

A Rapid Study on Sanitation in Garissa County, Kenya

September 2018

Background:

Community Led Total Sanitation (CLTS) is the method adopted by the Kenyan Government for expanding sanitation coverage. CARE Kenya – within the Kenya RAPID program – has been assigned 65 villages outside of Garissa town, to support the implementation of the CLTS method, and ultimately support the achievement of Open Defecation Free (ODF) villages. CARE essentially allocates the per diem and transport of local County Public Health Officers (CPHOs), who are responsible for carrying out the CLTS method in the community: pre-triggering, triggering and (some) post-triggering follow-up. To date CARE has supported the triggering of six villages, and “re-energizing” five villages and none have made significant progress toward full sanitation coverage. In the 582 villages where UNICEF is supporting CLTS rollout, 27 have been certified ODF and another 130 are nearly there (claimed or verified). In Sept 2018, CARE conducted a study on CLTS and sanitation to understand barriers to latrine construction and delays in ODF achievement.

Objective:

To understand barriers and opportunities for increasing sanitation coverage among pastoral populations in Garissa County – specifically in the rural and peri-urban areas where CARE is working.

Methods:

There were three data collection methods as part of this study: a literature review, key informant interviews, and semi-structured interviews at the household level.

1. Literature Review

CARE conducted a literature review on sanitation practices, traditions, taboos, barriers and opportunities within pastoral communities. Also included in the review was a look at studies specifically on CLTS – why and when it fails, and specifically CLTS in pastoral populations.

2. Key Informant Interviews

Key informant interviews were held with stakeholders from UNICEF, from the County Public Health Office and the Sanitation Hub in Garissa. Interviews included questions on the current strategy for sanitation in the County: who is involved and what are the expectations for their role (for Community Health Volunteers and Public Health Officers for example). The interview also asked about best practices and how CARE could better support the implementation of the sanitation strategy.

3. Semi-structured Interviews

Three villages were selected from CARE’s allocated villages and two were selected from UNICEF’s allocated villages. The three were selected purposively to represent different “phases” of CLTS implementation – triggering with limited progress, triggering with some progress and no recent triggering. The two UNICEF villages were chosen by the Sanitation Hub as “Centres of Excellence” where progress post-triggering follow-up has been significant.

Three enumerators, trained in the objective of the study, the interview tool, qualitative methods and in ethics of conducting research and interviews, were fluent in English, KiSwahili and Somali. Upon arriving in a village and seeking permission from the community leader, enumerators went in three different directions and selected the first household at random. A consent form was read to the participant and oral consent was sought for participation – noting that we were not recording names and all comments would be anonymous. After finishing the interview the enumerator walked past five houses before seeking an individual for the next survey.

Development of the semi-structured interview tool was informed by findings from the literature review regarding motivators of latrine use, dislikes and likes of latrines, current sanitation practices, and opinions and changes since CLTS. The tool was a mix of close-ended (yes or no) questions, and open-ended questions that asked “why” and for people to explain their thoughts further. The interview tool was designed to take less than 60 minutes per person.

Results:

1. Literature Review:

Thirty studies were included in the literature review. There was one study included that includes pastoral areas of Kenya. Generally, most studies conducted in pastoral populations were conducted in Niger, Nigeria, Ethiopia, Cameroon, Uganda and Mali – though there were lessons learned from multiple other (non-pastoral-specific) contexts including Bangladesh, Ghana, Kenya and multiple Asia and Pacific countries.

Below are a selection of major themes from the literature review. People reported lacking tools, resources and knowledge for building latrines. People reported disliking using latrines for a number of reasons including fear of snakes, bad smells and not wanting to share a latrine with certain family members.

Table 1. General findings from literature review on CLTS in pastoral areas 2018

Category	Findings from pastoral areas
Lack of tools & knowledge	<ul style="list-style-type: none"> • no tools for digging latrine pits • limited knowledge of how to construct latrines • no local supply chain for sanitation materials • limited knowledge on technical options for latrines • local building materials, structures do not last
Latrine attitudes	<ul style="list-style-type: none"> • latrines attract snakes / other animals • multiple latrines needed for same family (e.g. gender separation) • people don't want to defecate in a "little house" • people don't want to be seen entering a latrine • latrine use can shorten lifespan / health hazards • poor construction: unsafe; not suitable for those with reduced mobility • no light / no ventilation • no need: bush gives privacy; OD is traditional practice

Motivators

Motivators of latrines within pastoral populations include privacy, pride, convenience, health of family, saving money on health costs and elevating dignity. Hygiene messages on disease and death within pastoral populations are often less effective than messages focusing on cleanliness.

CLTS methods

There were a number of lessons learned from what not to do in pastoral populations, and what needs to be tried. Below are some suggestions from the literature.

- More in-depth pre-triggering activities necessary to better understand community
 - In areas with pastoral and sedentary populations defining “the community” was often challenging
 - Involvement of community leaders and local health workers from the beginning of the process
- Good facilitation / use of “shock” instead of “shame” in triggering
- Use of “early adopters” to accompany triggering / triggering done during certain seasons when income is higher
- Formal agreement on frequency and responsibility-bearer for monitoring and follow-up
- Alternative designs for areas prone to flooding or with sandy soils

The literature proposed a few solutions for piloting in pastoral areas to improve uptake and sustainability of CLTS.

- One study introduced inexpensive, innovative tools to allow high school students from pastoral areas to perform scientific sanitation and hygiene related investigations and "inspire them to think creatively and innovatively about how they could solve problems using limited resources in their own context"
- Another paper proposed the need for micro-finance options for sanitation and hygiene items in pastoral communities, including integrating mobile phone payment options
- A few papers discussed piloting sanitation marketing or “smart subsidies” in pastoral areas (but had not tried these)

2. Key Informant Interviews

We interviewed the head of the Garissa County Public Health office, the UNICEF WASH Advisor, Garissa County and the Garissa County Sanitation Hub Coordinator.

The Garissa government was grateful to CARE for support during the flood response, such as with water quality interventions and radio messaging. The government was also grateful for CARE’s support in training facilitators to enable greater human resources at the County level for receiving training in CLTS. There were some suggestions from interviewees on how CARE could better work in allocated areas on CLTS: moving villages “faster” through all stages of CLTS; *better* engagement with the Sanitation Hub and paying the government CLTS facilitators on time.

3. Semi-structured Interviews

Three enumerators conducted 47 interviews across 5 villages in 5 days. The table below outlines the number of interviews per village and the breakdown by gender. The organization in parentheses identifies who financially and logistically is supporting government-led CLTS activities in that village.

Table 2. Summary of Semi-structured interviews conducted outside Garissa, Kenya, September 2018

Village	Setting	Women	Men	Total
Baraki (CARE)	Rural	5	4	9
Kongowea (CARE)	Rural	9	2	11
Raya (CARE)	Peri-urban	6	6	12
Medina (UNICEF)	Urban	6	3	9
Makaa (UNICEF)	Peri-urban	4	2	6
TOTAL		30	17	47

Baraki is a remote, rural village just under three hours outside of Garissa town. The majority of people are reported to migrate during part of the year, (almost all houses own livestock), and “most” households built latrines after triggering, but they fell in the April 2018 rains and have not been re-built.

Kongowea is also a remote village over two hours from Garissa town. Many inhabitants (mainly men) were not in the village, as they were at their gardens on the riverside. This is a “sedentary” village where few owned livestock and do not migrate regularly. The two men interviewed were the community leaders – and they did not complete the whole survey – but they were only asked specific questions about CLTS triggering and community norms.

Raya is a semi-rural village, less than an hour from Garissa town. Latrine coverage in Raya was high and there was some evidence that CLTS or another sanitation intervention had previously been done here (though not with CARE support).

Medina and Makaa were both UNICEF-supported villages with high rates of latrine uptake and Community Health Volunteer (CHV) presence. Both of these villages were within 10-20 minutes of Garissa town.

Reported sanitation practices

The interview guide asked people where they currently defecate, where females, males and adolescent girls defecate and what is done before or after defecation. The table below reflects the most common answers in each village. Additional answers included “nothing” before or after, saying a prayer before defecation, entering the latrine with the left foot, or burying feces

(after defecation). According to reported behavior, there was no difference in defecation practice between men, women or adolescent girls. If the respondent used a latrine, everyone used a latrine.

Table 3. Reported sanitation practices in select villages outside Garissa, Kenya, September 2018

Village	Current place of defecation	What is done before defecation?	What is done after defecation?
Baraki	<ul style="list-style-type: none"> Majority use nearby bush 	Majority reported: "Take water"	Majority reported handwashing
Kongowea	<ul style="list-style-type: none"> Majority use nearby bush Some use neighbor's latrine 	Majority reported: "Take water"	Majority reported handwashing
Raya	<ul style="list-style-type: none"> Majority use HH latrine Some use neighbor's latrine 	Majority reported: "Take water"	Majority reported handwashing with soap
Medina	<ul style="list-style-type: none"> Majority use HH latrine 	Majority reported: "Take water"	Majority reported handwashing with soap
Makaa	<ul style="list-style-type: none"> Majority use HH latrine 	Majority reported: "Take water"	Majority reported handwashing with soap

Opinions on latrines

Everyone interviewed, whether they had a latrine or not, were asked what they liked or disliked about latrines people did not have to decide between liking or disliking a latrine. Respondents were able to describe what they did like about latrines and what they did not like. 54% said they liked latrines and had no issues with them. 46% reported things they liked about latrines, but also reported items they disliked.

What people dislike about latrines:

- 27% reported "bad smell"
- 18% reported "small space"
- 16% reported "fills fast"
- 12% reported mosquitoes, scorpions or snakes

This was an open-ended question so people could name multiple dislikes (which is why the sum total percentage is higher than 46). Respondents were also asked what they like about latrines.

- 81% of respondents mentioned privacy as something they liked about latrines
- 22% of respondents mentioned "safer than the bush" or "close to home" as reasons they like latrines

The interview guide included questions on the CLTS methods, who has been involved in the process and what their role is. There are questions regarding follow-up: how often, who was involved, what was done. If follow-up was not done (according to the respondent), they were asked about frequency and methods of what *should* be included in follow-up. Raya was not asked about CLTS because they were not triggered recently. In Raya we discovered that this village was likely to have been triggered a few years back – however they were not asked the questions in the CLTS section of the interview guide so our sample size for the below statistics is reduced to 35.

- 38% reported that CLTS approaches were fine
- 35% had no opinion
- 27% just reported what was done (taught about handwashing, health)
- 100% reported that the CLTS facilitator was friendly and approachable

The CLTS section of the interview guide included questions on the participation of the respondent in the CLTS triggering event, what they remember, if there have been follow-ups since triggering and what changes they have made in their household or seen in their neighbors since CLTS. The table below outlines some of the major findings from the five villages.

Village	Latrine status	Memories of CLTS	CLTS follow-up	Change since CLTS in HH?	Change since CLTS in neighbors?
Baraki (rural)	55% built latrines after CLTS, but they fell in April rains and have not been re-built 45% (now 100%) use bush	Good facilitation <ul style="list-style-type: none"> • HWWS • Latrine specs (size of hole, how to build) • How and why to keep compound clean 	11% report follow-up "there needs to be more follow-up to boost morale and motivate changes".	100% report "YES" they have made changes since CLTS Examples: <ul style="list-style-type: none"> • Bury feces with soil • More handwashing • How to use a latrine 	100% report "YES" they have seen changes in their neighbors Examples: <ul style="list-style-type: none"> • Built latrines but fell in rain • Dug rubbish pits • More hand and compound hygiene
Kongowea (rural)	33% have 33% constructing 33% no latrine	Good facilitation <ul style="list-style-type: none"> • HWWS • Latrine specs (size of hole, how to build) • Importance of latrine use • Importance of health 	60% report follow-up	90% report "YES" they have made changes since CLTS <ul style="list-style-type: none"> • Bury feces • Improved personal hygiene • Latrine built • Purify water • Clean compound 	90% report "YES" they have seen changes in their neighbors <ul style="list-style-type: none"> • Some were able to build latrines • Dug rubbish pits • Clean compound
Raya (semi-rural)	83% functional latrine <i>(previously triggered)</i>		<i>(not asked)</i>	<i>(not asked)</i>	<i>(not asked)</i>
Medina (urban)	83% functional latrine	Active female CHV; good facilitation <ul style="list-style-type: none"> • HWWS • Latrine specs (size of hole, how to build) 	86% report follow-up	100% report "YES" they have made changes since CLTS <ul style="list-style-type: none"> • HWWS / technique • Latrine built • Dispose of child feces in latrine • Clean latrine daily 	100% report "YES" they have seen changes in their neighbors <ul style="list-style-type: none"> • Built latrines • HHWT • Clean compound
Makaa (peri-urban)	78% functional latrine	Male CHV, good facilitation <ul style="list-style-type: none"> • HWWS • Latrine specs • Importance of hygiene 	17% report follow-up 33% report no follow-up 17% did not participate in CLTS 33% not heard of CLTS	50% report "YES" they have made changes since CLTS <ul style="list-style-type: none"> • Latrine built • Clean compound • Dispose of child feces in latrine 	60% report "YES" they have seen changes in their neighbors <ul style="list-style-type: none"> • Most have built a latrine • Dug rubbish pits • Boil water

Follow-up

As part of the CLTS section respondents were asked about whether or not there as been follow-up: Yes or No. Respondents were asked additional details including what was done and who performed it. Below is shown the quantitative data on the question of follow-up, compared to latrine status.

Been Follow-Up	Functional Latrine	Non functional or No Latrine	Total
Yes	8	6	14
No	3	8	11
TOTAL	11	14	25

The above table shows that there is a pattern: that those villages with reported follow-up have a higher number of functional latrines. Those without follow-ups also have the highest number of non-functional / or no latrines. Because one of the “boxes” within the table only has 3 observations it is not recommended to do a test of *significance*. Our small sample size does not allow us to draw reliable conclusions about the relationship between follow-up and latrine functionality.

Follow-up was performed by CHVs, PHOs or community leaders such as the village chief. In cases where it was not done, respondents generally reported that follow-up should be done quarterly or every two months by community leaders and CHVs to motivate people to build latrines and remind them of the importance of using a latrine.

Challenges building a latrine

Respondents with and without latrines answered the question about challenges regarding latrine building. For all respondents “too costly” and “lack of natural materials” were the top challenges. Other items reported include no tools for construction, limited access to markets, and no knowledge on how to build a good latrine. Sample size was too small to draw any conclusions about challenges building latrines and latrine status (functional, non-functional, no latrine). We separately asked about challenges maintaining a latrine and we received similar answers as those given for building latrines. 100% of respondents said they were fine with sharing the latrine with other family members (not needing multiple latrines as was expressed in some communities according to the literature review).

Latrine decision-making and latrine coverage

Across the five villages, 51% of respondents had functional latrines and 27% had no latrine. For this analysis we defined a non-functional latrine as one that is under construction, is full, is not in use, or was built and fell over. We did this because we did not want to just have information on the presence or absence of a latrine – but recognize the effort of a household building a latrine at some point – since this study was about latrine adoption through CLTS.

- Functional latrines: 51% (23/45)
- Non-functional* latrines: 22% (10/45)
- No latrine: 27% (12/45)

In the table below we present data side by side on the gender of the interview respondent, who they report as “making decisions about the household having a latrine” and the current status of their household latrine. Although our sample size

is limited, the data shows that when a man reports that both he and his wife make decisions about their household latrine (potentially an indicator of better gender relations generally in the household), they are more likely to have a functional latrine. *As with other findings we cannot draw conclusions, only make limited observations due to our limited sample size.*

Gender of respondent	Who makes decision about HH latrine?	% (n) of HHs with functioning latrines	% (n) HHs with non-functioning latrines	% (n) HHs with no latrine	Total (N=44)
		% (n)	% (n)	% (n)	(n)
Male	Female	0 (0)	0 (0)	100 (2)	2
Male	Male	75 (6)	25 (2)	0 (0)	8
Male	Male and Female	100 (5)	0 (0)	0 (0)	5
Female	Female	57 (4)	14 (1)	29 (2)	7
Female	Male	36 (5)	43 (6)	21 (3)	14
Female	Male and Female	50 (4)	0 (0)	50 (4)	8

Child feces

Proper disposal of child feces is an indicator of improved child health. The topic is also covered during CLTS triggering, according to responses. The table below summarizes the responses of those who responded to this question (N=42).

What is done with child feces?	Nothing	Thrown out of yard	Thrown in rubbish pit	Put in latrine	Buried
Child feces	2	6	8	24	1
Baby feces	0	8	9	23	2

The pastoral communities sampled have high numbers of livestock: goats, sheep or cows. Some have chickens. None of our respondents had camels. Research has shown that when children share the sleeping space of animals, they are more likely to have stunted growth. In this study all livestock, including chickens, slept in a different house than the family. Most had specific sheds either in or outside the family compound. We did not explore touching or shared spaces or interactions between animals and babies / toddlers generally.

The interview guide asked about human feces and animal feces in the compound. There were then follow-up questions about whether or not feces in the compound was a good or bad thing. No one reported human feces in the compound. Below the table briefly shows responses on animal feces.

Is there animal feces around compound?	Is animal feces okay to have around compound?
Yes = 12 respondents	Yes = 9 respondents “animal feces does not cause disease” = 4 respondents “we use the animal feces for manure in our gardens” = 3 respondents “I try to clean the animal feces, but it is difficult” = 2 respondents

Menstruation

Since menstruation is a sanitation issue it was included in the topics of the interview guide. Respondents were asked if women experienced challenges during menstruation (if yes, what challenges), and respondents were asked the same for adolescent girls. Very few respondents reported that women have challenges with menstruation; therefore, these data are not shown. 60% of male interview respondents “did not know” if adolescent girls experience challenges during menstruation, and over 50% of women said “no” girls do not experience challenges.

Do adolescent girls experience challenges during menstruation?	Female respondents	Male respondents
Yes	40%	13%
No	53%	27%
Don't know	7%	60%

Of the 40% that report girls have challenges during menstruation 58% of these specifically said pain was due to FGM (mentioned by respondents in all five communities). Only two respondents said women have challenges. Respondents discussed that women “no longer” have challenges with menstruation because they have given birth.

Conclusions

Key Informant Interviews

From the three key informant interviews it is evident that there is a disconnect between what CARE can do – and what the County government wants CARE to do. There is a need for better coordination, communication and a realistic interpretation of the roles actors can play. At times, it appears the efforts and investments of the County government vs. the role of CARE, are unclear. The “protocol” for CLTS implementation does not take into consideration the “special” and different circumstances of the remote and rural communities such as a lack of a CHV or the cost of PHO follow-ups.

It is recommended that CARE sit with the County government to propose feasible ways forward in remote communities that may involve alternative methods to the protocol used in closer villages. Proposed ways forward may include material subsidy, vouchers, additional sanitation options through (temporary) markets and alternative triggering or new plans for follow-up.

Semi-structured interviews

Our interviews found that people have positive views of latrines and want a latrine in their household. People were convinced by the CLTS methods and have made positive changes as a result.

There are many challenges remaining to reaching full sanitation coverage:

- People can't afford, or perceive they cannot afford latrines

Many people, those with and without latrines, mentioned "too costly" as the main barrier. Latrine building takes time and resources – and although people see the value of latrines, the time and resource investment is often seen as too large.

- People do not re-build latrines after the rains

Many people built latrines as a result of CLTS – but did not re-build them after they fell during the April 2018 rains. Conducting motivational follow-up "right after" flooding is one option. Preparing community members for latrines to fall over and discussing potential solutions and ways forward should be integrated into triggering, follow-up or other community discussions.

- There is limited follow-up in remote villages where access is more difficult and CHVs or PHOs or others are either not there, or not active

Follow-up appears to be inconsistent and people see it as a good motivator for behavior change. Currently if a village does not have a CHV or PHO and they are not paid their per diems by the supporting organization (like CARE) in a timely manner, then no follow-up is done. There needs to be a specific plan for follow-up in each village, outlined and agreed-upon by all stakeholders.

Recommendations

- In-depth, Improved Pre-triggering
 - Identify community history, challenges, population diversity, attitudes (getting information **not only** from community leaders)
 - The idea here is for pre-triggering to be more than a 1-2 hour meeting to get permission to come trigger. Instead, this full day can be used to talk to a diverse set of people in the community, meet community leaders separately, and understand the history of sanitation and other interventions in the community. It is also an opportunity to understand the relationship of the community with government and development agents in advance.
 - Map influential gate keepers and decision makers at the onset
 - Intimately and honestly involve leaders BEFORE triggering event
 - The idea behind these is to not just "use" leaders to try and convince people to build and use latrines – but actually engage and invest in community leaders to lead and believe in the process. CLTS should not be a program or a "thing" – but instead should be a new practice that everyone in the village adopts – just like vaccinating livestock.

- Involve men in triggering (women currently overrepresented; possibly separate sexes during triggering events; address HH discussions)
 - Many discussed that the majority of attendees at triggering events were women (since they were available in the village), while men make the majority of household decisions – regarding the use of resources and most often, latrine building. One idea is to rigorously engage men in the triggering process – and possibly hold one for men and women separately. Then they can be brought together at the end, or the separate groups can share ways that this can be addressed and discussed in the home.
- Integrate motivation for latrines beyond shame ('shame' impact fades over time)
 - Privacy, convenience and safety current motivators for latrines
 - Education, good health, religion and income (e.g. “savings due to good health”) are other priorities of this population that can be integrated into triggering, follow-up and community meetings
- Solutions need to be addressed during triggering
 - Addressing latrine “dislikes” (solutions for smell, space, bugs)
 - There were multiple respondents that did not mention dislikes in the condition of their latrines. CARE and others can learn of the “best practices” of individual households and share their tricks on reducing smell, creating more spacious latrines, and keep critters out of the latrines to share with other households.
 - Addressing short life-span (“mental preparation” and solutions)
 - As discussed above, opening dialogue about the potential of a latrine falling during flooding can be an important step in preparing people mentally that re-building latrines is important and normal (what else is re-built after floods?)
 - Additionally and importantly, community members can be supported to use better latrine designs that are less likely to fall during the floods. These can be off-set designs that put less pressure over a hole. Sanitation marketing may provide additional options for improved designs.
- Formal Follow-up plan and agreement
 - Currently inconsistent follow-up, particularly where no CHVs or PHOs
 - No follow-up / lack of “system” if supporting agencies do not pay per diem “on time”
 - In remote, rural areas there is inconsistent follow-up. Although it is unclear the precise cause of this, it is something that needs to be addressed through alternative follow-up methods such as training and utilizing select community members as opposed to an official volunteer or government worker.
 - Perhaps focus on a few villages at a time, get them through process to ODF, learn what works best - then move on to other villages for faster scale-up

- This is mentioned as a recommendation because often times CLTS implementation is done in stages with triggering performed in multiple villages in one week. In unique areas, such as remote or pastoral areas – perhaps what is needed is to follow a few villages all the way through the whole CLTS process to see where challenges are, and how we can address them, before scaling up CLTS in multiple villages.
- Trying out Sanitation Marketing or Micro-finance options
 - Loans for better toilets, better slabs?
 - Piloting sanitation marketing options for remote communities
 - Perhaps micro-finance loans can be offered to community members to build better toilets from the beginning, from the first “rung” of the sanitation ladder, as opposed to waiting until they build a basic latrine and later decide to move “up”. Using the most basic latrine may reduce their desire to maintain a latrine at their household.
 - Setting up temporary sanitation stalls during triggering to capture people while motivated
 - One approach that has worked in other contexts is having a slab-maker or other artisan present in the village during triggering in order to make sales or take orders while people are motivated. This (and all triggering events) should ideally coincide with times when communities have income.

Discussion questions

Do these findings resonate with other teams within Kenya RAPID?

What are similar challenges?

What are different or unique challenges?

What approaches and alternative methods have been taken by other organizations to expand latrine building and latrine use?

What is the level of buy-in at the County government to expand sanitation coverage *differently* in pastoral areas?