



SUSTAINING LATRINE COVERAGE AND USE : A STUDY OF CLTS PROGRAMS IN NORTHERN GHANA

Overview

Prior studies have identified several aspects of Community-led Total Sanitation (CLTS) program implementation as crucial to both achieve and sustain open defecation free (ODF) communities: (i) the involvement of community leaders, (ii) intensity and duration of follow-up, and (iii) support to poor households, including financial support (Crocker et al., 2016; Tiwari et al., 2017; USAID, 2018; Venkataramanan et al., 2018). USAID/WASHPaLS conducted qualitative research in 15 villages in the Northern Region of Ghana to better understand how community implementation strategies influence sanitation outcomes.

Key Takeaways

We found that high latrine coverage and consistent use were more common when:

- Natural leaders and/or traditional leaders were active post-triggering and remained active after the declaration of ODF status
- Neighbors provided support for latrine construction.
- CLTS facilitators continued to be engaged post-triggering.
- Women were engaged during triggering and participated as natural leaders.

Approach

USAID/WASHPaLS studied 15 communities across four districts that participated in one of the two CLTS programs implemented by the international NGO, Global Communities: USAID/WASH for Health (W4H) and USAID/Resiliency in Northern Ghana (RING). The research team selected communities to ensure variability in three key implementation characteristics of interest: involvement of community leaders, follow-up intensity and duration, and pro-poor support.

All 15 study communities were triggered at least two years prior to data collection in May 2019, and 12 were certified ODF by district government officials at least 12 months before our visit, meaning at least 80% of households in the community should own a functional improved latrine with handwashing facilities. We conducted 154 semi-structured interviews and 15 focus group discussions with a diverse set of stakeholders, including Global Communities staff, local government officials, traditional and natural leaders, and households. We analyzed the data using fuzzy-set Qualitative Comparative Analysis (fsQCA), a semi-quantitative method that identifies combinations of factors that influence an outcome of interest (Jordan et al., 2016, 2011; Rihoux and Ragin, 2009; Tribbe et al., *manuscript submitted for publication*).

We prioritized two CLTS programs outcomes (current latrine coverage and consistent latrine use) and identified six factors that could influence these outcomes based on hypotheses drawn from literature and on themes that emerged through our qualitative research (Table 1). We then scored each community with respect to the "strength" of each factor employing the information collected during qualitative interviews with village leaders and households. The scores were used to determine relationships between different combinations of factors and outcomes via fsQCA software.

Results

We examined two outcomes for each of the 15 communities visited during the study: current latrine coverage at the time of our visit (based on reports from community leaders and estimates by the research team) and consistent latrine use by the majority of households (according to qualitative data). The method of analysis produced "sets", or combinations of factors that are most commonly found among villages with an outcome of interest. Our analysis found that there is not one single factor leading to high latrine coverage or consistent use, but instead that a combination of factors operate together to achieve an outcome. These sets are visualized in Figures 1 and 2; detailed definitions of each outcome and factor are provided in Table 1.

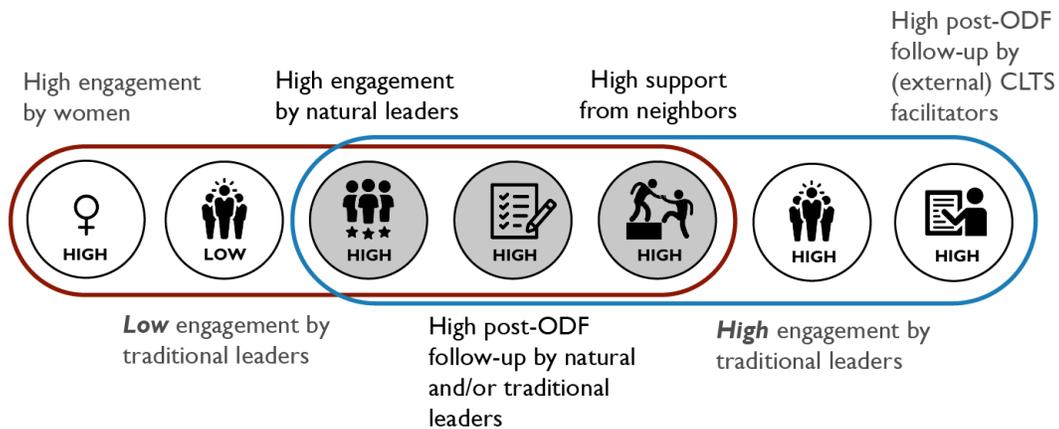


Figure 1. Two “sets” for achieving high latrine coverage, circumscribed by either a red or blue boundary. The elements highlighted in gray (what we call “factors”) were identified across all cases of high latrine coverage.

Our operational definition of “high” latrine coverage is 75% of households, which was true for 11 out of 15 of the communities under study.¹

Communities with high latrine coverage saw high engagement from a combination of actors internal and external to the community (Figure 1). Within the community, traditional leaders, such as chiefs or community elders, and “natural leaders” (community volunteers selected by the community itself during triggering) took on specific roles to support latrine construction and use. Follow-up by external CLTS facilitators following the ODF declaration, when it occurred together with high engagement from traditional leaders, was also associated with high latrine coverage. Our results also suggest that women have the potential to be as persuasive as traditional leaders (who were all male) in encouraging continued high latrine coverage.

Natural leaders were engaged in both post-triggering and post-ODF activities among communities with high latrine coverage. They supported latrine construction, conducted household visits, held meetings, and in some cases, enforced by-laws, but they did not operate alone. High coverage communities typically saw either the combination of *high* traditional leader engagement and high CLTS facilitator follow-up (the set bounded by a blue border in Figure 1) or the combination of *low* traditional leader engagement and high engagement by women in sanitation promotion (the set bounded by a red border in Figure 1).

Establishment of sanctions/by-laws by traditional leaders’ was important for ensuring latrine coverage and use. Chiefs rarely engaged in household follow-up but often selected and empowered natural leaders, enforced by-laws, or acted as a role model for the community.

CLTS facilitators played an important role in transferring technical skills for latrine construction to natural leaders. Most CLTS facilitators conducted regular community visits for several weeks post-triggering. In two communities, facilitators went “above and beyond” by remaining in the community for days or weeks post-triggering to help with construction and build the natural leader’s technical capacity, which the community noted as important for their success.

“[The Chief] motivates us a lot, telling us not to relent in our efforts to keep the community ODF. He would normally say he is no longer strong to engage in digging, but he would usually promise to send a young man or two to assist if need be.”

“The facilitators slept in the community for four days immediately after triggering and assisted households with demarcation of latrines, and educated the households on the usage of the latrines.”

¹ Current latrine coverage was calculated based on estimates made by the research team during data collection and self-reporting from local leaders. National guidelines define ODF as 80% latrine coverage of households. Our research team determined that most communities calculated coverage rates by compound (a grouping of number of households, which varied by community). For outcome 1, we used latrine coverage by compound and considered communities with 75% coverage or greater to have high coverage based on natural breakpoints in data for our study communities.

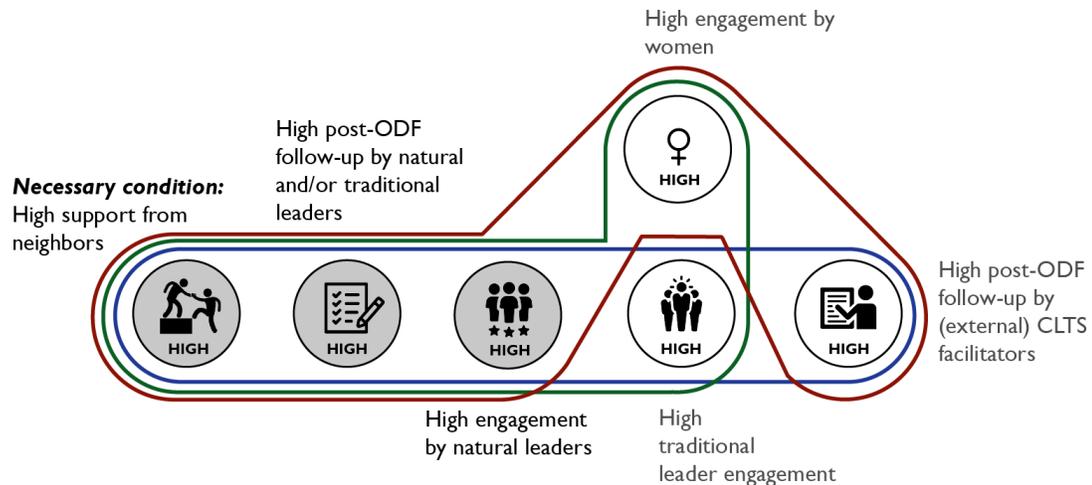


Figure 2. Three “sets” for achieving consistent latrine use, circumscribed by red, green, or blue boundaries. All sets included the factors of high neighbor support, high natural leader engagement, and high internal follow-up post-ODF (highlighted in gray). Neighbor support was also considered a necessary condition, meaning all cases with consistent latrine use had high neighbor support. In addition to these conditions, the blue and red sets both included high follow-up by CLTS facilitators, and either high engagement by traditional leaders (blue) or high engagement of women (red); the green set included both active traditional leaders and engaged women.

We identified a single necessary factor for consistent latrine use: neighbors helping neighbors, including poor and vulnerable households, construct latrines. Most community members in our study communities, however, rarely acknowledged any of their neighbors as poor or vulnerable, stating that “we are all poor,” or that there is no excuse for not building a latrine given that the materials are “free.”

The three program factors common to communities meeting our definition of high coverage were also present in among communities demonstrating consistent latrine use (see the gray subset in Figure 2: neighbors helping neighbors, post-ODF follow-up by natural leaders and/or traditional leaders, and natural leader engagement). Most community members in our study communities, however, rarely acknowledged any of their neighbors as poor or vulnerable, stating that “we are all poor,” or else that there is no excuse for not building a latrine given that the materials are “free.”

Women played a key role in maintaining latrines over time, and female natural leaders were active in sanitation-related activities in most communities. Just as with communities that had achieved high coverage, most communities with high latrine use saw some combination of highly engaged CLTS facilitators after ODF declaration, engagement by traditional leaders, and engagement by women; women were often engaged in cases where either traditional leaders or CLTS facilitators were absent. CLTS facilitators reported that they often targeted women as agents of change.

Post-ODF follow up was most often carried out by natural leaders, including weekly or bi-weekly household visits to ensure all households maintained or rebuilt latrines. Post-ODF follow-up by external actors, such as CLTS facilitators or district officials, was more limited (usually due to lack of funding), but where it occurred together with strong engagement by women, it resulted in consistent latrine usage.

The majority of households in communities we studied did rebuild or repair latrines when they collapsed or incurred damage, felt comfortable sharing latrines with neighbors, and had awareness of potential sanctions for open defecation. In communities exhibiting inconsistent latrine use, open defecation was most common among households with collapsed or full latrines, elderly or physically disabled family members, and female heads-of-household. Open defecation was also more common among pastoralists (*Fulani* households) who lived on the outskirts of communities. Notably, all communities exhibiting consistent latrine use had at least 70 percent coverage by compound at the time of our visit.

“[We] identify poor [households] and go with youth to dig pits for them when they get permission from the Chief.”

“Women are the right people to engage in the community to improve sanitation because of their primary role as gatekeepers of households.”



Conclusions

In line with previous CLTS evidence, our study results in Ghana emphasize the importance of natural leaders supported by traditional leaders and external facilitators, and the value of strong internal support mechanisms such as neighbors helping neighbors. The role of women emerged as an important factor in sustaining latrine coverage and use, both in their role in influencing household decisions, and as natural leaders within the community. Because there is often limited access to durable latrine materials in Ghana, it is critical to support latrine construction and repair to prevent latrine collapse. Some communities were able to provide this support internally (i.e., neighbors helping neighbors), though others may require more encouragement from CLTS facilitators and natural leaders. These results, however, demonstrate that one factor alone is generally not enough for communities to maintain their ODF status over time: support is still needed from internal and external actors. Finally, we found that follow-up activities and strategies used by leaders implemented between triggering and achievement of ODF are linked to post-ODF sustainability, which should encourage implementers to plan for sustainability from the outset of CLTS implementation.

Recommendations for Ghana

- Prioritize the selection and training of natural leaders, and secure buy-in from traditional leaders for their empowerment.
- Support women to act as natural leaders and engage in sanitation-related decision making.
- Leverage existing support mechanisms within communities (i.e., neighbors helping neighbors) where possible, and respond to those communities that may need more external support, especially technical support for latrine construction and continued monitoring.

Limitations

Latrine coverage data in this study are estimates made by the research team based on interviews with selected households and natural leaders; we were unable to visit every household in every community. In addition, the research team completed data collection at the beginning of the rainy season, when latrine collapse is more common, which may have contributed to lower than average latrine coverage data.

Table 1. Outcome and factor definitions used for analysis.

Category	Outcomes/Factors	Definition
Outcomes	Outcome 1: Current Latrine Coverage	Number of latrines per compound. (Note: a compound is grouping of households; the number of households per compound varied per community.)
	Outcome 2: Consistent Latrine Use	Prevailing latrine use behaviors in the community compared to open defecation behaviors.
Leadership	Factor: Traditional Leader Engagement	Activity and engagement levels of traditional leaders, namely the Community Chief, in sanitation activities post-triggering.
	Factor: Natural Leader Engagement	Activity level of natural leaders in sanitation activities post-triggering. (Natural Leaders were community volunteers selected during the triggering.)
Follow-up	Factor: CLTS Facilitator follow-up	Intensity of follow-up by CLTS facilitators or other external actors post-triggering.
	Factor: Internal follow-up post-ODF	Activity level of natural leaders or traditional leaders, or both, post-ODF (at the time of the research).
Pro-Poor Support	Factor: Internal Support	Engagement of community members in sanitation activities, including supporting neighbors to construct latrines, or ensuring that poor and vulnerable households were supported.
Other	Factor: Women engagement in sanitation	Involvement of women in sanitation activities such as triggering, the decision to construct latrines, maintaining latrines over time, or in leadership positions (i.e. natural leaders).



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Contacts

Morris Israel	Jesse Shapiro
Project Director	Environmental Health Team Lead
USAID/WASHPaLS	United States Agency for International Development
morris.israel@WASHPaLS.org	jeshapiro@usaid.gov

About USAID/WASHPaLS

The USAID Water, Sanitation and Hygiene Partnerships and Learning for Sustainability Project (USAID/WASHPaLS) is a five-year task order funded by the Bureau for Global Health that identifies and shares best practices for achieving sustainability, scale, and impact of evidence-based environmental health and WASH interventions. Through extensive desk reviews, key informant interviews, and field-based implementation research, USAID/WASHPaLS works with implementing partners to broaden the evidence base on the use and effectiveness of sanitation interventions, including Community-Led Total Sanitation (CLTS), market-based sanitation (MBS), and hygienic environments for infants and young children. For further information about this and other aspects of the project, as well as to access our knowledge products, please visit globalwaters.org/washpals.