

CHAPTER 11

Who is managing the post-ODF process in the community? A case study of Nambale sub-county in western Kenya¹

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Abstract

Post-ODF follow-up is central to sustaining open defecation free (ODF) status, and needs to be integrated into CLTS programming from the outset. This chapter explores who is to carry out these activities, and how they might be motivated and financed. It argues for the importance of identifying existing administrative and social structures prior to implementation. Looking at reasons for success in Nambale sub-county, which was declared ODF in 2012, the chapter discusses the role of Community Health Workers (CHWs), who, under the Kenyan Community Health Strategy Approach (CHSA) have an expanded remit that includes CLTS, in follow-up and in reaching the poorest and most marginalized within communities. The chapter highlights challenges which have arisen, such as incentives to motivate CHWs, as well as the risk that devolved government structures lead to inequity among districts and varying levels of funding for the same activities, thereby threatening ODF achievement and sustainability.

Keywords: ODF sustainability, ODF custodians, Community Health Workers (CHWs), Post-ODF, Follow-up, Kenya

Introduction

Post-ODF follow-up in communities is critical for the long-term sustainability of open defecation free (ODF) behaviour (Bevan, 2011; WSP, 2011; UNICEF, 2014; Cavill et al., 2015). However, this is something that has been widely neglected until recently. Implementing agencies and their funders do not typically have a strategy for continued improvements post-ODF (including their financing), capacity building, or for counteracting slippage (Venkataramanen, 2012). After an ODF declaration, the majority of implementing organizations will leave, or massively cut down on their community support, particularly when budgets are time-limited and there are pressures to achieve targets, unless the CLTS programme activities are integrated in other community initiatives. However, recently, more long-term support is being trialled in several places (see Table 11.1). Working with local government from the start has been documented to be the most feasible and effective way to ensure

sustainability for scaling-up (Perez et al., 2012). But a key challenge is that the strong partnerships developed between governments (central and local), NGOs, and other implementing agencies, are usually focused on the initial stages of the CLTS process leading up to ODF declaration, certification, and ODF celebrations, but not post-ODF.

Post-ODF plans that do exist often focus on sanitation marketing and assisting communities to climb up the sanitation ladder (Verhagen and Carrasco, 2013), and they do not usually consider how behaviour change will be embedded and become a new social norm (see Dooley et al., 2016, this book). Post-ODF follow-up is assumed to take care of itself through volunteer Natural Leaders who live within the communities. They are left to figure out how to continue working after the support they once enjoyed has been withdrawn by the NGO or government.² However, recent studies have highlighted that external support, follow-up, and encouragement to communities, is critical for sustaining behaviour change (Hanchett et al., 2011; WSP, 2011; Tyndale-Biscoe et al., 2013; Thomas and Bevan, 2013; UNICEF, 2014).

Key questions are:

- What happens post-ODF? Is ODF behaviour sustained? Who carries out post-ODF activities?
- Who finances the post-ODF activities when projects finish?
- What happens to the unpaid volunteer Natural Leaders?

This last question is raised in relation to those individuals or groups that become *de facto* ODF sustainability managers in the communities that have achieved ODF. It is assumed that, after the ODF declaration, Natural Leaders will continue with enthusiasm and work without payment as they live within the community. It is also assumed that the work is mainly completed and whatever work is left to be done is minimal. But the role of Natural Leaders in sustaining behaviour is critical, time consuming, and has financial implications too. Recent systematic reviews of performance for Community Health Workers (CHWs) have revealed the importance of providing motivation and remuneration for performance (Glenton et al., 2013; Kok et al., 2014).

This chapter argues that identifying existing social and administrative structures and groups within communities and government prior to CLTS implementation, and embedding them within the CLTS process from the start, is critical in sustaining ODF status. Post-ODF follow-up needs support, commitment, and action from many players (for example, communities, local and national governments, project implementers), and getting the balance between them right is a complex challenge. Expanding the remit of existing structures to include follow-up could help counter the funding and time pressures that many governments and communities face. It also creates a direct entry point to the community, providing access to members of the community who may otherwise be marginalized or excluded. The

chapter outlines how the Kenyan Government's Community Health Strategy Approach (CHSA) has been expanded to include CLTS, and the CHW's remit extended to incorporate CLTS follow-up activities within the community. The case of Nambale sub-county, in Busia County, Kenya is used to illustrate how this has been done.

Nambale sub-county case study

In 2006, the Ministry of Health in Kenya developed the Community Health Strategy Approach (CHSA) (MOH, 2006). It focuses on increasing the capacity of households to take care of their health matters and supporting equitable community access to health care and services across the country. The design of this approach includes capacity building for non-professionals in health and in specific community approaches at the community level. A new national constitution was introduced in 2010, and under the new decentralized system, counties are responsible for delivering health services and implementing health programmes (National Coordinating Agency for Population and Development et al., 2010). Counties now, 'have authority for decision-making, adapting the policy to their local context, finance, implementation and management' (McCollum et al., 2015: 2). Community Units (CUs) have been created that support the discussions, implementation, and monitoring of the various initiatives. Each unit consists of 5,000 people. Community Health Committees (CHCs) have been established to manage the day-to-day running of the CUs. CHC members are elected at the Assistant Chief's meeting (*baraza*). The committee itself is chaired by a respected member of the community. There should be nine members that may include representatives of: youth groups; faith groups; women's groups; NGOs; people living with AIDS; and people with a disability. At least one-third of the committee members should be female (MOH, 2009a).

The CUs are facilitated mainly by volunteer CHWs that in Busia County chiefly comprise members of existing women's groups.³ Table 11.1 outlines their key roles and responsibilities and the selection process. The CHWs collect health data that is relayed to the county headquarters to indicate the health status of the county. CHWs differ from Community Health Extension Workers (CHEWs) who are government-selected paid workers, stationed in local health facilities (government clinics/dispensaries). CHEWs supervise approximately 25 CHWs each (MOH, 2012), although in practice, the number is often many more. After 2011, when CLTS was introduced in Kenya, sanitation indicators were included in the data collection, and the CHW job description was amended to include CLTS activities. These included 'monitoring progress toward latrine construction, collecting sanitation, hygiene, and CLTS indicators (e.g. villages triggered and ODF status), and reporting data on a quarterly basis' (Crocker and Rowe, 2015: 2).⁴

Table 11.1 Community Health Worker roles and responsibilities according to current Community Health Strategy Approach in Kenya

Staffing per community unit	Selection and recruitment	Training	Tasks	Supervision
50	Nominated by community but selection facilitated by community representatives Must be able to read and write Permanent resident within the community Demonstrate attitudes valued by community	Initial 10 day training followed by refreshers	Community entry, organization, sensitization for 100 people Registering households, data gathering Collation of data on chalkboards Community dialogue for change Record keeping and report writing Health promotion Recognition and classification of common conditions and decision for action Home visiting Training and supporting home caregivers	Supervision by CHEW and community health committee

Source: McCollum et al., 2015

Busia County is home to Nambale; the first sub-county in Kenya to be declared ODF in 2012 – and it has remained so (MOH/UNICEF, 2015). The total percentage of open defecation (OD) in Busia County was recently assessed at 8 per cent (MOH, 2013a, b; WSP, 2014; Kenya Open Data). Busia is ranked as third best in the country out of 47 counties in the county sanitation benchmarking by the Ministry of Health. This has prompted exchange visits to Nambale from other implementers to come and learn by listening to the residents of these communities. The visits have created opportunities for others to understand how they have sustained ODF status and the way they have managed households that slipped back to OD. One key reason for success is the integration of CLTS with the CHSA and use of CHWs for follow-up. Another reason is the close working relationship between the public health unit and the Community Unit at the sub-county and county levels that ensures coordinated support at the community level. Nambale also has full coverage of CUs, which is not the case across Kenya.

The Community Health Extension Workers (CHEWs) assign 15–20 households each to CHWs, these are households that are relatively easily accessible to the CHWs, depending on the size of the village and how many group members are available. They are well respected within the community and are able to reach every member, regardless of their situation. They access all homes,

whether very poor, child headed, homes of single women, homes with disabled or elderly people. These are households that may not ordinarily attend triggering sessions and are often among the first to revert to OD (see Robinson and Gnilo, 2016, this book). CHWs can represent these marginalized groups in meetings and in the CHC meetings. Continued behaviour monitoring can ensure the retention of behaviour acquired at ODF (MOH, 2014a). Accessing these households ensures that everyone is reached and, in cases of slippages, they are dealt with contextually (Milward et al., 2014). Further research is needed to better understand the role of CHWs in ensuring sustained behaviour change.

Actions taken to ensure behaviour change is sustained

Community dialogue days are held to discuss health and sanitation matters, facilitated by the CHEW or CHWs. These are meant to take place on a monthly basis and are most vibrant in areas where there are active CHCs. Health data is considered, and the community discusses ways to provide support to sustain the newly acquired behaviour, and monitor progress. This information is relayed to the sub-county health team that provide follow-up and support to ensure that the behaviour is sustained.

The assumption that existing groups will indefinitely continue the follow-up work within the community soon came under pressure, with volunteers becoming demotivated, competing priorities for limited household funds, or in cases of slippages, for example collapsing latrines due to flooding or loose soil formation (MOH, 2014a). Lack of financial support to continue post-ODF follow-up in Nambale led the CHWs to rethink their strategy. They fell back on their original purpose of coming together, to support each other socially and economically, and initiated income-generating activities (IGAs) to raise the extra money needed for the promotion of hygiene and sanitation work (e.g. facilitation and coordination of follow-up, and home visits) (Ochieng, 2014). IGAs include kitchen gardens, breeding of small animals, selling of health products such as water treatment products, producing and selling sanitary towels. Communities are able to access these products through credit, to ensure that they are available when needed.

The CHWs are considered role models to encourage sustained behaviour change within the community. They have in place group sanctions about the kind of latrines they can have. For example, if a member's latrine is not up to the expected standards, the other members would not attend meetings at the person's home until the latrine is well constructed and maintained. There are also sanctions for other members of the community. For example, those who are considered to have a source of income are expected to have better latrines than the rest of the community. If their latrines are not in good condition, the CHWs write to them saying that if no corrective/upgrading action is taken within a period of time, then further action would be taken. They also write letters to the employers to request provision of loan facilities to their

employees to improve their latrines. These kinds of community initiated social sanctions have ensured that Nambale sub-county has households with latrines that they can comfortably afford and access.

Challenges

One of the weaknesses identified in the CHSA is that there are no sustainability mechanisms and incentives in place. Irregularity, inconsistency, and inadequacy of remuneration have stifled CHW motivation (MOH, 2014b). There has been limited financial backing or commitment of funds for community health and sanitation from within the government. According to McCollum (2015), lack of funds to pay salaries for CHWs was identified as a threat to the sustainability of the CHSA in Kenya and their volunteer status has resulted in high CHW attrition and lack of accountability. CHEWs have limited supervision capacities for CHWs (MOH, 2014b). Lack of structure and supervision generally has also been identified as a problem. Workload is high and can put stress on family life, especially if CHWs are mainly women, as is the case in Busia County.

Revision of the CHSA is now under way to address some of these issues. One key element proposed was to increase the number and clarify the role of county government salaried CHEWs working at the community level, and decrease the number of unpaid CHWs. The recommendation was that there should be five employed CHEWS per CU (MOH, 2014b; see Figure 11.1). The move by CHW groups to establish IGAs was also identified by the government as a factor that would contribute to sustaining CHW work, and was integrated into the strategy (MOH, 2014b). In the newly devolved system, counties can now determine whether to provide a stipend to CHWs (MOH, 2014b). The stipends are consolidated to create capital to initiate the IGAs, or, in some cases, CLTS implementers provide money for follow-up. While a good initiative, the fact that it is left to counties to decide the degree of investment for this (and the CHSA as a whole) may lead to inequity within the country, with some counties prioritizing other activities, and not allocating a sufficient budget. This would limit the success of the CHSA and have a knock-on effect on ODF sustainability. Funding gaps need to be acknowledged and addressed by counties; the increase in salaried CHEWs means they will need to budget for greater costs.

There are additional equity implications which need to be considered. Within Kenya, the establishment of CUs has often been supported by NGOs and donors, rather than by the government, which has resulted in geographical inequity in their distribution. This is changing in some counties following devolution in 2010; however it is still a challenge. Devolution brings decision-making closer to the communities, which is an opportunity to ensure on-the-ground context-specific realities are integrated into the CHSA and post-ODF follow-up plans (Ochieng et al., 2014). However, it also can result in inequity between counties. Some counties have good coverage, whereas other counties

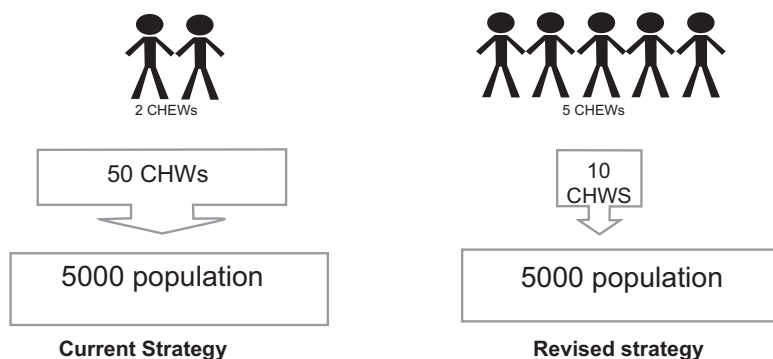


Figure 11.1 Current and revised CHWs structure
 Source: McCollum et al., 2015

often have very few CUs or none at all, and people have to travel long distances to reach them (McCollum et al., 2015). This has a direct impact on the ability of CHWs to carry out post-ODF follow-up. Areas which do not have a CU, or where the county decides not to fund the CHSA sufficiently, will not be reached, which could lead to slippage. Often, these areas will be the most remote or poorest (see Cavill et al., 2016, this book).

Embedding behaviour change post-ODF achievement: lessons learned

Identifying and integrating existing social groups into the CLTS process

As has been described in the case study, understanding the social dynamics of the community before introducing a CLTS programme is important to sustainability. When the CLTS process is designed to rely on established administrative and social structures at the village level, this can help ensure proper triggering, inclusion of marginalized groups, ODF attainment, and sustainability post-ODF, while reducing the amount of extra work needed to carry out activities to support these in the long term. Existing social groupings or key influencers in communities such as CHWs or women's groups should be identified at the pre-triggering stage (for example through mapping exercises) and then included in the CLTS process from the outset so that they internalize the CLTS approach and become the custodians of the attained behaviour change within the community (Maule, 2013; Dooley et al., 2016, this book). The women's groups in Nambale sub-county originally came together to support each other socially and economically; they are now noted as a force to be reckoned with in the community as they are respected, trusted, and influential, and have access to various households, including the poorest and marginalized. The engagement of these groups can facilitate an enabling environment to sustain behaviour change.

Building capacity and incentives

In Nambale sub-county, building capacity within existing community groups, ensuring good management, commitment, and continuity of community officials and other champions, have been critical factors to sustained reinforcement of behaviour (see Box 11.1). To achieve this, external support is necessary. One example is a formalized system of support to Natural Leaders as a group or official organization, which will continue post-ODF (Rao, 2015; Cavill et al., 2015). Ongoing training of Natural Leaders or community groups, and subsequent financial reimbursement, (e.g. for time and expenses when they visit other communities) would be a way of making them more accountable to the local government for following-up and reporting. It would build sustainable capacity within the community and help counter the problem of over-reliance on individuals who may leave or move on. But care needs to be taken to avoid undermining volunteerism. However, currently there are only a few cases where there are clear plans⁵ designed to support the CHWs or Natural Leaders in their work post-ODF (see Box 11.1).

Box 11.1 Capacity building taking place in different African countries

- Nigeria organizes a national annual CLTS roundtable to review progress, discuss challenges and lessons learned, and recognize different actors by giving awards to the Natural Leaders, the best performing local government area, and so on. This strengthens relationships between stakeholders and also creates a sense of healthy competition to sustain ODF status (Schouten and Smits, 2015). The annual meeting is a culmination of a series of CLTS regional consultative meetings that have provided insights on what is happening at the local level.
- Plan International in Ethiopia has supported Natural Leaders in forming an association that is set up like a business and trained them in business skills to make the group sustainable and profitable. The association focuses on ODF sustainability and moving communities up the sanitation ladder, for example, through various sanitation economic activities such as slab production and other hygiene materials and solid waste management (Cavill et al., 2015).
- Plan International in Malawi has supported Natural Leaders in forming networks at regional, district, and village levels in order to exchange information and to validate monitoring data from other districts (Kapatuka, 2013).
- The Ministry of Health in Kenya initiated a programme in 2013 to train Natural Leaders in 40 districts that received funding from the Dutch Government (MOH, 2014b). The Natural Leaders are given training in hosting community dialogues, reflection meetings, and exchange visits. They are also exposed to the process of consolidating lessons learned. This has built the capacity of Natural Leaders, motivating them to work as community consultants on sanitation matters. It has also provided them with some form of income. For example, they are given a stipend when they accompany the Public Health Teams in ODF verification and certification visits to villages (not their own). It has also motivated them to ensure that their own villages remain ODF as their villages are considered a point of reference when ODF verification is happening elsewhere. Some of the Natural Leaders are also trained in institutional triggering in cases where there are challenges with ODF attainment or large-scale slippage.
- Community coaches in Madagascar are trained in the construction of durable latrines, which means that they are assured of income if they carry on with sanitation work post-ODF, and emerge as sanitation entrepreneurs in the community (Venkataramanan, 2012; Milward et al., 2014).

Encouragement for community groups and understanding the motivations for long-term sustained behaviour change is important. In Nambale sub-county, as with all the sub-counties in Kenya, CHWs are working on a voluntary basis and some are investing the little money and time they have to ensure that ODF is sustained once attained. We should not assume they will be willing and able to do this voluntarily, and without payment on a long-term basis without support and incentives. Incentives can cover many different aspects, both financial and professional, performance contracts for health staff, mentoring and supervision, regular refresher training, and professional development to maintain the quality of interventions for behaviour change. McCollum et al. (2015: 7) found that non-financial incentives were important, with 'CHWs drawing on a sense of pride from being a role model, achievement from seeing community behaviours change, recognition from supervisors, community and peer support'. But they also found that absence of a salary was a de-motivator, and has influenced community provider performance, attrition, and accountability (McCollum et al., 2015).

Government commitment

Long-term government engagement and commitment is critical (Musyoki, 2016, this book). Incorporating CLTS indicators in the national or sector strategy, and integrating them into existing administrative structures supports ODF sustainability (see Table 11.2; MOH, 2014b; Wijesekera and Thomas, 2015). At this point, ODF becomes the first step in a longer-term process towards the main outcomes of health interventions and behaviour change. National ODF roadmaps should be extended to incorporate post-ODF follow-up (MOH, 2011; MOH/UNICEF, 2015; Musyoki, 2016, this book). This ensures that follow-up visits or continued monitoring needs are considered, included, and budgeted for. A structured follow-up process can highly improve reliability and effectiveness of monitoring post-ODF. This includes identifying the financial implications of support required for community-level monitoring going forward so that it is factored into the programme at the onset while engaging with the eventual custodian unit of the CLTS process post-ODF.

Table 11.2 Examples of where post-ODF follow-up has been integrated into government systems

Madagascar	Community consultants and champions work closely with the government, through the traditional and cultural leadership structures in the lowest units known as Tangalamena or Ampjanka (Milward et al., 2014). These leaders were identified at pre-triggering, post-triggering, and during follow-up and have taken up the work of carrying out follow-up on sanitation matters in the communities in addition to their leadership responsibilities.
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(Continue)

Table 11.2 Examples of where post-ODF follow-up has been integrated into government systems (*Continue*)

Malawi	CHWs in Malawi are accountable to local government through the Extension Health Teams that are headed by the Assistant Environmental Health Officer, who reports to the District Coordination Teams that provide further support to facilitate their work in ensuring ODF is sustained. Engineers without Borders Canada worked very closely with local government staff in two districts in Malawi on 'extension agent re-organization' for CLTS implementation and monitoring through an approach called 'block monitoring'. This approach ensures CLTS and hygiene promotion activities are integrated directly into everyday health centre work. This is done without specific project funding but using the existing resources of health extension services. CHWs are assigned to blocks of villages and carry out CLTS work in addition to their daily work. This has proven successful so far, but there is a risk, as the system is designed to be championed by one person at the health centre. If the champion leaves or fails to report to work, the entire system could stall (Kennedy and Meek, 2013).
Ethiopia	Health Extension Workers are part of a structured government system and are trained in advance in various health matters such as family planning and nutrition, as well as sanitation.
Somalia	Somalia is fast learning from other countries and is now working at integrating ODF indicators as part of routine health monitoring, thus entrenching sanitation as part of basic health programming. Sanitation monitoring is now appearing in the job description of health workers (Thomas and Bevan, 2013).
Mauritania	In Mauritania, CLTS has been integrated with existing Essential Family Practices programmes, that carry out triggering and post-ODF follow-up for at least two more years after ODF achievement. Bonuses are given to facilitators for each new village certified ODF (Weddady and Sandoz, 2011).

Looking ahead: recommendations and challenges

To achieve long-term sustainability of ODF behaviour and embed a new social norm, CLTS has to become a way of life and not a project (see also Dooley et al., 2016, this book). Ways to realize this include the following:

- Existing social and administrative structures should be identified within communities and government prior to CLTS implementation, and embedded within the CLTS process from the beginning. This ensures that beyond ODF, the community is well-placed to continue with follow-up, verification, and monitoring with minimal strain and financial burden. These groups should be well-placed to access the poorest and most marginalized people within the community, and ensure they are included in the CLTS process.
- Self-financing initiatives like IGAs to support follow-up costs can in some instances be possible within communities, but this should not be relied on. Long-term institutional commitment and financial and other resources for follow-up and capacity building need to be factored into

programming (both government and NGO) from the outset to support community groups (Venkataramanan, 2012). In the revised CHSA in Kenya, the focus is on the use of the popular IGAs, as well as provision for sustainable funding mechanisms and incentives through the use of the devolved governments' resources (MOH, 2014b).

- Formalized structures to support capacity development and ongoing activities of Natural Leader and community organizations need to be established.

The challenges are great. As the case of Nambale sub-county shows, balancing the tension between community engagement, enthusiasm, and commitment to sustaining the ODF status and health of their community against the simultaneous need for government (local and national) responsibility and engagement and support of communities' post-ODF can be difficult. Post-ODF activities and long-term monitoring and engagement need to be prioritized by governments and implementing agencies, and appropriate institutional arrangements (MOH, 2009b; see also Musyoki, 2016, this book) and resources embedded to support community groups and initiatives through structures which enable and do not undermine existing groups. Devolution in Kenya and the increase in power for the counties is an opportunity to bring communities closer to decision-making processes, but with this opportunity comes the potential for inequity; efforts must be made to ensure even distribution and financing of CLTS processes throughout the country.

Further research is needed to understand the extent to which ODF behaviour is maintained beyond the end of projects, and also to understand how this can be realized in practice. The revised CHSA has taken into consideration some of the lessons learned over the past years and integrated them. The revised implementation framework of the CHSA provides support for coordination, sharing, and learning through participation in relevant interagency coordination committees (ICCs) and stakeholder forums. It also seeks to strengthen health financing through promoting entrepreneurial/livelihoods activities at CU level; these include IGAs (MOH, 2014b). These activities have been provided with clear indicators⁶ to ensure there are ways to measure the achievements made. The integration of CLTS into the CHSA in Kenya presents an opportunity to strengthen community leadership and governance in the health sector and give sanitation practitioners impetus to sustain gains made.

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Endnotes

1. Thanks are due to Rosalind McCollum for reviewing a draft of this chapter, and for valuable comments and suggestions.
2. For example, they would sometimes be provided with facilitation for travel, either by bicycle, motorbike, or by receiving a transport allowance (Wamera, 2015).
3. For example, traditional birth attendants, church women's groups (Mothers' Guild, Mothers' Union), and merry-go-round groups.
4. There are still problems with the system, for example, a recent assessment has shown that monitoring data is not consistently reported and project costs are not tracked (Crocker and Rowe, 2015).
5. For example, in Sierra Leone the following training manual has been developed by the Ministry of Health and Sanitation, UNICEF and GOAL, www.communityledtotalsanitation.org/resource/clts-training-manual-natural-leaders. See also examples from Sierra Leone and Ethiopia, www.communityledtotalsanitation.org/resource/natural-leaders-networks.
6. The indicators in the revised CHSA of 2015 clearly outline what would be considered as entrepreneurial/livelihood activities and how they would be managed and measured.

References

- Bevan, J. (2011) *Review of the UNICEF Roll-Out of the CLTS Approach in West and Central Africa*, Briefing Paper 1247, 35th WEDC International Conference, Loughborough, UK, <http://wedc.lboro.ac.uk/resources/conference/35/Bevan-J-1247.pdf> [accessed 2 February 2016].
- Cavill, S. with Chambers, R. and Vernon, N. (2015) 'Sustainability and CLTS: Taking Stock', *Frontiers of CLTS: Innovations and Insights*, Issue 4, Institute of Development Studies, Brighton, <http://www.ids.ac.uk/publication/sustainability-and-clts-taking-stock>, [accessed 2 February 2016].
- Cavill, S., Roose, S., Stephen, C. and Wilbur, J. (2016) 'Putting the hardest to reach at the heart of the SDGs', in P. Bongartz, N. Vernon and J. Fox (eds.) *Sustainable Sanitation for All: Experiences, Challenges, and Innovations*, Practical Action Publishing, Rugby.
- Crocker, J. and Rowe, E. (2015) *Community-led Total Sanitation in Kenya: Findings from a Situational Assessment*, The Water Institute, University of North Carolina, Chapel Hill, <http://www.communityledtotalsanitation.org/sites/communityledtotalsanitation.org/files/SituationalAssessmentKenya.pdf> [accessed 2 February 2016].
- Dooley, T., Maule, L. and Gnilo, M.E. (2016) 'Using social norms theory to strengthen CATS impact and sustainability', in P. Bongartz, N. Vernon and J. Fox (eds.) *Sustainable Sanitation for All: Experiences, Challenges, and Innovations*, Practical Action Publishing, Rugby.
- Glenton, C., Colvin, C.J., Carlsen, B., Swartz, A., Lewin, S., Noyes, J. and Rashidian, A. (2013) 'Barriers and facilitators to the implementation of lay health worker programmes to improve access to maternal and child health: qualitative

- evidence synthesis', *The Cochrane Database of Systematic Reviews*, 10 (10): CD010414 <<http://dx.doi.org/10.1002/14651858.CD010414.pub2>>.
- Hanchett, S., Krieger, L., Kahn, M.H., Kullmann, C. and Ahmed, R. (2011) *Long-Term Sustainability of Improved Sanitation in Rural Bangladesh*, World Bank, Washington, DC, <https://openknowledge.worldbank.org/handle/10986/17347> [accessed 2 February 2016].
- Kapatuka, D. (2013) 'Natural leaders energizing change in villages to attain and sustain ODF status: A case study of Plan Malawi impact areas – Mulanje and Lilongwe districts', IRC Symposium, Ethiopia.
- Kennedy, M. and Meek, A. (2013) *Extension Agent Reorganization into a 'Block' system for CLTS – Implementation and Monitoring in Salima and Zomba Districts, Malawi*, paper presented at IRC Symposium on Monitoring Sustainable WASH Delivery, Addis Ababa, Engineers Without Borders Canada, www.communityledtotalsanitation.org/resource/extension-agent-reorganization-block-system-clts-implementation-and-monitoring-salima-and [accessed 14 September 2015].
- Kok, M.C., Dieleman, M., Taegtmeier, M., Broerse, J.E., Kane, S.S., Ormel, H., and de Koning, K. A. (2014) 'Which intervention design factors influence performance of community health workers in low- and middle-income countries? A systematic review', *Health Policy and Planning*, 30(9): 1207–27 <<http://dx.doi.org/10.1093/heapol/czu126>>.
- Maule, L. (2013) *Using Social Norms Theory to Strengthen UNICEF's CATS Programmes*, UNICEF, New York.
- McCollum, R. (2015) 'Implications of the community health policy change in Kenya in light of world health worker week', *REACHOUT*, 10 April, www.reachoutconsortium.org/news/identifying-implications-of-community-health-policy-change-in-kenya-in-light-of-world-health-worker-week-whweek/ [accessed 2 February 2016].
- McCollum, R., Otiso, L., Mireku, M., Theobald, S., de Koning, K., Hussein, S. and Taegtmeier, M. (2015) 'Exploring perceptions of community health policy in Kenya and identifying implications for policy change', *Health Policy and Planning*, 31(1): 10–20 <<http://dx.doi.org/10.1093/heapol/czv007>>.
- Milward, K., Pradhan, S., and Pasteur, K. (2014) *Promising Pathways. Innovations and Best Practices in CLTS at Scale in Madagascar*, CLTS Foundation, Kolkata.
- Ministry of Health (MOH) (2006) *Taking the Kenya Essential Package for Health to the Community: A Strategy for the Delivery of Level One Services*, MOH, Government of Kenya, Nairobi.
- MOH (2009a) *The Kenya Community Health Strategy Manual*, Department of Community Health, MOH, Government of Kenya, Nairobi.
- MOH (2009b) *The Kenya Environmental And Sanitation Hygiene Policy*. MOH, Government of Kenya, Nairobi.
- MOH (2011) *The Rural Kenya Open Defecation Free Roadmap*, Government of Kenya, Nairobi.
- MOH (2012) *The Rural Kenya Open Defecation Free Reporting Framework*. Government of Kenya, Nairobi.
- MOH (2013a) *WASH Annual Report 2012-2013*, MOH, Government of Kenya, Nairobi, http://www.communityledtotalsanitation.org/sites/communityledtotalsanitation.org/files/media/DEH_Annual_Report_2012_2013.pdf [accessed 2 February 2016].

- MOH (2013b) *The Status of Sanitation in Busia County*, Government of Kenya, Nairobi.
- MOH (2014a) *The Annual Report 2012–2013*, The Department of Environmental Health, WASH Unit, MOH, Government of Kenya, Nairobi.
- MOH (2014b) *Strategy for Community Health 2014–2019: Transforming Health: Accelerating the Attainment of Health Goals*. USAID, PEPFAR and FANIKISHA.
- MOH/UNICEF (2015) *Realizing Open Defecation Free Rural Kenya; Achievements and Road Ahead. A Synthesized Analysis of Village Micro-Planning for Community Led Total Sanitation*, Government of Kenya, Nairobi.
- Musyoki, S. (2016) 'Roles and responsibilities for post-ODF engagement: building an enabling institutional environment for CLTS sustainability', in P. Bongartz, N. Vernon and J. Fox (eds.) *Sustainable Sanitation for All: Experiences, Challenges, and Innovations*, Practical Action Publishing, Rugby.
- National Coordinating Agency for Population and Development, Ministry of Medical Services, Ministry of Public Health and Sanitation, Kenya National Bureau of Statistics, ICF Macro (2010) *Kenya Service Provision Assessment Survey 2010*, <http://dhsprogram.com/pubs/pdf/SPA17/SPA17.pdf> [accessed 2 February 2016].
- Ochieng, B., Akunja, E., Edwards, N. Mombo, D., Marende, L. and Kaseje, D.C.O. (2014) 'Perceptions of health stakeholders on task shifting and motivation of community health workers in different socio demographic contexts in Kenya (nomadic, per-urban and rural agrarian)', *BMC Health Services Research*, 14(1): S4 <<http://dx.doi.org/10.1186/1472-6963-14-S1-S4>>.
- Ochieng, G. (2014) *CHVs and CLTS Promoters Exchange Visit Report to Nambale Sub-County in Busia County*, WSP/MOH partnership.
- Perez, E. with Cardosi, J., Coombes, Y., Devine, J., Grossman, A., Kullmann, C., Kumar, A., Mukherjee, N., Prakash, M., Robiarto, A., Setiawan, D., Singh, U. and Wartono D. (2012) *What Does It Take to Scale Up Rural Sanitation? Water and Sanitation Program Working Paper*, World Bank, Washington DC, www.wsp.org/sites/wsp.org/files/publications/WSP-What-does-it-take-to-scale-up-rural-sanitation.pdf [accessed 2 February 2016].
- Rao, V. (2015) *A Study of Two Natural Leaders' Organisations in India*, CLTS Knowledge Hub, www.communityledtotalsanitation.org/resource/study-natural-leaders-networks-chhattisgarh-and-madhya-pradesh [accessed 2 February 2016].
- Robinson, A. and Gnilo, M. (2016) 'Promoting choice: smart finance for rural sanitation development', in P. Bongartz, N. Vernon and J. Fox (eds.) *Sustainable Sanitation for All: Experiences, Challenges, and Innovations*, Practical Action Publishing, Rugby.
- Schouten, T. and Smits, S. (2015) *A State of the Art of Strengthening Monitoring Water Supply and Sanitation in Developing Countries*, IRC/ Practical Action Publishing, Rugby.
- Thomas, A. and Bevan, J. (2013) *Developing and Monitoring Protocol for the Elimination of Open Defecation in sub-Saharan Africa*, UNICEF, New York, www.communityledtotalsanitation.org/sites/communityledtotalsanitation.org/files/Thomas_and_Bevan_Elimination_of_open_defecation_SSA.pdf [accessed 2 February 2016].

- Tyndale-Biscoe, P., Bond, M. and Kidd, R. (2013) *ODF Sustainability Study*, FH Designs and Plan International, www.communityledtotalsanitation.org/resource/odf-sustainability-study-plan [accessed 2 February 2016].
- UNICEF (2014) *Evaluation of the WASH Sector Strategy 'Community Approaches to Total Sanitation' (CATS)*, UNICEF, New York NY, www.unicef.org/evaluation/files/Evaluation_of_the_WASH_Sector_Strategy_FINAL_VERSION_March_2014.pdf [accessed 2 February 2016].
- Venkataramanan, V. (2012) *Testing CLTS Approaches for Scalability Systematic Literature Review*, University of North Carolina and Plan International USA, Chapel Hill NC and Washington DC.
- Verhagen, J. and Carrasco, M. (2013) *Full Chain Sanitation Services That Last: Non Sewered Sanitation Services*, IRC, The Hague.
- Wamera, E. (2015) *Natural Leaders Training Report in Uasin Gishu County, Kenya*, WSSCC, Geneva.
- Weddady, A. and Sandoz, S. (2011) *Gradual Progression of Mixed CLTS-EFP Programme and Using Performance Bonus to Improve Facilitators' and Natural Leaders' Effectiveness*, UNICEF, Mauritania, www.communityledtotalsanitation.org/resource/combining-clts-essential-family-practices-programme-and-using-performance-bonus [accessed 2 November 2015].
- Wijesekera, S. and Thomas, A. (2015) 'Taking stock: Reaching the bottom billion – beyond open defecation', *Waterlines*, 34(3) <<http://dx.doi.org/10.3362/1756-3488.2015.020>>.
- Water and Sanitation Program (WSP) (2011) *Factors Associated with Achieving and Sustaining Open Defecation Free Communities: Learning from East Java*, Research Brief, Water and Sanitation Program, Washington DC, www.wsp.org/sites/wsp.org/files/publications/WSP-Factors-Achieving-ODF-East-Java.pdf [accessed 2 February 2016].
- WSP (2014) *State of Sanitation in Busia County*, Water and Sanitation Program, World Bank: Washington DC.