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# Case study assessment: Blended Finance in Water, Sanitation and Hygiene (WASH) – Lessons for Development Partners

30 JUNE 2021





## SUPPORTED BY



## Disclaimer

This publication has been funded by the Australian Government through the Department of Foreign Affairs and Trade as part of Water and WASH Futures activities with the International WaterCentre. The views expressed in this publication are the author's alone and are not necessarily the views of the Australian Government. The Australian Government neither endorses the views in this publication, nor vouches for the accuracy or completeness of the information contained within the publication. The Australian Government, its officers, employees and agents, accept no liability for any loss, damage or expense arising out of, or in connection with, any reliance on any omissions or inaccuracies in the material contained in this publication.

## Citation

Tkachenko, Oksana and Mansour, Goufrane. 2021. Case study assessment: Blended Finance in Water, Sanitation and Hygiene (WASH) – Lessons for Development Partners. International WaterCentre, Griffith University, Lean Finance and Aguaconsult. Australia.

## Acknowledgements

The authors acknowledge guidance and input from Georges Michael (WASH Expert, Aguaconsult) and Lewis Rentschler (independent consultant). Dr Regina Souter from the International WaterCentre at Griffith University supported the design and review of the study.

The team greatly appreciates the assistance and provision of resources by Convergence Finance.

In addition, the team acknowledges time commitments, good will, inputs and open cooperation from all development actors, partner organisations, investors, local enterprises and community members involved in the case studies.

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## 1. INTRODUCTION

### 1.1 ABOUT THIS REPORT

**The Water Section (in the Climate Resilience Branch) of the Department of Foreign Affairs and Trade (DFAT) is initiating the design of future investments in Water, Sanitation and Hygiene (WASH) services and water security.** As part of this process, the Section is seeking advice on the role of blended finance for WASH and whether blended finance can and should be incorporated in future programs as a way to increase access to WASH at scale and influence the nature of WASH service delivery towards more climate-resilient and sustainable services.

**This report provides evidence on how blended finance has been applied in the WASH sector.** By identifying lessons from past experiences, particularly with regards to the possible roles of Development Partners, the paper aims to inform the identification and preparation of pathways for future WASH programming that could include the use of blended financing to scale-up or improve the impacts of WASH activities.

The paper also aims to provide or influence content for the Water & WASH Futures Conference and Symposium. The Water & WASH Futures Conference planned for February 2023 and delivered by the International WaterCentre will be preceded by a virtual Symposium on Climate Change and WASH. It is likely that innovative and blended financing for development, especially WASH, will be a theme at the Symposium as well as at the Conference itself. Material from this document will play an important role in providing content for panel sessions, keynotes and workshops in the Symposium and Conference.

This report is intended to be primarily a document for DFAT to use, though it may be shared with key stakeholders by DFAT, including other Development Partners.

Limitations of this report include:

- This was a rapid, desk-based assessment of WASH initiatives that used blended financing, relying thus on documents and remote interviews with participants; field visits were not possible.
- The scope of this report was focused on 5 case studies, and the assessment does not survey the many different types of financial arrangements possible.
- The assessment of financing arrangements and WASH outcomes achieved is limited to those reported by stakeholders.
- The scope of the report is limited to examples of how blended financing has been applied to the WASH sector in the recent past; this should not imply any restrictions on potential future applications of blended finance to WASH, recognising that new arrangements and strategies will inevitably reflect innovations and evolving place-based strategies.

### 1.2 CONTEXT: BLENDED FINANCE AND WASH

**The Addis Ababa Action Agenda recognises blended finance as key instrument for moving the development agenda forward and reaching Sustainable Development Goals.** It defines blended finance as activities that combine “concessional public finance with non-concessional private finance and expertise from the public and private sector, special-purpose vehicles (SPV), nonrecourse project financing, risk mitigation instruments and pooled funding structures”. The OECD report “Making Blended Finance Work for Water and Sanitation” further elaborates that blended finance has the potential to attract additional finance for water-related investments as well as acting as a market-building instrument to provide a bridge from reliance on concessional financing towards more self-sustaining financing approaches.

**The “blending” of financial investments from multiple partners assumes that, in the mix of funds, there will be an underpinning layer of capital with high tolerance to financial risk.** This layer could be in a form of a grant, a subsidy, a guarantee, or first-loss or concessional capital.<sup>1</sup> The purpose of this layer is to “protect” the financial returns of more senior capital in the structure. In such blended finance structures there is a degree of risk-return “subsidy” which is critical to “catalysing” investments. Such structures support the early-stage testing and refining of new business models prior to proving and scaling these models – potentially under more commercial, traditional capital arrangements.

**Funding innovations that catalyse new sources of capital are of interest to all sectors, particularly WASH.**

The WASH sector presents four unique challenges. First, the sector offers fewer commercially viable business models: that is, models with high levels of financial returns and social impacts. Second, water is such a basic human right that attempts to “commercialise” water access and sanitation can lead to outcomes that are unaffordable for communities and therefore also provide unsatisfactory results for investors. Third, sanitation and human waste management may not be attractive to some parties and can even be subject to cultural taboos, making it difficult to attract talent, capital and entrepreneurs who are willing to tackle this area. Finally, WASH investments have historically been subject to political interference, low willingness to pay, weak regulatory environments and low service provider performance – all of which hinder the development of private finance for the water sector.

**Blended finance could be adopted to address the perceived risks of WASH investments (responding to the above challenges) and help attract parties with different risk appetites and return expectations.** Blending is used to make projects with significant development outcomes financially viable for investors: projects that could not be fully structured on commercial terms. Blending aims to make the funding transaction attractive for all parties, thus achieving goals critical to impact and sustainability. These goals include increasing the overall pool of capital, attracting new, nonconventional participants, and building more heterogenous partnerships for strengthened systems resilience and impacts. An important principle in the use of blended finance is that its use be temporary — that is, “transitional”. Over time, projects funded through blended structures should help stimulate strong private sector markets that can then grow without government assistance and provide critical income, services, and revenue to society.

### 1.3 ASSESSMENT FRAMEWORK & METHODS USED

**This report provides evidence about the application of blended finance to WASH, based on the review of five WASH initiatives that aimed to mobilise alternative sources of capital.** The case studies were selected in consultation with DFAT as the most relevant in terms of institutional and financing arrangements and in terms of results achieved. Case studies were prepared based on publicly available literature as well as interviews with stakeholders involved in the technical and financial arrangements of those initiatives, or delivering impacts in the field. The team also gained access to confidential information related to transaction terms with permission from involved stakeholders. This report was shared amongst selected interviewees for verification and involved a review by Convergence Finance to support its credibility.

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<sup>1</sup> First-loss is a pool of funding offering compensation to investors or lenders if the entity (investee or borrower) defaults. “Concessional financing is financing on terms and/or conditions that are more favourable than those available from the market. Concessionality can be achieved through one or a combination of the following: a) Interest rates or expected returns below those available on the market; b) Other terms that would not be accepted/extended by a commercial financial institution such as: longer maturity (years before principal for a loan needs to be repaid), longer grace periods (time before interest or other payments are required), reduced security (rights to claim certain company assets if the loan is not repaid), lower rank (order in which financiers are repaid by the company), longer repayment profile (amount and timing of principal repayments)”, Using Blended Concessional Finance to Invest in Challenging Markets – ECONOMIC CONSIDERATIONS, TRANSPARENCY, GOVERNANCE, AND LESSONS OF EXPERIENCE: International Finance Corporation, February 2021

## 2 EXECUTIVE SUMMARY

### 2.1 CASE STUDIES

**All five case studies selected involved WASH projects that were initiated on the basis that public funds alone would not be sufficient to drive systemic change in the sector and to realise WASH development impacts at scale.** Among the five projects, two were focused on sanitation services, while the others sought broader opportunities across the water sector. **All initiatives were executed in low- and middle-income countries, including countries in the Indo-Pacific region.** The case studies feature some form of blending (2 cases), leveraging (2 cases), or linking (1 case) public and private capital to expand and offer WASH products and services to low income, marginalised and/or unserved populations, and to close affordability and financing gaps. The following WASH initiatives are presented:<sup>2</sup>

1. **WaterEquity Fund II:** This \$US 50 million fund was set up in the United States of America as an initiative driven by private investors. This facility has an innovative capital structure which blends different classes of equity and debt, de-risked by first-loss capital, and deploys 90% of the funds as loans to local microfinance institutions (MFIs) in India, Indonesia, Cambodia, and the Philippines. These MFIs, in turn, on-lend loans to households, who then purchase WASH products and services. Another 10% of the facility investment funds are loaned to medium- and large-scale WASH enterprises for growth and scale purposes.

WaterEquity builds on the legacy of Water.org, which pioneered the use of microloans for water supply and sanitation products to families living in poverty and has impacted up to 36 million people across 11 countries. The "Fund II" initiative, the focus of this case study, deployed all US\$ 50 million of fund capital within 18 months, and as of March 2021 had reached more than 1.1 million people with access to safe water and sanitation.

2. **Cambodia Rural Sanitation Development Impact Bond:** This is a results-based arrangement for scaling-up rural sanitation in Cambodia initiated by the UK-based Stone Family Foundation (SFF), involving USAID as the outcome-payer (with total outcome payments of US\$ 10 million) and iDE as the WASH service provider. The bond is not a blended finance structure, but rather links philanthropy and public funds and aims to demonstrate how to attract private investors and scale up impacts.

As a result of this project, 750 villages in Cambodia have claimed Open Defecation Free status over 18 months since its inception.

3. **Kenya Innovative Finance Facility for Water (KIFFWA):** This is a project preparation facility set up with funding support from the Dutch Government and a budget of \$US 19 million. The facility funds the development stage of water and sanitation projects and aims to support private sector developers in bringing the projects to financial close.

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<sup>2</sup> The order reflects that of the sections in this document and does not reflect size, importance or relevance

This facility has added 17 new water and WASH joint development agreements (JDAs) to the pipeline of water sector projects in Kenya and completed early-stage preparation work for each project. Total estimated value of the JDA projects equates to € 150 million, leveraged by € 7 million of actual funds invested by the Dutch government since establishment.

4. **World Bank Bangladesh Output-Based Aid (OBA) Sanitation Microfinance Project:** This was a project implemented between 2016 and 2018 (earlier interventions started in 2008), which led to the design of a US\$ 550 million WASH program, funded by the World Bank, Asian Infrastructure Investment Bank and the government of Bangladesh. The concept was to build a market of sanitation products and services, strengthen WASH enterprises in that market, build the capacities of local microfinance institutions serving the market and ultimately increase the affordability of WASH investments by households, changing consumer behaviours.

This project has built an ecosystem of more than 1,000 entrepreneurs providing sanitation products and services and has strengthened the mid-tier microfinancing sector to enable finance for the most poor. The project has reportedly impacted 170,000 households and three-quarters of a million people in Bangladesh.

5. **Azure Source Capital** is a blended finance facility that originated in the Vatican, via Catholic Relief Services. It is executed by a US-based impact investment fund manager (Total Impact Capital or TIC) and the Catholic Relief Services (CRS) as a technical service provider, focusing on El Salvador and Honduras. The facility brings US\$ 10 million of investor money blended in a mix of equity and debt classes, de-risked by concessional capital from the Inter-American Development Bank (IADB) and from private investors with a “soft tolerance” to financial returns. Funds are disbursed as loans either directly to water service providers or to local finance institutions (credit cooperatives), who then provide loans to local public or private water cooperatives or enterprises. An important emphasis of the facility is to develop technical and business capacities of Water Service Providers (WSPs) for improved technical and financial performance and creditworthiness.

This initiative has reportedly provided water services to 52,000 households in El Salvador and Honduras, strengthened technical capacities of 187 local water service providers and improved financial reach and expertise of 10 credit institutions. The funding of water infrastructure, equipment, and facilities is reported to have impacted the lives of 185,000 people in El Salvador. The year-to-date funds loaned are US\$ 3 million (30% of the total facility capital of US\$ 10 million).

Table 1 below provides additional information on the design and results of these initiatives, which are discussed in depth in Section 3 of the report.

TABLE 1: OVERVIEW OF CASE STUDIES (1 OF 2)

	1. WaterEquity Fund II	2. Cambodia Rural Sanitation DIB	3. KIFFWA	4. Bangladesh sanitation OBA	5. Azure Source Capital
<b>What is it?</b>	Blended finance facility for delivering loans to local financial institutions for on-lending to households and WASH service providers.	Results-based payment structure with upfront working capital from external investor to service provider for scaling-up rural sanitation.	Project co-development facility set up to identify greenfield projects/ companies and leverage private capital from commercial co-developers and investors.	Results-based payment structure to leverage local finance for sanitation service users (households) and local entrepreneurs.	Blended finance facility to facilitate access to finance for WASH service providers, particularly community-based water providers.
<b>Initiator</b>	Private individuals and philanthropy	Private philanthropy	Dutch government	World Bank	Catholic Relief Services (Vatican)
<b>Anchor investor</b> (provider of first capital to pool of funds)	Development Finance Corporation	Stone Family Foundation	Dutch government	World Bank	Inter-American Development Bank
<b>Anchor capital</b>	US\$ 20 m	US\$ 10 m	US\$ 19 m (€ 15 m) (budget)	US\$ 3.9 m	US\$ 2.775 m
<b>Type of anchor capital</b>	Loan	Upfront capital, reimbursable by results payer	Upfront capital	Upfront capital	Preferred equity
<b>Total pool of capital designated to WASH and water services</b> (incl. mobilisation capital)	US\$ 50 m	US\$ 10 m	US\$ 334 m (€ 282 m) – estimated	US\$ 27.6 m	US\$ 10 m
<b>Mobilisation capital</b> (de-risking capital)	US\$ 5 m – first-loss	US\$ 10 m – upfront	US\$ 19 m (€ 15 m) – upfront	US\$ 3.9 m – mix of upfront and based on outcomes	US\$ 4.25 m – concessional capital
<b>Players</b>	Niagara Cares, Skoll Foundation, Bank of America, IKEA Foundation, Johnson & Johnson, Conrad N. Hilton, Ceniarth, Osprey, DFC, WaterEquity.	USAID, Stone Family Foundation iDE.	Netherlands Embassy in Nairobi, KIFFWA Foundation, private and commercial developers in Kenya.	World Bank, Bangladesh Ministry of Finance, Palli Karma-Sahayak Foundation (PKSF), Assoc' for Social Advancement (ASA), Grameen Bank, Bangladesh Rural Advancement Committee (BRAC), local MFIs.	Catholic Relief Services, Development Finance Corporation, Inter-American Bank, Calvert Impact Capital, Mercy Investment Services, Total Impact Capital, and private individuals.

TABLE 1: OVERVIEW OF CASE STUDIES (2 OF 2)

	1. WaterEquity Fund II	2. Cambodia sanitation DIB	3. KIFFWA	4. Bangladesh sanitation OBA	5. Azure Source Capital
<b>Start date</b>	2018	2019	2018	2016	2018
<b>Status as of June 2021</b>	Ongoing	Ongoing	Ongoing	Reached completion in 2018, scaling up to US\$ 550 m	Ongoing, funds deployed US\$ 3 m
<b>Geography</b>	India, Indonesia, Cambodia, Philippines	Cambodia	Kenya	Bangladesh	El Salvador (planned expansion to Honduras)
<b>Role of development assistance</b>	DFC served as an anchor lender, providing US\$ 20M to the fund's debt tranche, which represented 40% of the total pool of funds.	USAID acted as an outcome funder, providing up to US\$ 10 m based on achievement of agreed milestones.	Dutch government provided seed capital to facilitate commercial investments and projects for the water sector in Kenya.	World Bank provided technical assistance and output-based grants to develop WASH sector and markets and capabilities of local MFIs to provide affordable financing for sanitation products.	Inter-American Development Bank acted as anchor investor, providing concessional equity to mobilise other investors and lenders.
<b>WASH focus areas</b>	Provision of loans to local MFIs to low-income families for affordable water and sanitation products and services, the majority of investments to service household needs (90%) and the remaining to WASH enterprises (10%).	Behaviour change for improved sanitation, support to local entrepreneurs in rural areas.	Facility develops water infrastructure projects, water and WASH enterprises, products and services across the water sector with main focus on greenfield projects.	Sanitation products demand creation, training of local WASH entrepreneurs, providing improved sanitation facilities and building capacities of the small MFIs to provide financing for WASH products and services.	Building technical and financial capacities of local water service providers and provision of funding to local FIs to enable water services and infrastructure investments, resulting in improved water solutions and cost savings to beneficiaries.
<b>Impacts since inception</b>	Since 2018, Fund II has deployed more than US\$ 50 million in loans, incl. one to a WASH enterprise in India supplying bio toilets and fecal sludge treatment plants. 1.1M lives impacted to date.	750 villages achieved defecation free status in Bangladesh over 18 months of project duration.	Since 2018, 8 Joint Development Agreements signed for water sector projects – total value US\$ 177 m. One project will achieve financial closure in 2021.	From 2016 to 2018, the project impacted 170,000 households and three-quarters of a million people in Bangladesh and built capacity of 1,000 enterprises.	Since 2018, the facility deployed US\$ 3m in loans to water service providers. Impacted 185,000 El Salvadorans. Built capacity of 187 WSPs.

## 2.2 LESSONS LEARNT

**The initiatives reviewed all provide different approaches for mobilising additional finance for WASH.**

Conclusions set out below are elaborated upon in Section 4 of this report.

There are nine major conclusions from considering each of these case studies:

1. Blended finance emerges from a long-term and socially **inclusive view of the ultimate purpose of capital** in the economic system. This view has motivated the leaders of each of the case studies.
2. Blended finance **shifts the role** of the public sector (and of private sector philanthropic agents) from that of the primary funder **to the early-stage enabler of social and development impact**. Public sector funding, applied to blended finance, fills the significant gap for risk-taking capital, which then scales impact by attracting third-party capital, not otherwise available.
3. The case studies cover the **full WASH value chain** where blended finance can be applicable, from upstream planning to portfolio and project / loan financing, to the various WASH areas (access, treatment, infrastructure, products and services), and to such supporting processes as capability building, skills development, marketing and behaviour change. The full WASH value chain is relevant for consideration in evaluating opportunities to extend social impact through applications of blended finance.
4. The case studies illustrate how **whole systems approaches**, combined with financing innovations, are critical to holistic WASH programs that drive systemic change, such as the World Bank Bangladesh program. Such whole systems approaches offer **greater** opportunities for replication and scale to further attract private and commercial capital and enable transition to commercial funding structures.
5. Financing for WASH that is directed to underserved communities, may be positively correlated with **climate change resilience** and reaches the neediest in those communities, and also often with a prominent gender lens focus (Case studies involving microfinance are significantly skewed to **female beneficiaries**.)
6. The **development of microfinance** can be a pathfinder for blended finance in WASH. Microfinance has moved from a sole-focus intervention and a heavily subsidised blended model to a proven financing tool that can fit within a more holistic program and attract market rates. WASH financing models could follow a similar evolution path.
7. Blended finance solutions for WASH require a strong **technical understanding in WASH** and of critical design issues in a local context. This means that the choice and ongoing role of a **technical partner** are critical to the success of multi-party ventures, complementing the required financial expertise.
8. WASH institutions operate within an **“enabling environment”** that includes legislature and regulation. This environment has to be conducive to public-private partnerships generally and to the development of WASH programs in particular. Building the enabling environment requires upfront capital, including but not limited to grants, technical assistance or paying for products and services creation.
9. WASH investments and blended finance applications are to be developed based on **in-country blending principles**.

The following matters are to be considered by Development Partners such as DFAT, prior to entering blended finance arrangements in order to adequately address both public policy considerations and private sector commercial issues and to ensure the success of such partnerships within blended finance structures:

- There needs to be a clear distinction between (a) the traditional additionality of the Development Partners as an aid agency to WASH development interventions and (b) the added value arising from blended finance arrangements, and recognition that Development Partner may play both of these roles within a WASH program.
- Public capital in the form of subsidies or concessional capital is only to be used to fill market gaps, thus avoiding market distortion or crowding out private sector through strong Development Partner provisions.
- Development Partner subsidies or concessional capital, which will be provided to de-risk or to leverage private investments, is only a transitional solution to help the WASH sector business models gain commercial confidence and, through building a positive performance track record, attract future commercial investments.

Development Partners can play different development roles to create sector systems change through partnerships that unlock funding. These roles seek to build an **enabling environment** conducive to **blended financing for WASH** and could include four major categories of development:

- **Market supply development** to influence rules and regulations and to reduce regulatory barriers for participation by philanthropic funds, pension funds and commercial investors.
- **Market demand development** to support growth of impact enterprises and enhance their capacity to absorb investment.
- **Intermediate player development** or directing capital into impact funds, blended structures or initiatives that create sustainable impacts.
- **Blended finance for WASH ecosystem development** to foster innovative partnerships and idea generation.

## 2.3 RECOMMENDED NEXT STEPS FOR DEVELOPMENT PARTNERS

Recommended next steps for Development Partner such as DFAT, following discussions on the case study report, may include:

1. Strengthen internal capacity in blended finance, including:
  - a. Explore knowledge exchange between global public players in water, WASH, and blended finance.
  - b. Pursue facilitated workshops, networking events and tailored training.
2. Explore pathways to engage with the private and commercial sector for strengthened climate resilience and WASH impacts.
  - a. Workshop and develop recommendations on the design, and possible pathways to achieving, WASH blended finance projects that could be incorporated into future Development Partner activities.
  - b. Create in-county pilot projects to trial some of the recommended designs and pathways.
  - c. Invest in existing or newly created blended finance structures which operate in countries of political significance to the Development Partner and within sectors of intended development impacts.

- d. Broker closer engagement between WASH and finance actors to co-develop joint ideas and initiatives for strengthened WASH programing, funding innovation and implementing WASH at scale.

### 3 CASE STUDIES

#### 3.1 WATERCREDIT INVESTMENT FACILITY 3 (FUND II) BY WATEREQUITY

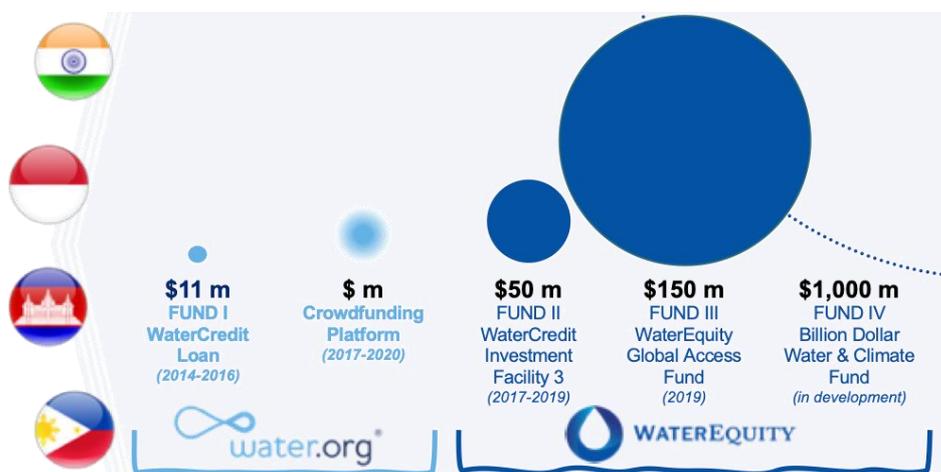
##### What is it? (Purpose, activities and organisation)

**Overview.** WaterCredit Investment facility 3 (“Fund II”) is a blended finance facility established by WaterEquity, an impact investment fund manager co-founded by Gary White and Matt Damon. WaterEquity has a mission to end the global water crisis, putting financial capital at work to deliver universal access to safe water and sanitation. WaterEquity was built on the foundation of Water.org, which was established in 2009 to facilitate access to finance by individuals and enterprises in order to expand water and sanitation products and services among underserved communities. Water.org provides philanthropic financial support and technical assistance to microfinance institutions to help them develop water and sanitation microloan portfolios for individuals and enterprises.

**WaterEquity developed the concept of a blended finance structure for Fund II in 2016.** Capital raising started in 2017 and was finalised in March 2019. To date, WaterEquity and Water.org have raised US\$ 183 million across 3 funds (see Figure 1 below), including US\$ 50 million for Fund II (analysed in this case study).

Partners for Fund II are equity investors and debt providers. They include Niagara Cares, Skoll Foundation, Ceniarth, Conrad N. Hilton Foundation, Bank of America, U.S. International Development Finance Corporation, IKEA Foundation, Osprey, Johnson & Johnson and some private individuals. The first pilot fund (“Fund I”, Figure 1) in the Water.org structure, described as a “friends and family fund”, was supported by early adopters (in particular, Matt Damon with US\$ 1 million in personal capital) as well as funds from the existing Water.org donor base.

FIGURE 1: WATER.ORG AND WATEREQUITY FUNDS



Source: Project team research

**WASH focus areas.** WaterEquity primarily lends to microfinance institutions (MFIs) for on-lending to households seeking water and sanitation improvements. This lending represents 90% of loans disbursed.

**Some loans are given to wash and sanitation SMEs directly.** Banka BioLoo (India) – founded by a woman and incorporated in August 2012 – is one of the loan recipients. In 2018 Banka BioLoo became the first sanitation company in India to raise US\$ 1.7 million from an IPO on the National Stock Exchange (NSE) of India (SME platform Emerge). Banka BioLoo manufactures bio toilets, supplying to corporations such as Indian Railway and Goa Waste management, and provides faecal sludge treatment plants in the states of Telangana and Andhra Pradesh. The latest WaterEquity project involving Banka Bioloo is funded through a hybrid annuity

model, relying on government contributions towards costs for the first years of development and a US\$ 1 million loan from WaterEquity.

**WaterEquity is set up to make mezzanine<sup>3</sup> and some subordinated debt investments, but primarily finances through senior loans.<sup>4</sup>** Interest rates charged on each loan depend on the country and borrower context. Rate-setting is based on rates for loans provided by other international investors, with the intent to charge a typical market rate.

**WaterEquity offers loans at market rather than concessional rates.** It sets lending terms that take into consideration assets that are ultimately financed by the MFI. For example, if an MFI is offering water and sanitation microloans with a tenor of 18 months, WaterEquity will offer that MFI a tenor of three or three and a half years. If investments are for home improvements, the tenor may be for five years, so that the loan is structured to meet time requirements for the improvements. There is also an alignment between (a) the capital allocated to segments in the original fund design – i.e. either to WASH enterprises or to financial institutions by country – and (b) loans made to such segments.

**WaterEquity Fund II does not provide early-stage patient capital or grant capital and has no mandate to achieve holistic or transformative water and sanitation systemic change in countries where it operates.** Rather, Fund II has a focused approach: it only raises capital and deploys it for the purpose of water and sanitation investments. It does not provide grants for technical assistance or capacity building. And it focusses on growth-stage or larger-scale companies that have established a sustainable business model that works.

**To support this focus, each loan agreement is structured to ensure that the capital is being used for water and sanitation and is subject to a rigorous audit mechanism.** WaterEquity performs due diligence in evaluating loans, exploring the borrowing institution's systems and processes in depth, with subsequent quarterly verifications and on-the-ground surveys. WaterEquity manages and collects data from its network. In the event that a borrower is no longer using funds for water and sanitation, WaterEquity will work with the borrower to determine corrective action to come back into compliance and meet impact targets. However, if the borrower is not capable or willing to resume water and sanitation funding, WaterEquity reserves the right to recall the loan.

The internal rate of return (IRR) for Fund II at inception was projected to be 3.5% but has actually ranged between 3.5% and 6.8% (as of April 2021, as stated on the WaterEquity website): this is satisfactory for most WaterEquity investors, who value capital preservation with moderate returns and high social impact rather than exceptional returns.

**Reporting. All impact targets were set at the start of the fund's operations.** These targets relate to the number of people to be reached by the investments, the level of water and sanitation improvements these individuals achieved, demographic characteristics and the impact to the beneficiaries of the funds loaned. WaterEquity's website states: "1.9 million people reached, including 1.1 million by Fund II, 92% of which are women end-clients". WaterEquity has released the first publicly available [impact report](#) in July 2021. A copy is provided to DFAT to supplement this case study.

**WaterEquity works in close collaboration with its sister organisation Water.org to verify impacts on the ground and to capture data from partner MFIs.** WaterEquity impacts are also verified by some investors, including DFC, which performs its own monitoring and verification checks and interviews beneficiaries. During interviews for this case study, DFC commended the quality of WaterEquity quarterly impact reports, rating them as "accurate, clean and easy to understand, done in a responsible manner and reliable, always reporting

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<sup>3</sup> Mezzanine financing is a hybrid of debt and equity, and is less risky than subordinated debt

<sup>4</sup> Senior loans are less risky than other types of loans

on time”. DFC also noted that any of their requests, for example for reports on COVID impacts, have been punctual and have met their expectations.

## Financing arrangements

**In total, WaterCredit Investment Facility 3 (Fund II) raised US\$ 50 million in capital.** This capital is inclusive of:

- **US\$ 22.5 million equity:** equity implies investor ownership rights in the fund. Classes of shares define levels of subordination and risk tolerances of parties, with class 3 as most tolerant to risk:
  - Preferred equity class 1 – US\$ 16.1 million.
  - Common equity class 2 – US\$ 6 million.
  - Class 3, US\$ 0.4 million by manager and general partner.
- **US\$ 27.5 million debt:**
  - US\$ 20 million 7-year tenor loan with some amortisation by DFC.
  - US\$ 7.5 million in senior and subordinated debt from other investors.

**Included in the total pool of capital is US\$ 5 million first-loss capital, contributed by Niagara Cares, Skoll Foundation, and some of the high-net-worth individuals.** The first-loss guarantee is a pool of funding offering compensation to investors or lenders if the entity (investee or borrower) defaults.

**Development Finance Corporation provided a significant share (40%) of the capital for Fund II at attractive rates for WaterEquity.** The DFC anchor loan was therefore instrumental to the establishment of the fund: without the US\$ 20 million DFC investment it would have been significantly more difficult for WaterEquity to raise other capital.

**DFC provided finance at a lower rate than usual.** Typically, DFC requires 15 – 20% first-loss capital for such debt provisions. In the case of WaterEquity, there was an ample first-loss cushion. The DFC credit committee granted approval for the loan provision to WaterEquity based on the net present value and risk assessment, concluding that the risks were relatively low. This anchor lending sent a positive signal to other investors and increased WaterEquity’s credibility and reputation, not least because DFC is known to apply a strict due diligence process. It took approximately four months from screening the WaterEquity deal to issuing a loan commitment letter.

**There were also credit enhancements.** The DFC for example requested collateral in the form of a pledge on all receivable funds (that is, receivables assets were “pledged” as collateral); and some lenders provided small amounts of subordinated debt (ranking below other types of debt, and riskier). This helped improve the total net worth of the fund, demonstrating the benefits of blended capital in the finance structure.

**According to DFC, the main driver for investing in WaterEquity is the prospect of significant development outcomes.** WaterEquity approached DFC with a proposal to become an anchor investor (lender in this case) in the fund, which could draw on a proven model using microfinance and build on Water.org’s established track record. Conceptually, DFC understood the risk profile of microfinance investments based on their existing portfolio in the sector (approximately US\$ 1 billion). This understanding supported their assessment of the WaterEquity opportunity as commercially viable and sustainable.

**One of the investors, Skoll Foundation, has been a long-standing partner of Water.org and WaterEquity.** The Skoll Foundation provided seed capital and a stamp of approval for WaterEquity. Most other investor funding was provided as a program-related investment from endowment or investment funds: that is, on a commercial basis but through a philanthropic lens. The IKEA Foundation on the other hand sought no return and provided a zero-interest loan. But this was the exception: the majority of WaterEquity investors are expecting moderate financial returns on their investments.

**The first-loss capital of US\$ 5 million has not been drawn upon to date, and WaterEquity is not expecting to use that capital since the fund is performing well.** Nonetheless, the capital guarantee was strategically critical to the establishment of the Fund. It mattered significantly to some of the investors, particularly to the Bank of America.

## Results to date

**Fund II has directly or indirectly benefited over 1.1 million people, most of whom are in low-income brackets, according to WaterEquity.**

**All impact targets set at the initiation of the fund have been achieved.** The COVID pandemic has inevitably slowed progress, but WaterEquity expects the market to rebound in the coming years, leading to increased funding levels.

**Fund II began disbursing capital immediately after close, and as of December 2020 had 13 loans to financial institutions and three loans to WASH enterprises outstanding. The fund had supported 209,909 water sanitation services microloans to low-income families and had reached 1,018,598 people.**<sup>5</sup> An estimated 92% of borrowers are women and the repayment rate is high at 99%. WaterEquity builds on the legacy of Water.org, which since establishment has built a network of 154 financial intermediary partners across the 11 countries in which it operates. WaterEquity and Water.org combined have impacted 38 million people.

**These outcomes are the result of substantial effort put into pipeline development.** WaterEquity allocates time and resources to identify borrowers and build relationships with new businesses, predominantly MFIs and other enterprises operating in WASH or water services. Such businesses need to meet performance criteria, have a strong credit rating, and must be committed to growing their water and sanitation portfolios. Prior to deploying capital, WaterEquity requires future partners to have, at minimum, a pilot product or a project that they have launched. As of June 2021, WaterEquity has identified 450 institutions in the pipeline, leading to the next round of 35 loans estimated to be converted (translating to an 8% conversion ratio from screening to capital commitment). WaterEquity's historical deal conversion ratio is said to average ~10%.

## Risks and challenges

**Regional risks play a critical role in WaterEquity's strategic planning.** Fund II is limited to four countries, and among those the Philippines has been the most difficult to identify opportunities matching the pricing model required for Fund II. There are also political and market-related challenges in Cambodia, where microfinancing markets are saturated, with intense competition for limited market share, and where there are risks of overheating or over-indebtedness.

**COVID has resulted in a busy year for lending institutions, with increased requests for loan waivers, delays in loan servicing, and deferrals of principal repayments.** Borrowers are showing signs of distress and lenders must set aside increased provisions. WaterEquity is reviewing their current portfolio and adjusting for credit risk, while reassessing the pipeline of future partners. In much of the world, the economic slowdown continues, and lockdowns are still in place, bringing detrimental outcomes for MFIs that WaterEquity invests in. MFIs are struggling with collections and dealing with the shift in priorities from water and sanitation to immediate-term income preservation for poor families, resulting in significant project delays. In addition, the inability to visit potential borrowers has impeded WaterEquity's efficiencies: due diligence must be carried out online, which makes it more difficult to mitigate risks with new relationships. COVID pandemic has not slowed down deployment or resulted in a lower deal flow from the original plan but has required WaterEquity to shift its pipeline building and due diligence processes towards larger less risky institutions. From a water enterprise perspective (i.e. for Banka BioLoo), the major challenge is the slowdown of the supply chain, resulting in a 36%

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<sup>5</sup> WaterEquity portfolio – provided by the WaterEquity impact team for the purpose of this case study

drop in revenue in 2020 and consequent staffing reductions of 30%. There are also delays in payment of receivables by government clients, and postponements in new contracts being awarded by government or corporate clients.

**COVID has also impacted WaterEquity funding levels.** In 2020, investors delayed making decisions on new investment opportunities. The majority of WaterEquity investors are in the USA, where short-term political and other domestic matters have relegated the priorities formerly attached to such themes as the water and sanitation crisis. However, a positive outlook has emerged over the past few months, and most of the investors are now looking beyond the pandemic, resuming earlier concerns and commitments over the developing world, which now has even greater need for their support.

**A further fundraising challenge for WaterEquity relates to the microfinance and to the impact investment sectors.** Microfinance has become a dominant theme in the social impact space, and some investors now view it as a saturated and “boring” market. In addition, the whole impact investing market lately has been subject to accusations of impact-washing (i.e. an organisation overstating or falsely characterising its commitment to environmental or social impacts in a bid to build market trust and brand value). This combines with concerns over the investment risks for water and sanitation in emerging markets, where new investors often have preconceived notions of high risk that are not based on an objective track record review. Overall, WaterEquity faces challenges in finding new ambassadors and packaging finance vehicles that appeal to many different types of investors.

**Another important risk is loan misappropriation.** There is an ongoing challenge in ensuring that borrowers apply loan funds for the purpose agreed with their lender, and a formal administration procedure is required to achieve this objective. WaterEquity has a due diligence process for choosing MFIs which ensures that these MFIs themselves have policies and procedures to ensure that utilisation checks are performed and that there is follow-up with every single end-borrower on every single loan. WaterEquity conducts periodic verifications to ensure there is no diversion of lending, collecting data from the MFIs and through third-party research firms to assess levels of loan mis-utilisation. In addition to monitoring the MFIs’ self-reported loan disbursements, Water.org officers are also used in the field to verify that toilet construction has occurred or that a rainwater harvester has been installed.

**WaterEquity – in common with any WASH services enabler or funder – also faces the risk that impacts will be compromised through poor quality WASH services.** WaterEquity data shows that their microloans, particularly in India, enable families to move from open defecation to basic access, but that the quality of that access is not reliable given the nascent state of faecal sludge management in these communities. Households are typically accessing on-premises water for the first time (through piped connections or wells), or augmenting their water sources (e.g. through rainwater harvesting). But since the reliability and quality of that piped water source is dependent on local water service providers, the outcome for households may not achieve the target of safely managed water. The approach to managing this risk in some markets could call for a more holistic, systemic sector change that builds the quality of local service providers.

### Lessons learnt and observations

**WaterEquity demonstrates well the potential of blended finance for addressing the water and sanitation services financing gap.** The facility has been able to attract a different range of investors with different risk appetite, though most of the investors are philanthropically minded and are willing to provide patient capital.

**In this context, blending funds, with a degree of subsidy either from public or private sources, has proven to be effective in applications to WASH.** Such models are growing in popularity globally and attracting investor interest. These blended structures do raise a separate challenge: to the extent that there is a risk-return “subsidy” (used to leverage private investment), some will be concerned that such structures, if retained over the longer-term, will lead to allocative inefficiencies and market distortion.

For that reason, subsidies provided through blended financial structures may be perceived as controversial. This issue was discussed in 2018 in a Stanford Social Innovation Review article, which argued that “impact investors should not want to change the financial structure of an investment with a subsidy, as that would mask an investment’s true price and encourage investors to make investments they would otherwise avoid [...which can result] in the wrong factories getting built and the wrong businesses getting support—a waste of financial resources and a missed opportunity to achieve social gains”.<sup>6</sup>

DFC’s Director for Enterprise Development, Anthony Randazzo, a thought-leader and blogger who was involved in the loan to WaterEquity, strongly disagrees with the above statement, offering this counterargument:

“If the private sector is not willing to invest in something because risk adjusted returns cannot be earned, then a subsidy must be destroying, not adding, value by inducing private investment to happen where the free market would have otherwise steered clear. However, equally there are two strong arguments to be made in favor of blended finance, even with the risk of ‘distorting’ the free market. Because many social enterprise business models are nascent and not well understood, there is a perceived higher risk to investing. Although the past cannot predict the future, investors are always looking to the past for data to determine what is likely to happen in the future. For this reason, blended finance helps build a market by creating a track record. By causing investments to happen, blended finance allows commercial investors to understand the risks better and get comfortable with them. Once the risks are known, they are easier to analyze and quantify. If done correctly, blended finance should enable the private sector to invest in the future on its own without subsidy. The microfinance sector went through a similar evolution. Some micro-finance institutions still receive subsidies, particularly in the form of soft loans, but by and large microfinance has achieved commercial scale and is able to attract private investment thanks in part to subsidies received in its earlier days”.<sup>7</sup>

**The facility also indicates the relevance of microfinance for water and sanitation and the need to mobilise capital for households and SME finance.** The number of loans disbursed via the facility since its origination (200,000+) indicates the need and therefore the market for financial products focused on water and sanitation.

**WaterEquity also demonstrates how to raise investors’ appetite for microfinance.** Microfinance was the first major social enterprise funding innovation to create excitement in the investor world. There are now dozens of different business models that apply microfinancing to solving development challenges in an effective and sustainable way. Though there may be signs that the investment market is “growing tired” of microfinance *as a singular focus*, this sentiment should only apply where microfinance is positioned as an “end in itself”. Investors should continue to be attracted to microfinance as one element of an innovative business model or as an enabler in the context of an investment “theme”: e.g. using microfinance for water and sanitation, or for housing, or for education.

**DFC, a development finance institution, played a catalytic role to enable WaterEquity to attract investors.** What blended finance structures aspire to achieve is to mobilise private commercial capital. These structures require investors who are catalytic and willing to put money in “underneath” the commercial investors (i.e.

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<sup>6</sup> [https://ssir.org/articles/entry/almost\\_everything\\_you\\_know\\_about\\_impact\\_investing\\_is\\_wrong](https://ssir.org/articles/entry/almost_everything_you_know_about_impact_investing_is_wrong)

<sup>7</sup> <https://impactmoney.net/impact-investing/what-is-blended-finance-and-is-it-needed/>

place a layer of financing at the base of the financial stack) to de-risk commercial capital. DFC was instrumental as an anchor lender – i.e. as provider of first capital to the pool of funds.

**Building on the lessons from Fund II, WaterEquity is establishing a new fund for investors with different risk appetites.** Though Fund II was able to attract a range of investors, it was challenging to raise capital from institutional and individual “market rate” investors. To help meet this challenge, WaterEquity has structured “Fund III” to blend debt and an equity tranche aimed at new types of investors and their risk-return preferences. To some extent, the new fund is more commercial and aims to secure higher returns for investors. De-risking here happens through concessionary leverage rather than through first-loss capital. Concessionary leverage refers to financing provided on more favourable (lenient) terms to mobilise commercial capital and could include: grants, debt at below-market rates, and equity with asymmetrical returns.<sup>8</sup> In Fund III, DFC is providing guarantee mechanisms to mobilise private investors, whereas in Fund II DFC was the anchor lender. This approach also facilitated capital raising.

**From WaterEquity’s perspective, each fund is expected to see growing levels of maturity, different levels of sophistication and an increasing ability to operate without subsidies.** For future deals, WaterEquity expects institutions like DFC to play a less catalytic role in blended structures, with less subsidy and less risk taking. WaterEquity aims to attract capital mostly from commercial sources, resulting in a diminished (or at least more specialised) role for public investors.

### Relevance to DFAT as a Development Partner

**This case is an example of blending different types of capital with various levels of risk tolerance, providing insights into the potential role for a public institution (DFC) in such a partnership arrangement.** DFC played a catalytic role by stepping in, taking on risk and helping WaterEquity secure and retain private sector investments for water and sanitation improvements by providing a large anchor loan with reasonable risk tolerance and relatively low interest rates. This role creates time or “breathing space” for building the market and creating a performance track record that can sustain private investor confidence.

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<sup>8</sup> Convergence Data Brief – Leverage of Concessional Capital, 2018

## 3.2 CAMBODIA RURAL SANITATION DIB

### What is it? (Purpose, activities and organisation)

**Overview.** Development Impact Bonds (DIBs) are a spin-off from Social Impact Bonds (SIBs), which were launched for the first time in the United Kingdom in 2010. SIBs are performance-based financing mechanisms in which the ultimate funder (outcome payer) only disburses funds based on the achievement of pre-agreed outputs and/or outcomes. Unlike earlier performance-based financing structures with an outcome funder and a service provider, SIBs involve an additional, intermediary funder. This intermediary funder is an impact investor that provides upfront capital to the service providers. If and when intended results are achieved, the impact investor recoups its investment from the outcome payer.

**One major benefit of the model is that it combines a results-based approach with the availability of capital for service providers.** Specific outputs/outcomes are pre-agreed and targeted at the design stage, and pre-funding to service providers is made available. Service providers do not have to concern themselves with building the initial working capital, as is often required in more classic results-based schemes.

**DIBs, like SIBs, are attractive for investors who care about impacts because they have the potential to generate social or development outcomes in addition to financial returns.** DIBs are specifically focused on international development outcomes. Only a few DIBs have been implemented to date, all with the involvement of international donor agencies as outcome funders.

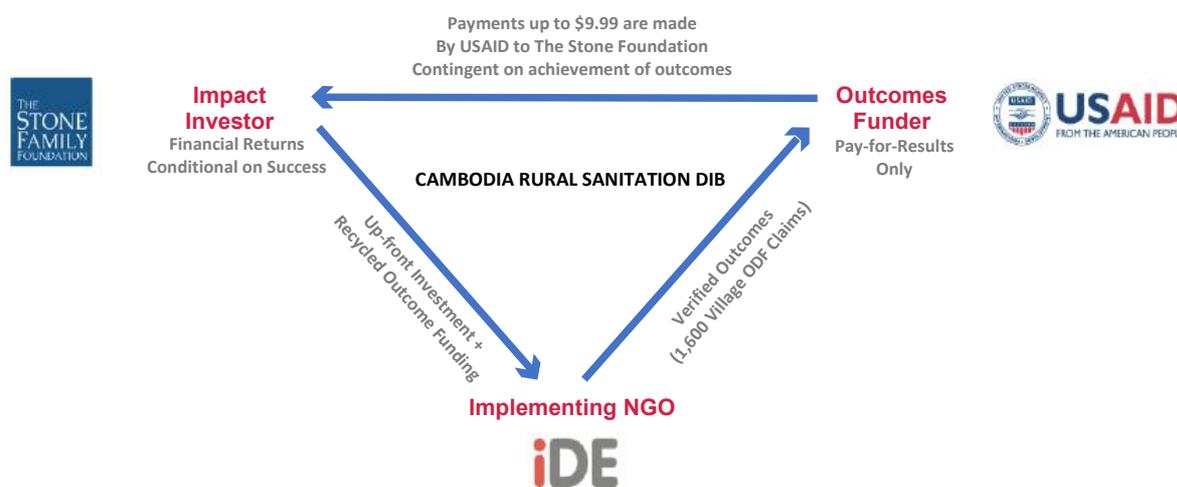
**The DIB in Cambodia is the first globally for sanitation – and for WASH in general.** The institutions involved in this structure are set out in Figure 2 below.

**Organisation.** The structure includes:

- The Stone Family Foundation (SFF) as the **impact investor** – the SFF is a relatively small foundation focusing on water and sanitation, with a track record of supporting water and sanitation enterprises and with experience in Cambodia.
- iDE as the **service provider** – iDE is an international NGO that has been operating in Cambodia for many years, where it has facilitated the uptake of sanitation services in rural areas. iDE's Sanitation Marketing Scale-up Program (SMSU) increased latrine coverage in selected provinces from 29% to 67% between 2009 and 2019; SFF had been providing iDE with grant support for its sanitation program in Cambodia since 2011.
- USAID as the **outcome funder**. The U.S. Agency for International Development (USAID) leads the U.S. Government's international development and disaster assistance through partnerships and investments that save lives, reduce poverty, strengthen democratic governance, and help people emerge from humanitarian crises and progress beyond assistance. USAID is the outcomes funder for the Cambodia Rural Sanitation DIB, committing \$9,999,999 to repay the investor for outcomes achieved. The DIB is another example of USAID's leadership in global innovative financing to achieve national and global development goals, including the SDGs.

Relationships between these entities in the structure – USAID, SFF and iDE – are illustrated on Figure 2 below:

FIGURE 2: CAMBODIA RURAL SANITATION DIB INSTITUTIONAL ARRANGEMENTS



Source: The Cambodia Rural Sanitation DIB: Lessons learnt from the first year: brief prepared by the three named entities

All three institutions involved are key actors in development assistance.

- SFF provides the **upfront working capital**, which enables the service provider iDE to plan securely all required activities.
- iDE provides **service provision expertise**, knowledge of the local context, and contributes financially to DIB (through not passing on all of its operational expenses).
- USAID provides **outcome funding**, which includes a return on investment (premium) for the impact funder and therefore an incentive for the investor (SFF). USAID puts significant value on the delivered outcomes, as achieving positive development impact is a core USAID national strategy.

All three institutions were instrumental in selecting and structuring the DIB, identifying the outcomes that trigger payments and identifying and optimising the operational costs.

SFF and iDE engage the relevant line Ministry and keep both the Ministry and the sector informed of progress. The official launch of the scheme involved the Minister and regular updates are provided through “sector fora”.

**Financing arrangements.** The DIB was launched in 2019 and will run through 2023, with a maximum of US\$ 10 million worth of outcome-based payments by USAID (to SFF).

**Outcome payments (by USAID to SFF) can be claimed in tranches (every 6 months) based on local village government reports collated and submitted by iDE.** Unlike other results-based programs, there is no independent verification agent. Rather, the villages themselves report their status and iDE carries out checks to verify these official results. No independent verification agent is required owing to the strength of iDE’s internal reporting systems and real time data. This arrangement was reviewed and agreed by all stakeholders and by the consultancy that supported the DIB design. The outcome metric of open defecation free (ODF) verification by villages is a formal process which is led by the government and supported by iDE. ODF claims are verified by the government using a sector-agreed process (outside the DIB).

SFF recruited a specialist consultancy (Social Finance) and a financial expert to help with DIB structuring.

**Between the Stone Family Foundation and iDE, the project financial IRR (internal rate of return) for each partner is ~5%, shared between the two parties.** Such a sharing arrangement represents an innovation in DIB

design. The rest of the funding is allocated to cover the cost of capital and expenses incurred during feasibility, design and implementation stages.

**WASH sector focus areas.** The DIB is only focused on rural sanitation. It targets rural communities across six provinces in Cambodia: Svay Rieng, Kandal, Prey Veng, Kampong Thom, Siem Reap, and Oddar Meanchey. It has the aim of improving sanitation services, especially for the poor and for such harder-to-reach groups as women, children, people living with disabilities, and older people.

**The DIB specifically aims to support villages in achieving open defecation free (ODF) status.** This metric was chosen to reflect the goal of minimising faecal matter in the environment, which is closely linked to positive health outcomes.

The DIB uses the Government of Cambodia’s definition of an ODF village, which implies that:

- 100% of households do not practice open defecation (i.e., each household has access to either improved sanitation in their own home or to a shared latrine).
- At least 85% of households have access to a functional, improved latrine in their own home (i.e., a maximum of 15% use shared latrines).
- All households dispose of infant faeces into owned or shared latrines.
- There is no evidence of human excreta in the village environment.
- Households can show a handwashing device with soap.
- The community has formulated and enforced informal and formal actions against open defecation.

**Rationale for the DIB.** From the funders’ perspective, the DIB in Cambodia is an important showcase or “demonstration” initiative. SFF was driven by an intent to achieve public health benefits by community level sanitation. If this goal is accomplished, it will demonstrate how finance instruments like DIBs can be used to align goals and balance the risk interests between partners of such arrangements. Considering iDE’s track record in Cambodia’s rural sanitation sector, the DIB did not carry significant development impact risks. The impact investor (SFF) – which provided the upfront funding – is a philanthropic organisation with an appetite for risk. The foundation also provides grants to water and sanitation businesses in other contexts. By engaging in the DIB, SFF demonstrates the viability of a set-up that can attract more risk-averse impact investors, who may not understand the water/sanitation sector very well (see lessons learnt below). In addition, the DIB provides an environment for external investors to understand sectoral intricacies and gaps, to learn from the implementor, and eventually to progress to other forms of investments with confidence and to other forms of capital blending.

**From the outcome funder perspective (USAID), the DIB de-risks its funding since disbursements are only made based on results.** Largely, DIB differs from results-based financing by shifting financial implementation and development impact risks from the traditional outcome funder to the external investor. In addition, DIB provides incentives for the public sector to strengthen linkages with philanthropy and the private sector and to de-risk entry into untested regions or sectors. From a broader development impact perspective, the DIB aims to secure access to sanitation for the remaining people still practicing open defecation who are often the poorest, most marginalised households. Reaching this population requires the use of tools and experience gained during earlier phases but it also requires an adaptable, iterative approach to respond to context-specific challenges encountered in new regions and populations. The DIB’s focus on outcomes, rather than specific activities or outputs, adds value over other funding mechanisms by enabling flexibility for more innovation, local problem-solving, and adaptation while minimising oversight requirements and reducing risks for the outcome funder, with payment made to the investor only when outcomes are achieved.

**From a service provider perspective, the benefit of the DIB is that it provides implementation flexibility and removes some of the project governance, design and management burden, thus saving costs.** This flexibility

is particularly important given the focus on harder-to-reach villages, which benefit from testing and innovative approaches that can be fine-tuned as the program rolls out.

Or in the words of key representatives Paul Gustensen of SFF and Greg Lestikow of iDE:

“The focus on the outcome rather than how you get to the outcome provides flexibility for the implementer to use various means to achieve the outcome. So, if one approach isn’t working, IDE can try another means. In a normal input-focused program, changes in activities, budget lines and approaches would need to be negotiated and agreed. These changes are monitored within the DIB and adaptations are agreed, but with the focus on the outcome there is greater flexibility for the implementer to adapt to what they experience in front of them”.

Paul Gustensen, SFF

“With the inception of the DIB and the third phase of the SMSU program, we are working in areas that are more challenging in many ways than those areas we covered in the first years of the program. As a result, there's more uncertainty around the type of market ecosystem interventions that will be effective. Because we are accountable for outcomes and for high level financial performance, we have a lot more flexibility to adapt our program design over time based on what's working (and not) on the ground”.

Greg Lestikow, iDE

## Results to date

**Overview.** According to progress reports, the DIB over the past 18 months has seen **750 villages** (out of the targeted 1,600) claim Open Defecation Free (ODF) status, as reported to USAID.

**WASH sector focus area.** The initiative focuses on **containment solutions (i.e. toilets)** for rural households, as well as on initiatives for **long term sustainability** through the sale of on-site treatment, dual pit latrines and servicing. iDE’s approach is to build local markets for toilet construction. It aims to empower communities to improve their own lives in a sustainable way by supporting local entrepreneurs in meeting the demand for sanitation facilities. The approach builds capacity on both the supply side (sanitation entrepreneurs) and through demand creation (i.e. through the marketing and sales efforts of sales agents).

**iDE’s approach is centered around behaviour change, with strengthened local capacity.** iDE’s efforts have strong potential for delivering sustainable sanitation outcomes because adoption is the result of *commercial* demand generation. In other words, the approach involves no grants for construction and households pay for their facilities.

The main technology involved – the **primary product** – is the **Easy Latrine**, which sells for about **US\$ 60**. The Easy Latrine is an offset single-pit latrine. iDE promotes different types of superstructures as well as an "alternating dual-pit upgrade" that serves as an on-site treatment solution.

**Inclusion, gender, and climate change impacts.** The DIB is designed to reach communities still practicing open defecation in Cambodia, which are also the **poorest communities** in the country. Inclusive sanitation is therefore at the heart of the DIB. Although there is no specific targeting of gender-related outcomes, sanitation investments tend particularly to benefit women and girls through safety, improved dignity and higher school attendance, among other benefits.

There is no specific mention of climate change-related outcomes expected from the initiative.

**Other results.** The DIB has wider implications for the water and sanitation sector because it demonstrates the feasibility of a de-risking financing structure that could attract investors.

**Potential for scalability or repurposing.** All parties agree that the **intervention is scalable and replicable**. However, from the funder and service provider perspective there needs to be a rationale for adopting a DIB as opposed to a more classic results-based scheme. Some key questions that should be asked prior to embarking on a DIB design are:

- From the original funder (impact investor) point of view, is the results-based approach too risky?
- Can service providers deploy the working capital without original funder support?
- Are time and resources available to design the DIB?
- Why is a DIB the right structure to achieve the goal the stakeholders collectively have agreed is important?

### Lessons learnt and observations

**On the relevance of a DIB for financing the water sector.** The DIB demonstrates a **set-up that can attract impact investors** who would otherwise be put off by the perceived risk of more conventional water and sanitation projects. Sanitation projects for rural areas in particular have had a poor track record in mobilising private capital, due to WASH sector specifics discussed earlier in this document.

*“What the DIB is showing is how impact capital can be deployed in a win-win situation where the outcome funder can support a high impact, goal-aligned program and the impact investor can achieve reasonable returns AND high social impact”.*

Paul Gustensen, SFF

The benefit of the approach results primarily from the performance-based nature of the arrangements between impact investors and outcome funders, arrangements that require strong oversight and alignment between all partners. Since outcomes are pre-defined jointly and costed thoroughly during the design phase, the model also incentivises efficiencies in delivering results.

The set-up for Cambodia has a specific focus. It is not designed to contribute to the Addis Ababa agenda of private sector mobilisation to reduce the SDG financing gap. This is because any mobilisation from impact investors is matched by funding from an outcome payer, so that the model does not contribute to mobilising *additional* funding to the water/sanitation sector. The model though can contribute to better utilisation of *existing* funding based on effective results achieved.

It should be noted that DIBs can be applicable to other types of outcomes. For example, DIBs could be applied to incentivise Non-Revenue Water (NRW) reduction; to extend water connection; to support faecal sludge emptying services in low-income areas, etc. In all these cases, the challenge will be to identify suitable service providers and to define outcomes that are measurable, realistic and that can be costed.

**On making a DIBs deliver WASH outcomes and impacts.** Some specific lessons emerge for making a DIB effective in delivering results:

- **Identify service providers with long-standing experience in their field and in the beneficiary country.** DIBs require diversified subject-matter expertise and practical design experience, so that the service providers’ profile is critical from a risk perspective. Where service providers know the country and setting in which they will be operating, and can draw on implementation experience, they will be well-placed to cost the DIB and to structure the outcome payments.

- **“In some senses, DIBs might work best when seeking to scale up a proven programmatic approach to achieve a specific goal around which stakeholders can align. High transaction costs occur when DIBs are used to establish and scale up pilot initiatives which are not operating at sufficient scale or with smaller scale partners.”** (Paul Gustensen, SFF.)
- **Allocate resources and expertise for careful design of outcomes and pricing.** The DIB financing structure relies on a detailed operational model that embeds the cost of services (plus risk premiums). In the case of iDE Cambodia, this exercise is intricate and includes not just “core” activities but also a number of “soft” (i.e. enabling or supporting) activities. Activities in the latter category include capacity building, communications, engagement with local authorities, and sourcing of materials. Program experience is required to cost both core *and* soft activities, and practical judgement is required to determine how or whether to allocate unit costs (i.e. to individual villages).
- **Focus on the results rather than on inputs and the implementation process.** On the upside, once there is a common agreement between all parties on the financial model for delivering WASH services, the DIB provides flexibility to service providers who can adapt and re-allocate resources as necessary – *as long as they deliver on the pre-agreed results*. From a funder perspective, this implies a shift from focusing on inputs (activities) to focusing on results achieved throughout implementation. (Though compliance with the overall agreed approach remains key.)
- Identify the **specific rationale for using a DIB** rather than a different financing structure.

### Relevance to DFAT as a Development Partner

The DIB is relevant to DFAT. The specific role for DFAT in a DIB set-up would depend on DFAT strategies, priorities, selected regions and the availability of strong and interested business partners. At least three roles could be contemplated:

- **Provision of outcome funding:** DFAT could provide results-based repayments to investors who have taken on the initial risk of providing funds or working capital to service providers.
- **Provision of upfront capital as an investor:** DFAT (or any affiliated structure) could assume the role of the impact investor to take on the initial risks.
- **Provision of technical assistance grants for facilitating DIBs:** DFAT could act as a “broker” to promote the DIB model (where it is appropriate for a particular challenge at hand).

In application to Cambodia Rural Sanitation DIB, DFAT has provided grant money to iDE to fund some of the latrine constructions by local entrepreneurs,<sup>9</sup> so DFAT is already linked to this program and has played an indirect role in “funds blending”.

Paul Gustensen from the SFF expressed his perspective on the relevance to DFAT in the following words:

“The Stone Family Foundation would encourage DFAT to find their strongest partners, identify programs which in their view are really impactful, and play a role in scaling it up. DFAT should be open to such conversations, which may lead to a DIB or indeed to some other structure for aid investment”.

Paul Gustensen, SFF

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<sup>9</sup> As part of the SMSU Program

### 3.3 THE KENYA INNOVATIVE FINANCE FACILITY FOR WATER (KIFFWA)

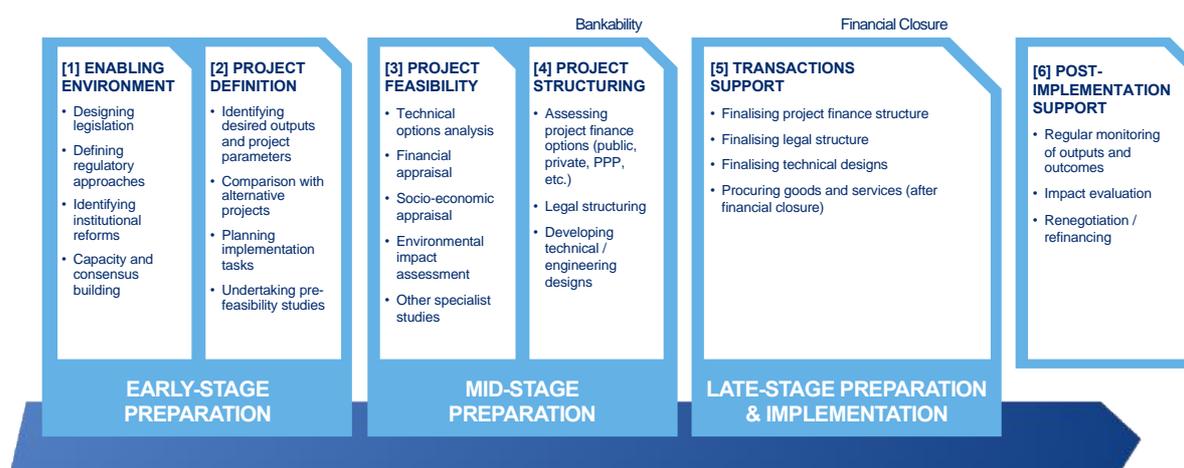
#### What is it? (Purpose, activities and organisation)

**Overview.** The Kenya Innovative Finance Facility for Water (KIFFWA) is a co-developer of commercial water initiatives in Kenya. It was set-up in 2016 (operations started in 2018) with funding support from the Embassy of the Kingdom of the Netherlands (EKN) in Nairobi. One of its key strategic objectives is to draw private and commercial finance into the water sector. KIFFWA aims to do so by:

- Providing early-stage capital (mainly to take on project identification and preparation costs).
- Providing expertise in project preparation (i.e., preparatory work related to technical and financial engineering).
- Supporting developers in mobilising commercial finance and reaching financial close.

KIFFWA was not designed originally to invest in the implementation of water projects (construction and operations), but only to fund early-stage project preparation activities. Since 2018, KIFFWA is also mandated to intervene at the mid and late stage of project preparation. An illustration of typical project preparation stages is set out as Figure 3 – KIFFWA activities fit into some but not all stages or activities.

FIGURE 3: THE MAIN STAGES OF PROJECT PREPARATION



Source: Effective Project Preparation for Africa's Infrastructure Development: Chaponda, Nikore, & Chennells, 2014 (formatting modifications)

For example, KIFFWA funds project identification (Stage 2 on Figure 3), feasibility studies and permits, to de-risk the development phase and potentially in future can provide financial guarantees and subsidies or grants with an intent to de-risk commercial financing of implementation.

KIFFWA seeks to become, at least partially, revolving, and therefore self-sufficient.

**Organisation.** KIFFWA became operational in 2018, following two years of business planning, policy-setting and other set-up activities. KIFFWA is run by two boards (one in the Netherlands and one in Kenya). The facility has a team of four full-time staff, consisting of the CEO, two associates and one legal expert. The team members have finance backgrounds and expertise and engage with consultants to cover relevant, cross-sector water expertise. KIFFWA has also set up an investment committee, comprising six members, which is responsible for project approval.

**Water sector focus areas.** KIFFWA targets projects across all water sub-sectors, including drinking water supply, sanitation and hygiene, irrigation, hydropower, desalination, and Integrated Water Resource Management (IWRM).

**Rationale for KIFFWA.** KIFFWA was set-up to instantiate the Dutch government’s commitment to the Addis Ababa Agenda, which pledged increased domestic resources and private finance mobilisation for development.

**The rationale for KIFFWA is that large investments are needed in the water sector which cannot be borne by the public sector alone due to budget constraints.** At the same time, the water sector lacks “shovel ready” bankable projects that could attract private investors. KIFFWA’s mission is to bridge that gap by focusing on project preparation, from project identification to financial close, taking on early stage project preparation costs and the risks that the project may not take off for technical, legal or financial reasons. Contributing to the gap that KIFFWA is designed to bridge is the lack of a track record in private-led investment in Kenya (and elsewhere in the developing world) – historically the government has carried out nearly all investment projects. (What private sector projects exist tend to be larger infrastructure projects that have demonstrated financial viability beyond the construction phase.) By intervening at the early stage, KIFFWA is designed to help de-risk private and commercial capital, which could attract potential developers to co-invest in project preparation and beyond by mobilising commercial finance. When KIFFWA was founded, it was expected that every dollar of the seed capital by the Dutch government would leverage 10 to 14 dollars of private or commercial investment.

**KIFFWA is not the only project preparation facility operating in Kenya, or more generally in Africa.** But it is the only one focused on water operating solely in Kenya. KIFFWA co-exists with regional facilities, including those managed by the African Development Bank (e.g. NEPAD) or the International Finance Corporation (e.g. DevCo). According to KIFFWA, its additionality compared with other facilities resides in:

- Its exclusive focus on water, meaning that efforts and financial expertise are concentrated to enable the origination and take-off of water projects.
- Strong local foundation, including an operational team on the ground.
- Its emphasis on project co-development and a hands-on approach.

**Financing arrangements.** EKN committed seed funding of € 15 million (US\$ 19 million) in 2016, with the intention to unlock commercial capital for water and water infrastructure development projects, with an estimated value exceeding € 145 million. Seed funding provided starting capital to conduct project identification and preparation activities. As such, KIFFWA, unlike WaterEquity, is not a blended financial facility, but a public pool of capital that leverages commercial capital, blending with it during the project development phase.<sup>10</sup> Actual expenditures for the period between 2016-2019 amounted to € 7 million (against an original budget of €15 m) and delivered 8 Joint Development Agreements (JDAs) for a total value estimated at € 150 million.<sup>11</sup> (JDAs do not equate to projects reaching “financial close” – e.g. commitments for capital investments – so that further expenditures and elapsed time would be expected for these JDAs to secure investor commitments to fund the deal.)

**KIFFWA funds a maximum of 50% of the project development budget in return for a minority stake in the development special purpose vehicle (SPV).** Given that a minority stake in shares diminishes security and control when liquidity issues arise, this position demonstrates EKN’s preparedness to take on risks in these arrangements. KIFFWA funding is provided under the following conditions:

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<sup>10</sup> KIFFWA is currently designing a blended finance facility to optimise efficiencies in capital raising, facility management and capital deployment

<sup>11</sup> KIFFWA MEDIUM TERM REVIEW, Rebel in cooperation with Trinomics, 15 July 2020 (exclusively provided for the purpose of this research, not for public viewing)

- Projects need to be operating in water sub-sectors, including drinking, irrigation, sanitation and hygiene, hydropower, port, desalination, and Integrated Water Resource Management (IWRM).
- Projects should be financially viable and have positive social, economic and climate impacts.
- Funding is available for technical studies, legal advisory and structuring support, financial modelling and fundraising.
- Repayment conditions are negotiated between the lead developer and KIFFWA once financial close has been reached, at which point funding provided by KIFFWA is either converted to a one-off fee, an equity stake, or a loan. In the first instance KIFFWA exits the project, in the second acts as a shareholder, and in the third acts as a creditor.

## Results to date

**Overview.** To date, KIFFWA has sourced and is working on 17 projects, representing a development budget of US\$ 19 million (of which US\$ 14 million is project-related), mobilising total commercial investments of \$US 315 million. Of these, 8 projects have reached the Joint Development Agreement (JDA) stage (the total value of these projects is \$US 177 million), where a contractual agreement binds developers and KIFFWA. Only one project was expected to reach financial close (e.g. investment commitments) by mid-2021.

**Results from the facility have proven more difficult to achieve than initially envisaged.** KIFFWA's objectives for 2016-2019 were to support 10-20 bankable projects and to reach financial close for 3-5 projects during this period.

**WASH sector focus area.** To date, KIFFWA has not delivered WASH implementation outcomes, since only one project is close to reaching financial close.

**KIFFWA has only worked on so-called 'greenfield' projects and enterprises with scaling potential.** These are projects requiring investments (and construction) from scratch. It seeks to develop projects outside the scope of local public Water Service Providers, although these can become off-takers (or buyers) in the case of bulk water facilities. Projects under JDA include:

- A bulk water supply project.
- A metering and billing enterprise with prominent climate impact outcomes.
- Two hydropower projects.
- A Commercial water kiosk enterprise.
- A waste-to-resource project and enterprise.

**Inclusion, gender and climate change impacts.** Since KIFFWA-enabled projects are yet to reach implementation stages, it is too early to assess probable impacts or outcomes in terms of inclusive services, gender equity and climate change mitigation and adaptation. However, looking at the type of projects under development, there seems to be potential for KIFFWA to generate WASH solutions in line with these development objectives. Projects under development that can deliver such inclusive impacts include:

- The Development of Commercial Water Kiosks.
- Scaling up of commercial water purification and distribution for a small community.

The portfolio is diverse and includes hydropower as well as bulk water supply projects. Yet probable outcomes for low-income populations are not yet assessable. Similarly, although water projects inherently hold the potential to enhance gender equity and mitigate climate change impacts (by securing long-term bulk water provision), assessments of these potential outcomes are also not yet feasible.

**Other results.** Despite the lack of assessable outcomes, KIFFWA has had important impacts to date for the water sector in Kenya. These include:

- Development of a pipeline of potential projects.
- Raising awareness on the potential of water for future investors.
- Mobilising local ecosystems, stakeholder cooperation (including private investors) and some policy changes, benefiting the sector.

### Potential for scalability or repurposing

It is arguably too early to conclude whether the KIFFWA model would be scalable. According to a mid-term review carried out,<sup>12</sup> the model still needs to demonstrate its value for the water sector in Kenya. However, the progress of KIFFWA should be considered in the context of regional, water sector challenges, noting: (i) the historical precedent for public funding; (ii) the entry barriers for private investors arising from perceived limited returns on investment due in part to tariff policy; and (iii) unclear government commitment related to private sector participation in financing and operating water assets.

The KIFFWA model may be attractive to other countries and achieve greater early traction where there is a clearer policy to attract private investments to the sector and where there is already a track record of private-led investments with prospects for future returns. Vietnam, for example, could be such a country, noting though that a project preparation facility like KIFFWA would be competing with other facilities delivering project preparation services, such as the national development bank of Vietnam. (Thus, a collaborative and / or a specialist and additive approach would be called for.) Bangladesh or Indonesia could be other regions suitable to trial a similar model.

### Lessons learnt and observations

**On the relevance of a project preparation facility like KIFFWA.** KIFFWA appears relevant through its objective to mobilise private sector finance, which is negligible in the Kenyan context. However, there are considerations for *how* such a model might be tailored to take into consideration:

- Country context and the water sector’s historic dependence on public spending – factors that influence how quickly such a model could be implemented and the sorts of opportunities it should focus on to help build market maturity.
- The scope of project planning that should be undertaken, including how far back the model should go – for example, to what extent should the model focus on the “Enabling Environment”.
- The mix of finance and industry expertise appropriate for the planning entity, including the resources that can readily be outsourced.
- The relationship between the planning entity and other aid entities in the ecosystem: ensuring that the entity is either filling a gap through its particular focus or can collaborate effectively with other entities.

### On strengthening the potential of the facility to deliver WASH outcomes and impacts

One main lesson from KIFFWA’s experience is that water sector greenfield projects in planning stages take a long time to come to life, from origination to financial close, especially in a context like Kenya with no track record in private-led financing for the sector.

**On the self-sufficiency of the facility.** KIFFWA has spent its project preparation budget and not yet established revenues to offset these costs: in short, it is not yet financially self-sufficient. Additional public funding support is needed for its activities to continue. The original goal was to become self-sufficient after just a few years of operation; it would be argued that this goal, at least for Kenya, was overly optimistic and aspirational. Reality

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<sup>12</sup> KIFFWA MEDIUM TERM REVIEW, Rebel in cooperation with Trinomics, 15 July 2020 (exclusively provided for the purpose of this research, not for public viewing)

has proven that models such as KIFFWA , in its current form, will continue to need funding for operational support.

### Relevance to DFAT as a Development Partner

Project preparation facilities such as KIFFWA have the potential to deliver DFAT’s development objectives related to mobilising private finance to enable access to WASH, with attention to inclusion, gender equity and climate change adaptation and mitigation. Such facilities help manage early-stage risks that are high and deter private investors.

There are, however, risks in setting up such a facility: in particular, the costs and potential delays in achieving real outcomes.

KIFFWA does though offer some lessons in mitigating the risks of the model through:

- Setting up in a context where the country is ready and open for private sector finance in the water sector and where there is a track record in place (failing that, accepting the costs and potential delays of working in a less mature market).
- Establishing appropriate policies for collaboration with public institutions (e.g., for generating buy-in from the wider water sector).
- Planning for the complexities of setting up financially viable water projects, which require extensive consultations, dealing with regulatory issues, securing off-takers, etc. This complexity may also mean that broader development outcomes (related to gender and inclusion in particular) may become a lesser priority, especially at early stages of the initiative where proof of concept is still required.
- Financial engineering is only one solution to the lack of bankable projects. A project preparation facility also needs to engage with the water sector broadly, including at all government levels, to originate projects and design projects that can secure revenue streams.

### 3.4 WORLD BANK BANGLADESH OBA SANITATION MICROFINANCE PROJECT

#### What is it? (Purpose, activities and organisation)

**Overview.** This output-based aid (OBA) started as a small-scale project, implemented between 2016 and 2018, which led to the government scaling-up microfinance for sanitation to US\$ 550 million by June 2021. In 2008, the World Bank Water and Sanitation Program (WSP), now re-launched as the Global Water Security and Sanitation Partnership (GWSP), initiated sanitation marketing initiatives in Bangladesh to create household demand for sanitation facilities, support sanitation entrepreneurs in rural areas and facilitate access to microfinance for households seeking sanitation improvements. Initially, the initiative aspired to address water access issues in rural areas, but this focus was discontinued when the World Bank recognised that the presence of high water tariffs meant low affordability for the most poor. This led to a shift in focus to sanitation, however that sector faced an undeveloped regulatory environment which meant unacceptable compliance risk exposure for local MFIs.

**To address sanitation sector compliance issues and to improve capacities of local MFIs, WSP provided US\$ 275,000 in technical assistance (TA). This enabled training and certification of sanitation entrepreneurs and demonstrated how microfinance could facilitate sanitation investments by rural households and entrepreneurs.** WSP engaged the private sector and a local micro finance institution with NGO status – the Association for Social Advancement (ASA) – to conduct field level research and a pilot. This work ran from 2008 to 2014 and developed service delivery modalities and improved toilet technology to enable Bangladesh to move beyond ODF. World Bank funded ASA staff capacity building through a TA grant. During the pilot phase, ASA provided loans with interest to entrepreneurs and to a few households, which built the foundation for the OBA Sanitation Project. Following success of this pilot initiative by WSP, the Global Partnership on Output-Based Aid (GPOBA) supplied a US\$ 3 million grant (GPOBA grant) in 2016. This initiative, the Bangladesh OBA Sanitation Microfinance Project, has now scaled up to over US\$ 550 million in microfinance loans for sanitation in Bangladesh and has a potential to be replicated in other regions. For the summary that follows, “the project” refers to activities carried out between 2008 and 2018 with a total dollar value of US\$ 27 million.<sup>13</sup>

**Organisation.** World Bank/WSP provided the technical lead throughout the project and worked in close collaboration with two leading financial institutions specialising in micro-lending: the Association for Social Advancement (ASA), the second largest microcredit lending institution worldwide, and the Palli Karma-Sahayak Foundation (PKSF), the Government of Bangladesh’s wholesale microfinance facility.

**Financing arrangements.** The US\$ 275,000 Technical Assistance (TA) budget and the US\$ 3 million grant from GPOBA, plus some other funding at the earliest stage of the project, resulted in a total of US\$ 3.9 million dollars of World Bank investment, which leveraged an additional US\$ 23.7 million in commercial capital (at a leverage ratio of 1:8), for a total project investment of US\$ 27.6 million. (See table 2 below.) TA supported demand creation and market promotion through awareness raising activities. It also provided follow-up support to trained entrepreneurs in order to guarantee the quality of construction and to help MFIs reach the poorest households. A GPOBA grant “crowded in” US\$ 23.7 million of commercial financing by local microfinance institutions, so that rural households could afford to buy hygienic latrines. The GPOBA grant was an output-based aid (OBA) instrument – a form of results-based financing in which subsidies are paid to service providers based on achievement of pre-agreed project targets. In the project, OBA subsidy payments were disbursed to MFIs based on the actual number of loans provided, corresponding to latrines constructed.

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<sup>13</sup> Refer to Table 2 for details

**OBA funds were channeled to PKSF and ASA via the Ministry of Finance.** In turn, PKSF and ASA directed assistance and funding to partner organisations (other MFIs) who provided loans to households.

**OBA subsidies were used to:**

- **Partially cover the cost of loans** taken out by households to purchase improved latrines by covering loan interest for poor households, thus reducing risks for the MFIs and making loans more affordable. MFIs received a 10% subsidy against the total value of the loan disbursed (loan and interest) to the households. ASA, who invested their own capital, received a 12.5% subsidy. Loans had a minimum size of US\$ 45 (with a subsidy of US\$ 4.50) and a maximum size of US\$ 128 (with a subsidy of US\$ 16). Borrowers were responsible for repayment of the total amount of the loan, minus the subsidy, to the lending institution, and repayments were made in weekly installments over a period of 55 weeks.
- **Partially cover the total capital cost of the latrine** through a subsidy equal to the interest amount of the loan provided. For that reason, these loans were promoted as “interest free loans”, with an opportunity to be paid in installments. Many existing latrine users were willing and able to invest in building improved sanitation facilities, but owing to cash constraints found the upfront costs of a toilet prohibitive. Hence, the opportunity to take out a loan removed this barrier.
- **Help MFIs develop a loan product** to finance sanitation and extend their reach to poorer households and to assist MFIs with capacity building, skills training and marketing support. Among other achievements, the project helped design a new financial product, the Sanitation Development Loan (SDL), which was promoted by marketing organisations and consultants (funded by the project).

**TABLE 2: PROJECT ACTUAL CAPITAL**

Institution	Investment	
	US\$ m	%
World Bank & GPOBA	\$3.9	14%
ASA	\$13.6	49%
PKSF	\$4.0	15%
PKSF's other Pos	\$5.5	20%
Customers (additional)	\$0.6	2%
<b>Total</b>	<b>\$27.6</b>	<b>100%</b>

Note: Minor changes to the percentages in the original and to reflect rounded totals

Source: Bangladesh OBA Microfinance Project documents

**The project enabled access to finance for households via two channels:**

- PKSF provided wholesale loan financing to 21 MFIs (partner organisations), who in turn made sanitation loans available to 70,000 households.
- ASA provided sanitation loans directly to 100,000 households.

The economic internal rate of return (EIRR) for the project is strongly positive at 35%<sup>14</sup>, though less than the anticipated 40% owing to higher than anticipated implementation costs and delays. By contrast, the financial internal rate of return (FIRR), originally projected to be marginally positive, turned out to be negative at the completion of the project.

<sup>14</sup> The World Bank (FOR OFFICIAL USE ONLY) IMPLEMENTATION COMPLETION AND RESULTS REPORT, February 2019

**Loans were used by households to pay trained and pre-certified local construction firms to carry out the construction of hygienic latrines.**

**The OBA grant to MFIs was a successful innovation for mobilising MFI capital and reaching project objectives.** According to the evaluation report,<sup>15</sup> the US\$ 3.9 million investment by the World Bank and GPOBA has leveraged an additional US\$ 23.7 million in private commercial capital. This was primarily achieved through the partnership with ASA and PKSF, contributing nearly US\$ 17.6 million for sanitation loans (included in US \$23.7 million of the leveraged capital) for both households and enterprises.

### WASH sector focus area

**The project supported the development of hygienic latrines.** Models promoted (Figure 4) met higher quality and hygiene standards than what populations were using. They were also more attractive to consumers and offered a higher level of service than those previously promoted. Latrines responded to changing customer preferences, in which user experience and product aesthetics were motivating factors in their decisions to invest in upgrading their existing sanitation services.

FIGURE 4: HYGIENIC LATRINES PROMOTED IN THE PROJECT



Source: World Bank

**Households could choose from the selection of trained and qualified local entrepreneurs (LEs) to construct hygienic latrines.** In accordance with their loan agreement, households were required to choose from the selection of World Bank-designed hygienic toilets.

**The project also developed capacities of small businesses in rural areas by training LEs on the construction and sale of the newly designed latrine models.** LEs who were engaged in the project were also offered loans from the MFIs to help cover the cost of initial capital requirements to meet increased demand for latrines and to expand their businesses.

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<sup>15</sup> Bangladesh OBA Sanitation Microfinance Project, Evaluation Report, September 2019

**Provision of marketing support to MFIs and local enterprises boosted the demand for improved sanitation.** Interventions prompted behavioural change and supported supply chain development, enabling the development of sanitation as a viable business for LEs.

## Results to date

As shown in Table 3, the project enabled 170,000 households to access loans, with an estimated 776,000 people benefiting from improved sanitation. A large majority of borrowers are female, and repayment rates are very high. Most borrowers come from households that can be described as “at least poor”.

TABLE 3: SELECTED IMPACTS

Impact Description	Outcome
Number of households receiving sanitation loans	170,679
Corresponding value of these loans	US\$ 22m
Percentage of loans disbursed to female borrowers	90%
People provided with hygienic sanitation facilities	776,590
Number of local sanitation entrepreneurs receiving loans for business expansion	1,031
Corresponding value of these loans	\$US 1.34m
Loan repayment rate	99%
Percentage of household borrowers classified as “at least poor”... “ultra-poor”	89%...13%

Sources: Bangladesh OBA Microfinance Project, Evaluation Report, September 2019;  
The World Bank (FOR OFFICIAL USE ONLY) IMPLEMENTATION COMPLETION AND RESULTS REPORT, February 2019

Post-implementation surveys of local entrepreneurs show significant demand and willingness of households to pay for the latrine models designed and developed under this project, even without access to credit at market rates. This suggests that the project increased the perceived value of sanitation among community members, which would be expected to lead to ongoing behaviour change and thus indirect positive social and economic impacts, mainly in health improvement.

The scale of these social impacts is underscored by World Bank, which describes the baseline in Bangladesh before these interventions as follows:

“According to the World Bank Economics of Sanitation Initiative (ESI) for Bangladesh, inadequate sanitation caused Bangladesh economic losses equivalent to 6.3% of the country’s GDP in 2007. This equated to an economic loss in 2007 due to poor sanitation of US\$ 4.22 billion per year (US\$ 30 per capita per year). The economic costs of inadequate sanitation in Bangladesh were the greatest on health (84.3%), followed by welfare and access time (10.8%) and water (4.9%). The losses resulting from premature mortality account for three quarters of all economic impacts with diarrhea being the most detrimental of the health factors”.<sup>16</sup>

In addition, and quoting from the project report:

<sup>16</sup> Barkat, Abdul. Economic Impacts of Inadequate Sanitation in Bangladesh. World Bank, 2012

“The consequences of the constant exposure to unsanitary environmental conditions have also been shown to contribute to the incidence of chronic undernutrition in children (i.e. the failure to achieve normal height-for-age standards which is also known as stunting) [... This]...affects the physical and intellectual development of children and consequently the future economic development of a nation. The consequences of the chronic exposure of children to a poor sanitary environment...on the incidence of chronic undernutrition...on the economic potential of the workforce is much more difficult to quantify and was not included in the ESI for Bangladesh”. (See source to Table 3 above.)

Based on baseline impact assumptions, the economic internal rate of return (EIRR) at the completion of the project was estimated at 35%, based on actual project costs and economic and social cost-benefit analysis, using ESI data. This indicates considerable cost efficiency and socio-economic return on invested capital.

### Lessons learnt and observations

**This project demonstrates how public funds can be used to mobilise additional finance for sanitation.** The project evaluation report notes the following:

“Carefully designed public funding can leverage significant commercial resources to improve [the] future. In line with the objectives and approach of the World Bank’s Maximizing Finance for Development (MFD) agenda, the project proved that carefully designed catalytic funding can leverage...significant...external resources for the sanitation sector. With the Sustainable Development Goals requiring new ways of doing business to meet the challenging targets set, the combining of output-based approaches with new models to leverage commercial finance offers the sanitation sector a new and now tested model to tackle these challenges”.

**A number of “success factors” have contributed to the project’s results.** These are also outlined in the evaluation report:

- **Greater engagement of women and local entrepreneurs** at the doorstep led to investments in higher quality latrine facilities.
- **A combination of sanitation loans for households and for small businesses** created incentives for MFIs to bear the costs of hygiene behaviour change.
- **Sustainability is improved** when MFIs already have their own sanitation policy and capital for sanitation loans, which was the case in the project.

**However, project results also highlight some limitations. In particular, it was less able to reach the ultra-poor.** As pointed out in the evaluation report, reaching the ultra-poor will require additional instruments better suited to their needs and capacities. While microfinance has been effective in improving access to finance for the poor, microfinance has not been so effective in reaching the ultra-poor that are not part of local credit groups. OBA has proven to be effective in orienting institutions to meet quality of output targets at scale but has been less effective in improving services for the bottom wealth quintile. In order to reach the ultra poor with verified high-quality offset latrines, OBA grants to MFIs should be combined with other instruments such as social safety net programs and local government subsidies.

**The project loaned at market rates to MFIs and only gave partial subsidies to borrowers, while monitoring household repayments: these factors improve the sustainability of the project outcome.** In the future there will be opportunities to reduce subsidies further while increasing market rate lending to household borrowers and entrepreneurs. This will help ensure that growth is sustainable and that strong social impacts also accumulate.

Similar programs were delivered by the World Bank in Kenya, Sri Lanka, and Uganda. Programs in Kenya and in Bangladesh were the most successful. Positive accomplishments in Uganda were attributed to the extraordinarily strong leadership role played by the national water utility, who eventually took over the project completely. Sri Lanka was the most challenging country in which to deliver the project owing to external politics and to weak program design.

Implementation of the Bangladesh program could have been more rapid, especially during the design phase, where delays were caused by prolonged negotiations with the Ministry of Finance and financial intermediaries. Yet performances of the both organisations (PKSF and ASA) were highly praised by the World Bank, who described them as “very entrepreneurial, efficient and innovative”.

### Relevance to DFAT as a Development Partner

**This case study is an example of development assistance funding used successfully to mobilise additional capital for sanitation.** Public funds were deployed in two main ways:

- **Technical Assistance** for market development (demand creation and training in particular).
- **Direct OBA subsidies** to MFIs (based on results) to incentivise MFIs to provide more affordable loans to households.

**It is this combination of TA and OBA subsidies that contributed to the achievement of results at scale.** It should be noted that TA is often introduced early, prior to blended finance implementations, and can precede the development of partnerships with financial institutions.

**The project’s approach is already being replicated.** International NGOs, such as Max Foundation, Plan International, and WASH Alliance International, have also built on the project’s experience and mobilised the private sector to expand sanitation loans across Bangladesh.

### 3.5 AZURE SOURCE CAPITAL

#### What is it? (Purpose, activities and organisation)

**Overview.** Azure Source Capital (Azure) is a blended finance facility set up in 2018 specifically to deliver finance to water and sanitation enterprises. To date, the facility has mobilised funding from Inter-American Development Bank, Calvert Impact Capital, Catholic Relief Services (CRS), the United States International Development Finance Corporation (DFC), Mercy Investment Services and some other private sources. The facility aims to support the provision of reliable water supply and sanitation services to under-served urban and rural households in Latin America (and beyond). Azure made its first loan in May 2019 and has since disbursed \$US 3 million in loans cumulatively in close collaboration with 10 local financial partners in El Salvador.

**Azure provides both financial capital and technical support.** It provides financial capital to water service providers and WASH technical assistance through CRS. It can take between 90 days and 2 years to move from first engagement to close of loan. This combination of financial capital and technical assistance enables small-scale water and sanitation service providers – such as municipal water supply operators, community water boards and private water and sanitation service enterprises – to upgrade their services and to protect water sources.

**Azure Source Capital was created to fill a gap in the local financial market.** CRS was already providing technical assistance services to water and sanitation providers. CRS would also assist them in identifying local financial institutions and applying for loans. However, with the development of local enterprises and additional investment needs identified by CRS, it became apparent that the local capital market was not sufficient to cover all the business in the area. These investments would also be critical to improve the performance of service providers and therefore contribute to strengthening their financial position.

**CRS identified a range of small bankable investments opportunities which could boost service providers operational and financial performance.** Technical services identified the need to install micrometers in every home, enabling service providers to charge based on actual water consumption rather than a flat fee, for more cost-efficient water system management. From a user perspective, the adoption of volumetric charges also leads to changing behaviour (e.g. turning the tap off), which would in turn enable service providers to make savings on energy consumption. Small investments in water meters, therefore, potentially generate additional revenues and reductions in operational costs. Stronger performance generates instant cash flow improvements, which can then be used for improved debt financing.

**The facility only provides loans for on-lending to water service providers or directly to water service providers.** It does not provide finance in the form of equity. This is because the vast majority of water cooperatives in El Salvador are community organisations with a not-for-profit status. As such, the only instrument that is suitable is debt. Although there are some private water cooperatives, they do not offer the potential for equity investments to take place, as they serve 1,000 households or less with little prospect of rapid scale-up to 100,000 households. However, all water service providers have a steady income stream. In that regard, debt is a natural instrument for financing water infrastructure and services, as a strong cash flow indicates high chances for loan approval.

**Organisation.** Azure was created and is managed by Total Impact Capital (TIC), a US-based firm specialising in capital structuring and managing impact investment vehicles. TIC oversees financial performance and cash flow, along with investor relations, and liaises with CRS to ensure project proposals are technically sound and make financial and commercial sense, particularly for local financial institutions.

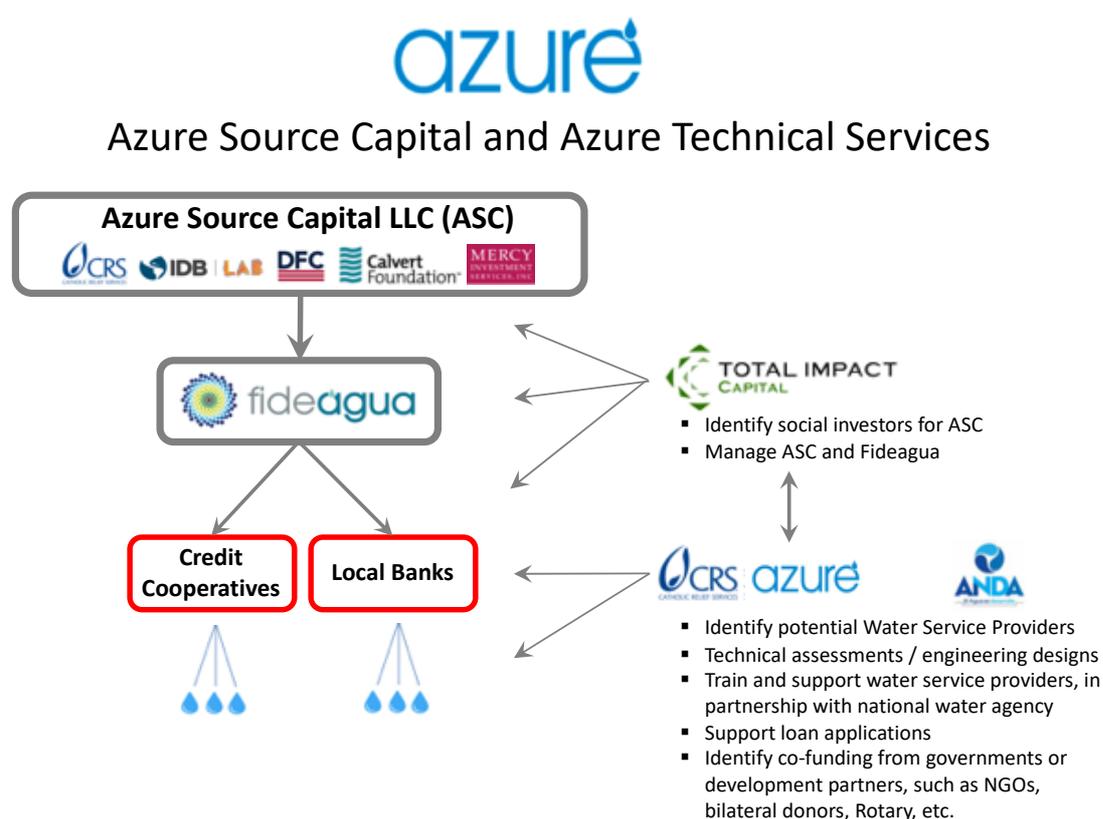
TIC specialises in impact capital for basic human needs, including water, health care, food, housing and energy. The firm acts as an intermediary between on-the-ground implementers and investors. It works with implementers who have a proven track record, with the goal of providing investors low downside risk and reasonable (not high) fixed income returns, while generating strong social impacts. Among other activities, TIC is about to complete the capital raising for a sale leaseback facility supporting an East African social franchise in water and is involved in the creation of a carbon credit fund, also in East Africa.

**CRS provides technical services for Azure Source Capital through Azure Technical Services.** CRS provides engineering guidance and business training, including “train the trainer” models to local water and sanitation entrepreneurs. CRS’s environmental and engineering expertise is instrumental to making sure that all projects financed by Azure make both economic and social sense. CRS’s expertise builds on 75-years’ experience in water and sanitation services in Latin America and globally.

**Azure benefits from additional technical support from the innovation laboratory of the Inter-American Development Bank (IADB) Group (IDB Lab).** IDB Lab contributes to enterprise development through incubation, acceleration, and capacity building.

Further details of Azure partners and relationships between entities are set out in Figure 5 below.

FIGURE 5: AZURE ENTITIES AND PARTNERS



Source: Catholic Relief Services: Azure presentation (minor formatting modifications)

**Azure operates in El Salvador via a separate trust, Fideagua, managed by Bandesal, the Development Bank of El Salvador.** The partnership leverages on Bandesal’s existing knowledge, local practices, legal, compliance capabilities and relationships with financial institutions.

**Financing arrangements.** To date, Azure has raised US\$ 10,275,000 in capital. This capital includes:

- US\$ 4 million 7-year DFC loan with a final maturity date of 15 September 2025.
- US\$ 2.775 million in preferred equity from Inter-American Development Bank (IADB).
- US\$ 0.5 million in common equity from CRS, TIC and private investors.
- US\$ 1 million in a loan from Calvert Impact Capital (multi-year draw period).
- Other debt or equity from other investors, including Mercy Investment Services.

**The capital structure of Azure has a de-risking component.** This component is not achieved through first-loss or guarantee, but rather through concessional capital with a “soft tolerance” to financial returns. Inter-American Development Bank (IADB) de-risks the blended facility financially by providing preferred equity (US\$ 2.775 million) and a relatively low concessional rate for the accumulating coupon in the structure. IADB also provides funding in the form of grants to support the technical service and capacity building either to CRS or to local water service providers. Catholic Relief Services, Total Impact Capital and a private investor also invested US\$ 0.5 million of common equity as a “patient investment” – that is, with modest expectations of obtaining a return.

**Azure’s goal is to move from US\$ 10 million in committed capital to US\$ 40 million over the next 10 years.** This will involve adding more technical service partners and expanding into new regions, e.g., Honduras. The ongoing partnership with IADB aims to support this expansion.

**Reporting. Azure reports on both social and development impacts.** Social Impacts refer to population impacts and development impacts refer to impacts on the enabling environment for water sector organisations.

**With regard to social impacts, the Azure monitoring system evaluates 12 indicators to provide a composite score of the quality of water services.** Quality is evaluated on a scale of *A* to *D*: *A* being optimal services, providing dependable and continuous safe water at affordable rates, and *D* being failing services, requiring major capital improvements. The online system measures the baseline of service quality for each water service provider (WSP), the total resources invested in water and sanitation systems, and the post-intervention service quality. CSR collects data from the technical service providers on the underlying impacts. Raw data is then coded into an impact report, and metrics are shared through an online monitoring system using a dashboard and interactive map. In addition, water quality is assessed in accordance with water disinfection standards.

**Water sector focus areas. Azure’s investments primarily target water systems upgrade.** Overall, Azure funds are used for provision of the water system equipment, micrometers, and for water and construction infrastructure.

## Results to date

**To date, Azure has disbursed US\$ 3 million in loans either directly to WSPs or via local financial institutions to WSPs in El Salvador.** Loans differ in size, ranging from US\$ 0.5 – 1 million (for big wells or other infrastructure) or smaller loans from US\$ 50,000 – 100,000. Through distributing these smaller loans, Azure is filling an important financing gap for small water service providers. According to Azure, smaller loans have high impact value. And of course, from a business growth perspective, enterprises who take a US\$ 50,000 loan today are taking bigger loans tomorrow as they continue to scale up their services to community.

**When determining interest rates for loans, Azure seeks not to undermine existing market rates, so that water sector investments are not viewed as less competitive in returns than other sectors.** At the same time, Azure tries to make the cost of capital as affordable as possible. Azure works with financial institutions to drive down costs and still secure a rate that allows capital providers to make returns, so that the source capital and consumer loans themselves are sustainable.

**TIC and CRS also carry out due diligence over any negative financial impact of loans on communities.** For example, a recent investment opportunity, valued at US\$ 1.3 million, was assessed by CRS from the perspective of its social and economic implications and deemed to carry an unacceptable cost to the

community as structured. CRS accepted the deal on condition that it was restructured – downsized for cost reduction – and thus made affordable to the community and financially sound.

**This financing facility appears to have high developmental impacts in El Salvador.** Chronic underinvestment in critical infrastructure has left an estimated one third of the population reliant on trucked water vendors. These private service providers usually charge high prices. Azure provides both financial and technical support to these water service providers, with the aim of benefiting 300,000 people through US\$ 10 million to be deployed.<sup>17</sup> The facility enables populations accessing water at a more affordable price: the cost of trucked water in barrels is US\$ 8 per m<sup>3</sup>, compared with < US\$ 0.20 per m<sup>3</sup> for piped water to homes.<sup>18</sup>

**Beneficiaries of improved water services constitute above 52,000 households (185,000 individuals).**<sup>19</sup> At least 80% of beneficiaries belong to rural communities, 9% to urban and 11% to peri-urban. An estimated 30% of beneficiaries are in a “high poverty” bracket and 50% in a “moderate poverty” bracket.

**In total, 12 water service providers have received loans to date.** Of these, 64% are women-led. Uses of proceeds are distributed at 46% for water system equipment (pumps, electronics, pipes), 38% for building infrastructure and offices, 16% for construction and micrometers.

**In total, 187 water service providers have received technical capacity building or training since 2018.** CRS is in the process of expanding technical assistance capacity by training trainers so as to reach additional communities and expand the deals pipeline.

Selected results to date are also summarised in table 4 below:

**TABLE 4: SELECTED RESULTS TO DATE**

Impact Description	Outcome
Number of households benefiting from improved water services	52,000
Corresponding number of individuals	185,000
Percentage from rural villages / periurban / urban	80% / 9% / 11%
Percentage “high poverty” / “moderate poverty”	30% / 50%
Total water service providers receiving loans	12
Total water service providers (WSPs) receiving technical capacity building or training	187
Percentage of women-led WSPs (out of 187 supported)	64%
Percentage of proceeds distributed for water system equipment (pumps, electronics, pipes)	46%
Percentage of proceeds for building infrastructure and offices	38%
Percentage of proceeds for construction and micrometers	16%

Source: Azure Impact Report Q2 FY2021

## Risks and challenges

**The biggest risks and challenges from TIC’s perspective are a function of the COVID pandemic,** which has made it more difficult for water service providers by interrupting the flow of financial support from the federal government: a flow that is essential to making the loans work. Since its establishment, the biggest challenge

<sup>17</sup> OPIC (DFC) Information Summary for the Public

<sup>18</sup> Azure Slide Deck (courtesy of Convergence Finance)

<sup>19</sup> Azure Impact Report Q2 FY2021

for Azure has been getting more loans out the door. As impressive as the US\$ 3 million deployed in loans might be, Azure aspires to operate at about *double* that volume. Progress toward this target has been slowed down by COVID. The deal pipeline is generated from CSR as a technical service provider and from Azure local financial partners.

**TIC does not see a challenge in continuing to raise capital for Azure because it is an attractive product to investors.** TIC believes that another US\$ 10 million can be raised rapidly, without delays, since many impact investors are willing to invest capital with such high impact indicators. TIC believes that the water sector is more bankable than most people perceive, and points to the fact that to date there have been no late payments on loans, despite the COVID pandemic.

As TIC founder John Simons put it:

“The water sector is more bankable than most people perceive”.

John Simons, TIC

**There are, however, risks relating to water service providers and arising from a lack of capacity and from skill gaps.** As community organisations, WSPs require help to structure appropriate financing deals, to strengthen business and technical expertise, to understand the commerciality of solutions and to be able to enlist broad support for new opportunities across the community. Currently, there are delays in deal execution resulting from community isolation and from interruptions to government financing subsidies, which also underpin the security of loan repayment.

## Lessons learnt and observations

**What makes Azure unique compared to other similar facilities is the technical partnership component of the arrangement.** Azure’s pipeline is built through its technical service partner (CRS), who not only ensures that investments deliver high quality results for beneficiaries but also that they are financially cost effective, viable, and sustainable, thus resulting in cheaper water services costs for end users. This business model is replicable by Total Impact Capital for financing vehicles outside of Azure and is new to the market. The strength of the TIC and CRS partnership is not just in offering a blended finance structure, but in the intertwining or braiding of technical services with a fit-for-purpose, sustainable financing model.

**This combination of financial and technical services is particularly well-suited for WASH investments.** There are three inter-related factors that make water, and WASH in general, particularly challenging: financial issues (including high investment requirements), technical issues, and policy issues. First, to create and to integrate access to quality water over a sustainable period, there is a need for significant upfront capital. This may not be the greatest challenge, but expertise is clearly required to raise capital and create payment mechanisms. Second, associated with this capital is the need for capital management and for maintaining systems that are effective and efficient. Here is where the technical side is vitally important to achieve optimum tradeoffs for water allocation and pricing. Third, to make these tradeoffs requires a mature policy framework. These three factors combined explain the massive investment deficit for water. If correctly structured and executed, however, water can be an attractive investment financially, not least because consumers pay for water and need water. This has become evident through COVID, as Azure has had no issues with nonpayment or late payment of loans.

## Relevance to DFAT as a Development Partner

**This case study is an example of a unique financial partnership involving multiple co-investors to enable access to capital for water and sanitation enterprises.** Azure is a unique financial partnership between a development finance agency (DFC), a multilateral bank (IADB), humanitarian agencies and private investors to

co-invest capital and fulfil different roles in order to build supply and demand of regional markets and to scale-up WASH outcomes.

**In this partnership, IADB plays a key role in expanding the model.** IADB provides an anchor investment, required to expand the model into regions of strategic and political significance. IADB's investment is in the form of preferred equity.<sup>20</sup> Though this form implies that IADB intends to see the capital returning back, in fact IADB's expectations for this outcome could be described as *modest*.<sup>21</sup>

**The Azure model has great potential for repurpose and scalability in Indo-Pacific, and DFAT could play a role similar to IADB in that region.** DFAT could play a similar role in partnership with technical service providers and investors and explore the potential in geographies that matter. The Azure model has great potential for being repurposed and scaled in Indo-Pacific, recognising that regional expertise and networks would play a significant role in ensuring success.

**Azure demonstrates that the choice of the technical partner is a key determinant for the success of such an initiative.** Local expertise and networks are important to build capacity and generate investment opportunities.

Catherine Godschalk from Calvert Impact Capital expressed her perspective on the relevance to DFAT in the following words:

“Public funds [which DFAT can bring] provide a scarce supply of catalytic capital. DFAT thinking could be about how to come into the market, and in a way that really mobilizes other forms of private capital, and maybe other forms of public capital, in a way that is not distortive and does not displace capital that otherwise might be able to come in. It could come in a way that addresses a gap in the market”.

Catherine Godschalk, Calvert Impact Capital

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<sup>20</sup> With the level of highest security for financial returns and lowest risk tolerance

<sup>21</sup> Based on stakeholders' feedback

## 4 CONCLUSIONS AND IMPLICATIONS FOR DEVELOPMENT PARTNERS SUCH AS DFAT

There are eight major conclusions from considering each of these case studies:

1. Blended finance emerges from a long-term and socially **inclusive view of the ultimate purpose of capital** in the economic system.
  - a. A generic view holds that capital is an asset created by humans to perform “economically useful” work.
  - b. A “narrow” interpretation of this definition argues that capital is to be held in private hands and that “useful” means “profit maximising” for those private asset owners over a reasonably short timescale (e.g. over a single economic cycle rather than multi-generational).
  - c. A “broader” interpretation posits a more profound view of the purpose of capital, as is articulated by Jed Emerson and others: “to enable humanity to move toward the realization of its potential on this planet; to be free of poverty, to function in the present experience of living, to support and sustain not only human existence, but to place that existence within the context of shared systems of optimized human and non-human life”<sup>22</sup>
  - d. This broader view has motivated the innovations of blended finance generally and more particularly the institutions leading initiatives featured in the five case studies summarised in this report.
  - e. This broader view also motivates the project team that has prepared these case studies and thought leaders in DFAT who have assigned this research to the team.
  
2. Blended finance **shifts the role** of the public sector (and of private sector philanthropic agents) from that of the primary funder **to the early-stage enabler of social and development impact**.
  - a. The traditional domain of the public sector in social impact initiatives has been that of safety net funding (within underserved regions) and international aid (outside underserved regions).
  - b. The traditional role of the private sector in social impact initiatives has been restricted to philanthropic funding or through corporate social responsibility programs.
  - c. It has long been accepted that, restricted to these roles, the gap between required and available social and development impact funding will never be bridged: that approaches must tap into broader private sources of capital available under conditions of traditional market returns.
  - d. The shift required to attract private capital requires innovations in the approach: blended finance brings such innovation to the structure of the funding instrument itself and to the nature of partnerships.
  - e. Blended finance is required when public aid is insufficient to make an important project viable and achieve impact at scale. The role of public funding in such arrangements is to fill market gaps without distorting the markets, to create opportunities for entry and to extend the development impact of private sector activities in a region, for example by creating new markets consistent with that region’s development priorities, or by extending products and services to new consumers and end-users.

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<sup>22</sup> Emerson, Jed. The Purpose of Capital. Elements of Impact, Financial Flows and Natural Being. Blended Value Group Press, 2018

- f. Public sector funding, applied to blended finance, fills the significant gap for risk-taking capital, which then scales impact by attracting third-party capital, not otherwise available. Public capital may include subordinate debt, equity stakes, longer-term and more flexible capital with fewer programmatic and other restrictions: capital that can be directed to strengthen the markets and investable institutions or provide supply chain subsidies to reduce costs for improved profitability of enterprises.
3. Providing “cushion” public capital secures funding from sources not otherwise readily available for the benefit of the disadvantaged through making sustainable changes to community members’ lives. The case studies cover the **full WASH value chain, enabled by blended capital, including:**
  - a. Upstream planning by building the enabling environment, policy regulations, building markets and strengthening WASH and water ecosystems in the region.
  - b. Raising dedicated capital for water and WASH.
  - c. Providing funding to WASH and water enterprises, infrastructure projects and end-consumers, enabling investments to improve water and sanitation access, treatment, products and services and infrastructure development.
  - d. Supporting processes such as capability building and skills development, marketing, and behaviour change.
4. The case studies illustrate how **whole systems approaches**, combined with financing innovations, are critical to holistic WASH programs that drive systemic change, such as the World Bank Bangladesh program. Such whole systems approaches offer **greater** opportunities for replication and scale to further attract private and commercial capital and enable transition to commercial funding structures. The World Bank case illustrates multi-lever, systems impacts through:
  - a. Early efforts to build **market demand** through testing and pilots in order to: understand consumer behaviour; confirm the pivotal role women play as consumers in the value chain; assess the current and potential future drivers of value for sanitation products and services across different underserved communities; confirm the products and services that are suited to target communities; and drive social mobilisation through effective market communications.
  - b. **Building capacity in the environment** through extensive technical assistance, which in this case included the training and certification of entrepreneurs to deliver quality construction services, together with regulatory provisions underpinning the required certification.
  - c. **Developing the intermediary financing market** by equipping a network of microlenders with new skills and disciplines and a new lending product (the design, launch and marketing was funded by the program). Plus, defining pricing strategies that support the most poor through subsidies while adopting market rates where feasible for other borrowers.
  - d. **Rolling out the products and services at scale.**
  - e. **Achieving behaviour change** through successful implementation: increasing the value that households place on sanitation, illustrated both by their willingness to pay for products and services and by their compliance with community goals that were set.
5. Innovative financing for water and WASH that is directed to underserved communities may be positively correlated with **climate change resilience** and reaches the neediest in those communities, with prominent gender lens focus. (Case studies involving microfinance are significantly skewed to **female beneficiaries.**)

- a. Water investments serve direct human needs and benefit a range of sectors, including agriculture, urban development, and energy. They increase water availability in times of scarcity, provide supplies for basic needs, health, food and livelihood security, thus potentially helping communities to cope better with risks imposed by disaster events due to climate change.
  - b. WASH is a critical pathway for transforming gender relations and helping women and girls – as agents of change – lead healthy lives and participate in social, economic and political activity.
6. The **development of microfinance** can be a pathfinder for blended finance in WASH.
  - a. Microfinance has moved from a sole-focus intervention and a heavily subsidised blended model to a proven financing tool that can fit within a more holistic program, attracting market rates.
  - b. WASH investments could follow a similar path. Currently, WASH business models require groundbreaking investments with high subsidies or funding with high risk tolerance in order to demonstrate viability and establish a performance track record that will attract additional private investments on commercial terms. For lower-income countries this means an even more diversified instrument mix, higher ratios of concessional finance, and higher levels of advisory support to develop projects and markets.
  - c. Local MFIs fill in financing gaps by providing loans to groups of populations who are unable to access funding from commercial banking owing to poor credit history and lack of collateral security. With some public subsidies, such loans can be affordable to the poor, allowing them to purchase water or sanitation products and services.
7. Blended finance solutions for WASH require a strong **technical understanding in WASH** and definition of critical design issues in a local context, not just financing skills. This means that the choice and ongoing role of a **technical partner** are critical to the success of multi-party ventures, complementing the required financial expertise.
  - a. Local knowledge is instrumental for efficiencies, effectiveness and relevancy of solutions, products and services. It fosters community trust, relationship building and broadens networks.
  - b. The right technical partner understands the true costs of the supply chain, which then can be favourably reflected in project economies and deal feasibility.
  - c. Technical partners assist in deal generation by identifying commercially viable solutions and opportunities, based on a strong understanding of market demand and supply.
  - d. Technical partners control project implementation in the field with the best commercial outcome and report on impacts drawing on trusted real data sources that have passed through appropriate verification processes.
8. WASH institutions operate within an “**enabling environment**” that includes legislature and regulation. This environment has to be conducive to public-private partnerships generally and to the development of WASH programs in particular. Building the enabling environment requires upfront capital, including but not limited to grants, technical assistance or paying for products and services creation. Successful capital blending requires certain conditions to be met at the country level:
  - a. Policy reforms to improve the investment environment must mobilise commercial finance – firstly to improve investee viability and become attractive to investors (e.g., technical assistance to build technical and business capacities and skills, provision of securitisation and guarantees) and secondly to create favourable conditions for investors to invest (e.g., financial incentives, subsidies, availability of IT infrastructure and real data access).

- b. Financial reforms to allow creation of suitable new, more flexible instruments for investments (innovative forms of loans, equity, debt).
9. WASH investments and blended finance applications are to be developed based on **in-country blending principles**:
  - a. Use of blended finance should start on a case-by-case basis, preferably at smaller scale, to avoid undue subsidies to the private sector and undue risk for the public sector, and with strong consideration for social and development impacts.
  - b. Developing countries should play a central role and ownership in the decision to prioritise the use of development aid for blending and in the planning, design, and management of specific blended finance projects.
  - c. Continued efforts are needed to ensure transparency and accountability of all actors in blended financing, with relevant contractual frameworks and data accessibility mechanisms.
  - d. Development Partners should support public sector capacity in developing countries to effectively engage in blended financing decisions and projects and to manage complex multi-stakeholder partnerships.<sup>23</sup>

In the handbook for Finance Ministers on how to make public financing work in the WASH sector,<sup>24</sup> the global partnership “Sanitation and Water for All” recommends encouraging innovation and yet to-be-explored approaches, such as climate funds and social impact bonds, to unlock sources of finance rarely accessed by the water and sanitation sector.

In evaluating the potential for financial innovations and blended financing for WASH, the Department of Foreign Affairs & Trade should take the following into consideration:<sup>25</sup>

- There needs to be a clear distinction between (a) traditional additionality of Development Partners as aid agencies to WASH development interventions and (b) the added value arising from blended finance arrangements.
- There should be a sound economic rationale for entering into blended structures.
- Funding should crowd in capital from other sources with minimum co-sessionality.
- The expectation should be set for eventual commercial sustainability over time, with the goal that market players will eventually provide commercial finance.
- Comprehensive approaches will be required to build and reinforce market support to strengthen national capacities, including: the legal and regulatory framework; institutional frameworks; operational and technical capacity; the supporting investment climate; and financial facilities.
- There should be high standards with respect to governance, risk management, transparency, and environmental and social issues for such structures.

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<sup>23</sup> Influenced by OECD Financing Water Roundtable notes, 2020

<sup>24</sup> WATER & SANITATION: HOW TO MAKE PUBLIC INVESTMENT WORK, Sanitation and Water for All, 2020, A Handbook for Finance Ministers

<sup>25</sup> Using Blended Concessional Finance to Invest in Challenging Markets – ECONOMIC CONSIDERATIONS, TRANSPARENCY, GOVERNANCE, AND LESSONS OF EXPERIENCE, International Finance Corporation, February 2021

Development Partners can play different development roles to create sector systems change through partnerships that unlock funding. These roles seek to build an **enabling environment** conducive to **blended financing for WASH** and could include four major categories of development:<sup>26</sup>

**Market supply development** to influence rules and regulations and to reduce regulatory barriers for participation by philanthropic funds, pension funds and commercial investors.

- Provide co-investment in matching funds to mainstream private and commercial investments.
- De-risk blended structures by providing either first-loss capital, guarantee or concessional capital.
- Act as anchor investor to support capital raising.
- Employ the services of impact enterprises and intermediaries in government contracts.

**Market demand development** to support growth of impact enterprises and enhance their capacity to absorb investment:

- By enabling impact enterprises to adopt corporate legal structures that accommodate, under prevailing legislature, their legal and tax needs.
- By building capacity of enterprises through incubators, accelerators, skill development and investment readiness support.
- By providing funding to support creation of impact metrics, to ensure the provision of coherent data to enterprises to effectively monitor impacts.

**Intermediate player development** or directing capital into impact funds, blended structures or initiatives that create sustainable impacts:

- By providing investments into blended structures, funds, initiatives and projects.
- By funding outcomes in Development Impact Bonds or Social Impact Bonds.
- By supporting construction and design of innovative funding structures and blended facilities.
- By establishing the investment platforms to facilitate network strengthening and investment flows.

**Blended finance for WASH ecosystem development:**

- By creating regulations to direct tax and subsidy capital for social and environmental outcomes.
- By fostering internal government capacity to include blended finance in policy approaches across the government agenda for climate change and systems resilience.
- By establishing knowledge centres to support innovations and entrepreneurship.
- By demonstrating commitment to work with the private sector through providing de-risking finance in blended structures (see supply development).

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<sup>26</sup> Addis, Rosemary – The roles of government and policy in social finance. Social Finance, Oxford University Press, 2016

Recommended **next steps** for Development Partners such as DFAT, following discussions on the case study report, may include:

1. Strengthen internal capacity in blended finance, including:
  - a. Explore knowledge exchange between global public players in water, WASH, and blended finance.
  - b. Pursue facilitated workshops, networking events and tailored training.
2. Explore pathways to engage with the private and commercial sector for strengthened climate resilience and WASH impacts.
  - a. Workshop and develop recommendations on the design, and possible pathways to achieving, WASH blended finance projects that could be incorporated into future activities.
  - b. Create in-county pilot projects to trial some of the recommended designs and pathways.
  - c. Invest in existing or newly created blended finance structures which operate in countries of political significance and within sectors of intended development impacts.
  - d. Broker closer engagement between WASH and finance actors to co-develop joint ideas and initiatives for strengthened WASH programing, funding innovation and implementing WASH at scale.

From the perspective of underserved communities that benefit from DFAT's programs, the timing is right for taking these steps. Darren Walker, President of the Ford Foundation, expressed this point on timing relative to COVID and to underserved communities as follows:

“Everyone has been affected by the economic fallout. And yet, as is so often the case, historically disadvantaged communities have been disproportionately impacted first and worst. These underserved communities, many communities of colour, need economic relief and resources they have been denied for decades. As we transition to a new year and the next phase of the pandemic, leaders at all levels, and from every sector, must act swiftly to deliver investment capital to these overlooked populations in financial distress and build a more inclusive capitalism. We can no longer afford to bifurcate how we invest capital and how we deploy it for good. We must, instead, integrate our approach to ensure real, equitable impact”.<sup>27</sup>

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<sup>27</sup> Walker, Darren, President, Ford Foundation Chair, U.S Impact Investing Alliance, Community Investing Bank Report, May 2021

## 5 APPENDIX A: SOURCES OF INFORMATION

### Literature and Video sources included (but not limited to)

- Convergence (Jan 2021) Outcome Document – Working Group on Blended Finance for Water Infrastructure Maintenance and Fecal Sludge Management.
- Convergence (April 2019) Data Brief – Blended finance for water and sanitation.
- OECD (October 2017) Policy Perspectives – Blended finance. Mobilising resources for sustainable development and climate action in developing countries.
- OECD (August 2019) Policy Highlights – Making blended finance work for water and sanitation. Unlocking commercial finance for SDG6.
- Uptime (May 2019) Working Paper – Performance-based funding for reliable rural water services in Africa.
- Enclude (Palladium) (2018) Blended finance: How to get investors on board (funded by the Ministry of Foreign Affairs of the Netherlands)
- Using Blended Concessional Finance to Invest in Challenging Markets ECONOMIC CONSIDERATIONS, TRANSPARENCY, GOVERNANCE, AND LESSONS OF EXPERIENCE, International Finance Corporation, February 2021
- OECD Financing Water Roundtable notes, 2020
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- Social Finance, edited by Alex Nicholls, Rob Paton and Jed Emerson, Oxford University Press, 2016
- Walker, Darren, President, Ford Foundation Chair, U.S Impact Investing Alliance, Community Investing Bank Report, May 2021

#### WaterEquity:

- Water.org(2017) Closing the financing gap for safe water and sanitation. Access to safe water and sanitation gives women hope, children health, and communities a future.
- Convergence (July 2019) – Case study, WaterCredit Investment Fund
- Convergence Data Brief (2018) – Leverage of Concessional Capital
- WaterEquity Annual Impact Report, July 2021
- Anthony Randazzo, Impact Money Blog – “What is Blended Finance and Is It Needed?”  
<https://impactmoney.net/impact-investing/what-is-blended-finance-and-is-it-needed/>

#### Cambodia Rural Sanitation DIB:

- The Cambodia Rural Sanitation DIB: lessons learnt from the first year.
- Cambodia Rural Sanitation Development Impact Bond, The fact sheet
- iDE video for Innovate 4 Water Forum, Brisbane, August 2020

#### KIFFWA:

- KIFFWA Annual Report 2019, public version
- KIFFWA Essentials (2019)
- USAID WASH-FIN fact sheet
- Water Finance Facility, Tapping Local Capital Markets for Water Infrastructure, December 2019 (slide deck courtesy of Convergence finance)

- KIFFWA MEDIUM TERM REVIEW, Rebel in cooperation with Trinomics, 15 July 2020 (not available for distribution)
- KIFFWA Response to the Report of the Mid-Term Review (MTR) on KIFFWA, October 2020
- NWP (2015) KIFFWA Inception report

#### World Bank TA and OBA in Bangladesh:

- World Bank Group, MAXIMIZING FINANCE FOR DEVELOPMENT BANGLADESH, Sanitation Microfinance for Rural Households
- Bangladesh OBA Sanitation Microfinance Project, Evaluation Report, September 2019
- The World Bank (FOR OFFICIAL USE ONLY) IMPLEMENTATION COMPLETION AND RESULTS REPORT TFOA3117 ON A SMALL GRANT IN THE AMOUNT OF US\$3.0 MILLION TO THE PEOPLE'S REPUBLIC OF BANGLADESH FOR OBA SANITATION MICROFINANCE PROGRAM (P157958), February 24, 2019, Water Global Practice, South Asia Region
- Barkat, Abdul. Economic Impacts of Inadequate Sanitation in Bangladesh. World Bank, 2012

#### Azure Source Capital

- Azure Slide Deck (courtesy of Convergence Finance)
- OPIC (DFC) Information Summary for the Public
- Azure Impact Report Q2 FY2021
- <https://www.crs.org/media-center/news-release/crs-and-idbmif-announce-partnership-azure-blended-finance-facility>
- [https://www.calvertimpactcapital.org/portfolio/list/azure-source-capital#:~:text=Azure%20Source%20Capital%20\(ASC\)%20provides,providers%20at%20competitive%20interest%20rates.](https://www.calvertimpactcapital.org/portfolio/list/azure-source-capital#:~:text=Azure%20Source%20Capital%20(ASC)%20provides,providers%20at%20competitive%20interest%20rates.)
- <https://mercyinvestmentservices.org/article-details.aspx?article=8984&articlegroup=>
- Video: [https://vimeo.com/275403964?ref=;](https://vimeo.com/275403964?ref=)  
<https://www.youtube.com/watch?app=desktop&v=xGuheV7CzY4&feature=youtu.be>

## 6 APPENDIX B: INTERVIEWS

### Interviews conducted:

#### WaterEquity:

- Elan Emanuel, Director of Investor Relations at WaterEquity
- Genevieve Edens, Director, Impact and ESG at WaterEquity
- Anthony Randazzo, Director, Social Enterprise Finance, U.S. International Development Finance Corporation (DFC) (Successor to OPIC)
- Sanjay Banka, SDG6 Advocate and Chairman of Banka BioLoo Limited

#### Informal conversations included:

- Alix Lebec, Founder & CEO, Lebec Consulting | Fortune Connect (former Chief Investor Relations Officer at WaterEquity)
- Tom Light, Executive Director, Arctic Ice Project (former Managing Director at WaterEquity)
- Margarita Salasyuk, Advisory Solutions Expert at Water.org

#### Cambodia Rural Sanitation DIB:

- Paul Gunstensen, Venture Philanthropy, Impact Investing, Sustainability Director at Stone Family Foundation
- Greg Lestikow, Director of WASH, iDE
- Laura Cizmo, Deputy Director, Sustainable Economic Growth Office at USAID Cambodia (provision of the case study and input)

#### KIFFWA:

- Hein Gietema, Impact Investor, Owner CSC Strategy and Finance, instrumental to KIFFWA creation
- Joseph Murabula, CEO KIFFWA
- Kajetan Hetzer, Impact Investor, instrumental to creation of Take-a-Stake Fund and FINISH Mondial (informal interview)

#### World Bank TA and OBA in Bangladesh:

- Joel Kolker, Program Manager, GWSP, World Bank (informal conversation)
- Rokeya Ahmed, WASH Specialist at the World Bank, Bangladesh (formal interview)

#### Azure Source Capital

- John Simon, the Founder and Managing Partner of the Total Impact Capital
- Mitchell L. Strauss, Special Advisor, Socially Responsible Investment Finance, U.S. International Development Finance Corporation (DFC) (Successor to OPIC)
- Catherine Van Dusen Godschalk, Vice President, Investments, Calvert Impact Capital
- Narita Tetsuro, IADB