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**TRANSFORMATION TOWARDS SUSTAINABLE
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**Effectiveness and sustainability of community-led
total sanitation in Yobe State, Nigeria**

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Since 2012, Action Against Hunger is working with local authorities in Yobe State, Northern Nigeria, to trigger 138 communities using the Community-Led Total Sanitation methodology. This approach aims to empower communities to realize the negative impacts of open defecation, and thus mobilize themselves to eliminate open defecation and improve sanitation with limited external intervention. In mid-2017, Action Against Hunger conducted a review of triggered communities to garner best practices and lessons learned for CLTS effectiveness and sustainability. The study found significant progress towards achieving open defecation free status among project villages. Communities demonstrated high commitment to constructing and maintaining latrines and sustaining behaviour change. Key lessons learned included: the need for gender-specific programming; the potential for improved training of local artisans and natural leaders to offer improved sanitation options; and the importance of consistent community follow-up and continued engagement with community and local leaders and stakeholders.

Humanitarian context

In Nigeria, diarrheal diseases are the third leading cause of mortality, accounting for over 75,000 deaths of children aged 1-59 months in 2015 (WHO, 2016). Access to improved sanitation in rural areas is limited. According to the WHO/UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation, rural areas in Nigeria had a 33.8% prevalence of open defecation in 2015 (WHO/UNICEF, n.d.). Open defecation is associated with high levels of diarrhoea, stunting, and mortality.

Yobe State in northeast Nigeria is currently in a stage of transition from emergency to development. The UN Office for the Coordination of Humanitarian Affairs (OCHA) estimated that recent and ongoing conflict had destroyed about 75% of WASH Infrastructure in the region (2016). According to the 2015 Millennium Development Goals Survey Report, only 25% of households in Yobe State were using improved sanitation facilities, below the national average of 29%.

Improving sanitation and eliminating open defecation is a national and state priority, codified both in the national Roadmap to Eliminate Open Defecation by 2025 (Federal Government of Nigeria & UNICEF, 2016) and the Yobe State Water Supply and Sanitation Policy (2010). To enhance these efforts to improve access to sanitation in Yobe State, Action Against Hunger began applying the Community-Led Total Sanitation (CLTS) approach in 2012.

Program overview

The objective of CLTS is to empower the community to realize the negative impacts of open defecation (OD) on health and well-being, and thus mobilize itself to eliminate OD and improve sanitation with limited external intervention.

This approach focuses on community-driven changes in sanitation behavior, rather than externally provided subsidies for latrine construction. The intent is to stimulate demand, foster innovation, and encourage community-based solutions and sustainability. The ultimate goal of CLTS is to achieve open defecation free (ODF) status in each community, thus improving health and nutritional status.

From 2012 to 2016, Action Against Hunger worked with the Rural Water Supply and Sanitation Agency (RUWASA) and local government area (LGA) WASH units to trigger 138 communities in four local government areas (LGAs): Bade, Damaturu, Fune, and Potiskum. The triggering events served to raise the communities' awareness of the dangers of open defecation, and stimulate latrine construction and behavior change.



Photograph 1. Triggering activity, Nangere LGA, Yobe State

Source: Maria Wrabel

Action Against Hunger and LGA teams also conducted monthly follow-up visits to assess community status, and identify gaps and any need for support. During triggering, one female and one male “natural leader” from each community were selected to facilitate monitoring and follow-up within each community. Natural leaders attended trainings every month to build their capacity to support CLTS.

By 2017, 46 villages had been certified ODF by RUWASA or the State Task Group on Sanitation (STGS), comprised of representatives from RUWASA, the Ministry of Water Resources, the Ministry of Environment, and civil society organizations. In 2015 and 2016, latrine ownership almost doubled in the project communities for which data was available.

Study objectives and methodology

The objective of this study was to assess the effectiveness and sustainability of the CLTS interventions in Yobe State by documenting achievements, challenges, and good practices. It sought to understand the extent to which the intervention was effective in bringing about behaviour change, as well as the strengths of and gaps in Action Against Hunger's CLTS process. This study explored sustainability from two perspectives: sustainability of ODF status after certification, and programmatic sustainability of CLTS activities, monitoring, and follow-up after the end of Action Against Hunger's funding cycle.

These questions were investigated using a mixed methods approach, including household questionnaires, focus group discussions (FGDs), and key informant interviews (KIIs). In June and July 2017, a team of enumerators visited 600 households in 40 communities – 20 officially certified as ODF, and 20 not certified ODF – to collect data on latrine construction and usage and defecation behaviours, and conduct an analysis of motivating, enabling, and constraining factors in efforts to build and use latrines. Fifteen households from each of the 40 communities were selected using a two-stage cluster randomized sampling approach.

Men and women from 22 communities participated in FGDs to explore communities' perceptions of open defecation, experience with CLTS, and motivations and barriers to achieving and sustaining ODF status. KIIs were also held with community, LGA, and state stakeholders, including traditional and natural leaders, representatives from STGS, RUWASA, and other non-governmental organizations working on CLTS, and Action Against Hunger WASH and monitoring and evaluation (M&E) staff.

Finally, to ascertain the sustainability of ODF practice after certification, enumerators visited the remaining 26 ODF-certified villages to conduct household latrine inspection and inquire about defecation

behaviours. This data was aggregated with the surveys collected from the other 20 ODF-certified villages to determine the extent to which communities sustained behaviour change after certification.

Key findings

Out of the 600 households surveyed, 549 households had their own latrine or shared a latrine at another household. Most households had simple pit latrines (85%; n=472). The JMP classifies pit latrines with slab and ventilated improved pit (VIP) latrines as “improved sanitation.” Using this definition, 15% of the households surveyed had access to improved facilities. The majority of latrines had lids (83.4%; n=457), a critical component to reduce odor and access by flies, cutting off this fecal-oral transmission route.

Latrines were assessed using Action Against Hunger’s CLTS verification checklist: 53.5% of latrines (n=321) fulfilled all criteria on the checklist, and only 20.5% of the observed latrines failed more than one criterion. Since CLTS focuses on the community rather than individual households, these results were aggregated to assess community status. Out of all 40 study communities, only one fulfilled all criteria on the checklist; however, 24 communities had fewer than 50% of households failing at least one criteria, showing low to moderate “open defecation.”

Having access to a latrine does not always translate into usage, and the primary focus of CLTS is to effect behaviour change in eliminating open defecation. Therefore, respondents were also asked about their household’s defecation behaviours. Only 9.8% of respondents (n=59) reported open defecation among adults or children at home, and 68.4% (n=410) reported no open defecation behaviours among any household members at home or away from home. At the community level, 60% of the communities surveyed did not report any open defecation behaviours among households while at home.

Table 1. Reported Open Defecation Behaviours

Practice	All (n=600)	ODF (n=300)	Non-ODF (n=300)	Difference in Proportions Test
Adults OD at home	50 (8.3%)	4 (1.3%)	46 (15.3%)	p < 0.0001*
Children OD at home	54 (9%)	7 (2.3%)	47 (15.6%)	p < 0.0001*
Adults OD away from home	110 (18.3%)	44 (7.3%)	66 (22%)	p < 0.0001*
Children OD away from home	165 (27.5%)	71 (23.7%)	94 (31.3%)	p = 0.0186*
Total number of HH reporting any OD	190 (31.6%)	81 (27%)	109 (36.3%)	p = 0.0072*

Household-level factor analyses identified health concerns, religious and cultural beliefs, and shame or embarrassment at open defecation as the primary motivations for constructing and continuing to use latrines. Focus groups triangulated these priorities, and also noted that privacy was a major concern. The main barrier to continued use of latrines was overwhelmingly that the latrines had either broken or collapsed, and households were unable to repair them. Households and focus groups also identified a lack of access to financing options and technical advice as key barriers to latrine construction.

The Nigerian National ODF Certification Protocol states that CLTS projects in Nigeria can aim towards one of two potential outcomes: ODF certification, and the achievement of total sanitation, which adds improvements in personal, domestic, and environmental hygiene to achievement of ODF certification. Action Against Hunger’s projects in Yobe currently focus on the first aim of achieving ODF, but follow-up visits to communities after triggering often involve hygiene promotion activities to address other avenues of faecal-oral transmission.

For example, though no baseline data was available for comparison, this study showed high ownership of handwashing materials. Over 80% of the household respondents (n=481) showed enumerators the soap or ash they used to wash their hands. Enumerators also noted handwashing containers at 84.9% (n=465) of the observed latrines. Encouragingly, 93.7% of respondents (n=562) identified the need to wash hands after defecation. Most positively, 100% of households with children under 2 years of age knew how to properly dispose of their children’s faeces. The study showed room for improvement in comprehensive knowledge of

handwashing behaviours: overall, only 8 respondents could successfully identify all five critical times for handwashing.

The final phase of the study aimed to verify the status of all ODF-certified project communities. Enumerators visited the remaining 26 ODF-certified communities that were not visited in the first phase to conduct latrine inspections at a random sample of households. The verification process revealed that 28% of all ODF communities remained ODF, while the remaining 72% showed signs of slippage. Throughout the years, a notable increase in success and ODF certification is observed, from 13% of the triggered communities in 2012 becoming certified to 68% in 2016, thanks to a combination of improved follow-up, continued facilitator trainings, and commitment and motivation of certification authorities. There is no clear relationship between the year in which a community was triggered and certified, and slippage to OD.

Reports of latrine usage and open defecation behaviors were promising: 535 households (89%) reported that adults used a latrine when at home. Overall, 23 out of 46 communities (50%) reported no open defecation among adults or children at home or away from home. This finding indicates that communities do sustain the behavior change incited by CLTS, but that they also face challenges in doing so: collapsing latrines, habit and tradition, and financial difficulties.

This study also documented best practices identified by stakeholders at every stage in the CLTS process. When identifying communities, Action Against Hunger and its LGA partners should plan to adjust the intervention strategy according to the size and spread of the community. During triggering, the community mapping exercise, “shit and water” demonstration, and medical expenses calculation were identified as the most effective tools. After triggering, constant and consistent follow-up was universally recommended as a best practice to overcome challenges early and facilitate behavior change. Finally, engagement after certification can maintain and reinforce positive behaviors and encourage continual improvement.

Recommendations

Through a series of workshops with Action Against Hunger staff and stakeholders, a number of recommendations have been agreed to learn and improve based the findings of the study.

Streamlining and augmenting monitoring and evaluation of CLTS projects could improve the evidence base for the program’s effectiveness and support advocacy efforts. This can be accomplished by moving towards electronic data collection and inclusion of impact indicators such as community diarrhoea and disease prevalence.

The current monthly engagements with communities after triggering are a positive practice. These can, however, be increased, and the interactions diversified to further sensitize community and religious leaders and build the capacity of local artisans and WASH committees.



Photograph 2. Creating a Community Action Plan, Nangere LGA, Yobe State



Photograph 3. Engaging with children, Nangere LGA, Yobe State

Action Against Hunger can also work with LGA facilitators to establish a follow-up plan with communities that do not achieve certification by the end of the project, and identify sources of funding to facilitate the certification celebration once Action Against Hunger’s funding ends.

A common recommendation echoed in the KIIs was the need to incorporate further gender-specific programming into the CLTS process as the negative ramifications of OD fall disproportionately on women. Action Against Hunger has already added a menstrual hygiene management and practice component in 2017. Opportunities to encourage women to participate in the community WASH committees and other mechanisms for empowerment should be explored.

Despite improved programming efforts, there may still exist cultural barriers that hinder communities' achievement of ODF. Action Against Hunger could conduct a formal barrier analysis to identify these issues and design options to overcome them.

To empower ODF communities to continue improving sanitation and maintain the behavioural changes undertaken during the CLTS progress, Action Against Hunger should work with LGA facilitators and other CSOs to develop a strategy for maintaining contact with communities after official certification. They can also encourage the construction and maintenance of public latrines to overcome the noted barrier of a lack of access to facilities when away from home.

In order to address the prevalent challenge of broken or collapsing latrines and to stimulate progress towards improved sanitation, Action Against Hunger in Yobe should facilitate opportunities for local artisans and community WASH committees to share knowledge and learn more about locally appropriate and affordable latrine options, and encourage households to move up the sanitation ladder.

Given that many households in these communities have limited income, the cost of building, maintaining, and upgrading latrines can be excessive. However, in ODF communities, a greater percentage of participants perceived the cost of latrines as “very affordable” or “somewhat affordable”: 44.5% compared to 35.7% in OD communities. This may be a result of variance in actual prices or different perceptions of the benefits gained from the costs. CLTS activities should therefore also aim to reduce the perception that building and maintaining latrines is unattainably expensive, and emphasize the costs saved as well as the intangible and tangible benefits of having and maintaining a latrine.

Finally, promoting CLTS sustainability requires engagement with policymakers at multiple levels. There already exists significant interest in CLTS at the state and national level. However, stakeholders identified a lack of sensitization and knowledge on the part of key policymakers as a barrier to securing funding allocations for CLTS at the state and LGA levels. In order to promote CLTS sustainability, Action Against Hunger should develop a comprehensive advocacy strategy to promote increased awareness of and sustainable funding for CLTS at all government levels.

This study overall revealed significant progress towards the achievement of open defecation free villages in the project areas. Communities demonstrated high levels of commitment towards constructing and maintaining latrines, and sustaining behaviour change. The study also identified several challenges that both individual households and communities face in achieving and maintaining ODF status. By improving its processes, collaborating with and learning from local communities, and engaging in advocacy, Action Against Hunger can better support these communities as they move to improve their sanitation status, and thus their quality of life.

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