

Technology Assessment Framework (TAF) for sustainable WASH services in Ghana

The introduction of a robust methodology for WASH Technology appraisal, termed the Technology Assessment Framework (TAF) was welcomed by WASH stakeholders at the 25th edition of the National Level Learning Alliance Platform (NLLAP 25) meeting in Accra. In a lively interactive session that also saw the formal launch of the WASHTech project, participants expressed the need for an enforcement mechanism for technology introduction, approval and use; and hoped that the draft TAF will be fine-tuned, after the testing of the six selected WASH technologies, to provide a systematic and participatory way of assessing and adopting technology innovations.

The 25th edition of the NLLAP was held on Thursday 29th March, 2012 under the theme “Assessment Framework for sustainable WASH Technologies in Ghana.” The chairman for the day was Demedeme Naa Lenason, Director at the Environmental Health and Sanitation Directorate (EHSD) of the Ministry of Local Government and Rural Development (MLGRD). NLLAP 25 also presented the opportunity to Ms Charlotte Engmann, Engineer at the Community Water and Sanitation Agency (CWSA) to launch the WASHTECH Ghana project on behalf of Dr. Al-Hassan Sumani, the then Director for Water at MWRWH. And, as is the norm, there were presentations to set the tone for discussions. Mr. Benjamin Tuffuor of TREND started the day with a presentation on the WASHTECH project. He was followed by Dr Eric Ofusu Antwi of the Kwame Nkrumah University of Science and Technology (KNUST) who presented on the “Technology Assessment Framework (TAF)”, and Jesse Coffie Danku of WaterAid in Ghana who treated the “Piloting of Draft TAF in Ghana.” This communiqué is intended to share with the wider WASH community the most critical issues brought up during the meeting.

Six technologies of the Water, Sanitation and Hygiene (WASH) system which are used at the household, community and institutional levels are under assessment on pilot basis to determine the effectiveness of the draft TAF. The six technologies are Slow Sand Filtration, Ghana Modified India Mark II Pump, Pour Flush Latrine, Rope Pump, EnviroLoo and Biofil Toilet systems. The piloting phase will span March to November, 2012 in 18 Metropolitan, Municipal and District Assemblies (MMDAs) across six regions of Ghana. The TAF (in action) is the main output of the Water, Sanitation and Hygiene Technologies (WASHTech) project, which is being implemented in Ghana, Burkina Faso and Uganda.

The WASHTECH Project

In the first presentation, Mr. Benedict Tuffuor informed his audience that the Water, Sanitation and Hygiene Technologies (WASHTech) project is a three-year project that spans 2011 to 2013.

Funded by the European Union, the project is a Multi-Stakeholder Action Research Project involving eight European and African partners with the African countries being Ghana, Burkina Faso and Uganda. The implementing institutions in Ghana are TREND/RCN, KNUST and WaterAid with a focus on technologies for sustainable WASH delivery in Peri-urban, Small Towns and Rural areas.

The project has become necessary because the achievement of water and sanitation MDGs in many African countries

South of Sahara is uncertain. Besides, stakeholders have: recognised the role of affordable, sustainable technologies in facilitating progress in the sector; recognised that innovative WASH technologies have a wide applicability; noticed that national strategies have focused on conventional approaches for too long; observed that there are no systems to validate new technologies and assess real potential; and observed that there are no proven approaches to successfully introduce and go to scale.

The task of implementers, therefore, is “To provide the sector with a systematic and participatory way of assessing and adopting technology innovation that effectively takes the poorest of the world a step closer to expanding their life choices and opportunities for development,” Mr. Tuffuor stated.

To ensure the desired participation, the project adopts the learning alliance approach to ensure collective learning and sector uptake.

In line with this, the project is targeted at national level WASH sector stakeholders (including government, NGOs, and small and medium enterprises (SMEs). It is also targeted at district (or decentralised level) WASH stakeholders with a focus on local decision-makers, planners, and practitioners. It is also targeted at building interface between community and district level (including community leaders and potential users) as well as focus on households, rural areas,

and small towns, and somehow low-income peri-urban areas.

The overall goal is to facilitate effective investments in new technologies for sustained access to WASH services. Specifically, the project objectives are to: strengthen sector capacity for informed decision in the choice of sustainable WASH technologies; initiate action research to identify barriers and opportunities for scaling up technology beyond pilot stage; provide a set of methodological tools and participatory approaches for informed decision-making and strategic planning; and support the embedding of the practice of multi-stakeholder learning, sharing and collaboration.

The implementation process is divided into “work packages” consisting of Consortium Management, Situation analysis on WASH technology introduction plus uptake, Framework/ process design plus development and finalization, Pilot Technology assessments, Recommendations for sector strengthening, Capacity building for Learning Alliance members, Monitoring and Evaluation/Analysis of impact, Communications and information dissemination, and Coordination.

The main methods of execution are research and capacity building. These activities are meant to increase awareness on technology options, develop assessment systems, and build long-term in-country capacities.

Generally, the project is expected to result in the development of a Technology Assessment Framework (TAF) as well as informative guidelines for the application and adaptation of TAF at different scales. A global TAF review report, country situational assessment reports, a WASHTech website, and a series of training course to roll out and embed the use of TAF are also among expected outcomes of the project.

For Ghana, the following are specific expected outcomes: establishment of WASHTech core groups, country technology review report, country study on technology assessment and approval process report, country project communication strategy, country project flyer, country picture of change (PoC), and country most significant change (MSC) plan.

The NLLAP is a WASH sector multi stakeholder platform with the overall goal of improving sector learning and dialogue. It is hosted by the Ghana WASH Resource Centre Network (RCN). The platform offers learning and sharing opportunity for sector players as one of the practical approaches to improving sector engagements/sharing with the long term aim of achieving a knowledge driven WASH sector that delivers quality and sustainable services in Ghana. NLLAP meetings take place on the last Thursday of every month and opened to all interested parties. The discussions of each NLLAP meeting are summarized and shared with the wider WASH community. The topics of upcoming meetings are decided on by the RCN secretariat and a list of upcoming meetings can be found on the RCN website www.washghana.net.

If you are interested to propose a topic for a meeting please contact us on,
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Technology Assessment Framework

Meanwhile, technology introduction involves the process design which depends on investment model selected; whereas the various actors involved have to take on their roles in all phases of the introduction process, said Dr Eric Antwi Ofose of KNUST. He took participants through the Technology Assessment Framework (TAF) for Selected WASH Technologies in Ghana.

He named the key elements for technology introduction as the context /enabling environment, the technology/product, the actors, and the introduction process.

Speaking on the “Piloting of the Draft TAF in Ghana,” Jesse Coffie Danku of WaterAid Ghana named the 18 MMDAs where various sites have been selected for piloting of the TAF. These MMDAs are spread across the Greater Accra, Ashanti, Volta, Brong Ahafo, Western and Upper East regions.

According to him the testing of the TAF on the Rope Pump was supposed to be carried out in March and April 2012. Testing of the TAF on Pour Flush and Slow Sand Filtration was set for June and July while Testing of TAF on Ghana Modified India Mark II Pump, EnviroLoo, Biofil Digester are scheduled for September and October. The months of May, August, and November, 2012 have been set aside for feedback on the various stages of testing.

Key issues and recommendations

Participants were satisfied with the content of presentations except for a few clarifications they sought on issues relating to equitable access to technologies for all groups, the target of the communication strategy, scoring workshops, and the ultimate ownership of the TAF.

The following suggestions were then made:

- ❖ There should be support systems for all technologies adopted to ensure prompt repair and replacement of broken down systems
- ❖ An enforcement mechanism for use of approved technologies should be fashioned
- ❖ Technologies should be patented to protect copyright