RCN Ghana
Resource Centre Network Ghana

WASH REFLECTIONS
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A monthly review of the National Level Learning Alliance Platform

Life-Cycle Cost Approach to WASH service delivery in Ghana

Participants in the 13th NLLAP meeting engaged in lively discussions, provoked by findings of the WASHCost project. Chief among these was the relatively high level of non-functioning and under-performing services, due in part to insufficient expenditure on a range of operational and maintenance related activities. Amongst the findings reported was that it costs a minimum of 4US$/person/year to provide water services based on hand pumps; and a minimum 10-14US$/person/year to provide services using small town piped networks. The research also re-confirmed the already well known fact that the sanitation sector in rural areas continues to lag, with coverage in 30 surveyed communities not exceeding 14% in rural and 31% in small towns.

The 13th NLLAP, the first in 2011, took place on Thursday January 27 facilitated by Mr. Patrick Apoya. The topic for the day was, "Life-Cycle Costs Approach (LCCA) to WASH Service Delivery in Ghana". Prior to the main business of the day, Messrs Abu Wumbei and Michael Jonga presented some reflections on the RCN and the NLLAP series of meetings. Following this Dr. Kwabena Nyarko presented the main findings of WASHCost research in 2010. After discussion of these findings by participants, Mr. Alex Obuobisa-Darko presented the WASHCost project plans for 2011.

NLLAP becoming an Accra institution

Before the main meeting started, Mr. Abu Wumbei of RCN presented findings from surveys completed by participants at the previous 12 NLLAPs. In short this showed that the NLLAP monthly meetings were well appreciated by sector stakeholders and are indeed becoming something of a 'must attend' sector event.

Launch of RCN online digital library

Mr. Wumbei also announced the launch of RCN's digital library (http://www.washghana.net/library), where some 200 key sector titles are already available and more are being added constantly. All RCN participants with relevant documents are urged to share these with the RCN secretariat and thus make them available to the sector as a whole.

Rural water services: not up to standard (although small towns doing better)

Dr. Kwabena Nyarko (KNUST/WASHCost) presented detailed findings of WASHCost research carried out in 2010 in some 30 rural communities in three districts and three regions of Ghana (Ashanti, Northern, Volta) as well as in some 17 small-towns. At the heart of the work were surveys with some 1,000 rural water users. In his report he stressed on the following key elements, noting also that these are preliminary findings subject to revision:

- Some 75% of those relying on point sources for their water supply were experiencing a sub-standard service (according to national CWSA norms).
- However, almost 70% of those living in small-towns with piped water supplies received a service that met or exceeded standards.
- The minimum per-capita annual cost of providing a service based on point sources was some 4US$; while that from small towns was between 10-14US$.
- That premature failure of systems can lead to very high replacement costs (sometimes effectively doubling the cost of the service).
- That access to sanitation services (in the form of latrines) was very low (14%) in rural areas and slightly better (31%) in small towns.
- That the range of costs for access to sanitation was difficult to establish as this is typically a household level cost, but is typically under 5US$/person/year for private systems, rising to about 25US$/person/year for public ones.

Dr. Nyarko's presentation provoked lively reactions as participants probed him to understand better the WASHCost methodology and the implications of these findings for Ghana's rural WASH sector.

Dr. Nyarko clarified that the findings on access to services did not reflect any value judgement by the WASHCost project. Rather they were based on national norms for access, as developed by CWSA. These specify that a minimum level of rural water service implies that users get 20 litres of good quality water every day; that the service works for 95 out of every 100 days; that the distance from home to water point is not more than 500m and that not more than 300 people share a spout or 150 share a well. It is according to these norms that some 75% of those rural water users relying on point sources accessed a sub-standard service. The reasons for this

were varied, including overcrowding; long distance to source; and people taking less than 20l of water per capita.

Ensuring sustainability: Capital Maintenance and post construction support

During his presentation Dr. Nyarko reacquainted participants with the different cost elements of the service delivery life cycle. These included familiar items such as capital investment costs (CapEx) and operation and minor maintenance (OpEx); but also strayed into less familiar territory of Capital Maintenance (i.e. major repairs) (CapManEx) and support costs: *direct* (e.g. area mechanics, DWSTs and RWSTs) and *indirect* (e.g. the Water Directorate); and the almost always ignored cost of capital – i.e. the interest rate on borrowed money.

Dr. Nyarko pointed out that it is failure to address these costs, particularly **capital maintenance** and **direct support costs** that most often leads to problems, failed systems and wasted investment. Other participants agreed that these cost elements need to be dealt with by for example including them in the district water and sanitation plans and by better enforcement of the requirement on WSDBs to maintain a healthy balance in their capital maintenance account.

It was also noted that, as legal owners (under decentralisation) of water supply assets, it is squarely the responsibility of DAs to ensure that these costs are covered either directly through their own revenues or indirectly through proper oversight of the collection and use of user fees by boards. If nothing else, DAs should actively promote a strong maintenance culture. However, it was also noted that many DAs are not fully aware of these responsibilities.

How much is enough? Sample size and next steps

Several participants commented on the size of the sample taken by WASHCost. Is a sample based on 30 communities enough to make generalisations about the whole country? Can the sample size be increased?

The WASHCost team explained that as for WASHCost, the funds for primary research had been exhausted. However, WASHCost was not just about collecting data. Rather it was about developing a methodology that others can also use. Dr. Nyarko encouraged any sector participants interested in looking at either life cycle costs, or measuring service level received to contact the WASHCost team – who would be happy to help.

In addition, the general poor maintenance of records and pervading culture of secrecy about data (including costs) needs to be broken down so that this information is freely available, and can be used by service users to hold service providers to account.

Moving forward: next steps for WASHCost

Mr Alex Obuobisa-Darko made a brief presentation. Firstly on the use of cost data in the existing planning frameworks for water service delivery, and then on the next steps for the WASHCost project.

On the former, he noted that currently the integration of District Water and Sanitation Plans (DWSPs) into District Medium Term Development Plans (DMTDPs) is not optimal, and that these in turn are not clearly linked to budgetary allocations. He also highlighted that DWSPs currently make no allowance for post-construction costs such as capital maintenance or support costs.

Next steps for WASHCost include continued analysis and sharing (at national and regional levels) of data; case studies to probe into gaps around sanitation and post-construction costs in small-towns; modelling to identify the 'ideal' costs of capital maintenance and support costs for different levels of service; and possible piloting at the district level of including post construction costs in WSDPs.

Emphasising again that WASHCost is as much about developing a methodology and raising awareness as it is about providing cost data, Mr Obuobisa-Darko urged other sector actors to be more aware of costs and to more rigorously collect and share cost data around their own activities. To aid this, WASHCost Ghana will be developing some training modules to help others in applying a life-cycle cost approach to their own work. These will be made available later in the year.

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 are organized and facilitated by the Ghana WASH Resource Centre Network (RCN), and take place on the last Thursday of every month. They are open to all interested parties. The discussions of each NLLAP meeting are summarized and shared with the wider WASH community in the form of a communiqué after the meeting and any presentations made during the meeting are also shared. 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 in proposing a topic for a meeting please contact us on,
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