

## It's all about sustainability and institutional support

### *Engineers Without Borders (EWB Canada) on using the Life-cycle costs approach in Malawi*

In this series of conversations with various organisations talking about the use/adoption of the *WASHCost's* life cycle costs approach, we had a conversation with Mike Kang.

*“One of the big thrusts in our strategy for the past few years was tackling the problem that local government lacked up-to-date information on functional rates for water distribution. That’s a problem many in the sector know about, but they have reacted by supporting high-tech monitoring approaches, something that’s not always the most useful or appropriate...”* Mike Kang



Mike Kang

Mike was originally trained as an engineering physicist and has been working for EWB Canada for the past four years with the Malawi Water and Sanitation team. For the last three years, he worked as the Co-Director of the team, which supports a Service Delivery Approach in Malawi aimed at increasing the efficiency of the sector. Currently, Mike works as an Advisor to EWB-Canada. Below he discusses his time with the Malawi Water and Sanitation team and their use of the life cycle costs approach.

*“If you took a quick look at the rural water supply and sanitation situation in Malawi, you’d think that things were in great shape— almost 80% rural water coverage for instance. But if you dig a little deeper, you’ll see a different reality—sustainability and actual usage are serious concerns. Water points are often placed haphazardly, based on ease of drilling, political need, or NGO specific catchment areas for example. A significant proportion of existing water points are either broken or placed poorly... (source)*

## EWB Canada and Complexity-Oriented Approaches



Diwa- Malawi

Talking about how their strategy evolved, Mike explained that EWB-Canada uses complexity theory as an entry point for the intervention. The primary aim was to understand the system, not to implement a project. Understanding the work as a “complex intervention” entails becoming embedded within the system surrounding water and sanitation and understanding the relationships between all the different stakeholders, as well as finding out where the capacities are, where the information was flowing between people, and where it was not. The idea was that there is value to be added by examining policy, practice, and planning for infrastructure as

they affect water supply sustainability, which appeared to be one of the biggest factors affecting the sector’s overall efficiency.

EWB Canada has a unique definition of success for contributions to water supply sustainability: rather focus on getting one particular operation and maintenance approach to “work”, EWB

measures progress by how well they enable local government to identify the key problems themselves and expand their understanding of possible solutions.

*“By demonstrating compelling field evidence, and bringing influential district perspectives into the dialogue, we can affect the sector’s conversations to focus on issues rather than individual projects, and adopt more experimental mindsets of learning to address the most relevant challenges”*

On the relationship between WASHCost and EWB Canada, Mike explained that EWB Canada is different from many organisations that are using the life-cycle costs approach; EWB Canada does not do any infrastructure implementation or other direct programming at the community level. All of their work is focused on policy and learning within the existing sector work, such as information flows between different stakeholders and capacity at different levels.

Mike said that EWB-Canada has engaged with the idea of life-cycle costs approach and that WASHCost and Triple-S have been important thought partners in developing their strategy.

## Using the service delivery approach and life-cycle costs approach in Malawi

EWB Canada did not come into Malawi with a predefined solution for the water sector problems. They studied the system and developed their understanding of the challenges in the sector from that exploration. They focused on the key problem of sustainability, and specifically the role of local government in supporting sustainability. They also systemically studied the policy and practice factors that affect local government, trying to understand what works and what does not work.

When EWB Canada was developing their strategy in 2007-2009, they wanted to look at many different approaches already in the sector and learn from others who were already looking at institutional-level problem. EWB-Canada’s Megan Campbell discovered that Triple-S and WASHCost had been thinking about institutional support for sustainability and that the analysis they had done was relevant for Malawi’s problems. Mike explained that Triple-S and WASHCost highlighted many of the same problems that EWB Canada was seeing and provided defined language for those complex issues.



Mike Kang & Harold

Mike explained that the collaboration with Triple-S and WASHCost has been useful for strengthening EWB-Canada’s language, which was previously quite nebulous. By crystallising the terms used to describe the problems into something more clear, EWB-Canada was able to establish a little more consistency in the way they talk about issues such as “expenditure on direct support”. EWB Canada also now uses the term “sustainable services at scale” to describe aspects of the outcomes they aim to achieve in Malawi.

EWB-Canada are working with Harold Lockwood of Aquaconsult to document the way they work and the types of impact it can have, and case studies are expected before the end of 2012.

EWB-Canada has found utility using terms such as CapEx and OpEx in analyzing costs associated with infrastructure development, markets for maintenance supplies, and costs of support services. Within their own team, a consistent set of terms has been useful. Internally, EWB Canada's budget processes have not been influenced by the life-cycle costs approach because such terms don't directly apply to their work. EWB Canada budgets focus on their human resource expenditure for work with policy makers in the sector: nearly all of their expenditures are on staff, not operations. Currently, EWB's model places people at various levels of the sector, which helps learning by strengthening the feedback loops from the district to policy level. The LCCA concept *could* become more relevant to their model if, one day, a need or desire arose within the Malawi government to hire on-budget staff to play a similar role. However, it is not clear that this would be the best way for the sector to become better at learning.

## Impact of the life-cycle costs approach on the WASH sector

Mike noted that the life-cycle costs language plays in the Malawi sector, stating that most people generally understand the language even if they have not seen the LCCA framework before. If people are told for example that 'operational costs are different from replacement costs and rehabilitation costs, and this has certain implications', people generally understand what this means.

Mike also stated that, while he doesn't expect that introducing the LCCA framework at a sector level would strengthen policy, its concepts *have* helped EWB influence individual districts. For instance, EWB is working with several districts that are interested in finding a way to solve sustainability problems without spending a lot of money.



Chaponda & Nazombe  
Malawi

*"If you train an area mechanic network and support them the way that NGOs usually do, funding regular meetings and re-training for example, you may find this effective, but it will also be expensive with high expenditure on direct support'. By working with district officers to analyse the costs of the work they already do and work they could do within their budgets, low-cost solutions can be found that don't relying on donor funding. For example, in certain districts we've found that area mechanics are motivated more by recognition of their efforts than by payment, so a repair service model could be found with relatively low expenditure on direct support."*

## Experiences from other sectors:

EWB Canada, as part of their strategy development, has learned from Water for people (WfP)'s ideas at the international sector level and from WaterAid's sustainability framework. Mike notes that, while EWB, Water for People, and WaterAid have some differences in approach, EWB

appreciates the leadership shown by both of those organizations in really pushing better ideas for solving the sustainability problem.

## Perspective on use of life-cycle costs approach in Malawi

Mike explained that EWB Canada choose not to push in Malawi the life-cycle costs approach methodology used by WASHCost in its multi-country study. That was because of the problems that can come from introducing more analysis tools in a sector that's already overrun by conflicting opinions on how problems should be defined and analysed. Mike further notes that, if a life-cycle costs approach were to be successful in Malawi, it would need to come with some big changes in capacity and dialogue in the sector, issues that EWB-Canada and other partners are working on. *“Many agencies are unable to say whether they've made progress in water coverage, because they don't have the data. Introducing another tool for analysis of data that's hard to come by might just confuse things further”.*



Kafwala - Karonga WMA

Currently the management systems for the water sector in Malawi need improvement, and that leaves little space for data to actually improve policy. Mike believes that the persistent water and sanitation challenges are due to inefficient investment rather than lack of investment in the sector, and that management, learning, and sector dialogue spaces need work before more technical data availability and analysis tools can make a big difference.

## Looking ahead – what will happen in the next five-six years

The EWB-Canada vision...

*“The rural WASH sector shifts from project-based approaches to a service delivery model by thinking critically, learning, and innovating”.*

Mike and his colleagues believe that the WASH sector's ability to think critically, learn and innovate is more important than any single innovation, mechanism or approach in creating sustainable services at scale.

“Our vision is a sector that is able to learn from its decisions in such a way that it increases its efficiency and effectiveness continually on its own. If we saw that the government and donors used learning processes that allowed them to determine whether projects and other initiatives were efficient, and especially whether they enabled local government to solve problems efficiently without overreliance on donor funds, that would be a ‘success scenario’”.

EWB Canada is working with multiple hypotheses about how this “success scenario” could emerge, acknowledging that they can only contribute to sector-wide change, not create it singlehandedly. The vision is that the sector has systems that work to collect information and



translate into actionable and effective policies and practices for a service delivery-oriented sector. Within this vision, a role like EWB Canada's would no longer be needed – the relevant actors would be getting the information they need from multiple levels in the sector.

*Vera van der Grift (IRC) based on a conversation with Mike Kang, (Portfolio Manager at EWB Canada) with input from Megan Campbell (former Co-Director of EWB in Malawi), Alyssa Lindsay (current Programme Director of EWB in Malawi), and Duncan McNicholl (current Programme Manager of EWB in Malawi).*

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