

# A BETTER WORLD



Actions and commitments to the Sustainable Development Goals

# Accelerating towards universal access to clean water and sanitation – WaterCredit and beyond

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Addressing the world's water and sanitation needs is one of the great human development challenges of our time. While we have known how to deliver safe water and sanitation (WSS) for more than 100 years, today there are still more than 2.3 billion people that lack access to basic sanitation services<sup>1</sup>.

It is well understood that safe drinking water and hygienic toilets protect people from disease, enable societies to be productive, and are fundamental to the well-being and safety of a household. WSS advocates argue that progress on the Sustainable Development Goal 6 (SDG 6) – universal and equitable access to safe and affordable drinking water and sanitation for all – is a requirement to achieve other SDG goals, including elimination of poverty and gender equality.

The sums of money needed to achieve SDG 6 are undoubtedly large, and reliance on government and donor financing alone limit the pace at which the required investments can be made. The latest World Bank estimates indicate that achieving universal access to safely managed water and sanitation would cost approximately US\$114 billion per year for capital expenditure – an amount that is three times the current investment levels<sup>2</sup>.

These realities have inspired Water.org to think of system change, particularly through finance that is as close to the poor as possible. Through its WaterCredit approach (see Figure 1), Water.org works with microfinance providers to create, pilot,

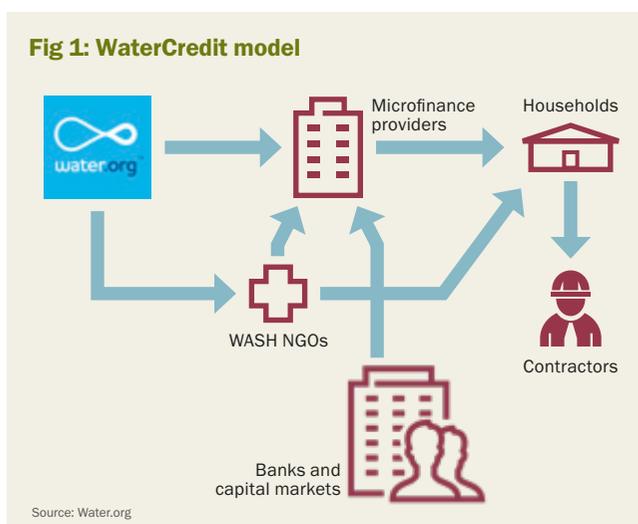
and scale affordable WSS financing solutions for the poor. In the case of early adopters, Water.org also provided a grant while the case for WSS lending was being built in the region. This grant helped partners build their technical capacity. These partners then leverage funding from banks and capital markets to disburse loans to their clients, who in turn use the financed amount to build their own WSS improvement.

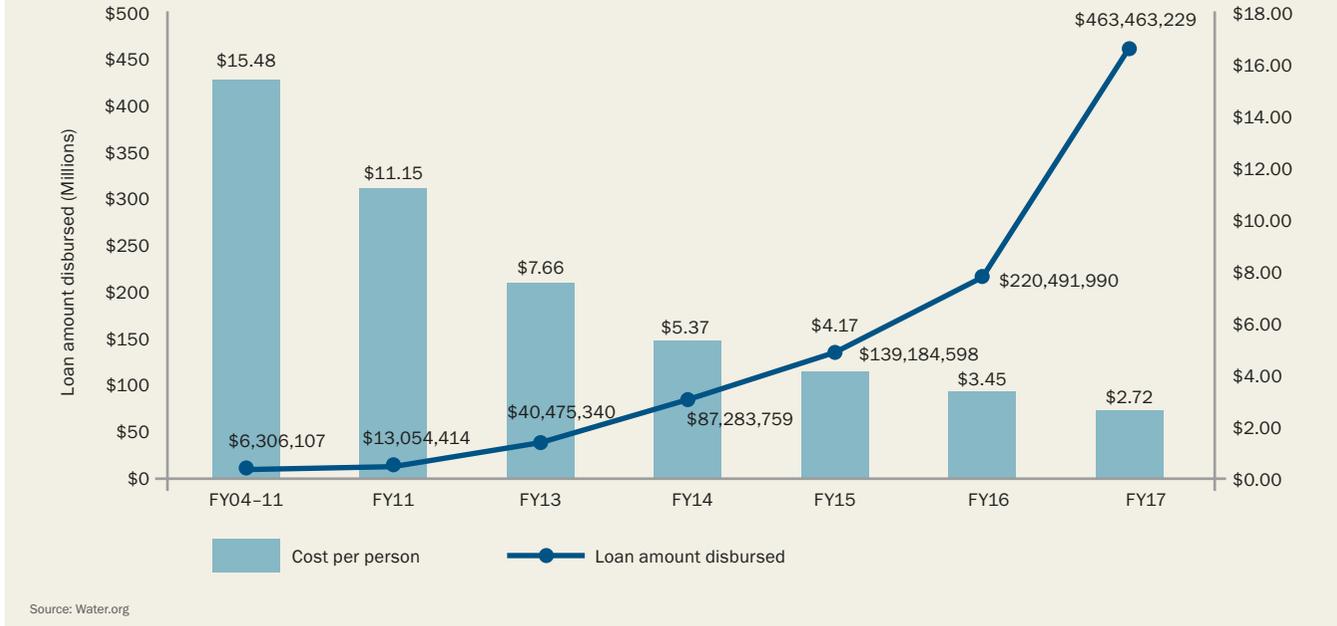
The upfront cost of a toilet or a piped water connection can easily equal a household's entire monthly income, but many are willing to purchase one if they can spread the cost over time. The recycling of affordable WSS capital to the base of the pyramid can help achieve the ambitious goal of SDG 6 by making capital affordable for the poor.

## WaterCredit: reach and impact<sup>3</sup>

WaterCredit-led WSS lending has effectively leveraged funding for great impact and has helped to meet ambitious national and global targets, including SDG 6. WaterCredit interventions have disbursed more than 1.6 million loans for WSS improvements, totalling over US\$463 million and have positively impacted more than 7.1 million people. The cost per person to deliver water and sanitation solutions has continued to drop with an increase in loan disbursement over time, indicating increasing efficiency of WaterCredit programs (Figure 2).

The success of WaterCredit has demonstrated that the poor are viable customers who are willing to take up loans



**Fig 2: Cumulative cost per person under the WaterCredit program, as of August 2017**

to improve their water and sanitation infrastructure and are able to repay these loans. A majority of WaterCredit borrowers (55%) are living on under US\$1.90 per day. Only less than 1% of very poor water and sanitation loan recipients were delinquent over 30 days. Not only do these clients belong to poor households, a key aspect is that over 90% of these loans are borrowed by women. Table 1 shows the key characteristics of loan portfolios across major countries where loans were disbursed under the WaterCredit program.

Apart from direct benefits in terms of improved water and sanitation facilities, household investments in access to water and sanitation have shown to produce significant returns, including socio-economic and health impacts. In a recent evaluation in India, around 25% of WaterCredit borrowers reported reduced illness and one in five reported reduced medical expenses. Previous studies have shown that reducing illness improves children's school attendance and lifetime earning potential. Access to improved water and sanitation also reduces the incidence of chronic diarrhoea, which correlates to improved cognitive function and reduced risk of impaired growth. Research suggests that impaired growth decreases the likelihood that children will lead healthy, economically productive lives.

Access to improved on-site water and sanitation brings dignity, safety, and privacy to the family, especially for women, children, and the elderly. External evaluations of WaterCredit interventions show that women with a toilet in the home are safer and have more privacy than those who must find isolated locations far from the home to defecate. Around 39% of sanitation loan recipients reported increased safety, after acquiring a toilet at home<sup>4</sup>.

A large percentage of households with improved access to water and sanitation have experienced increased household income. Before taking a loan, only 53% of WaterCredit borrowers in India made at least US\$47 per month; after the

loan, this proportion nearly doubled to 97%, suggesting that the investment in water and/or sanitation may have contributed to households' abilities to generate income. According to the WaterCredit impact evaluations, nearly 25% of borrowers attributed increased income to extra time for women, regained from minimised water collection times. Similarly, one in five attributed increased income as a result of increase in overall productivity due to fewer negative health impacts from water or sanitation<sup>4</sup>.

### Lessons and challenges

A joint World Bank and Water.org study found that microfinance is a key tool in breaking down the barriers that prevent those at the bottom of the economic pyramid from accessing improved water and sanitation<sup>5</sup>. In reaching more than 7.1 million people through WaterCredit, Water.org has grasped a better understanding of the factors required for increased sustainability and scalability of WaterCredit operations and has made and proven the case for WSS financing. A recent evaluation of a WaterCredit intervention in India showed that trained MFI staff and self-help groups were valuable change agents in their communities, helping to drive behaviour change and providing necessary product information<sup>5</sup>. The intervention's success in the notoriously challenging state of Odisha also demonstrates that there can be a healthy demand for WSS microfinance, even in areas that are deemed to have less favourable microfinance environments<sup>6</sup>.

To address sustainability and scalability, a recent case study<sup>7</sup> outlined the major enablers and constraints identified in WaterCredit partners in India. Among the factors, access to loan capital was identified as a major constraint by half of the India WaterCredit partners in the study, largely due to reluctance among commercial banks to finance WSS portfolios. However, the inclusion of WSS in the Reserve Bank of India's Priority Sector Lending in April 2015 has enabled

more capital to be unleashed towards WSS portfolios. By reaching more than half a million households in just four years with a unit cost significantly lower than traditional WSS programs, WaterCredit in India demonstrates that microfinance can significantly amplify the reach and impact of investments in the WSS sector.

On a global level, multilateral stakeholders like the World Bank stress the role of blended finance – the strategic use of development finance and philanthropic funds to mobilise private capital flows to emerging and frontier markets<sup>8</sup> – in achieving SDG 6. It has been touted as an effective tool for stimulating lending interest from the commercial financial sector, helping educate commercial banks about opportunities in the financial sector as well as dispelling the perceived risks related to WSS lending<sup>9</sup>. This messaging aligns directly with Water.org’s model and helps propel the importance of finance-driven solutions for the WSS challenge.

### Beyond WaterCredit

Evidence from Water.org’s programs demonstrate that a viable market can be made for financing water and sanitation improvements. However, WaterCredit alone cannot make up for the gap in financing that is needed to achieve SDG 6. To expand and accelerate impact, Water.org has been developing and testing new innovations on the central theme of financing for water and sanitation. These new approaches include working with utility companies, the supply chain, and impact investing to increase both the amount of financing mobilised



Image: Water.org

**Table 1: Key characteristics of loans disbursed under the WaterCredit program as of August 2017**

	Bangladesh	India	Cambodia	Indonesia	Philippines
<b>Number of WaterCredit loans</b>	79,386	1,101,725	16,618	34,682	222,505
<b>People reached</b>	423,485	4,570,982	55,373	142,684	962,005
<b>Women borrowers (%)</b>	98	97	85	86	99
<b>Loan amounts disbursed (US\$)</b>	20,181,906	220,640,074	7,368,529	8,264,689	47,952,863
<b>Water.org grants to partners (US\$)</b>	2,644,573	11,012,189	436,940	1,315,857	673,536
<b>US\$ leveraged ratio</b>	7.63	20.04	16.86	6.28	71.2
<b>Cost per person (US\$) – partner grant cost only</b>	6.24	2.41	7.89	9.22	0.70
<b>Average loan size (US\$)</b>	254	196	443	238	216
<b>Average repayment rate (%)</b>	98	99	-	99	99

	Ethiopia	Ghana	Kenya	Uganda	Peru
<b>Number of WaterCredit loans</b>	322	149	77,326	2,740	109,203
<b>People reached</b>	1,977	17,121	439,010	68,653	423,177
<b>Women borrowers (%)</b>	43	38	55	45	47
<b>Loan amounts disbursed (US\$)</b>	194,190	420,448	21,518,516	2,292,573	134,629,441
<b>Water.org grants to partners (US\$)</b>	305,802	64,031	1,586,567	637,798	687,535
<b>US\$ leveraged ratio</b>	0.64	6.57	13.56	3.59	195.81
<b>Cost per person (US\$) – partner grant cost only</b>	154.68	3.74	3.61	9.29	1.62
<b>Average loan size (US\$)</b>	603	2,822	278	837	1,233
<b>Average repayment rate (%)</b>	83	-	90	99	99

Source: Water.org



Image: Water.org

for water and sanitation as well as water and sanitation access at the base of the economic pyramid.

In Indonesia and the Philippines, Water.org is partnering with rural and municipal water utilities to enable financing for household water connections. In addition to paying in cash to connect to the utility water system, households can pay cash instalments to the utility company or take out a loan from a microfinance institution. Similarly, Water.org is working with financial partners in Kenya as well as Indonesia to facilitate loans to water utilities for infrastructure extension and service improvements to boost availability and the quality of services.

In addition to working with water utilities, Water.org is engaging the supply chain. In India, Water.org provides technical assistance and grants to scale up and expand operations for two supply chain enterprises – one social business manufactures and distributes toilet kits to rural villages, and the other provides access to clean drinking water, both using local entrepreneurs via a decentralised distribution model, among other methods.

Water.org is also pursuing scale by offering WaterCredit via groups of institutions, with technical assistance designed using the evidence generated to date.

Similarly, in India Water.org is engaging several partners to accelerate an ecosystem for WSS financing in both the public and private sectors. Partnering with UNICEF to integrate finance availability into its demand creation programs among households for water and sanitation, Water.org works closely with both commercial banks and microfinance partners to align lending where UNICEF is activating community



Image: Water.org

The leader of three joint-liability women's groups in Palanjoghalli, India. Her sanitation loan bought a toilet for her family and is now in repayment

demand. This includes channelling financing to remote rural areas via the India Post Payments Bank and self-help groups linked to the State Rural Livelihoods Missions, a government-managed program.

Lastly, WaterEquity, a Water.org innovation, unlocks affordable social investment capital to help microfinance institutions and other enterprises to scale their water and sanitation efforts to meet market demand. It provides a variety of financial instruments and technical assistance to microfinance institutions to help them launch loan portfolios. The loans enable the world's poor to pay for a connection to a water source or install a toilet in their homes.

With these innovations, Water.org is highlighting the fact that ending open defecation and ensuring basic access to water and safe sanitation to everyone, everywhere, by 2030 cannot be achieved without WSS financing mechanisms.