

CHAPTER 5

CLTS and sanitation marketing: aspects to consider for a better integrated approach

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Abstract

This chapter draws on experiences of three large sanitation programmes in Malawi, Tanzania, and Zambia, and discusses eight aspects to consider when integrating Community-Led Total Sanitation (CLTS) and sanitation marketing: phasing; affordability; financing; the supply chain; masons and entrepreneurs; informed choice; technology; and monitoring. Working out the optimal moment to phase sanitation marketing and CLTS to ensure that community initiative and the behaviour change process is not stifled by imposing inappropriate or unaffordable designs, is still part of our emerging learning. The chapter discusses programme experiences, where progression up the sanitation ladder has been slow, with many households remaining with basic, unimproved toilets. Identified in all the programmes was the need to develop low-cost, durable, and acceptable products that respond to the needs of all.

Keywords: Sanitation ladder, Sanitation marketing, Sanitation supply chains, Sanitation financing, Masons and entrepreneurs, Informed choice materials

Introduction

Post-ODF (open defecation free status), there is an assumption that households will climb the sanitation ladder and upgrade their toilet over time; however there is no guarantee this will happen (Thomas, 2014). Post-triggering, gains made in behaviour change and demand for sanitation facilities can be undone by lack of timely support and information on appropriate toilet technology (Coombes, 2016, this book). Consequently, it is not uncommon to find households working hard to construct pit toilets that will only have a life span of a few months because they are built in unsuitable conditions such as sandy soil or high water table areas with frequent flooding (Phiri, 2010; Hanchett et al., 2011). Poor construction and materials are a significant factor in the decision to abandon toilets (Cavill et al., 2015): households with access to technical support are more likely to maintain their toilets (Tyndale-Biscoe et al., 2013). When toilets collapse, costs to rebuild may be too high, and people may

revert to OD (Thomas, 2014). Negative perceptions and a loss of trust in toilets can also reduce motivation to re-build (O'Connell, 2014). Context-appropriate technical design is therefore required (Sugden, 2003; WaterAid, n.d.).

Ensuring that households have easy and convenient access to materials and parts is another key challenge in moving up the sanitation ladder. Supply chains are often fragmented, and the 'last mile' consumers (i.e. the poorest or most isolated communities) tend not to have access. Missing 'are the skills and activities to transform these materials into a product or service for the rural poor' (Thomas, 2014: 3). Poor, marginalized or hard-to-reach people are often not able to afford the sanitation products available, since prices for materials are driven up by high transportation costs and lack of competition, and even when financing options are established, such as vouchers or microfinance loans, often the poorest will not meet the criteria to be approved for a loan (Jenkins and Pedi, n.d.).

A successful approach will consider and integrate the aspects outlined in Figure 5.1.

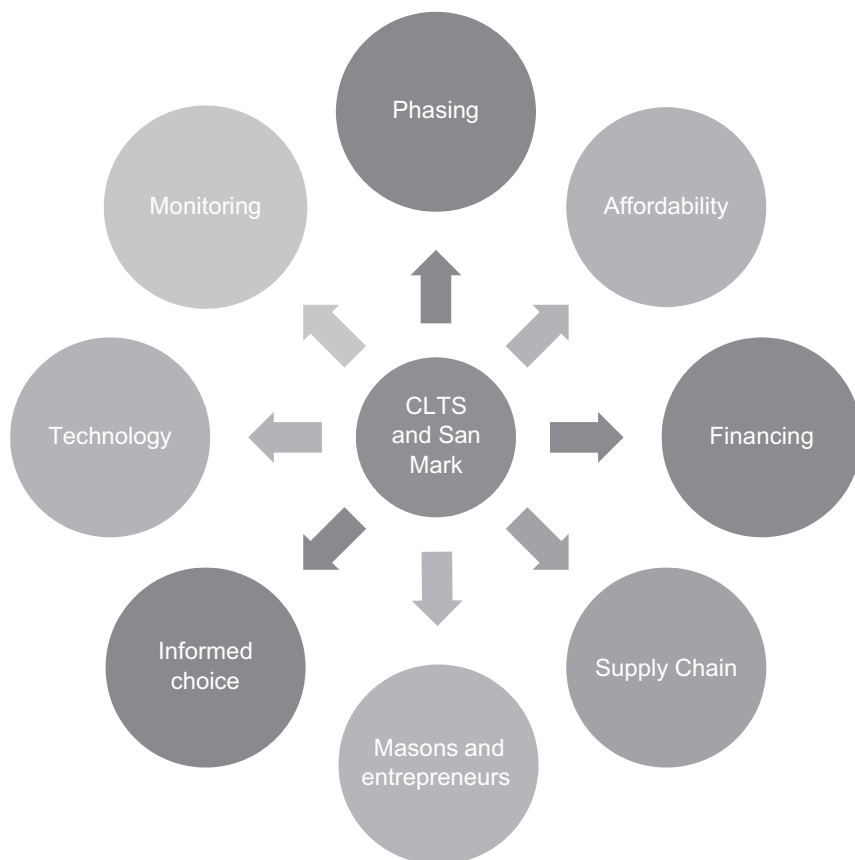


Figure 5.1 Sanitation marketing integrated approach

Source: Author's own

Figure 5.1 shows eight aspects to consider when integrating Community-Led Total Sanitation (CLTS) and sanitation marketing; these are explored in turn in this chapter. Working out when to phase in which one, and what the optimal order is, is still part of our emerging learning. However, this chapter aims to set out current experience based on the learning from three scaled-up sanitation programmes: the Accelerated Sanitation and Hygiene Promotion Programme (ASHPP) in Malawi; the Usafi wa Mazingira Tanzania programme (UMATA) (both programmes funded by the Global Sanitation Fund, GSF); and SNV's Department for International Development (DFID) funded Sustainable Sanitation and Hygiene for All (SSH4A) results-based programme and its water, sanitation, and hygiene (WASH) sector partnerships in Zambia. These are countries where large parts of the rural population use traditional toilets and where sanitation actors are grappling with how to promote ODF sustainability and at the same time support households to move up the sanitation ladder. Experience in these settings suggests that the timely introduction of context-specific sanitation marketing can speed up the household's ability to climb the sanitation ladder (Kappauf, 2011; GSF, 2014). The programmes are described in more detail in Box 5.1.

Box 5.1 Scaled-up sanitation programme descriptions

The work described in this chapter relates principally to three sanitation programmes:

UMATA 'Usafi wa Mazingira Tanzania', funded by the Water Supply and Sanitation Collaborative Council (WSSCC) through the GSF, is one of the first initiatives of sanitation at scale, which was designed to strengthen the Tanzanian National Sanitation Campaign. Its first phase was implemented since the last quarter of 2013 until April 2016 in three districts of Dodoma Region, Bahi, Chamwino, and Kongwa. Sanitation marketing, CLTS, and microfinance are developed at the same time. In Kongwa, ONGAWA is in charge of sanitation marketing, with Lay Volunteers International Association (LVIA) as a local partner. Research about sanitation technologies is key and is supported and conducted by the Polytechnic University of Madrid in partnership with Ardh University.

Plan International Malawi serves as Executing Agency for the **Accelerated Sanitation and Hygiene Practices Programme (ASHPP)**, a five year initiative supported by the WSSCC through the Global Sanitation Fund (GSF). Through sub grantees, ASHPP has been running since December 2010 and it aims to reach out to up to 1.06 million people by the end of 2015, applying CLTS and sanitation marketing approaches. Over 60 per cent of the people in the targeted districts of Rumphi, Nkhotakota, Ntchisi, Balaka, Phalombe, and Chikhwawa are living in an ODF environment.

SNV Zambia has been implementing the DFID-funded Sustainable **Sanitation and Hygiene for All (SSH4A)** Results Programme since April 2014. Its goal is to improve access to sanitation and promote good hygiene practices especially handwashing with soap. The targets are:

By the end of 2015:

- 250,000 people reached through hygiene promotion
- 230,000 people gain access to sanitation

By the end of 2017:

- 115,000 people further improve their sanitation facilities to the Joint Monitoring Programme (JMP) benchmark
- 80,000 people practise handwashing with soap

Sanitation market development was implemented in two phases – prior to and soon after sanitation demand creation.

The rest of this chapter describes the eight aspects to consider for integration of CLTS and sanitation marketing based on the learning from these three programmes.

Phasing

There is a need for more evidence on the optimal moment for sequencing sanitation marketing. Is it before, during, or after triggering? At follow-up meetings? After ODF achievement? As market research, product, and business model development, and the creation of marketing and supply chain strategies, all require substantial time, recent experiences suggest that these initial steps of the sanitation marketing component should start before sanitation demand creation and CLTS triggering (Hanchett et al., 2011; WSP, 2011; Kappauf, 2011; Pedi and Jenkins, n.d.; Pedi and Kamasan, forthcoming, 2016).

A WaterAid study in Nigeria recommends introducing sanitation marketing a year after the initial CLTS intervention to help people upgrade facilities and move up the sanitation ladder (Robinson, 2009). However there are also examples of countries where households have skipped up the sanitation ladder, moving directly to improved sanitation. Experiences in Uganda found that implementing sanitation marketing straight after ODF achievement was more successful, as it didn't undermine use of local materials, and initiative, training of masons, and market analysis was initiated beforehand (Nabalema, 2011).

In Malawi, a participatory design approach to sanitation marketing was successfully trialled by UNICEF, aligned with the philosophy of CLTS, drawing on local knowledge and experience to design toilets (Cole, 2015). ASHPP projects in Malawi conduct CLTS activities alongside forming linkages between small-scale sanitation providers and village banks to enable rural households to access improved sanitation. In Tanzania, artisans are present during triggering sessions and introduced to the community, and are available to answer any questions they have at that stage.

Introducing sanitation marketing to communities years after the initial CLTS triggering proved unsuccessful, with households sticking with basic, unimproved toilets. For example, the first sanitation programme developed at scale in Tanzania was piloted by the Water and Sanitation Program (WSP) in 10 districts, combining CLTS and sanitation marketing and using the Total Sanitation and Sanitation Marketing (TSSM) methodology, and was not as successful as expected (Briceño et al., 2015). Constraints on uptake included limited availability of hardware materials creating bottlenecks in the process. In Malawi (2010–2015), ASHPP targeted 180,000 households accessing improved sanitation and introduced sanitation marketing two or three years after conducting CLTS triggering. But after four years of implementation only 29,933 households accessed improved sanitation (GSE, 2014).

In Malawi, the importance of basic sanitation is emphasized in the National Sanitation Policy (MoIWD, 2008: 1) and the priority for the elimination of open defecation is set out in the ODF strategy (Malawi Government, 2011).

However, improvement of existing toilets is a major concern. Despite the fact that simple pit toilets built after triggering can meet hygienic criteria if properly constructed and maintained (Harvey and Mukosha, 2009; Reed, 2014; WHO, n.d.), there is evidence that the health gains in moving from OD to unimproved simple pit toilets are limited (Quattri and Smets, 2014; WSP, 2014a and b).² There is some evidence to show that projects where CLTS is blended with sanitation marketing have proven effective in stopping OD and moving households up the sanitation ladder (Devine and Kullmann, 2011; Cole, 2015). ASHPP project experience suggests that some people do not want to build another toilet or upgrade after sanitation marketing is introduced at a later stage. Households thought building a simple pit toilet was the ultimate end, only to be told later to further improve or upgrade their toilets when sanitation marketing was introduced a year or so later. If they have the financial resources and knowledge of technical local options available, they would prefer to build an improved toilet straight away (GSF, 2014). In addition, households would prefer to build a new toilet rather than upgrading an existing one that is partially filled in with excreta. 'I would rather build a new toilet than upgrade the same toilet, because I do not want to see shit in the pit and also touch dirty parts of the latrine' (John Mkandawire, Rumph District). As such, project staff have been asked to market all sanitation options during CLTS implementation so that households are able to make informed decisions (GSF, 2014; SNV, 2014a, b), as opposed to waiting until ODF status is reached.

This all implies that starting above the bottom rung of the sanitation ladder may be beneficial, in addition to a focus on continuous upgrading and maintaining.

Affordability

Affordability is a key determinant for moving up the sanitation ladder (Whaley and Webster, 2011). Toilet costs are affected by the number of people willing to buy them – fewer people will lead to an increase in the cost – which then results in even fewer people being able to afford them. High costs, or competing priorities for limited household funds, are repeatedly given as main reasons for not having a toilet, even if people would like one (Jenkins and Scott, 2007; Whaley and Webster, 2011; Sara and Graham, 2014; Cole, 2015). Upgrading existing toilets can also be unaffordable or else people may be unwilling to pay (Whaley and Webster 2011; Sara and Graham, 2014). And rebuilding a toilet every year after flooding or collapse is expensive and unsustainable (SNV, 2015a).

Experience to date shows that the poorest and most marginalized people in a community are rarely able to afford to buy the goods without some form of assistance (SNV, 2014b). They are also most likely to revert to OD or remain on the lowest rung of the sanitation ladder. Ensuring they are able to move up the ladder and avoid reversion to OD is critical to sustaining ODF communities (see Robinson and Gnilo, 2016a, this book).

In Tanzania, when ONGAWA³ conducted a survey at the beginning of the programme, one of the questions asked was ‘How much can you afford to spend on a toilet?’ (Muñoz, 2014). The average price of a toilet is around TZS250,000 (approximately US\$125) but half of the respondents stated an amount between TZS20,000 and 50,000 (see Figure 5.2). This reveals the importance of developing low-cost solutions for the market to be sustainable.

In Zambia, SNV (2014a) did a supply chain analysis at the beginning of the programme, which included a review of affordability of existing sanitation options. In the study seven sanitation options were identified, with costs ranging from ZMK485.71 (US\$77.00) to ZMK3,840.10 (US\$609.00). The average annual cash incomes of households averaged at ZMK2,580 (US\$350) (Table 5.1), which means that even the cheapest option was not largely affordable to consumers. Hence improving affordability through supply chain interventions and microfinance became a priority for the programme.

What a household can afford varies within districts in Zambia. SNV (2014a) found that if households are near the district centre they tend to opt for more expensive sanitation options. Households in and near district centres have a larger disposable income than those far away. Furthermore, the high cost of transportation and the poor state of feeder roads for remote communities limit them to the most basic of toilet options.

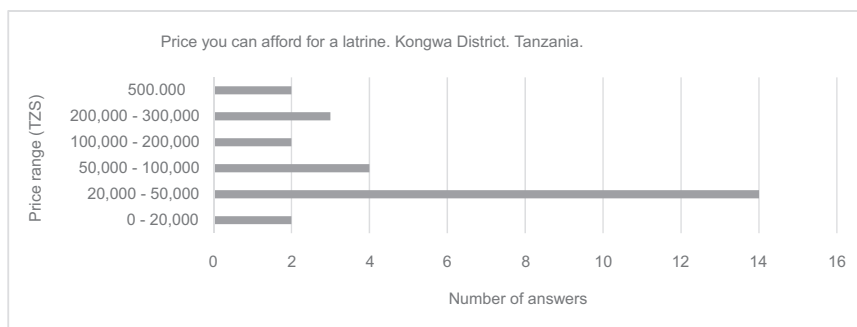


Figure 5.2 Results from a research survey on the price you can afford for a latrine, Kongwa District, Tanzania

Source: Muñoz, 2014

Table 5.1 Average annual household incomes in Zambia, 2014

District	Average annual household income (ZMK)
Luwingu	2,340 (US\$371)
Mporokoso	2,280 (US\$362)
Mungwi	2,580 (US\$409)
Kasama – Rural	3,120 (US\$495)

Financing

Sanitation marketing strategies should include a financing component. Research has shown that some (wealthier) rural households would be willing to borrow to buy a toilet, and would prefer to pay in instalments (Perez et al., 2012; Shah et al., 2013). However, access to financial services is a critical constraint. In villages, households, traders, and transporters have to travel long distances to access financial services. Financial institutions do not reach many villages due to high transaction costs and perceptions of the 'high risk' of lending to poorer customers.

In Zambia, credit schemes have been initiated by members of local cooperative societies and women's clubs. For example, in Chanda Mwamba village, Lukulu ward of Kasama district, there are two registered cooperatives promoting saving and lending schemes among the local people (SNV, 2014a). In Zambia, SNV is exploring formal and informal finance mechanisms with the National Savings and Credit Bank, Kasama Christian Community Centre, and the Ministry of Community Development.

In Nkhotakota, Malawi, rural women have acquired improved toilets through village-level sanitation financing mechanisms. Village banks have been established to help members procure toilet slabs and other materials to enable them move up the sanitation ladder. Although it does not leave out men, the initiative strategically empowers women, widows, and the economically weak, and allows them to access better sanitation facilities.

It is critical to integrate financing mechanisms to reach the poorest and most marginalized people within communities. They will often not meet the criteria for lending demanded from financial institutions, and there is often a reluctance to get into debt or be burdened with a loan they may not be able to repay. Community-initiated schemes will also likely be beyond their reach. Potential ways of establishing financing mechanisms to reach the poorest such as rewards, targeted subsidies, rebates, and vouchers are explored by Robinson and Gnilo (2016b, this book).

Supply chains

Good technical innovations will be unsustainable and can fail to scale up if there are not suitable supply chains in place. Lack of transport can limit access and also supply (Perez et al., 2012). Transportation of sanitation products is typically provided by trucks, bicycles, or ox carts (SNV, 2014a). Poor road conditions can lead to cement slabs breaking and an increase in cost in remote and rural areas (Thomas, 2014). In the UMATA project area in Tanzania, the price of 50 kg of cement was around US\$8, but transportation costs added a minimum of US\$1 if the location was near the hardware shop (Thomas, 2014). Some cheap sanitation accessories such as the plastic 'P-traps' piece were found to be 50 per cent more expensive in rural areas than in main towns like Dodoma or Dar es Salaam, mainly because of the transportation fees and

the lack of competitors there. In Malawi, there are many cases where slabs are cast on site, making it easier and cheaper for the household.

The SNV-developed SAFI⁴ toilet proved very popular. However, the slow development of local supply chains is a major constraint to meeting the high demand for the product (Kome, 2015). The provision of the SAFI-latrines rests on a systematic supply chain business model. A review of SAFI-latrines market penetration in Kenya and Tanzania found that it was not affordability, but rather the sales capacity of the entrepreneurs that holds back SAFI-latrines sales. The SAFI-latrines are in retrospect perceived as a 'significant investment in home improvement' for the household rather than a 'fast moving consumer product' (WR Partnership, 2015). Roll-out depends on development of sales capacity for sanitation entrepreneurs.

Once business communities have been identified in the district, their capital investment is channelled to identify trained masons, who act as extended business chain actors for the businessman. The business investment has many ripple effects that include sustainable marketing from the business community and systematic monitoring.

Masons and entrepreneurs

Training masons and entrepreneurs within communities has had mixed results. Not every mason can be an entrepreneur; different skill sets are needed. In Malawi, people with a background in masonry and who currently own a small business were more successful (Cole, 2015). The UMATA project has identified the level of demand for sanitation facilities along with the ability for masons and entrepreneurs to make a sufficient profit as crucial to their decision to remain in the sanitation business. Experiences such as these show that a more complex model will be needed, which draws on local skills, resources, and contexts.

Improving local sanitation options and services is important. Masons often have good ideas of appropriate toilet options using locally available building materials. Indigenous local knowledge must be used in designing options so that they are tailored to fit the affordability and durability needs of the consumer. Participatory design has been trialled in Malawi, where stakeholders design very low-cost toilets using easily available local resources, costing US\$6–30, depending on the provision of materials and the ability of customers to pay (Cole, 2013, 2015). As the market develops, masons and entrepreneurs can create economies of scale as their average cost of production will be reduced with the increased number of units produced.

In Zambia, the Technical Education, Vocational and Entrepreneurship Training Authority (TEVETA) is revising its building course Level III to include masonry. TEVETA has been training masons in the districts where UNICEF and SNV are operating. This is intended to enhance the sustainability of technologies, as trade schools adopt them into their curriculum. The district councils in Zambia provide the legal enforcements for standards and quality

of service delivery in conjunction with ward and district mason and artisan associations.

In Tanzania, the approach applied by the UMATA Programme combines the training of masons and entrepreneurs with more intensive and specialized knowledge transfer. Six experienced masons and entrepreneurs were selected to follow a 'Training of Trainers' (ToT) course, conducted by a consultant with the guidance of the project manager (PM) and project officers (PO).⁵ The participants were especially skilled at construction and sanitation technologies, but they lacked some knowledge about entrepreneurship. An ONGAWA project officer and a member representing the team of ToTs, attended the modules 'Business Model and Plan in Sustainable Sanitation' and 'Running a Sanitation Business' of an EU funded training programme called 'Entrepreneurship, Community Planning and Appropriate Technologies in Sustainable Sanitation'.⁶ The aim of the training was to make the trainers capable of providing technical advice to masons and entrepreneurs within the community. This knowledge transfer to community-based resources was a way of providing long-term sustainability for the project as they will remain in the area after implementation finishes.

In Malawi, under the ASHPP, entrepreneurs were identified by their community. However, this tended to result in the selection of inappropriate individuals with no interest in sanitation and with no entrepreneurial skills. In Chikwawa district, 202 masons were trained through a project, but only 10 per cent remained active after four years of implementation. Community members often selected relatives on the basis that they may get some benefits from the project. In Balaka, training individuals from a business background on sanitation marketing was more successful. However, care should be taken not to train an excessive number of entrepreneurs in one community, which can flood the market and reduce profit margins (GSF, 2014).

The ASHPP also conducts training in business management to hone the skills and impart knowledge that enable entrepreneurs to sustain sanitation businesses and continue to serve their communities. The ASHPP uses existing structures that include government extension workers, Area Development Committees (ADCs), Village Development Committees (VDCs), District Coordinating Teams (DCTs), and market committees to implement its activities. Such an approach avoids the creation of parallel programme implementation structures and ensures continuity and sustainability of activities even after programme funding stops.

There are many efforts to provide credit to households, but comparatively few to provide credit or financing facilities to the masons, suppliers, entrepreneurs, and the local private sector (Perez et al., 2012) (i.e. in Zambia; SNV, 2014a). Affordability of materials is an obstacle once the masons are trained and the demand has been triggered. Access to finance helps to ensure sanitation entrepreneurs are able to sustain the supply of improved sanitation products and services, and enable them to have diversity of choice in products and services. It also helps develop the supply chain, which is a key constraint to scaling up in rural areas.

Materials to inform choice

Households need the knowledge to make informed choices about the ways to construct the most suitable and affordable toilets and handwashing stations, the life span and durability of the toilet options, as well as their cleaning or emptying needs. Households can then discuss and analyse options with other members of their family and community. Similarly, masons should have the relevant information to build a toilet that lasts and functions as intended and responds to people's needs and budgets.

In Tanzania, a catalogue of affordable sanitation products and local innovations has been developed by the 'Water and Sanitation Systems for Development Cooperation Group' (GCSASD) of the Polytechnic University of Madrid in collaboration with ONGAWA and the Ardhi University to help to link CLTS with sanitation marketing. The need for a catalogue was clearly identified during the initial triggering sessions as households frequently demanded detailed explanations and information about different sanitation options from the masons. The less experienced masons lacked a tool that could help them in those situations, and a catalogue could serve as a technical reference for their work as well.⁷

In Zambia, in compiling its informed choice materials, SNV held focus group discussions with:

- Masons and bricklayers with experience in constructing rural toilets who highlighted the importance of understanding the soil of the village before construction; the construction materials available; for example if cement needs to be transported or burnt bricks fetched or made to construct brick-dome toilets.
- Community members to ascertain their preferences, needs, aspirations, and the concerns of rural communities.
- Chiefs who have promoted various innovations in their chiefdoms. Chief Mporokoso, from Mporokoso district, for example, has put up several demonstration toilets at his palace.
- District Water, Sanitation, Health Education (D-WASHE) officials, who attended a workshop to generate innovative ideas for developing locally specific informed choice materials, as well as to develop plans to distribute and disseminate these materials.

All the materials have been translated into Bemba, the major language spoken in Mporokoso, Luwingu, Kasama, and Mungwi districts. Where appropriate, details on cost have been included for intended users. Traditional leaders have been included as key stakeholders in the dissemination of this information.

In Malawi, learning materials have been developed for masons and entrepreneurs, aimed to enhance their skills to provide user-friendly improved sanitation facilities and hygiene practices on a sustainable basis.

Technical innovations and solutions to fit local contexts

It is essential for toilet designs to be appropriate for local contexts. Without this, scaling-up could quickly stall. A few examples of locally appropriate technology in Malawi, Tanzania, and Zambia are presented in this section, including options for handwashing and adaptations for disabled and elderly people.

1. *Ecological sanitation (Eco-san)*: Eco-san technology was introduced in Malawi along the lakeshore areas of the Traditional Authority Mwamlowe in Rumphu district through a careful blending of sanitation marketing and CLTS. In the past, the area used to continuously shift between OD and ODF status due to regular toilet collapses in sandy and other unstable soils (Sugden, 2003; Munkhondia, 2013). Eco-san technologies provided a clear way up the sanitation ladder. With the Eco-san toilets, the Traditional Authority Mwamlowe in northern Malawi has been able to sustain ODF.
2. *Traditional pour flush*: In Kongwa, Tanzania, there is only one functional water point for every 1,200 people (WPM, 2014). Water scarcity makes it essential to design technological options that need less water. The 'pour flush' toilet uses a raised plastered brick platform with a pipe on a slight slope connecting it with the off-site pit (see Figure 5.3). There is no water seal and it requires just 300–400 ml of water per use.⁸



Figure 5.3 Traditional pour flush toilet

Source: Esteban-Zazo et al., 2014

3. *The SAFI-latrine*: This innovation meets consumer aspirations of durability, safety, acceptability, and affordability (SNV, 2015a; see Figure 5.4). It makes use of toilet parts that can be easily moved and transported by ox-carts and bicycles. As the toilet parts are movable, households that relocate to another plot can still use their old toilet parts. Further, the SAFI-latrine can be used as bathing shelters, thus reducing resources to be spent on constructing a separate shelter. The one-off investment in a SAFI-latrine has long-term extended benefits. However, as previously discussed, the supply chain is still under development to take this innovation to scale.
4. *Slab for disabled and non-disabled users*: Developing low-cost practical solutions for people with disabilities and the elderly is vital (Wilbur and Jones, 2014). In Zambia, private sector actors involved in the provision of technology options, ideal for people living with disabilities, pregnant women, children, and the elderly, have partnered with SNV to enhance availability of appropriate market-based sanitation options, such as Toilet Yanga.⁹ In Tanzania, applied research came up with a slab that brings together a drop hole with a foot rest and a separated second drop hole with a raised structure¹⁰ for people with disabilities. Figure 5.5 shows it during the development phase.



Figure 5.4 SAFI-latrine

Source: SNV Zambia



Figure 5.5 Slab for disabled and non-disabled people, Kongwa, Tanzania

Source: Ana Esteban Zazo et al., 2014

5. *Ash for handwashing*: Handwashing with soap is a parameter in defining the adequacy of a toilet in Zambia and in many other countries.¹¹ In Zambia, communities in the SSH4A results programme mix water and ash and use the resulting product for handwashing. This prevents ash placed in open vessels from dissolving when it is raining. As a marketing strategy, the masons provide a handwashing station as a bonus when a consumer seeks their services and products. In Kongwa, Tanzania, where water scarcity is also high, handwashing with ash has been promoted as an alternative to handwashing with soap.

Monitoring

Monitoring the success of programmes that merge sanitation marketing with CLTS is essential. We need to know more about what works, and what does not, and as quickly as possible.

The Ministry of Local Government and Housing (MLGH) conducts sanitation monitoring in Zambia, with the support of UNICEF (Osbert et al., 2015). These organizations have developed a monitoring system based on DHIS 2¹² to capture data on sanitation and hygiene activities. DHIS 2 is a web-based system that provides real-time sanitation information for planning, monitoring, and decision making at district, provincial, and national levels, by providing an automated feedback on data from village level up to national

level through SMS.¹³ While the sanitation marketing interface is still being developed and piloted for DHIS 2, SNV Zambia has developed a sanitation marketing web-based monitoring tool used to develop appropriate market-based interventions in real time. Indicators include profitability, toilet and soils types, annual household cash incomes, sources for purchasing expenditures, and sanitation supply chain business development. This ensures timely and appropriate interventions in areas of need.

In Tanzania, one of the key operational challenges has been to coordinate the implementation of sanitation marketing and CLTS, as they were carried out by different organizations. Local government authorities (LGAs), sanitation marketing and CLTS project managers are involved in monthly one-day joint planning sessions to plan 'triggering sessions', together with the activities in the other components. This has improved the effectiveness of those activities and the impact of sanitation marketing significantly. LGAs (from the Health Department mainly) were also able to share learning on the earlier failures found when previous triggering sessions were conducted in a former project in some villages of the district¹⁴ and the logistics needed to reach each sub-village. For example, some sub-villages cover a vast and mountainous geographical area, and two triggering sessions were needed. LGAs monitor and evaluate the performance of masons and entrepreneurs. Village or ward executive officers verify the monthly data registered by the Community Own Resource Person (CORPs). The official reporting channels facilitate coordination. The Regional Health Officer has created registers (A4 size books) to monitor a set of indicators on a three-monthly basis including, for example, toilet type, presence and use of a handwashing facility. Data was initially collected by the village health workers at sub-village level, and then compiled in steps: village, ward, district, and region. Although valuable, this information is not enough to evaluate the sustainability of sanitation marketing measures: whether the mason and entrepreneur selected remain active in the sanitation business, and if not, why not.

Conclusion

This chapter has discussed eight aspects to consider in order to better integrate CLTS and sanitation marketing within sanitation programmes, based on learning from the programmes in Tanzania, Zambia, and Malawi. We still have much to learn on when to phase each one in, and what the ideal order is. Sustainable access to sanitation for rural communities demands strategies that allow for products and services that respond to consumer needs and aspirations. Financing strategies (such as microfinance) need to be developed to ensure all households can climb the sanitation ladder so that the poorest are not left on the bottom rung, or revert to OD. Participatory design processes based on local knowledge show potential to develop low-cost, durable, and acceptable products that respond to the needs of all, including people with disabilities and the elderly. Understanding local markets and their limitations is also key to the development of successful supply chains.

We need to know more about the optimal time to phase sanitation marketing with CLTS, and it is vital that experiences, successes, and failures are monitored, documented, and shared widely. More research and continued learning is needed to do this. Formative research is needed in advance of implementation to identify evidence on current practices, the factors that influence these practices, the current supply, and the types of sanitation products and services needed (Devine and Kullmann, 2011; SNV, 2015b).

Moving up the sanitation ladder should not necessarily be viewed as a step-by-step process; sanitation marketing provides the opportunity to rise to any level of the sanitation ladder depending on affordability and willingness to pay. Getting the delicate balance right to ensure that community initiative and the behaviour change process are not stifled by imposing prescriptive, inappropriate, or unaffordable designs early on in the CLTS process is central to achieving long-term sustainability.

About the authors

Twitty Munkhondia, Plan International. Twitty carried out research in Malawi on moving up the sanitation ladder funded by the Global Sanitation Fund (GSF).

Warren Mukelabai Simangolwa, SNV Netherlands Development Organisation. Warren, a WASH Market Specialist, has led efforts in reinvigorating WASH markets with cutting-edge WASH market interventions for profitability, sustainability, and scalability.

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Endnotes

1. The contributions to the Tanzania related aspects of this chapter are based on the teamwork of ONGAWA's Technical Adviser David Muñoz Cifuentes, Researcher Ana Esteban Zazo, and Professor José Antonio Mancebo Piqueras, from the Polytechnic University of Madrid, and Alfonso Zapico.
2. WHO define an 'unimproved' pit latrine as one without a slab or platform, or an open pit. Pit latrines with a slab or covered pit, or ventilated improved pit (VIP) latrines are both defined as 'improved' http://www.who.int/water_sanitation_health/monitoring/jmp2012/key_terms/en/ [accessed 29 January 2016].
3. ONGAWA: Engineering for Human Development, <http://www.ongawa.org/en/> [accessed 29 January 2016].
4. Kiswahili for 'clean'.
5. ONGAWA conducted 194 personal interviews of artisans in 22 different wards. Selection criteria included: they should know how to read and write; must have completed standard VII or more; they should belong to the respective village/ward and not expect to move from that village/ward; they should be self-disciplined and respected by the community.

6. Organized by ACRA in collaboration with International Centre for Water Management Services (CEWAS), University of Natural Resources and Life Sciences, Vienna (BOKU), Research Laboratory on Appropriate Technologies for Environmental Management in resource-limited Countries (CeT-Amb), and Maji na Maendeleo Dodoma (MAMADO).
7. http://issuu.com/ana_ezazo/docs/catalogue_english/1 [accessed 29 January 2016].
8. Normal pour flush with common P-trap needs around 2 litres for a full flush.
9. <https://www.facebook.com/pages/Toilet-Yanga-Limited/592504520854328?fref=ts>
10. Non-disabled people generally prefer non-raised platforms in rural areas of East Africa.
11. Other criteria are a smooth cleanable floor, a super-structure which provides privacy, and a lid for the pit hole.
12. <https://www.dhis2.org/> [accessed 29 January 2016].
13. Short Message Service.
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