38th WEDC International Conference, Loughborough University, UK, 2015

WATER, SANITATION AND HYGIENE SERVICES BEYOND 2015:
IMPROVING ACCESS AND SUSTAINABILITY

Hygiene promotion: designing a simple, scalable programme in rural Mozambique

J. Beale & R. Vander Meule (Mozambique)

BRIEFING PAPER 2189

This case study outlines the rural hygiene promotion work of the Anglican Diocese of Niassa. The approach builds on the strategies and structures established during ten years of community development by the Diocese in northern Mozambique. This paper demonstrates the successes and challenges of working through existing community structures, including the church, to achieve widespread behaviour change in very rural areas. This is done through a scalable programme that promotes six key hygiene themes which are taught to every household in a community. We conclude by sharing lessons learnt about the mobilisation of volunteers, ensuring consistency and avoiding dilution of messaging, as experienced through the two initial iterations of the programme.

Context

The Diocese of Niassa's hygiene promotion programme is currently being implemented in 45 communities or neighbourhoods in 2 districts of Northern Mozambique: the district of Lago in Niassa province and the district of Milange in Zambezia province.

According to national documentation, the provinces of Zambezia and Niassa have some of the lowest water and sanitation coverage in the country and Diocese baseline surveys have confirmed these low figures. Mozambique has one of the highest child mortality rates in the world: the national under five mortality rate is 90 deaths per 1000 live births and Zambezia is the province with highest rate in the country (141 deaths per 1000 live births). The World Health Organization estimates that 12% of these deaths are caused by diarrhoea (WHO, 2013) meaning that around 2600 children die each year in Zambezia due to diarrhoea.

Knowledge and practice of hygiene practices and causes of diarrhoeal diseases were low in both programme areas: in a survey of 328 households 55% could not give any causes of diarrhoea; 48% listed 'after defecating' as a time that they washed their hands; and despite the high proportion collecting water from unsafe sources only 11% used any sort of treatment. Some comparisons between Lago and Milange districts are shown in Table 1 and further baseline data can be seen in Figure 3.

Existing structures for community action

The Anglican Diocese of Niassa created a formal HIV and AIDS program in 2004. Though people living with HIV and AIDS had been included in the care traditionally given to sick people by the church's women's groups, this 2004 decision encouraged congregations to create their own HIV and AIDS response teams, now known as "*Equipas de Vida*" or "Life Teams." Thousands of activists now voluntarily participate in community-based teams within the Diocese. These teams manage and develop their own community-based activities in the northern half of Mozambique.

Equipas de Vida are groups of volunteers who live in the communities where they work, collectively identifying their own priorities for a better community. As the *Equipas de Vida* began to respond to the needs of people living with and affected by HIV, they recognized that medication alone was not sufficient for good health. The paucity of improved water sources meant that HIV positive patients, in the words of one activist "got diarrhoea while they fought HIV by swallowing HIV medication with dirty water."

Leaders of the Diocese of Niassa challenge hierarchies in society through their language. For example, the job title given to field workers is *adepto*, a Portuguese term referring to a "supporter" or "fan" (such as someone at a sporting event). Using this analogy, the *Equipas de Vida* are the ones who win or lose the game; the *adeptos* serve to support their teams. The words *equipa* and *adepto* become ways in which language serves to reaffirm identity. This language backs up the principle that the Diocese of Niassa sees its few support staff as supporting the work of the activists, not as the activists helping the support staff achieve broader diocesan goals. The diocese does not conform to typical NGO practices in that it does not go into the community to recruit volunteers.

Table 1. WASH statistics for programme locations

Published data	**Lago District, Niassa Province**	**Milange District, Zambezia Province**
Density (MOPH, 2009)	15.19 people/km^2	64.47 people/km^2
% Rural by population (MOPH, 2009)	83%	93%
Access to safe water in rural areas (PES 2012)	50.7%	26.3%
Open defecation prevalence (provincial level statistics) (WHO/UNICEF 2014)	2%	75%
Diocese of Niassa programme baseline data (for sampled communities)	**Lago District, Niassa Province**	**Milange District, Zambezia Province**
Children under 2 reported to have had diarrhoea in the 2 weeks preceding the survey	32%	49%
Have a latrine at home	79% (66% in good condition)	39% (47% in good condition)

Hygiene programme design

The programme was developed using a combination of the Participatory Hygiene and Sanitation Transformation (PHAST) approach, Community-Led Total Sanitation (CLTS) and the Diocese's experience in health education in Niassa Province. Modifications to the original programme were made based on assessments of which methods were most effective and which messages were most locally relevant and these modifications are discussed in the next section.

The programme has had three phases to date, each of which takes approximately 8 months from start to finish.

Table 2. Programme phases

	Location	**Number of animators**	**Number of counsellors**	**Number of households**
Pilot phase (2014)	Lago District, Niassa Province	40	1021	10,105
Phase 1 (2014)	Milange District, Niassa Province	30	1282	12,820
Phase 2 (2015)	Milange District, Niassa Province	60	1158	11,575

Structure for the dissemination of hygiene education

As described above, requests of community *Equipas de Vida* for training on water, sanitation and hygiene instigated the initial hygiene promotion teaching. Following a needs assessment in the target area, each *Equipa de Vida* from identified communities is invited to select a member who will become a hygiene animator. The community members come together to agree on whom that person should be, or they may choose not to send anybody at all. The community also provide transport or money for transport to the first meeting.

These animators receive orientation from a fieldworker, and then facilitate the communities to choose one woman to serve as a water and sanitation counsellor for every 10 households. It is through this network that

the hygiene promotion messaging is eventually distributed to every house in the community, regardless of religion or political allegiance. This is illustrated in Figure 1.

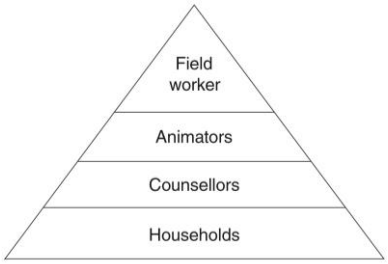

Figure 1. Pyramid showing the distribution of hygiene promotion messaging from field workers to animators to water and sanitation counsellors and finally to each house in the community

The animators take on this role voluntarily, although they receive a bicycle to enable them to travel between communities and to training meetings. They sign an agreement to this effect and are free to leave at any time.

Throughout the rollout of the hygiene promotion programme, field workers and programme managers visit each community every 6 weeks to encourage the counsellors and animators and to see the progress in hygiene behaviour change.

Content of hygiene education programme

During the course of the programme, the animators, and subsequently each household, receive training in 6 modules as follows:

1. The concept of germs
2. Hand washing
3. Keeping water safe (safe storage of clean water and treatment of contaminated water)
4. Building and improving latrines
5. Treating diarrhoea (whilst emphasising that prevention is better than cure)
6. Creating action plans (space for review of previous modules and for creating personal and community action plans)

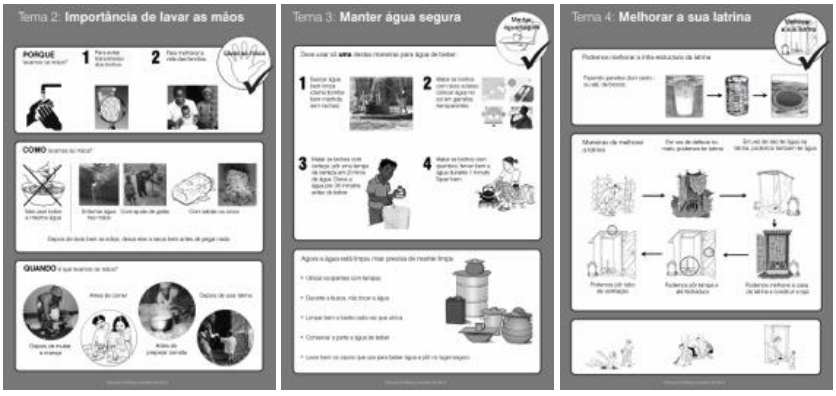

Figure 2. Example of the posters developed for three of the modules

Each theme has an associated teaching poster (Figure 2), which every counsellor receives and learns to facilitate. These posters are predominantly pictorial to account for the low literacy rate amongst communities, and the words that are used are written in the local language (Chinyanja, Chiyao, or Chichewa). The plans (in Portuguese) that the field workers use contain a series of interactive exercises and they are written in detail with material requirements to enable new facilitators to easily replicate the session.

The activity plans for the sessions include several CLTS-inspired triggering activities: in this way the animators are led to discover the key messages for themselves.

Evidence and factors of success

The graphs in Figure 3 show a selection of initial post-implementation results in Lago District (June 2014) immediately after the 6 modules had been taught.

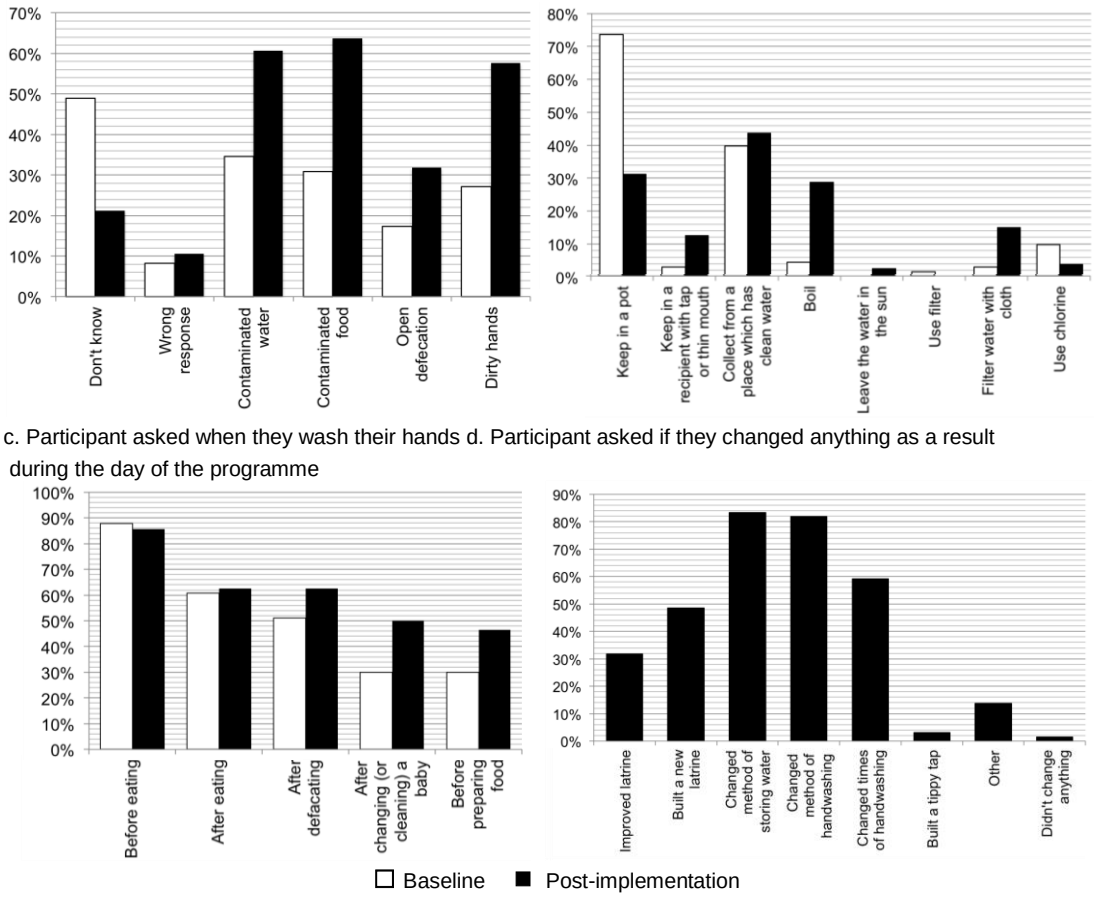

Figure 3. Graphs showing indicators of behaviour change following pilot phase

The results show evidence of reported behaviour change and in the authors' view there are 5 key factors that lead to the successes of this programme:

- The communities have already identified the need for improvements in hygiene through their requests to the Dicoese and their selection of an animator (in this way they are, in a sense, already triggered).
- Within the diocese, there is a culture of community-driven action (without a precedence of remuneration or 'handouts') and it is on this foundation that the hygiene promotion work builds.
- The modules are facilitated predominately peer-to-peer.
- The programme is focused in very remote, extremely poor areas of Mozambique where there is limited information available, and therefore eager reception of new teaching.
- The church's established and respected position in local communities means that a longer term transformative approach makes better use of the Diocese's strengths than triggering for rapid change.

Lessons learnt

Although the general trend of results from the pilot were positive the programme strives towards achieving total community-wide transformation which is not yet being achieved. In addition, only 45% of women surveyed in the follow up survey said that they had received any teaching on hygiene in the previous 6 months. This implied that every household was not being reached. There was also some evidence of the dilution of messaging on its way from field worker to households. In order to try and address this and ensure whole community transformation, several changes were made to inform the scaling up of the programme to

Milange district as detailed below. Results from both phases will be compared at the end of the programme in July 2016.

Narrowing the pyramid

As shown in Figure 4, the pilot year of the programme involved each animator training 50 counsellors and each counsellor 10 households. Whereas the animators are mainly teaching by calling counsellors to a meeting, the counsellors travel from house to house. In the Phase 1 (in Milange) the balance was readjusted so that there was less reliance on people 'turning up' (by reducing the ratio of animators to counsellors) and instead increased the numbers of households that each counsellor visited to 15. In Phase 2, due to an increase in funding, it was decided to try to focus the training further so that each animator would have fewer counsellors (15-20), in order to better facilitate their follow up visits and those of the field workers. Each counsellor returned to teaching only 10 households, as in the Pilot Phase. This is in an attempt to balance whole community transformation with scalability: one of the key strengths of this programme design.

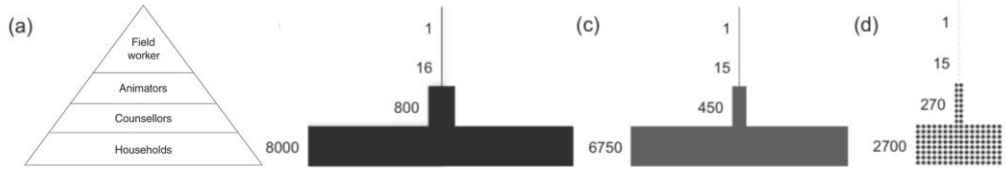

Figure 4. Figure showing the number of each of the agents (a) for (b) Pilot in Lago (c) Phase 1 in Milange, (d) Phase 2 in Milange

Mobilising and valuing volunteers

In addition to the bicycle that each animator receives, in the Milange phases of the programme further measures were introduced to encourage the animators and counsellors to complete their work. Each animator receives a badge (Figure 5) to identify them in their role and to help them to feel part of a team of animators working across the entire district. In addition they receive a booklet which outlines each theme and has space for them to record the date they received training, the date they taught the counsellors and how many counsellors turned up. The field workers record these numbers in each meeting. If they complete each theme they receive a sticker for that theme which covers a logo of the same theme in their booklet. Volunteers are eager to collect all of the stickers and the badges are kept safe and worn with pride. In a similar system, counsellors are given a 'certificate' at the beginning as shown in Figure 6. As with the animators, if they come to each training they will collect all the 'I'm hygienic' stickers on each logo. As a result, there is a significant increase in attendance at these trainings with some counsellors arranging to work each others fields to free them up to teach in the afternoons. During encouragement visits field workers are travelling to the extremes of each community to ensure that the messaging is reaching every household.

A celebration event has also been introduced at the end of the six themes. Support for these events can be applied for by the communities when they think that the whole community has changed its behaviour and that they are open defecation free, drinking treated water and washing their hands at key times. During these events, the community is visited by their local priest with materials to create a large banner for the village, and the animators organise a day of celebrations.

Figure 5. Animator badge design

Figure 6. Counsellor certificates

Ensuring consistency of message

In post-implementation visits at the end of the pilot phase some distortions were seen of the messaging. For example, some households had begun to use a cloth to filter water as a stand-alone treatment method. In an attempt to resolve this problem and to ensure consistency throughout the distribution pyramid more guidance has been developed at each level. The field workers follow a more detailed activity plan when they train the animators and the animators have the key messaging from each theme and suggested teaching activities in their booklets, which they can refer to when training. The counsellor posters have also been further refined and simplified.

Adaptation to context

In evaluating the successes and lessons learnt from the pilot year in Lago district it was necessary to take into account the different context of Milange as shown in the statistics in the first section of this paper. In some cases these differences were favourable to the programme such as the lack of exposure of communities to previous 'hand out' aid: this appears to have resulted in a higher level of commitment to the voluntary work. The lower poverty levels also seem to make the communities more eager for information and teaching that can contribute towards transforming their current situations. Some differences are more challenging: in Lago many communities underwent a process of villagisation in the late 1970s and early 1980s, meaning that houses are clustered with farms on the outskirts. In Milange the houses are adjoined to farmland and each dwelling can be tens or even hundreds of metres from the last, making the communities much harder to travel around and coordinate. There are other variations such as geology and climate which have impacted programme design but these are beyond the scope of this paper.

Conclusion

The Diocese of Niassa's hygiene promotion work is already showing promising results in terms of behaviour change. There are still many challenges to achieving community-wide transformation but as this programme is still in its early stages there is opportunity to be learning and adjusting the design to best address the needs of the local population. The key lessons learnt to date have helped to adjust the programme and will hopefully lead to improved results. There are some remaining challenges, particularly around the gender balance of animators (an issue caused by extremely low literacy rates in the programme areas, particularly among women) and the quality of latrine construction (recent flooding has destroyed many latrines built as a result of this programme). The programme hopes to address these in further iterations.

Acknowledgements

The author would like to extend thanks to the programme donors Anglican Overseas Aid and World Renew for entrusting us with this important work and to all the staff at the Diocese of Niassa who work with such enthusiasm despite the challenges in their own lives.

References

Ministério de Obras Públicas e Habitação (MOPH) (2009) *Programa nacional de abastecimento de água e saneamento rural.* Governo de Moçambique.

World Health Organisation (WHO) (2013) *Neonatal and child health country profile: Mozambique*

World Health Organisation and Unicef (2014) *Progress on drinking water and sanitation: 2014 update.* WHO Switzerland.

Plano Económico e Social (PES) (2012) *Taxa de acesso rural e urbano.* Governo de Moçambique.

Contact details

Joanne Beale
Diocese of Niassa, Mozambique
Tel: +258 868703015
Email: joannefbeale@gmail.com