

Issue 17 | June 2016

Concern's
Knowledge
Quarterly
Review

KNOWLEDGE MATTERS

Water, Sanitation and Hygiene:
experiences and learning



CONCERN
worldwide

Any contributions, ideas or topics for future issues of knowledge matters. Contact the editorial team on email: knowledgematters@concern.net

The views expressed are the author's and do not necessarily coincide with those of Concern Worldwide or its partners.

Knowledge Matters basics

Knowledge Matters offers practice-relevant analysis relating to the development and humanitarian work of Concern Worldwide. It provides a forum for staff and partners to exchange ideas and experiences. The publication is committed to encouraging high quality analysis in the understanding of Concern's work. Concern staff and partners document their ideas and experiences through articles. Articles are very short – 500 – 1,000 words. Usually you only have space to make two or three interesting points. Here are some tips on writing a short feature article:

- Start by imagining your audience – a Concern colleague. Why are they interested – why do they want to read what you have to say? When you identify what your most important point is, say it straight away, in the title or first sentence.
- What can others learn from your story? Focus on this. Remember to back up your story with evidence. This can be got from evaluations.
- It's easier to get people reading if you start with the human perspective – mentioning real people and real-life events. (You don't have to give names).
- Use short sentences. Use Concern's style guide to help you.
- Keep paragraphs to a maximum of six lines long.
- Use clear language. Many of the readers of Knowledge Matters are non-native English speakers, so think carefully about using idioms or colloquial language that might not be easily understood by others.
- Always avoid assuming too high a level of knowledge of the topic you are writing about, on the part of the reader.
- Use active sentences ('we held a workshop' not 'a workshop was held by us')
- Use short and clear expressions.
- Keep your title short - no more than eight words.
- Where necessary use photos to accompany the narrative but ensure that you follow the Dochas Code of Conduct on Images and Messages.

Cover image: Pamela Kapinga washing her hands from a rain water tank in Ngara District, Kagera Region, Tanzania. Photo by Jennifer Nolan, 2012

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From the Issue Editor

For more than 40 years, Concern has developed its expertise within the Water, Sanitation and Hygiene (WASH) sector. Nevertheless, producing evidence-based interventions is still a challenge: programmes are often not well documented to allow for the lessons learned to be shared widely. For this reason, the current edition of Knowledge Matters is a great opportunity for disseminating best practice that might help achieve better results in terms of access to safe water, sanitation coverage and adoption of hygiene behaviours – to name just the three classic components of any WASH programme.

This edition is also very timely as it follows the recent publication of our new WASH strategy 2016-2020. The strategy highlights some important changes that we would like to promote in our WASH interventions. The articles in this edition have been chosen to reflect these new trends: more attention on economic analysis, integration between sectors, gender issues and behavior change strategies, among others.

Our success in WASH is variable: we have vast experience in implementing new boreholes, building institutional latrines and providing hygiene kits but as with many agencies involved in this sector, we often fail to achieve sustainability, maintenance and use of the WASH facilities we are supporting, and/or adoption of new hygiene behaviours.

The reasons for this are many and complex but among those, building each WASH intervention on an existing body of knowledge is the first crucial step to follow if we want to achieve sustainable progress. Thus, I believe that this edition of Knowledge Matters grounded in Concern's evidence and experience will add value to our work.

Finally, I want to thank all those who contributed to making this edition a reality!

Franck Flachenberg

Overview of Concern's Water, Sanitation and Hygiene Strategy



By Ros Tamming

Introduction

Concern has a large Water, Sanitation and Hygiene (WASH) programme that is operational in 22 countries across a number of diverse contexts which in 2014 reached two million people costing approximately €22.5 million. Concern's ambition in WASH is to provide quality programmes that are based on the best evidence available. The new Concern WASH strategy (2016-2020) sets out a number of objectives and approaches to do this.

The strategic goal for WASH is '*to contribute to the achievement of health and wellbeing of the extreme poor within the context of the water, sanitation and hygiene related Sustainable Development Goal (SDG 6)*'. There are four strategic objectives:

- To achieve significant and lasting improvements in the health, nutrition and wellbeing of the extreme poor through effective and resilient WASH programmes.
- To achieve WASH programmes which are sensitive to gender and to vulnerable groups in society.
- To achieve sustainable WASH services through strengthening systems, adopting a Service Delivery Approach, and building an enabling environment.
- To improve Concern's capacity in delivering effective and high quality WASH services.

The WASH theory of change (figure 1) outlines how building the capacity of Concern and partners will lead to better provision of WASH infrastructure, services and hygiene behaviour change. This along with the creation of an enabling environment will lead to improved health and wellbeing of the extreme poor. Expected outcomes, indicators and targets are outlined in the results framework in the strategy. Countries are encouraged to include the core WASH indicators in their results frameworks and to actively monitor the other indicators through their household surveys and programmatic documentation.

Innovation

There are a number of new approaches in this strategy. Firstly, we have explicitly stated that we will adopt a Service Delivery Approach which takes a demand-led rather than a supply led approach and is concerned with system strengthening of all levels of government. Although this approach is more suited for countries where governments have some capacity elements of it can be applied in poor fragile contexts. It encourages governments to take more responsibility and ownership of WASH services. Related to this we plan to do more post implementation monitoring to measure longer term sustainability of programmes beyond the life of normal programme funding. We will actively pursue funding for this. Secondly, we are committed to exploring alternatives to the community management system for water points. This will include looking at self-supply and the role of the private sector in improving WASH services for the poor. Thirdly, we are committed to increasing our capacity and activities in urban areas. Urban populations are growing and there are unique challenges in providing WASH services in urban areas which will require innovative approaches. Fourthly, with regard to behaviour change, we intend to adopt a twofold strategy which involves raising general community awareness on WASH-related diseases followed by specific campaigns using a number of different channels targeting one behaviour at a time. We are also continuing to promote the designing for behaviour change approach and the use of barrier analysis to identify the specific barriers or enablers to a certain behaviour and thus develop a tailored specific message. Fifthly, we will develop our programmes and staff to be more gender sensitive and to be more sensitive to the needs of the extreme poor. This will involve developing minimum standards for gender sensitivity and protection. Finally, we have endeavoured to incorporate the prevention of undernutrition throughout the document in line with one of the strategic goals of Concern.



The strategy encourages Concern staff to use their programme findings to advocate locally, nationally and internationally for better services for the poorest

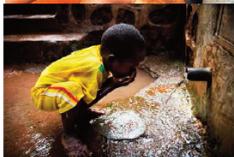
Based on some infrastructure quality control issues identified over the last number of years we will pilot and roll out a quality control system to improve the quality of WASH infrastructure. Part of this will involve thorough risk analysis of each project using a disaster risk reduction framework and also a thorough technical feasibility assessment for each water point planned. These activities may require increased use of contractors and consulting engineering companies and other external supports. Concern will develop tools and trainings to support WASH staff in contract development and contract management.

The format of programmes will continue to be a range of integrated, stand-alone, and consortia programmes depending on the context and the aims of each programme. Where possible, and appropriate, integrated programmes will be encouraged. Achievement of this strategy's goal will require coordinated support at all levels of the organization. The three dimensions of poverty, assets and a return on assets, inequality, and risk and vulnerability are embedded throughout the strategy.



WATER SANITATION AND HYGIENE STRATEGY

January 2016 – December 2020



Screenshot of the WASH Strategy cover page

Monitoring the strategy

We have developed a checklist for WASH proposal development to ensure that all new proposals are in line with the strategy and to encourage adoption of the new approaches such as the service delivery approach. Implementation of the strategy will be monitored and overseen by the Resilience Unit in the Strategy, Advocacy and Learning Directorate (SAL) which has responsibility for WASH. This will be done through monitoring a series of annual milestones and assessing the findings from annual country surveys and reports. Additional information will be sought from individual WASH programme managers. Concern's environmental health adviser and WASH engineering adviser will be available to support countries to implement this strategy. If funding permits at least one WASH workshop will be planned in the life of the strategy. Webinars on specific topics of interest to WASH staff will also be organized and information will continued to be shared via the WASH e-group. Concern will continue to build and develop relationships with key institutions that can provide expertise and potentially staff for our programmes. We are committed to sharing our learning with peers through presentation at conferences and documentation of our work.

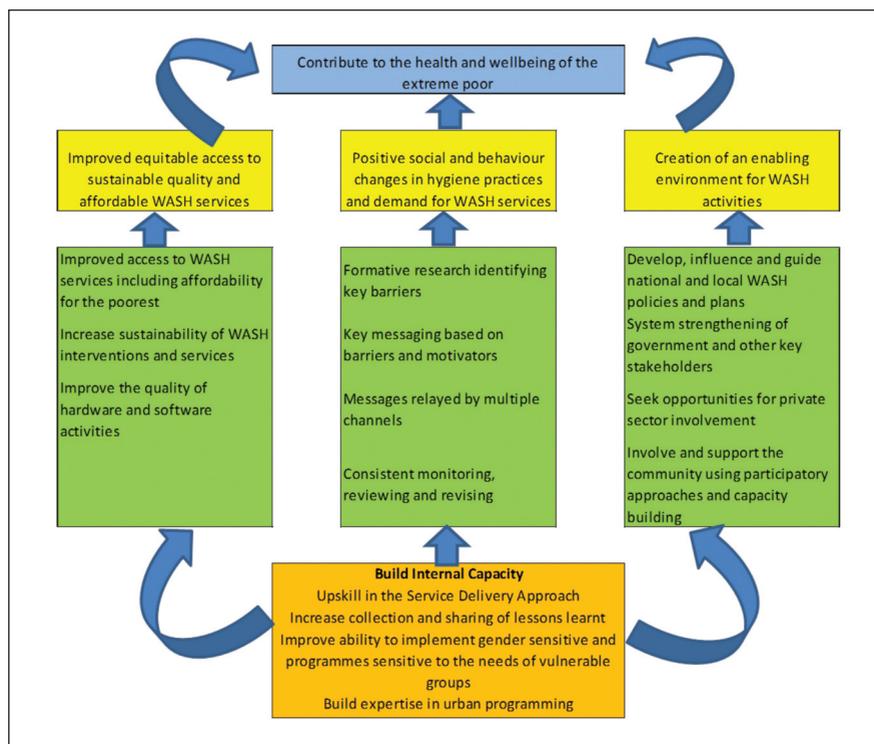
Conclusion

In summary, this strategy provides an exciting opportunity to bring WASH to a new level within Concern. Programmes such as the Department for International Development (DFID) funded DRC WASH consortium which Concern leads is a great example of the level of scale and quality we can achieve and is building Concern's reputation in the WASH sector. Almost every emergency in the last two decades has had WASH as a primary response and we have built a reputation for high quality work and a rapid response. We need to continue to build this reputation and to address any deficiencies in the quality of our work. The strategy encourages Concern staff to use their programme findings to advocate locally, nationally and internationally for better services for the poorest.

References and Content Notes

1. The WASH Strategy is available on Knowledge Exchange

Figure 1: Concern's WASH Strategy Theory of Change



Why effective water facilities remain a challenge in the Democratic Republic of Congo



By Stephen Jones , Bryan Rhodes, and Chaungo Barasa

Introduction

In the Democratic Republic of Congo (DRC), 67 per cent of handpumps do not work. This is the highest rate of broken handpumps in Sub-Saharan Africa¹.

Concern Worldwide, as lead agency of the DRC WASH Consortium (five international NGOs implementing a five-year rural WASH programme in DRC funded by UKAid), commissioned a “Handpump Spare Parts and Maintenance Supply Chain” study in Manono, Katanga province. The objectives were to assess sustainability factors for handpumps, conduct a supply and value chain analysis and to recommend alternative business models to improve sustainability.

What are the problems around WASH in Manono?

Access to spare parts was found to be the biggest problem. Interviews with Water Management Committees indicated that NGO knowledge of suppliers was not being effectively communicated. Furthermore, the study found that the spare parts market in DRC suffers from an “NGO-induced demand-side market failure” due to the direct purchase by NGOs of handpumps and spare parts from manufacturers in India and the heavy reliance of water committees on NGOs for buying and supplying spare parts.

Is it cheaper to buy parts locally?

The small number of handpump purchases and lack of direct links between local suppliers and manufacturers explains the high cost of buying locally. It also explains why most spare parts are bought outside of the country.

Recommendations to support a local supply chain of handpumps and spare parts include

Setting up direct links between local suppliers and manufacturers; facilitating reasonable terms from manufacturers; advocating for tax exempt status for spare parts; increasing spare parts purchase volumes to obtain lower prices; and buying spare parts from local suppliers.

Water management committees

The study looked at the capacity of water committees to sustainably manage water systems. Water committees still require significant training in key areas, including budgeting and fee collection from service users.

Following this research, the DRC Wash Consortium reconsidered the sequencing of water committees and community training activities to begin developing basic management skills *prior* to the installation of improved water points. The consortium decided to discuss key topics (eg. user fee rates and collection strategies), earlier on in the process.

The consortium also investigated the feasibility of a number alternative business models for spare parts supply, maintenance and repair services, as outlined below.

Figure 1: Alternative Business Models for Spare Parts Supply

Integrated supply/ service model	<ul style="list-style-type: none">• Suppliers employ field techs on commission basis• Multiple income streams
Independent service companies	<ul style="list-style-type: none">• Feasible with minimum cluster (200 – 400 pumps)• Difficult to cover overhead if 100% service and parts
Authorized-dealers	<ul style="list-style-type: none">• Existing suppliers who stock on behalf of spare parts traders• Consignment, partial consignment, commission
100% WMC	<ul style="list-style-type: none">• Technical expertise a challenge• Finance for spare parts still an issue, lack of frequency
Public-private (zone de santé)	<ul style="list-style-type: none">• Leverage health center network for forward stocking• Training HC staff in repair and maintenance, extra income stream
Sub-offices	<ul style="list-style-type: none">• Physical subsidiaries of larger DRC traders• Inefficient, overhead high, need sufficient volume
Creative finance mechanisms	<ul style="list-style-type: none">• Working capital to increase spare parts stocking• Loan guarantee fund to catalyze private finance

The rest of this article summarizes the specific pilot initiatives Concern Worldwide has taken since the research to address the issues of improving water committee's governance, capacity and links to supply chains.

Improving training for hand pump technicians

The conventional practice has been for NGOs to identify two people from a village where the water facility is installed, to train them for a couple of days, and deem them handpump mechanics.

Concern expanded the training course to 20-30 days (spread over 1-3 months) and changed the role of handpump mechanic to that of “Water Supply Operator” (WSO). The WSO is in charge of taking care of the whole facility including hygiene, cleanliness, fence and drainage maintenance and billing. The bulk of the training takes place in the trainee’s village while training on hygiene, monitoring of free residual chlorine, and hand pump installation is done by grouping trainees from 3-5 villages. Each water committee is given a toolkit for maintenance of the water facility.

Bringing stakeholders together to support supply chain development

Currently, the nearest handpump and parts dealer is 650km from Manono town. Concern organised a stakeholder conference in November 2014 to bring together more than 200 people to discuss the establishment of a handpump spare parts and service chain in South/ East Katanga. An action plan was developed as a result.

Box 1: Action Plan following the November 2014 forum

- Facilitate the establishment of a handpump and spare parts and service provider in Manono.
- Facilitate the following linkages: Water committees /health area level; health areas/ Manono dealer, and facilitate water committees to organize into an umbrella organisation that can lobby for their interests.
- Facilitate linkages between a Manono dealer to provincial dealer(s), who are already linked with international suppliers.
- Capacity building to water committees
- Dissemination of the concept of “Small Doable Important Actions” that can be done by households to improve their current water sources and household hygiene without external investments by partners.



The consortium investigated the feasibility of a number alternative business models for spare parts supply, maintenance and repair services

Improving water management committee structures and financial management

Further recommendations were that water committees should use a model where the committee deals with overall oversight of the scheme, while a paid water supply operator handles the routine operation and caretaking of the facility.

Another recommendation was to support water committees to develop “business plans” for the water facilities to determine and operate water tariffs to be paid by water users, and to establish a mechanism for safe deposits and access to credit. The DRC Wash Consortium is asking water committees to consider payment exemptions for the most vulnerable members of the community (the elderly, the sick, persons with disabilities, and potentially the lowest income households in the village).

Water committees often choose to integrate money making activities to generate extra funds. The DRC Wash Consortium developed a training manual on this topic in 2015 which is available to share with all Concern WASH programmes (in English and French)².

Emerging issues

To what extent will there be support from donors on the idea of buying spare parts locally even though this will incur a greater cost at the start? So far the donor has been receptive to the idea in principle. However the extent of this support will be clearer when the Consortium plans the next phase of its work. How can the role of NGOs shift to facilitating local discussions to try to address these problems, rather than just as implementers of projects? This is a challenge in DRC as most NGOs and their staff have much more experience of direct implementation (often in emergency projects) and less experience of ‘softer’ support to governance and the private sector.

References and Content Notes

1. Rural Water Supply Network, 2009
2. The manuals are available on Knowledge Exchange

Using the Community-Led Total Sanitation - Plus Approach in Uganda

 By Felix Achunge and Nicole Franklin

Introduction and overview

Concern Uganda's largest single programme is the Resilience through Wealth, Agriculture and Nutrition (RWANU), in the Karamoja region of Northern Uganda.

RWANU is a five-year programme (2012-17) that is being implemented through a consortium with ACDI/VOCA and Welthungerhilfe (WHH) and operates in 16 sub-counties in the four districts of Napak, Nakapiripirit, Amudat and Moroto. ACDI/VOCA and WHH are leading implementation of activities related to agriculture, livestock and improved livelihoods under the first Strategic Objective, while Concern has primary responsibility for health, nutrition and WASH activities under Strategic Objective Two.

In 2014, RWANU expanded activities in the Water, Sanitation and Hygiene (WASH) sector. The inclusion of WASH activities recognized the key linkages between improved hygiene and sanitation behaviour and improved nutrition outcomes. RWANU WASH activities reach programme participants through the rehabilitation of defective boreholes, capacity-building of local government personnel at village, parish and sub-county levels, construction of latrines, and Community-Led Total Sanitation (CLTS) triggering and sensitization sessions in 64 villages throughout Moroto, Nakapiripirit and Amudat districts. This complements WASH messages being delivered to 41,787 mothers through the household caregiver groups.

A shift from traditional CLTS

The ultimate goal of the CLTS approach is to mobilise communities to adopt sustained behaviour change to completely eliminate Open Defecation (OD) and be declared an Open Defecation Free (ODF) community. There are three main phases in CLTS: pre-triggering, triggering and post-triggering. During the pre-triggering phase, sanitation profiles are developed for targeted communities as well as documentation of their current WASH practices. The triggering phase is when community facilitation starts and is based on prompting feelings of disgust and shame in participants when confronted with the negative facts and consequences of OD.

During initial project implementation, the RWANU WASH team encountered resistance and resentment in the first five villages targeted for triggering. CLTS is supposed to incite feelings of shame and disgust, but that did not occur and no behaviour change was achieved in the first

month. Due to the communities' negative reception and the team's previous experience in CLTS, it was concluded that a shift in approach was required. A number of modifications were made to the CLTS approach.

CLTS – PLUS

To ensure that the CLTS intervention would deliver the necessary public health benefits for the community in Karamoja a number of modifications had to be made. These changes were made based on staff observations, community feedback and monitoring data.

- 1) Walk of Shame and Mapping of Defecation Areas:** The 'Walk of Shame', or transect walk, involves a facilitator walking with community members through their village and identifying areas of OD, stopping at points of OD, and asking various questions to trigger feelings of embarrassment or shame. The mapping is a participatory activity that involves community members drawing a simple map of their village on the ground after the walk, showing households, defecation points, resources, and water points to stimulate discussion. The RWANU WASH team noted that neither activity was producing the desired outcome – many community members felt no sense of shame, even going so far as to take pride in demonstrating piles of their faeces. As a result of this behaviour the transect walk was replaced by household (or manyatta) visits.



Residents of Longaroi village drawing a map of a typical Manyatta. Photo by Felix Achunge, 2015.



To ensure that the CLTS intervention would deliver the necessary public health benefits for the community in Karamoja a number of modifications had to be made

Instead of drawing a map of the entire village, programme participants drew a map of their manyatta and listed important places within the manyatta (households, kraals, granaries, etc.). A tour of the manyatta was requested and organised. Once the tour commences, the facilitator compliments various aspects of the manyatta while tying in questions related to hygienic practices which leads to a conversation about WASH practices. The facilitator then requests to take a pile of faeces to a central community meeting area to have a general discussion on the danger of faecal transmission of disease, using food and water to demonstrate how disease can be spread. At the meeting point, triggering segues back to traditional CLTS.

- 2) Faeces Calculation and Medical Expenses:** When it comes to calculating the amount of faeces to emphasize the magnitude of the OD problem, a modified explanation for community members was also needed. Traditionally, the facilitator uses standard units of measurement to represent the amount of faeces generated in order to produce negative feelings. Since the majority of the target communities do not use traditional units of measurement (e.g. grams, kilograms), the team used locally understood measurements called 'idits', also known as heaps. It is then explained that one person produces one heap of shit a day and a household produces the size of a goat (14 heaps) in a week, a cow in one month and so on. It is also explained that the Government spends more money on medical expenses because of recurring diarrheal illnesses instead of investing in essential developmental expenses like infrastructure and food. Once both of these points are understood, the ignition moment occurs and triggers the community to start eliminating OD.
- 3) Identification of 'Natural Leaders':** CLTS usually identifies natural leaders from the community to work voluntarily to monitor latrine construction and provide data on progress. In Karamoja, the experience of using this approach in five villages was not positive: there was no progress on constructing latrines or reducing OD. One of the reasons for this may be the absence of a culture of voluntarism when it comes to WASH activities in Karamoja – it is something which is often managed on an individual or household level. Equally, as sanitation coverage is so low communities and individuals lacked the skills, knowledge and equipment to construct even the most basic of latrines.

Instead the team, based on experience in the five initial villages, decided to use a more structured approach by electing Sanitation and Hygiene Committees (SHC) in each of the 64 villages. This is in addition to the Water User Committees formed in 10 villages where Concern has rehabilitated a borehole. The SHCs are trained on how to construct latrines using local materials and supplied them with basic toolkit consisting of a hoe, spade, pickaxe, metallic bucket and string. At the community level, the SHC is considered as the first line of support – cascading their knowledge down to households.

The WASH Manager developed the modified CLTS- PLUS plan and shared it with the regional Technical Support Unit (TSU) - a body within the Ministry of Water and Environment for feedback and additional input. A more polished version of the plan was disseminated to the rest of the team and local government and then piloted in Acerer parish, Moroto district with positive results. Subsequently, the team started rolling out the CLTS-PLUS version and training officials from Moroto, Nakapiririt and Amudat districts.



Members of the Technical Support Unit walking verifying that residents of Longaroi village are practicing WASH, Longaroi Village, Nakapiripirit District, Uganda. Photo by Felix Achunge, 2015.

The results of the CLTS – Plus approach

Longaroi village in Nakapiripirit district has a population of 1,411 (719 male and 694 female) and was one of the first villages triggered using CLTS-PLUS. From the beginning, community members were very receptive to the CLTS-PLUS approach. Their biggest problem was water: they did not have a functioning borehole. The first latrines they constructed after triggering were made from grass because they didn't have water to create mud walls – the sandy soil in the area is unsuitable for construction in its raw form. After rehabilitation of the borehole by Concern, proper construction of latrines ensued: all grass latrines were disassembled and replaced with mud latrines, made possible by the water from the borehole. With consistent follow-up, 108 latrines were constructed but there were still signs of OD.

Two initiatives were developed to speed progress towards ODF status: bringing motivational speakers to Longaroi, and organizing an inter-village CLTS meeting. The inter-village CLTS meetings connect two villages in order to facilitate peer learning, with exchange visits providing an opportunity for constructive criticism on each other's hygiene and sanitation practices. The inter-village CLTS meetings proved effective, and after three weeks Longaroi was declared ODF.

Longaroi village was very proud to be declared ODF by the TSU in December 2015. Longaroi is the first village in the entire district to be declared ODF. This represents a major achievement given the history of previous failed attempts. Trees to signify dedication to the sustainability of their ODF status were distributed to community members. District officials including the District Water Officer, District Health Inspector, and sub-county Chief of Nabilatuk all attended the ODF ceremony. All agreed that Longaroi should be given priority when allocating hygiene and sanitation funding due to their commitment to achieving ODF status. Based on current progress, Concern expects that six further villages will be in a position to be declared ODF in the first half of 2016.



Members of the Technical Support Unit declaring Longaroi Village ODF. Photo by Felix Achunge, 2015.

Through the Uganda Water and Sanitation NGO Network (UWASNET), Concern's success in Nakapiripirit was covered in the national press¹. The report highlighted that Concern's approach to CLTS had reaped rewards in an area where many other attempts to improve sanitation coverage have failed – leading to chronically poor standards of sanitation and hygiene. In many of the districts in the area only a handful of villages have any latrines at all, and villagers might walk more than one kilometre just to find a private place to defecate.

Lessons learned

- It is effective and beneficial to modify key activities to fit the community context
- It is essential to figure out methods to re-energize and re-focus community members during the CLTS process
- Ensuring communities have a reliable safe water source is a driving force in ensuring that ODF occurs
- Ownership and involvement by local leaders is key to sustainable change

Priorities for 2016

- To maintain ODF through focusing on work with Lead Mother's and children within the Mother Care Group model
- Also increase advocacy with local government to ensure that ODF villages are given priority when it comes to allocating district resources
- Supporting water user committees to establish village by-laws that will maintain water and sanitation facilities

References and Content Notes

1. <http://www.monitor.co.ug/artsculture/Reviews/Eliminating-culture-open-defecation-Karamoja/-/691232/3021298/-/t3iyxz/-/index.html>

Improving access to water facilities in Pakistan



By Sher Hassan Safi

Introduction and overview

In the last decade, Pakistan's clean drinking water resources have come under increasing strain from a variety of factors. Climate change has contributed to a drastic decrease in rainfall in some parts of the country over the past 16 years, leading to more frequent droughts and increased exploitation of the country's limited groundwater reserves.

Compounding this, in the areas of Pakistan bordering Afghanistan (including Baluchistan Province), the influx of Afghan refugees has placed greater demands on the area's deteriorating drinking water resources and systems; resources now have to provide for both host and refugee communities. Even prior to the influx of refugees, supplying clean drinking water to rural, remote areas of Baluchistan Province has proved extremely challenging given the area's volatile security conditions and relative lack of capacity and coordination among communities and water supply/service providers.

To address this unmet need, Concern and its local partner organisation, Innovative Development Organisation (IDO), designed and implemented a programme to improve access to clean drinking water and appropriate sanitation for host and Afghan refugee communities in Pishin and Qila Saifullah Districts (Baluchistan Province, Pakistan). The programme was called 'Improving access to water and sanitation (IAWS)' and ran from January 2010 till December 2012. The programme was implemented in consultation with the Local Government Rural Development Department (LGRDD), the Public Health Engineering Department (PHED) and local communities. This programme, implemented over a period of three years and funded by the European Commission (EC), focused on improving the capacity of service providers and the quality of water and sanitation facilities.

Key results

Safe Water

At the end of the programme target communities have access to clean drinking water from a variety of sources, including boreholes, pipes into dwellings, pipes into neighbouring dwellings, protected wells, public tap/standpipes and tube-wells. According to the programme documentation, 30 hand pumps, 14 new water supply schemes, 10 existing non-functional water supply schemes, 6 windmills and 3 solar water pumps were installed /rehabilitated to provide water to marginalised communities.

Under this project 40 percent of target households (HHs) were provided water through pipes linked into their dwelling (during the baseline, this figure was 20 per cent); 14 per cent collect water from neighbours that are connected into piped networks (during the baseline, this figure was 4 per cent); 17 per cent of HHs collect water from protected wells; and 23 per cent of HHs collect water from tube-wells and 41 per cent of the communities fetch water from other places near to their home.

Appropriate Sanitation

According to the programme documentation, Concern's implementing partner (IDO) and Concern (with the financial support of EC) have installed 1,000 demonstration latrines in poor HHs of the target communities. In addition, several health and hygiene sessions were organized to sensitise marginalised communities. The programme also distributed 5,000 health and hygiene kits to ensure that basic health and hygiene measures are integrated into daily routines.

As per the external evaluation report conducted at the end of the programme the majority of communities (almost 75 per cent) reported satisfaction with the interventions. Meanwhile, 3 per cent were very satisfied, 25 per cent expressed an average level of satisfaction. The evaluation results also illustrated that approximately 96 per cent of HHs have been using the latrines that were installed in HHs. However, 4 per cent of the HHs still practice open defecation.

Community Based Organizations formed in the beginning of the programme in each village participated in the latrine construction process through in-kind contributions. The latrines were constructed keeping in mind their design, easy construction and location and the need to benefit women and children in particular. Solid waste disposal systems (landfills) were constructed in the target communities to manage solid waste. In total, 20,832 people (10,624 men and 10,208 women) from both host and refugee communities benefited from these interventions. More than 71 per cent of communities reported disposing of their solid waste in a safe location. However, more behavior change training would better enable the communities to fully benefit from the landfills.

Health and Hygiene

The programme was successful in organising 210 health and hygiene sessions and distributing 5,000 hygiene kits to assist individuals in developing better health and hygiene habits.

Key challenges

The overall political and security situation in Baluchistan restricted the movement of Concern and partner field staff. A number of NGO staff in the region were kidnapped for ransom and also killed at the time of programme implementation. These conditions therefore acted as constraints, causing delays due to the need to take necessary security precautions.

Low literacy rates also served as a barrier, especially during the early phases of collecting information from programme participants

Energy shortfalls also acted as a significant constraint, as many of the schemes depend upon electricity to operate. Development efforts in the region are handicapped by a dysfunctional energy infrastructure.



A comprehensive exit strategy was developed and implemented with a view to promoting sustained outcomes

Lessons

Social Mobilization

An appropriate time should be allocated to allow for behavior change and it should be integrated into the project plan, including steps to implement a social mobilization strategy.

In some instances, women's Community Based Organisations (CBOs) were less empowered as compared to the men's CBOs to carry out programme activities such as the hardware component i.e. installation of Water supply system, windmills, Solar water systems, etc . This is likely due to the conservative nature of some elements of Pakistani society. In future organizations that are seen as leaders in transforming gender relations should be consulted.

Training and Capacity Building

Training of communities in management and leadership has been successful. These capacity-building activities have thus improved the ability of communities to plan, implement and monitor their own development projects.

Sanitation

Children serve as a primary driver of behavior change (especially with regards to sanitation practices) and thus can play a substantial role in ensuring project sustainability. The programme therefore included a focus on schools as forums to build hygiene and sanitation knowledge.

The programme also used demonstration latrines to encourage communities to develop their own HH latrines.



Hand pump at Killi Shaibzada Khail in District Pishin, Pakistan. Photo by Salahuddin, 2014.



Demonstration Latrine (PFL) at Killi Zyaba Kakari District Pishin, Pakistan. Photo by Salahuddin, 2014.

Sustainability

A comprehensive exit strategy was developed and implemented with a view to promoting sustained outcomes. For instance, all the schemes rehabilitated are owned by the Public Health Engineering Department (PHED) and handed over to PHED. Whereas new community-level schemes (e.g. hand pumps and tube wells) were handed over to the relevant communities. Furthermore, capacity of these communities and government line departments was developed to promote the smooth functioning of the schemes without oversight from Concern and IDO. Additionally, the Management Information System/Geographic Information System cells were also transitioned to the PHED.

Concluding thoughts

In summary, the water and sanitation intervention in Pakistan has despite working under challenging conditions demonstrated some clear success stories. The most notable relates to the provision of appropriate sanitation facilities which has led to the safe disposal of solid waste. However, in other areas there is room for improvement. Going forward gender empowerment needs to be better addressed.

Can the sustainability of WASH services be achieved: The Welthungerhilfe perspective



By Stephan Simon

Introduction

Development partners are putting greater emphasis on reporting, monitoring and transparency within the Water, Sanitation and Hygiene (WASH) sector. As they become more critical about the value and sustainability of their investments, various options are being discussed including a contractually binding “sustainability clause” and/or sustainability compacts which describe the roles and responsibilities of the implementing partner, the partner government and others in ensuring sustainability. There is on-going debate among policy makers and practitioners as to the legality, monitoring and enforcement of these instruments.

Regardless of the on-going debate Welthungerhilfe shifted its focus from building systems and facilities (infrastructure) to the adoption of a service delivery approach in 2013 i.e. guaranteeing sustained services levels over time.

Why post-implementation monitoring (PIM)?

Typical Project Monitoring – as it is still carried out by many implementing organizations – is limited to the defined lifespan of a project intervention and is generally short term. It is typically geared towards reporting progress against the correct and timely inputs for construction of WASH facilities against stated time frames or budgets – with the purpose to inform external funders about progress and performance at the end of the project term.

In contrast, the very nature of sustainable services as a concept means that it is about the continued (future) functioning of something that is working now. Ongoing monitoring at local level is a prerequisite for taking action to maintain water systems, to repair them, to expand or upgrade the system.

In the end, comprehensive and robust monitoring is about improving performance and delivering better services to the users of WASH facilities. Measuring the right things at the right time and, most critically ensuring a response (at both operational and policy level) to make things better are the heart of why monitoring is done at all.

Adapted from “From Infrastructure to Services”, T.Shouten, S.Smits, IRC 2015

Despite this shift a number of significant challenges still remain mainly in the area of monitoring. There are gaps when it comes to implementation monitoring and post implementation monitoring (PIM). The gap in monitoring during implementation is often due to lack of planning and inadequate budgeting by project planners; the gap in PIM is due to the funding agencies project financing conditionalities which are unable to support activities beyond the project implementation period. The outcome is that project planners have an insufficient understanding of why handpumps break down or why toilets are unused.

A lack of monitoring and strategic planning for service delivery results in projects being inadequately financed to cover for their “life-cycle costs” including support to the rightful duty bearers for administration, management, operation and maintenance and back-up services. These “true” costs of WASH services have to be shared between the users, national governments and donors. The ultimate consequence of focusing only on the installation of hardware and disregarding sustainability of services is the handpump is installed, the ribbon is cut but the water stops flowing soon after.



Ongoing monitoring at local level (after the end of the project support) is a prerequisite for taking action to maintain water systems

The Sustainable Service Initiative

Numerous practitioners, policy makers and research institutions: International Rescue Committee (IRC), Rural Water Supply Network (RWSN), Water for People, Aqua Consult, Swiss Centre for Appropriate Technology (SKAT), WaterAid, Sustainable Sanitation Alliance (SUSANA) and Oxford University are already working on solutions to sustainable WASH services.

To get more clarity on the topic WHH invited a number of implementing partners and different sector stakeholders to a Workshop in May 2015 in Addis Ababa, Ethiopia under theme “Understanding Post-Implementation Monitoring in NGO’s WASH Programming”. As a result of this workshop Welthungerhilfe in partnership with the German Toilet Organisation (GTO) and Viva con Agua (VCA) decided to design an initiative that links up with the above mentioned “think and do tanks” to take part in the practice and policy debate and advocate for positive changes.

The Sustainable Services Initiative (SSI) will be implemented over a two-year period starting in January 2016. The final design of the initiative will be based on planned sector wide consultations (first quarter of 2016) with individuals and organisations already working in the area of WASH. The implementation approach will have to be highly flexible to take account of the dynamics that are to be expected during the consultation process. Milestones planned for 2016 include: a guided online discussion using the SuSanA-Platform and the Rural Water Supply Network (RWSN), a seminar during the Stockholm World Water Week and the piloting of several approaches in selected partner countries.

With this initiative Welthungerhilfe wants to conceptualize and introduce an effective approach to enhancing long term WASH service provision. Such an approach will lead to improved monitoring systems (including post implementation), better reporting and greater transparency in Welthungerhilfe WASH projects.



Participants at the Welthungerhilfe-WS 'Understanding Post-Implementation Monitoring in NGOs WASH programmes, Addis Ababa, Ethiopia. Photo by Stephan Simon, 2015.

Concluding thoughts

In conclusion the initiative will produce a number of outputs on three levels:

At country level

1. Standardising the information that has to be collected at project level around a set of core service indicators linked to national monitoring systems.
2. The realistic costing and budgeting of (post implementation)-monitoring activities.
3. The harmonisation of project indicators with national data collection/management systems so that state actors can plan and manage these services better (this would help with developing a clearer exit strategy for projects).
4. Discussion with “progressive” donors in-country about corrective actions based on PIM and development of projects that are responsive to past failures i.e. not just documenting the lessons and failures but incorporating these into future project design¹
5. Support to develop project concepts in WHH strategic countries with large WASH portfolios that “go one step further” to support decision-making and capacity development of local government and reduce the barriers to entry into WASH service delivery by the private sector.
6. Support innovative approaches that have the potential to provide the evidence base to allow a cost-benefit analysis of investment decisions by Government, institutional donors and the private sector

At HQ level

1. Cost-benefit analysis of how far WHH should move along this continuum i.e. determining to the extent possible, the point at which there are diminishing returns from investment.
2. Supporting country offices with appropriate tools and methodologies for determining the appropriate technological solutions, management and financing models.
3. Setting up a global WHH WASH inventory with AkvoFLOW² to provide a good baseline for post implementation monitoring systems.
4. Developing internal guidelines on how to support the governance and coordination of monitoring at country level, providing guidance on how to design a (country-wide) PIM-concept for Welthungerhilfe interventions.
5. Developing policy on the sharing of PIM-data i.e. reporting failure and contributing to knowledge management and learning within the organisation and with external stakeholders.
6. Exploring funding options to carry out PIM, based on cost estimates published by IRC
7. Advocating for and setting up clear internal institutional arrangements.
8. Improving coordination and aligning project-monitoring systems with the monitoring systems of government agencies

At Sector level

1. Position Welthungerhilfe as one of the lead implementing agencies in the thematic discussions on sustainable services in the WASH sector
2. Support advocacy initiatives that secure financial aid for Post Implementation Monitoring
3. Contribute towards making investments in the WASH the sector more accountable and transparent

References and Content Notes

1. Viva con Agua has a strong connection with national and international artists who -as part of the social platform of Viva con Agua – could address and increase awareness on WASH-sustainability issues through music, art and sport both at country level as well as in the countries of the global North.
2. Akvo is a dutch based non-profit foundation that develops and runs web and mobile services that are designed to support international development partnership networks. Akvo manages a number of unique and transformative services, backed by a partner support and training team. AkvoFLOW is a mobile phone and online service that transforms field monitoring using low-cost Android smartphones. Data is more accurate, and easier to gather and share. It can be collected in areas where there is no mobile connection – Akvo FLOW automatically transmits the data once a connection is detected. Results are made available in real time to broader audiences, leading to better decisions. Further information on AKVOflow can be found under:
<http://akvo.org/blog/akvo-flow-in-action/>
http://akvo.org/wp-content/uploads/2012/10/akvo_flow_2pp_Aug_2013.pdf
<http://akvo.org/products/akvoflow/>

Why are gender equality issues important in the WASH sector?



By Bernadette Crawford

Introduction

Women and men usually have very different roles in water and sanitation activities; these differences are particularly pronounced in rural areas. Women are most often the users, providers, and managers of water in rural households and are the guardians of household hygiene. If a water system breaks down, women, not men, will most likely be the ones most affected, for they may have to travel further for water or use other means to meet the household's water and sanitation needs.

Women have a strong incentive to acquire and maintain improved, conveniently located water facilities, since they often spend more time collecting water. Hence, women and girls tend to benefit most when water quality and quantity improves. They tend to take shorter trips carrying heavy containers, they may have more time for income-generating activities and they are able to spend more time in school. Given their long-established, active role, women usually are very knowledgeable about current water sources, their quality and reliability, and any restrictions to their use. They will also be key players in implementing improved hygiene behaviors. Men are usually more concerned with water for irrigation or for livestock. While women are often more direct users of water, especially in the household, men traditionally may have a greater role than women in public decision-making. Because of these different roles and incentives, it is important to fully involve both women and men in demand-driven water and sanitation programs, where communities decide what type of systems they want and are willing to finance.

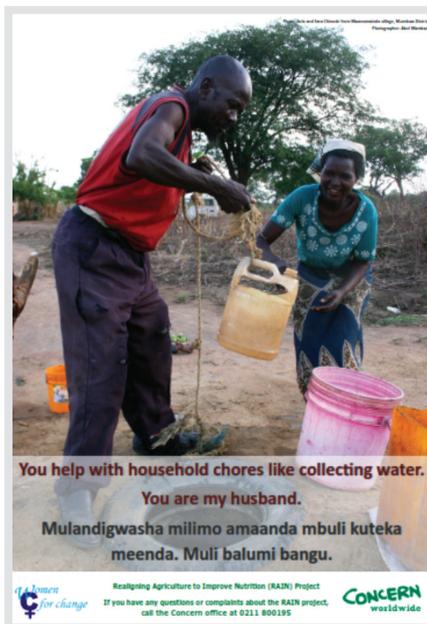
Challenging gender norms

The provision of water, sanitation and hygiene are often considered women's tasks. If we reinforce this practice by only targeting women for hygiene messages, we are being blind to the role and influence that men play within the household and wider community. Bringing about change in gendered norms and practices is possible. Concern has learnt this from its work in Tanzania. Through group education processes to engage men as allies in women's empowerment, changes took place in relation to increased decision making, increased status and respect for women, and a shifting in sharing of household tasks including that of water collection which increased from 5 percent to 34.4 percent at midterm review stage¹.

In many of Concern's Water programmes, we seek to have equal representation of women and men on water committees, but we do not know whether women's voices are listened to, can they really influence decisions in the context given the prevalence of gender inequality. In response I would say that we may need to work with men to influence a shift in attitude and practices. This could be done by learning from the experiences on the 'Engaging Men' approaches at a household level, and transferring it to community level structures, in order to bring about gender transformation, to empower women, and have their voices heard.



Bringing about change in gendered norms and practices is possible. Concern has learnt this from its work in Tanzania



A poster from the Zambia RAIN programme promoting the sharing of water collection.

Attitudes such as, "Women should – or should not – do this and that" or "Men are supposed to do this –but not that", may prevent either women or men from taking action regarding water use, access or management. These practices often result in unfair and self-perpetuating impacts on the lives of both women and men as it reduces the benefits of development among disadvantaged groups and marginalizes their contribution to society. Addressing gender and water together acknowledges these imbalances and seeks to ensure that the contributions of both men and women are recognised and that changes in roles and gender equality is possible in the contexts that we work.

Key issues to consider:

- To manage water effectively and sustainably, it is important to understand the different roles of men and women and to target action appropriately.
- Promote meaningful participation of women in water management including leadership roles. Ensuring that leadership training and support is provided, and engaging men to influence a positive shift in the recognition of women.
- Use inclusive gender sensitive community consultation that engage women and men, young and old to ensure that responses meet actual and not perceived needs.

- Carry out a gender analysis to understand the different roles, capacities, vulnerabilities and needs of different groups to inform programme design and implementation
- Collect and main gender and age disaggregated data
- Tackle the gender inequalities that shape women's and men's roles, responsibilities and status in order to bring about long term change that transforms the lives of women and men living in poverty.

Concluding thoughts

Programmes that ensure that women as well as men are fully involved in planning and development of strategies are far more likely to succeed. We should utilise strategies within our WASH programmes, to promote gender transformation such as promoting the role of men as fathers and care givers, and the roles of women in decision making both at the household and community levels. The adoption of this approach should ensure that WASH interventions impact on gender inequality.

References and Content Notes

- 1 The midterm review of the Women's Social and Economic Rights Programme is available on Knowledge Exchange

The sustainability of hand-dug wells in Tanzania



By Laurence Gill and Franck Flachenberg

Background

It is widely reported that a substantial proportion of water supply facilities across sub-Saharan Africa are broken, with statistics showing that some 30 – 40 per cent of rural water points do not work (IRC, 2012). The sustainability of water points is measured through examining the characteristics of the infrastructure (is it robust, appropriate, placement, etc.), the motivation and skills of the local community for managing it, and the support available (RWSN, 2009).

Concern Worldwide has implemented various Water, Sanitation and Hygiene (WASH) projects in Tanzania since 2003, drawing on lessons learned over the years. In the Kagera region of north-west Tanzania, Concern has been carrying out WASH activities with local partners over the past 9 years. This involved constructing water points with hand pumps, protected springs, sanitation in schools with rainwater harvesting, supply of sanitation slabs (used to build latrines), as well as solar pumping projects. In November 2014, an evaluation of the water points was carried out to measure sustainability over time.

Evaluation findings

Water point physical indicators

From the 17 hand pumps only one was not functioning at the time of the survey. However, three other water points, although still functioning, were not being used at all by the local population due to complaints about the water smelling, not tasting good and running dry during the dry season. One water point was not trusted during the rainy season due to the smell of the water and only used in times of water shortage during the dry season.

At 10 out of the 17 of the wells the users reported that the water changed colour after heavy rainfall which indicates potential pollution pathways. An example of this is shown in Photograph 1 which shows the difference in water clarity from water drawn in the morning following a couple of days without rain (the red bucket) compared to water pumped just after a rainfall event (the white buckets). At two of the wells, users reported that worms sometimes appeared in the pumped water during the rainy season. The placement of some of the wells was very close to surface water (rivers or traditional wells) which provides a contamination source and potential for pollution (see Photograph 2). Many users reported significant problems with reduced yields of water in the dry season.



Photograph 1 (above): Change in turbidity of water following a rain event, Kagera, Tanzania. Photo by Franck Flachenberg, 2014.

Photograph 2 (left): Proximity of PE17 hand pump to traditional open water source, Kagera, Tanzania. Photo by Franck Flachenberg, 2014.



Functioning of water point committees

The water committee members were all elected initially by a public vote. However, very few committees had replaced members who had left or had organised a second round of elections since the installation of the water point. Although 42 per cent of the water committees were female, only 27 per cent of four key roles (chairperson, treasurer, secretary, caretaker) were occupied by women. For most committees there was evidence of regular meetings being held with minutes taken, but the frequency of meetings decreased for older water points.



Each time a repair was needed, water point committees were able to collect enough money to perform the needed repairs

Most committees had collected some money just after the pump installation, but this practice had generally shifted to just collecting money reactively from the users if problems with the pump developed. The committee members had very little knowledge of cost of spare parts and only one committee saved money in a bank account.

A third of the committees had successfully maintained their water points and were happy to pay their caretaker for service. However, no caretakers appeared to carry out any routine preventative maintenance. Access to a good mechanic seemed to be a key element for long term sustainability.

Support

Whilst Concern had installed an impressive number of new water points, there had been no direct commitment from Concern or their local partners to develop the supply chain (pump spare parts, trained mechanics, etc.). It was assumed that the local government Water Department would provide the main link in the supply chain, but they are resourced adequately to take on so much work. Almost half of the water points had required no maintenance since installation as they are still relatively new. Thus the committees and supply chain are still relatively untested.

Sustainability

One significant finding is that the sustainability of the water points seems to increase with the higher number of users per well which is perhaps an indication that the more frequently used water points are more valued by the community.

Conclusions

The evaluation showed that whilst a lot of effort had been made to choose a robust pump technology for the programme, there were issues with the placement of several of the water points. A number of the functioning water points were not used by the population due to concerns about water taste and colour. This highlights the importance of using a service delivery approach and the need to have flexibility to allow the best technology to be chosen depending on local conditions. The links between ownership of the water points and sustainability are important. This is clear through the fact that each time a repair was needed, water point committees were able to collect enough money to perform the needed repairs. From a longer term perspective on sustainability, it is important to focus on the analysis and development of the supply chain.

References and Content Notes

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2. Rural Water Supply Network (RWSN), *Myths of the rural water supply sector*, Perspectives No. 4, RWSN Executive Steering Committee, July 2009.
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Reflecting on hygiene promotion in emergencies: The case of South Sudan



By Franck Flachenberg

Introduction

In 2014 I was involved in supporting the Water, Sanitation and Hygiene (WASH) efforts of two Protection of Civilian Sites (PoCs) in Bentiu, Republic of Sudan. The PoCs housed Internally Displaced Persons (IDPs) who were fleeing violence and conflict. The population of PoC 1 was initially 8,000 but rapidly decreased to 5,000. The population in Camp 2 was initially 1,200 and gradually rose to 2,000.

As with the majority of WASH emergency interventions, soap, jerry cans and buckets were distributed to the PoC residents. Hygiene promotion was also a central part of the intervention. The plan for hygiene promotion was to recruit hygiene promoters in each PoC and train them to give health messages and promote behavior change. Five hygiene promoters were recruited in camp 2 but we were unable to recruit promoters in camp 1. This was due to the fact that those who were more literate and educated left the PoC first. Additionally, those who remained felt their stay would be short and therefore were reluctant to take on a hygiene promoter's role despite it being a paid position. In the rest of this article I will share my thoughts on the hygiene promotion component since I was closely involved in this.

Hygiene promotion intervention

Due to the unplanned nature of the PoCs only basic WASH facilities were available before Concern's intervention. The initial situation was similar in both PoCs with widespread open defecation, limited access to clean water and no waste management. An assessment was made through a rapid survey and discussions with community representatives and the hygiene promotion team. Results showed very little knowledge regarding what causes diarrheal diseases (only 20 percent were able to name two or more ways of contamination) and low level of hygiene practices (less than 15 percent reported using soap to wash their hands), which is consistent with the national data available for South Sudan¹.

In PoC 2 five hygiene promoters were recruited in order to achieve the Sphere standard of one hygiene promoter per 500 people, and a three day training was provided. The hygiene promoters were responsible for activities such as highlighting the problem of diarrheal disease and how to prevent it, promotion of hand washing stations, a hygiene promotion play performed in front of people queuing to receive distributions. Additionally, the hygiene promoters were responsible for special events such as the environmental clean up day, handwashing

demonstrations, organising competitions with rewards for the cleanest compound and sanitation caretakers' recruitment. The caretakers were in charge of the daily cleaning of the latrine blocks and the maintenance of the hand washing stations nearby.

The early stages of an emergency response rarely allow time and resources to conduct a full baseline survey on hygiene knowledge, attitude and practices. However, Concern did conduct an initial survey with 60 respondents to examine the PoC resident's knowledge and habits on hygiene and sanitation. It was observed that there was clearly a discrepancy between what people were saying about their practices and what they were actually doing. We therefore decided not to use a survey to compare differences between PoCs but to use direct observation. Direct observation was conducted by walking through the PoCs to assess the number of functioning handwashing stations, the cleanliness of the compounds and hygienic use of the latrines provided.

The direct observation was done over three consecutive days, each morning at the same time. The walk was from one extremity of the main path to the other. Additionally, observations were also made on four sub-paths, as far as they could be seen from the main path. For both PoCs, the walk took five minutes and the length was similar –around 200 meters. Data was collected using a checklist.



Too often, hygiene promotion relies on uninspired community volunteers

The direct observation showed that PoC 1 had no functioning handwashing stations, but PoC 2 had between 6 and 12. We never observed anyone washing their hands with soap in PoC 1, though a small number of people were seen doing this in PoC 2. Less than five dwellings in PoC 1 were observed to be free from waste, but this was vastly better in PoC 2. Half of the new latrines in camp 1 had faeces on the floor and only two holes were covered – but in PoC 2 all the toilets were clean of faeces and the holes were all covered with lids.

Concluding thoughts

From my experience in South Sudanese PoCs, the above results can only be made possible if staff members are dedicated full-time to the hygiene promotion activities and are not involved in other components of the WASH intervention (such as monitoring the water quality, which is also a priority but should be performed by other staff).

Too often, hygiene promotion relies on uninspired community volunteers. Hygiene promoters need to be motivated and dynamic. Unless a strong sense of community pre-exists the crisis, emergency situations tend to generate more individualism or family-centred reflexes among the IDPs. In South Sudan, I found that paying hygiene promoters was more successful than relying on the community representatives to assign volunteers.



Many interventions during an emergency (e.g. paying staff, distributing free soap) are not conducive to a longer term sustainable approach to hygiene promotion. However, we believe that these interventions are required initially due to the higher risk of spread of infectious diseases in a PoC setting. Finally, as soon as possible, a more development focused approach should be adopted to ensure that the behavior change is maintained by the displaced people when they return home.

References and Content Notes

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Community Led-Total Sanitation in fragile contexts: The Somalia/Somaliland Case



By Mercy Gitau

Introduction

Over the years, Somalia has received generous funding from a variety of donors aimed at latrine construction in both rural and urban contexts. This strategy while serving an immediate need has been ineffective in increasing sanitation coverage and usage outside of the areas of intervention. This strategy has also tended to only focus on the hardware component of WASH, the software component linked to behaviour change messaging has not received the same level of investment.

The dangers presented by Somalia's inadequate sanitation and hygiene situation are reflected in its high rates of open defecation and related human development statistics. At present, at least 83 percent of the rural population defecate in the open (4th highest in the world). The national average for Open Defecation (OD) stands at over 50 percent¹. The seriousness of the health situation in the country is underlined by frequent diarrhoea and cholera outbreaks combined with increasing mortality of children under five years of age, resulting from poor sanitation. The death rate caused by diarrhoea in children under five years of age is estimated to be two out of every five children and every hour one child under five years of age dies due to water and sanitation related illnesses. Somalia's Infant Mortality Rate (IMR) is 180 (for every 1000 live births) which is the 3rd highest in the world². The situation is exacerbated by the fragile security situation that has ravaged the country for years and the harsh climatic conditions that put a lot of pressure on existing resources.

In this context, Community Led Total Sanitation (CLTS) is seen as an effective strategy to rapidly change the sanitation scenario in Somalia and involve the community more actively in achieving better sanitation and health as key development outcomes. Although the national policy incorporates CLTS as the core strategy, its translation into action and outcomes has been difficult. Challenges range from a lack of systems and protocols to guide effective action to low levels of community awareness of the benefits of CLTS.

The approach taken

CLTS is a community-led / community driven approach that involves and affects everyone in the community. It addresses total elimination of open defecation through collective community decision & collective local action. The approach triggers four key elements of human behaviour, that is, the element of shame, disgust, fear and self-respect. CLTS is a non-subsidy approach whereby actions are locally decided and do not depend on external support, prescriptions or pressure. In order for

CLTS to succeed, our personal attitudes, professional attitudes and our institutional attitudes must change. In the CLTS approach we need to consider each other as equals and learn from each other and believe that regardless of the burdens currently on programme participants they have the capacity to take responsibility for their own waste disposal and hygiene. The success of CLTS depends on the following: the right attitude and behaviour, the enabling environment and the effective administration of CLTS tools and techniques.

It's all About Change of Attitude and Mind-set

Concern Somalia/Somaliland is currently implementing two programmes which both aim to improve sanitation to reduce diarrhoeal related morbidity and mortality rate thus reducing medical expenses burden at household level. The SHERRIS programme aims to achieve Open Defecation Free (ODF) status in 14 villages in Gabiley while the BRCiS targets 9 villages in Elwak and Belet Xawa Districts of Gedo Region.

The "Strengthening Household Economy and Reinforcing Resilience In Somaliland (SHERRIS)" programme in Gabiley planned to use a strategy that combined the CLTS and Participatory Hygiene and Sanitation Transformation approaches in a two phased 18 month strategy per village. Given the long subsidization approach that has traditionally been applied in Somaliland and South Central Somalia and the fact that CLTS is relatively new in Somalia, the approach did not gain full acceptance and total buy-in of the staff. Actual implementation therefore became a challenge and a decision was taken to support the community partially to build their own latrines (by providing a floor slab and door). This approach is not in line with the principle of CLTS. Some communities even received blanket support for latrine construction. There is very little evidence of communities or individuals investing their own resources in latrine construction. Only one community that received the blanket subsidy has been declared Open Defecation Free (ODF). The rest are still waiting to receive support from aid agencies.

The "Building Resilience Communities in Somalia (BRCiS)" programme in Gedo, Lower Shabelle and Banadir regions started implementing the CLTS approach in 2015, covering 4 villages in Gedo Region. Staff in South Somalia were trained and taken to visit one village where the approach has been applied successfully. Interaction between the staff and the local community in this ODF village changed the implementers' mind-set and attitude whereby they started believing that it is possible for the communities to construct latrines on their own. This change in attitude by both the implementing staff and the community has been critical.

The outcome of implementation in the Somaliland and South Somalia has taught us that in addition to building knowledge and skills on CLTS application, changing the attitude of the implementing staff and partners is the most essential part of the strategy.

Our Strategy

Concern Somalia/Somaliland has adopted a model that aims at improving sanitation in rural areas through CLTS, while the construction of latrines through subsidy is implemented in urban areas, mainly Internally Displaced Persons (IDPs) camps. Latrine construction will continue in IDP camps is due to the need for immediate hygiene measures amongst the growing population.

The long history of subsidised latrine construction has created barriers for interventions like CLTS that seek to promote community development with very little financial incentives. It was with this in mind that Concern Somalia/Somaliland has focused on building the technical capacity of its implementing staff and partners to enable them to:

1. Gain clear understanding of the Community-led Total Sanitation (CLTS) approach;
2. Understand the meaning of open defecation free (ODF) environments, including clarity on collective behaviour change for health outcomes vs target driven latrine construction for geographical coverage;
3. Understand and appreciate the new role of the government as enablers and process facilitators rather than as direct implementers;

The role of Natural Leaders in delivering results

Special focus was paid to the identification of Natural Leaders (activists and enthusiasts who emerge and take the lead during CLTS processes, and can be men, women, children or young people) as these are the constant drivers of communal initiatives. Out of the four communities where CLTS was used, two (Oridimtu and Qaranri in Gedo Region, Somalia) have active natural leaders comprising mainly community male elders and women that have mobilized the community to construct and use their own latrines. As of January 2016, 97 percent of the households had their own latrines and were using them. These villages had no single latrine before the intervention. The few without latrines are not allowed to defecate openly but rather share with their relatives that own latrines. The Natural Leaders have put in place strict by-laws relating to open defecation and defaulters are penalised heavily. These leaders such as Mr. Aden are proud of their achievements, see box 1.

Box 1: A Natural Leader reflects on his CLTS achievements

"I remember when these boys (implementers) came to me, I told them to stop joking with old people who are the age of their fathers...." Aden continues "...because it was unethical to talk about shit in public and especially when women, men and children are altogether. Now I appreciate the work of these boys." He narrates an incident that took place during the triggering process. "I was shocked and felt a lot of shame during the walk that we had around the village because it happened that when these boys asked children to show them shit in an open area, the moving crowd unfortunately targeted my own family's defecation site that was near my house. My own shit was lying on the ground; the boys were mockingly talking about the shape, colour and consistency of the shit. I and my wife felt very offended as everyone else laughed heartily. I took a decision there and then that this will not continue and was the first to construct a latrine in this village," Aden summarizes proudly.



Photo taken by Abdi Rahim Mohamed from LLG, CLTS focal person in Elwak; taken on 08/08/2015 in Urdimtu Village, Elwak District, Gedo Region



By fostering a strong civic spirit through Natural Leaders it can be possible to discuss taboo subjects such as defecation in public forums

While achieving ODF is a great success, sustaining the same requires interminable effort that can only be assured through the Natural Leaders. Any newcomers to the village are monitored by the Natural Leaders to ensure that they do not practice open defecation and that they construct their own latrines using locally available materials (sticks, cloth, leaves, fodder stalks and logs).

Conclusion

As has been demonstrated in this article CLTS can make a significant difference to public health outcomes. By fostering a strong civic spirit through Natural Leaders it can be possible to discuss taboo subjects such as defecation in public forums. Concern Somalia will continue to contribute towards the improvement of public health through the CLTS approach in rural areas. Learning exchange visits will be organised whereby implementers will not only be trained but also visit the villages that have been declared ODF (security allowing) so as to change their attitude and mind-set around the community's capacity to solve their problems. The key learning points are;

- CLTS is all about changing the attitudes and mind-sets of the community so that they understand the repercussions of open defecation and find practical solutions. The change has to start with us (the implementers).
- Commitment is the key in any context – stable or fragile! Implementers must develop passion for change and instil the same in Natural Leaders that live in the community.
- Communities can do anything on their own as long there is communal responsibility, passion and a means. Go with a clean slate to the community – if the facilitator looks very knowledgeable then the community will misunderstand her/him and expect guidance to finding a solution and this marks the beginning of failure.

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Adapting the life-cycle costs approach for rural water supply in the Democratic Republic of Congo



By Stephen Jones

Introduction and overview

Investments in rural water infrastructure in the Democratic Republic of Congo (DRC) are rarely made with good information on what financing and technical support is required in the long term for the infrastructure to provide a sustainable service to the users. Given the under-developed policies and local government structures for water supply, the responsibility for organising and financing long-term operation, maintenance, and minor and major repairs is left to the users by default, usually through community-based water management committees.

The DRC WASH Consortium led by Concern Worldwide is trying to address this reality by adapting the life-cycle costs approach (LCCA) to permit informed investment decisions by local actors which are based on an analysis of long-term economic, technical/environmental and social/institutional feasibility. This article explains how the Consortium has developed this approach, and provides lessons learned and recommendations for other WASH actors.

In DRC, the national rural Wash programme called “Healthy Villages and Schools” is experiencing difficulties to ensure the sustainability of the WASH services it initiated: 1 to 4 years after being certified as ‘Healthy Villages’, only 2 percent of villages had maintained their certification based on the adoption and upholding of the 7 ‘national WASH’ norms, 33 percent of boreholes with handpumps were not functioning, and only 22 percent of villages collected funds to cover the operation and maintenance of water points (Hydroconseil, 2014)¹.

The DRC WASH Consortium (2013–2018) was established as a complementary initiative to the national rural Wash programme. It comprises five international NGOs (Concern Worldwide being the lead agency) and aims to support over 500 villages (500,000 people) in rural DRC through a 12-step process which lasts eighteen months in each village, followed by additional monitoring and evaluation for a further six months. One of the main differences in methodology compared to the national “Healthy Villages and Schools” programme is the DRC Wash Consortium’s emphasis on the use of the life-cycle cost approach to inform decision-making.



We defined different ways of using the life-cycle costs approach to inform decision making

Using the life-cycle costs approach to inform decision-making

The DRC WASH Consortium has adapted the definitions of the different cost components of water services to focus on the recurrent costs at service provider (community) level: operating and minor maintenance expenditure; capital maintenance expenditure; and full renewal/replacement (the final being equivalent to the original costs for investment). Note that as shown in the table below the Consortium has adapted the life-cycle costs approach to make a distinction between the different elements of “capital maintenance costs”: “major repairs” which occurs every year and “full rehabilitation” after typically 10-15 years.

The DRC WASH Consortium has two objectives in adopting the LCCA:

1. To enable local actors (communities, local authorities and health services) to make informed decisions about whether the installation of an improved water point is likely to lead to sustainable services in the long term (given local capacities);
2. To permit an informed decision between different feasible technical options, in terms of estimated costs vs level of service.

Table 1: Using the life-cycle costs approach to inform decision-making

Estimated capacity of the community to cover long-term costs of the proposed water point	Recommendation for implementation	Action for advocacy
The community would be unable to cover operation and minor maintenance costs (“level 1 costs”)	Assess the potential for alternative solutions (eg. household water treatment).	Advocate for consideration of alternative solutions such as household water treatment in national policy as part of ‘progressive certification’ of Healthy Villages.
The community would be able to cover “level 1 costs”, but not major repairs (“level 2 costs”).	Proceed with investment and installation of infrastructure, and support the setting-up of income-generating activities such as animal-rearing to help cover “level 2 costs”.	Advocate for solutions to address capital maintenance costs in the medium-term (eg. mutualisation of costs between villages) and the long-term (eg. cross subsidies and government investment).
The community would be able to cover “level 2 costs” but not full rehabilitation (“level 3 costs”). (Note that it is rarely feasible in any country for communities to cover full rehabilitation costs, so for the moment it is assumed that this is not realistic in DRC).	Proceed with investment and installation of infrastructure.	

When the different analyses show that the community is not able to guarantee the required level of sustainability, the DRC WASH Consortium recommends a progressive approach which encourages the implementation of Small Doable Actions that are based on communities' capacity to mobilize funding and/or resources. Small Doable Actions are not only linked to water; they also comprise the identification and implementation of local solutions for the improvement of hygiene and sanitation. Examples of Small Doable Actions include regular households visit by 'community relays' to promote the adoption of good WASH practices, household water treatment solutions, the construction of hygienic latrines and hand washing stations with local materials, the digging of waste pits, the construction of structures to dry dishes, etc.

Life-cycle costs tools used and developed

The DRC WASH Consortium has developed key tools to implement the life-cycle costs approach, in particular a facilitator's manual for how to guide a community through the process of analysing costs and different financing options, leading to the eventual choice of infrastructure and set-up of a financing mechanism.

The Consortium calls this process 'developing a 'business plan' for the proposed water service (and associated hygiene and sanitation improvements) where the committee acts like a social entrepreneur; this terminology was chosen to highlight the difference with the humanitarian approach that NGO staff in DRC are more accustomed to using.

At sector level, the DRC WASH Consortium has also succeeded in opening up the debate about the importance of life-cycle costs for sustainability through organising biannual "sector reviews" since February 2014, where representatives from all key stakeholders come together to share experiences. The Consortium is now developing further targeted advocacy towards the national "Healthy Villages and Schools" programme to advocate for the 'business plan' approach and tools to be adopted at scale. The tools and guide are available (in English and in French) to share with all Concern WASH programmes and we will keep you updated on how they progress.

Lessons learned and recommendations

The following are the key lessons learned so far, and recommendations for other actors:

- The development of the life-cycle costs approach within the Consortium so far has required continual adaptation. Although this is in line with the Consortium's original logic, as well as the move to "adaptive programming" by the donor Department for International Development (DFID), this has required time for reflection both internally and externally and means that the implementation of project activities has taken longer than anticipated. This has required transparent engagement with the donor and government partners to ensure that the longer-term benefits of this time taken are understood and agreed by all.

- It is important to find a balance between harmonising the approach and tools across the different members of the Consortium and permitting some freedom to adapt for each member. As discussed above, this promotes a sense of ownership of the teams who are using the tools, and also permits adjustments according to different contexts within DRC and to encourage new ideas to emerge from project activities.
- At this stage of implementing a life-cycle costs approach, the key concepts and the fact of using the approach to inform decisions are more important than the exact details of the analysis and calculations made (especially because the accuracy of any calculation is limited by the poor detail that exists in DRC). This is an important lesson for other actors in making sure that the use of life-cycle costs is targeted to inform a specific decision or activity, such as the process of investment decisions for the Consortium.

Emerging issues and recommendations

The implementation of a life-cycle costs approach so far has mostly focused on the recurrent costs which occur at community level of operating and minor maintenance expenditure and capital maintenance expenditure. Although some costs of direct support are considered, this should be further analysed in collaboration with other stakeholders who have a greater emphasis on developing local health services to help provide this support in the long-term.

For the Consortium itself, the greater focus on longer-term sustainability has led to a partial shift away from working in the most vulnerable regions and communities and towards more feasible intervention areas. However, it is still important to consider what alternative approaches to community-based water supply could be feasible in such areas (such as self-supply or household water treatment).

Finally, the question remains of to what extent it is possible to consider a life-cycle costs approach and long-term sustainability in post-conflict situations or fragile states, especially those such as DRC where water sector policies and government structures are under-developed.

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Key words

WASH, CLTS, Gender, Safe Water, Sanitation Coverage, Hygiene Behaviours, Sustainability

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Design and Layout: Pixelpress **Print:** Genprint

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KNOWLEDGE MATTERS

Concern's Knowledge Quarterly Review Issue 17 | June 2016
