



Water.org: Meta Study of Existing WSS Research

Thematic paper on WaterCredit as an Accelerator

14 December 2021

Ben Harris

Submitted to



Submitted by



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List of Abbreviations

DID	Difference in Difference
FCDO	Foreign, Commonwealth and Development Office
FI	Financial Institution
HH	Household
MF	Microfinance
MFI	Microfinance Institution
RAG	Red, Amber, Green
RCT	Randomized Controlled Trial
SDG	Sustainable Development Goal
ToC	Theory of Change
TOR	Terms of Reference
WASH	Water, Sanitation and Hygiene
WC	WaterCredit
WCST	WaterCredit Sustainability Tool
WHO	World Health Organization
WSS	Water Supply and Sanitation

Acknowledgements

This report was written by the Iwel/Aguaconsult team of Ben Harris (Iwel), Bill Twyman (Aguaconsult), Sue Cavill (Iwel), Rachel Norman (Iwel), Joseph Thompson (Iwel), with internal quality control by Goufrane Mansour (Aquaconsult), Don Brown (Iwel), and Elisabeth West (Iwel). The authors wish to thank the Water.org team, in particular: Katrina Green (Senior Insights Analyst) and Heather Arney (Senior Manager, Insights and Innovation) for their collaboration, engagement and responsiveness during this assignment. Thanks also goes to other Water.org staff including Magdalene Goble (Senior Analyst for Global Insights Monitoring), David Strivings (Impact Analyst), Zehra Shabbir (Senior Analyst for Knowledge and Learning) and Rich Thorsten (Chief Insights Officer) for their engagement. Furthermore, thanks goes to the program managers Anthony Githinji (Kenya), Abu Aslam (Bangladesh), Jose PM (India) and Ann Carl Bailey (Philippines).

1. Introduction

1.1 Scope of the Meta Study

The objectives of the Meta Study are “to organize, synthesize and translate the (internal) evidence base into meaningful insights that compel action across donor and sector stakeholders” and “to inform Water.org’s future research and learning agenda by identifying key evidence gaps where additional insights and research are needed”. These objectives reflect the breadth of the (internal) evidence that already exists and highlights where evidence between Water.org activities and outcomes related to these thematic areas remains weak. Recommendations are also made in terms of Water.org’s future learning agenda as well as improving Water.org’s programming to strengthen its potential contribution to the five thematic areas.

1.2 WaterCredit as an Accelerator to WSS access

Water.org’s original theory of change for ‘WaterCredit as an Accelerator’ was based on the assumption that WaterCredit leads to faster improvements in access to WSS services, than would otherwise be expected. In practice, this means that:

1. households which access WaterCredit (or other WSS microcredit loans) are more likely to invest in improving their household WSS facilities than other households in the same area; or
2. communities which are covered by MFIs offering WSS loans will see faster improvements in access to WSS services than would be expected in similar communities without access to loans.

In this report, WaterCredit as an accelerator to WSS access covers six specific areas of evidence:

- Participating financial institutions continue to develop WSS loan portfolios beyond the initial support provided by Water.org, extending access to household financing for WSS improvements.
- Access to improved WSS via WaterCredit increases more rapidly than alternative approaches by addressing financing as a bottleneck to progress.
- WaterCredit leads to more sustainable access to improved WSS. WaterCredit financed WSS is higher-quality than those constructed without WaterCredit (either with or without subsidies), and households can access additional funds for improvements and repairs.
- WaterCredit allows more low-income households to support themselves for WSS improvements, which enables local government to direct limited public funds to support the most vulnerable households.
- Households which use WaterCredit to improve WSS subsequently influence other members of the community to invest in improved WSS using WaterCredit.
- WaterCredit strengthens the enabling environment for FI WSS lending to HHs.

These sub-themes are primarily based on Water.org’s internal evidence-base – specifically evaluations, impact assessments and monitoring data - and a review of the limited external literature relevant to this topic.

1.3 Methodology

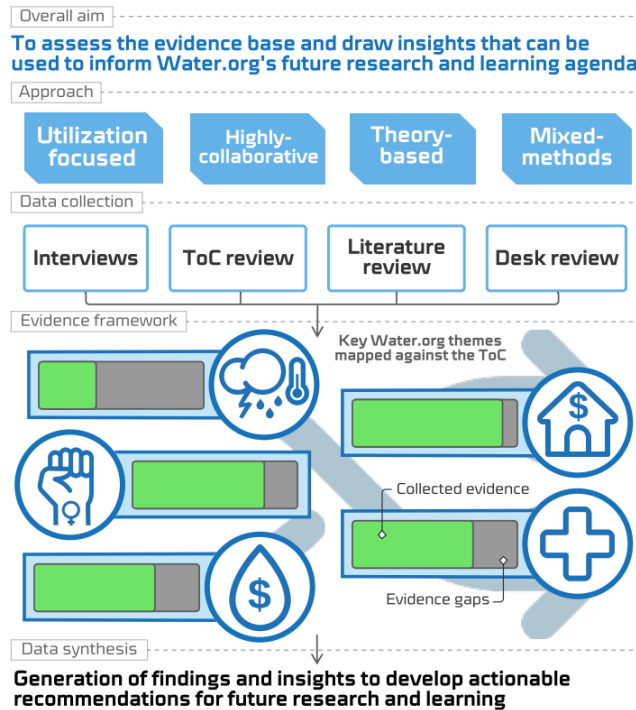
Figure 1 summarizes the approach and methodology applied for the meta study.

Six stages of work were carried out:

1. Review and reformulation of the thematic theories of change and development of a Theory of Action;

2. Deep dive document and data review for internal evidence. This incorporated a sense check with Water.org core team to identify whether any additional data was available;
3. External literature review to source evidence on associated sub-themes including any gaps identified with the internal evidence;
4. Drafting of the Thematic Paper;
5. Co-creation workshop to develop and refine the associated Theory of Change;
6. Finalizing the Thematic Paper.

Figure 1. Meta-study approach and methodology



Analysis framework: The reformulated theory of change and associated sub-themes was used as the analysis framework.

Internal evidence data sources: The meta study analyzed both primary (interviews with country program managers) and secondary data, quantitative (WaterPortal data and mwater data) as well as qualitative analysis (evaluation reports and other such publications).

External evidence data sources: External literature was sourced using Google Scholar, reference lists in sourced literature, personal libraries, and cross-over and sharing of literature from one thematic area search to another. Both internal and external evidence were entered into a data capture tool for further analysis.

Scoring the evidence: Each sub-theme is given a Red, Amber, Green (RAG) rating. A grey color block depicts that the rating is not applicable.

Table 1. Color classification of RAG rating

Internal data	Strong evidence	External data	Strong evidence
	Emerging evidence		Emerging evidence
	Mixed evidence		Mixed evidence
	Weak evidence		Weak evidence
	Not applicable		Not applicable

Internal quality control: in addition to the sense checking by Water.org, three discrete internal quality control steps have been taken: an internal workshop sharing the internal and external evidence to identify and discuss thematic findings and cross-cutting aspects; and 2 rounds of quality assurance of the report (draft and final).

Internal and external evidence: two icons are included in the text to denote whether a data source is internal to Water.org or external:

In = internal evidence

Ex = external evidence

1.4 Structure

The remainder of the report is structured as follows:

Section 2 provides a summary of findings.

Section 3 provides detailed findings for each of the sub-themes of (insert theme).

Section 4 provides a concluding statement.

Section 5 details the thematic Theory of Change (ToC).

Section 6 sets out a series of practical recommendations for consideration by Water.org.

References are then detailed.

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2. Summary of findings and recommendations

Participating financial institutions continue to develop WSS loan portfolios beyond the technical and grant support provided by Water.org, extending access to household financing for WSS improvements.

In There is clear evidence that microfinance institutions (MFIs) supported through WaterCredit programs scale up their WSS loan portfolios. MFIs are able to access additional capital to support a larger WSS loan portfolio, and in many examples, WSS loans become a significant component of MFIs total portfolio. There are indications that MFIs are likely to continue and expand WSS lending in future. Collecting additional information on long-term lending by MFIs for WSS – including beyond partnerships with Water.org – would allow Water.org to understand better the full extent to which WaterCredit catalyzes increased financing for WSS. This would help Water.org articulate clearly the contribution that microfinance can make to the global financing gap for achieving Sustainable Development Goal (SDG) 6.

Recommendation: Develop data on graduated financial institutions to understand the long-term prospects for WSS loan portfolios. Water.org should have a systematic approach to following up with (M)FIs which are no longer directly supported through WaterCredit programs and collect data on core metrics to understand the extent and sustainability of long-term WSS lending.

Access to improved WSS via WaterCredit increases more rapidly than alternative approaches by addressing financing as a bottleneck to progress.

In There is clear evidence from multiple impact assessments that WaterCredit *can* make a difference to the rate at which households gain access to improved WSS services: with households accessing loans progressing faster than the broader population. Outside WaterCredit programs, there is relatively little evidence of the impact of microfinance for WSS, but studies in India (Augsburg 2019a and 2019b) also suggest that microfinance programs can lead to faster uptake rates for improved sanitation facilities. This impact is not consistently seen across all WaterCredit program countries, and there is insufficient evidence to understand clearly why WaterCredit is successful in some contexts and not others. It is also not always clear *why* WaterCredit accelerates access to improved WSS where it is successful: it is possible that the non-financial aspects of WaterCredit – such as marketing campaigns and MFIs establishing relationships with WSS service providers and installers – may be as important as the provision of additional credit. Extending the collection of robust evidence on the impact of WaterCredit to more countries – and ensuring that this evidence is comparable where possible – would help Water.org better understand the contextual drivers of successful WaterCredit

Ex

Recommendation: Consider extending data collection beyond households that take WaterCredit loans to understand the difference that WaterCredit makes beyond community, area or nationwide improvements in access to improved WSS facilities. Water.org routine data only provides information on households which take loans, so it is not possible to understand the difference WaterCredit has made (via a comparison with other households) or progress towards universal access – whether supported by WaterCredit or other actors.

programs. It would also allow a more comprehensive picture of the scale of microfinance’s impact on rates of access to improved WSS services.

Further data is required to ascertain links between WaterCredit and higher levels of sustainability.

- In** There is no evidence that WaterCredit leads to more sustainable access to improved WSS, that WaterCredit financed WSS is higher quality than those constructed without WaterCredit (either with or without subsidies), or that households can access additional funds for improvements and repairs. Whilst WSS improvements supported by WaterCredit are typically found to be functional when assessed through external evaluations or WaterCredit surveys, this only provides information on short-term functionality: the data is typically collected within a short time – often less than six months – of the improvement being constructed and at one time only. Comparison with more traditional programming approaches is challenging, but some of the available evidence suggests no inherent sustainability benefit from using WaterCredit.

Ex There is very limited external evidence on this sub-theme, but the one study which addresses this directly shows that sanitation facilities constructed using microfinance loans are of the same quality as those constructed with other means. Collecting longer-term data on the functionality of WSS improvements constructed using WaterCredit would allow a better understanding of the sustainability of these services.

Recommendation: Ensure that there is longer-term monitoring of WSS improvements supported through WaterCredit. By only collecting data on WSS improvements shortly (6 months) after loan disbursement, Water.org cannot know if WSS improvements continue to provide a service for households in the long term.

WaterCredit reaches low-income households and enables them to support themselves for WSS improvements, allowing local government to direct limited public funds to support the most vulnerable households.

- In** There is no evidence to date that WaterCredit supports the more effective use of public subsidies for WSS improvements. Whilst the mechanism for microfinance to support subsidies is realistic, this is likely to require microfinance and subsidy programs to be explicitly designed to complement each other. It is unlikely that this impact will be realized simply by programs co-existing. Currently, there is a sector-wide evidence gap on whether and how microfinance can support subsidies in practice. A few examples from India and Bangladesh provide some indications of why this might work and how the program could be designed. Developing – and testing – a clear model for how microfinance can

Recommendation: Develop a clear model for how microfinance and subsidies can complement each other for WSS improvement programs. Water.org should collect evidence on how existing and past WaterCredit programs have supported the more effective distribution of public funds to the most vulnerable by allowing other low-income households to support themselves for WSS improvements. Using this evidence Water.org could help to ensure that future WaterCredit programs are intentionally designed to complement public subsidies, contributing to achieving universal access.

support subsidies, would allow Water.org to contribute to addressing this evidence gap. This would allow Water.org to better articulate the role microfinance can play in achieving SDG6.

Households which use WaterCredit to improve WSS subsequently influence other members of the community to invest in improved WSS using WaterCredit.

In There is no clear evidence from quantitative or qualitative sources that peer influence is critical in whether households choose to take up WaterCredit loans. External studies suggest that peer-effects for sanitation microfinance may be more complicated than the hypothesis for this sub-theme, with negative peer-effects observed in some studies.

WaterCredit strengthens the enabling environment for MFI WSS lending to HHs.

In There is emerging evidence of the contribution of WaterCredit programs to strengthening the enabling environment for WSS lending to households, but this could be better conceptualized and documented. This was an emergent sub-theme for this brief: it was not included in the original terms of reference (TOR) for the theme of WaterCredit as an Accelerator, but it became clear from a review of documentation that this impact of WaterCredit programs should be better captured and articulated. Whilst there is evidence of how WaterCredit programs help strengthen the enabling environment for WASH financing – for example advocating for policy changes which increase capital allocation to WSS lending – this is not yet clearly linked with Water.org’s work on sector engagement. There is no unified Theory of Change (ToC) which brings together Water.org’s three levels of impact.

Recommendation: Consider a standard measure for impacts of WaterCredit on improvements in WSS facilities. There are multiple high quality external evaluations of WaterCredit programs which measure the difference made by the availability of loans. However not all evaluations are high quality and the use of differing definitions for access and comparison groups makes it difficult to collate data and compare across evaluations.

Table 2. Robustness of the internal and external data for the ‘WaterCredit as an Accelerator’ sub-themes

Sub-themes	Internal Data	External Data
Participating financial institutions continue to develop WSS loan portfolios beyond the technical and grant support provided by Water.org, extending access to household financing for WSS improvements		
Access to improved WSS via WaterCredit increases more rapidly than alternative approaches by addressing financing as a bottleneck to progress.		
WaterCredit leads to more sustainable access to improved WSS. WaterCredit financed WSS is higher quality than those constructed without WaterCredit (either with or without subsidies), and households can access additional funds for improvements and repairs.		
WaterCredit allows more low-income households to support themselves for WSS improvements, which enables local government to direct limited public funds to support the most vulnerable households.		
Households which use WaterCredit to improve WSS subsequently influence other members of the community to invest in improved WSS using WaterCredit.		
WaterCredit strengthens the enabling environment for FI WSS lending to HHs		

3. Findings

3.1 Participating financial institutions continue to develop WSS loan portfolios beyond the technical and grant support provided by Water.org, extending access to household financing for WSS improvements

Table 3. RAG rating for evidence of FIs continue to develop WSS loan portfolios

Internal data	<ul style="list-style-type: none"> ▪ Water.org has multiple assessments and documents relevant to this sub-theme ▪ There is not yet systematic data on the continued WSS lending of graduated partners 	External data	<ul style="list-style-type: none"> ▪ External evidence is not relevant to this question
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There is clear evidence that MFIs supported through WaterCredit programs scale up their WSS loan portfolios. MFIs are able to access additional capital to support a larger WSS loan portfolio, and in many examples, WSS loans become a significant component of MFIs total portfolio. There are indications that MFIs are likely to continue WSS lending in future, but additional information on long-term lending could strengthen the evidence base for this claim.

Financial institutions scale up their WSS loan activity as a result of WaterCredit

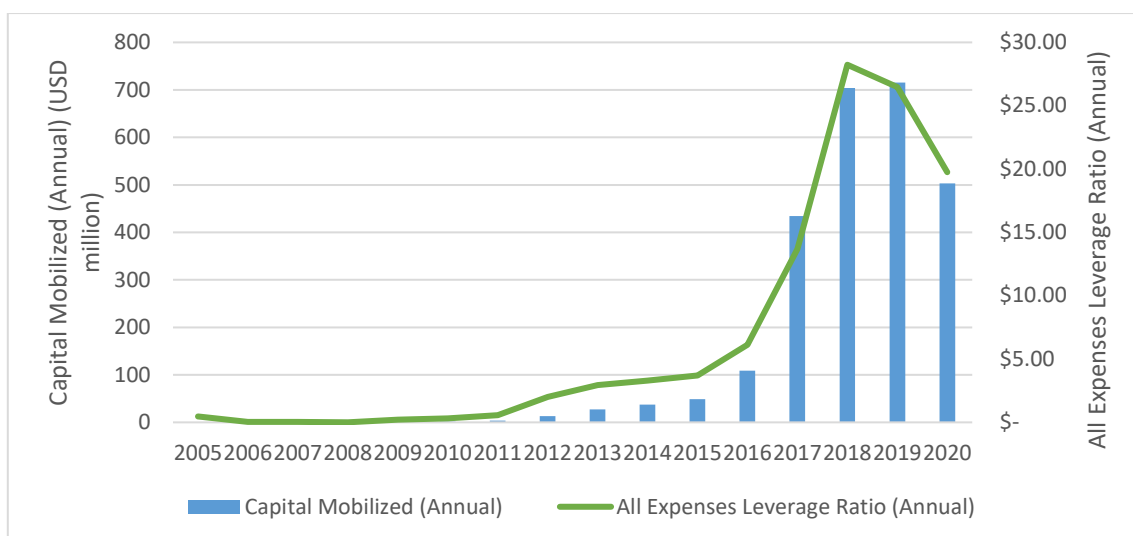


Water.org’s initial investment in WaterCredit leverages significant additional credit. At a global and national level, Water.org has collected significant evidence that its initial funding leverages significant additional investment in the form of loan capital provided by MFIs. Since 2005 WaterCredit programs have leveraged total capital of \$2.6 billion for WSS loans – an overall leverage ratio of \$13.45 dollars for every dollar invested in program support and running costs. There has been a significant increase in the scale of lending since 2017 (see, with capital leveraged quadrupling between 2016 and 2017. In the same year operational expenditures increased by only 78%, suggesting a considerable increase in efficiency. Over the last three years (2018-2020) Water.org all expenses leverage ratio has been significantly higher: with ratios in excess of \$26 for 2018 and 2019, and of \$19.74 for 2020 (despite a considerable drop in capital mobilized during the COVID-19 pandemic).

Country specific examples of capital leveraged include:

- In Bangladesh, Water.org’s \$4 million investment leveraged \$19.6 million in capital for WSS improvements (Water.org, 2018)
- In India and Indonesia, \$70 and \$57 respectively were mobilized in loan capital for each dollar spent on grant funding (Water.org and Grameen Foundation, 2020)

Figure 2. Water.org: WSS Capital mobilized and all expenses leverage ratio, 2005-2020



In WSS loans can grow to become a significant part of financial institutions’ overall loan portfolio.

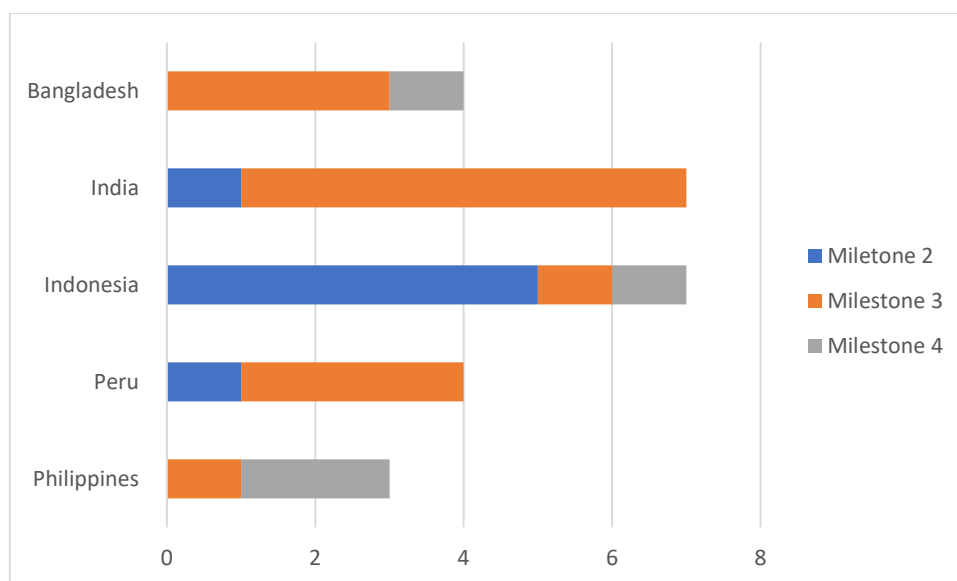
There is clear evidence that, directly as a result of the WaterCredit program, MFIs develop new WSS loan products and that these can become a significant part of the overall portfolio. It is reasonable to assume that the WSS loans may not have been created without Water.org’s involvement. Specific examples include:

- In India, there are examples of the very rapid growth of a WSS portfolio, with the number of loans disbursed increasing 380% year on year (Ikeda and Arney, 2015).
- There were examples of strong growth of WSS portfolios in Bangladesh, ranging from 35% to 103% (Water.org, 2018). More limited growth was seen for MFI’s that only offered WSS loans through a small proportion of their branches.
- In the Philippines and Peru, WSS lending grew from a low base to up to 10% of MFI’s total portfolios over the course of the WaterCredit program (Mansour and Sánchez-Trancón, 2019).

In There are indications that MFIs will sustain WSS portfolios beyond WaterCredit programs.

In multiple external evaluations, there are clear indications that partner MFIs are likely to continue offering WaterCredit or similar WSS loans beyond the end of the program. Water.org has also used the WaterCredit Sustainability Tool (WCST) to understand how likely MFIs are to continue funding. In 2017, 61% of partner MFIs were scored as “viable” on an operating self-sufficiency basis (IPC, 2020).

Figure 3. WaterCredit partners by WCST milestone, 2017



In However, analysis of WCST results in 2019 showed challenges to viability due to rising operational costs (India) and falls in WSS revenue (Bangladesh). Whilst 84% of partners indicated a desire to continue WSS lending after the end of the Water.org partnership, fewer (56%) had included WSS lending in key strategic documents. In specific examples:

- In India, a Water.org partner (Cashpor) subsequently secured additional partnerships with other actors to extend sanitation loans to 17,000 additional clients (Water.org and Grameen Foundation, 2020).
- In Kenya and Uganda, an external evaluation indicated that all five partners were likely to continue offering WaterCredit products beyond the end of the program (Water.org, 2015).

Additional data on the graduation of financial institutions could further support this claim. The evidence for this sub-theme is based on external evaluations and reports and some results from the WCST. These sources provide information on the *likelihood* of MFIs continuing WSS lending, but not whether they actually do in the long term. Water.org does not currently collect information on the continued WSS lending of microfinance institutions after they ‘graduate’ beyond direct support from Water.org.

[Profitability is not the only incentive for financial institutions offering WSS loans](#)

In **WSS loans can be sustainable and profitable for MFIs.** There is substantial evidence from Water.org partners that WSS loan portfolios are not inherently more risky than other forms of microfinance [Ikeda and Arney, 2015; Water.org, 2018; Water.org, Grameen Foundation, 2020] and can become operationally self-sufficient (Mansour and Sánchez-Trancón, 2019). In a program in India and Indonesia (Water.org and Grameen Foundation, 2020), all MFI partners had reached scale (milestone 3 in the WCST), and two had reached milestone 4 (sustain and grow). In Ethiopia (Water.org, 2019), all three MFIs had reached milestone 3. However, this is evidence that that path to operational self-sufficiency can be longer than the program duration and that MFIs with smaller WSS loan portfolios may struggle to achieve operation self-sufficiency (Water.org, 2018).

In **A motivation to be socially valuable and the reputational gain from supporting access to water and sanitation are factors in financial institutions offering loans for WSS.** However, there is a perception from Water.org documentation and external evidence that WSS loans are typically less profitable than

Ex

other microfinance loans¹ (Ikeda and Arney, 2015; Institute for Sustainable Futures, 2019; Geissler, Goldberg and Leatherman, 2016). For example, in Bangladesh, across 4 MFIs, the average operating self-sufficiency for WSS loans was 91.4%, compared with 134.5% for non-WSS loans with the same MFIs (A2F and M-CRIL, 2018). Non-financial considerations such as a sense of social responsibility and the importance of the perceived reputational gain from offering WSS loans may be equally important for MFIs to consider whether to develop a WSS portfolio (Ikeda and Arney, 2015).

3.2 Access to improved WSS increases faster in areas targeted by WaterCredit programs: access to WSS loans means that individual households are more likely to invest in WSS improvements than similar households.

Table 4. RAG rating for evidence of WaterCredit extends access to improved WSS faster than alternative approaches

<p>Internal data</p>	<ul style="list-style-type: none"> Water.org has commissioned multiple evaluation and impact assessments which address this sub-theme. Current Water.org routine monitoring does not provide evidence for this sub-theme 	<p>External data</p>	<ul style="list-style-type: none"> There is limited external evidence on how microfinance can support accelerated access to WSS, but that which is available shows similar findings to Water.org’s internal evidence
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There is clear evidence from multiple impact assessments that WaterCredit *can* make a difference to the rate at which households gain access to improved WSS services, although access to credit may not be the critical factor. In multiple cases, households that take out loans gain access faster than those which do not. However, this is not true in all cases, suggesting that other contextual factors may limit the effectiveness of WaterCredit. The limited external evidence for this sub-theme (which only covers India) points to a similar picture.

The availability of WaterCredit loans can help to accelerate access to WSS in some contexts

In

There are well-documented examples of how WaterCredit (or other WSS loans) has helped accelerate access to improved WSS. In half of the examples reviewed for this brief, WaterCredit was shown to increase the rate at which households gained access to improved WSS services. The extent of this effect varied significantly, but **in the most pronounced examples, households that took a WaterCredit loan were 28% more likely to have gained access to an improved WSS service compared to households in the same area that did not take out WSS loans** (see Table 5 for full details of all relevant results). In most cases, the extent of the impact was considerably less than this.

In

Internal evidence strongly suggests that WaterCredit can – in the right context – make a measurable impact on rates of access to improved water and sanitation. The evaluation identified nine Water.org reports that measured the impact of WaterCredit on both water supply and sanitation services robustly (Table 5), comparing the change in access to sanitation with households which took out a WSS loan with a suitable control group. This provided 18 observations in total – each of the nine studies covered water and sanitation loans. In half of the observations (9 out of 18), **WaterCredit was found to have a statistically significant impact on the rate of uptake of improved WSS services.** This rate was broadly similar for both water (5 out of 9) and sanitation (4 out of 9) services. In the other observations, although there was an improvement in access to improved WSS services for households

¹ The available evidence does not indicate whether WSS loans are less profitable because they have higher operational costs, have poorer economies of scale or attract lower interest rates than other microfinance loans.

that took a WaterCredit loan, this was not statistically different from the increase in access seen in the broader population.

Whilst this evidence provides individual examples of the impact of WaterCredit, making comparisons across the examples is challenging due to the use of different methods for assessing impact.

Colour key to Tables 4 and 5

Statistically significant positive impact of WaterCredit	No statistically significant impact of WaterCredit	Statistically significant negative impact of WaterCredit
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Table 5. Impact of WaterCredit on access to improved WSS facilities, based on Water.org evaluations

Study	Country	Year	Measure	Impact on Water	Impact on Sanitation
WaterCredit – Kenya impact assessment (Davis and Gilsdorf, 2016)	Kenya	2016	% of HH which made a ‘major’ investment in water supply Comparison between HH where water credit was actively promoted and not ²	100 % of promotion HH 16% of comparison HH	16% of promotion HH 18% of comparison HH
WaterCredit Endline Evaluation (Causal Design, 2020)	Cambodia	2020	Is there is a statistically significant difference at endline Comparison between HH which took a loan or not.	Loan HH are 7.8% more likely to have a HH water connection by endline.	Loan HH are 27.88% more likely to have a toilet in the home by endline.
Endline Evaluation: Scaling Water Credit for Safe Water Access and the Dignity of a Toilet among the Poor (Water.org and Grameen Foundation, 2020)	India	2020	Increase in access to at least Basic services Comparison between HH which took a loan or not.	27% for loan HH 19% for control HH 9.0% DID	34% loan HH 20% control HH 13.6% DID
Endline Evaluation: Scaling Water Credit for Safe Water Access and the Dignity of a Toilet among the Poor (Water.org and Grameen Foundation, 2020)	Indonesia	2020	Increase in access to at least Basic Water. Access to at least Basic sanitation at endline. Comparison between HH which took a loan or not.	37% for loan HH 26% for control HH 10.7% DID	65% loan HH 68% control HH -2.8% DID

² All Households had access to loans, but this was only actively promoted in some MFI branches.

Study	Country	Year	Measure	Impact on Water	Impact on Sanitation
Endline evaluation of "WaterCredit: Strategic expansion and scaling in Key geographies" (Mansour and Sánchez-Tracón, 2019)	Indonesia	2019	Access to an improved water or sanitation service. Comparison between HH which took a loan or not	Average treatment effect = 5.7%	Average treatment effect = 26.2 %
Endline evaluation of "WaterCredit: Strategic expansion and scaling in Key geographies" (Mansour and Sánchez-Tracón, 2019)	The Philippines	2019	Access to an improved water or sanitation service. Comparison between HH which took a loan or not	Average treatment effect = 2.8%	Average treatment effect = -1.3%
Endline evaluation of "WaterCredit: Strategic expansion and scaling in Key geographies" (Mansour and Sánchez-Tracón, 2019)	Peru	2019	Access to an improved water or sanitation service. Comparison between HH which took a loan or not	Average treatment effect = 64.4% ³	Average treatment effect = 0
Endline evaluation of Watercredit project: Increasing health, dignity & opportunities with access to safe water and sanitation in India (Institute for Sustainable Futures, 2019)	India (SIDUR)	2018	Increase in access to water available on premises, or to an improved sanitation facility Comparison between HH which took a loan or not	Loan HH Δ = 75% All HH Δ = 32%	Loan HH Δ = 15% All HH Δ = 10%
Endline evaluation of Watercredit project: Increasing health, dignity & opportunities with access to safe water and sanitation in India (Institute for Sustainable Futures, 2019)	India (ODP)	2018	Increase in access to water available on premises, or to an improved sanitation facility Comparison between HH which took a loan or not	Loan HH Δ = 88% All HH Δ = 58%	Loan HH Δ = 96% All HH Δ = 78%

³ Although this results is statistically significant it is based on a small (21) sample of HH which took a loan and used it for a water service

Beyond WaterCredit, there is little high-quality evidence on the impact of microfinance on access to sanitation and none on the impact on water supply services. However, the limited evidence does support this sub-theme. In two of the three relevant studies identified, access to microfinance increased the rate of uptake of improved sanitation by between nine and 12 per cent (Table 5). All three studies provided evidence on sanitation only, and all three covered India.

Ex

Table 6. Impact of microfinance on access to improved WSS facilities, based on external evidence

Study	Country	Year	Measure	Impact on Water	Impact on Sanitation
FINISH Impact Evaluation Report (Augsberg and Lesmes, 2015)	India (Tamil Nadu)	2015	Impact of FINISH intervention on HH toilet ownership	n/a	2.64% more HH have a toilet
Labelled Loans, Credit Constraints and Sanitation Investments (Augsberg et. al., 2019a)	India	2019	Impact of the introduction of a sanitation specific loan on toilet ownership. Comparison between HH offered a sanitation loan or not.	n/a	Intervention led to a 9 percentage point increase in toilet ownership
Can Micro-Credit Support Public Health Subsidy Programs?"	India	2019	Impact of the introduction of a sanitation specific loan on toilet ownership. Comparison between HH offered a sanitation loan or not.	n/a	Intervention HH were 12.4% more likely to have toilet uptake [note: significantly greater impact for subsidy ineligible HHs]

In

There is an evidence gap in which contexts WaterCredit is likely to help accelerate access to improved WSS and key factors behind program success. Whilst there is a reasonable volume of evidence from India and, to a lesser extent, other countries in South and South-East Asia, evidence for broader contexts is sparse. The inclusion of only one study covering Kenya (Davis and Gilsdorf, 2016) which is Water.org’s second-largest market in terms of the number of loans disbursed is a notable omission. This makes it challenging to understand what the necessary conditions are for WaterCredit to be a success.

Ex

However, there are some indications of the limitations of Microfinance (MF) for WSS. (Mader, 2011) highlights that microfinance addresses “*the symptoms not the causes of the under-provision of water and sanitation to the poor*”. In this example (from Vietnam), microfinance helped households connect to existing infrastructure, but this was limited to wealthier communities. Households in underserved areas could not benefit from microfinance. Some WaterCredit evaluations (Institute for Sustainable Futures, 2019) have made similar observations.

Evidence collated by Water.org doesn’t always demonstrate whether or not WaterCredit has made a difference to WSS access above and beyond broader trends in WASH services, and does not explain why WaterCredit made a difference.

In

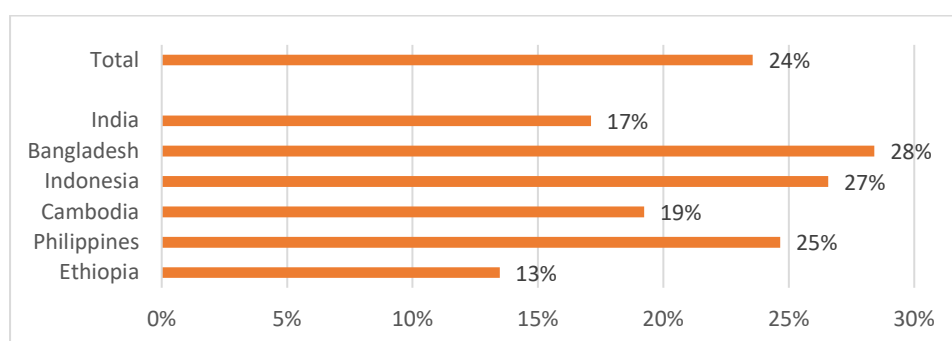
Evidence on whether households taking WaterCredit loans have gained access to improved WSS faster than the broader population is not consistently robust. Beyond the studies cited in Table 4, much of the internal evidence available to Water.org is not sufficient to determine if WaterCredit loans have made a difference to the rate at which households gain access to improved WSS services.

The regular monitoring data collected through WaterPortal and household surveys only covers borrowers [ref WaterCredit Survey v 2.0 and 3.0] and cannot be used to make comparisons with the broader population. Similarly, some external evaluations and assessments do not present a clear comparison to understand whether WaterCredit made a difference.⁴ For example, studies using measures such as *the % of HH making major investments in facilities* without including data on the overall level of access at baseline or endline do not provide useable insights.

Ex **Financing may not be the only barrier to improving WSS that WSS loan programs should address.** External evidence suggests that even when there are improvements in access to sanitation linked to the availability of microfinance, only a small number of sanitation improvements (between 2 and fourteen per cent) were financed by loans, with the majority of households using existing savings (Augsberg and Lesmes, 2015). One study in India found that the fact that microfinance loans were specifically earmarked for sanitation improvements was a greater factor in the take up of the loan than the fact that additional credit, at a lower interest rate, was made available (Augsburg, Caeyers, and Malde, 2019, p20). **This suggests that the total loan package – including marketing and provision of a catalogue or WASH products – may be as important as the provision of extra credit in driving improvements in access to WSS services.**

In Water.org’s internal evidence also suggests that for many households which undertake a WSS improvement after taking out a loan, the loan was not the most important factor. Figure 1 shows that less than a quarter of households claimed that the WaterCredit loan made it [the WSS improvement] possible⁵.

Figure 4. Water.org internal data – Why did you decide to take out a loan for the improvement? – respondents answering: “Loan made it possible”



It is not straightforward to reconcile evidence that improved availability of credit (via the WSS loan) is not critical to driving improvements in WSS services, with earlier findings that HH which took loans *were* more likely to improve their WSS services. Additional research would be needed to understand which specific aspects of the loan package were most critical to driving improved WSS.

⁴ Additional Water.org evaluations were reviewed but not included in Table 3 as they did not include a valid comparison group, or did not present a clear measure of increases in access to water and sanitation which was broadly comparable to other evaluations, for example: Endline Evaluation of the Program- WaterCredit: Catalyzing Access to Safe Drinking Water and Sanitation in Bangladesh (Water.org, 2018); End-of-Program Evaluation Report: The WaterCredit Initiative in Kenya and Uganda (Water.org, 2015), WaterCredit in Ethiopia: End of Program Evaluation - December 2019 (Water.org, 2019) and WaterCredit Project: Safe Water and Sanitation in Bangladesh – Endline Evaluation (Data International Ltd, 2020).

⁴ All Households had access to loans, but this was only actively promoted in some MFI branches.

⁵ The wording of this question does not mean that the remaining 76% of households reported that they would have been able to undertake the improvement without the loan.

3.3 WaterCredit leads to more sustainable access to improved WSS. WaterCredit financed WSS is higher-quality than those constructed without WaterCredit (either with or without subsidies), and households can access additional funds for improvements and repairs.

Table 7. RAG rating for evidence of WaterCredit leads to more sustainable access to improved WSS

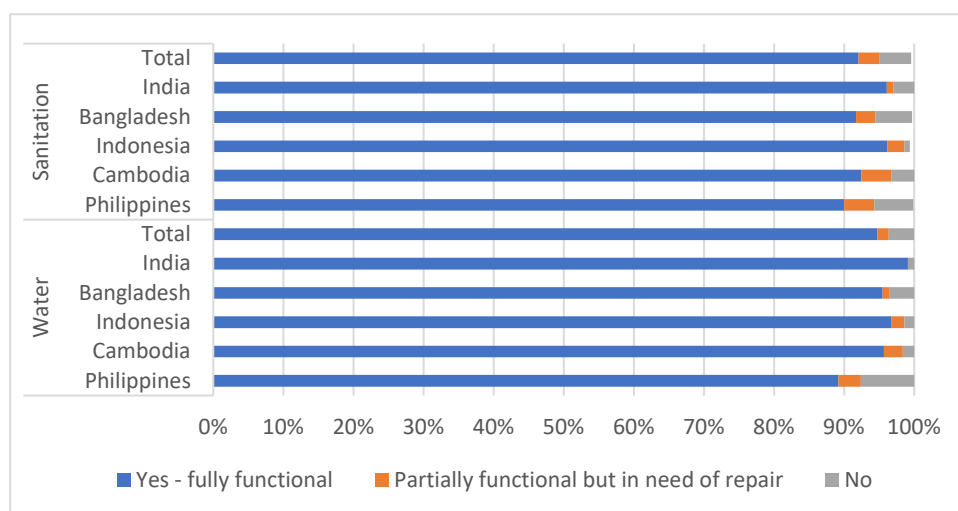
Internal data	<ul style="list-style-type: none"> Water.org has good evidence on the functionality of WSS improvements shortly after implementation but little evidence on long-term sustainability. 	External data	<ul style="list-style-type: none"> The limited external evidence for this sub-theme suggests that sanitation facilities constructed using micro finance are of similar quality to those constructed using other means.
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Overall, over 90% of WSS improvements supported by WaterCredit found to be functional when they are assessed – either through external evaluations or WaterCredit surveys. However, this only provides information on short-term (typically up to 6 months) functionality: the data is typically collected within a short time of the improvement being constructed and at one time only. Comparison with more traditional programming approaches is challenging, but some of the available evidence suggests that there is no inherent sustainability benefit from using WaterCredit. External evidence, which does make a direct comparison, suggests that sanitation facilities constructed using microfinance loans are the same quality as those constructed from other means.

There is no evidence that WaterCredit leads to higher levels of functionality for WSS services than alternative approaches.

In **The functionality of WSS constructed with WaterCredit appears to be good.** Based on WaterCredit survey data, over 90% of WSS improvements constructed after taking out a WaterCredit loan are fully functional at the time of the survey (Figure 2). Although there is variation – with functionality highest in Indonesia and lowest in the Philippines – this high rate of functionality is seen across all countries for which there is data and water and sanitation improvements.

Figure 5. Water.org internal data - Is the water/sanitation improvement functional (household response)

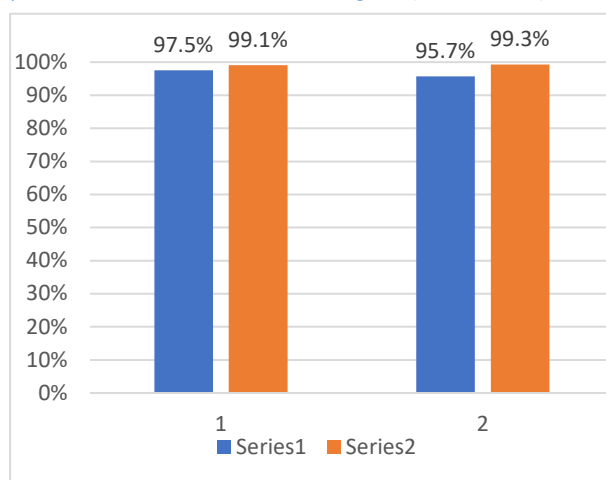


In **But this functionality is short-term and is in line with other large scale WASH programs.** The data on functionality collected through WaterCredit surveys is typically collected shortly after the WSS improvement is constructed, so it does not provide an insight into whether the facility is likely to be

sustainable in the long term. An initial analysis⁶ of the gap between a loan being taken and the date of the survey shows that over half (57%) of households are surveyed less than six months after they took out a loan, and only 15% of households are surveyed more than one year after they took out the loan.

- In** The functionality of WSS improvements constructed with WaterCredit loans is in line with functionality observed for other large scale WASH programs. Comparable functionality data is not easily available.
- Ex** However, published data from the UK Foreign, Commonwealth and Development Office (FCDO) WASH Results Program in Bangladesh (E Pact, 2020) shows similar or higher levels of functionality to WaterCredit surveys for WSS improvements that were at least two years old at the time of the survey (Figure 3).⁷ Given the very short time between construction and assessment for WaterCredit loans, non-functionality rates of nearly 5% for sanitation facilities could be viewed as quite high.

Figure 6. Comparison of observed functionality of WSS improvements constructed in Bangladesh using WaterCredit and as part of the FCDO WASH Results Program (E-Pact, 2020)



There is inconsistent evidence on whether facilities constructed with WaterCredit are consistently high quality.

- In** **There does not appear to be consistently high-quality control and technical support for the construction of WSS improvements in WaterCredit programs.** Across the evaluation of WaterCredit reviewed for this brief there are examples of MFI’s being able to provide standardized designs and technical to ensure infrastructure improvements are of an appropriate quality (Water.org, Gram-Utthan, and Swiss Re Foundation, 2017), but also of MFIs with no formal approach for technical advice (Institute for Sustainable Futures, 2019). Whilst in the latter case it was claimed there were sufficient skilled masons to construct WSS improvements this is not always the case: (Water.org et al, 2017) explicitly identified a lack of skilled masons as a curb on the growth of sanitation loans.

Overall, this appears to point to an inconsistent approach in assessing the technical capacity of MFI partners and local WSS providers, and putting in place measures to mitigate poor capacity where needed. Studies of microfinance loans for sanitation in India (Augsburg, Caeyers and Malder, 2019; Augsburg et al, 2019) have shown that households that accessed a micro-loan did not construct higher-quality toilets than those who built toilets from existing savings or with the help of subsidies.

Ex

⁶ The WaterCredit survey does not provide a clear measure of how long the WSS improvement has been constructed.

⁷ This was a more conventional community-based approach and supported over 1.7 million people to gain access to water sanitation in Bangladesh



Households which take out WaterCredit loans to invest in improved WSS services do not appear to be more satisfied with those services than other households. In the only Water.org evaluation which directly compared satisfaction with WSS services between loan and non-loan households there was little evidence that facilities constructed with a loan led to higher satisfaction (Institute for Sustainable Futures, 2019). Although satisfaction with WSS services improved between baseline and endline, this was the same for loan and non-loan households. For water there was no difference in satisfaction with either the quantity or quality of water. For sanitation there were improvements in aspects of satisfaction⁸ in only one of the two intervention areas.

3.5 WaterCredit allows more low-income households to support themselves for WSS improvements, which enables local government to direct limited public funds to support the most vulnerable households.

Table 8. RAG rating for evidence of WaterCredit frees up limited public funds to subsidize the most vulnerable households.

Internal data	<ul style="list-style-type: none"> There are no documented examples of this from WaterCredit programs. 	External data	<ul style="list-style-type: none"> There is support for the principle and emerging evidence of how this might work in practice.
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At present, there is little evidence – internal or external – to support this sub-theme. However, the principle of WSS microfinance loans complementing subsidies is realistic, and there is emerging evidence for how this relationship might function. There is a clear need for additional work to understand and demonstrate how combining financing approaches can work in practice.

There are no documented examples of WaterCredit directly freeing up public funds to support targeted subsidies



Although the idea that microfinance can free up public funds for subsidy is realistic, there are no case studies from water.org programs. Water.org has made this claim in multiple publications (Water.org and World Bank, 2015; Water.org and IRC, 2017; World Bank, 2017) but this is not backed up by specific examples. In a review of Water.org documentation, we found no anecdotal evidence to support this statement. This lack of evidence is not unique to Water.org: external studies (Augsburg, Caeyers and Malder, 2019) also highlight that “at present there is no evidence available on how and to what extent micro-credit can supplement standard health subsidy programs.”

WASH programs increasingly see microfinance working alongside targeted subsidies, but there is a need for further research on how to combine both financing models



There is emerging evidence from a study in India that microfinance for WSS improvements can complement public subsidies for sanitation improvements. (Augsburg, Bet, and Bansi, 2019) use evidence from India to propose two mechanisms where microfinance and subsidies can be mutually reinforcing:

- 1. Microfinance for WSS can support households that are not eligible for subsidies.** Specifically, the labelling of loans for sanitation appears to have encouraged significant uptake of the loans and a high loan – toilet construction conversion rate amongst households which could not access subsidies.

⁸ Safety, Privacy, Functionality, Cleanliness and Overall

2. **Microfinance for WSS can also support households that are eligible for subsidies.** WSS loans can provide bridge funding for households as they wait for disbursement of subsidies (in this example subsidies were provided only post-construction) helping overcome short-term financial difficulties caused by the capital outlay for construction of the sanitation improvement. WSS loans also allowed households to invest in more expensive sanitation improvements than would be possible using only the subsidy funding.

Ex

Where subsidies and microfinance co-exist, this should be carefully designed and implemented.

There is a clear argument for effectively combining government subsidies and microfinance to support WSS improvements: a well-designed program using both finance sources should be able to match the fiscal efficiency of microfinance with ensuring that all households, including the very poorest, are able to benefit from improved WSS. However, there is little evidence on how microfinance and subsidies can co-exist. Recent literature on the use of ‘Smart Subsidies’ for sanitation (Andres et al, 2019) notes the potential role of microfinance in covering the large one-off costs of access to networked sanitation, but does not explore how subsidies and microfinance could complement each other in practice. (Augsburg, Bet, and Bansi, 2019) notes that “the merit of a model combining government subsidies and private sector micro-credit to promote investments ... has not yet been rigorously considered and is not yet understood”. Whilst the same study provides some examples of how subsidies and microfinance can support each other (see above) and postulates several alternative models for the integration of financing approaches, there is a clear demand need for developing clearer models of how subsidy and microfinance can be combined for WSS improvements. Recently developed programs which actively seek to combine subsidies and microfinance (for example the World Bank in Bangladesh (World Bank, 2020) provide an example of how this might be approached, and could produce learning which is more widely applicable.

3.6 Households which use WaterCredit to improve WSS subsequently influence other members of the community to invest in improved WSS using WaterCredit.

Table 9. RAG rating for evidence if households taking loans influence other members to do likewise.

Internal data	▪ The internal evidence available does not strongly support the sub-theme.	External data	▪ There little external evidence, and that available contradicts the sub-theme
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There is no clear evidence from quantitative or qualitative sources that peer influence is critical in whether households choose to take up WaterCredit loans. External studies suggest that peer-effects for sanitation microfinance may be more complicated than the simple relationship envisaged in this theme.

There is mixed evidence on the extent to which peer influence drives uptake of WaterCredit loans

In

Data from household surveys suggests that peer communication is important to learning about WaterCredit but may not be critical in the decision to take a WaterCredit Loan. In the six countries with data, a significant number of households – over 20% of households in all countries bar Peru – reported that they had heard about WaterCredit from friends or family or a group member (Figure 4). However, it remains for more common that households heard about WaterCredit directly from MFIs: overall 78% of households reported hearing about WaterCredit via a loan officer.

It is less clear that receiving information from other members of the community is critical in the decision-making process when households choose to take a WaterCredit loan. In the same countries fewer than 4% of households surveyed identified pressure from the community or partner organization as a reason for taking the loan. However, there is some evidence from Bangladesh that

peer influence may be an important factor: nearly all (97%) of households would recommend a WSS loan to somebody else interested in making a water and sanitation improvement⁹ (Figure 4).

In **There is limited qualitative evidence on community members directly influencing each other to take WaterCredit loans.** A review of Water.org evaluation and other documentation only found one reference (Institute for Sustainable Futures, 2019) to qualitative evidence (in this case from focus group discussions) of households influencing each other to take up WaterCredit loans.

Understanding *how* households might influence each other to take up WaterCredit loans is not straightforward.

Ex **The limited external evidence suggests that the relationship between households taking a loan for WSS improvements and subsequently influencing community members may be complex.** (Ben Yishay et al, 2017) found that, in Cambodia, there was a negative peer effect: having more neighbors who have purchased a latrine actually reduces the likelihood that a household install a latrine. It is speculated that this may be due to shared use of latrines by households. If a household has access to an improved sanitation facility with a neighbor, there may be less incentive for that household to construct their own facility. Interestingly, there is some evidence from WaterCredit programs in Uganda and Kenya (Water.org, 2015) that a significant (40%) percentage of households that created a water supply improvement after taking a WaterCredit loan were also sharing this with neighbors and residents.

In an improved sanitation facility with a neighbor, there may be less incentive for that household to construct their own facility. Interestingly, there is some evidence from WaterCredit programs in Uganda and Kenya (Water.org, 2015) that a significant (40%) percentage of households that created a water supply improvement after taking a WaterCredit loan were also sharing this with neighbors and residents.

Figure 7. Water.org internal data – How did the client hear about the loan?

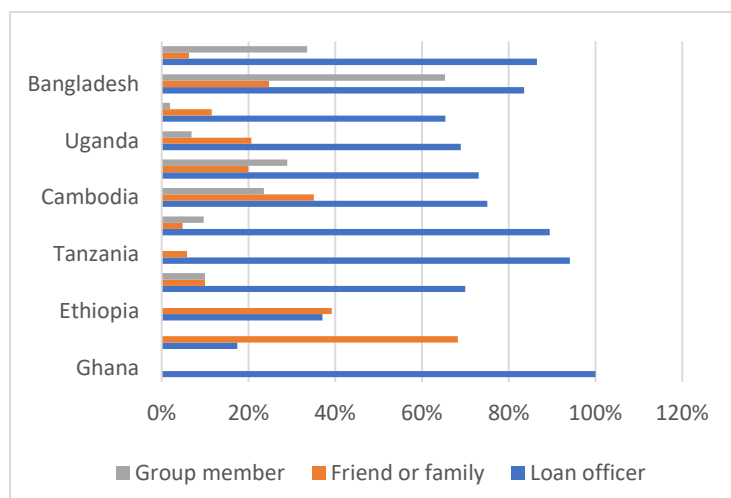
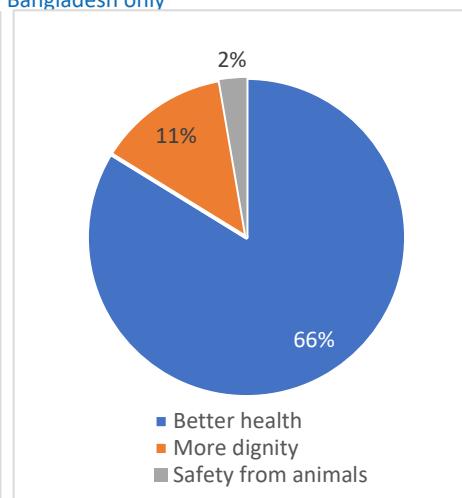


Figure 8. Water.org internal data - Would you recommend a water and/or sanitation loan to someone else interested in this type of loan? - Bangladesh only



3.7 WaterCredit strengthens the enabling environment for financial institutions WSS lending to households

Table 10. RAG rating for evidence of WaterCredit strengthening the enabling environment for WSS lending.

Internal data	External data
<ul style="list-style-type: none"> There is some internal evidence for this, but it is not part of a cohesive ToC for how WC supports systems strengthening. 	<ul style="list-style-type: none"> Not relevant to this sub-theme

The initial ToC for ‘Water Credit as an Accelerator’ did not explicitly include how WaterCredit programs could contribute towards a stronger enabling environment for WSS financing, and microcredit in particular. Water.org has a growing portfolio of work on sector engagement, but this is not explicitly

⁹ Bangladesh was the only country for which data on this measure is available.

linked with WaterCredit. However, emerging from the documentation reviewed from this brief there is evidence that the WaterCredit programs in and of themselves directly contribute towards a stronger enabling environment,

There is emerging evidence of the role which WaterCredit plays in strengthening the enabling environment for WSS financing and an opportunity to link this more directly to Water.org’s broader work on sector engagement.

In Water.org’s work with MFIs as part of WaterCredit programs has clearly helped to improve the conditions for WSS lending in specific countries. For example, in India the WaterCredit program contributed to India designating WSS loans as priority sector lending – paving the way for increased capital allocation (Water.org and World Bank, 2015). In Indonesia, through establishing WaterCredit Partnerships, Water.org was cited as playing a significant role in capacity building for MFI and utility companies at the regional level, enabling them to work together to scale access to financing (Water.org and Jones, 2015).

In Water.org currently articulates its impact across three levels: Level 1, Direct impact; Level 2 Collaborative impact; and Level 3, Systems impact. A recent evaluation of Water.org’s impact on systems change (Water.org and Smits, 2021) highlighted that there appeared to be a lack of clarity on the linkages between the impact levels and how interventions under each can reinforce and amplify each other. There is not currently a single unified ToC that brings the three levels together, and describes how the three levels of intervention interrelate and jointly are expected to lead to Water.org’s overall outcomes and goals.

At a country-level, the Water.org systems level evaluation identified the following activities undertaken by Water.org and partners which contributed to systems change:

Table 11. Water.org activities contributing to systems-level change (Water.org country-level systems change Evaluations, 2021)

Type of Activity	Bangladesh	India	Indonesia
Documentation of good practices and relevant experience of repayable financing with sector players and other (M)FIs and FIs	YES	YES	
Dissemination by organising of and participating in sector learning platforms and hosting media campaigns	YES		YES
Developing relationships with sector actors	YES		YES
Influencing programs of other sector organizations, by being part of program evaluations and formulation missions	YES		
Directly encouraging and influencing other sector organizations to include microfinance in their WASH programs	YES	YES	
Lobby and advocacy towards the Government on increase for, and better accountability over, public finance for WASH	YES		
Influencing policy at national and state level: to build an enabling environment favourable to repayable finance for WSS to households and entrepreneurs		YES	YES

In It is clear from all three country evaluations that Water.org has a credibility in the area of household financing for WSS built on its considerable experience in supporting microcredit for WSS – and a track record of going beyond policy to practice. This suggests that WaterCredit does directly play a role in supporting systems strengthening for WSS financing in these countries.

In In addition to the systems strengthening evaluations, between 2018 and 2021 Water.org has harvested outcomes from its country programs, detailing observed changes in water and sanitation actors and policy linked to financing and WSS lending. (Water.org, 2021). This includes outcomes at all three levels, and ranges from very specific localized changes, to high-level changes in national policy and budget allocation. Examples of observed outcomes at the systems level include:

- The government of Bangladesh increasing the WASH budget for FY20-21 by 13.25%.
- In Bangladesh, WaterAid and UNICEF collaborated with Water.org on a webinar on how best to support MFIs during COVID-19 (April 2020).
- In 2019, four Ethiopian Government ministries mandated financial institutions to integrate WASH into their loan portfolios.
- The Development Bank of the Philippines signed an MOU with Water.org to expand their wholesale financing facility for microfinance to include WSS lending for Water.org partner institutions and water utilities (July 2019).

In At present the outcome harvesting does not include Water.org's contribution¹⁰ (however indirect) to the observed outcomes: only a small number of the systems-level changes include a reference to Water.org. For some of these observed outcomes - for example, changes in national budget allocation to WASH – it is not credible to assume that Water.org's contribution will be significant in comparison to other influencing factors. Without this information it is not possible to understand how or if WaterCredit programs specifically are supporting systems-level changes.

4. Concluding statement

Water.org can reasonably claim that the grant funding and technical support it gives to partner MFIs leverage significant capital for household investment in WSS services. MFIs also go on to develop sustainable WSS loan portfolios beyond the initial support provided by Water.org. There is evidence that – given the right conditions and context – the availability of WSS loans can mean that more households invest in improving their WSS facilities and do so faster than would be expected in the same context without access to loans. However, this effect isn't universal and there is insufficient evidence to predict what conditions may be necessary. Given the current data available, it isn't possible to determine if WSS facilities constructed using WaterCredit (or other MFI) loans are of higher quality, or more sustainable, than WSS services established through other approaches.

Given Water.org's unique position in the WASH sector in terms of support microfinance for WASH, the majority of the evidence on the effectiveness of microfinance for WASH comes from Water.org studies and documentation – there is very little external evidence. Additional evidence generated by Water.org is likely to significantly contribute to the overall WASH sector understanding of household financing for improved WSS services.

5. Theory of Change

The below diagram depicts the Theory of Change (ToC) for the WC as an accelerator theme that was co-constructed by the research team and Water.org together during the ToC workshop. The ToC builds from the foundational outcomes (blue boxes) up to the theme-related outcomes (pink boxes + other colors from other themes). The ToC shows how change is expected to occur both in regard to the WC (blue arrows) and WASH contributions (black arrows). It also maps out the linkages between related

¹⁰ Some of the same outcomes are included in the systems change country-level evaluations alongside Water.org's contribution to changes.

outcomes, the level of impact associated with these connections, and the strength of evidence associated with each outcome, as explored in the report (please see the key for further detail).

Figure 9. Key for the ToC

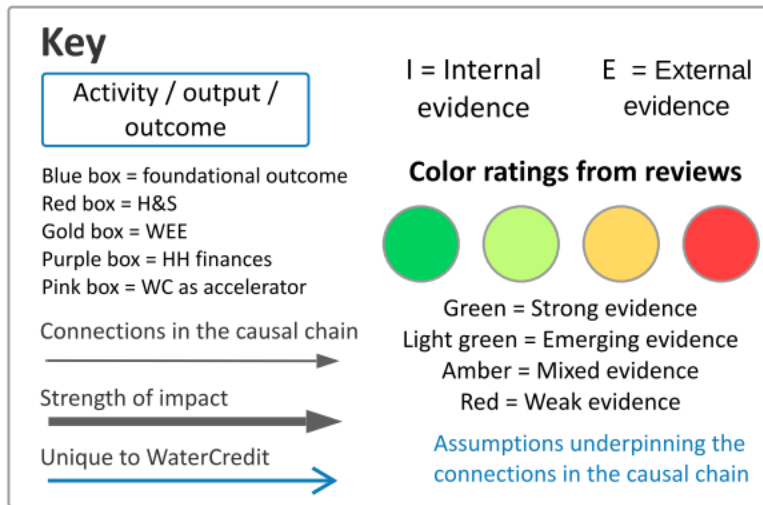
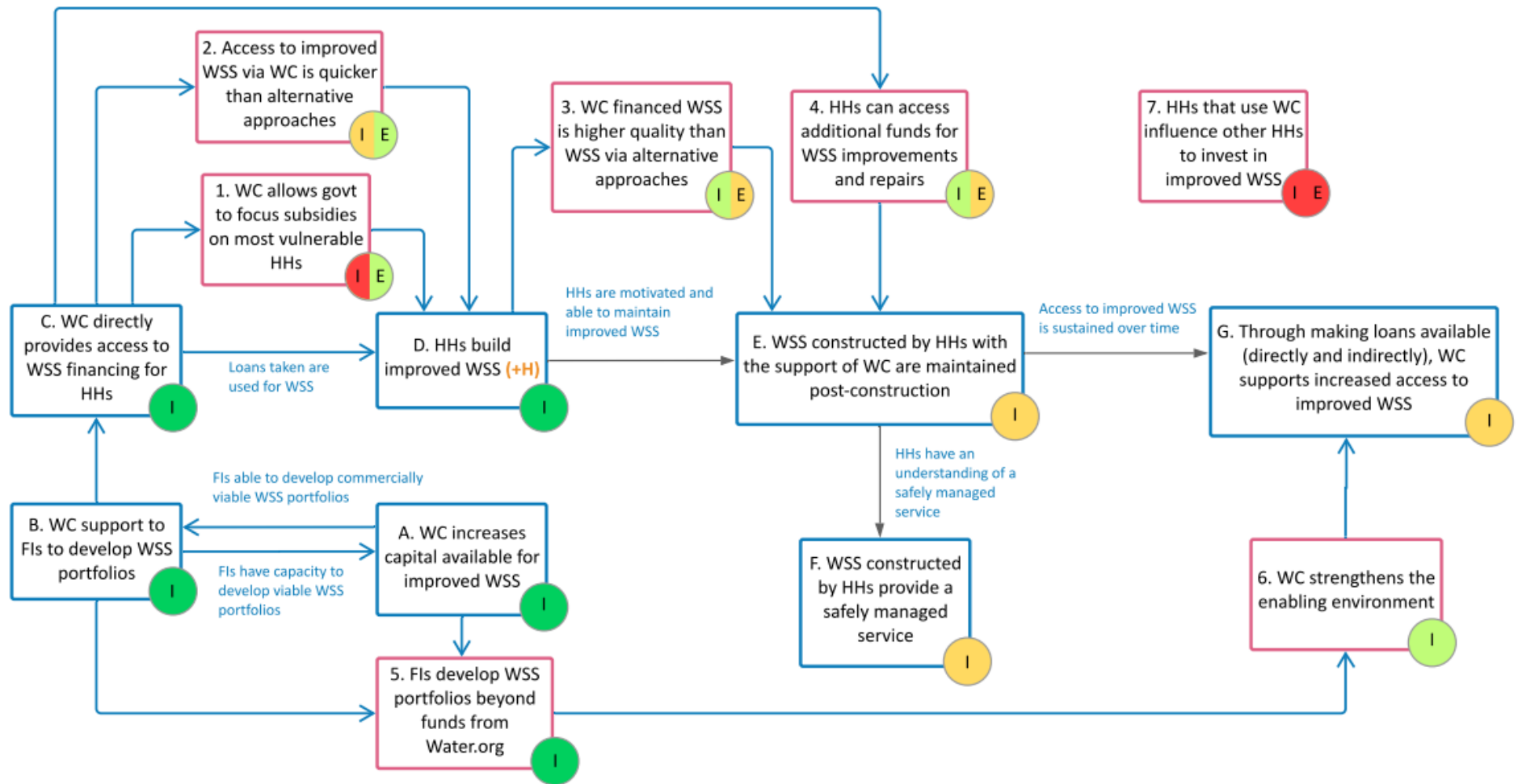


Figure 10. ToC co-constructed for the WC as an accelerator theme



6. Recommendations

Develop data on graduated financial institutions to understand the long-term prospects for WSS loan portfolios.

Problem: there is good evidence that WaterCredit supported MFIs scale up and sustain WSS loan portfolios, but less evidence on whether WSS loans are sustained once MFIs graduate and are no longer directly supported by Water.org.

- Water.org should start a process for collecting regular data on FIs who have graduated from direct support to understand whether they continue to offer WSS loans, and the growth and sustainability of WSS loans in the long-term.
- Collecting this data would allow Water.org to better understand and communicate the long-term prospects of WSS lending, and the potential for WaterCredit lending to become self-sufficient. It would also provide evidence on the potential of microfinance to fill sector financing gaps for household WSS improvements.
- Data collection could be relatively light touch: annual data from graduated partners on a small number of key metrics would be sufficient to provide evidence for the relevant sub-theme.
 - This could include the volume of loans (number and capital disbursed), estimates of the number of households and individuals served, details on the proportion of overall lending which is made up by WSS loans, and headline figures on the OSS of WSS loans.

Consider extending data collection beyond households that take WaterCredit loans to understand the difference that WaterCredit makes beyond community, area or nationwide improvements in access to improved WSS facilities.

Problem: at present it is difficult to communicate the difference WaterCredit has made because it is not possible to distinguish uptake of WSS improvements from context-wide increases in access.

- Water.org should ensure that all data collection on access to WSS facilities includes a comparison with the broader community (e.g. households which did not take loans) wherever possible. This should be considered for routine data collection (WaterCredit surveys) and essential for any external evaluations or stand-alone research.
- The samples for data collection should be designed to include loan and non-loan groups at both baseline and endline, so that it is possible to track and understand if households which take loans gain access to improved WSS at a faster rate than the broader community.
- Extending WaterCredit surveys to non-loan households may not be feasible – there would be a considerable burden of data collection households who have not benefitted from the WaterCredit program. However, Water.org could explore working with local partners or local government to support or develop regular monitoring of access to water and sanitation on an area-wide basis. This would provide Water.org with data to understand the added value of WaterCredit, whilst also supporting systems strengthening through increased availability of data for planning and monitoring.

Ensure that there is longer-term monitoring of WSS improvements supported through WaterCredit Loans.

Problem: Water.org cannot talk about the longer-term sustainability of WSS improvements supported by WaterCredit as most functionality data is collected shortly after construction.

- Water.org should undertake to follow up WaterCredit surveys several years after the loans have been disbursed.

- The surveys should be administered no earlier than 2 years after loan disbursement, and ideally up to five years after, to provide insights into the long-term functionality and use of WaterCredit funded facilities.

Consider a standard measure for impacts of Water Credit on improvements in WSS facilities.

Problem: understanding the added advantage of WaterCredit is made more difficult by non-comparable measures being used in Water.org evaluations and assessments.

- Water.org should ensure that all external evaluations use – as a minimum – a standard measure of how access to water and sanitation has improved; and use a standard comparison group to understand the impact of WaterCredit.¹¹ This could comprise:
 - Access to at least basic sanitation and water (which would help understand progress towards universal access and enable comparison with a broad range of other WASH sector data).
 - Access to water and sanitation on premises (important given the nature of the improvements typically financed by WaterCredit, and that many loan-takers may already access community or shared facilities).
 - Comparing access with households which took a loan, and those in the same area which did not take a loan.
 - Any other measures – which may be necessary for contextual or donor reasons - should be in addition to those listed above.
- Addressing this issue could allow Water.org to collate data on the impact of WaterCredit on access to improved WSS services across programs and countries. This could drive insights into what contexts are most suitable for WaterCredit programs and create a powerful advocacy tool.

Develop a clear model for how microfinance and subsidies can complement each other for WSS improvement programs.

Problem: there is little evidence for or understanding of how and to what extent microcredit programs can support public subsidies for WSS improvements.

- Water.org's should:
 - Undertake thorough documentation of any existing examples of WaterCredit intentionally complement public subsidies for WSS improvements from current or previous WaterCredit programs;
 - Using the emerging evidence for this sub-theme to develop WaterCredit programs which are intentionally designed to complement existing public subsidies;
 - Developing evidence-based advocacy (when evidence is available) for how microfinance can work alongside subsidies to support universal access to water and sanitation.
- This is a gap in sector knowledge which Water.org is in a unique position to address due to its large portfolio of WaterCredit programs. Establishing a clear model for how WaterCredit can support subsidies would also help further articulate the role microfinance can play in achieving the SDG6 goal of universal access to water and sanitation.

¹¹ The Endline Evaluation of the Bank of America supported WaterCredit project in India (Institute for Sustainable Futures, 2019) provides a good example of an evaluation with clear measures and comparison groups which could serve as a model for other WaterCredit evaluations.

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