Creating Better, Evidence-based Policies and Plans for Sanitation Interventions:
Policy Findings from the Testing CLTS Approaches for Scalability Program

Report Highlights

- In a field lacking rigor and data, the study shows evidence of positive effect of CLTS and local actors on latrine coverage;
- The costs behind CLTS are misunderstood; this study identifies and measures costs across a spectrum of categories;
- Local actors (natural leaders, teachers, local government officers) are frequently overburdened, but are effective as catalysts for change;
- CLTS operates most effectively under known ‘conditions’; there are (cost)-inefficiencies in applying the approach beyond those conditions; and
- Significant funds and resources for sanitation were successfully leveraged by local actors (either at community or local government level).
Community-led total sanitation (CLTS) is an approach to sanitation promotion that has spread to countries across South Asia, Latin America and Africa since the year 2000. This approach seeks to eliminate open defecation (OD) and encourage the construction and use of sanitation facilities through “triggering” or grassroots mobilization of communities. When successful, triggering promotes a community-wide commitment to becoming open-defecation free (ODF). Successfully mobilizing communities to become ODF depends greatly on the skills of local facilitators.

Plan International USA’s Testing CLTS Approaches for Scalability project, funded by the Bill & Melinda Gates Foundation, and implemented with the University of North Carolina’s Water Institute, sought to understand the essential aspects of the facilitation and mobilization process and how it could be scaled to national level and/or replicated in other countries. The project drew on experiences with natural leaders (drawn from communities), teachers and local government officials in Ghana, Ethiopia and Kenya respectively.

Key messages:

1. CLTS can have a major impact on latrine adoption and achievement of open defecation free status for communities,
2. but CLTS only works well within a certain “performance envelope,”
3. and the cost of CLTS is not insignificant.

I. CLTS can have a major impact on latrine adoption and ODF achievement

The scientific evidence base on the impact of CLTS is limited. In conjunction with the University of North Carolina’s Water Institute, a comprehensive literature review was completed for this project to examine the available evidence, some of which is very recent. For example, an impact evaluation from Mali published in 2015 (Pickering et al., 2015) shows significant decrease in open defecation as a result of CLTS interventions. Open defecation reportedly decreased by 70 percent among adults and by 46 percent among children. The researchers report that CLTS was “highly successful in increasing access to private latrines, improving the quality of latrines, and reducing self-reported open defecation.” The evaluation further showed that households in communities where CLTS was implemented were three times more likely to have soap present. The evaluation also showed a remarkable impact on health, with reduced stunting, higher

Further details about the main findings from the study can be found at: http://waterinstitute.unc.edu/clts/
height-for-age, and lower risk of being severely underweight for children under five in CLTS villages compared to a control group of villages.

Although research on CLTS is not well represented in the peer-reviewed literature, there are relevant publications on similar interventions; that is, those that focus on driving demand to change sanitation behaviour. A qualitative evaluation of an approach in Indonesia known as “Community-based Total Sanitation,” a program essentially similar to CLTS that includes hygiene, handwashing, safe water practices, and environmental sanitation, showed that participatory approaches empowered community members and increased acceptance of sanitation systems (Roma & Jeffrey, 2010). An impact evaluation of the Total Sanitation Campaign in India (Pattanayak et al., 2009) documented a 19 percentage point increase in latrine ownership. Although the approach used was not CLTS, it did include triggering techniques. The evaluation showed that two thirds of the impact achieved was as a result of the behaviour change approach. The authors concluded that an intensive educational campaign had a “substantial and statistically significant effect on latrine adoption and use.”

Research carried out under this project in Cambodia, Haiti, Indonesia, Lao PDR, Nepal, Niger and Uganda shows that CLTS can be successful in increasing latrine coverage and can result in communities that are open defecation free. Of 981 communities in the seven countries studied, 336 (36 percent) had been declared open defecation free after Plan’s interventions. However, household latrine coverage after CLTS in each country varies considerably, from 6 percent in Haiti to 97 percent in Indonesia. In Uganda, 95 percent of households in the 152 villages triggered by Plan had latrines after the CLTS intervention, compared to 51 percent before - a 44 percentage point rise. In Nepal, on the other hand, the increase in households with latrines achieved through triggering 171,000 households was 27 percentage points.

Clearly, CLTS implemented by Plan was shown to be more effective in some countries and settings than in others. The research carried out by Plan and UNC has helped shed some light on the reasons why.

2. CLTS works well within a certain “performance envelope”

A good example of a distinct difference in outcomes can be seen in the study’s findings in Ethiopia, where changes in open defecation rates varied from 3 to 34 percentage points difference between two study sites: Oromia and Southern Nations, Nationalities, and Peoples (SNNP) Region. Compared to SNNP, Oromia is more remote and less densely settled. Villages tend to be smaller, and households are bigger, with fewer household resources.

<table>
<thead>
<tr>
<th>Region</th>
<th>Baseline OD</th>
<th>1-yr follow-up OD</th>
<th>Decrease in OD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oromia study sites (3 kebeles)</td>
<td>68.6%</td>
<td>34%</td>
<td>32.6 pp</td>
</tr>
<tr>
<td>SNNP study sites (3 kebeles)</td>
<td>27.1%</td>
<td>23.7%</td>
<td>3.3 pp</td>
</tr>
</tbody>
</table>

As the table above shows, the study sites in Oromia, where the greater reduction in open defecation was found, had a much higher rate of open defecation before the project started. By contrast, just over a quarter of households were practising open defecation in the study sites in SNNP; these may be households which are harder to convince of the benefits of abandoning open defecation, or those facing other barriers to latrine construction and use.

1. The assessment of open defecation free communities is complicated by the fact that definitions and measurement of open defecation free status differ.

Further details about the main findings from the study can be found at: [http://waterinstitute.unc.edu/clts/](http://waterinstitute.unc.edu/clts/)
The research in seven other countries included interviews with CLTS implementers. These respondents confirmed what the evaluation in Ethiopia and Ghana had found: CLTS had a greater likelihood of success in small, remote, rural communities with low initial latrine coverage, a large measure of social cohesion, a stable population, and little prior experience of subsidies for latrine construction. Another factor in success was the presence of village leaders (elected or traditional) who were willing to give permission for CLTS triggering to be carried out, and who played a role in mobilising participation by village residents.

In addition to formal leaders, the research suggests that training “natural” leaders has a significant impact on the success in certain settings, but that the factors that lead to success in training and using natural leaders are consistent with those that are determinants of overall success of CLTS. For instance, in Ghana, the evaluation examined the impact of training natural leaders as an add-on activity to CLTS, with the results showing that in the Upper West region, where impact was greatest, was also where fewer communities had benefited from prior water and sanitation projects (45 percent of communities compared to 100 percent of communities in Central region). Upper West region communities were also more remote, less densely populated, smaller and had more stable populations.

<table>
<thead>
<tr>
<th>Region</th>
<th>Baseline latrine ownership</th>
<th>1-yr follow-up latrine ownership</th>
<th>Increase in latrine ownership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>14.6%</td>
<td>21.6%</td>
<td>7.0 pp</td>
</tr>
<tr>
<td>Upper West</td>
<td>13.9%</td>
<td>52.3%</td>
<td>38.4 pp</td>
</tr>
<tr>
<td>Volta</td>
<td>9.9%</td>
<td>23.7%</td>
<td>13.9 pp</td>
</tr>
</tbody>
</table>

CLTS has greater likelihood of success in small, remote, rural communities with low initial latrine coverage, good social cohesion, stable populations and little prior subsidies for latrine construction.

A clear lesson from the detailed research and case studies is that there is no ‘single’ CLTS approach, applied universally the same way in all settings. The evaluation shows that the approach was being actively adapted in all countries and at all stages of the process—with varying institutional set-ups, a range of types of facilitators, and different follow-up arrangements. In addition to the training of natural leaders in Ghana, there are examples of teachers being used as facilitators in Ethiopia, religious leaders being encouraged to include sanitation in sermons in Indonesia, Niger and Cambodia, and the use of hygiene clubs for triggering in Haiti.

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2. “Natural leaders” are those who emerge as a result of the CLTS triggering process and feel motivated to help change the sanitation situation in their communities. They do not have to be existing community leaders.
Policy and Planning Implications:

- National sanitation authorities need to consider CLTS as one component of their national strategy for sanitation, but not the only approach they apply; a “toolbox” of sanitation approaches is required.

- Project designers must assess the attributes of a locality, analyze how well they fit with the known optimum “performance envelope” of CLTS, and then target CLTS and other approaches accordingly. This implication means making choices about where to program CLTS, or how it is sequenced with other approaches.

- Donors should support government targeting and align with national and local strategies, rather than support one particular approach.

- CLTS implementers have to consider how to adapt CLTS to the local context if they wish to increase the chances of successful outcomes.

- Practitioners, who adapt CLTS to critically evaluate their experiences, ought to determine if these adaptations are leading to better outcomes and document them so others may learn.

3. The cost of CLTS is not insignificant

As households are triggered to make their own investments in sanitation infrastructure, CLTS is commonly considered a cheaper option than other sanitation approaches. Plan’s research shows that the costs of CLTS may be consistently underestimated. The typical costs associated with triggering (through community meetings and participatory activities) are only a small part of the overall costs. In order to estimate the full costs, it is necessary to include training, project management and follow-up in communities. Harder to quantify are the costs associated with the time that is volunteered by local leaders and community members for such activities as pre-triggering (helping to mobilize attendance at meetings), conducting triggering sessions, and post-triggering activities (encouraging neighbours, verifying ODF status). In Ethiopia, for each hour Plan spends training local actors (teachers, health extension workers, local leaders), an average of 6 hours are spent on CLTS by local actors (participating in the training, facilitating CLTS in their communities). Added to this should be the investments in sanitation infrastructure made by households.

Accurate budgeting for CLTS requires program managers to consider the full range of actions and costs, and to budget for each of these. The evaluations in Ghana and Ethiopia showed that training was a major CLTS cost, and that mentoring and continued training over time was needed for training to yield outcomes. Trainees reported that mentoring during the seven months following the initial training session motivated them and helped them to apply what they had learned. Flexibility in budgeting is also required, as CLTS must be adapted to suit local conditions and the response in each community.

The evaluation revealed that CLTS depended on a wide range of local actors taking on new or increased responsibilities – this included local government officials, teachers, health workers and community members.

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While it is difficult to quantify the cost of the actors’ time, it is certain that there is an opportunity cost, as CLTS activities take them away from other duties. Government workers tasked with facilitating CLTS almost always have multiple responsibilities. In Ethiopia, health extension workers have 16 core tasks, only one of which is CLTS related. Supervisors may be reluctant to release government workers to devote time to sanitation. Conversely, actors who are distracted by other additional non-sanitation duties may not be effective champions of CLTS. For instance, in Kilifi in Kenya, the intended trainees were expected to participate in a polio vaccination campaign and multiple terrorism and security-related workshops during Plan Kenya’s program.

In most study countries, the research revealed that the capacity of local government to carry out follow-up activities was weak due to financial constraints. Programs had to rely on routine follow-up by village volunteers, who are reported to not follow up as consistently or effectively as paid government staff.

**Policy and Planning Implications:**

- Planning and budgeting process needs to take into account the full costs of CLTS interventions, and allow for flexibility.

- Local capacities must be assessed before designing a sanitation program, and the other demands being made on local actors must be considered.

- Time needs to be invested in improving the relationship between local actors, such as government workers, and the relevant authority figure, such as supervisors, to ensure that adequate time can be allocated to sanitation.

**Publications:**


**References:**

