WASH KAP Survey for KIZIBA refugee camp, 2021

KIZIBA refugee camp,
Karongi District
July 2021

ACKNOWLEDGEMENT

ALIGHT wishes to thank UNHCR, the support accorded in executing the KAP survey, data analysis and training of staff. We cannot express enough thanks to the community including data collectors for their combined support and commitment

Our completion of this report could not have been successful without the support of the Monitoring & Evaluation department for provision of tablets used for data collection and finance dept.

We acknowledge also enumerators who contributed for data collection tirelessly. The same acknowledgement goes to interviewees.

Our heartfelt thanks!

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EXECUTIVE SUMMARY

Kiziba refugee camp is located in Karongi district in the Western Province of Rwanda. The camp opened in December 1996 is hosting Congolese refugees and constituted by 10 quartiers, composed by 54 villages. The current population is 16,774 refugees.
ALIGHT is the implementing partner on water, sanitation and hygiene activities in Kiziba camp.
The KAP survey in KIZIBA camp aims to identify gaps in knowledge, attitudes and practices of the refugees in June 2021 in order to inform future WASH interventions.

The following are the findings of the survey:

Key survey results are as follows:

Water:

- Average litres of potable water/per person/per day collected at household level is at 25.06 L/p/d
- 97.69 % of surveyed households collect water from public water points meaning the majority of the people of concern in Kiziba camp depend on these water points
- For 79.54%, the water points within 5 m
- 28.53 % of the respondents corresponding to 99 households said they used three containers for collection and storage of water
- The distance to water points in average is 8.6 meters

Sanitation:

- 87.03 % of the people interviewed informed that they use communal latrines.
- 0.58 % revealed that they do open defecation because the latrines are not near to them (some kids above five years go to ease themselves in some areas such as mall forests and downhill of roads).
- Some respondents told us that baby pots are needed for families with kids under five to eradicate open defecation during the daytime and night.
- 0.29% use plastic bag to ease them because they are old and are not able to commute to the latrines during the night.
- 92.8% dispose solid wastes in communal pits whereas for 2.59% disposes in undesignated open areas.

Hygiene:

- 11 % of persons interviewed did not manage to show the soap within one minute.
- 0.86 % corresponding to 3 households confirmed that they have hand washing station at home
- 33.58 % of surveyed households were reported to wash hands before eating a meal, before cooking/meal preparation met 25.86%, after defecation covered 30.2%, after handling a child's stool covered 4.11 % whereas breast feeding met 6.07 %.

Menstrual hygiene:

- 46.11% households surveyed do have one (1) reproductive woman per each household.
- 63.98 % answered that they use disposable sanitary pads; however, some of women responded that they do not get disposal sanitary pads regularly.

1. METHODOLOGY

The KAP survey was done during the COVID-19 pandemic and a number of considerations were taken regarding sampling, data collection, storage, revalidation and report writing as detailed below:

The Systematic Sampling method were used and the number of 347 households from all KIZIBA camp was randomly selected to cover 10 quarters of the camp

For determining scientifically accepted sample size, the reference of Systematic Random Sampling Methodology (Cochran, Sampling Techniques Third Edition, 1977)

The methodology was consisting on the Systematic Sampling method:
The sequences of 10 households have been identified randomly from the starting point of the village making sequence number one and the same method were used to identify other sequences from the neighboring households. See a table in Annex.

Households were selected from one Quartier to another using their normal known numbers and their usual letters by adding the number of sequence number at the end (example Sequence No1 was 10 households from Quartier 1, Village 1) which is the first group located in Quartier No1 up to Quartier No10 that are composing the KIZIBA Refugee Camp. The selection of 10 HH is because the KIZIBA Camp is very congested and houses are very close from to another.

In order to eliminate bias, enumerators were instructed to interview the identified households and to find them at their living locations. The selection of respondents was done using systematic or simple random sampling. Each community was clustered following the camp scale structure mentioning the households to be interviewed.

The table No 2 below shows this structure and their respective sample sizes as well as number of data collectors.

3.1 Survey Tools

A simple structured questionnaire with ordinal and nominal questions organized in **five thematic** areas in order to collect data in compressive way and to see the key WASH knowledge, attitude and practices in the project areas were utilized. Discussion with the community and observation of the water points, latrines facilities was also designed to complement the household's survey.

The following key indicators were tackled to generate the results of the survey:

The thematic areas for the KAP survey

Themes	Indicators
1.Demography	1. Structure of the camp population according to Quarters.
2.Water Supply	1. Principal source of domestic drinking water for household.
	2. Distance to water sources.
	3. Duration to reach water point in one direction.
	4. Duration for waiting to get water at water point.
	5. Drinking water collection and storage for the house.
3.Latrines sanitation	1. Defecation areas of household's members excluding children under five.
	2. Percentage of households practicing in open defecation (including defecating in the forest and bush either at night or daytime):
2. Bathing facility	1. Access to bathing facility.
5.Hygiene	1. % of households with access to soap.
	2. % of households with access to a specific hand-washing device.
	3. Percentage of respondents knowing at least three critical times when someone should wash their hands for hygiene reasons.
6.Solid waste	1. % of households with access to a solid waste disposal facility

7.Menstrual hygiene	1. Number of women in reproductive age.
	2. Accessibility of menstrual hygiene materials used during previous monthly period.

3.2 Study area

The KAP survey took place in the selected villages for all 10 quarters comprising the KIZIBA Refugee camp.

3.3 Sample size:

For determining scientifically accepted sample size, the reference of **Systematic Sampling Methodology** (Cochran, Sampling Techniques Third Edition, 1977)

The KAP survey team collected data by administering 347 household questionnaires.

- ✓ The formula below is indicating scientifically the sample size selected in each village:

$$n = N \times \frac{\frac{Z^2 \times p \times (1-p)}{e^2}}{\left[N - 1 + \frac{Z^2 \times p \times (1-p)}{e^2}\right]}$$

Whereby:

- n = Sample size,
- N = Number of households which is 3500
- Z = Confidence level which is 1.96
- p = Sample proportion, which is 0.5
- e = Margin of error, which is 5%

Using this computation, a total 347 households interviewed.

3.4 Sampling methodologies:

The Sampling method used in KIZIBA consisted on determining sequences of 10 households situated at the same location randomly from the starting point up to the end of the concerned village in KIZIBA to ensure representation of the overall population.

The survey team was made up by 5 enumerators who were trained. They carried a field visit prior data collection to make sure that all the respondents are available.

The questionnaire was developed by UNHCR with a focus on the need to obtain responses relating to the degree of access to different WASH services at the household and individual levels, as well as responses relating to the perceptions of barriers and to the solutions required to increase access to services. The questionnaire was reviewed in WASH working group meeting to further customize and make it more responsive to the community needs including addressing answerability concerns. . The interview tool was thereafter keyed on the data collection system (Kobo) to enable use of tablets to capture responses using the Kobo.

The absence of the interviewees was taken care of in order to avoid bias of the results because any that occurred, we had set another appointment. Working as a team helped to review the collected data to minimize errors. All above stated processes helped to eliminate bias.

3.5 Training of data collectors:

Prior to data collection, all field enumerators and supervisors received the training virtually organized by UNHCR due to COVID 19 outbreak. The training focused on interviewing techniques and familiarization with the data collection tools including tablets devices containing questionnaires uploaded in Kobo tool.

Picture 1: Enumerators being oriented on how to do the data collection

4 DATA ENTRY AND ANALYSIS

4.1 Data Entry

Quantitative data was entered into a computer database using UNHCR KOBO tool. Following data entry, data cleaning was conducted in excel spreadsheets and a file of cleaned data was prepared for analysis.

4.2 Data Analysis

After the data collection using data Kobo toolbox, all questionnaires were cleaned and entered into excel work sheet designed for the survey. Tables and graphs were developed in excel too. The results of the survey are presented in narrative, pie charts and graphs.
A simple descriptive analysis (frequency, percentage, mean, minimum, maximum, etc.) was used to carry out data analysis to evaluate KAP changes and to come up with conclusions and draw recommendations for current and future WASH projects. The results are presented while following the thematic areas for easy understanding of the situation in the field and in form of tabular, percentage and graphical forms.

5 ETHICAL CONSIDERATIONS

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

6 CHALLLENGE DURING THE SURVEY

We got challenged by time given that some respondents were not respecting time for the interview appointment, which resulted in numerous postponements.
COVID 19 restrictions prohibiting movements from outside the camp was the barrier for employing experimented enumerators who are not living in the refugee camp.

7 KEY FINDINGS OF THE SURVEY

When the KIZIBA camp started in 1996 (during the emergency), some WASH services were not meeting the minimum standards, it was difficult for the People of the community to fetch water at the agreed quantity making long distances, hygiene and sanitation were not well monitored. The Knowledge, Attitudes and Practices of WASH within the Communities found to be very low because of low coverage and insufficient WASH services.
This section presents the key findings of this first WASH KAP survey in KIZIBA Camp. The findings in both tabular and graphical forms along with some further analysis, interpretation and suggestion for the WASH team with all results and their detailed treatment hereby indicated:

Composition of the population in surveyed households:

The surveyed households represent approximately 10% of the total households in 10 quartiers composing the KIZIBA Camp.

Total surveyed total population is 1,735 adult people of the age between 18 to 60 years from which male do constitute 10% of the KIZIBA population.

7.1 Structure of the camp population according to Quarters

With assistance of the executive committee, the survey interviewed 347 households. Below are the table, pie chart and graph for illustration.

Structure of the households to be interviewed after sampling

Structure of the camp population according to Quarters			
Villages	HH to be interviewed	Percentage	Number of enumerators
Quarter 1.	40	12%	Enumerator No 1
Quarter 2.	30	9%	
Quarter 3.	35	10%	Enumerator No 2
Quarter 4.	37	11%	
Quarter 5.	34	10%	Enumerator No 3
Quarter 6.	33	10%	
Quarter 7.	37	11%	Enumerator No 4
Quarter 8.	33	10%	
Quarter 9.	32	9%	Enumerator No 5
Quarter 10.	36	10%	
Grand Total	347		

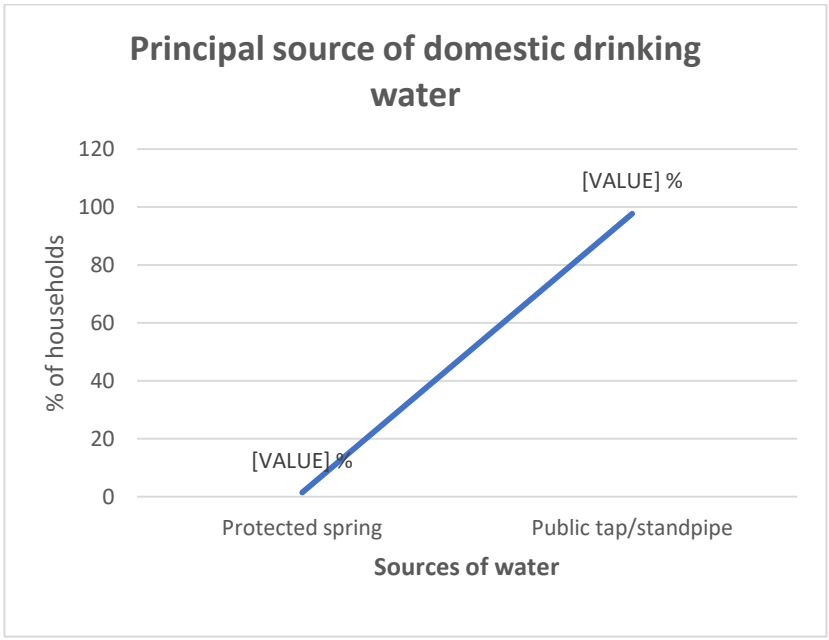
7.2 Water Supply

When collecting answers from the selected people of the community, the enumerators were informed that the water supplied in Kiziba is in sufficient quality for drinking and cooking, and good for personal and domestic use.

The majority of people fetch water at the public water points. The source of supplied water in KIZIBA camp is typically the surface water from rivers and groundwater, which is treated before delivery to consumers. The distribution of potable water is done through public water points constructed within 52 villages of the KIZIBA refugee camp.

Picture 2: Most of the community fetch water at the public water poin

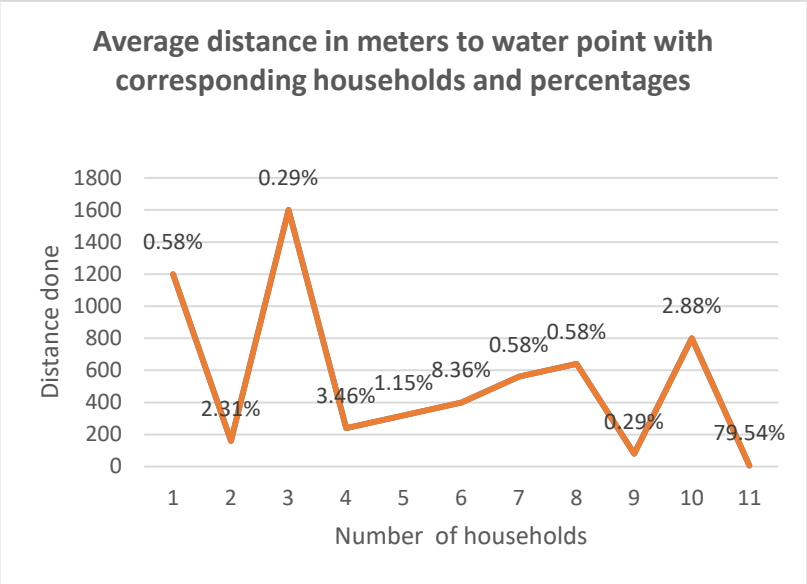
Graph 1: Principal source of domestic drinking water



Principal source of domestic drinking water for household:

According to the survey findings, majority of the households (97.69%) across all the reported public tap/standpipe as their main source of drinking. We learnt that some beneficiaries walk to fetch water from springs located outside the camp because of passion purpose. This corresponds to 1.44 % above.

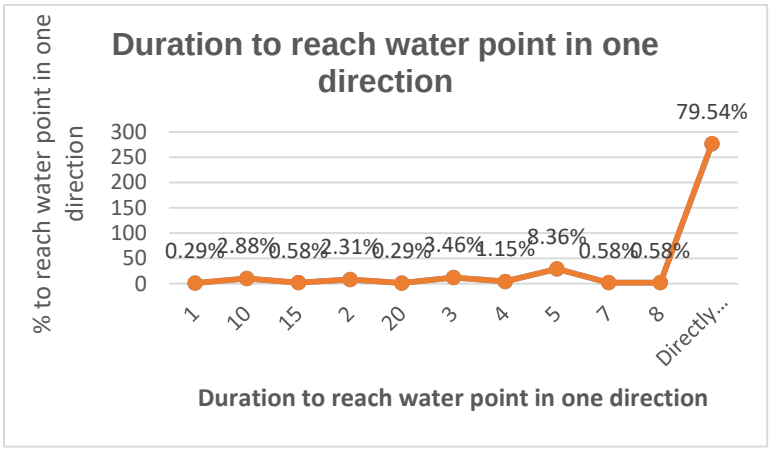
Graph 2 : *Distance to water point See in Annex 3, the table for average distance in meters to water point.*



Average distance to water point:

From the survey findings, the overall average walking distance by household members to the nearest water point below 200m (the sphere standards) and few households walk a maximum distance of about 1200 meters from their households to portable water collection point especially when the nearest source is broken down.

Graph 3: Duration to reach water point in one direction.



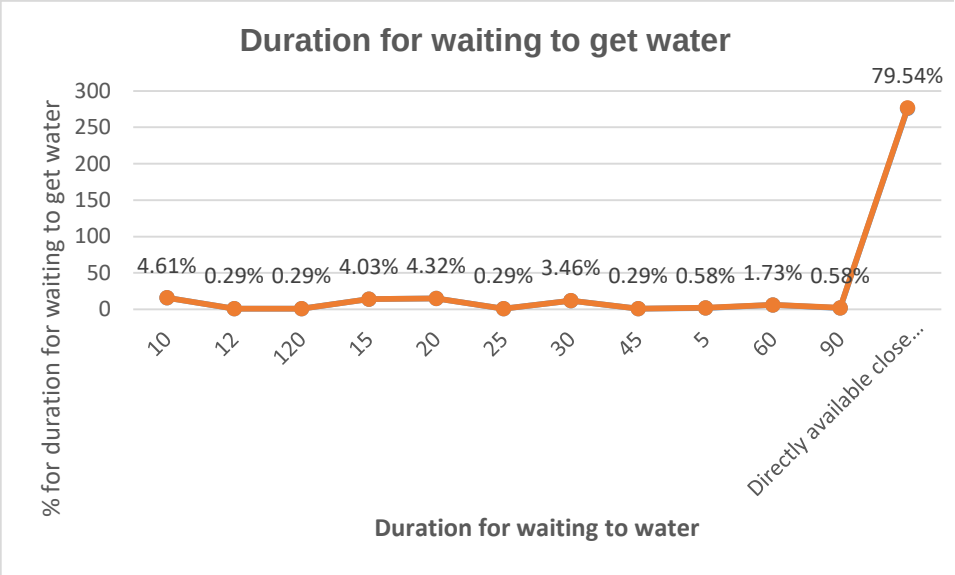
Duration to reach water point in one direction:

For 79.54%, the water point is near to their households, 3.46% corresponding to 12 households reach the water point in 3 minutes, 0.29 % for 1 household takes 1 min and 0.58 % for 2 households use 8 minutes.

Duration for waiting to get water at water point.

79.54 % stay close to the water point and subsequently were not taking long to fetch at water point, 4.61% corresponding to 16 households took 10 min, 3.46 % corresponding to 12 households took 30 min and 0.58% took for 2 households 5 min.

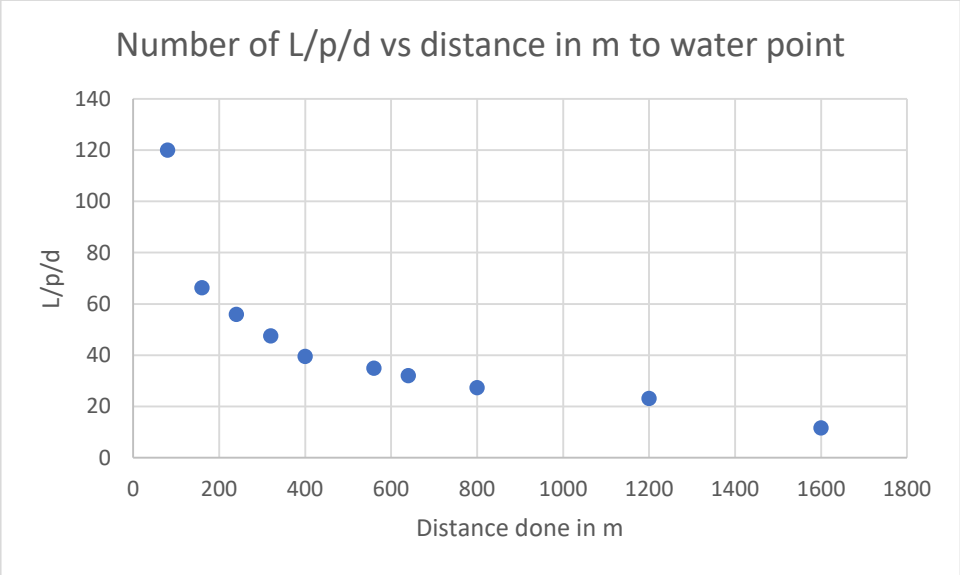
Graph 4: *Duration for waiting to get water*



Duration for waiting to get water at water point

79.54 % stay close to the water point and subsequently were not taking long to fetch at water point, 4.61% corresponding to 16 households took 10 min, 3.46 % corresponding to 12 households took 30 min and 0.58% took for 2 households 5 min.

Graph 5: Number of liters of potable water per person per day collected at household level vs distance in m to water point



Number of liters for potable water per person per day vs distance in m to water point

According to the survey, people living nearby the water point consume more water point consume more water comparing to people fetching from far the long distance.

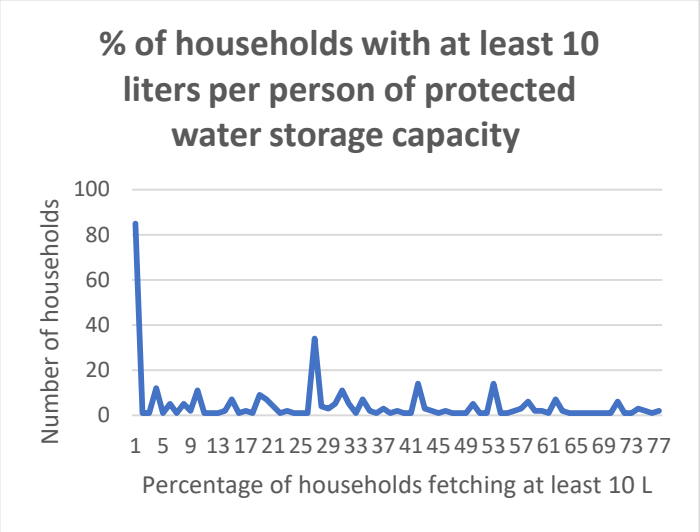
The survey looked at whether households collect enough water to meet their needs. The responses indicated that more than half of the households reported that they collect enough water for their daily needs despite different distances they walk to reach to water points.

A table for illustration is located in Annex 5

Percentage of households with at least 10 liters per person of protected water storage capacity for domestic use.

According to the survey, all the KIZIBA community have access to sufficient quantity of safe water to meet their drinking and domestic needs. However, it was noticed few numbers of people who do not have water storage materials for domestic use.

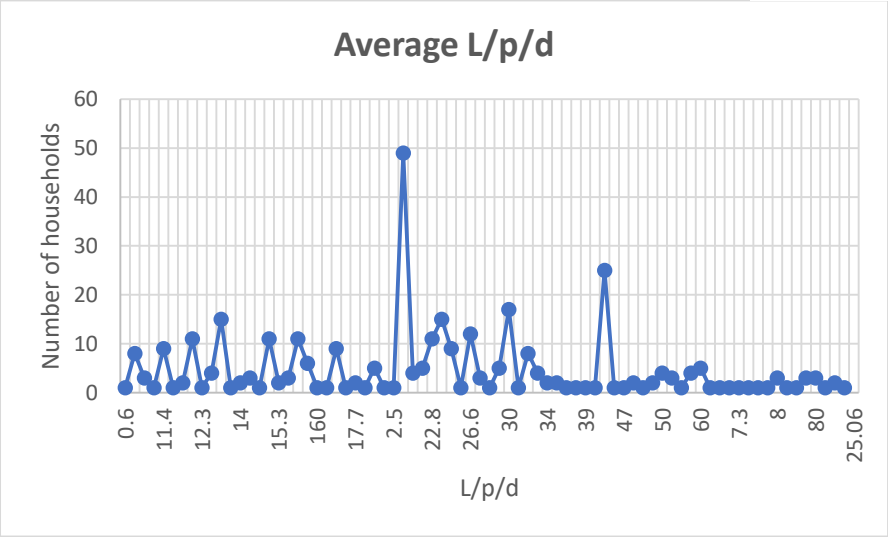
Graph 6: % of households with at least 10 liters per person for domestic use



It was noticed that about (61.22%) of the households had at least 10 L/p protected water storage capacity while the rest (38.78%) had less than 10 L/p storage capacity.

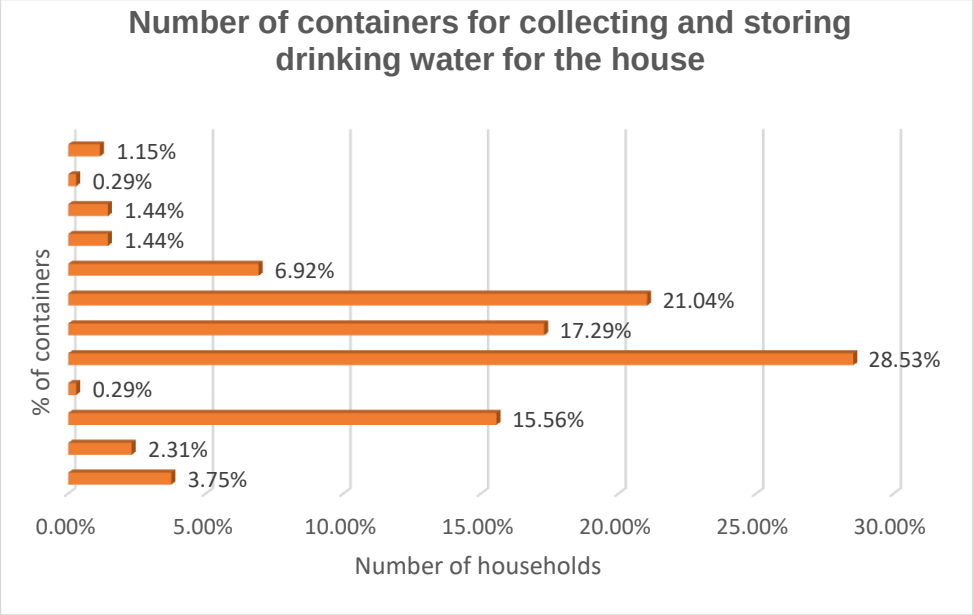
For the households who do not have 10liter storage containers (38.78%) reported that they have to go many times to water point for them to collect enough water that they need on daily basis.

Graph 7: *Average number of L/p/d*



According to the survey analysis, it has been observed that the average litres of potable water/per person/per day collected at household level is at 25.06 L/p/d. The water distributed in KIZIBA per capita is above the post emergency standard of 20 L/p/d.

Graph 8 : *Number of containers for collecting and storing drinking water for the house*



Drinking Water collection and storage for the house

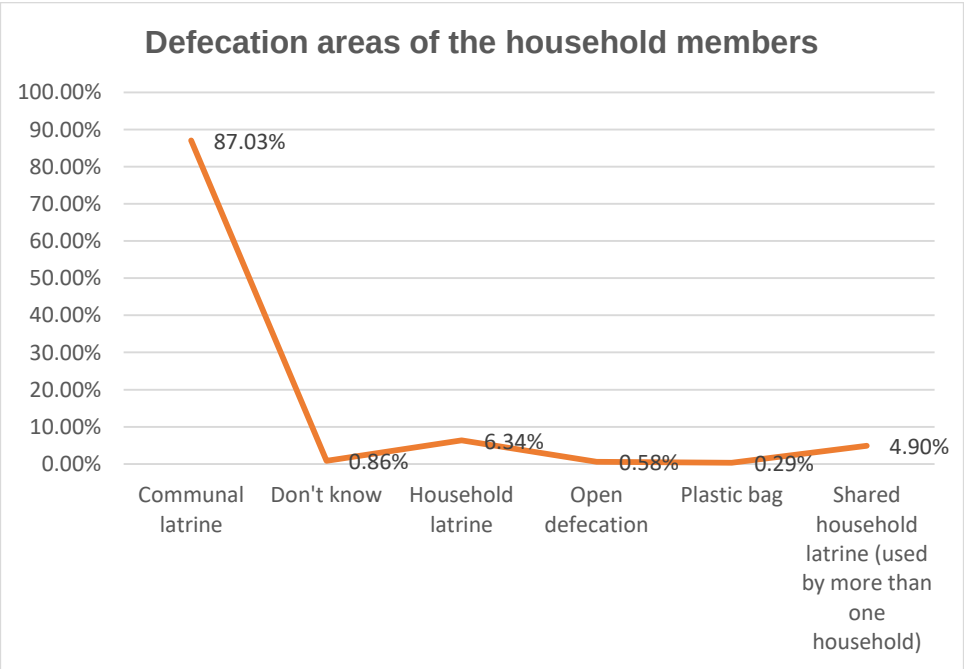
According to the table 28.53 % of the respondents corresponding to 99 households said they used 3 containers for collection and storage of water

0.29 % of the respondents corresponding to 1 household said they used 9 containers for collection and storage of water.

According to findings as in graph No 8 below, the majority of the population of households have drinking water storage materials.

7.3 Latrine's sanitation

Graph 9*: Defecation areas of the household members*

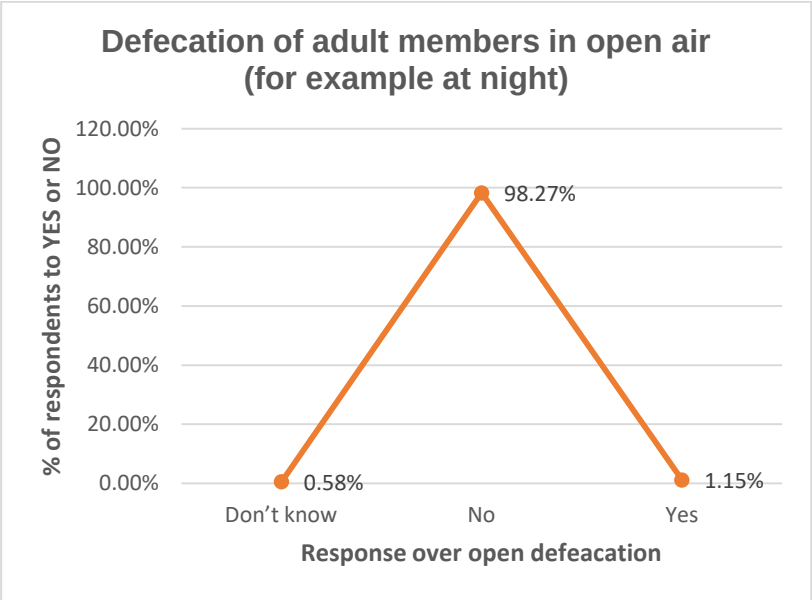


Defecation areas of the household members (excluding children under 5)

87.03 % of the people interviewed confirmed that they use communal latrines, 6.34 % use household latrines, 0.58 % revealed that they do open defecation because the latrines are not near to them (some kids above 5 go

to ease themselves in some areas such as mall forests and downhill of roads). The survey found that some kids defecate in the house courtyard at night and the feaces cleaned in the morning. Currently, Kiziba camp is at 23 person per drop hole while the UNHCR standard is 20 person per drop hole. Thus, there is a need to build more latrines. 0.29% use plastic bag because they are old and are not able to commute to the latrines 4.90% use a shared household latrine. 0.86 % did not will to inform us.

Graph 10: Defecation of adult members in open air (for example at night)

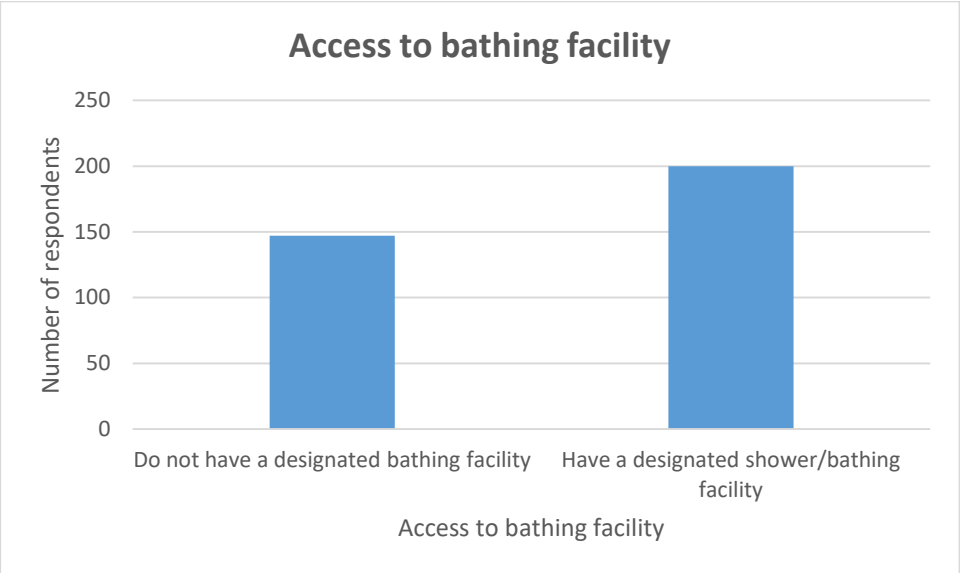


Household adult defecation in an open air (for example at night)

98.27 % of the respondents said that they do not do open defecation whereas 1.15 % admitted to do open defecation because they are scared to walk (during the night) to the latrine and this is not near where they stay, others go to forest and bush even during daytime. 0.58 % did not will to respond to provide an answer.

7.4 Bathing facilities

Graph 11: Access to bathing facility



42.36 % of respondents do not have a designed a bathing facility whereas 57.64 % have access to a design bathing facility.

7.5 Hygiene

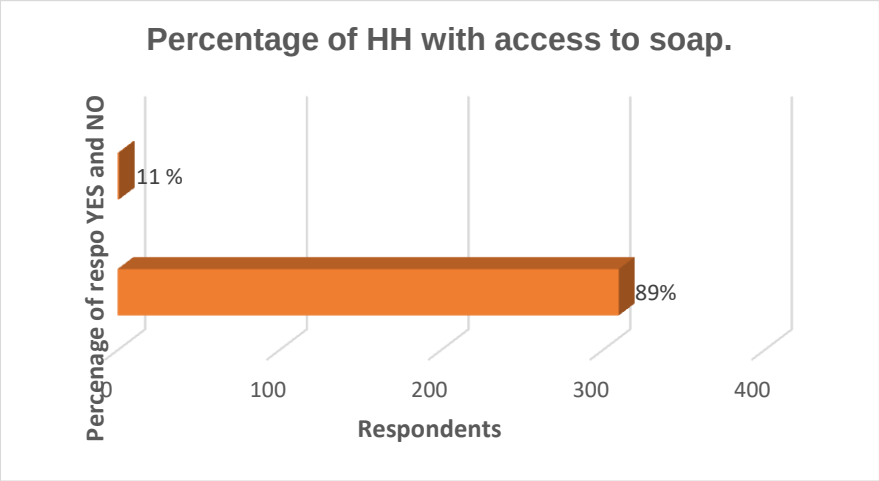
Percentage of Household with access to soap:

Across all the quarters, 89% of the total respondent showed a soap within 1 minute 0.11 % did not manage to show the soap within one minute.

This is due to the regular sensitization against COVID 19 being done during the survey period. We noticed that some were kept the soap at some areas, which not quickly accessible such as under cupboards, behind chairs in living room,

Picture 3: Enumerator collecting some data regarding the hygiene

Graph 12: Percentage of household with access to soap.



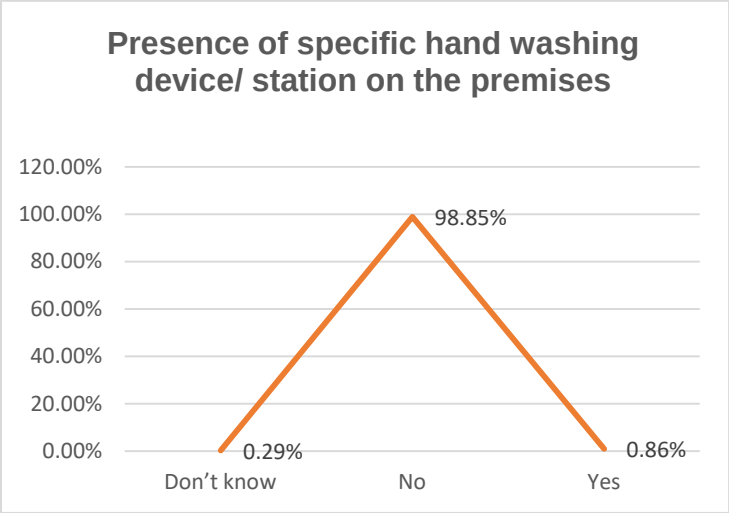
The data from the survey shows that people with access to soap are 89% while the rate of 11% have difficult to get soap on a regular basis. This is due to the fact that the always wait to get soap from distribution from the humanitarian agencies operating in KIZIBA Camp.

Presence of specific hand washing device/station in the premises

During our survey, it was found that between 98.85 % representing 343 households said that they did not have a hand washing device/station in their respective premises. On the other

hand, 0.86 % corresponding to three households said that they have hand-washing station at home and 0.29 % for 1 household was not willing to give us information.

Graph 13: Presence of specific hand washing device/station on the premises

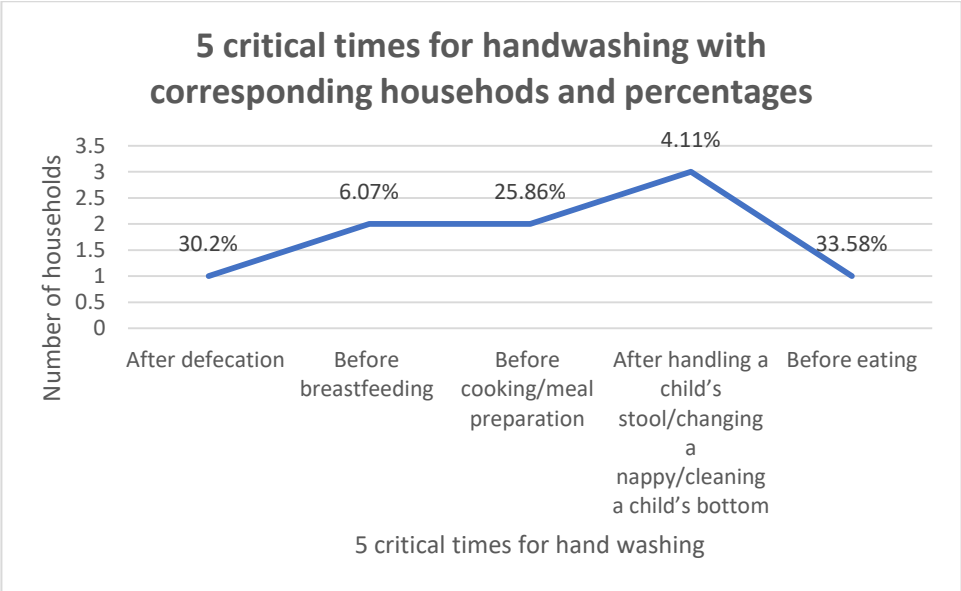


Presence of specific hand washing device/station in the premises

During our survey, it was found that between 98.85 % representing 343 households said that they did not have a hand washing device/station in their respective premises. On the other hand, 0.86 % corresponding to three households said that they have hand-washing station at home and 0.29 % for 1 household was not willing to give us information.

Percentage of respondents knowing at least three critical times when someone should wash their hands for hygiene reasons

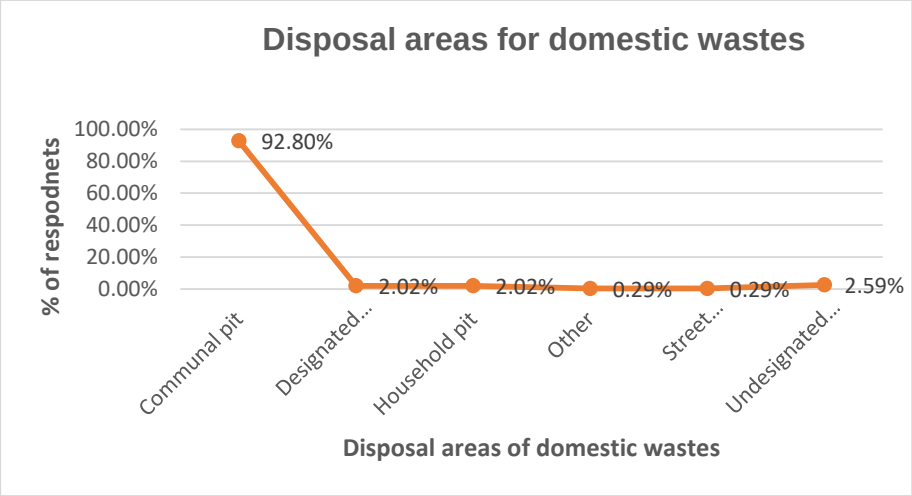
Graph 14: Number of respondents knowing at least 5 critical times when someone should wash hands for hygiene reasons



Interviewers requested people to name at least three critical times when someone should wash their hands. The survey revealed as below figures that 60.52 % of surveyed households told us washing hands before eating, before cooking/meal preparation and after defecation. 0.58% responded. Before eating. Before cooking/meal preparation. Before breastfeeding. Before feeding children whereas, 4.03 % responded. Before eating, after defecation, Before feeding children, etc.

7.6 Solid waste

Graph 15 : *Disposal areas for domestic wastes*



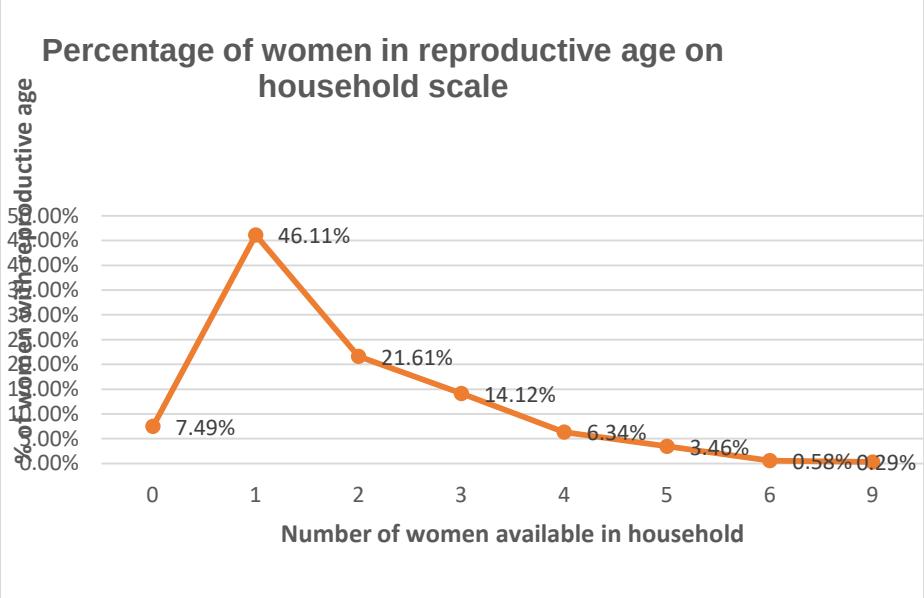
It was noticed that the majority of households (93.09%) have access to solid waste collection points. 2.02% dump in designated open area, 2.59% for undesignated open area, (2.59%). It was observed that 2.02% again dump in household pits.

Other sanitation facilities observed in surveyed households were undesignated open areas such as animal houses, household and communal bathing shelters and household & communal latrines.

7.7 Hygiene

Number of women in reproductive age

Graph 16 : Percentage of women in reproductive age on household scale

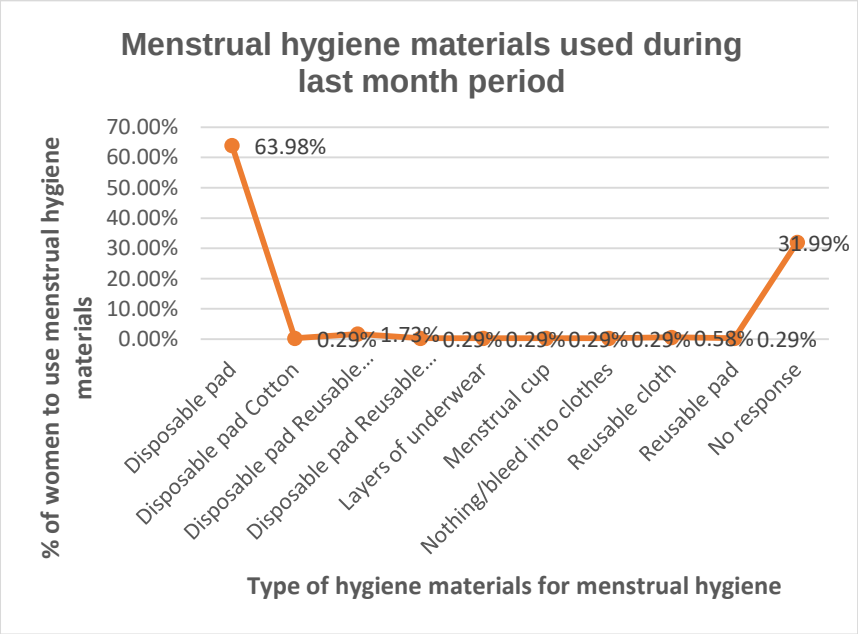


The survey reported that 46.11 % of the respondent representing 160 households do have one reproductive woman per house whereas the minimum is 7.49 % corresponding to 26 households, which do not have a reproductive woman.

Accessibility of menstrual hygiene materials used during last month period

63.98 % survey respondents (female) answered that they use disposable pads, 1.73 % used both disposable pad and reusable cloth, 0.29 % used disposable pad cotton, 1.73 % used both disposable pad and reusable cloth 0.29 % used combination of disposable pad, reusable pad and reusable cloth and reusable cloth, where as 31.99 % did not will to give us a reply. The survey established that some female refugees do not get the menstrual hygiene materials, yet, they were getting them before. Others who never got these indispensable materials told us that they need them as well.

Graph 17 : Menstrual hygiene materials used during last month period

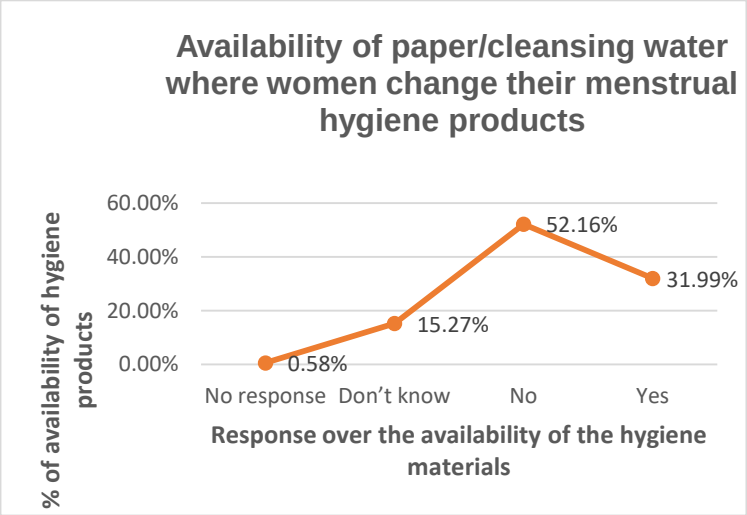


Availability of paper/cleansing water where women change their menstrual hygiene products

The survey assessed about availability of adequate facilities and materials where women change their menstrual hygiene products. The graph No16 below and its narrative shows the situation of KIZIBA Camp concerning this subject.

Picture 4: Enumerator inquiring about some information about menstrual hygiene materials

Graph 18: Availabity of paper/cleansing water where women change their menstrual hygiene products



During the survey, it was found that 31.99 % of the people interviewed said that toilet paper/water were available for menstrual management, while 52.16 % confirmed that they were not accessing, 15,27% do not have any information about the requested subject and 0.58 % did not will to respond.

8 OBSERVATIONS

With regards to the above indicator findings, this KAP survey acknowledges that UNHCR and partners have done an important job in improving the living conditions of the refugees in relation to Water, hygiene and Sanitation compared to the minimum WASH standards especially in water supply whereby KIZIBA is supplying 25 L/P/D.

However, there are still challenges under the different thematic areas to ensure that the standards are met.

The sanitation situation in terms of open defecation is still bad since the open defection at still at 8% which is supposed to be zero and so more needs to be done by doing regular sensitization and availing baby pots to concerned community.

Therefore, this survey recommends regular maintenance and rehabilitation and increasing the WASH infrastructure for keeping them in good hygiene standard.

RECOMMENDATIONS

- There is need to increase community engagement through interactive methods such as UMUGANDA approach (a local community work) & sanitation competitions and motivation through award of prizes to have the people of concern being encouraged to manage properly the WASH facilities existing in their locations.

- There is a need of cleaning tools such as spades, hoes, pickaxes, to carry out the community work ''Umuganda'' aforementioned,

- There are some water infrastructures such as water points that are old and need to be rehabilitated/replaced. Thus, UNHCR should mobilize funds for a massive rehabilitation. More water kiosks as part of Livelihood are needed to sustain and protect some plumbing works
- There is great need to invest in development of durable water solutions
- Provision of public light throughout the camp (especially at latrines and streets) would be an advantage for people who scare to walk to the latrines during the night. Moreover, this would also contribute for prevention of SGBV (Sexual and gender based violence).
- Construction of sanitation corridors are needed even for sustainable and adequate care of the latrines. This would be beneficial to the user and lower the culture open defecation.
- Numbering latrines is needed for a better identification of these infrastructures
- Since we have not met the standards of 20 PoC / drop holes more latrines needed to be constructed.
- There is also a need of soap throughout the camp since we are in Covid 19 outbreak, which is currently changing to different variants in this country.
- 98.85 % of the surveyed households do not possess hand wash stations. This is a huge gap. Provision of tippy tap can also help.
- Women in reproductive ages should be trained and facilitated on how to manufacture reusable pads as well as their proper disposal. Because it found out that, some women used disposable pads are not regularly available. Need to advocacy to access to sanitary pads for women and girls in Kiziba camp.
- As part of WASH protection mainstreaming, there is need to empower women participate in various forums in order to acquire information they need to properly handle WASH community concerns / issues, which involve them in planning, and community consultations in order to strengthen their capacity and build community trust within them.
- Refugee executive committee to mobilize villages to sensitize the refugees about the culture of ownership in order to reduce and eliminate vandalism of WASH infrastructures.
- Harmonization of existing hygiene messages, approaches and appropriate communication methods to maintain consistency.
- Small budget versus the current WASH needs thus more funds are needed.

9 ANNEXES

Annex 1: Questionnaire

Questionaire.xlsx

Annex 2: Camp structure according to villages, quarters, and households to be interviewed

Camp structure according to villages and quarters and households to be interviewed		
10	# of Households	HH to be interviewed
Village 1	78	8
Village 2	63	6
Village 3	74	7
Village 4	83	7
Village 5	63	6
Village 6	57	6
	418	**40**
Quarter 2.		
Village 1	79	8
Village 2	67	7
Village 3	43	3
Village 4	65	7
Village 5	54	5
	308	30
Quarter 3.		
Village 1	54	5
Village 2	68	7
Village 3	79	8
Village 4	84	8
Village 5	67	7
	352	**35**
Quarter 4.		
Village 1	77	8

Village 2	76	8
Village 3	65	7
Village 4	67	7
Village 5	65	7
	350	37
Quarter 5.		
Village 1	62	6
Village 2	69	7
Village 3	84	8
Village 4	66	7
Village 5	58	6
	339	34
Quarter 6.		
Village 1	64	6
Village 2	69	7
Village 3	68	7
Village 4	64	6
Village 5	68	7
	333	33
Quarter 7.		
Village 1	55	6
Village 2	65	7
Village 3	65	7
Village 4	77	8
Village 5	90	9
	352	37
Quarter 8.		
Village 1	77	8
Village 2	59	6
Village 3	64	6
Village 4	67	7
Village 5	57	6
	324	33
Quarter 9.		
Village 1	64	6
Village 2	68	7
Village 3	59	6
Village 4	65	7
Village 5	55	6

	311	32
Quarter 10.		
Village 1	59	6
Village 2	64	6
Village 3	76	7
Village 4	64	6
Village 5	73	7
Village 6	38	4
	374	36
Grand Total	3461	347

Annex 3: TABLES FROM 1 TO 21

Table 1: The principal source of domestic drinking water for members of the household

The principal source of domestic drinking water for members of the household		
Answers	Respondent	%
Protected spring	5	1.44
Public tap/standpipe	339	97.69

Table 2: Distance to Water Point in Meters

Distance to Water Point Meters		
Distance in meter	Number of respondents	%
1200	2	0.58%
160	8	2.31%
1600	1	0.29%
240	12	3.46%
320	4	1.15%
400	29	8.36%
560	2	0.58%
640	2	0.58%
80	1	0.29%
800	10	2.88%
5	276	79.54%
Grand Total	347	

Table 3: Percentage of respondents knowing at least three critical times of when someone should wash their hands for hygiene reasons

Mentioning at least 3 of the most important times when someone should wash their hands for hygiene reasons		
3 of the most important times when someone should wash their hands for hygiene reason	Number of households	Percentage
After defecation Before breastfeeding After handling a child's stool/changing a nappy/cleaning a child's bottom	1	0.29%
After defecation Before breastfeeding Before feeding children	2	0.58%
Before cooking/meal preparation After defecation After handling a child's stool/changing a nappy/cleaning a child's bottom	2	0.58%
Before cooking/meal preparation After defecation Before breastfeeding	3	0.86%
Before cooking/meal preparation After defecation Before feeding children	3	0.86%
Before cooking/meal preparation After defecation Other non-hygiene reason / Before prayer	1	0.29%
Before cooking/meal preparation Before breastfeeding After handling a child's stool/changing a nappy/cleaning a child's bottom	2	0.58%
Before cooking/meal preparation Before feeding children After handling a child's stool/changing a nappy/cleaning a child's bottom	1	0.29%
Before eating After defecation After handling a child's stool/changing a nappy/cleaning a child's bottom	11	3.17%
Before eating After defecation Before breastfeeding	17	4.90%
Before eating After defecation Before breastfeeding After handling a child's stool/changing a nappy/cleaning a child's bottom	2	0.58%
Before eating After defecation Before breastfeeding Before feeding children	3	0.86%
Before eating After defecation Before feeding children	14	4.03%
Before eating After defecation Don't know/less than 3 responses	3	0.86%
Before eating After defecation Other non-hygiene reason / Before prayer	1	0.29%
Before eating Before breastfeeding After handling a child's stool/changing a nappy/cleaning a child's bottom	2	0.58%
Before eating Before cooking/meal preparation After defecation	210	60.52%

Before eating Before cooking/meal preparation After defecation After handling a child's stool/changing a nappy/cleaning a child's bottom	5	1.44%
Before eating Before cooking/meal preparation After defecation Before breastfeeding	14	4.03%
Before eating Before cooking/meal preparation After defecation Before breastfeeding After handling a child's stool/changing a nappy/cleaning a child's bottom	2	0.58%
Before eating Before cooking/meal preparation After defecation Before breastfeeding Before feeding children	7	2.02%
Before eating Before cooking/meal preparation After defecation Before breastfeeding Before feeding children After handling a child's stool/changing a nappy/cleaning a child's bottom	12	3.46%
Before eating Before cooking/meal preparation After defecation Before feeding children	8	2.31%
Before eating Before cooking/meal preparation After defecation Before feeding children After handling a child's stool/changing a nappy/cleaning a child's bottom	2	0.58%
Before eating Before cooking/meal preparation After handling a child's stool/changing a nappy/cleaning a child's bottom	1	0.29%
Before eating Before cooking/meal preparation Before breastfeeding	7	2.02%
Before eating Before cooking/meal preparation Before breastfeeding Before feeding children	2	0.58%
Before eating Before cooking/meal preparation Before feeding children	4	1.15%
Before eating Before cooking/meal preparation Before feeding children Other non-hygiene reason / Before prayer	1	0.29%
Before eating Before cooking/meal preparation Don't know/less than 3 responses	2	0.58%
Before eating Don't know/less than 3 responses	2	0.58%
Grand Total	347	100%

Table 4: Duration to reach water point in one direction

Duration to reach water point in one direction		
Duration in min	Number of households	Percentage
1	1	0.29%
10	10	2.88%
15	2	0.58%
2	8	2.31%
20	1	0.29%
3	12	3.46%
4	4	1.15%
5	29	8.36%
7	2	0.58%
8	2	0.58%
Directly available close to house	276	79.54%
Grand Total	347	

Table 5: Duration for waiting to get water

Duration for waiting to get water		
Duration in min	Number of households	Percentage
10	16	4.61%
12	1	0.29%
120	1	0.29%
15	14	4.03%
20	15	4.32%
25	1	0.29%
30	12	3.46%
45	1	0.29%
5	2	0.58%
60	6	1.73%
90	2	0.58%
Directly available close to house	276	79.54%
Grand Total	347	

Table 6: Number of liters for potable water per day vs distance in m to water point

Number of liters for potable water per day vs distance in m to water point	
Distance in m	L/p/d
80	120
160	66.3
240	55.9
320	47.5
400	39.5
560	34.9
640	32
800	27.3
1200	23.1
1600	11.6

Table 7: Percentage of households with at least 10 L for domestic use per person

% of households with at least 10 liters per person of protected water storage capacity		
# of respondents	Number of liters	Percentage
85	0	0
1	0.2	0
1	0.6	0
12	10	3.50%
1	10.9	0.29%
5	11.4	1.46%
1	11.5	0.29%
5	12	1.46%
2	12.5	0.58%
11	13.3	3.21%
1	13.7	0.29%
1	14	0.29%
1	14.2	0.29%
2	14.5	0.58%
7	15	2.04%
1	15.3	0.29%
2	15.5	0.58%

1	152	0.29%
9	16	2.62%
7	16.6	2.04%
4	17.1	1.17%
1	17.5	0.29%
2	17.7	0.58%
1	18.1	0.29%
1	2.2	0
1	2.5	0
34	20	9.91%
4	21.8	1.17%
3	22.2	0.87%
5	22.8	0.29%
11	24	3.21%
5	25	1.46%
1	25.7	0.29%
7	26.6	2.04%
2	27.2	0.58%
1	28.3	0.29%
3	28.5	0.87%
1	29	0.29%
2	3.3	0
1	3.6	0
1	3.8	0
14	30	4.08%
3	32	0.87%
2	33.3	0.87%
1	34	0.29%
2	34.2	0.58%
1	35	0.29%
1	35.5	0.29%
1	36	0.29%
5	4	0
1	4.4	0
1	4.8	0
14	40	4.08%
1	45.2	0.29%
1	47	0.29%

2	48	0.58%
3	5	0
6	5.7	0
2	50	0.58%
2	53.3	0.58%
1	54.5	0.29%
7	6.6	0
2	60	0.58%
1	66.6	0.29%
1	7	0
1	7.2	0
1	7.3	0
1	7.5	0
1	7.6	
1	70	0.29%
6	8	1.75%
1	8.2	0
1	8.3	0
3	8.5	0
2	8.8	0
1	80	0.29%
2	9.2	0
343		63.27%

Table 8: Percentage of Household with at least 10lt for domestic use.

Number of containers	Household	Corresponding percentage
1	13	3.75%
10	8	2.31%
2	54	15.56%
20	1	0.29%
3	99	28.53%
4	60	17.29%
5	73	21.04%
6	24	6.92%
7	5	1.44%
8	5	1.44%
9	1	0.29%

No response	4	1.15%
Grand Total	347	

Table 9: Average number of L/p/d

L/p/d	Number of households
0.6	1
10	8
10.9	3
11.1	1
11.4	9
11.5	1
11.6	2
12	11
12.3	1
12.5	4
13.3	15
13.7	1
14	2
14.2	3
14.5	1
15	11
15.3	2
15.5	3
16	11
16.6	6
160	1
17	1
17.1	9
17.5	1
17.7	2
18	1
18.1	5
19.6	1
2.5	1
20	49
21.8	4
22.2	5
22.8	11
24	15
25	9
26.2	1
26.6	12

27.2	3
28.3	1
28.5	5
30	17
30.8	1
32	8
33.3	4
34	2
34.2	2
35	1
35.5	1
39	1
4	1
40	25
45.2	1
47	1
48	2
5	1
5.7	2
50	4
53.3	3
54.5	1
6.6	4
60	5
62.5	1
66.6	1
7.2	1
7.3	1
7.5	1
7.6	1
70	1
8	3
8.2	1
8.5	1
8.8	3
80	3
9	1
9.2	2
9.3	1
25.06	

Table 10: Number of drinking Water collection and storage containers for the house

Number of containers	Household	Corresponding percentage
1	13	3.75%
10	8	2.31%
2	54	15.56%
20	1	0.29%
3	99	28.53%
4	60	17.29%
5	73	21.04%
6	24	6.92%
7	5	1.44%
8	5	1.44%
9	1	0.29%
No response	4	1.15%
Grand Total	347	

Table 11: Defecation areas of the household members (excluding children under 5)

Where household members (EXCLUDING children under 5) usually go to defecate		
LOCATION	RESPONDENT NUMBER	CORRESPONDING PERCENTAGE
Communal latrine	302	87.03%
Don't know	3	0.86%
Household latrine	22	6.34%
Open defecation	2	0.58%
Plastic bag	1	0.29%
Shared household latrine (used by more than one household)	17	4.90%
Grand Total	347	

Table 12: Household adult defecation in an open air (for example at night)

Household adult defecation in an open air (for example at night)		
RESPONSE	RESPONDENT NUMBER	Percentage
Don't know	2	0.58%
No	341	98.27%
Yes	4	1.15%
Grand Total	347	

Table 13: Access to bathing facility

Access to a bathing facility		
Access to a bathing facility	Number of respondents	Percentage
Do not have a designated bathing facility	147	42.36%
Have a designated shower/bathing facility	200	57.64%
Total	347	100%

Table 14: Disposal areas of household domestic waste

Disposal areas of household domestic waste		
LOCATION	RESPONDENT NUMBES	CORRESPONDING PERCENTAGE
Communal pit	322	92.80%
Designated open area	7	2.02%
Household pit	7	2.02%
Other	1	0.29%
Street bin/container for garbage collection	1	0.29%
Undesignated open area	9	2.59%
Grand Total	347	

Table 15: Percentage of household with access to soap

Percentage of household with access to soap		
Answers	# of respondents	Percentage
No	37	10.66
Yes	310	89.34
Grand Total	347	

Table 16: Presence of specific hand washing device/station in the premises

Answers	Respondent	Corresponding percentage
Don't know	1	0.29%
No	343	98.85%
Yes	3	0.86%
Grand Total	347	

Table 17: Percentage of households which reported at least 5 critical times

Mentioning percentage of households which reported at least 5 critical times of when someone should wash his/her hands for hygiene reasons		
5 important times when someone should wash his/her hands for hygiene reasons	Number of households	Percentage
After defecation	1	30.2 %
Before breastfeeding	2	6.07 %
Before cooking/meal preparation	2	25.86 %
After handling a child's stool/changing a nappy/cleaning a child's bottom	3	4.11%
Before eating	1	33.58%

Table 18: Number of women in reproductive age

Number of women in reproductive age	Number of households	% of households	Number of women in reproductive age x number of households
0	26	7.49%	0
1	160	46.11%	160
2	75	21.61%	150
3	49	14.12%	147
4	22	6.34%	88
5	12	3.46%	60
6	2	0.58%	12
9	1	0.29%	9
Grand Total	347		

Table 19: Disposal areas of household domestic waste

Disposal areas of household domestic waste		
LOCATION	RESPONDENT NUMBES	CORRESPONDING PERCENTAGE
Communal pit	322	92.80%
Designated open area	7	2.02%
Household pit	7	2.02%
Other	1	0.29%
Street bin/container for garbage collection	1	0.29%
Undesignated open area	9	2.59%
Grand Total	347	

Table 20: Number of women in reproductive age.

Number of women in reproductive age	Number of households	% of households	Number of women in reproductive age x number of households
0	26	7.49%	0
1	160	46.11%	160
2	75	21.61%	150
3	49	14.12%	147
4	22	6.34%	88
5	12	3.46%	60
6	2	0.58%	12
9	1	0.29%	9
Grand Total	347		

Table 21: Menstrual hygiene used during the previous monthly period.

Menstrual hygiene materials used during your last monthly period		
Materials	Respondent number	Corresponding percentage
No response	111	31.99%
Disposable pad	222	63.98%
Disposable pad Cotton	1	0.29%
Disposable pad and Reusable cloth	6	1.73%
Disposable pad, Reusable pad and Reusable cloth	1	0.29%

Layers of underwear	1	0.29%
Menstrual cup	1	0.29%
Nothing/bleed into clothes	1	0.29%
Reusable cloth	2	0.58%
Reusable pad	1	0.29%
Grand Total	347	

Table 22: **Availability of paper/cleansing water where women change their menstrual hygiene products**

Is toilet paper/cleansing water available where the women change their menstrual hygiene management products?		
Response	Respondent number	Corresponding percentage
No response	2	0.58%
Don't know	53	15.27%
No	181	52.16%
Yes	111	31.99%
Grand Total	347	

10 REFERENCE

A. "Cochran 1977 Sampling Techniques Third Edition, Chapter 8 of Systematic Sampling on page 206".
https://glad.geog.umd.edu/Potapov/Library/Cochran1977_Sampling_Techniques_Third_Edition.pdf.