WaterHealth International
IFC Dakar Conference
June 5, 2012
Africa is poised for significant growth – but basic infrastructure still lags

- Africa is in the initial stages of explosive growth:
  - As a continent, economic growth of over 5%, with many countries (e.g., Ghana at 13.5 real GDP growth in 2011) exhibiting much higher levels
  - Driven by a resource boom (oil discoveries on the west coast), exports (e.g., Cocoa in Ghana, rubber in Liberia)
  - Tangible government changes resulting in political stability, market driven policies
  - A record 36 of 47 Sub-Saharan countries (World Bank Business Report) improved regulatory environments

- Foreign Direct Investment (FDI) in Africa increased from $9 billion in 2000 to $62 billion in 2008 (almost as large as the flow into China when measured relative to GDP)

- New ecosystems around financial services, mobile technologies, basic infrastructure are also driving growth

- The African Development Bank estimates that in 2010, the middle class had risen to 34% (in the range of 300-500m)

- However, Africa is lagging behind on providing basic infrastructure - Africa has the lowest drinking water coverage of any region
The lack of infrastructure provides WaterHealth with the opportunity to be the provider of choice

- High demand, little supply of clean and safe quality water – a largely untapped market

- Only a quarter of the population 25 sample Sub-Saharan countries had water on their premises in 2010, meaning that in 75 per cent of households, water had to be collected from a source some distance from the dwelling. (Water Report, 31)

- Old model of development (i.e., the aid model) is being challenged, and results based finance is gaining primacy as is the recognition of the need for public-private partnerships

- There are calls for improving the global monitoring of quality of development, including not only access to drinking water, but its quality

- African populations are becoming better informed, assertive and are demanding development and more accountable governments. This includes pressing for the rule of law, property rights and a higher quantity and quality of public services and development

- Africa is a popular destination for CSR engagement – either as aid or to support and strengthen supply and value chains

Africa is a huge opportunity for companies willing to make the investment in time, resources and finances
WaterHealth Centres

- Complete **skid mounted** water treatment system housed inside a modular contemporary structure
- Standardized sizes from 20,000 liters/day, 65,000 liters/day and 100,000 liters/day but can be expanded easily due to **modular design**
- Designed to service communities of **2,000-10,000** people but expansion allows higher community sizes to be accommodated
WHI Business Model

- **Decentralized WaterHealth Centres** help combat the problem of waterborne disease
  - Safe Water at low cost
  - Can be constructed and put into operation quickly
  - Branded Product
- **Sustainable** model allows for long term operations for an initial one time investment using water revenues to pay for operation and maintenance
- **Scalable business** model allows thousands of WaterHealth Centres to be constructed, operated locally and managed centrally
  - State of the art technology platforms
  - Remote sensing and monitoring of all water health centers
  - Efficient supply chain management and logistics system
- **Technology Agnostic** model uses the most competitively priced technology wherever it may exist
- **Flexible financing** model:
  - WHI model has demonstrated the use of private funds to scale
  - Debt is used as leverage only where indicated by economic model
  - Grants from corporate foundations are not part of the capital structure of WHI, instead corporate foundations become purchasers of WHC’s for the community
Lifecycle of a WaterHealth Centre

- **WHC (Equipment and Facility) is set up in partnership with the Community**
  - Community provides land and access to local water source. WHI arranges for rain water harvesting if needed to make the water source perennial.
  - Community makes cash down payment depending on size of community and availability of local financing. Cost per head is very low, a fraction of what was calculated by the World Bank in connection with the Millennium Development Goals.
  - Local and development banks finance remainder of capital costs with a long term fixed price loan. WHI arranges the financing.

- **User Fees charged for water purification**
  - Very low cost compared to alternatives in all markets.
  - Water is sold at the WHC through 20 litre cans or through delivery services.

- **WHC is managed through a long term service & quality monitoring contract with community**
  - WHI manages the operation and maintenance of the WHC under a service contract with community for 10-15 years (matches term of loan).
  - WHI runs community education programs in the villages.
  - Service charges for operation, management and maintenance are paid to WHI from user fees that are collected from water revenues. Debt service if any is recovered next and the operating surplus is shared between the community and WHI.

A one time payment for the WaterHealth Centre with no further investment requirement from the community, makes for a sustainable water supply.
WHI Funding Partners

- Investors looking to invest in a sustainable platform which provides safe drinking water for the more than billion underserved population

Corporate Partners / Customers

- Safe Water for Africa Partnership to establish 200 WHC’s in West Africa and provide access to potable water to 2 Million people

JV Partners (Bangladesh)

- Established JV to construct 500 WHC’s over 5 years to impact 5 Million people with safe drinking water
SAFE WATER FOR AFRICA
Program Summary

Safe Water for Africa is a business-driven safe water access program in West Africa formed by a partnership between the private sector, multi-lateral agencies and local governments.

- **2011**
  - 2 countries
  - 5 communities
  - 46,000 beneficiaries

- **2012**
  - 3 countries
  - 43 communities
  - 430,000 beneficiaries

- **2015**
  - 6 countries
  - 500 communities
  - 5 million beneficiaries
Benefits of the Partnership

• **Benefits**
  
  • *Sustainable Impact*: Provide safe water to 5 million people by 2015 through a sustainable, reliable, innovative service delivery model.
  
  • *A Customized Approach*: Select specific communities* and countries (among 4 targets) for intervention based on donor/CSR priorities.
  
  • *Leverage the Coalition*: Achieve at least 10-20X leverage as a member of a $10 million safe water partnership among leading organizations.
  
  • *Efficient Investment*: 100% of contributions support the purchase of community WHCs (overhead costs completely covered by WHI’s equity investment) with transparent accountability.
  
  • *Branding and Media*: Opportunity to brand WHCs with your logo; periodic visits can be coordinated for company officials, stakeholders, and media.

*Communities will need to be vetted to ensure that intervention can be sustained in the long-term.*
Liberian President Ellen Johnson-Sirleaf Speaking at the Inauguration of WHI’s First SWA Site in Liberia

“I applaud [the] efforts to increase access to clean water in Liberia through the Safe Water for Africa program. [...] As we rebuild our country, we encourage all stakeholders to support our development goals.”

-- Nobel Laureate, President Ellen Johnson Sirleaf speaking at the launch in Liberia in November 2011
2012 Program – Expecting to provide access to over 400,000 people with current funding raised

<table>
<thead>
<tr>
<th></th>
<th>Quarter 1</th>
<th>Quarter 2</th>
<th>Quarter 3</th>
<th>Quarter 4</th>
<th>Total population with access</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GHANA</strong></td>
<td>4 sites operational</td>
<td>11 total sites operational</td>
<td>12 total sites operational</td>
<td>Expansion plan to be determined</td>
<td>120,000</td>
</tr>
<tr>
<td><strong>NIGERIA</strong></td>
<td>Site selection</td>
<td>5 total sites operational</td>
<td>10 total sites operational</td>
<td>25 total sites operational</td>
<td>250,000</td>
</tr>
<tr>
<td><strong>LIBERIA</strong></td>
<td>1 site operational</td>
<td>Site selection</td>
<td>3 total sites operational</td>
<td>6 total sites operational</td>
<td>60,000</td>
</tr>
</tbody>
</table>

Red = Operational Sites; Blue = Identified Sites

GHANA

LIBERIA

NIGERIA

Locations TBD
WaterHealth Center in Ghana
WHC’s in Action

Vantage Point

Pakro WHC

Free Water Day in Asukawkaw
# Africa Challenges

<table>
<thead>
<tr>
<th>Risk</th>
<th>Risk Level</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>Scalability of Business</td>
<td>![Low]</td>
<td>Ability to scale business in multiple countries simultaneously is challenging</td>
</tr>
<tr>
<td>Demand for Water</td>
<td>![Low]</td>
<td>Demand for water exists – market driven approach requires nominal user fees but some areas dominated by aid agencies</td>
</tr>
<tr>
<td>Inflation</td>
<td>![Low]</td>
<td>Relatively high inflation cannot be offset with higher prices – operations need to be managed more efficiently</td>
</tr>
<tr>
<td>Currency Risk</td>
<td>![Low]</td>
<td>Revenues are in local currency, returns are expected in USD</td>
</tr>
<tr>
<td>Cash Management (Theft/Pilferage)</td>
<td>![Low]</td>
<td>Loss of cash and equipment possible in some areas – precautions need to be taken</td>
</tr>
<tr>
<td>Electricity (Lack of)</td>
<td>![Low]</td>
<td>Lack of electricity results in increase in costs – solar solutions only now becoming economically viable</td>
</tr>
<tr>
<td>Safety</td>
<td>![Low]</td>
<td>Areas of conflict in various African countries needs to be evaluated carefully before market entry</td>
</tr>
<tr>
<td>Availability of Talent</td>
<td>![Low]</td>
<td>Hiring management and technical talent is a challenge</td>
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**Key:**
- ![Low]  Low
- ![High]  High
WHI is an innovative private enterprise bringing Safe Water to people worldwide