

Accelerating access to safe water and sanitation in Bangladesh, Cambodia, and India

Program evaluation brief

Written by Aguaconsult, March 2024

This research brief presents the findings from an evaluation of a Water Supply and Sanitation (WSS) program that took place between 2020-2024 in Bangladesh, Cambodia, and India. The program was funded by Inditex and implemented by Water.org with several in-country partners with a goal of capitalizing over USD 165 million, providing more than 600,000 loans to support the development of improved water and sanitation facilities to more than 2.7 million people, and advancing the sector conversation around WSS financing. The brief provides an overview of the evaluation methodology and overall findings across the three evaluation pathways, as well as overall programmatic recommendations.

Program background

To achieve program targets, Water.org collaborated with and provided technical support to different partners across the three countries:

- In India, Water.org continued to partner with a well-established non-profit development organization that plays an intermediary role between self-reliant community Self-Help Groups (SHGs), and commercial banks.
- In Cambodia, besides continuing its partnership with six microfinance institutions (MFIs) and partnered with two water utilities and two associations.
- In Bangladesh, Water.org partnered with a total of nine financial institutions and one research institute, six of which they had collaborated with previously. Eight partners remain active, with one withdrawing due to COVID-19 and another graduating from the program.

Methodology

The evaluation assessed the effectiveness of the program and interventions implemented by Water.org, analyzing the program performance, partners' performance, and sector-level and household-level impacts to inform future programming. Evidence collected was mapped against the Theory of Change to understand how the work carried out by Water.org and its partners contributed to the intended outcomes. The evaluation was structured around the program's focus pathways, as mapped in Figure 1:

- 1. **Interaction**: assessing the financial leverage and the channels through which finances were accumulated.
- Knowledge and behavior: assessing the program performance at the household level in terms of knowledge and behaviors.
- 3. **Outcomes and impact**: assessing the program's impact on the household, in terms of indirect benefits resulting from the WSS improvement (socio-economic benefits, physical and/or mental health gains, climate resilience, and women's empowerment).



Figure 1: Focus pathways of the evaluation

Findings are derived from Water.org's quantitative data (household surveys, financial data, and program progress reports) and complemented by primary qualitative data, to assess partnerships' quality, and partners' strengths and weaknesses and identify sector-level and household-level impacts. Primary qualitative data was collected through 32 KIIs¹ to gather more evidence on program performance, partner performance, sector impact, and 43 FGDs² on household-level impacts in September–October 2023.

¹ With Water.org country teams and Water.org's partners in Bangladesh, Cambodia and India, as well as with local governments and banks in India.

² 17 in Bangladesh (in Khulna and Dhaka), 11 in Cambodia (Kampong Chhang, Prey Veng, Phnom Penh Kandal, Takeo) and 15 in India in Tamil Nadu

Findings

The evaluation revealed that, overall, the program implemented by Water.org between 2020 and 2024 in India, Cambodia, and Bangladesh was successful in providing **767,346 loans**, reaching **3,028,441 people**, and mobilizing **USD 271,389,314 in capital**.



Borrowers from a program intervention in Bangladesh

Pathway 1: Interaction

Program performance

At a program-wide level, targets have been exceeded. In Bangladesh, the program has significantly overachieved its targets across the three indicators (266% of capital mobilized, 201% of WSS loans disbursed, 197% of WSS people reached), largely due to the selection of strong partners already familiar with WaterCredit at the outset and the reallocation of additional funds to Bangladesh during implementation. India has also overachieved nearly all of its targets, especially regarding capital mobilized (146%), mainly because 31% of households took out second loans. In contrast, Cambodia has exceeded its capital target but only reached 77% of the WSS loans disbursed and 96% of the WSS people targets, suggesting that the loan sizes were larger than anticipated. In Cambodia, the focus on loans to water utilities, and securing a USD 1,305,000 loan by three water utilities is expected to lead to a future increase in household impact in the future.

Table	1:	Program	achievements ³
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Country	Indicator	Target	Achieved	Achievement
	Capital mobilized	USD 62.1M	USD 90.6M	146%
India	Total number of loans	300,000	368,686	123%
	People reached	1,440,100	1,127,127	78%
Bangladesh	Capital mobilized	USD 37M	USD 98.7 M	266%
	Total number of loans	135,000	271,700	201%
	People reached	609,500	1,200,559	197%
Cambodia	Capital mobilized	USD 66.1M	USD 82 M	124%
	Total number of loans	165,500	126,960	77%
	People reached	728,200	700,755	96%
Total	Capital mobilized	USD 165 M	USD 271.3 M	164%
	Total number of loans	600,000	767,346	128%
	People reached	2,700,000	3,028,441	112%

Partner performance

Partners greatly benefited from Water.org's expertise and support and expressed strong satisfaction about their collaboration. In India, the DHAN Foundation received technical support to strengthen its staff capacities and to conduct activities to sustain behavioral change. At the start of the program, the DHAN Foundation was already present in 13 out of the 28 states, had well-established linkages with banks and the government and handled WSS portfolios. During the program, the Foundation confirmed its ability to sustainably scale up WSS lending through its demand-driven community-based model, especially in Southern states where it had a long-term presence.

In Bangladesh, Water.org successfully provided technical support to nine partners, covering all divisions and 52 of the 64 districts in the country. The USD 200 million 'BD Rural WASH' (PKSF) microfinance program supported partners during turbulent times but also had impacts on the program, as partners did not want to offer the WaterCredit and PKSF WSS loan products in the same branches, limiting Water.org's potential reach across the country.

In Cambodia, Water.org partnered with nine organizations, covering all provinces in the country. Of these partnerships, five were with financial institutions that are now self-sustainable—AMK, Philip Bank/Kredit, Chamroeun, LOLC, and NH Finance/SAMIC. These institutions continue to scale and sustain the water and sanitation lending portfolios



Representatives from a Water.org partner institution in Bangladesh

post-partnership. Beyond these five financial institutions, Water.org also supported two water utilities, Kampong Chomlong Water Supply, and Treang Water Supply, and established new partnerships with CMA and CWA. However, the establishment of these new partnerships with CMA and CWA was delayed, primarily due to the COVID-19 pandemic.

³ As of March 2024

Sector impact

Although no specific strategy was developed to influence the enabling environment at a country level, varying levels of sector-level impact have been recorded in the three countries. In India, the program provided an opportunity for the DHAN Foundation to leverage its pre-existing links with banks and the Government of India, showcase the sustainability of its model at the sector level, influence policy, and promote water and sanitation credit financing, especially through the establishment of the knowledge center. In Bangladesh, no significant outcome-level results for the sector have been noted, though several landscape studies on topics such as utilities, micro, small, and medium-sized enterprises, and government willingness towards WSS have been conducted recently and provide a strong basis for articulating an engagement strategy. In Cambodia, Water.org's success story has influenced other organizational programs like the USAID WASHFin program. Furthermore, Water.org has expanded its influence, fostering knowledge sharing and capacity building and potentially impacting sector policies, by partnering with associations—CWA and CMA.

Pathway 2: Knowledge and behavior

Loan satisfaction

Overall, borrowers consider WSS loans as a worthwhile investment and report positive experiences. This is particularly the case regarding customer service and loan amounts and less around interest rates that are considered too high by a third of household survey respondents. Satisfaction levels translate into high utilization rates for constructing or improving WSS facilities that are above 89% across Bangladesh and Cambodia; and 100% in India. The success can also be attributed to strong monitoring processes, especially in India through SHG federations.

Knowledge and behaviors

Strong emphasis was placed on awareness raising in Bangladesh and India, where the majority of households respondents confirmed learning about handwashing techniques, water and sanitation-related diseases and WSS benefits. In India, even greater emphasis was placed on hygiene practices and on safe water storage, improving hygiene practices, especially among the youth. 50% of households reported washing their hands more frequently than before the program and all FGD respondents reported having improved water storage practices, bathing, and washing clothes.

Pathway 3: Outcomes and impact

Access to water and sanitation

All three countries have experienced direct positive impacts regarding access to water and sanitation. A minimum of 92% of household survey respondents reported having increased access to water, in terms of water quantity, reliability, and availability. Improvements to sanitation facilities have also led to a significant reduction in self-reported open defecation in India and Cambodia⁴, respectively evolving from 57% to 17%, and from 35% to 8% during program implementation.

⁴ In Bangladesh, open defecation rate is at 0% (JMP, 2022)

Indirect benefits⁵

Households report several indirect socio-economic benefits since their WSS improvements. Across the three countries, households reported experiencing a better quality of life. Especially in Bangladesh and Cambodia, households report saving time, where respectively 95% and 75% reported spending less than 5 minutes to get water, compared to only 26% and 16% before the water improvement. Moreover, survey households' responses and FGDs suggest that water improvements can lead to cost savings and increased income due to better time use and productivity and reduced health expenditure.

Female borrowers report changes in aspects of empowerment. Women represent almost 100% of borrowers in India and Bangladesh, and 80% in Cambodia. Since the sanitation improvement, at least 33% of women in each country no longer ask for permission to use the toilet, compared to before the program. Across the three countries, at least 95% of women reported experiencing better privacy, safety, menstrual hygiene management (MHM), and access to the facilities, because of their sanitation improvement.



Figure 2: Women asking permission to use toilets

The extent to which WSS loans and improvements increased people's climate resilience is more difficult to evaluate. However, while climate issues pose challenges, particularly in India and Bangladesh where 70% and 72% reported facing climate-related challenges (floods, droughts, severe storms), these surprisingly did not emerge as a primary motivation for investments in WSS. In addition, households often fail to connect environmental hazards with climate change, especially in Cambodia.

⁵ The lack of baseline and the available data make it difficult to quantify and correlate WSS improvements and socioeconomic, health, gender, climate benefits

Borrowers report experiencing multiple health benefits. Improved access to WSS facilities has resulted in better mental and physical health. Although insights from FGDs suggest that there has been an increase in stress associated with meeting the repayment installments, at least 70% of women in India and Cambodia and 90% in Bangladesh reported being less stressed regarding household water management for different reasons but mostly because women are less worried about collecting enough water for the family. Moreover, four in five household survey respondents in Cambodia and nearly all in Bangladesh reported improvements in family physical health following their WSS construction.



Conclusion

Water.org's partner organizations have achieved strong results in terms of capital mobilized, loans disbursed, and people reached across the three countries, particularly in Bangladesh and India. Although no specific strategy was developed to influence the enabling environment at a country level, sector-level activities have been recorded in the three countries. Households have directly benefited from improved access to water supply and sanitation and indirectly from improved socio-economic conditions, improved health, and a sense of empowerment.

Recommendations

- **Develop a comprehensive advocacy strategy** for sectoral impact at global and country-level based on a thorough assessment of the micro-credit and banking sector in each country, opportunities for change and Water.org and partners' positions in the sector.
- Actively seek and establish partnerships across governmental, non-governmental, and private sectors to attract further investments in WSS and water infrastructure development.
- Support the development of detailed country-specific climate risk assessments and use these to inform the development of climate-resilient WSS facilities. In parallel, increase efforts to disseminate knowledge products and raise awareness about climate risks and climate change among households and lending institutions.
- Support financing options for environmentally friendly WSS solutions, such as solar-powered systems and develop incentive strategies to make green loans more attractive and accessible to FIs and consumers.

