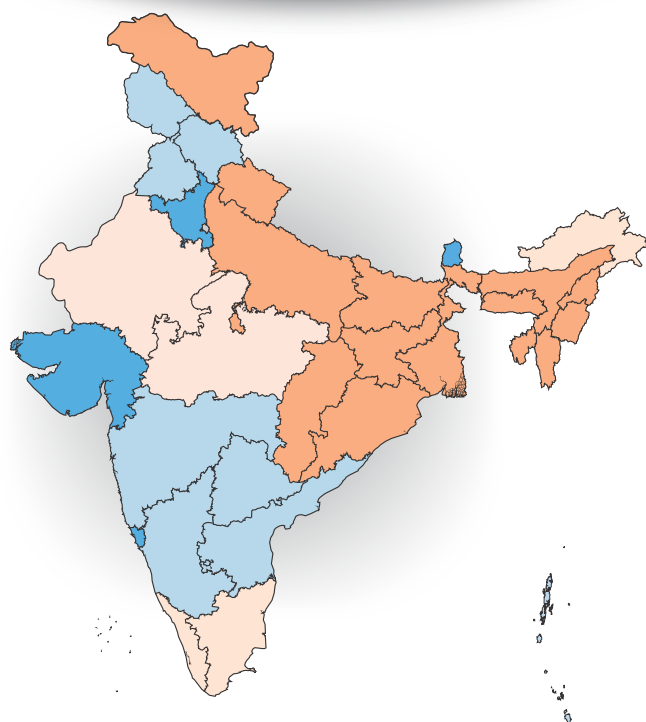
100% FHTC States/ UTs

Goa, A & N Islands, Puducheerry, D&NH and D&D, Haryana, Punjab, Telangana, Gujarat



As on 15<sup>th</sup> August, 2019

As on 31<sup>st</sup> March, 2024



0 to <10%

10% to <25%

25% to <50%

50% to <75%

75% to <100%

100%



## Shri Gajendra Singh Shekhawat, Union Minister for Jal Shakti launches Jal Shakti Abhiyan: Catch the Rain 2024

- NJJM

The 5<sup>th</sup> edition of Jal Shakti Abhiyan was launched by the Union Minister of Jal Shakti, Shri Gajendra Singh Shekhawat on 9<sup>th</sup> March 2024 at NDMC Convention Centre, New Delhi. The theme this year is 'Nari Shakti se Jal Shakti' highlighting the key role played by women in water conservation and sustainable management of water resources. Through the campaign the Ministry recognises and appreciates the crucial role played by women in water management, its conservation and sustainability.

During the event, two books were released – '101 Glimpses of Women Power: Through the Prism of JJM' and 'Jal Shakti Abhiyan: 2019 to 2023'. A movie was also released on the

journey of Jal Shakti Abhiyan (JSA). The journey for a sustainable water future was started by Department of Water Resource. River Development and Ganga Rejuvenation lays down policy guidelines and programme for development and regulation of country's water resources. National Water Mission was set up under National Action Plan on Climate Change (NAPCC) in 2011 with the objective to conserve water, minimise its wastage and ensure equitable distribution both across and within States through integrated water resource development and management.

Jal Shakti Abhiyan was launched in 2019 for 1,592 blocks in 256 water stressed districts of the country. It

aimed at making water conservation a *Jan Andolan* through extensive communication and community involvement. Despite Covid-19 restrictions, JSA was continued in 2020 with the aim to nudge States and its stakeholders to create Rain Water Harvesting Structures (RWHS) suitable to region's climatic needs, its soil strata, with people's active participation before the onset of monsoon to ensure storage of rainwater.

The Prime Minister launched JSA with the tagline: 'Catch the Rain: Where it falls, when it falls' on 22<sup>nd</sup> March 2021, World Water Day with focus on –

- (I) Rainwater harvesting and water conservation,



Launch of  
**JAL SHAKTI ABHIYAN:  
CATCH THE RAIN-2024**  
Theme: "Nari Shakti Se Jal Shakti"  
9th March, 2024

Venue: NDMC Convention Centre  
Sansad Marg, New Delhi

Organized by: Ministry of Jal Shakti, Government of India

NATIONAL WATER MISSION  
Respect Water for LIFE

The poster features a blue background with a large water drop on the right containing a blue flame-like shape. On the left, there are four raised fists in different skin tones, each wearing a rainbow-colored bangle. The text is in a mix of blue, orange, and black fonts.

- (ii) Enumerating geo-tagging and making inventory of all water bodies, preparation of scientific plans for water conservation,
- (iii) Setting up Jal Shakti Kendras in all districts,
- (iv) Intensive afforestation, and
- (v) Awareness generation

In 2022, the President launched the JSA on 29<sup>th</sup> March in all districts of the country with additional features on spring shed development, protection of water catchment areas and creation/renovation of Amrit Sarovars. As the country celebrated Azadi ka Amrit Mahotsav, it was decided to rejuvenate 75 water bodies in every district called Amrit Sarovar. JSA 2023 was launched by the President on the theme: 'Source Sustainability for Drinking Water' by geo-tagging all water sources of drinking water supply schemes, identification of at least one drinking water recharge structure for water conservation to ensure sustainability. Sanitation survey and source protection was also undertaken in villages where piped water supply is based on ground water or spring source.

Today, a portal has been developed to monitor the progress made under

JSA. The Mobile App helps report feedback and key observation. NGOs, SHGs, educational institutes and Anganwadi are important stakeholders who are playing an important role to conserve water. 530 District Water Conservation Plan is being developed in each district based on existing water structures and planning for the future. 661 Jal Shakti Kendras (JSKs) – knowledge centres for dissemination of knowledge related to water, techniques of water conservation and water saving have been set up. The youth of the country are engaged through Nehru Yuvak Kendra Sangathan (NYKS). Training has been imparted to over 700 officials of NYKS. Until now, 39.64 lakh activities have been undertaken with participation of over 4.5 Crore people.

During the programme five women champions spoke on their water journey. Babita Kanwar, Sarpanch of Bawanwas village from Kotputli, Behror district in Rajasthan said that they have constructed check dam which has helped in improvement of ground water table. Under Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) ponds have been built in the village along with soak pits in schools, Anganwadi centre.

Ms Razia Khan a Gram Pradhan from Satrapur village in Aligarh district of Uttar Pradesh thanked the government of India for its 'Har Ghar Jal' programme which has brought tap water in every rural household. She said, people in the village are sensitised on judicious use of water and its conservation. Rainwater harvesting structures are developed and monitored. A 15-member committee has been constituted to ensure that safe drinking water is being supplied and any issue related to water is timely addressed.

Kusum Rathod, a Village Water and Sanitation member from Googi Kota village in Kotputli – Behror, Rajasthan informed the gathering how ASHA workers play an important role in sensitising the public on importance of clean drinking water and its impact on health. The VWSC members undertake house-to-house visit to check the quality of water supplied.

Neetu, a VWSC member of Taja Majra village in Rohtak district of Haryana said that women are the primary water managers as they are the care givers looking after household need of every family member. The main responsibility of a VWSC member is frequent testing of water supplied in every rural household and public institution.

Anuradha works as a pump operator in Sureti Jakhal village from Mahendragarh district in Haryana. Her responsibility is not limited to just timely supply of water but also to check that there is no leakage.

The inaugural address was given by Ms Debashree Mukherjee, Secretary, Department of Water Resources, River Development and Ganga Rejuvenation and vote of thanks by Shri Chandra Bhushan Kumar, Additional Secretary and Mission Director Jal Jeevan Mission.





## Women's Day Special Why Jal Jeevan Mission is a 'WOMEN' Story?

- Shailika Sinha, NJJM

Reflecting on the plight of women and children in rural India due to water scarcity invites us into a world far away from the conveniences many of us take for granted. The question arises: How deeply do we think about the daily struggles faced by the rural communities, especially the burden shouldered by women and girls in accessing clean drinking water? Despite India's leap into independence on 15<sup>th</sup> August 1947, a reality lingered for decades. Even after 73 years of independence, until 2019, the stark disparity in access to clean water painted a grim picture: out of 19.30 crore rural households, only 3.23 crore enjoyed the convenience of tap connections. This left the vast majority of the population in a dire quest for a basic necessity.

### The Journey for Water

Water, by traditional roles or definitions, has been predominantly the domain of women, embedding the task of water collection deeply into the routine of their daily lives. Consider the daily odyssey that began in the dim light of dawn. Women and girls across rural landscapes have long been the bearers of this task. Their efforts to ease the lives of their families often went unnoticed, as did the silent participation of their daughters, who were initiated into this relentless cycle from a tender age. It was a ritual handed down through generations, a journey that spoke of disparity, of a basic human right not equally shared.



### A New Dawn

A significant shift came on 15<sup>th</sup> August 2019, a new chapter began with the announcement of Jal Jeevan Mission (JJM). This initiative promised more than just the provision of water; it symbolised the dawn of liberation for countless women and girls from the endless cycle of water scarcity, marking a pivotal moment in redefining the essence of independence for the rural heartlands of India.

### A Vision for Generations

Bringing water closer to where life happens marks a profound shift. It is about eliminating the hours spent in pursuit of water, freeing up time for learning, earning, and simply living. It is about acknowledging that water, this very precious commodity, should be a given, not a luxury. This mission is not just for today's generation but

for all those to come, ensuring that the legacy we leave behind is one of abundance, not scarcity.

### A 'Women' Story

Jal Jeevan Mission is intrinsically a woman's story because it directly addresses the disproportionate burden women and girls have historically shouldered for procurement of water. The countless hours of their loves spent in this labourious pursuit impacted their education, health, and economic opportunities, and a lot more. By aiming to provide every household with piped water, Jal Jeevan Mission has not only alleviated this physical burden but has also paved ways to empower women. It has given them back precious time to pursue education, engage in economic activities, and participate more fully in community life. The



initiative has marked a significant step towards gender equality and recognition of the roles women play in managing household resources, making it a narrative deeply rooted in their liberation and empowerment.

## Women at the Centre

Jal Jeevan Mission laid a systematic plan to encourage women participation and empowerment.

- 50% participation of women in Village Water & Sanitation Committee (VWSC)/ Paani Samiti was made mandatory. Active participation of women at all levels of institutional arrangements with special emphasis at village level was ensured.
- Gram Panchayat and/ or its sub-committee, i.e. VWSC/ Paani Samiti/ User Group, etc. were to identify, train and appoint 5 women from local community to conduct water quality tests using FTKs/ bacteriological vials and report the results.
- Training and skill development programs were designed to equip rural women to take up roles in water operations, maintenance, and water quality testing.

A number of Women have been trained to use Field Testing Kits (FTK) for testing water samples, equipping them with the necessary expertise to verify the quality and safety of drinking water in their communities.

### Field Testing Status (As on 13<sup>th</sup> March 2024)

Women trained for testing water samples using Field Testing Kit (FTK)	Villages where women trained for testing water samples using Field Testing Kit (FTK)
<b>23,89,981</b>	<b>4,92,585</b>

According to a study by the World Health Organisation, providing tap connection to every rural household would result in significant time saved on water collection (5.5 crore hours each day), especially for women.



JJM, indeed, has the power to transform the daily realities of millions. It is a bold stride towards a future where the provision of basic needs is not a struggle but a foundation for the flourishing of all citizens, regardless of gender. As we move

forward, the success of JJM will undoubtedly be an inspiration, not just for India but for the world, showcasing the profound impact of integrating sustainability, equity, and empowerment in addressing global challenges.



***Women smile, for they now walk fewer miles,  
As water flows, their lives glow.  
In every drop, there's a sigh, a sweet relief,  
As water sweeps away all their grief.***

***No longer chained by the burdens of the past,  
Empowered, uplifted, their spirits vast.  
Jal Jeevan Mission, a ray of light,  
Fills their lives with joy, so bright!***

# Empowering Women Drudgery Reduction and Livelihoods Promotion through Access to Water under Jal Jeevan

- Ajaya Mohapatra, Mission, CEO, We The People<sup>1</sup> - Key Resource Centre under NJJM

## Introduction

Jal Jeevan Mission (JJM) in India aims to provide safe and clean drinking water of 55 litre per capita per day (LPCD) through functional household tap connection to all rural households. One significant aspect of this mission is its profound impact on women, particularly in reducing their drudgery associated with water collection and improving their livelihoods. Besides, beyond its primary goal of ensuring access to potable drinking water with adequate quantity, the mission also addresses socio-economic issues, including reduction of drudgery of women. This article delves into the transformative effects of the Jal Jeevan Mission on women's lives, focusing on alleviating drudgery and improving their livelihoods through improved access to clean and safe drinking water. It also highlights how the JJM contributes to empowering women in reducing the drudgery of water collection and management in rural communities.

## Background

Before the execution of Jal Jeevan Mission, access to potable drinking water in rural India was a daunting task, especially for women. Women and girls often spent several hours



Intake well of GMVRWSS at Sontola village, Harrhatola Gram Panchayat, Gohparu Panchayat Samiti, Madhya Pradesh dated 10<sup>th</sup> February 2024

*Access to safe drinking water is essential for human health, economic development, and environmental sustainability. He added that in rural India, women shoulder responsibility in fetching water for the household needs. This task entails long walks to distant water sources, carrying heavy containers while spending hours each day collecting water from distant sources. Such drudgery impacts physical health and well-being of women and limits their opportunities for education, employment, and personal development.*

**Rajesh Kumar Jain, CEO, Zilla Panchyat, Shahdol**

each day fetching water from distant sources, which consumed their precious time and subjected them to physical exertion, health risk, limited their opportunities for education and economic participation.

Post the launch of JJM on 15<sup>th</sup> August, 2019 by the Hon'ble Prime Minister

Shri Narendra Modi and the initiation of the 'Har Ghar Jal' by the Ministry of Jal Shakti, Government of India in collaboration with States/ UTs of India to provide every rural household with a functional household tap connection has improved the quality of lives of millions of rural households especially women with an access to

<sup>1</sup> We the People is an empanell ed Key Resource Centre (KRC) under National Jal Jeevan Mission offering training to L2 and L3 functionaries on JJM in India. Since 2021, We the People- KRC trained over 10,000 Level-3 functionaries and 1000 Level 2 functionaries under JJM. Besides, it offers livelihood promotion services in India. It works in 21 States/ UTs in partnerships with the union and state governments, industries, international agencies and civil society organisations.



potable drinking water with adequate quantity of 55 lpcd. It has not only brought in lasting happiness amongst the rural households but also helped in drudgery reduction of rural women and girls who used to cover long distances fetching water. Further, the mission has created economic opportunities for millions of women in the rural hinterland.

However, Gohparu Multi Village Rural Water Supply Scheme (GMVRWSS) under JJM supplies clean and safe drinking water through functional household connections to 28 villages of Gohparu Panchayat Samiti that has transformed the lives of the rural population, especially women and children living in these villages. This scheme has adopted multi-pronged strategies reducing drudgery of women associated with water collection by providing potable drinking water connections by extending piped water supply networks to rural households, as a result, need for long-distance water collection has minimised, significantly reduced the burden of women. Besides, the mission encouraged community participation in water management, empowering women to take active roles in decision-making processes related to water supply, sanitation, and hygiene. Moreover, leveraging technology such as solar-powered water pumps and water purification systems reduces the manual effort required for water extraction and treatment, easing the workload on women. Additionally, training programmes were conducted by empanelled Key Resource Centres of Ministry of Jal Shakti, Govt. of India and Madhya Pradesh Public Health Engineering Department (MPPHED) viz. We The People in Shahdol division, educated women about water conservation, efficient water usage, operation and maintenance of water infrastructure, enhancing their skills and confidence in managing water resources.

## Jal Jeevan Mission Reduced Drudgery of Women in Rural India

The success story of the mission is clearly visible in one such village of Shahdol district of Madhya Pradesh. Barelli of Gohparu Panchayat Samiti is around 25 km from the district headquarters, situated 466 meters above sea level. Md. Niyaz, vice president of the Village Water and Sanitation Committee (VWSC) of Barelli village, while narrating the journey of the struggle of fellow women folks in his native-village doing the arduous task of fetching water from distant places, said that during peak summer in May and June, two out of three dug-wells in his village would get dry as a result, women and girls had to cover long distances, stand in a long queue and wait for their turn to fetch water from the only functional well. Women and girls often spent long hours each day fetching water from distant sources in the village around the year. It further constrained women from participating in economic activities and limited girls from continuing

their education, resulting in school dropouts.

The transformation has happened in his village in July 2020, he says. "Our village started receiving potable drinking water through piped water connection under the Gohparu Multi Village Rural Water Supply Scheme planned and executed by Madhya Pradesh Jal Nigam Corporation under JJM. Since then, there is no looking back. The quality of lives of the villagers, especially women, have drastically improved due to access to potable drinking water through piped rural water supply networks with adequate quantity supplied under Jal Jeevan Mission. Henceforth, number of hours women used to spend collecting water for household chores overcome through the mission. Women folks in our village are now spending such quality time in various productive activities at home and outside," says Md. Niyaz.

He expressed his gratitude to the present government in the state and the centre and was thankful to the Prime Minister while acknowledging



Md. Niyaz, Vice-President and Poonam Viswakarma, member of VWSC of Barelli village and Gram Panchayat, Gohparu Panchayat Samiti sharing their experience regarding JJM at Bareli village with Plant Head GMVRWSS, Gohparu and We The People team, dated 10<sup>th</sup> February 2024





Rajkumari Singh of Sontola village, Harrhatola Gram Panchayat taking water from the household tap installed in front of her home under GMVRWSS, dated 10<sup>th</sup> February 2024

his visionary leadership of providing 'Har Ghar Jal' to every rural household in the country, empowering women, reducing their hardships and creating economic opportunities.

Rohit Mishra, the Plant Head of Gohparu Multi Village Rural Water Supply Scheme, highlighted the persistent efforts undertaken by his team and VWSCs, which resulted in the provision of clean and safe drinking water to rural households across the 28-project intervened piped water supply villages. Mishra emphasised that prior to the implementation of this scheme, women in these villages had to endure the burden of traveling long distances to fetch water, leading to the wastage of their time, energy, and resources that could have been invested in more productive endeavours. However, the Gohparu Multi Village Scheme has significantly improved the lives of women by reducing their physical labour, creating income-generating opportunities through time savings, and enhancing overall quality of life.

### Jal Jeevan Mission Opens Up Income Opportunities for Women

While expressing her joy and happiness about the success of Jal Jeevan

Mission in bringing transformative changes impacting lives of millions of women across the country, Rajkumari Singh, a resident of Sontola, a cent percent tribal village of Gohparu Panchayat Samiti in Shahdol district, said that her daily routine had to revolve around fetching water for her family needs. She would wake up before dawn, rushing to the nearest well to fill her pots before the well would get surrounded with other fellow women folks. This task consumed nearly two to three hours of her day, leaving her exhausted and unable to pursue other socio-economic activities.

She said that after her village received functional household tap water connections through the Gohparu Multi Village Scheme, planned and executed by Madhya Pradesh Jal Nigam Corporation under Jal Jeevan Mission, transforming the life of women in Harrhatola Gram Panchayat. Now, the fellow women folk in her Gram Panchayat have access to potable drinking water at home through rural piped water connections. No longer burdened by the arduous task of water collection, women are able to reallocate their time and energy to income generation activities promoted by the self-help groups in the village through National Rural Livelihood Mission (NRLM). The women started contributing to monthly family income as a result. Sail Kumari Singh, President of Jagriti Village Organisation of Barmania Gram Panchayat promoted under the NRLM, said that Jal Jeevan Mission has not only addressed the crucial issue of water scarcity but has also played a significant role in promoting livelihoods of women in rural areas. Like many fellow women of her village, she said that befo JJM, women and girls in rural households often spent a significant amount of time fetching water from distant water sources, sometimes multiple



Group discussion with Rajkumari Singh and other women of Sontola village, Harrhatola Gram Panchayat about the impact of JJM on women's drudgery reduction, dated 10<sup>th</sup> February 2024

times a day. This task not only consumed their time but also required strenuous physical labour. With the provision of piped water supply to households, the burden of water collection has significantly reduced. Women and girls can now effectively invest this time for other productive activities, including pursuing income-generating opportunities.

Malti Singh, member of the Jagriti Village Organisation of Barmania Gram Panchayat of Gohparu Panchayat Samiti said that JJM focuses on community participation and encourages the involvement of women in decision-making processes related to water management and infrastructure development. By actively participating in VWSCs, community meetings, and planning discussions, women gain a voice in shaping water-related policies and projects that directly impact their lives. This empowerment enhances their confidence and leadership skills, contributing to their overall socio-economic development. She also added that access to reliable water supply opens up opportunities for women to engage in income-generating activities within their communities. For instance, with consistent access to water, women can initiate small-scale enterprises such as vegetable gardening, tailoring, running beauty parlours, or small-scale food processing, thus have helped additional income for the households and contributed to local economic growth and self-sustainability.

While sharing her experience, she said that the improved access to water has enhanced the overall well-being of her family. With potable drinking water readily available in the village, hygiene practices have improved, reducing the incidence of water-borne diseases. Children from her village now attending school

more regularly, as they no longer need to assist their mothers in water collection and storage.

The case of Rajkumari Singh has demonstrated the transformative impact of the JJM on women in rural India. By reducing the drudgery associated with water collection, the mission has liberated women from the confines of traditional gender roles, empowering them to pursue education, employment, and community engagement.

Jal Jeevan Mission addresses the basic need for potable drinking water with adequate quantity also serves as a catalyst for gender equality and women empowerment. While recognising and addressing the disproportionate burden of water collection on women, the mission contributes to their socio-economic advancement and overall well-being. As India strive towards universal access to water, it is imperative to focus on initiatives that uplift and empower women, ensuring their rightful place as equal participants in society.

Afjal Amanullah, Executive Engineer, Public Health Engineering Department (PHED), Shahdol Division,

Madhya Pradesh, added that Jal Jeevan Mission execution has brought about transformative changes in rural communities, particularly for women. He said that with access to piped water supply, women no longer spend hours each day fetching water, allowing them to pursue other productive activities, including education and income-generating opportunities. The mission has reduced physical exertion from water collection and lowers the risk of injuries and health complications among women, contributing to improved overall well-being. By relieving women of water-related chores, the mission enables them to participate more actively in community development initiatives, decision-making processes, and economic activities, as a result enhancing their socio-economic status and empowerment.

### Jal Jeevan Mission Reduced Water-Borne Diseases and Improved Human Health in Rural India

Jal Jeevan Mission importantly plays a pivotal role in reducing water-borne diseases and improving human health in rural areas. The mission



Children of Sontola Primary School, Harrhatola Gram Panchayat, Gohparu Panchayat Samiti drinking potable water from the tap water provided under GMVRWSS, dated 11<sup>th</sup> February 2024







Resident of Harrhatola village, Gohparu Panchayat Samiti fetching water from the tap provided under GMVRWSS, dated 10<sup>th</sup> February 2024

focuses on providing functional household water tap connections to every household, ensuring access to potable drinking water. As a result, the mission has significantly reduced the dependence of the rural households on contaminated water sources like ponds, rivers, or open wells, which are often breeding grounds for water-borne diseases.

The medical staff of the Community Health Centre (CHC), Gohparu Panchayat Samiti has accepted the fact that access to potable drinking water by the rural population of Gohparu Panchayat Samiti drastically reduced various water-borne diseases such as diarrhoea, typhoid, jaundice and dysentery. By ensuring the supply of safe drinking water, JJM contributed to the reduction of these diseases. Santosh Kumar Choudhury, Pharmacist of Community Health Centre (CHC) of Gohparu Panchayat Samiti said that prior to the launch of the Jal Jeevan Mission, 30-40 cases of water-borne diseases such as diarrhoea, typhoid, jaundice and dysentery reported in their hospital, reduced to around 5-8 cases per month. He owes the credit to the success of the Mission in providing clean and safe drinking water to rural households.

Divyanshu Sharma, a woman Counsellor working under Rashtriya Kishore Swasthya Karyakram at the CHC, Gohparu, said that the Jal Jeevan Mission focuses on the importance of sanitation and hygiene practices, including grey water and black water management, maintaining cleanliness in and around water sources. This holistic approach to water supply and sanitation helps preventing the spread of diseases and promoting overall health and well-being of rural population especially women and children. She said that along with infrastructure development, JJM conducts awareness programmes on water, sanitation, and hygiene (WASH). These programmes educate communities about the importance of clean water, proper sanitation practices, and personal hygiene, empowering them to take preventive measures against water-borne diseases.

Sushila Kashyap, Senior Staff Nurse Officer at CHC Gohparu, said that women and children, who are often responsible for fetching water in rural households, benefit significantly from the availability of piped water supply. It has substantially reduced the burden on women and girls, allowing them to invest time in education and other productive

activities. Moreover, overall health and well-being of children improves as they consume safe drinking water, leading to better growth and development outcomes. She added that no doubt Jal Jeevan Mission is instrumental in addressing the water crisis in rural India and improving the health and well-being of millions by ensuring access to clean and safe drinking water.

### Jal Jeevan Mission Encouraged Convergence for Source Sustainability and Institutional Sustainability

One of the critical objectives of JJM is to ensure the sustainability of water sources and Institutional arrangements for effective operation, maintenance and management of rural water supply systems. The convergence of different central govt government schemes, include the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), Swachh Bharat Mission (SBM), and the National Rural Drinking Water Programme (NRDWP) under Jal Jeevan Mission allows for integrated planning and resources optimisation. For instance, MGNREGS has significantly contributed for water conservation activities like watershed management, and rejuvenation of traditional water bodies, and afforestation, replenishing water sources and improving their sustainability. JJM facilitates collaboration between different government departments and agencies involved in water management, including the Ministry of Jal Shakti, Ministry of Rural Development, and Ministry of Environment, Forest and Climate Change. Through interdepartmental coordination, synergies created to address water-related challenges comprehensively, such as groundwater depletion, pollution, and infrastructure development.





Filtration Plant of GMVRWSS at Sontola village, Harhatola Gram Panchayat, Gohparu Panchayat Samiti, dated 10<sup>th</sup> February 2024

Leveraging technology for water resource management is a cornerstone of JJM. Geographic Information System (GIS) mapping has been used to identify potential water sources, assess groundwater quality and quantity, and plan infrastructure development. At the same time, remote sensing techniques aid in monitoring changes in water levels and land use patterns, facilitating informed decision-making for sustainable water management.

Local community involvement under the JJM is considered vital for ensuring the sustainability of water sources and infrastructure. Through participatory approaches like the preparation of Village Action Plan (VAP) for the rural water supply schemes and formation of Village Water and Sanitation Committees (VWSCs) and Pani Samitis, communities have engaged in the planning, implementation, and operation, maintenance and management of water supply systems. It fosters a sense of ownership, leading to better operation and maintenance of rural water supply infrastructure created under the JJM and sustainable use of water resources.

Despite the convergence of multiple schemes, adequate funding remains a challenge for sustaining water supply infrastructure and management mechanisms. While govern-

ment allocations have made, they may not always be sufficient to meet the diverse needs across different regions. Therefore, exploring innovative financing mechanisms, promoting local contributions while collecting new water connection charges, security deposits for the new connection, water tariff, fines and penalties from the domestic and

non-domestic users, and leveraging public-private partnerships could alleviate funding constraints and ensure long-term sustainability.

## Conclusion

The collaborative efforts of the Government of India, states, and the civil society organisations under Jal Jeevan Mission serve as a transformative intervention in the drudgery of women in rural India. By ensuring access to safe and reliable water supply, the mission has improved health and hygiene and empowered women by freeing them from the time-consuming and physically demanding task of water collection. As India progresses towards achieving its universal goal of access to potable drinking water, women empowerment remains central to the success of Jal Jeevan Mission, fostering sustainable development and gender equality in rural communities.

*The convergence of government schemes under JJM has led to significant progress in providing piped water supply to rural households. By leveraging resources from various programmes, infrastructure development has accelerated, resulting in increased coverage and access to safe drinking water. Efforts towards water conservation, recharge, and rejuvenation of traditional water bodies have contributed to promoting source sustainability. By integrating watershed management practices with water supply projects, the dependence on groundwater has reduced, leading to more resilient water sources. The formation of VWSCs and Pani Samitis has strengthened institutional mechanisms for community-based rural water supply operation, maintenance and management. These institutions play a vital role in the operation, maintenance, and regulation of rural water supply systems, ensuring their sustainability beyond the project lifecycle. He added that various government schemes convergence under the Jal Jeevan Mission presents a promising approach to achieve source and institutional sustainability in providing safe drinking water to rural communities. By integrating planning, leveraging technology, promoting community participation, and addressing challenges effectively, significant progress has been made towards achieving the vision of sustainable water supply for all. However, sustained efforts are needed to overcome remaining challenges and ensure the long-term viability of water sources and infrastructure.*

**Rajesh Kumar Jain, CEO, Zilla Panchayat, Shahdol**



# Viksit Bharat ka Prashikshan Pahiya Highlights of Water Training Initiatives Across India

- Utkarsha Rathi and Punam Singh, NJJM

Efforts to address water related challenges and support sanitation awareness have been a significant traction across various states in India. These efforts range from Women Empowerment, Training and Skilling, technological advancements and innovations to community sensitisation and participation. Such initiatives vivify the innate abilities of the communities and synergise them with the vision of the mission, cascading a lasting change at grassroot levels. Under Jal Jeevan Mission several training programmes, workshops and IEC activities are being organised in different parts of the country. Giving a boost to community engagement and empowerment such activities are proving to be pioneers to a water secured nation.

## Mosaic of recent training programmes across India

A glimpse of the recent training programmes reveals a diverse array of activities aimed at enhancing knowledge and skills across India. These programmes strive to equip participants with essential capabilities to address water-related challenges and contribute effectively to community development.

### Haryana

#### Women Centric Meeting for a New Insight

A meeting held in *Khand Jakhla* on 1<sup>st</sup> March 2024, Fatehabad district, centred on women's issues, particularly addressing waterborne diseases, conservation practices, water quality assessment, and the Jal Jeevan Mission. It offered valuable insights and awareness on water-related matters, stressing the

significance of maintaining water quality and the mission's objectives.

#### Nal Jal Mitra Programme Skilling the Rural Haryana

To provide employment to the educated youth in their villages itself, a training programme was organised under 'Nal Jal Mitra' in the Bhiwani district of Haryana. In the workshop, information was shared regarding the work of plumber, pump operator, fitter, electrician and masons.



Women centric issues discussed in a meeting conducted in Fatehabad, Haryana  
Source: <https://twitter.com/phedhry/status/1761715161369550893>





NJMP, training sessions conducted in the Bhiwani district, Haryana

Source: <https://twitter.com/phedhry/status/1763466793748746358?t=bzvumukZHLusKUWH0gEAWQ&s=19>

## Chhattisgarh

The *Jajwalyadev* Folk Festival and AgriTech Agriculture Fair 2024 was held at High School Ground, Janjgir, from 10<sup>th</sup>-12<sup>th</sup> February. Diverse cultural festivities were showcased, and advancements in agricultural technology were featured. Importantly, free water testing was facilitated by the Department of Public Health Engineering through FTI India at their stall during the fair, contributing to both cultural enrichment and community well-being.



The Jajwalyadev Folk Festival and AgriTech Agriculture Fair 2024 was held at High School Ground, Janjgir, Chhattisgarh

Source: <https://twitter.com/JanjgirJjm/status/1757396312440385608>

## The UT of Jammu and Kashmir

### Utilising the 'Debate' Learning Approach

A debate organised by the Jal Shakti Department's Mission Directorate in Jammu emphasised the role of government versus individuals in water conservation, with Neha Rana, Moksh Sharma, and Khushboo Parihar securing top honours. The event, part of the Jal Jeevan Mission, underscored community involvement and awareness-building, highlighting the mission's objective of providing tap connections to rural households. Officials stressed



The Jal Shakti Department's Mission Directorate organised a debate on "Water Conservation is the duty of the government, not the individual" at Teacher Bhawan, Gandhi Nagar, Jammu.

Source: [https://twitter.com/JJM\\_JK/status/1755583830466117767?t=9k8Z4iyuekRUBc5UVGEM6g&s=08](https://twitter.com/JJM_JK/status/1755583830466117767?t=9k8Z4iyuekRUBc5UVGEM6g&s=08)

collective efforts and showcased the JJM Tableau to educate students on water management advancements.

### **"Village Level 3 Functionaries Workshop: Building Community Capacity"**

JJM J&K, in collaboration with KRC 'Himalayan Institute for Environment, Ecology & Development (HIFEED)' conducted a Level 3 Functionaries workshop. It was inaugurated on 4th March, 2024, at the mini conference hall DC Office Samba by District Development Commissioner Samba, Abhishek Sharma. Training was undergone by about 70 participants organised by JJM J&K in collaboration with Key Resource Centre (KRC) "We the People". Various topics such as waterborne diseases, safe drinking water, and the role of stakeholders in village development were discussed throughout the programme. The aim was to equip participants with the necessary knowledge and skills to address water-related challenges and contribute to community development.

The four-day workshop from 4th to 7th March included discussions on waterborne diseases, safe drinking water and village development, assessment of current village water practices and infrastructure, importance of Safe Drinking Water and Future Vision, Stakeholder Engagement and Role-playing, Focus on water source sustainability and protection measures, discussions on wastewater management strategies, development of village water security plans for enhanced water management. With a promising four-day training session, attendees anticipated gaining essential knowledge and skills for effective management of rural water supply schemes under JJM.



Fig. JJM J&K, in collaboration with KRC 'Himalayan Institute for Environment, Ecology & Development (HIFEED)' conducted a Level 3 Functionaries workshop.

Source: [https://twitter.com/JJM\\_JK/status/1765340765339963658?t=Dre76051C2x2bdx7vR1CkA&s=08](https://twitter.com/JJM_JK/status/1765340765339963658?t=Dre76051C2x2bdx7vR1CkA&s=08)

## **Karnataka**

A two-day training field-level practical programme for waterworks plumbers of villages under Hoskote Taluk Gram Panchayat was organised by the Rural Drinking Water and

Sanitation Department, in collaboration with Zilla Panchayat Bangalore Rural. The programme aimed to enhance the skills and knowledge of plumbers in ensuring efficient water management and sanitation practices within rural communities.



A two-day training field-level practical programme of villages under Hoskote Taluk Gram Panchayat, Bangalore Rural, Karnataka

Source: [https://m.facebook.com/story.php?story\\_fbid=pfbid02jGKj1B1sa6sXuBjbGua0dTJcaYTuLyHd5oyKUcy5jiUNQwecLfwCU9BLemNK7ERgl&id=100063732579081](https://m.facebook.com/story.php?story_fbid=pfbid02jGKj1B1sa6sXuBjbGua0dTJcaYTuLyHd5oyKUcy5jiUNQwecLfwCU9BLemNK7ERgl&id=100063732579081)



## Nagaland

A two-day capacity-building and Information, Education, and Communication (IEC) awareness programme under the aegis of the Jal Jeevan Mission (JJM) was conducted on 12th and 13th March, 2024 in three blocks under Phek district of Nagaland. The initiative sought to empower and enable rural communities by cultivating a stronger sense of ownership and promoting active participation in the effective management of water and sanitation in their villages.

## Rajasthan

A Central Government Team on 12th March, 2024 visited revenue villages of the Gram Panchayats of the Bhilwara district of Rajasthan. During the visit, the team took stock of the ground work taken place in the district under JJM. The National Jal Jeevan Mission Team under JJM reviewed the work of providing FHTC in the rural households and work done by the Water Quality Inspection Committee in detail.

These workshops, training sessions, and initiatives across various states reflect a concerted effort towards achieving national objectives related to water conservation, sanitation, and community empowerment. By cultivating partnerships, raising awareness, and equipping individuals with necessary skills, these endeavors are instrumental in securing a sustainable water future for India.



A two-day capacity-building and Information, Education, and Communication (IEC) awareness programme under the aegis of the Jal Jeevan Mission (JJM) in Phek, Nagaland



Meeting at Gram Panchayat of Block Jahazpur Talunda, Khajuri, Sarsya, Bhilwara district, Rajasthan  
Source: State IEC

# Community-led Operation & Maintenance of the Piped Water Supply Schemes: A Key to Sustainability

- Tasha Mahanta, Project Manager, WaterAid India

## Introduction:

Situated 15 km away from the block headquarters in Icchawar, Biccholi is a small village in the Kudi Panchayat of Sehore district, Madhya Pradesh, comprising 225 households. The village is divided into 8 wards across 4 *mohallas*. In the 1980s, Biccholi relied solely on just one hand pump and a pond for its water needs. By the 2000s, the government installed five additional hand pumps, later supplemented by private and government-supported hand pumps and borewells around 2010. Despite these efforts, the village continued to face acute drinking water scarcity, especially during the summers. Residents, including women, men, and children, had to travel approximately 2 km to fetch water, leading to frequent disputes and quarrels at the water sources.

## Participatory approach all the way:

WaterAid India, as the State Lead under the Rural WASH Partners Forum (RWPF) and Technical Support Partner for the Public Health Engineering Department (PHED) in Madhya Pradesh, initiated its intervention in Biccholi in 2020. The journey commenced with an introductory meeting with the Panchayat and the establishment of an active Village Water and Sanitation Committee (VWSC) in Biccholi. Ensuring compliance with the prescribed norms, the VWSC membership included representation from women, SC/ST communities, and all habitations within the village. Participatory Rural Appraisals (PRAs) were conducted collaboratively with women and youth from the community to understand the village's

geographical and demographic dynamics, as well as to contextualise the prevailing drinking water situation and future requirements.

Over the one and half years of engagement in Biccholi, WaterAid India provided support and capacity-building initiatives to key stakeholders at the village level. Women representatives from each habitation underwent training on water quality assessment and the use of Field Test Kits (FTKs). In addition to training sessions, regular *Jal Chaupals* (water meetings) and interpersonal communications were organised to equip community members, VWSCs, and the Panchayat with the necessary skills for scheme management, ranging from planning and monitoring to handover and beyond.

Capacity-building exercises and handholding support were provided



Tax collection by VWSC members



## SPECIAL FEATURE – OPERATION AND MAINTENANCE



Assured regular supply translates to regular water tariff collections

to VWSC and Panchayat representatives in a phased manner. This included training sessions on the roles and responsibilities of each stakeholder within the Jal Jeevan Mission (JJM) framework, development of Operation and Maintenance (O&M) plans and budgets, establishment of financial and institutional mechanisms to ensure scheme sustainability, identification of skilled local resources, and training on basic O&M of Piped Water Supply Systems (PWSS). The scheme became fully operational in 2022, marking a significant milestone in Biccholi's water journey. Since then, there has been no looking back.

### Community-led O&M of PWSS – A beacon of hope

Driven by a collective resolve to alleviate water-related hardships, the community eagerly awaited the implementation of the Jal Jeevan Mission. A comprehensive village action plan (VAP), developed through participatory processes and backed by a Gram Sabha Resolution, was submitted to PHED. Subsequently, 228 connections were provided under the JJM. With safe drinking water now available at their doorsteps, the VWSC and Gram Panchayat were committed to ensuring the scheme's sustainability. Leveraging

their newfound knowledge, the committee took proactive steps towards sustainable O&M. Village-level norms for water supply were established and endorsed through a Gram Sabha Resolution.

In accordance with the set norms, a roster for habitation-wise water supply was devised to ensure equitable distribution to all households in the village. Each habitation receives a water supply for 30 minutes every morning, with an additional 15-20 minutes during summer evenings. During distribution, VWSC members, along with the pump operator, oversee water



Regular water quality testing by village level volunteers



Happy faces: Relieved of drudgery







PRA for development of VAP



Meeting of VWSC members

wastage prevention at delivery points. Flexibility was extended to marginalised households and institutional/ religious establishments, while an incentive of Rs 200 was offered to users who pay their annual charges upfront. To ensure compliance, notices are regularly issued to tax defaulters by the VWSC. Women members of the VWSC spearhead door-to-door water charge collections.

A comprehensive O&M plan for managing and maintaining the PWSS was developed and approved through a Gram Sabha Resolution. A water tariff of Rs 100 per household was established based on anticipated expenditures, with users receiving water tax receipts upon payment. In the fiscal year 2022-23, Biccholi recorded total collections of Rs 2.5 lakhs through water tariffs. Against the average monthly collection of Rs 22,500, the committee maintains an average closing balance of Rs 5,000 every month. Additionally, the committee collected Rs 67,500 as community contributions towards the PWSS. Equipped with training in basic repairs and maintenance, the

pump operator promptly addresses minor issues, ensuring uninterrupted service. No major breakdowns have been reported since the scheme's inception, with minor issues typically resolved within a day. The Panchayat maintains a small inventory of spare parts, including a backup motor for emergencies. Annual audit of accounts is facilitated by the Panchayat, with audit reports shared with the community by the VWSC and Panchayat.

### Key takeaways

Since the scheme's commissioning, uninterrupted water supply has been maintained in Biccholi for the past 2.5 years. While there may be apprehensions about panchayats being capable of effective O&M of PWSS, Biccholi serves as a testament to the efficacy of community-led sustained O&M of PWSS. Continuous community involvement is imperative for decentralised service delivery, emphasising the importance of ongoing engagement. Decentralisation of services is only possible if all the stakeholders are involved in the process enabling them to understand the nuances of management of PWSS.

Structured training and capacity-building efforts, coupled with demystified concepts and continuous handholding to VWSCs and Panchayats, are vital for scheme sustainability. Identification and formal engagement of skilled local resources (plumbers/ electricians/ mechanics) further bolster the system, ensuring swift troubleshooting in case of breakdowns. Support to these resources in the form of a basic tool kit and maintaining an inventory of vendors for supply of spare parts or other equipment further strengthen the system.

Users will eventually pay for the assured supply of safe drinking water when their trust in the established system is strengthened. Conducting annual audits of accounts, sharing audit reports with the community, and providing water tax receipts are some of the methods that help build this trust and translate into water tariff collections. These efforts ultimately contribute to sustainable access to safe drinking water, as envisioned under Jal Jeevan Mission.

## Transforming Lives Delivering Safe Water to Homes Across West Bengal

- Anurag Gupta, State Programme Director, WaterAid India

### Location of intervention

The collaboration between **WaterAid India** and the **PepsiCo Foundation** has profoundly impacted the lives of numerous women and girls in **Hooghly, Bankura, and Purba Bardhaman**. This partnership represents a significant stride towards achieving universal access to Functional Household Tap Connection (FHTC) in rural India, aligning with the objectives of Jal Jeevan Mission (JJM). Through this initiative, 44 remote villages have been successfully linked to FHTC, benefiting over 6,200 individuals by ensuring consistent and safe access to drinking water at home.

### From drudgery to empowerment: Community takes charge

This initiative transcended the mere construction of water facilities; it fostered community ownership. Across three districts in West Bengal, 44 remote villages saw the establishment of community-operated pipe water supply systems. The pivotal tool? Water User Committees (WUCs) ensure equal participation of both genders. With 44 WUCs comprising 305 members almost evenly split by gender – 155 women and 150 men – these groups were not only informed but also deeply committed. They actively engaged in setting connection fees and user charges, and contributing to setup costs, instilling a profound sense of ownership and accountability for their water resources.

### Building capacity, ensuring sustainability

WaterAid India went beyond mere infrastructure construction; we empowered the community to manage their pipe water supply schemes (PWSS). WUC members received training on various aspects, including:

- A. Water Quality Testing:** Prioritising water quality, the project trained WUC members to use field testing kits. Additionally, enthusiastic young villagers joined



Location of intervention

the effort, creating a wider team committed to regular water quality checks. Over 350 youths have been trained in using field testing kits. Going beyond standard protocols, these empowered communities conduct water source testing twice a year – pre-monsoon and post-monsoon, covering not only the pipe water supply and hand pump sources but also random household taps. In 2023, over 500 drinking water sources were tested twice. This comprehensive approach ensures the long-term safety of the water consumed by villagers.





Safeguarding every sip: water quality testing ensures our drinking water sources are clear, clean and healthy

**B. Operation and maintenance:** To ensure the sustainability of their piped water supply schemes, Water User Committees have undergone various training programs and received on-site handholding support. They also conduct regular water quality testing. The WUCs perform the following tasks for the smooth operation of their piped water supply schemes:

**1. Water Source Management:** Ensuring the sustainability of the water source is crucial. This includes protecting the source from contamination, managing its use to prevent over-extraction, and undertaking groundwater replenishment measures for the source's longevity.



Replenishing groundwater through recharge shafts



Rooftop rainwater harvesting system collecting precious water for use and groundwater recharge



## SPECIAL FEATURE – OPERATION AND MAINTENANCE

- 2. Financial Management:** The project assisted 39 WUC members in enhancing their financial management skills to collect user fees and manage funds for operation and maintenance costs. The first WUC was established in October 2021, and by February 2024,

the 39 WUCs had collected Rs 9,32,062. They spent Rs 7,15,820 on electricity bills and minor repairs. All 39 pipe water supply schemes are functioning effectively, providing reliable water supply, with households consistently paying their user fees.



Empowering change: Women in rural communities take charge of water management

- 3. Infrastructure Maintenance:** Regular inspection and maintenance of physical components like pipes, pumps and storage tanks are essential to prevent

leaks and ensure efficient operation. All WUCs have been provided with toolkits to facilitate maintenance work on their pipe water supply schemes.



Toolkit provided to each Water User Committee



Training of Water User Committee members

- 4. Grievance Redressal:** The Water User Committees are autonomous entities that develop their regulations and protocols through a participatory approach. Once established, these rules are binding for all users and prominently displayed for reference.

In case of rule violations or conflicts, the WUC endeavours to resolve the matter according to their agreed principles. If necessary, unresolved issues may be escalated to the village water and sanitation committee or the Gram Panchayat.







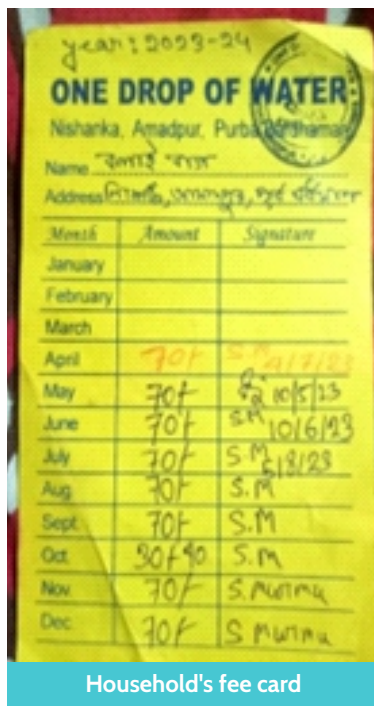
Empowering change: Women in rural communities take charge of water management

**5. User Engagement and Education:** Regular engagement and education of the community on water conservation, along with safe water handling and hygiene practices are essential components of ongoing operations and maintenance (O&M) strategies. Consistent efforts on this are vital for achieving sustainable outcomes.

**6. Record Keeping:** All Water User Committees meticulously maintain detailed records. This includes O&M activities, financial transactions (user fees, expenditures), and a user complaint log. This comprehensive data serves as a valuable resource for future planning and informed decision-making.



Monthly user fee register



Household's fee card



User charge payment receipt

## SPECIAL FEATURE – OPERATION AND MAINTENANCE

7. **Emergency Planning:** Having a predefined plan for scenarios such as source contamination or infrastructure damage can greatly minimise disruptions to the water supply. By raising awareness among water user committees about these issues, we enable them to be better prepared, respond effectively to challenges, and handle adverse situations independently.

C. **Waste Water Management:** Intensive efforts in greywater management have sensitised over 1700 households in these 44 villages, enabling effective on-site wastewater management through soak pits and kitchen gardens. This initiative prevents pollution and promotes water conservation. Despite adequate water supply at home, communities face no wastewater issues, thanks to daily infiltration of over 3,00,000 litres into the ground through soak pits, totalling over 10 crore litres annually.

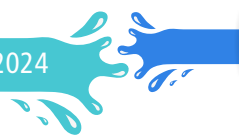
### Insights for replication: Key lessons learned

The success of this initiative hinges on **community ownership and empowerment**, fostering transformative change in these villages with improved access to safe water. Women have more time for income-generating activities and the overall well-being of the community including children has improved significantly. This initiative serves as a beacon of hope, demonstrating how collaboration and community engagement can bring forth sustainable change, offering valuable lessons for replicating success elsewhere. Here are the key takeaways:

- ◆ Active community participation is paramount.
- ◆ User fees are crucial for financial sustainability.
- ◆ Regular water quality testing ensures safety.
- ◆ Capacity building empowers communities for long-term management.

*Congratulations to citizens of*  
**Karnataka**

Karnataka has crossed  
**75% coverage**  
under Jal Jeevan Mission





## Middle Manager's Activeness in Reviving a Sustainable Mechanism to Ensure Community-Managed Multi-Village Pipe Water Supply System in Ramgarh District of Jharkhand

- Bhawna Badola and Biplab Shankar Dey, Piramal Foundation

### Background

The Gola Multi Panchayat Piped Water Supply Scheme (PWSS) was established through the District Mineral Foundation Trust (DMFT) in the Gola block of Ramgarh district in Jharkhand. It has been operational since July 2019. The Drinking Water and Sanitation Department is managing the operation and maintenance of the scheme through a contracted agency. This contract spans five years and is scheduled to end in July 2024. Approximately 2,500 households across 15 villages, covering five Gram Panchayats, namely Gola, Huppu, Purabdih, Charhi, and Kumhardaga, are benefiting from the scheme, receiving treated water through their Family Household Tap Connections (FHTCs).

### About the Initiative

The Multi-Village Scheme (MVS) sourced water from the Bhairvi River. To ensure the sustainability of the MVS after the compilation of the contracted operation and maintenance, a 20-member committee called *Bahu-Panchayat Jal Evam Swachhata Samiti, Gola (Ramgarh)*, i.e., the Multi-GP or Multi-Village Water and Sanitation Committee (MVWSC), was formed. The committee is comprised of *Mukhiyas* (Sarpanch) of the five Gram Panchayats and *Jal Sahiyas* of 15 villages. The committee was established at the initiation of the PWSS. A system of funding was



WTP of the Gola Multi-Village PWS

**ग्रामीण जलापूर्ति योजना, गोला**  
**बहु पंचायत जल एवं स्वच्छता समिति, गोला**

क्रम सं. - **9478** दिनांक.....

ग्राम पंचायत.....

ग्राम..... प्रखण्ड-गोला (रामगढ़)

उपभोक्ता नाम .....

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कुल योग		

Sample receipt of Gola MVWSC

हस्ताक्षर  
जल सहिया/कोषाध्यक्ष  
ग्राम जल एवं स्वच्छता समिति

## SPECIAL FEATURE – OPERATION AND MAINTENANCE

devised to support the ongoing operations. This system includes a one-time connection fee of Rs 310 and a monthly water tariff of Rs 62. Based on the bye-laws of the committee, the *mukhiya* of Gola Gram Panchayat was nominated as president, and the *Jal Sahiya* of Gola village was designated as the treasurer of the MVWSC. Additionally, all 15 *Jal Sahiyas* were authorised by the MVWSC to collect the one-time connection fee and monthly water tariff within their respective villages. The bye-laws also entitled the *Jal Sahiyas* to receive 10% of the amount collected by them.

During the initial year of 2019-20, the *Jal Sahiyas* demonstrated proactive efforts in mobilising their communities in the respective villages. They undertook the task of raising awareness among villagers regarding the significance of consuming safe drinking water. Additionally, they facilitated the installation of Family Household Tap Connections (FHTCs) by receiving applications along with the requisite one-time connection fee and monthly water tariffs from households. Simultaneously, ensured that the collected funds were deposited regularly into the bank account designated for the committee.

### Challenges in the Initiative: Tariff Collection

The implementation of the incentive disbursement faced challenges, leading to discouragement among the *Jal Sahiyas* and the subsequent negligible collection of monthly water tariffs. Mrs Bulti Devi, the newly elected *mukhiya* in the year 2022 who successively became the chairperson of Gola MVWSC, noticed the issue of declining fund collection in the committee's bank account. She discussed the issue with Mr Rajesh Ranjan, the then Executive Engineer of the Drinking Water and Sanitation



Water tariff collection by *Jal Sahiya* of Gola village

Division in Ramgarh, who issued a letter to all the MVWSCs of the district in September 2022 to operationalise the water tariff collection and incentive distribution mechanism. The *Jal Sahiyas* demanded the disbursement of their arrear incentives, but due to poor bookkeeping records and misunderstandings among the committee members, it became challenging to disburse the incentives.

Subsequently, the successor Executive Engineer, Mr Anand Singh, proposed that the Junior Engineer and members of Team Devnet, a UNICEF-supported NGO partner operating in Ramgarh district, conduct meetings with one MVWSC to identify prevailing issues, challenges, and potential solutions to revitalise the committee's roles and responsibilities. Team Devnet began organising and facilitating a series of meetings with 15 Village Water and Sanitation Committees (VWSCs) under MVWSC Gola in mid-year 2023. Their efforts resulted in the mobilisation of 10 VWSCs and the provision of handholding support to streamline their records effectively. However, they encountered difficulties with the remaining five VWSCs,

hindering progress in the incentive disbursement process once again.

### Strengthening Sustainability: Overcoming Challenges

Subsequently, the newly appointed successor Executive Engineer, Mr Anil Prasad, intervened in the situation and suggested that the MVWSC Gola obtain a bank cheque book for the committee's account. Together, with Team Devnet, they expedited the process to establish a consensus within the MVWSC committee to prioritise the disbursement of incentives for the *Jal Sahiyas* in the 10 villages where all the records and calculations were prepared. To encourage this new initiative, a motivation-building workshop was organised under the joint leadership of the Executive Engineer and Gola Block Pramukh on 23<sup>rd</sup> November 2023. During this event, cheques were distributed to the 10 *Jal Sahiyas*, along with members of the MVWSC and the Panchayati Raj Institution (PRI).

The 10 *Jal Sahiyas* were handed cheques for their arrear incentives totaling Rs 2,44,092 against a total







Incentive disbursement by cheque to the Jal Sahiyas associated with Gola MVWSC

Therefore, establishing a sustainable tariff collection mechanism by the Gola MVWSC will be crucial for ensuring the sustainable operation and maintenance (O&M) of the Gola PWSS in the long run.

The success observed in implementing this approach has led the Drinking Water and Sanitation (DWS) Division in Ramgarh to plan to replicate the initiative through district administration for all other Multi-Village Schemes (MVS) running in the district. This initiative aims to ensure that the goals of Jal Jeevan Mission are sustained appropriately throughout the district, emphasising the importance of community involvement and sustainable financing mechanisms in ensuring the long-term success of water supply schemes.

This proactive approach not only ensures the sustainability of water supply schemes but also aligns with the broader mission of providing safe and sustainable drinking water to all households, contributing to the overall development and well-being of the communities served.

collection of Rs 15,64,005, which included Rs 6,17,830 from 1,993 households in the 10 villages as connection fees and Rs 9,46,175 as water tariffs (refer to the table mentioned below). Among the Jal Sahiyas, Mrs Sima Devi of Gola village received the highest incentive of Rs 1,29,116, attributed to her diligent efforts in collecting connection charges since the inception of the scheme and continuing to collect water tariffs even when others had stopped. This initiative of institutionalising and incorporating the incentive mechanism by the MVWSC motivated all the Jal Sahiyas to

resume the collection of tariffs in their respective villages regularly. This also encouraged the Jal Sahiyas of the remaining five villages to restart their collection process.

Mr Ajay Kumar, the operator of the Water Treatment Plant (WTP) of Gola PWSS, highlighted that there are five Elevated Service Reservoirs (ESRs) under this scheme, with a total of seven operators engaged by the private agency. These operators include three for the ESRs, two at the intake well, and two at the WTP, responsible for the operation of the scheme for the initial five years only.

Sr. No.	Name of Jal Sahiya	Village	Connection fees collected (Rs.)	Monthly tariffs collected (Rs.)	Total collection till Oct 2023 (Rs.)	Jal Sahiya incentive disbursed in Nov'2023
1	Radhika Devi	Heramdaga	67,580	51,320	1,18,900	21,482
2	Usha Devi	Purabdih	1,01,370	33,480	1,34,850	27,873
3	Meena Devi	Huppu	55,800	1,45,110	2,00,910	28,011
4	Pinki Devi	Toyar	55,180	14,820	70,000	14,832
5	Sumila Devi	Purna Sirka	8,680	29,000	37,680	5,000
6	Savita Devi	Naya Sirka	7,130	4,000	11,130	2,125
7	Farzana Parvin	Ghasi Kenke	14,880	0	14,880	3,600
8	Rina Devi	Kenke	19,220	13,780	33,000	6,028
9	Sima Devi	Khokha	13,950	26,500	40,450	6,025
10	Sima Devi	Gola	2,74,040	6,28,165	9,02,205	1,29,116
		<b>Total</b>	<b>6,17,830</b>	<b>9,46,175</b>	<b>15,64,005</b>	<b>2,44,092</b>

## Operation and Maintenance of Single Village Schemes – Community Participation, Institutional Arrangements, and the Role of Panchayati Raj Institutions

– Jayprakash Singh, Aga Khan Rural Support Programme (India)<sup>1</sup>

### Context

The MGPNY (Mukhyamantri Gramin PeyJal Nischay Yojana), launched in September 2016, has achieved remarkable success with near-universal coverage at 96.42%<sup>2</sup>. The MGPNY has a provision for the installation of schemes at the ward level by WIMC (Ward Implementation and Management Committee) and operation and maintenance (O&M) responsibility in non-quality affected areas (PRD schemes) was also entrusted to WIMC. In the last couple of years, access to pipe water supply through installation has been achieved in almost all the areas of Bihar except some hard-to-reach and geographically atypical areas, while the desired level of community involvement and ownership in schemes is yet to be achieved.

In this context, CSOs like AKRSP(I), Argyham, and Water For People have collaborated with the Panchayati Raj Department of Bihar to address service delivery issues and enhance stakeholder capacity through targeted training and initiatives piloted in three blocks in Muzaffarpur, with a design-for-scale principle wherein learnings and best practices could be replicated and scaled up in different districts and at state level.

### The strategy adopted for enabling the environment

A three-pronged strategy for creating and enabling an environment was adopted in three pilot Blocks of Muzaffarpur district.

- ◆ Capacity building.
- ◆ System strengthening.
- ◆ Innovation through technology integration and application.

### Capacity building and content development support

AKRSP-India, in partnership with other organisations, conducted an orientation for SPRC members to facilitate environmental implementation at the state level. The orientation emphasised five digital modules aimed at improving the sustainable O&M of piped water schemes. These digital modules have been successfully introduced to all 38 DPRCs, with plans for a gradual rollout across different districts.

### District-Level Support

Regular updates were shared with DPRO at the district level on a fortnightly basis, and necessary letters and orders were issued to support project partners in a timely manner.

### Initiatives at a Block level

Smooth operation and maintenance of the MGPNY scheme necessitated meetings with the Block Development Officer and Block Panchayat Raj Officer at all three locations. AKRSP-India briefed them on the scheme's status and the necessary support required as per operational guidelines. During discussions, we shared the Block Baseline Findings and other relevant documents to aid their understanding. Initially, they claimed to be unaware of any such issues since the unavailability of the documents. To gather information, our team interacted with the concerned officers across all locations but found limited data due to the absence of primary information. Recognising this, we proposed creating a baseline with government functionaries' involvement, which they accepted. They requested support for format designing, compilation, and analysis.

The communication from the Department of Panchayat Raj catalysed launching and completing the baseline within a specified timeframe. Block Development Officers and Block Panchayat Raj Officers recognised the importance of a Block Level Baseline for grass-roots planning and strategy. Consequently, they issued a formal letter to

<sup>1</sup> Aga Khan Rural Support Programme (India) is a non-denominational, non-government development organisation. AKRSP(I) works as a catalyst for the betterment of rural communities by providing direct support to local communities. AKRSP(I) is active in over 3,255 villages of Gujarat, Madhya Pradesh, Bihar and Maharashtra.

<sup>2</sup> <https://ejalshakti.gov.in/jjmreport/JJMState.aspx>





all Gram Panchayats under Sakra, Muraul Bandra, mentioning their support for AKRSP-India for implementing Nal Jal scheme projects through Arghyam and Water for People.

Another significant initiative at the Block Level involved capacity building for government functionaries and PRIs. We conducted training workshops with block officials and PRIs engaged in the MGPNY scheme across all locations. During these sessions, our project team outlined project aims, objectives, working areas, duration, and the nature of support available over the next two years. Key activities with various stakeholders were also discussed. A weekly follow-up mechanism accelerated ground-level maintenance and progress on piped water supply installations under the MGPNY scheme in these areas. This review and guided mentoring initiative boosted morale among Block and Gram Panchayat-level officials, such as Technical Assistants, Executive Assistants, and Panchayat Secretaries, resulting in improved coherence in their work. Progress updates were shared weekly at the Panchayat, Block, and District levels.

However, various limitations and challenges arose during the review and guidance of government officials. Regular transfers and postings disrupted momentum, causing delays as rapport-building and creating an enabling environment had to restart. Furthermore, competing priorities and the mission mode working of state functionaries, often tasked with duties like transfers, census, elections, and other administrative tasks, further impeded progress. These factors diverted attention from scheme-related aspects.

To enhance the scheme's effectiveness and water quality testing,

intervention mechanisms were developed at the Gram Panchayat level using Field Test Kits (FTKs). Benefits from the drinking water scheme were extended to the community. Additionally, a Block-level WhatsApp group was created to facilitate real-time progress updates, ensuring everyone remained informed about scheme-related developments, planning, input, solutions, and outcomes. Block Panchayat Raj Officers added Block functionaries, Gram Panchayat heads, and the AKRSP-India team to this group, where activities carried out at the WIMC level (Ward Implementation and Management Committees) were shared.

### **Initiatives for Panchayat-level stakeholders to ensure smooth implementation and operation of Har Ghar Nal Ka Jal schemes**

- ◆ Gram Panchayat level meeting to streamline charge transfer and other disputes of PWS
- ◆ Orientation of stakeholders on service level benchmark and ways to ensure it

After coordinating at the Block level, our focus shifted to the Panchayat level in accordance with administrative directives. We initiated an orientation programme at the Gram Panchayats to convene all involved functionaries and address operational challenges related to the scheme at the grassroots level. To achieve this, we conducted an interaction meeting at the Gram Panchayat level, inviting the respective Panchayat Sachiv (Secretary), Executive Assistant, and Technical Assistant from the Block level. We also notified the Gram Panchayat Head, WIMC President, and Ward Sachiv about this meeting.

The primary objective of the meeting was to facilitate formal interaction among all functionaries and discuss project activities and current practices concerning the piped water scheme. We deliberated on various scheme-related issues such as operation and maintenance, both minor and major repairs. Additionally, we exchanged information about the scheme, including the number of households connected, the documentation process, methods to ensure effectiveness, and the implications of these efforts.

During the meeting, several significant agendas regarding scheme information and improvement plans were formulated. One key decision was to ensure the active involvement of the WIMC Committee, highlighting its importance. Subsequently, we directed our focus towards intervention at the ward level, discussing strategies to make the scheme operational and achieve our goals. Following the discussion, a group exercise was conducted to identify gaps in scheme implementation. Based on the insights gained from this exercise, we developed a mechanism for intervention at the appropriate level to address these gaps and improve the scheme's effectiveness.

After the discussion, a group exercise was conducted to identify gaps in scheme implementation. Using the insights gained, we developed a mechanism to intervene at the appropriate level to address these gaps and enhance the scheme's effectiveness.

### **WIMC level stakeholder for smooth implementation & operation of Har Ghar Nal Ka Jal schemes**

At the Gram Panchayat level, intervention is seamlessly integrated with WIMC engagement. AKRSP(I)

## SPECIAL FEATURE – OPERATION AND MAINTENANCE

volunteers organised meetings with elected WIMC members, discussing their roles and responsibilities. A ward-level mechanism was established to operationalise the scheme and raise community awareness. Performance and resolution registers were prepared, and a 10-day plan was executed to create model wards and through, including activities like Jal Chaupal, morning and evening follow-ups community awareness programmes, and water tariff collection, etc.

### Initiative taken at ward-level

Supporting initiatives for user tariff contribution included preparing documents like household contribution registers (HCR), Receipt Books, and Master Registers at the WIMC level. Training on five digital modules via the PDA App enhanced scheme functionality and transparency. Handholding support was provided to *Anurakshak* for scheme improvement, along with connecting WIMC with Anurakshan agencies. Assistance in record-keeping was also offered. Gender empowerment and participation were ensured through focused content development and capacity-building

initiatives. Community integration and ownership were improved through participatory tools such as WIMC meetings, *Jal Chaupal*, and regular sharing of minutes.

### WIMS meeting in session

#### Outcomes:

- ◆ Over a 20-month period (about 1 and a half years), 138 such non-functional or partly functional schemes became effectively functional.
- ◆ 92% of schemes are effectively functional.
- ◆ Consistent tariff collection.



- ◆ Decentralised enterprise group repaired and available for quick servicing.
- ◆ Regular *Jal Chaupal* and WIMC meetings being conducted at PWS
- ◆ 14 local plumbing supported with repair kits and linked with WIMCs through a cluster of Gram Panchayats as their catchments for providing on-call repair services.

### Innovation through technology integration application web and portal

#### Avni Application

It was created and designed by the Samanvaya Research and Development Foundation. Avni app enables end users, Anurakshak of PWS to capture activities like WIM meetings, *Jal Chaupal*, WIMC meetings, tank cleaning, PWS logbook, and water quality testing, which is available digitally and ensures trusted data generation with improved transparency and visibility. Currently, all 548 wards in AKRSP(I) intervention areas of Muzaffarpur are using this app to report mandated tasks being carried out by PWS digitally through this app. All the PWS operators have been trained in the hybrid mode of using the

Zoom app and have been handheld on using digital initiatives in this pilot. This has made reporting seamless and actionable data visible across different levels on a real-time basis.

#### mGramseva overview

In this context to streamline the income and expenditure at the PWS level by WIMCs, the access and usage of the mGramseva web portal (<https://peyjalbihar.org>) has been prompted by AKRSP(I) in 3 pilot blocks. This initiative has been rolled out in the AKRSP-India Intervention Block of Sakra, Muraul, and Bandra in the Muzaffarpur district of Bihar. Household family register and digital register of active beneficiaries whose house relates to tap water, consume water from the community-led ownership under Mukhyamantri Gramin Nischay Peyjal Yojana. mGramseva consists of nine tabs; collect payment, bill and receipt download, add expenditure report, update expenditure, generate bill, add new beneficiary, beneficiaries' details or active and disable option, WIMC dashboard.

It is noteworthy that while the programme initially collaborated with the Panchayati Raj department, it has since been transferred to the Public Health Engineering Department (PHED) starting in June 2023.



# AKRSP(I) Water Tariff Management: Decision-Making, Collection Process, Meeting Levels, Expenditure, Record-Keeping, and Transparency

- Pankaj Kumar, Programme Integrator - WASH, AKRSP-INDIA

## Background

This article showcases the transformative initiatives undertaken in Mukhyamantri Gramin Peyjal Nishchay Yojana (MGPNY) in Bihar by Aga Khan Rural Support Programme, India (AKRSP-I) to create an enabling environment for community engagement and ownership, resulting in improved service delivery and leading to regular user charge collection and management of public water systems (PWS) in 3 blocks of Muzaffarpur.

The tariff collection journey commenced with organising *Jal Chaupal*, where discussions were held with beneficiaries regarding the necessity of their contributions to maintain the functionality of PWS. Moreover, the dialogues emphasised the role of Water and Sanitation Management Committees in efficiently managing recurring costs associated with PWS, including minor repairs, electricity bills, and incentives for *Anurakshaks*.

The enabling environment initiative strategically focuses on reshaping the landscape of pipe water supply management through proactive decision-making and rapport-building efforts. The efforts of this initiative span three blocks: Sakra, Bandra, and Muraul. AKRSP-I has been engaged in activities related to Har Ghar Nal ka Jal since February 2022. They have collaborated with various stakeholders to streamline the operation and maintenance (O&M)

of point-of-use water supply (PWS) systems. These PWS systems were installed under MGPNY. In total, 548 PWS systems are being managed and supervised by AKRSP-I, with support from Arghyam and Water for People in terms of funding and technical expertise.

The Government of Bihar implemented the 'Long term O&M policy of PWS' in September 2021 as a measure to address the significance of sustainable water management. This policy encourages households to make a monthly contribution of Rs 30 per household, aiming to establish the practice of paying water user charges. By implementing this innovative approach, the government intends to instil a mindset that values the water provided through the PWS system under MGPNY. This policy is a groundbreaking step towards ensuring the long-term operation and maintenance of the water supply infrastructure while fostering a sense of responsibility and appreciation for the available water resources.

## Assessment of Operational Dynamics

The baseline study conducted in May 2022 had a specific focus on understanding the status and operational dynamics of the water supply schemes implemented under the MGPNY. The study aimed to comprehensively assess various aspects of the schemes, including

their functionality, usage, and financial aspects of operation and maintenance (O&M). Furthermore, the study sought to identify and map the existing challenges related to infrastructure and availability that affect the key stakeholders involved in the water supply schemes. This mapping exercise aimed to provide a comprehensive overview of the obstacles faced by the stakeholders at different levels.

A baseline study conducted in May 2022 revealed that only 132 out of 548 wards possess the capacity to address immediate O&M needs, including minor and major repairs, and bill payments. Some of these wards have established mechanisms to address needs-based breakdowns or other issues. In alignment with the long-term O&M policy, the Ward Implementation and Management Committee (WIMC) has been entrusted with the responsibility of collecting user tariffs from each household. Currently, all existing connections in the ward are non-metered and non-commercial, with a uniform pricing of Rs. 30 decided by the WIMC. However, acknowledging the diverse nature of geographies, the WIMC has the authority to determine more appropriate pricing for monthly water tariff collection and address specific O&M requirements.

In terms of implementation, the pilot project planned to target three specific blocks Sakra, Muraul, and

## SPECIAL FEATURE – OPERATION AND MAINTENANCE

Bandara. These blocks encompassed 548 water supply systems spread across 49 Gram Panchayats and 190 revenue villages. The pilot project's objective was to gather specific data and insights from these target areas to inform future efforts and potential improvements to the water supply schemes under the MGPNY.

**Functional Systems:** Out of the total 535 systems, 397 are reported to be functional, representing a percentage of 74.2%. Functional systems are operational and provide water supply services to the communities.

**Water Systems where users are paying charges:** Among the functional systems only 132 systems, are receiving user charges. This indicates that approximately 24.6% of the operational water systems are actively collecting tariffs from the beneficiaries' households.

The survey findings also reveal a significant gap in electricity bill coverage and payment among the surveyed wards. Only 64% of the wards surveyed reported receiving electricity bills among these wards that receive electricity bills, and only 34% paid these bills.

### Need Assessment and Training

- To assess the need for capacity building by Anurakshaks and other key stakeholders for effective water management and readiness for adopting recent technologies (such as virtual training modules or software applications for user charge collection), a comprehensive assessment was conducted. The goal was to augment knowledge and proficiency in handling technology essential for the day-to-day operation of water supply services.
- All the training sessions were conducted in hybrid mode using the online Zoom application.
- To facilitate seamless participation tracking, digital training content sharing, and monitoring participant engagement with digital materials, the PDA (Participatory Digital Attestation) application was utilised.
- Based on the needs assessment, training modules were designed, that covered relevant topics.
- Training encompassed five digital modules aimed at equipping

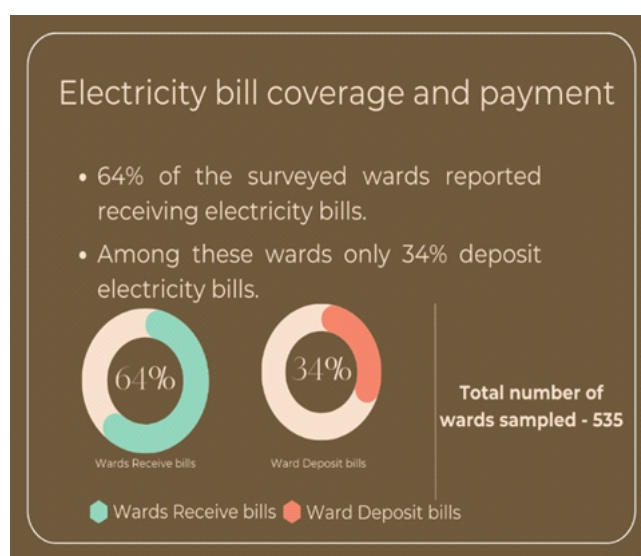
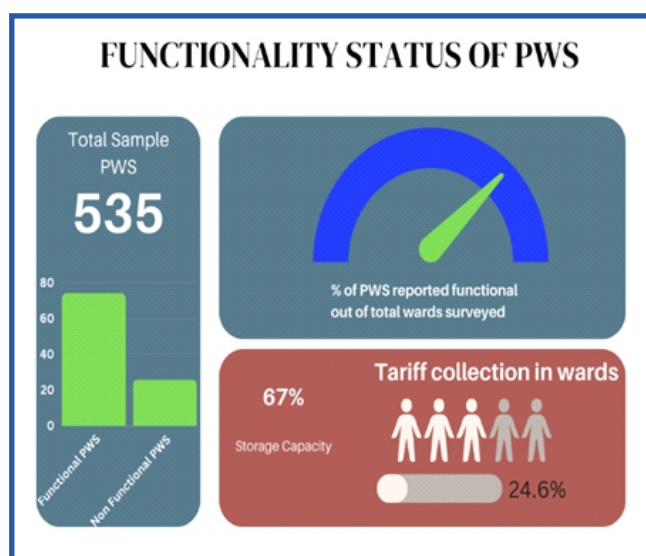
stakeholders with the necessary skills to leverage technology effectively and optimise water supply services.

### Monthly Meeting and Jal Chaupal

*Jal Chaupal* is a community engagement initiative that aims to facilitate dialogue and collaboration among various stakeholders to address water-related challenges and promote sustainable water management practices. It brings together community members, local leaders, government officials, and other stakeholders to discuss water issues, find collective solutions, keep beneficiaries informed, and ensure proper documentation (HCR register and receipt book).

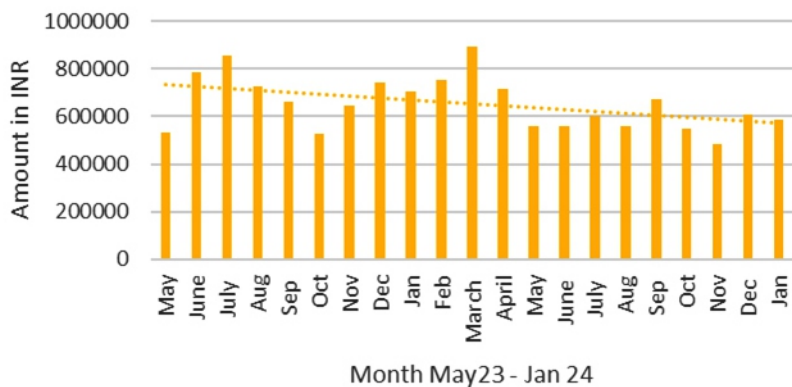
### Shift from pen-paper-based record keeping into digital mGramseva portal

Through these initiatives, a total of Rs. 13,717,600 has been collected by WIMCs between May 2022 and January 2024. Much of this collected amount has been spent by WIMCs on paying electricity bills and minor repair costs, and Anurakshaks' incentives as committed funds from O&M from the state through GP were





Monthly collection



transparency and visibility into tariff collection and expenditure records, enabling more efficient management of financial resources. Consistent follow-up efforts have yielded promising results, with over 80% of WIMCs managing functional PWS and initiating tariff collection. Additionally, approximately 30% of households are consistently paying monthly user charges.

### mGramseva Overview

The mGramseva web portal (<https://pejyalbihar.org>) governs access and usage. This initiative has been rolled out in the AKRSP-India Intervention Block comprising Sakra, Bandra, and Muraul in Muzaffarpur District of Bihar. The image and the following points, mentioned here, provide information about the mGramseva web portal and its various features. The portal offers a range of features aimed at enhancing efficiency and transparency in water management practices. Users can access the portal to manage beneficiary information, track operations, and facilitate the collection of tariffs related to the MGPNY.

### Brief about the 9 icons available on the mGramseva portal

- 1. House family register:** This icon provides a digital register containing basic details of active beneficiaries who have access to tap water at their doorstep.
- 2. Collect payment:** This icon allows the collection of payments, either in cash (Rs. 30 rupees) or through a message sent to the beneficiaries.
- 3. Bill and receipt download:** Anurakshaks can download the monthly bill and receipt, which are shared on WhatsApp.

क्र. सं. : 2584

दिनांक : 15/08/23

**मुख्यमंत्री ग्रामीण पेयजल निश्चय योजना**  
वार्ड क्रियान्वयन एवं प्रबंधन समिति

ग्राम पंचायत डिहली ईशहाक, वार्ड संख्या - 04, प्रखण्ड - शकरा, जिला - मुजफ्फरपुर

**रख-रखाव, पेयजल एवं बिजली शुल्क हेतु रसीद**

उपभोक्ता का नाम मुल्का कुमारी

पिता/पति का नाम विनायक कुमार पता - डिहली ईशहाक, माह. 25 ME

वर्ष 2023 रूपया 30/- सधन्यवाद पाया।

विद्युत शुल्क प्रतिमाह	= 30/-
पानी शुल्क प्रतिमाह	30/-
कुल शुल्क प्रतिमाह	

बिजली या अन्य उपकरणों के लिए पानी का उपयोग हो सकता है।  
स्रोत पट्टे पर धुलाई : 2100/- रूपया  
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(अध्यक्ष, वार्ड क्रि. एवं प्र. समिति)  
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delayed, prompting WIMCs to utilise the collected funds.

Initially, AKRSP(I) provided support to each WIMC by supplying 10 receipt books and one master register,

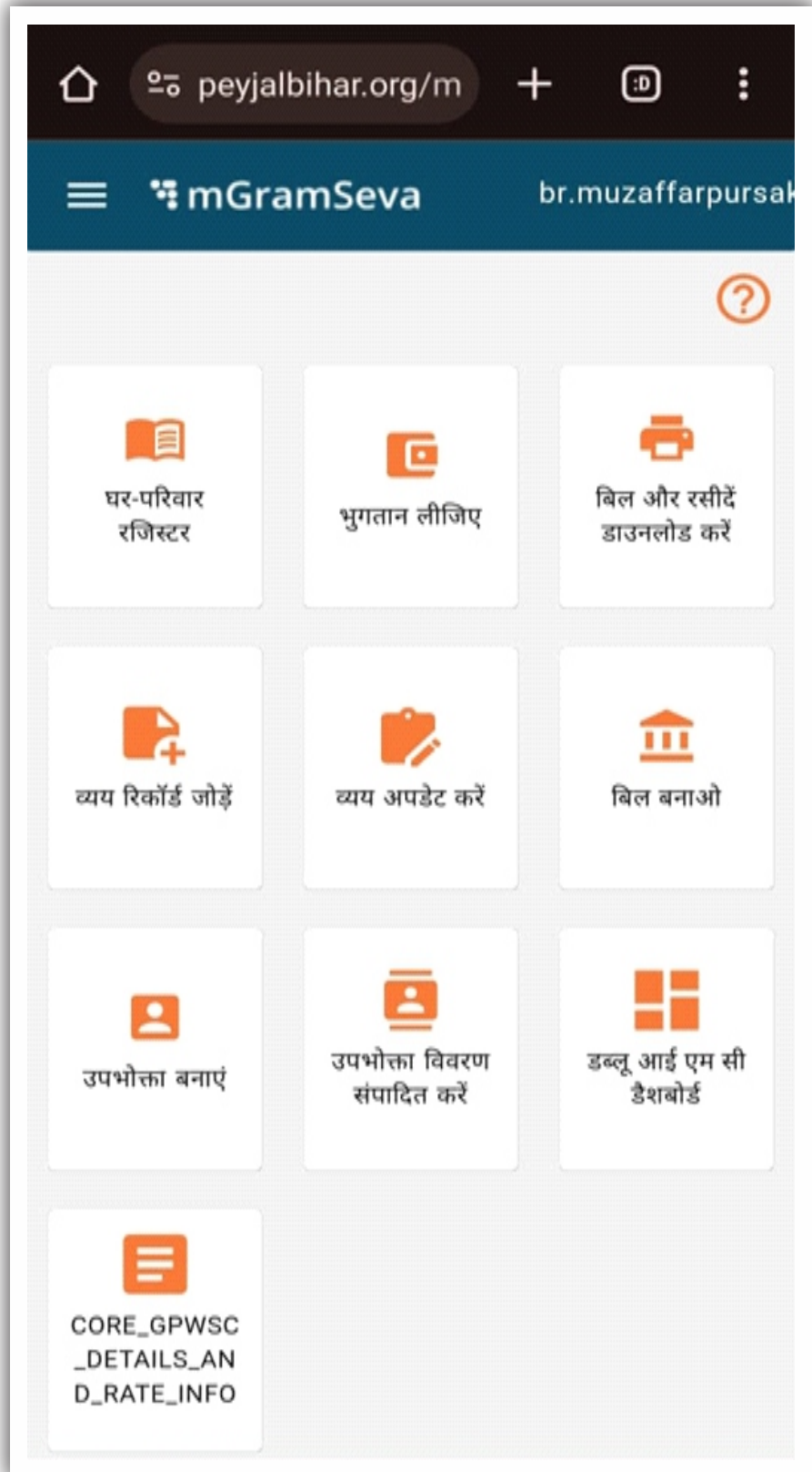
facilitating the proper recording of collections and expenditures. Since November 2023, WIMCs have been undergoing training and transitioning to the mGramseva digital platform. This platform offers enhanced



## SPECIAL FEATURE – OPERATION AND MAINTENANCE

4. **Add income and expenditure report:** Anurakshak can use this icon to add monthly expenditures related to the water systems, including maintenance bills, electricity bills, and tank and cleaning bills.
5. **Update expenditure:** This icon enables the correction of any missing details or bills discovered at the end of the month.
6. **Generate bill:** To generate bills for active beneficiaries, Anurakshak use this icon to select the billing month and year every month.
7. **Add beneficiary:** Anurakshak can add the details of beneficiaries who wish to have a tap at their doorstep. The added beneficiaries are included in the bill generation list for the following month, and messages are delivered to them by the Anurakshak.
8. **Rectify beneficiaries' details (active and disable):** This option allows Anurakshak to rectify errors in the details of beneficiaries. It provides an editing option to update and correct the beneficiary information.

Through this portal, every household gets a monthly SMS for pending bills, and once they pay the bill, they also get payment confirmation through the mGramseva portal. The portal is being managed at the WIMC level by Anurakshaks, and they generate monthly bills and send payment confirmations to payee households on their registered mobile numbers. Anurakshaks can update the monthly expenditures through the portal, which can be monitored at different levels by system functionaries. As of today, 394 out of 548 WIMCs are using the mGramseva portal for tariff and expenditure management. By the end of March, all 548 WIMCs are



expected to be integrated into the portal. This widespread adoption of the mGramseva portal signifies a significant step towards digitising and streamlining water management

processes, ultimately contributing to improved efficiency and transparency in service delivery. By the end of March, all 548 WIMCs will be using this portal.





## Enhancing local capacity for operation and maintenance through skill development, training, equipping, fair remuneration, and efficient response mechanisms

- Vikramaditya Das, Grameen Sahara<sup>1</sup> working with TATA Trust

### Introduction

Access to clean water is a basic human necessity, yet it persists as a challenge in rural areas. Compounding this issue are concerns regarding both the quality and source of water. In many rural regions, water supplies are primarily sourced from groundwater and are often consumed directly with limited filtration or quality checks, which poses significant safety risks. Despite the presence of Jal Jeevan Mission (JJM), which envisages providing safe and adequate drinking water through individual household tap connections to all rural households. Assam, till now, has been able to connect only 50% of its population to functional household tap connections. The World Health Organisation (WHO) has found that microbiologically contaminated drinking water can act as a vehicle for diseases such as diarrhoea, cholera, dysentery, typhoid, and polio, leading to an estimated 5,05,000 diarrhoeal deaths annually.

### Critical Issue

In response to critical statistics highlighting water security in remote tribal villages in Assam, Grameen Sahara took proactive measures to empower these communities. Collaborating with Tata Trusts, they implemented the "Diversion-Based



A woman filling her bucket from a tap connection

Irrigation" project, serving as a lifeline for families in the upland areas of Kamrup district, Assam. This initiative aimed at ensuring a sustainable water supply for agricultural activities and drinking purposes.

Covering 22 villages, the project addressed the pressing need for water security, particularly in regions heavily reliant on agriculture for livelihoods. Through strategic interventions, Grameen Sahara

<sup>1</sup> Grameen Sahara is a Not-for-Profit Organisation which, from its very inception, has been engaged in promotion and strengthening of sustainable livelihoods. As on date, Grameen Sahara has been working with 60,500 poor and disadvantaged families from three districts of Assam and two districts of Meghalaya.



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Women join in a queue to fill their buckets from a community tap connection

sought to enhance the resilience and well-being of these marginalised communities.

Operations and Maintenance (O&M) stands as a cornerstone for ensuring the longevity, efficiency, and safety of critical assets like community drinking water supply structures and filtration systems. Despite its crucial role, O&M often encounters hurdles due to a lack of localised skills, insufficient capacity building, and inadequate response and remuneration mechanisms. This article explores the significance of localised skills in O&M and proposes strategies for enhancement. An essential aspect related to the community is inadequate capacity, which underscores the need for capacity-building initiatives. The organisation of participating community members into Water User Groups (WUGs) emerges as a pivotal element, enabling collective action and ensuring efficient management of water resources at the local level.

The implementations, achievements, and sustainability of the project hinge upon the strength of WUGs. Therefore, a meticulous approach was

adopted to organise WUGs in every location. From the outset, this enabled informed decision-making on various fronts, including the process and manner of community contributions such as labour, pipeline direction, outlet provision, regular fundraising, and rules for fund utilisation. All decisions were made collectively to foster a sense of ownership and accountability. To sustain interventions and uphold infrastructure across all ten Diver-

sion-Based Irrigation (DBI) locations, villagers established WUGs following guidelines provided by Grameen Sahara and Tata Trusts. Furthermore, these WUGs set up farmers' producer groups, particularly targeting female members, and conducted capacity-building training programs tailored to the needs of the group members under the supervision of WUGs. This comprehensive approach aims to enhance community involvement and ensure the long-term success of water supply systems.

It was an important component of the DBI project to cultivate a sense of ownership among the project beneficiaries. Through discussions with beneficiaries, it was ensured that members of WUGs would contribute their physical labour to all necessary construction works related to irrigation systems. Despite initial reluctance due to daily livelihood needs, farmers responded positively after understanding the importance of their contribution. As per the agreed conditions of the WUGs, members participated in activities such as forest clearance, stone removal, trench digging, and pipe laying, adjusting their involvement according to their schedules. Although this approach extended the



School children filling their water bottles at a Grameen Sahar intervention area





project timeline, it fostered a sense of ownership among beneficiaries towards the piping system. Project team members supervised these activities to ensure uniformity across locations. A total community contribution of Rs 69,70,900 reflected this ownership. Additionally, each WUG member contributed Rs 20 per month to a group account, sufficient for filter candle replacements every 6-9 months. Regular filter cleaning and backwashing were carried out voluntarily by WUG members. Water purifiers have been installed in the common place, in each of the 22 DBI villages, so that the villagers have easy and continuous access to safe drinking water. Before the implementation of the project, women had to travel a long distance to fetch water, even for domestic purposes, but now, after DBIS, they can easily fetch water, reducing women's drudgeries considerably.

This sustainable strategy has fostered active community involvement in both pre-and post-construction



A happy picture of school children

phases. This has cultivated an environment conducive to participatory decision-making, aimed at achieving the long-term sustainability of water supply systems.

Partnering with the government's JJM as an Implementation Support Agency is another strategy to take to extend the initiative to the last mile, by mobilising local communities,

especially women, to participate and take ownership of water resource management, water supply and greywater treatment, and its reuse. Grameen Sahara operates in two development blocks, covering 104 villages across the Kamrup and Goalpara districts of Assam. Functional assessments have been conducted to raise awareness among beneficiaries about the significance of ownership in ensuring a sustainable O&M approach for continued and sustainable water supply services.

### Empowering Community

The model of the WUGs has enabled the community, especially women, by creating opportunities to exercise management and leadership. The project enabled the same through capacity building encompassing various fields such as O&M, managing accounts, organising and recording minutes of the meetings, and liaising with Panchayati Raj Institutions. As a result, they have emerged as catalysts for positive change within their communities, actively contributing to the sustainable management of water resources and the overall development of their villages.



Two women walk after fetching water from a community water connection

## A journey from cyclone devastation to women-led water and sanitation transformation

- Chandrika Patnaik, Gram Vikas<sup>1</sup> (RWPF)

Cyclone Fani struck in May 2019, causing widespread devastation to the lives of Adivasi communities in the outskirts of the Chandaka Forest, Khurdha district, Odisha. Gram Vikas promptly provided crucial relief and rehabilitation support. In response to community interest, a longer-term community development effort commenced in 2020 involving six village habitations in Chandaka region. Dependent on forests with limited land ownership, men and women from these villages, work as daily wage labourers at construction sites or farmlands in neighbouring

Panchayats or Bhubaneswar, earning up to Rs 450 per day.

Gram Vikas collaborated with women's self-help groups (SHGs) in the villages to enhance their capacities for sustainable livelihoods and facilitate linkages with banks. Four SHGs from Phirikinali village namely Maa Dariani SHG, Maa Binapat SHG, Jeeban Saathi SHG, and Maa Kateni SHG were trained to prepare business plans for mushroom, organic manure, and poultry enterprises. They received financial assistance from Mission Shakti and sold their products locally, leading to increased household incomes.

### Growing confidence and aspirations

Phirikinali village, situated on the outskirts of Bhubaneswar, borders the densely forested Chandaka Elephant Sanctuary. For women and young girls in the village, open defecation posed challenges, as forest guards patrolling the core forest area often deterred them. Moreover, encountering elephant herds roaming freely in the sanctuary added to the risks.

Reflecting on these hardships, Jyotsna Sinku, a member of Maa Kateni SHG, shared, "Men can openly defecate in broad daylight just a few metres from the village. However, women rarely choose this option due to shame, except when very unwell or suffering from diarrhoea." Additionally, access to proper bathing facilities was a luxury. Jyotsna elaborated, "There are only two community standposts in the entire village, powered by solar energy. We have to fetch water from these standposts for bathing, washing clothes, and cooking. Carrying plastic bottles filled with water for over a kilometre to defecate deep inside the forest, away from the view of men and forest guards, consumes a significant amount of our time daily."



Reena Ugarsandi of Phirkinali proudly stands in front of her toilet and bathroom she and her husband built together

<sup>1</sup> Gram Vikas is non-profit organisation located in Odisha. Gram Vikas has demonstrated pathways to address issues of poverty and underdevelopment over 40 years now. Gram Vikas has institutional strengths to rely upon, memories to guide the way ahead, and collaborations, old and new. Gram Vikas is recognised as one of the pioneering organisations in WASH sector in India as well as in abroad.



Reena Ugarsandi, 35, President of Jeeban Saathi SHG in the village, emphasises the significant risk posed by encounters with wild elephants, in addition to concerns about forest guards. "We frequently encounter elephant herds in the forest, and each time, we must hide behind bushes, clinging to our lives until the herd passes. We wait silently before we can sit down anywhere, wasting time and enduring acute physical discomfort."

Rajani Hembram, President of Binapat SHG noted, "Open defecation by men, women, and children in and near the village creates an unsightly scene, causes unbearable stench, attracts swarms of flies and contaminates the environment."

The SHGs provided a platform for women to gather, collect savings, and offer loans. 40 out of 51 households in the village had women participating in the SHGs. During savings collection meetings, they discussed shared hardships, particularly the challenges posed by open defecation and the lack of private bathing spaces. Following a crucial meeting involving all four SHGs, the women of Phirkinali collectively resolved to address this issue. They decided to secure a loan against their accumulated savings in the SHG bank accounts to construct sanitation and water facilities in their village. Opting for a bank loan meant lower interest rates compared to those demanded by local moneylenders in the village.

In September 2022, the four SHGs contacted Gram Vikas for assistance in constructing toilets and bathing rooms and establishing a piped water supply for all households in the village. They also outlined their plan to raise a loan to finance the sanitation infrastructure. Subsequently, Gram Vikas collaborated with Wipro Cares to develop piped water infrastructure in the village,

including an overhead water tank and three water tap connections in each household.

### **Women lead the way and drive change**

Reforming the Village Development Committee (VDC) was imperative to coordinate this endeavour. Women assigned responsibilities among themselves and mobilised all households to attend a meeting to elect a new VDC. In October 2022, a meeting was convened where the importance of a robust VDC to tackle community challenges was discussed. After selecting candidates, a ten-member VDC was established. During the meeting, women spearheaded discussions on water and sanitation issues they faced, seeking support from all residents and the VDC to construct toilets and bathing rooms for every household.

Furthermore, the women emphasised their dialogue with the Gram Vikas team, who had committed to assisting in building piped water supply infrastructure in the village. This initiative aimed to ensure a 24x7 tap water supply to every household, providing women with more time for household chores, enabling better childcare, and crucially, guaranteeing the privacy, safety, and dignity of women and young girls during defecation and bathing.

The newly elected President of the VDC, 45-year-old Biranchi Banaraa, took a proactive approach to garner support from all community members. "During the meeting, we encountered resistance from some male members of our community," recalls Biranchi. "They were hesitant to invest in building toilets and bathing rooms in their homes, citing lack of time due to reliance on daily wages." Despite this, Biranchi remained resolute in supporting the

initiative, acknowledging the legitimate challenges faced by women and young girls in the village.

In response, Biranchi convened another village meeting to address opposition in the same month. He underscored the health and safety issues confronting the community, particularly women, young girls, and children. Biranchi emphasised that men and children also encountered difficulties during defecation, especially when elephant herds roamed the village, particularly during the paddy season. Multiple meetings were held between September and November 2022 to persuade all community members to support the initiative.

Jyotsna Sinku, President of Maa Kateni SHG, revealed that her husband, Jogendra Sinku, consistently criticised her, urging her to prioritise earning money over attending village meetings. Sita Chattar, 40, President of Maa Dariani SHG, recounted that her husband resisted assisting in constructing the toilet and bathing room at their home, fearing it would lead to financial loss for the family.

Biranchi acknowledges the formidable challenge faced by the women in persuading their families over six months. However, the women remained resolute in their commitment to having toilets at home, and after numerous meetings, all 51 households eventually reached a consensus.

### **Creating a life of dignity, leaving no one behind**

As part of the post-cyclone rehabilitation efforts in 2019, Gram Vikas initiated a mason training programme in the village. Rajani Hembram, the President of Binapat SHG, who participated in the training, stated, "Thanks to the three-month

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mason training, I can accurately estimate the material needed and also carry out the construction. Nine individuals from the village participated in the training, five of whom were women."

These five women proceeded to estimate the required materials for building toilets and bathing rooms, calculate the costs, and create a layout for each household. With the assistance of VDC members, they organised a village meeting to share the cost estimate and layout. They proposed that families collectively order materials from a single vendor to ensure cost-effectiveness.

In August 2023, after receiving the loan from the bank, SHG members placed orders for the required materials. Rajani mentioned encountering new challenges. "Eleven families were not part of any SHGs and were unable to afford the Rs 25,000 required to build a toilet and bathroom in their homes. The four SHGs decided to allocate a portion of the loan they received from the bank to support these

eleven families. This ensured that every household in the village would have sanitation facilities."

In September 2023, 20 households began constructing their toilets and bathrooms, led by women masons. "We can build the foundation, raise the plinth, and construct the walls on our own, thanks to the training provided by Gram Vikas. Each household will save up to Rs 9,000 in mason and labour charges. For the roof construction, we will consider employing a senior mason," shared Rajani.

Janaki Pingua, Secretary of Maa Kateni SHG, expressed satisfaction in contributing to the sanitation system's construction. "I calculated the materials. It was truly empowering to achieve so much without seeking assistance. We are determined to bring toilets to our homes, eliminating the need to roam the forests early in the morning or after nightfall. Our women and young girls will no longer have to endure indignity or face threats to their lives when they need to defecate outside."

The women of Phirikinali aim to complete the construction of toilets and bathing rooms for all 51 households by February 2024. Construction of the overhead water tank began in December 2022. While Gram Vikas provided all external materials, including bricks, cement, and steel, all families contributed labour to dig the foundation and lay the pipeline. The work was completed in October. Piped water supply will commence once construction of all toilets and bathrooms with tap connections is finished. This is a day eagerly awaited by the women of Phirikinali.

### Postscript

Seventy-eight families residing in this village now enjoy the convenience of 24X7 running water supplied through taps in their homes, all thanks to a 30,000-liter overhead water tank. The operation and maintenance of water facilities are the responsibilities of VDC. The user fee was fixed at Rs 50 per household consumed and collected by the VDC.

In October 2022, Gram Vikas partnered with Wipro Cares to implement the project Water Secure Initiative in six villages in two Gram Panchayats – Chandaka and Daruthenga in the Chandaka region in the periphery of Bhubaneswar on aspects of access to water, improved WASH behaviour, and water source sustainability. The project aims to bring water through taps in the six villages covering all the 470 households residing in these villages.

Currently, 1440 villages across 27 districts of Odisha and Jharkhand have a toilet and bathing facility for every household, with tap water. They have adopted safe sanitation and health practices and established a community monitoring system to ensure the effective use of water and sanitation infrastructure.





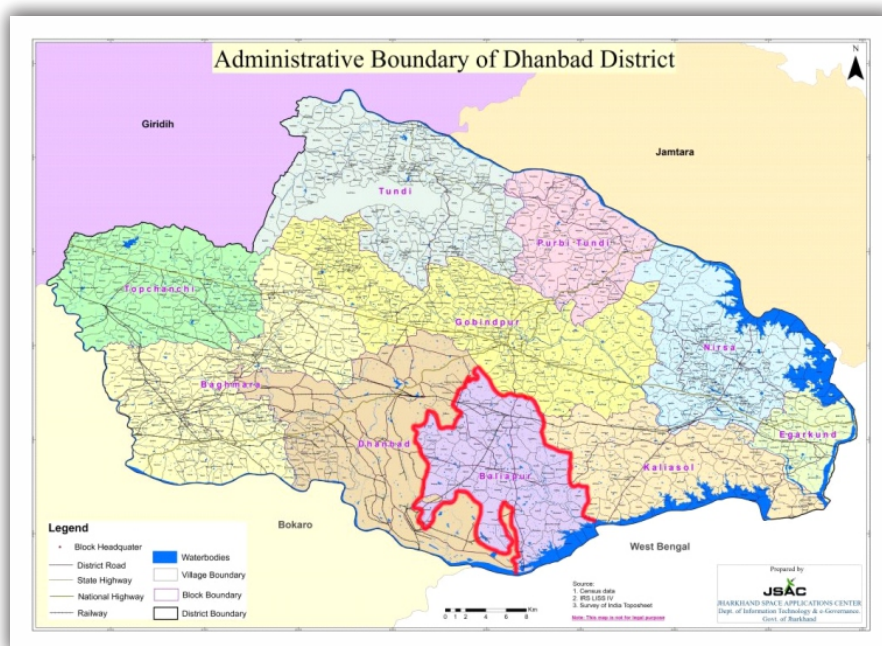
## Why is it Important to Effectively Operate and Maintain Surface Water-based Piped Water Supply in Habitations Affected by Groundwater Contamination – Learnings from Gharbar Panchayat in Baliapur Block of Dhanbad District

- Eklavya Prasad, Managing Trustee<sup>1</sup>, Megh Pyne Abhiyan<sup>2</sup>

### Mega Rural Water Supply Programme in Baliapur Community Development Block

**B**aliapur Community Development (CD) block has 23 Panchayats (Aamjhar, Aamtal, Alakhdiha, Baghmara, Baliapur Purb (East), Baliapur Pashchim (West), Baradaha, Bhikhrapur, Birsinghpur, Chandkueeya, Chhatatand, Dolabar, Dudhiya, Gharbar, Jagdish, Karmatand, Kusumatand, Mukunda, Palani, Parasbaniya, Pradhankhanta, Sindurpur, and Surunga)<sup>3</sup>. Out of these, a total of 15 Panchayats; Aamjhar, Baghmara, Baliapur Purab (E), Baliapur Pashchim (W), Baradaha, Bhikhrapur, Birsinghpur, Chhatatand, Dolabar, Dudhiya, Gharbar, Jagdish, Kusmatand, Sindurpur, and Surunga are part of the 1<sup>st</sup> phase of the Mega Rural Water Supply Programme (MRWSP) under the Department of Drinking Water and Sanitation (DWSD), Government of Jharkhand (GoJ) supported by the National Bank for Agriculture and Rural Development (NABARD) for Rs 71.96 crore (Rs 719.60 million).

Under the first phase of MRWSP, water is sourced from the Damodar River and supplied to a population of



74,626 people (as per the 2011 census) in 41 villages across 15 Panchayats. Damodar river water is first treated at the water treatment plant (WTP) established at Sheetalpur, Kesariya Mor in Baliapur CD Block. For the execution of the first phase of MRWSP, Chennai-based Shriram EPC Limited was identified as the implementing agency.

It is believed that the first phase of MRWSP was in response to the fluoride contamination in groundwater in a few Panchayats in Baliapur CD

Block. The credit for MRWSP goes to the villagers of Brahman Tola (Gharbar revenue village, Gharbar Panchayat) as they played a vital role in creating awareness and initiating action in response to contaminated groundwater, outside the Panchayat since 2013. The project was initiated on 2<sup>nd</sup> February 2016, and was scheduled to be completed by 11<sup>th</sup> November 2018. However, it remains uncertain whether this MRWSP, which began in 2016, has been completed in its entirety.

<sup>1</sup> Managing Trustee of Megh Pyne Abhiyan MPA

<sup>2</sup> Megh Pyne Abhiyan (MPA) is a Public Charitable Trust that works on issues of water distress in East India. The primary focus of MPA is on safe and secure drinking water processes and technologies, participatory groundwater management, and hygienic & contextual sanitation management. MPA is committed towards resilience and adaptability of local rural communities, particularly in natural hazard prone regions.

<sup>3</sup> Dhanbad district (2024); Dhanbad district's official website; Baliapur Block Voter List; Accessed on March 15, 2024 - <https://dhanbad.nic.in/baliapur-block-voter-list/>

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### Mega Rural Water Supply Programme in Gharbar Panchayat

Gharba Panchayat consists of 6 revenue villages, 12 wards and 20 hamlets. These 20 hamlets have 1,275 households.<sup>4</sup> As of 1<sup>st</sup> November 2022, the piped drinking water supply was dysfunctional in 11 hamlets; Kharikabad Basti Kulhi, Rai Basti Kulhi, Rai Dibudih, Dibudih, Mahato Dibudih, Vijaydih, Kharikabad Dahardih, Kalajhod, Rai Tola, Majhi Tola, and Gope Baori Tola. Among these, all but Mahato Dibudih had either partial or complete piped water networks, all of which were dysfunctional.<sup>5</sup>

During a camp organised by the Dhanbad district administration under GoJ's *Aapki Adhikar, Aapki Sarkar, Aapke Dwar* (Your Right, Your Government, At Your Doorstep) on 4<sup>th</sup> November 4 2022, ward members, Anganwadi members, and villagers registered complaints regarding the dysfunctional piped water supply system in their respective hamlets. Additionally, in the nine hamlets where piped water supply was operational, complaints were lodged about water supply needing more filtration and irregular supply.

Six months after the camp in November 2022, the piped water supply was made functional in 19 out of the 20 hamlets, with Mahato Dibudih remaining deprived of a piped water connection due to the absence of laid pipelines. Despite the restoration of piped water supply in 10 hamlets between November-December 2022 and January 2023, residents continued to face challenges such as intermittent supply, fluctuations in water quantity, varying supply times, and the absence of redressal systems.

Similar challenges were experienced in the nine hamlets where piped water supply was operational before November 2022. Moreover, these habitations faced issues with poor water quality supply during the monsoon season.

#### Fluoride contamination in ground-water in Baliapur CD Block

In 2018, Megh Pyne Abhiyan (MPA) took the initiative to voluntarily test 56 water sources, including hand pumps and dugwells, for fluoride contamination across 14 Panchayats within the Baliapur CD Block. These Panchayats included Aamtal, Alakhdiha, Baliapur Pashchim (W), Chandkueeya, Dolabar, Gharbar, Karmatand, Kusumatand, Mukunda, Palani, Parasbaniya, Pradhankhanta, Sindurpur, and Surunga. The testing was facilitated by employing the Field Testing Kit (FTK) developed by LTEK Systems, Nagpur.

Of the 14 Panchayats where water testing was conducted, 6 Panchayats (Baliapur Pashchim (W), Dolabar, Gharbar, Karmatand, Sindurpur and Surunga) are in the first phase of MRWSP. Water testing for fluoride contamination in groundwater in 14 Panchayats indicated the following:<sup>6</sup>

- All 56 samples indicated the presence of fluoride in varying proportions
- Nineteen of the total 56 sources (34 per cent) tested had fluoride below the desirable limit (<1 milligram/litre (mg/l)) in 11 Panchayats
- Sixteen of the total 56 sources (29 per cent) tested had fluoride at the desirable limit (1 mg/litre) in 11 Panchayats

- Eight of the total 56 sources (14 per cent) tested had fluoride at the permissible limit (1.5 mg/l) in five Panchayats
- Thirteen of the total 56 sources (23 per cent) tested had fluoride above the permissible limits (> 1.5 mg/l) in seven Panchayats
- The Panchayats with fluoride above the permissible limit were Alkadiha, Baliapur Pashchim (West), Chandkuiya, Dolabar, Gharbar, Mukund and Surunga
- Panchayats with fluoride above the permissible limit and which are included in the first phase of MRWSP were Baliapur Pashchim (West), Dolabar, Gharbar and Surunga

The results of the water quality tests highlight the critical need for the cautious and diligent implementation of the first phase of the MRWSP. It was imperative to ensure that residents of the four Panchayats had continuous access to fluoride-free drinking water, thereby reducing their dependence on contaminated groundwater sources. The periodic monitoring of fluoride contamination and MRWSP in Baliapur CD Block by MPA between 2018 and 2020 revealed significant challenges in the piped water supply system.

Delays in implementation, sporadic progress, inadequate awareness of the health risks associated with consuming water containing high levels of fluoride, and the absence of functional formal institutions and redressal systems at the village level posed significant obstacles to providing safe drinking water to the people. Additionally, the implementing agency's prioritisation of infrastructure creation over the

<sup>4</sup> Megh Pyne Abhiyan (2022); Study report of fluoride affected Gharbar Panchayat; Dhanbad

<sup>5</sup> Megh Pyne Abhiyan (2022); Daily bulletin of Status of Piped Water Supply in Gharbar Panchayat; Dhanbad

<sup>6</sup> Megh Pyne Abhiyan (2018); Drinking water quality test report of Baliapur CD Block; Dhanbad





effectiveness of the MRWSP further hindered progress in ensuring access to safe drinking water.

Addressing these issues required a comprehensive approach, encompassing not only infrastructure development but also community engagement, awareness campaigns, and the establishment of robust monitoring and redressal mechanisms. Only through such measures could the objectives of the MRWSP be fully realised, safeguarding the health and well-being of the affected communities.

### **Fluoride contamination in groundwater and status of Mega Rural Water Supply Programme in Gharbar Panchayat**

Post-Covid, MPA resumed its visits to the Baliapur CD Block in 2022, specifically focusing on the Gharbar Panchayat, to monitor the fluoride problem and evaluate the status of the piped water supply. A comprehensive landscape study was conducted to document the existing drinking water practices and the status of the Megh Pyne Rural Water Supply Project (MRWSP) within the Panchayat.

During the study in Gharbar Panchayat, MPA collaborated with the School of Environmental Studies (SOES) at Jadavpur University (JU) in Kolkata. Together, they aimed to test all water sources, including hand pumps (private and government), dug wells (private and government), the government's solar water supply, ponds (private and government), locally packaged water, and river water. The testing was conducted using Ion Selective Electrode (ISE) technology in direct potentiometry for analytical purposes.

A total of 308 water samples were collected and tested, alongside 160

human urine samples, to comprehend the extent of fluoride presence in both. The testing conducted by SOES, JU, Kolkata revealed alarming results. It established the presence of fluoride contamination above 1 mg/l in 47% of the water samples. Additionally, SOES also confirmed the presence of fluoride above 1 mg/l in human urine in 83% of the total samples tested.

These findings showed the urgent need for further intervention to address the fluoride contamination issue in Gharbar Panchayat. It highlighted the critical importance of ensuring access to safe drinking water for the residents and the necessity of comprehensive measures to mitigate the adverse effects of fluoride contamination on human health.

### **Impact of consuming fluoride-contaminated water for drinking**

The absence of a consistent and dependable fluoride-free drinking water supply provided by the Megh Pyne Rural Water Supply Project (MRWSP) left economically vulnerable communities in the Panchayat with no alternative but to consume fluoride-contaminated water, significantly impacting their health. The lack of continuous and reliable piped water supply forced 75 families in Kalajhod Revenue Village to rely on eight groundwater-based water sources to meet their drinking water needs.

Among these sources, primary school students consumed water from a groundwater-based solar water supply system, while villagers used another groundwater-based solar water supply system in the village. Unfortunately, both systems produced water with fluoride levels far exceeding safe limits, measuring 4.43 mg/l and 7.47 mg/l, respectively. As a

result, there was a high incidence of dental and skeletal fluorosis in the village, highlighting the dire consequences of inadequate access to safe drinking water.

### **What is missing**

In Gharbar Panchayat, the absence of well-defined and participatory processes to monitor primary and secondary water pipelines has led to regular complaints of leakage from various hamlets, disrupting water supply. Additionally, there is no mechanism in place to monitor the quality and quantity of water supplied regularly through the piped water system. The entire operation relies on an operator appointed by Shriram EPC Limited, lacking community involvement and support.

The occurrence of these problems is attributed to the absence of a Village Action Plan (VAP) and clear Operation and Maintenance (O&M) arrangements for providing piped water supply to all households. The sustainability of the water supply system hinges on community ownership, planning, implementation, management, and O&M. However, the current implementation lacks community involvement and support.

O&M is crucial for ensuring the functionality and longevity of the MRWSP. According to Jal Jeevan Mission (JJM) operational guidelines, management and O&M of the piped water supply scheme by the Gram Panchayat and/or its sub-committee are essential for long-term sustainability. However, Gharbar Panchayat lacks this structure.

A decentralised, demand-driven, community-managed approach to implementation would foster a sense of ownership among local users and promote trust and transparency, leading to better implementation and long-term O&M of water supply

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systems. This approach would ensure equitable access to supplies and regular supply to every household.

The existing scenario in Gharbar Panchayat can be understood in multiple ways. Firstly, there is a situation where risks are allowed to increase due to indifference towards providing a fluoride-free water supply. Secondly, a situation where failure to acknowledge and address fluoride contamination and unreliable water supply exacerbates risks, resulting in large-scale impacts. Lastly, the failure to plan and administer actions corresponding to these issues accumulates impacts over time, making it difficult to mitigate risks and associated impacts.

The crisis in Gharbar Panchayat illustrates the urgent need to address the problems related to piped water supply in the Panchayat through comprehensive and community-driven approaches.

### Way forward

The case of Gharbar Panchayat makes one realise why the O&M of surface water-based piped drinking water supply is so important in groundwater-contaminated habitations.

Despite initial problems of piped water supply in Gharbar Panchayat, it is suggested that Drinking Water and Sanitation (DWS) Division 2, Dhanbad implement the following measures in partnership with the residents of the Panchayats and the implementing agency

- ◆ Developing a panchayat-based framework and institutional mechanism for management, operations, and regular quality monitoring of piped drinking water supply system
- ◆ Constituting village-level sub-committee in all 20 hamlets in collaboration with Gram

Panchayat for monitoring piped water supply system and ensuring fluoride-free drinking water in all hamlets.

- ◆ Strengthening capacities of the Gram Panchayat and/or its sub-committee as per the Operational Guidelines for the Implementation of the Jal Jeevan Mission for facilitating proper functioning and O&M of piped water supply system
- ◆ Preparing local people as groundwater and water experts - *Bhujal Doots/ Jal Doots*, in all hamlets through a series of on-field trainings
- ◆ Making structural and non-structural plans for fluoride-free drinking water supply systems for all the hamlets
- ◆ Generating awareness on fluoride contamination, fluorosis, and ways to access safe and fluoride-free water in the Panchayat

- ◆ Establishing the processes for groundwater quality monitoring to ensure access to safe and fluoride-free drinking water
- ◆ Organising orientation workshop for government officials, technocrats, and medical professionals at the district level on fluoride contamination, fluorosis, and sustainable ways forward
- ◆ Planning a day's training workshop for panchayat functionaries in Baliapur CD Block
- ◆ Establishing Gharbar Panchayat as the model Panchayat for safe and fluoride-free drinking water to be replicated in other Panchayats with similar problems in the district

The above diverse measures will facilitate the creation of a Panchayat-based participatory framework to ensure safe piped drinking water to habitations affected by groundwater contamination.





## Utilising App-Based Solutions System Strengthening and sustainability

- **Jairam Pathak**, Senior Programme Officer, Aga Khan Foundation



The Jal Jeevan Mission is a transformative initiative by the Government of India aimed at providing safe and sustainable drinking water to all rural households. As around 14.56 crore households (more than 75% of the total) now enjoy access to safe drinking water, at the heart of this mission lies the efficient operation and maintenance (O&M) of water supply schemes. In our journey to support the government in achieving this goal, we have encountered few challenges and devised innovative solutions to ensure the functionality, sustainability, and quality of water supply systems in the area where Aga Khan Foundation is working. One of the key components of our success lies in the integration of app-based solutions to streamline operations, enhance capacity building, and ensure accountability.

Tracking the functionality of water supply schemes is crucial for timely maintenance and efficient service delivery. AKF leveraged app-based solutions to monitor the functionality of various components such as pumps, pipelines, and water treatment units in real-time. Through this android based real time tracker, field operators can report issues instantly, enabling swift responses and preventive maintenance measures. This proactive approach has significantly reduced downtime and ensured uninterrupted water supply to communities. This app works on input-based system and does not

## SPECIAL FEATURE – OPERATION AND MAINTENANCE

require any expensive and complicated sensors; therefore, it is easy to implement with a high potential of scalability. In addition to functionality status, it also captures key information on user satisfaction i.e. adequacy, regularity, and adequate pressure. This app is extremely helpful in getting information on collection of user charges by VWSC. These features make this app unique and useful.

As of now this system has been rolled out in 63 water supply schemes and AKF is planning to scale it up across five implementing districts.

### Capacity Building of Pump Operators and Village Water and Sanitation Committees (VWSC)

Pump operators play a pivotal role in the O&M of water supply schemes. To enhance their skills and knowledge, AKF has conducted comprehensive capacity-building programs focusing on technical aspects, troubleshooting, and water safety protocols. Additionally, we have empowered Village Water and Sanitation Committees (VWSC) with training sessions on documentation, financial management, and community engagement. By

strengthening the capacity of both pump operators and VWSC members, we have fostered a culture of ownership and accountability within communities, leading to more effective O&M practices.

This is extremely encouraging to note that 50% VWSCs in the intervention area of AKF regularly collecting user charges in the initial stage which will play a key role in effective maintenance of these water supply schemes. In the remaining villages the process is underway.

### Dedicated Cadre for Water Quality Monitoring

Ensuring the quality of drinking water is paramount for safeguarding public health. In line with this objective, AKF established a dedicated cadre of women trained in water quality monitoring (WQM). Five *Jal Sakhis* were selected from each village panchayat to go from village to village and test the quality of water coming to homes, and aware community towards importance of safe drinking water. AKF has trained these women to conduct regular testing of water samples at various points along the supply chain, including source, treatment, and distribution. AKF provides field testing kits, for which households do not have to pay. After

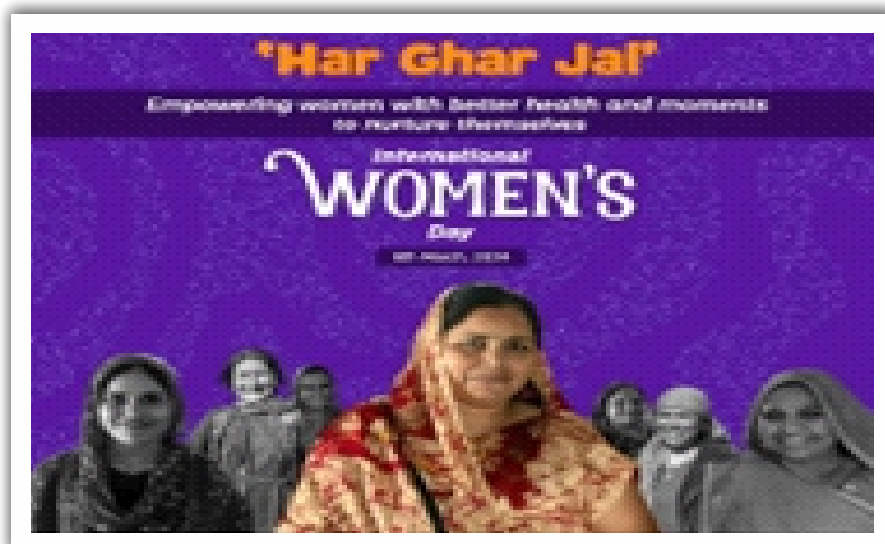
the test, *Jal Sakhis* write down the water report in a register and later uploaded it to the JJM Water Quality Management Information System (WQMIS) portal.

By prioritising Water Quality Monitoring, we are not only ensuring the safety of drinking water but also building trust and confidence among the communities.

### Focus on Groundwater Management and Source Sustainability

Groundwater is a vital resource for many rural water supply schemes. However, its overexploitation and contamination pose significant challenges to sustainability. To address these issues, we have implemented strategies for groundwater management (GWM) and source sustainability. This includes ground water recharge initiatives, rainwater harvesting, and community-led conservation efforts. App-based solutions are utilised to monitor groundwater levels, track extraction rates, and identify potential risks to aquifer health. By promoting sustainable practices and community participation, AKF is supporting in safeguarding groundwater resources for future generations.

Innovation in operations and maintenance is essential for the success of Jal Jeevan Mission in ensuring sustainable and safe drinking water for all. By harnessing the power of app-based solutions, focusing on capacity building, and prioritising water quality and source sustainability, we are overcoming challenges and achieving tangible results on the ground. As we continue our journey, we remain committed to leveraging technology and community engagement to build resilient water supply systems that meet the needs of rural communities across India.





## Journalists/ Editors from 13 Central European (CE) Countries Interacted with DDWS Officials to Showcase Jal Jeevan Mission and Swachh Bharat Mission (G)

- NJJM

A delegation comprising 20 journalists/ editors from 13 countries of Central Europe (CE) visited India from 13<sup>th</sup>-20<sup>th</sup> March 2024 as part of the familiarisation programme organised by the Ministry of External Affairs. The familiarisation programme is aimed at exposing the visiting delegates to different aspects of India. The programme for the CE countries journalists included engagements with Ministers/ Senior Government Officials, having cultural and spiritual experience, followed by field visits highlighting India's success in the area of trade, tourism, technology, industry, electoral democracy, women empowerment among others. As part of their familiarisation tour, the media delegation from CE countries were briefed about Jal Jeevan Mission and Swachh Bharat Mission (Grameen) as the success of the Missions has drawn appreciation from far and wide. Based on the interaction and field visit, the visiting media team would be publishing articles in their home countries to showcase India's intervention in WaSH sector among others.

On 15<sup>th</sup> March 2024, CE delegates visited DDWS, Ministry of Jal Shakti (MoJS) to exchange ideas, experiences, learnings and to learn about how world's largest water supply initiative – Jal Jeevan Mission and world's largest behavioural change programme – Swachh Bharat Mission (Grameen) is being implemented in India inspite of vast geographical,



cultural and demographic diversities and the outbreak of Covid pandemic right after the launch of JJM by the visionary Prime Minister.

At the onset, Dpt. Secretary, Ministry of External Affairs, set the context of the visit of media representatives from CE countries to India. Shri Chandra Bhushan Kumar, AS&MD – NJJM welcomed the visiting media delegates and representatives from MEA for the interactive session to learn the work done in the field of water and sanitation by the Department of Drinking Water and Sanitation, Ministry of Jal Shakti, GoI. He also introduced the Secretary – DDWS, & Joint Secretary & MD – SBM (G).

Smt. Vini Mahajan, Secretary – DDWS, MoJS, in her opening remark, said that JJM is the most ambitious programme to provide potable water of definite standards to the entire

rural population of India. The nature of the geographical strength has spread across more than 6,000 villages of 34 States/ UTs of rural India. As per the Constitution of India, water and sanitation are done by the collaborative efforts by the federal government and provisional government where the federal government provides funding support, technical knowhow, various guidelines and provincial government, State departments and local bodies implements on ground. The federal government has prioritised water and sanitation as it has direct impact on health, economic status, time, women dignity & safety and impact on climate. She stated that in India on waterfront challenges like water accessibility and quality are major which under Jal Jeevan Mission are focused, ensuring water accessibility as close as possible to the homestays and of prescribed quality.

The programme faced many issues and challenges in its implementation, like pandemic outbreak right after the launch of the scheme which affected the pace of work, vast geographic variations, huge population, water issues like geogenic contamination, water shrinkage in hot season, difference in the quantity of water availability from place to place, and so on. In spite of all the challenges our motto is to ensure water availability and accessibility to make the rural life particularly of women's life ease.

On Sanitation open defecation was the decade long challenge that has been addressed in the first phase of Swachh Bharat Mission. Our sanitation programme is the largest ever behavioural change programme where large IEC campaigns, Inter Personal Communication happened from 2014 as a result in 2019 the nation became open defecation free, all the local bodies declared themselves as ODF. Our efforts culminating in open defecation free status and going forward focusing on solid and liquid waste management in villages focusing on promotion of circular economy specially through reuse and recycle of various wastes like greywater, organic and biodegradable waste, plastic waste etc.

Jal Jeevan Mission the world largest water supply programme is the most ambitious programme of our government. The mission was announced by the Prime Minister on the 15<sup>th</sup> August 2019 and it took around six months to actually start the work. Many rounds of stakeholder consultations with States/ UTs and other partners happened as in the Indian Constitution, water and sanitation is a subject of states. Operational Guidelines for the mission was developed and issued in December 2019 and it was then that the work started. In spite of challenges, the mission is progressing

ahead and achieving many milestones.

Shri Chandra Bhusan Kumar, AS&MD – JJM made a brief presentation on the progress made so far, challenges faced while implementing the mission, water quality aspects, source sustainability efforts, and other verticals of the mission. He first explains the meaning of the Mission, *Jal* means water, *Jeevan* means life so it's a mission to provide quality water which is quite essential for life. He said that ever since independence, attempts have been made in the country to provide drinking water to the citizens focusing the community targeting habitations. But JJM is a paradigm shift as for the first-time partnership has been made with the local community and local governance to safeguard the water supply infrastructures developed in villages. The unit of coverage shifted from habitation to household. The delivery standard enhanced to 55 lpcd, standard water of Bureau of Indian Standard (BIS) 10500 focusing on functionality, regularity, adequate pressure and long-term supply of water. The mission ensures community participation in planning, implementation, operation and maintenance of water supply

schemes and for this skill development of community is one of the core activities. Sustainability of schemes and drinking water sources is also focused under the mission.

In spite of many challenges, on an average, almost 1 new household tap connection is being provided every day in each second since 1 January 2023. Today more than 14 crore tap connections, catering to more than 75% rural households have been made available inside their premises, which was merely 16% at the time of the launch of the mission.

The mission is the highest ever water supply programme. What sets the JJM apart is its speed and scale of implementation. Every year, on an average 24.5 million tap connections are provided catering to a population of around 117.6 million, almost 1.8 times higher to that of France. In just about 4.5 years, more than 112.7 million rural households with more than 563.5 million people have been benefitted under the JJM. This is more than the population of European Union. Even Uttar Pradesh (the largest State) has provided three times as many tap connections as the population of world's 6 largest country Australia. In Uttar Pradesh in





just about 4.5 years, more than 20.73 million rural households with more than 103.65 million people have been provided tap water.

Not only households but the mission is also ensuring potable tap water in schools and day care centres. The mission is taking remedial actions and WQMIS to ensure quality of water supplied. In India a network of 2,120 water quality testing laboratories has been established at state, district and block level. The laboratories are opened for general public to test their water quality by paying a nominal charge. Around 2.39 million women have been trained for water testing through Field Test Kits (FTKs). In one year (2023-24), 6.9 million water samples tested in laboratories and 11.34 million water sample tested by trained women using FTKs. Today clean drinking water is being provided in all Arsenic and Fluoride affected habitations.

Shri Chandra Bhushan further added that transparency is a cornerstone of Jal Jeevan Mission. Information regarding water quality, supply, and expenditure is readily available to the public through various technological platforms. This ensures accountability and fosters trust between the government and the citizens.

The impacts of Jal Jeevan Mission extend far beyond providing access to clean drinking water. It has improved the quality of life for millions, particularly women and girls who no longer have to trek long distances to fetch water. The mission has empowered women by involving them in decision-making processes and ensuring their active participation in water management.

As Jal Jeevan Mission continues its journey, sustainability remains a key focus. Almost 65% of water supply are from ground. Efforts are underway to ensure source sustainability through rainwater harvesting and



recharge initiatives, as well as financial and institutional sustainability through user charges and community ownership.

Jal Jeevan Mission represents a monumental effort to transform the lives of millions of rural Indians by providing them with access to clean drinking water. It is a testament to the power of collective action, innovation, and unwavering determination. As the mission moves forward, it holds the promise of a brighter, healthier future for rural India.

Shri Jitendra Srivastava, JS&MD – SBM (G) made a brief presentation on various aspects and progress made so far under the mission. He said that SBM (G) phase one has been recognised across the world as the largest behavioural change programme. When in 2014 SBM (G) started more than half of the country was defecating in open and women are mostly affected due to unavailability of sanitation facilities. Swachh Bharat Mission became a *Jan Andolan* (mass movement) for a cleaner, healthier and more sustainable India. The campaign was not merely about an asset creation, but behavior change among each and every person as a result India declared as Open Defecation free in 2019. Over 100 million individual household toilets

were constructed within five years. The SBM (G) Phase II focuses on ODF Plus activities, based on 3 pillars, i.e i). Maintaining ODF status, ii). Each village should have solid and liquid waste management system in place, iii). Visual cleanliness of village. He further shared the progress made so far and various initiative taken.

The presentation on Swachh Bharat Mission (G) and its progress and impacts was followed by a question-and-answer session, where the Secretary – Department of Drinking Water and Sanitation (DDWS) addressed various queries from media delegates. The discussion highlighted JJM's commitment to transparency and inclusivity, with a focus on several key areas like quality, quantity of drinking water, source sustainability, use of green energy, gender perspective in programme management and transparency in programme management through participation of Rural Wash Partner's Forum.

**1. JJM's Management System:** It's a collaborative effort between federal government, provincial government, and local bodies. The central government provides funding support, technical assistance, and support to the provincial government. Local bodies and community are

involved in planning, implementation, operation and maintenance of the water supply system.

## 2. Behaviour Change Initiative to Stop Open Defecation:

Over the years regular efforts were taken to convince people. Open defecation was decades long practice which is not easy to break. Since 2014 massive IEC efforts are made, influencers like sports persons, actors, eminent personalities are spread the message on safe sanitation practice, the PM himself became the influencer. Local peoples are engaged as change leaders, naming and shaming method implies. Day to day IPC campaigns done. In a nutshell a 360 degree massive behaviour change communication approach helped in stopping open defecation.

## 3. Climate Change and Water Resource Management:

Recognising the impact of climate change, particularly in the context of altered rainfall pa-

terns and groundwater recharge, JJM is focused on sustainable water source management. Groundwater, being the most cost-effective and familiar source, forms the primary supply, complemented by river and surface water. In regions where groundwater is scarce, alternative sources like river water are utilised. Upon completion of JJM, it is projected that approximately two-thirds of household water supply will be derived from groundwater, with the remainder from surface sources. In the Himalayan regions, spring water will also be utilised.

## 4. Collaboration for Funding and Experience Sharing:

JJM collaborates with various organisations, community-based organisations (CBOs), academic institutions, and development organisations in the WASH (Water, Sanitation, and Hygiene) sector. Global partners like UNICEF and WHO share experiences, aiding in knowledge exchange. The World Bank, for

example, shared JJM's experiences in a North African event, highlighting the benefits of international learning exchanges. Both the missions are implementing entirely by domestic funding of government.

## 5. Gender Perspective and Women's Leadership in Water Management:

The mission acknowledges the pivotal role of women in water management, given their traditional responsibilities in household chores. JJM mandates at least 50% female membership in each village water and sanitation committee. These committees are integral to planning, overseeing, and maintaining village water supply systems. Women are also engaged in self-help groups (SHGs) that manage the operational and maintenance aspects of water supply, including billing and chlorination processes. States are encouraged to train women in water quality testing, positioning them as key stakeholders and leaders in water governance.





## Empowering Future Leaders Assam's *Jal Vidya* Programme Takes a Leap

- NJJM

In a significant stride towards cultivating water sustainability and enhancing public health, the Department of Higher Education of Assam took a monumental step on Tuesday, March 5, 2024. The department signed a Memorandum of Understanding (MoU) with the Jal Jeevan Mission, paving way for the implementation of the '*Jal Vidya*' programme. This initiative is set to complement and broaden educational and learning objectives, specifically targeting the awareness of college students regarding water quality and its far-reaching implications.

The *Jal Vidya* programme, stemming from the collaboration between the Department of Higher Education and the Jal Jeevan Mission, marks a visionary move to address the critical need for water literacy among the youth. This programme is designed to impart comprehensive knowledge to college students, equipping them with the tools to understand, evaluate, and contribute to ensuring the quality of water sources in the region.

One of the primary outcomes of this MoU is the establishment of a robust curriculum that integrates "water quality" education seamlessly into college courses. Through specialised modules, students will delve into the nuances of water testing, purification processes, and the impact of water quality on human health. This interdisciplinary approach aims to produce a cadre of informed individuals capable of addressing the challenges posed by water pollution and scarcity.

The implications of this educational initiative extend far beyond the



confines of academic institutions. As students gain a deeper understanding of water quality, they become advocates for sustainable water practices in their communities. Armed with knowledge, they can actively contribute to the preservation of water resources and the improvement of overall water quality standards.

The connection between water quality and public health is a linchpin in this initiative. Unsafe water can lead to a myriad of health issues, contributing to high mortality rate and placing a burden on healthcare systems. By instilling a sense of responsibility and awareness among the youth, the *Jal Vidya* programme not only addresses the educational gap but also acts as a pacemaker for positive change in public health outcomes.

Moreover, the programme aligns with the broader goals of Jal Jeevan Mission, which seeks to provide safe and sustainable drinking water to all

households. The educational aspect is a crucial pillar in achieving this mission, as it ensures that future leaders and decision-makers are well-versed in the importance of water quality and its implications on the well-being of citizens.

In conclusion, the signing of the MoU between the Department of Higher Education of Assam and Jal Jeevan Mission heralds a new era of education and awareness. The *Jal Vidya* programme not only enriches college students with knowledge but also sets the stage for a more sustainable and health-conscious society. As we look to the future, it is these informed individuals who will lead the charge towards a water-secure and resilient Assam.

The Department of Higher Education of Assam on 5<sup>th</sup> March 2024, signed a Memorandum of Understanding (MoU) with Jal Jeevan Mission for *Jal Vidya* programme to educate college students on water quality.  
<https://shorturl.at/jvlZO>

## Visits

### AS&MD – NJJM Visit to Karnataka

AS&MD – NJJM conducted a visit to Kodihalli and Poojanahalli villages in Chikkaballapura District, Karnataka, on 11<sup>th</sup> March 2024. The purpose of the visit was to evaluate the progress and implementation status of the Jal Jeevan Mission in the state. During this visit, AS&MD – NJJM engaged with VWSC members and the local community to assess the impact of JJM on their lives and to gather information about the status of drinking water schemes managed by VWSCs. Accompanying AS&MD – NJJM were the Director and Chief Engineer of RDWSD, the CEO of Chikkaballapura, and the respective EE of the district.



## Meetings/ Webinars

Dr. Syama Prasad Mookerjee National Institute of Water & Sanitation (SPM-NIWAS), DDWS organised a 3-days training programme from 11<sup>th</sup>-13<sup>th</sup> March 2024 on "Source Sustainability for Drinking Water" with the assistance of CGWB at SPM-NIWAS campus, Kolkata. On the third day of the training programme, AS&MD – NJJM

addressed the participants and emphasised on source sustainability, without which water supply benchmarks cannot be assured. This workshop was organised with support from CGWB aimed to help participants in designing recharge structures and implementing the same wherever needed.





## Technical Committee Meeting

The Technical Committee of Jal Jeevan Mission met for the 9<sup>th</sup> time on 18<sup>th</sup> March 2024, jointly led by the Principal Scientific Advisor and the Secretary – DDWS, and considered 2 technologies for "Web & mobile-based tool for mapping water supply networks on GIS network in rural areas". The Technical Committee also reviewed 8 approved R&D projects supported by JJM and under-

taken by 6 Scientific Institutes. Emphasis was given for commercialisation of the R&D products for the benefit of the States/UTs. The meeting was attended by AS&MD-NJJM, AS -MoHUA; JS&MD-SBMG; JS- NJJM, Directors from NJJM, members of the TC committee and special invitees.

## Brainstorming Session on Construction to Collaboration

A brainstorming session, in hybrid mode, under the chairpersonship of Secretary DDWS was held on 21<sup>st</sup> March 2024 with participation from different Central Ministries, State/ UTs, Rural Wash Partner Forum (RWPF) and senior officers from DDWS.

Joint Secretary, NJJM welcomed the participants and requested representatives of different Departments/ Organisation/ States to actively participate in the workshop.

1. Asset Management and Ownership
2. Operation
3. Monitoring & WQMIS
4. Monitoring and SBM(G) IMIS
5. Capacity Building/ WASH PMU – SBM(G)
6. HR & Capacity Development – JJM
7. Skilling and Repair & Maintenance
8. IIHL & CSC
9. Solid Waste Management

10. Waste water management
11. Source Sustainability
12. Convergence of Funds – FFC/MGNREGS & WASH in institutions
13. Community Engagement, IEC, JJM,
14. IEC- SBM(G)
15. Impact Assessment of JJM on Health & Nutrition and Education
16. Water Use Efficiency
17. Grievance Redressal Mechanism

At the outset, AS&MD – NJJM set the context of the workshop and explained that the team had been deliberating on 17 Thematic Areas in physical/online mode with various stakeholders from 18<sup>th</sup>-20<sup>th</sup> March 2024 before the peer review session.

The Secretary – DDWS mentioned the workshop's purpose for forward planning in JJM and SBM(G). The exercise aimed to update policies, guidelines, and roles of institutions. Key points and recommendations from each thematic area were summarised for taking them further.

# Jal Jeevan Survekshan

In the month of **March-2024**, Unnao from Uttar Pradesh, Dharmapuri from Tamil Nadu, Hathras from Uttar Pradesh, Nilgiris from Tamil Nadu & Porbandar from Gujarat have secured first rank in Aspirants, Performers, Achievers, High Achievers, and Front Runners sub-categories respectively under “Best Performing Category”.

Followed by districts Deeg & Khairthal-Tijara from Rajasthan, Aligarh from Uttar Pradesh, and Annamaya from Andhra Pradesh have secured first rank in Aspirants, Performers, Achievers, and High Achievers sub-categories respectively under “Fastest Moving Category”.



**Jal Jeevan Mission**  
Department of Drinking Water & Sanitation  
Ministry of Jal Shakti




## Jal Jeevan Survekshan 2023



### Jal Jeevan Survekshan 2023 - Result (for the month of March 2024)

[ Top 3 districts in each category ]

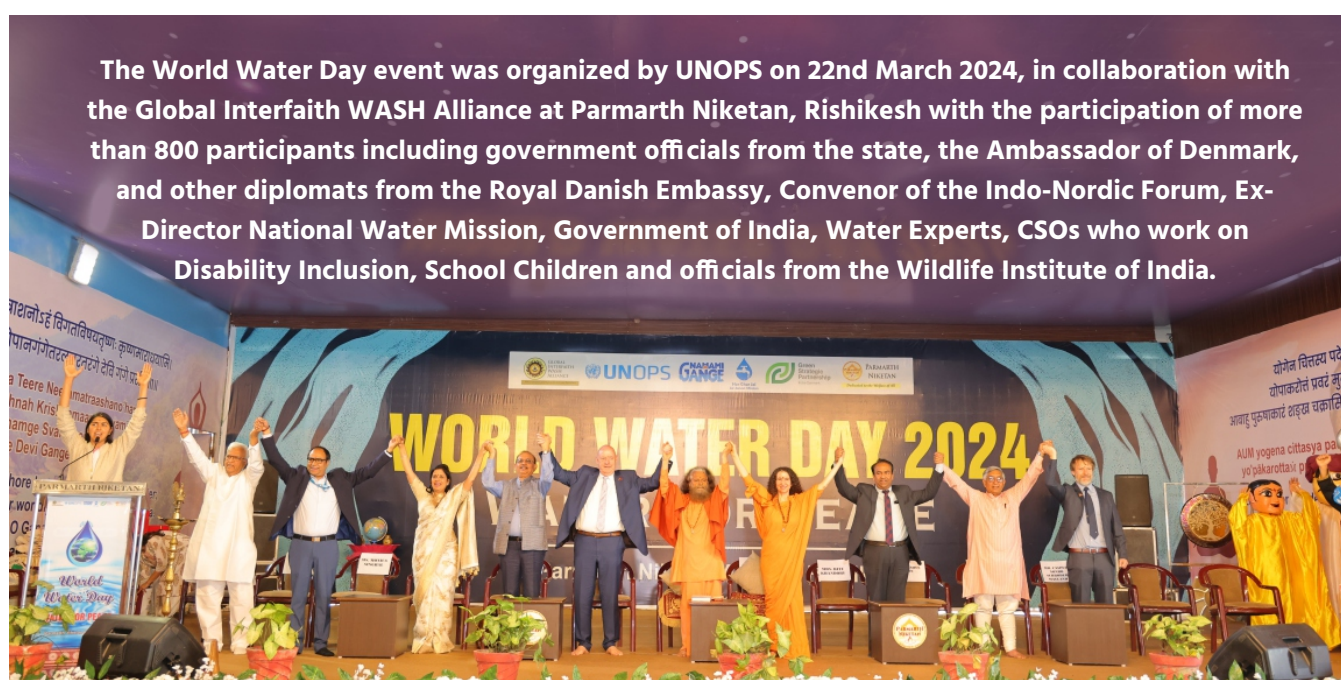
Category of District (at the beginning of March 2024)	Best performing districts	Fastest moving districts within categories
<b>Front Runners (191)</b> ★★★★★ Tap connection coverage (100%)	1. Porbandar [Gujarat] 2. Vadodara [Gujarat] 3. Patan [Gujarat] <a href="#">See full list...</a>	
<b>High Achievers (299)</b> ★★★★★ Tap connection coverage (75-100%)	1. Nilgiris [Tamil Nadu] 2. Mahoba [Uttar Pradesh] 3. Cuddalore [Tamil Nadu] <a href="#">See full list...</a>	1. Annamaya [Andhra Pradesh] 2. Chittoor [Andhra Pradesh] 3. Tirupati [Andhra Pradesh] <a href="#">See full list...</a>
<b>Achievers (181)</b> ★★★★ Tap connection coverage (50-75%)	1. Hathras [Uttar Pradesh] 2. Udalguri [Assam] 3. Chirang [Assam] <a href="#">See full list...</a>	1. Aligarh [Uttar Pradesh] 2. Mau [Uttar Pradesh] 3. Serangerh-bilaigarh [Chhattisgarh] <a href="#">See full list...</a>
<b>Performers (82)</b> ★★★ Tap connection coverage (25-50%)	1. Dharmapuri [Tamil Nadu] 2. Nagapattinam [Tamil Nadu] 3. Palamu [Jharkhand] <a href="#">See full list...</a>	1. Khairthal-tijara [Rajasthan] 2. Kotputli-behor [Rajasthan] 3. Kekri [Rajasthan] <a href="#">See full list...</a>
<b>Aspirants (8)</b> ★ Tap connection coverage (0-25%)	1. Unnao [Uttar Pradesh] 2. Godda [Jharkhand] 3. Pakur [Jharkhand] <a href="#">See full list...</a>	1. Deeg [Rajasthan] 2. Unnao [Uttar Pradesh] 3. Dungarpur [Rajasthan] <a href="#">See full list...</a>



## National WASH Experts' Visits

In the month of March 2024, National Wash Experts' Visits were conducted in 12 priority states to observe the ground-level situation and provide suggestions to improve the quality of work done in the villages, total 21 teams consisting of two Wash experts visited these States to evaluate the quality of work done/ on-going in 336 villages. Star rating of villages visited by them is attached herewith.

S. No.	States	No. of villages rated under				
		1 Star	2 Star	3 Star	4 Star	5 Star
1.	Andhra Pradesh	0	0	0	9	7
2.	Assam	0	0	25	8	0
3.	Chhattisgarh	0	0	20	9	0
4.	Jharkhand	0	0	9	7	0
5.	Karnataka	0	0	0	30	2
6.	Kerala	0	0	1	13	5
7.	Madhya Pradesh	0	0	7	41	1
8.	Maharashtra	0	0	1	14	1
9.	Odisha	0	0	0	14	2
10.	Rajasthan	0	1	11	38	1
11.	Tamil Nadu	0	2	14	0	0
12.	Uttar Pradesh	0	7	10	28	4









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