

# **FINAL REPORT FOR**

## **WASH Knowledge, Attitudes and Practices (KAP) Survey in Mugombwa Refugee Camp**



**Submitted to:**

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**October 2021**

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

- Survey population: Refugees in Mugombwa 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, Mugombwa camp was accommodating 10,940 refugees living in 2,268 households structured into 8 quarters and 28 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<sub>eff</sub>** 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<sub>b</sub>** 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 sizes for each camp are 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 |
|----------|---|--|--|-------------------------------|---|
| Mugombwa | 385                                       | 2,268                                  | 330  | 5%                            | 348   |

### 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 Mugombwa camp is presented in the following table.



**Table 2: Distribution of sample size per village for Mugombwa camp**

| Quarter | Village | Number of Households<br>(estimated) | Planned Sample<br>size per village |
|---------|---------|-------------------------------------|------------------------------------|
| Q1      | V1      | 97                                  | 15                                 |
|         | V2      | 67                                  | 10                                 |
|         | V3      | 67                                  | 10                                 |
| Q2      | V1      | 74                                  | 11                                 |
|         | V2      | 83                                  | 13                                 |
|         | V3      | 75                                  | 12                                 |
|         | V4      | 68                                  | 10                                 |
| Q3      | V1      | 58                                  | 9                                  |
|         | V2      | 56                                  | 9                                  |
|         | V3      | 66                                  | 10                                 |
| Q4      | V1      | 97                                  | 15                                 |
|         | V2      | 80                                  | 12                                 |
|         | V3      | 80                                  | 12                                 |
| Q5      | V1      | 59                                  | 9                                  |
|         | V2      | 74                                  | 11                                 |
|         | V3      | 58                                  | 9                                  |
|         | V4      | 62                                  | 10                                 |
| Q6      | V1      | 131                                 | 20                                 |
|         | V2      | 93                                  | 14                                 |
|         | V3      | 75                                  | 11                                 |
|         | V4      | 80                                  | 12                                 |
| Q7      | V1      | 87                                  | 13                                 |
|         | V2      | 60                                  | 9                                  |
|         | V3      | 97                                  | 15                                 |
|         | V4      | 52                                  | 9                                  |
| Q8      | V1      | 90                                  | 14                                 |
|         | V2      | 148                                 | 23                                 |
|         | V3      | 134                                 | 21                                 |
|         |         | <b>2,268</b>                        | <b>348</b>                         |

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 will assess 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 <sup>3</sup>  |
|                   | Number of persons per usable water tap <sup>4</sup>   |
| 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 <sup>5</sup> |
| 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 e.t.c.) 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.

### 3.5 CHALLENGES AND LIMITATIONS

#### 3.5.1 Challenges

In conducting field works like the current WASH KAP survey challenges are rationally expected. Having this in mind, we were ready for mitigation measures for both expected and unexpected challenges before deploying staffs in the field. Practically, we had the following challenges:

- The questionnaire used was a Kinyarwanda version translated from English. Some technical terms were difficult to translate in Kinyarwanda and match well their English meaning so as to capture the information well.
- Instrumentally, the FGD guide is found to be a little bit long which makes some of the participants bored. But our trained field staffs reported that they mitigated these challenges by pursuing participants about the benefits of the information they got from them for their community.
- Some community members exaggerated their condition/situation. For example, some said that they do not have a single water collection and storage container in order to elicit sympathy. To triangulate what they were told, field teams had to verify some concerns like verifying the storage containers of water.
- Some respondents especially women were shy responding to menstrual hygiene questions administered by data collectors.

#### 3.5.2 Limitations

- Data about distance to water sources was estimated by the Kobo Toolbox from the total time used to fetch water from the sources as reported by respondents. The distance was not measured by data collectors.

## 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 16.6% (95% CI: 12.7% - 20.5%) of the surveyed households are made of 5 members, 14.3% (95% CI: 10.6% - 18.0%) are made of 6 members followed by 4 members' households with 13.5% (95% CI: 9.9% - 17.0%), 7 members' households with 12.6% (95% CI: 9.1% - 16.0%), 3 members' households with 10.0% (95% CI: 6.9% - 13.2%), 8 members' households with 8.9% (95% CI: 5.8% - 11.9%) and 10-members' households with 6.6% (95% CI: 4.0% - 9.2%). The other households' sizes are in small numbers as presented on the Figure 1.

Figure 2 shows the number of children less than 5 years living in surveyed households. It is indicated that most of the households don't have children less than 5 years old (34% (95% CI: 29.1% - 39.1%) of surveyed households) while 30% (95% CI: 25.3% - 34.9%) of households have 1 child, 25% (95% CI: 20.9% - 30.1%) of households have 2 children, 9 % (95% CI: 5.7% - 11.5%) of households have 3 children, 1% (95% CI: 0.03% - 2.3%) have 4 children and a small percentage of 1% (95% CI: 0.03% - 2.3%) have 5 children.

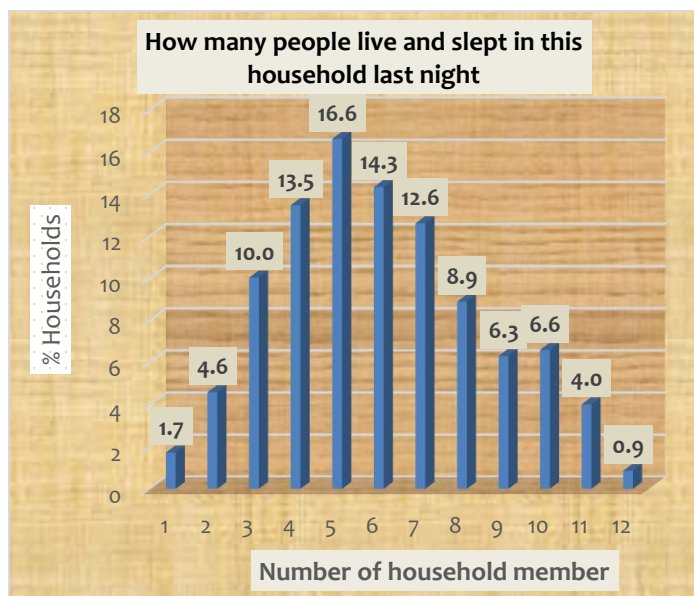


Figure 1: Sizes of the surveyed households

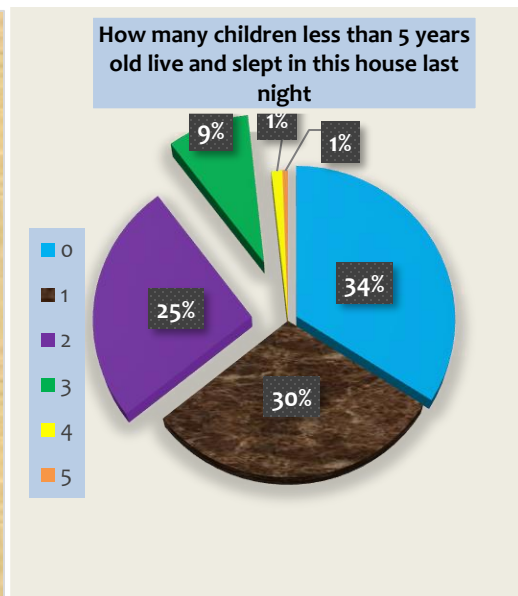
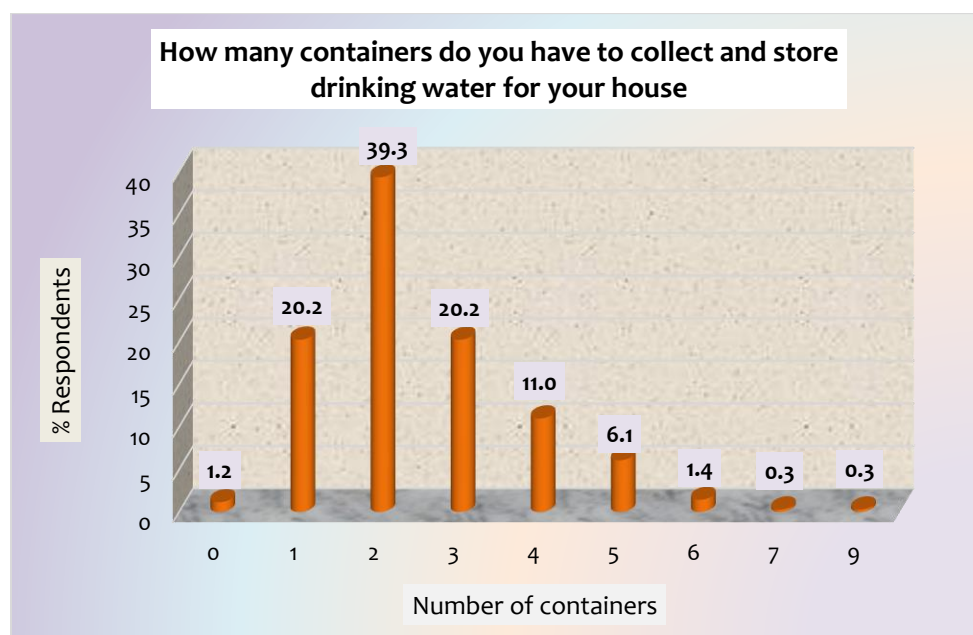


Figure 2: Number of children less than 5 years living in surveyed households

#### 4.1.2 Principal source of drinking water

Data collected from Mugombwa camp show 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 4 that majority of the surveyed households have 2 containers with respectively 39.3% (95% CI: 34.2% - 44.5%) of respondents. 20.2% (95% CI: 16.0% - 24.5%) of households have reported to have 1 and 3 containers while 11% (95% CI: 7.7% - 14.3%) have 4 containers and 6.1% having 5 containers.



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

#### 4.1.3 Availability of water source on the premises

99% (95% CI: 98.2% - 100%) of surveyed households confirmed that water source is available directly on or near their premises on while 1% (95% CI: 0% - 1.8%) of them said there is no water source available directly on the premises.

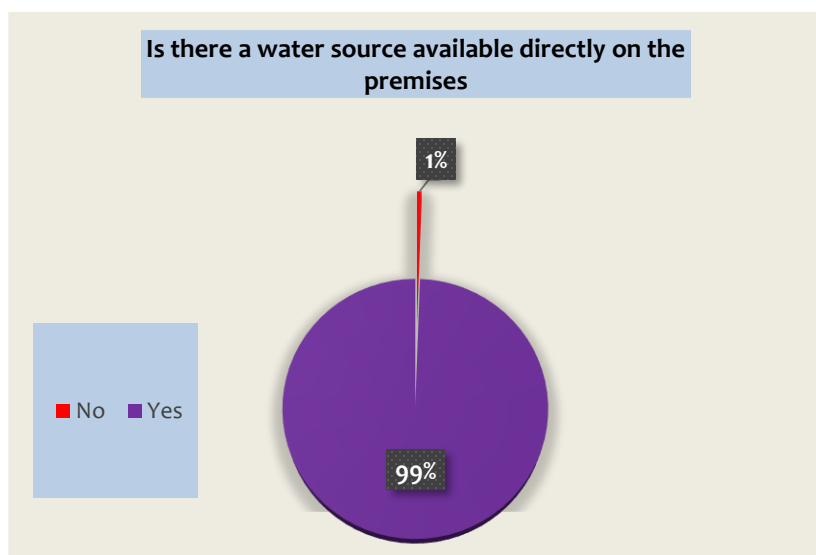


Figure 4: Data on availability of water source on the premises

#### 4.1.4 Time used to fetch water from the source

99.4% of households stated that they use less than 5 minutes to reach to water sources and about 0.3% use about 5 minutes (95% CI: 4.0 – 6.0 min), 0.3% require 10 minutes (95% CI: 9.0 – 11.0 min) to reach to water sources. In general, it was found that more than 99.7% of households use less or equal to 5 minutes to go to the water sources.

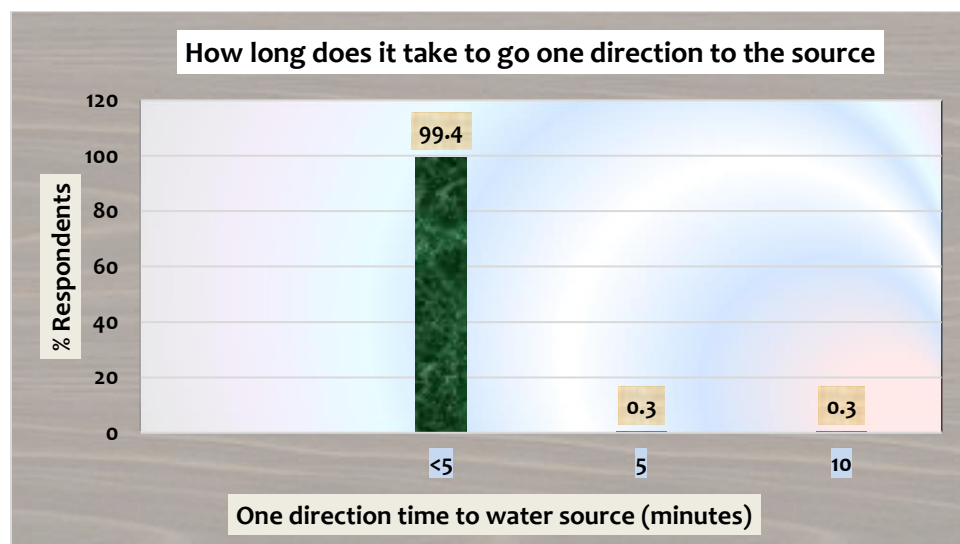


Figure 5: One direction time to go to water sources

In terms of the total time used to fetch water from the sources, as depicted in figure 8, 99.4% of households reported that they use less than ten minutes to get water from the source, 0.3% use 10 minutes (95% CI: 9.3 -10.7 min), 0.3% needs 20 minutes (95% CI: 19.3 – 20.7 min) in total



to fetch water from the source. In general, it was found that 99.7% of households use about 10 minutes (95% CI: 9.3 -10.7 min) to get water from the source.

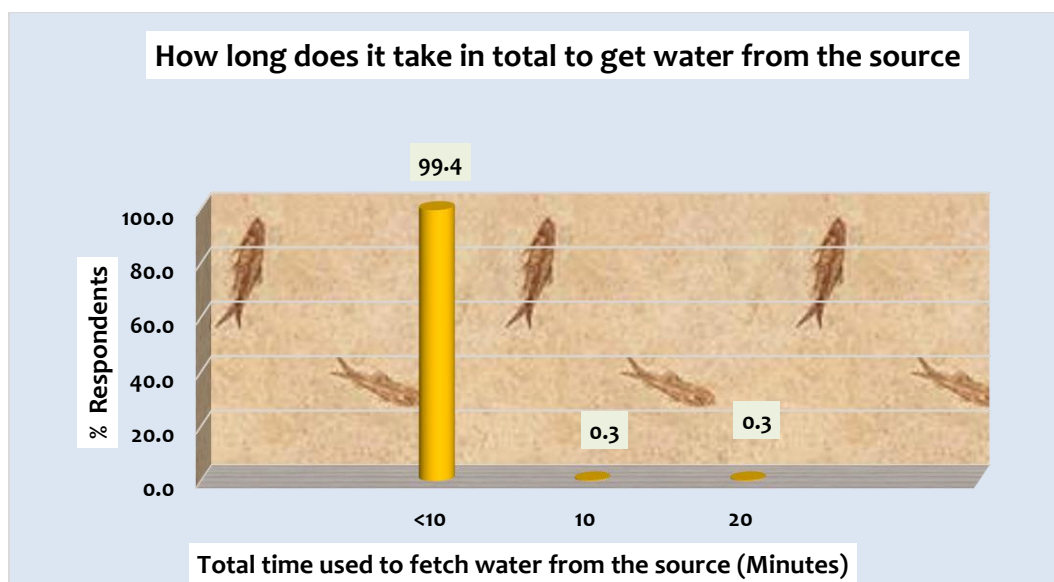


Figure 6: Total time used to fetch water from the source

#### 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.

99.4% beneficiaries stated that they travel less than 80 meters from their premises, 0.3% walk less than 400 meters, 0.3% take a distance of 800 meters (95% CI: 797.1 – 802.9m) (figure 6).

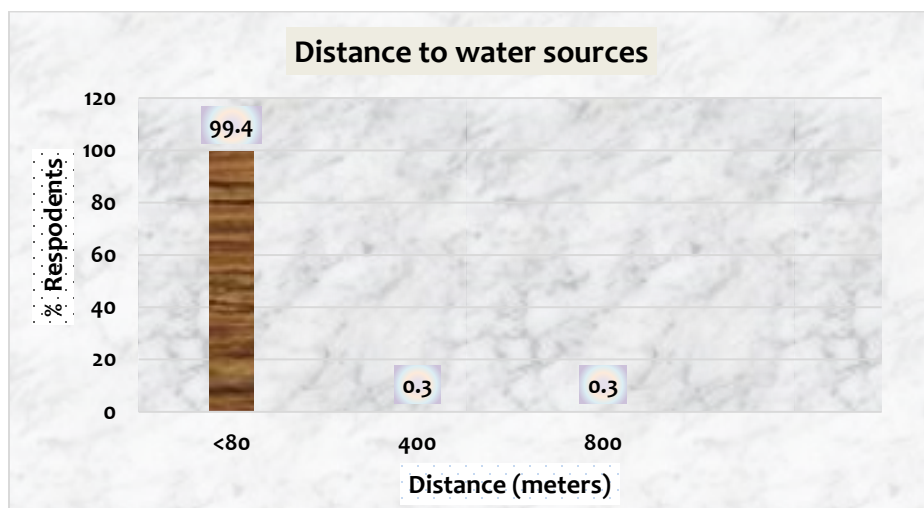


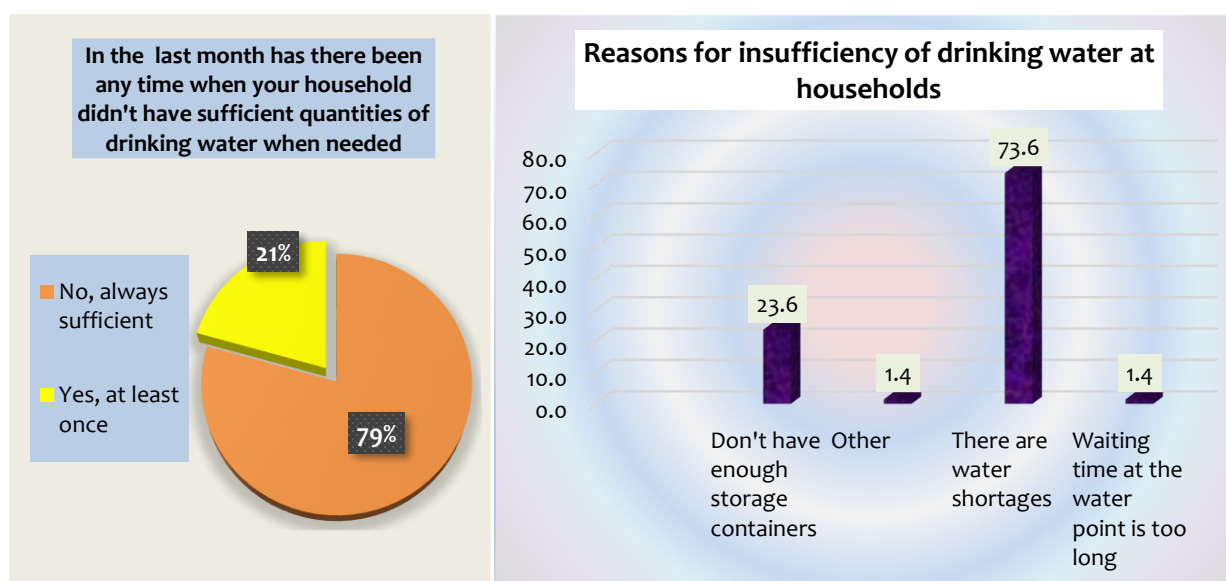
Figure 7: Distance to water sources



#### 4.1.6 Sufficiency of drinking water from the sources

21% (95 CI: 16.4% – 24.9%) households said that they did not have water in sufficient quantities at least once in the previous month while 79% (95% CI: 75.1% - 83.6%) of respondents said that they always had sufficient quantities of potable water in their households (Figure 9).

The water shortages at the sources were mentioned as the main reason for having insufficient potable water quantities with 73.6% (95% CI: 69.0% - 78.3%) of respondents while 23.6% (95% CI: 19.0% - 27.9%) of households said that they do not have enough storage containers (Figure 10).



**Figure 8: Data on sufficiency of drinking water for the 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.

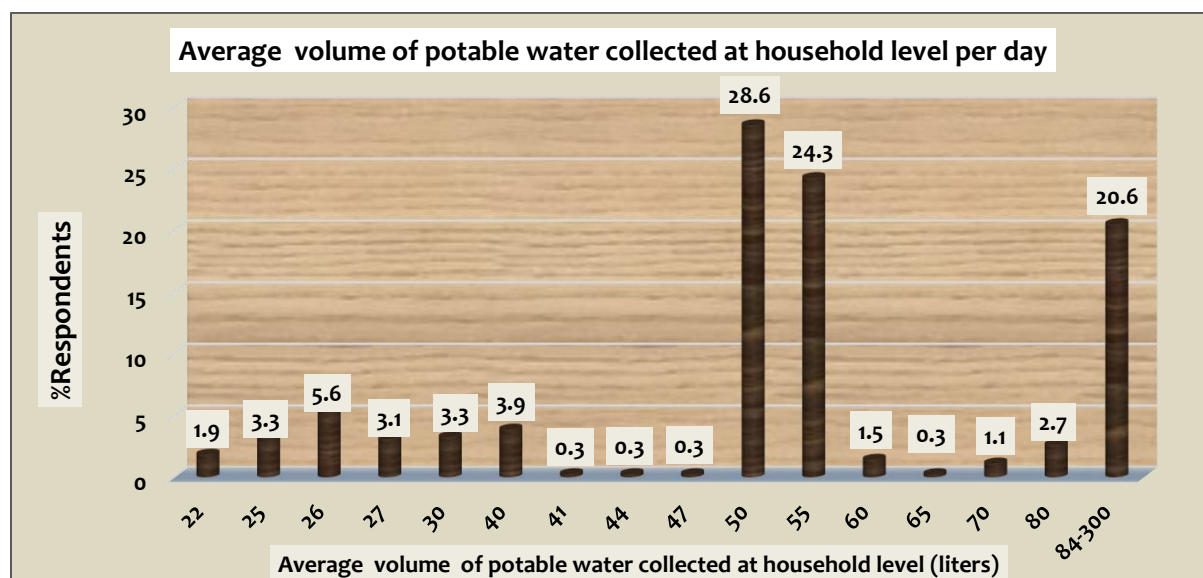


Figure 10: Volume of potable water collected at household level per day

83.9% of households get at least 40 liters (95% CI: 39.0 – 41.0L) of potable water per day, while 16.1% collect less or equal than 30 liters (95% CI: 29.0 – 31.0L) of water per day.

#### 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 78.7% of households get over 20 liters (95% CI: 19.0 – 21.0 L) of potable per person per day while 16.5% of households get in between 10-20 liters of potable water per person per day.

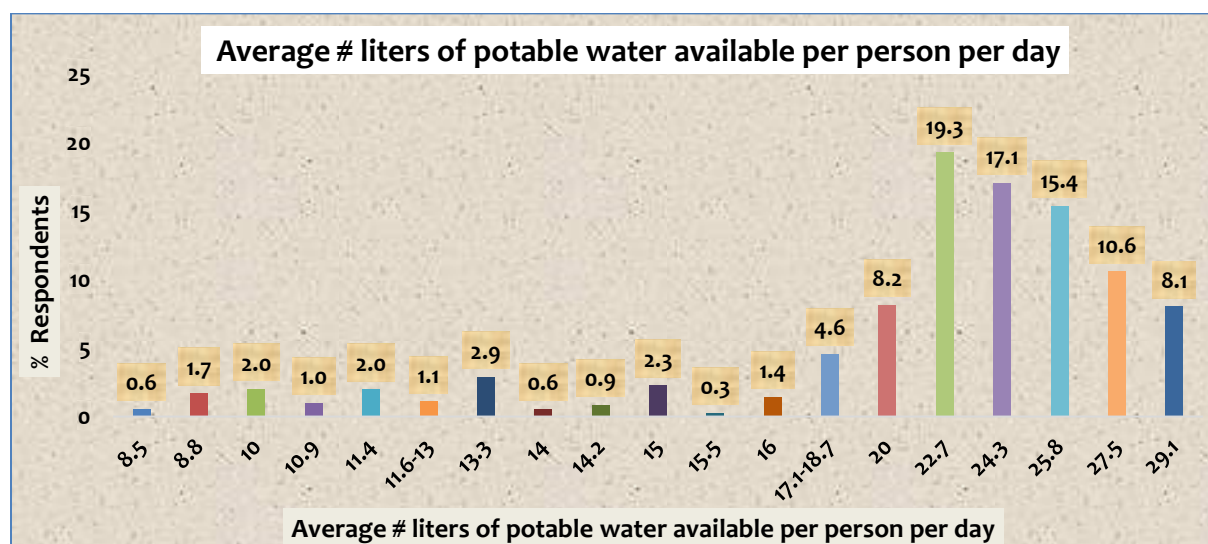


Figure 11: Volume of potable water available per person per day (liters)

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

Collected data as depicted in figure 13 show that 85.6% (95% CI: 82.0% - 89.3%) of households have 24 to 28 liters' potable water storage capacity per person which means that 98% (95% CI: 96.5% - 99.5%) of households have at least 10 liters' potable water storage capacity per person.

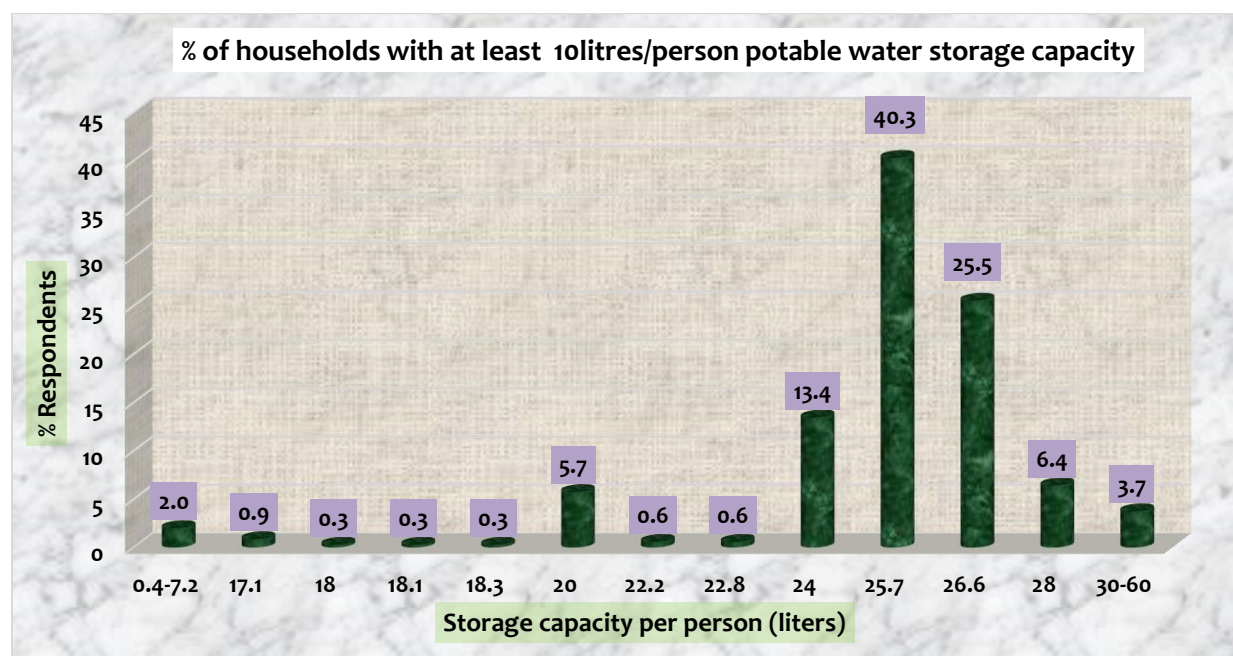


Figure 12: % Households with at least 10liters/person portable water storage capacity

#### 4.1.10 Summary of key findings on water supply

Key findings from the quantitative data collection which have been detailed in the previous sections and qualitative study are summarized below.

- **Water access**

99% (95% CI: 98.2% - 100%) of households reported that water source is available directly on or near their premises. It was found that 99.4% of surveyed households travel less than 80 meters from their premises to water sources. Compared to the target of travelling less or equal to 200 meters by the UNHCR WASH indicator, 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.

83.9% of households collect at least 40 liters (95% CI: 39.0 – 41.0L) of potable water per day which is greater than the target of having equal or greater than 20 liters of water per household per day as set by the UNHCR WASH indicators.

It was found from the survey data that about 80% of households get 24.6 liters (95% CI: 23.6 - 25.6L) of potable water per person per day which is in line with the target of having equal or greater than 20 liters (95% CI: 19.0 – 21.0 L) of water per person per day.

Data on households' water storage capacity showed that 98% (95% CI: 96.5% - 99.5%) of households have at least 10 liters' potable water storage capacity per person. This figure meets the target of having equal or greater 80% of households having least 10 liters' potable water storage capacity per person.

- **Water quality**

The survey found that the principal sources of domestic potable water is public tap or stand pipe at 100%. The percentage is greater than the target of 95% of households collecting drinking water from protected/treated sources as set by of 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 sufficient quantities for cooking, showering and general cleaning except 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:

- Time to fetch water takes place during school hours and children living alone and orphans are not able to collect water for their households (less accessibility to water).
- Some households don't have enough containers to store water

Recommendations were made by FDGs participants to increase the water access, quality and quality 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.

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

- **Partners general views on overall situation of water supply in Mugombwa 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 MUGOMBWA 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 are no sex abuses of any kind or harassment cases caused by water shortages according to all interviewed partners. Water is available all the time even if it is not in sufficient quantity, but it is a positive and good achievement for WVI which was appreciated.

The beneficiaries are involved into decision making and solving their daily WASH issues. Refugees are the ones who coordinate the operation and management of water points as said by some partners during their interview and beneficiaries appreciate the current water provision in the camp.

- **Positive changes**

People in the camp are satisfied by the supply and access to water because they are no longer fetching dirty water from unimproved sources. Currently, beneficiaries can easily get potable water to use in all household activities and 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 communal latrines. Figure 15 shows that 69% (95% CI: 64.2% - 73.9%) of children under 5 years old use plastic pots while 31% (95% CI: 26.1% - 35.8%) use communal latrines same as their parents.

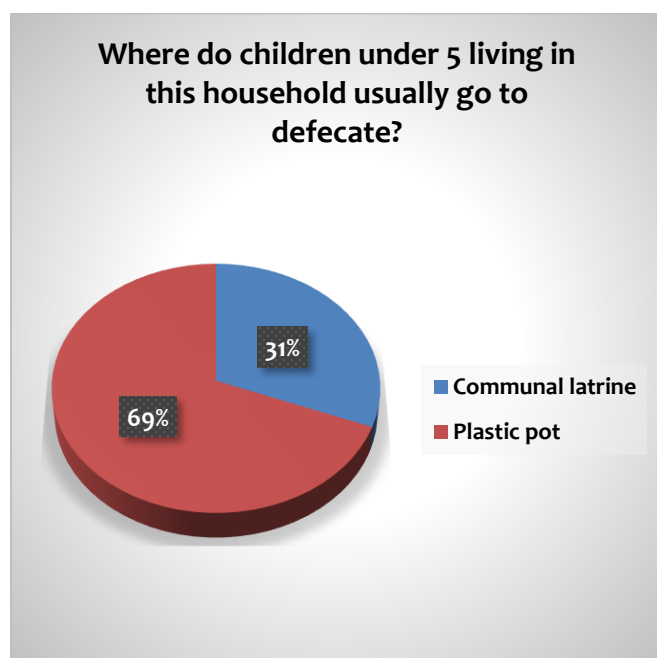


Figure 13: Defecation location for children under five years old

No cases of households' members defecating in the open air were reported in Mugombwa camp.

### 4.2.2 Latrines emptying

90.6% (95% CI: 87.5% - 93.6%) of households confirmed that their latrines have been emptied while 6.6% (95% CI: 4.0% - 9.2%) said that theirs have never been emptied and about 2.8% (95% CI: 1.1% - 4.6%) said that they do not know anything about emptying as shown on figure 14. From those who agreed that emptying is done, 93.9% (95% CI: 91.5% - 96.5%) respondents indicated that wastes are removed by a service provider and taken to an unknown location and 1.8% (95% CI: 0.4% - 3.1%) said that wastes are emptied by a service provider and taken to a dumping site (Figure 15).

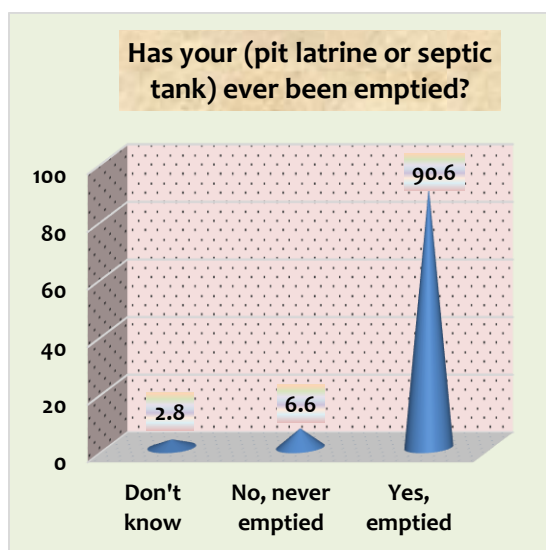


Figure 14: Latrines emptying

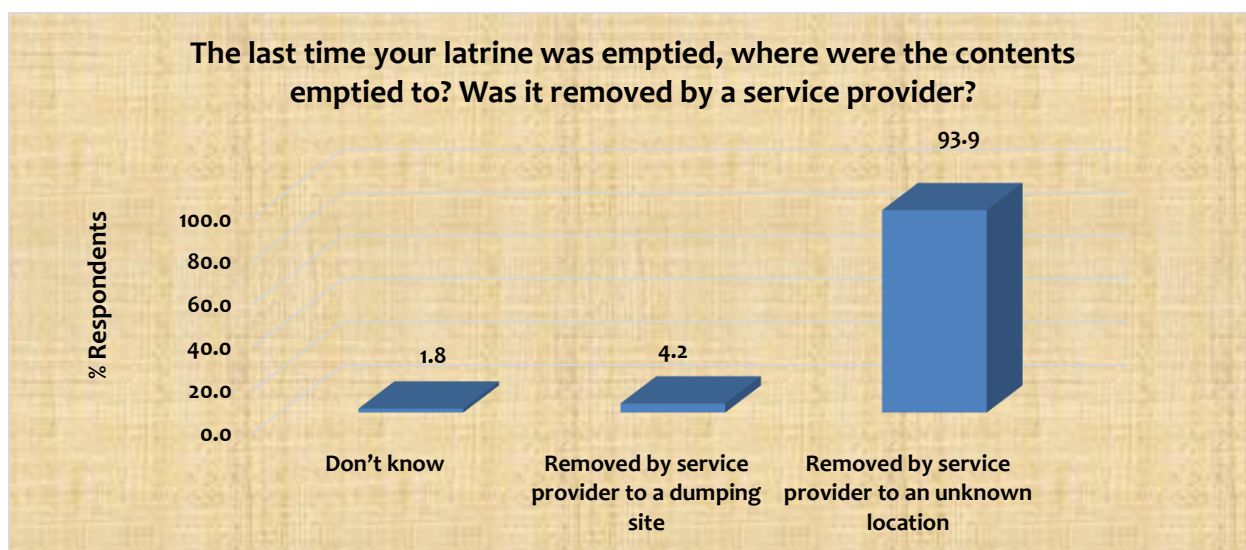


Figure 15: Places where latrine wastes were emptied to

#### 4.2.3 Summary of key findings on sanitation

Key findings from the quantitative data collection which have been detailed in the previous sections and qualitative study are summarized below.

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

It was confirmed from the survey that all 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 72% (95% CI: 67.2% - 76.6%) of respondents said that they have soaps in their households while 28% (95% CI: 23.4% - 32.8%) indicated that they don't have them. 46% (95% CI: 40.9% - 51.4%) of households confirmed that they have hand washing devices/stations while 54% (95% CI: 48.6% - 59.1%) don't have them.

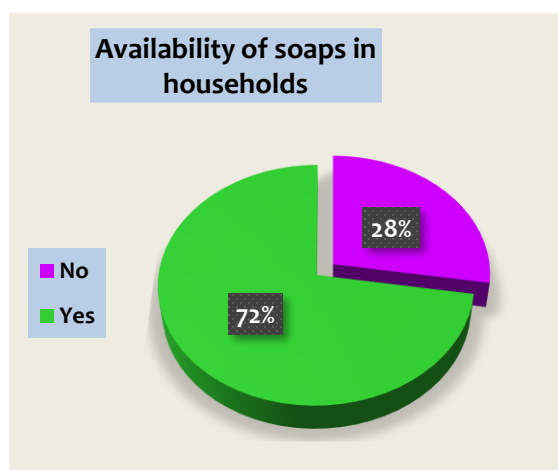


Figure 14: Usage of soaps in households

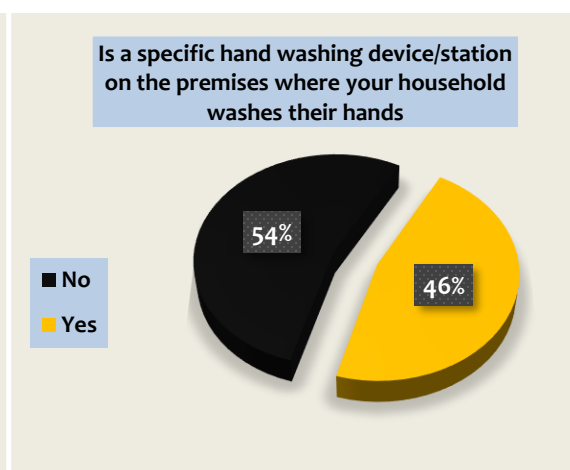


Figure 15: Availability of hand washing devices/stations in households

98% (95% CI: 96.5% - 99.5%) of households with hand washing devices confirmed that they have water in their devices while 2% (95% CI: 0.5% - 3.5%) said that they don't have water in the devices. Among the households with hand washing devices and water, 45% (95% CI: 39.8% - 50.2%) of them said that they have soap or ash around the devices while 55% (95% CI: 49.8% - 60.2%) don't have either soap or ash.

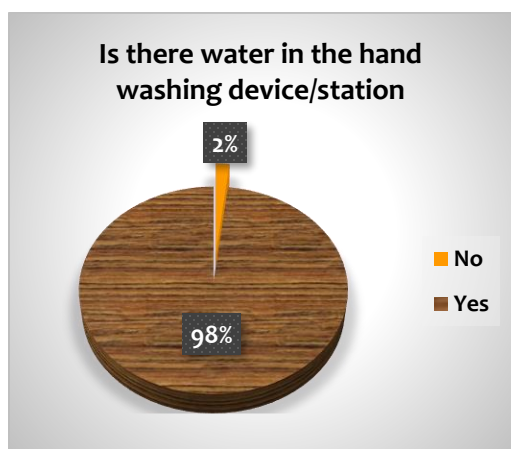


Figure 16: Presence of water in hand washing device

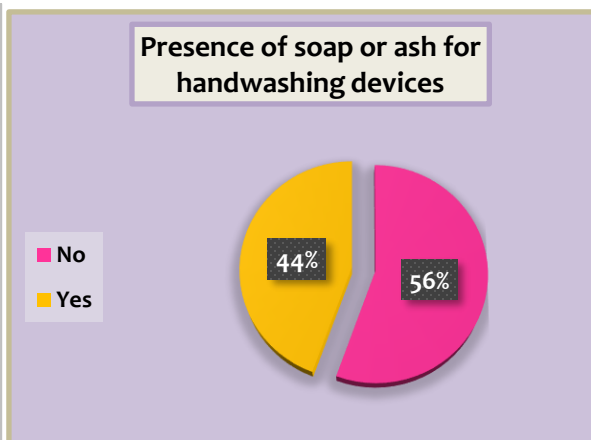


Figure 17: Presence of either soap or ash around a hand wash device

#### 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 in the figure 22 below that most household members stated the 3 moments as after defecation (91%, 95% CI: 88.1% - 94.1%), after changing nappy (91%, 95% CI: 88.1% - 94.1%) and before feeding children (83%, 95% CI: 79.2% - 87.0%). The rest of the households also identified another set of 3 critical moments of hand washing as before eating (81%, 95% CI: 77.0% - 85.2%), before cooking (73%, 95% CI: 68.4% - 77.7%) and before breastfeeding (28%, 95% CI: 23.4% - 32.8%).

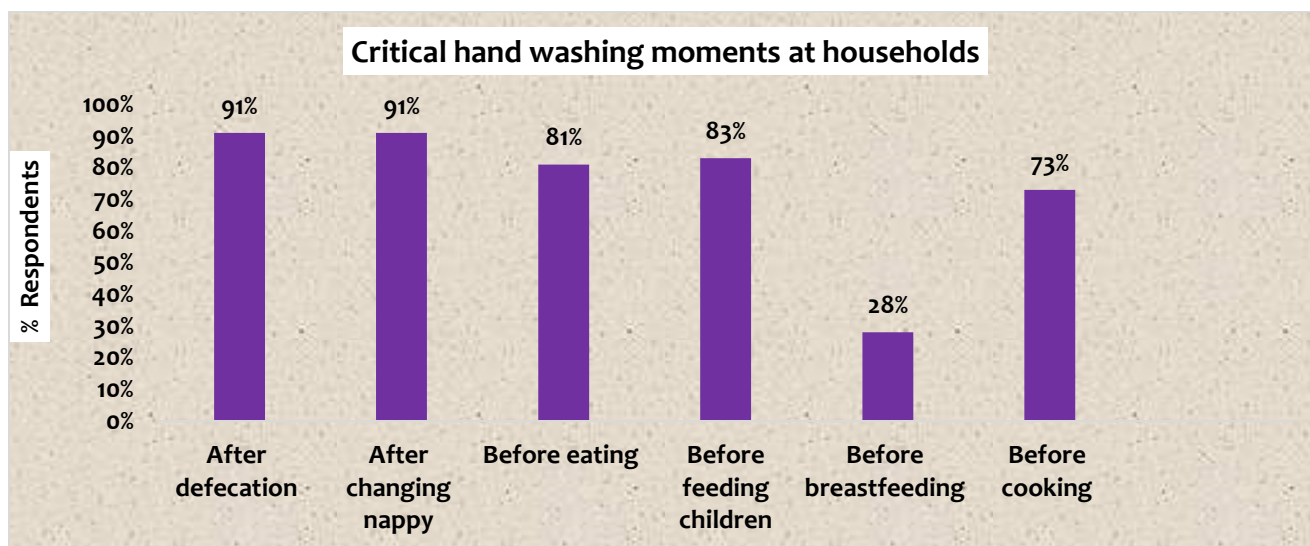


Figure 18: Critical hand washing moments at households

#### 4.3.3 Bathing facilities for households

100% of surveyed households do 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 72% (95% CI: 67.2% - 76.6%) of respondents said that they have soaps in their households which is below the target of 90% of which should have access to soap.

46% (95% CI: 40.9% - 51.4%) of households confirmed that they have hand washing devices/stations while 54% (95% CI: 48.6% - 59.1%) don't have them.

100% of surveyed households confirmed that they have access to designated bathing facilities. Data from the WVR project performance report show that in Mugombwa camp 37 persons are counted per shower room. This number is above the target of 20 persons per bath shelter set UNHCR WASH indicators.

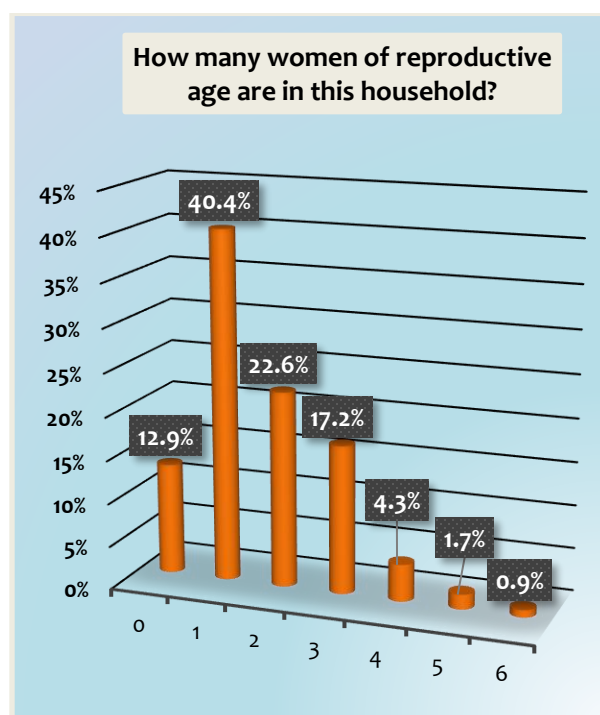
Findings from the qualitative study also showed similar findings in which community members who participated in FGDs mentioned that hygiene materials like soaps and sanitary pads are no longer being distributed to refugees. This makes it difficult for them to find soaps for their daily cleaning activities 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.

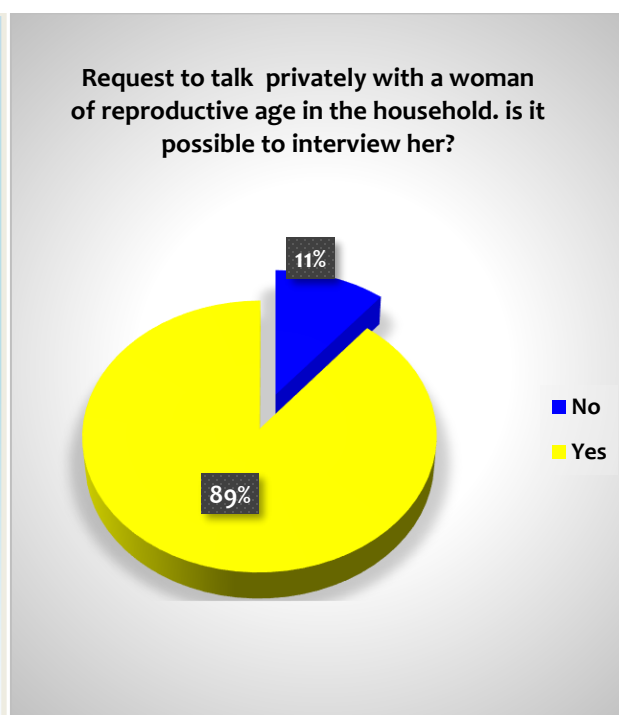
It was further found from the FGDs that the camp has got hygiene and sanitation promoters per village who disseminate health information whenever required and train camp's communities on hygiene and sanitation best practices.

#### 4.4 MENSTRUAL HYGIENE

In the survey sample, 12.9% (95% CI: 9.4% - 16.4%) of households didn't have any women of reproductive age, 40.4% (95% CI: 35.3% - 45.5%) of them have 1 woman of reproductive age, 22.6% (95% CI: 18.2% - 27.0%) of households have 2 women. The identified women of reproductive age were requested for an appointment for private interview about menstrual hygiene and only 89% (95% CI: 85.6% - 92.6 %) of them agreed to be interviewed.



**Figure 19: Number of women in reproductive age**



**Figure 20: Consent to be interviewed about menstrual hygiene**

It was found that 99% (95% CI: 97.6% - 100%) of women of reproductive age used disposable pads during their menstrual period while 1% (95% CI: 0% - 2.4%) used reusable cloths as depicted in figure 25 below.

About their second choice of material used during menstrual period, 81.1% (95% CI: 76.5% - 85.8%) of respondents said to have no other choice while 16.3% (95% CI: 11.8% - 20.6%) of them stated that they use reusable cloth as seen on figure 26.



Figure 21: Materials used during menstrual period

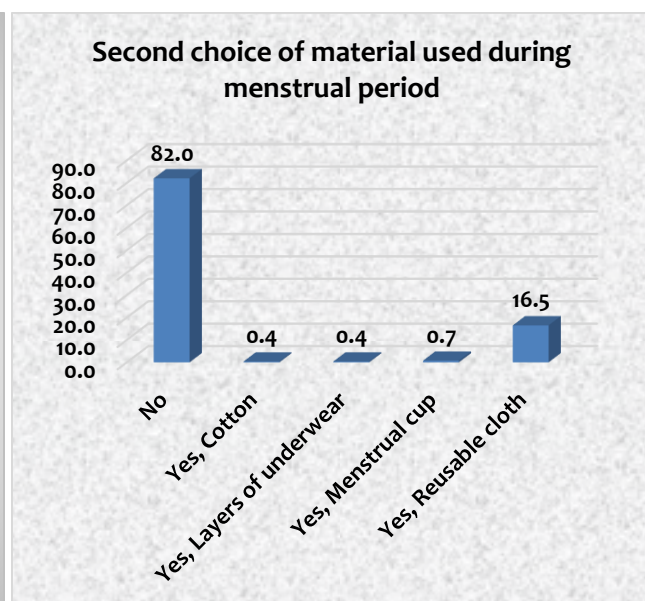


Figure 22: Second choice of material used during menstrual period

88% (95% CI: 83.9% - 91.7%) of women confirmed that they were able to wash and change in privacy at home, while 67% (95% CI: 61.6% - 72.8%) of respondents said that they were able to wash and change at work or school while 33% (95% CI: 27.2% - 38.4%) indicated that they didn't have privacy at work or school (figures 27 and 28).

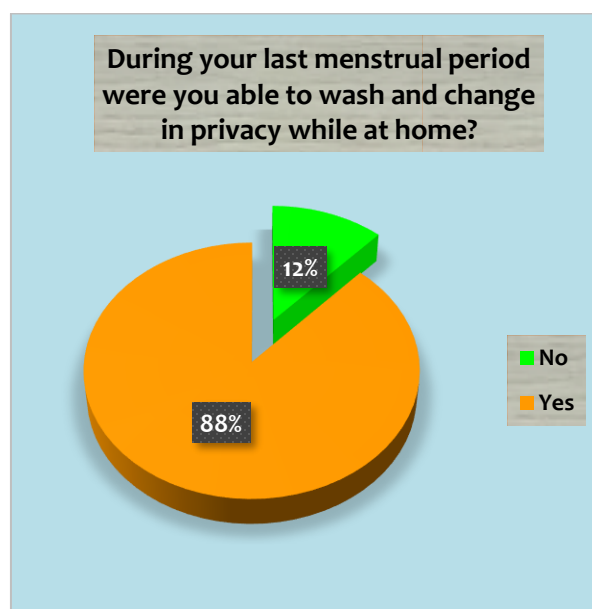


Figure 23: Privacy at home

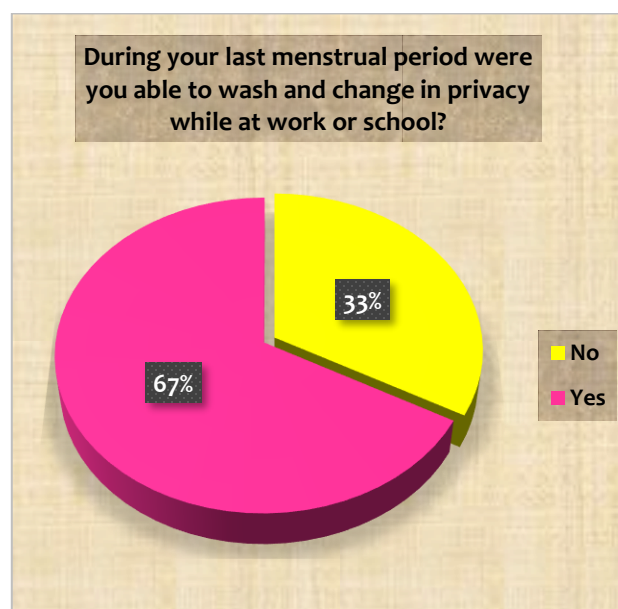


Figure 24: Privacy at Work or School

62% (95% CI: 56.2% - 67.8%) of women said that there was no toilet paper/cleansing water available where they change their pads.

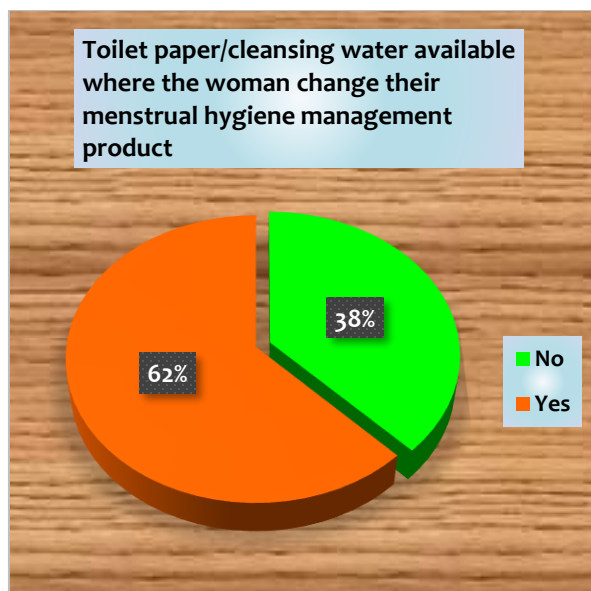


Figure 25: Availability of toilet paper and cleansing water

#### 4.4.1 Summary of key findings on menstrual hygiene

It was found that 99% (95% CI: 97.6% - 100%) of women of reproductive age use disposable pads during their menstrual period. 88% (95% CI: 83.9% - 91.7%) of women confirmed that they were able to wash and change in privacy at home, while 67% (95% CI: 61.6% - 72.8%) 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 been achieved in Mugombwa camp.



#### 4.5 DOMESTIC SOLID WASTES DISPOSAL

The survey found that 64.2% (95% CI: 59.2% - 69.2%) of households use other materials to keep solid wastes such as sacks, 24.4% (95% CI: 19.9% - 28.9%) of surveyed households use designated open area while 9.5% (95% CI: 6.4% - 12.5%) of households use communal pits. A few households use other means for disposing off their domestic wastes as shown in figure 33.

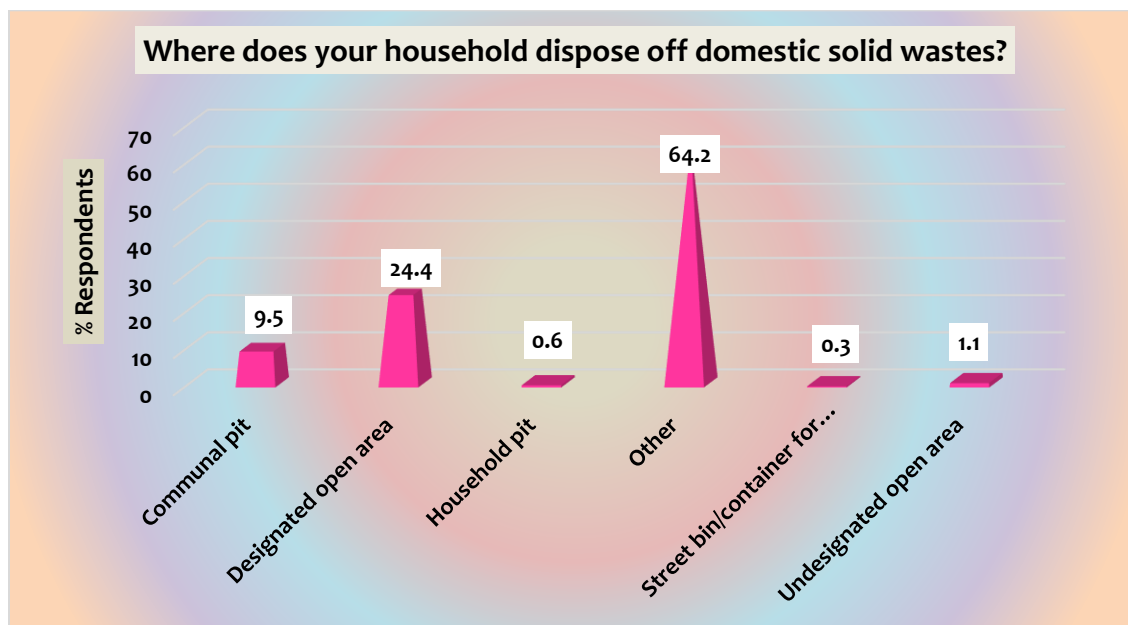


Figure 26: Location for disposal of domestic solid wastes

The percentage of households with access to a solid waste disposal facility in Mugombwa camp is below the target of 90% set by the UNHCR indicators target which means that this indicator is not yet achieved in the camp and proper arrangements should be made to improve on the disposal of solid wastes from households.

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 Mugombwa Camp

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

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

| Indicator         |   | Post Emergency Target | Means of Verification | Survey findings |
|-------------------|---|-----------------------|-----------------------|-----------------|
| Water Quantity    | Average # liters of potable water available at household level  | ≥ 20                  | KAP survey            | 83              |
|                   | Average # liters of potable water collected at household level per person per day                                     | ≥ 20                  | KAP survey            | 24.6            |
|                   | % Households with at least 10 liters/person potable water storage capacity  | ≥ 80%                 | KAP survey            | 98%             |
| Water Access      | Maximum distance [m] from household to potable water collection point   | ≤ 200m                | KAP survey            | 80m             |
| Water Quality     | % Households collecting drinking water from protected/treated sources   | ≥ 95%                 | KAP survey            | 100%            |
| Sanitation        | Number of persons per toilet/latrine  | ≤ 20                  | Monthly Report Card   | 25              |
|                   | % Households reporting defecating in a toilet   | ≥ 85%                 | KAP survey            | 100%            |
| Hygiene           | Number of persons per bath shelter/shower   | ≤ 20                  | Monthly Report Card   | 37              |
|                   | Number of persons per hygiene promoter  | ≤ 1000                | Monthly Report Card   | 9,123           |
|                   | % Households with access to soap  | ≥ 90%                 | KAP survey            | 72%             |
| Menstrual Hygiene | % of recipient women of reproductive age who are satisfied with menstrual hygiene management materials and facilities | ≥ 90%                 | KAP survey            | 94%             |
| Solid Waste       | % Households with access to a solid waste disposal facility   | ≥ 90%                 | KAP survey            | 100%            |



## 5 APPENDICES

1. Questionnaire for WASH KAP Survey
2. Raw data