Safe Water Enterprises

The Opportunity To Reach A Billion People

Stockholm World Water Week

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KEY QUESTIONS

The Safe Water Ladder

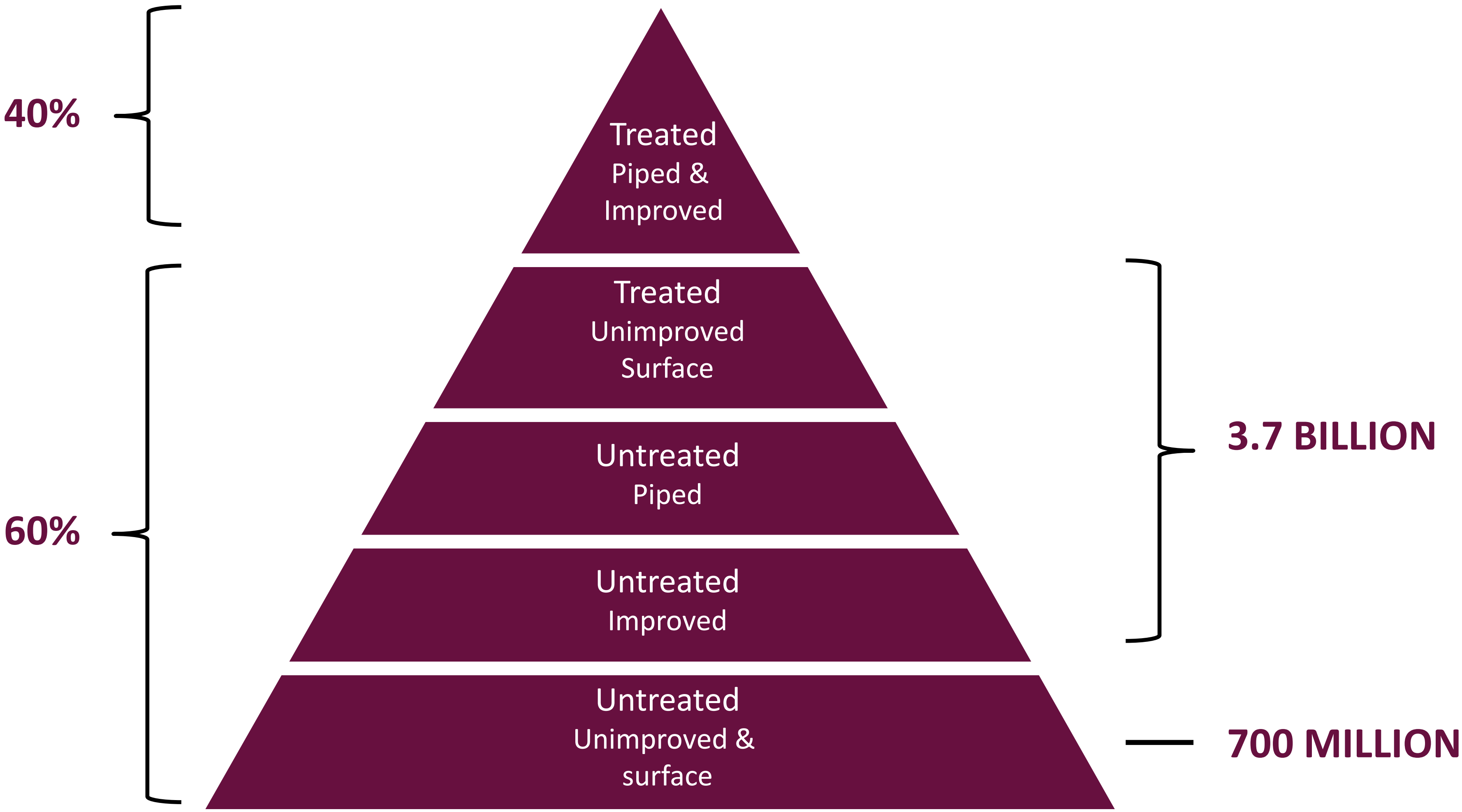
The Need For Alternatives

What Are Safe Water Enterprises?

Successes & Challenges

Opportunities: Venture Level & Ecosystem Level

4.4 billion people don't have access to adequately treated water or to an improved source or both. Out of this, 700 million use an unimproved source with no treatment



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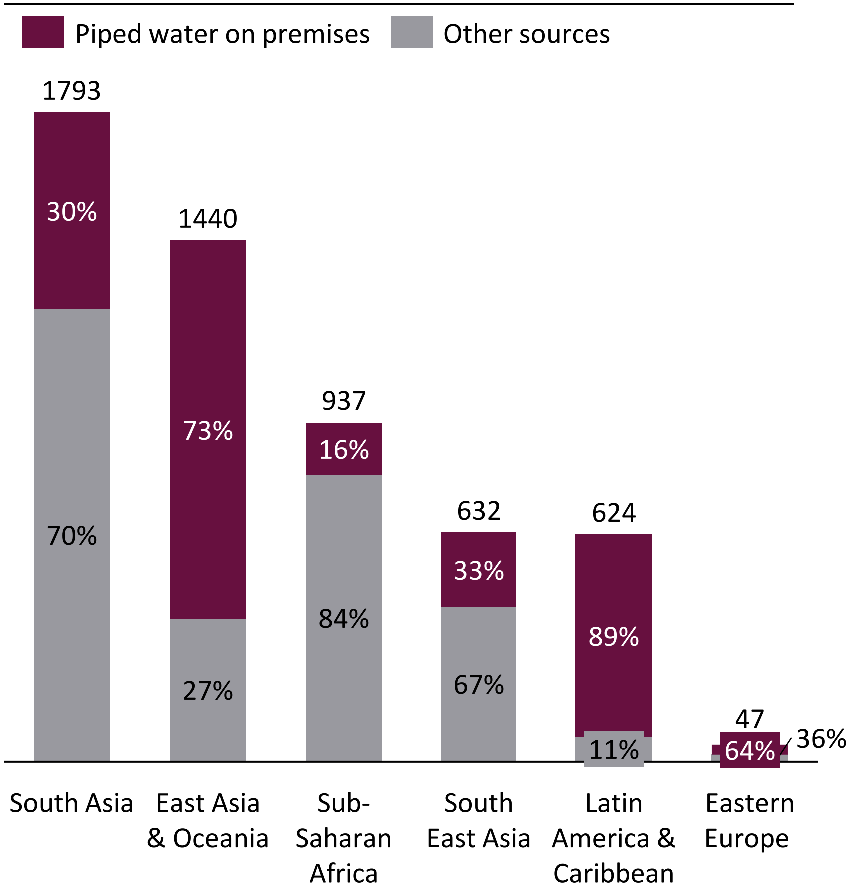
Building piped connections for the millions of unconnected is expensive

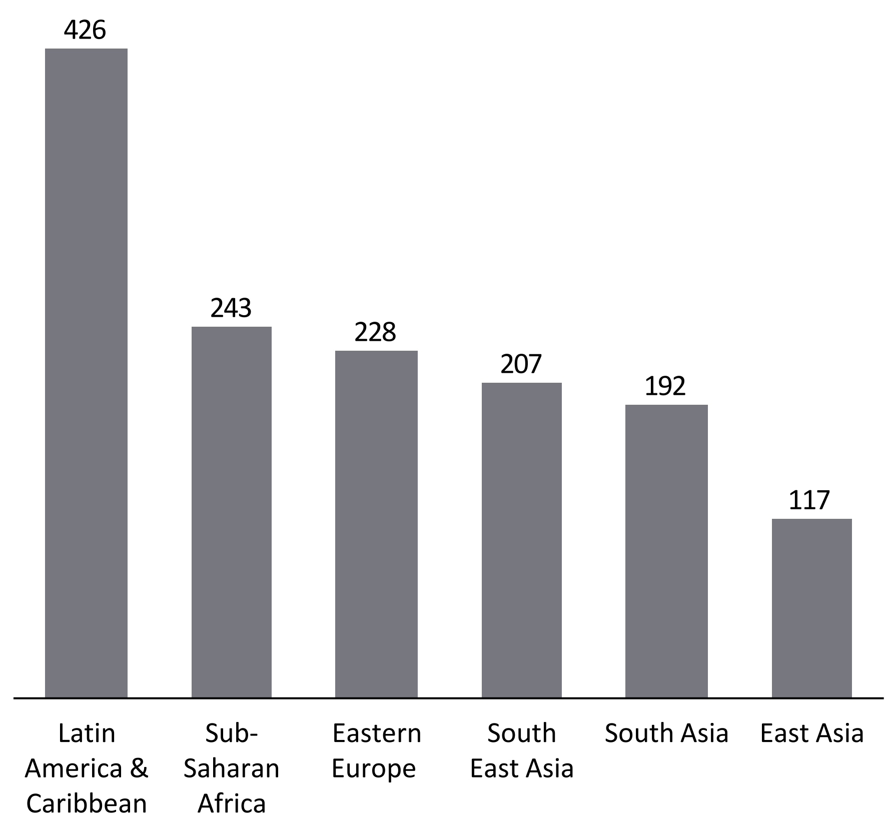
Access to piped water in developing countries, 2015[1]

Population in each region, millions



Capex per capita by region for piped water[2]

$

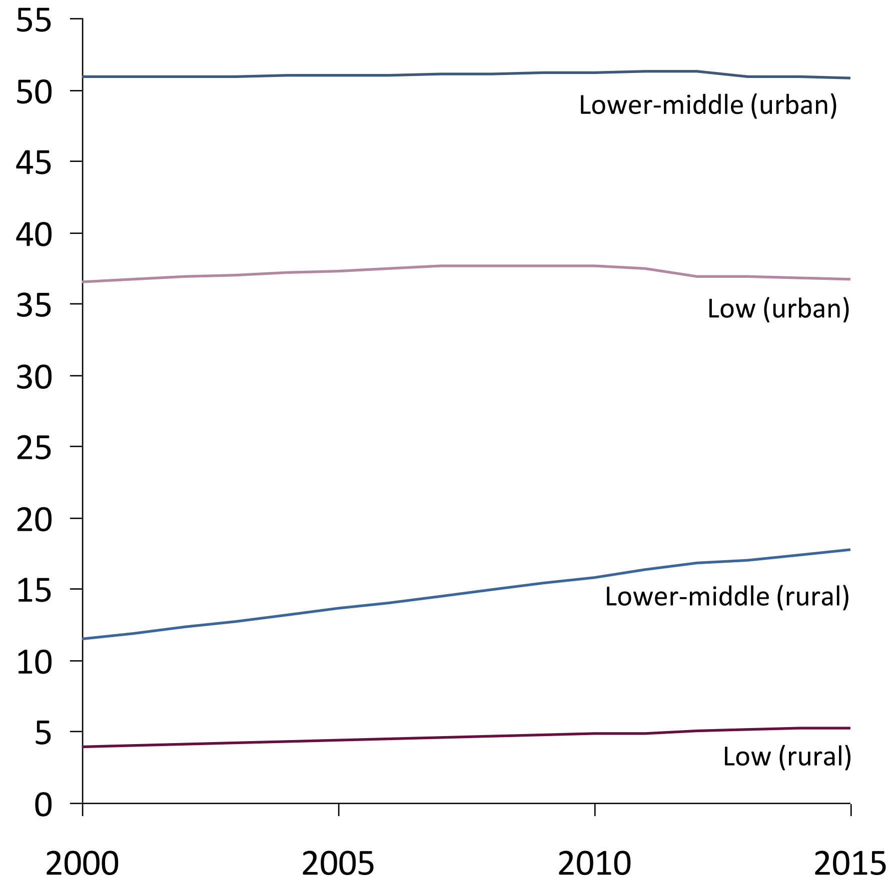


Note: 1) Sourced from JMP WHO/UNICEF website (2) Capex refers to cost of piped connection or replacement that is safe, continuous and on-plot

Source: JMP WHO/UNICEF (2015), "The Costs of Meeting the 2030 Sustainable Development Goal Targets on Drinking Water, Sanitation, and Hygiene", January (2016)

Progress has been slow, so alternate models that can scale are needed

Growth in access to piped water on premises
% of population



"WASH is meeting only a third of the finance required to meet the SDGs"

Joel Kolker
Lead WASH specialist
World Bank

"Even if they are able to provide quality water in urban areas, piped water is unlikely to reach the most marginalized groups"

Corinne Bazina
GM, Danone Communities

"Have you calculated the capex to provide access to 80% of India, it is never going to happen"

Paul Polak
CEO, Windhorse International

"Water kiosks reach the same number of people as a mini-utility business but at a much lower upfront cost"

Paul Polak
CEO, Windhorse International

Source: JMP UNICEF/WHO, Expert interviews, Dalberg analysis

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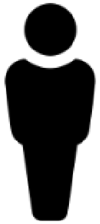
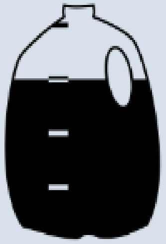
SWEs are one of the four dominant models of how people get drinking water

Self-Supply Surface & Ground	Unregulated Providers	Piped Networks	Safe Water Enterprises
			

Drinking water value chain

Extraction	Treatment	Transportation	Delivery	Payment
Groundwater, Surface water, rainwater, utility water, sea water	RO, Chlorination, UV Disinfection, Sand filtration	Deliver to a spoke	Pickup, direct home delivery, reseller	Cash on delivery, prepaid

SWEs can play different roles in partnership with public-sector water utilities depending on the presence and quality of piped water supply

Water Delivery Role

Independent water operations

Last mile distributor

Water logistics manager

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Water Quality Role

Last mile water quality enhancer

Last mile water quality assurance

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SUCESSES & CHALLENGES

Our study focused on SWEs across Asia, Africa and Latin America

SWE	Founded	Country	Business model	Primary funders (select list)
water for people	1994	Malawi	Management support to existing kiosks	Osprey Foundation, Charity Water, The Stone Family Foundation, The Coca Cola Foundation, UNICEF
Bala Vikasa	2002	India	Community operated kiosks; pick up model	Chola, Aurobindo Pharma, Franklin Templeton,
1001 fontaines	2007	Cambodia	Franchisee operated kiosks; home delivery	Danone Communities. The Stone Family Foundation
water point DROPS OF LIFE	2007	India	Venture operated kiosks; pick up model	Earth Water Group
Safe WATER NETWORK	2008	Ghana	Venture operated kiosks; primarily pick up model	The Stone Family Foundation, Osprey Foundation, Hilton Foundation, PepsiCo Foundation, Newman's Own Foundation
sarvajal	2008	India	Venture and Franchisee operated kiosks; pick up and home delivery	Piramal Foundation
iPure	2010	India	Venture operated kiosks; pick up model	Danone Communities, Mahindra
Jibu	2012	Rwanda	Franchisee operated storefronts; micro-franchisee (reseller) delivery model	USAID, SPRING, Cordes Foundation, Odell Family Foundation, Petritz Foundation, Soderquist Foundation
SPRING HEALTH Safe Drinking Water	2012	India	Franchisee operated kiosks; home delivery	Paul Polak, TR Ventures, Aqua for All, The Stone Family Foundation
dloHaiti	2013	Haiti	Venture operated kiosks; reseller model	Jim Chu (Founder), FMO, IFC InfraVentures, Leopard Capital

Note: In addition to the ten SWEs listed above, we also reviewed specific innovations at four ventures – EcoAlberto (Mexico), Pharmagen (Pakistan), Sunlight Water Centers (Nigeria) and Swiss Fresh Water (Nigeria)

We found that SWEs are grappling with five key challenges

Strategic positioning	Managing the balance between the "public good" goal of clean water and financial sustainability.
Market creation and product positioning	Creating a need and willingness among consumers to pay for "safe" water and not just access to water.
Financial sustainability	Increasing market penetration to become financially sustainable when both capital and operational expenditures are considered.
Operational independence	Creating an operating and contractual model that enables effective decision making that is not encumbered by donor or funder priorities.
Regulatory risk	Navigating unclear regulation that can sometime result in an "unclear" license to operate and competition with (un-potable) piped supply programs.

The study also determined that SWEs have a compelling future

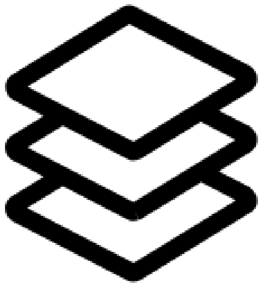
SWEs are necessary and complementary	SWEs have complementarity with piped networks and will provide both the "access" function and the "cleaning" function depending on location.
SWEs are climbing the learning curve	They are a new industry and are quickly learning to be financially prudent, operationally effective, and growth oriented.
Customer demand for safe water is increasing	Investments in public health awareness as well as private marketing campaigns are paying off and increasing numbers of customers are demanding safe water globally.
Effective contracts are important to success	SWEs are beginning to realize the importance of long-term, stable, and fair contracts with regional governments that lead to financial sustainability and increase the investment attractiveness.
Penetration is key	SWEs are realizing that penetration is key to sustainability and are investing in customer-centric features such as home delivery of water.

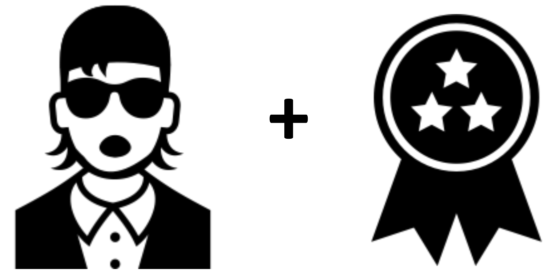
SWEs can invest in improving customer engagement and operational performance

Customer Engagement	Operational Performance
Aligning on the need for safe water	Technology and data to drive operational excellence
Grassroots marketing to drive awareness	Automation to reduce costs
Community engagement prior to initiating operations	Institutional sales and secondary products
Optimizing UX	Robust risk management

SUCCESSES & CHALLENGES

Ecosystem level initiatives can drive substantial gains for the SWE industry





Aggregated Buying

Support technology/ equipment standardization, reduce information asymmetry in the market, and reduce lead-times for both procurement and maintenance of treatment equipment/ machinery.

Quality Linked Branding Platform

A cross cutting branding platform that participating SWEs could “borrow” from if they play by the rules.

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OPPORTUNITIES TO SCALE

SWEs can address a large opportunity of ~4 billion people with four distinct segments

USER ABILITY TO PAY	Untreated – Piped (1.25 billion)	Untreated – Unpiped (2.61 billion)	
High	**Segment 1** **Expected size:** 700 million people **Strategy:** Emphasize the value of "safe water" and build an user-facing independent brand.	**Segment 3** **Expected size:** 1.46 billion people **Strategy:** Emphasize the value of home delivery, invest in distribution, and build a good brand.	**2.16 B people**
Low	**Segment 2** **Expected size:** 550 million people **Strategy:** Emphasize the value of "safe water", partner with the government for subsidies through effective contracts.	**Segment 4** **Expected size:** 1.15 billion people **Strategy:** Partner with government for distribution, hedge risks within long-term contracts, based on contract focus on water production & / or delivery	**1.7 B people** **$ 14.5 B annual subsidy**

Source: Dalberg analysis, IHME data, UN Population estimates

FOR MORE INFO

Please read the full report or the highlights report online

www.safewaterenterprises.com