

transforming the way people get water



WaterHealth Ghana Presentation –
Standards to Support U.S.-Ghana Trade and
Investment
Accra, Ghana
March 31st, 2017

Contents

- I. Global Scenario
- II. Introduction to WaterHealth
- III. Ghana Overview
- IV. Proposed Plan
- V. Program Highlights
- VI. WHCs Rollout



I. Global Scenario



**OVER 783 MILLION
PEOPLE ON THE PLANET
DO NOT HAVE CLEAN DRINKING
WATER!**

=

**ONE IN TEN OF WORLD'S
POPULATION**



**OVER 700,000 CHILDREN
IN AFRICA
DIE ANNUALLY DUE TO UNSAFE
DRINKING WATER**

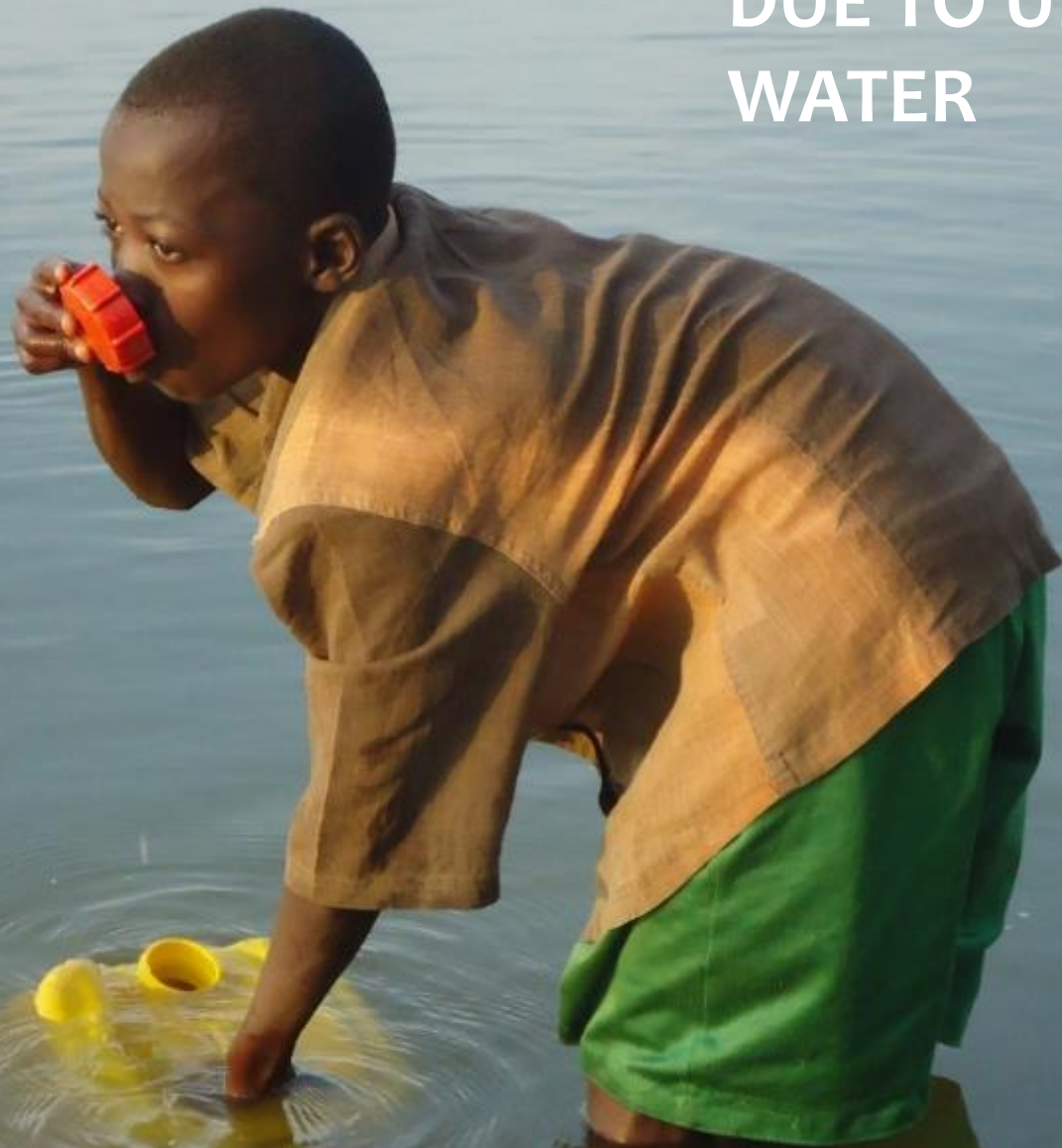


**ONLY 0.3%
OF WATER ON
EARTH IS USABLE**

~1,000,000,000

One billion

AT RISK EVERYDAY
DUE TO UNSAFE
WATER



**EVERY
90
SECONDS**



**A child
dies from
unclean
water.**



unite for children

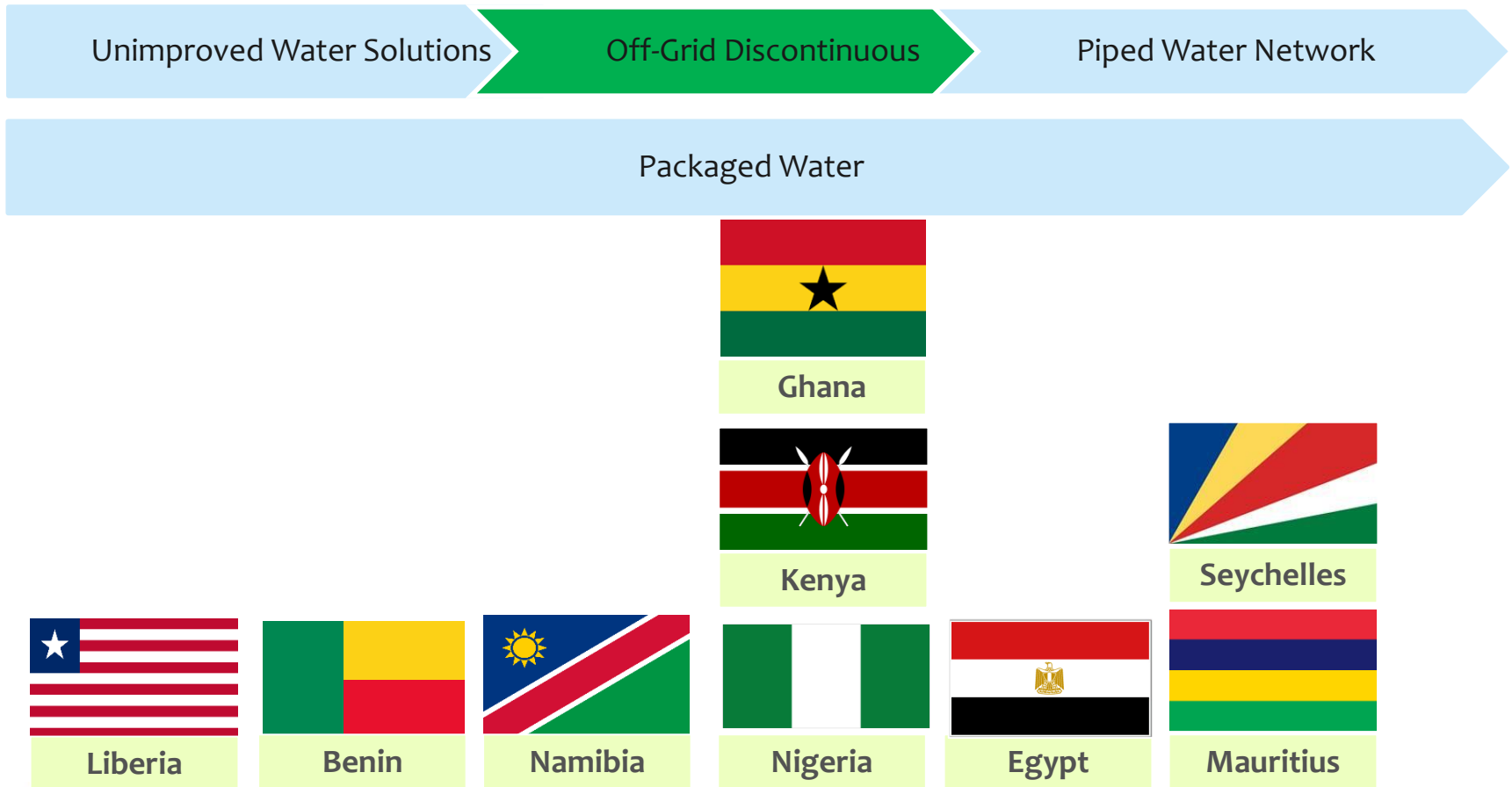
I. Global Scenario – Drinking Water Sources (Utilization)

Different countries utilize different water sources. While one end represents least developed nations that utilize only surface water to meet drinking water needs, the other end represents developed nations which effectively utilize all the different water sources.



I. Global Scenario – Drinking Water Solutions (Developing Nations)

The focus of most developing nations is to move away from the scenario of no water infrastructure to having 24 X 7 piped water access. But most countries do not understand that a 100% access to piped network would take considerable investment, time and effort.



I. Global Scenario – Drinking Water Solutions (Developed Nations)

All developed nations have 24 X 7 access to piped drinking water due to availability of world-class infrastructure and adequate investment by the government to strengthen the water sector.



Not all models are applicable everywhere



II. Introduction to WaterHealth – why we exist?



- WaterHealth, a global leader in decentralized drinking water solutions.
- WaterHealth is currently providing safe water access to over seven (7) million customers through the brand name dr. water in underserved communities.
- Currently operating in India, Ghana and Nigeria.

What do we solve?

Whom do we serve?

How do we serve?

The 'Need'
for safe drinking
water

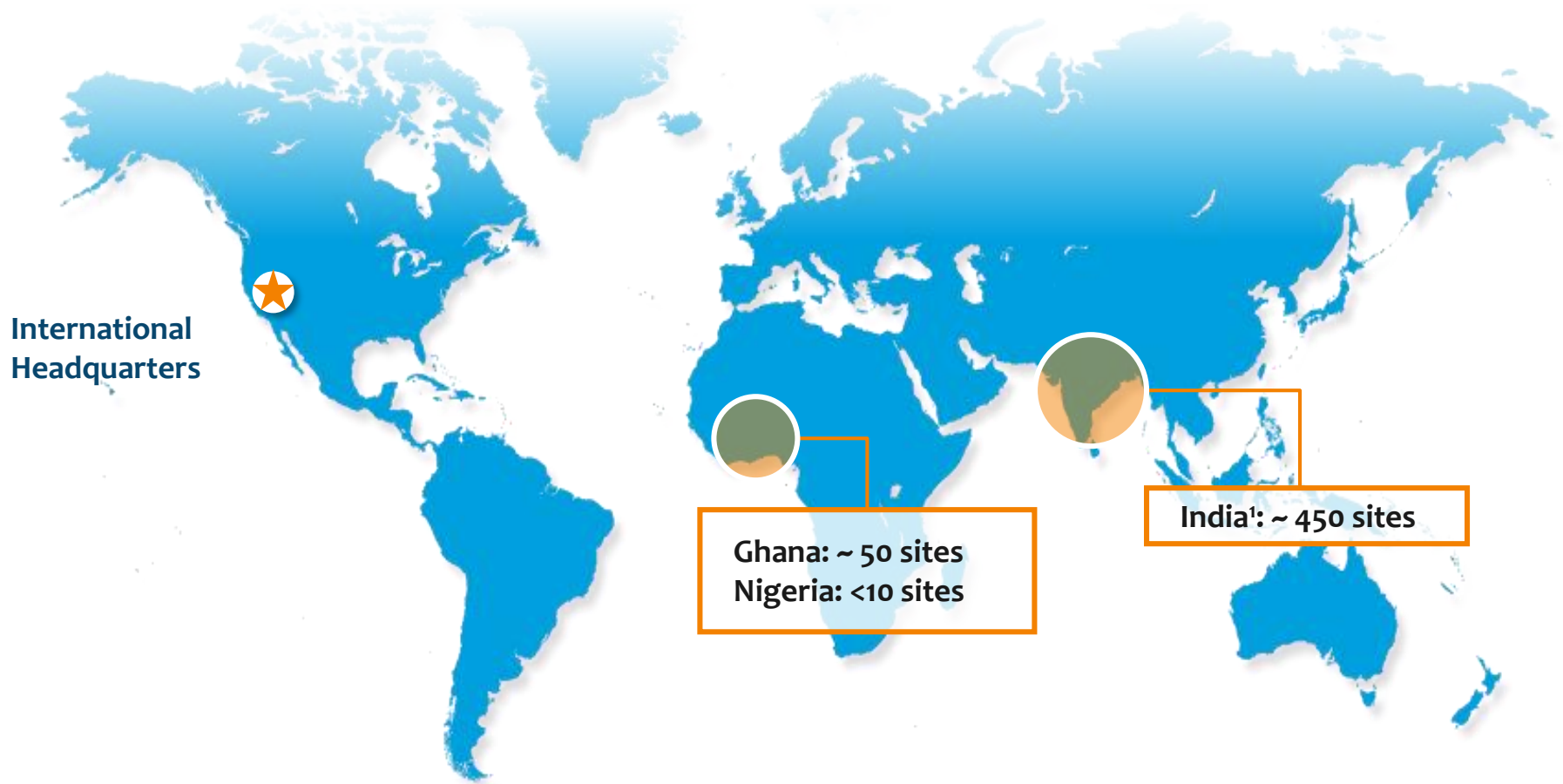
The
underserved
communities

Innovative
water solutions



II. Introduction to WaterHealth – Global Presence

‘Safe water access to over seven (7) million people worldwide’



WaterHealth International (WHI) plans to install 5,000+ systems by the year 2020.



II. Introduction to WaterHealth – Vision and Mission

WaterHealth aims to provide safe water access to large number of communities.



Vision

To be the global Leader in providing **scalable**, **safe** and **affordable** water solutions to the underserved communities through **innovative business models**.



Mission

To serve over **100 million consumers by 2020**.



II. Introduction to WaterHealth – Treatment Solution Comparison

Decentralized Community Water Systems
vs.
Traditional, large-scale water treatment plants



S. No.	Parameters	Decentralized Systems	Centralized Systems
1	Capital Investment	Small per system investment (\$4.8 per beneficiary).	Large upfront investment (\$22.6 per beneficiary).
2	Installation Lead Time	Short, 8-10 weeks.	Long, 3-5 years.
3	Operations and Maintenance	Designed to be simple and therefore easy to operate and maintain.	Complex, requires specialized skills and long down time.
4	Quality Monitoring	Local, where consumers are served.	Central, very far from the point of consumption.
5	Raw water source	Optimized to make use of local sources like lakes, ponds, bore wells etc.	Requires extra-large water sources like river, dams etc.
6	Adverse impact on environment	Low, since <1% of overall water consumption in a community is utilized leading to optimal use of natural resources.	High, since the project would utilize large quantity of surface water thereby putting a lot of stress on the ecosystem.
7	Impact of plant breakdown	Limited people are affected due to decentralized operations of the plant and water access can easily be provided through alternative sources.	Large number of people are affected, difficult to provide safe water access due absence of immediate alternative solutions.



II. Introduction to WaterHealth – A transformational solution.

WaterHealth is providing **safe, reliable** and **affordable drinking water** to the underserved communities worldwide.

end-to-end, sustainable, and scalable



Water Purification
Plant

Operations and
Maintenance

Quality
Monitoring

Social Marketing



II. Introduction to WaterHealth – WaterHealth’s Impact

- WaterHealth has conducted a study to estimate the socio economic status of WHC household customers in a community. Some of the key findings of the study include,



86%

of regular WHC customers are in IFC’s ‘base of pyramid’, having per capita consumption below \$8 per day.

50%

of regular WHC customers would have used sachet water in the absence of a WHC, that is priced higher than the water from a WHC.

5%

of regular WHC customers are earning less than \$ 1.25 per day.

-
- Another study conducted across three (3) communities (Nsuta, Abenkro and Mampong) in Ghana where WHCs are operational has revealed that,
 - about 62% of the people (in Nsuta community) relied on WHC for their primary source of drinking water.
 - More than 60% of the community members rated WHC excellent on ‘neatness of the surroundings’ and ‘neatness of water’.
 - Most of the people (Mampong and Nsuta community) preferred WHCs over the other water supply system.



II. Introduction to WaterHealth – Impact Story # 1

One of the many stories that narrates WaterHealth’s Impact.



“dr. water is the safest and purest drinking water within in the community”

For some time now we have been using tap water but we decided to use dr. water when WaterHealth opened their WaterHealth Center in our community. It is the safest and the purest water within the community. The school kids have stopped drinking from the sachet water, they fetch water from WaterHealth Center in dr. water jerry can so we don’t waste water anymore. I am also happy with the prompt delivery of the water by the deliveryman.

- Anna Mills-Awoo, Unique Care International



II. Introduction to WaterHealth – Impact Story # 2

Other story elucidating WaterHealth’s Impact.

“The water is fresh to drink and has no added chemicals unlike the other brands”



Earlier I was selling only other brands of water but when the Ashaley Botwe WaterHealth Center started, the Relationship Executive (RE) for the plant came and introduced me to dr. water and WaterHealth Ghana since then I have started to strongly promote dr. water. The water is fresh to drink and has no added chemicals unlike the other brands.

I also don't know how the other brands purify their water but with dr. water I know how they run their treatment processes so I have the confidence that they provide high quality water. I even recommended them to a school in the community and pray that dr. water becomes number one.

- Antoinette Setorwu, Aqua World Enterprise Dome



Sales and Distribution



Push cart



Tricycle



Ghana Consumer Benefit Communication

“We drink dr. water.
We are **9 times** healthier!”



dr. water consumer households are 9 times*
less likely to experience a waterborne disease
as compared to non-using households

Customer Helpline **0501278725**



*As per WaterHealth Impact study conducted by IMRB, India for International Finance Corporation

A product of
water health

dr. water
SAFE DRINKING WATER

Now get two dr. water
fridge bottles free
on purchase of dr. water jerry can



- It's safe and hygienic to use
- Carry anywhere you go – School, Office, Gym
- Light weight, economic and durable
- Recyclable
- Available at a WaterHealth Centre near you

WaterHealth Centre



Customer Helpline:
0501278725

A product of
water health

dr. water
SAFE DRINKING WATER



Ghana Consumer Connect



- dr. water branded house name plates have helped connect with consumers apart from increasing awareness.
- The program aims to build a sense of pride in dr. water consumers (sate the emotional need to justify brand adoption) and spread word of mouth.



Social Campaigns

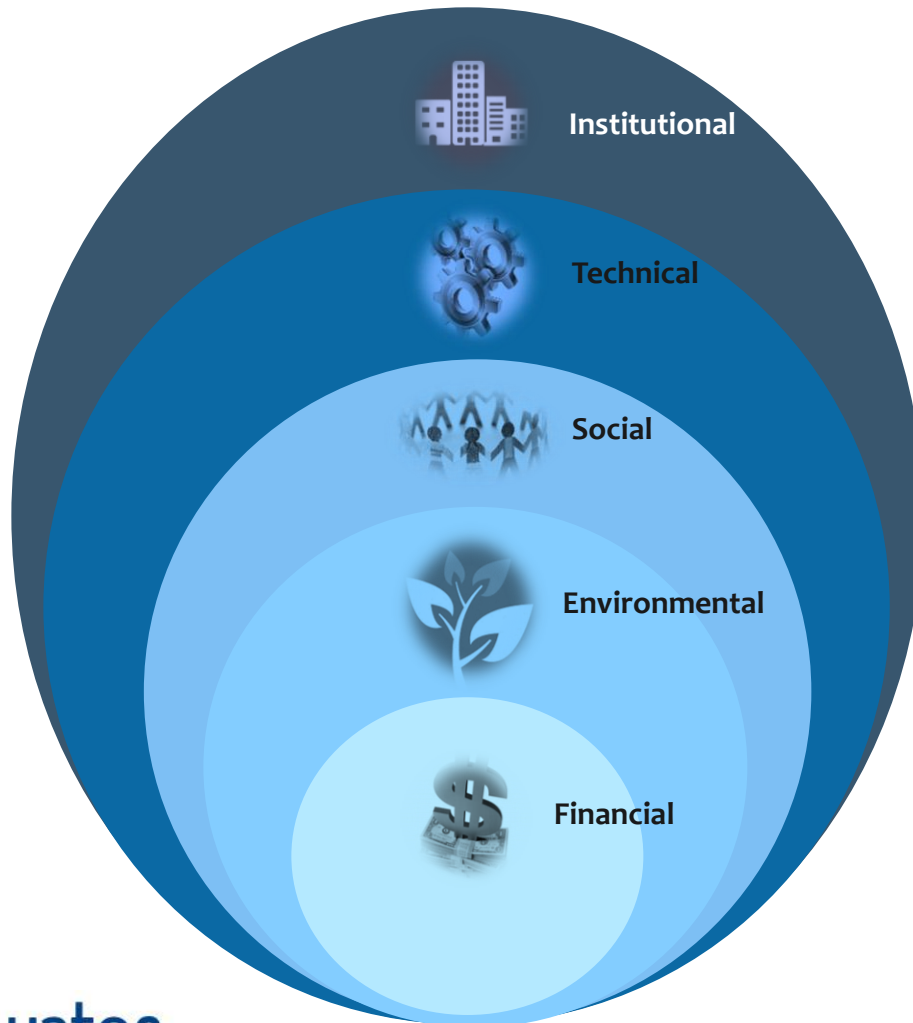
A business that drives social transformation in the community

- The Company's scope of work extends beyond the purification and water life cycle management, WHG runs well conceived Social Marketing programs to change Community behavior towards safe drinking water.
- These programs are customized to spread awareness about the health benefits of safe water, even in communities where little or no healthcare knowledge exists.
- Presence of WaterHealth Center in the community impacts as a greater productivity at work and improved attendance in schools due to reduced instances of waterborne diseases. It also improves community economy by creating entrepreneurship and employment opportunities for residents.



II. Introduction to WaterHealth – Sustainability Program

WaterHealth defines five (5) pillars of sustainability. WaterHealth,



involves local institutions to drive community engagement improvement.

runs 6 stage purification technology, Modular design, easy replacement of defective parts/equipment

runs social marketing programs to bring behavioral change.

consumes less than 1% of water used by communities, High water recovery (70% efficiency), Rain water and Reject Water Harvesting

is the lowest cost producer in Community Water Systems.



III. Ghana Overview

- Ghana is one of the most densely populated countries in West Africa.
- According to an estimate, 40% of urban population is covered under piped network. Inadequate investment in water infrastructure over the past few decades has restricted the piped water growth. Subsequent water rationing, poor quality of water and limited storage systems leave large parts of the population with inadequate potable water.
- Only around 49% of rural population has water access through boreholes, hand-dug wells and small piped systems.
- Where lack of infrastructure and/or rationing have left a void, entrepreneurial water vendors have stepped into sell water in three (3) general delivery modes i.e. water tanker supplies, tap water and packaged or sachets with varying degrees of filtration or disinfection.



IV. Proposed Plan – ‘Safe Drinking Water Access’

- Based on the experience and understanding of various customer groups, WaterHealth Ghana intends to provide safe and clean drinking water access to the underserved communities of Ghana i.e. the ones that face significant water contamination.
- The equipment designed by WaterHealth is customized to remediate the contamination in the raw water source.
- The plan is to provide safe and affordable drinking water access to over twenty (20) million consumers by 2020.



IV. Proposed Plan – Proposed Solution(s)





The various solutions proposed by WaterHealth and Jaldhaara Foundation to serve the underserved communities in Ghana include,

1. **WaterHealth Center (WHC)** is a decentralized water treatment system which provides affordable, safe water to underserved people sustainably. The WHCs are ideal solutions for serving a community which have a population ranging between 10,000 - 20,000 people.
2. **Water Vending Machine (WVM)** is an automated water purification system which provides 24 x 7 safe water access to the people. The ability to purify and dispense water makes this an ideal solution for small communities with population of less than 4,000 people.
3. **Autonomous Transportable Operating Module (ATOM)**, WaterHealth has recently added ATOM to its product line. ATOM is a low cost, rapidly deployable containerized unit which has advanced controls and remote monitoring capabilities. All these capabilities make ATOM an ideal solution for disaster relief and rehabilitation operations.



V. Program Highlights – ‘Safe Drinking Water Access’

The details of the phased plan that is currently being implemented by WHG are indicated below.

S. No.	Program Name	Phase	Period	WHCs Installed	Current Status	Partners	Products
1	Establishing foothold	Phase I	2008-15	~ 30	Concluded	Safe Water for Africa (SWA) ¹ , Water and Development Alliance (WADA) ²	
2	Safe water for urban underserved	Phase II	2015-17	~ 85	Currently in progress and is available/open for funding of WHC.	Netherlands Enterprise Agency (RVO)	
3	Safe water for rural and remote areas	Phase III	2017-20	a) 130 – 140 WHCs in large communities b) ~ 1,000 WVMs in high footfall locations	Initial program planning in progress	Jaldhaara Foundation Ghana	 



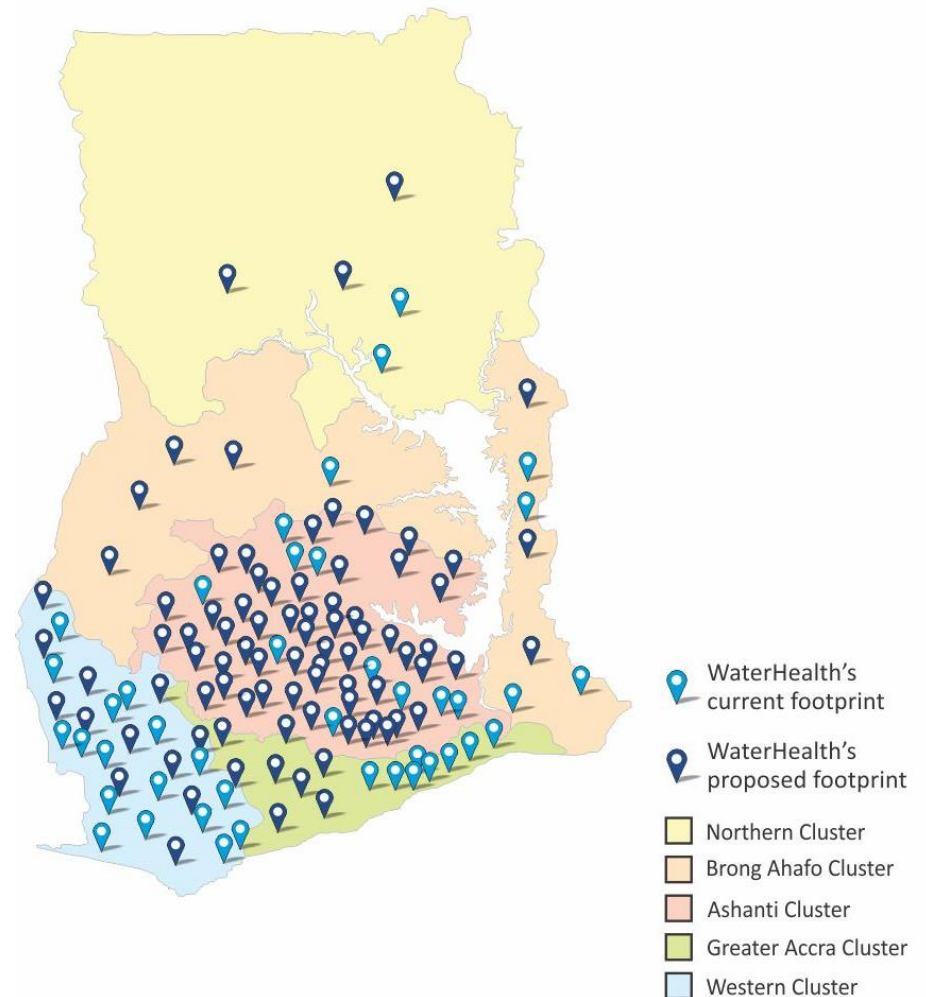
VI. WHCs Rollout – Proposed Footprint

- **Current Footprint**

- i. WaterHealth Ghana (WHG) launched its operations in 2008 and during the first phase (i.e. 2008-15) of establishing its footprint in the Country, the Organization installed about thirty (30) WHCs across various regions in Ghana.
- ii. WHG’s Phase II focuses on providing safe drinking water access to urban underserved communities across various locations in the country.

- **Proposed Footprint**

- i. WHG intends to conclude the Phase II in 2017 by setting up 115 WHCs cumulatively.
- ii. WHG has already started the process of conceptualizing Phase III that will also cover rural and remote underserved areas. The proposed plan is to set-up another 250 WHCs during this phase



GWW Project Launch



WHC Launch event in Kantinkyiren community.



WHC Launch event in Effiduase community

- His Majesty Otumfuo Osei Tutu II inaugurated the Community Water System to provide clean and safe water to the people of Kantinkyiren in the Ashanti Region. Representatives from the Otumfuo Charity Foundation, DWP (Dutch Water Partners), the local government, Chiefs of various communities, NGO partner GLOWDEP and a large gathering of community members and media attended the function besides the top management of WaterHealth.
- Chief of Effiduase community, Nana Adu Ameyaw II, inaugurated the WaterHealth Center in the community. It was attended by important members from the Community and the Assembly apart from representatives from WaterHealth.



Commissioning Kantinkyiren WaterHealth Center



Welcoming His Royal Majesty Otumfuo Osei Tutu II-The King on the Golden Stool



Commissioning Kantinkyiren WaterHealth Center



Commissioning Kantinkyiren WaterHealth Center



Inauguration Ceremony Effiduase WaterHealth Center



Young students trained by GLOWDEP to reciting poems on dr.water and safe drinking water



Traditional drumming and dancing troupe



Ribbon-Cutting Ceremony by Nana Adu Ameyaw II



Inauguration Ceremony Effiduase WaterHealth Center



Young students trained by GLOWDEP to reciting poems on dr.water and safe drinking water



Traditional drumming and dancing troupe



Ribbon-Cutting Ceremony by Nana Adu Ameyaw II



Half way mark Celebration.

Some of the images of the launch event have been given below.



Panel : Mr. Sarpong of KOSMOS, Mr. Kuzoe [middle], MTN Foundation and Mr. Vikas Shah of WHI



Mr. Willams moderating the panel discussion



Half way mark Celebration.

H.E. Ron Strikker, the Ambassador of the Kingdom of Netherlands to Ghana [right] and Mr. Fred Smiet [left] observing proceedings



Half way mark Celebration.



Fred Smiet ,first secretary , Ron Strikker, the Ambassador of the Kingdom of Netherlands ,, Mr Vikas Shah WHI, Melinda Tabler-Stone and Mr Cosmos B. Kambozia. MLGRD



Half way mark Celebration.

Some more images of the JF Ghana launch event.



H.E. Ron Strikker, the Ambassador of the Kingdom of Netherlands to Ghana addressing the audience at the event.



Mr. S.R Amji from the Indian Embassy [middle].



Thank You

Prashant G. Kulkarni
WaterHealth Ghana
Mob: +233 501526275
gprashant@waterhealth.com. www.waterhealth.com

