What is social entrepreneurship?

Developing innovative solutions to address society’s most pressing social problems and offering new ideas for wide-scale change.
What defines success?

Innovative & Transformative

Locally Sustainable: Economic, Technical, Operating & Environmental

Inclusive

Socio-Economic Benefits

... at scale
What we are doing
Who We Are

Board of Directors

Rita Colwell, PhD
Former Director, National Science Foundation; Professor at University of Maryland

Richard Delaney
SVP, International Operations, PepsiCo, Inc.

Robert Forrester
President & CEO, Newman’s Own Foundation

Christina Gold
Retired President and CEO, The Western Union Company

Hank Greenberg
Chairman & CEO, C.V. Starr & Co, Inc.

Harold Newman
Partner, Neuberger Berman

Linda Nordstrom
Founder, Northstream Development

Josh Weston
Retired Chairman & CEO, Automatic Data Processing

John Whitehead
Former U.S. Deputy Secretary of State; Former Co-Chair, Goldman Sachs

Joanne Woodward-Newman
Board Member, Newman's Own Foundation

Management Team

Charles Nimako, Director, Africa Initiatives
CEO of PepsiCo Bottler in Ghana

Ravi Sewak, India Country Director
Resource Sustainability Director for PepsiCo, India. Mechanical Engineer

Somnath Bandyopadhyay, PhD, Chief of Strategy, India
Senior Programme Officer, Aga Khan Foundation; Senior Ecologist for the Gujarat Ecology Commission.

Amanda Gimble, SVP, Strategy
Co-head of Corporate Strategy at Merrill Lynch

Hew Crooks, Initiatives, Impact
Emerging markets private equity firm focused on infrastructure, supply chain logistics and turnarounds

Bob Stea, VP, Technology Systems
Senior Research Engineer at PepsiCo focusing on water issues and water protection strategies
Our Purpose

Coordinated Action: From Pilot to Scale

Creating the Model ➔ Model Optimization/Proof of Concept ➔ Scale – Project Development ➔ Scale – Project Rollout

2008 2009 2010 2011 2012 2013 2014
Where We Work

Ghana
Field Initiatives & Office
“9 million people without access”

Kenya
Field Initiatives
“62% of rural Kenyans lack access”

India
Field Initiatives & Office
“500,000 children die annually from water-borne disease”

New York City
Headquarters
Data gaps in evidence-based research on small water enterprises in developing countries
Melissa C. Opryszko, Haiou Huang, Kurt Soderlund and Kellogg J. Schwab
Selection of “Opportunity” Areas

AFFORDABILITY OF INTERVENTION

Low/no risk

Moderate risk
(“Good bet”)

Very high risk
(“Daring”)

RISK OF INVESTMENT

Low

High

Cash poor

Some cash

More cash

Commercial/NGO franchising and intermediation for slum retailing 600 million

Point-of-use household water treatment (small towns) 600 million

Extension of piped services to urban slums based on utility reform 750 million

Social marketing and participatory hygiene behavior change 500 million

Franchised water vendors (small towns) 600 million

What is Needed?

Effective Partnerships
Facilities & Services
Creative Financing
Political Commitment
“To achieve impact in the short-term and at small scale is relatively easy. The challenge is to go to scale in a sustainable manner.”

Source: The Bill and Melinda Gates Foundation, Water, Sanitation, & Hygiene Initiative
Our Approach

In-field testing to solve critical challenges to sustainability

Field Initiatives
Our Approach

In-field testing to solve critical challenges to sustainability

Establish an evidence base, develop scale proposition and disseminate findings
Our Approach

- In-field testing to solve critical challenges to sustainability
- Establish an evidence base, develop scale proposition and disseminate findings
- Engage expertise to develop and implement scale propositions
Decentralized Water Purification Systems

- Community-sized
- Revenues cover operating costs; in some cases capital
- Owned and operated by village committee or entrepreneur
Decentralized Water Purification Systems

Field Implementation:

- Community Mobilization
- Site Assessment
- System Design
- Installation & Training
- Launch
- Operations & Maintenance
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A-Z Safe Water Station Manual
Training local operators
Decentralized Water Purification Systems

Working within the regulatory environment
Demand generation
Decentralized Water Purification Systems

Cost-effective distribution to expand reach
Health & Hygiene: Education

Prevent Cholera
Wash your hands
With soap before...

Eating and after
Visiting the toilet
Testing for Outcomes: Independent assessments
Loans to self-help groups
Water charges for economic sustainability
Decentralized Water Purification Systems

Wash basins to clean containers
Decentralized Water Purification Systems

Data Analysis and Reporting

- Field Data
- Centralized Data (all projects monthly since inception)

- Sales
- Operating
- Census
- Health measures
- GPS
Decentralized Water Purification Systems

Score-Carding:

- Access/Coverage: 90% of population
- HH Penetration: 75% of people with access
- Retention: 80% of customers weekly
- Water Quality: WHO for microbial contaminants
- Failure Rates: 5% down time
- Wastage: < 5%
- Hours of Operation: 12 hours / 7 days
- Technology: Locally maintained & operated
- P&L: Opex covered, surplus for capex
- Production Cost: Less than 2 cents per 20L
- Handoff: Credible path in place

= unknown
What we are learning
Lessons Learned From Field Initiatives

Action: “Container program” to improve water transport, storage and handling

Result: Reduced disease and increased adoption rates

Key Finding: Programs responsive to local drivers improves adoption
**Action:** Demand generation and hygiene education

**Result:** Achieved 85% household penetration and operating profit

**Key Finding:** Be responsive to local conditions and demands
Lessons Learned From Field Initiatives

**Action:** Remote monitoring system pilot

**Result:** Real-time information to respond to consumer and operating issues

**Key Finding:** Low-cost, accurate and sustained monitoring can support scale initiative
Lessons Learned From Field Initiatives

**Action:** Installed remote kiosks to expand reach

**Result:** Volume increased 75% Year over Year

**Key Finding:** Coverage significantly increases household adoption and improves capital utilization
**Action:** Clean water delivered to girl’s school in Rajasthan

**Result:** Fewer sick days

**Key Finding:** Health benefits and economic savings are significant

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### Avg. Monthly Bill

<table>
<thead>
<tr>
<th></th>
<th>Previous</th>
<th>Present</th>
</tr>
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<tbody>
<tr>
<td>Medical</td>
<td>$133</td>
<td>$44</td>
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<tr>
<td>Water</td>
<td>$16</td>
<td>$31</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>$149</strong></td>
<td><strong>$76</strong></td>
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</tbody>
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**Monthly Savings**

$73
The Unanticipateds

Broken pipes in Ghana
The Unanticipateds

Abandoned foundation in Ghana
Source Water Challenges
Local standards and controls
The Unanticipateds

Culture of giving in India
The Unanticipateds

Reduction in infections from bathing
Our partnerships
We engage expertise to develop and implement scale propositions:
Development of Business Analytics Platform (IBM)
Market Feasibility (IFC Collaboration in Kenya)
Developing the case for decentralized water solutions
Consumer & Community Behavioral Study (Merck Foundation)
Formative research to develop improve interventions

Community Education

Safe Water Network “Learning Materials”
Working with Others

Market Knowledge and Experience (PepsiCo)
Last-mile capability and operations

- Management Fee (Technical / Operating)
- Repair
- Consumables
- Electricity
- Other
- Personnel

4.5¢/20L by June 2012

Technical costs of current solution

Potential Further Optimization

4.5¢ per 20L

3.4¢ per 20L: Gap

Goal: 2.0¢ per 20L

Main Site + 4 Remote Kiosks
Priorities Going Forward

- Establish an evidence base
- Identify and test successful models
- Prove potential for scale
- Disseminate best practices across sectors
- Engage functional experts to solve challenges
Thank You