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Sanitation in Bukwo, Uganda:  
An Assessment of Community Led Total Sanitation (CLTS)

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An Assessment of Community Led Total Sanitation (CLTS)

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An abstract of  
A thesis submitted to the Faculty of the  
Rollins School of Public Health of Emory University  
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2015

## **Abstract**

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An Assessment of Community Led Total Sanitation (CLTS)  
By Maria Sara Hoffman

In 2014, Emory University and Catholic Relief Services (CRS) collaborated in research aimed to assess the effectiveness of the Community Led Total Sanitation (CLTS) approach for hygiene and sanitation promotion under CRS's Integrated Water Resource Management (IWRM) project in Bukwo, Uganda. CLTS is a no-subsidy approach that encourages communities to self-assess their existing defecation and sanitation practices and harnesses local motivation and mobilization to eliminate unsafe practices and help communities become open defecation free (ODF). However, this approach can have unintended consequences as it generates collective feelings of shame, disgust and fear to motivate communities. In-depth interviews were conducted for 67 households in 28 villages across the Bukwo district to identify any consequences, as well as explore the motivators and barriers that caused households to use or abandon their latrine.

The assessment found that communities received CLTS positively and the accompanying activities were executed in a culturally appropriate and sensitive manner. Health was the most common motivator for increasing sanitation and hygiene in a home, which influenced both sanitary and hygienic practices and latrine use. The barriers that caused people to abandon their latrine included structure and maintenance issues as well as availability of materials. Households that continued to practice open defecation cited lack of materials and funds and poor latrine conditions as barriers to safe defecation practices. Among households that practiced hygienic and sanitary behaviors, the expected outcomes of consistent latrine use motivated them to continue this practice.

Programmatic recommendations included an emphasis on pre-implementation activities to familiarize the community with the objectives of the intervention as well as strategies for facilitators on how to operationalize the collective feelings of shame, fear and disgust with care. Emphasis should also be placed on the major motivators, which included health. To address maintenance and structure issues, future programming should focus on using sanitation marketing to disseminate best practices for latrine design and maintenance as well as increase the accessibility of materials while retaining CLTS's commitment to a no-subsidy approach. Communities should also be encouraged to assist one another and share not only sanitary and hygienic values, but also share responsibility.

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## Table of Contents

<b>Executive Summary</b> .....	<b>1</b>
<b>Introduction</b> .....	<b>3</b>
Sanitation in Uganda .....	3
CLTS Background.....	3
Advantages and Disadvantages of CLTS .....	6
CRS’s Implementation of CLTS in Uganda.....	11
Research Aims.....	13
<b>Methodology</b> .....	<b>14</b>
Introduction to Sampling Strategy .....	14
Research Setting .....	15
Household Selection.....	16
Data Collection.....	17
<b>Findings</b> .....	<b>21</b>
Was CLTS Culturally Sensitive and Respectful? .....	21
Motivators and Barriers to Achieving ODF Status .....	28
Sustaining ODF .....	36
<b>Discussion</b> .....	<b>39</b>
<b>Limitations and Challenges</b> .....	<b>51</b>
<b>Recommendations</b> .....	<b>52</b>
<b>Conclusion</b> .....	<b>54</b>
<b>References</b> .....	<b>56</b>
<b>Appendix I</b> .....	<b>58</b>

## **EXECUTIVE SUMMARY**

From May through August 2014, Emory University and Catholic Relief Services (CRS) collaborated in research aimed to assess the effectiveness of the Community Led Total Sanitation (CLTS) approach for hygiene and sanitation promotion under CRS's Integrated Water Resource Management (IWRM) project in the eastern district of Bukwo in Uganda. This report presents the methods, findings and key programmatic recommendations to address the impact of CLTS in helping communities achieve total sanitation. More than 60 households participated in the assessment through in-depth interviews conducted in 28 villages across the Bukwo district.

CLTS is a no-subsidy approach that encourages communities and individuals to self-assess their existing defecation and sanitation practices and harnesses local motivation and mobilization to eliminate unsafe practices and help communities become open defecation free (ODF). This assessment sought to identify any unintended consequences of the CLTS approach that may leave households feeling embarrassed or inadequate. The communities received CLTS positively and the accompanying activities were executed in a culturally appropriate and sensitive manner. The fear or threat of disease was found to have the most potential impact on long-term use. However, disgust and shame still have a role to play, as they are important in setting community level norms and standards for hygiene and sanitation. Overall, there was a strong linkage between a healthy life and sanitary and hygienic practices in the participating communities.

The second part of the assessment focused on exploring the motivators and barriers that caused people to use/share or abandon their latrine. Health was the most common motivator for increasing sanitation and hygiene in a home, which influenced both sanitary and hygienic practices and latrine use. Preventing disease and keeping homes clean and without feces were the principal motivators in stopping open defecation practices among households. The barriers that caused

people to abandon their latrine included structure and maintenance issues as well as availability of materials. Shared latrines with non-family members often led to conflict with neighbors. The lack of latrines available in crop fields contributed to the practice of open defecation in these areas during planting, weeding and harvesting seasons. Households that continued to practice open defecation after triggering cited lack of materials and funds and poor latrine conditions as barriers to safe defecation practices.

Among households that attained ODF status, the expected outcomes of consistent latrine use motivated them to continue this practice. Latrines and sharing latrines were perceived as convenient and effective in preventing diseases and keeping homes clean. Future challenges included how to prevent use of latrines by non-family members, maintenance and cleaning and what to do once the latrine became full. Conflicts with neighbors and latrines that were in poor conditions led some households to revert back to unsafe practices.

Programmatic recommendations included an emphasis on pre-triggering activities to familiarize the community with the objectives of the intervention as well as strategies for facilitators on how to operationalize triggers with care. To address maintenance and structure issues, future programming should focus on increasing the accessibility of materials while retaining CLTS's commitment to a no-subsidy approach as well as techniques for construction and maintenance. Communities should also be encouraged to assist one another and share not only sanitary and hygienic values, but also share responsibility.

# **1. INTRODUCTION**

## **1.1 Sanitation in Uganda**

Uganda's struggle with underdevelopment and poverty includes the serious challenge of poor access to water and sanitation services across geographic and economic status. Despite some progress in increasing quality water sources, access to improved sanitation facilities has lagged behind. The Demographic Health Survey defines appropriate sanitation as facilities that include an improved toilet and method of waste disposal that separates waste from human contact.<sup>1</sup> The 2011 Uganda DHS found that over 60% of rural households continue to use latrines without a slab or open pit, compared to 25% in urban areas.<sup>2</sup> Only 16% of households use improved toilet facilities that are not shared with other households.<sup>3</sup> An overwhelming 73% of rural households use non-improved toilet facilities in Uganda while 10% of households in the country having no toilet facilities at all. The Government of Uganda developed the Home Improvement Campaign in 2011 to improve the conditions of homes in households across the country. The campaign includes a hygiene and sanitation component, which promotes the construction of latrines.

## **1.2 Community Led Total Sanitation (CLTS) Background**

Under the Home Improvement Campaign, the Ugandan government implemented a no-subsidy Community Led Total Sanitation (CLTS) approach to increase the construction and use of latrines across the country. CLTS is a community-driven approach that encourages communities and individuals to self-assess existing defecation and sanitation practices. The approach seeks to harness local motivation and mobilization to eliminate open defecation and improve hygienic and sanitary practices. The end goal of CLTS is to eliminate open defecation and have communities retain ODF (Open Defecation Free) status.

CLTS was developed by Kamel Kar in 2011 as a response to the pro-subsidy approach most NGOs were implementing to improve water and sanitary conditions in Bangladesh. Together with Robert Chambers' background in participatory approaches, the two developed the methodology for CLTS, which is rooted in a commitment to a "hands-off" approach that places the decision-making and actions in the hands of communities.<sup>4</sup> Today it is promoted in Latin America, Africa and Asia by various international organizations including CARE, Plan International, UNICEF, the World Bank and CRS.

The CLTS Handbook was developed by Kar and Chambers in 2008 to help guide organizations through the CLTS process and provide a source of information on experiences and lessons learned. The handbook provides the following general steps for CLTS programs: (1) Pre-triggering; (2) Triggering; (3) Post-Triggering; and (4) Scaling up and going beyond CLTS. The approach uses shame, disgust and fear as "triggers" that help communities realize the harmful effects of open defecation and the extent of these practices in their communities. The approaches and experiences of pre-triggering are varied yet unrecorded.<sup>5</sup> It involves the selection of the villages across physical and social conditions, policy environment and current sanitary and hygienic practices as well as the introduction and rapport building process. These include meetings with local and religious leaders, and visits to selected villages to assess the conditions with the overall objective of getting a representative sample of the community during the triggering meeting. A date for the triggering is also set during the visits.

On triggering day, community members go through a series of participatory activities that map out sanitation coverage and open defecation areas, participate in a transect walk, calculate the amount of feces generated by the community to illustrate the magnitude of OD, calculate the costs for medical expenses to treat diarrhea, and identify pathways for fecal-oral contamination, which

include water and food presentations. These activities are meant to generate collective disgust and shame towards open defecation. The role of the facilitator conducting these activities is solely to help community members realize the negative impact of open defecation—the community itself decides what to do to mitigate and resolve the problem.

The success of the CLTS approach is measured by whether the targeted area attains ODF status. The long-term goal of CLTS is to achieve total sanitation, in which “total” includes: stopping open defecation, community-wide use of hygienic toilet, washing hands with soap before preparing food and eating, after using the toilet, and after contact with babies’ feces, or birds and animals; handling food and water in a hygienic manner; and safe disposal of animal and domestic waste to create a clean and safe environment.<sup>6</sup> The post-triggering period involves the community developing actions and plans to eliminate open defecation as well as the verification and certification of ODF status and accompanying celebrations.

A vital component in the scale up of CLTS is ensuring high quality and comprehensive CLTS trainings that are evidence-based and thoughtfully executed. The handbook emphasizes that all trainings be hands-on and involve the triggering of communities and provides a rough outline for training facilitator teams for village triggerings.<sup>7</sup> Mechanisms to ensure high quality CLTS trainings can include careful vetting of trainers, surprise visits, and an emphasis on outcomes to assess long-term performance. Campaigns and fostering pride and competition are encouraged to sustain achievements in communities and help continue moving communities up the sanitation ladder. As CLTS creates a demand for sanitary hardware, several actions are listed in the handbook to promote supply and access, including encouraging entrepreneurs to find bulk sources and inviting traders to community meetings.<sup>8</sup>

### 1.3 Advantages and Disadvantages of CLTS

There has been no rigorous evaluation conducted to assess the effectiveness and impact of CLTS.<sup>9 10</sup> Loevinsohn et al. also stated that the “health impacts of CLTS have yet to be comprehensively assessed” and suggested that the added benefits of privacy, dignity, security and a clean environment might prove to be valued more than avoiding the threat of disease.<sup>11</sup> Most assessments and evaluations focus on scalability or case studies. Venkataramanan et al. found that structured follow up activities and visits from outsiders were key in motivating communities to eliminate open defecation and harmonizing efforts among implementing organizations can avoid duplication.<sup>9</sup> For CLTS specifically, it is important that all donors abide by a no-subsidy policy, as this may cause issues if nearby project areas are receiving different kinds and amounts of subsidies.<sup>9</sup>

The Venkataramanan et al. review also identified pre-triggering as an important precursor for an effective triggering process—however the authors point out that the level at which the pre-triggering occurred varied across countries.<sup>9</sup> In Ghana, a participatory data collection during pre-triggering fostered community participation and helped facilitators develop strategies using community level data.<sup>12</sup> In other instances, the pre-triggering encompassed a meeting with district level government representatives in Zimbabwe, while programs in countries like India, Mozambique and Ghana conducted activities in selected villages. The pre-triggering process was viewed as an opportune time for rapport building, understanding local context of leadership and power relations as well as an opportunity for baseline data collection.<sup>9</sup> However, some countries did not conduct any pre-triggering. In Vietnam, for example, there was no baseline survey or pre-triggering visit conducted, which did not identify any possible influential actors that could be included in the triggering activities.<sup>13</sup> The World Bank’s Water and Sanitation Program (WSP)

evaluation found that CLTS should only be implemented if village leaders express interest during pre-triggering.<sup>14</sup>

The majority of interventions followed the triggering activities outlined in the CLTS Handbook. The Venkataramanan et al. review mentioned one example of multi-triggering of several villages in Liberia, with the objective of fostering competition among these communities.<sup>9</sup> The Venkataramanan et al. review also found what appeared to be a relationship between attendance at triggering and measured CLTS outcomes, like latrine coverage.<sup>9 15</sup> However, the Dyalchand et al. qualitative study that found that triggering alone was not responsible in changing hygienic and sanitary behaviors in India.<sup>16</sup> Instead, triggering must be followed by “persuasive communication” that requires a core group of individuals that establish collective norms, which included children and women in this particular study.<sup>16</sup> Strategic timing of the triggering process was also viewed as important as the available resources for households and individuals vary throughout the year—most likely, with an increase in cash in hand during the harvest season.<sup>9</sup>

The majority of the reviewed articles in Venkataramanan et al. reported the triggers of shame and disgust were effective, however one anthropological study in Cambodia noted that older community members were more reticent to adopt new hygiene and sanitation practices than younger people and recommended that programs should use “other motivating factors besides embarrassment, which has been found to be a relatively weak motivator, hampering (but not stopping) the practice of open defecation.”<sup>9 13</sup> A multi-country sustainability study carried out by Plan International assessed the main motivators for OD households reported that “health” was a more common motivator among households than shame, disgust and pride.<sup>17</sup> Financial constraints and lack of support were the most common factors that led households to abandon their latrine and begin practicing open defecation.<sup>17</sup> However, Plan’s study did not examine barriers among

households that went from open defecation to safe excreta disposal to identify strategies and any possible obstacles these households may have overcome.

Several papers have questioned the ethics of CLTS, especially the shaming and disgust aspects of the triggering process. However this strategy may have unintended consequences that can leave households feeling embarrassed or inadequate, which undermine the success of the approach. The ethics of shame and embarrassment has been questioned as well as their effectiveness as long-term motivators.<sup>9 13 17 18</sup> Bartram et al. cite various examples of physical harassment by children and/or individuals and structural harassment by local officials.<sup>18</sup> However it was not possible to determine if these issues were widespread or just individual instances. The authors criticize the methods employed by the CLTS facilitators and communities as well as a lack of a critical approach in previous literature.<sup>18</sup> The potential to further marginalize already vulnerable populations is also highlighted. Bartram et al. point to the lack of systematic analysis of CLTS as another weakness of the approach.<sup>18</sup> Engel and Susilo went so far as to suggest CLTS created a dynamic reminiscent of the colonial period in programming in Indonesia.<sup>19</sup> Their assessment also mentioned low awareness levels of triggering and poor attendance during triggering.<sup>19</sup> The Plan Sustainability study suggested that the shame and disgust triggers worked well as initial motivators as their influence on household's actions lessened over time.<sup>17</sup>

Across all the resources cited in this literature review, monitoring and follow up mechanisms were found to be challenges in the sustainability of CLTS and often weakly developed by implementing organizations. More specifically, there is no standardized assessment framework and no systematic follow up.<sup>9</sup> A study conducted by Engineers Without Borders (EWB) Canada noted a relationship between CLTS progress and follow up activities and natural leader activity.<sup>20</sup> The study recommended that natural leaders be tapped as potential resources to identify lagging

households, rather than conducting follow up visits in every household in the community.<sup>20</sup> In the Venkataramanan et al., the authors mention EWB Canada's suggestion to involve natural leaders in the follow up mechanisms to relieve "external pressure on external actors."<sup>20</sup> Follow-up visits by outsiders were also main motivators in several countries, which include "re-triggering" communities and generating collective pride of achievement.<sup>9</sup> Tsegaye et al. built on this a step further and stated that outsiders are necessary to maintain the shaming aspect and encourage behavior change.<sup>21</sup> The ongoing impact assessment of CLTS in Mali funded by the Bill and Melinda Gates Foundation published preliminary lessons learned following its baseline survey. These suggest moving monitoring to the household level, rather than villages and more systematic monitoring by local officials/key actors to improve the effectiveness of CLTS.<sup>22</sup> The Plan Sustainability study found that households that reverted back to open defecation felt they had little or no access to technical resources, despite the follow up activities conducted by Plan and local organizations.<sup>17</sup>

Sanitation coverage and latrine construction are outputs commonly measured by CLTS interventions. However, latrine construction is only a step in the sanitary ladder, as continued use of the latrine is crucial in the sustained elimination of open defecation and reaching total sanitation. A cross-sectional study by Barnard et al. in India found that a third of households with latrines reported that no one in their household used the latrine and almost 40% of members of households with latrines reported never using the latrine.<sup>23</sup> These findings highlight the importance of follow up mechanisms in maintaining long term use of latrines. The Venkataramanan et al. review found that few implementing organizations measured any sort of sustained behavior change.<sup>9</sup> Chambers emphasizes the importance of not using ODF status as a complete indicator of success, as these may be exaggerated and inflated.<sup>24</sup> In addition, ODF status relies on complete and total elimination

of feces, which may be difficult to achieve and sustain.<sup>24</sup> A UNICEF evaluation found that in Mozambique, the presence of one or two households resisting change led to entire communities remaining not ODF.<sup>25</sup> Despite achieving high sanitation coverage, these villages did not achieve ODF status under program guidelines, despite the high number of households adopting sanitary behaviors. UNICEF's baseline assessment in Mali suggested improving construction techniques, formalizing hygiene committees and focusing on children's defecation behaviors to improve sustainability.<sup>22</sup>

The ability of CLTS to make concrete behavioral change among beneficiaries was reported in several resources. However, the sustainability study carried out by Plan International found that CLTS was less successful at improving hygiene behaviors than it was at motivating households to build and use latrines. The study found that when all standards for initial ODF declaration are applied during follow ups, rates of reverting back to open defecation increase dramatically.<sup>17</sup> Even countries with low rates of reverting had low rates of hand washing facilities available at latrines. The UNICEF evaluation also found CLTS to be effective in triggering and bringing communities into ODF status but cannot seem to establish concrete social norms, given the high rates of slippage in the multi-country evaluation of programs in Mauritania, Mozambique, Sierra Leone, Nepal and India.<sup>26</sup>

In Uganda, the Institute for Development Studies conducted a situational analysis on CLTS, SLTS (School Led Total Sanitation) and ULTS (Urban Led Total Sanitation) in 2009. The authors found CLTS to be effective, especially in raising knowledge and awareness levels that can lead to concrete behavior change among community members.<sup>27</sup> In addition, the approach was conducive to the involvement of key local actors, which included children, women and village

health teams (VHTs).<sup>27</sup> The authors also noted that program sustainability was questionable, as local officials did not have a strategy in place, despite embracing the approach.<sup>27</sup>

Plan International also published several assessments and manuals for their CLTS programming in Uganda. Their review of good practices for CLTS recommended not mixing approaches. All found that respondents regarded CLTS as effective (more than 75%) and improvements were gained in awareness levels, hygiene behavior and latrine coverage. However, these did not assess perceptions of the triggering process specifically and instead evaluated the benefits of CLTS, as did their sustainable analysis. The assessment identified several challenges that led to only 50% of triggered villages eliminating open defecation since 2007.<sup>28</sup> These included weak documentation and management of follow up data, lack of funds for follow up, low capacity building of local officials and leaders, and an inadequacy of sanitary options among program beneficiaries.<sup>28</sup> The good practices outlined included harnessing the community to socially persuade members to improve hygiene and sanitation practices, engaging women, men and children, taking into account local context, collaboration between community, local authorities and other key actors, and a focus on sustainability.<sup>28</sup>

#### **1.4 CRS's Implementation of CLTS in Uganda**

The Integrated Water Resources Management (IWRM) project is a three-year program developed by Catholic Relief Services (CRS) to respond to the high demand for domestic and productive uses of water and to reduce vulnerabilities to water-related shocks in the rural Bukwo District of Eastern Uganda. Given the limited access to safe water in Bukwo and poor sanitation and hygiene practices, the risk for water-related diseases in the area is high. Prior to CRS's intervention, no other organizations were promoting IWRM in the area.<sup>29</sup> Project activities address

the following main objectives: public hygiene promotion, school WASH, capacity building of water user committees, water source protection, and natural resource management.

CRS followed the Ugandan Ministry of Health's guidelines for CLTS, which follows these steps: (1) Planning and mobilizing for triggering; (2) Introduction and Rapport Building; (3) Triggering the community; (4) Managing the triggering moment; (5) Community Action Planning; and (6) Follow up.<sup>30</sup> Prior to implementation, the IWRM conducted a training of trainers (TOT) for selected CRS staff, district staff and identified leaders. Visits to each of the targeted villages were conducted to create "a common ground for sharing and learning from each party about the sanitation situation in the community."<sup>31</sup>

A total of 85 villages in Bukwo were triggered with CLTS between November 2012 and March 2013. CRS's Integrated Water Resources Management (IWRM) project considers a household ODF if it complies with the following criteria used by the Ugandan government:

- All members of the household defecate in a latrine
- Children's/babies' feces are disposed of in a latrine
- Former open defecation areas are clean with no feces visible
- There are bylaws, rules or other mechanisms imposed by the community to prevent open defecation
- There is a monitoring mechanism by the community to achieve 100% household ownership of improved latrines
- Efforts are underway to upgrade existing latrines to improved latrines and popularizing other key behavior change towards total sanitation

CRS conducted ODF verification cycles in April and December 2013 and March and August 2014. As of July 2014, 58 villages had been declared ODF. ODF celebration ceremonies were conducted in late July and early August 2014.

### 1.3 Research Aims

The objective of this study was to evaluate the effectiveness of CLTS in achieving and sustaining household ODF status in Bukwo, Uganda. The specific aims were:

1. *To examine if CLTS is a culturally sensitive and respectful approach for hygiene and sanitation promotion in Bukwo, Uganda*

The assessment examined the constructive and adverse **consequences of the CLTS triggering process** on community perception of the approach. One of the key components of CLTS triggering relies on generating collective feelings of disgust and shame among communities. The study explored the unintended consequences that may undermine the success of the approach as well as the factors of CLTS that were perceived to be successful among communities.

2. *Understand the motivators and barriers to achieving ODF status among the households triggered by CRS CLTS programming*

This aim **examines the motivating factors and barriers to achieving ODF status following CLTS triggering** in the project area. In this study, ODF households were defined as those using a latrine or sharing a latrine with another household. These households were asked to identify common strategies and motivators for successfully achieving ODF as well as financial, social or other barriers that prevented them from stopping open defecation. Among households that never achieved ODF status, financial, social or other barriers and non-receptiveness to CLTS were assessed.

3. *Among households that attained ODF status, identify what motivates them to continue this practice. Among households that stopped open defecation post-CLTS triggering but have resumed the practice, explore reasons for barriers to latrine use.*

Lastly, this component aimed to assess **current practices among households that have achieved ODF status** to examine factors of long-term ODF status. This included households that are continuing to use a latrine or have reverted back to open defecation. Successful strategies and any anticipated challenges were identified among households that retained ODF status. Among households that have reverted back to unsafe defecation practices, financial, social or other barriers were assessed.

## **2. METHODOLOGY**

### **2.1 Introduction to Sampling Strategy**

This study employed a purposive sampling strategy to identify households for in-depth interviews. While quantitative data collection typically employs random sampling in order to understand population-level characteristics, qualitative data collection commonly uses different sampling approaches in order to capture information from pre-determined populations. This method is called purposive sampling and is typically conducted until saturation of information is reached. In this case, as the study is interested in households with certain criteria, probability sampling would have been time and resource consuming. This research is exploratory in nature and the aims of the study are to find if issues exist with the CLTS approach, which makes non-probability sampling a practical and cost-effective solution. In other words, a “biased” sample can actually be beneficial in this particular study as there are few studies studying the effectiveness of CLTS, so if barriers, motivators or issues do not exist in this “biased” sample, they are unlikely to

exist in an “unbiased” sample. The objective of purposive sampling is “not to randomly select units from a population to create a sample with the intention of making generalizations from that sample to the population of interest.”<sup>32</sup> Despite these advantages, purposive sampling is also prone to interviewer/researcher bias, however this study had predetermined research aims as well as a theoretical framework, which help mitigate this bias.

## **2.2 Research Setting**

This assessment was conducted from June 9 – July 10 in 28 villages in the Bukwo District in the Eastern Region of Uganda. All villages participated in CRS CLTS programming between November 2012 and March 2013. The three predetermined categories for target households dictated the selection of villages. The following section will provide a more in-depth discussion of these categories and how they influenced village selection.

To maintain a varied sample, the villages comprised 11 different parishes and the three sub-counties in the Bukwo District. Of the 28 triggered villages, 18 were declared as ODF and 10 had never been declared ODF. At the time the study was conducted, the IWRM project had organized three verification cycles for triggered villages. The first cycle was in April 2013, the second in December 2013, the third in March 2014. A final cycle was planned for August 2014, after this survey was conducted. To maintain variation in the sample, villages were selected from all three verification cycles, with five declared ODF since April 2013, four since December 2013 and nine since March 2014.

## 2.2 Household selection

Households were purposively selected to ensure variation in participants and allow for comparisons in perception of CLTS and barriers and strategies to achieving ODF status. The following selection criteria was employed:

- (1) **Declared ODF and maintaining status.** These are the households that have been successfully triggered and continue to practice safe excreta disposal methods.
- (2) **Declared ODF but reverted back to unsafe practices.** These households were successfully triggered but can help identify barriers to latrine use after achieving ODF status.
- (3) **Never declared ODF following CLTS triggering.** These households were unsuccessfully triggered and can identify barriers and factors contributing to unreceptiveness of CLTS messages.

Two additional sub-criteria were also used in an effort to maintain a varied sample, which were mentioned in the prior section. Villages were selected from those close to town as well as those far from the town to assess contextual differences, specifically available resources and socio-economic status. Among those declared ODF, villages were selected across the three ODF verification cycles of the project to allow for the assessment of households that have continued latrine use for over or less than a year.

As no data was available for households that had reverted back to open defecation, these were selected through a community mapping activity with 11 CRS community mobilizers, who conduct monthly household follow-ups and have the necessary on-the-ground knowledge to identify reverted households. CRS household level data was used to select households declared

ODF and continuing to use or share a latrine and households never declared ODF. These purposively sampled categories were also used to minimize the potential selection bias among the community mobilizers, as they were predetermined and prevented the community mobilizers from selecting only households that were successful. The categories allowed for model households, as well as including households that never achieved open defecation status and households that reverted back to open defecation practices, i.e. households that may be deemed unsuccessful by community mobilizers.

## 2.2 Data Collection

This assessment was guided by the Integrated Behavioral Model for Water, Sanitation and Hygiene (IBM-WASH) framework of factors expected to influence behavior change in interventions related to WASH. The IBM-WASH model is comprised of three dimensions—Contextual Factors, Psychosocial Factors and Technology Factors—that operate on five levels (structural, community, household, individual and habitual) as seen in the table below.

**Table 1. Integrated Behavioral Model for WASH (IBM-WASH) Framework<sup>33</sup>**

Levels	Contextual Factors	Psychosocial Factors	Technology Factors
<b>Societal/ Structural</b>	Policy and regulations, climate and geography	Leadership/advocacy, cultural identity	Manufacturing, financing, and distribution of the product; current and past national policies and promotion of products
<b>Community</b>	Access to markets, access to resources, built and physical environment	Shared values, collective efficacy, social integration, stigma	Location, access, availability, individual vs. collective ownership/access, and maintenance of the product
<b>Interpersonal/ Household</b>	Roles and responsibilities, household structure, division of labor, available space	Injunctive norms, descriptive norms, aspirations, shame, nurture	Sharing of access to product, modeling/ demonstration of use of product

<b>Individual</b>	Wealth, age, education, gender, livelihood/employment	Self-efficacy, knowledge, disgust, perceived threat	Perceived cost, value, convenience, and other strengths and weaknesses of the product
<b>Habitual</b>	Favorable environment for habit formation, opportunity for/barriers to repetition of behavior	Existing water and sanitation habits, outcome expectations	Ease/Effectiveness of routine use of product

A qualitative method was adopted to evaluate the effectiveness of CLTS in achieving and sustaining household ODF status in CRS program areas in the Bukwo region. A qualitative assessment can be used to gain an understanding of the targeted communities' perceptions of the CLTS approach as well as their practices in achieving and sustaining ODF status. This qualitative evaluation was performed through a series of structured in-depth interviews (IDIs) with beneficiary households in the community. The IBM-WASH framework was used to organize the factors that determined latrine use and perception of CLTS as seen in Table 2 below.

**Table 2. IBM-WASH Framework applied to CLTS**

<b>Levels</b>	<b>Contextual Factors</b>	<b>Psychosocial Factors</b>	<b>Technology Factors</b>
<b>Societal/ Structural</b>	Rain and dry season and soil and their effects on defecation practices and latrine construction	Leadership/advocacy for latrine use	Ugandan government's Home Improvement Campaign, capacity for latrine construction
<b>Community</b>	Policies developed after CLTS	Community commitment to eliminate open defecation, role of local leaders, perceived stigma of open defecation	Latrine coverage in villages, perceived availability of latrines
<b>Interpersonal/ Household</b>	Division of labor related to disposal of feces, condition of latrine, latrine maintenance	Perception of shame during triggering, injunctive and descriptive norms for latrine use and construction and open defecation	Sharing and access to latrines, modeling/ demonstration of use of product

<b>Individual</b>	Wealth, age, education, gender, livelihoods/employment	Self-efficacy for latrine use, knowledge of sanitation and hygiene messages, perception of disgust, perceived threat related to open defecation in the home	Perceived cost, value, convenience, and other strengths and weaknesses of latrines
<b>Habitual</b>	Favorable environment for habit formation, opportunity for and barriers to consistent latrine use, future challenges	Existing water and sanitation habits, outcome expectations (expected outcome of consistent latrine use)	Ease and perceived effectiveness of routine use of latrine

A total of 67 in-depth interviews were conducted with head of households in the Bukwo District. The table below details the sampling for the IDIs among triggered households.

**Table 3. Sampling Table for CLTS in the Bukwo District<sup>1</sup>**

	<b>Maintained ODF status after being declared ODF</b>	<b>Reverted to open defecation after being declared ODF</b>	<b>Never declared ODF following CLTS Triggering</b>
<b>Research Aim 1: Whether CLTS is a culturally sensitive and respectful approach</b>	67 household interviews		
<b>Research Aim 2: Understand the motivators and barriers to achieving ODF status</b>	45 household interviews		22 household interviews
<b>Research Aim 3: Motivators for sustained ODF status</b>	26 household interviews	19 household interviews	N/A

**N=67 head of households**

<sup>1</sup> Note: The 45 households selected under Research Aim 2 (n=45) were broken down between those who maintained ODF status (n=26) and those who reverted (n=19), which add to 45 households.

IDI's can provide a range of detailed insight and perception of the triggering process, and individual attitudes and behaviors of program beneficiaries concerning latrine use, which can identify common barriers and strategies to achieving ODF status. As the study is examining specific features of CLTS and the achievement and maintenance of ODF status among households, questions were pre-determined and asked to all respondents. However, to maintain the conversational nature of the interview, questions were adjusted to individual respondents when necessary during the interview. The questionnaire was reviewed by CRS staff and Emory professor Matthew Freeman. Protocols were submitted to Emory University's Institutional Review Board and a waiver of review was obtained.

The community mapping activity to select households was preceded by a training with the community mobilizers to introduce them to the assessment, the sampling frame and the data collection tool. During the training, the community mobilizers, CRS community facilitator and the translator pilot-tested and adapted the tool to the Bukwo context to ensure adequate language and clarity in the translation as well as make any necessary edits in formatting and wording.

The researcher and translator interviewed all respondents. CRS community mobilizers directed the researcher and translator to the selected households, handled introductions and broadly described the assessment. All participants were informed of the objectives of the assessment and that their participation was voluntary. Interviews lasted between 15 and 45 minutes, depending on the household category. Sixty-four interviews were recorded, with the permission of participants and three participants declined to be recorded. Field notes and observations were also noted during interviews. All interviews were transcribed into a Word document and uploaded into the MAXQDA program. Data was then coded according to the IBM-WASH framework (see Table 1)

and the research aims. As the research aims were predetermined, a deductive approach was used to analyze these data.

### **3. FINDINGS**

The findings are grouped according to the research aims of the assessment, as these were identified prior to the collection of data. The IBM-WASH framework is used to report and interpret findings, as it encompasses factors at the individual level, structural and community level as well as addressing habitual use of latrines.

#### **3.1 Was CLTS Culturally Sensitive and Respectful?**

This section reports the constructive and adverse consequences of the CLTS triggering process on community perception of the approach. Unintended consequences that may undermine the success of the approach are also listed as well as the factors of CLTS that were perceived to be successful among communities. The uptake of CRS's sanitation messages is also examined.

In this assessment, the question of CLTS's cultural appropriateness and respectfulness was approached using several questions to evaluate these concepts. Participants were asked how they felt about the triggering activities and the facilitator conducting the activities. To measure the effectiveness of the sanitation and hygiene campaign held in tandem with CLTS, receptiveness of CRS's sanitation and hygiene messages was approached by asking respondents to recall the components of the messages they received. However, it is important to note that CRS's campaign coincided with the Ugandan government's Home Improvement Campaign and both campaigns promote the same messages. This makes it difficult to isolate the effect on knowledge levels attributable to each campaign. As a result, the assessment also sought to identify the person or persons who were perceived to be the most committed to achieving sanitary and hygienic practices

in each village in an effort to gauge CRS's presence in delivering messages.<sup>2</sup> All 67 households that participated in the study were asked about CLTS and the triggering process.

### *Triggering*

Less than half (31) of the 67 respondents reported attending the triggering activities, which included the walk of shame, the water presentation and the community meeting. The breakdown of attendance by household category is outlined in the table below.

**Table 4. Breakdown of households attending triggering activities**

	<b>Maintained ODF status after being declared ODF</b>	<b>Reverted to open defecation after being declared ODF</b>	<b>Never declared ODF following CLTS triggering</b>
<b>Attended Triggering</b>	18 households	8 households	5 households
<b>Did not attend triggering</b>	8 households	11 households	17 households
<b>Total</b>	26 households	19 households	22 households

**N=67 households**

Households that did not attend CLTS triggering reported that they heard of the activities from their neighbors (7) or received a visit from a local leader or CRS mobilizer (9) on the messages and policies regarding the construction of a latrine, a plate stand and a rubbish pit. A large number of respondents (15) reported neither attending nor hearing about triggering from their neighbor's or a CRS community mobilizer or local leader.

Among the households who attended the triggering (31), both the walk of shame and the water presentation were found to be motivating. Many respondents (22) cited the contamination of feces in water and food shown during the presentations as the activity that motivated them the most. One respondent stated,

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<sup>2</sup> Discussed in the "Motivators for Stopping Open Defecation" Section below.

*The food and glass of water presentation showed me feces moved everywhere around the food.*

When asked which activities they found most motivating, the water presentation was the most widely cited with respondents stating that they refused the dirty water and the activity showed them what water was safe for drinking. Another key message reported was the contamination of water sources, especially the river, by feces due to rainwater. One respondent mentioned that her vegetable plot was close to the river and expressed concern that water contaminated with feces would run into the plot,

*...water washes into the river and I didn't want to fetch veggies from contaminated areas.*

Several households (16) reported that the walk of shame was good. One respondent mentioned, “it [walk of shame] showed it was safer to use a latrine” while others stated,

*...the walk was good because people know from that time that it is bad to defecate outside.*

*The walk was good because it was helping people to avoid diseases because when you defecate everywhere it brings diseases.*

However, while the water presentation did not have any negative feedback, even respondents who reported the walk as being a “good” activity criticized the walk of shame. For example, respondents stated:

*...picking up feces in the compound is not good but [her family] liked the activity and it was motivating because [she] learned how to make a home clean and the teaching was good.*

*There was education during the walk, but they [CRS] didn't support households that could not afford to construct a latrine.*

Two respondents even elucidated the difference between accepting and agreeing, in the local context, with the activities taking place during the triggering.

Agreeing was explained as liking the activity, while accepting indicated the realization of the benefit of the activity and understanding that the facilitator was doing his/her job even though one may not have liked the particular activity. Many respondents (19) reported accepting the activities and the facilitator. However, a few of these respondents (4) also stated that they did not agree with the activities. One facilitator was seen removing dirty bedding from a home and telling people that this was not suitable for sleeping:

*The man came to our home and I saw that in another home the man saw dirty bedding and showed it to everyone and people commented that it should not be used for sleeping—I didn't like this activity but decided to keep clean bedding.*

The act of picking up and retrieving feces was the stated criticism of the walk of shame rather than the facilitator himself/herself. For example, one respondent stated, “I didn't like the work because it is not good to bring feces to a home.” Another mentioned that the feces were “wrongly placed and dumped where they weren't meant to be seen.” Only one participant stated they specifically didn't like the facilitator, as he was “showing people dirty things.” However, respondents acknowledged the difficulty of the work, with one stating,

*The facilitator was conducting hard work because he was teaching people things that should not happen.*

In fact, many households (29) reported that they appreciated and/or liked the facilitator and their work during the triggering. One respondent said,

*The facilitator was a good person because he brought a message on how people should keep their homes clean.*

However, the fact that the facilitator was not from the village was criticized by one respondent that asked why someone “came from far away to teach them something they could teach themselves.” A few respondents (2) also reported that their local leaders and communities did not like the walk

of shame. There was only one mention of witchcraft, with one respondent stating that her community thought:

*...people that were collecting feces during the walk were conducting witchcraft but I disagreed because I knew they were teaching people about good things.*

The table below outlines the positive and negative perceptions of the water presentation and walk of shame activities during triggering.

**Table 5. Perception of Triggering Activities**

TRIGGERING ACTIVITIES – Likes and Dislikes	
<b>Water Presentation</b>	
<b>Likes:</b> <ul style="list-style-type: none"> <li>• Difference between clean and dirty water</li> <li>• Feces can infect water</li> <li>• Shows cleanliness</li> </ul>	<b>Dislikes:</b> None
<b>Walk of Shame</b>	
<b>Likes:</b> <ul style="list-style-type: none"> <li>• Promotes health</li> <li>• Educational</li> <li>• Shows that defecation is bad</li> <li>• Showed unhealthy behavior and it prevents diseases</li> </ul>	<b>Dislikes:</b> <ul style="list-style-type: none"> <li>• Did not like people picking up feces</li> <li>• Feces placed in inappropriate places</li> <li>• Facilitator shows people dirty things</li> <li>• One facilitator removed bedding from home and displayed it to the community</li> <li>• Did not support households that could not afford a latrine</li> <li>• It was shaming</li> </ul>

**N=31**

Most participants (26) reported that following triggering their community decided that it was compulsory for everyone to build latrines. Thirteen respondents mentioned specifically receiving visits from CRS community mobilizers or local leaders. During the community-led meetings following triggering, most households (34) reported that communities decided to arrest any community member that did not construct a latrine. Some respondents (5) said that animals would be seized from households that practiced open defecation and sold to fund the construction of the latrine.

*Community members said if you don't have a latrine they will arrest you and while you're in prison, they will come take a goat or chicken and sell them and use that money to construct a latrine.*

*Community members said if they come to your family and you don't have a latrine, they sell your goat and use that money to make you a latrine.*

*Local leaders made policies that if you don't have a latrine they will get one of their animals taken.*

In one case, people not constructing latrines would be beaten. Another respondent said,

*Local leaders said that people who didn't have a latrine should be arrested and people from prison sent to come clean home.*

Neither the beatings nor the seizure of animals, however, was enforced, according to respondents. No respondent mentioned any arrest taking place. One respondent stated that households who did not construct latrines were lazy. Only a few respondents (4) suggested additional sensitization or warnings for households that failed to construct latrines. One respondent said,

*[Open defecation] is a bad and a negative practice and should be made unlawful if poor can receive help to construct them.*

### *Sanitation and hygiene knowledge*

The uptake of the sanitation and hygiene messages from the CLTS triggering was high, with many households demonstrating high knowledge levels and perceived threat of disease. However, as previously stated, CRS and the Ugandan government conducted similar campaigns so it is difficult to isolate the effect on knowledge levels attributable to each campaign. As a result, the following findings should be interpreted in that context.

One of the most commonly reported reasons (54 households out of 67 households) for practicing good hygiene and sanitation was the prevention or avoidance of diseases. More

specifically, some households (10) reported that good hygiene and sanitation practices reduce health expenses and decrease the incidence of disease in the family and the community. Other participants reported being able to live longer. Other reasons were more community-centered—having a clean home that is suitable for visitors and demonstrating self-respect. The table below lists the reasons mentioned by respondents to keep hygienic and sanitary practices.

**Table 6. Reasons mentioned for importance of sanitation and hygiene**

<b>SANITATION AND HYGIENE – Reasons for importance in the home and their frequency</b>
<ul style="list-style-type: none"> <li>• Preventing/avoiding diseases (54 times)</li> <li>• Maintaining health (10 times)</li> <li>• Keeping the home clean (5 times)</li> <li>• Keeping the environment healthy (1 time)</li> </ul>

**N=67 households**

CRS' hygiene and sanitation messages, which complements the government's Home Improvement Campaign, promotes the use of latrines, a shelter in good condition, plate stand, rubbish pit and hand washing facilities. The table below breaks down the frequency that respondents correctly stated each component they recalled from CRS's hygiene promotion campaign and follow up activities for CLTS.

**Table 7. Components of Sensitization Message**

<b>CRS SENSITIZATION MESSAGE – Components mentioned by households</b>
<ul style="list-style-type: none"> <li>• Latrine use (51 times)</li> <li>• Shelter in good condition (38 times)</li> <li>• Rubbish pit (32 times)</li> <li>• Plate stand (29 times)</li> <li>• Clean drinking water (10 times)</li> <li>• Keep the environment clean (3 times)</li> </ul>

**N=67 households**

The messages respondents reported remembering from CRS' hygiene promotion campaign were latrine use, a good shelter, plate stand and rubbish pit. Relatively few households mentioned clean drinking water as part of the sensitization package. Five households mentioned not receiving any sensitization, four of which were households that had never been declared ODF.

### **3.2 Motivators and barriers to achieving ODF Status**

This section identifies the motivating factors and barriers to achieving ODF status following CLTS triggering in the project area. The common strategies and motivators for successfully achieving ODF as well as financial, social or other barriers that prevented households from stopping open defecation are listed. Among households that never achieved ODF status, financial, social or other barriers and non-receptiveness to CLTS were assessed.

In this assessment, safe defecation practices were defined as sharing a latrine or owning a latrine and the motivating factors and barriers for each were evaluated in the survey. The question of motivating factors for sharing or owning a latrine was approached by asking participants to identify the reasons for sharing or using a latrine and what they like about each. To ascertain barriers, participants answered questions regarding the dislikes and difficulties of owning or sharing a latrine, frequency of use, as well as perceptions of children and babies' waste. Respondents that neither owned nor shared a latrine were asked to identify the positive and negative aspects of open defecation.

Unless otherwise stated, a total of 45 households that were at one point declared ODF are sampled in this section.

### *Motivators for stopping open defecation*

As previously stated, safe defecation practices entailed the use or sharing of a latrine. Among households in villages declared ODF, the main motivators for stopping open defecation cited by respondents (in order) included preventing diseases, avoiding defecation in the compound, keeping feces in one place, privacy, keeping flies away so food and water remain clean and maintaining hygiene. Other less cited reasons included avoiding shame and avoiding fear that you may have from going into the bush. The table below lists the motivators and their frequency as stated by households.

**Table 8. Motivators**

Motivators to begin using a latrine reported by households
<ul style="list-style-type: none"> <li>• Preventing diseases (16 households)</li> <li>• Avoiding defecation in the compound/home (12 households)</li> <li>• Keeping feces away/in one place (10 households)</li> <li>• Privacy (7 households)</li> <li>• Keeping flies away (7 households)</li> <li>• Maintaining hygiene (6 households)</li> <li>• Avoiding shame (4 households)</li> <li>• Do not have their own latrine (4 households)</li> <li>• Avoiding fear from the bush (2 households)</li> <li>• Avoiding conflicts with neighbors (2 households)</li> <li>• Controlling smell of defecation (1 household)</li> </ul>

**N=45 households**

Regarding the prevention of diseases, two participants stated that, “[a latrine] avoids defecating everywhere, which causes diseases.” Three households also specifically mentioned using a latrine to prevent cholera and diarrhea. In addition to avoiding the presence of feces in the home, a respondent stated using a latrine,

*...to avoid flies because when you use a latrine the flies don't come back and step on food.*

Four participants also indirectly addressed self-respect as an important reason why they constructed a latrine, and said, “You feel good because when the visitor comes, you don’t feel ashamed” and “A latrine is a sign of responsibility and respect.”

In addition to reporting common motivators, several respondents also expressed concerns regarding about the impact of open defecation on the health of other community members. This demonstrates not only a perception of individual risk, but also the risk or threat of disease to another community member. For example, one respondent stated that she began using a latrine so as to not leave feces in the bush that could be transported across the village through rain water and infect other community members. Another stated that other people might step on your feces if you use the bush. As one respondent put it,

*After the picking of feces, I started using the latrine. When I defecate in the bush and when it rains, the water pushes it to the river and then people use that water.*

Among all respondents (n=67), 58 reported women as being the family member that encouraged the construction of the latrine as well as the person in charge of teaching family members, including children and visitors, to use the latrine and the maintenance of the latrine.

Three respondents stated the following,

*I have a big role. I clean the latrine so everyone wants to go there and I teach the children.*

*My wife has a big role because she cooks, so she makes sure people go to the latrine and because she’s at home she teaches everyone how to use the latrine and teaches visitors.*

*I do big work; I told my husband we should have a latrine and influenced him to build a latrine.*

The presence of local leaders and CRS community mobilizers was another motivating factor in eliminating open defecation among households declared ODF at one point. Respondents

mentioned a strong presence of either or both the CRS mobilizers and local leaders. Half of respondents (23) reported local leaders as having the greatest commitment in improving sanitation in their village and 18 households cited CRS. Respondents said,

*CRS mobilizers have the greatest commitment because they want people to be clean and avoid diseases.*

*CRS mobilizer has the greatest commitment because these people come to our home and help us stop being people who practice open defecation.*

*Local leader has the greatest commitment because he is the one who is leading our community and he's also near to our people, versus bringing someone from far. Local leaders plan for a meeting and informs members.*

As previously stated in the triggering section, CRS mobilizers and local leaders were also key in delivering sanitation and hygiene messages to households that did not attend any triggering activities (9 households). It is, however, important to note that among those never declared ODF (n=22), only 7 reported receiving a visit from a local leader of CRS community mobilizer.

The perceived strengths and benefits of latrines were also motivating factors in either constructing or sharing a latrine. Some households (10) reported no difficulties and nothing they disliked about using a latrine. Among all respondents (n=67 households), the strengths of a latrine include its ability to prevent disease (21 households), keep feces away (12 households) and provide privacy (11 households). Latrines also keep a home and compound clean (4 households) as well as prevent flies from stepping on food or water (5 households). One respondent stated,

*I like that the latrine keeps flies away from the compound. I grow maize and vegetables around my compound so I want to keep feces away from it.*

The bush was also found to have snakes that could harm people, as well as a source of disease.

*Barriers to stopping open defecation*

As mentioned previously, safe defecation practices were defined as using or sharing a latrine. Among all respondents (n=67), a common barrier to latrines was their smell and the presence of feces around the pit (7 households). This prompted a few respondents (2) to practice open defecation in the bush instead. Another difficulty mentioned was the issue of non-family members using their latrines (10 households). These were believed to ruin their latrines or get them sick. In the same vein, another common weakness was a fear of contracting diseases if sick people used the latrine, either within the family or non-family members. One respondent stated,

*Non-members come and use [the latrine]. It has no door so there's a risk of spreading diseases because there are so many people using the latrine.*

Several respondents also stated preferring to use the bush when experiencing diarrhea or stomach problems. One respondent stated, “When I’m sick, it’s easier to go to the bush.”

Another advantage of open defecation was that unlike the latrine, the respondent did not have to wait until the latrine was unoccupied (4 households). Respondents also mentioned that they did not like encountering another person in the latrine (5 households). Several respondents also mentioned privacy as a benefit from using the bush or garden—as these can hide them. One respondent stated, “In the bush, you can come back with firewood and the bush helps hide you.”

The condition of the latrine was also a major driving factor in use and impacted an individual’s decision to use or share a latrine. A latrine in poor condition is less likely to be used as it does not offer privacy or protection because of a lack of walls or roof or is unusable due to the full pit. As one respondent stated,

*[the latrine has] no walls and a roof so going to the bush is just like going to the latrine.*

Another difficulty was the maintenance of walls during rainy seasons among all respondents (n=67). Interestingly, only respondents who had never been declared ODF (4 households) or had reverted back to open defecation practices (4 households) cited this as a difficulty. One said,

*The rain gets inside and the walls fall—there's not enough grass for roofing because the grass is far and then the rain causes the walls to fall.*

Another setback reported was the soil type—rocks make digging very difficult and tend to make pits shallow (3 households).

*My latrine broke and now we are digging a new pit but there's lots of rocks that make it hard to dig.*

One woman mentioned she received no assistance from the husband to do the digging and could not afford to hire anyone. Only one stated helping their neighbor in the construction. A few respondents (3) had latrines that were under construction—either no walls or missing roofs.

For households that share a latrine, the major problem cited was finding a person from another family already in the latrine. Several households stated that they had conflicts with the neighbors, when these refused to let them use their latrine (4 households). These latrines were locked and the households sharing were not given a key. One respondent stated she, “I fear the owner because I am not free to use [the latrine] anymore.” Another mentioned, “...sometimes I feel ashamed using [the latrine] for my neighbor.”

Other barriers cited by respondents that did not own or share a latrine was isolation (i.e. no neighbors), lack of materials and lack of available funds, which is closely tied to the primary provider's presence in the home. Three households mentioned the husband as spending the day away from home at the bar so their partners did not view the latrine as a priority. One respondent stated,

*My husband goes drinking and doesn't even leave us enough to fix the shelter and eat—his brothers provide for us.*

For households that practice open defecation in villages not declared ODF, a lack of resources (financial and/or material) or time to construct the latrine was the difficulty (10 households). For example, some reasons for not constructing latrines included having another construction project (often another home), they were only temporarily living in the home, and no one available to help construct the latrine. Lack of materials was also stated as a reason—grass (for roofing) was difficult to find and some were still looking for money. In addition, incomplete or collapsed latrines were unusable and drove residents to practice unsafe defecation.

On the issue of children, it widely varied as to whether it was appropriate and at what age they should begin using the latrine among all respondents (n=67). Numerous respondents (12 households) did not consider their waste as requiring disposal in the latrine and allowed children to practice open defecation in and around the home. This was across the three types of households. Most stated that children under the age of 3-5 years should defecate anywhere (11 households) and the mother is in charge of cleaning it up. Babies' waste was also not regarded as feces, with the water used to wash the clothing poured anywhere nearby (21 households). Only a few households mentioned using a child's potty. Children were reported to fear the hole and could not go alone, especially at night.

The table below summarizes the motivators and barriers to latrine construction and use among respondents.

**Table 9. Summary of Motivators and Barriers to Latrine Construction and Use**

<b>MOTIVATORS AND BARRIERS TO LATRINE CONSTRUCTION/SHARING AND USE</b>	
<b>Motivators</b>	<b>Strengths</b>
<ul style="list-style-type: none"> <li>• Preventing diseases</li> <li>• Avoiding defecation in the compound/home</li> <li>• Keeping feces away/in one place</li> <li>• Privacy</li> <li>• Keeping flies away</li> <li>• Maintaining hygiene</li> <li>• Presence of local leaders and CRS community mobilizers</li> </ul>	<ul style="list-style-type: none"> <li>• Prevents disease</li> <li>• Keeps feces away</li> <li>• Provides privacy</li> <li>• Keeps home and compound clean</li> <li>• Prevents flies from stepping on food and water</li> </ul>
<b>Barriers</b>	<b>Weaknesses</b>
<ul style="list-style-type: none"> <li>• Smell</li> <li>• Non family-members using the latrine</li> <li>• Structural: condition and maintenance of the latrine as well as soil type</li> <li>• Low use and low self-efficacy among children</li> <li>• If sharing, the locking or other means that renders the latrine unavailable/conflict with neighbor</li> <li>• Lack of resources (time, material and money)</li> </ul>	<ul style="list-style-type: none"> <li>• Wait time for latrine that is in-use</li> <li>• Presence of feces around the latrine</li> <li>• Finding the latrine occupied</li> </ul>

### *Latrine Usage*

The lack of latrines in crop fields and gardens greatly affected latrine usage among respondents. A large number (38 households) reported that they did not use latrines when they were out in the crop fields during planting and harvesting seasons. This time period was reported to be during May, June, July and October. Other reasons for non-use were when the respondent or their family members were not in the home and in areas where there was no latrine or while they were walking or traveling to a destination. Most households reported using the latrine throughout the day, with only a few respondents (3 households) mentioning not using it when it was dark out. The husbands were often the family members that used the latrine the least (27 households), as they are not home for most of day, either because they are working or are out drinking.

### 3.3 Sustaining ODF Status

This component assessed current motivators among households that have achieved and sustained ODF status as well as barriers among households that were declared ODF and reverted to open defecation. Successful strategies and any anticipated challenges are identified among households that retained ODF status. Among households that have reverted back to unsafe defecation practices, financial, social or other barriers were assessed. In total, 45 households were interviewed for this section, 26 of which continue to practice safe defecation and 19 households who have reverted to unsafe practices.

#### *Barriers for Households Reverting Back to Open Defecation*

Households that reverted back to open defecation (n=19) either had collapsed latrines or latrines in poor condition (8 households), were sharing a latrine that is no longer available to them (3 households), or had full pits (2 households). The poor conditions of latrines were due to the walls and roofs collapsing from rain and wind. Water seeping inside the latrines was also an issue as this deteriorated the structure as well. Many respondents pointed out their lack of good roofing as most used grass instead of iron sheets. Several respondents said,

*The roofing is not well. When it rains, water splashes inside and it rots the slab and rafters, which also affects the walls. Our latrine has a broken roof from two months ago.*

*During the rainy season water came in and collapsed the walls. We are currently digging the pit. It's taking long because the person we hired has lots of commitments.*

*There is a lack of grass for the roof. My wife cannot mud because when it rains, the walls fall down. I can't fix the latrine because my wife left and I have to take care of the children and graze the cattle.*

*I'm looking for food, so I don't have the time to construct a latrine. When I ask my husband, he doesn't respond and when I ask him, he stays silent.*

When asked what they like about not having a latrine, most respondents mentioned the poor condition of their latrines as the major factor prompting them to revert back to open defecation in the bush or the gardens (10 households). This was usually a lack of roofing, collapsed walls or poor ventilation.

A few households (3 households) mentioned conflicts with neighbors and finding the latrines they previously used locked, with two respondents saying,

*My neighbor's latrine is very far because by the time I reach it, I could have urinated and defecated already and the neighbor's latrine is locked most of the time.*

*If you are sharing, you fear that the owner will meet you there.*

One respondent stated that she was only temporarily renting, so she did not think it was necessary to improve the latrine. Another said that her husband does not support her and that, "He is drinking so he forgets everything."

#### *Difficulties, Strategies and Future Challenges for ODF Households*

Over half of respondents (14 households) stated no one in their family had any difficulty using the latrine. Only two households reported that small children had difficulty using the latrine due to fear of the hole. The strengths of the latrine were that it prevented diseases (10 households) and improved hygiene (4 households). One said,

*The latrine avoids diseases because when you use the latrine it avoids flies and is important because the flies will step on food, which will cause problems.*

The main concern expressed by households was the possibility of the latrine becoming full in the future (19 households). The only two solutions that were stated for this problem were the construction of another latrine or emptying the pit.

*The latrine will get full and I will have to construct another one or that it will collapse, so I will build a strong one.*

One respondent with a cement latrine expressed the following concern,

*Because the latrine is cemented I can't construct another one. I'll have to find way to remove waste, but removing waste requires money.*

The second challenge was the use of the latrine by non-family members. This had the potential to fill up the latrine quickly and spread diseases. One household also expressed a monetary concern related to use by non-family members:

*When people use [the latrine], it costs money to repair or build a new one.*

The strategies mentioned to prevent non-family members was to lock the latrine and/or fence the compound.

A third challenge was the maintenance and cleaning of the latrine (12 households). During the rainy season, the mud walls begin collapsing so it requires constant maintenance. Households reported constructing permanent or semi-permanent structures using cement and bricks and iron sheets for roofing. Households that had mud latrines reported routine maintenance of walls and roofing. The solutions for this were building trenches or other tactics to redirect water away from the latrine. As several respondents said,

*When you smear it and it rains you have to go back and redo the walls. When I find money I will put cement on.*

*Heavy rains cause the walls to fall and smearing because soil is soft here. I have to make sure the water has somewhere to go and then look for sand.*

*To avoid walls falling down, I will add another iron sheet to prevent rain and digging soil and then mudding again.*

*I will lock it throughout the year and make a trench to keep water away from the latrine.*

Respondents also stated that the smell of latrines was another challenge (4 households). To control the smell, several households (3) reported burning debris (grass and vines) around the latrine in an effort to neutralize the smell. Other households mentioned purchasing chemicals that reduced smell.

Lastly, similar to reverted households, self-efficacy among children was seen as a challenge (5 households) to habitual latrine use as they tend to fear the hole and did not defecate directly into the pit, which led to the presence of feces around the hole. The strategies suggested were to accompany children to the latrine or teach them how to use the latrine.

#### 4. DISCUSSION

There has been little research done on CLTS to assess the effectiveness and impact of this approach.<sup>34</sup> This assessment uses the IBM-WASH framework as a way to present the different factors and levels that dictate hygiene and sanitation practices as well as the perception of CLTS.

Table 4.1 presents a summary of the key findings.

**Table 10. Summary of Key Findings**

Summary of Key Findings			
Levels	Contextual Factors	Psychosocial Factors	Technological Factors
<b>Societal/Structural</b>	<ul style="list-style-type: none"> <li>Rain affects condition and maintenance of latrine as most are made using mud and grass roofing</li> <li>Soil is a barrier to latrine construction—rocks makes digging pits difficult</li> </ul>	<ul style="list-style-type: none"> <li>CRS has a strong presence in the advocacy for latrine use</li> </ul>	<ul style="list-style-type: none"> <li>Materials are sometimes unavailable (these include grass and iron sheets)</li> </ul>

<b>Community</b>	<ul style="list-style-type: none"> <li>• Policies developed after CLTS included arresting OD households or seizing animals</li> </ul>	<ul style="list-style-type: none"> <li>• Community has strong commitment to eliminate open defecation, local leaders</li> <li>• CRS community mobilizers play a key role</li> <li>• Stigma around open defecation present and concern for infecting others with diseases</li> <li>• Presentable home for visitors was a main motivator</li> <li>• Low attendance during triggering activities</li> </ul>	<ul style="list-style-type: none"> <li>• Low perceived availability of latrines among those sharing latrines—neighbor’s are often far if in a rural area</li> </ul>
<b>Interpersonal/ Household</b>	<ul style="list-style-type: none"> <li>• Women are responsible for teaching children how to use the latrine and latrine maintenance</li> </ul>	<ul style="list-style-type: none"> <li>• Perception of shame during triggering was mostly positive</li> <li>• Latrines should be used</li> <li>• Most participants reported using the bush during planting, weeding and harvesting seasons</li> </ul>	<ul style="list-style-type: none"> <li>• Latrines prevent diseases and keep homes clean as well as provide privacy</li> <li>• Weaknesses pertain to the durability of the structure</li> </ul>
<b>Individual</b>	<ul style="list-style-type: none"> <li>• Widows and women with absent primary providers often don’t have latrines</li> </ul>	<ul style="list-style-type: none"> <li>• Self-efficacy is a problem only in children</li> <li>• High degree of perceived threat to disease</li> <li>• High knowledge of sanitation/hygiene messages</li> <li>• Perception of disgust and fear was positive—with the water presentation received positively</li> <li>• The act of picking feces during the walk of shame was perceived as inappropriate</li> </ul>	<ul style="list-style-type: none"> <li>• Routine use prevents diseases and keeps families healthy</li> <li>• Smell can prompt people to use the bush and/or gardens instead</li> <li>• Some respondents reported having no time or anyone to help construct latrine, rather than lack of monetary resources</li> </ul>

<b>Habitual</b>	<ul style="list-style-type: none"> <li>• Latrine constructed using mud requires routine maintenance</li> <li>• Latrine will get full in the future and non-family members will ruin the latrine</li> <li>• Construction of another latrine is a concern</li> <li>• Finding a latrine occupied was a barrier in consistent use</li> </ul>	<ul style="list-style-type: none"> <li>• Latrine is used throughout the day and year, except during weeding, planting and harvesting seasons (some households are out in the fields where there are no available latrines)</li> <li>• Routine use will prevent diseases and keep home clean</li> </ul>	<ul style="list-style-type: none"> <li>• Durability is the only concern with routine use</li> <li>• Reverted households had collapsed or full latrines</li> <li>• Strategies include locking latrine and constructing permanent and semi-permanent latrines</li> </ul>
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### *Sanitation*

At the individual level, the majority of respondents were able to clearly state the linkage between a healthy life and sanitation and hygiene. Respondents demonstrated high levels of knowledge and receptiveness to the messages of CLTS and CRS's sanitation campaign. More specifically, many mentioned the lowered costs of healthcare as a result from healthier practices. This complements the findings of Plan's ODF sustainability study, which also found health to be the most commonly identified motivator.<sup>17</sup> A number of respondents, however, expressed difficulty in answering the survey question pertaining to sanitation<sup>3</sup>, especially when asked to elaborate on their reasoning. Few households mentioned safe drinking water as part of the sanitation message they received when answering the question regarding the purpose of the sensitization they received. However, it is difficult to determine whether this is a lack of receptiveness or uptake of CRS's sanitation package or whether these respondents do not consider safe drinking water as part of "sanitation and/or hygiene."

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<sup>3</sup> Part A. Question 1.: What do you think is the most important reason to improve hygiene and sanitation in your home? Why?

It is also important to note that CLTS and the sanitation campaign were conducted in tandem with the Ugandan government's Home Improvement Campaign. As a result, it is difficult to isolate the effect on knowledge levels attributable to each campaign. However, when asked to identify the person/persons perceived to be the most committed to eliminate open defecation in a community, many respondents mentioned the CRS community mobilizers and CRS trained local leaders. Nonetheless, as the two campaigns contained similar messages and the fact that respondents cited a strong presence of CRS trained community mobilizers and local leaders, it can be concluded that CRS played a strong role, although not measurable in this assessment, in delivering hygiene and sanitation messages and increasing knowledge levels.

CRS community mobilizers and local leaders were instrumental in delivering the sanitation and hygiene messages, as households that did not attend triggering were able to vocalize the linkage between health and sanitation and hygiene as well as the main messages of CRS's sensitization messages. Plan's sustainability study, which also found health to be the most common motivator, questioned whether this was a result from high receptiveness to messages or the benefits—real or perceived—of preventing diseases.<sup>17</sup> Many households that attended triggering and remained ODF referenced real benefits of latrine use, with one respondent stating that she couldn't "...remember when I've had diarrhea last because we have been so clean." A large number also mentioned reducing the amount of household income spent on treating diseases. On the other hand, households that did not attend triggering and did not have latrines were able to cite health as a main or important outcome of latrine use. It appears these households have digested CRS's hygiene and sanitation messages but have not yet perceived or experienced the linkage between this and a healthy and longer life. CRS community mobilizers and local leaders are in a

position to strengthen this connection through follow up and monitoring mechanisms already in place that can promote latrine construction as well as the perceived and real benefits of a latrine.

### *Triggering*

The IBM-WASH model uses fear, shame and disgust as psychosocial motivational factors. However shame operates at the household/interpersonal level compared to disgust and fear, which operate at the individual level. Shame requires the presence of community social norms that are broken or violated by an individual, but this individual is “punished” for violating the community-level social norms. Thus it operates more at an interpersonal level.

Preventing diseases is the major motivator in constructing latrines among respondents. “Fear” (noted as a perceived threat related to open defecation in Table 5) then has an influence on hygienic and sanitary practices. The threat of diseases and/or illness was often referenced in responses concerning latrine construction, in addition to the monetary costs incurred by having a disease or illness. This is encouraging considering the baseline survey for the IWRM found that 80% of illnesses in the district were a result of poor sanitary and hygienic conditions.<sup>35</sup> This is also interesting as Loevinsohn et al. suggested that other benefits such as privacy, security and a clean environment may prove to be more valued than prevention from disease.<sup>11</sup> Although these were mentioned by a large number of participants, disease prevention was the most commonly cited benefit of both latrines and hygienic and sanitary practices.

While none of the participants mentioned “disgust” specifically as a motivator for latrine construction, a significant number alluded to it when mentioning their desire to keep feces away from their compound and home. “Disgust” was also referenced among the respondents that criticized the walk of shame—many said the facilitator was doing dirty things and that feces should not be picked up. During the presentation, the glass of water containing feces was often referred

to as “dirty water.” Among the majority of those who attended triggering, both activities were found to be motivating. Those who did not like the activities, it was the walk of shame that was the source of discomfort and/or dislike. Although both activities were meant to elicit “disgust” in the participants, the water presentation was viewed more positively. This could be cultural, as many respondents mentioned that the facilitator was placing feces where it did not belong. However, it is important to note that regardless of the disapproval of the collection of feces, these respondents reported being motivated by the activity, as they understood the purpose.

The physical act of collecting feces was thus the cultural “infraction” committed during triggering, however it was seen as an unavoidable one given the nature of the activity rendering it culturally appropriate despite the disgust elicited by the activity. Being familiar with the purpose of the activity prior to it taking place could also improve attendance during the actual triggering activities. On the issue of cultural sensitivity, the cultural infraction noted was an instance in which the facilitator removed bedding from a home to show the community in an effort to emphasize clean bedding. This was perceived as excessive by the respondent, however she found the walk motivating despite this incident as she had attended the community meeting prior to triggering activity. This situation could also be avoided by emphasizing to facilitators that they should not go beyond collecting feces during the walk. Overall, the activities conducted during triggering were well received and understood by most of the communities and were as a result both culturally appropriate and sensitive.

The importance of pre-triggering mentioned in several articles of Venkataramanan et al.’s systematic review of CLTS further highlights the importance of activities preceding the triggering process. These could include mentioning the project and its purpose at events of high attendance, e.g. church or prayers, which would require rapport building with religious leaders. Canvassing in

communities may also be an investment that may be time-consuming, but can have an impact in increasing attendance at triggering events. In addition, care should be taken on how the facilitator is operationalizing the triggers, especially shame, during the walk of shame and the water presentation. This seems to support Brown's conclusion that shame and embarrassment are weak motivators.<sup>13</sup> Plan International's multi-country sustainability study also noted that shame, disgust and pride were "initial motivators" but their ability to motivate dropped as time progressed.<sup>17</sup> Shame, however, has a role to play, as it is pivotal in setting community norms and standards for sanitation and hygiene. But as previously mentioned, the threat of disease and maintaining health are the motivators that continue more strongly over time, while shame and disgust work well as an initial motivators.

Stigma around openly defecating was present at the community level—no one defended nor rationalized the act of open defecation itself. This is important given that it is the only trigger that operates at the community level. The motivating factor least referenced was "shame," with very few respondents stating that they constructed latrines to avoid shame. However, many respondents mentioned adequately housing visitors or self-respect as a main motivator in improving hygiene and sanitation as well as constructing a latrine. This could be seen as avoiding feeling shame from not having a suitable home for visitors. In terms of effectiveness, despite the fact that the shame and disgust triggers evoke negative reactions, they are shown to be beneficial if the participants understand the overall purpose and message, which highlights the importance of pre-triggering.

This also underscores, again, the important role of the CRS community mobilizers and local leaders in delivering messages and conducting follow-ups to keep households progressing up the sanitary ladder. These actions are two components that are the weakest in CLTS programming.

The EWB Canada study notes the potential of natural leaders to conduct follow up activities to “relieve the pressure on external actors.”<sup>20</sup> However findings from this study also suggest that the strong presence of local leaders and CRS community mobilizers in monitoring and follow up activities are key in motivating households to construct and maintain latrines and ultimately increase the sustainability of the project as local leaders assume the responsibility once CRS leaves the project area. In addition, local leaders already have established agency/influence within the community and can support natural leaders. Although the majority of respondents did not mention the fact that facilitators were not members of their community, a few questioned their presence during triggering. This is something that could be explored in the quantitative end of project survey. Chambers suggests cross-visits involving natural leaders or local leaders visiting nearby villages.<sup>24</sup>

Attending triggering activities and meetings does not seem to necessarily be a precursor for constructing a latrine, as households with a latrine and without a latrine either did not attend or heard of the activities. This could be attributed to the sensitization methods used by CRS and the Ugandan government’s Home Improve Campaign, as these also played a role in constructing or sharing a latrine. Faris et al., found what seemed to be a correlation between latrine coverage and attendance at triggering, however it is likely that the delivery and uptake of sensitization messages also plays a role in increasing latrine coverage. However lack of attendance at meetings may also be a product of poor pre-triggering to notify individuals rather than the poor execution of the triggering itself. Given the large number of respondents that did not attend triggering, it is possible that community members need to be more informed or alerted to these meetings and presentations. More substantial pre-triggering should take place to familiarize community members with the activities. Communities may need to be “refreshed” on the objectives. This is similar to the

findings of Venkataramanan et al. that structured follow up activities are major motivators in eliminating open defecation. The criminalization of lack of a latrine as well as extreme bylaws (e.g. seizing animals) can instill fear and/or reticence among households with no latrines. Many respondents were hesitant and fearful to answer, as they believed the research team was there to enforce these bylaws and/or arrest them. This can also present major challenges during follow-up and monitoring, as community members who have not yet constructed or shared a latrine may be hesitant or fearful of those conducting the follow ups and monitoring.

### *Motivating Factors and Barriers to Achieving ODF Status*

Most households view latrines as both convenient and effective in keeping their home clean and preventing diseases. However, nearly every respondent stated they practiced open defecation during planting, weeding and harvesting seasons, as there were no latrines in the areas where people are farming. This is a period that lasts several months and can have negative effects on the environment and health of community members. Communities should then be trained on the “cat method<sup>4</sup>,” in cases where a latrine is unavailable. Participants also understood the expected outcome of consistent latrine use—most mentioned living a longer life and keeping their families healthy.

The households that mentioned a concern for infecting other community members demonstrated a high degree of shared values and concern for the community as a whole. However at the community level, many households also did not share communal responsibility for the households that did not have a latrine. Instead, most stated they were planning to lock latrines and fence compounds to prevent non-family members from using latrines. In addition, most

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<sup>4</sup> Individuals dig a small hole and then cover their feces while in the fields.

communities enacted policies to arrest these type of households. Although there are shared injunctive norms regarding the practice of open defecation, the idea of being responsible as a community is not apparent. In addition, many respondents stated that the ways to handle households practicing open defecation were to arrest them. This can have implications with the community's commitment to eliminate open defecation. Respondents want to succeed as a community, as these are the ones declared ODF, but place the accountability at the local leadership level. For CLTS to be truly successful, communities need to not only share hygienic and sanitary values but also share responsibility. Community members may benefit from being encouraged to aid neighbors or family members in digging latrine pits, rather than arresting them. This can complement the findings from the Dyalchand et al. qualitative study that found early adopters have the potential to play a key role in establishing collective norms and encouraging the non-adopting members of the community.<sup>16</sup>

Several of the households also stated a lack of resources or time as the main barrier to constructing a latrine. The resources mentioned were related to the availability of materials as much as cost. This differs slightly from the results of Plan International's sustainability study, which found financial constraint as the principal "de-motivator" to eliminating open defecation, which was also carried out in Uganda.<sup>17</sup> Some respondents mentioned not wanting to construct as they were only renting the home and others mentioned not having the agency to build their own, as they were only renters. The participants with monetary issues were either widowed or were in a situation where the primary provider was absent. Therefore it seems that the monetary costs of the latrine are a main barrier, but this is also tied to lack of time, materials or available manpower. This finding complements Plan's sustainability study, which identified lack of availability of land, materials and labor as additional barriers for households practicing open defecation. Cost and

availability of materials are closely linked, as the more quantity and diversity of materials that are available, the more likely it is to drive down costs. Neighbors can also buy materials in bulk together to drive material costs even lower. The possibility of communities gathering together to help neighbors dig pits or collect materials could help mitigate some of the issues associated with this particular barrier.

The major barrier among households sharing latrines was the unavailability of latrines they once shared, which often led to conflict with the neighbors. If these members are not part of the family, they have little agency to push for permission to use the latrine and may inadvertently create conflict. It should therefore be emphasized during community meetings following triggering that sharing a latrine should not be the end point and follow up activities may want to promote latrine construction among households sharing latrines with non-family members. As these circumstances led many to practice open defecation.

Self-efficacy is only an issue with children. In many instances, children and babies' waste was not disposed in the latrine. Water that was used to wash babies' soiled clothing was often dumped anywhere close to the home. This may suggest that many households did not consider children and babies' waste as "true waste" and therefore able to spread diseases and unsanitary.

### *Structural Issues*

Although the absence of open defecation is the indicator used to measure the success of CLTS, the most important should be uptake and continued latrine use. As Chambers points out, the measurement of success from CLTS is difficult to measure as the "actual scale is difficult to know and impossible to put sharp figures on."<sup>24</sup> He questions the reliability of using ODF status, a common indicator to measure success in CLTS, as the status may be exaggerated and inflated.<sup>24</sup> Eliminating open defecation should be a clearly marked step, however it should be complemented

with extensive follow up and promotion of continued long-term use of latrines and movement up the sanitation ladder.

It appears the main barrier for long-term latrine use among respondents was maintenance. As the majority of latrines are constructed with mud walls, the rainy season often causes these structures to collapse or wear down. The durability of the structure was often a cause of concern for many households. The majority of the reverted households failed to repair walls and roofing following heavy rains—which last for several months in the Bukwo District. Households practicing open defecation stated the poor condition of the latrine as the reason for doing so, rather than a rejection of the sanitation and hygiene messages. Successful households either had permanent or semi-permanent structures, good roofing and routine maintenance of the latrine. Availability of materials plays a key role in this and future programming could focus increasing access to appropriate and affordable materials for the construction of latrine slabs and superstructures. This could be done by working with local entrepreneurs or working groups to keep in line with CLTS's no-subsidy approach. Programming could link these groups with importers or higher quality soil that may not collapse as easily as the soil found in Bukwo. This would also be an opportune time to promote small keyholes in the latrines, as this highlights the need to make the latrine accessible to the whole family, including children.

### *Current Practices of ODF Households*

The biggest concern for the future was what to do when the latrine gets full—which can present a barrier in consistent use. The most common solution provided was constructing another latrine while few respondents mentioned removing the waste from their existing latrine. Constructing a new latrine however presents not only issues with available resources (both financial and structural), but also if there is limited space in the compound and/or it's a permanent

latrine. Some households who live closer to more populated areas may not have any room in the compound for another latrine. For permanent latrines, the investment is high and the cost of emptying a pit can be prohibitive for some households. This study did not look at existing government and local mechanisms and resources in place to sustain ODF status, however this is an area that should be explored as the follow up and monitoring will fall on local leaders and government health officials.

## **5. LIMITATIONS AND CHALLENGES**

As a qualitative study, the results from this assessment cannot be generalized and thus are not representative. The purposive method of sampling also leaves room for researcher bias. Creating the household criteria for selection beforehand attempted to mitigate the potential for bias. As mentioned previously, a biased sample is useful when trying to identify issues or problems in a study because if these are not present in a biased sample, they are unlikely to be present in a “non-biased” sample. These findings therefore should be interpreted in the context of the quantitative survey that will take place at the end of the project in September 2014.

Most households that admitted to open defecation were reticent at first and opened up during the end of the interview, when the researchers reinforced the confidentiality of the project. Several respondents mentioned being reticent to participate, as they believed the research team was there to arrest and/or enforce the community bylaws.

It is also important to note that several villages that have not been declared ODF currently have high sanitation coverage, but have not been selected for the ODF verification cycles. As no ODF celebrations had occurred before the questionnaire was created, the assessment did not look at the impact of celebrations and gifts on households. This is a key community and interpersonal

dynamic that should be explored. ODF celebrations have the potential to become “friendly competition” and become a “positive” trigger, rather than a “negative” one, like shame.

## 6. RECOMMENDATIONS

The following recommendations on how to improve the triggering process and sustained use of latrines are as following:

### *Triggering:*

- Pre-triggering activities at the local level can familiarize communities with the overall objectives. Activities can include rapport building, and canvassing among communities to increase awareness of triggering event and purpose. CRS can also conduct informational sessions at highly attended community events e.g. church or prayers or local festivities.
- Care should be taken on how operationalize the triggers of shame, disgust and fear, with more emphasis on fear of diseases and disgust/fear of consuming feces and contaminating food and water sources with feces (e.g. water and river presentations). During training, facilitators could be asked to develop a list of do’s and don’ts for the walk of shame, with guidance from trainers and CRS. Some examples of “do’s” and “don’ts” include,
  - Do **not** take anything other than feces from homes e.g. do not take bedding from a home to show the village
  - Do **not** encourage criminalization for lack of latrines
  - Do emphasize communal responsibility for open defecation
- Continue training high quality facilitators and conduct routine supervision visits during triggering/water presentations to ensure quality standards.
- Highlight the importance of disposing of children’s and babies’ waste in the latrine

- Encourage communities to develop bylaws that emphasize communal responsibility, rather than criminalization

*Sustained Latrine Use:*

- Increasing access to latrine materials through sanitation marketing, which can also be used to generate awareness about improved latrine designs that highlight durability. Or encourage and train local entrepreneurs to purchase high quality soil and other materials. Also, a future project can emphasize and provide refresher trainings on latrine maintenance, especially prior to the rainy seasons. Sanitation marketing can be harnessed to ensure latrine designs meet the needs of households and are resistant to the rains. These should include techniques for proper roofing and door placement.
- Encourage community groups or neighborhood groups to buy materials in bulk to reduce cost
- Encourage community members to help other members in vulnerable situations, especially widows or those where the primary provider is absent
- Develop strategies with local leaders and community members to redirect water away from latrines. These can include emphasizing proper roofing or the construction of troughs.
- Emphasize proper siting of latrine—away from wells, pipes or irrigation channels and not too far from the home
- Households should be encouraged to install some sign for displaying whether a latrine is occupied
- Promote use of soil and ash or other strategies to reduce smell
- Men should be encouraged to participate in maintenance and teaching other family members on how to use the latrine

- Encourage households sharing latrines with non-members to construct their own
- Develop a strategy for addressing full latrines and/or removing waste from the latrine, taking into account some households may be unable to construct another. One latrine design that could be helpful is the arborloo, which is easy to dig and can be moved regularly once a pit fills up.
- Integrate Water User Committees into the monitoring and follow up activities and conduct cross visits with other villages and/or parishes

## **7. CONCLUSION**

Overall, community perception of Community Led Total Sanitation was positive. Community members that were interviewed had high knowledge levels of CRS' sanitation message as well as making the linkage between a healthy life and hygienic and sanitary practices. Despite the criticism of the act of collecting feces during the walk of shame, the activities were well received and were executed in culturally appropriate and sensitive manner. Care should, however, be given on how to operationalize the triggers, with facilitators conducting activities that have an emphasis on fear and disgust—as preventing diseases was the major motivating factor to begin using latrines. Shame, however, should continue to be a factor, as it operates on a community level and is important in setting community level norms and standards for hygiene and sanitation.

Low attendance during triggering activities may be improved by conducting more pre-triggering activities to familiarize the community with the objectives of the intervention. Emphasis should be placed on the major motivators, which appear to be preventing diseases and keeping a clean home. Communities should also be encouraged to assist one another in digging pits as time and resources were cited as constraints to latrine construction. What happens once latrines get full

presents difficulties because constructing new latrines requires additional resources—material, monetary and spatial.

As a previously underserved community, the Bukwo District has responded positively to CRS's CLTS program. Community members are aware of the effectiveness and benefits of using latrines. CRS community mobilizers and local leaders have played key roles in motivating these communities to increase latrine coverage and utilization. Improving hygiene and sanitation is a process and as such requires steps before reaching total sanitation and the communities in Bukwo have made significant strides.

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## Appendix I: In-depth Interview Guide

Respondent ID \_\_\_\_\_

Date \_\_\_\_\_

### Community Led Total Sanitation (CLTS) In-Depth Interview Guide for Triggered Households

**INTERVIEWER, READ THE FOLLOWING TO EACH RESPONDENT:**

**My name is \_\_\_\_\_. I am conducting an interview on behalf of the non-profit organization Catholic Relief Services. The purpose of this interview is to examine the impact of Community Led Total Sanitation (CLTS). The information collected will be useful to CRS and their programs. Your participation will help us ensure that the information is as accurate as possible. The interview will last approximately 1 hour.**

**Your participation is voluntary and all the information provided will be confidential and our research team will be the only ones that will have access to any of the information you provide. Any identifying information will be destroyed. You do not have to answer anything you feel uncomfortable with and you may stop the interview at any time you wish.**

**Do you agree to participate in this interview?**

**Do you mind if I record the interview?**

**Do you have any questions?**

**Ok, let's get started.**

**TIME BEGAN \_\_ : \_\_ (24 HOUR TIME)**

<b>Audio recording code</b>			
<b>Date (MM/DD/YYYY)</b>		<b>Gender</b>	
<b>Location</b>	Village: Parish:		

<b>Interviewer</b>	
<b>Note Taker</b>	

**INTERVIEWER SAY: I will now ask you some information about yourself and your household. Again, all information will be confidential.**

<b>ATTITUDES TOWARDS CLTS</b>	
<b>Domains:</b> positive/negative consequences of CLTS triggering using shame/disgust specific to the household, comprehension of CLTS	
1.0: What do you think is the most important reason to improve hygiene and sanitation in your home? Why?	
Notes:	
1.1: What was the purpose of sensitization you received (Community Led Total Sanitation)?	
Notes:	
1.2: What were some of the activities during triggering that motivated you personally to use a latrine? Which did you find were not motivating? Why? (Probe: what did you feel about the glass of water presentation? The walk of shame? Why?)	
Notes:	
1.3: What did you feel about the facilitator conducting the activities and walk of shame?	
Notes:	
1.4: What kind of treatment did you experience from community members or local officials following the presentations and walk of shame? How did you feel?	
Notes:	

<b>SUCCESSFUL STRATEGIES/BARRIERS TO ACHIEVING ODF STATUS</b>	
<b>Domains:</b> Main motivators for stopping open defecation (OD), strategies and barriers for stopping OD	
1.0: Has a CRS community worker declared your household as Open Defecation Free (ODF) status? CIRCLE ONLY ONE	YES.....1 →CONTINUE TO SECTION A NO.....2 →GO TO SECTION B, QUESTION B.1
<b>SECTION A</b>	
A.1: What was the <b>most important</b> reason why you began using a latrine or sharing a latrine? What are some other reasons? What do you think about households that still practice Open Defecation?	
Notes:	
A.2: What were some steps you took to begin using a latrine or sharing a latrine? Did anyone support you? Who and how?	
Notes:	
A.3: What kind of commitment does your community have to achieve Open Defecation Free status? Who do you believe has the greatest commitment? Why? (Probe: What did your community decide to do after the presentation and walk of shame?)	
Notes:	
<b>SECTION B</b>	
B.1: How often do you use a latrine or share a latrine? (Probe: What are the times during the year when you do <b>NOT</b> use the latrine? What time during the day do you <b>NOT</b> use the latrine? What about when you are sick or experiencing diarrhea?)	
Notes:	
B.2: Who in your family uses the latrine the most? The least? (Probe: What are the times during the year that this person does <b>NOT</b> use the latrine? What time during the day does this person <b>NOT</b> use the latrine?)	

Notes:
B.3: What do you like about using a latrine? What do you like about <b>NOT</b> having to use a latrine or share one? What are some difficulties in using a latrine or sharing one?
B.4. What do you think about children using the latrine? Where should children defecate? What about babies' waste? (Probe: what if the children are sick or experiencing diarrhea?)
Notes:
B.6: What do you think was the level of women's participation in motivating the family to use a latrine? (Probe: Since women are in charge of the household maintenance, what is their accountability in eliminating feces from the home?)
Notes:

<b>Sustained ODF Status</b>	
<b>Domains:</b> Necessary environment to continue long-term use and construction, successful strategies/motivators for households that maintained ODF status, barriers for households that reverted to unsafe practices	
1.0: Do you <b>and</b> members of your household continue to use a latrine or share a latrine? CIRCLE ONLY ONE	YES.....1 → CONTINUE TO SECTION A NO.....2 → GO TO SECTION B
<b>SECTION A</b>	
A.1: What are some difficulties that you or a member of your household has in using a latrine or sharing a latrine? What are the things you like about <b>continuing</b> to use a latrine or share a latrine?	
Notes:	
A.2: What are the challenges to <b>maintaining</b> the latrine you use or share? What are some things that could help you avoid these challenges?	
Notes:	
A.3: What are some strategies you think are useful to maintain the latrine or share a latrine in the future? What problems do you think may happen in the future that you may have to resolve?	
Notes:	
<b>END. DO NOT CONTINUE. PLEASE THANK THE PARTICIPANT FOR HIS/HER TIME</b>	
<b>SECTION B</b>	
B.1: What difficulties did you have in using a latrine or sharing a latrine? Who in your family has difficulty in using the latrine/shared latrine? Why?	
Notes:	
B.2: What are the things you like about <b>NOT</b> continuing to use a latrine or share a latrine? What were the things you liked about using a latrine or sharing a latrine?	

Notes:

**END. DO NOT CONTINUE. PLEASE THANK THE PARTICIPANT  
FOR HIS/HER TIME**

TIME STOPPED \_\_ : \_\_ (24 HOUR TIME)