



Improving Access to Water and Sanitation through DIGITAL FINANCIAL INCLUSION

2.1 billion people lack access to consistently safe drinking water.¹

THE OPPORTUNITY

Digital finance enables water and sanitation providers to serve low-income households, while also supporting the sustainable expansion of utility networks.



CHALLENGES*

In many countries, water providers who rely on cash struggle to serve rural customers because **metering, billing, and payment collections are slow, costly, and insecure.**²

Utilities in many countries barely cover their costs: The ratio of revenue to operating expenses in 2014 was just 1.09 in low-income countries compared to 1.42 in high-income countries.⁴

People in some emerging economies face **prohibitively high costs** to access basic sanitation or safe water in their homes. Upfront costs can often equal the monthly income of poorer households.⁶



SOLUTIONS*

Using digital channels for metering, billing, and collections **lowers operating expenses, secures cash flows,** and enables providers to expand **safe water** access to rural customers.³

Pay-as-you-go water ATMs and smart meters can help utilities to **reduce late payments, reduce water use that is not paid for, and sustainably expand access.**⁵

Micro-loans and *layaway* products can help bring safe, **sustainable services** within reach for low-income households. Digital wallets can make it easier to save and pay for water and sanitation upgrades, ultimately saving lives.⁷



“Ensure availability and sustainable management of water and sanitation for all.”

GHANA By introducing digital payments and prepaid smart meters, Safe Water Network more than **doubled its per-liter payment collection rate** between 2016 and 2017, helping the company sustainably expand access to safe drinking water.⁸

KENYA Digital billing and payment services developed by software company Wonderkid helped a Kenyan water utility to increase its revenue collected by 28% in 18 months.⁹



TANZANIA A water payment's digitization project resulted in **tripling water utility payments** and **reducing water collection waiting time from 3 hours to 10 minutes**

on average within a year, benefiting women in particular.^{10,11,12}

BANGLADESH The national government and the World Bank have partnered to support micro-financed installation of hygienic toilets, leveraging mobile money for loan repayments. 16,500 toilets were installed in 2017, with a long-term goal to reach 170,000.¹³

* These represent only a few of the many important challenges and solutions. They should not be read as an exhaustive list.



UNSGSA

BETTER THAN CASH
ALLIANCE



THE WORLD BANK

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¹ WHO & UNICEF, 2017 ² World Bank and WSP, 2014 ³ Ericsson, 2016 ⁴ World Bank & WSP, 2014 ⁵ Waldron & Sotiriou, 2018 ⁶ Ikeda & Arney, 2015 ⁷ Waldron & Sotiriou, 2017
⁸ Waldron, Hwang, & Yeboah, 2018 ⁹ GSMA, 2017 ¹⁰ Sippy & Dugange, 2018 ¹¹ UN Women, 2013 ¹² Water.org, 2018 ¹³ World Bank, 2017