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### Digging in, Spreading out and Growing up: Introducing CLTS in Africa

Kamal Kar and Kirsty Milward

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#### Kamal Kar and Kirsty Milward

#### Summary

Open defecation is the norm in rural and urban Africa – only about a third of the population uses improved sanitation facilities – and this contributes in various ways to a heavy disease burden. Community-led Total Sanitation (CLTS), an approach to sanitation which focuses on community-wide behaviour change to completely stop open defecation, began to go to scale in Africa in 2006. Since then, it has spread dramatically and in many countries very successfully, and is now used at some level in at least 26 African countries.

This paper draws on the extensive involvement of Kamal Kar with the spread of CLTS in Africa to describe the early stages of the process, to elaborate on its developments and to outline insights into the circumstances and features which have facilitated its rapid spread. Taking a broadly comparative approach which draws on the somewhat earlier experience of the spread of CLTS in Asia, it identifies aspects of the institutionalisation process and circumstances, including key individuals, that have contributed to the success of the approach in Africa. It also discusses challenges, however, noting several issues which may limit its impact and hinder its dissemination. In particular, the paper discusses some of the many adaptations made to CLTS in response to a wide range of pressures, varying country circumstances and strategy choices. These adaptations, it is claimed, should be made with a clear picture of what may be lost and gained by adopting them. As CLTS progresses further, it will be important to continue to grapple with these issues, to acknowledge the lessons from adaptations that have had little success, and to retain a vision of the potential of CLTS to bring fundamental transformations in sanitation, health and rural lives.

**Keywords:** Africa; behaviour change; Community-led Total Sanitation (CLTS); health; institutionalisation; rural development; sanitation; scaling up; training.

**Kamal Kar** pioneered the Community-Led Total Sanitation (CLTS) approach whilst evaluating a traditionally subsidised water and sanitation project of Water Aid Bangladesh and their NGO partner VERC (Village Education Resource Centre), in Bangladesh in 1999–2000. Through training, advocacy and consultation, Kar introduced and took an active role in the spread of CLTS in more than 30 countries in Asia, Africa and Latin America over the last ten years. Today, CLTS is being implemented in more than 43 countries across the world and at least seven countries have adopted CLTS in their respective national sanitation policies. Kar founded the CLTS Foundation in order to develop functional linkages with the practitioners of CLTS, policymakers and governments. Dr Kar has recently been named by *Foreign Policy* as one of the 100 top global thinkers, in his case 'for doing the world's dirty work.' He has a 20 year long association with IDS, and during this time has been closely associated and worked with Professor Robert Chambers, Lyla Mehta and others of the Participation Group, KNOTS and STEPS of IDS.

**Kirsty Milward** is a freelance writer and editor, with 15 years' experience specialising in rural development and gender. She also founded and manages an education and health-focused NGO amongst the *adivasi* community where she lives in rural West Bengal, India. She completed an MA at IDS in 1994 and has contributed to a number of IDS and other publications. For this paper, she worked closely with Kamal Kar to write based on his involvement in the spread of CLTS in Africa.

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### About CLTS Foundation

CLTS Foundation is an association of like-minded development professionals, focusing on issues around rural and urban sanitation and water globally. The Foundation also builds capacity, undertakes research and action learning initiatives focused towards poverty reduction, rural and urban livelihoods and governance issues with CLTS as an entry point strategy. It is a Trust being managed by a board of Trustees and headed by the Chairman with headquarters in Kolkata, India. For more information go to: www.cltsfoundation.org

## Abbreviations

ADB	African Development Bank
ATPC	L'Assainissement Total Piloté par la Communauté
BATS	Balanced Approaches to Total Sanitation, an umbrella term used in Pakistan
CATS	Community Approaches to Total Sanitation, an umbrella term used by UNICEF for a range of community-based sanitation
CLTS	programming Community-led Total Sanitation
CREPA	Centre Regional pour l'Eau Potable, Burkina Faso
DFID	Department for International Development, UK
DWASHE	Department of Water Sanitation and Hygiene Education, Zambia
EAP	East Asia and Pacific
Ecosan	Ecological Sanitation
GP	gram panchayats; local government bodies in India
ITN	International Training Network
JMP	Joint Monitoring Programme of WHO and UNICEF
LGA	Local government authority
MDG	Millennium Development Goal
NETWAS	Network for Water and Sanitation International, based in Kenya
NGP	Nirmal Gram Puruskar; the award given to ODF villages in India
NL	Natural leader
OD	Open defecation
ODF	Open-defecation-free
PHAST	Participatory Hygiene and Sanitation Transformation; a sanitation approach
Plan	RESA Plan International, Region of Eastern and Southern Africa
PPP	public-private partnerships
PUs	Programme Units
RUWSA	Rural Water Supply and Sanitation Authority, Nigeria
SA	South Asia
SARAR	Self-Esteem, Associated Strength, Resourcefulness, Action
	Planning and Responsibility; a sanitation approach
SLTS	School-led Total Sanitation
SNNP	Southern Nations, Nationalities and People's Region, Ethiopia
TA	Traditional Authority area (Malawi)
TREND	Training, Research and Networking for Development, Ghana
TSC	Total Sanitation Campaign; government-led programme, India
VERC	Village Education Resource Center; Bangladesh NGO
WASH	Water, Sanitation and Hygiene, UNICEF programme
WATSAN	Water and Sanitation
WAWI	West Africa Water Initiative
WCARO	West and Central Africa Region Office, UNICEF
WLTS	Women-led Total Sanitation
WSLIC	Water and Sanitation for Low Income Countries, World Bank programmes, Indonesia
WSP	Water and Sanitation Programme, World Bank

### 1 Introduction: the story so far

Community-led Total Sanitation (CLTS) is an innovative approach for empowering communities to completely eliminate open defecation (OD). It focuses on igniting a change in collective sanitation behaviour, which is achieved through a process of collective local action stimulated by facilitators from within or outside the community (Kar with Chambers 2008). The process involves the whole community and emphasises the collective benefit from stopping OD, rather than focusing on individual behaviour or on constructing toilets. People decide together how they will create a clean and hygienic environment that benefits everyone.

Certain features have been fundamental to the evolution of CLTS as an approach to sanitation issues. CLTS involves no individual household hardware subsidy and does not prescribe latrine models. Social solidarity, help and cooperation among the households in the community are a common and vital element in CLTS. Other important characteristics are: the spontaneous emergence of natural leaders (NLs) as a community proceeds towards open-defecation-free (ODF) status; local innovation in low-cost toilet models using locally available materials; and community-innovated systems of reward, penalty, spread and scaling up. CLTS encourages the community to take responsibility and to take action leading towards achieving the common goal of ODF status (Kar and Pasteur 2005).

I pioneered CLTS during the evaluation process of the Water and Sanitation Programme of WaterAid and its implementing partner Village Education Resource Center (VERC) in Mosmoil village, Rajshahi district, Bangladesh, in 1999–2000. I was deeply involved in the spread of CLTS first within Bangladesh, then to Asia more widely and then later to Africa, Latin America, the Middle East and the Pacific. The approach is now used in more than 43 countries on various scales (Chambers 2009). Kirsty Milward, co-author, is a rural development specialist with long experience of working in education and gender in rural areas. She heads an NGO based in Shantiniketan, West Bengal, India, and has worked closely with me during the writing of this paper.<sup>1</sup>

CLTS first began clearly spreading in Africa in 2006. It has made spectacular progress in the years since then. It has been implemented at least at demonstration and training level in over 26 countries in Africa, and in a number of these it has been scaled up to cover substantial areas of the country.<sup>2</sup> Thousands of ODF

Those that have conducted some triggerings; where the approach has been relatively recently introduced where substantial challenges are still being faced in terms of a conducive environment for CLTS, or where information is not clear: Angola, Benin, Burkina Faso, Burundi, Cameroon, Central African Republic, Congo Brazzaville, Cote d'Ivoire, Democratic Republic of Congo, Guinea-Bissau, Guinea-Conakry, Niger, Tanzania, Togo and Zimbabwe.

<sup>1</sup> The paper draws on Kamal Kar's experience with CLTS in Asia and Africa, and the first person narration in the text refers only to Kamal Kar.

<sup>2</sup> Divided into two broad categories – those in which CLTS is well established and those where it is less well established or where information could not be obtained. These countries include: Those that have full plans and programmes for capacity building and large scale roll out, have conducted many/some triggering (exercises/workshops introducing the CLTS process in villages) all over or in parts of the country and/or have good evidence of ODF villages and natural leaders: Chad, Eritrea, Ethiopia, Gambia, Ghana, Kenya, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Nigeria, Senegal, Sierra Leone, Sudan, Uganda and Zambia.

villages have been declared, and – quite remarkably – at least five national governments of eastern, southern, western and central Africa have now adopted CLTS as *the* major approach in their national sanitation strategies. In this relatively short time, hundreds of thousands have gained the benefits of better sanitation by changing their individual and collective hygiene behaviour, including their open defecation practices – changing where they shit – and millions are poised to do the same.

How has this phenomenon come to pass? What circumstances have helped CLTS spread so quickly in Africa? And what needs to be done to ensure the promise displayed by CLTS at this time can flourish to its full potential? Are there pitfalls which threaten to diminish what it appears to be offering in terms of real results?

This paper attempts to give an account of the process of introducing CLTS to different parts of Africa, including some insights into what factors have contributed to its spread, and what factors may have been limitations. I have been involved in the process at different levels; initially as an experimenter, test-triggering villages; and later as an 'ambassador' of CLTS, as a trainer and as an advocate. Those who have worked alongside and with me, argued, protested, learned with me, taught me and taken up the mantle include many remarkable representatives from government departments and ministries, non-governmental organisations (NGOs) and development agencies, as well as those many community members who have been instrumental in changing their sanitation situations. In southern and eastern Africa, Dr Khairul Islam and Amsalu Negussie of Plan RESA (Region of Eastern and Southern Africa) were instrumental in introducing CLTS into Plan countries of this region, after which it spread in many directions. In Zambia, now considered one of the success stories of CLTS in the region, Dr Peter Harvey then head of the UNICEF's Water, Sanitation and Hygiene (WASH) programme, and Leonard Mukosha, Giveson Zulu and Chief Macha at district levels, have steered and facilitated a transformation in sanitation practices. These and many more have taught me a great deal about the region, carried the torch forward and constitute the backbone of this collective enterprise in which I feel privileged to have played a part.

The first concerted attempts to introduce and popularise the approach were made in Tanzania, Ethiopia, Kenya and some other countries of the Plan RESA working area, in 2006, under the impetus of Plan International.<sup>3</sup> Plan drew on its experience of developing and implementing the approach in Bangladesh, which by then had become a demonstration ground for all the other Plan countries.

Before these major inputs at institutional levels began, however, I was involved in some of the smaller experiments in CLTS that had been carried out in Uganda, Zambia and Ethiopia between 2001 and 2006. These experiments produced insights into the distinctive features of the CLTS process in different parts of Africa, and began the task of building up the now quite substantial body of experience that is sustaining the roll-out process.

<sup>3</sup> WaterAid Nigeria was also beginning to seek out the support of WaterAid Bangladesh around this time (2006–07), but their reach was at this point not wide.

My experience in implementing and institutionalising CLTS had, up until 2006, been mainly in Asia, with some inputs in Latin America. Along with many colleagues, I had developed the approach in Bangladesh and been closely involved with its introduction and progress in several other Asian countries: India, Cambodia, Indonesia, Nepal and Pakistan among others.<sup>4</sup> The spreading of CLTS across parts of Asia began at least four years before the approach was first introduced in Africa. In Asia, a key event in this process was when the work of the World Bankmanaged Water and Sanitation Programme (WSP) South Asia with CLTS attracted the attention of WSP East Asia and the Pacific (EAP), and the approach was developed or introduced in Cambodia,<sup>5</sup> Indonesia, Lao PDR, Vietnam,<sup>6</sup> and later in the Philippines. My contribution to the development of CLTS in Africa was, therefore, informed primarily by - and later interacted with - these experiences in Asia. This paper attempts to chart the course of CLTS as it has spread relatively rapidly across Africa, and is flavoured by this comparative perspective generated by my involvement with the Asian experience. It attempts to draw attention both to how the process has taken on a different character in parts of Africa, and also to how in many ways the challenges confronting CLTS remain similar.

The next section of the paper gives an overview of the sanitation situation and defecation practices in sub-Saharan Africa. The third summarises my initial experiments with CLTS and the insights gained from these. The rate at which CLTS has been taken up by big organisations in Africa is quite striking, and the fourth section of the paper describes some of the processes through which this happened. The fifth and final sections highlight some of the similarities and differences in how CLTS has developed in Asia and Africa, and flags several challenges which must be addressed if the approach is to retain its core qualities and continue to inspire communities to solve their sanitation and other problems in ways best suited to their circumstances.

## 2 The sanitation and OD situation in Africa

The Millennium Development Goal (MDG) 7 sets the target of reducing by half the proportion of people without sustainable access to basic sanitation. Globally in 2010, 2.6 billion people still do not use improved sanitation; of these, 565 million live in sub-Saharan Africa. Like large parts of Asia, the large majority of countries in sub-Saharan Africa are seriously off-track to meet this goal, and the region has the largest number of countries where less than 50 per cent of the population have access to improved sanitation.

<sup>4</sup> For lessons and challenges regarding implementing CLTS in Asia, see Mehta and Movik (2011).

<sup>5</sup> CLTS was first introduced in Cambodia by Concern Worldwide with Irish Aid support. Plan and WSP-EAP then developed the work, and UNICEF with the Ministry of Rural Development (MORD) Government of Cambodia later also became a major player in Cambodia.

<sup>6</sup> Several other players were also involved in Vietnam and Lao PDR.

Open defecation is the norm in rural areas in the majority of African countries, as well as in large parts of urban settlements. As Figure 2.1 shows, in 2000 substantially less than half of the continent's rural population had access to sanitation facilities. Estimates by the WHO/UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation,<sup>7</sup> for 2008, shown in Table 2.1, suggest that only 31 per cent of the whole population of sub-Saharan Africa (rural and urban combined) have access to 'improved' sanitation. West and central Africa have the lowest coverage of improved sanitation in the world. According to a UNICEF/WHO report (2008), less than 30 per cent of the population of West Africa has access to improved sanitation.

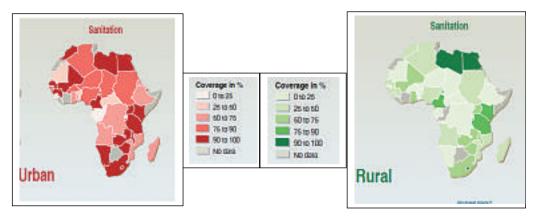


Figure 2.1 Sanitation coverage in Africa, urban and rural areas (2000)

Source: Developed from WHO (2000).

Africa's disease burden arising from open defecation is enormous and deadly. Data suggests that in 2002, about 707,000 people died from diarrhoeal diseases in Africa (WHO 2004). While it is difficult to establish exactly how many of these deaths are directly related to open defecation, it is known that hygiene behaviour and sanitation circumstances play major roles in the transmission of these diseases, and it is clear that open defecation is an important risk factor.

Apart from enteric diseases, zoonotic diseases contribute significantly to the negative disease burden in Africa as elsewhere – and for some kinds of infection, the disease toll may be much higher in parts of Africa than elsewhere.<sup>8</sup> These are diseases that transfer between animals and humans, and those which require specific human or animal hosts in stages of their life cycles. Although they impact seriously on health, they gain much less global attention. For many of these, as for enteric diseases, human shit is a key factor in transmission and infection or re-infection. For instance, carriers of tapeworm release thousands of matured

<sup>7</sup> The official United Nations mechanism responsible for monitoring progress towards the water and sanitation MDG; see www.wssinfo.org.

<sup>8</sup> Except in countries such as Vietnam, Lao PDR, parts of Thailand and Cambodia, where there is a habit of eating raw fish and aquatic vegetables, especially in the Mekong delta region, the prevalence of food-borne trematodes is higher in Africa in general than in Asia, and in West Africa in particular.

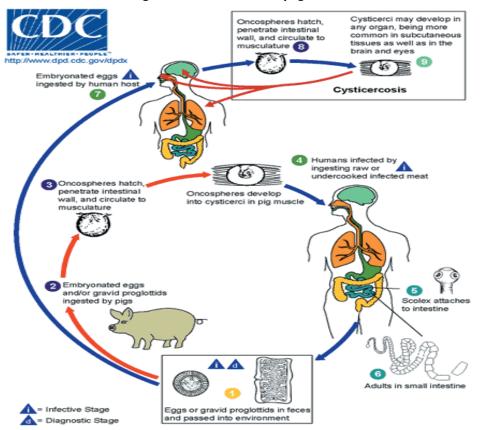
Year			1990	2000	2008
			%	%	%
Urban p	opulation as %	28	33	37	
Urban	Improved		43	43	44
	Unimproved	Shared	29	30	31
		Unimproved	17	17	17
		Open defecation	11	12	8
Rural	Improved		21	23	24
	Unimproved	Shared	10	11	13
		Unimproved	22	23	25
		Open defecation	47	43	38
Total	Improved	1	28	29	31
	Unimproved	Shared	16	18	20
		Unimproved	20	21	22
		Open defecation	36	32	27
•	ning access to i 008 (thousand)	114,344			

Table 2.1 Use of sanitation facilities in sub-Saharan Africa: estimates for 1990, 2000 and 2008

Source: WHO and UNICEF (2008).

eggs and proglottids through their faeces, which get spread everywhere in OD situations contaminating food, and in particular get ingested by pigs or cattle which are intermediate hosts. Tapeworm is acquired by eating raw or improperly cooked pork or beef (even by vegetarians through food handlers). In addition to the effects of poor nutrition on tapeworm carriers, when eggs are ingested through faecal-oral contamination through poor hygiene and are exposed to gastric acid in the human stomach, they lose their protective capsule and turn into larval cysts, called oncospheres. Oncospheres cross the gastrointestinal tract and migrate via the vascular system to the brain, which might cause cysticercosis including neurocysticercosis (see the cycle of infection in Fig. 2.2). In endemic regions, more than 30 per cent of people with epilepsy (seizures) have neurocysticercosis lesions of the brain (Ndimubanzi *et al.* 2010; WHO 2010).

Many such zoonotic diseases could be stopped or significantly reduced simply by improving sanitation and hygiene, but no research has been carried out systematically to investigate the impacts of CLTS on the prevalence of such diseases (WHO, forthcoming). In general, it is very difficult to prove links between sanitation and health conclusively, as there are a host of intervening factors such as nutrition, water quality, hand-washing practices, maternal health and poverty (see Mehta 2011). What is clear is that stopping open defecation is one of a group of factors which can have a significant impact on health outcomes. In addition, the process of improving sanitation through CLTS has the potential to bring a range of other benefits, even though the health benefits can rarely be proven. Health issues are not usually identified as the main benefits by people who undertake CLTS – rather they cite privacy and security (especially for women and girls), a clean village environment and dignity (see Scott, Curtis, Rabie and Garbrah-Aidoo 2007; WaterAid 2007).



### Figure 2.2 Life cycle of Taenia solium (pork tape worm) and its transmission through human shit and pigs in OD environment

Source: www.dpd.cdc.gov/dpdx/HTML/ImageLibrary/Cysticercosis\_il.htm (accessed 14 May 2011)

Despite the benefits of sanitation, in many countries in Africa, open defecation proceeds in much the same way as in most of Asia. Specific areas are designated around villages for defecation; often these are segregated into women's and men's areas. In Africa, separate areas are often designated for elders and village chiefs. As in Asia, many villagers keep pigs or other animals which feed on human excreta in order to keep the village surroundings cleaner.

However, in some countries the OD picture is somewhat different. In Kenya, Tanzania, Nigeria and Ghana, for example, British colonial laws are still in place, which make it compulsory to have some kind of toilet for each house. The



Stray pigs looking for human shit, Freetown, Sierra Leone

Government of Ethiopia had also introduced similar legislation. This legal situation spawned the practice of digging 'shit holes' in each household: extremely basic defecation arrangements with open holes and no sanitation benefit beyond the fact that shit is in principle confined to a smaller area. These arrangements can be referred to as 'fixed point open defecation arrangements'.

In practice, however, shit holes are so hopelessly unpleasant – filthy, smelly, fly-ridden – that they are used at most only by those who are old or sick and cannot make it to more distant places, or for defecation at night. There is no sense of compulsion to use a shit hole, and most prefer the more pleasant open spaces surrounding the villages. Furthermore, despite the legislation, many households do not even have a shit hole. Thus widespread open defecation exists alongside the use of shit holes for some limited purposes.

Nevertheless, the relatively widespread existence of shit holes – and their unhygienic nature – has made the notion of 'improved sanitation' particularly relevant in these areas of Africa. JMP estimates suggest that in 2008, 22 per cent of the population of sub-Saharan Africa use 'unimproved' facilities such as shit holes (Table 2.1). There is some disagreement, however, over what counts as an improved facility. JMP definitions state that the key feature of an improved sanitation facility is that it hygienically separates human excreta from human contact.<sup>9</sup> Box 2.1 elaborates on the types of latrine that establish this essential feature.

### Box 2.1 JMP definitions of improved and unimproved sanitation

Improved:

- Flush or pour flush to Piped sewer system Septic tank
- Pit latrine
- Ventilated improved pit (VIP) latrine
- Pit latrine with slap
- Composting toilet

Unimproved:

- Flush or pour flush to elsewhere (not to sewer system, septic tank or pit latrine)
- Pit latrine without slab/open pit
- Bucket
- Hanging toilet or hanging latrine
- Shared facilities of any type
- No facilities; use of bush or field

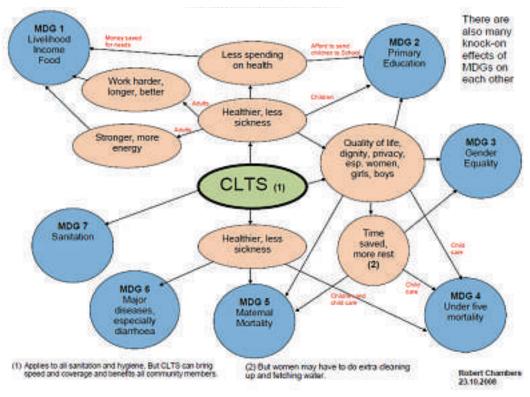
Source: JMP at www.wssinfo.org/definitions-methods/watsan-categories/ (accessed 7 June 2011)

For CLTS, however, the bottom line for improved facilities is that a latrine is flyproof, that all members of the family are using it, and that it does not contaminate water sources. The latter is very important and may be an emerging secondgeneration issue for CLTS as well as other basic sanitation approaches – much remains unknown about the process regarding long-term impacts on ground and surface water quality (see, for example, Khale and Dyalchand 2011).

9 www.wssinfo.org/definitions-methods/introduction/ (accessed 7 June 2011).

What is clear is that for CLTS the first-step bottom line is behavioural. Whereas other approaches dwell in some detail on type and durability of latrine, the focus for CLTS is firmly on sanitation practices and the ODF target, because in the absence of ODF status, no resident – whether they individually have access to improved facilities or not, and whatever type of latrine they have – will gain the benefit of adequately improved hygiene in the area or a reduced disease burden.

CLTS offers an approach which could radically alter prospects in the region of achieving the MDG on sanitation. What is more, the process of improving sanitation swiftly and in a widespread manner via CLTS also has the potential to impact on progress towards all the MDGs. Figure 2.3 shows how health improvements and time and money savings brought about by the CLTS process can make huge differences to many aspects of people's lives.



#### Figure 2.3 CLTS and the MDGs

Source: Chambers (2008).

## 3 First footprints, comparative insights

My very first experiences of introducing CLTS in Africa were gained on an *ad hoc* basis when opportunities arose in the context of work on other projects and programmes. The history of CLTS is firmly rooted in work which sought to use

participatory approaches and methods such as Participatory Rural Appraisal (PRA) in rural development in many different manifestations. In my work, opportunities to introduce the approach arose during a participatory impact assessment and while introducing PRA in a decentralised district planning process, for example. It was thus while wearing a 'participation' hat that I found my first chances to work directly on CLTS. The first arose in 2001 when I was involved in the capacity building of district- level government officials and elected people's representatives in Kibale district, Uganda, under an Irish Aid supported Decentralised District Planning Programme. Teresa McDonald, then programme officer of Irish Aid at the Embassy of Ireland in Kampala, and Brendan Rogers, Irish ambassador in Uganda, took the major initiative in using this opportunity to experiment with CLTS. We triggered ten villages in three sub-counties, at least two of which quickly became ODF.

#### 3.1 Initial cautions

Both previous to this first experience and subsequently, I met with many warnings concerning what some people considered to be poor prospects for CLTS in Africa. These cautions took a variety of forms. CLTS was considered by many professionals to be a typically Asian phenomenon and its success to be born partly out of an intense need for sanitation solutions in densely populated Asian countries. Africa's more dispersed populations and open spaces meant the need for sanitation was less intense, and hence CLTS would not thrive. Some believed it would be impossible to work around the taboo in some areas on pregnant women using pit latrines because it was believed this practice caused miscarriage. Others felt CLTS offered a cultural mis-match: that the driving notions of shame and disgust which had produced such dramatic effects in parts of Asia were differently embedded in Africa and would not produce such significant results. I was informally cautioned that it might be difficult during triggering amongst rural Africans to provoke sufficient shame about shitting in the open to stimulate the latrine building and behaviourchange process. Some may have also implied that in many African nations most people were so poor that a completely non-subsidy approach was bound to fail; or that the culture of handouts by donor agencies was so deep rooted that a subsidy-free approach was not possible. While looking for favourable villages with no past history of subsidy for practice triggering by the participants of hands-on training workshops, I was often told that it was difficult to find any such villages. In Sierra Leone, Chad, Zambia and Mali, for example, I was told that there were no villages without some history of household-level hardware sanitation subsidy given either by government, donor agencies or by national or international NGOs.

#### 3.2 Positive experiences

Despite these cautions, and carried forward by very positive first encounters, I continued seeking opportunities to test the effectiveness of the approach. I was curious to see what the results would be, and strongly motivated to at least attempt an exercise that had the potential to improve the lives of so many. I also realised that if the experiments were successful, they would be valuable demonstration sites to advocate the approach further. At that time, together with the colleagues of VERC and WaterAid Bangladesh, I was continuing to introduce CLTS in the northern and southern districts of Bangladesh and learning a lot from the positive responses in communities after each triggering.<sup>10</sup> In particular, we were learning the extent of technical, social and economic innovation that was possible at community level, and were especially struck by the variety of low-cost latrine models that were produced (Kar 2003). These insights fuelled my readiness to continue experimenting when opportunities arose in Africa.

Later in 2001, I visited Zambia for an evaluation mission for WaterAid. The evaluation was conducted in a participatory impact assessment (PIA) mode, involving staff members of WaterAid Zambia and their government partner Department of Water Sanitation and Hygiene Education (DWASHE). During that review mission, mostly in the villages of Monze district, and with the support of Ravi Narayanan and Mimi Khan of WaterAid London, I test-triggered CLTS in communities and found the same exciting response I had in Uganda.

In October 2004 I visited Arba Minch, in Ethiopia, to conduct training activities for the staff of an Irish NGO, Vita (then known as Refugee Trust International), engaged in integrated rural development. As an adviser to their rural livelihoods programme, I found an opportunity to introduce CLTS as an entry point for initiating broader local-level collective action. In 2005–6, I introduced it in the Arba Minch area of the Goma Gofa Zone via the first African full 'hands-on' training – an opportunity made possible partly because of Vita's connection with Irish Aid, which by now had evidence of the success of the approach in their Uganda programmes. More than 50 participants drawn from the project, local and international NGOs, government departments, and the local *Woreda* (district) administration attended the training – thus this was also the first step towards introducing a direct institutionalisation dimension in the region. Workshop participants triggered a number of villages in Arba Minch, including some in semi-urban slums. Potential natural leaders from within the communities were invited to Addis Ababa to share their plans for the ODF process with policymakers and funding agencies.

This experience in Ethiopia was very positive. At the Addis Ababa presentations, the audience was struck by the enthusiasm of the rural communities, who invited them to visit their ODF villages after two or three months. CLTS later spread to Vita's operational areas in Chencha Woreda and the tribal areas of Hammar. According to Vita's project coordinator, 90 per cent of the villages in all 11 *Kelebes* (wards) of Chencha Woreda were ODF by 2009<sup>11</sup> in a process which had interesting local empowerment effects as well as practical sanitation results (Gebresilase 2010).

#### 3.3 Issues distinguishing triggering and follow-up in Africa

These early experiences firmly established the potential of CLTS in Africa and confronted many of the cautionary assumptions. Enthusiasm was generally very

<sup>10</sup> The enthusiasm and support rendered by Timothy Claydon, Adil Ahmed, Yakub Hussein, Masud Hassan and many other colleagues of WaterAid and VERC was remarkable.

<sup>11</sup> Personal communication, Alemitu Golda, Vita Project Coordinator.

high and an element of fun during mapping and transect walks often animated the triggering exercises. Of the four grading levels used to group and evaluate the outcome of triggering processes – 'Matchbox in a gas station' 'Promising flames' 'Scattered sparks' and 'Damp matchbox' (see Kar with Chambers 2008) – these villages were always in the first two categories. Usually, people were very open, and freer interactions between women and men compared with many Asian contexts – such as parts of Bangladesh, Pakistan and Yemen – meant that full participation by women was rarely in question. From Ethiopia to Zambia and later through to Sierra Leone, the role of African women in adapting CLTS to end open defecation has been significant. Women natural leaders in many African countries created great examples of local leadership, community reward and punishment and self-spread of the approach in neighbouring villages. Mrs Weizero Belayinesh Worku, for example, a natural leader in Fura Kebela village in SNNPR (Southern Nations, Nationalities and People's Region) in Ethiopia punished openly defecating men by making them collect their shit and drop it into toilet pits (see Kar with Chambers 2008).

Some aspects of the process in these countries therefore differed from the processes I had known in Asia. Some of these differences clearly supported the CLTS process, making it faster and more dynamic, and partly explain its rapid uptake and spread. Others presented particular challenges to CLTS facilitators, highlighting the need for sustained quality in facilitation, and in training for facilitation.

#### Negotiating with shit holes

In those countries where legislation existed making a 'toilet' mandatory for every household – for example, in Tanzania, Kenya, Ethiopia, Nigeria and Ghana – a common challenge was that during the initial stage of triggering, for fear of being penalised, people were reluctant to admit that they did not have a toilet or that they practised OD. My response was to make the shit holes, where they existed, the focus for part of the triggering, using a stick to pull out maggots from the pit and facilitating all present to consider what they already knew – that these pits were disgusting. It also made the transect walk to inspect OD areas particularly important, as it established that OD was in every case in fact widespread.

On the other hand, two aspects of the shit hole situation also helped the CLTS process in ways we had rarely seen in Asia. First, the practice of fixed-point defecation had to some extent already been established in these areas, and a certain level of moral pressure to use 'toilets' had been established by the legislation. Second, taking the first step to stop OD and make sanitary arrangements was relatively easy: the shit holes only needed proper covers in order to make them anaerobic and thus prevent the breeding of flies. Sometimes this meant showing how existing covers were failing to serve the purpose – in a follow-up exercise after triggering in Nigeria, we asked a latrine owner to remove the cover to see that the flies were getting in and had been breeding. In this case, everyone present knew that this could be stopped by sprinkling ash after every use and reinforcing cover seals with ash. Following these checks, all that was required was to make sure everyone was using the latrine. This almost certainly partly explains the speed with which some villages achieved ODF status in Africa: in many cases, the shit holes were covered the next day after triggering.

Elsewhere, the first steps of the process may take much longer, if the season means the ground is too wet to dig pits, or if people are particularly busy with other work to spend the time required for digging.



Sprinkling ash in and around the shit hole after every use in Niando district, Kenya

Hand washing tipi-tap innovated by ODF communities in Slyaya district of Kenya

#### Poorer health care access

A further, tragic, issue that appeared to increase the positive response to CLTS triggering, especially in the more remote villages, was that the very limited access to health facilities of any kind relative to most parts of Asia meant that many people had recent direct experiences of child deaths from diarrhoea. Where hospitals, doctors, quacks or other facilities offering saline treatment are distant, children can die quickly from dehydration. Many participants remembered these traumatic incidents. Carefully drawing on these scarring experiences during triggering can, and often did, ignite a community to rapid action.

In one incident, I remember the distress of a mother of a dehydrating baby in a village in Kenama district, Sierra Leone, during the transect walk of a CLTS triggering exercise. As there was no hospital or health centre nearby, anxious relatives and villagers didn't know what to do. In this case, it was possible for us to send the baby and the mother to a distant health centre using our vehicle. But this situation is common, and thousands of children die annually in such circumstances. When these realities coincide with CLTS triggering, they can make achieving ODF status feel truly urgent. In a similar case, outbreaks of cholera hastened the adoption and spread of CLTS in at least two regions of Chad in 2010.

#### Direct appeals by children

Partly in connection with the very real hazard of frequent diarrhoea and enteric disease of children, children were often powerful actors in the follow-up processes.

They often formed strong processions and set about persuading parents to construct and use latrines. On more than one occasion, the songs they sang during processions made direct appeals to parents to save their lives by improving sanitation and providing latrines – whereas in Asia these songs were more usually about the disease links with open defecation practice and were less direct about the personal health effects, the risk of children dying, or parents' responsibilities to prevent this. For example, during triggerings in Sierra Leone, Mali and Chad, it was common to see large numbers of students taking part in demonstrations, perhaps on their way home from school, chanting slogans and beating drums, appealing to their parents not to make them shit in the open. Children often took lead roles in triggering processes, making presentations and actively taking part in discussions of defecation practices.



#### **Topographical** issues

Aside from the 'shit hole' situation, which required special handling during triggering, other issues which required careful handling during triggering and follow-up were aspects of resistance to the process. It is true that most areas in Africa are less densely populated than Asia, which means that the effects of OD are less intense, and this can mitigate the perceived need for change. Nevertheless, I and my many colleagues found that during triggering it was simply necessary to create a conducive environment where the community could learn in detail

about faecal-oral contamination originating from the practice of OD in order to stimulate motivation for sanitation change.

In a similar vein, in the vast semi-arid areas, faeces scattered in the open dry out very quickly and are often perceived to be neutralised at that point. The scarcity of water is often a problem – most communities in remote rural areas of Africa collect their drinking water from streams and natural reservoirs which store surface run-off rain water. Often, it was enough simply to point out that all the human shit, dried or raw, is carried by rain into the drinking water sources and contaminates the entire source. Spending time discussing the transfer of human faeces to homes and drinking water sources via livestock grazing was a very powerful triggering strategy amongst the many communities living in difficult, remote areas which depend heavily on livestock for their livelihoods.

As in Asia, many residents of villages situated along the sea coast where the tide takes the daily shit away can initially see no need to make other arrangements.

These are all issues for careful handling during triggering, but are rarely major blockages to starting out on the ODF road if handled intelligently. For example, in a fairly large shantytown in the coastal areas near Freetown in Sierra Leone, during a triggering session with the fishing community, a few empowered members of the community commented that the fish they ate were eating the shit. Taking advantage of this comment, we opened up the viscera of some freshly caught fish and people smelt shit in their intestines. The triggering was also planned during low tide, when the beach and rocky coastline were full of human shit and the smell of it was heavy in the air.



Shit from toilets is discharged on the seashore directly through pipes, which gets in to the seawater during high tides. Sierra Leone



Open defecation is rampant among fishermen community living along the coastal areas near Freetown, Sierra Leone

Despite or because of these features, the villages triggered in these early sessions, many of which became ODF, were the landmarks of the success of CLTS. They became the places people visited to see how it worked and if it was real. These were the original demonstration villages.

#### Cultural issues

I had been alerted to potential difficulties for CLTS related to tribal cultural practices in Africa, such as that elders and chiefs would be unlikely to use the same latrine as others, or that daughters-in-law could not use the same latrine as

fathers-in-law. A range of other beliefs and taboos operate amongst different peoples. Musyoki (2007), for example, points out that in the mythology of the Maasai, men do not defecate at all, making the issue difficult to discuss. However, my experience has been that the CLTS process is open and flexible enough for communities to find their own solutions to these kinds of problems, either through discussion amongst themselves, or with technical adaptations. A common solution, taken up by many communities, was for families to construct more than one toilet on their homestead, each allocated to different family members as dictated by local practices. I have rarely seen the progress of CLTS hampered by such taboos, although an interesting exploration of how such beliefs influence the details of the CLTS process continues (see Movik and Mehta 2010).

On the other hand, CLTS has been clearly facilitated by a culture of cooperation in communities. In most countries, able-bodied men and women offered their help in digging toilet pits for the elderly and disabled members of the community who had none in the family to help. In Nigeria, Chad and Mali, there are now many examples where natural leaders emerging from the CLTS process went from house to house organising groups of volunteers to help poor and disabled families. In the Arba Minch area of Ethiopia, a great deal of social solidarity has been noticed amongst the members of the community coffee ceremony groups, which have in some cases formed the social groupings for work on CLTS.<sup>12</sup>

### 4 Institutionalising CLTS

With this growing body of evidence that CLTS worked well in Africa, by the end of 2006 the time was ripe to begin a concerted process of spreading and institutionalising the approach. But how was this to be done? Emerging experience in Asia was suggesting to many CLTS actors that pockets of good-quality work by various NGOs could be substantially built on when governments and/or big agencies understood and took initiative in the process. Seeking this support, however, had met with mixed success in Asia: the Indian government remained uncommitted to the basic principles of local empowerment and no upfront household-level hardware sanitation subsidy in CLTS except at state government level in a few states; the Bangladesh government had taken CLTS on board but continued with subsidies in the form of a limited free supply of rings and slabs to the poorest community members, distributed through Union parishads (the lowest tier of local government). In Cambodia, there remains no clarity on the situation although many NGOs have worked with CLTS, it is not fully incorporated into the national sanitation strategy. In Indonesia, however, CLTS had by the end of 2006 been taken on by the government and donors as a potential solution to the slow progress of the World Bank Water and Sanitation for Low-Income Communities (WSLIC-II) programmes, and was poised for implementation. Later, WSLIC-III (PAMSIMAS) was totally designed on the basis of the CLTS approach.

<sup>12</sup> All over Ethiopia groups meet together regularly to conduct the coffee ceremony.

#### 4.1 Plan pioneers in southern and eastern Africa

At the October 2006 Addis Ababa workshop in which villagers' ODF plans from Arba Minch were presented, I met Mr Amsalu Negussie, Plan RESA's Regional Water and Sanitation (WATSAN) Advisor who was ready to finalise a capacity building and training schedule to roll out CLTS across the 13 countries of Plan RESA's WATSAN programmes.

This was perhaps the formal beginning of the institutionalisation process. Plan RESA organised two major regional training workshops on CLTS, one in February 2007 in Dar es Salaam, Tanzania, and one in March 2007 in Awassa, Ethiopia. At least 90 participants from almost all the eastern and southern African countries actively participated in these two workshops - participants included WATSAN advisors and front-line staff from Plan and from other international and national NGOs and government officials. Some very good CLTS trainers emerged as a result, who then took forward the process of training others and spreading the process in their own and neighbouring countries.<sup>13</sup> CLTS gradually became firmly institutionalised in Plan and all the field staff working in all the programme areas were trained by those who received training in Awassa. Within months, magnificent results started emerging from villages in SNNP, Sidama, Gurage, Tigray and Jimma regions of Ethiopia. These were then systematically used as learning laboratories for others. Shebedino village became a household name in the area, and produced many natural leaders including child leaders of great calibre. Awassa-trained trainers provided training support to other interested agencies in the region: the spread was remarkable in Ethiopia and in the coastal areas of Mombassa in Kenya. In Ethiopia, the head of the Regional Health Bureau of the SNNP Region at this time was Dr Shiferaw, who in 2008 became minister of health. Under his influence, CLTS was included in the national health policy and the reach of CLTS was further broadened - however, the complications of this process are discussed in Section 6.

Within three years of the regional training workshops, CLTS had spread widely and is now practised in Ethiopia, Kenya, Tanzania, Eritrea, Uganda, Malawi, Zambia, Mozambique, Sudan and Madagascar. However, this rapid spread was initially driven mostly by institutionalisation within Plan RESA. Institutionalisation within government sanitation departments and mechanisms was the next step.

#### 4.2 UNICEF develops the model

This first process provided a solid model for how CLTS could be taken up and spread with the backing of a 'champion' agency. By the middle of 2007, UNICEF New York – despite the ambivalence towards CLTS in some Asian countries such as India and Bangladesh due in part to different sets of government-donor

<sup>13</sup> Key trainers included Atnafe Beyene, Cherkos Tefera and Dr Tezera Fisseha from Plan Ethiopia; Dawit Belew, Seyoum Geitu, Samuel Musyoki, Philip Otieno, Martin Hinga and Frank Marita from Plan Kenya; and Solomon Kebede and Alemitu Golda from Vita, Ethiopia, and Francis Mtitu from Plan Tanzania.

relationships and discussed further below – had begun taking serious steps towards developing a no-subsidy community empowerment approach as an international strategy for sanitation. This process was promoted particularly by Clarissa Brocklehurst who had previously worked as country representative of WaterAid Bangladesh, during the time when I had developed this approach during an evaluation of their programme. This strategy was officially taken up later, in 2008. As one of several precursors to it, I was contracted by UNICEF New York towards the end of 2007 to introduce CLTS in African countries where UNICEF offices expressed an interest.

Following the first workshops in this process, UNICEF became increasingly aware that Plan had built up solid experiences in CLTS in eastern and southern Africa. The workshops that I facilitated already drew on the model developed with Plan RESA. But for UNICEF, particular emphasis was on influencing government sanitation agencies, bureaucrats and policymakers.

#### 4.3 The strategy

The process of bringing governments on board in spreading CLTS has taken a much shorter time in most parts of Africa than in Asia, and this has been in part due to how quickly UNICEF took up the mantle and worked from the start mainly with government departments and ministries. In this they were supported by some donors, in particular the UK Department for International Development (DFID), which was promoting CLTS – DFID had funded the Plan RESA CLTS workshops in Tanzania and Ethiopia in relation to their sanitation focus in Africa.

Previous to the developments towards the end of 2007, UNICEF sanitation work in African countries had been mainly focused on sanitation hardware, using Participatory Hygiene and Sanitation Transformation (PHAST)<sup>14</sup> as a behaviourchange and learning approach, including its several prescriptive elements. In October 2007 the first UNICEF regional workshop was held in Nairobi, for the regional training institutes such as Network for Water and Sanitation International (NETWAS) in Kenya, Centre Regional pour I' Eau Potable (CREPA) in Burkina Faso for francophone western Africa, Training, Research and Networking for Development (TREND) in Ghana for anglophone western African countries and other training centres in Zimbabwe and Mozambique. This was a three-day exposure and assessment workshop.

Following this, in the first half of 2008 a series of hands-on in-country training workshops began in Sierra Leone, Ethiopia, Malawi, Kenya and Zambia (see Annex 1). In some countries, agencies such as Plan and WaterAid had already been promoting CLTS, and in these my role was to contribute to establishing it further, in particular through workshops involving government ministers, bureaucrats, and UNICEF staff. A second task was to extend the process of training a cohort of trainers who could take the triggering and follow-up process forward.

<sup>14</sup> See Section 5 for more details on the PHAST approach.

In other countries, CLTS was new, and my role was to run workshops which could present the evidence that CLTS works, convince and persuade key actors, and also produce ODF villages as learning and demonstration sites. Frequently, I made return visits three or four months after these initial workshops, to discuss experiences and hitches and to continue training.

#### The first trainings: foreground and background objectives

The initial in-country UNICEF CLTS workshops followed a particular pattern. They were all 'hands-on' workshops, meaning they were focused on working 'live' with communities in real time. These were five-day workshops, with participants working in groups in different villages, leading triggering exercises from day two, as well as on days three and four. Time is also set aside on these days for reviewing and comparing the experiences of the different groups. On day five, a selection of village members – potential 'natural leaders' or 'community consultants' who showed enthusiasm and ability to pursue the process in their communities and identified by the workshop participants and facilitators – are invited to make presentations of their plans for becoming ODF.<sup>15</sup>

Similar workshops have since been held in many countries across Africa. They are triple-agenda workshops:

- At one level, the objective is to introduce CLTS to a group of potential CLTS actors, persuade them of its effectiveness, give them a good understanding of how CLTS works through community initiatives and natural leaders, and give them experience of their own triggering.
- At another level, these are training of trainers workshops a selection of participants who find they have an aptitude for CLTS, and especially triggering, are equipped to spread the training further.
- At a third level, the workshops aim to create sustained demonstration sites on the ground in the form of villages on their way to being ODF. These are the 'proof' that CLTS works, and help the process spread as visible examples for village-to-village spread, as reference points for the new CLTS facilitators, and as evidence and data to help convince decision makers at administrative and political levels.

In other words, these five-day processes are intended to create a multi-level experience of 'seeing', 'doing' 'learning' and 'passing on' CLTS in order to create a cadre of CLTS advocates with hands-on experience of their own, and in order to create the evidence in villages that CLTS works to facilitate persuasion at decision-making levels. The workshops also work towards developing specific plans and commitments from participants regarding how they would take CLTS forward, and what the targets would be for the numbers of ODF villages, and for ODF declarations.

UNICEF's in-country trainings differed somewhat from those that had been led by Plan in southern and eastern Africa. Most significantly, Plan had a group of

<sup>15</sup> See footnote 13 for some of the many key people emerging as advocates from these workshops.

in-house trainers, so one primary objective was to use initial workshops to change how these trainers worked: emphasis was put not only on generating communityled village initiatives, but also on the learning methodology through which this was most likely to happen, moving away from prescriptive approaches.

UNICEF, on the other hand, had a clear mandate to involve government staff because in most countries government departments and ministries are their major partners. These participants should be enabled to take CLTS on at local levels and to scale; to persuade further within the immediate bureaucracies in which they are placed. Around 90 per cent of participants at UNICEF workshops were government and UNICEF staff. Some representatives of UNICEF's partner NGOs were also invited, generating broader awareness of the approach within partner organisations.

In some countries, there was also a focus on using the workshop opportunity to expose and persuade key policymakers and programme heads. Other workshops have had a regional perspective, such as the October 2007 regional training institutes' exposure meeting in Nairobi, Kenya and the WATSAN regional training in Mali in November 2008, which was aimed at UNICEF country heads of water and sanitation programmes and government senior decision makers in water and sanitation ministries and departments. In the Mali workshop which introduced CLTS at an institutional level in the western and central Africa regions, this involved at least ten francophone countries with UNICEF offices.

A regional workshop was also held in Nigeria in February 2009, attended by participants from the five Anglophone countries in the western and central Africa regions. At this point, Sierra Leone, Nigeria and Ghana<sup>16</sup> already had some experience of CLTS, so the 'hands-on' aspect of the workshops in these cases was less to give experience of triggering to people who would actually implement the roll-out process than on producing a persuasive experience and to develop national-level action plans to roll out CLTS further in each country.

#### Subsequent and follow-up workshops

Following these initial workshops promoted by UNICEF New York, several UNICEF offices in other countries contacted me independently to conduct introductory hands-on training with government officials and major NGOs, etc: the news of CLTS was spreading. Most often, participants of the regional workshops became interested in introducing CLTS in their countries, and especially in creating country-specific demonstration sites which could be used as critic-proof evidence that CLTS worked in that country. These included Chad, Mozambique, Eritrea, Nigeria and Mali – where the regional workshop had been held – all of whom requested in-country training.

<sup>16</sup> Sierra Leone had UNICEF-led hands-on training workshops by Kamal Kar in January-February 2008. CLTS was also followed up and supported by Plan and the Irish NGO GOAL, as well as the Ministry of Water Supply and Sanitation. Nigeria and Ghana had been introducing CLTS through WaterAid, within WaterAid operational areas.

Many of these countries, as well as the initial countries beginning to institutionalise CLTS, have also held follow-up workshops to review progress, develop the skills of trainers and/or introduce the approach to further participants. Often, these subsequent workshops are co-facilitated or led by the earlier trainees. Sometimes, they focus on training for well-established training organisations, such as CREPA in Burkina Faso which trains in francophone western and central Africa, TREND in Ghana and NETWAS in Kenya. However, there remains some disagreement over how subsequent training and training of trainers workshops should be conducted, discussed further in Section 6.

Overall, the spread and uptake of CLTS across Africa has been extraordinary. At least 26 countries have introduced the approach and at least five have introduced it as a major part of their national sanitation strategies. However, the processes following initial workshops have also differed in different countries. In some, such as Mozambique, Ethiopia, Zambia, Malawi and Sierra Leone, spread has been rapid, hundreds of villages have been triggered and a considerable proportion of triggered villages have been declared ODF. In others, such as Burkina Faso, Tanzania, Uganda and Nigeria, while a cadre of trainers may or may not have been trained, this has not translated so rapidly into high numbers of triggered or ODF villages (see Section 6). The proportion of triggered villages becoming ODF varies quite substantially across countries. Table 4.1 gives an idea of these variations and a broad picture of some of the institutional issues that may be affecting prospects – such as the co-existence of subsidy-led approaches. The following section attempts to pull out some of the factors which, from my perspective informed by the Asian experience, appear to have influenced these different trajectories.

Country	Introduction of CLTS- Year/month	No. of triggered villages	No. of ODF villages	No. of families with better sanitation	Population in ODF villages	No. of key trainers	No. of facilitators	Status of CLTS in national sanitation strategy	Do hardware subsidies exist/ operate?	Other organisations promoting/ using CLTS	Comments
Benin	Nov. 2009	67			-	5	74	National policy/strategy is being elaborated/ validated	Yes Plan,	Plan, Helvetas, UNICEF	CLTS introduced by CREPA. If CLTS were adopted by the national sanitation strategy, scaling up would be faster. But high-quality training, facilitation and follow-up is essential
Burkina Faso	2008	32				5	5		Yes	WaterAid, UNICEF	Government sanitation strategy promotes hardware subsidy and prescribe latrine models. CREPA needs to develop ODF villages around its own institutional site to demonstrate applicability of CLTS and convince the government
Cameroon	Mar. 2009	30	6		14,085	2	80	CLTS is explicitly included in official policy/strategy documents		UNICEF	Urgent need for more good quality trainers and facilitators. Serious post- triggering follow-up mechanism needed
Chad <sup>a</sup>	Sep. 2009	35 + 5 auto- trigger	3	200 HHs (house- holds) in ODF villages; more in nearly ODF villages		5	196	National policy/strategy is being elaborated/ validated. CLTS is explicitly included in official policy/ strategy documents	Emergency and development agencies practising subsidy for individuals in IDP and refugee camps and within host areas	Oxfam GB, Secours Islamique France, International Aid Services (IAS), World Concern and CARE, UNICEF	Several triggered villages are very close to ODF. Stringent ODF verification norms, less frequent verification visits and difficulty in the

### Table 4.1 Comparative progress and updates, selected countries (November 2010)

Country	Introduction of CLTS- Year/month	No. of triggered villages	No. of ODF villages	No. of families with better sanitation	Population in ODF villages	No. of key trainers	No. of facilitators	Status of CLTS in national sanitation strategy	Do hardware subsidies exist/ operate?	Other organisations promoting/ using CLTS	Comments
									World Vision, Oxfam GB, Concern Worldwide, Intermon Oxfam, SECADEV, AFRICARE and all NGOs working in water and sanitation use latrine subsidies		availability of verification team delays declaration and inclusion of new villages in the list
Congo Brazzaville	Nov. 2009	25	5		6,510	5	300	CLTS implemented in governmental programmes but not included in official policy/ strategy		UNICEF	
Côte d'Ivoire	Jun. 2009	129	5		4,554	4	53	National policy/strategy is being elaborated/ validated	Yes	UNICEF	The ratio between the number of triggered and ODF villages is alarming. Suggests problems in quality of triggering, seriousness of follow-up or frequency of monitoring and certification visits
Democratic Republic of Congo (DRC)	Dec. 2010	6	0								CLTS just introduced with the support of Tearfund UK. Philip Otieno and Njoroge Kamau of Plan Kenya conducted the training. The workshop was held in Kindu in Maniema Province of DRC
Djibouti	2010	20	-								A first hands- on training on CLTS was conducted by CREPA in 2010

Country	Introduction of CLTS- Year/month	No. of triggered villages	No. of ODF villages	No. of families with better sanitation	Population in ODF villages	No. of key trainers	No. of facilitators	Status of CLTS in national sanitation strategy	Do hardware subsidies exist/ operate?	Other organisations promoting/ using CLTS	Comments
Eritrea <sup>b</sup>	End 2007 'mixed CLTS'; mid- 2009 'pure' CLTS	162	33	47,185 in ODF villages; 128,490 using latrine in triggered villages		Rou- ghly 10	146	Eritrean Rural Sanitation Policy and strategy direction fully supports CLTS approach	No	Eritrean National Red Cross Federation adopted CLTS and is training facilitators UNICEF	Several villages auto- triggering and at least one of these ODF
Ethiopia	Feb 2007	18,256	14,110	2,822		30	Over 250	CLTS is now transformed into CLTSH to include hygiene. A National Hygiene & Sanitation Task Force chaired by the Ministry of Health involves the health, water and education sectors and major bilateral agencies as well as INGOs and LNGOs, public-private partnerships (PPPs)	Almost none	Majority operating in the area of Health & Safety are promoting CLTS, UNICEF	The figures are incomplete; updated data collection in progress
Gambia	May– Jun. 2009	39	3		3,323	4	46	CLTS is explicitly included in official policy/strategy documents	Yes	UNICEF	
Ghana <sup>a</sup>	2007	308	69	1390	8,340	n/a		CLTS is mentioned in the national policy and national environmental sanitation strategic action plan. CLTS is explicitly included in official policy/ strategy documents	Yes, with only one project being managed by World Vision. The IWASH project provides post triggering incentives to communities in the form of slabs	WaterAid, Plan Ghana, Community Water and Sanitation Agency, UNICEF	Data from 2009 CLTS evaluation report. No current data available
Guinea Bissau	Feb. 2010	94			7,766	5	35	National policy/strategy is being elaborated/ validated		UNICEF	

Country	Introduction of CLTS- Year/month	No. of triggered villages	No. of ODF villages	No. of families with better sanitation	Population in ODF villages	No. of key trainers	No. of facilitators	Status of CLTS in national sanitation strategy	Do hardware subsidies exist/ operate?	Other organisations promoting/ using CLTS	Comments
Guinea Conakry	Jun. 2009	24			15,515	2	47	CLTS is explicitly included in official policy/ strategy documents	Yes, very lightly	UNICEF	
Kenya <sup>c</sup>	Apr. 2007	261	113	78,900		30 or more		The government of Kenya has adopted CLTS as a sanitation strategy. The line government Ministry is working towards training personnel on CLTS. Some personnel have been trained by Plan and UNICEF	No	Plan, UNICEF, Kenya Red Cross, Aga Khan Foundation, KWAHO, SNV Netherlands, NETWAS	
Liberia	Mar.– Apr. 2009	60	15		10,285	6	70	CLTS is explicitly included in official policy/ strategy documents	Yes	UNICEF, Many National and International NGOs	In spite of government ministry's interest in scaling up, triggering and emergence of many ODF villages seems to be problematic. In the recent CLTS practitioners' sharing workshop, Lusaka, Zambia, the Director of Water and Sanitation and Assistant Minister said they would engage local NGOs, CBOs for scaling up and would engage natural leaders as community consultants
Malawi <sup>c</sup>	Apr. 2008	722	172	52,295 people		About 10	Over 150				Figures from Nov 2009

Country	Introduction of CLTS- Year/month	No. of triggered villages	No. of ODF villages	No. of families with better sanitation	Population in ODF villages	No. of key trainers	No. of facilitators	Status of CLTS in national sanitation strategy	Do hardware subsidies exist/ operate?	Other organisations promoting/ using CLTS	Comments
Mali <sup>a</sup>	Mar. 2009	About 261	About 178 (certified: 41; expected certified: 162)		137,200 individuals	6	294	CLTS now part of the National Water and Sanitation Programme and recognised as main strategy for rural sanitation; detailed action plans being established for regions of Mopti, Koulikoro, Sikasso, Kayes and Segou; to be ready September 2010. CLTS is implemented in governmental programmes but not included in official policy/strategy	Yes: • household latrine programs with 90% subsidy by the African Development Bank for the construction of around 1,000 latrines; • SanPlat slabs promotion with heavy subsidy developed by Aga Khan; • Other subsidised programs for public sanitation (in schools, marketplaces)	ARD-WAWI, SNV, WaterAid, Plan Mali, Global Water Initiative Mali UNICEF	Individuals affected probably 201,000 by Oct 2010. Trained delegations from Mauritania and Togo. Delegation from Burkina Faso expected October 2010
Mauritania <sup>a</sup>	March 2009	About 185 rural, 177 urban	107		33,790	5	60	National sanitation policy is being developed now; CLTS will definitely be included as an alternative approach. Document not ready yet. National policy/ strategy is being elaborated/ validated	Very small scale: one project in three of 13 regions, funded by the African Dev Bank	Gret, Counterpart International, MCMMJSS, UNICEF	
Mozambique <sup>d</sup>	Oct. 2008	790, mostly under UNICEF One Million Initiative	2009			Over 15		Yes. Joint meeting with ministries of Health, Education and Water – directors of each dept. agreed to the scaling up of CLTS in the 10 provinces. Training of trainers will be completed in all provinces by end October 2010	No	WaterAid, African Development Bank (ADB), CARE, UNICEF	

Country	Introduction of CLTS- Year/month	No. of triggered villages	No. of ODF villages	No. of families with better sanitation	Population in ODF villages	No. of key trainers	No. of facilitators	Status of CLTS in national sanitation strategy	Do hardware subsidies exist/ operate?	Other organisations promoting/ using CLTS	Comments
Niger <sup>a</sup>	Nov. 2009	10 (UNICEF Sept. 2009); 8 (Plan Niger May 2010); 20 (UNICEF June 2010)	10 in 2010 under UNICEF	2,156	12,122	6	86	In 2010, a National Commission in charge of the promotion of the CLTS was created	Yes, very lightly	Water Aid, Plan Niger, UNICEF, WSP, Global Water Initiative (GWI) Mali. UNICEF	Training of trainers trained delegations from Mali, Burkina Faso, Ghana, Senegal and Niger expected September 2010
Nigeria		2654	425		37,0128	24	70	National policy/strategy is being elaborated/ validated CLTS is explicitly included in official policy/strategy documents		UNICEF	
Senegal	Dec. 2009	29	12		556	3	41	National policy/strategy is being elaborated/ validated	Yes	USAID, UNICEF	
Sierra Leone <sup>a</sup>	Late 2007	2108	790		152,304	9	242	CLTS incorporated into District Health Plans in March 2009, following advocacy by MoHS. March 2009, CLTS was included in PRSP II: Agenda for Change as a Strategic Priority. CLTS is explicitly included in official policy/ strategy documents	Yes	39 national and local NGOs, UNICEF	ODF and triggered Figures from June 2010; some villages auto-triggered by neighbour NLs; at least two ODF
Тодо	May 2009	44	0		1,200	10	63	CLTS is explicitly included in official policy/ strategy documents	Yes	Red Cross, UNICEF	

Country	Introduction of CLTS- Year/month	No. of triggered villages	No. of ODF villages	No. of families with better sanitation	Population in ODF villages	No. of key trainers	No. of facilitators	Status of CLTS in national sanitation strategy	Do hardware subsidies exist/ operate?	Other organisations promoting/ using CLTS	Comments
Uganda <sup>e</sup>	Feb 2007	About 169	37			40	Over 200	CLTS is part of the national sanitation strategy, published in 2006. It is also recognised in the national development plan, a five- year strategy to guide Uganda programming. Started on roll out to 30 of 80 districts	No, it is national policy not to subsidise household sanitation. A few NGOs have done so especially in areas disturbed by wa	Plan Uganda; OXFAM- Kitgum, WSP- World Bank and the Ministry of Water & Environment, UNICEF	Although trying to roll out through the local governments, these are limited due to limited resources
Zambia <sup>c</sup>	Nov 2007	1,200	910	36,000 (210,000 people)	Over 10	Over 200		Following adoption of CLTS as one of national strategies for rural sanitation promotion, the Gov. of Zambia is planning to expand the CLTS programme to all 72 districts	No (WaterAid has a small subsidy component in one district in its approach called Community Based Total Sanitation	Oxfam, Plan International, Africare, WaterAid, World Vision, Local Authorities, UNICEF	Figures are incomplete; updated data collection in progress
Zimbabwe <sup>c</sup>	Nov 2008	257	15	7857	5	43		Sanitation and hygiene strategy currently being reviewed. CLTS is being considered; the proposal is that it should be called Community Led Incremental Sanitation (CLIS). All stakeholders agree that stopping OD has to be addressed	Yes supported by other stakeholders (NGOs)	Plan, UNICEF	CLTS activities were briefly suspended after MOH had raised policy issues; now allowed for piloting. Plan is piloting in four districts/ Programme Units (PUs). Several villages still have to be followed up, verified and certified ODF

Note: The table presents a comparative snapshot of CLTS situation in various countries at a particular time. It should be noted, however, that the picture is continuously, and in some cases, rapidly changing. Source:

a – and countries in western and central Africa: UNICEF West and Central Africa Regional Office's regional review of the CLTS roll-out, conducted in July–Sept 2010. Final version of the report is still pending. Personal communication Jane Bevan, WASH specialist, West and Central Africa Regional Office, Dakar, Senegal.

b – Personal communication, Patrick Sijenyi, Yirgalem Solomon UNICEF Eritrea in Asmara.
c – Personal communication, Amsalu Negussie, Regional WASH advisor, Plan RESA.
d – Personal communication, Samuel Godfrey, UNICEF Mozambique, Maputo.
e – Personal communication, Carol Nabalema, Plan Uganda. [keep with other source notes]

# 5 Comparing experiences of the institutionalisation process

CLTS in different parts of Africa of course faces many challenges if it is to become a real and effective sanitation solution across the continent. Some of these are discussed later. Nevertheless, there is little doubt that the approach has spread extremely rapidly and that it has affected the lives of thousands of both rural and urban people. Most notably, several governments have quickly taken up the approach, increasing the likelihood that it will continue to spread, making improved sanitation a reality for millions more people much more quickly and effectively than subsidy-led approaches.

In Asia, on the other hand, while CLTS has also generated far-reaching results in several countries, its spread has been less rapid, its operational areas remaining patchy, and governments have tended to respond to the approach with more ambivalence.

While communities are at the centre of CLTS, donors, NGOs and governments have variously – and sometimes in combination – played important roles in making the approach available to communities. How these different organisations relate to each other, their relative influence and their varying agendas and drivers are some of the factors which have come into play and affected how CLTS has been taken up.

#### 5.1 Institutional leadership

One key factor in the rapid spread of CLTS in Africa has been the clear institutional leadership displayed by UNICEF in actively advocating the approach. UNICEF is a major player in the water and sanitation sector across the continent and has a good deal of credibility in many parts of Africa, mainly on the strength of its work on successfully establishing safe water facilities, often in remote areas.

Thus, as far as the 'water' side of the WATSAN equation went, UNICEF's work was well regarded – even though safe drinking water was still not available everywhere. On the sanitation side of this equation, however, UNICEF had tried a number of approaches but these had not been so successful.

Both SARAR (Self-Esteem, Associated Strength, Resourcefulness, Action Planning, and Responsibility) and PHAST had been major approaches promoted by UNICEF. Both of these include elements of participatory approaches and tools and various levels of community involvement. SARAR engages participatory analysis using cards representing preset categories. PHAST follows in that tradition with an extended sequence of sessions with some community members. Neither had really been able to trigger a self-mobilisation effect to clear up shit on a sustained basis. Both approaches have 'messages to deliver', and to achieve this, a level of didactic teaching/learning inevitably underlies – and confounds – any community leadership objectives. In PHAST, the whole community is rarely involved – it is assumed that some people will take the message to others, but usually this did not fully happen. CLTS thus appeared at a time when donors, including UNICEF, were seeking more effective answers. Still, it required active intervention and serious engagement on the part of several individual champions to get institutional support for CLTS from within UNICEF. As everywhere, resistance from old-school sanitation engineers within the organisation, who regarded the sanitation problem as requiring technical and engineering-based solutions, was evident, and focused policy advocacy work was required by a number of people to break down this resistance.<sup>17</sup>

In Asia, CLTS started out on a quite different footing, and at a quite different moment in its own history. When CLTS began in Bangladesh, it was a WaterAid project being implemented across a relatively small area, and questions of whether or how it could be implemented at scale were as yet far off. The approach was spread initially not by donors with relatively wide spheres of influence, but between and across interested NGOs which might be able to take it up. Donor involvement began when a DFID review included evaluation of the WaterAid project, and the India Country Team Leader of WSP South Asia (SA), Vivek Srivastava, was invited to take part in the review process. Following this evaluation, DFID funded a WaterAid programme for scaling up CLTS in Bangladesh – but this scaling up took place at grassroots/implementation levels, rather than at institutional levels.

In Asia, the World Bank-managed WSP was a significant player in taking CLTS forward at institutional levels. An element of competition between the big agencies, anxious to find an approach to sanitation that produced real and widespread results, may have facilitated the process. In Asia, the competing agencies were UNICEF and WSP. In India, UNICEF has been much slower to promote CLTS than in Africa, at least in part because of its relative lack of influence with the Government of India, discussed further below. WSP SA, however, despite some internal disagreements over the approach (Sanan 2011), made sufficient impact with CLTS in Pakistan as well as in India that WSP EAP (East Asia and Pacific region) took CLTS on board and began organising a series of in-country hands-on workshops across Asia: in Indonesia, Cambodia, Lao PDR, Vietnam and, by 2009, in the Philippines.

#### 5.2 'Fit' with other approaches

In addition to institutional leadership, a second important factor influencing the prospects of going to scale appears to be how far existing or in-the-pipeline country-level sanitation programmes can be made to fit with the ideas and mechanisms of CLTS. Although there is no clear pattern, there may be more

<sup>17</sup> Key individuals who contributed to overcoming this resistance, discussed further later, include, in UNICEF: Peter Harvey, Chris Cormency, Clarissa Brocklehurst, Nicolas Osbert, Lillian Okweri, Peter Feldman, Samuel Godfrey, Bisi Agberemi and Sophie Hickling. In other organisations, champions working hard to change the outlook on and approach to sanitation issues include Edward Mac Abbey, Dr Khairul Islam, Peregrine Swann, Alistair Ray, Barry Jackson, Francesca De Ferrari, Morag Baird, Amsalu Negussie, Robert Chambers, Petra Bongartz, Samuel Musyoki, Soma Ghosh Moullik, Ajith Kumar, J.V.R. Murty, Deepak Sanan, Nilanjana Mukherjee, Joko Wartono, Devi Setiawan, Mark Ellery, Rokeya Ahmed, Nicolas Osbert, Lillian Okwirry, Rose Nierras, Hamidu Maiga, Chimwemwe Nyimba, Americo Muianga, Gibson Zulu, Yirgalem Solomon, Dr Kesete, Patrick Sijenyi, Belinda Abraham, Bisi Agberemi and Lonis Salihu.

examples of this 'fit' taking place in Africa than in Asia. India is perhaps an example of this 'fit' failing to fully happen with the central government's Total Sanitation Campaign (TSC) (Kumar and Shukla 2011) – except where CLTS was actively helped by key individuals to 'fit' with the TSC in certain states. In Indonesia, advocacy throughout WSP EAP resulted in a 'fit' being achieved at national level with the second and third phases of the Water and Sanitation for Low-Income Communities (WSLIC) Project and CLTS has subsequently been rolled out widely on the back of this programme. In this case, CLTS was seen to be offering a solution to the struggling WSLIC programme.

In Africa, this 'fit' has been sought out and found in several countries. In Mozambique, for example, CLTS was the approach taken up by the Government of The Netherlands and UNICEF-funded One Million Initiative. This was implemented initially in 18 districts in three provinces for which I trained facilitators at a workshop in October 2008. This pilot ran for seven or eight months and produced very good results, with the consequence that it was scaled up to the entire project area. Subsequently, the ministries of health, education and water agreed to scale up throughout all ten provinces of the country and complete training of trainers for this process by October 2010.<sup>18</sup>

In Sierra Leone, one of the early CLTS implementers, it was not exactly a case of 'fitting' with an existing programme, but excellent coordination and collaboration between agencies which took CLTS forward. On the initiative of Francesca De Ferrari of UNICEF who came to know about CLTS via Dr Nilanjana Mukherjee, the then country team leader of WSP Indonesia in Jakarta, UNICEF had begun introducing the approach in October-November 2007 and was supporting the changes to and the development of the government machinery necessary to implement it, both at central and local levels. Francesca organised a series of hands-on training workshops and invited me to facilitate them. At that time, Morag Baird was the infrastructure advisor of DFID, Sierra Leone. Previously, she had been posted in Dhaka, Bangladesh as a trainee engineer working with WaterAid, and had learned about CLTS but had never had the chance to participate in a full training workshop. Morag took this opportunity to participate in the first workshop held near Freetown. At the same time, the country director of GOAL, an Irish NGO, was very enthusiastic about CLTS approach and sent several GOAL staff to participate. The second training workshop was then held in Kenama district, which is one of the major working areas of GOAL.

The committed leadership provided by these three heads of institutions/departments formed a unique inter-institutional collaboration which resulted in quick implementation on the ground. Making this inter-institutional linkage even stronger were the inputs of Brian Beckett of Plan UK and Mariama Munia Zombo, Community Empowerment Advisor of Plan Sierra Leone. All of these people were in touch to lay out the plan for the immediate roll out of CLTS in Sierra Leone, and worked together to incorporate CLTS into the Sierra Leone sanitation project proposal being prepared for funding.

<sup>18</sup> Personal communication, Samuel Godfrey, UNICEF Mozambique.

This initiative, coupled with a serious political commitment of the government to drastically reduce the disease burden from diarrhoea, typhoid, cholera and other water-borne disease resulted in the submission by UNICEF and approval by DFID of a £30 million project to roll out CLTS throughout the government mechanism and other NGOs. In September 2008, the Sierra Leone government established the National Water and Sanitation Policy and started undertaking this new programme, which includes a range of community-led sanitation programmes – here termed Community Approaches to Total Sanitation (CATS) programming<sup>19</sup> (UNICEF 2009). This was the beginning of a country-wide movement in Sierra Leone which has subsequently been spreading in war-torn remote rural areas.

Chad provides a further example of 'fit', though one which has not yet come to fruition. During and following an in-country workshop in September 2009, 35 villages were triggered and five more auto-triggered, seeing the impressive results in some of the first villages. These examples inspired government officials and policymakers to the extent that efforts were made to centralise CLTS in the developing National Sanitation Strategy. However, at this point a proposal was already in the pipeline for European Commission funding for a sanitation programme based on hardware subsidies. The Chad government has been proactive in trying to change the terms of this programme, so that these potential funds will be used to scale up CLTS rather than for subsidised latrines. They requested me to advocate this on their behalf at a recent European Commission meeting on water and sanitation, and as a result the request to make CLTS the central approach of this programme is under consideration. The Chad government has opted to wait rather than accept a programme which does not take CLTS on board.

# 5.3 Government-donor-NGO relationships

Most African countries do not have access to the levels of internal funds available to some of the Asian countries such as India and China. This clearly puts many of them in a different relationship to donors and multilaterals than in those countries. Internal budgets in Africa do not generally allocate sufficient, or in some cases any, funds to develop and implement national strategies on sanitation, so most governments have not much choice but to take on board donors' sanitation programmes.

This is another key factor in the difference between how rapidly CLTS has spread in Africa and Asia. UNICEF in particular, a UN agency which supports national government partners with UN funding according to agreements, is not a straightforward donor organisation. Partly as a result of this role, they do not have the

<sup>19</sup> Community Approaches to Total Sanitation (CATS) is an umbrella term used by UNICEF to encompass a wide range of community-based sanitation programming. CATS share the goal of eliminating open defecation; they are rooted in community demand and leadership, focused on behaviour and social change, and committed to local innovation (see www.communityledtotalsanitation.org/resource/ community-approaches-total-sanitation-case-studies-india-nepal-sierra-leone-zambia, accessed 15 May 2011).

kind of influence in many parts of Asia that they have in Africa. In India, for example, UNICEF was initially unwilling and subsequently perhaps unable to influence the government sufficiently to override the government-led and subsidy-driven Total Sanitation Campaign with CLTS principles.

In terms of numbers of players, the NGO–government–donor interaction is generally not so complex in African countries as in Asia. In most Asian countries, many organisations are working – either in different areas, or sometimes in the same area; often each has a different focus and approach. Communities are therefore frequently subject to mixed messages and conflicting loyalties. Politics driven by a variety of different political parties in some countries adds to this complicated canvas. In Africa, requirements for coordination and alignment between agencies and organisations are somewhat less complicated, because fewer organisations are working, and the operational areas of NGOs overlap far less often.

At the same time, work with CLTS in Africa has produced some good examples of excellent coordination and cooperation between agencies. Strong functional linkages were built between Plan International and UNICEF around CLTS in several countries – Kenya, Ethiopia, Mozambique, amongst others. In Sierra Leone, as discussed, DFID sanctioned funds for the new CLTS-based five year WASH programme in cooperation with Plan, UNICEF and GOAL. In other countries, relationships between UNICEF, WaterAid, Plan and other NGOs have been both cooperative and productive.

# 5.4 Champions

#### Champions within organisations

Perhaps the most important factor facilitating rapid uptake in Africa has been the existence of individual champions who have steadily carried the approach throughout organisations and to communities, influencing policy and gradually transforming sanitation systems based on agency-led and subsidy-led approaches. Often, when organisations had strong roots in engineering-based and didactic learning models, this has been no easy task, requiring courage and persistence.

In the early stages of spread in southern and eastern Africa, for example, the foresight and conviction of Dr Khairul Islam, Regional Programme Support Manager, and Mr Amsalu Negussie of Plan RESA were critical to the rapid spread of CLTS as Plan's sanitation approach in several countries. In UNICEF New York, Clarissa Brocklehurst, herself an engineer, has been a key player driving the process of introducing CLTS into country programmes in Africa, as also in Latin America.

Many of these champions are engineers – a fact that lends weight amongst other water and sanitation actors to their conviction that CLTS is a valid and effective sanitation approach. They include a number of UNICEF actors: Peter Harvey, then in Zambia; Nicolas Osbert in Mali; Chris Cormency in Senegal; Francesca De Ferrari in Sierra Leone; Susana Sandoz in Mauritania; Peter Feldman in Ethiopia; Samuel Godfrey in Mozambique; Lillian Okewari in Chad, Farukh Khan in Kenya

and Bisi Agberemi in Nigeria, amongst many others. These individuals, as engineers, became powerful examples that helped many sceptics and disbelievers within UNICEF to change their attitudes and their behaviours, and to try out this simple, community-based approach.



CLTS champion, Mr Fwamba Ambrose DPHO (District Public Health Officer) Busia, Western Province, Kenya addressing communities gathered to celebrate ODF declaration. Ms Vicky C

Ms Vicky Chelangate District Officer, Nambale, Western Province Kenya encouraging ODF community.



John Kariuki, Deputy Chief Public Health officer, Kenya presenting certificate of achievement to natural leaders in ODF villages in Kenya.

There are many more champions whose contributions made a massive and striking difference in the overall institutional transformation of UNICEF's focus and approach. The process could not have been carried only by engineers – it also needed the driving force of other professionals in the organisation, such as health, hygiene and social development specialists. These individuals carried the main responsibility for facilitating the change in institutional emphasis from physical

infrastructure to sustainable human behaviour change. Amongst non-engineer champions in UNICEF, Therese Dooley in New York, Belinda Abraham in Ethiopia, Sophie Hickling, Eastern and Southern Africa regional office in Kenya, and Yirgalem Soloman in Eritrea played key roles.

# Traditional chiefs

Traditional chiefs have also played a variety of roles in championing CLTS, both at local community levels, persuading village residents alongside other natural leaders, and at advocacy levels with government administrators and wider populations.

Chief Macha in Choma district, Zambia, for example, has used his status in a uniquely proactive manner to advocate for CLTS with a multitude of stakeholders, from ministers of state to elected councillors, from fellow chiefs to rural householders. He has also led the drive to promote involvement of other traditional leaders in the improvement of the health and well being of their people. During 2009 he embarked on reaching out to other tribal chiefs in Southern, Western, Copperbelt, and North-Western provinces of Zambia. Consequently, several other districts have expressed the desire to surpass the gains made in Choma district. In recognition of his efforts, and of the important role he has played in influencing others, in 2009 Chief Macha received an AMCOW-Africa SAN award<sup>20</sup> in Johannesburg.

Similarly, Chief Mkanda, Traditional Authority Chief in Malawi, was identified by the Mchinji district UNICEF CLTS team as one of the emerging local champions of CLTS. Inspired by the triggering which took place in his own village, Chief Mkanda expressed the desire for all 169 villages in his traditional authority area (TA) to become ODF and set an objective to become the first completely ODF TA in the country. He made it a point to accompany field workers to other villages during subsequent triggering.

It clearly cannot be assumed that all traditional leaders are concerned with bringing in development in their communities through true participation – there are, for example, around 260 chiefdoms in Zambia alone. Some may, for example, be motivated mainly to generate support and popularity through CLTS; and they may be able to use their considerable power ruthlessly in order to gain ODF status (see Kar 2011). Nevertheless, where the power and reach that they represent has been used in community-based processes to follow through on triggering exercises and spread CLTS, the roles of some individuals have been very significant.

#### Personal careers

It is clear that the personal career experiences and trajectories of development professionals have had major influence on the spread of CLTS in Africa, as elsewhere. Individuals who have gained experience of CLTS in one location have often found opportunities to promote it in other locations when their jobs move on. Where new jobs involve more decision making, this has often provided crucial openings to put more power behind the CLTS movement.

For example, in Ethiopia it was Theresa McDonnell Friststrom's idea to introduce CLTS in the participatory planning process of Vita's programme in Ethiopia when she was the head of programmes of the Irish NGO in Dublin. Previously, as programme officer of Irish Aid in Uganda, she had also been the champion behind the introduction of CLTS in Kibale district. She had gained her first experience of the effectiveness of CLTS in Cambodia as country director of Concern World Wide, where she had also promoted the approach.

<sup>20</sup> Award given by the African Ministers' Council on Water at the second Africa Conference on Hygiene and Sanitation, 9–13 November 2009.

Similarly, a key step was achieved when UNICEF New York took on CLTS as an international strategy – a step which was in part carried forward by Clarissa Brocklehurst who, as mentioned, had experienced CLTS in her earlier role as country representative of WaterAid Bangladesh. Carrying through the CLTS strategy in New York had profound implications; in Africa UNICEF has consistently encouraged subsidy-free approaches and while some subsidy-based programmes are still running their course, very few new subsidy-based sanitation programmes have been introduced by UNICEF since 2008.

In another example, Brendan Rogers, Irish ambassador in Uganda, had supported the initial experiments in Kibale district in 2001. Later in 2008–9, as chief of Irish Aid in Dublin he extended support to the Institute of Development Studies in the UK, in its initiative of 'Taking CLTS to Scale', which enabled a year of activity, much of it related to the process of scaling up CLTS in Africa.

#### Champions cooperating across institutions

One of the factors influencing the pattern of progress following the first hands-on workshop is the existence of champions in the lead sanitation institutions in each country. When leadership and conviction for CLTS is displayed by programme heads in the major water and sanitation organisation, then progress tends to be rapid. On the other hand, rolling out CLTS cannot be done by any single organisation, and solid, functional linkages need to be built with like-minded organisations and individuals within them. Where these linkages exist, then work 'on the ground' by one organisation can act as a strong pull factor for others.

A very productive scenario can develop when champions lead programmes at two major sites, particularly if the counterpart in the government ministry responsible for sanitation is one of these champions. This is the situation, for example, in Chad, where Lillian Okwirry, head of WASH, UNICEF, and Adoum Ramadane Kaboul, head of the Ministry of Water (Ministè re de l' Eau, Chad) are solid advocates of CLTS. While Chad's implementation has not yet scaled up, the delay has primarily been caused by prudent foresight, and a desire to fit CLTS into the proposed new EC-funded sanitation programme, rather than begin a programme before this sanction has been won. Similarly in Nigeria, Bisi Agberemi of UNICEF Nigeria and Salihu Lonis, Desk Officer, Sanitation, Federal Ministry of Water Resources, have initiated a massive drive to scale up CLTS in the country. Similar collaborations have taken place in Sierra Leone, as discussed, and in Zambia, Mozambique and Ethiopia.

# 6 Challenges and lessons

As in Asia, the advance of CLTS in Africa has not always been plain sailing. While its progress has been remarkable, it has also met with challenges and setbacks, many of which are similar to those which have arisen in different parts of Asia.

#### 6.1 Shit money and the politics of subsidy: comparative issues

A key challenge for CLTS, right from its beginnings in Bangladesh to the present, is that subsidy-based programmes always carry with them a kind of politics. In those countries in Asia where household hardware subsidies for sanitation are embedded in government programmes, this politics is often vote driven. The power to disperse subsidies is highly valued amongst local-level politicians and makes an important contribution towards ensuring continued support – more valued, perhaps, than effecting real changes in sanitation behaviour; removing this power by promoting non-subsidy approaches threatens this arrangement and is therefore often very unpopular.

This source of resistance is only applicable in Africa in those few countries which have government-led subsidy-based programmes, such as Burkina Faso. Generally speaking, governments in Africa have responded more favourably to the idea of no-subsidy approaches, and it certainly appears that in countries which have never offered a sanitation subsidy, progress has been smoother. Ethiopia's situation, for example, was conducive to CLTS, first, because there was already a law on household latrines and, second, because there had never been any subsidy on sanitation.

A subsidy politics of a different kind nevertheless exists in some countries, but concerning subsidy-based programmes backed by donors rather than governments. Almost all major donors have at some point backed subsidy approaches, with subsidies ranging from quite substantial to a small proportion of hardware costs. Many donors also continue with subsidies in some countries and circumstances, including the World Bank, UNICEF and DFID, which in other circumstances and countries have withdrawn subsidies and are strong promoters of CLTS. Subsidies are relatively common amongst refugee populations and in host communities (see Table 4.1) – in Chad, for example, the same organisations promoting CLTS in other parts of the country offer subsidies in these areas.

In some cases, promoting subsidies in some limited programmes does appear to be motivated by a perceived need to adapt policy to particular circumstances, such as where subsidies are used in emergency and development programmes. But in others, it is fair to question whether the mechanisms within donor organisations which measure individual and organisational success and efficiency in terms of funds disbursal may still be conflicting with results-based assessments – which in the case of CLTS are unlikely to correlate very strongly with levels of spending.

Whatever the reason, an important issue for the future of CLTS, and for its prospects for generating good results in particular countries, remains how far it is in conflict with subsidy-led approaches operating at the same time.

# 6.2 Limitations in the institutional environment for CLTS

#### Political will

The bottom line of CLTS is that it takes political will to embed the approach in policy and implementation procedures. Chad is a fine example of displaying that will, with ministers having the conviction to risk donor funding in order to insist on a sanitation programme which will actually help people improve their sanitation conditions. In other countries, political will has clearly been insufficient to produce changes at community levels as yet: in Burkina Faso, for example, although there have been CLTS advocates and a training led by the francophone training organisation CREPA, no progress has been made. There, CLTS also competes with a government-led subsidy-based approach.

### Training and training organisations

How can the spread of CLTS be sustained? Trainers are essential actors in this process as they are the main individuals who pass on the CLTS torch. As elsewhere, the quality of training and the credibility of trainers is an issue in Africa that needs consistent attention. The quality of training can often be read off from the proportion of resulting ODF communities, but there can be a reasonable time lag which makes other assessment markers useful, such as actual implementation experience and/or the lack of attachment to 'traditional' training or facilitation methodologies.

There are two difficulties with placing the major responsibility for further training in the hands of established training organisations, whether these are government training departments or NGOs. The first is that while these organisations train, often they do not implement the approaches they are providing training for. This means that they have no credibility in terms of results of their own, while also having no direct feedback on what the difficulties are or what adaptations to their training programmes may be appropriate.

The second is that established training organisations are likely to have roots in teaching/learning methods which are anathema to the community-led principles of CLTS. Facilitating community leadership requires having more trust in the knowledge and abilities of the community and less trust in the knowledge of 'teachers'. It requires facilitating others to reach their own conclusions, not presenting conclusions to them. Making this change in methodology is much harder for those who have years of experience with traditional methods.

In francophone western and central Africa, UNICEF has supported CREPA – an established training outfit – in becoming the main organisation spreading the CLTS approach. CREPA is mainly known for Ecological Sanitation (Ecosan)<sup>21</sup> work and is not known for establishing good ODF villages in their base country, Burkina Faso. This reputation may limit their legitimacy when they train for CLTS in other francophone countries. While they conduct evaluations of the training at the end of each training programme, the real results of their work in terms of ODF villages produced by their trainees are not directly assessed. These factors may need to be kept in mind as the CLTS process progresses in these countries.

# 6.3 Mixed messages: mainstreaming and watering down

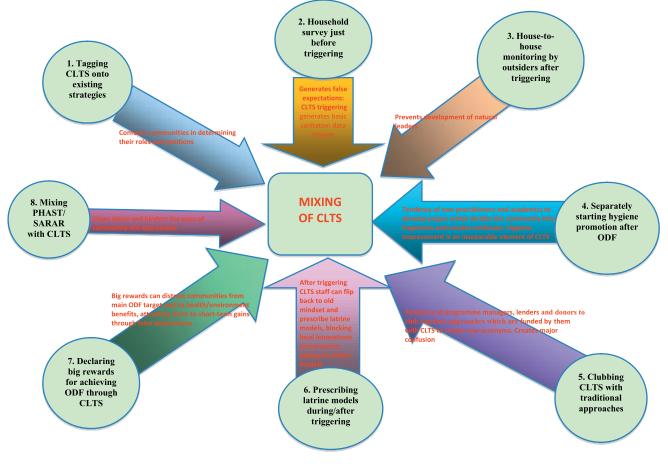
There are several examples across Africa of both governments and donors adopting a 'mixed package' of approaches to sanitation. This happens in a variety of ways and is in some instances a result of deliberate policy to keep a variety of approaches alive and developing in order to increase the likelihood that the 'right'

<sup>21</sup> Ecosan focuses on sanitation systems permitting nutrient reuse, mainly by source separation.

one will eventually be identified. It is also based on the reasonable logic that contexts require adaptations – that 'one size will not fit all' – and those different policies in different conditions are therefore necessary.

As previously discussed, sometimes this 'mixed approach' scenario emerges as promoting subsidy-based approaches or prescribing latrine models in some areas or circumstances while promoting subsidy-free approaches elsewhere. This is perhaps a case of the left hand ignoring what the right hand is doing. Figure 6.1 shows some further examples of how approaches have sometimes been mixed, and suggests some of the risks involved in this mixing. It may, on occasion, be necessary to adapt the approach to the particular conditions existing in particular countries – but this should be done with a large dose of caution and a clear idea of aspects or opportunities that may be lost in the process.

Further scenarios involve tagging CLTS onto an existing approach, other elements of which may contradict essential principles of CLTS. Alternatively, different approaches with elements in common are brought under an umbrella term for strategic reasons, or CLTS is overlayed on top of the mechanisms and structures of 'older' approaches fails to transform these latter completely, with the result that elements of them emerge during training, triggering and follow-up, which are all weakened in the process. Figure 6.1 shows how some of these 'mixing' initiatives can work against the potential of CLTS.



# Figure 6.1 Hazards of mixing messages in CLTS

Source: Author's own.

1. Tagging CLTS onto existing strategies. As suggested in Figure 6.1, one example of a kind of mixing is when CLTS is 'added on' to an existing broader sanitation or health package. This happened to an extent in Ethiopia: in this case CLTS was added on to a broader sanitation package, because this was the clearest way to bring CLTS in at an institutional level. Dr Shiferaw, who had previously been head of the Regional Health Bureau of SNNP Region and was already a strong believer in CLTS, became the minister of health in 2008. He wanted to include CLTS in the national health policy, but this was not straightforward because the government was promoting an 11-point health package with a number of prescriptions for communities to follow. Dr Shiferaw held a number of meetings with me and colleagues from UNICEF and Plan International in Addis Ababa to discuss how CLTS could be blended with the package. Eventually, while a no-subsidy policy became the primary approach, it did not fully take on board the non-prescriptive, community-led key principles of CLTS, and it could be argued that some essence of CLTS was obscured in this recipe.

2. Borrowing techniques from information extraction approaches. A further form of mixing can happen where information is collected using extractive techniques with roots in other approaches. During a recent trip to Nigeria, I found that the Local Government Authorities (LGAs) on the advice of the Rural Water Supply and Sanitation Authority (RUWSA) had been from house to house collecting household-level data in anticipation of CLTS triggering. This prior data collection can create a false expectation of stronger involvement of the state, and in situations where this method is commonly used to select beneficiaries for a project or assess living standards in an area, it can create an expectation of financial and material support in the sanitation process which follows. It also often sets up a scenario in which people are encouraged to report themselves as needy and poor. Apart from losing quality in the data in terms of nuance, this also weakens the chances of building the strength of collective local action, which is an essential element of CLTS triggering.

3. House-to-house monitoring by outsiders after triggering. Figure 6.1 suggests that setting up monitoring systems in which outsiders are in the lead roles can cause various problems. Where monitoring and follow-up is only or mainly in the hands of outsiders, the opportunity for creating and empowering natural leaders is lost or weakened. Rather, the ultimate responsibility for the sanitation situation is vested in the hands of outsiders. This may interfere with natural leaders' sense of responsibility, making them less effective in pursuing the ODF process in the community.

In addition, losing the opportunity for building a group of community leaders, even if no damage is done to the single village, can seriously hinder the scaling-up process – because a handful of outsiders cannot possibly cover the whole area or country. In Zamfara State, Nigeria, for example, monitoring had been taken on by the LGAs, and they were constantly complaining of staff shortage for this huge task. Where natural leaders are developed as an integral part of the approach, the cadre for monitoring is created automatically.

4. Returning to standard approaches after ODF. In many places, including, for example, Chad and Nigeria, a hygiene promotion programme has been reinstated as soon as ODF is declared; or in some cases this programme runs alongside the

CLTS process. The hygiene programme, which includes hand washing, wearing sandals and covering food, is managed according to standard authority and management structures and therefore limits the potential empowerment effect of community-led approaches, as well as jeopardising the sustainability of the hygiene behaviour change achieved through CLTS.

Fragmenting programme activity interventions in this manner – here into OD issues on the one hand and other hygiene issues on the other – also fragments the behaviour change element which is so integral to all parts of the process. Here, the hand-washing behaviour was being approached quite differently from defecation behaviour. This situation can detract from the 'total' element of CLTS, and imposes an (OD) 'project' mentality on CLTS which is actually an approach applicable to many different activities.

5. Clubbing CLTS with traditional approaches. In several places, organisations including UNICEF have begun to use umbrella terms to group a range of approaches or intervention elements together. Community Approaches to Total Sanitation (CATS) is an example of this. CATS includes CLTS, School-led Total Sanitation and – surprisingly – India's Total Sanitation Campaign (UNICEF 2009; Bevan and Thomas 2009). In Pakistan, a similar term, Balanced Approaches to Total Sanitation (BATS), has also emerged. Perhaps both are devices to keep clients from feeling their programmes are jeopardised by the introduction of CLTS but in the process CLTS is sometimes brought under the same umbrella as subsidy-driven, prescriptive approaches which are generally not total. Drawing different elements together in a programme may well be a strategy – particularly for organisations such as UNICEF which manage funds on behalf of a range of different donors - to promote CLTS while apparently also catering to a variety of inclinations amongst the donors and governments they work with. Nevertheless, this strategy can create considerable confusion about CLTS, and more so because these terms are used to refer to different mixtures in different places. CATS, for example, is used in some documents to mean the above mixture, but is used in Mozambique to refer specifically to CLTS plus a reward system (Godfrey 2009).

At the same time, where different elements with a CLTS approach are divided from it by different terminology – such as promoting School-led Total Sanitation (SLTS) or Women-led Total Sanitation (WLTS) – this can not only fragment parts of the community but can also miss the contributions from all sections of the community towards achieving a common goal and may detract from the idea of CLTS as a 'total community' activity, from which the total community benefits.

For example, SLTS is commonly a process that starts and takes place in schools, usually focuses on children's defecation practices and hygiene behaviour primarily while at school, sometimes sidelining what they do at home or at best assuming that they will carry the hygiene messages to their parents. This process thus misses the potential for *total* community behaviour change. Although SLTS is quite popular and seemingly very effective in Nepal in particular, it is probably hard to find rural schools which could claim that all their students come from ODF villages that resulted and emerged from a school-led initiative. While schoolteachers may play a very important role in the spread of SLTS, the opportunity for the emergence of informal natural leaders might also become slimmer in a school-based process. Finally, SLTS threatens to create a barrier between those children who go to

school and those who do not; non-school-going children can be left out and stigmatised, further fragmenting the community. On the other hand, as mentioned earlier, many schoolchildren across Africa have been particularly pro-active in CLTS processes, and in this sense SLTS may have its own unique potential; perhaps a more appropriate name would be 'schoolchildren-led sanitation'.

WLTS, while not very widespread, has also begun to emerge in some areas. This approach may carry the benefits of foregrounding women's perspectives on the sanitation process, and making visible their contributions to it, which generalised 'whole community' efforts are less likely to achieve. Ultimately, women-led sanitation exercises may have the potential to generate empowerment processes which are beyond the reach of mixed community interactions, especially if the process generates active discussion on gender relations. It is possible that WLTS processes may be sites for the development of women's leadership, which could then be promoted in the spread of CLTS.

Nevertheless, there are also risks associated with separating out women in this way which we should be alert to, and against which potential advantages may need to be assessed carefully. One risk is that where only part of the community is involved, the process may take much longer. Women in Cross River State of Nigeria, for example, during a recent review process, recently changed their WLTS-based strategy on realising how much they could have gained by engaging children in the process right from the beginning or if the same women natural leaders had involved village youth in the process. There may also be risks that where sanitation change is in the hands of women, this can be a reason or excuse for sidelining it as trivial by the wider community. A further possibility is that where women are separated out for activating sanitation change, they may also become responsible for it in ways that may be clearly unequal.

The advantage of embracing a community-wide process is that this approach has most potential for involving everyone in taking responsibility for stopping OD. Nevertheless, communities encompass many levels of differentiation in terms of power and privilege. Full-community CLTS processes can risk by-passing some groups due to their lesser status unless facilitators are aware of community divisions and address these during triggering and follow-up (see Mahbub 2011).

6. Prescribing latrine models during or after triggering. This practice is evident in several countries and is particularly prevalent in places where sanitation marketing programmes have been undertaken alongside CLTS, such as in Tanzania. Prescribing models either during or after triggering inhibits the emergence of local innovation of latrine design, and thereby also the development of innovations regarding many other local-level hygiene and non-hygiene issues. The practice also inhibits using no-cost or low-cost appropriate technology and local materials, increases dependence on external inputs and risks creating inappropriate and unwanted supply. In Ghana, for example, although CLTS was introduced as early as 2006, it was accompanied by the promotion of ventilated improved pit ('VIP') latrines as well as a communal latrine model. In the wake of these efforts, by 2010, access to sanitation in Ghana remained low at 13 per cent, with only about 70 ODF villages.

Similarly, in Tanzania, funding from the Gates Foundation via WSP Africa has emphasised sanitation marketing – thus focusing on sanitation hardware supplies where supplies were poor or absent. The central idea was to help move the ODF communities up the sanitation ladder. CLTS creates demand and sanitation marketing bridges the gap in supply and helps establish easy access to markets. As collective hygiene behaviour changes, ODF communities tend to invest and improve their toilets within their means, which vary greatly from location to location and between countries depending on many bio-physical and social factors. When work on sanitation marketing is done alongside or subsequent to the beginning of a CLTS process, it may meet a need for those who can afford and wish to input latrine models which are tried and tested, and address some of the 'risks' of rock-bottom models. But in some areas, models are prescribed or become available without or prior to the groundwork of creating demand, thus acting as prescriptions and taking innovation out of the process. In Cambodia, sanitation marketing has focused on relatively expensive models, with too little regard to what designs or technologies will fill the gap for the thousands of households who cannot afford these models.

On the other hand, sanitation marketing which responds to and facilitates or enables voluntary steps up the sanitation ladder once behaviour change has been established through a successful CLTS process, may fill important gaps. While the process of latrine improvement depends on many factors – including the existence and functioning of sanitation markets – even very remote communities have made self-initiated, incremental improvements, such as cementing the platform, using plastic pipes for ventilation, using ash in dry pit latrines to reduce smell, making the latrine comfortable. Institutions need to seek ways of engaging with these self-generated innovations for marginal improvements, taking these, rather than institutional models, as the starting point for more refined technologies. This was the process in 2004–5 in Bangladesh when Plan Bangladesh promoted local dealers in developing and selling community models (see Kar with Chambers 2008).

More engagement with sanitation technology issues which could solve potential second-generation problems, for example of groundwater contamination in areas where latrines are concentrated, may be a necessary part of follow-up processes on the part of CLTS practitioners.

7. Declaring big rewards for achieving ODF through CLTS. Offering big rewards for achieving ODF through CLTS carries some important risks. While these may function as effective short-term incentives, they also have several major drawbacks and can threaten the core principles of CLTS. First, communities can get side-tracked, by working towards rewards, from the real target of achieving and sustaining ODF, and also potentially lose sight of the fact that that ODF brings its own major rewards across the whole community if it is sustained. Second, big rewards such as those offered under the Mozambique One Million Initiative – including bicycles, mobile phones and computers for certain actors – are unsustainable for most countries and cannot be afforded in the first place by many poor countries. In Mozambique, the elaborate reward system was recognised as unsustainable in the long term and could not be scaled up; following this assessment, a more cost-effective solution was sought but within the same reward framework.

Third, there is a question of who gets the reward, and whether some are rewarded for the efforts and work of others. For example, if natural leaders and formal leaders such as village chiefs get the rewards, this can be divisive amongst community members who might quite rightly question why these people must be given additional benefits for everyone's hard work. This can happen, for example in the context of the Nirmal Gram Puruskar (NGP) in India, the large cash awards given to ODF *gram panchayats* (local government bodies, GPs), of varying amounts according to the population of the GP. There is no guarantee that the GP will spend this money in ways that all community members will benefit from – indeed there are strong possibilities that the reward will be captured by relatively powerful community members (see Mehta and Movik (2011) for cautions concerning reward systems).

Finally, big rewards bring in the spectre of corruption and foul play, even where corruption does not actually take place. Where big money is associated with an initiative, community members may have good reason to assume that not all of it is being used as was intended and may withdraw goodwill even when this is not the case. False declarations of ODF have also been a significant problem in India, where numerous villages which were not ODF have been awarded the NGP (see Khale and Dyalchand 2011; Sanan 2011).

8. Mixing with PHAST or SARAR with CLTS. Another form of 'mixing' is when elements of older approaches such as PHAST are retained in the new CLTS programmes. WaterAid in Nigeria, for example, is applying a method in some areas which uses CLTS triggering and then follows this up with a PHAST training a few days later, using the prescriptions on hygiene behaviour and the didactic methods of the earlier approach. Added to this, in some areas of Nigeria, CLTS has also been accompanied by training for latrine construction centred on masons, and by the promotion of SanPlat latrine models. A major drawback of these mixes in this case is that potential natural leaders have not clearly emerged from the triggering process and have not found the opportunity to flourish and lead the process. Outsiders continued to educate, teach, offer solutions and monitor at the household level after triggering, all of which could have been facilitated by the NLs. As a result, the spread and scaling up of CLTS has faced severe challenges in Nigeria.

Similar mixes have also taken place in Asia: a Knowledge Links<sup>22</sup> visit to Cambodia, for instance, noted that in most cases visual material developed for PHAST programmes – such as pictures of the sanitation ladder – were being used before triggering in some cases of CLTS implementation. In Eritrea, initial attempts in 2007 to introduce CLTS consciously mixed it with the earlier SARAR and PHAST methods: recognising the role of communities in improving and managing their own sanitation, a strategy was developed which attempted to include a focus on low-cost sanitation options managed at community level and the use of locally available materials wherever possible. However, no ODF villages emerged as result of these attempts, and a full CLTS approach was adopted in 2009.

The issue for CLTS is that watering it down, mixing approaches or running subsidies in parallel can seriously threaten its proven power to produce results in terms of villagers' sense of responsibility for sanitation behaviour, motivation to

<sup>22</sup> Knowledge Links is a consultancy organisation based in India which conducts training and advocacy for CLTS.

change, and the leadership and innovation to do so. Where mixing is unavoidable, it should be done with large doses of caution and a clear picture of the core principles of CLTS.

# 6.4 Missed opportunities

A further challenge faced by CLTS is that, as it becomes more established within different organisations, it can become a victim of the structural divisions operating within those organisations, which can cause missed opportunities. A significant investment is made in communities during CLTS triggering and follow-up, and a lot of energy is generated in the process. Although there are examples of channelling this human capacity into new work, most often the process stops at ODF.

One aspect of this is the imposition of a 'project' mentality, such that the energy generated in a CLTS process fails to get passed on into a continuing evolution in sanitation once ODF has been achieved. Many natural leaders are created during the ODF process, and much community energy is created. Nevertheless, generally we move on to the next village without using this huge potential generated by the facilitation process. In general, we do not use natural leaders for the extension of CLTS to other villages – even while sometimes, given the right circumstances, they might do this themselves. In Kadadaba, Zamfara State, Nigeria, and in Sabadino village, SNNP Region, Ethiopia for example, there have been reliable reports of auto-triggering taking place in villages neighbouring officially triggered villages.

Often these natural leaders could move on from improving the sanitation situation of the village and hygiene behaviour, into issues of solid and liquid waste management, cleaning up roads and common places, creating sanitation facilities in marketplaces, bus-stands, and schools. This happened, for example, in Loni *gram panchayat* in Solan district, Himachal Pradesh – where community members painted bus stands, and began to address solid and liquid waste management in the immediate environment and cleaning and maintenance of public areas. There are examples in Pakistan, Kenya and Malawi where community consultants have been used for scaling up, but we need more and more examples of this progression.

A second aspect of this is that many agencies working on CLTS are specifically water and sanitation agencies, which can limit the potential of CLTS to expand into other areas of livelihood and rural development, even while the process often generates the energy and empowerment to do so. There are examples where natural leaders have progressed from sanitation to wider livelihood issues. In Bangladesh, for instance, natural leaders and communities experiencing CLTS have moved on to addressing inequality of wages between men and women, enhancing wage negotiations with landlords, eliminating the phenomenon of seasonal hunger through collective initiatives, ensuring total enrolment in schools, creating alternative livelihood options for the landless poor, and many other issues (see Bode *et al.* 2006). But unless the agencies involved in CLTS already have, or are working to establish, strong links with agencies or departments working in other sectors, this progression is very difficult to achieve.

# 7 Concluding reflections

Establishing and spreading CLTS in Africa has been something of a rollercoaster ride for myself as well as a large number of CLTS advocates and practitioners working in several different organisations. From its first experimental steps in Uganda, Zambia and Ethiopia, it has spread fast and furiously across and within villages, countries and organisations, but with a range of different results. In some of these situations, it has flourished; in others it has met with frustrating blockages; in still others it has displayed trends which warrant review and assessment.

In comparison with CLTS in Asia, in Africa the scaling-up process has moved quickly. This is in part due to the stages of its own history – by the time the approach took root in Africa there was a precedent in Asia, which was persuasive as well as providing experience to CLTS actors. In part, also, it is due to the solid institutional leadership quickly taken on by UNICEF in Africa, and to good examples of coordination and cooperation between agencies and governments, making it possible to mainstream the approach in several large-scale sanitation programmes.

What has scaling up meant for CLTS? At one level, scaling up is about coverage, and it is on coverage, in terms of numbers of countries and districts, and markers of success in terms of numbers of ODF villages that we are often – perhaps rightly – focused. But scaling up is also about depth and sustainability; about how deeply rooted the principles of community leadership, foregrounding local knowledge and non-prescription have become in the agencies promoting CLTS; and about how far the evolutions of the approach that seem to be taking place contribute to its sustainability within the organisations that are carrying it forward.

In terms of coverage, although undoubtedly much has been achieved, there is still much work to be done. While some countries have achieved astonishing progress, others are still very new to the approach, and others have achieved less than expected in terms of ODF villages or numbers of people accessing improved sanitation. In terms of depth and sustainability, it is perhaps too early for a thorough assessment. On the one hand, hundreds of people have been trained; several governments have taken it on board; and many sanitation engineers have moved from advocating prescriptive, technology-focused sanitation solutions to this approach, which foregrounds community potential and behaviour change. Many adaptations have emerged, from umbrella terms such as CATS, to reward schemes of different kinds, to various levels of mixing approaches. Whether these are precisely the adaptations which have enabled CLTS to be carried forward so fast in Africa, or whether they represent deviations that may seriously undermine the approach are questions which CLTS practitioners will need to continue to grapple with. In some countries, such as Nigeria and Ghana, it seems clear that mixed or 'layered' approaches have created serious blockages to the spread and scaling up of CLTS, and the implications of this for future efforts need clear acknowledgement.

Nevertheless, CLTS has changed the sanitation situations of hundreds of thousands of people in Africa, and holds the promise to do the same for millions more. However, it also holds the promise of achieving much more than this. CLTS

has enormous potential for, and the process creates the energy for, a continuing process running through all kinds of hygiene-related activities as well as rural and livelihoods development in general. It was born as a first step or entry point into working on livelihoods at many different levels, and it is perhaps into this role that it must now mature.

We would be seriously undermining the approach if it is considered only as a means to achieve ODF status. Achieving ODF status is a first step, from where a systematic journey in three different directions is poised to begin:

- An upward journey along the sanitation ladder in terms of improving durability and quality of the initial pit latrines, with active involvement of community engineers. It could also lead to participatory technology development and building appropriate market chains with community consultants and local dealers of sanitary hardware (see Kar 2003). As discussed, institutions need to engage with self-generated technological improvements to facilitate this process.
- 2. A journey towards achieving other milestones of hygiene behaviour change such as hand washing, nail trimming, clearing the surroundings of animal excreta, safe handling of food and drinking water and other personal hygiene issues such as menstrual hygiene. OD is only one of many hygiene behaviours, but CLTS is an approach which can apply to all of them.
- 3. An outward journey towards ensuring sanitation coverage for public places such as markets, bus stands and schools, and moving into broader areas of community development, waste management and livelihoods development.

All these are happening sporadically in many places in Africa, Asia and Latin America, but while systematic institutional involvement in these directions is rare, major organisations in sanitation are spending huge sums on these other areas in disconnect from the central approach of CLTS. The CLTS platform must be used to its maximum potential. It is time we started merging these different programmes created in isolation, and mainstreaming them within CLTS.

The seeds we sow when we begin CLTS are the seeds of community empowerment, and it is partly on this measure that we must assess our results. Over the past four years, a host of people have worked hard and systematically to promote the approach and to change their organisations and their villages. Progress has been remarkable. If the energy generated in this process can be harnessed with inspiration, this progress may represent the first steps towards fundamental transformations in sanitation, health and rural lives.

# Annex 1 Timeline of Kamal Kar's involvement and other events in the development of CLTS

Note: bold text indicates events in Africa.

1998	Review mission of WaterAid Bangladesh and their local partner VERC. Kamal Kar led the mission. Recommended no flat-rate hardware sanitation subsidy at household level but differential subsidy based on level of poverty. Recommended a participatory impact assessment for different districts of Bangladesh to assess the need for subsidy on sanitation.
1999	On the basis of Kar's recommendation WaterAid initiated the process of participatory poverty assessment to determine a differential subsidy strategy.
Feb 2000	The first exercise was carried out to understand why people defecate in the open in Mosmoil village in 2000. First CLTS triggering experimented in Mosmoil.
2001	DFID Review Mission carried out in Rajshahi area, Bangladesh. Vivek Srivastava, Country Team Leader of WSP South Asia, New Delhi led the review mission to see CLTS in the field and was convinced. Other members of the mission were Alistair Wray from DFID, London, and Archana Patkar from Mumbai, India, who were also thoroughly impressed to see the power of community participation to eliminate open defecation.
Dec 2001	WSP New Delhi, India, invited Kar to make a presentation of the community-led approach he developed in Bangladesh and requested his help to introduce it in India.
Feb 2002	Indian and Bangladeshi senior administrators' workshop in Rural Development Academy, Bogra, Bangladesh. WSP South Asia arranged the three-day workshop to share the new experience of CLTS in Bangladesh, facilitated by Kar.
Aug 2002	Kar introduced the CLTS approach in a two-day workshop in Pune, Maharashtra, India, to which all the chief executive officers of 32 districts and senior government officers of the Government of Maharashtra (GoM) were invited. The workshop was led by Mr B.C. Khatua, Principal Secretary, Water Supply and Sanitation, GoM.
Oct 2002	WSP had a role in India: as an immediate outcome of Bogra workshop Government of Maharashtra and WSP South Asia jointly decided to initiate CLTS pilot in two

	districts of the state. Kar was invited to assess the potential and introduced CLTS in Ahmed Nagar and Nanded districts as the very first pilot in India.
2002–05	Kar facilitated major training workshops and follow-up visits in the states of Haryana, Himachal Pradesh and Andhra Pradesh in the next three years. Haryana and Himachal Pradesh are the lead states on CLTS in India.
Apr 2003	Kar introduced CLTS in Cambodia through Concern Cambodia in Pursat, Kampung Chang, Kampung Chhanang and in Siem Reap provinces.
2003	Kamal Kar's IDS Working Paper 184, <i>Subsidy or Self-</i> <i>Respect?</i> published and disseminated widely at international conferences.
Oct 2003	At South Asian Conference on Sanitation I (SACOSAN I) in Dhaka, Kar delivered keynote address on CLTS and more than 50 per cent of the conference discussed the emerging approach. More than 30 natural leaders from the ODF villages of Bangladesh were invited to interact face-to-face with ministers and senior decision makers from different countries in Asia and a few from Africa. Models of more than 50 community-innovated models of latrines were displayed by a number of national and international NGOs such as Plan International, WaterAid and World Vision, which became very popular. This was the very first major event where CLTS was presented to a global audience. The Dhaka Declaration by ministers emphasised local community empowerment in sanitation.
Apr 2004	Kar delivered a keynote lecture on CLTS at the UN Commission on Sustainable Development (UN CSD-12) in New York.
Jul 2004	Nepal: Kar introduced CLTS in Nepal through the first hands-on training workshop at Hetwada district.
Jul 2004	Pakistan: WSP SA, Islamabad and New Delhi, Water Supply & Sanitation Collaborative Council (WSSCC), Geneva, and the Ministry of Environment Ministry of Health, Government of Pakistan, organised a two-day workshop on Total Sanitation at Bhurban in Pakistan, where Kar introduced the concept of CLTS.
Sep 2004	Indonesia: Kar was invited by WSP EAP in Jakarta, Indonesia, to assess the possibility of CLTS in Indonesia. Kar visited different islands of Indonesia and field-tested the applicability of CLTS where WSLIC-II project supported by the World Bank was being implemented and submitted his

recommendations.

2004–2006	Kar introduced CLTS to Plan International, CARE, and a couple of national NGOs of Bangladesh. The approach was not received well by the big national NGOs of Bangladesh who received huge donations from outside agencies for sanitation subsidy. However the institutionalisation of CLTS in Plan International began from Bangladesh. Edward 'Mac' Abbey and Dr Khairul Islam emerged as champions of CLTS within Plan International global family.
Mar 2005	Kar facilitated the first hands-on training workshop on CLTS in Lumajang, East Java, Indonesia, the landmark event of the introduction of CLTS in Indonesia.
Nov 2005	IDS Working Paper 257, <i>Subsidy or Self Respect?</i> <i>Community Led Total Sanitation. An Update on Recent</i> <i>Developments</i> by Kamal Kar and Katherine Pasteur published (Kar and Pasteur 2005).
Nov 2005	Kar's Practical Guide to Triggering Community-Led Total Sanitation published (Kar 2005).
Dec 2005	First Orientation Workshop on CLTS facilitated by Kar, organised by Country Office Plan China at Pucheng County, Shaanxi Province.
2006	DFID to fund IDS, Sussex, UK for three years for research, action-learning and networking for CLTS.
2006	Ministry of Health, Indonesia, announced inclusion of CLTS in national policy.
2006	Kar and Bongartz (2006) <i>Update on Some Recent Developments in Community Led Total Sanitation</i> published.
Aug. and Nov 2006	Kar visited Indonesia, ran hands on training workshops and provided follow-up support on the CLTS initiative, including advocacy and consultation with major stakeholders, and helped in the process of institutionalisation.
Sep 2006	SACOSAN II in Islamabad, Pakistan. A special CLTS practitioner's workshop was organised by IDS, one day before the main conference. CLTS was a major topic of issue in all the sessions of the conference.
Dec 2006	First hands-on training workshops on CLTS in Latin America organised by UNICEF and other major actors in sanitation in La Paz and Potosi in Bolivia. Workshop was facilitated by Kamal Kar.
Jun 2006 – Apr 2007	Three major hands-on training workshops on CLTS facilitated by Kar in Mardan and Peshawar in North-West Frontier Province and in Islamabad, Pakistan.

Feb and Mar 2007	Plan International Regional Training Workshop in Dar es Salaam, Tanzania, followed by workshop in Awassa in Ethiopia by Kar.
Apr–May 2007	First national-level training workshop on CLTS for 65 community activists drawn from all the Rural Support Programmes (RSPs) and RSP network of Pakistan was facilitated by Kar in Rawalpindi and in Islamabad.
Apr 2007	Kar facilitated the first hands-on training workshop on CLTS in Ibb Governorate and a national workshop in Sana'a for the staff of Social Fund for Development (SFD), Yemen, and the national NGOs and government agencies engaged in sanitation.
Sep 2007	Kar facilitated the first hands-on training on CLTS and Total Sanitation and Sanitation Marketing (TSSM) with the Indonesian trainers in East Java.
Oct 2007	First regional workshop on CLTS for the regional training institutions supported by UNICEF held in Nairobi, Kenya. The workshop brought together International Training Network (ITN) centres from Ghana, Burkina Faso, Kenya, Zimbabwe and Mozambique as well as UNICEF offices in Kenya and Ethiopia.
2007	Regional training and orientation workshop for senior policy and decision makers of francophone countries in western Africa in Bamako, Mali, by Kar. Senior planners and decision makers from Burkina Faso, Benin, Cameroon, Chad, Democratic Republic of Congo, Senegal, Ivory Coast, Mali, Togo, Mauritania, Nigeria, and Ghana actively participated and gained ideas and insight on the CLTS approach.
2008	Indian Government starts CLTS familiarisation training for two to four selected officials from each of the 621 districts of the country, at Knowledge Resource Centre in ATI, Nainital, Uttaranchal.
2008	Indonesia Ministry of Health implements CLTS programme, known as CBTS.
Jan 2008	CLTS introduced to Sierra Leone, western Africa, by Kar.
Jan–Feb 2008	First hands-on training workshops on CLTS in western Africa. Three major workshops facilitated by Kar, which organised by UNICEF and Plan Sierra Leone in Freetown, Kennama and Port Loko when at least a dozen national

level trainers on CLTS emerged.

Feb 2008	Special one-day CLTS practitioners workshop conducted by IDS, one day before Africa San in Durban, South Africa.
May 2008	A five-day hands-on training workshop was organised jointly by the Regional Bureau of Health of Tigray region and UNICEF Ethiopia in Mekele, facilitated by Kar, with 30 participants from the government ministries, INGOs and local NGOs. In addition to the participants from Ethiopia there were participants from Zambia, Zimbabwe, Ghana and francophone Burkina Faso.
Jun 2008	Kar facilitated three hands-on training workshops on CLTS in Malawi which laid the foundation of the CLTS approach in the country.
Jul 2008	Kar facilitated a hands-on training workshop in Kilifi district near Mombasa, Kenya, in which 65 participants from Plan countries (Kenya, Sudan, Ethiopia, Egypt and Uganda), government staff from different government departments of Kenya, NGOs, UNICEF and WSP participated. Some of the best trainers of Kenya emerged from this workshop.
Jul 2008	Second major hands-on training workshop on CLTS in Zambia by Kar.
Sep 2008	Kar delivered Keynote lecture on CLTS at the inaugural session of the World Water Week in Stockholm.
Oct 2008	CLTS in lusophone Africa: national training workshop on CLTS in Mozambique facilitated by Kar and attended by government ministries, UNICEF, 18 people from national and international NGO partners, and WATSAN technicians. Six government officers and UNICEF staff from Angola also participated.
2008–09	John Claude Somda, from CREPA in Burkina Faso, who was trained by Kar in trainers' training workshops in several countries, facilitated several CLTS/ L'Assainissement Total Piloté par la Communauté (ATPC) workshops in French in Madagascar, Burundi, Mauritania, Cameroon, Togo and Haiti.
Nov 2008	First hands-on training workshop on CLTS for the trainers and facilitators of Mali was facilitated by Kar in Kolokani, Mali. Some of the best CLTS trainers and facilitators emerged from this workshop. Participants from Togo, Burkina Faso and Senegal also participated.
Feb 2009	First regional hands-on training workshop on CLTS by Kar in Otukpo, Benue State, Nigeria.

Mar–Apr 2009	First hands-on training workshop on CLTS in Liberia facilitated by Kar.
May 2009	First hands-on training workshop on CLTS in Eastern Samar, Philippines.
Jun 2009	First hands-on training workshop on CLTS by Kar in Keren, Eritrea.
May 2009	Second hands-on training workshop on CLTS by Kar in Cochabamba, Bolivia.
Jul 2009	The first hands-on training workshop on CLTS organised by Plan Sudan in Kosti in White Nile state, facilitated by Kar.
Sep 2009	First hands-on training workshop on CLTS by Kar in N'Djamena, Chad.
Nov 2008	SACOSAN III in Delhi. Pre-conference one-day sharing workshop for CLTS practitioners organised by IDS.
Dec 2008	CLTS research conference, IDS, Sussex
Mar 2009	Africa Regional Workshop, Mombasa, Kenya, organised by IDS.
Nov 2009	CLTS in South East Asia and the Pacific, Phnom Penh, Cambodia, organised by IDS, Plan International, Ministry of Health Government of Cambodia, UNICEF and WSP.
Mar 2010	Latino San-II in Foz do Iguaç u, Parana, Brazil.
Jun 2010	Second national hands on training of trainers workshop on CLTS at Sarh in Chad-UNICEF (organised by the Federal Ministry of Water Resources and sanitation and UNICEF Nigeria).
Jul–Aug 2010	National review of practice of CLTS in Nigeria and hands-on training of trainers on CLTS-UNICEF and Federal Ministry of Water Resources and Sanitation, Nigeria (organised by the Federal Ministry of Water Resources and sanitation and UNICEF Nigeria).
Nov 2010	Sharing workshop for CLTS for anglophone African countries organised by IDS, UNICEF and Plan Zambia in Lusaka.
Dec 2010	Sharing workshop for CLTS trainers and practitioners from the francophone African countries held in Bamako, Mali, organised by IDS, UNICEF, Plan Zambia and Government of Mali.
Feb–Mar 2011	Country-wide review of practice of CLTS in Ghana and facilitating two national hands-on training of trainers

workshop on CLTS supported by UNICEF, Ministry of Local Government and Rural Development, Ghana, Plan Ghana and WaterAid Ghana.

Apr-May 2011 Review of practice of CLTS in Kenya and facilitating a national level 'hands-on' training of trainers workshop on CLTS supported by the Ministry of Public Health, and UNICEF Kenya and SNV at Kisumu. National campaign on Open Defecation free Rural Kenya 2013 was developed and launched. National Coordinating Unit and Resource Centre on CLTS was established in the Health Ministry building in Afya House in Nairobi for strengthening and country-wide scaling up of CLTS in Kenya. CLTS website: cltskenya.org was inaugurated by the Minister of Public Health.

# References

Bevan, J. and Thomas, A. (2009) 'Community Approaches to Total Sanitation: Triggering and Sustaining Sanitation Behaviour Change in West Africa', West Africa Regional Sanitation and Hygiene Symposium, Accra, Ghana, 3–5 November 2009

Bode, B.; Haq, A.; Ahmed, S.; Aziz, M.B.; Roy, A.D.; Majumder, M. with Kar, K. (2006) *From Dependency to Emancipation,* Dhaka: Social Development Unit, CARE Bangladesh

Chambers, R. (2009) *Going to Scale with Community-led Total Sanitation: Reflections on Experience, Issues and Ways Forward,* PLA Notes 61, London: International Institute for Environment and Development

— (2008) "Shit" Matters: Community-Led Total Sanitation and the MDGs', 19 November 2010, www.ids.ac.uk/go/news/-shit-matters-community-led-totalsanitation-and-the-mdgs (accessed 5 May 2011)

Gebresilase, Yenenesh (2010) 'Community Led Total Sanitation and Empowerment: The Case of Dorze Hyzo Community, SNNP Region of Ethipia. (A Phenomenological Study)', *OIDA International Journal of Sustainable Development,* September: 99–107

Godfrey, Amaka (2009) Preliminary Documentation and Evaluation of the Sanitation Component of the 'One Million Initiative' in Mozambique, WSP, www.communityledtotalsanitation.org/sites/communityledtotalsanitation.org/files/C LTS\_Prelim\_Documentation.pdf (accessed 20 April 2011)

Kar, K. (2011) 'Community-Led Total Sanitation in Africa', in L. Mehta and S. Movik (eds), *Shit Matters: The Potential of Community-Led Total Sanitation,* Rugby: Practical Action Publishing

—— (2005) *Practical Guide to Triggering Community-Led Total Sanitation* (CLTS), Brighton: IDS, at www.communityledtotalsanitation.org (accessed 16 May 2011)

—— (2003) Subsidy or Self Respect? Participatory Total Sanitation in Bangladesh, IDS Working Paper 184, Brighton: IDS

Kar, K. and Bongartz, P. (2006) *Update on Some Recent Developments in Community Led Total Sanitation,* Brighton: IDS

Kar, K. with Chambers, R. (2008) *Handbook on Community-led Total Sanitation,* London: Plan International (UK)

Kar, K. and Pasteur, P. (2005) *Subsidy or Self-respect? Community-led Total Sanitation. An Update on Recent Developments,* IDS Working Paper 257, Brighton: IDS

Khale, M. and Dyalchand, A. (2011) 'The Impact of Rural Sanitation on Water Quality and Water-borne Diseases', in L. Mehta and S. Movik (eds), *Shit Matters: The Potential of Community-Led Total Sanitation,* Rugby: Practical Action Publishing Kumar, N. and Shukla, J.P. (2011) 'Doing CLTS in a Countrywide Programme Context in India: Public Good vs. Private Good', in L. Mehta and S. Movik (eds), *Shit Matters: The Potential of Community-Led Total Sanitation,* Rugby: Practical Action Publishing

Mahbub, Amina (2011) 'Social Dynamics of CLTS: The Inclusion of Children, Women and Vulnerable People', in L. Mehta and S. Movik (eds), *Shit Matters: The Potential of Community-Led Total Sanitation,* Rugby: Practical Action Publishing

Mehta, L. (2011) 'Introduction: Shit Matters: Community-Led Total Sanitation and the Sanitation Challenge for the 21st Century', in L. Mehta and S. Movik (eds), *Shit Matters: The Potential of Community-Led Total Sanitation,* Rugby: Practical Action Publishing

Mehta, L. and Movik, S. (2011) *Shit Matters: The Potential of Community-Led Total Sanitation,* Rugby: Practical Action Publishing

Movik, S. and Mehta, L. (2010) *The Dynamics and Sustainability of Communityled Total Sanitation (CLTS): Mapping Challenges and Pathways,* STEPS Working Paper 37, Brighton: STEPS Centre

Musyoki, S.M. (2007) Sceptics and Evangelists: Insights on Scaling up Community-Led Total Sanitation in Southern and Eastern Africa, Brighton: IDS

Ndimubanzi, P.C.; Dickey, M.; Nguyen, H.; Qian, Y-J; Rainwater, E.; Reynolds, S.; Budke, C. and Carabin, H. (2009) 'Global Burden of Neurocysticercosis, a Systematic Review', paper presented at 137th APHA Annual Meeting, Washington DC, 7–11 November 2009

Ndimubanzi, P.C.; Carabin, H.; Budke, C.M.; Nguyen, H.; Qian, Y-J; Rainwater, E.; Dickey, M.; Reynolds, S. and Stoner, J.A. (2010) 'A Systematic Review of the Frequency of Neurocyticercosis with a Focus on People with Epilepsy', *PLoS Neglected Tropical Diseases* 4.11: e870

Sanan, D. (2011) 'CLTS: The Sanitation Story of the Millennium: The India Chapter', in L. Mehta and S. Movik (eds), *Shit Matters: The Potential of Community-Led Total Sanitation,* Rugby: Practical Action Publishing

Scott, B.; Curtis, V.; Rabie, T. and Garbrah-Aidoo, N. (2007) *Health in our Hands, but not in our Heads: Understanding Hygiene Motivation in Ghana,* Oxford: Oxford University Press in association with The London School of Hygiene and Tropical Medicine

UNICEF (2009) Community Approaches To Total Sanitation Based on Case Studies from India, Nepal, Sierra Leone, Zambia, New York: United Nations Children's Fund

UNICEF and WHO (2008) *Progress Towards the MDG Sanitation Target Source: Snapshot on Sanitation in Africa,* June, New York: UNICEF; Geneva: WHO

WaterAid (2007) Community Led Total Sanitation (CLTS): An Evaluation of the WaterAid's CLTS Programme in Nigeria, London: WaterAid

WHO (forthcoming) '1st Report on Zoonoses and Marginalised Infectious Diseases of Poverty (ZOOM-IN Annual Report)', Chapter 3, *Community Led or Community Directed Interventions,* Global Report for Research on Infectious Diseases of Poverty, Geneva: WHO

—— (2010) Working to Overcome the Global Impact of Neglected Tropical Diseases: First WHO Report on Neglected Tropical Diseases, Geneva: WHO

— (2004) *The World Health Report 2004,* Geneva: WHO at www.who.int/whr/2004/en/index.html (accessed 15 May 2011)

—— (2000) *Global Water Supply and Sanitation Assessment 2000 Report,* Geneva: WHO

WHO and UNICEF (2008) *Progress on Drinking-water and Sanitation: Special Focus on Sanitation,* Joint Monitoring Programme for Water Supply and Sanitation: Special Focus on Sanitation, Geneva: WHO; New York: UNICEF