

20 Moving up the sanitation ladder: A participatory study of the drivers of sustainability and progress in Community Led Total Sanitation

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Abstract

This participatory study was conducted in December 2006. It encompasses three different eco-climatic regions of the project operational areas of the Village Education Resource Centre (VERC): Manda, Sitakunda and Lalmohan, where VERC is implementing its innovative CLTS approach. The main purpose of the study was to generate and disseminate learning on the causal background of people following or not following the Sanitation Ladder (SL) and to generate ideas to make the movement more effective.

Under the overall leadership of an international consultant, two national consultants and six VERC staff worked together on the study. They applied a multidisciplinary team approach to conduct

this study, involving participatory methodologies. A total of 136 people (comprising 67 males and 69 females) participated in data generation activities to provide data on 424 family samples. Of these families, 55 were perceived as hardcore poor, 208 as poor, 158 as middle class and seven as rich.

A summary of results shows that:

- *In Manda, some 70% of people who had previously used low cost latrines had gone up the ladder by adopting ring slabs, while the remaining 30% remained using the low cost tin/mokta-made versions they had previously developed.*
- *In Sitakunda around 40% remained using their initial low cost simple pit versions, while 25% had implemented ring-slabs, a further*

25% had adopted offset-pit latrines and the remaining 10% indicated that they use bamboo and shared latrines – so up to 50% had moved up the ladder, and 10% were showing signs of slippage.

- *In the last area, Lalmohan, only 10% had stayed with their initial low cost designs, with 90% moving up the ladder to various types of offset and key hole pit latrines.*

Introduction and objectives

The Village Education Resource Centre (VERC), a national NGO in Bangladesh, with financial and technical support of WaterAid Bangladesh (WAB), has been implementing an approach known as “*Community Led Total Sanitation*” (CLTS). Its headline achievement is that between 2000 and 2006, (when this paper was drafted) CLTS has completely transformed the toilet facilities of no fewer than 700 villages in 32 unions of six districts in Bangladesh. Because of this success, CLTS has not only become part of water-sanitation discourse among development scholars and practitioners, but is also being replicated in other Asian countries.

The *Sanitation Ladder* (SL) concept is central to the CLTS approach. In this instance, sanitation ladder means there has been a gradual progression over time of installation and use of latrines. A community that has reached the lowest steps of the sanitation ladder – by virtue of behaviour conditioning intrinsic in CLTS – would not only sustain its present level, but would move onto the next step of the ladder, without material and financial support.

As the sanitation ladder is so important to the success of CLTS, it is necessary to establish if, and how, people are moving up the ladder. So, the main objectives of this study were:

1. To learn:
 - i. Whether or not this was happening: do people travel up the sanitation ladder, who travels and who does not?
 - ii. What were the causal factors for both behaviours, particularly, what forces helped and/or hindered communities to move up, sustain their position, stagnate or fall down the ladder?
2. To identify what impact these factors have on the overall sustainability of CLTS, particularly what is the sustainability of low-cost latrines?
3. To generate ideas to assist people to move up the ladder more effectively.

CLTS – an introduction¹

Community Led Total Sanitation (CLTS) is a process where, through the activities of entire communities working together, open defecation is adopted and sustained. *Community led* refers to active participation (not elites or elements within it) of the entire community in assessment, planning, implementation, monitoring and evaluation, and decision-making in a sanitation project. *Total sanitation* depicts a desired situation in which all households of the community, social institutions such as mosques and schools, and all public places such as bus-stands and market places, have appropriate sanitation systems. For introductory texts on CLTS see articles by Timothy Claydon (2002) and Kamal Kar (2003).

But while the most important element of CLTS is its intended outcome – that open defecation is

¹ Readers familiar with CLTS may either refresh their knowledge of the concept in this section, or may choose to move on to the next section.

eradicated across the whole village/community – the concept also encompasses the adoption of proper waste disposal practices and access to safe water for all domestic purposes. Furthermore, it includes personal hygiene and environmental cleanliness. So, CLTS clearly goes beyond the installation of latrines and tubewells. It also tackles the more holistic and objective issues of breaking the faecal-oral chain, by encouraging communities to change existing habits and behaviour patterns. The CLTS process teaches them to use and maintain hygienic latrines, wash their hands afterwards, keep food and water covered, use safe water and maintain a clean environment. The success of this approach depends on the participation of every member of the village, and on making people see themselves as a community where every member's behaviour affects the others. The development of a public good, through and upon the behaviour of individuals, is a central plank of CLTS. The approach is an attempt to influence household behaviour so as to make it consistent with community goals of good health and safe water.

Two key assumptions on which CLTS is grounded are empowering *communities to help themselves*, and *a shift from technocratic and financial patronage to participatory approaches*. CLTS embodies a change in approach from training and management to an emphasis on empowering communities and strengthening local institutions.

One of the most noteworthy features of CLTS is the *absence of externally provided household-level subsidies*. Unlike earlier approaches, the process of behaviour change is initiated without external financial support to households. CLTS advocates that financing latrine construction is not an issue; it recognises that total sanitation can only be

achieved if every member of the community participates. The belief and evidence is that communities *can* arrange cross-subsidies to make sanitation facilities accessible to weaker groups if formation of self-help groups and micro-credit schemes are linked as a source of funding; provided that the community is assisted to recognise the public good dimension of private behaviour.

It is believed that subsidies distort incentives and adversely affect the potential of communities to achieve self-reliance – they undermine sustainability. Motivating communities to change sanitation practices rather than the provision of hardware and financial support is the focus of this approach. Households that cannot afford to make the financial investment are not excluded because the community recognises that total sanitation depends on the participation of every community member. So, community members helping other members with the cost of hardware are accepted practice in CLTS – and this form of cross subsidy is not felt to undermine the principle.

The approach recognises that there is a *public good dimension in water and sanitation improvements* to what is generally considered a private good. By creating awareness within communities, *a change in mindset* is achieved. The aim is that the shift from open defecation to fixed-spot defecation is irreversible because, in addition to health benefits, it provides privacy and safety and people are likely to find it difficult to regress to previous practices. The effect of *peer pressure and participatory monitoring systems* of CLTS generates merits towards sustainability, which encourages communities to apply innovative systems to guard against open defecation. These have taken the form of watchmen and children's

groups and the refusal of families to allow their daughters to marry into households without sanitation.

CLTS offers a wide range of hardware options that allows users to choose an appropriate model based on affordability. Local innovations are actively encouraged to expand the range of options available. Members are supported to select the option best suited to their individual needs and budgets. The use of cheaper materials and of range of technology options increases demand, and so a growing number of users are able to enter the market. As a result, no special efforts have to be made to create the supply chain because private producers of pit latrines and related equipment can largely meet the growing demand.

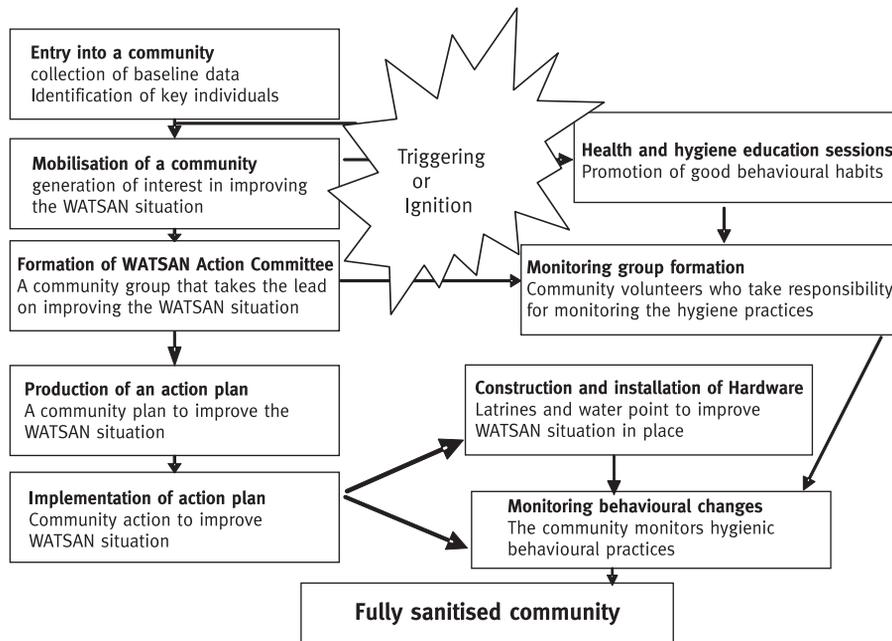
Furthermore, CLTS recognises *that other infrastructure* have an influencing factor for change in sanitation practices. The source and availability of water supply is one such influencing factor, which catalyses demand for household toilets. While sanitation provides the means by which the lessons of hygiene education can be put into practice, and the environment for improved health through changed personal behaviour, both require adequate water for effective use. For example, hand washing after defecation requires sufficient quantity of water, as does flushing after defecation.

The entry point for the CLTS work of WAB-VERC's is through 'igniting' behaviour change in sanitation practices. This is creating awareness in the community of the lack of environmental sanitation and its adverse impact on hygiene and health conditions. Once communities are motivated to change behaviour patterns, they seek to introduce sanitation facilities that ultimately lead to improved

health and self-esteem. The approach starts on getting people to move away from open defecation to fixed-point defecation – even if it is at the bottom of the 'sanitation ladder' – on the assumption that people will move up the ladder of superior options when they can afford them. In CLTS, communities are informed about the ill effects of open defecation practices and how the mismanagement of faeces disposal causes disease. This helps the community to effectively understand the enormity of the problem when its people visit defecation sites to make a collective assessment of the situation and calculate the amount of faeces being deposited in the open. One village may calculate that around 120,000 tons of human excreta are being added annually. When the community visualises this figure in truckloads, they are totally repulsed and motivated to change existing practices. Following this, communities begin to look at ways to improve their current sanitation environment. Individuals are identified to work as catalysts in the community to spread the demand for latrines. The community is made aware that to achieve total sanitation it is necessary that every household adopts hygienic sanitary practices, and behaviour change must be taken up *collectively*.

The approach is based on the belief that communities are capable of dealing with their sanitation problems on their own. Based on this assumption, it emphasises building community structures and total community empowerment rather than the delivery of services and financial support. CLTS facilitates to develop and strengthen community-based institutions. Local committees are formed with representatives from all sections of society including women. Religious leaders and teachers were also involved to create social pressure for change. Action plans were drawn up

FIGURE 1 The CLTS process



and meetings organised to find collective responses and solutions. These committees now monitor behaviour change, and the feedback from monitoring is used to revise action plans to achieve total sanitation.

Methodology

The research work was carried out in December 2006. In order to include different ecological climatic characteristics and settlement patterns the study covered:

- *Sitakunda* area comprises saline-prone coastal and mountainous region. The area is situated along the Asian Highway, linking the capital city with the port city Chittagong – it is predominantly an industrial area.

- *Lalmohon* - a plain saline coastal area, and
- *Manda* as northern non-saline Barind tract water declining zone.

As of September 2006, among nine unions, which have reached a state of full latrine coverage, three were randomly selected, ie Manda, Sitakunda and Lalmohan.

Under the overall leadership of an international consultant, two national consultants and six VERC staff worked together. Some 136 people (50:50 men and women) participated in data generation, providing data on 428 families, which were classified in the following manner. Some 55 families were defined as *hardcore poor*, 208 families as *poor*,

158 families as *middle class* and seven families as *rich*. The definition of the above mentioned four economic categories are stated in Annex 3 of the main report (Saha et al, 2006).

In order to generate simultaneous learning among participating agencies, the study involved a total of 12 facilitators from different disciplinary backgrounds. For each of the districts, a three-member team was formed (of two VERC staff and one local consultant). Each of these teams conducted data generation activities in one of the above three study areas and accomplished intermediary consolidation of the data.

At the outset, to increase shared understanding among facilitators a day-long levelling (drawing a common understanding) workshop was conducted and attended by senior staff of VERC and all study facilitators. The outcomes of this workshop are presented in Annex 2 of the main report (Saha et al, 2006). By conducting a two-day facilitators' workshop, methods and tools for village level PRA and union level multi-stakeholder workshops were developed, field tested and finalised.

In each of the three-sample study areas, data and ideas were solicited at two levels, such as a village and a union. Village level PRA sessions were conducted to generate data on following questions:

- What are the reach/sustainability, upward and downward movements of the village on the SL, analysed by the population categories economy, culture and family structure?
- What forces are contributing towards sustenance and upward movement on the SL by the same categories of population?

- What forces are contributing towards unsustainability and downward movement on the SL?

Tools for village level PRA sessions included (a) models of latrines in use², (b) timeline changes in prevalence and use of latrines by models and family category, (c) timeline major events of sanitation journey in the village, and (d) force-field analysis. Sessions were conducted separately with male and female participants.

On completion of the village level PRA sessions, union level multi-stakeholders workshops were conducted in which community representatives, local government officials, staff of Upazilla level government offices and other civil society representatives participated. The union workshop generated data and ideas on (a) changes in latrine installation and use in the union during the period 2003-2006, (b) driving and resisting forces to changes, and (c) achieving sustainability of the process. To generate and share multiple perspectives in this day-long union workshop, participants were divided into two groups, which were service providers (included local government officials, relevant government agency staff and other civil society actors) and community representatives. The first part of the workshop engaged group exercises while the second part shared the group's outcome through plenary presentation and discussion.

The responsible facilitator's team consolidated generated data and information of each of the study areas. On completion of field data gathering, all facilitators teams met and compiled their findings around study questions though participatory

² See Annex 2 of the main report (Saha et al, 2006) for details of various latrines that the community is using – these vary from the very cheap and relatively unsophisticated, to more expensive, well designed and aesthetically appealing devices.

discussions and reflections. At the end, on 30 December 2006, a presentation session of summary findings was organised in participation with study facilitators and senior staff of VERC.

Impact

A clear picture emerged that, despite regional variations and variations by category of families, communities have made significant upward movement on the sanitation ladder. Initially, people started using simple pit latrines, but now they commonly reported use of more sophisticated and/or expensive models. Without being subsidised, the majority of families invested their own resources to install improved latrines. Reduced suffering and savings arising from a reduced burden of

waterborne diseases were reported as the enabling factor of this investment capacity. For example, participants in Baropai (in the Kushumba union of Manda) calculated that before 2003, an average family would lose Tk 3,950 (around \$60) per year in this way. This has now reduced to Tk 1,340, so reduction of financial losses caused by waterborne diseases is Tk 2,610 (around \$40) per family, per year – a significant amount in Bangladesh.

The key specific finding is that all categories of household have made upward movement on the SL (see Tables 3, 4 and 5), as follows.

1. In general the hardcore poor categories made upward movement in the sanitation ladder and achieved full coverage among them:
 - i. Households in Manda region have better moved towards improved latrine options in comparison with the region of Sitakunda and Lalmohon
 - ii. Households in Lalmohon region have only moved from open defecation to simple-pit latrine, while in Sitakunda around half of hardcore poor families have moved towards improved options, e.g. ring-slab and plastic-pan water-sealed offset latrines.
 - iii. As reported, economic hardships and landlessness are the reasons behind the slow movement up the latrine ladder among the hardcore poor.
 - iv. Affordability for this segment of the population is relatively less because they cannot move towards improved options (*it is reported that improved options are relatively costly*).
2. Within the poor/lower category of families in general the prevalence of latrine models shows upward movement trend:

BOX 1 People's travel on the sanitation ladder – a summary

Despite regional variations and variations by category of families, it is clearly evident that people made significant upward movement in sanitation ladder (SL).

- Poor families (the largest category with 208 from the 424 sample) are the best performers in moving to upper steps of the SL.
- Middle class families are the second largest category (154 of 424 sample families) and represent the second highest performer.
- Hardcore poor (represented by 55 of the 424 sample) are relatively slow mover in SL.
- The seven families identified as rich also moved towards better latrine options.

All categories of families have followed gradual progression principles. Compared with only 22 families (among the 424-strong study sample) that were using hygienic latrines in 2003, all families were using hygienic latrines by the end of 2006. Within three years, most families had invested resources and continued to have better latrine options, accompanied by better personal hygiene and community environmental cleanliness practices.

- i. In Manda, among 135 poor families, 132 have moved towards improved options.
 - ii. In Sitakunda, previously none used sanitary latrine. By 2006, half of the families have travelled to improved versions, while the other half is sticking with its previous options.
 - iii. None of the poor households in Lalmohon used sanitary latrine before 2003. By 2006, all of them have remarkably moved towards improved latrines.
 - iv. The poor represents largest categories of population as defined by the community people. It is also evident that coverage of sanitary latrines and movement towards improved version among the poor in all regions is higher than that of other categories.
3. Middle class families have also made upward movement in sanitation ladder:
- i. In Manda, all middle class families are using improved latrine options, while before 2003 most families (69) used to use open places for defecation.
 - ii. Different practice patterns of defecation prevailed before 2003 in Sitakunda because all families in the middle class category used to use soil-pit, unhygienic latrine instead of open places. This might have also happened due to the peri-urban context. Now, around 70% families are using improved latrines, while 30% of families are using a simple-pit version.
 - iii. In Lalmohon, the initial coverage was relatively high: particularly among the middle class category (around 45%), which rose to full coverage by 2006.
4. The category of rich families has been identified by the community people only in

Manda and Lalmohon. In Sitakunda, people perceive that there are no rich families in their village. There is not much regional variation in this particular category of population. Compared with all other population categories a distinctive difference is noticeable that even before 2003 all rich families used to use sanitary latrines. However, regional variation in terms of movement - towards improved options are as follows:

- i. In Manda, only two families are in this category. Before 2003, they used model-15 (community innovated offset pit latrines (4), which has been presently moved towards model-10 (offset pit latrine).
- ii. In Lalmohon, ten families are in the rich category. Among them only one had initial latrine option, while others used to use improved options even before 2003.

In 2003, of the sample of 424 families, only 22 families used latrines and altogether invested a total of Tk 11,110 at an average of Tk 26.20 across the sample. By the end of 2006, all families used latrines (422 families made direct investment and two poor families shared facilities) while the average investment per family has reached Tk 506.80 (see Table 6).

Of these, 237 families were using model 10 (offset pit latrine) (see Annex 2 of the main report (Saha et al, 2006)) at a cost Tk 427 per unit: the most costly option among nine models being used. This provides a clear indication of movement of families to higher steps on the sanitation ladder. Furthermore, this calculation does not include the investments of superstructure and maintenance. Most respondents added that compared with 2003 they now have better superstructures for their

latrines – these probably would add around Tk 50 to 200 in cost per latrine. This is held to confirm the assumption of CLTS that “subsidy is not an issue for sanitation promotion but collective community participation and benefit linked to the improvement of health”.

Drivers and barriers to movement on the sanitation ladder

It is difficult to differentiate between the forces that drive people to **adopt** CLTS originally from those which subsequently cause them to **rise up** the sanitation ladder. In some cases they are indistinguishable – i.e. the same force that starts the process ensures its continuation – but this need not always be so.

The research to date has made some progress in identifying this process, but it is felt that more work is needed to solidify the initial observations made here.

At this stage, it is felt that there are six factors, which lead to CLTS adoption and which then drive movement up the ladder. These either emerged from the study, or are the view of the authors, and they are covered in the following paragraphs.

All categories of families followed a ‘Gradual Progress Principle’, as members of each category gradually replaced low-cost models with improved models. It appeared that this movement went hand in hand with increasing health awareness, income, and reduction of waterborne diseases. However, it was also found that that the middle class families tend to sustain a lower model of latrine for a longer period than other categories of users. It was felt that middle class families would like to have

installed a more sophisticated model but they were not able to do so.

Awareness raising as factor

The study recognises that the fundamental driving force, which triggered people to mobilize and take collective action, is based on the following: the embedded cultural sense that having a latrine dignifies a family; a sense that defecation is very much a private practice that should not be seen by others; that it is matter of prestige, particularly for women; and that they view human excreta as a disgusting thing from which one should steer clear. While assessing any resisting forces, the study tells that there was an embedded cultural sense that latrine use and one’s defecation is so private that it should not be discussed in meetings; that safe, or unsafe, defecation is one’s own business; and that it is not a social responsibility. These feelings initially slowed down the speed of the movement.

It is felt that once this force is ignited in people during the original CLTS community mobilisation, it is extremely unlikely that they will return to open defecation. So, it may not cause people to rise up the ladder but it will ensure that they don’t fall off.

Using health cost savings

As a driving force for change, people said that the immediate observable benefit of reduced waterborne diseases served to fundamentally motivate them to move up the sanitation ladder. It is felt that the improvement in people’s own health (e.g. reduced incidence of diarrhoea) will ensure that they stay on the ladder, while the recognition that productive time, and money which would otherwise have been needed for medicines,

BOX 2 Case study: Nasima's innovation

Nasima Khatun, aged 40, of Mosmoil village under Bagmara Thana of Rajshahi district, said: *"I had severe economic problems and was struggling only for survival together with my husband, kids and two other brother-in-laws because my husband was unemployed. Our family income was very little but demand was high. We were, in fact, fully concerned with how we can earn money, collect food and support our kids for their education, but had no time to think about a good latrine. Moreover, we did not know about the use and importance of using a sanitary latrine."*

Since 2005, Nasima and her son, two daughters and two brother-in-laws have been using an attached toilet within her home. She has made a long journey, from open defecation to using offset pit latrine with ceramic pan. During 2001, VERC workers came to this village and organised a series of discussion sessions with the villagers on the 'excreta' issues. They helped villagers to visualise how villagers eat their own excreta, as most people were used to defecating in open places. They told how rain flushes away human excreta and mixes with nearby water bodies, and thus, comes in to villagers' stomachs when they wash. That discussion helped to create a necessary and common 'humiliation' among villagers about defecation in the open places.

After four to five days of being sensitised by the VERC workers, Nasima constructed a simple soil-pit latrine behind her house. By this time, her husband started to operate a small business, preparing and selling bamboo-made baskets for betel-leaf ('Paan' in local language) marketing. Betel-leaf is a popular agricultural product in this particular area. Her family income started to increase, and in 2002 Nasima decided to buy and

install a ring-slab, water-sealed latrine at her home. She feels her family esteem rose simultaneously with the installation of this sanitary latrine.

Nasima's family continued to use that water-sealed latrine from 2002 until 2005. During this period, her brother-in-laws had grown up and become earning family members. Nasima eventually became part of the economically better-off society of the village. They started thinking of advantages for women and children, comfortable use, good looking household latrine and also how to protect them from spreading of diseases through insects, etc. Finally, Nasima and her family decided to modify their latrine once again. At the end of 2005, Nasima constructed attached, off-set, twin-pit sanitary latrine within her house at a cost of Tk 5,500.

When asked about lessons learnt from her journey, Nasima said that improvement of household facilities such as latrines and tubewells depend on the economic ability, together with willingness of members of the entire family. This is also very much related to social dignity and prestige, which automatically takes place alongside economic development. She believes that her father-in-law died of lower abdominal pain caused by his open defecation. This has made her different from others and keen to change her attitudes and practices towards sanitary latrine. *"Now, common diseases decreased in my family and I can even say that it has stopped among our family members. And this was made possible only due to VERC workers' dedicated efforts; they taught us how to save our lives from excreta,"* added Nasima.

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has been saved, can lead to people choosing to spend more on sanitation hardware when the need arises, and thus rise up the ladder.

Methodological

At the heart of CLTS is the creation of Open Defecation Free (ODF) villages: the concept of "total

sanitation". The concept of self-help – 'no direct subsidy and no service delivery from an external agency' is central to this process: the involvement of the entire community and a multi-stakeholder participation process is judged to be effective in attaining the status of ODF. Within this, local culture and context-oriented multiple creativities and innovations (e.g. *many ways of doing and knowing*)

allowed people to come up with their own ideas and actions, and to implement solutions that suited their needs and resources. It is felt that this in depth awareness creation has led to sustainable outcomes, such as people wishing to retain hygienic behaviours. The fact that whole villages become ODF means that peer pressure is a factor that works against any relapse into old behaviours. It may also contribute to the desire to progress up the ladder.

Another very important methodological driver was to apply a low- to high-gradual progression principle, which enabled people to be engaged at their own capacity in the first instance. Blaming local government officials and line agencies is a common feature among people in Bangladesh. In CLTS, rather than blaming, a positive culture was fostered: encouraging each other by finding and sharing positive aspects created an appreciative discourse and attributes among communities, local government officials and government line agencies. This appreciative discourse successfully transformed negative into positive relationships and enhanced cooperation. This sense of community will also help to ensure that people stay on the ladder, or perhaps climb it to emulate others, by talking with other community members about moving up.

The range of technological choices was another driver. From the start, VERC displayed a range of technologies to community members as a central element of the awareness building process. So, community members will have been fully aware that there were options to implement “better” facilities when the time came to replace their first facility.

Increase in the number of suppliers

A simple explanation for increased suppliers – and a driver for climbing the ladder – is shown in the fact that wherever total village sanitation became embedded, the local private sector saw a market opportunity and they moved in to create a supply of materials and choices for community members. Such an opportunity had not previously been available.

Lessons and recommendations

A view is emerging that low-cost latrines themselves are a medium, and are not necessarily sustainable; instead, they act only as the basis to move up the sanitation ladder. But, it is a very important medium to start with because it obviously provides the framework from which to engage people in the entire process.

It has been pointed out that the outcomes of the process will sustain because individuals and the whole community recognise the benefit of latrine use and hygiene practices. This perception is supported by the fact that, without any external support, people are themselves choosing improved options and taking better care of latrines. Furthermore, people mentioned that local forests and jungles are regularly being reduced and that people are being forced to use latrines for this reason.

Past approaches to water and sanitation did not succeed in making major progress in coverage of latrines, even after a decade of effort (see for example Kar, 2003). In contrast, VERC-WAB’s approach showed its merits by helping to obtain total coverage of households in villages within 12

to 18 months. So, it is necessary for development scholars and practitioners to ask how this process can be made sustainable.

The study points out that the total village sanitation mobilisation process is now in danger of stagnating a little due to a lack of clear direction on 'what next'. Instead of direct service delivery, sustaining the process would require VERC-WAB to be retained as a facilitator to the people's institutions, which emerged in the early stages of CLTS. Many community organisations emerged out of the process and played a gigantic role, yet they could do with some back up during the next stages.

Sustainability of outcome is one issue and sustainability of *process* is another. The study found that successes made in terms of people's movement up the sanitation ladder result from applying processes of both development and social change. So it can be assumed that sustainability comes from sustainability of the *process* at the community level. The study tells that achievement of process and outcome sustainability would depend on the VERC's and the communities' efforts to systematise and institutionalise the processes that emerged in the first stage of CLTS. It is felt that this should include:

- Consolidation of organisational processes and structures that emerged out of the first stage
- Systematisation of Participatory Planning Monitoring Evaluation and Learning (PPMEL) process
- Integration of water resource management, disaster risk reduction as integral components of improved sanitation situation by all stakeholders
- VERC-WAB should retain its present role as facilitator and technical support provider to

community institutions with jointly defined phase out strategy, but then phase-out based on jointly defined exit strategy

- Advocacy towards enforcement of government policies by VERC, WaterAid and other sector advocates
- Conducting a study on gender in CLTS and ensure its integration.

These are spelt out in more detail below.

Consolidation of the organisational process and structure

Representatives of CBOs expressed their concerns about their destination; for example, who will support them in the absence of VERC, how they would be able to continue the process that has already been created, etc. All stakeholder categories that participated in the study expressed their strong desire for the process to be continued. There are huge numbers of CBOs, for example, in Kushumba Union of Manda there are 63 Community Water Sanitation Action Committees (CWSACs). These can be facilitated to act as micro self-help groups based on their own action plans to improve other components included in sanitation. The organisational processes and outcomes that have emerged from the approach need to be consolidated.

Participants engaged in the study recognised the weak implementation of the government policy at local level. Appropriate forms of organisation, which can be linked to the organisational structure of the local government body, thus become important. Among many, a fundamental reason is the absence of processes at the government agency level to make Ward Sanitation Task Forces (WSTF) and Union Sanitation Task Forces (USTF) functional and

active. This shortcoming needs to be addressed by VERC. To establish a consolidated institutional structure from village to union, a representative organisational structure starting from CWSAC to WSTF and USTF has been suggested by the participants of the multi-stakeholders workshop. Local government representatives perceived that it is quite possible to involve two representatives from each of the CWSAC as extended members in a WSTF, and this has started taking place.

Systematisation of Participatory Planning, Monitoring, Evaluation and Learning (PPMEL) process

Institutionalisation of community processes warrants integration of PPMEL processes in community-based organisations. Consolidated community organisational structures rarely function if the PPMEL process is not instituted within it. At present all CWSACs, USTFs and WSTFs have action plans, but no plan for the future continuity of the process they will encounter when VERC withdraws. Including this sustainability dimension requires the systematisation of PPMEL processes at the community-based organisations – an important task for VERC in the years ahead.

Capacity development of community organisations is another important area that needs to be addressed. In a process-oriented approach of development, capacity development of diverse community organisations is not usually high on the agenda, but integration of a process-oriented approach to organisational assessment and action should be an integral part of PPMEL.

Furthermore, this systematisation needs scaling up at the level of VERC's organisational learning. There

are enormous innovations and lessons created by the programme but documentation and sharing of practice-generated learning is inadequate.

Integration of water resource management and disaster risk reduction as integral components

While conducting a study session in the Kushumba Union of Manda, a woman in the community added: *“I have learned that water and safe defecation overlap”*. She explained that a hygienic latrine and its proper maintenance requires extra water supply per family. Depletion of both surface and ground water is a global issue. Bangladesh has some **15.6 million** rural households; if each household requires a gallon of extra water per day then significant pressure is placed upon water (and other natural) resources. This concern increases the importance of integrating water resource conservation and management as an integral part of water and sanitation programme. Natural hazard multiplied by vulnerability and divided by existing capacity determines a community's degree of exposure to the risks of disaster. The study shows that people's attainment of a higher step on the sanitation ladder was adversely affected by various natural hazards; particularly by heavy rainfall in the Lalmohon of Bhola districts.

With relentless collective effort, people have established latrines in their families as basic physical infrastructure of sanitation. However, if disaster risk reduction is not factored in, the whole process when exposed to hazard events may jeopardise achievements, as was the case for Lamohon. As a learning NGO, one of VERC's organisational strategies is to develop an innovative approach in the field of development. Relevant to its

organisational strategy, VERC can facilitate a community led water-sanitation project that integrates water resource conservation, sanitation, and disaster risk reduction as interlocking components.

VERC retains its role as facilitator and technical support provider to community institutions

The success of VERC-WAB's total village sanitation approach also influences policy. When VERC-WAB initiated this approach in 2003 it did not attract much attention. After three years of 'total village sanitation', the discourse not only entered into many national and international NGOs, but also into that of the Government of Bangladesh to the extent that it is implementing a national total village sanitation approach³. If VERC was to shift from a facilitating role to a direct implementing role it would mean going backwards. There is no denying that people need water-sanitation hardware support but this should not go by an operational strategy that drives out the community's role as implementer and VERC's role as facilitator.

Historical experiences tell us that better functionality and use of water-sanitation hardware unavoidably depend upon the intensity of software. Furthermore, the ongoing total village sanitation programme of VERC itself put forward a concrete example that software can act as the independent variable to improve the water and sanitation situation. Any discussion of future actions must place the provision of software support higher than considerations of hardware.

Enabling policy environment

It was mentioned earlier that the Government of Bangladesh is preparing for the implementation of its total village sanitation policy. Participants engaged in the study commonly expressed their observations of weakness in enforcing government policy. Participants held the view that while principles and processes of government policy look great written on paper, they are not implemented. So, VERC needs to play an advocacy role to create the necessary environment in which policy is translated into practice. Policy awareness creation among the community, monitoring of policy compliance and reporting are examples of such advocacy strategies.

Conducting a separate study on "gender in CLTS" and being deliberate to integrate this critical dimension

In a male dominated society, where men control economic resources, it is important that WAB-VERC conducts a separate study on the role of gender in CLTS. This is particularly crucial to see whether CLTS has generated positive effects towards changing the traditional role of males and females in water and sanitation. Furthermore, in a demand-driven approach in which community capacity to mobilize services from the market is a main factor in the sustainability of process and impacts, then the access of and control by women of economic resources is fundamental. Such a study should also look at the participation of women in the growth of supply chains to meet the growing demand for sanitation hardware generated by CLTS. Based on the study findings, WAB-VERC can be more

³ The Government of Bangladesh has prepared a paper for discussion entitled 'Country Strategy Paper for Community Led Total Sanitation' prepared by Arun Arya, Senior Sector Adviser, Unit for Policy Implementation (UPI) Local Government Division.

deliberate and focused on integrating gender dimensions in CLTS and other programmes.

VERC phase-out based on jointly defined phase out strategy

Participants and stakeholders involved in the study commonly held their views that VERC should continue its involvement until communities and their organisations have been able to run the process by themselves. Regarding the ‘question of phasing out,’ most participants responded that VERC should decide and phase out, based on jointly prepared phase-out plans. The study team recognises that the proposal of study participants is absolutely grounded on the principle of participation, and in which both people and VERC should move by reciprocal accountability – a very

fundamental essence of participation. Furthermore, people’s proposal of developing area specific, joint phase-out plans makes sense because the capacity of different communities and their organisation in each operational area should not be assumed to be the same. Location/area-specific, joint phase-out planning thus appears to be the correct response.

Further Study

In addition to these observations, it is felt that further clarification of the specific drivers of progress up the ladder is required, especially to help to differentiate between those that led to people being motivated to adopt CLTS initially, and those that were part of the choice to move up the ladder when the time came to do so (or to standstill, or indeed to fall off).

References

- Arun A** (2005) *Country Strategy Paper for Community Led Total Sanitation*. Government of Bangladesh, Ministry of Local government, Rural Development and Cooperatives, Unit for Policy Implementation (UPI) Local Government Division
- Claydon T** (2002) Presentation at Rural Sanitation Workshop: ‘*Community Initiatives in Rural Sanitation*’, February 12-15, 2002, Bogra, Dhaka, Bangladesh and Published in Jal Manthan, India
- Kar K** (2003) *Subsidy or Self-respect? Participatory total community sanitation in Bangladesh*. **IDS Working Paper 184**
- Saha S K, Kashem M A, Rafi S M** (2006) *Walking Through Sanitation Ladder: A Participatory Study on the Trends and the Drivers of Community Movement in VERC-WAB’s People Initiated 100% Sanitation Approach*

Annex 1

TABLE 1 Study participants

Manda			Sitakunda			Lalmohon		
Male	Female	Total	Male	Female	Total	Male	Female	Total
21	17	38	21	43	64	36	14	50

TABLE 2 Study coverage of families by region and category of population

Population category	Manda	Sitakunda	Lalmohon	Total
Landless/floating (hardcore poor)	48	2	5	55
Poor/lower class	135	48	25	208
Middleclass	84	30	40	154
Rich	2	0	5	7
Total:	269	80	75	424

TABLE 3 Pattern of latrine use and regional variations by category of population

Population Category	Changes in Latrine use Pattern					
	Manda		Sitakund		Lalmohon	
	2003	2006	2003	2006	2003	2006
Landless/floating (hardcore poor)	Low coverage 3F out of 48F (45F used open defecation, 3F used simple-pit)	Coverage 100% (22F use model-10, 17F use model-13, 6F use model-15 and 3F use model-5)	Coverage 0% (all 2F used open defecation)	Coverage 100% (2F shared)	Coverage 0% (All 5F used open defecation)	Coverage 100% (All (5F) use general simple pit (model-1)
Poor /lower class	Very low coverage 3 out of 135 (132 used open defecation, 2F used model-15, 1F use model-1)	Coverage 100% (104F use model-10, 10F use model-13, 7F use model-8, 8F use model-5, 6F use model-15)	Coverage 0% (all 48F used open defecation)	Coverage 100% (22F use model-1, 14F use model 8, 10F use model-5, 1F use model 2, 1F shared)	Coverage 0% (All 25F used open defecation)	Coverage 100% (10F use model-10, 15F model-13)
Middle class	Low coverage 13 out of 82Fs used simple pit (69 families used open defecation)	Coverage 100% (83F use model-10 and 1F use model-8)	Coverage 0% (all 30F used unhygienic soil-pit)	Coverage 100% (10F use general simple-pit Model 1, 4F use model 8, 12F use model 5, 4 F use model 29)	Coverage 45% (7F used model-7, 10F used model-10)	Coverage 100% (22F use model 7, 18F use model-10)
Rich	Coverage 100% (2 families used model-15)	Coverage 100% (2 families shifted towards model-10 from model-15)			Coverage 100% (1F used model-1, 5F used model-7 and 4F used model-10)	Coverage 100% (5F use model-5 and 5F use model-7)

Note: for information on the models referred to here see Annex 2 of the main report (Saha et al, 2006)

TABLE 4 Gradual progress in the movement of latrine installation by time period

	Naogaon	Sitakunda	Bhola
2001-2006	70% latrines shifted towards ring-slab; 30% remains tin/motka latrines, but continuing to shift; Improved superstructures;	More than 40% families use simple-pit latrines; 25% use ring-slab, (25%) have moved toward offset-pit latrines and others (10%) use bamboo and shared latrines	Most (around 90%) coverage with model-10, 7 and 13, while others (10%) use simple pit latrines; Shift continuing among other than floating/hardcore poor and poor families
2002-2005	Full coverage by 2003, but among which 70% use motka/PVC bent pipe and simple pit latrines; Major shift to low-cost motka latrine from simple-pit took place; Underdeveloped superstructure and basement;	Major shift happened towards simple-pit latrine (model-1) from soil-pit/tree-latrines; Among middleclass families a shift was made towards ring-slab & offset-pit from simple-pit latrines; Massive latrine installation started during 2004	80% latrines were shifted towards offset-pit latrine (model-5 & 10) and plastic pan water-sealed offset latrines from plastic-pan simple pit latrine; Remaining families (20%) continue to use plastic-pan simple pit latrine; Superstructure improved as a whole
Baseline 2001	Existence of few sanitary latrines (water-seals broken); Most people used open defecation;	Most (around 75%) families used to use soil-pit/tree-latrines; Remaining (around 25%) families used brick-constructed open bottom latrines; Almost none used to hygienic use of latrines	27 families had latrines with different options, while 53 families used open defecation; Simple-pit was prevalent option and others were keyhole-pit and plastic-pan water-sealed offset pit latrines

TABLE 5 Gradual progress in the movement of latrine use by time period

	Naogaon	Sitakunda	Bhola
2001-2006	All people consistently use sanitary latrines; Cleanliness of latrines are maintained; Children also use sanitary latrines	Everybody use sandal in latrine and wash hands after defecation; all latrines are properly maintained	No human excreta found here and there; All people properly use sanitary latrines including children
2002-2005	People started gradually to maintain cleanliness of latrine and personal hygiene; By 2003-04 all families started to use sanitary latrines	People in general sensitised on oral-faecal diseases by the staff and community leaders; Gradually increased the number of proper latrine users and reach 100% by the year 2004	Collective actions taken first for covering all latrines; Hygiene behaviour practices are ensured among all people at least after 1 year of full latrine coverage
Baseline 2001	People did not properly use latrines	Most people used to use home-based soil-pit latrine without maintaining hygiene; No open defecation probably because of living in urban settings	Hardly 5% of community people used to use latrine properly; Remaining 95% families did not know and aware about importance of proper latrine use

TABLE 6 Comparison of investment in latrine utilisation between 2003 and 2006
(424 family samples covered by the study)

Latrine model/ option	Cost per unit excluding superstructure In Tk (lower to higher cost option)	During 2003		During 2006	
		Number in use by number of families	Investment in Tk	Number in use by number of families	Investment in Tk
Model 1: General home made latrine	125	1	125	37	4,625
Model 13: Community innovated offset pit latrine (2) :	130	-	-	42	5,460
Model 2: Homemade latrine with bamboo lining	245	-	-	1	245
Model- 5: Offset pit homemade latrine	194	-	-	38	7,372
Model 15: Community innovated offset pit latrine (4):	265	4	980	10	2,650
Model-7: VERC keyhole pit latrine	395	7	2,765	27	10,665
Model 8: Water seal latrine	420	-	-	26	10,920
Model 29: Community innovated offset pit latrine (18):	339	-	-	4	1,356
Model 10: Offset pit latrine	724	10	7,240	237	171,588
Families sharing others latrines	-	-	-	2	-
Total		22	11,110	424	214,881

Average investment per family in the year 2003 was TK 11,110 ffi 424 families = TK. 26.20

Average investment per family in the year 2006 was TK 214,881 ffi 424 families = TK 506.80

Total investment increase: TK 203,771

Average increase of investment per family: TK 203,771 ffi 424 families = TK 480.59

Average increase of investment per family in %: $100 \text{ ffi } 26.20 \times 506.80 = 1,934.35\%$