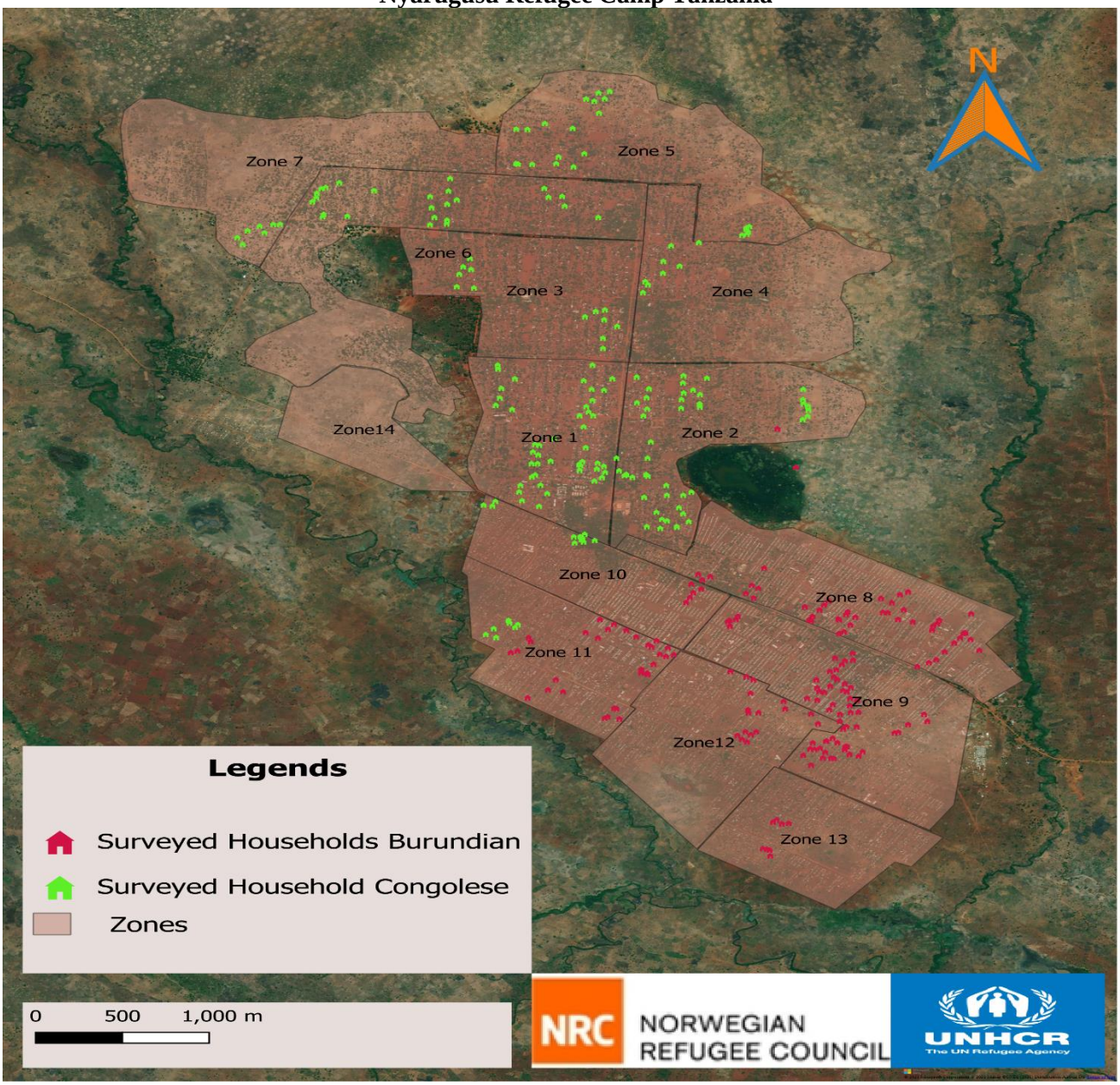
WASH KAP SURVEY REPORT
(Knowledge, Attitudes and Practices)
Nyarugusu Refugee Camp Tanzania



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Norwegian Refugee Council
P.O BOX 66 Kibondo,
Tanzania

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1 Abbreviations and Acronyms

BDI	Burundians
DRC	Congolese
KAP	Knowledge Attitude and Practices
LPCD	Litres Per Capita Per Day
M & E	Monitoring and Evaluation
NGO	Non-Governmental Organization
NRC	Norwegian Refugee Council
OD	Open Defecation
PSN	People with special needs
PWDs	People with Disabilities
UNHCR	United Nations High Commissioner for Refugees
WASH	Water, Sanitation and Hygiene

. II Acknowledgements

Many people contributed to the success of this KAP survey. We wish to acknowledge our donors who supported the survey, including UNHCR and NMFA as part of monitoring WASH services in Nyagurusu refugee camp. To the role played in this KAP survey by Violeth Biphuye, the WASH Programme Manager and Solo Lufundisha the Project Coordinator. WASH Officers, Deogratius Kimena, Lukurazo Liberatus, Agripina Mtengu, Abdallah Khamis and Devotha Shirima and the whole team is highly appreciated.

The survey could not have been successful without the tireless support from, Efraim Kabakulu and Valentino Sembe M&E Technical assistants in backstopping the enumerators. Thanks to all the NRC staff at both Nyarugusu field and Kibondo area offices who have contributed in making the KAP Survey successful.

This report commends all the households who participated in the KAP survey on a short notice. Much appreciation to the men and women from the refugee community who availed themselves for the interview and contributed towards the findings in this report.

It have been realized that; the community is very much touched when they admit the dangers of not utilizing services availed to them properly and it is our hope that they will take appropriate actions to improve their own hygiene, water and sanitation situation. And as WASH lead, NRC to advocate for more funding where there are gaps and rectify where needs have been identified.

III. Executive summary

This report summarizes the findings for the Knowledge Attitudes and Practices (KAP) survey on Water supply, sanitation and hygiene promotion in Nyarugusu Refugee Camp, conducted in November 2021. The sample size was arrived based on the Nyarugusu Refugee camp population. The total population in Nyarugusu was 128,638 Population comprising 79,005 Congolese, 49496 Burundians and 137 other nationalities (Tanzania Refugee Situation Statistical Report 31st October, 2021).

Out of 29,534 households, 496 households interviewed from 14 zones with an average of 30 households per zone. All data can be accessed through this website; https://kobocat.unhcr.org/accounts/login/?next=/#/. The purpose of the survey was to assess WASH services in the camp, monitor the progress of NRC WASH activities funded by UNHCR and NMFA.

The broad purpose of the survey was to inform NRC on the results of WASH project based on Knowledge, Attitude and Practice of the beneficiaries in line with the intended outcome of the Project. The internal survey is to strengthen accountability to donors, stakeholders and beneficiaries to draw lessons from their feedback to inform future WASH programs.

The KAP survey information was gathered against the following characteristics of interest:

1. Water collection and storage
2. Drinking water and Hygiene
3. Hygiene Promotion
4. Sanitation / latrine
5. Dissemination of hygiene messages
6. WASH related diseases and health seeking behaviour
7. Menstrual Hygiene Management
8. Gender and Protection Mainstreaming

IV. Background and Context

NRC has been delivering assistance in Nyarugusu camp since May, 2017. The focus been on emergency assistance to the Burundian and Congolese and asylum seekers residing in the camp. In particular, NRC Tanzania has been providing the affected population with shelter, WASH, Education and ICLA services. As WASH lead Organization, Norwegian Refugee Council received funding from UNHCR, NMFA and DFID in order to safeguard equitable and full access to services and protection for persons of concern (PoCs) living in Nyarugusu camp.

The total population in Nyarugusu was 128,501 Population comprising 79,005 Congolese, 49,496 Burundians and 137 other nationalities (Tanzania Refugee Situation Statistical Report 31st October, 2021). For accountability purposes to both donor and the beneficiaries, NRC has established an M&E system; therefore, as a routine monitoring activity, NRC has conducted an assessment to identify the gaps in the process for services improvement and find out information in line with the following objective stated below.

VI. Survey Objectives

The WASH program is one of the pillars of NRC's intervention in Tanzania. NRC conducted an assessment to evaluate the knowledge, attitude and perceptions of beneficiaries to monitor the quality

of WASH services provided in Nyarugusu camp. This will also determine the usage and the beneficiaries' feedback on the services provided.

This would then be used to establish the benchmark by which implementation impact could be gauged and suggest recommendations for the implementation given the context. The survey results will guide the implementation and benchmarking of project effectiveness to both NRC and other agencies working in the camp.

The specific objectives of the survey

- To provide Water and sanitation coverage data to determine the gap resulted from dilapidation of sanitation facilities due to wear and tear as most of the refugees have been in the camp for more than 3 years.
- To provide data/information on hygiene practices in Nyaruguusu Refugee camp which will be used to measure the change resulted of from interventions compared to the previous KAP survey at the commencement of the project.
- To provide data which provide a planning figure for actual gaps in terms of water supply, latrine coverage, and also in consideration of the increasing refugee needs and inform future projects.
- To get information on the people living with disabilities and people with specials and identify the gaps to be addressed in the camp.

Generally, the survey findings will be used to inform donors, Government Ministries and other partners responding to the refugee situation and for NRC to monitor the progress of the implementation of project activities in Nyarugusu refugee camp. The results will also be compared with the previous KAP survey to measure changes resulted from WASH interventions in the camp.

VII. Methodology

NRC employed mixed method approach using both qualitative and quantitative data collection methodology. Both types of data were analysed disaggregated by gender and location. A survey method using structured questionnaires was used for data collection. Data collection was done through household interviews. The data collected was entered and uploaded to Kobo online system to be cleaned and analysed by the M&E team while Project manager and WASH Coordinators did the interpretation of the data.

As part of the methodology, the survey team conducted desk review. A set of key documents were reviewed, including: UNHCR Refugee Situation in Tanzania – as of 31st October 2021. NRC monthly operational reports from December 2020 through October, 2021, UNHCR and NMFA Log frames, present KAP Survey Questionnaire, WASH KAP Survey report: April, 2021 and the implementation plan(s).

Survey Area and Sample Frame

The survey area was Nyarugusu Refugee camp, comprising of both refugees and asylum seekers, majority being Congolese and Burundians. The exercise took place from 5 November to 15 November 2021. The camp is comprised of two major nationalities (Congolese and Burundian). Congolese settled

mostly in Zone 1 to 7 and 14 while Burundian refugees settled in zone 8 to 13; Zone 11 is for both populations.

A cluster sampling technique used to select the zones and villages to be surveyed whereby 59 villages were selected. A simple random sampling method used to select 496 households, 192 from Burundian and 304 from Congolese out of 29,534 households from both Burundian and Congolese for inclusion as part of the sampling strategy for the assessment.

Indicators and Questionnaire Elaboration

Survey tools were pre-tested for consistency, accuracy and user-friendliness. NRC adapted the global UNHCR WASH KAP Questionnaire.

The indicators for the objectives were based on the ongoing projects key out outcomes targets including the following;

a. # Litres of water per person per day (l/p/d) available through water points (Burundian 22, Congolese 24lts of water per person per day)
b. 90% of beneficiaries who report using a sufficient (20 l/p/d) amount of safe water for daily use (e.g. drinking, cooking & hygiene)
c. 90% of beneficiary households who report or are observed queueing at tap stands within recommended 30 minutes.
d. 99% of beneficiary households who report or observed to walk not more than 200m to nearest water point
e. 95% of beneficiary households with no visible evidence of human faeces/rubbish in or around the immediate living area
f. 85% of new or rehabilitated communal/ household latrines which are clean, secure, and fit for use.
g. 80% of households with drop-hole latrine or drop-hole toilet (Congolese)
h. 75% of households with drop-hole latrine or drop-hole toilet. (Burundian)
i. 85% of PoC with knowledge in basic hygiene practices

Ethics and Consent

NRC places a strong emphasis on the issue of ethics in data-oriented activities. In line with NRC's and UNHCR broad policy guidelines, the survey had observed the following ethical standards in collection and management of data and information pertaining to beneficiaries and other stakeholders:

1. Adoption of informed consent and voluntary participation procedures, including written and oral consent
2. Ensuring either written or oral consent is secured from participants
3. Adopting appropriate confidentiality procedures sensitive to the needs of the target groups and more specifically children, in case they are also participating
4. Respecting the dignity and autonomy of those participating in the data collection activity
5. Where children are involved, ensuring that the best interest of the child is taken into account and that the costs to their participation do not outweigh the benefits.
6. Being sensible and prepared in terms of understanding and being mindful of cultural, religious, gender and other significant considerations within the communities in planning, conducting and reporting findings.

7. Ensuring that all staff and external parties contracted to undertake specific M and E tasks are adequately briefed of the above ethical issues and they sign to indicate willingness to adhere and be held accountable in case of a breach.

Recruitment and Training

NRC recruited the enumerators from the refugee population with the following qualifications:

- Experience in similar surveys as part of their job routine including the use of digital data collection gadgets.
- Knowledge of local culture including language proficiency
- Knowledge of local/camp geography
- Gender representation
- Their availability during data collection period
- Data collectors were introduced on the Purpose and background of the survey and trained on;
- Ways of accessing the sampled population through matching of the expected numbers of interviews per villages and zones.
- Understanding the study tools especially the questions in the questionnaire.
- Possible survey setbacks and how to circumvent them
- The importance of accuracy and how to achieve it
- Accurate translations to native language.

To be familiarized with the survey tool and sample specification; the enumerators were trained for two days.

Data Collection

NRC applied the survey method, using the UNHCR WASH KAP questionnaire. The questionnaire was pre-tested, resulting in modifications to the questionnaire in terms of translations. The interviews averaged 40 minutes in length.
Data collection was done using Kobo application platform from 5Th November through 15Th November 2021 by the enumerators (20) from the refugee community.

Data Quality Control Measures

In addition to enumerators training, both qualitative and quantitative data were gathered, per the definition made in the study tool. The methodology used in the survey enhanced accuracy and statistical quality. The questionnaire was piloted prior the actual data collection. M&E team provided backstopping to enumerators during data collection. For data cleaning and initial analysis, the information captured was reviewed and uploaded every evening, this was also to avoid any loss or tampering while also ensuring that the phones were secured and fully charged.
All data was collected electronically; archived in the kobo toolbox website; https://kobocat.unhcr.org/accounts/login/?next=/#/

Camp population data and existing map was used to identify the villages and guide the enumerators. The study designed such that it triangulates information to enhance validity. Further validation came from WASH team when approached for review of the of the draft report.

Data analysis:

The analysis was conducted using UNHCR WASH KAP Analysis tool, which provides infographic information for UNHCR WASH core indicators. For the variables not configured in the analysis tool, Pivot tables were used as an alternative, by accessing Kobo website and interpretation of the same. Descriptive statistics such as proportions were used to summarize the categorical variables.

Limitations, Challenges and Lessons Learnt

Language

The language applied was both English and Kiswahili. Enumerators used Kiswahili version, whereby translation into Kirundi had to be carried out when interviewing respondents who did not understand Swahili.

VIII. Key Results and Findings

Global WASH Indicators

Legend on computed indicators' colors:	Main indicators for the surveyed population							Secondary indicators for the surveyed population			
Above Emergency and Post-Emergency Standards level *Between Emergency and Post-Emergency Standards level* *Below Emergency and Post-Emergency Standards level*	1 - Average liters of potable water/per person/per day collected at HH level	2 - % HHs with at least 10 L/p protected water storage capacity	3 - % HHs collecting drinking water from protected/treated sources	4 - % HHs with family latrine/toilet	5 - % HHs reporting defecating in a toilet/latrine	6 - % HHs with access to soap	7 - % HHs with access to solid waste disposal facility	8 - % HHs with access to a specific hand-washing device	9 - % respondents knowing at least 3 critical moments when to wash hands	10 - % HHs practicing open defecation. **Includes defecating in the bush at night.	11 - % HHs having access to a bathing facility
Emergency Standards	≥ 15	≥ 70%	≥ 70%	-	≥ 60%	≥ 70%	≥ 70%	≥ 70%	≥ 60%	0%	≥ 70%
Post Emergency Standards	≥ 20	≥ 80%	≥ 95%	≥ 85%	≥ 85%	≥ 90%	≥ 90%	≥ 90%	≥ 80%	0%	≥ 90%
Population surveyed (DRC)	**23.3**	**78.9%**	**100.0%**	**92.8%**	**96.4%**	**71.1%**	**86.5%**	**13.2%**	**92.8%**	**16.4%**	**66.4%**
Population surveyed (BDI)	**21.9**	**72.9%**	**99.5%**	**92.7%**	**95.8%**	**87.5%**	**66.7%**	**14.1%**	**99.5%**	**25.0%**	**43.2%**

Table 1: Global Wash Indicators

Water supply

The survey findings shown that the average liter per person per day for camp was 22.6 l/p/d (23.3 litres for Congolese, 21.9 litres for Burundian). This indicates that the average litres of potable water/per person/per day has surpassed the post emergency standards (20l/p/d).

Additionally, the survey indicated that 96.4% of the households accessed drinking water from public tap/standpipe (98.4% Congolese, 94.4% Burundian), 3.3% collected water from hand pumps/boreholes (5.6% Congolese, 1.0% Burundian) while 0.5% of Burundian collected water from surface water like lake, pond, dam and river. Despite the fact that most of the population-accessed water from tap stands (treated water) sensitization measures should continue.

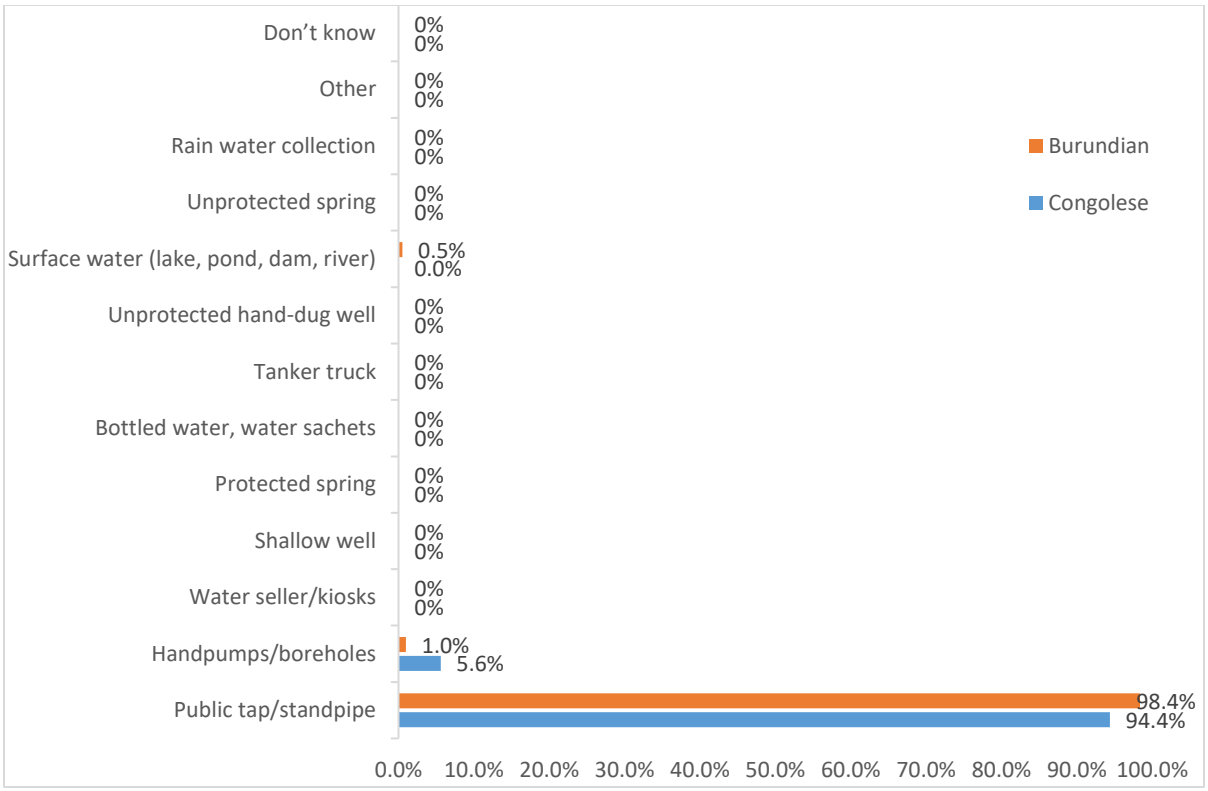


Figure 1: Principal source of water for Domestic use

Regarding the amount of water supplied; the findings portrays that 70.56% of the households were receiving enough water, that is 20 of more liter per person per day (63.84% Congolese, 81.25% Burundian). This is indicative that more than half of the families especially Burundians received enough water to meet their household needs.

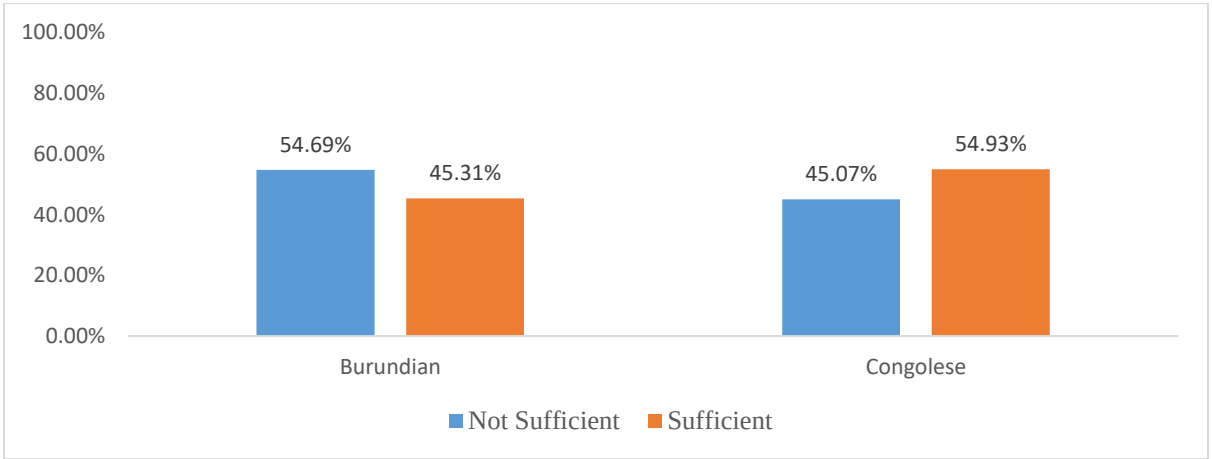


Figure 2: Community perceptions on the amount of water supplied

For those who felt that they didn't receive enough water, the main reasons was not having enough water storage containers (67.6%) (79.0% Burundian, 56.2% Congolese) and 15.7% experienced water shortages in their areas (21.9% Congolese, 9.5%Burundians). While, 9.9% of the households reported

that, it is too dangerous to get water (13.1% Congolese, 6.7% Burundian), 3.6% of Congolese mentioned on waiting time at the water point is too long, 2.4% mentioned on limitation of volume of water that can be collected at water point (1.5% Congolese, 2.9% Burundian), 2.2% mentioned that water is too far (1,5% Congolese, 2.9% Burundian) while 0.7% of Congolese mentioned cannot afford to buy enough water. In future programming, water supply improvement needs to consider provision of enough water storage containers for both caseloads.

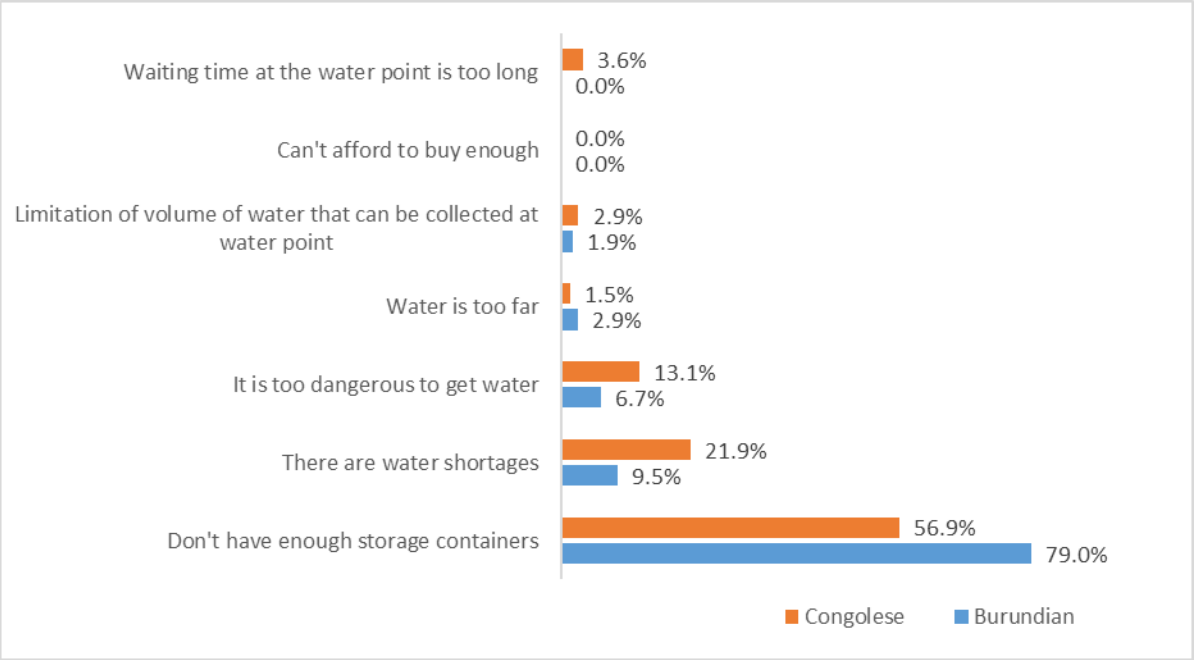


Figure 3: Reasons as to why water provided is not enough for the households' needs

The survey finding on water collection time depicts that 91.7% population collected water within 30 minutes (84.9% Congolese, 98.4% Burundian). This indicates that more than half of the households collected water within a range of sphere standards.

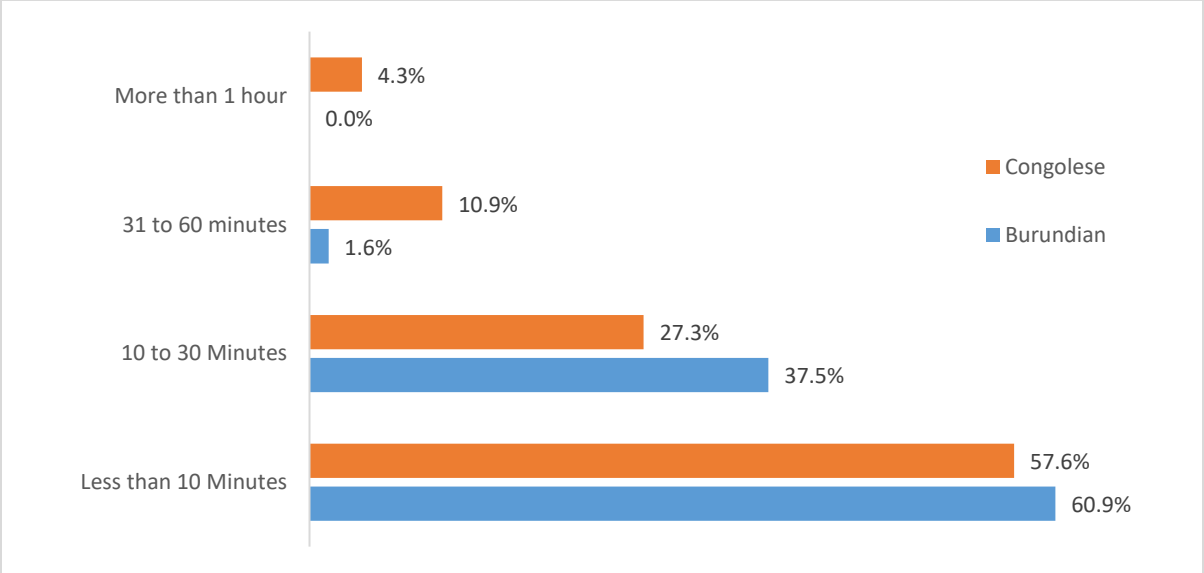


Figure 4: Waiting time at tap stands.

Conclusion

1. Majority of the household get drinking water from the treated water source. Shortage of water storage containers has remained the gap despite the recent distribution, which targeted family size 5 and beyond.
2. There is a significant improvement in water production and supply in the camp, however, the long water collection timings has persisted, indicative of low pressure, long queue, and few/broken taps and over congestion in some villages thus increasing water demand to the old taps.

Recommendations:

1. The survey recommends that there is a need to improve on the water collection time to reduce congestion at tap stands including; - pumping water with sufficient pressure, installation of tap stand at the given location as per sphere standards, continuous monitoring of facilities by WASH committees, proper maintenance and replacement of damaged taps.
2. The upcoming budget revision should factor in purchase of water storage facilities to cover the left out households in the previous distribution.

Water Quality

Concerning water quality, 72.8% households appreciated the quality of water provided in the camp (74.7% Congolese, 70.7% Burundian). While 20.3% mentioned on unpleasant taste (18.1% Congolese, 22.4% Burundian), 4.05% mentioned on unpleasant smell (3.9% Congolese, 4.2% Burundian), 2.6% reported that water provided is not clear in color/suspended particles/turbid Burundian (2.6% Congolese, 2.6% Burundian) and 0.7% Congolese household reported that water gives them stomachache.

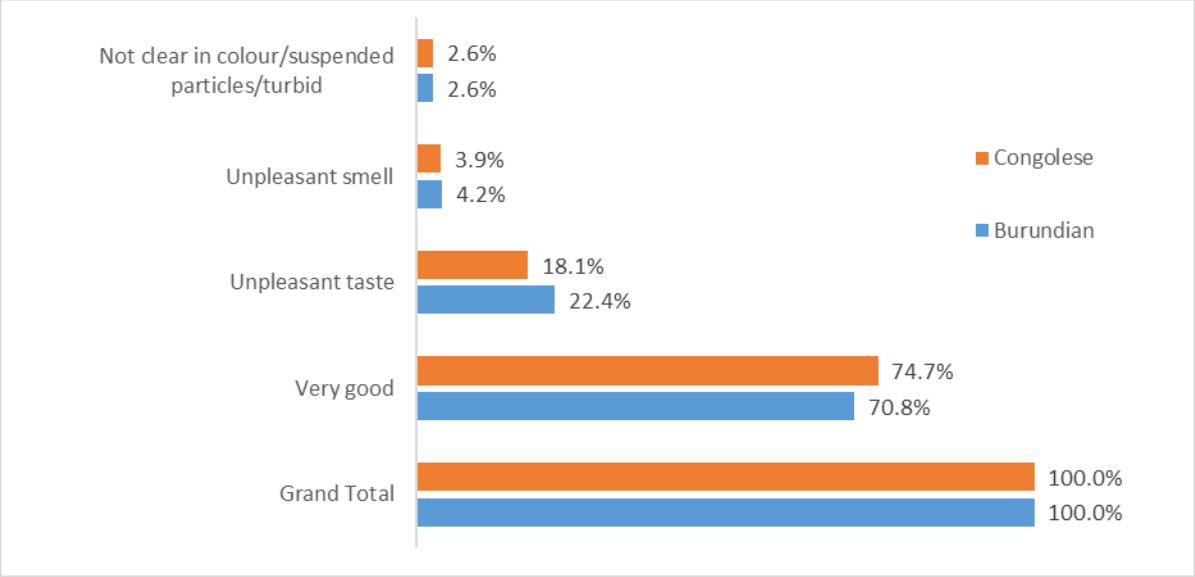


Figure 5: Community opinions on quality of water provided

Sanitation

On the latrine use the survey captured the following variables; -

- **Access and use**

The findings on latrine use and cleanliness revealed that 94.6% of the households relieve themselves in household's latrines (94.4% Congolese, 94.7% Burundian). Whilst 3.4% reported to use communal latrines (3.6% Congolese, 3.1% Burundian) that is, one toilet/latrine shared by a maximum of 4 households, 1.3% reported practicing open defection (1.0% Congolese, 1.6% Burundian) and 0.75% reported to use plastic bags (1.0% Congolese, 0.5% Burundian). This signifies that majority of Burundian and Congolese population are using the household latrines. However, the use of communal latrines may have direct impact to beneficiaries' hygiene and health condition.

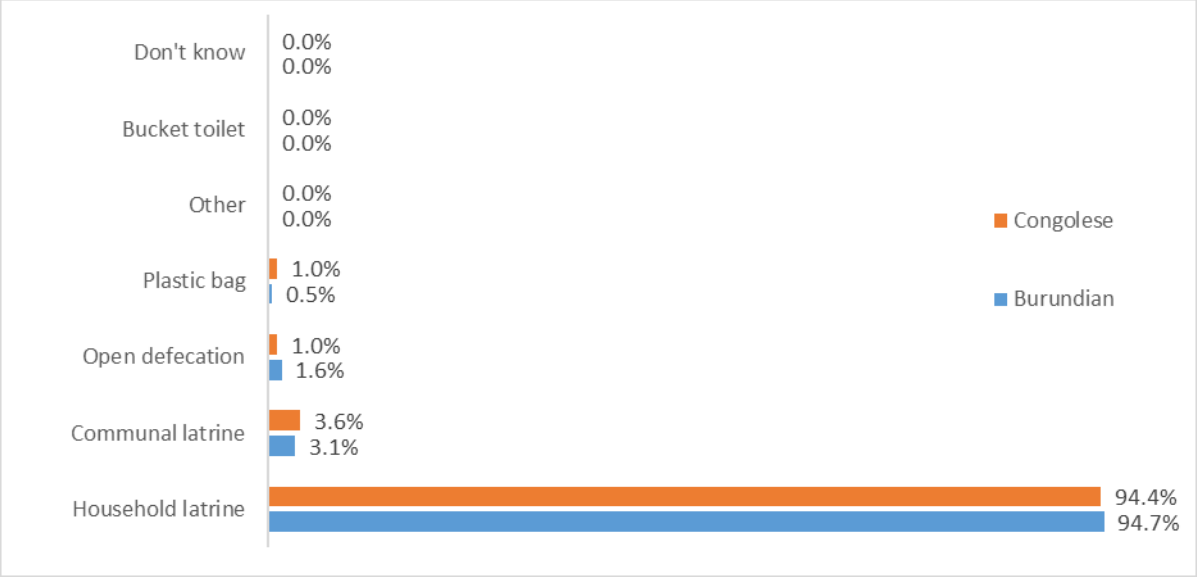


Figure 6: Where household members usually defecate

- **Open defecation**

Overall, the survey findings depicted that, the 20.7% of households practising open defecation in the camp that is 25.0% among Burundian and 16.4% amongst Congolese.

Specifically for children, the survey results indicated that 30.8% Burundian and 15.8% Congolese reported on open defecation amongst children under 5 years of age.

Furthermore, the results indicated that, 48.0% of the households were using household latrines to manage under five (5) children's faeces (49.6% Burundian, 46.4% Congolese), 24.1% used plastic pots (32.4% Congolese, 15.8% Burundian), 1.9% used plastic bags (1.4% Congolese, 2.3% Burundian), 2.4% used other means to manage under five (5) faeces (3.2% Congolese, 1.5% Burundian) and 0.9% Congolese used Communal latrines manage under five (5) faeces.

The results of the survey entails that there is still a need for plastic potties especially among children and empowerment of hygiene promoters so that to best relay hygiene messages during sanitation campaigns and routine monitoring activities.

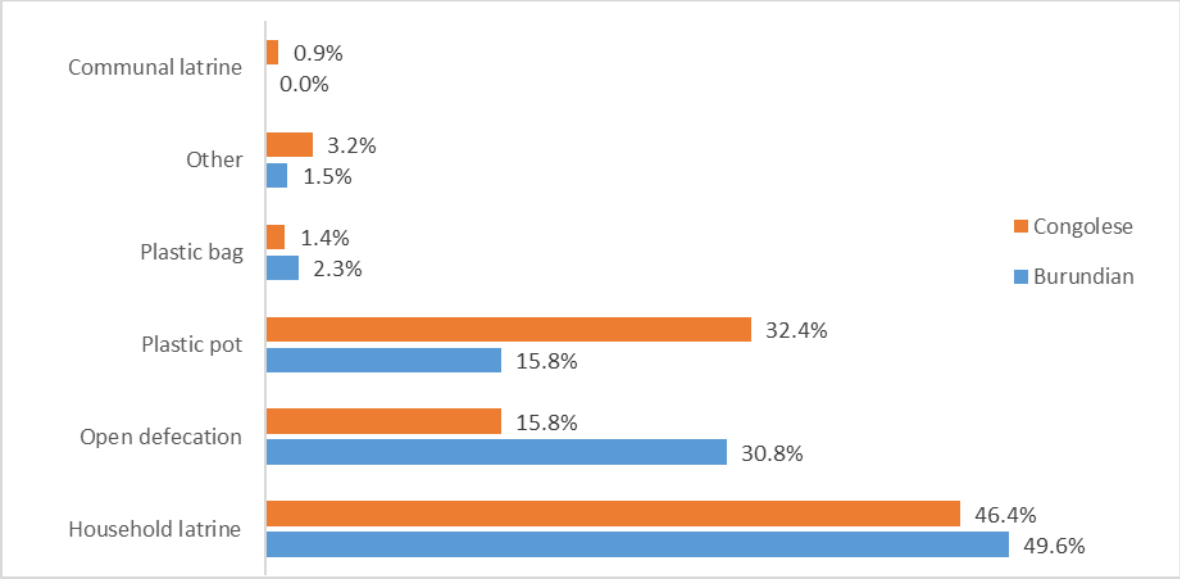


Figure 7: Management of under five Children faeces

- **Latrines' condition**

Regarding the state of the latrines, 82.1% latrines were clean (84.78% Congolese, 79.35% Burundian) of which 78.3% were not full (75.5% Burundian, 81.1% Congolese). The existence of full latrines and dirty latrines is indicative of the presence of communal/family shared latrines that tend to fill faster owing to the large number of people using them and due to low sense of ownership, thus poorly maintained. Furthermore, to control open defecation among adults, future programming should consider provision of solar lamps, as alternative to improve security during the night.

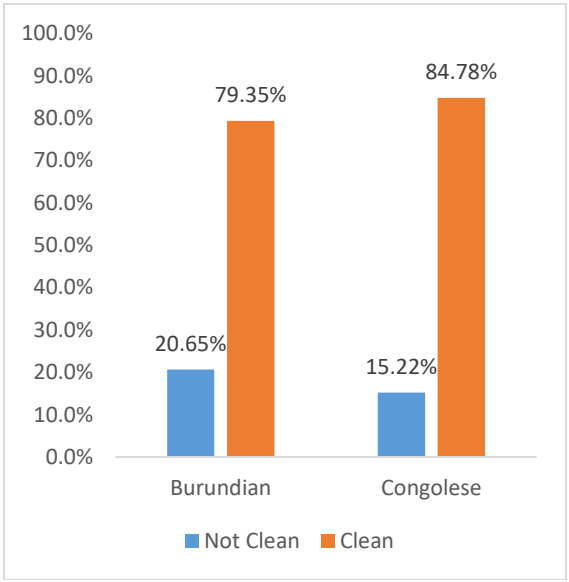


Figure 8: Latrines condition

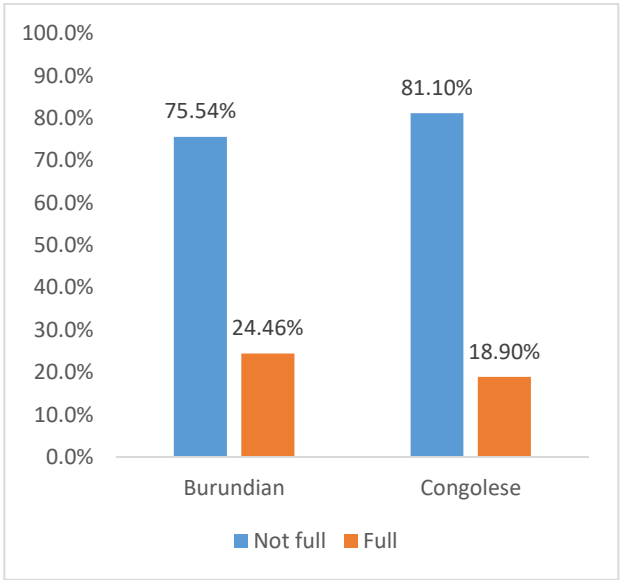


Figure 9: Latrine status

- **Handwashing station and use**

With regard to presence of handwashing stations at the household level, the findings portray that fewer households had hand washing stations; 17% households had handwashing stations at latrines (16% Congolese, 18% Burundian), 33.5% had specific handwashing devices in their household (38% Congolese, 29% Burundian). Among the households with specific handwashing devices, 85% had water (100% Burundian, 70% Congolese) of which 69% had soap (85% Burundian, 53% Congolese). This signifies that most individuals do not wash their hands immediately after visiting the latrines. Thus, a need to ensure: timely provision of handwashing facilities, regular maintenance of latrines, availability of anal cleansing materials and soap across the camp.

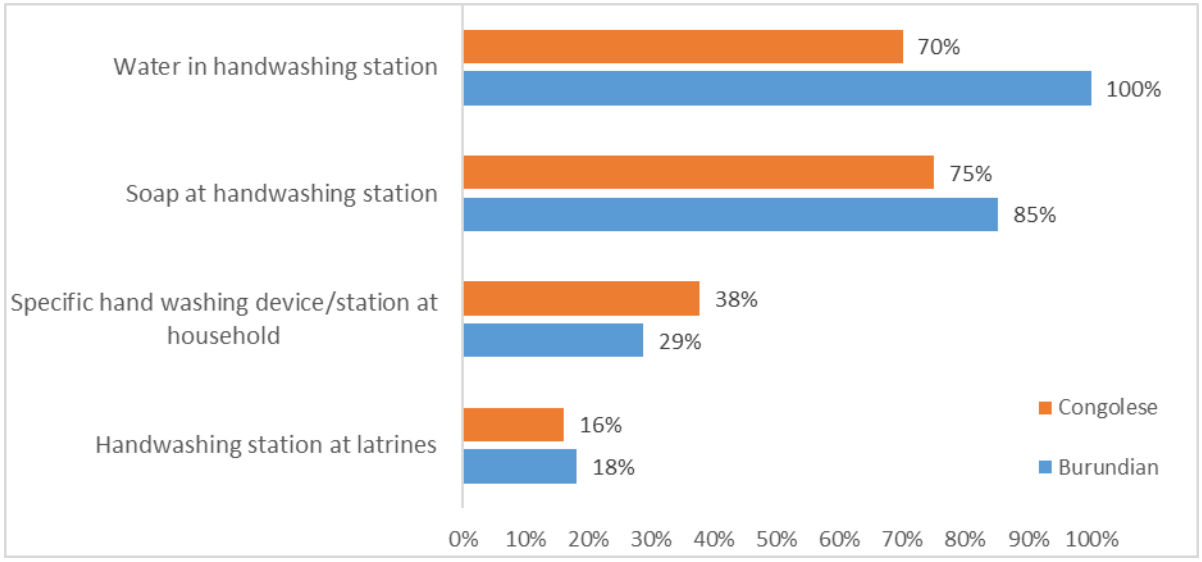


Figure 10: Handwashing devices, water and soap presence at the household

Regarding provisional of bathing shelters, survey findings portray that 54.8% households had designated shower/bathing facility (66.4% Congolese, 43.2% Burundian). This means there is a need to provide bath shelters materials to the population who do not have.

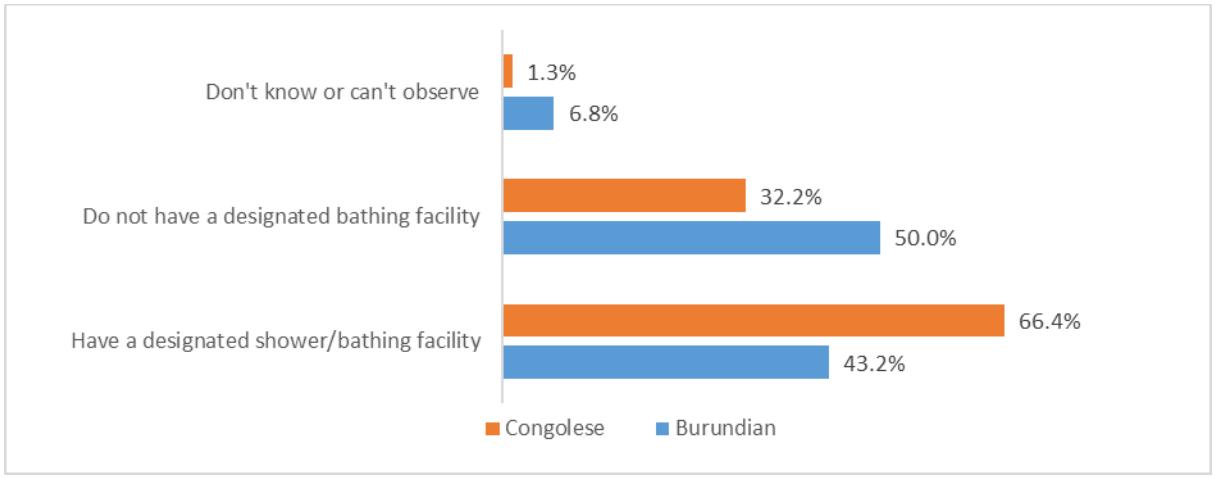


Figure 11: Households with designated bath shelter

Regarding sanitation services to PSN, the survey findings shows that 24.4% of the households had people with disabilities (25.3% Congolese, 23.4% Burundian). Among the household living with disabilities 12.0% had access to PSN latrines appropriate to their needs (20.0% Burundian, 4.0%

Congolese) while 52.5% had access to special PSN latrines (61.0% Congolese, 44.0% Burundian). This calls for a need to collect data on users who have disabilities and plan to construct appropriate facilities for them.

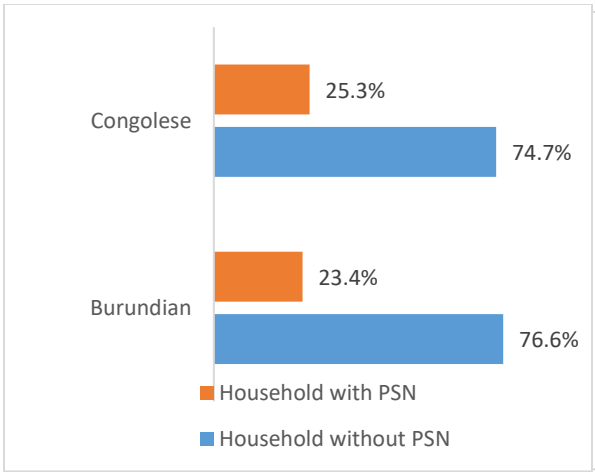


Figure 12: Households with PSN

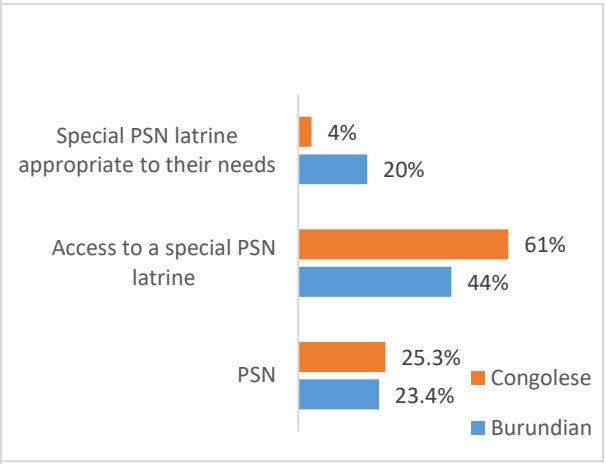


Figure 13: PSN with access to latrines/special facilities

Waste Management

Regarding waste management; majority of the households used proper waste management measures. That is, 70.8% used household pits (63.0% Burundian, 78.6% Congolese), 5.6% used communal pit (7.6% Congolese, 3.6% Burundian), 5.8% used designated open area (5.3% Congolese, 6.3% Burundian), 11.8% used undesignated open area (17.7% Burundian, 5.9% Congolese), 4.3% of the households burn it (1.3% Congolese, 7.3% Burundian) and 0.3% of Congolese used the street bin/container for garbage collection. This implies that there is a need to increase the coverage of street bin and strengthen the management of waste collection points. Another strategy would be to involve the community in solid waste management to address sustainability from a livelihood lens.

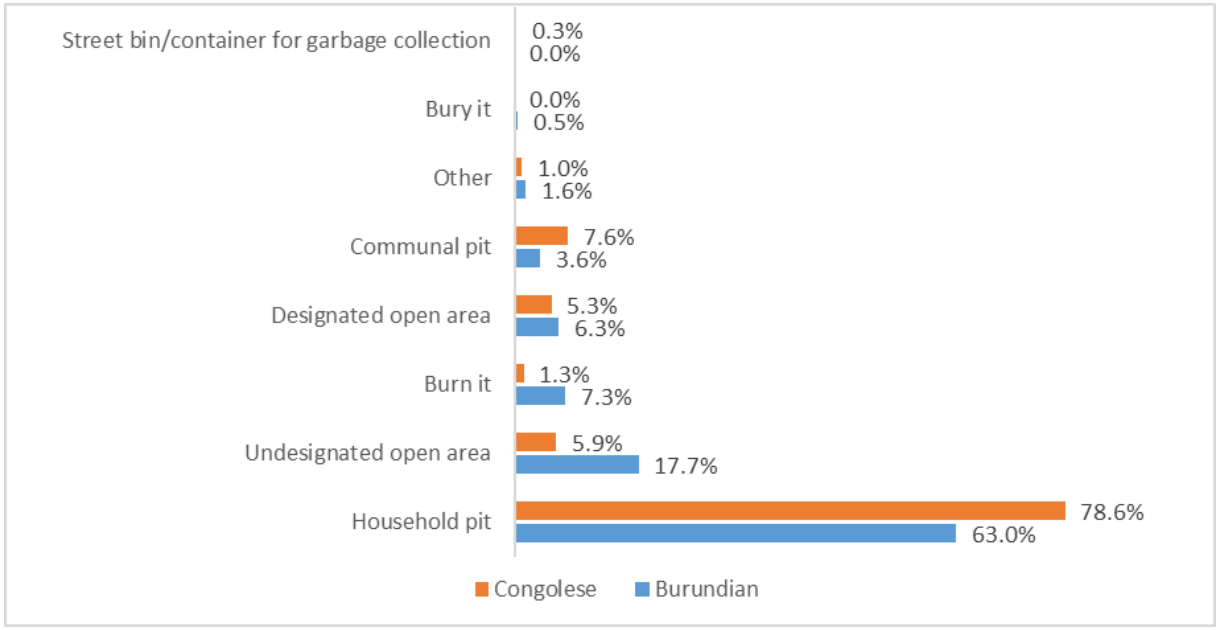


Figure 14: Where community dispose domestic waste products.

Hygiene

With regard to hygiene promotion to beneficiaries, 79.3% had access to soap (71.1% Congolese, 85.7% Burundian), 74.5% were aware and able to name five (5) key hygiene messages (61.5% Congolese, 87.5% Burundian). The five key hygiene messages mentioned by majority of the households were, 87.3% handwashing (87.7% Congolese, 86.9% Burundian), 75.3% food hygiene (69.5% Congolese, 81.0% Burundian), 69.7% households reported on environmental cleanliness (69.5% Congolese, 69.6% Burundian), 68.0% mentioned on safe water chain (67.4% Congolese, 68.5% Burundian) and 69.6% of households reported on safe excretal disposal (74.9% Congolese, 64.3% Burundian). This implies that more than half of the visited households were aware and able to name five key hygiene messages. There is a need of having continuous community sensitization to beneficiaries on hygiene promotion and awareness.

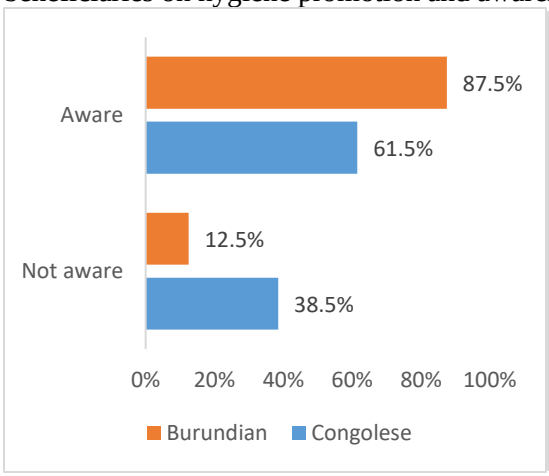


Figure 15: Awareness on hygiene key message

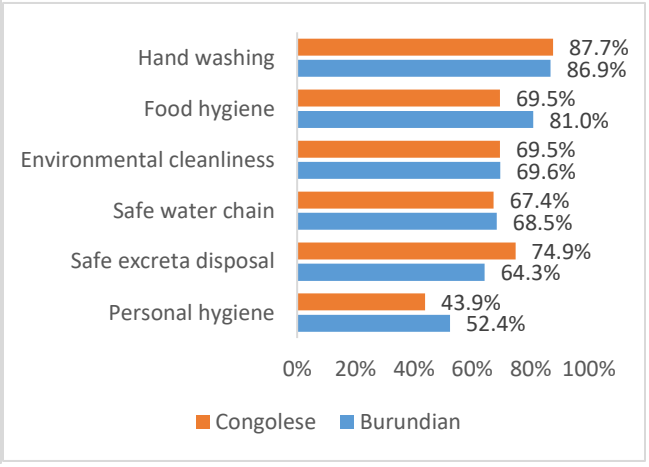


Figure 16: Key hygiene messages

With regard to important moments for washing hands, the findings indicated that, 98.2% washed hands before eating (98.0% Congolese, 98.4% Burundian), 83.7% washed hands after defecation (84.5% Congolese, 82.8% Burundian) and 76.2% washed hands before cooking or meal preparation (75.7% Congolese, 76.6% Burundian). These findings signify that there is a need of having continuous community sensitization to beneficiaries on hygiene promotion and awareness.

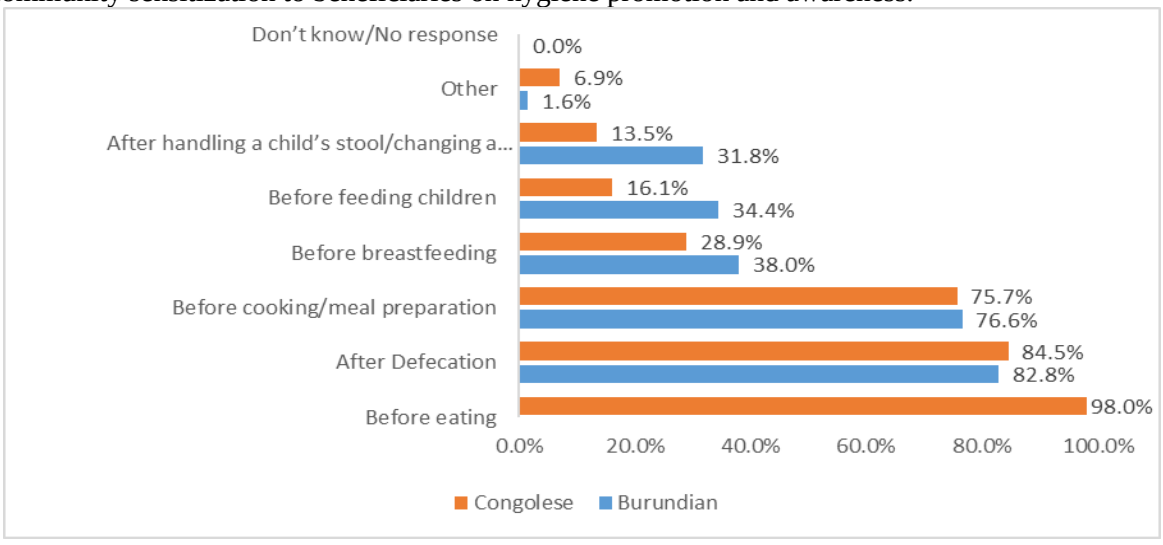


Figure 17: Most important times for washing hands

Regarding diarrhoea prevalence, knowledge and health seeking behaviour, the survey depicted that 91.2% had no diarrhoea-related adult cases in the recent days (100.0% Burundian, 82.5% Congolese) while 34.8% had under five (5) diarrhoea-related cases (39.6% Burundian, 30.0% Congolese) which portrays a significant increase from 27.6% (KAP Survey, April 2021). This implies that there is a need for more dissemination forums for hygiene promotion for improvement of knowledge and hygiene practices among the refugee community.

IX. Discussion

This section provides an overview and summary of key analytical points of the survey.
Generally, the refugees in Nyarugusu camp were satisfied with WASH services, however the survey have raised some concerns that need to be intervened for the WASH implementing partner to offer comprehensive services in the camp.

Access to improved water supply and related hygiene practices

The water supplied to the camp is above 20 litres per person/day, which portrays a significant increase for Burundian side from 18.4 l/p/d. The population in Nyarugusu has been receiving water from six boreholes, borehole 1, 3, 5 at zone 8, borehole 2, 6 at zone 7 and borehole 4 at zone 14.

a. Water supply at household level has significantly increased by 50.1%, influenced by provision of water storage containers at households. However, majority of the households reported to receive enough water were from Congolese side. There is a need to provide more storage containers for Burundian side to adopt effective hygiene practices among the beneficiaries. Therefore, water supply interventions to be tailored towards improvement of water storage capacities at household level, bulky storage at the water base and water pipeline extension to take water closer to dwelling places.
b. Delays of maintenance of damaged tap stands, leakages and faulty taps may lead to water shortage to beneficiaries. From field observation, however, the installation of water saving sensor taps in some zones has improved the situation.
c. There are few protection concerns, that some individuals felt unsafe when they go to collect water at tap stands. The survey recommends the need to assess safety and privacy issues that might interfere beneficiaries' access to services. In future, the programme should consider provision of solar lighting at strategic locations.

Access to improved Hygiene Practices

a) Generally, the community has basic knowledge on the hygiene key messages, which has eventually improved their practices as well.
b) Hand washing with soap and clean water after visiting the latrine not practiced consistently as expected, most of the latrines do not have handwashing stations and the available handwashing stations are not equipped with soap and water.

Access to improved Sanitation and Related Hygiene Practices

a) Irregular or limited distribution of cleaning materials including water storage containers.

b) There is a gap concerning hygienic use and maintenance of sanitation facilities, there is a number of latrines, which are full (21.7%) but still in use, and some latrines are rarely cleaned, major reason being lack of cleaning materials.
Additionally, the short distance to the latrine (6-8m) can be a public health threat due to the higher

risk of flies contaminating the food. The issue of safe, dignified latrine is a major concern when it comes to access to latrine

c) Limited resources for motivating WASH committee members to scale up the adaptation of improved sanitation.
d) Limited provision of safety gears to facilitate hygiene and sanitation promotion in the camp. With funding reduction, NRC need to engage with beneficiaries in handling the matter in a sustainable manner
e) Presence of hard rock in some zones limits the construction of deep pit latrines as a result the latrines fill fast.

Wash facilities for persons with disability

The proportion of persons with disability (PWDs) reported to be sizeable in the community. The survey had some findings that indicated there was suboptimal coverage WASH facilities designed specifically for people living with disabilities.

Safety and Security

The survey depicted that, 96.4% of the households felt much safer on their way to the nearest tap stand or at the tap (93.7% Burundian and 99.01% Congolese). The proportion of protection concerns raised is rather low but it needs immediate attention before the problem escalates to a larger population. NRC to conduct follow up assessment, to ascertain the safety threats facing POC in accessing WASH facilities in the camp.

Sited Problems based on Observation and Oral Feedback from the Enumerators

i. Open defecation amongst children has significantly decreased in the camp; influenced by provision of plastic potties by NRC 2020 and early 2021 to under five (5) children.
ii. Inadequate and dilapidated household-based water collection and storage facilities
iii. Very few households have handwashing stations and necessary supplies for handwashing

Hygiene

i. Shortage of cleaning materials at both community and household levels, example hand washing facilities, soap, brooms and buckets
ii. Inadequate provision of excavation tools for example shovel spade, and pick axe to facilitate community own initiatives to dig their own pits and other cleaning activities. Beneficiaries to discuss more sustainable approaches through FGDs.

Open Defection

Open defecation is mainly practiced by young children. Key reasons for open defecation were:

i. Lack of enough potties for children under five years.
ii. Significant number of latrines are full thus need to be decommission and replaced.
iii. The community has some level of knowledge about the risks of open defecation, notably contamination of water and ground. The sensitization to be conducted during hygiene promotion mass campaigns.
iv. Carelessness of children caretakers

Maintenance of Latrine Hygiene

For individual household latrines, it is the household's responsibility to maintain the latrine in hygienic conditions. For the communal latrines, the households sharing the latrines are responsible for organizing

the cleaning and proper uses. Latrine cleaning materials are not sufficient, thus there is a need to consider distribution of cleaning kits.

Solid Waste Management

Due to shortage of space, it has been difficult for the team to plan waste pit for every household. Few households make use of designated waste collection places due to distance, therefore resort to use the undesignated areas instead.

Table 2: Findings for Key Projects Outcomes Indicators

			Finding		
Indicator	**Baseline**	**Target**	**Overall**	**BDI**	**DRC**
# of litres of water per person per day (l/p/d) available through water points	23.5	22		21.9l/p/d	23.3l/p/d
% of beneficiaries who report using a sufficient (20 l/p/d) amount of safe water for daily use (e.g. drinking, cooking & hygiene)	79%	90%	50.0%	45.1%	54.9%
% of beneficiary households who report or are observed queueing at tap stands within recommended 30 minutes.	62%	90%	91.7%	98.4%	84.9%
% of beneficiary households with positive chlorine residual (0.2-0.5mg/l) in drinking water supplies.	90%	99%	96.4%	94.4%	98.4%
% of beneficiary households who report or observed to walk not more than 200m to nearest water point	62%	90%	54%	52.6%	55.3%
% of beneficiary households with no visible evidence of human feces/rubbish in or around the immediate living area	92%	95%	79.3%	75%	83.6%
% of new or rehabilitated communal/ household latrines which are clean, secure, and fit for use.	68%	85%	95.9%	95.4%	96.4%
% of households with drop-hole latrine or drop-hole toilet.	69%BDI/75% DRC	75%BDI/80% DRC	94.6%	94.7%	94.4%
% of beneficiary women and girls who report safe menstrual health management during the 2 months following distribution			90.9%	93.4%	88.4%
% of PoC with knowledge in basic hygiene practices	-	85%	74.5%	87.5%	61.5%

X. Recommendations

i. Provision of water storage containers will resolve the problem of having insufficient water for daily use, as portrayed by the survey findings that amongst the reason for having inadequate water, was having fewer water collection/storage containers.

ii. There is a need for thorough analysis on the water tests conducted to improve the quality of water supplied in the camp.

iii. The observed number of full and dirty latrines calls for the need of closer monitoring of latrine status and plan for maintenance, decommission, replacement and hygiene sessions with the refugee community.

iv. A huge number of children who defecate outside the latrines calls for a need for timely provision and enough potties. Regarding adult open defecation among adults there is a need for continuous sensitization, provision of solar lamps and hygiene campaigns.

v. With the observed shortage proper waste collection measures, there is a need to increase the coverage of waste collection gadgets. Also, enhancing solid waste pits excavation and use awareness campaigns

vi. The suboptimal coverage of WASH facilities amongst people with disabilities calls for a need to identify individuals who have disabilities and plan to increase number of facilities appropriate for them.

vii. Develop and deliver direct messages on safe handling of faeces from the people who cannot use latrines elderly, physically challenged, the mentally challenged and the babies.

viii. Tap stand monitoring should be continue to ensure proper uses of water and reduce the amount of water lost through unattended taps.

ix. Community sensitization on proper hand washing (with soap and flowing water) at critical times should be a priority item in the hygiene promotion agenda.

x. Develop and use simplified training tools to raise awareness on key hygiene messages at the household level.

xi. Develop and deliver messages that target prevention of open defecation among adult and children, equally in and out of school.

xii. Engagement of the community in solid waste management will enhance ownership and eventually improve community hygiene.

XI. Conclusion

i. Generally, water production and supply shall improve with the ongoing expansion of meters of water supply and covering the entire camp population with enough water storage containers.

ii. Access to basic sanitation is good, but there is a need to replace all the shared latrines with household latrines. A sense of ownership will enhance proper maintenance of hygiene and sanitation of facilities.

iii. There is a gap as regard to hygienic use and maintenance of sanitation facilities, as a result, there is a number of full latrines in use and some latrines are hardly cleaned, major reason being lack of cleaning materials.

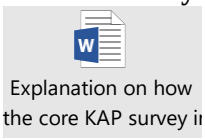
iv. The fact that there is open defecation at some households and faeces in some latrines raises the risks of faecal-oral disease transmission in the process of handling faeces from those who do not use latrines.

v. Most of the household no longer have the hand washing station; thus, unable to adhere to appropriate hand washing practices that would make it possible to readily wash hands near the latrines and kitchens with flowing water. This calls for the provision of hand washing containers at the latrine exit points.

vi. There exists a gap for potties and adoption of proper handling and disposal of under five children faeces.

XII. Annexes

Calculation of Core KAP survey indicators



WASH KAP Survey Questionnaire