WORKING PAPER 5

ISLANDS OF SUCCESS

Towards water, sanitation and hygiene services for everyone, forever in Patharpratima and Sagar blocks, West Bengal, India

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water for people
INDIA everyone | forever

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triple-S
WATER SERVICES THAT LAST

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Cover: Latrine slabs for sale on Sagar island (Stef Smits/ IRC)

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ABBREVIATIONS

CapEx	Capital Expenditure
CapManEx	Capital Maintenance Expenditure
CHCMI	Community Health Care Management Initiative
ExpIDS	Expenditure on Indirect Support
FLOW	Field Level Operations Watch
Gram Panchayat	Lowest level of local government
INGO	International Non-Governmental Organisation
IRC	IRC International Water and Sanitation Centre
Jalabandhu	Handpump mechanic
MWA	Millennium Water Alliance
NBA	*Nirmal Bharat Abhiyan* (Lit: Clean India Campaign): the renamed Total Sanitation Campaign of the Government of India
NGO	Non-Governmental Organisation
ODF	Open Defecation Free
OpEx	Operation and maintenance Expenditure
Panchayat Samiti	Council of elected representatives
Pradhan	President of the *Gram Panchayat*
PHED	Public Health Engineering Department
Upa-Pradhan	Deputy President of the *Gram Panchayat*
Sabhapati	President of the *Panchayat Samiti*
Saha Sabhapati	Deputy President of the *Panchayat Samiti*
SHG	Self-Help Group
Zilla Parishad	District level local government

EXECUTIVE SUMMARY

Sagar is an island located at the mouth of the river Ganges, where it meets the Bay of Bengal. Every January about half a million pilgrims visit the island to worship the holy Ganges. The hundreds of mobile toilet units left standing on the empty festival terrain throughout the remainder of the year reflect the island authority's efforts to ensure that the pilgrims' stay is as comfortable, hygienic and safe as possible.

The authorities also provide for the sanitation needs of the islands' 200,000 permanent inhabitants. Together with the non-government organisation (NGO) Water For People, and other partners, the government aims to achieve full coverage of sanitation and water supply in the next few years. Together, they want to make sure that the services last forever.

This report assesses how Water For People and the government is faring in meeting their goals to deliver lasting sanitation and water supply services in Sagar and its neighbouring block, Patharpratima.

In general terms they can be considered islands of success, with full coverage all but achieved in Sagar both in terms of water and sanitation, and facilities set up in schools. Remaining gaps that still exist can be addressed in the next few years. Patharpratima on the other hand still has a population of about 20 per cent unserved with respect to water, and 15 per cent with respect to sanitation. Equally important are improvements in the sustainability, with non-functionality down to 18 per cent from the originally estimated 30-40 per cent, and downtime reduced to few days.

Coverage gains have been achieved due to the combined efforts of Water For People and the government in pooling funds. Water for People topped up local government funding for water points and water, sanitation and hygiene (WASH) facilities in schools. Loans have also been made available by Water For People to complement government subsidy for sanitation.

Improvements in sustainability of water supply are best manifested in changes in local services, particularly in the following:

- Establishing committees responsible for cleaning, minor maintenance and tariff collection.
- Promoting the establishment of tariffs, or special fee collections (at the very least) when break downs occur.
- Setting up a network of *Jalabandhus*, or handpump mechanics for major repairs, who have also started undertaking other water-related tasks, such as preventive maintenance, routine monitoring and plumbing of piped supplies.

However the overall potential sustainability rating of the bulk of water points in the block has only reached an intermediate level. Improvements have not been scaled up to all water points in the block—hence only a small percentage of water points have water committees or have raised tariffs to cover repairs.

The above is compounded by the ambiguous definition of shared responsibility over operation and maintenance costs between *Gram Panchayats* (local government units) and water committees.

It is however encouraging that improvements have increasingly been recognised by authorities at block and *Gram Panchayat* level, through the passing of local resolutions. Authorities believe that the main value add of the Water For People programme has been in developing and testing local improvements, which can be scaled up by the government.

To the outsider, these arrangements may not come across as a revolutionary way of achieving sustainability in rural water supply. However, in a context where local government has served as a de facto, but not well-performing service provider—these arrangements do form an important step towards increased sustainability.

More importantly, the combination of local arrangements with relatively large amounts of government funding may in fact prove to be the "right mix". Notwithstanding the big challenges ahead—in achieving WASH sustainability in both islands—the programme was successful in showing how NGO investments and innovations can be leveraged through government investment programmes; moving from islands of success to reaching Everyone, Forever.

1 INTRODUCTION

1.1 BACKGROUND

Water For People has adopted an approach to rural WASH that is unique compared to many other International Non-Governmental Organisations (INGOs) in the water sector.

First, it aims to achieve 100 per cent coverage in the districts where it works. It guarantees that water supply and sanitation services meet minimum service levels—such as quality, quantity and reliability for at least ten years.

Water For People country teams, with their partners in local government and civil society, have been instrumental in achieving this goal. For example, universal coverage had already been reached in selected municipalities in Bolivia and Honduras and is well underway in larger districts in Rwanda and blocks in West Bengal, India.

Triple-S (Sustainable Services at Scale) is a project run by IRC International Water and Sanitation Centre together with partners. It aims to promote more sustainable rural water services delivery. As part of its International work Stream, Triple-S inspires governments, donors and international NGOS with innovative practices to achieve this.

Water for People and Triple-S are currently collaborating to document experiences in achieving 100 per cent coverage and with putting in place systems and structures supportive of sustainable service delivery. Documented experiences are disseminated to inspire other INGOSs and government agencies to follow similar approaches.

A first such study was conducted on Water For People's experience in the municipality of Chinda, Honduras (Smits, 2011a; Smits, 2011b). The results of the study offered insight into Water For People's achievements, but also articulated areas for improvement, particularly regarding the financing of capital maintenance. The results of the study have been shared widely amongst others among like-minded NGOs and alliances, fomenting the adoption of the Everyone, Forever approach by some, e.g. the Millennium Water Alliance (MWA).

However, the Honduras study was limited in that the scale of operations was relatively small—typically municipalities had a few thousand inhabitants, much fewer than districts in Africa or India. Initial levels of coverage were also typically higher. Institutional capacity for sustaining services was also different from one context to the other.

To expand understanding of how the Everyone, Forever approach can be applied in other situations, the approach was analysed on two blocks in West Bengal, India as an additional study, but with a specific focus on the implications of a different scale and context of the approach.

1.2 OBJECTIVES AND SCOPE OF THE STUDY

The study analyses the processes and results of achieving universal water and sanitation coverage, including the mechanisms that had been established to deliver sustainable services in the Patharpratima and Sagar blocks of the South 24 Parganas district of West Bengal, India.

The study is not a quantitative verification of the extent to which full coverage has been achieved but it assesses how (near-) full coverage has been achieved, what secondary evidence is available, what needs to be done to ensure services last.

1.3 STRUCTURE OF THE DOCUMENT

This report first presents the Everyone, Forever conceptual framework and explains the methodology used for data collection and analysis. It also discusses the study's scope.

It is followed by a description of the background and context of the work of Water For People in West Bengal, including an explanation of the key characteristics of the Patharpratima and Sagar blocks. The results analyse the extent to which universal coverage and sustainable services have been achieved, and concludes with recommendations that Water For People can apply within the scope of its operations.

2 METHODOLOGY

2.1 CONCEPTUAL FRAMEWORK

This chapter presents the conceptual framework behind the Everyone, Forever approach, followed by the principles framework developed by Triple-S. Based on these, the analytical framework for this study is presented.

2.1.1 Everyone, Forever

The basic premise of the work of Water For People is to provide everyone with water, sanitation and hygiene (WASH) services in the administrative units (municipalities, districts or blocks) where they work. With support from its partners, Water For People put in place the necessary prerequisites in ensuring that services last forever. How exactly this is achieved is purposely left open so that context-specific arrangements can be developed. Such flexibility also leaves room for testing innovations.

Water For People has identified the following elements as central to the achievement of their goal.

Everyone

- Planning
- Co-finance
- Training, and ongoing roles of local government, community
- Procurement
- Technical options
- Design, installation and implementation
- Management options (and tariff setting)

Forever

- Finance for ongoing operation and maintenance, major repairs, retraining, upgrades and extensions, major replacements and planning for end of useful life.
- Monitoring of functionality, use and access; water quality and resource availability and sustainability.

- Ongoing availability of tools and skills for maintenance and ensuring institutional strength, including spare parts, technical advice, technological innovation and ongoing organisational support.
- Governance and regulatory environment for management models, support to institutional development and water use regulations.

Overall these elements reflect a balance in activities at community level, of infrastructure development and creation of local service provision capacity, and other institutional levels. Support to communities is organised and an enabling environment is created to foster sustainable service provision.

2.1.2 Principles framework for sustainable services at scale

Triple-S is looking at similar kinds of issues using a slightly different approach and terminology. The starting point is the same—sustainable services (forever) at scale (everyone). Based on a review of literature, experiences, case studies, etc., guiding principles have been identified— which need to be in place to achieve sustainable services at scale. These have been brought together in a principles framework, building upon the scaling up framework (Scaling Up Group, 2005) which was subsequently adapted by Van Koppen, et al. (2009), with a focus on multiple-use services. In 2011, the latter framework was revised and updated, resulting in a principles framework by Smits, et al. (2011), which is currently being applied in IRC's Triple-S project.

The primary aim of a principles framework is to encourage a systemic view of the problems and present potential solutions about sustainable services at scale because links can be seen between factors affecting sustainability at different levels.

Instead of identifying one single solution (the so-called 'silver bullet"), it allows for analysing strengths and weaknesses in the sector as a whole; addressing all issues relevant to sustainable services at scale.

It helps demonstrate that work needs to happen on various fronts and at different levels to achieve meaningful change. It also shows that by addressing an issue at, for example, community level, changes need to take place at other institutional levels as well, such as with national policy.

A principles framework can be used in three ways:

1. to inspire and guide elements that need to be in place in the sector of a given country;
2. as a planning tool to achieve sector change towards more sustainable services at scale; and
3. as an analytical tool in which the principles can act as windows to analyse and query a given situation in relation to that principle

Guiding questions are then formulated to support the analysis. The accompanying guiding questions and other tools, therefore, become as important as the principles themselves, but the principles are important as a way of structuring the analysis, and ensuring that the framework is exhaustive.

The principles framework, as used in Triple-S, is based on a vision of a water sector with the capacity and capability to provide sustained access to water supply by all poor people living in rural areas. For Triple-S, three pillars contribute in achieving this vision. These pillars contain a total of eight principles.

Adopting a Service Delivery Approach (SDA)

This means taking the perspective of water supply as a service that needs to be provided continuously, rather than as a "one-off" development of water supply infrastructure. The principle under this pillar include:

1. Policy, legislation and institutional roles are clarified for commonly agreed-upon service delivery models.
2. Financing for full life-cycle costs is addressed through a mix of tariffs, taxes and transfers.
3. Planning aims for full coverage and accounts for the different stages of the life cycle of the service. Planning is based on undertaking participatory processes.
4. Transparency and accountability mechanisms are in place between consumers, service providers and independent oversight bodies over the quality and sustainability of services provided.

A strong learning and adaptive capacity

This implies a sector with the capacity to learn, innovate and adapt to changing circumstances and demands—these considered necessary in ensuring that service delivery continues to be provided. The underlying principles are:

5. Capacity (awareness, skills, resources, and access to support) exists within the sector for stakeholders to fulfil their functions, as defined in the service delivery model.
6. The sector has the ability to learn and innovate on the basis of knowledge sharing, reflection and analysis.

Harmonisation and alignment

This refers to harmonising donor efforts at both operational and national levels, as well as coordinating and aligning efforts to follow government-led strategies for service delivery to rural populations.

7. Sector investment and support is harmonised and aligned with national priorities and policies.
8. Actions of stakeholders are coordinated at different levels with commonly recognised platforms and forums.

All principles are then applied in the form of a matrix at five main levels of scale. The five levels of scale are:

1. The **consumer or user level** comprising households that not only use water for different purposes, but also have rights and obligations to perform vis-à-vis the service received.
2. The **water service provider level**, which may cover one or more villages.
3. The **water service authority level** where decentralised governance functions over service delivery are placed, particularly around planning, financing, support and sometimes water resources management. Typically water services authorities are found in the district or may consist of several administrative levels, e.g. both province and district.
4. The **National (or State) level** where the enabling environment for service delivery is defined in terms of policies, laws, institutional frameworks, financing flows etc.

5. The **international level**, which co-develops development assistance policies and mechanisms in relation to the adoption of a Service Delivery Approach.

Understandably, the matrix allows identifying which elements need to be in place for sustainable services provision, and – when applying it as analytical tool – the extent to which these are already there. The details of this will need to be made context-specific. However, the principles framework leaves it open how these principles might be achieved. The exact route for that, the methods used and steps taken will obviously differ from one case to another and will need to be agreed upon with relevant sector stakeholders. Lockwood and Smits (2011) identify a number of building blocks, or areas of change, that may allow meeting the principles.

2.1.3 Analytical framework for this study

In this study the principles framework is used as an analytical tool. The principles are used as lenses through to assess the extent to which elements have been put in place in providing sustainable service at scale. Recognising that the Everyone, Forever approach and the principles framework may use different terminologies, when referring to similar concepts—an attempt has been made by the researchers to adapt the framework in the context of Water For People's work in West Bengal[1].

The analytical framework used for the purpose of this study mainly focused on the sustainability of services, and was less explicit on the achievement of full coverage. In order to highlight important issues specific to Sagar and Patharpratima—two additional lenses of analysis had been used to complement the principles framework:

Scale

The scale of districts, or even blocks, in West Bengal is very large in terms of the number of people to be reached with water and sanitation services. The government—at different institutional levels—is the only body that can possibly carry out the investment needed to operate at this level of scale, thereby making investments by others look very modest. The study is therefore an assessment of how Water For People has been working at this level of scale, and particularly, its efforts in aligning with government's investments.

Social inclusion

Achieving full coverage, by definition, requires a specific focus on social inclusion. Those excluded from WASH services are often those living in geographically remote locations, belonging to a certain social class or group, or because of their poverty status. Providing services to these groups is often difficult and expensive, and thus requires an explicit approach for social inclusion. The study also offers an analysis of socially inclusive approaches undertaken to reach full coverage.

Furthermore, the principles framework, having been developed in first instance for water supply, was limited in its capacity to offer insight into sanitation and hygiene. The same holds true for the Everyone, Forever approach, which is also largely biased towards water supply. As Water For People's work also touched on sanitation and hygiene, including WASH at schools—the analytical framework was complemented by two additional lenses of analysis:

[1] Annex 1 provides the detailed matrix, indicating how the principles framework refers to similar terms in the Everyone, Forever framework.

Markets and supply chains for sanitation

This refers to the presence of an adequate number of suppliers of sanitation materials (such as slabs and rings for pits) and qualified labour (masons).

Sustainability of hygiene behaviour

Notoriously difficult to assess, particularly when using a largely qualitative data collection methodology, a review of hygiene behaviour sustainability was limited to qualitative observations of the potential risks if changes in hygiene behaviour are not sustainable. Mitigation measures had also been offered in this study.

2.1.4 Unit of analysis

The main unit of analysis are the Sagar and Patharpratima blocks—administrative units where Water For People had applied the Everyone, Forever approach, with various stakeholders. In order to obtain insight into the broader enabling environment for WASH service delivery, literature was reviewed on service delivery in the State of West Bengal, complemented with a limited number of interviews with State and district level officials.

2.2 DATA COLLECTION

In order to assess the extent to which the principles for sustainable services delivery had been met, the following data collection methods were applied:

- Review of project documents and other relevant (grey) literature, prior to the site visits.
- Review of statistics on coverage and service levels data for the State, district, blocks and Gram Panchayats (lowest level of local government) from the Ministry of Drinking Water and Sanitation's online database, as well as from survey's done using FLOW (Field-Level Operations Watch) by Water For People.
- Focus group discussion with Water For People staff involved in the programme to assess the history of the programme, the approaches followed and results obtained.
- Key information interviews and/ or focus group discussions with a range of stakeholders (see summary in TABLE 1 and full list in annex 2).
- Validation workshop, in which the preliminary results of the analysis were validated with Water For People staff and where gaps were identified.

Photo 1: Focus group discussion with Sagar block officials

TABLE 1: INTERVIEWEES AND PARTICIPANTS IN FOCUS GROUP DISCUSSIONS

Group	Details
State	Assistant Chief Engineer-I and Water Quality Officer at West Bengal Public Health Engineering Department
District	District Magistrate & Collector; District Coordinator and Assistant Coordinator for the *Nirmal Bharat Abhiyan* (NBA) Cell for South 24 Parganas
Block	*Sabhapati* (President), *Saha Sabhapati* (Deputy President) and members of Standing committees of the Patharpratima and Sagar *Panchayat Samiti* (council of elected representatives) Block Development Officer of the Sagar block
Gram Panchayat	*Pradhan* (President), *Upa-Pradhan* (Deputy President), members of standing committee, members of Everyone, Forever monitoring committee and Engineer at four *Gram Panchayats*: Dhaspara Sumatinagar-I, Dhaspara Sumatinagar-II, Digambarpur and Laxmijanardanpur
Support service providers	4 *Jalabandhus* (handpump mechanics) Sanitation entrepreneur
Service providers	Members of three water committees (Mahendragunge, Sumatinagar and Ramnagar Abad) Members of two sanitation Self Help Groups (SHGs) (Purba Dwarakapur Das Para and Purba Dwarakpur School Para)
High school	Headmasters, teachers and secretary of Parents Teacher Association at three high schools (Dhablat Lakshman Parabesh High School, Harinbari Girls' High School and Gadamathura Sikhaniketan High School)
NGO partners	Staff of the NGOs Sabuj Sangha and Tagore Society for Rural Development
Water For People	Staff of Water For People India and Water For People International

3 THE BROADER CONTEXT: WASH SERVICES DELIVERY IN SAGAR AND PATHARPRATIMA BLOCKS

3.1 WASH SERVICES DELIVERY POLICY AND APPROACHES IN WEST BENGAL

In line with the overall policy of the Government of India, the Government of West Bengal has strongly committed to the achievement of universal coverage in water and sanitation services. For water supply the State's target is to reach full coverage by 2020 (GoWB, 2011). The main emphasis of developments in the country's water supply is to rapidly increase access to piped supplies, thereby replacing or complementing point sources (tubewells with handpumps), which so far have been the most common type of technology in the State's rural areas. The main rationale for this is the aim to increase service levels by bringing water closer to people's homesteads. It is also driven by considerations of water quality (in salinity and arsenic affected areas) and water quantity (in areas where there is high seasonal variability of groundwater levels).

As part of the *Nirmal Bharat Abhiyan* (NBA) programme, formerly known as the Total Sanitation Campaign, there is a target of reaching Open Defecation Free (ODF) status for the whole country by 2022 (GoI, 2012). To achieve this, the government currently provides a subsidy for household sanitation to households classified as Below Poverty Line (BPL) and special categories of households classified as Above Poverty Line (APL)—such as Scheduled Castes, landless labourers, women-headed households and households with physically handicapped members. As per the NBA guidelines (GoI, 2012), the subsidy currently stands at Rs 4,600[2] (US$ 77), but has been much lower for the larger part of the period under review in this report. In 2007, the subsidy stood at about Rs 2,000 (US$ 45 in 2007), and has gradually been increased since then. Approximately Rs 3,400 (US$ 57) is derived from the national government and Rs 1,200 (US$ 20) is funded by the state government. The recipients of the subsidy are expected to also make their own contribution to the construction of the toilet equivalent to a minimum amount of Rs 900 (US$ 15), either in cash or in labour. Households classified as APL are expected to finance the construction of a sanitation facility themselves. In addition to the provision of subsidies, the government tries to create demand for sanitation through public awareness raising campaigns and continuous hygiene promotion. Furthermore, it has been promoting the establishment of rural sanitary marts, which are run by sanitation entrepreneurs who produce and provide components for toilets, particularly slabs and rings to line puts.

The NBA programme also extends to school sanitation. The NBA guidelines (GoI, 2012) provides for the provision of toilet blocks for boys and girls in all schools, as well as hygiene education classes. A national government subsidy of up to 70 per cent—equivalent to Rs 35,000 (US$ 589)—is allocated for schools blocks. The state government is expected to contribute the remaining 30 per cent.

In order to achieve these ambitious targets, the government is making large investments in rural water supply and sanitation. These investments are channelled through the following: a) the NBA programme for sanitation; b) the State-wide Public Health Engineering Department (PHED) for piped supplies; and c)

[2] For difficult to reach and hilly terrains the estimate is at Rs 5,100 (US$ 86).

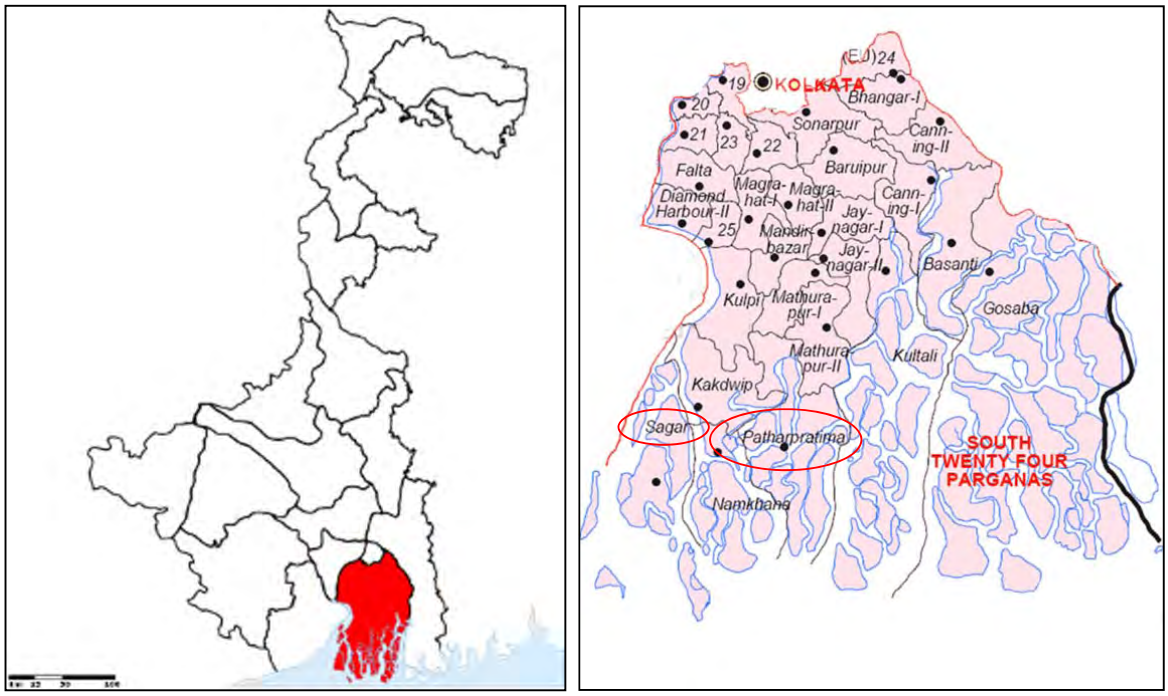
various levels of local government: the districts, blocks and *Gram Panchayats* (lowest level of elected local government). In addition, members of the Legislative Assembly at State level may also be provided with budgets for water and sanitation.

Currently, official government statistics place West Bengal's water supply coverage at 89 per cent. This places West Bengal among the ten best covered States in the country (MDWS, 2013a), which is well above the Indian average. With respect to individual household latrine status, West Bengal's coverage stands at 74 per cent according to the NBA report card, but only at 58 per cent based on household census data—figures well above the national average of 45 per cent (MDWS, 2013b).

3.2 PATHARPRATIMA AND SAGAR BLOCKS AND THEIR INITIAL WASH SITUATION

Patharpratima and Sagar are blocks found within the South 24 Parganas District in the State of West Bengal. South 24 Parganas stretches from Kolkata's metropolitan area to the numerous islands that make up the Sundarbans in the mouth of the Bay of Bengal. The district is home to some eight million people, according to the 2011 census.

FIGURE 1: LOCATION OF SOUTH 24 PARGANAS IN WEST BENGAL STATE AND SAGAR AND PATHARPRATIMA IN SOUTH 24 PARGANAS



Source: Wikipedia, 2013.

The block of Patharpratima covers an area of 469 km^2 and is home to 346,064 people, as per 2011 census data. Part of the block is located in the mainland, the other part is spread over a dozen islands. It is further subdivided into 15 *Gram Panchayats*.

Sagar is an island of some 300 km^2 located at the place where the Hooghly—a branch of the Ganges river—flows into the Bay of Bengal. It is home to 211,991 people, according to the 2011 census, with

nine *Gram Panchayats*. Every January, the island receives close to half a million pilgrims for the Gangasagar festival.

The initial water and sanitation situation in both blocks is difficult to establish in quantitative terms. No initial baseline has been established and the government's statistics database only goes as far back as 2006. The latest government statistics (2009) put the water supply coverage in Patharpratima at 74 per cent, and 96 per cent in Sagar when expressed as habitations covered, and at 78 per cent and 96 per cent when expressed as population covered (MDWS, 2013a). The sanitation database only tracks the number of toilets installed over the time period versus the target for facilities to be installed.

Hardly any detailed data is available on the status of the water and sanitation services. Based on interviews conducted, estimates of the non-functionality of water points are between 30-40 per cent for both blocks. At any moment in time, this percentage of water points was found to be not functioning. In terms of service levels, a small percentage of water points were considered quality affected, mainly in relation to salinity. Arsenic, a common problem in other parts of the Sundarbans, was not found in both blocks.

Point sources and deep tubewells with different types of handpumps have both formed as the main type of water supply technologies in both blocks. In larger villages, piped water supply schemes were present.

Beyond statistics, the initial situation in 2006 can be described as one in which steady progress was being made with respect to coverage, but many problems linked to sustainability. As in most other parts of the State, few people used to pay for water services. Most water points didn't have any water committees or community-based organisations—groups that typically fulfil the functions of a water service provider. The *Gram Panchayats* act as de facto service providers, covering the costs of operation and maintenance. De facto service rendered by the *Gram Panchayats* often resulted in long periods of service down time. Whenever a break down would occur, *Gram Panchayats* would need to be informed before arrangements with a mechanic for repairs could be made. In each blocks, only two handpump mechanics were found to be present.

4 THE EVERYONE, FOREVER PROGRAMME IN PATHARPRATIMA AND SAGAR BLOCKS

This chapter describes the programme of Water For People in the two blocks. It summarises the historical development of the programme and outlines the key components of the programme. This chapter also contains an overview of investments that had been made and the numbers of interventions that were done.

4.1 TOWARDS A COMPREHENSIVE PROGRAMME OF EVERYONE, FOREVER

Water For People has been active in West Bengal since 1996. Back then, Water for People's engagement was limited to a number of specific interventions, particularly related to the design of arsenic treatment technologies. In 2006, Water for People shifted to activities under a more

programmatic approach. From undertaking this shift, its activities have progressively increased in scope, as summarised in TABLE 2:

TABLE 2: TIME LINE OF THE PROGRAMME'S DEVELOPMENT IN PATHARPRATIMA AND SAGAR

Year	Key activities and developments in scope
2006	Start comprehensive programme in 20 villages, in both blocks, through collaboration with local partner NGOs
2007	Developing baseline information of the focus *Gram Panchayats*
2008	Growing focus on demand creation and reaching full coverage at block level
2009	Start of the handpump mechanic (*Jalabandhu*) network
2010	More explicit focus on the sustainability of service delivery
2011	Formal adoption of the Everyone, Forever focus and principles; first round of water point mapping using the FLOW (Field-Level Operations Watch) information system

Initially the focus of the programme was mainly to increase coverage, both in terms of water and sanitation. The programme was conceptualised at the level of groups of villages. In 2006, the programme started with 20 villages. A year after, the scope of Water for People's work expanded to the full coverage of entire *Gram Panchayat* areas. In 2008—three years before its formal adoption of the Everyone, Forever concept—discussions on how to achieve full coverage at block level. It is expected that by 2016 full coverage will have been achieved in both blocks, and that Water For People will no longer need to invest in further extending coverage.

Despite this gradual expansion in scope, aspects of sustainability have already been part of Water For People's activities from the onset, as characterised by the establishment and training of water committees. Gaining more prominence in 2010, it was realised that many water committees were not performing well, and that a large percentage—an estimated 30-40 per cent at the time—of the water points was not functional. This triggered the consolidation of various areas of work on sustainability, which is now gaining more attention as progress is being made in extending coverage. As part of the principles of Everyone, Forever, Water For People has committed to monitoring the results of its programme—following the expected closure of investment in infrastructure development—as its own contribution to sustaining service delivery.

"In about 2010, we started realizing that many water committees were not performing well and that 30-40 per cent of the water points didn't work. We then had to put more emphasis on sustainability".

Sudipta Barman
Programme Head at partner NGO Sabuj Sangha

Within the context of India, international NGOs like Water For People are not allowed to implement programmes directly. Following a thorough assessment, local NGO partners were selected for programme implementation. Most of the work on the ground—particularly the implementation of the hardware components and its corresponding awareness raising activities—was conducted by partner NGOs, who are

based in the blocks and have staff on the ground. These are:

- **Sabuj Sangha:** construction and rehabilitation of water points, training water committees, developing school toilet blocks, provision of loans for household sanitation and training *Jalabandhus*.
- **Sundarban Social Development Centre:** construction and rehabilitation of water points, training water committees, developing school toilet blocks, provision of loans for household sanitation and training *Jalabandhus*.
- **Tagore Society for Rural Development:** development of school toilet blocks only.

Water For People's direct intervention was limited in providing technical, training and financial support to its partner NGOs. The former was also involved in linking partner NGOs with block and District administration.

Water For People has been coordinating closely with government close to the onset of the programme, mainly through *Gram Panchayats* and the block level. Whilst district and State level government bodies have been kept informed with certain regularity, less emphasis was placed on collaboration at those levels.

4.2 PROGRAMME COMPONENTS

The programme is made up of a number of components that together should be able to achieve the ambition. These are the following.

To reach everyone with water, new tubewells have been installed in communities that did not have an existing water point. Tubewells that were completely broken down were rehabilitated. As shown in TABLE 3, Water For People delivered about 20 per cent of all water points in the two blocks, either by constructing new ones or through rehabilitation.

TABLE 3: INTERVENTIONS IN WATER PROVISION, WATER FOR PEOPLE PROGRAMME (2006-2012)

Block	Total number of water points	Newly constructed tubewells	Rehabilitated tubewells	Water committees established
Patharpratima	1,665	88	219	307
Sagar	891	52	100	152
Total	**2,556**	**140**	**319**	**459**

Reaching everyone with sanitation has focused on providing households with loans through a revolving fund so they could invest in a sanitation facility. TABLE 4 shows the number of households supported by the Water For People programme. As shown in the table below, this programmatic component mainly focused on Patharpratima, where about 10 per cent of the households received support in the construction of their own sanitation facility, through loans provided by Water For People.

TABLE 4: HOUSEHOLD SANITATION CONSTRUCTION, WATER FOR PEOPLE PROGRAMME (2006-2012)		
Block	**Number of households**	**Number of household sanitation construction supported**
Patharpratima	67,002	6,207
Sagar	43,472	744
Total	**110,474**	**6,951**

An added "Everyone" commitment target is for every school to be equipped with adequate sanitation and water facilities. The focus is mainly on high schools and a few in primary schools. TABLE 5 shows water and sanitation-related interventions at schools, done by Water For People in the period from 2006 to 2012. As can be seen, Water For People has supported the development of such facilities at almost all high schools in both blocks, and between 14-20 per cent for primary schools.

TABLE 5: WATER AND SANITATION INTERVENTIONS IN SCHOOLS, WATER FOR PEOPLE PROGRAMME (2006-2012)				
Block	**High schools**		**Primary schools**	
	Nr of schools	**Water For People intervention**	**Nr of schools**	**Water For People intervention**
Patharpratima	43	34	205	42
Sagar	35	33	120	17
Total	**78**	**67**	**325**	**59**

Finally, the programme also engaged with the *Gram Panchayats* and blocks, as service authorities, to jointly coordinate and plan for investments with both officials and elected representatives. It aimed to ensure that investments went to areas prioritised by authorities and avoid double investments in the same area.

With the government also undertaking major efforts in water and sanitation, Water For People decided to *not* undertake certain types of activities to ensure that its work complemented that of the government's. Key activities that were not covered by the Water For People Programme are:

- **Development of piped water supplies.** The development of such schemes is characterised as highly capital-intensive and is targeted at areas already covered, but requiring improved service levels, due to, for example, water quality problems or seasonal water shortages.
- **Direct household sanitation construction.** In line with the Government's policy framework, the approach has been one that facilitated family investment in and construction of sanitation facilities. Further, Water For People has not carried out any direct construction activities.
- **Provision of subsidies for households classified as BPL**. As a domain already covered by government, Water For People has rather considered complementing these subsidies with top-up loans, but not providing subsidies directly.

- **Roll-out of sanitation production centres and other supply chain activities.** With the government having already established sanitation production centres, Water For People only set up limited centres in few areas where there were none.

With respect to achieving the goal of sustainability, the following programme components had been developed:

- **Setting up and training water committees at the water points that were intervened** (either new ones or rehabilitations) that would be responsible for some of the operation, maintenance and administration tasks (see the number of water committees that had been supported in TABLE 3).
- **Establishing tariffs and corresponding book keeping systems at those water points**, so as to be able to cover some of the future operation and maintenance costs.
- **Setting up a network of handpump mechanics, called *Jalabandhus*** (literal meaning: friends of water in Bengali), to provide major repair services. The establishment of the network entailed the initial training of 20 *Jalabandhus* in each block, the provision of tool kits, and the promotion of their services among *Gram Panchayats* and water committees.
- **Setting up maintenance committees for school sanitation blocks** where Water For People's programme intervened.
- **Mapping all water points, and indicating their status in terms of functionality, service level provided and performance of the water committee as service provider**, using the FLOW (Field-Level Operations Watch) information system, with the purpose of identifying added investment needs and establishing a monitoring system.

BOX 1: FIELD-LEVEL OPERATIONS WATCH (FLOW)

FLOW is a tool that helps collect, manage, analyse, and display geographically-referenced monitoring data on water and sanitation services. It is being developed in a partnership between Water For People and AKVO. FLOW consists of three components:

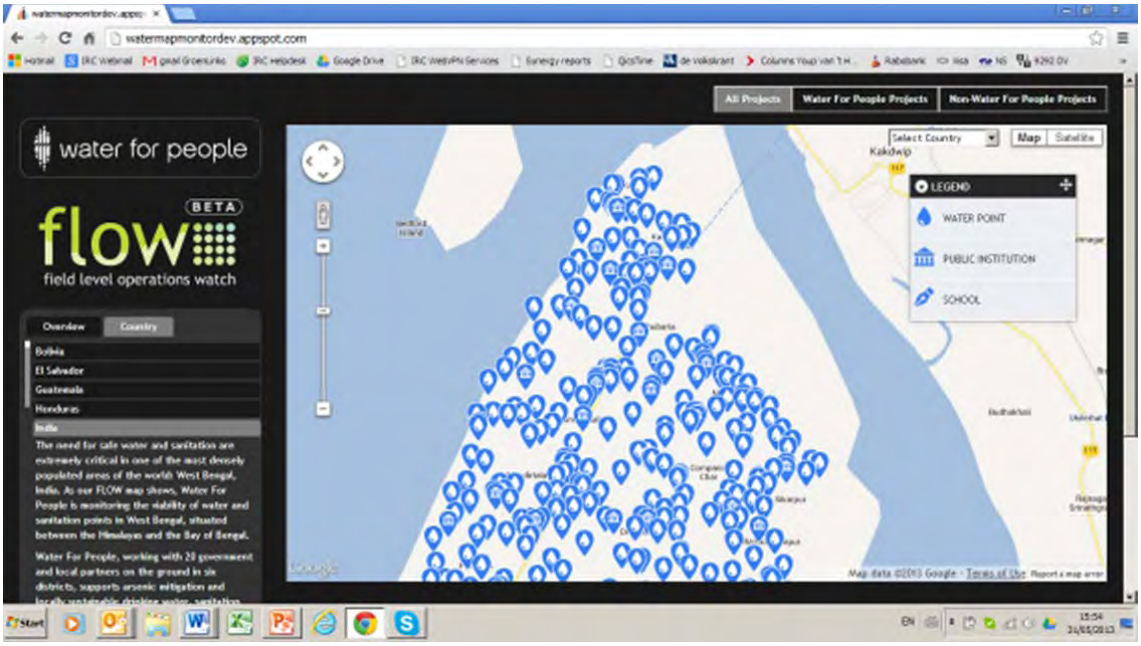
- Handheld data collection – the FLOW Field Survey application runs on Android phones and devices with integrated GPS, camera, and custom adaptive surveys.
- A web-based dashboard where users manage and analyse FLOW surveys and data.
- Visual map-based reporting tools displayed in Google Maps and Google Earth.

Water For People has utilised FLOW for its ongoing monitoring across its various country programmes. It was also used to map 10,000 water points in Liberia in 2011 by the Water and Sanitation Program of the World Bank.

In Patharpratima and Sagar, FLOW was used to map all water points in both blocks and assess the status of service delivery in 2012. With initial monitoring work completed, regular annual updates are made easier, requiring less intensive time investment.

For more information, see http://watermapmonitordev.appspot.com/

FIGURE 2: SCREENSHOT OF THE MAP VISUALISATION OF ALL WATER POINTS MAPPED WITH FLOW FOR PART OF SAGAR ISLAND



5 RESULTS

Having reviewed the approach and investments made by Water For People in the broader context of WASH interventions in West Bengal, this chapter presents the results of the organisation's efforts. It is focused on assessing the implementation of the Everyone component of increasing coverage and is followed by a review of the conditions for sustainability put in place[3].

5.1 EVERYONE

5.1.1 Water supply

Available statistics provided different results on access to water supplies. Official government statistics (MDWS, 2013a) put coverage in Patharpratima at 81 per cent when expressed as number of habitations fully covered, and 74 per cent when expressed as population covered. In Sagar both expressions of coverage yielded 97 per cent. The water point mapping exercise done by Water For People, using FLOW, showed that there were 1665 water points in Patharpratima and 891 in Sagar. A comparison of these numbers to the total block population suggested both are nominally covered, considering the government standard of 250 persons per water point. However, this mapping doesn't account for pockets of people who live relatively far away from water points. This was probably the

[3] Overall findings, in the form of an infographic, are presented in the Water For People website. See: http://reporting.waterforpeople.org/west-bengal;jsessionid=0A22E33F83EB0E5CC7B0B252C316873D.87772

case for Patharpratima—where certain populations are spread out over the many islands that make up this block. For that reason, the government statistics probably give a better indication of real levels of access to water.

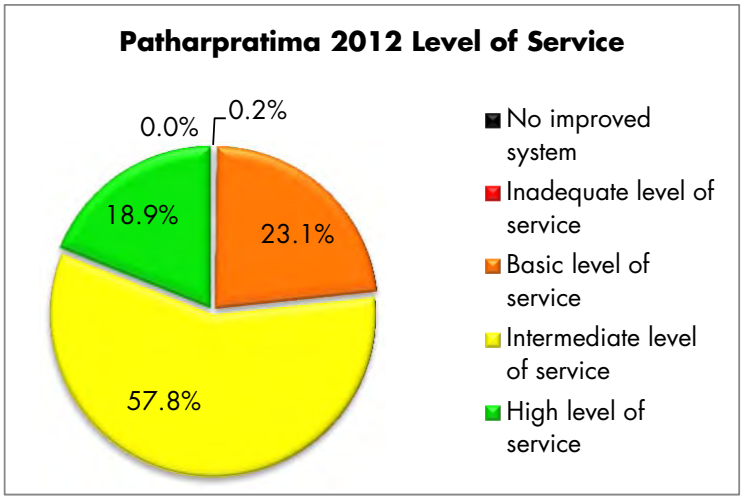
The results implied that the situation in Sagar was good and with high potential to reach the four villages that are considered only partially covered before 2016. For Patharpratima, it meant that 40 habitations are awaiting an upgrade in order to bring coverage levels from partially covered to fully covered. An additional 29 habitations that are "quality-affected" (mainly by salinity) have to be addressed— affecting almost 100,000 persons. In view of progress made in increasing habitation coverage over the past years, results suggested that it is possible to achieve full coverage in the stipulated time frame.

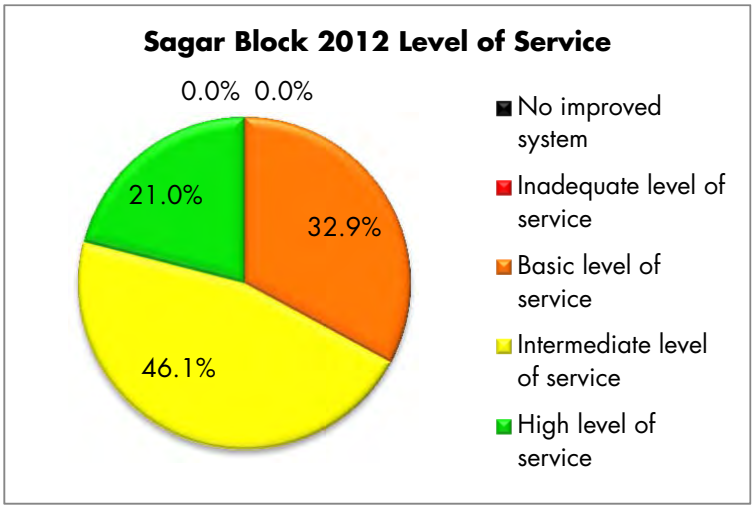
Initially, efforts to achieve full coverage were not accompanied by an explicit approach to promote social inclusion. Planning of installation and repair of water points was done simply to provide coverage in all villages within a *Gram Panchayat*. With detailed data on all existing water points having started to become more available, opportunities for a more detailed analysis of exclusion—in villages that are nominally covered, and for distant populations that are unable to access these—have increased.

The service level typically provided was a basic one, as per official standards, in the form of tubewells with handpumps as the most predominant technology used. A tubewell with handpump is expected to serve a maximum of 250 persons, providing more than 40 litres per capita per day (lpcd) of water quality that meets the norms. Higher levels of service, for example in the form of household connections, have however not been offered so far. Nor has the Water For People programme included piped supplies in its scope of work. Though not strictly speaking a part of the service level, the designs that had been used included two elements that have resulted in a more convenient and robust service—a raised platform, so that it is less likely for tubewells to inundate during floods, and a roof that offered protection against sun and rain.

The FLOW survey revealed that 67-77 per cent of all people received an intermediate or even high level of service (see FIGURE 3). However, the definition of service levels in FLOW differed from the Government of India's definition, and is based on seven indicators, including downtime of water points.

FIGURE 3: SERVICE LEVELS IN PATHARPRATIMA AND SAGAR BLOCKS

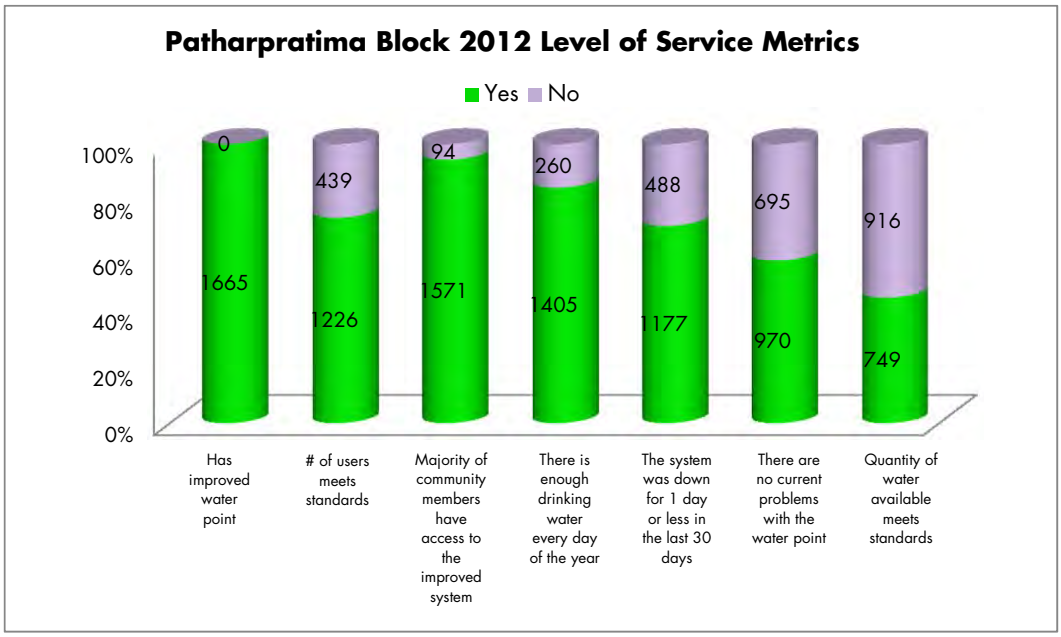


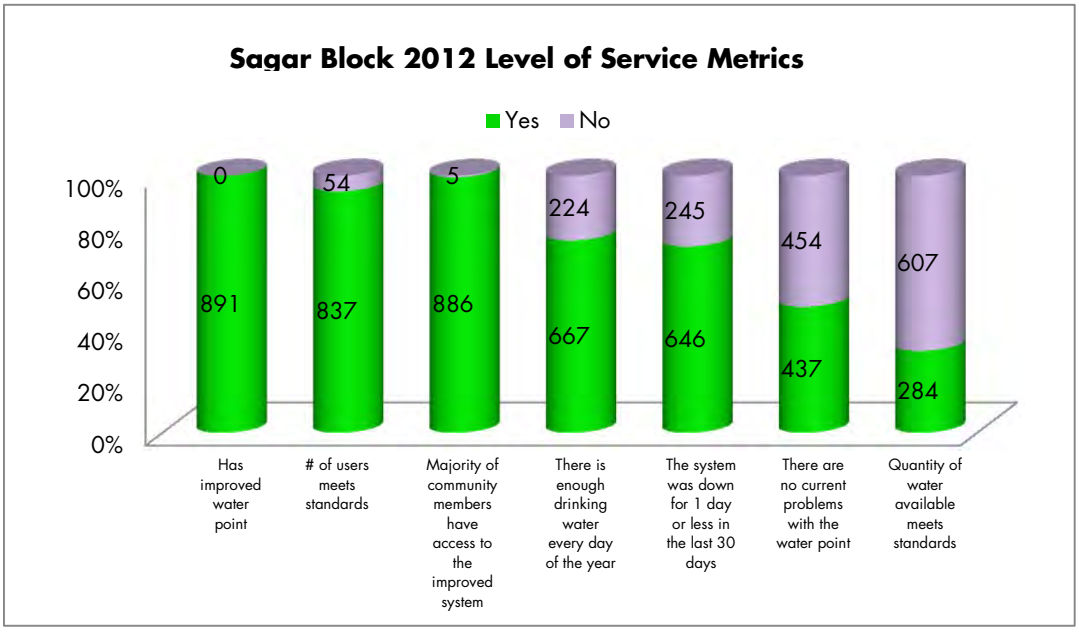


Source: WFP, 2013.

A more detailed analysis (see FIGURE 4) of the data from the FLOW survey showed that the key service level factors most frequently found to be problematic were quality and downtime in both blocks. Water quality analysis from the government lab indicated that total coliform contamination was above standards—13 per cent of the tested water points in Sagar, and 23 per cent in the tested water points in Patharpratima. A water quality testing campaign of 118 water points in Sagar in April 2013 found bacteriological contamination in some 10 per cent. In Patharpratima, crowding was identified as an additional problem, i.e., the number of users per water point.

FIGURE 4: NUMBER AND PERCENTAGE OF WATER POINTS MEETING DIFFERENT SERVICE LEVEL INDICATORS





Source: WFP, 2013.

Though piped supplies were not offered as a technology option that has the potential to provide higher levels of service, there was a demand for higher levels of service, particularly in the form of household connections. However, the interviewed water committees and *Gram Panchayats* had expressed various doubts and reservations against providing piped water supplies. Many existing systems have been fraught with vandalism. Coupled with the intermittent availability of supplies—people fear that newly-installed piped systems will prove unreliable.

5.1.2 Sanitation

Sanitation coverage figures also differed across various information sources. Patharpratima household sanitation coverage stood at 86 per cent according to the NBA report card (accounting for population growth), but was only at 68 per cent based on a 2012 baseline survey. For Sagar it was at 100 per cent and 89 per cent respectively (MDWS, 2013b). Examining past progress against targets to increase sanitation coverage, both blocks scored well against government targets of implementing new toilets. Even if the lower figures were more valid—both blocks were likely to achieve full coverage in line with the government target.

At higher levels of scale, 2 out of 15 *Gram Panchayats* have been declared open defecation free in Patharpratima and 4 out of 9 in Sagar. However, as new households are formed, there is a risk of slippage. For those classified as APLs who often find themselves without the means to build toilets without access to financing, loan facilities are available.

"My monthly turn-over from slabs and rings is about Rs 70,000 (~1200 US$)."

Amar Mandal
Sanitation entrepreneur at Kamalpur, Sagar

Unlike water, an approach towards socially excluded groups had been well defined and followed—providing loans to two groups of the population:

1. Households classified as BPL could receive a loan, on top of the government subsidy, providing them with the means to obtain a sanitation facility of better quality.

2. Households classified as APL were eligible for a full loan for a sanitation facility. Just barely above the eligibility criteria for government subsidy, many of the APL households find themselves without access to state support but are often in need of capital to invest in a toilet.

Over time, the loan terms for sanitation have d changed—both in terms of the amount provided and the duration/ schedule of payments. Initially, a 70-month arrangement for full payment of the amount of Rs 4,000 (US$ 80) was organised. This meant that relatively small amounts were paid by the borrower. This proved to be an ineffective approach. Default rates were relatively high as well as overhead expenses for administering amounts. Now, the loan stands at about Rs 2,000 and pay-back period is 12 months.

With the loan—sometimes in combination with the subsidy—households took responsibility over purchasing materials like slabs and rings for the pit, digging the pit and constructing the top structure, or contracting labourers. Around the area, there already existed a large number of production centres for sanitation materials, supported by the government. Only in some parts of Patharpratima, during the initial stage, was a problem encountered in accessing sanitation materials. Water For People also provided credit support to two local entrepreneurs to set up a production centre. Sensing opportunities for profit making and marketability, many small level production centres began to appear. Through the government-supported production centres and the ones triggered by the Water For People programme—households were able to obtain the construction materials they needed.

The type of technology employed is generally a pour-flush latrine, with a concrete slab and porcelain siphon, placed on a single pit, often reinforced with concrete rings. In some cases, the siphon came prefabricated with two outlets, allowing households to connect the siphon to a second pit—in case the first one filled up. While the quality of the slabs appeared to be good, the quality of superstructures was found to be variable (see photo 2). During transect walks, simple constructions of reed and plastic were observed, as well as well-finished concrete structures. Various interviewees commented on the fact that the simple bamboo, reed and plastic structures were often an inconvenience, and often got damaged during storms. The use of these materials may have put the sustained use of the toilets at risk. For this reason, a top-up loan was seen by the interviewees as having important added value, recognising that the additional investment in a reasonably comfortable top structure was key for sustained use. For the same reason, the government's subsidy had also increased in the recent year.

Photo 2: Differing quality of top-structures: from none, via reeds and plastic to bricks and concrete

5.1.3 WASH at schools

With respect to water and sanitation at schools, official government statistics indicated that around 10 per cent of all government schools have no toilet blocks or water facility (see TABLE 6). The data presented was not differentiated between high schools and primary schools. Data from private schools was missing. In both blocks it was found that a relatively small effort was still required for extending water and sanitation services to all schools.

TABLE 6: SCHOOLS WITHOUT TOILETS OR WATER FACILITY

	Patharpratima	Sagar
per cent of government schools without toilet	10	6
per cent of government schools without water facility	10	13

Source: MDWS, 2013B.

As can be seen from the earlier figures on Water For People's interventions, its activities mainly focused on high schools. The high level of interventions in high schools may have be achieved by an approach of pooling funds that schools received from the government for water and sanitation facility development. Here, the approach used was one that complemented government investment.

The level of service provided was generally high, with a mix of toilet types, such as urinals (for boys and girls), pour flush latrines, and child-friendly designs. All toilet blocks observed provided a high degree of privacy and convenience. High school toilets were all fitted with a box to dispose off menstrual hygiene materials.

Photo 3: Girl toilet block at Dhablat Lakshman Parabesh High School

In general, the interviewees at the schools commented that the main change they observed was reduced incidence of girls' absenteeism. Before the construction of new or the upgrade of toilet blocks, girls went home during the day or stayed at home when menstruating. This had reduced. At one of the schools visited, a representative of the parents' association mentioned that there too have been changes in hygienic behaviour, particularly around toilet use and there now is an increased demand for more convenient and comfortable latrines. But, as hygiene behaviour—and changes therein—is very difficult to assess, such statements need to be interpreted with caution.

5.2 FOREVER

5.2.1 Intervention model

The bases for the sustainability of services are laid during the implementation phase of infrastructure development. This section describes the general intervention model.

Water supply

For water a standard demand-responsive approach intervention model was followed, where communities would articulate their demand for either a new or rehabilitated water point through the *Gram Panchayat*. A parallel strategy employed by Water For People, through its partner NGOs, was demand creation through awareness raising. In general terms, this process proved to be relatively easy—also because the local NGOs worked closely with the *Gram Panchayats* and its councillors. Construction or rehabilitation of water points required the contribution of communities to capital investment.

Photo 4: Typical design of a water point with raised platform and a protecting roof, in Mahendragunge

Given the simplicity of technology (i.e., tubewells) in this, there was limited scope for participation in decision making on the type of water facility. Choice was an option for the type of handpump to be used, namely: India Mark II, Tara, PHE6 or Noria. Communities did

however have a say in the siting of the tubewell. The presence of a raised platform also was non-negotiable: all had to have it.

Though participation in decision making over the type of service was limited, this phase placed a lot of emphasis on the arrangements for future service provisioning, which will be elaborated upon in the next section.

None of Water For People's activities differed much from the intervention model typically followed by government. If any, the main difference lies in the fact that the State government, through the PHED, no longer provides point sources—only piped supplies.

Sanitation

The sanitation intervention model employed was very different in that it was mainly limited to the following: a) demand creation through awareness raising and hygiene promotion; and b) the provision of access to loans in addition to subsidies received from government so that households could construct their own toilets.

Photo 5: Members of the Purba Dwarakapur Self-Help Group discussing loans for sanitation

The implementation of this model was in response to increased pressure applied on households. For example, the *Gram Panchayats* mandated that only households with a toilet in the household were eligible for food rations. Local NGOs like Sabuj Sangha also carried out awareness raising activities on the health benefits of toilet use. At the same time, Self-Help Groups (SHGs) were being established in many villages, often for purposes other than sanitation. For sanitation specifically, the SHGs served as the liaison group for the administration of the rotating fund.

This fund was established through an initial seed capital investment made by Water For People to its partner NGOs. The seed capital provided possibilities for SHG members to take out a loan for sanitation investments. The SHGs on their turn would prioritise the first members to get access to this loan. Once repayments were being made, these are then lent out to the next batch of households.

Apart from providing a loan, both local NGOs and the *Gram Panchayats* also offered other types of support. For example, the local NGOs helped in arranging the transport of sanitation materials or recommended reliable masons.

Schools

The intervention model of the school was arguably the most participatory. In schools, a committee is usually established with representation from teachers, students and even parents. Participatory planning and design typically followed and decisions were made on the type and number of facilities. But as with water, the non-negotiable components of the design were defined—this included, in particular, the menstrual hygiene box, a washing room and an incinerator for napkin disposal. This intervention model was different in comparison to standard school interventions as the former allowed for more participation in decision making on the design of WASH facilities.

5.2.2 Service delivery models

Water supply

For ongoing service delivery activities at water points, various components have been put in place. First of all, in all water points—that were beneficiaries of the Water For People programme— a local management committee was established, whose members were subsequently trained. Two types of committee were observed:

- **Water committee:** Committees with the sole purpose of managing a water point.
- **SHG:** General SHGs that carry out added tasks related to the management of a water point.

Although the presence of a water committee in is a standard feature in any rural water supply programme in India, they are a relatively new institution in both blocks. In the past, the *Gram Panchayats* acted as the de facto service provider, taking care of operation and maintenance of water points; often they did not have the capacity to fulfil their role effectively. In many villages that were not beneficiaries of the programme—local service provider arrangements were missing. The *Gram Panchayat* does however still seek to fulfil their role as service provider. An estimated 25 per cent of water points have no active local organisation.

Photo 6: Members of the Mahendragunge water committee

The main tasks of these committees include the cleaning of platforms, carrying out minor repairs— though it is not always clear what constitutes as "minor", preventive maintenance such as greasing, breakdown reporting to the *Gram Panchayat* and *Jalabandhu*, and the collection of user contributions—which was either organised as a monthly tariff, or as a collection of money in case of repairs.

The main perceived benefit of having a local committee, both according to users and officials from the *Gram Panchayats*, is that their presence has led to more rapid repairs in cases of breakdown. For small breakdowns, the committee quickly repaired water points themselves without having to wait for someone from the *Gram Panchayat* to do so. Even for more complicated repairs, money collections for hiring the repair services from a *Jalabandhu* (see below) was relatively faster than relying on the *Gram Panchayat*. Indeed, many interviewees mentioned a significant reduction in downtime, as a result of the *Jalabandhus* work—unfortunately no hard statistics were available to confirm this. Overall functionality of water points was reasonable, at 82 per cent in both blocks, and even 95 per cent at the water points created or renovated with support from Water For People, according to the FLOW survey. Though the figure for the initial situation was based on estimates, it was inferred that the number of non-functional water points had been reduced by about half.

"We have issued a letter that all water points need to have a water committee. Now about half of all water points have one, though many are not active."

Rabindranath Bera,
Upa-Pradhan (*Vice President)*
Digambarpur Gram Panchayat

Although the work of such local committees had led to improvements in local operation and maintenance, there continues to be a low degree of professionalisation. First of all, as they are not formally registered as a service provider, they do not have any legal status. Formal registration process is perceived by local committees as more of a burden, rather than a benefit. Committees would need to undergo the bureaucratic procedure of registration, and file annual reports and financial statements. However the absence of registration was found to limit their mandate to handle user fees and formally carry out service provision tasks. Secondly, limited support is also received from the *Gram Panchayats* for non-registered institutions. Only after having seen the benefit of having water committees did some *Gram Panchayats* issued a resolution for all water points to set up a water committee. Though this move has given some backing for local committees, as a resolution, it still lacks the regulation needed for enforcement. *Gram Panchayat* officials continue to find themselves in doubt on how to enforce regulations, for example, by making registration a precondition to receiving support for major repairs. Thirdly, this model heavily relies on volunteerism; the members of the committee do not receive any remuneration for their work. This brings about the risk that after some time, they lose interest in the work, and the committees will cease to exist all but on paper. Last but not least, many *Gram Panchayats* continue to fund repairs in an ad hoc manner for those water points without a committee. Hence, there seems to be little incentive to establish water committees, apart from the possibility of having more speedy repairs.

A second component of the service delivery model is found in the network of *Jalabandhus*, or handpump mechanics. *Jalabandhus* are private entrepreneurs who received training in 2009 as handpump mechanics, and were provided with a repair toolkit. Initially, they were also supported in promoting their activities, e.g., through sharing their contact details with *Gram Panchayats* and water committees. Even though they now operate fully independently, as entrepreneurs, Water For People tries to continue tracking their businesses. For example, the *Jalabandhus* had been requested to report the repairs they had made and the income they received to populate Water For People's monitoring system.

"The first thing we do when someone calls us to repair a pump, is ask: who will pay? If the community has the money, we do the repair within a day or two. If they don't have the money, we first need to get confirmation against a quote to the Gram Panchayat, and this takes several days."

Jalabandhus

In general, the *Jalabandhus* carry out major repairs to handpumps, in two ways:

- They provide repair services directly to a water committee. In this case, a water committee calls them, informs them of the type of repair required and which aspects to prioritise and carry out within one or two days.

The water committee is expected to pay them directly. Any spare parts that are used for the repair services are also paid for directly by the water committee.

- They provide repair service in assignment from the *Gram Panchayats*. This normally happens when a village does not have the funds to cover their costs. In these cases, the *Jalabandhus* first pay a visit to the water point to assess the repairs that need to be done. Based on their findings, a quotation for the repair costs is prepared and offered to the *Gram Panchayat*. Once the quotation is approved, the repairs are carried out and upon its completion, the *Gram Panchayat* is billed. In total, this process may take several days—before the repair is actually done.

Whilst the first modality comes at a cost to the users, various interviewed committees and users preferred this option. Quick repairs over potential savings realised through the second modality was the preference.

Photo 7: Banner with names and contact details of all *Jalabandhus* at the Patharpratima block office

Jalabandhus had been operating for a few years already—new services are now being offered and additional requests for their services had been placed. For example, in some villages with piped systems, the *Jalabandhus* have started offering plumbing services for repairs. Some of the *Gram Panchayats* had put in place contracts with the *Jalabandhus* for monitoring the water points and conducting routine preventive maintenance. Finally, some of the *Jalabandhus* had also been contracted by other programmes to help with the implementation of new systems. Such a diversification had enabled the *Jalabandhus* to make a better income out of their work. Moreover, from a sustainability point of view, this diversification was indicative of the potential to widen the scope of *Jalabandhu* service to area such as preventive maintenance.

In some areas, the *Jalabandhus* had also started competing with each other. The more proactive ones had taken up a bigger part of the market share from those who had been less responsive or provided poorer quality work. As a result, wide differences in monthly earnings of *Jalabandhus* have been reported: from anywhere between Rs 4,000 (US$ 67) to Rs 20,000 (US$ 336). Some *Jalabandhus* have quit altogether, but also, new ones have started up their own businesses.

Household sanitation

For sanitation, the service delivery model remained one of household management. After having received the initial loan and/ or subsidy, households are expected to take responsibility for all operation and maintenance works. Key to this is the question of how to deal with full pits. One of the solutions already provided in the design is the possibility to have a siphon with two exits. When one pit is full, that exit is closed; a second pit is dug, and with a new pipe connected to the new pit. Likewise, when a slate cracks or breaks, households are made to cover those costs. For such repairs, households are allowed to either apply for a loan again (though not for a subsidy) or cover the costs themselves. As the need for pit emptying and parts replacement has hardly happened, respondents were not clear on how this would be done in practice.

WASH at schools

For WASH at schools a differentiation has to be made between the water point and the toilet block. The water point would typically fall under the same arrangements as community water points—that is, that schools are made responsible for minor maintenance and cleaning. Major maintenance is outsourced to a *Jalabandhu* and through the School Development Fund that all schools receive; schools have possibilities to cover their costs.

With respect to sanitation, all schools had some form of management or maintenance committee. This was composed of teachers and students are tasked to oversee and monitor the cleaning and maintenance of the facilities. The actual cleaning itself was arranged to be done by students, on a rotational basis. Whether that happens in reality remains to be seen. Few cases exist where the schools outsourced the cleaning of the facilities to professional cleaners— allegedly because of lack of funds.

"Classes take turns in cleaning the toilets. Our management committee oversees that."

Memberof Management Committee
Gadamathura Sikshaniketan High School

5.2.3 Financing life-cycle costs

This section reviews the costs associated with service provision under the EF approach, using the life-cycle cost categories proposed by Fonseca, et al. (2010). In addition to providing the costs, it discusses how these were financed by the different stakeholders.

Overall investments

TABLE 7 provides an overview of the total investment made by Water For People for the period 2006-2012. This table follows the cost categories used by the programme. For subsequent analysis of the life-cycle costs, Fonseca, et al.'s (2010) life-cycle cost categories have been added in table 7 and are discussed in further detail in the following sections.

TABLE 7: PROGRAMME EXPENDITURE BY WATER FOR PEOPLE OVER THE PERIOD 2005-2012 FOR BOTH BLOCKS COMBINED

LIFE-CYCLE COST CATEGORY (FONSECA, ET AL., 2010)	CATEGORY OF INVESTMENT (WATER FOR PEOPLE)	TOTAL INVESTMENTS (2005-2012) (RS)	TOTAL INVESTMENTS (2005-2012) (US$)
Capital expenditure (CapEx) on hardware	Hardware investments in household and school sanitation	35,582,774	711,655
CapEx and capital maintenance expenditure (CapManEx) on hardware	Hardware investments in water	16,418,463	328,369

CapEx/CapManEx on software	Staff and consultants	10,419,500	208,390
	Health and hygiene education	1,849,758	36,995
	Capacity building	2,162,207	43,244
	Operations (NGO partners administrative expenses)	3,220,268	64,405
Expenditure on indirect support (ExpIDS)	Research and advocacy	1,169,720	23,394
	Monitoring and evaluation	579,344	11,587
	Total	**71,402,034**	**1,428,039**

In addition, contributions to the programme were made by the different partners, as presented in TABLE 8. Unfortunately, these contributions were not classified according to the cost categories presented above, but they can be assumed to be mainly related to the capital (maintenance) expenditure on hardware. As an overall contribution, this then amounts to about 30 per cent of the total Water For People programme investment. The figures below only account for direct contributions made by partners and exclude other WASH investments government may have made in the blocks. The presentation also excludes government subsidies to toilets.

TABLE 8: CONTRIBUTIONS FROM PARTNERS TO THE PROGRAMME (2005-2012)

SOURCE OF CONTRIBUTION	AMOUNT (RS)	AMOUNT (US$)
Government	8,400,367	168,007
Community	7,459,185	149,184
School	11,189,275	223,786
Others	3,493,598	69,872
Total	**30,542,424**	**610,848**

Capital expenditure

Capital expenditure (CapEx) refers to the initial investment made in hardware development. It is usually split between actual hardware costs (materials and construction) and accompanying software activities (community mobilisation, training and capacity building, and hygiene promotion). CapEx should also include expenses for all staff time associated with the activities it encompasses. As almost all works of the programme were related to capital expenditure, all staff time was reported under this cost category.

A detailed calculation of the unit costs of CapEx—for comparison with benchmarks found in a study conducted in Andhra Pradesh (Burr et al., 2012)—could not be done for water. Many of the investments were not registered strictly as CapEx since many were rehabilitations—considered in the life-cycle costs as capital maintenance expenditure (CapManEx). CapManEx refers to the replacement of existing assets. Neither was this possible for sanitation. No data was available on the subsidies provided by government to the concerned households. Moreover the hardware costs on sanitation included both household and school sanitation.

Findings are therefore limited to insights in co-financing mechanisms for the different types of investments:

- For **water**, a standard co-financing model was used for CapEx. The Water For People programme, the *Gram Panchayats* and communities all contributed to the costs. The exact division of the contributions developed over time, and was organised based on the required activity—rehabilitation or the construction of a new water point. But in all cases, most of the investments came from the Water For People programme.
- For **sanitation**, as mentioned above, the financial model consisted of a subsidy from government (for eligible households) and investments made by households through loans and other cash contributions. The loan was provided at zero interest rate, which represents actually a cost of capital by the programme. Moreover, the programme assumed all the costs of activities like awareness raising and hygiene promotion, as well as technical support.
- For **school** blocks, the financial model used for covering CapEx was one of pooling funds between the Water For People programme and the school, through its School Development Fund. Initially, Water For People contributed a maximum of Rs 350.000 (US$ 7,000), and the school was expected to contribute the remainder. At the time of the study, the Water For People contribution stood at Rs 150.000 (US$ 3,000) per block.

Operation and minor maintenance Expenditure (OpEx) and Capital Maintenance Expenditure (CapManEx)

For water supplies, OpEx refers mainly to the costs of minor repairs and preventive maintenance, as well as to any operational costs for the administration of the system. CapManEx refers to the actual rehabilitation of components of a system, including major replacements. As described earlier—in the discussion on *Jalabandhus*—defining the responsibility over this cost category is not clear. In principle, water committees can charge a tariff to cover these costs and/ or raise money from users whenever a repair is needed. The FLOW survey showed that a tariff was applied at 95 per cent of all water points where the Water For People programme had intervened. The tariff paid was typically between Rs 2-5/ household/ month (US$ 0.04-0.10/ household/ month). Though the amount is very low, and goes well below the benchmarks for the operation and maintenance of handpumps—some communities have shown to be able to actually raise the required funds through extra collections when a repair is needed. More worrying is that the FLOW survey found that for the other water points, hardly any tariffs were being collected: only at 10 per cent of the water points in Sagar, and at 25 per cent of the water points in Patharpratima.

This situation implies that communities often had to rely on the *Gram Panchayats* to pay for repairs—even where a tariff was collected as repairs may cost well beyond the amount saved by the committee. This happened often, though precise data on how much *Gram Panchayats* spent exactly on OpEx and CapManEx. Some *Gram Panchayats* have tried to set some rules around their further classification. Some had set an amount (e.g., Rs 1,500 or US$ 30) as the "breaking point"— below which a repair is then considered minor (and as such, the responsibility of the community). Anything over the "breaking point" amount is considered major. However this was not found to be the standard practice. Often there was some confusion, and ad hoc behaviour and decisions were made on who pays for these costs.

For sanitation, the OpEx was usually very small and mainly referred to the costs of cleaning or the maintenance of the superstructure—this clearly perceived as the responsibility of households. For more complicated capital maintenance needs, one either has to dig a new pit dug (with a second outlet pipe as described above), or buy a new slab, in case the first one breaks down. Though this was also the

responsibility of households, those without the means require access to a new loan. So far, there continues to be little insight into how this works.

Also for schools, the capital maintenance of toilet blocks poses as the biggest concern. Most schools do not put up a reserve for this. In case the toilet blocks need replacement, it is highly likely that schools will apply for government funding again.

Direct and indirect support costs

Direct and indirect support costs are the costs of providing support to service providers and service authorities, including for example the operational expenditure of local government. The study showed that the *Gram Panchayats* have some funding for this. For example, through the network of health workers, ongoing sanitation and hygiene promotion was being carried out. Moreover, the *Gram Panchayats* carried out some monitoring, and the PHED carried out water quality testing. The Water For People programme contributed to these costs through the FLOW survey. If these activities are to become part of the monitoring work of the *Gram Panchayats* or blocks—as part of their service authority functions—a detailed cost analysis needs to be undertaken. To what extent government has the capacity to cover those activities will also need to be understood.

Main gaps in the life-cycle costs

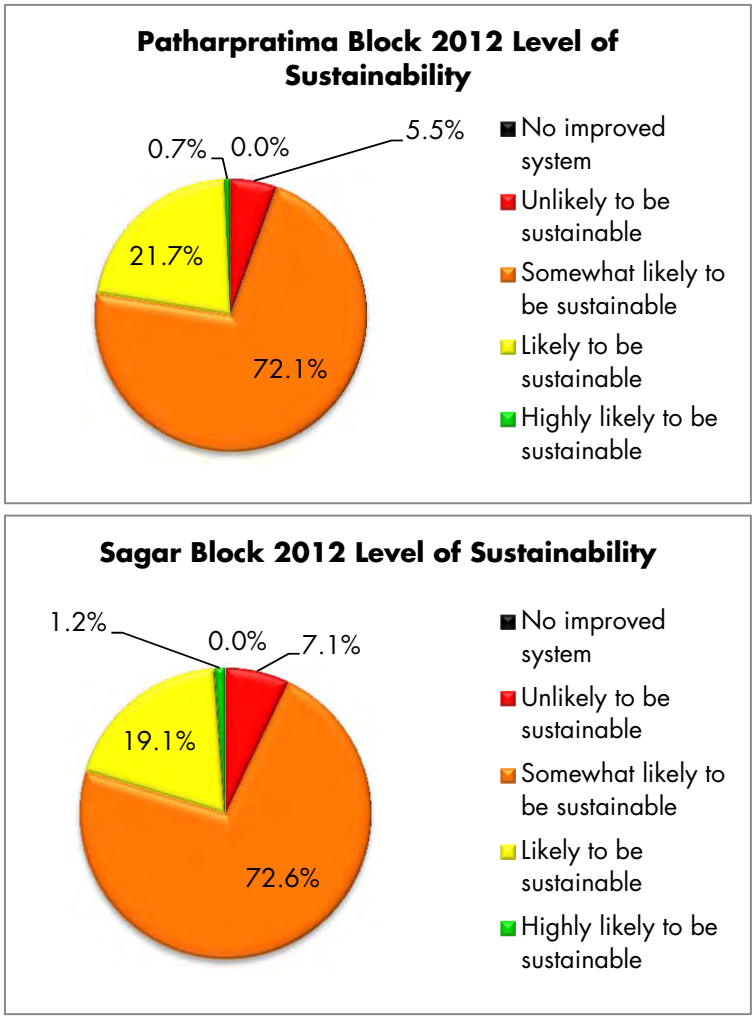
The financial model behind the programme was clearly built on concepts of co-financing, pooling and providing complementary funds to government. This was found to be very relevant in view of the significant amounts that government was investing, also because complementary investments further improved those initiatives done by government. However the data available at the time of the study did not allow for a comparative analysis to take place, with other life-cycle costs benchmarks.

Of all life-cycle cost categories, OpEx appeared to be most problematic, particularly for water. The amounts raised via tariffs were very low, due to low collection rates. There was unclarity on how tariff should be used owing to the absence of clear definitions between major and minor maintenance. As long as *Gram Panchayats* covered the costs, in theory, it was felt that there was no problem. However as described earlier, this may have led to longer downtime of services.

This point also becomes clear in assessing the likelihood of sustainability, through the FLOW survey (see FIGURE 5). This sustainability likelihood and its underlying indicators were used by Water For People globally, and are not India-specific. The following parameters were used:

- Functionality of the day of visit
- Presence of an entity responsible for operation and maintenance
- The payment of a tariff and a positive balance on the accounts of the service provider
- Spare part availability
- Extension of the system to include new users

FIGURE 5: LIKELIHOOD OF SUSTAINABILITY OF WATER SERVICES IN PATHARPRATIMA AND SAGAR BLOCKS



Source: WFP, 2013.

As can be seen, in both blocks about 72 per cent of the water points were classified as somewhat likely to be sustainable. The main reason behind most water points only achieving a medium level score was because tariff collection (with a positive account balance) was only found in 10 per cent of all water points. On nearly all the other indicators[4], only few of the water points failed. This finding confirms the ambiguous situation of tariff payments, and its related responsibilities for paying for operation and maintenance between water committees, *Jalabandhus* and *Gram Panchayats*.

[4] The only other indicator that was not complied with in the majority of cases was the one of expansion of the system – an indicator that arguably applies more to piped schemes than to water points.

5.2.4 Strengthening service authority functions

Sustainability of services does not depend only on how the services are being managed at community level, but also on the support they receive from service authorities. In the West Bengal WASH sector, this concept in general is not well-defined. But, the typical authority functions of planning, monitoring, coordination, implementation and support are spread out over the *Gram Panchayat* and block levels, with some tasks carried out at district and State level. This section summarises how these functions are currently being fulfilled, and how the Water For People programme has worked with authorities and contributed to strengthening the performance of their functions.

Planning

Investment planning for the water and school components of the programme was done largely together with the *Gram Panchayats*, and to a lesser extent with the blocks. Investment plans followed the standard planning tools and instruments used by government. However it was observed that the planning tools were quite linear—focused only on infrastructure development, and not on aspects such as management of assets or development of local service provider capacity. Moreover, these tools did not allow for an in-depth analysis of pockets of exclusion to take place. With the further development of FLOW, such tools are starting to become more available[5]. Water For People is planning to work through with the *Gram Panchayats* to interpret the data from FLOW and use these to plan for filling coverage gaps.

Monitoring

In all the planning, authorities use government monitoring data as sources of information. Mainly the online databases of the National Rural Drinking Water Programme and the Nirmal Bharat Abhiyan (MDWS, 2013a; 2013b) are used. The main limitation, particularly of the Nirmal Bharat Abhiyan, is in its focuses on tracking progress—that is, the execution of building new toilets, and not the assessment of actual coverage. A third monitoring source focuses on water quality. The PHED has labs in various parts of the district that are tasked to regularly sample all water points. However the interviews revealed that there was confusion on their frequency and whether this would cover all water points. This confusion stemmed from poor communication of the results of water quality testing to the *Gram Panchayats*. While the analysis reports are sent to the *Gram Panchayats*, they are without any explanation of what the test results imply. Support in identifying possible causes or corrective measures are neither communicated. The *Gram Panchayats* in turn lack the capacity to interpret the results on their own. As a result, test reports are often filed without any action.

In addition, the government also organises monitoring at community level. For example, during the interviews it was mentioned that three different types of groups visited communities to monitor sanitation and hygiene behaviour: 1) Everyone, Forever monitoring committees, composed of village volunteers; 2) Community Health Care Management Initiative (CHCMI) paid representatives; and 3) ward representatives who compiled information in their area and reported these to the *Gram Panchayats*. Monitoring is largely based on observation of status of latrines and hygiene behaviour and through talks and interviews with household members. Structured monitoring tools were often lacking, and activities were found to be more of a combination of monitoring and awareness raising. It was also not clear whether and how the results of such monitoring fed into the national and state databases.

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[5] With the *Gram Panchayats*, Water for People is planning to interpret the data gathered through FLOW, using findings from the tool to plan for filling/ addressing coverage gaps.

Neither the block nor the *Gram Panchayats* undertook a systematic monitoring of water services. The FLOW exercise provided, for the first time, a complete mapping tool of all water points, also providing insight into service levels and the likelihood of sustainability. The actual data collection was done by enumerators from the local partner NGOs, but the planning of the exercise was done in close coordination with the block and *Gram Panchayat* officials. Results have been presented back to them. Yet, the step of using the data for more fine-grained planning to benefit excluded groups has yet to materialise.

"We monitor sanitation in three ways: by observing cleanliness and presence of soap, through interviews and verification with neighbours."

Member of Standing Committee on Sanitation
Dhablat Gram Panchayat, Sagar

Still, working with FLOW generated lots of interest from local authorities as it provided a more comprehensive set of indicators. A key factor for its future use and uptake depends largely on how it can be shaped to fit the government's monitoring and planning systems. This has started to become all the more urgent as the PHED is currently developing a water point monitoring system, that is, similar to FLOW, also based on the use of mobile phones. Three options for expanding the functionality of FLOW and its embedding into government planning systems have been mentioned during the interviews. These include:

- **Expand FLOW into real-time monitoring**, allowing users to send an SMS, for example, when a water point is down. This functionality is already under development within the FLOW-plus initiative. Such a system would also be of interest, above all, amongst those found at higher institutional levels, such as a block or district, as it would generate lots of data to analyse trends in break-down rates. But for local operational practices, FLOW was not found necessary, as the communities already have good communication channels established with the *Jalabandhus* and *Gram Panchayats*.

- **General monitoring tool at block level**. In this case, the block would carry out regular updates with the FLOW tool. However, this will require adjusting the questionnaire so that it better aligns with the compulsory data the block needs to collect and feed into state and national databases.

- **Complement government monitoring**. It is doubtful that FLOW would replace the government's monitoring indicators or system, but it can certainly be used to complement the existing surveys of the *Gram Panchayats*. For example, it can also be used to carry out the more fine-grained planning required for those found in pockets of exclusion.

Whichever of these options will play out, what is clear is that specialised support is needed to analyse the data, as capacity is and will remain limited. One of the considerations is to institutionalise the regular monitoring using FLOW in the Block Resource Centre—a technical support unit to support the data collection, processing and analysis. But this will require more detailed exploration.

Coordination

A final authority function is coordination of WASH activities. This is crucial as there is a multiplicity of investments in both blocks, mainly by government: PHED invests in piped supplies, *Gram Panchayats* in point sources and sanitation, as do the Members of the Legislative Assembly, who often have a small investment fund for their constituencies. In addition, there may also be the existence of small investments by other line agencies. Finally, there are the investments by NGOs and projects. The *Gram Panchayats* serve as the core stakeholder in this web of activities and funding. They tend to have good bilateral contacts with each of those bodies, and are mandated to sign off any WASH investment made in their area of jurisdiction. Some bodies opt to channel all their funds through the *Gram Panchayats*, rather than investing directly. For example, all the blocks' funds for WASH are channelled through the *Gram Panchayats*. Yet, the *Gram Panchayats* do not have any pro-active multi-stakeholder coordination mechanisms, in which they try to bring together all—or at least most of the funders—to develop a combined investment plan. This means that there is a risk of duplication of efforts between the investments made, thereby reinforcing the approach focused on infrastructure development only.

6 CONCLUSIONS AND RECOMMENDATIONS

6.1 CONCLUSIONS

In 2011, Water For People India formally adopted the Everyone, Forever approach and decided to use that as the orientation to consolidate its work in the Patharpratima and Sagar blocks—areas where much of its efforts had already gone into extending coverage for all and strengthening the bases for sustainable service delivery.

This report aimed to assess how Water For People's programme in both blocks has tried to achieve the ambitious objectives of Everyone, Forever, and what evidence exists to demonstrate that progress has been made against EF's two objectives. It has done so through capturing the perspectives of different stakeholders in the process, ranging from users and water committees to officials and elected representatives at different levels of government, as well as private sector entrepreneurs and NGOs. Interviews were complemented by the analysis of secondary data, both from government sources and from Water For People's own data.

The results showed different data with respect to the achievement of the objectives of *Everyone*, but in general terms islands of success were evident—particularly given the scale of the two blocks, which have a combined population of 558,000 persons:

- In terms of water supply, this has been achieved for all, except for a few geographically isolated pockets in Sagar. In Patharpratima, while there are sufficient water points to supply the entire population, because of accessibility (and to a lesser extent quality), about 20 per cent of the population was not covered. Given the size of the population and its geographical conditions, it will be hard to achieve the objective of Everyone by the expected date of 2016.
- For sanitation, Sagar was again found to have a much higher coverage, but still 10 per cent remained unserved. In Patharpratima, effective coverage stands at about 85 per cent. The coverage gap towards Everyone might be achievable in Sagar, but will be difficult in Patharpratima.

- With respect to school, statistics indicate that about 10 per cent of all schools still lack adequate school WASH facilities. Given the intervention track record of Water For People, these are likely to be primary schools, where Water For People had put less emphasis, so far.

Not only was coverage important, but also the level of service provided. Though the water points provided through the programme had the potential to deliver a basic level of service as per governments' norms, challenges remain due to factors like seasonality, quality and accessibility. However, a definitive assessment of service levels was not possible as the government did not collect such data, and the FLOW monitoring survey used indicators that were not specific to the India context.

The gains in coverage have not been achieved only thanks to the efforts of Water For People—in fact, they have contributed about 10-15 percentage point of the current coverage in water and sanitation (for sanitation mainly in Patharpratima). They were successful in the organisation's emphasis on building strong partnerships with the government, leveraging and topping up government investments in different ways:

- Pooling funds with local government for investments in water points.
- Providing loans to complement government subsidies for sanitation for BPL households, and providing a full loan for APL households through a revolving fund.
- Topping up government investment for funding school WASH blocks.

Progress in terms of sustainability was more difficult to assess, largely because of the lack of baseline data. Current non-functionality rates of water points stand at about 18 per cent, which is possibly a reduction by half compared to the situation in 2006 when the programme started, and only at 5 per cent when considering the water points where Water For People intervened—a huge success. Also, average downtime after a break down is now often only a few days, though hard figures on this are lacking. Yet, the overall sustainability likelihood rating, as done through the FLOW survey puts the bulk of the water points at only an intermediate level of likelihood to achieve sustainability. The main reason for that is the low percentage of water points wherein a tariff had been raised, and where a positive cash balance was reported. Though the figure still remained low, it still probably represented a substantial increase when compared to the original situation.

The Water For People programme has been putting much emphasis on establishing local service provision arrangements around the water points where it intervened, mainly by:

- Establishing committees, responsible for cleaning, minor maintenance and tariff collection.
- Promoting the establishment of tariffs, or at least special fee collections at moments of break down.
- Setting up an active network of Jalabandhus, or handpump mechanics, who now undertake major repairs, but increasingly other water-related tasks, such as preventive maintenance, routine monitoring and plumbing on piped supplies.

The importance of these local improvements for service provision has increasingly been recognised by authorities at block and *Gram Panchayat* level. This recognition is manifested by *Gram Panchayat* resolutions calling for the massive establishment of water committees, user tariffs and increasing the role of *Jalabandhus*. Still, there are many limitations and risks to these arrangements. Ambiguity in responsibility sharing over the operation and maintenance costs between *Gram Panchayats* and water committees remains. This manifests itself not so much in the rapid break down of facilities, but more so by inefficient and expensive repair and capital maintenance through government. Most committees continue to see the process of legal registration burdensome; few take the necessary steps toward

formalising water committees. This poses risks to sustainability as non-registration limits the committees' possibilities to handle fees and formally carry out service provision tasks.

There have been positive signs regarding the likelihood of sustainable hygiene behaviour change. For example, school stakeholders mention reduced absenteeism at schools as a result of having menstrual hygiene facilities included in the school blocks. Mention has been made of children taking hygiene behaviour messages from schools to their homes, many of them demanding for adequate toilet facilities in their own homes. The change in hygiene behaviour was accompanied by the critical increase in access to toilets, and has probably generated a critical mass of people demanding for adequate sanitation in each household and community. Still, there continues to be risks for people to fall back to open defecation and unhygienic behaviour, also for example when a new household is formed, and does not have immediate access to funds to build its toilet. This risk is compounded by the rudimentary superstructures. Not only do these get damaged easily, for example during a storm, but some have considered them as lacking comfort and giving insufficient privacy. Some mitigating measures have been observed, such as monitoring by ward representatives or CHCMI committees, combined with the continuous awareness raising.

At schools, management committees had been established. Members of these committees have been tasked to organise the cleaning and maintenance of the blocks, whilst the actual cleaning is often done by the students themselves, on a rotational basis. However, as funding for maintenance in schools is derived from a mix of financial commitments–there may be a tendency to let facilities crumble until the next round of government funding is made available for a major rehabilitation. This puts schools at risk to quickly fall back in a state of uncleanliness and disrepair.

As many of the factors that affect sustainability depend on government decisions, the programme had in many ways worked closely with the blocks and *Gram Panchayats*, who themselves, fulfil the main authority functions; though in a much more limited way when compared to district and state government. Tasks have taken mainly an operational form, for example through joint planning and coordination of actions. Strengthening of the institutional capacity of these bodies of government was not an explicit component of the programme, though in various ways a contribution to this is most likely to have been made. Above all the programme was crucial in advocating ways to institutionalise various innovations—around service delivery, like the water committees, *Jalabandhu* and tariffs—through government resolutions. Monitoring of service delivery through FLOW has shown the potential to strengthen the local government's capacity for analysing data and using findings to adequately plan for filling remaining coverage gaps. So far, interest in this has been created but next steps need to be taken in aspects such as joint data analysis of the FLOW results and using those for planning.

"The main contribution made by Water For People is through the innovations and ideas they brought, for example FLOW, the Jalabandhus and water committees."

Gouri Haldar
Sabhapati (President)
Patharpratima

the government's approach to sustainability. In addition, the programme's added value has been in filling gaps in achieving coverage that are difficult to reach for government. For example, the loan for APL households for sanitation fills such a gap. Likewise, by pooling funds with government for schools blocks higher levels of service could be achieved than through the government subsidy alone.

In conclusion, the *Everyone* component of the programme was one that was relatively easy to develop and apply. It mainly came down to developing an implementation and funding strategy that complemented and aligned with government policies and investments. In that sense, it is a component that can be followed largely as it stands now in the two blocks, but that can be easily replicated in other parts of the state or beyond; though time frames will of course depend on factors such as the initial coverage conditions.

The main new challenge is found in addressing demands for higher levels of service, for example through piped supplies, and the corresponding required convergence with the PHED. The *Forever* component, as applied so far, has revealed many relevant and strong components. But these will need further development to address the challenges mentioned earlier, many of which need to be addressed at higher levels of government, such as the district or state, as they depend on policies on community-based management, and the funding of operation and maintenance costs. But it is felt that if the developed innovations and approaches are institutionalised at those levels of governance, a critical impact can be made on improving the bases for sustainability significantly. For that reason, the *Forever* component will probably need to undergo major changes if it is to be applied in other districts or states, taking cognisance of differences in policy and institutional frameworks.

6.2 RECOMMENDATIONS

In view of the above, the recommendations herein are designed to support the further implementation of Water For People's programme in both blocks. These may need to be adjusted if the approach is planned to be replicated in other blocks or states.

Everyone

- Analyse water and sanitation coverage gaps with Gram Panchayats and block officials, using FLOW for data gathering and producing a structured monitoring and planning methodology.
- Pilot piped supplies as a technology option to reach everyone, opening up technology choices and service levels on offer. This will need professional service providers.

Service delivery model

- Work with blocks and *Gram Panchayats* to legalise, regulate and institutionalise water committees as service provider models. This may take different forms to be explored, for example, as a registered entity or as a sub-committee. Develop corresponding by-laws and guidelines, including for reporting by water committees to Gram Panchayats.
- Develop a plan for the Gram Panchayats to establish and train water committees at water points without committees.
- Pilot different modalities for professionalised water committees—particularly for piped supplies if those are to be piloted
- Work with blocks and Gram Panchayats on local policies, by-laws and guidelines on tariffs and cost sharing arrangements for operation and maintenance costs.

- Work with blocks and Gram Panchayats on local policies, by-laws and guidelines on tariffs and cost sharing arrangements for operation and maintenance costs.
- Encourage Gram Panchayats to establish contracts with Jalabandhus for routine monitoring and preventive maintenance.
- Encourage schools to outsource cleaning and develop relevant budgets.

Strengthening service authority functions

- Establish investment tracking and coordination mechanisms, initially at block and later in the Gram Panchayat. Prioritise Patharpratima as the largest investments need to made there.
- Implement mapping and analysis of existing government monitoring processes and examine where and how process, technical platform and indicators in FLOW (plus) best works. Prioritise water over sanitation. Support Gram Panchayats and blocks in the process of water quality monitoring by participating in sampling, analysing data and reporting to water committees.
- Strengthen monitoring by Gram Panchayats and their sub-committees to retain open defecation free status by providing more structured monitoring tools and instruments.
- Develop a communication strategy about the programme for districts and states to achieve recognition for sustainability innovation and seek ways to institutionalise these ideas.

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ANNEX 1: ANALYTICAL FRAMEWORK

ANNEX 1: ANALYTICAL FRAMEWORK					
PILLAR	**PRINCIPLE**	**LEVEL OF APPLICATION OF PRINCIPLE**			
		CONSUMER	**WATER SERVICE PROVIDER**	**WATER SERVICE AUTHORITY**	**NATIONAL/ STATE**
Service Delivery Approach	Policy, legislation and institutional roles are clarified for commonly agreed-upon service delivery models.	Consumers understand which service they are supposed to receive, from which service provider they get this and what their rights and responsibilities are.	Water infrastructure, service levels and management arrangements are part of recognised and well-defined service delivery models. Includes both intervention approaches and details on design, procurement, etc., and management models.	Clear roles and responsibilities are defined and authority is exercised at decentralised levels to ensure the delivery, support and oversight of water services delivery. Refers to the governance arrangements for the role of local government and communities in the service delivery. Specific emphasis made on the roles for long-term ongoing support.	Water For People approach is aligned with and embedded with national and state policies, legislation, regulation and institutional arrangements
	Financing the full life-cycle costs are effectively covered through an agreed-upon combination of tariffs, taxes and transfers.	Consumers contribute through tariffs to cover parts of the full life-cycle costs they are responsible for. This is in line with national tariff structures. This could also entail co-financing of initial capital expenditure.	Service providers understand the full life-cycle cost of the service they are running, and cover these through a combination of tariffs that are effectively levied as well as taxes and transfers in line with national policy. Service providers have appropriate financial	Financial planning accounts for the full life-cycle costs, and service delivery is supported with available funding through a combination of taxes and transfers and where relevant indirectly through tariffs. Refers to the definition of different cost categories and payment for	Water For People approach is aligned with national or state level arrangements for covering life-cycle costs, and/ or contributes to the promotion of a life-cycle costs approach.

			accounting systems. Includes tariff settings and payment for the various cost categories.	these. A specific point is the financing of recovery after disasters.	
	Planning aims for full coverage and accounts for the different stages of the life cycle of the service, and is based on participatory processes.	Consumers participate in planning processes and consultation mechanisms in the different stage of the life cycle of the service (including technology selection).	Service providers plan and implement operation and (capital) maintenance activities based on life-cycle planning which is informed by consumer feedback. This may involve asset management activities, where relevant. This refers both to planning as well as the whole process of feasibility, planning, design, procurement and implementation/construction.	Service authorities plan for full coverage across their entire area of jurisdiction, based on the different stages of the life cycle of services, seeking economies of scale in the fulfilment of their functions. This may involve asset management activities, where relevant. Links to district, block and *Gram Panchayat* planning approaches. A specific point of attention is the inclusion of planning for water resources and security.	Water For People plans in coordination with national and State level planning or contributes to strengthening such processes at State level.
	Transparency and accountability mechanisms are in place between consumers, service providers and independent oversight	Consumers have access to information about service delivery and are able to hold providers to account both directly and indirectly for the service received.	Service providers put mechanisms in place to enable consumers to voice their opinions on performance and provide both consumers and authorities with information about service provided. In addition, service providers can	Service authorities apply instruments for monitoring of water service delivery, based on an agreed set of service delivery indicators. In addition, they provide accountability to consumers, service providers, civil	Water For People approach is aligned with the national strategies for regulation and transparency and contributes to the development of the monitoring initiatives in the country.

	bodies over the quality and sustainability of services provided.		hold higher level authorities to account over their support functions.	society and national authorities on their own performance. includes systems to monitor service delivery aspects, such as quality of the service, functionality, etc.	
Learning and adaptive capacity	Capacity (awareness, skills, resources, and access to support) exists within the sector for stakeholders to fulfil their functions, as defined in the service delivery model.	Consumers are aware of their roles, rights and obligations within the framework of the service delivery model and are able to fulfil them.	Service providers have the skills and resources required to provide a sustainable service and are able to draw on post-construction support (including training, refresher courses, technical assistance, etc.) as required.	Skills, resources (including supply chains) and information are available at service authority level to ensure water authority functions are fulfilled, including post-construction support to service providers. In addition, they are able to draw on capacity support as required from higher levels. Refers to the development of local government's institutional capacity—including in the field of technical support, tools, spare parts, etc.	Water For People contributes to and is aligned with sector efforts to strengthen capacities of service providers and municipalities.
	The sector has the ability to learn and innovate on the basis of knowledge sharing, reflection and analysis.		Mechanisms are in place for service providers to learn from monitoring their own performance as well as through sharing with peers.	Mechanisms are in place for service authorities to learn from monitoring their own performance as well as through sharing with peers. This includes technological development and innovation.	Water For People contributes to knowledge management and learning initiatives.

Harmonisation and Alignment	Sector investment and support is harmonised and aligned with national priorities and policies.		Service providers operate within national sector guidelines, norms, standards and approaches as set out in service delivery models, regardless of funding source.	Water service authorities plan for local investment, and support and monitor service providers according to national guidelines and established service delivery models, regardless of funding source.	Alignment of Water For People with national policies, strategies, planning processes and priorities, including financial coordination on how its efforts in funding feed into the water sector.
	Actions of stakeholders are coordinated at different levels with well-recognised platforms and forums in place.		Service providers are able to share information or plan activities to achieve economies of scale through coordination platforms.	Water service authorities provide coordination mechanisms and platforms for service providers and operational programmes to share information and create economies of scale, for coverage issues, tariff setting and support for existing systems.	Mechanisms are in place to ensure funding flows and polices in the sector at national level are well coordinated, both between ministries, or other sources of national funding, and development partners where relevant.

ANNEX 2: INTERVIEWEES AND PARTICIPANTS IN FOCUS GROUP DISCUSSIONS

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NAME	**DESIGNATION**	**ORGANISATION**
STATE LEVEL		
Animesh Bhattacharya	Assistant Chief Engineer – I	West Bengal PHED
Gautam Basu	Water quality officer	West Bengal PHED
DISTRICT LEVEL		
Narayan Swaroop Nigam, IAS	District Magistrate & Collector	South 24 Parganas
Biplab Kumar Dam	District Coordinator, NBA Cell	South 24 Parganas Zilla Parishad
Hiranmoy Bose	Assistant. NBA Coordinator	South 24 Parganas Zilla Parishad
BLOCK LEVEL		
Gouri Haldar	Sabhapati (President)	Patharpratima Panchayat Samiti
Sheikh Abdur Rajjak	Saha Sabhapati (Vice President)	Patharpratima Panchayat Samiti
Ranjan Mal	Member of Standing Committee (Public Health)	Patharpratima Panchayat Samiti
Partha Mukhapadhyay	Block Development Officer	Sagar Block
Apurba Ranjan Giri	Sabhapati (President)	Sagar Panchayat Samiti
Malati Das	Saha Sabhapati (Vice President)	Sagar Panchayat Samiti
Anukul Das	Member of Standing Committee (Public Health)	Sagar Panchayat Samiti
Anita Maity	Member of Standing Committee (Education)	Sagar Panchayat Samiti
Anita Jana	Member of Standing Committee (Women & Child)	Sagar Panchayat Samiti
Shrabani Sahoo	Member of Standing Committee (Fishery)	Sagar Panchayat Samiti
Ashok Kr. Maity	Member of Standing Committee (PWD)	Sagar Panchayat Samiti
Amar Mandal	Member of Standing Committee (Agriculture, Irrigation & Cooperatives)	Sagar Panchayat Samiti
GRAM PANCHAYAT LEVEL		
Himangshu Sit	Pradhan (President)	Dhaspara Sumatinagar-I *Gram Panchayat*

Bharat Mandal	Pradhan (President)	Dhaspara Sumatinagar-II *Gram Panchayat*
Rabindranath Bera	Upa-Pradhan (Vice President)	Digambarpur *Gram Panchayat*
Janmejoy Bera	Member of Standing Committee on Public Health	Digambarpur *Gram Panchayat*
Jaba Rani Bhattacharya	Member of EF monitoring committee	Digambarpur *Gram Panchayat*
Juthika Maity	Member of EF monitoring committee	Digambarpur *Gram Panchayat*
Sandhya Das	Member of EF monitoring committee	Digambarpur *Gram Panchayat*
Ashwini Mirdha	Pradhan (President)	Laxmijanardanpur *Gram Panchayat*
Narayan Chandra Bar	Upa-Pradhan (Vice President)	Laxmijanardanpur *Gram Panchayat*
Praddut Kumar Mondol	Engineer	Laxmijanardanpur *Gram Panchayat*
SUPPORT SERVICE PROVIDERS		
Bhagirath Jana	*Jalabandhu* in Gangasagar *Gram Panchayat*	Independent entrepreneur
Gobindo Patra	*Jalabandhu* in Muriganga-II *Gram Panchayat*	Independent entrepreneur
Ashutosh Das	*Jalabandhu* in Muriganga-I *Gram Panchayat*	Independent entrepreneur
Dukhishyam Maity	*Jalabandhu* in Laxmijanardanpur *Gram Panchayat*	Independent entrepreneur
Amar Mandal	Sanitation Entrepreneur at Kamalpur, Rudranagar *Gram Panchayat*	Independent entrepreneur
SERVICE PROVIDERS		
Laxmi Pradhan	President	Mahendragunge Water Committee in Dhaspara Sumatinagar-I *Gram Panchayat*
Kakali Hazra	Secretary	Mahendragunge Water Committee in Dhaspara Sumatinagar-I *Gram Panchayat*
Sandhya Mandal	Treasurer	Mahendragunge Water Committee in Dhaspara Sumatinagar-I *Gram Panchayat*
Pashupati Sahoo	Secretary	Sumatinagar Water Committee in Dhaspara Sumatinagar-II *Gram Panchayat*
	Various members	Ramnagar Abad water committee in Digambarbur *Gram Panchayat*
	Various members	Self Help Group Purba Dwarakapur (Das Para) in Laxmijanardanpur *Gram Panchayat*
	Various members	Self Help Group Purba Dwarakapur (School Para) in Laxmijanardanpur *Gram Panchayat*
HIGH SCHOOL		
Santanu Gayen	Headmaster	Dhablat Lakshman Parabesh High School

Mitali Patra	Assistant Teacher (Mathematics)	Harinbari Girls' High School
Anupama Mandal	Assistant Teacher (Geography)	Harinbari Girls' High School
Ishita Das	Assistant Teacher (English)	Harinbari Girls' High School
Swapna Samanta	Assistant Teacher (Life Science)	Harinbari Girls' High School
Sonali Giri	Assistant Teacher (Bengali)	Harinbari Girls' High School
Subrata Kumar Dhara	Head Master	Gadamathura Sikhaniketan High School
Bimal Kumar Das	Secretary Parents Teacher Association	Gadamathura Sikhaniketan High School
NGO PARTNERS		
Sudipta Barman	Program Head	Sabuj Sangha
Asok Bhattacharya	Regional Manager	Sabuj Sangha
Samaresh Das Adhikary	Program Manager-Sagar	Sabuj Sangha
Bipin Parua	*Jalabandhu* Supervisor	Sabuj Sangha
Samir Maity	School Sanitation Supervisor	Sabuj Sangha
Ganesh Chandra Das	Water Supervisor	Sabuj Sangha
Sukumar Das	Household Sanitation Supervisor	Sabuj Sangha
Bibhabasu Pal	Project Coordinator	Tagore Society for Rural Development
WATER FOR PEOPLE STAFF		
Arumugam Kalimuthu	Country Director	Water For People - India
Sushanta Ghosh	State coordinator, West Bengal	Water For People - India
Swagato Mitra	Programme Officer, West Bengal	Water For People - India
Asis Sadhu	Project officer of East Medinipur & Murshidabad	Water For People - India
Satya Narayan Ghosh	Senior Programme Officer	Water For People - India
Sujata Tripathy	Project officer of South 24 Parganas	Water For People - India
Lopamudra Baruah	Communications Officer	Water For People - India
Nick Burn	Chief of Program, Water For People	Water For People