



# PROMOTING SOCIAL INCLUSION FOR PIPED WATER SUPPLY

A STORY FROM BARBATA VILLAGE IN BIHAR, INDIA

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*Watershed*  
empowering citizens

## ABBREVIATIONS

GP	GRAM PANCHAYAT
CSO	CIVIL SOCIETY ORGANISATION
WASH	WATER SANITATION AND HYGIENE
NGO	NON-GOVERNMENTAL ORGANISATION
PRA	PARTICIPATORY RURAL APPRAISAL
WIMC	WARD IMPLEMENTATION MANAGEMENT COMMITTEE
SHG	SELF HELP GROUPS
VWSC	VILLAGE WATER AND SANITATION COMMITTEE
MDWS	MINISTRY OF DRINKING WATER AND SANITATION
VDC	VILLAGE DEVELOPMENT COMMITTEE

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## PROJECT CONTEXT

Heading the list of BIMARU<sup>1</sup> States in India, Bihar has remained India's poorest State between 1998 – 99 and 2015 – 16. Within the layers of poverty, the Dalit and Mahadalit<sup>2</sup> families remain the most deprived and vulnerable communities in the State. Few such communities benefit from the egalitarian development schemes of the government, as they are neither informed nor have capacities to access these programmes. With one of its key objectives of 'social inclusion', the Watershed programme in India selected 10 villages in Samastipur, one of the districts with the highest concentration of Dalits and Mahadalits in Bihar. Since 2016, Nidan, Watershed India's landscape partner NGO, has been building capacities of the most deprived communities and CSOs in the region to advocate for their rights for better and holistic WASH services.

The Watershed project is a five-year strategic initiative of the Dutch Ministry of Foreign Affairs (DGIS) that aims to build the capacities of local CSOs for using evidence-based advocacy, to influence government departments, for better access and management of sustainable WASH and WRM services. In India, the programme is being implemented in the States of Odisha and Bihar, in partnership with two local NGOs (Gram Uthan in Odisha and Nidan in Bihar) and coordinated by three Dutch organizations - IRC, Wetlands International (South Asia) and Akvo Foundation (South Asia). Barbatta, one of the landscape villages of the programme in Sarairanjan Block in Samastipur District of Bihar State, is located about 11km south of District headquarters in Samastipur and 76 km from State capital, Patna. Known to be one of the most economically vulnerable regions of the country, the two villages constituting the Barbatta Gram Panchayat<sup>3</sup>, are distinctive in their high proportion of the socially disadvantaged population.

In 2016, the Government of Bihar declared 'Providing safe, piped water supply, to every household in the next four years', as one of its seven policy resolutions (Saath Nischay)<sup>4</sup> for development. In 2017, the 'Har ghar nal ka jal'<sup>5</sup> programme was introduced as an endeavor to provide clean drinking water in the homes of approximately 2 crore (20 million) households, through concerted co-operation of communities and their elected representatives, without any discrimination. The scheme strives to end dependence on ground (i.e. Hand-pumps) and other sources of drinking water such as ponds, unprotected dug wells, etc. and also ensure water quality as per national standards. This case study documents how the capacity building efforts of the Watershed India team has resulted in local Dalit and Mahadalit communities successfully advocating for and accessing piped water supply

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<sup>1</sup> BIMARU is an acronym formed from the first letters of the Indian states of Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh. It resembles the Hindi word 'bimaar' meaning 'sick' and is used to refer to poor economic conditions in the states.

<https://www.livemint.com/Politics/2mYGqXDSb37bediFJmGUvL/Indias-BIMARU-states-developing-but-not-catching-up.html>

<sup>2</sup> Dalits & Mahadalits - most socially and economically disadvantaged communities constitute over 15 percent of Bihar's population of 100 million (Census of India 2011). They include 22 caste groups, classified as Scheduled Castes (SC) and occupy the bottom rungs of the caste hierarchy, some being poorer and more discriminated against than others. The poorest among the Dalit groups were given the name 'Mahadalits' by the Bihar Government in 2007.

<sup>3</sup> Total population of Barabatta Gram Panchayat is 11,380 with 2152 families as per Census of India 2011 and Panchayat records 2017.

<sup>4</sup> Saat Nischay scheme: <https://bvm.bihar.gov.in/nishchay/cdws/bjLLS0dGOG1XbU9MOEJ5NXBValqzdz09>

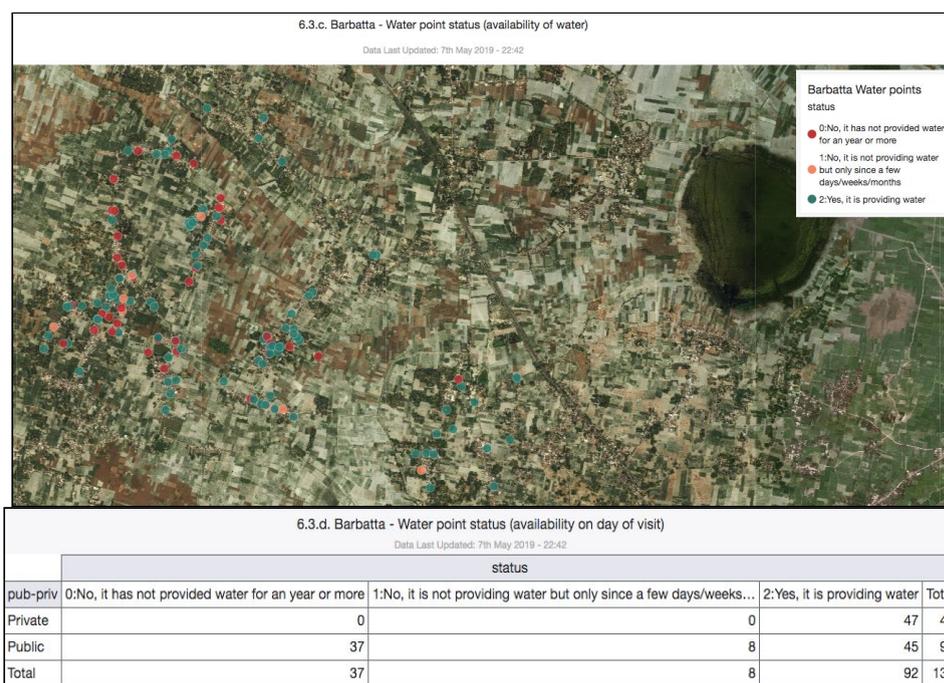
<sup>5</sup> Har ghar jal scheme: <https://bvm.bihar.gov.in/nishchay/cdws/bjLLS0dGOG1XbU9MOEJ5NXBValqzdz09>

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for their own villages. It also demonstrates how community groups, even from the most deprived backgrounds, once organized, can take ownership of their village infrastructure and successfully manage and sustain investments for WASH services.

## BACKGROUND

In 2017, when the Watershed programme began operations in Barbatta Gram Panchayat (GP), only 2%<sup>6</sup> of its households reported to be accessing piped water supply. The villages are dotted with hand pumps and a few standposts<sup>7</sup>, which are the main source of drinking water for 96% of the families. Bulk (65%) of these water sources are privately owned and reported to be discharging water. However, close to half of the public water points that the marginalized households depend on, were found to be defunct or providing water only intermittently.



Above and Below: The visualisation shows water point status (availability of water) on the day of the visit for baseline data collection, 2017

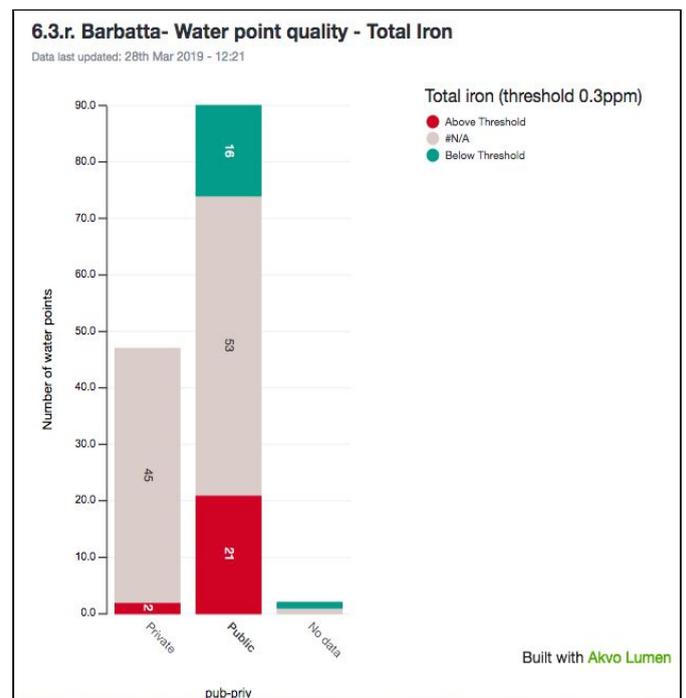
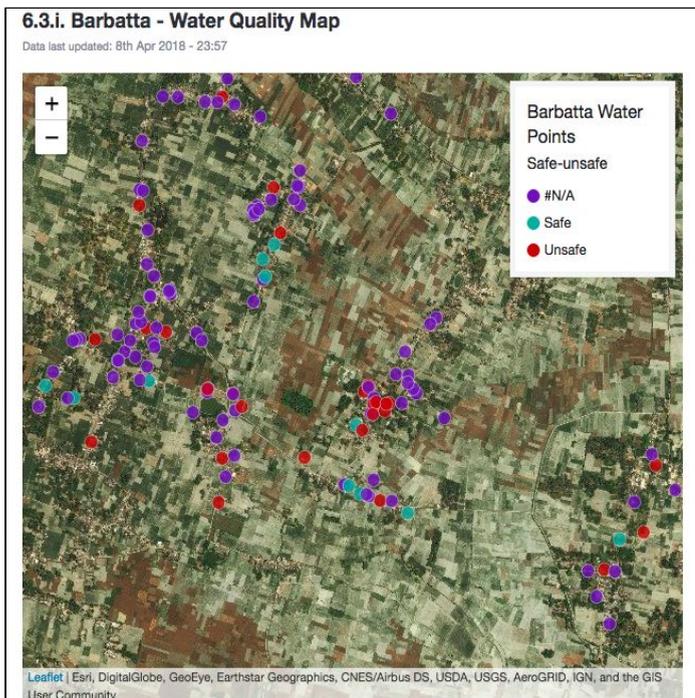
Link: <https://watershedsouthasia.akvolumen.org/s/8tDFnFJxD9U> and <https://watershedsouthasia.akvolumen.org/s/yHlhWZbZusw>

<sup>6</sup> Watershed India Baseline survey 2017 (All 139 public and private water points and 69 sampled households)

<sup>7</sup> Data visualisation shows the distribution of water points, public-private mostly handpumps and a few standposts and dugwells: <https://watershedsouthasia.akvolumen.org/s/dvf9x5-pCk4>

In Barbatta, the private water points are managed by the households themselves. Households accessing the public water points also have to pool in their own resources for maintenance, as support for operation and maintenance by the authorities or the local government is virtually nonexistent. Breakdowns are frequent and seasonal shortages are common, but by and large, the communities keep the water flowing, by undertaking periodic minor and at times major repairs<sup>8</sup>. However, problems related to poor drainage, broken platforms and poor water quality (especially iron contamination) continue to remain unaddressed<sup>9</sup>.

People of Barabatta also recognized the possibility of contaminants in their water (It smells odd, looks dirty/muddy, doesn't taste good etc.) but are unable/unaware about mitigation/treatment procedures. The high concentration of iron is obvious and concern for almost all families, a fact reinforced by the water testing results during the Watershed survey in 2017<sup>10</sup>. However, similar to their repeated appeals for better maintenance of the water sources, the authorities did not take proactive steps to address the water quality issues.



Above: Water quality map displays water quality status of sources tested for four parameters; Total Iron, pH, Electrical Conductivity and Faecal Coliform. The chart shows the status of Iron concentration in the tested water sources.

Link: <https://watershedsouthasia.akvolumen.org/s/4m6cAZLGSWh> and <https://watershedsouthasia.akvolumen.org/s/G6xHAQsk8XQ>

<sup>8</sup> Visualisation displays nature of minor repair: <https://watershedsouthasia.akvolumen.org/s/KzxhD.Jaz8Tg> and major repairs: <https://watershedsouthasia.akvolumen.org/s/22MRW9iBQT8> done in the last one year

<sup>9</sup> Chart visualises the problems/issues observed in the water points during the baseline data collection in 2017: <https://watershedsouthasia.akvolumen.org/s/HsLcqGEuH7E>

<sup>10</sup> Water point considered unsafe if any one of the four parameters (Iron, Coliform, EC, PH) tested were not in conformity with National standards. Test results are for 40 public water points where water was available on the day of the visit)



## PREPARING THE GROUND FOR EFFECTIVE EXECUTION OF THE SCHEME

In March 2017, Ward No. 7 in Barbatta Gram Panchayat was selected as a priority location for piped water supply through the 'Har ghar nal ka jal' 5 scheme. The scheme entailed a complete listing of the most marginalized communities in the village. For effective implementation, this scheme was decentralised to the Ward -level. Ward No.7, with its high proportion of Dalits and Mahadalits, therefore received priority. However, execution of this scheme required a functional seven-member WIMC, active participation of Ward members and community representatives and most importantly, a commitment for monthly contributions of at least INR 30/- per family, as charges for the water being supplied. Management of the water supply would entirely be the responsibility of the community and their local government representatives. None of these existed in the Ward in 2017.

The first task that the Watershed team therefore undertook, was to familiarize members of instituted Ward Implementation Management Committee (WIMC)<sup>11</sup>, with the guidelines of the new scheme and impress upon them their share of responsibilities. The Nidan frontline team also ensured that the WIMC members organized village meetings where the scheme guidelines were shared with the villagers. Parallaly, social mapping of WASH services was conducted in every village, using Participatory Rural Appraisal (PRA) methods. These were followed up with additional meetings (Focus Group Discussions) with the women and marginalized groups, who generally do not attend village meetings. Information about the WASH services status from the baseline survey was shared with these groups and gradually the need for community involvement and ownership for the new water supply scheme was established. What became clear during these interactions was that even the most deprived in the villages were eager to access piped water connections and also willing to pay (73% households expressed willingness<sup>6</sup>) a reasonable tariff for continued safe water supply. They had realized that piped water supply would reduce their expenses for repeated repair and maintenance of the hand pumps and also address the problems of water quality, as the water to be supplied would be treated before distribution.

## A VOLUNTEER AS A BRIDGE BETWEEN THE COMMUNITY AND AUTHORITIES

Another significant development that emerged from the community interactions was the identification of a dedicated local social worker (Bikram ji) who was keen to bring about positive changes in the quality of life of his community members. In March 2017, Bikram ji was supervising the borewell installation in Ward 7 when the Nidaan Watershed team met him and since then he has been an active volunteer for the programme, acting as a bridge with the villagers. Being one of the few educated persons in his village, he is well respected by the community leaders and also lends a presence during negotiations with the authorities. His participation during lobby meetings with the departments was largely instrumental in ensuring that Ward 7 of Barabatta GP received priority during selection. He also played an

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<sup>11</sup> WIMC – Ward Implementation Management Committee is a body constituted by the local government in each Panchayat for implementation of two WASH development schemes (Mukhyamantri Grameen Peyjal Nichaye Yojana And Mukhyamantri Grameen Gali Nali Pakkikaran Nischaya Yojana) as per the State government ordinance and later amended Bihar Panchayat Act ( amendment act), 2017 <https://www.hindustantimes.com/patna/patna-hc-allows-bihar-qovt-to-implement-nischaya-schemes-through-panchavats/story-ZPc2MFaaNn3y5Mk031w6HM.html>

active role in motivating the WIMC members and the Mukhia<sup>12</sup> to come together to locate and contribute a suitable space for sinking the borewell in the village.



Above: Nidaan staff in an interaction with Bikram ji, social worker

The responsibility of executing the water supply scheme rests on the local government and the WIMC with technical support being provided by the PHED<sup>13</sup> and coordinated by the Block administration. Following the scheme guidelines that were shared by the Watershed (Nidan) team Bikram ji brought the WIMC members together to decide on an execution plan. The WIMC located a contractor for the job and approached the JE (Joint Engineer) at the Block to review the technical and financial estimates that were prepared. A total of 153 households were to be provided three tap connections inside their homes (kitchen, toilet and courtyard) with an hour of water supply, three times a day. The allocated budget with WIMC would range between INR 13 to 17 Lakhs.

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<sup>12</sup> Mukhiya – Village head / leader of the Gram Panchayat

<sup>13</sup> PHED - Public Health and Engineering Department

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## INCENTIVISING DRINKING WATER SUPPLY AND SANITATION SCHEMES

As observed in the baseline data in 2017, only 26% of the families in Barbatta GP have toilets at home. The coverage in the more vulnerable Wards like No.7 is even less. Many of the families had limited /no space and resources to install a toilet. The piped water supply scheme had a provision under which connection will be provided in 3 locations including toilet. As a result of this, gap in toilet construction was also seen to be addressed in case of some households. The Ward members were advised to meet the Block Development Officer (BDO) and discuss the possibility of linking the households with the subsidy scheme for toilet construction (SBM)<sup>14</sup> and installation of community toilets for those without land.

By the early 2018, all households in Ward no. 7 were connected with piped water. A monthly fee of INR 30/- was being paid by each family. However, it was soon realised that the tariff collected was not enough to pay the electricity bills to run the pump. Some of the villagers were also using the water for vegetable cultivation. It was time for the WIMC to intervene. A series of meetings were organised by the WIMC and the fee was revised to INR 50/- for each family. The fee hike would indeed be a stress on the poor families but the WIMC members along with Bikram ji were able to convince them. As per the BDO's advice a separate bank account was opened by the WIMC where all the tariff would be collected and tracked. Families misusing the water for agricultural purposes were warned that their connections would be cut if they continued.

## CONCLUSION

Ward No. 7 of Barbatta village has become a model for spreading the scheme to other villages. Work has already begun in Wards 1, 2, 3, 10 and 13 where the monthly tariff of INR 50/- has been agreed upon. With growing confidence and familiarity with the government departments, the WIMC members have begun pursuing resources for other development work in their constituencies. Drainage schemes under the 'Nali Gali' programme are also underway in Ward No. 7.

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<sup>14</sup> SBM - Swachh Bharat Mission <https://mdws.gov.in/sites/default/files/SwachBharatGuidelines.pdf>

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