# Hult Global Case Challenge Water.org

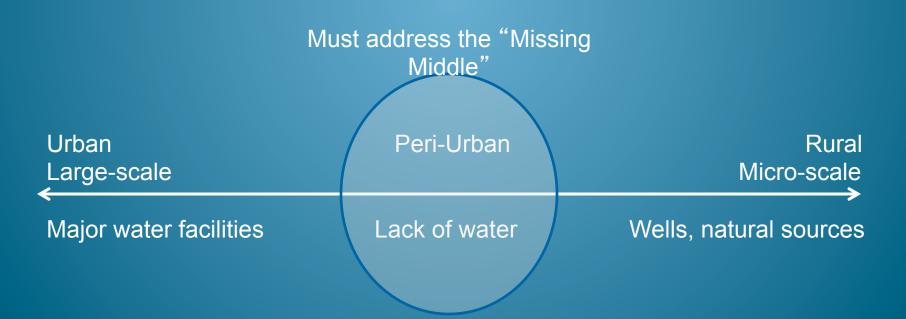
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#### The Problem

- Key question: How to reach at least 100 million people in five years?
  - Growing need: by 2050, 70% of world's population will be urban
  - Solutions are known; issues are access, funding, and scale
  - How can Water.org provide an incentive for service provision in underserved peri-urban communities?





### Insights

- Investing in poor communities is profitable: demonstration effect to overcome investor inertia
- Community-scale solutions require appropriately-sized loans
- Electrification mini-grids and agricultural cooperatives provide innovative models



## Proposed Solution: Community-Run Micro-Grids

- Community co-operative develops and implements a water micro-grid with Water.org technical assistance
  - 1. Community-initiated project design
  - 2. Stakeholder engagement and planning
  - 3. Micro-grid implementation, administered by water co-op
- Modular design allows later connection to municipal water
- Financed by large loan to the community water cooperative
- Paying water tariffs made easy: cash/mobile payment; billing training by local NGOs
- Grant Recycling: cooperatives repay loans to Water.org for use on other micro-grids; royalties provide ongoing revenue



#### **Impact**

- Demonstration effect encourages similar investments elsewhere – public and private
- Reduced cost of water through economies of scale
- Improve local institutional capacity, enabling other fee-based services to succeed
- Reduce risk of water-borne disease through easy monitoring and treatment of central water source
- Myriad community, economic, and health benefits of expanded water access



#### Implementation Plan

Mid-2011

Late 2011

Early 2012

Thru 2012

2013

Initial discussions between Water.org and potential NGO partners NGOs identify needs and Water.org selects community for pilot

Community water co-op forms, with support from Water.org / NGO

Water.org invests in infrastructure selected by co-op

Co-op begins to operate new infrastructure NGOs engage in social marketing / community education Community members begin paying water tariffs thru co-op

Municipal / private water authority pays initial fee for infrastructure, begins paying royalties to Water.org
Water.org reinvests initial fee and royalties in new projects
Water.org publicizes success story, other water NGOs copy model



#### Cost-Benefit Analysis: Pilot Project

\$000's	2011	2012	2013	2014	2015
Revenues					
Water tariffs		120	240	0	0
Infrastructure sale/lease	0	0	100	0	0
Royalties*	0	0	24	24	24
Total revenues	0	120	364	24	24
Costs					
Operations	0	36	72	0	0
Community development / education	50	50	0	0	0
Infrastructure investment	250	0	0	0	0
Total costs	300	86	72	0	0
Profit (Loss)	(300)	34	292	24	24
*depending upon exit strategy selected for project					

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Break even in two years – by 2013 Royalties could provide ongoing revenue for Water.org



#### Risks and Mitigations

- Lack of stakeholder consensus
  - → Rigorous vetting process of community applicants (ensure strong community demand)
- Inadequate tariff collection
  - → Community outreach and mobile payment technology to make paying easy
  - → Quality service makes customers feel valued, incentivized to pay bills
- Regional WATSAN provider fails to take over at end of capital payback period
  - → Significant incentive for their participation (\$\$)
  - → Foster local self-sufficiency