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Gender and Community-Led Total Sanitation: A Case Study of Ekiti State, Nigeria

Adenike Adeyeye, MEM 2011

Abstract
Community-led total sanitation (CLTS) has succeeded all over the world, yet it has struggled in Ekiti State, Nigeria. This report examines the role “gender mainstreaming” plays in the progress of Ekiti State CLTS projects. Interviews with CLTS facilitators, community leaders, and individual households indicate that WaterAid Nigeria focuses on equal representation of men and women within the Water and Sanitation Committees (WASCOMs) and as Volunteer Health Promoters (VHPs), two entities that implement CLTS. However, equal representation does not always translate to equal decision-making power. Without clearly delineated roles within the committees, the committees’ foci naturally turn to issues with which men are most familiar, as men are more vocal than women in public spaces. As a result, issues with which women are more familiar can be overlooked to the detriment of the entire community. This report suggests that CLTS facilitators present communities with the option of electing individuals to specific roles within the WASCOM, possibly in the form of sub-committees for different aspects of the program, to ensure that all relevant issues are addressed thoroughly. Sub-committees could create a space for women and men to influence decision-making equally.

Introduction
Community-led total sanitation (CLTS) appears to be the ultimate sanitation win-win. It costs next to nothing to implement, is designed to quickly become self-sustaining, and promises to eradicate open defecation and its attending public health and environmental hazards in remote villages. It is almost entirely community driven; no household level subsidies are given (Kar and Pasteur 2005). After external facilitators enter a community and run through participatory exercises to illustrate the dangers of open defecation, the community holds elections to select Volunteer Health Promoters (VHPs) and Water and Sanitation Committee (WASCOM) members. With over two billion people lacking adequate sanitation around the world, and time running out for developing nations to meet the 2015 United Nations targets for reductions in open defecation, nations around the world are adopting CLTS as a cost-efficient means to reach these targets. CLTS has spread from its birthplace in Bangladesh to Latin America, Africa, and other parts of Asia in little over a decade (UNDP 2006; Kar and Pasteur 2005). As a result of its widespread popularity and effectiveness, WaterAid Nigeria, an international not-for-profit organization, has implemented CLTS in rural Nigerian villages since 2004 (Robinson 2009).
Despite all the benefits, CLTS has faced criticism. Experts have stated that it fails to address gender equity and does not ensure that women and men participate equitably in CLTS implementation (Movik and Mehta 2010). In Nigeria, many regions have succeeded in reducing or eliminating open defecation, but many more still have struggled to implement the program successfully. This report explores the possibility that CLTS’s limited success in Ekiti State villages is linked to its gender mainstreaming strategy.

**Theoretical Literature**

**Gender mainstreaming**

Gender mainstreaming has been a popular concept in international development policy since the 1990s. It is a reaction to the realization that women often bear much of the responsibility for implementing development projects while lacking the authority to influence decision-making and to reap the full benefits of their work (Fonjong 2001). Gender mainstreaming attempts to completely change the process of development by including a consideration of gender concerns and gender equity at all stages: project design, implementation, and monitoring and evaluation (de Waal 2006). It also requires a radical rethinking of processes and policies from community-level implementation of a project all the way up to planning and visioning at the executive level. Gender mainstreaming can result in greater female participation in typically male-dominated development projects as well as greater collaboration between the genders when implementing development projects (de Waal 2006).

While gender mainstreaming has become very popular at the policy level, such an approach often meets resistance at the regional and local levels. Local NGO staff or government staff can view gender mainstreaming as something they have to implement in order to fulfill their responsibilities to donors. They will incorporate gender mainstreaming into their projects, but they may not see how the gender mainstreaming process benefits communities or understand the theory behind gender mainstreaming. In addition, gender mainstreaming can be viewed as a threat to men in the community because “gender” is often equated with “women” (Wendoh and Wallace 2005). Men may be concerned that gender mainstreaming benefits women at the expense of men. However, NGOs that successfully mainstream gender in their development projects engage communities in conversation about gender equity using terms and examples that are easily understood, rather than often-confusing gender mainstreaming theory. They translate the concepts behind gender mainstreaming and facilitate discussion that helps communities realize the benefits that gender equity can bring (Wendoh and Wallace 2005).


**Background**

CLTS begins with trained facilitators entering a community to “trigger” the community (see Figure 1). In Ekiti State, facilitators are local government or NGO staff. The facilitators employ participatory rural appraisal (PRA) methods to determine the status of sanitation coverage in the community. This includes going on transect walks with community members, observing all areas in which open defecation occurs, drawing sanitation maps that depict areas in which open defecation occurs, and calculating the amount of feces deposited on the land in a year. The goal of these exercises, according to the development practitioners who developed this program, is to evoke a sense of “disgust and shame” in the community (Kar and Pasteur 2005).

CLTS literature stresses that the project is to be as community-driven as possible. As the creator of CLTS says,

“The facilitator should never lecture or advise on sanitation habits, and should not provide external solutions in the first instance (for example with respect to models of latrine). The goal of the facilitator is purely to help community members see for themselves that open defecation causes ill health and unpleasant circumstances (Kar and Pasteur 2005).”

The approach is supposed to assist community members in assessing the status of sanitation in their communities. CLTS facilitators are tasked with walking the fine line between shaming people and illuminating certain behaviors as shameful. The community should infer from the data generated using PRA tools that current sanitation practices such as open defecation and infrequent hand washing can lead to illness and death. This realization should then inspire community members to take action to reach open defecation-free status; the impetus for behavioral change in the community should not come from the facilitators forcing the community to adopt CLTS.

Communities then devise action plans
to reach open defecation-free status without household level subsidies. In many cases, this means using local materials to construct latrines. WaterAid Nigeria works with the Local Government Authority to ensure community level subsidies in the form of funding for borehole construction in all CLTS communities, as WaterAid Nigeria holds that access to water is a necessary prerequisite to access to adequate sanitation. With sanitation but without access to water, communities struggle to create and use handwashing stations, which are necessary to reduce incidence of fecal-oral disease transmission. CLTS further prioritizes community-based leadership of the program through its reliance on WASCOMs and VHPs. WASCOM members are elected to help the community develop a sanitation action plan, while VHPs volunteer to provide support as households implement changes in sanitation and hygiene practices.

Research sites

Most of the research took place in Osogbotedo, a village in Ekiti State in southwestern Nigeria. Osogbotedo is a Yoruba community, home to approximately 55 households and 235 people. Its residents are migrants from nearby states who come to the village to farm, and consider the villages and states they came from to be their true homes. Many choose not to invest in constructing latrines in homes they view as temporary (WaterAid Nigeria 2009). Nearby streams and rainwater (during rainy season) are the primary sources of water in most rural villages in Ekiti State, and there is little knowledge about the ways in which water can be contaminated. For instance, [community members] will say ‘egbin omi l pani’ meaning the dirt of water does not kill” (WaterAid Nigeria 2009).

There were fewer visits to the other two research communities, Aba Audu and Ijesamodu. Aba Audu is an Ebira Muslim community, and, like Osogbotedo, the residents came to Ekiti State from a neighboring state to farm. Ijesamodu is a larger community, and, unlike Aba Audu and Osogbotedo, its residents have lived in Ekiti State for generations.

Despite the differences amongst these communities, gender roles are clearly prescribed and consistent across the three villages. Women
make goods such as palm oil or gari\(^2\), trade goods at the market, and work at home. Most men farm. Women sometimes assist with farming, but mainly during the harvest period, while men work on the farm more regularly (Flinn and Zuckerman 1981). Though men are the heads of household and are the public face of the family, women are actively involved in work outside the home as well, through trading.\(^3\) Gender mainstreaming in Ekiti State is important not only because women are responsible for much of the labor CLTS generates, but also because existing gender relations indicate that women can become more equal participants in CLTS decision-making processes.

### Methodology

Data were collected through semi-structured interviews and observations in the three villages, as well as through a questionnaire administered to households in Osogbotedo. Each of the three villages fell under the jurisdiction of a different Local Government Authority (LGA).\(^4\) At the LGA offices, I interviewed staff involved in the CLTS implementation process using semi-structured interviews.

In the three communities, I conducted a community meeting. In two communities, Aba Audu and Osogbotedo, the meeting was open to all community members. In Ijesamodu, the meeting was limited to WASCOM members, VHPs, and local leaders. In each community, I met with all WASCOM members as a group. In Aba Audu and Osogbotedo, semi-structured interviews were conducted with people holding leadership positions in the CLTS program at the community level, such as WASCOM members, VHPs, nurses at a community health clinic, and people selling sanitation materials. In Osogbotedo, I conducted structured interviews at 20 households. Every fifth household was surveyed in an attempt to randomize the sample. Household interviews were conducted with any adult over 18 years old living in the household. All interviews at the community level took place with the assistance of a translator. Staff at the WaterAid Nigeria national office in Abuja and in the Ekiti State office provided research support, access to prior evaluations of CLTS programs, and information about the WaterAid Nigeria approach toward achieving gender equity.

### Findings

Based on interview data from Osogbotedo, open defecation is a common sanitation practice. Of the twenty households interviewed, fourteen households (70%) had no access to a latrine while six households (30%) did. The fourteen households included over 87 of the approximately 235 residents of Osogbotedo. All households without a latrine reported that they practice open defecation.

### Sanitation-related labor

Understanding how labor is distributed within households is essential in crafting an appropriate gender mainstreaming strategy. Women's work centers around caring for children, cooking, cleaning the interior of the home, and fetching water, with children supporting women in household work.\(^5\) Interview responses indicated that CLTS has positively impacted women's labor, particularly in fetching water. Twelve of the 20 households reported that the construction of the boreholes as a result of the CLTS project had decreased the amount of time required to fetch water per day, and 16 of the 20 reported that since the construction of the boreholes, they have enjoyed more access to water.

CLTS had a less direct impact on men's work. Men are responsible for environmental sanitation, or ensuring that the community itself looks clean and orderly without overgrown bushes. In interviews, community members discussed cutting back brush, typically men's work, as an important part of the CLTS program and a way to safeguard public health, as brush surrounding the community provides habitat
Gender and Community-Led Total Sanitation in Nigeria

Gender and decision-making

CLTS facilitators are tasked with making sure that women and men are represented in nearly equal numbers amongst the CLTS leadership – the WASCOMs and VHPs. Osogborodo had a relatively even number of men and women on its WASCOM – nine men and six women. Membership in the WASCOM appeared to be fluid. Men who were not elected members of the WASCOM would attend WASCOM meetings. Though the Osogborodo WASCOM has 15 members, sixteen men and five women attended the WASCOM meeting that took place during the research period. During the meeting, none of the women spoke; men discussed road maintenance, reported challenges in constructing latrines to the LGA, the most recent LGA staff visit, and changes in water fetching and management as a result of...
the boreholes.

Though men dominate public life in Osogbogoro (and the other two research communities), households interviewed in Osogbogoro also noted the importance of women in water and hygiene-related labor. When asked who has more control over sanitation decisions in the household, men or women, 13 of 20 respondents (6 male, 7 female) said neither did, because men and women each have their own roles. One female respondent said women had more power than men because the men are always gone, while the women stay in the home. Six of 20 respondents (3 male, 3 female) reported that men had more power than women because they are responsible for giving orders.

Analysis

WaterAid Nigeria and its state and local partners clearly recognize the importance of women’s equitable involvement in water and sanitation programs. Reports from WaterAid Nigeria’s Ekiti State office include equity and inclusion as metrics for evaluating their work. In the 2009 third quarter report, the Ekiti State office listed two performance indicators that corresponded to their “equity, inclusion, and gender” objective. The indicators were: (1) “adequate representation of women and physically challenged persons in WASHCOM [sic] and VHP” and (2) “adequate representation of women and physically challenged persons’ in proposed [Water Management Committee]” (WaterAid Nigeria-Ekiti State). The Ekiti State program assesses gender equity through the number of men and women occupying leadership positions in CLTS (i.e. the number of male and female WASCOM members).

The focus on male and female representation in CLTS leadership positions is important. Encouraging gender balance can empower women, since their involvement in a project is necessary to fulfill the goals established by WaterAid Nigeria and the CLTS facilitators. The requirements can give women more power in the public sphere than they would have otherwise (Meinzen-Dick and Zwartveeen 2001). However, that power does not automatically translate to a meaningful involvement in the decision-making process, and these indicators can obscure the real power dynamics within leadership bodies.

Observations indicated that women do not have the same decision-making power as men, even if they hold the same leadership positions as men. In Osogbogoro, women and men serve as WASCOM members and VHPs, but more men than women attend the WASCOM meetings. Men were the only ones who spoke during the WASCOM meeting attended in July 2010. The meeting focused heavily on typically male activities, such as road construction, rather than typically female activities, such as water management and household hygiene and sanitation.

Reviewing WaterAid Nigeria project reports and interviewing LGA staff involved in CLTS facilitation produced few details about ways that WaterAid Nigeria and CLTS facilitators encourage gender equity. LGA staff reported that WaterAid Nigeria trained them on gender equity and told them to ensure as much as possible that women and men have equal rights. LGA staff, as mentioned above, recognize the importance of engaging women from the start of the CLTS “triggering” process. Yet interviews with LGA staff reiterate the findings from WaterAid Nigeria’s Ekiti State reports: the number of men and women involved in the project is the only indicator used to assess equitable engagement of men and women in CLTS projects.

Women and men have different roles and responsibilities within the visited communities, and this gendered division of labor could be used to allow women and men to participate equally and meaningfully in CLTS. The CLTS handbook notes the difference between male and female leadership: “Women natural
leaders tend to be less visible than their male counterparts in latrine construction but more active and responsible in their maintenance, establishing usage norms, and sustaining hygienic behavior change” (Kar and Chambers 2008). CLTS facilitators could encourage communities to clearly delineate responsibilities for the WASCOM and for VHPs, and to note which responsibilities are more in line with work that women usually do in the community and which are in line with typical men’s work in the community. As a result communities will have established, even before the committee members are elected, areas in which women’s experience suggests that women should lead and areas in which men’s experience suggests that men should lead. However, care should be taken to ensure that this system does not pigeonhole members of either gender. The gendered division of labor is dynamic, and this system could allow for that dynamism through community review of delineated responsibilities at predetermined intervals.

If communities create their own rules for WASCOMs and VHPs, there will be more community buy-in, as has been seen in Aba Audu. In Aba Audu, community members elected male and female WASCOM members and agreed to follow rules that the WASCOM set, so that even in a highly patriarchal society, all community members had to respect the authority of female WASCOM members because they speak for the entire WASCOM. A similar system of respect for the knowledge and power of both genders is needed within these leadership bodies in order to achieve gender equity. If communities establish clear responsibilities for WASCOMs and VHPs while keeping the gendered division of labor in mind, there will be space for women and men to take the lead in decision-making based on their experience with the issue at hand. This will result in the most qualified WASCOM members leading the decision-making process on a given issue, while allowing all WASCOM members to participate.

**Conclusion**

Ekiti State has much to gain from CLTS, but as of yet, the potential health and sanitation benefits have not been fully realized. CLTS is not succeeding in Ekiti, and this may be due to the fact that women and men do not have the same decision-making power, even when they hold the same leadership positions. In a generally patriarchal society, men speak for the community and take the lead in conducting business with people from outside of the community, such as LGA staff. LGA staff and other CLTS facilitators do ensure that women and men are represented in equal numbers in CLTS leadership positions, but this does not result in women and men having the same amount of power in these leadership bodies. CLTS facilitators do need to respect the rules and norms of the communities they visit, but there are ways to help foster a more equitable distribution of power without imposing external beliefs on communities, such as articulating individual WASCOM member and VHP roles so that all members have the opportunity to exhibit leadership and make decisions.

Clearly established responsibilities for WASCOM members and for VHPs will help create a much-needed space for women to influence decision-making. This could mean creating sub-committee roles within the WASCOM. For example, one member (likely a woman) would be head of the sub-committee on water management while another member (likely a man) would be head of the sub-committee on latrine construction. Through this system, the most knowledgeable members of the committee would lead the discussion and decision-making process at all times. This is an organizational strategy that facilitators can pose to community members during triggering. Community members can decide whether to adopt this strategy and can create and modify responsibilities to fit their needs.
Endnotes
1. An ethnic group in neighboring Kogi State.
2. Coarse flour made from cassava.
3. This is consistent with research on gender relations in Yorubaland, which has found that women in Yoruba society are traditionally very independent and engaged in trade (Guyer 1980, McIntosh 2009, Oluwoye 1990, Schiltz 1982, Van Staveren and Odebode 2007).
4. Each Nigerian state is divided into Local Government Areas that are governed by Local Government Authorities, similar to county governments in the United States.
5. Thirteen of the households combined had a population of 87. The fourteenth household reported that there were too many members of the household to count.
6. Nine of the 20 households interviewed in Osogboto indicated that children either helped with or were solely responsible for fetching water (a task for which women are normally responsible).
7. Physically challenged individuals are included because they are disproportionately affected when there is no access to latrines and are forced to walk long distances to defecate.

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References
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