



**safe water
network**



Beyond the Pipe: Achieving Local Sustainability

Introduction & Breakout Session Descriptions

Date: March 20, 2013, 9am-4pm

Place: Holiday Inn, Airport City – Accra

Special Thanks To:

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Hydrologist &
Former Director of Water
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Works & Housing

A MESSAGE FROM CHARLES NIMAKO, SAFE WATER NETWORK COUNTRY DIRECTOR-GHANA

Dear Attendees:

The 'Beyond the Pipe' series has been organized to stimulate discussion, exchange ideas and promote collective action among leaders from government, NGOs, and the private sector. Today's forum is the fourth in this series, and our first in Ghana. The purpose of today's event is to bring together these key stakeholders in Ghana's water sector to develop a comprehensive sector agenda for advancing the sustainability of pro-poor safe water systems at the community level in 2013.

Each of us works toward developing solutions to provide safe drinking water to those most in need. We all bring important perspectives that contribute to the goal of enabling water systems to operate sustainably as self-sufficient "Local Operating Units."

We may not agree on everything, but I think it is fair to say that we are all searching for the most cost-effective ways to deliver reliable, safe and affordable water in a manner that realizes measurable health and human development benefits. Perhaps we can also agree that there is value in a more coordinated effort, because no sector is equipped to solve this alone. How we do this is the challenge.

I hope today we can make some progress towards that end. By exchanging ideas and exploring new ways to work together, we can accomplish considerably more than on our own. And by committing our best people to the problems at hand, we can innovate and execute at the level required to deliver enduring solutions.

I also hope that today's discussions will spark fresh thinking, that introductions will create new partnerships, and that old acquaintances will renew efforts. Your participation is an important part of this process. Your perspective and input is an essential ingredient to finding these solutions together. Thank you for coming and please let me know about your experience so that we can build upon today's event.

Finally, I'd like to acknowledge and offer a special thank you to the Conrad N. Hilton Foundation for their support for this Forum and our Market Assessment work upon which it builds, and also to our other sponsors: Kosmos Energy, Newman's Own Foundation, PepsiCo Foundation and USAID.

Sincerely,

Charles Nimako

March 20, 2013

BEYOND THE PIPE FORUM- 2013

This document presents an overview of Safe Water Network's 2013 Ghana Forum, "Beyond the Pipe: Achieving Local Sustainability." Given the high failure rate in the water sector, it is critically important to develop and codify approaches to enable community water systems to operate as sustainable, self-sufficient "Local Operating Units." The purpose of the Forum is to bring together key stakeholders in Ghana's water sector to share insights, build a dialogue, and develop a comprehensive sector agenda for advancing the sustainability of pro-poor safe water systems at the community level in 2013.

The development of this Forum was informed by Safe Water Network's field experience and by the output of the Ghana Market Assessment we completed with funding from the Conrad N. Hilton Foundation. An Executive Summary of the Assessment is being distributed as a pre-read.

The Forum will include plenary sessions as well as five breakout sessions. The breakout sessions will be interactive, with both panelist discussion and audience engagement. An overview of each breakout session, outlining the challenges and key questions for each thematic area, appears in the pages that follow.

About Safe Water Network

Co-founded in 2006 by actor and philanthropist Paul Newman, along with prominent civic and business leaders, Safe Water Network develops innovative solutions that provide safe, affordable water to those in need. We bring together diverse capabilities to address the challenges of local ownership and sustainability. Working with the private and public sectors, we advance our field initiatives for broad replication. We also document and share this effort through forums, workshops, reports and case studies.

Ghana Team

Charles Nimako, Country Director

Charles Yeboah, Monitoring & Evaluation Coordinator, Health & Hygiene Manager

Joseph Ampadu Boakye, Program Manager

Francis Tetteh-Zomayi, Project Assistant

Akosua Afreh, Project Engineer

SESSION 1: Driving Behavior Change for Sustainability and Health

Session Chair: Kweku Quansah, Programme Officer, Environmental Health and Sanitation Directorate, Ministry of Local Government and Rural Development

Panelists: Victoria Norgbey, Private Consultant
Joyce Maku Appiah, Extension Services Specialist, CWSA, Greater Accra Region
Charles Yeboah, Health & Hygiene Manager/M&E Support, Safe Water Network
Sophie Oddo, WASH Specialist, AFD
Afia Zakiya, Country Representative, WaterAid Ghana

In most rural communities in Ghana, people are accustomed to easily available, free and often unsafe water from surface water and other sources. The wide availability of free alternatives makes it difficult for safe water systems to raise the revenue needed to meet operating and capital maintenance expenses, even where prices are kept at levels affordable to the poor. Where consumers have a high willingness to pay for safe water in principle, this willingness is strongly influenced by convenience. Maintaining water quality through to the point of use also means improving local hygiene behaviors including hand-washing and proper water handling.

The **purpose** of this session is to identify and codify the most effective techniques for engaging poor consumers, spreading awareness, and changing behaviors around safe water and hygiene.

Key Questions

The key questions to be discussed are:

- i. How can local organizations be engaged to scale up health and hygiene education for the poor?
- ii. What kinds of incentives (monetary and non-monetary) are appropriate and effective for health and hygiene educators?
- iii. How can convenience of access be enhanced in cost-effective ways, so that systems do not compromise their financial sustainability?
- iv. What lessons can be learned about pro-poor consumer engagement from experiences of commercial marketing?

SESSION 2: Water System Economics: How Appropriate Technologies Contribute to Sustainable Solutions

Session Chair: Dr. Philip Gyau-Boakye, Deputy Director, Water Research Institute

Panelists: Kolly Dorcoo, Private Consultant

Dr. Kwabena Nyarko, Civil Engineering Department, KNUST

R. K. D. Van Ess, Private Consultant

Charlotte Engmann, Community Water and Sanitation Agency

Joseph Ampadu-Boakye, Program Manager, Safe Water Network

In rural Ghana, sector investment has generally gone into groundwater-based systems, particularly un-mechanized boreholes and hand-dug wells. These systems involve a low capital investment, but require the user to expend significant time and energy pumping water – a burden that lowers willingness to pay. Although the country is endowed with surface water resources including lakes, rivers and streams, these water resources are under-utilized because they generally require treatment to be safe for drinking. The majority of poor rural communities are also without electricity, which restricts the options for pumping, conveyance, and treatment of water.

The **purpose** of this session is to review different technologies – Limited Mechanisation, Modular Slow Sand Filtration, and Membrane Filtration, as well as other technologies – for their potential to provide safe water to poor communities in Ghana. Safe Water Network will also discuss the results of the economic modeling we completed to identify the requirements for sustainable deployment of each technology in poor communities.

Key Questions

The key questions to be discussed are:

- i. What is the potential market size for different technologies and approaches?
- ii. How can these systems be reliably serviced locally?
- iii. What are the options for subsidies in smaller communities where fully-commercial solutions are unrealistic?
- iv. How can supply chains be developed domestically so that system technologies are less reliant on imported equipment?

SESSION 3: Catalyzing Financing Solutions for Safe Water

Session Chair: Amanda Gimble, Senior Vice President, Strategic Initiatives, Safe Water Network

Panelists: Mettle Addo, ARB-APEX Bank

Frances Adu-Mante, Group Coordinator Microfinance, ECOBANK

George Yanore, Project Manager, WASHUP CHF International

Stanley Attarfi, CEO, Youth and Social Enterprise Fund

Yaw Adu-Gyamfi, Executive Secretary, Ghana Microfinance Institutions Network

There is a lack of well-structured financial products targeting water provision for the poor and an inadequate funding base of financial institutions. The water sector has not been perceived as commercially viable and is therefore viewed as a high-risk venture for financial sector institutions. The cost of capital is high (with interest rates about 30%) and most financial sector institutions in Ghana are risk-averse.

The **purpose** of this session is to identify specific opportunities to work collaboratively with financial institutions and government to structure and deploy financial products that meet the needs of the poor.

Key Questions

The key questions to be discussed are:

- i. What has been the experience in the use of microfinance for social infrastructure in other sectors, and how can the most successful approaches be replicated in the water sector?
- ii. What are the prospects and barriers for providing funding for on lending by MFIs and what is the potential role of stakeholders – Ghana Government, Development Partners, MFIs, District Assemblies, sector institutions including CWSA and GWCL etc.?
- iii. What are the prospects for applying output-based aid for financing water supply in Ghana?

SESSION 4: Creating an Enabling Policy Environment for Market-Based Solutions

Session Chair: Minta Aboagye, Former Director, Water Directorate, Government of Ghana

Panelists: Sam Appenteng, Vice President, Association of Ghana Industries
Emmanuel Gaze, Director of Technical Services, Community Water and Sanitation Agency
Nii Okai, Director, Director of Water, Public Utilities Regulatory Commission
Kofi Amponsah Bediako, Ghana Standards Authority
Joseph Ampadu-Boakye, Program Manager, Safe Water Network

Limited enforcement of tariff legislation makes it highly challenging to recover costs, especially in poor, rural communities. Meanwhile, a lack of clarity on the responsibilities and plans of government agencies leads in some cases to duplication and waste of scarce resources.

The **purpose** of this session is to identify opportunities to work with the Ghana Government to improve the enabling regulatory environment for pro-poor, community-level, market-based safe water initiatives.

Key Questions

The key questions to be discussed are:

- i. What are the key barriers to operating as a private entity in water provision?
- ii. What has worked, and what hasn't worked, in water tariff enforcement for poor communities?
- iii. Given the ban on community contributions to capital, how can we ensure that local communities are sufficiently invested in outcomes?
- iv. How can overlaps in jurisdiction and accountability among water service providers be minimised?
- v. What's the process for engaging government and other key stakeholders to improve the enabling environment?

SESSION 5: After the Launch: Stimulating Local Capacity for Sustainability

Session Chair: Vida Duti (Mrs.), Country Director, IRC-Ghana

Panelists: Theodora Adomako-Adjei, Extension Services Specialist, CWSA
Oduro Donkor, Executive Director, PRONET Accra
Nii Odai Laryea, Director, MAPLE Consult
Emmanuel Nkrumah, WASH Specialist, World Bank
Charles Yeboah, Health & Hygiene Manager/M&E Support,
Safe Water Network

Other Participants: District Water & Sanitation Team (DWST) members, Ga West and South Dayi
Gabriel Amanfu, Technical Director, Vicco Ventures Ltd.

There is currently limited oversight, operation and technical servicing capacity for most communal water systems in Ghana. It has been challenging for Municipal and District Assemblies to provide adequate training and supervisory support to manage water systems at the community level. Most Water and Sanitation Management Teams (WSMTs) are inactive, and rely on the goodwill of individual members to function. This weak local capacity inhibits the ability to repair and maintain water systems and limits the ability to generate adequate cash flow to enable sustainable operations.

The **purpose** of this session is to document best practices in developing local level capacity for water system management, and develop an agenda for how these practices can be replicated or scaled up.

Key Questions

The key questions to be discussed are:

- i. What has been the experience with building local capacity for water systems management – what has worked, what has not worked and the way forward?
- ii. How can we develop local servicing capability for water systems in resource-poor settings?
- iii. How can Municipal and District Assemblies (particularly Environmental Health Assistants and Community Development Officers) be engaged to provide effective follow-up support for management of water systems?
- iv. What is the role of local educational institutions (e.g. technical institutes) in building capacity to manage water systems and how can these institutions be leveraged?



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