

FINAL REPORT FOR

WASH Knowledge, Attitudes and Practices (KAP) Survey in MAHAMA Refugee Camp



Submitted to:

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Table of contents

ABBREVIATIONS AND ACRONYMS	3
1. INTRODUCTION	4
2. PURPOSE AND OBJECTIVES OF THE KAP SURVEY	4
2.1 PURPOSE OF THE KAP SURVEY	4
2.2 GENERAL OBJECTIVE	4
2.3 SPECIFIC OBJECTIVES:.....	4
3. METHODOLOGY FOR THE KAP SURVEY	5
3.1 SURVEY AREA AND SAMPLE FRAME	5
3.2 SAMPLING SIZE AND METHODOLOGY	5
3.2.1 Sample design and sample size calculation	6
3.2.2 Sampling procedure	7
3.2.3 Data collection and quality control measures	8
3.2.4 Survey teams	10
3.3 ETHICAL CONSIDERATIONS	10
3.4 DATA ANALYSIS	10
4. FINDINGS OF THE SURVEY	11
4.1 WATER SUPPLY	11
4.1.1 Sizes of the households.....	11
4.1.2 Principal source of drinking water	12
4.1.3 Availability of water source on the premises	13
4.1.4 Time used to fetch water from the source	14
4.1.5 Distance to water sources.....	15
4.1.6 Sufficiency of drinking water from the sources.....	15
4.1.7 Volume of potable water collected at household level.....	16
4.1.8 Volume of potable water available per person per day	17
4.1.9 Households with at least 10liters/person potable water storage	17
4.1.10 Summary of key findings on water supply	18
4.2 SANITATION	21
4.2.1 Defecation practices	21
4.2.2 Latrines emptying	22
4.2.3 Summary of key findings on sanitation	23
4.3 HYGIENE.....	23
4.3.1 Availability of hand washing devices/stations and soaps.....	23
4.3.2 Critical hand washing moments.....	24
4.3.3 Bathing facilities for households.....	25
4.3.4 Summary of key findings on hygiene.....	25
4.4 MENSTRUAL HYGIENE.....	26
4.4.1 Summary of key findings on menstrual hygiene.....	28
4.5 DOMESTIC SOLID WASTES DISPOSAL	29

4.6	Summary of WASH Indicators and Targets in MAHAMA Camp	30
5	APPENDICES	31
5.1	Questionnaire for WASH KAP Survey	31

ABBREVIATIONS AND ACRONYMS

KAP	Knowledge attitude and Practices
WASH	Water Sanitation and Hygiene
UNHCR	United Nations High Commissioner for Refugees
WVI	World Vision International
FGD	Focus group discussion
KII	Key In format
CHW	Community Health Workers
HH	Household
PoC	People of Concern's
DRC	Democratic Republic of Congo
CBT	Cash based Transfer
CBI	Cash based Intervention

1. INTRODUCTION

The WASH intervention refugee camps aims to ensure access to improved WASH services. The focus of this intervention is to enable refugees and all targeted host community members to have sufficient Water (Quality and quantity), improved sanitation and better hygiene practices to ensure that refugee community is living in satisfactory condition of Hygiene and sanitation.

World Vision has signed a partnership agreement with UNHCR in WASH sector to work in Mugombwa, Kigeme, Mahama, Gihembe, Nyabiheke camps and Gashora ETM Nyanza, Kijote and Gatore reception and transit centers to implement WASH project for lives improvement of registered refugees in the said sites by reducing the vulnerabilities and suffering of the refugees through provision of basic WASH needs and essential services.

This report presents the findings of the Knowledge, Attitudes and Practices (KAP) survey carried out in Mahama refugee camp in May and June of 2021.

2. PURPOSE AND OBJECTIVES OF THE KAP SURVEY

2.1 PURPOSE OF THE KAP SURVEY

This survey is intended to generate an understanding of the communities' level of knowledge, attitudes and practices gained through WASH interventions in the camps and project performance indicators measurements. The survey results and recommendations will also guide World Vision and partners throughout WASH project implementation in the camps.

2.2 GENERAL OBJECTIVE

The goal of survey is to assess how the earlier WASH interventions contributed to the Knowledge, Attitudes and Practices and the influence this has had on behavior change of Communities regarding WASH actors in the camps, the results will generate the data for project M&E frameworks and log frames.

2.3 SPECIFIC OBJECTIVES:

Specifically, this survey aims to:

- Conduct KAP survey and assess WASH project SMART indicators in the camps and achievements on completed and ongoing interventions on water, sanitation, hygiene and Non-Food Items (NFIs) in refugee camps, output, and outcome and impact level.

- To determine the relevance, effectiveness and appropriateness and accountability of the project.
- Document stories and best practices from the camp by 4 case studies (one each on Water supply, sanitation, hygiene promotion activities and NFIs).
- Use KAP survey results to recommend key simple and achievable interventions that will address the identified issues to ensure appropriate practices for the sake of improving lives of refugees.
- To explore attitudes, knowledge and experiences of refugees in hygiene related practices.
- Assess the progress made towards the project goal and assess the performance indicators as outlined in humanitarian M&E framework

3. METHODOLOGY FOR THE KAP SURVEY

This section presents the survey approaches and tools that were used for data collection and the sampling technique for the actual household selection. The survey team conducted a survey to randomly selected households in Mahama camp, conducted in-depth interviews and focus group discussions with selected groups and made observations in and around homes, latrines and water points.

3.1 SURVEY AREA AND SAMPLE FRAME

The survey was conducted in Mahama refugee camp. The sample size was done within WASH KAP survey standards agreement and camps' population size. Target groups included:

- Survey population: Refugees in Mahama camp
- Age: Seven years and above
- Gender: Males and Females, Boys and Girls
- Individual education: any level
- Housing: All types within the camp
- Socio-economic status: Any
- Stakeholders: WASH partners and project staff.
- People with special needs

As of the survey period, Mahama camp was accommodating 54,867 refugees living in 6,467 households structured into 9 quarters composed of 18 villages.

3.2 SAMPLING SIZE AND METHODOLOGY

The survey population was the population of camp and the sampling unit was the household.

3.2.1 Sample design and sample size calculation

A representative sample was drawn from camps' households. The sample size (number of households to be surveyed) is calculated using the recommended (and widely used) formula below:

$$n = \frac{t^2 x p x q}{d^2} x d_{eff}$$

With:

- **n** being the calculated sample size
- **t** being the error risk parameter (use 1.96, for a confidence interval of 95%)
- **p** being the expected prevalence (use 0.5 - 50% prevalence - in normal situations)
- **q = 1-p** is the expected non-prevalence (which is 50% in normal situations)
- **d** being the relative desired precision (for simple/systematic random sampling, use 5% precision in normal situations, 10% in some cases)
- **d_{eff}** being the design effect in case of cluster sampling (use 1 for random sampling, 2 for cluster sampling)

The calculated sample size then needs to be adjusted based on the total number of households and the anticipated non-response.

Under normal conditions, the most common sample sizes are the following:

- 360 households for random sampling with 5% precision
- 100 households for random sampling with 10% precision (should be used only in case of important resources limitations – doesn't allow intra-camp comparisons)
- 210 households for cluster sampling
- **Sample size adjusted to the size of the camp/site (number of households)**

The sample size calculated must then be adjusted to the camp population (total number of households in that camp). This does not change much the sample size in very large camps, but can be beneficial in smaller camps (less than 5'000 households for example) as it will reduce the sample size and can save time, energy and resources on the field. The adjustment formula is the following:

$$n_b = \frac{n \times N}{n + N - 1}$$

With:

- **n_b** being the sample size adjusted to the size of the site
- **N** being the site total number of households

- **Sample size adjustment to anticipated non-response rate**

Once the sample size is calculated, it needs to be adjusted again upwards to account for the expected non-response rate. This is to make sure that at the end of the survey we will have the required number of filled forms. The formula used for that is detailed below:

$$n_{fin} = \frac{n_b}{1 - r}$$

With:

- n_{fin} being the adjusted calculated sample size taking into account expected non-response rate
- r being the expected non-response rate

The expected non-response rate is the proportion of the households we expect to be unavailable, or refuse to participate. If we expect that 5% of the households (1 out of 20) will not be available or refuse to participate, the expected non-response rate is 5%. If we expect that 1 out of 10 households will not participate, the non-response rate would be 10%. The anticipated non-response rate can be based on previous year's experiences, but additional factors need to be weighed in such as seasonal migrations. If you have no such information, you can **safely use 5%**.

The calculated sample size for Mahama camp is given in the table below.

Table 1: Calculated Sample size per camp

Camp	Simple size (number of households) needed	Total number of households in the camp	Sample size adjusted to the total number of households	Anticipated non-response rate	Sample size adjusted for anticipated non-response
Mahama	385	6,467	364	5%	384

3.2.2 Sampling procedure

In order to ensure representation, the survey teams used simple random sampling of the overall sample size determined in the camp. As the camp is subdivided into villages, the sample size was proportionally distributed by the number of households in each village so as to ensure representability of all villages. The households to be surveyed for each village will be selected by simple random. The distribution of sample size per village in Mahama camp is presented in the following table.

Table 2: Distribution of sample size per village for Mahama camp

Region	Quarter	Village	Number of Households	Surveyed sample size per village
MAHAMA I	Q1	V10	273	30
		V1	324	30
	Q2	V7	334	15
		V2	287	20
	Q3	V3	43	20
		V4	368	15
	Q9	V5	272	
		V6	248	15
	Q4	V8	460	30
		V9	385	30
MAHAMA II	Q5	V11	430	30
		V12	314	30
	Q6	V13	376	15
	Q7	V14	426	15
		V15	497	45
		V16	447	15
	Q8	V17	457	15
		V18	526	15
	Total		6,467	385

The households surveyed during the process were selected randomly. The more randomly the households are selected, the more representative the results will be of the whole camp.

3.2.3 Data collection and quality control measures

A combination of qualitative and quantitative approaches were used to collect and analyse data. In addition, the evaluations assessed the project periodic data reports to assess its progress towards achieving intended outcomes. Qualitative approaches will be used to not only assess the remaining criteria but also to help making sense of quantitative data.

i. Quantitative data

A Standardized Questionnaire developed by UNHCR for WASH KAP Survey in Refugee Sites was used. The questionnaire was used to collect data related, but not limited to, the following key indicators:

Table 3: WASH KAP survey indicators

Indicator	
Water Quantity	Average # liters of potable water available per person per day
	Average # l/p/d of potable water collected at household level
	% Households with at least 10 liters/person potable water storage capacity
Water Access	Maximum distance [m] from household to potable water collection point
	Number of persons per usable handpump / well / spring ³
	Number of persons per usable water tap ⁴
Water Quality	% Households collecting drinking water from protected/treated sources
	% water quality tests at non chlorinated water collection locations with 0 CFU/100ml
	% of water quality tests at chlorinated water collection locations with FRC in the range 0.2-2mg/L and turbidity <5NTU ⁵
Sanitation	Number of persons per toilet/latrine
	% Households with household toilet/latrine
	% Households reporting defecating in a toilet
Hygiene	Number of persons per bath shelter/shower
	Number of persons per hygiene promoter
	% Households with access to soap
Menstrual Hygiene	% of recipient women of reproductive age who are satisfied with menstrual hygiene management materials and facilities
Solid Waste	% Households with access to a solid waste disposal facility

A Standardized Questionnaire developed by UNHCR and imbedded in KoBoToolbox as Rwanda 2020 WASH KAP 10_1_7 was used for data collection.

Data were collected using smartphones and tablets which loaded with the Rwanda 2020 WASH KAP 10_1_7 questionnaire. Data collectors used internet to synchronize data in the overall evaluation database.

ii. Qualitative data

Qualitative data were collected to complement quantitative findings. Qualitative data were collected through Focus Group Discussions (FGDs) and Key Informants Interviews (KIIs). FGDs were specifically addressed to: People with disabilities, elder people above 60 years old, unaccompanied children, community health workers (CHWs), local leaders and MEAL teams. KIIs were conducted with the WV partner organizations and key stakeholders. All FGDs and KIIs were done in order to gather information of key beneficiaries' perceptions on the program.

a. Focus Group Discussions and Key Informants Interviews

Four (4) focus group discussions of 3-6 participants were conducted in the camp.

The FGDs and KIIs were moderated by trained moderators and note taking was done by trained and experienced note takers. Purposive or convenience sampling was used for selecting participants for Focus Group discussions. This means that the community members who are likely to provide us with the best information were selected.

iii. Data quality control

After every day, both quantitative and qualitative data were checked and validated by field supervisors. Specifically, qualitative data were expanded (field notes) to have the fieldwork summary. After the fieldwork, the records were transcribed in Kinyarwanda, the language for data collection (for both quantitative and qualitative approaches), then translated in English, the report writing language.

3.2.4 Survey teams

Prior to data collection, all field enumerators and supervisors received training. The training focused on the survey background, sampling procedures, interviewing techniques and familiarization with the data collection tools including the questionnaires.

3.3 ETHICAL CONSIDERATIONS

All activities involved in this study have taken into consideration of ethics in research principles. Description of the main study objectives and confirmation of free consent was provided to all potential respondents involved in the actual study. Respondents were entitled to stop responding or participating in the study at any time.

3.4 DATA ANALYSIS

The survey data analysis was performed using the **WASH KAP Kobo Excel Analyser**.

The data collected using the KoBo toolbox were exported from KoBo account data in the format corresponding to WASH KAP Kobo Excel Analyser.

A simple descriptive analysis (frequency, percentage, mean etc..) was used to carry out data analysis and to evaluate KAP changes and to come up with conclusions and draw recommendations for current and future WASH projects.

4 FINDINGS OF THE SURVEY

This section presents the key findings of the WASH KAP survey. The findings were presented in both tabular and graphical forms along with some further analysis, interpretation and suggestion for the WASH team.

4.1 WATER SUPPLY

4.1.1 Sizes of the households

This sub-section presents findings on sizes of the surveyed households. Figure 1 below indicates that 18% (95% CI: 13.8% - 22.0%) of the surveyed households are made of 4 members, 14% (95% CI: 10.5% - 17.8%) are made of 5 and 6 members followed by 7 members' households with 13.2% (95% CI: 9.7% - 16.8%), 3 members' households with 10.2% (95% CI: 6.9% - 13.3%), 8 members' households with 7.1% (95% CI: 4.5% - 9.9%), 9 members' households with 6.3% (95% CI: 3.7% - 8.9%) and 2-members' households with 6.1% (95% CI: 3.5% - 8.5%). The other households' sizes are in small numbers as presented on the Figure 1.

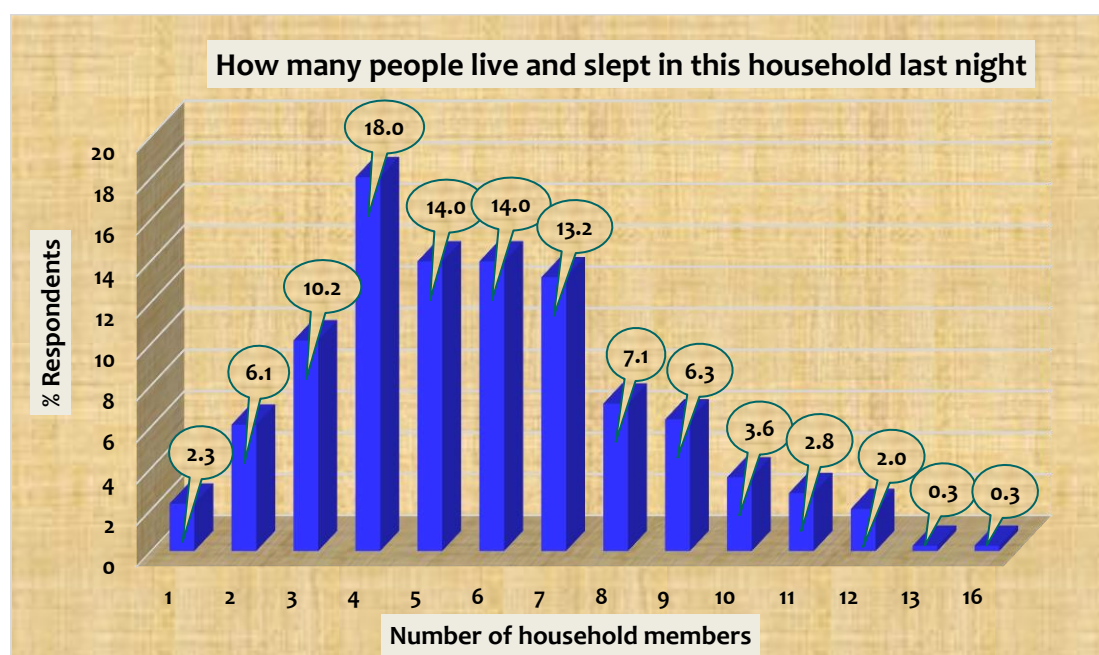


Figure 1: Sizes of the surveyed households

Figure 2 shows the number of children less than 5 years living in surveyed households. It is indicated that most of the households do have one child less than 5 years old (33%, 95% CI: 28.2% - 38.1%, of surveyed households) while 29.2% (95% CI: 24.3% - 33.9%) of households have 2 children, 7.1% (95% CI: 4.5% - 9.9%) of households have 3 children, 1 % (95% CI: 0% - 1.8%) of

households have 4 children 0.3% (95% CI: 0% - 0.9%) have 5 children meanwhile there exist households with no child at 29.4% (95% CI: 24.6% - 34.2%).

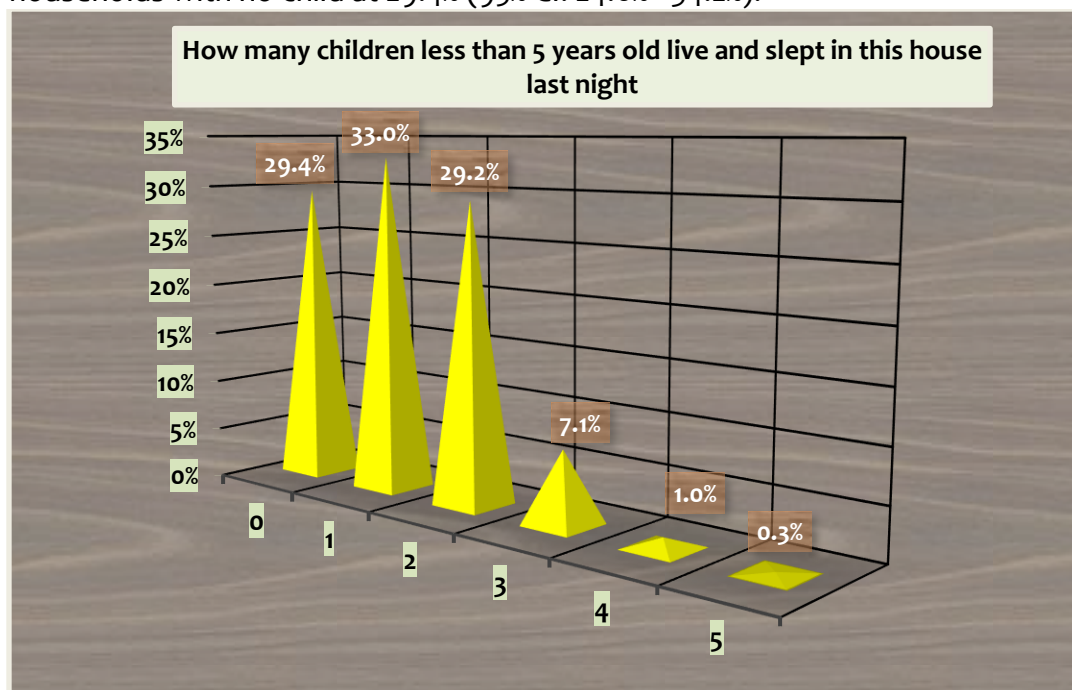


Figure 2: Number of children less than 5 years living in surveyed households

4.1.2 Principal source of drinking water

Data collected from MAHAMA camp shows that the principal source of domestic drinking water is public tap or stand pipe with 100% of respondents.

Apart from the source of drinking water, the capacities of households to collect and to store drinking water was surveyed in terms of the numbers of collection and storage containers in possession. It is shown from figure 3 that the majority of surveyed households have 2 containers with 52.9% (95% CI: 47.5% - 58.1%) and 3 containers with 21.2% (95% CI: 17.0% - 25.6%) of respondents. 18.7% (95% CI: 14.5% - 22.8 %) of households have reported to have 1 container while 3.8% (95% CI: 1.7% - 5.8%) have 4 containers and 2% (95% CI: 0.5% - 3.5%) of household do not have any container to store and collect water from water points.

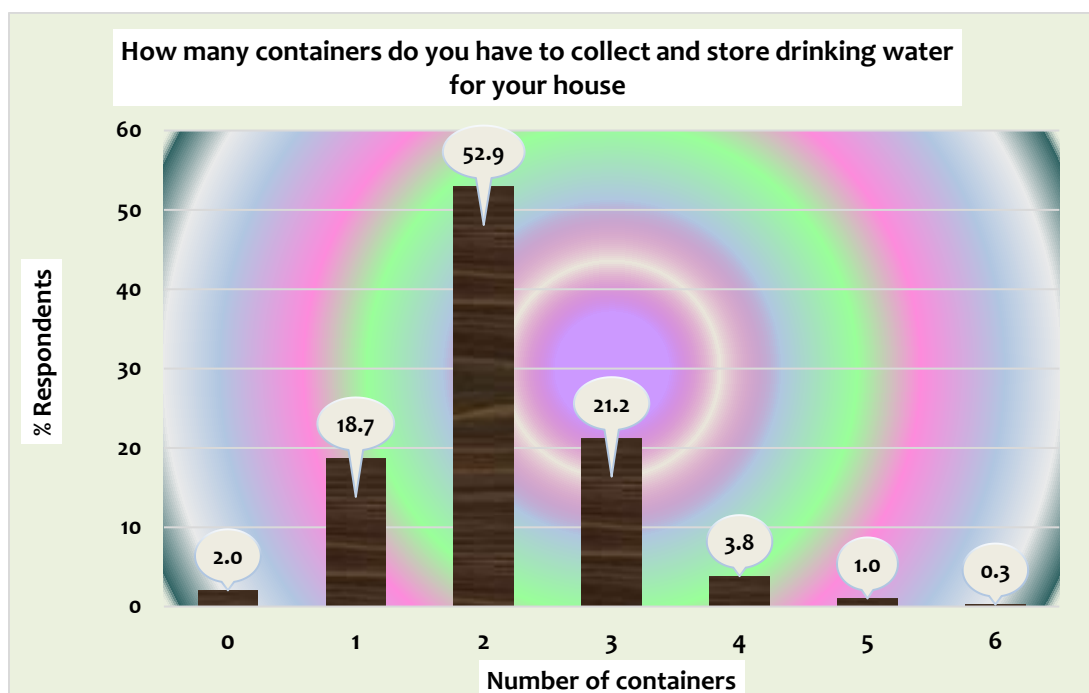


Figure 3: Number of collection and storage containers of drinking water

4.1.3 Availability of water source on the premises

98% (95% CI: 96.5% - 99.5%) of surveyed households confirmed that water source is available directly on or near their premises while 2% (95% CI: 0.5% - 3.5%) of them said there is no water source available directly on their premises.

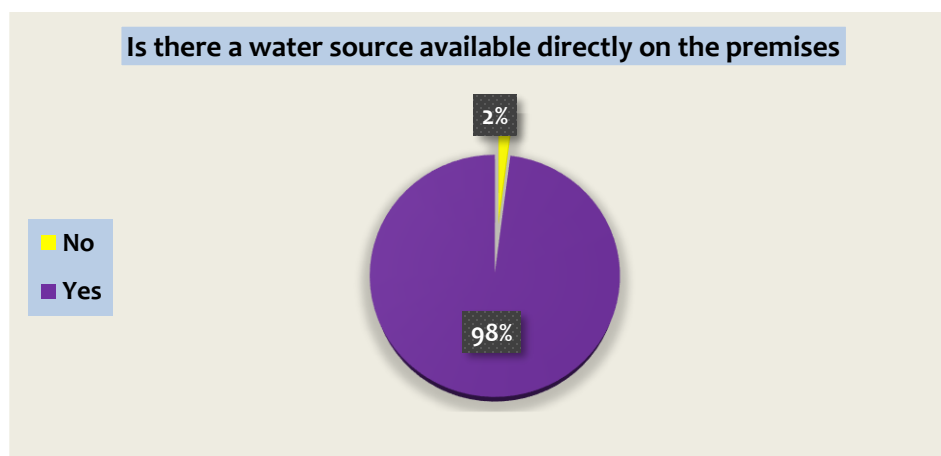


Figure 4: Data on availability of water source on the premises

4.1.4 Time used to fetch water from the source

98% of households stated that they use less than 1 minute (95% CI: 0.6 – 1.4 min) to reach to water sources and about 0.3% use about 2 minutes (95% CI: 1.6 - 2.4 min), 0.5% require 5 minutes (95% CI: 4.6 – 5.4min) to reach to water sources. In general, it was found that more than 98.8% of households use less or equal to 5 minutes to go to the water sources.

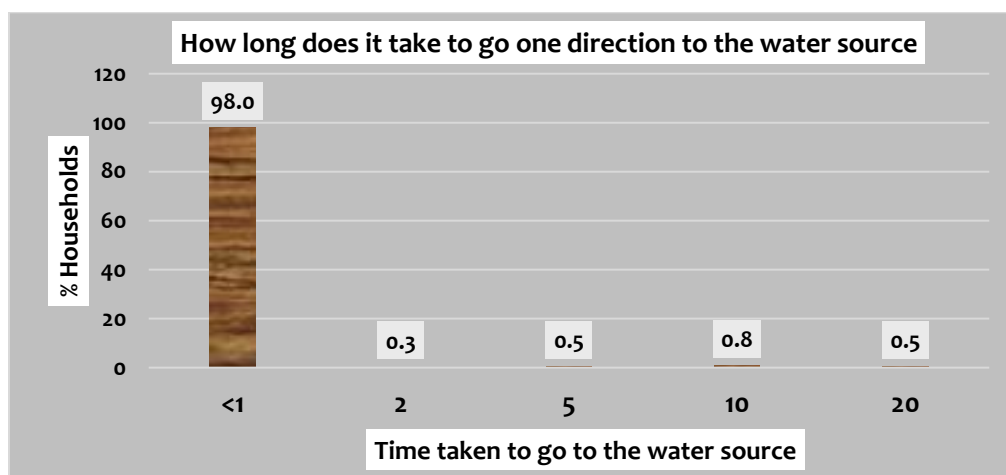


Figure 5: One direction time to go to water sources

In terms of the total time used to fetch water from the sources, as depicted in figure 7, 98% of households reported that they use less than 5 minutes (95% CI: 3.1 – 6.9min) to get water from the source, 0.3% use 12 minutes (95% CI: 10.1 – 13.9min), 0.3% needs 20 minutes (95% CI: 18.1 – 21.9min) in total to fetch water from the source. In general, it was found that 98.6% of households use about 20 minutes to get water from the source.

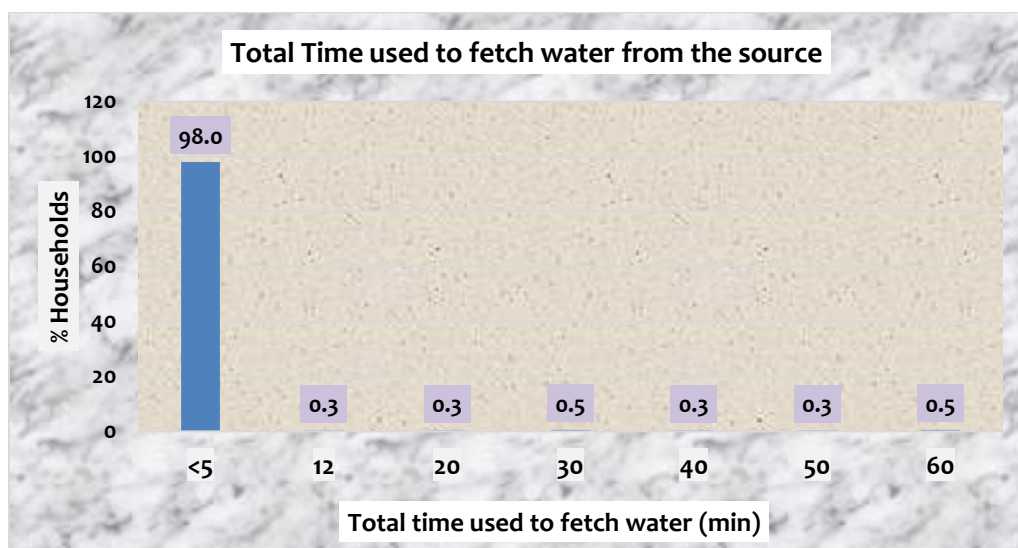


Figure 6: Total time taken to fetch water from the source

4.1.5 Distance to water sources

The distance to water sources is estimated from the total time used to fetch water from the sources.

It was found that 98% of households travel less than 80 meters (95% CI: 77.1 – 82.9m) from their premises, 0.3% walk less than 160 meters (95% CI: 157.1 – 162.9m), 0.5% walk a distance of 400 meters (95% CI: 397.1– 402.9m), 0.8% walk a distance 800 meters (95% CI: 797.1 – 802.9m) to fetch water from the source (figure 5).

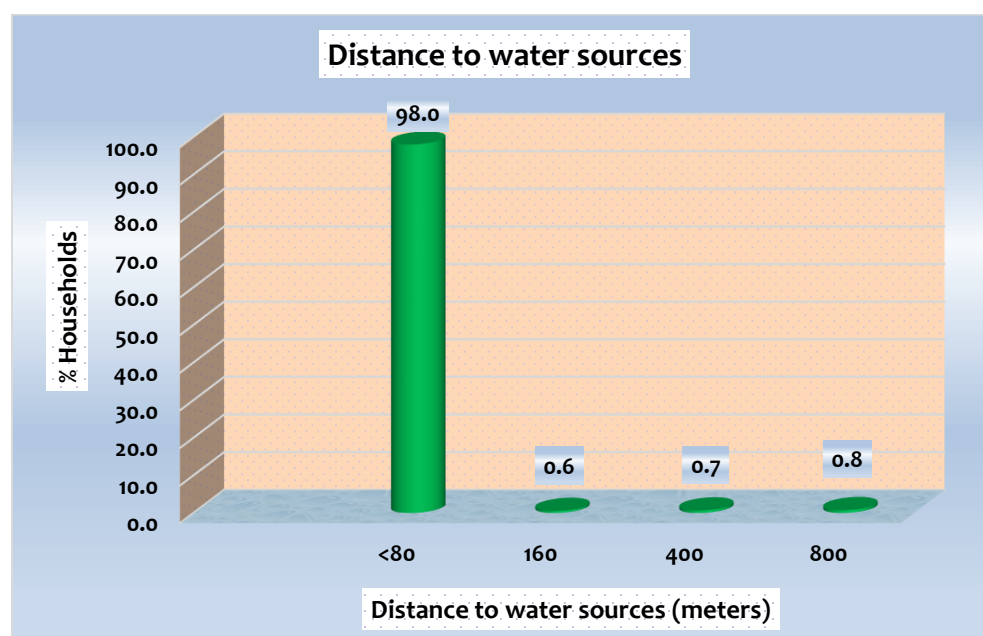


Figure 7: Distance to water sources

4.1.6 Sufficiency of drinking water from the sources

30% (95% CI: 25.2% - 34.8%) households said that they did not have water in sufficient quantities at least once in the previous month while 70% (95% CI: 65.2% - 74.8%) of respondents said that they always had sufficient quantities of potable water in their households (Figure 8).

The water shortages at the sources were mentioned as the main reason for having insufficient potable water quantities with 96.6% (95% CI: 92.3% - 99.8%) of respondents while 1.7% (95% CI: 0% - 4.7%) of households said that they do not have enough storage containers and 1.7% (95% CI: 0% - 4.7%) of respondents mentioned too long waiting time at the sources (Figure 9).

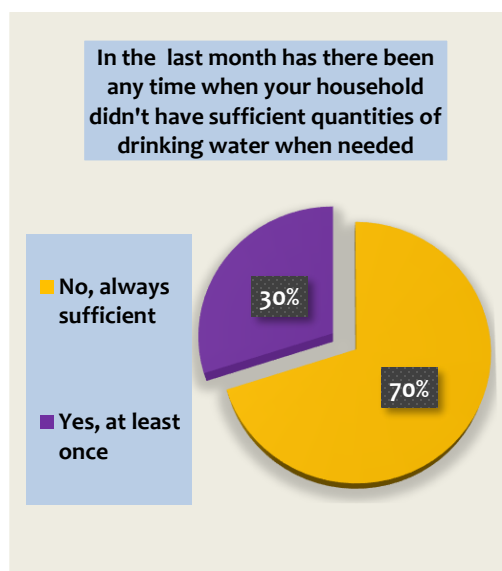


Figure 8: Data on sufficiency of drinking water at households

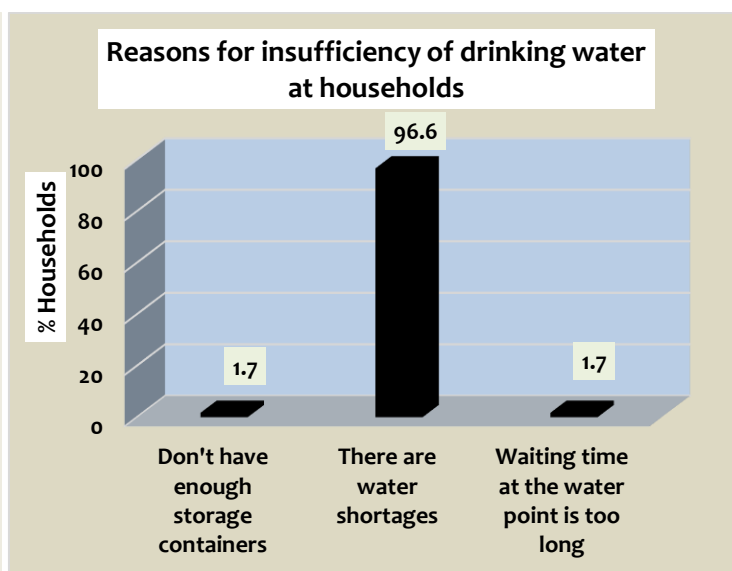


Figure 9: Reasons for insufficiency of drinking water at households

4.1.7 Volume of potable water collected at household level

The volume of potable water collected at household level is given by the average volume of potable water collected by the household per day.

Data show that 85.1% of households collect between 48.3 and 62.7 liters of water per day.

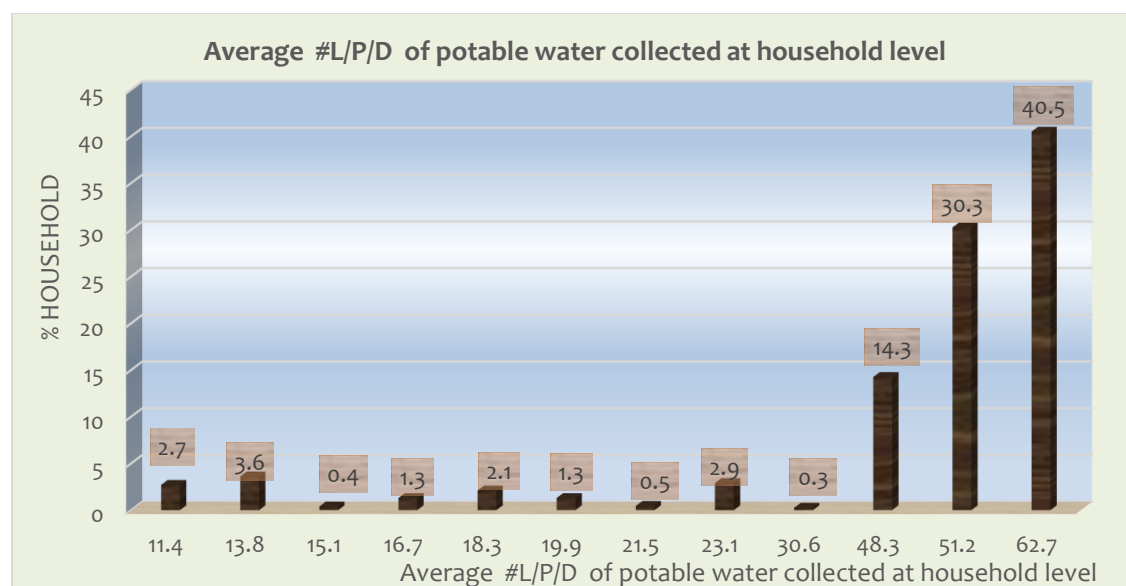


Figure 10: Volume of potable water collected at household level per day (liters)

4.1.8 Volume of potable water available per person per day

It is the volume of potable water in liters available per day per person in each household. It is found from the survey data that about 81.6% of households get 18.7 to 20.8 liters of potable water per person per day.

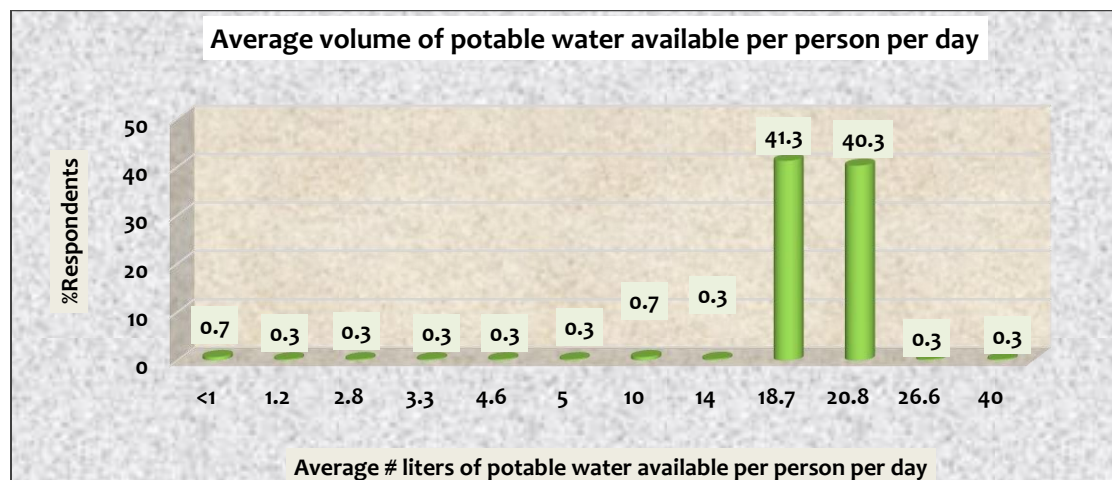


Figure 11: Volume of potable water available per person per day (liters)

4.1.9 Households with at least 10liters/person potable water storage

Collected data as depicted in figure 12 show that 95.7% (95% CI: 93.5% - 97.8%) of households have in between 10 to 40 liters' potable water storage capacity per person

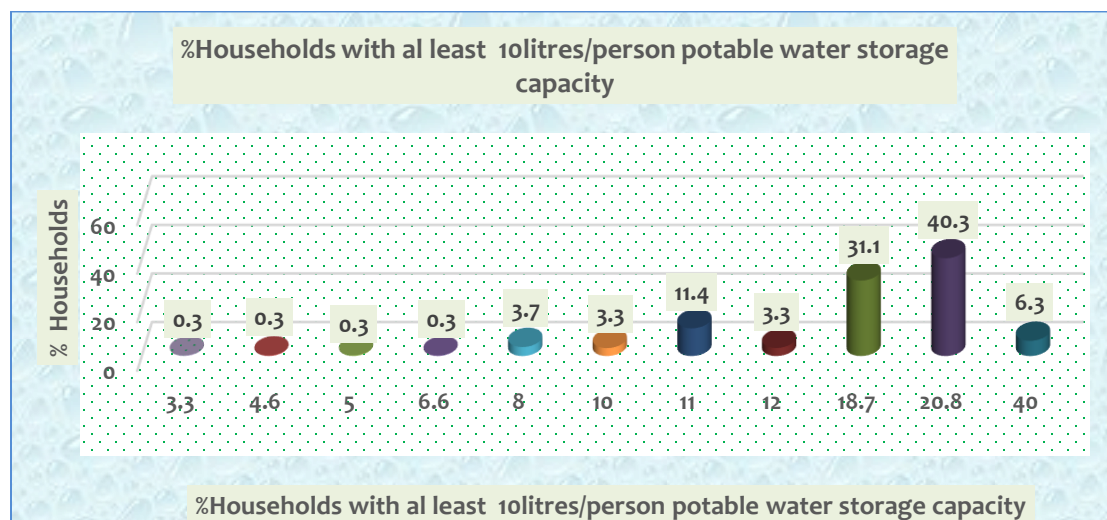


Figure 12: Households with at least 10liters/person portable water storage capacity

4.1.10 Summary of key findings on water supply

- **Water access**

98% (95% CI: 96.5% - 99.5%) of households reported that water source is available directly on or near their premises while 2% (95% CI: 0.5% - 3.5%) of them said there is no water source available directly on the premises.

98% of surveyed households stated that they travel less than 80 meters (95% CI: 77.1 – 82.9m) from their premises to water collection points while about 98.3% travel less than 200 meters (95% CI: 197.1% - 202.9%). Compared to the target of travelling less or equal to 200 meters by the UNHCR WASH indicators, it is a good indication that the water is accessible by all of the camp's households.

- **Water quantity**

The availability of water in sufficient quantities is measured in terms of average volume (liters) of potable water available per person per day, average volume (liters) of potable water collected at household level and the percentage of households with at least 10 liters/person potable water storage capacity.

99% of households collect 20 liters and above of water per day. These figures shows that the target of having equal or greater than 20 liters of water per household per day set by the UNHCR WASH indicators has been achieved in the camp.

It was found from the survey data that about 81.6% of households get 18.7 and 20.8 liters of potable per person per day. The average liters per person is 19.8 liters (95% CI: 16.4 – 23.2L), these figures are below the target of having equal or greater than 20 liters of water per person per day.

Data on households' water storage capacity showed that about 86% (95% CI: 82.2% - 89.5%) of households have at least 10 liters potable water storage capacity per person. These figures confirm that the target of having equal or greater than 80% of households having at least 10 liters' potable water storage capacity per person has been achieved in the camp.

- **Water quality**

The survey found that the principal source of domestic potable water is public tap or stand pipe (100%), which is considered as a treated water source. The percentage of households getting water from protected/treated sources is 100% which is beyond the target of 95% defined by the UNHCR WASH indicators.

Findings from the qualitative study also showed similar findings in which community members who participated in FGDs mentioned that potable water is available in insufficient quantities due to different obstacles and the case is highly raised in dry season and when water pipes are broken or pumps are not working. When water is not available in the camp, they fetch from the neighbouring host community

The issue of not having water taps designated for elderly people and people with disabilities was mentioned but they get water with the help of the water point manager. It is recommended to construct water points designated for elderly people and people with disabilities.

Some challenges related to water access were stated by FDGs participants as follows:

- Insufficient materials to store water;
- Scarcity of wash hands device near their premises.

Recommendations were made by FDGs participants to increase the water access, quality and quantity as follows:

- Increase evening hours of fetching water so that students and orphans can find the water points still open after school hours;
- Distribute water storage containers to some households so as to increase the quantity of water they can store at households;
- Set up a plan for regular cleaning of common water tanks to increase the water quality because it is currently done once a month.
- Provide the water hand washing the device

Information gathered from Key Informant Interviews (KIIs) through different stakeholders operating in MAHAMA camp allowed to assess the level of water supply service received by the camp communities as follow:

I. Partners general views on overall situation of water supply in MAHAMA camp

Plan Rwanda, Humanity Inclusion (HI), Alight, MINEMA, ADRA Rwanda and UHCR, AHA medical center, Prison Fellowship are the key partners that were interviewed during the KAP survey in MAHAMA refugee camp.

According to interviewees, since the time that WVI has started implementing WASH program in the camp many things were achieved compared to the time of the previous partner.

There is no sexual abuse neither any kind of harassment cases, caused by water shortage up to date, **“all interviewed partners said”**. Water is available even if it is not enough quantity all the time, but it is a positive and good achievement for WVI that have to be appreciated.

They also responded that beneficiaries are involved into decision making, they are involved to solve their daily WASH issues. Refugees are the one who makes coordination of water points, said some partners during their interview.

Beneficiaries appreciate water provision

- **Positive changes**

People are satisfied, because they no longer fetching dirty water from non-improved source, such as marchland or drainages. Actually, beneficiaries can easily get clean water to be used in household activities including: Drinking, cooking food, washing clothes, body and whatever else needed. So, there are visible and tangible changes in terms of water provision.

- **World Vision strength**

When there is water shortage, they use trucks to supply water to the community. WVR has a skilled and experienced staff who can identify problems on the water supply pipelines and other components and repair them quickly.

WVI set up a WASH committee, composed by refugees in majority, in charge of WASH issues. The committee works in collaboration and under coordination of WASH implementing partner (WVI). The responsibilities of the committee are to manage water infrastructures, mobilize community how to properly use water, checking the quality and quantity of water depending to the beneficiaries needs.

The strategy of problem solving is appreciated by the community because of communication channel set up by WVR: They use dialogue approaches to communicate with refugees' leaders and other community representatives to find good solutions that have to be applied on any particular problem. The existence of WASH committee facilitates good collaboration between refugees and WASH implementing partners.

Some issues were raised like the stealing by some refugees of toilet doors and hand wash devices and which are repaired/restored a bit late by the stakeholders in charge.

Some recommendations were made by different stakeholders as follows:

- Mobilize other partners in water supply so that the issue of water shortage can be completely solved. If possible, put in place a backup system and improve

communication channel from community to high management of WVR in order to reduce the time taken to find solutions for some problems.

- Increase the skilled labors in order to achieve to WASH program objectives and to provide water storage containers to some households.
- Improve the protection and ensure the safety of some equipment like handles of water taps.

4.2 SANITATION

4.2.1 Defecation practices

100% of the respondents confirmed that they use share communal latrines.

Figure 14 shows that 51% (95% CI: 45.7% - 56.3%) of children of under 5 years old use plastic pots while 49% (95% CI: 43.7% - 54.3%) use communal latrines.

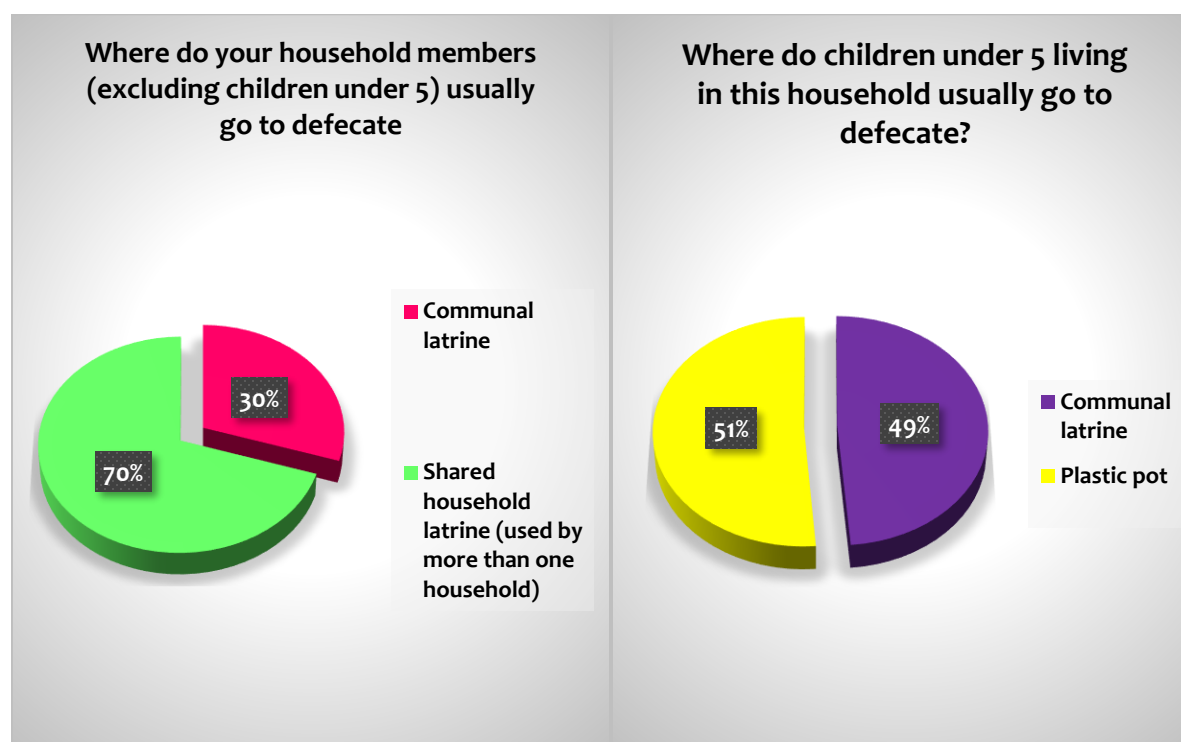


Figure 13: Defecation location for households

Figure 14: Defecation location for children under five years old

Figure 15 shows that 9% (95% CI: 5.9% - 11.9%) of respondents agreed that sometimes the household members defecate in the open air (at night). The reason for that mentioned by most of respondents is the darkness at night with 69.2% (95% CI: 64.3% - 74.0%), 23.1% (95% CI: 18.6% - 27.5%) said that the latrines are too far (Figure 16).

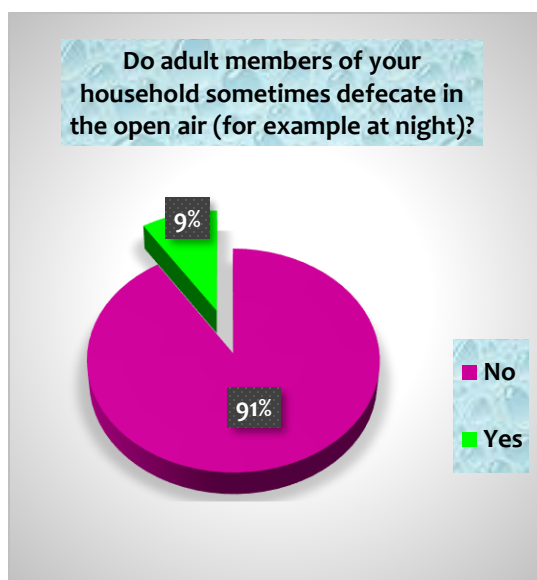


Figure 15: Defecation in open air

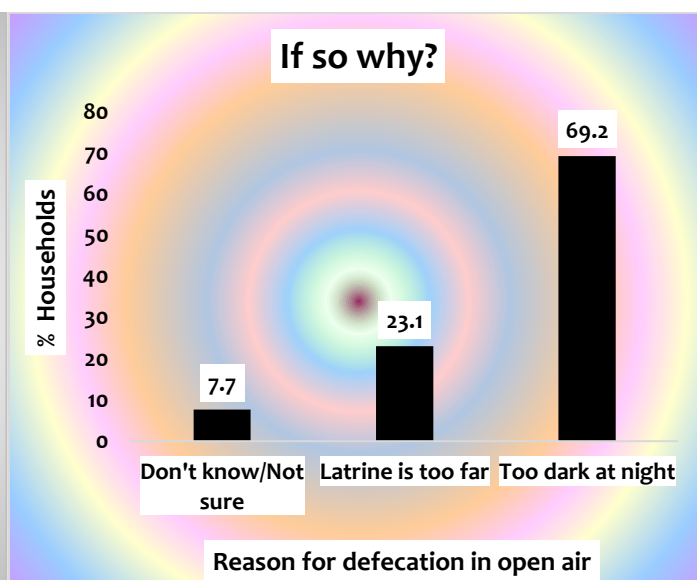


Figure 16: Reasons for defecation in open air

4.2.2 Latrines emptying

84% (95% CI: 80.0% - 87.7%) of households confirmed that their latrines have been emptied while 16% (95% CI: 12.3% - 20.0%) said that theirs have never been emptied as shown on figure 17. From those who agreed that emptying is done, 90.1% (95% CI: 87.1% - 93.3%) responded that contents are removed by a service provider and discharged to an unknown location and 9.9% (95% CI: 6.5% - 12.7%) said that contents are removed by service provider to a dumping site (Figure 18).

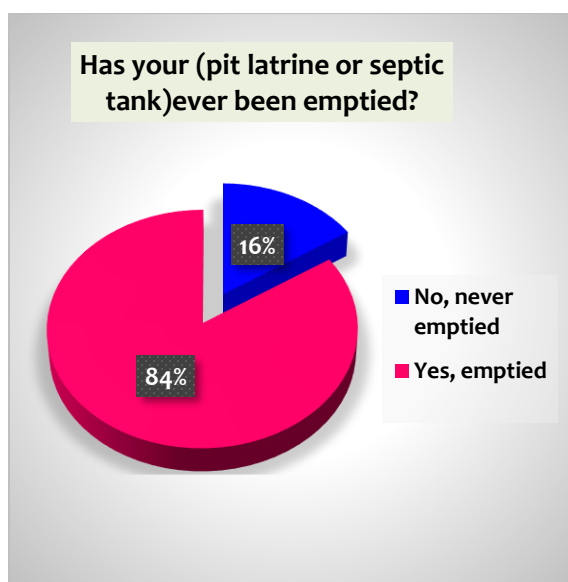


Figure 17: Latrines emptying

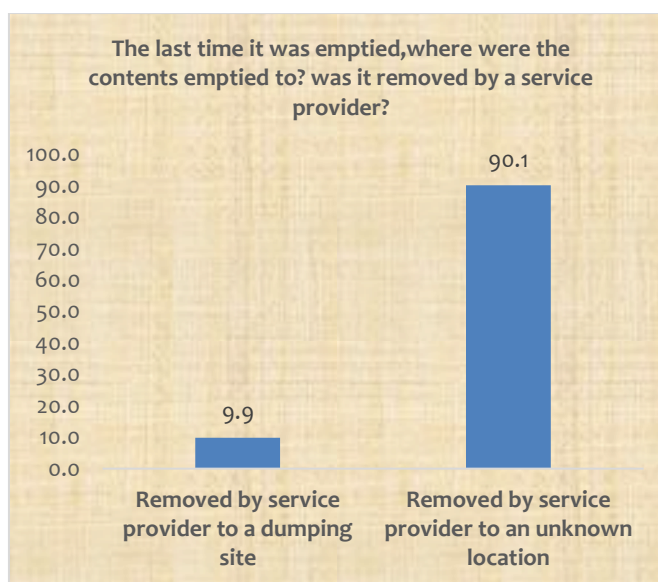


Figure 18: Places where wastes are emptied to

4.2.3 Summary of key findings on sanitation

100% of the surveyed households reported that they defecate in a toilet (communal latrines). It is found from the survey that the target of 85% of households reporting defecating in a toilet as defined by UNHCR WASH indicators has been achieved in Mahama camp.

It was confirmed from the survey that all of latrines have proper concrete slabs as covers and they are regularly emptied.

Findings of the qualitative study from community members who participated in FGDs highlighted some issues which could hinder the provision of better sanitation services:

- It was mentioned that it is difficult for households to clean latrines, wash hands, clothes and any other materials without soaps which are no longer distributed to them.
- Cleaning the latrines also require some money to pay the cleaners and they can do that on regular basis because they don't have money to pay for that.

Some recommendations were made by KIIs participants where they requested to improve the accessibility of toilets for disabled people by rehabilitating the access streets/paths to toilets.

4.3 HYGIENE

4.3.1 Availability of hand washing devices/stations and soaps

Collected data showed that 71% (95% CI: 66.1% - 75.7%) of respondents said that they have soaps in their households while 29% (95% CI: 24.3% - 33.9%) indicated that they don't have them. 52% (95% CI: 46.6% - 57.1%) of households confirmed that they have hand washing devices/stations while 48% (95% CI: 42.9% - 53.4%) don't have them.

96% (95% CI: 94.0% - 98.0%) of households with hand washing devices confirmed that they have water in their devices while 4% (95% CI: 2.0% - 6.1%) said that they don't have water in the devices. Among the households with hand washing devices and water, 52% (95% CI: 46.6% - 57.1%) of them said that they have soap or ash around the devices while 48% (95% CI: 42.9% - 53.4%) don't have either soap or ash.

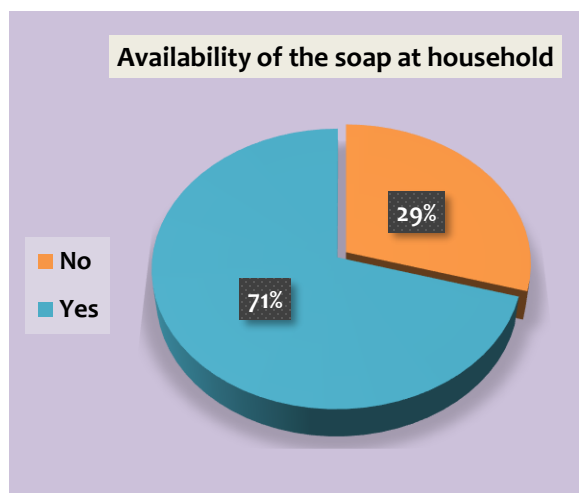


Figure 19: Usage of soaps at households

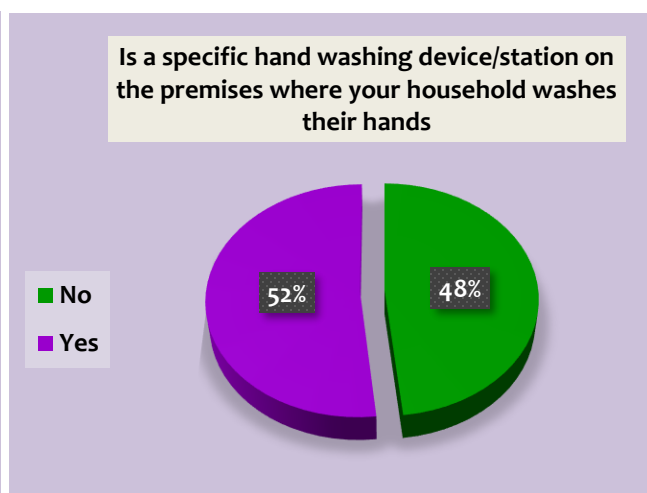


Figure 20: Availability of hand washing devices/stations in households

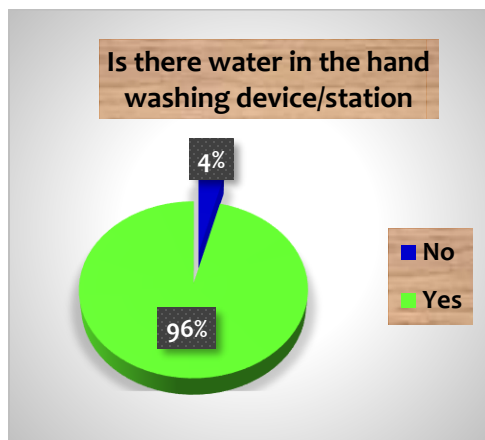


Figure 21: Presence of water in hand washing device

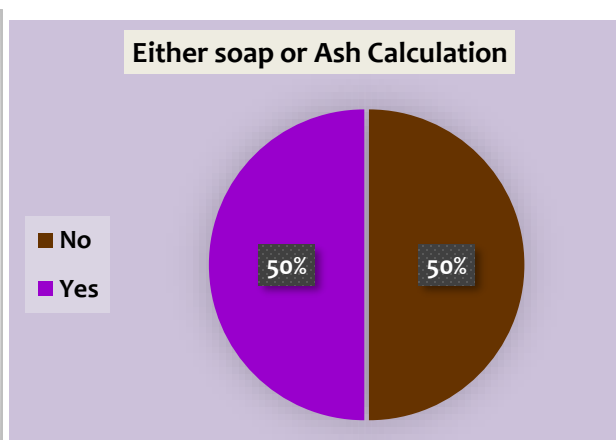


Figure 22: Presence of either soap or ash around a hand wash device

4.3.2 Critical hand washing moments

The households were asked to name at least 3 of the most important times when someone should wash hands. The survey revealed as on figure 22 below that most household members stated the 3 moments as before eating (94%, 95% CI: 91.4% - 96.5%), after defecation (88%, (95% CI: 84.5% - 91.3%), and before cooking (71%, 95% CI: 66.1% - 75.7%). The rest of the households also identified another set of 3 critical moments of hand washing as before breastfeeding (36%, 95% CI: 31.3% - 41.4%), before feeding children (14%, 95% CI: 10.5% - 17.8%) and after handling a child's stool (8%, 95% CI: 5.2% - 10.9%).

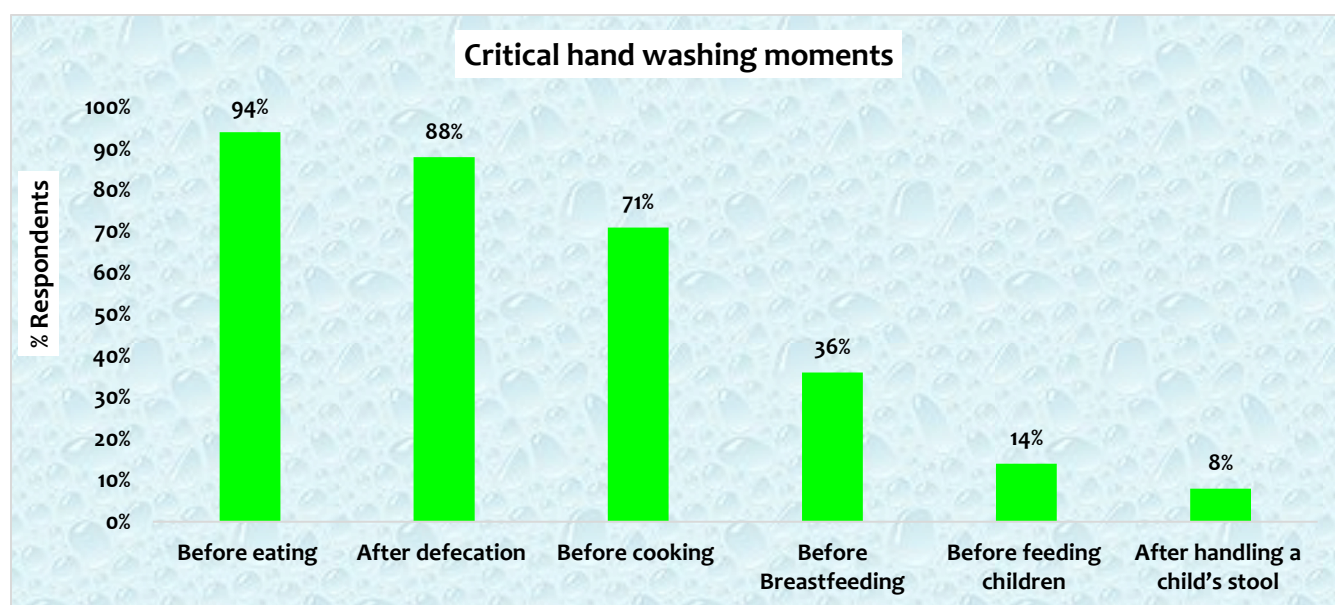


Figure 23: Important times to wash their hands

4.3.3 Bathing facilities for households

100% of surveyed households have designated bathing facilities.

4.3.4 Summary of key findings on hygiene

The hygiene services are measured in terms of the number of persons per bath shelter/shower, the percentage of households with access to soap and the number of persons per hygiene promoter.

Collected data showed that 71% (95% CI: 66.1% - 75.7%) of respondents said that they have soaps in their households while 29% (95% CI: 24.3% - 33.9%) indicated that they don't have them. 52% (95% CI: 46.6% - 57.1%) of households confirmed that they have hand washing devices/stations while 48% (95% CI: 42.9% - 53.4%) don't have them.

100% of surveyed households confirmed that they have access to designated bathing facilities.

Findings from the qualitative study also showed similar findings in which community members who participated in FGDs mentioned that hygiene materials like soaps and sanitary pads are no longer being distributed to refugees. This makes it difficult for them to find soaps for their daily cleaning activities and those to use around hand washing stations because the money they receive is not sufficient for their families' needs.

It was also mentioned by some participants that they need support to get hand washing devices for their households.

It was further found from the FGDs that the camp has got hygiene and sanitation promoters per village who disseminate health information whenever required and train camp's communities on hygiene and sanitation best practices.

4.4 MENSTRUAL HYGIENE

In the survey sample 85.3% (95% CI: 81.5% - 89.2%) of households were having women of reproductive age with numbers varying between 1 and 8. Among the identified women of reproductive age, 96% (95% CI: 93.8% - 98.1%) agreed to interviewed privately about their menstrual hygiene practices while 4% (95% CI: 1.9% - 6.2%) of them refused.

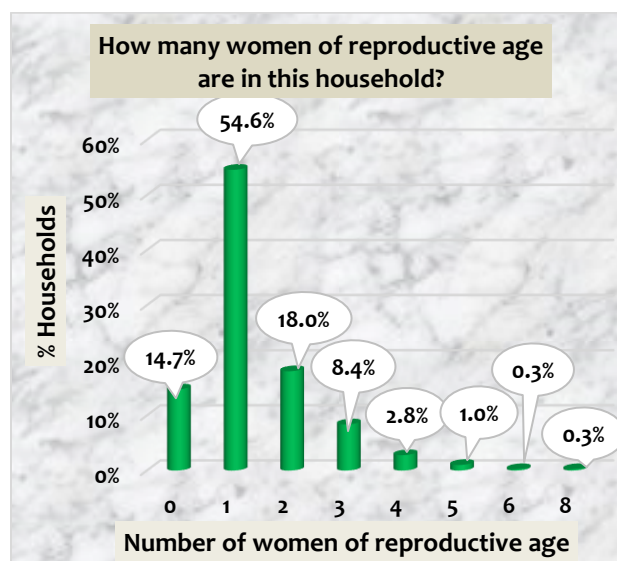


Figure 24:: Number of women of reproductive age

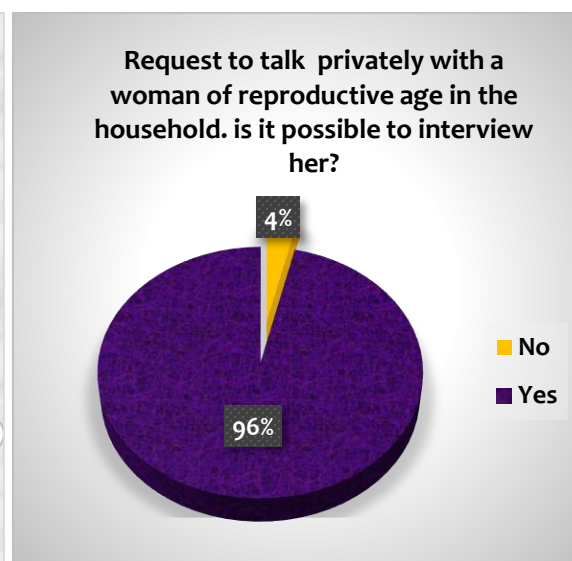


Figure 25: Possibility to interview identified women

It was found that 87.9% (95% CI: 84.3% - 91.4%) of women of reproductive age used disposable pads during their menstrual period while 11.4% (95% CI: 8.0% - 15.0%) used reusable cloths.



Figure 26: Materials used during menstrual period

About their second usable material in menstrual period, 82.2% (95% CI: 78.1% - 86.4%) of women indicated that they do not have any other choice while 7.5% (95% CI: 4.6% - 10.4%) used reusable cloth as seen on Figure 27.

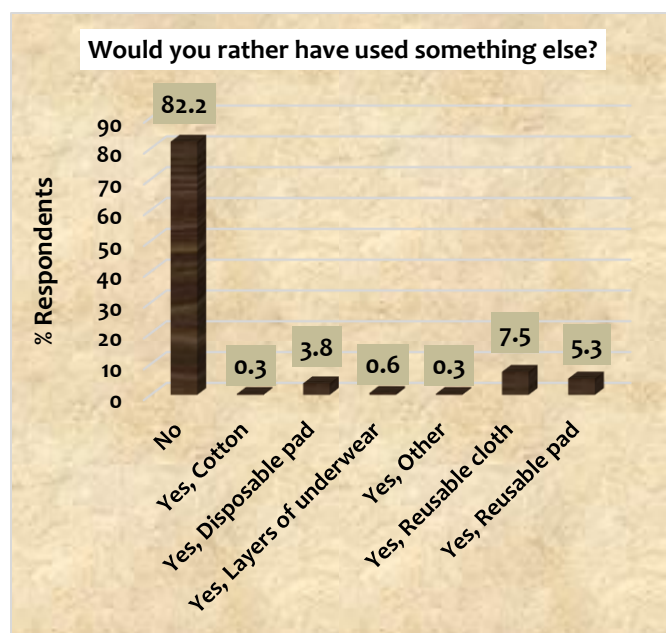


Figure 27: Second choice menstrual period

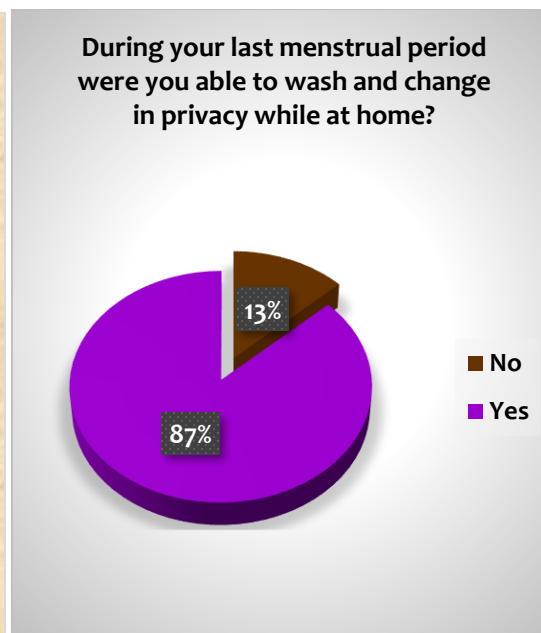


Figure 28: Privacy at home

87% (95% CI: 83.2% - 90.6%) of women confirmed that they were able to wash and change in privacy while at home while 13% (95% CI: 9.4% - 16.8%) of them were not able. 74% (95% CI: 69.4% - 78.9%) of respondents said that they were to wash and change at work or school while 26% indicated that they didn't have privacy at work or school (figures 28 and 29).

52% (95% CI: 46.6% - 57.5%) of women said that there was no toilet paper/cleansing water available where they change their pads while 48% (95% CI: 42.5% - 53.4%) of them had access to them.

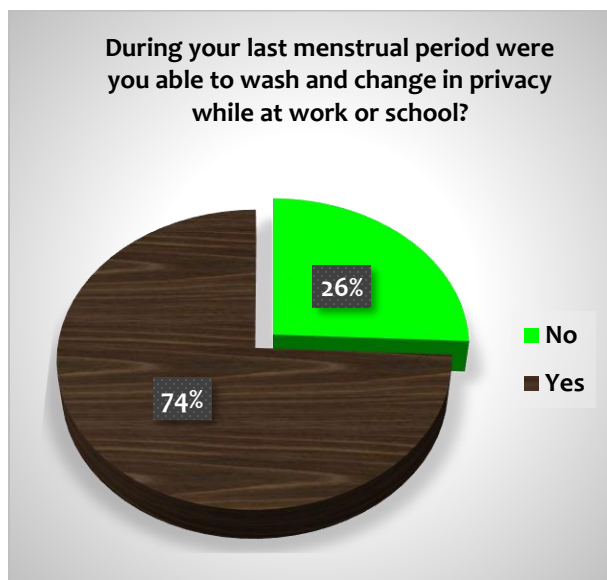


Figure 29: Privacy at Work or School

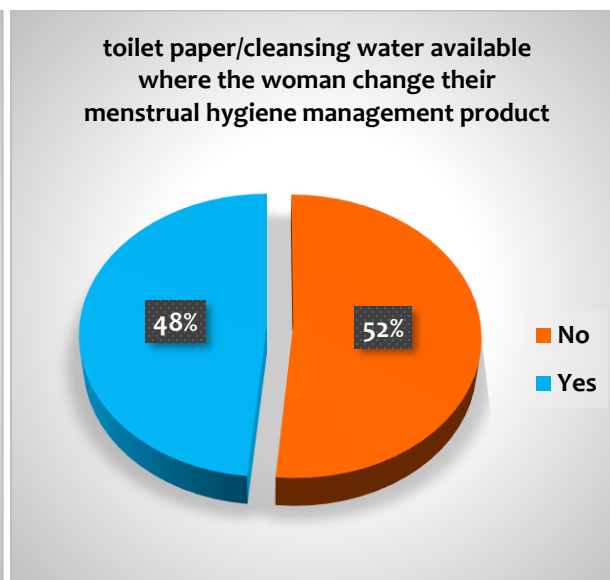


Figure 30: Availability of toilet paper/cleansing water

4.4.1 Summary of key findings on menstrual hygiene

It was found that 87.9% (95% CI: 84.3% - 91.4%) of women of reproductive age use disposable pads during their menstrual period. 87% (95% CI: 83.2% - 90.6%) of women confirmed that they were able to wash and change in privacy at home. 74% (95% CI: 69.4% - 78.9%) of respondents said that they were able to wash and change at work or school.

These findings confirm that the target of having equal or greater than 90% of recipient women of reproductive age who are satisfied with menstrual hygiene management materials and facilities has not been achieved in Mahama camp.

4.5 DOMESTIC SOLID WASTES DISPOSAL

70.3% (95% CI: 65.5% - 75.1%) of surveyed households indicated that they dispose off their solid wastes in communal pits, 26.9% (95% CI: 22.1% - 31.4%) of them dispose them off in designated open areas, 1.8% (95% CI: 0.4% - 3.1%) use household pits and 1% (95% CI: 0.0% - 1.8%) use street bin/container for garbage collection as shown on figure 31.

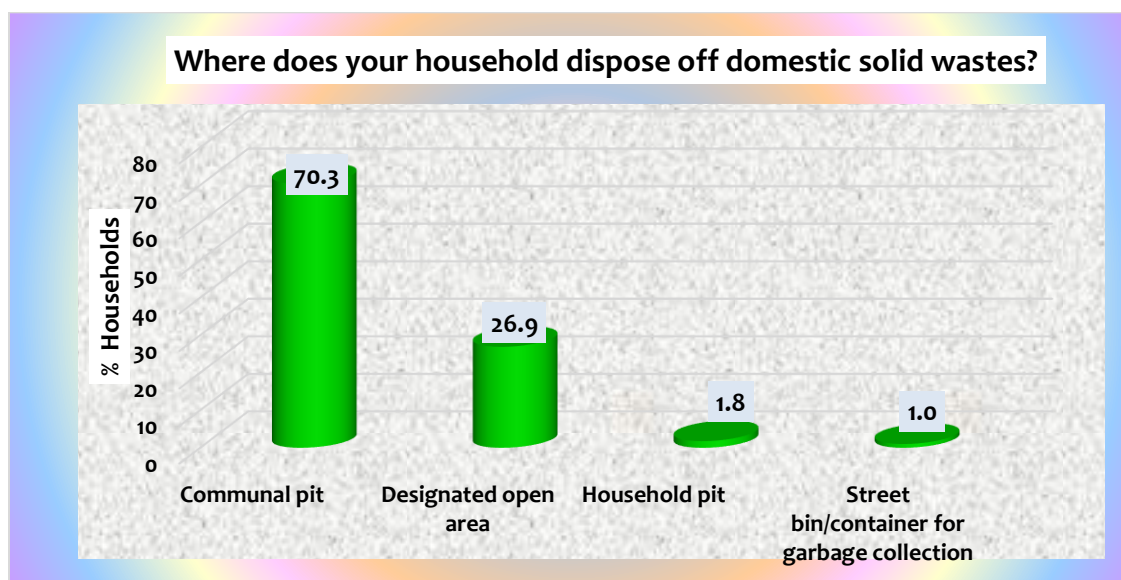


Figure 31: Location for disposal of domestic solid wastes

The percentage of households with access to a solid waste disposal facility in Mahama camp is above the target of 90% set by the UNHCR indicators target which means that it has been achieved in the camp.

Findings from the qualitative study also showed similar findings in which community members who participated in FGDs mentioned that domestic solid wastes are collected into trash bags and thrown into designated areas.

4.6 Summary of WASH Indicators and Targets in MAHAMA Camp

The table below summarises the key findings of the KAP survey for each indicator in comparison with the target set by UNHCR for refugee camps.

Table 4: Summary of key findings of WASH indicators in Mahama refugee camp

Indicator		Emergency ¹ Target	Post Emergency Target	Means of Verification	Survey findings
Water Quantity	Average # liters of potable ² water available per person per day	≥ 15	≥ 20	KAP Survey	30.0 liters
	Average # l/p/d of potable water collected at household level	≥ 15	≥ 20	KAP Survey	19.8 liters
	% Households with at least 10 liters/person potable water storage capacity	≥ 70%	≥ 80%	KAP Survey	85%
Water Access	Maximum distance [m] from household to potable water collection point	≤ 500m	≤ 200m	KAP Survey	<80m
Water Quality	% Households collecting drinking water from protected/treated sources	≥ 70%	≥ 95%	KAP Survey	100%
Sanitation	Number of persons per toilet/latrine	≤ 50	≤ 20 ⁶	Monthly Report Card	13
	% Households reporting defecating in a toilet	≥ 60%	≥ 85%	KAP Survey	100%
Hygiene	Number of persons per bath shelter/shower	≤ 50	≤ 20 ⁶	Monthly Report Card	13
	Number of persons per hygiene promoter	≤ 500	≤ 1000 ⁸	Monthly Report Card	
	% Households with access to soap	≥ 70%	≥ 90%	KAP Survey	71%
Menstrual Hygiene	% of recipient women of reproductive age who are satisfied with menstrual hygiene management materials and facilities	≥ 70%	≥ 90%	KAP Survey	80%
Solid Waste	% Households with access to a solid waste disposal facility	≥ 70%	≥ 90%	KAP Survey	100%

5 APPENDICES

5.1 Questionnaire for WASH KAP Survey

5.2. Raw data