

The background of the entire slide is a close-up, high-angle shot of water with numerous bubbles of various sizes. The lighting is bright, creating a shimmering effect on the water's surface and highlighting the spherical shapes of the bubbles. The color palette is a range of blues, from light sky blue to deep, dark navy blue.

# Water For Change

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# Discussion

- Overview of issue
- Tackling the water issue
  - Short term solution
  - Long term solution
- Tackling the waste issue
- How our solution meets the key criteria





# Water Access – 3 Phase Approach

## **Phase 1 Objective:**

- Recommend philanthropy to invest in locating / funding survey for key locations of water tables.
- Previous research conducted on water tables might have aimed too high for requirements.
  - If possible look at the smaller water tables to pool together water sources.
- Educate the surrounding communities that there is a water source around them.



# Phase 2 – Short Term Solution

## Phase 2 Objective:

Create a time-saving solution for community members to retrieve their water while creating a source of revenue over a period of time

- Assumption: there is use of a local water source

## Q- Drum rental model

- Cost \$65 / Rental cost will vary by market
- Portion of rental fee will go towards investment of development of well and water distribution network



# Phase 3

## Phase 3 Objective:

Integrate rental revenue model against a plan to develop and build a well and water supply for long term use ~ 10+ years.





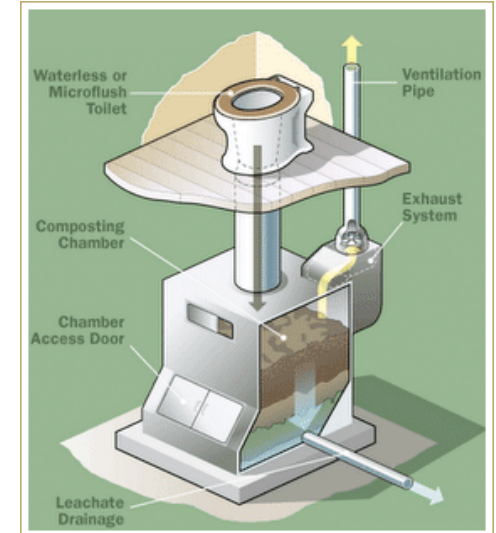


# Waste: Why do we care?

- Help to minimize contamination of local water sources
- Provide easy-to-maintain facilities that population would want to use
- Reduce the lives claimed through water-borne diseases in developing nations

# Solution

- Enter the latrine building and waste management business
- Turn the businesses into for-profit ventures
- Benefits:
  - Addresses sanitary issues with limited latrine access
  - Job creation and skills for women and older children
  - Investment of community in business (think locally)
  - Revenue generation





# The Solar Port-a-Potty Technology

- Example is SCAT (solar composting advanced toilet)
- Recycles human excrement into relatively dry compost (AKA biosolids)
- Freestanding structure
- Easy to build
  - IKEA concept
- Uses local and easily accessible materials to maintain smell
  - Ex: peat moss, sawdust, worms
- Provides income generation ability
- Financed: “Get 1 build 10”
- Train the trainer
- Easy to dump (sized to support 6-7 people for 4-6 months)
- Communities provided with centralized collection point
- Sell toilets to other communities



# Uses of Biosolids

- Community revenue generation
- Sell as fertilizer to other communities
- Sell to energy companies for electricity generation
- Use fertilizer
  - Community based co-op garden
- Sell to produce natural gas for at-home use





# Financing Our Business

- Initial outlay includes:
- PPE (rented, bought, donated, leased)
- Training for employees
- Minor technology investment (electrical for solar panel)
- Raw material sourcing (local preferred)



A background image showing a dense field of blue water bubbles of various sizes, creating a textured, shimmering effect. The bubbles are more concentrated on the right side and become sparser towards the left.

# Why This Model?

- Our model leverages Water.org's existing demand driven model and local partners for identifying opportunities
- Low startup costs – Self Funding
  - Q-Drums are reusable, moved to next community once long term water supply is established
  - Multiple revenue streams reduce dependency on donations
  - Engages community



# A Comprehensive Solution

- Q-Drums Provides immediate relief to the community with existing water source
- Long term wells provides clean water on demand
- Employs people in the community to build toilet facilities
- Accessibility to water increases over time with usage
- Training people in the community to care for facilities helps ensure long term success





# Snap Shot of the Numbers...

- Assumptions:
  - 1 MM investment
  - Start Small and Scale Fast
  - Advertising by WOM
  - Do not reinvent the wheel
  - Demand for bio-solids
- Water Capacity
  - 3,850 Q-Drums
  - Cost of Q-Drums = 250k
  - 1K for Water Table Survey
  - 4K Drilling Cost
- Waste Capacity
  - Toilet Cost \$500
  - Cost of Toilets = 250k