



waterhealth  
Leading the Blue Revolution

Presented to the  
Base of the Pyramid Conference, 2007





# The Global Need

- Over 200 deaths per hour due to waterborne diarrheal diseases alone
- Stunted development of 60 million children annually
- Large scale infrastructure systems expensive and not economically viable for low density (rural) areas
- Conventional decentralized technologies uneconomical/unsustainable in most underserved environments
- NGO efforts are helpful but limited by nature

*A new approach is necessary*





# The WaterHealth Breakthrough

## Path-breaking patented technology platform

- Enabling lowest cost water disinfection/purification at scale
- Environmentally, socially, economically sustainable

## Innovative business models

- Decentralized “total” systems and services offering
- Non-traditional partnerships and channels to market
- Differentiated models for urban and rural segments
- Focus on health, high quality, and affordability

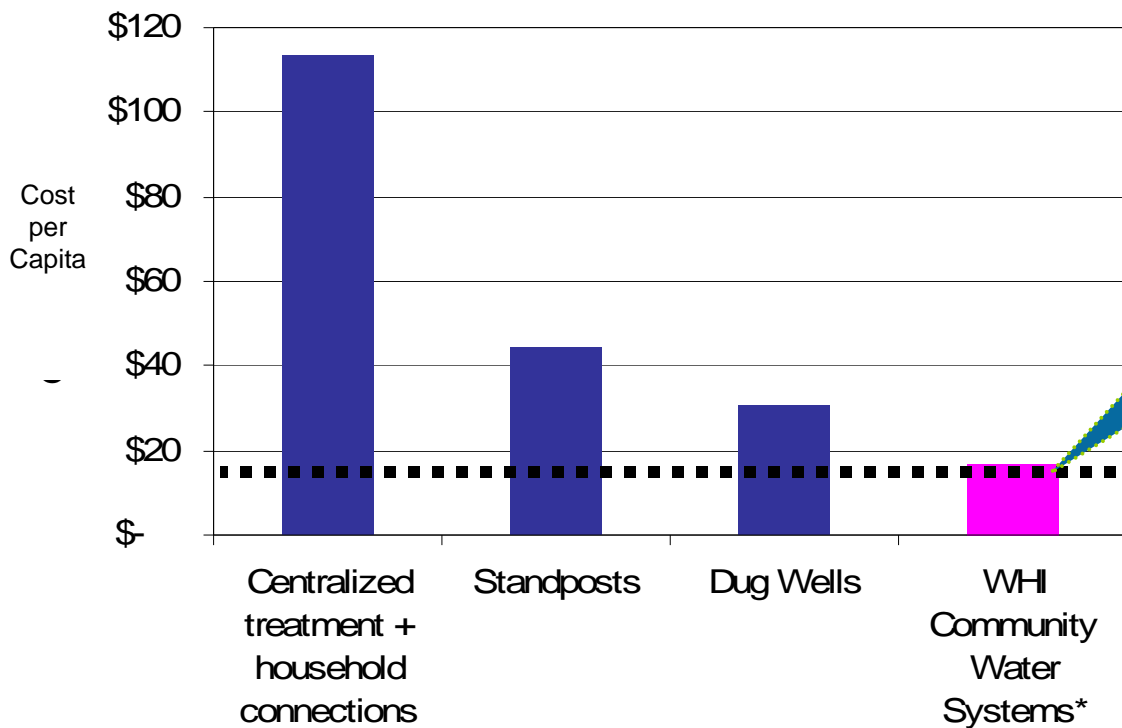
*Unique harnessing of critical elements for deep reach into underserved markets*





# WHI's Investment Cost Advantage vs. Other Treatment Options

Average per Capita Investment Costs for water provision and treatment



WaterHealth produces WHO-quality potable water at a lower capital investment per person than other interventions

Source: WHO/UNICEF Global Water Supply and Sanitation Assessment 2000 Report, average international per capita investment costs

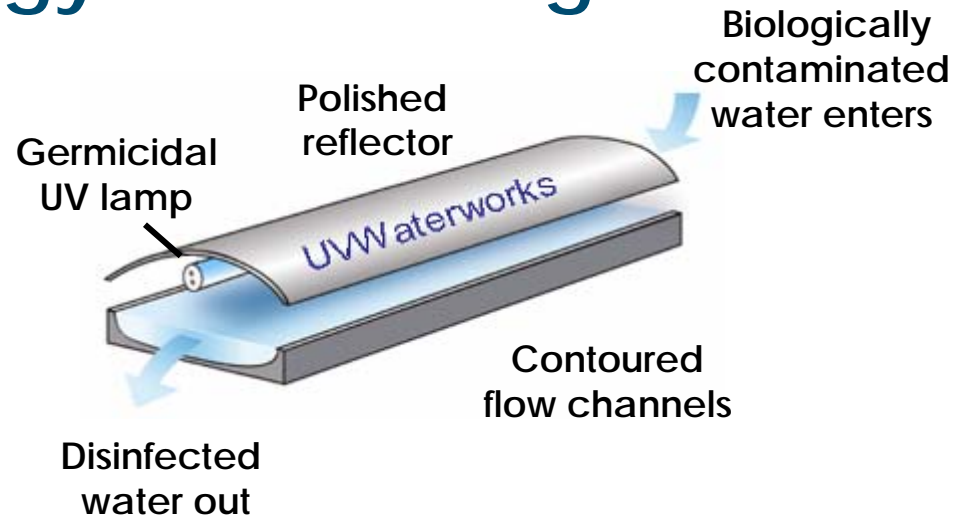
\* Based on WHI WaterHealth Centre serving 3,000 people with 10-20 Liters/person/day



# UV Waterworks™

## The Technology Breakthrough

- High efficacy
- High throughput
- Low operating costs
- Low energy requirements
- Low maintenance costs
- Robust and versatile





# Rural Water Solutions

## WaterHealth Centres<sup>™</sup> Turnkey micro-utilities Include:

- Site assessment and preparation
- Construction of multi-purpose community water treatment/collection facility
- Piping water up to 1km to facility
- Complete installation
- Operator training and management
- Maintenance services
- Education programs on health and hygiene
- Daily water tests
- Access to portable generators in event of power outages
- Water collection/storage containers
- Project financing

*Proven Performance in Challenging Environments*





# WaterHealth Centres™

*High-quality water for under-served markets*



- Turn-key, full service, community-owned micro-utilities
- Reach *thousands* with a single installation
- WHO-quality water sufficient to meet all potable water needs
- Self-sustaining through sale of treated water

# WaterHealth Centres™

## Engines of Growth



- Immediate health and development benefits
  - Reduced medical expenses
  - Long term development gains; healthier children during developmental years
- Productivity Gains
  - Reduced time spent collecting water
  - Increased wage-earning capabilities through improved health
- Environmental benefits
  - No water waste
  - Disinfection without chemicals
  - Avoided carbon emissions
- Economic development
  - Creation of jobs
  - Free cash flows benefit communities in which systems are installed (user-fee supported programs)
  - Self-sustainability enables government to use limited funds for other programs





# The India Example

- WaterHealth India subsidiary focused primarily on rural markets
- Championed by one of India's most prominent business leaders
- Leveraging NGO expertise through partnership
- Successful pilot program laid groundwork for commercial operations



Water collection before WHI



Local entrepreneurs deliver treated water

*Over 100 installations completed in ~18 months*



# Proven Rapid Implementation



## Case Study: India

- Installed capacity of > 1.3 billion liters/year implemented in Andhra Pradesh in ~18 months
- Unprecedented adoption rates
- Moving into other states in 2007

On track to serve  
>700,000 rural  
inhabitants of  
India by year-end





# Evolution of WaterHealth Centres – India

Transition to modular structures accelerates speed-to-implementation



Original Concept - 2005



Masonry Structure 2006 – Q1 2007



Modular Structure  
Q2 2007 and beyond

- Can be held in inventory
- Assembled rapidly in the field
- Replication of India model in new markets with greater ease



# Triple Bottom Line Impact

Economic	Social	Environmental
<ul style="list-style-type: none"><li>• Benefits of reduced healthcare expenses</li><li>• Productivity gains</li><li>• Engines of growth for communities<ul style="list-style-type: none"><li>• Excess cash flows accrue benefits to the communities in which systems are installed</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Relieves burden of waterborne disease</li><li>• Improved childhood development</li><li>• Relieves burden of water collection</li><li>• Improved health and hygiene habits</li><li>• Social development<ul style="list-style-type: none"><li>• \$1 invested yields \$7-\$34 return</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Conserves water – eases stress on water table</li><li>• High energy efficiency</li><li>• Reduces carbon emissions; generates carbon credits</li><li>• Eliminates chemicals from water treatment</li></ul>

*Multiplier Effects beyond Water*





# Summary



WaterHealth International –  
an innovative leader,  
providing  
affordable,  
sustainable,  
safe water  
solutions –  
to the world.



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