

FINAL REPORT FOR

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



Submitted to:

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

- Survey population: Refugees in Nyabiheke 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, Nyabiheke camp was accommodating 14,484 refugees living in 2,662 households structured into 8 quarters having 29 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 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
Nyabiheke	385	2,662	337	5%	355

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 Nyabiheke camp is presented in the following table.

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

Quartier	Village	Number of Households per village	Planned Sample size per village
Q1	Village A	99	13
	Village B	103	14
	Village C	132	18
Q2	Village A	63	8
	Village B	115	15
	Village C	99	13
Q3	Village A	69	9
	Village B	91	12
	Village C	114	15
Q4	Village A	105	14
	Village B	126	17
	Village C	140	19
	Village D	71	10
Q5	Village A	65	9
	Village B	63	9
	Village C	56	7
	Village D	46	6
Q6	Village A	78	10
	Village B	78	10
	Village C	75	10
Q7	Village A	101	14
	Village B	109	15
	Village C	108	14
	Village D	130	17
Q8	Village A	141	19
	Village B	102	14
	Village C	77	10
	Village D	55	7
	Village E	51	7
TOTAL		2,662	355

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 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 ⁷
	% 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 ⁹ & 10
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.

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 16.4% (95% CI: 12.6% - 20.2%) of the surveyed households are made of 10 members, 13.6% (95% CI: 10.1% - 17.2%) are made of 11 members followed by 13 members' households with 13.3% (95% CI: 9.8% - 16.8%), 12.8% (95% CI: 9.3% - 16.2%) of households with 12 members, 8 members' households with 10.6%, 14 members' households with 8.3% (95% CI: 5.5% - 11.2%) and 2-members' households with 5.6% (95% CI: 3.2% - 7.9%). 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 (31.7%, 95% CI: 26.9% - 36.5%) of surveyed households) while 39.2% (95% CI: 34.1% - 44.2%) of households have 1 child, 22.5% (95% CI: 18.2% - 26.8%) of households have 2 children, 3.9% (95% CI: 2.0% - 5.9%) of households have 3 children, 1.9% (95% CI: 0.5% - 3.4%) have 4 children and a small percentage of 0.8% (95% CI: 0% - 1.8%) have 5 children.

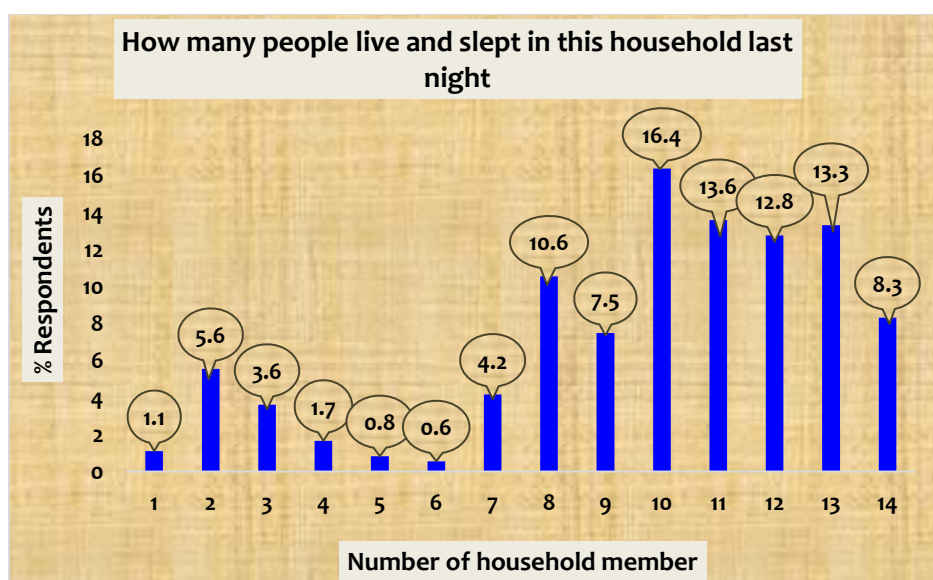


Figure 1: Sizes of the surveyed households

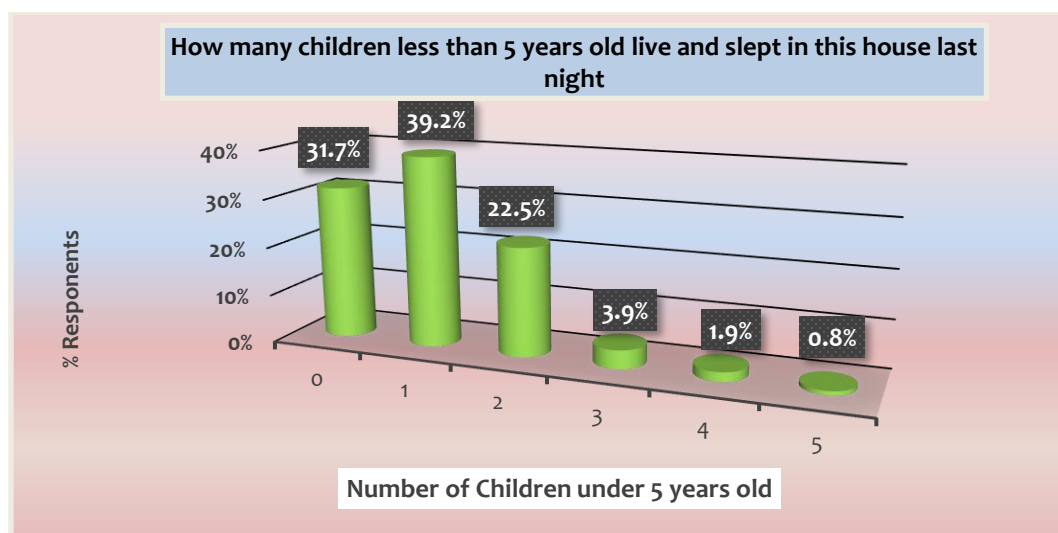


Figure 2: Number of children less than 5 years living in surveyed households

4.1.2 Principal source of drinking water

Data collected from Nyabiheke camp shows that the principal source of domestic drinking water is public tap or stand pipe with 100% of respondents. As for the second alternative source, 53% (95% CI: 47.9% - 58.2%) of respondents use surface water as their second source of domestic drinking water meanwhile 38% (95% CI: 47.8% - 60.1%) use protected spring as shown in figure 3.

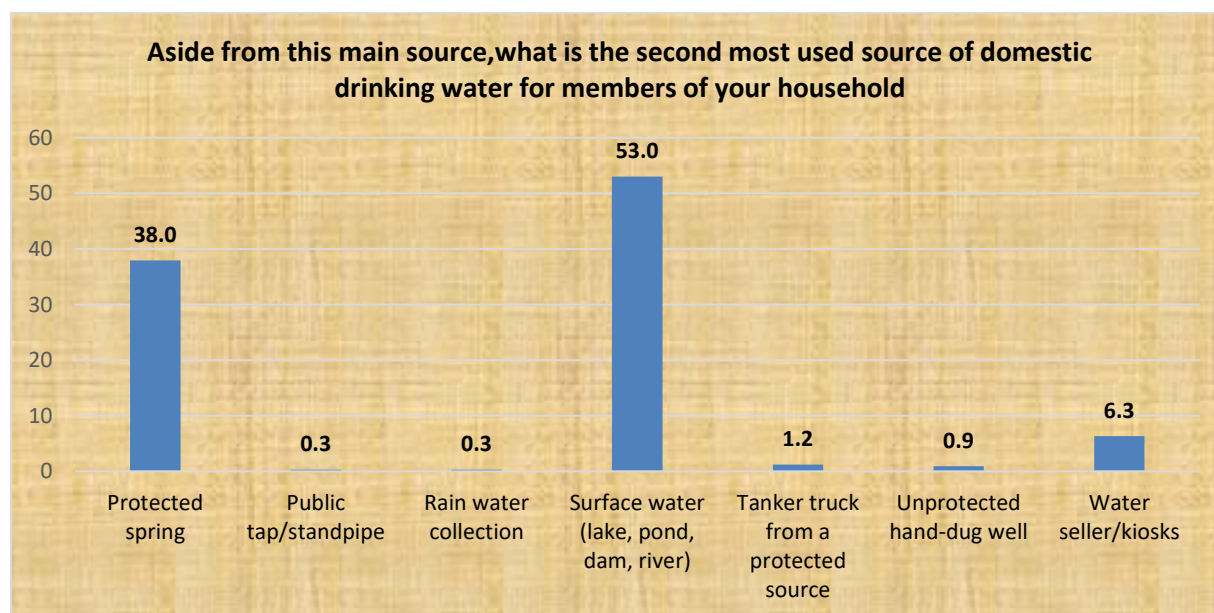


Figure 3: Source of drinking water for households

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 1 container with 75.7% (95% CI: 71.4% - 80.3%) of respondents. 13.2% (95% CI: 8.8% - 15.6%) of households have reported to have 2 containers, 3.3% (95% CI: 1.3% - 4.8%) have 3 containers while 5.1% (95% CI: 2.5% - 6.9%) have no container.

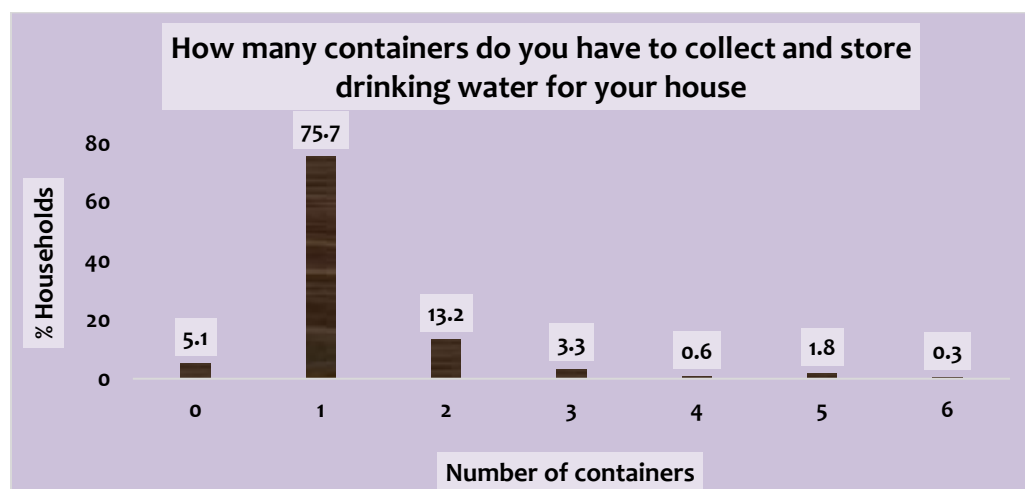


Figure 4: Number of collection and storage containers of drinking water

4.1.3 Availability of water on the premises

13% (95% CI: 9.6% - 16.5%) of surveyed households confirmed that water source is available directly on or near their premises on while 87% (95% CI: 83.6% - 90.4%) of them said there is no water source available directly on the premises.

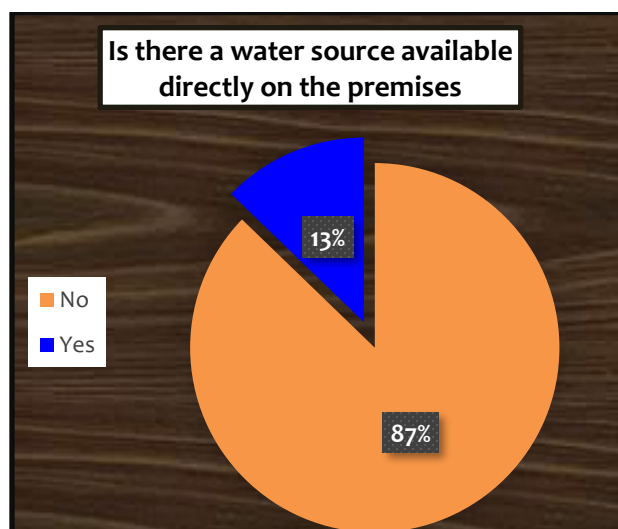


Figure 5: Availability of water on the premises

4.1.4 Time used to fetch water from the source

12.8% of households stated that they use less than one minutes to reach to water sources, 48.1% use between 1 and 5 minutes, while 39.1 use more than 5 minutes to reach to water sources. In general, it was found that about 79% of households use less or equal to 10 minutes to go to the water sources.

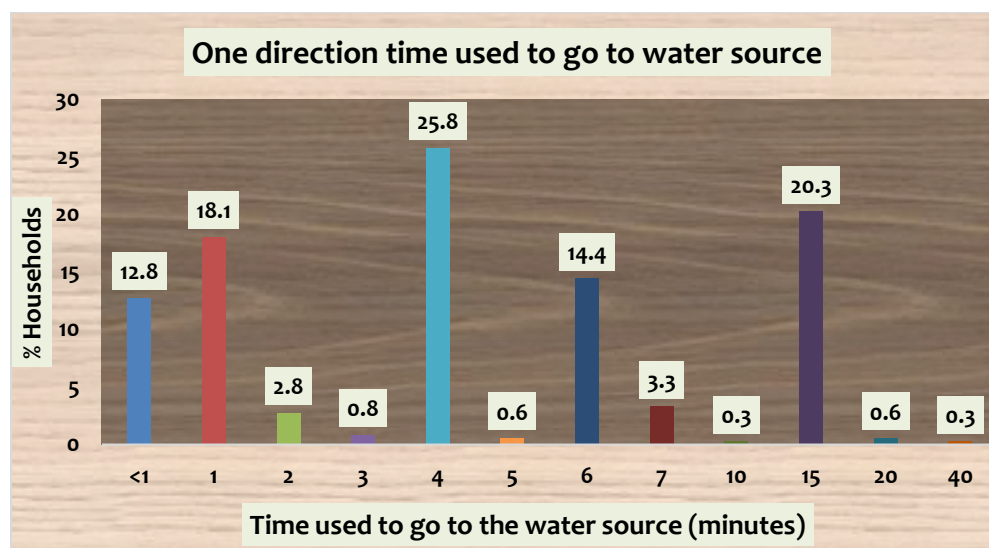


Figure 6: One direction time to go to water sources

In terms of the total time used to fetch water from the sources, as depicted on figure 8, 28.1% of households reported that they use less than or equal to ten minutes to get water from the source, 13.6% of households use between 10 and 30 minutes while 48.1% of households use more than 30 minutes to fetch water from the source. In general, it was found that 71.9% of households use more than 10 minutes to get water from the source.

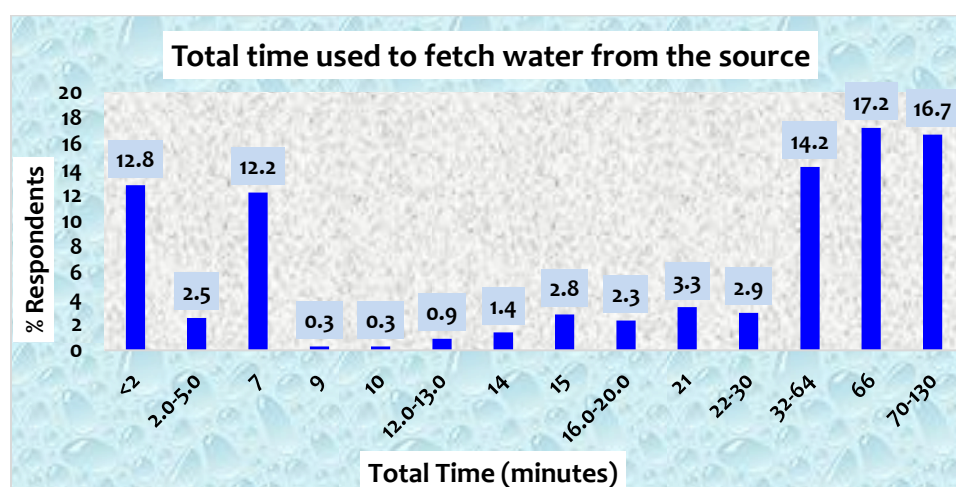


Figure 7: Total time used to fetch water from the source

4.1.5 Distance to water sources

It was found that 12.8% of households travel less than 80 meters from their premises to water sources, 25.8% walk about 160 meters (95% CI: 156.2 – 163.8m), 14.4% walk about 240 meters (95% CI: 236.2 – 243.8m), 20.3% travel a distance of 400 meters (95% CI: 396.2 - 403.8 m) while 5.4% of households travel more than 400 meters to water sources (figure 8).

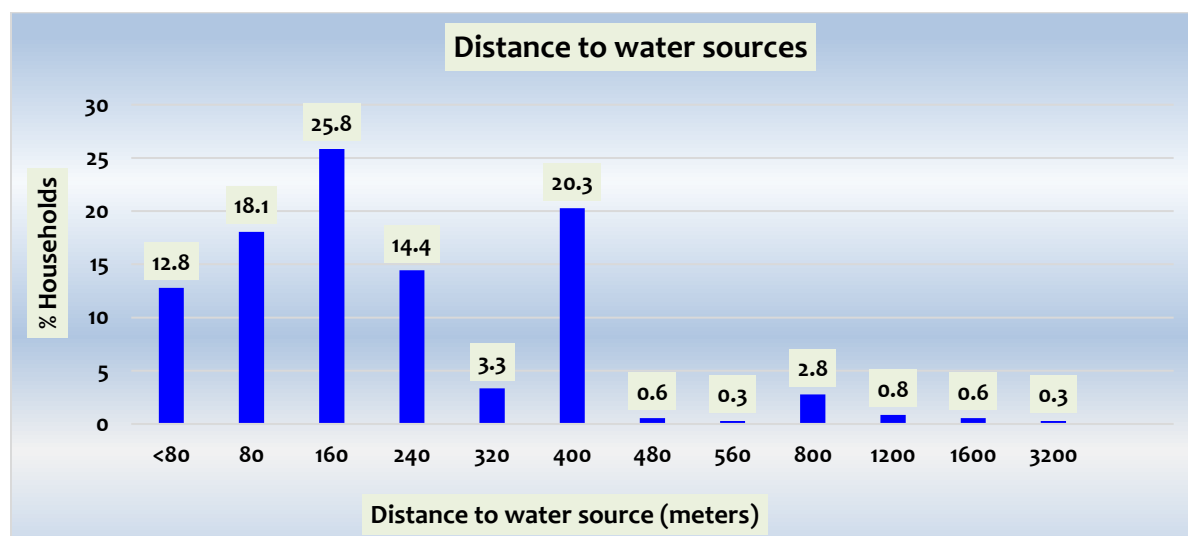


Figure 8: Distance to water sources

4.1.6 Sufficiency of drinking water from the sources

75% (95% CI: 70.8% - 79.7%) of households said that they did not have water in sufficient quantities at least once in the previous month while 25% (95% CI: 20.3% - 29.2%) of respondents said that they always had sufficient quantities of potable water in their households (Figure 9).

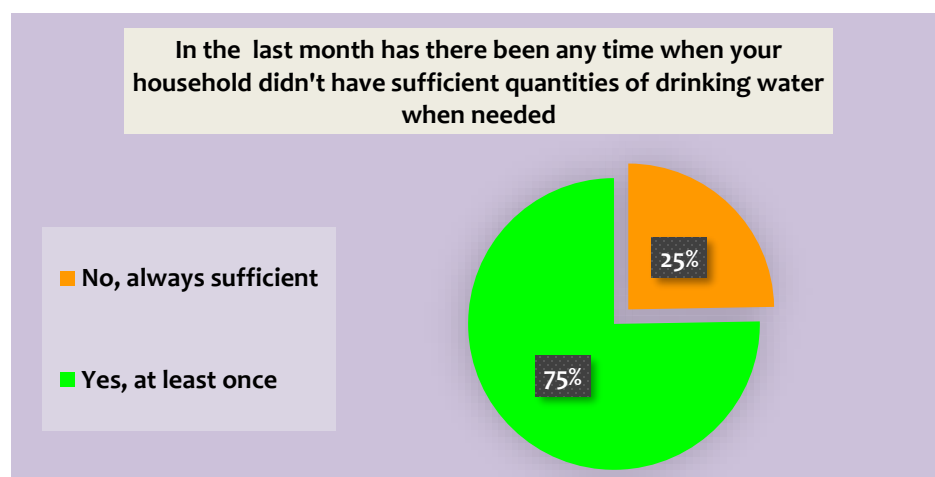


Figure 9: Data on sufficiency of drinking water for the households

The water shortages at the sources were mentioned as the main reason for having insufficient potable water quantities with 74.2% (95% CI: 69.6% - 78.7%) of respondents while 18.8% (95% CI: 14.8% - 22.9%) of households said that they do not have enough storage containers (Figure 10).

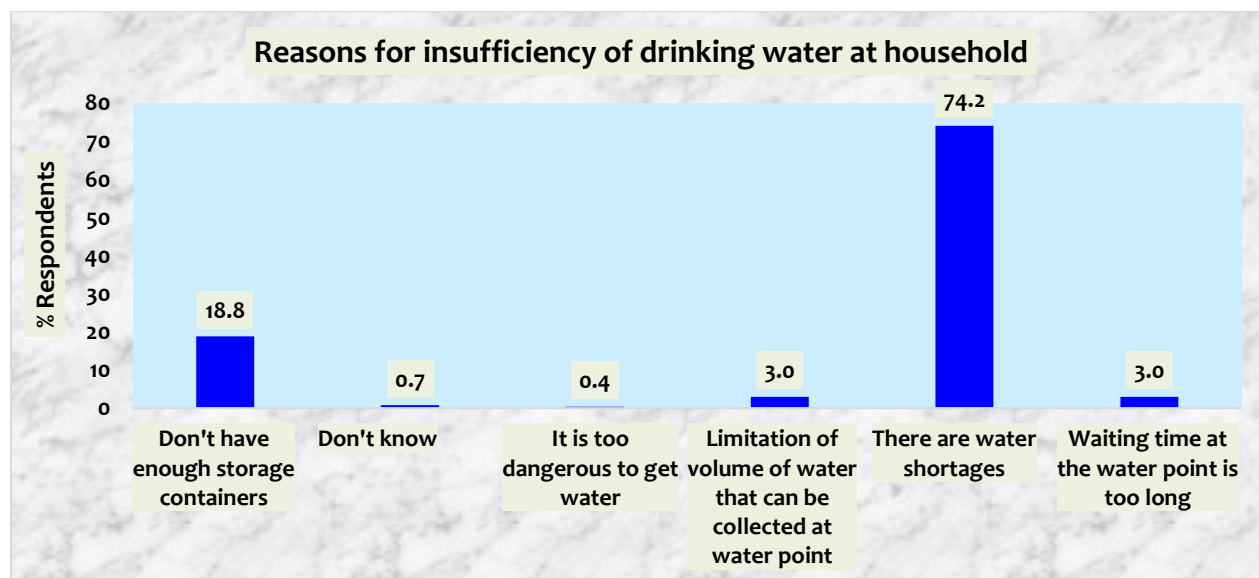


Figure 10: Reasons for insufficiency of drinking water for the households

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.

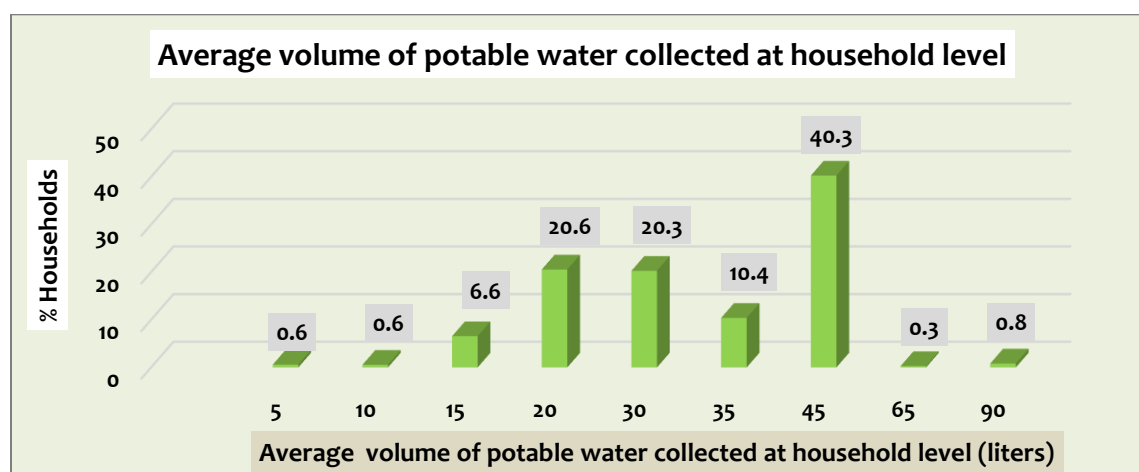


Figure 11: Volume of potable water collected at household level per day

Survey data showed that about 93% of households collect equal or greater than 20 liters of water per day while 7% collect less than 10 liters 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 70.9% of households exceeds 12 liters of potable per person per day.

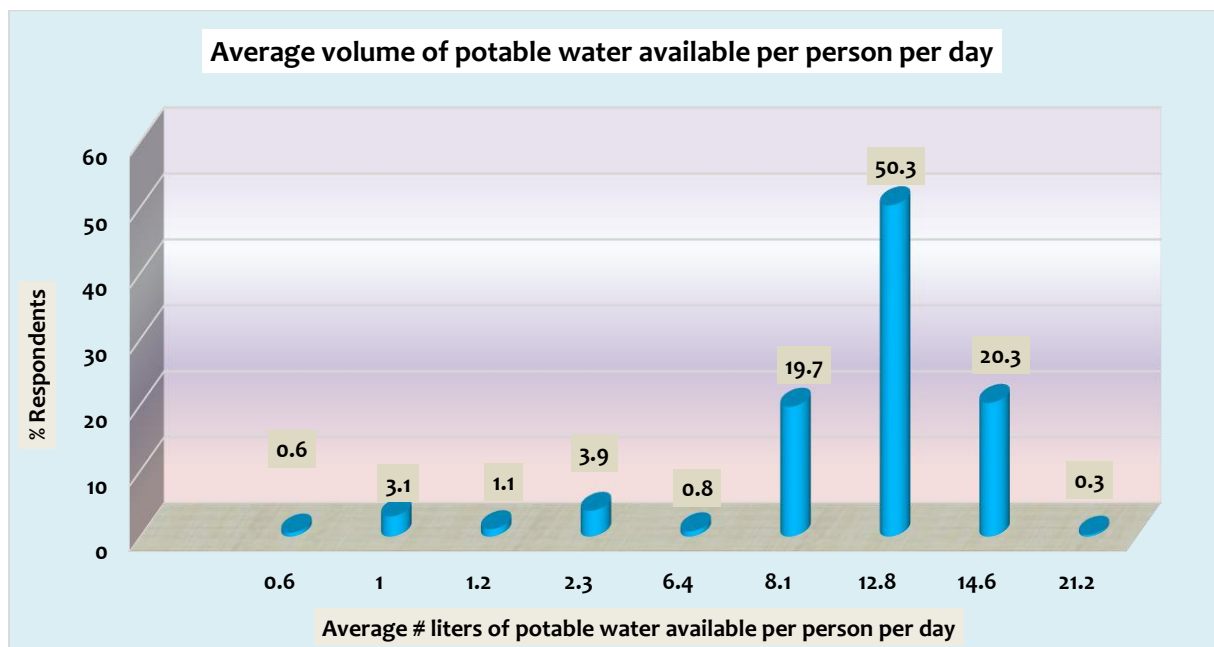


Figure 12: Volume of potable water available per person per day (liters)

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

Collected data as depicted on figure 13 show 61% (95% CI: 56.1% - 66.1%) of households have above 10 liters' potable water storage capacity per person while 39% (95% CI: 33.9% - 43.9%) of households have less than 10 liters' potable water storage capacity per person.

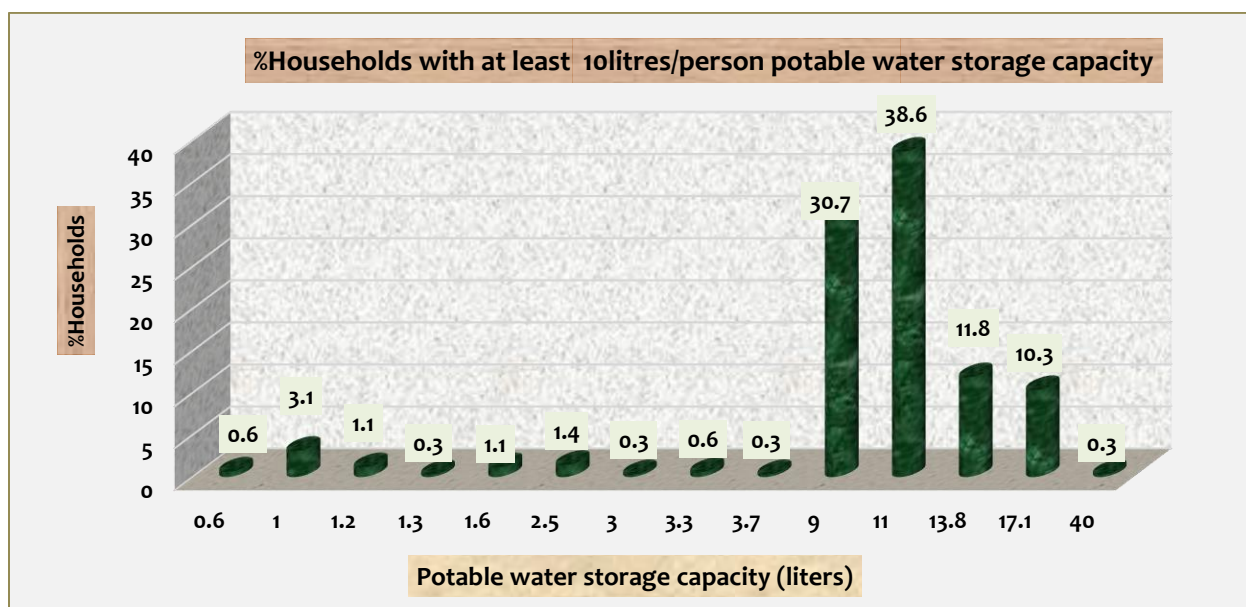


Figure 13: Households with at least 10liters/person portable water storage capacity

4.1.10 Summary of key findings on water supply

- **Water access**

87% (95% CI: 9.6% - 16.5%) of households reported that water source is available directly on or near their premises on while 13% (95% CI: 9.6% - 16.5%) of them said there is no water source available directly on the premises.

30.9% of surveyed households stated that they travel less or equal to 80 meters from their premises to water points and about 71 % of households travel less than 200 meters to reach water points. 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 most 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.

Survey data showed that about 93% of households collect equal or greater than 20 liters of water per day while 7% collect less than 10 liters of water per day. These figures show 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.

It was found from the survey data that about 71% of households get an average of 12.6 liters (95% CI: 9.4- 15.8 L) of potable per person per day while 29% get less than 10 liters of potable water per person per day. These figures below the target of having equal or greater than 20 liters of water per person per day and improvements should be made to reach the target.

Collected data as depicted on figure 13 show 61% (95% CI: 56.1% - 66.1%) of households have above 10 liters' potable water storage capacity per person while 39% (95% CI: 33.9% - 43.9%) of households have less than 10 liters' potable water storage capacity per person. These figures show that the target of having equal or greater 80% of households having least 10 liters' potable water storage capacity per person is not yet achieved in the camp.

- **Water quality**

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

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 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.
- Provide the water hand washing the device
 - Sometimes, people agree on fetching schedule, some in the morning and others in the evening;
 - Children might not go to school because of water problems;
 - Quarrels and a strong jostling at the water point when water is insufficient especially in summer;
 - The purity of water is not assumable because of water tunnels hygiene which is not good;
 - Dirty water tanks changes the colour of water, when never it's not cleaned regularly;
 - The villages that don't have water taps struggle enough, like: 4B, D and C shares , village 8A and 1C shares;
 - Due to the fact that water pumps are old, the quantity of water becomes little;
 - Insufficient materials to store water;
 - Borrowing their neighbour's latrines, when theirs are full and closed before dislodging time.

Information gathered from Key Informant Interviews (KIIs) through different stakeholders operating in NYABIHEKE 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 NYABIHEKE 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 NYABIHEKE 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 a little bit 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 track for providing water to the community; they have a skilled and experienced staffs; Quick solution on the problem eg: Reparation of pipeline as soon as it is necessary and maintain pipelines regularly without delay.

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

Figure 15 shows that 53% (95% CI: 47.9% - 58.2%) of children under 5 years old use plastic pots while 47% (95% CI: 42.5% - 52.9%) use communal latrines.

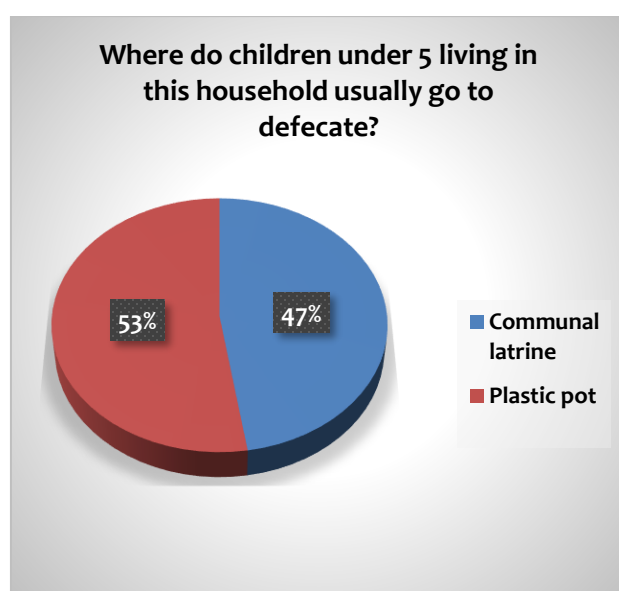


Figure 14: Defecation location for children under five years old

As small percentage (1.4%, 95% CI: 0.2% - 2.6%) of respondents admitted that they can sometimes defecate in open air at night. The reasons for defecating in open air at night mentioned are the darkness of night with 60% (95% CI: 54.9% - 65.1%) respondents and latrine which is too far with 20% (95% CI: 15.9% - 24.1%) of respondents.

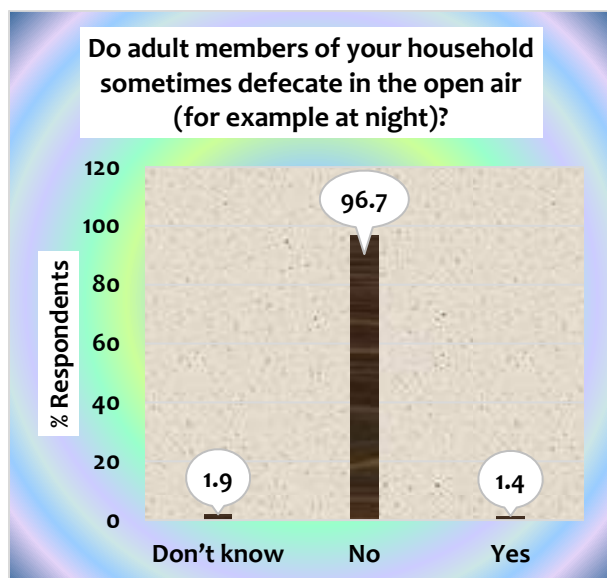


Figure 15: Defecation in open air

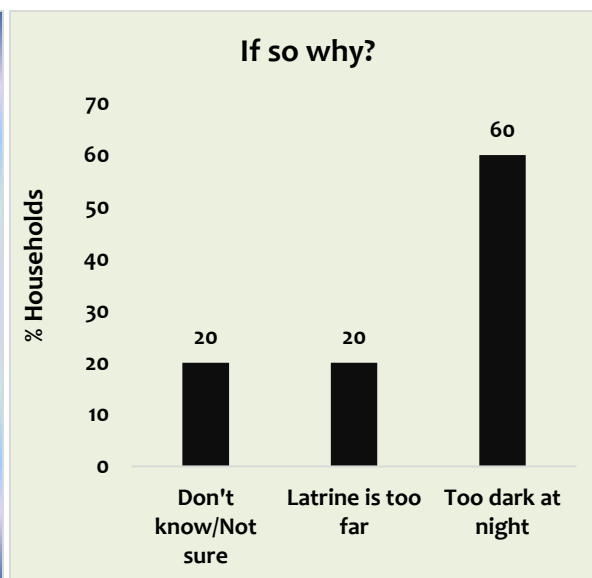


Figure 16: Reasons for defecation in open air

4.2.2 Latrines emptying

97% (95% CI: 95.2 % - 98.7%) of households confirmed that their latrines have been emptied while 3% (95% CI: 1.3% - 4.8%) said that theirs have never been emptied as shown on figure 20. From those who agreed that emptying is done, 98% (95% CI: 96.6 % - 99.5%) responds that are removed by service provider to an unknown location and 2% (95% CI: 0.5% - 3.4%) said that are removed by service provider to a dumping site (Figure 21).

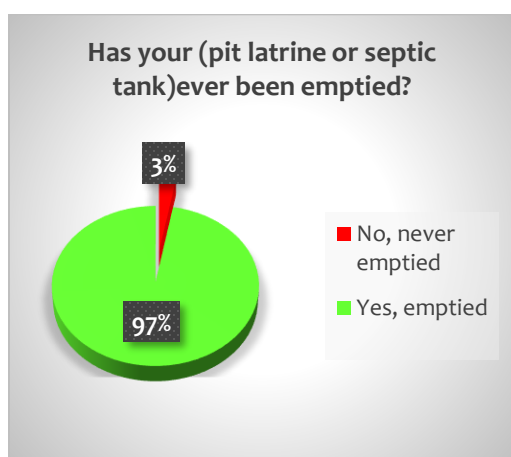


Figure 17: Latrines emptying

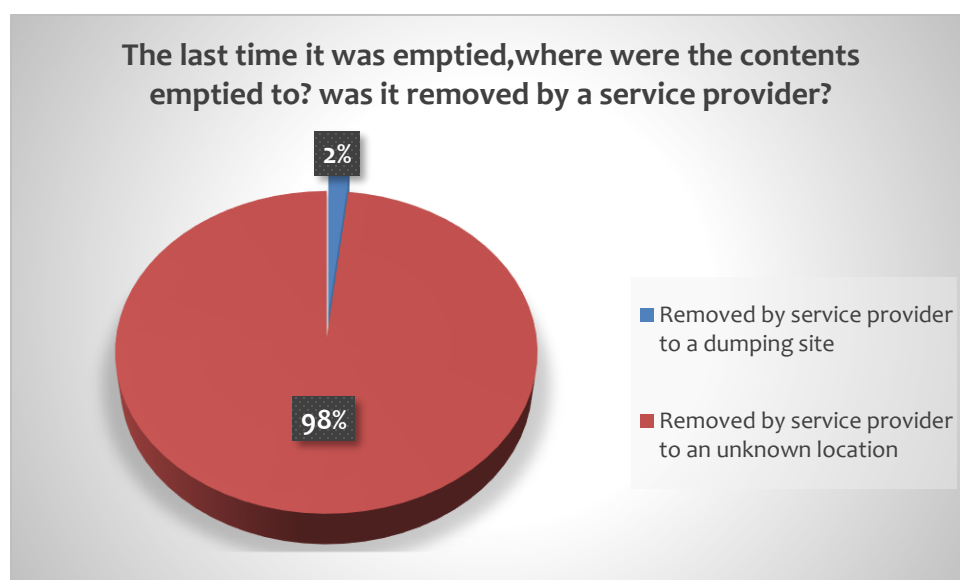


Figure 18: Places where wastes are emptied to (remove 2 and 3 and correct 4)

4.2.1 Summary of key findings on sanitation

100% of the surveyed households reported that they defecate in a toilet. 83.1% (95% CI: 82.5% - 89.7%) of the households confirmed that they use shared household latrines, 16.1% (95% CI: 12.3% - 19.9%) use 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 NYABIHEKE camp not yet a bit.

It was confirmed from the survey that majority 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 KIs 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 Critical Washing Hands Moments

To know much about their understanding about washing their hands, we use to ask them about the three most important times someone or themselves should wash their hands for hygiene reason.

Each shows his/her three special times to wash his/her hands to keep safe hygiene, where exist similarities in their choices in fact washing hands after defecation is the most repeatable among the three choices at 90% (95% CI: 86.9% - 91.4%), this means washing hands after defecation was one raised by more householders as key main time to wash their hands. Washing hands before eating announced by 88% (95% CI: 84.7% - 91.4%), this means it is a second choices preferred by more refugees as most time to wash their hands, before cooking and meal preparation had 54% (95% CI: 48.7% - 59.0%), though before breastfeeding has 51% (95% CI: 45.9% - 56.3%) before children feeding took 14% (95% CI: 10.3% - 17.5%) while washing hands after handling a child's stool and changing a nappy, cleaning a child's bottom got 5% (95% CI: 2.7% - 7.3%) as one among three principal times to wash their hands.

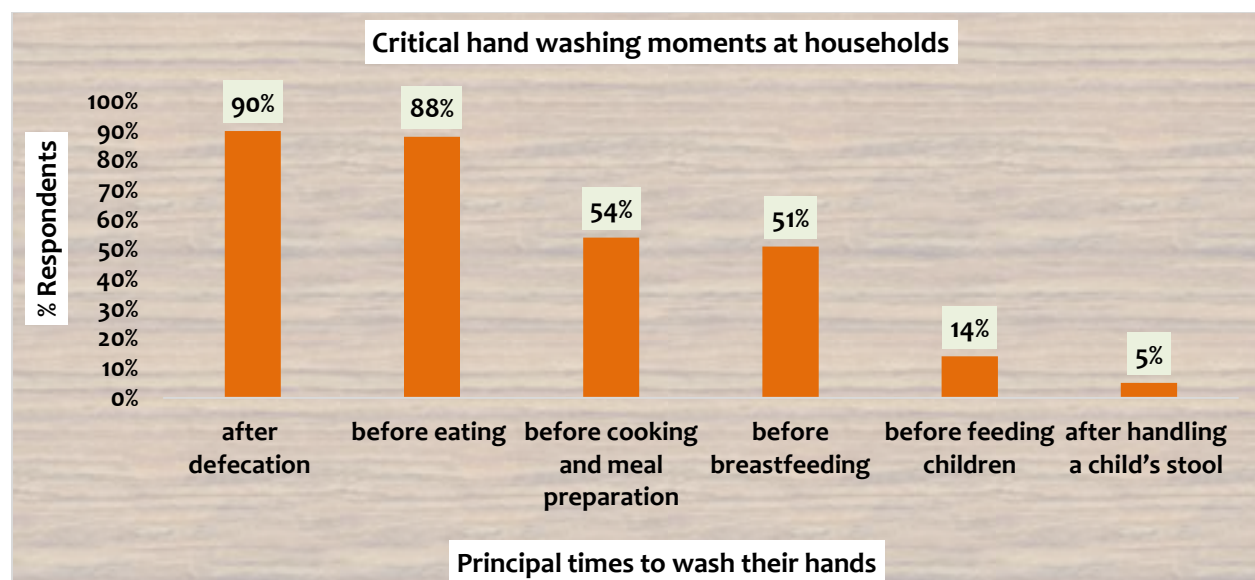


Figure 19: Important times to wash their hands

4.3.2 Availability of hand washing devices/stations and soaps

Collected data showed that 48% (95% CI: 43.0% - 53.2%) of respondents said that they have soaps in their households while 52% (95% CI: 56.9% - 67.0%) indicated that they don't have them.

68% (95% CI: 63.2% - 72.9%) of households confirmed that they have hand washing devices/stations while 32% (95% CI: 27.1% - 36.8%) don't have them.

94% (95% CI: 91.4% - 96.4%) of households with hand washing devices confirmed that they have water in their devices while 6% said that they don't have water in the devices. Among the households with hand washing devices and water, 44% (95% CI: 38.8% - 49.0%) of them said that they have soap or ash around the devices while 56% (95% CI: 51.0% - 61.2%) don't have either soap or ash.

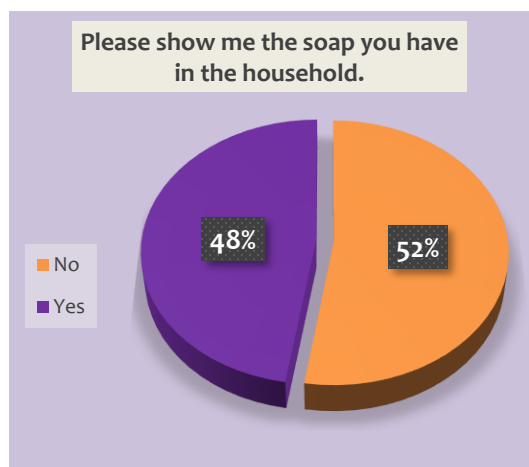


Figure 20: Usage of soaps in households



Figure 21: Availability of hand washing devices/stations in households

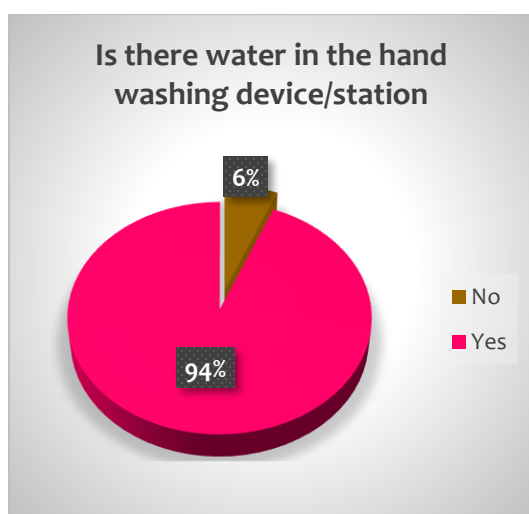


Figure 22: Presence of water in hand washing device

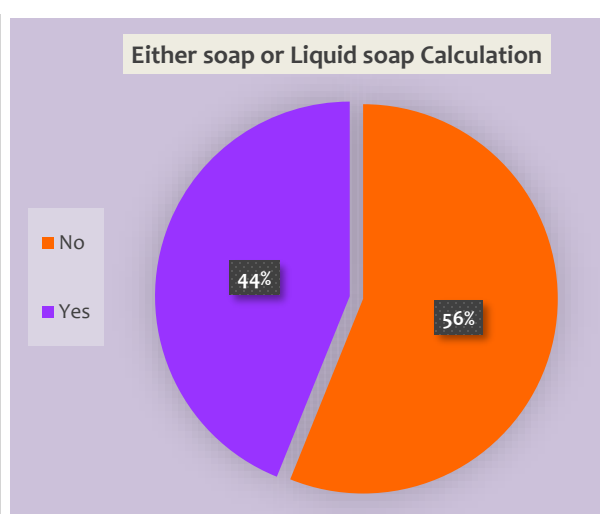


Figure 23: Presence of either soap or Liquid soap around a hand wash device

4.3.2 Bathing facilities for households

100% of surveyed households do have designated bathing facilities.

4.3.3 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 48% (95% CI: 43.0% - 53.2%) of respondents said that they have soaps in their households while 52% (95% CI: 46.8% - 57.1%) indicated that they don't have them. 68% (95% CI: 63.2% - 72.9%) of households confirmed that they have hand washing devices/stations while 32% (95% CI: 27.1% - 36.8%) don't have them.

100% of surveyed households confirmed that they have access to bathing facilities with 40% (95% CI: 54.9% - 65.1%) of households that indicated not having designated bathing facilities while 60% (95% CI: 34.9% - 45.1%) of them have 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 35.3% (95% CI: 30.3% - 40.2%) households do have one women of reproductive age while 28.9% (95% CI: 24.2% - 33.6%) of them have 2 women of reproductive age though 14.4% (95% CI: 10.8% - 18.1%) households have 3 women though 9.4% (95% CI: 6.4% - 12.5%) households do not have a woman in reproductive age. To get more information, we use to ask for an appointment to interview her about menstrual hygiene privately, 95% (95% CI: 92.7% - 97.3%) agreed to interview her while 5% (95% CI: 2.7% - 7.3%) refuse.

It was found that 70.4% (95% CI: 65.6% -75.5 %) of women of reproductive age used disposable pads during their menstrual period while 20.9% (95% CI: 16.4% - 25.3%) used reusable cloths.

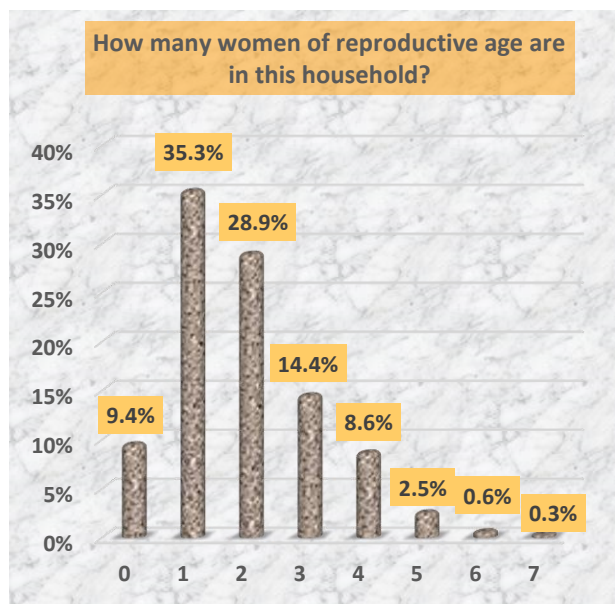


Figure 24: Number of women in reproductive age

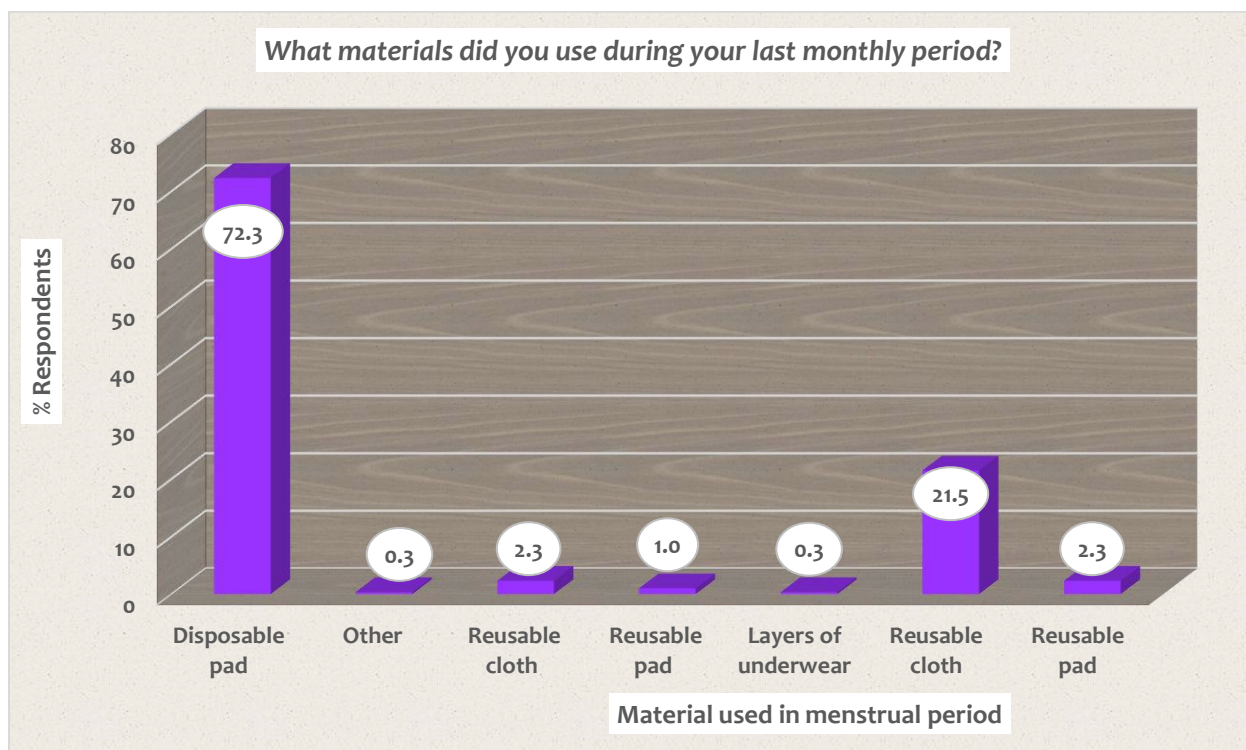


Figure 25: Materials used during menstrual period

About their second usable material in menstrual period, 69.1% (95% CI: 64.0% - 74.0%) do not have any other choice while 22.5% (95% CI: 17.9% - 26.9%) use disposable pad though 5.1% (95% CI: 2.8% - 7.6%) raised at reusable pad as seen on Figure 29.

95% (95% CI: 92.7% - 97.4%) of women confirmed that they were able to wash and change in privacy at home, while 96% (95% CI: 93.9% - 98.1%) of respondents said that they were able to wash and change at work or school while 4% (95% CI: 1.9% - 6.1%) indicated that they didn't have privacy at work or school (figures 30 and 31).

77% (95% CI: 72.4% - 81.6%) of women said that there was no toilet paper/cleansing water available where they change their pads.

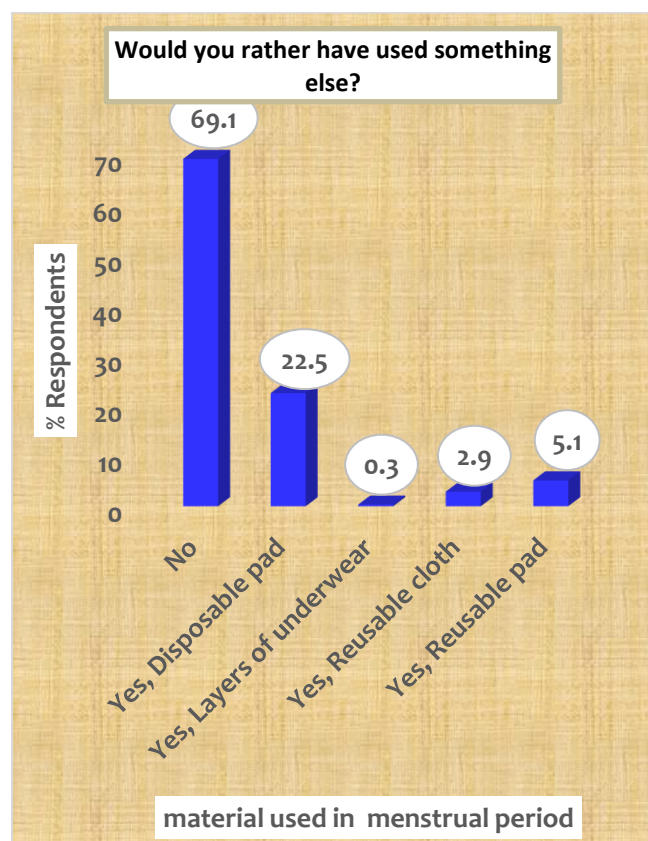


Figure 26: Second choice menstrual period

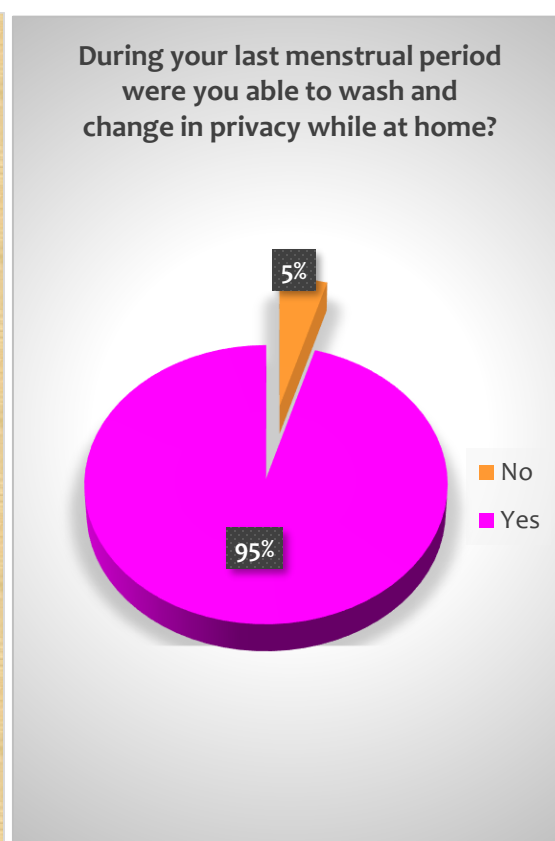


Figure 27: Privacy at home

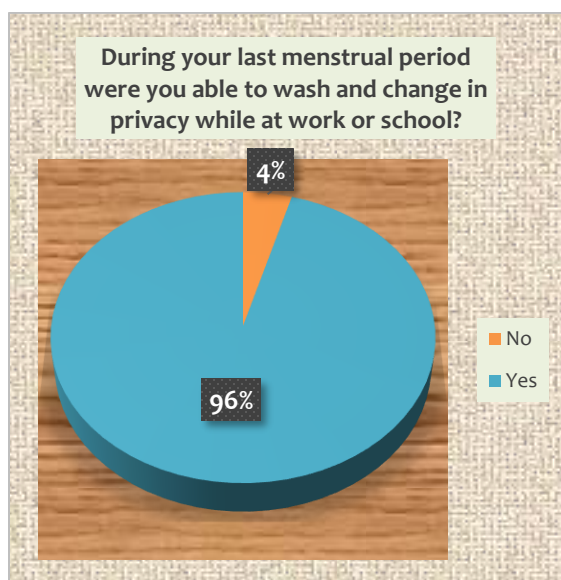


Figure 28: Privacy at Work or School



Figure 29: Availability of toilet paper and cleansing water

4.4.1 Summary of key findings on menstrual hygiene

It was found that 70.4% (95% CI: 65.6% -75.5 %) of women of reproductive age use disposable pads during their menstrual period. 95% (95% CI: 92.7% - 97.4%) of women confirmed that they were able to wash and change in privacy at home, while 96% (95% CI: 93.9% - 98.1 %) 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 NYABIHEKE camp.

4.5 DOMESTIC SOLID WASTES DISPOSAL

Apart from toilets contents, refugees show us at 89.2% (95 CI: 86.9% - 93.1%) use communal pit to keep solid waste as household disposition of domestic waste as shown in figure 33.

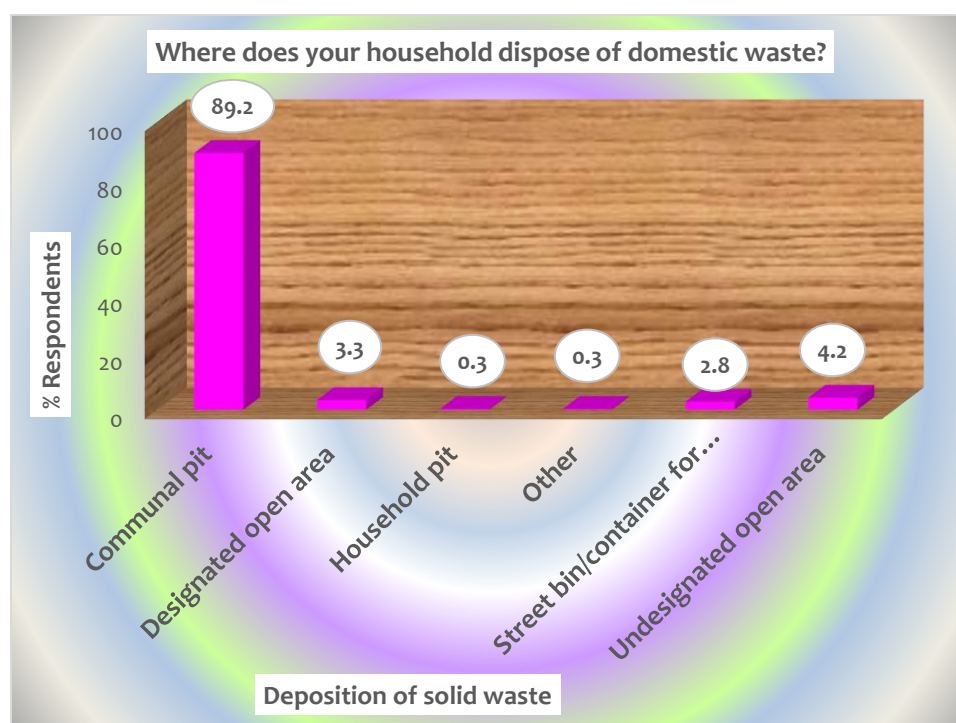


Figure 30: Location for disposal of domestic solid wastes

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

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 NYABIHEKE camp.

4.6 Summary of WASH Indicators and Targets in NYABIHEKE 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 Nyabiheke refugee camp.

Indicator		Emergency ¹ Target	Post Emergency Target	Means of Verification	Survey findings
Water Quantity	Average # liters of potable ² water available at household	≥ 15	≥ 20	KAP Survey	45

	Average # l/p/d of potable water collected at household level	≥ 15	≥ 20	KAP Survey	11.7
	% Households with at least 10 liters/person potable water storage capacity	≥ 70%	≥ 80%	KAP Survey	61%
Water Access	Maximum distance [m] from household to potable water collection point	≤ 500m	≤ 200m	KAP Survey	400m
	Number of persons per usable water tap	≤ 250	≤ 100	Monthly Report Card	69
Water Quality	% Households collecting drinking water from protected/treated sources	≥ 70%	≥ 95%	KAP Survey	100%
Sanitation	Number of persons per toilet/latrine	≤ 50	≤ 20	Monthly Report Card	22
	% 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	48
	Number of persons per hygiene promoter	≤ 500	≤ 1000 ⁸	Monthly Report Card	
	% Households with access to soap	≥ 70%	≥ 90%	KAP Survey	48%
Menstrual Hygiene	% of recipient women of reproductive age who are satisfied with menstrual hygiene management materials and facilities	≥ 70%	≥ 90%	KAP Survey	94%
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