

Sufficient Affordable Reliable service from For the people Meets relevant national source to home water quality guidelines who need it SUSTAINABLE **WATER SERVICES**

Acceptable

For engaged and supportive communities

Accessible

Convenient, safe water access—24/7

Financially Viable

THRIVING

COMMUNITIES

WITH

SUSTAINABLE,

SAFE WATER

Revenues cover operating, maintenance. and replacement costs

WATER THAT **WORKS**

Safe Water. Turn on the faucet and it's there. Yet, for more than two billion people around the globe, it's not that simple. Because the issue isn't the water—or the faucet. It's the system.

Everyone agrees that the lack of safe water is a priority global health issue that threatens livelihoods in many regions. Each year, government programs invest billions of dollars on large-scale urban networks, while generous nonprofits focus on small rural projects. Yet, most of these wellmeaning endeavors never make it to growing towns that lie beyond the reach of public utilities. Failure rates for providing safe water in these "missing middle" zones range from 30% to 60%. Over time, infant mortality rates rise, diseases spread, and families needlessly suffer.

Yet, the problem is solvable.

Safe Water Network is changing the status quo with locally managed small water enterprises. We are dedicated to improving the processes and mobilizing the funding for a robust deployment system that realizes convenience, local ownership, and social inclusion. Our approach has been demonstrated at scale in Ghana and India, where we have helped more than 400 communities establish and manage safe water systems. serving over a million people.

A SAFE WATER **DELIVERY** SYSTEM

We are grateful to the stakeholders who strengthen this work, enable our progress, and share our commitment to sustainability. Together we are advancing the capabilities, processes, and tools for replication.

But this is only the start to realizing global impact.

Working with others, we are building technical capacities, training initiatives, and advocacy programs. We are dedicated to sharing our capabilities and encouraging the collaborative exchange of knowledge and the investment of philanthropic resources.

We invite you to join us in accelerating this progress. Let's make safe water work.

Sincerely,

Kurt Soderlund Co-Founder and Chief Executive Officer



Source Water

Surface water and groundwater resources are assessed for microbiological and chemical contaminants, granting an understanding of local water quality challenges and management requirements.

Entrepreneur/Operator

to run day-to-day operations.

functioning of the station.

Community members are employed Operators, trained in basic operations and maintenance, bookkeeping, and reporting, are responsible for the daily

Treatment System

Enterprises use field-tested, locally adaptable standard purification technologies that are robust, available in the local market, and maintained largely by operators.

Water ATM

People from the local community can purchase water using a 24/7 water "anytime machine" (ATM), which reduces non-revenue water and increases convenience for consumers through the use of prepaid smart cards.

Water Delivery

Clean water reaches community members when and where they need it. Water is available for purchase at the main station, community distribution points, via third-party retailers, and through household connections and bulk delivery.

2018 SUCCESS **METRICS INCLUDE:**

Safe water provided to more than 1.3 million people in over 400 communities

1,200 community members employed in small water enterprise operations

100% of our small water enterprises are still in operation

100% of our systems are designed to meet all applicable water safety and quality standards

95% of enterprises cover local operating costs from water revenue after one year

EMPOWERING COMMUNITIES TO MANAGE THEIR OWN **WATER SYSTEM**

Operating within a sector where the system failure rate is up to 70%, small water enterprises are locally owned and operated businesses that provide communities with a safe, affordable, and dependable supply of water. Enterprises emphasize:

- local governance and ownership
- convenience, the primary driver for safe water consumption
- operational excellence
- social inclusion.



Safe Water Network understands that the

From The Prosperity Paradox by Clayton Christensen

solution to a water problem is not to simply 'build

a well' or 'provide water.' The organization has

found that there must be a system, or a market,

that sustains the water investments it makes. "





Community Buy-in and

We work closely with local

residents to conduct a site

serve their community.

selection and needs assessment

identify priorities, develop local

management capacity, and raise

awareness of water benefits and

how small water enterprises can

Mobilization





and Education

— Rani Barukaum, the leader of a women-led self-help group



Consumer Marketing

"I have seen how safe water changed the health of my family. Sometimes, I share my own experience or I tell how drinking safe water will reduce doctor bills."

in India



PARTNER HIGHLIGHT

UL employs exacting scientific processes and the highest ethical principles in working for a safer, more secure, and sustainable world. UL supported the development of our quality assurance protocols and assessment tools to help ensure safe water processing at iJal Stations in India.

Small water enterprises apply robust technologies that enable decentralized solutions in a way that would not have been possible before, and at a lower cost. These technologies allow for:

- remote monitoring of operational performance, including water quality
- · cashless consumer and supply chain payments
- low-cost IT tools for data management.

On-Demand Water

More than 1,000 household connections carrying water directly to the home, boosting safe water consumption.

Pay-As-You-Go

Smart meters were installed to help consumers better manage their water expenditures, and reduce revenue collection challenges.

Remote Monitoring

We use sensors to review water quality, track water levels and usage, and provide alerts to operators for routine maintenance and unexpected issues.

Solar

In off-grid communities, solar power increases reliability of water supply without expensive diesel costs, and with reduced greenhouse gas emissions.

2018 SUCCESS **METRICS INCLUDE:**

278 water ATMs have been deployed in Ghana and India to date

Solar power has reduced downtime in Ghana by **50%**

Smart meters for household connections in Ghana have led to an 18% increase in revenue

Sensor-automated pumping has reduced operating expenses

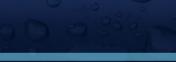
Small water enterprises in 45 communities in India that experience excessive high temperatures now feature chilled water systems











Real innovation is the fact that we're bringing these technologies—with the communities, with local government, and with the private sector—and we're working together to build them. 📆

Cynthia McCaffrey, Director of the Office of Global Innovation, UNICEF



Performance Management

Tablet-based monitoring speeds up data collection, allowing for real-time analysis, and ensures that operational challenges are addressed before they affect service delivery.



Training

Operators and field service teams are trained throughout the year on new technologies before these technologies are rolled out across the portfolio.

PARTNER HIGHLIGHT



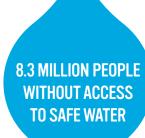
fibr

Financial Inclusion for Business Runways (FIBR), a project implemented by BFA Global, supports our mobile and digital integration and consumer activation initiatives as a key pathway to accelerate and deepen financial inclusion of underserved customers.

SNAPSHOT GHANA REACHING COMMUNITIES IN NEED

SNAPSHOT GHANA ADVANCING THE APPROACH IN 2018

The Safe Water Gap in Ghana



Safe Water Network in the Field

4 sustainable small water enterprise clusters in operation

120 communities with safe water through H2OME Water Stations

382,500 people with access to affordable water

478.9 million liters of water produced in 2018

Water sales revenue supports the ongoing and long-term operating costs of the water service



Small piped networks that can be expanded to household connections and neighborhood distribution points, **H2OME!** Water Stations are implemented through community partnerships with local governments in small towns and peri-urban communities in Ghana



Changing the Business of Water

Household connections and water ATMs, coupled with digital innovation, make water access more efficient and convenient. Digital finance improves financial management, enables flexible pricing, and captures important data on low-income consumers' purchasing patterns.

We work with engineering, IT, and financial inclusion experts such as Engineers Without Borders and the Consultative Group to Assist the Poor to ensure that our enterprises are demand-driven and operationally sound.



Mainstreaming the Model

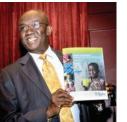
Our work to build a stronger enabling environment is critical to the growth of the market for small water enterprises.



On the Ground Leadership

"We have demonstrated that small water enterprises have a critical role to play in providing safe, affordable, and sustainable water access."

- Charles Nimako, Safe Water Network Ghana Country Director



Policy Development

We were tasked by the World Bank to develop a comprehensive policy framework to facilitate private sector participation in Ghana's community water supply (pictured, former Minister of Sanitation and Water Resources. the Honorable Joseph Kofi Adda).



Stakeholder **Engagement**

At the request of Ghana's Ministry of Sanitation and Water Resources. Program Manager Joseph Ampadu-Boakye (pictured) coordinates the multi-sector Small Water Enterprise Working Group, which meets regularly to address policy and financing challenges.

I always prefer using mobile money to purchase water for my house because I can buy water anytime and with any amount...I am able to top up remotely for my tenants, helping me operate my property.

Augustina Micah, Retired teacher and landlord, Ghana

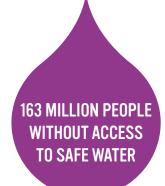
" SNAPSHOT INDIA

REACHING COMMUNITIES IN NEED

SNAPSHOT INDIA

ADVANCING THE **APPROACH IN 2018**

The Safe Water Gap in India



Safe Water Network in the Field

3 sustainable small water enterprise clusters

300 communities with safe water

More than a million people with access to affordable water

> 250.4 million liters of water produced in 2018

Water sales revenue supports the ongoing and long-term operating costs of the water service



iJal Stations are water kiosks implemented in rural villages and urban slums through partnerships with governments, entrepreneurs, and women-led self-help groups in India



Bringing Safe Water to the Masses

We work with local, state, and central governments and global policy makers to scale the small water enterprise model for exponential impact.

Our market assessments and advocacy efforts have led to the Ministry of Housing and Urban Affairs' inclusion of small water enterprises within cities. As part of an initiative supported by Honeywell, we have received a concession from the Greater Hyderabad Municipal Corporation to implement 50 urban small water enterprises in vulnerable slum communities.



Impact Beyond Delivering Water

Partnerships with local and global stakeholders are strengthening the deployment ecosystem to promote an inclusive environment for small water enterprises.



Market Development

Our urban market assessments, funded by the United States Agency for International Development (USAID), point to small water enterprises as a critical component for building resilient cities in India.



Development **Partnership**

"This [urban] partnership, and subsequent scale-up, was so successful that USAID literally worked itself out of a job."

– MaryKay Loss Carlson, Deputy Chief of Mission U.S. Embassy in New Delhi



Gender **Empowerment**

Under an agreement with the government and through funding from key partner Honeywell, 36 iJal Stations (and counting) are owned and managed by women-led self-help groups, and governed by village Gram Panchayats.



Safe water is not just about health. It allows children to go to school every day, parents to work, and enhances living standards of people. ***

Akshay Bellare, Vice President and General Manager, Honeywell Technology Solutions, India

THINK SCALE

VIABLE SOLUTIONS THAT CAN BE REPLICATED WORLDWIDE

Safe Water Network is a go-to resource for addressing common sector challenges to sustainability and scale. We team up with likeminded organizations to provide:

- applied small water enterprise expertise
- market development
- policy advocacy
- knowledge documentation and dissemination.

Building the Evidence Base

We document field and market insights on topics such as digital finance, quality assurance protocols, and the necessary conditions to attract greater support and funding.

Increasing Visibility

For more than seven years, our annual Beyond the Pipe Forums in both India and Ghana have brought together a cross-section of influential local and global stakeholders.

Collaborating to Raise the Bar

We have launched two global sector working groups with eight peer implementers from around the world to improve the sector's collective performance.

Improving the Enabling Environment

Our newly launched Small Water Enterprise Alliance in India is developing recommendations for water quality policy reform and sustainable pricing.

Advancing Replication

Our global Technical Services Unit is helping other organizations improve performance and replicate small water enterprises in diverse environments.

OUR FUTURE GOALS FOR SAFE WATER NETWORK:

Convene **annual national and global meetings** to advance sector priorities, share lessons, and facilitate partnering.

Create **standardized tools, technologies, and digital systems** to support the field implementation, monitoring, and management of small water enterprises by other implementers.

Provide **training and capacity-building** to help organizations optimize and replicate small water enterprises.

Implement new **blended-financing mechanisms** to attract social investment capital to the water sector.











The experience from Safe Water Network has taught us that small water enterprises are an important part of the mix for sustainable water supply in Ghana.

Honorable Michael Yaw Gyato, Deputy Minister for Sanitation and Water Resources



Advancing a Global Agenda

A landmark Community of Practice, leveraging our existing working groups, is underway to create a unified voice and a more efficient sector.



Innovative Financing

We are building a Ghana Water Enterprise Trust that will mobilize blended finance, provide financial stewardship, and catalyze replication.

PARTNER HIGHLIGHT

Vitol Foundation

The Vitol Foundation supports critical global initiatives, including our work with EY and implementers UNTAPPED and Jibu to develop a digital operating platform that can serve small water enterprises at scale.

¹⁴ SAFE WATER NETWORK AT A GLANCE

COMBINED GLOBAL PROGRAM EXPENDITURES OF \$7.3M BRINGING SAFE WATER TO THOSE MOST IN NEED

Country Program Expenditures

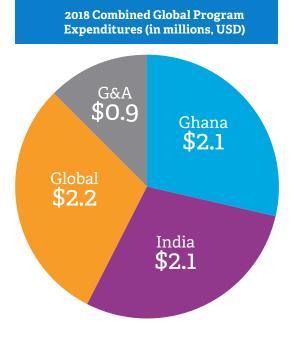
- Construction of new stations and expansions
- Operations, maintenance, and community outreach
- Optimizations to reduce operating expenses and boost revenue
- Sector engagement to improve policies, attract funding, and establish standards

Global Program Expenditures

- Program strategy
- Analytics and insights for sustainability and impact
- Advancing sector knowledge
- Mobilizing partnerships and capital to scale opportunities
- Quality assurance

G&A Expenditures

Administrative, finance, and fundraising functions needed to support mission and global programs



2018 amounts are based on preliminary and unaudited financial information, and are subject to change as additional data is received from field offices.

Expenditures above are the combined operating results of all Safe Water Network global offices, and are not intended to represent any individual entities.

The India program is facilitated by Safe Water Network India, an independent, India-based trust, with support from Safe Water Network.

Safe Water Network

Safe Water Network is led by a skilled management team, board of directors, and advisory committee: our team of 80+ professionals working in the US, Ghana, and India bring a diverse range of capabilities from both the private and public sectors, with extensive operational, policy, and public health experience.

As of December 31, 2018. Safe Water Network had 78 employees: 39 based in Ghana; 24 in India; and 15 in New York City.

2018 Board

Steve Zide. Chairman* Senior Advisor Bain Capital

Rita Colwell, PhD

Vice Chair* Former Director, National Science Foundation; Professor University of Maryland and Johns Hopkins University

Chris Brody

Chairman Vantage Partners, LLC

Rich Delaney

Former SVP Operations PepsiCo

Robert Forrester

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Founder & Managing Partner Four Rivers Group

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President & CEO Albertsons Companies

Kurt Soderlund

Safe Water Network

Josh Weston

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Joanne Woodward Newman

*as of 2019

Key Partners

Adamus Resources

BFA Global

Conrad N. Hilton Foundation

Consulate-General of Japan in Chennai

Consultative Group to Assist the Poor

Embassy of the Kingdom of the Netherlands **Engineers Without Borders**

Government of Karnataka

Honeywell

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Macquarie

Newman's Own Foundation

Oracle

Osprev Foundation

Pentair Foundation

Powertec

Public Private Infrastructure Advisory Facility

United States Agency for International Development

Vitol Foundation

Waterloo Foundation

World Bank

I am remarkably proud of the progress we have made, and even more inspired by our very real plans for the future. That significant difference in the world is at hand, and safe water access for all is a viable reality.

Josh Weston, Founding Board Chair, Safe Water Network

