RWANDA NGOs FORUM ON HIV/AIDS & HEALTH PROMOTION

Report

Needs Assessment in Areas of Bugesera and Ruhango Districts: WASH and Social Behaviour Change (WASH/SBC) to Interrupt Transmission of Bilharzia and Intestinal Worms by 2027

May 2025

Contents

Acronyms and Abbreviations

CAPI	Computer Assisted Personal Interviewing
CHW	Community Health Worker
CSPro	Census and Survey Processing System
DALYs	Disability-adjusted life years
DHS	Demographic and Health Survey
MOH	Ministry of Health
NISR	National Institute of Statistics of Rwanda
NTDs	Neglected Tropical Diseases
RBC	Rwanda Biomedical Center
RNEC	Rwanda National Ethics Committee
SBC	Social Behaviour Change
SCH	Schistosomiasis
STH	Soil Transmitted Helminths
UNICEF	United Nations Children's Emergency Fund
WASH	safe Water, Sanitation, and Hygiene
WHO	World Health Organization

Executive summary

Background

A needs assessment of Water, Sanitation, and Hygiene (WASH) and Social Behaviour Change (SBC) was conducted in Bugesera and Ruhango Districts. The objective was to generate evidence to inform strategies aimed at interrupting the transmission of schistosomiasis (bilharzia) and soil-transmitted helminths (STH) by 2027.

The specific objectives of the study were to (1) Assess the current WASH infrastructure in both districts; (2) Identify communities at high risk of STH and schistosomiasis transmission due to inadequate WASH services and poor sanitation practices; (3) Examine local behaviours, cultural norms, and socioeconomic factors influencing WASH and sanitation practices; (4) Evaluate community engagement in hygiene promotion and sanitation initiatives; and (5) Propose targeted interventions to reduce the transmission of these parasitic infections.

Methods

A cross-sectional study employing both quantitative and qualitative methods was conducted to assess WASH and SBCC needs in Bugesera and Ruhango Districts. A household survey collected data from 1,011 households across both districts, targeting heads of households and other adult members (aged 18 and above). The study also evaluated WASH facilities and infrastructure in public institutions, including 56 health centres, 36 schools, and 18 other public spaces such as churches, markets, and car parks.

Qualitative data were gathered through in-depth interviews and focus group discussions. Community leaders provided insights into local practices, governance structures, and cultural or religious factors influencing WASH behaviours. Local government officials contributed information on health policies, existing WASH infrastructure, and disease prevalence. Healthcare providers offered perspectives on community health challenges.

Results

The proportion of cases was significantly higher in Ruhango District (16.4%), with the difference being highly statistically significant ($p = 0.000$). The primary reason for not treating drinking water was financial constraints, cited by 52.9% of households. Among those who treated their water, 85.8% used boiling as the method.

Travel time to the nearest safe water source was reported as 0–30 minutes in 41.1% of cases and 31–60 minutes in 30.7%. Most households (95.5%) reported owning a toilet or latrine. Only 50.2% of households were aware that pit latrines should be at least six metres deep.

A large proportion of households (79.9%) lacked both water and soap for handwashing, and 71.5% reported the presence of flies in the household. Human excreta were used as fertiliser in 15.1% of households, with the highest usage reported in Ruhango District.

The majority of participants (76.2%) worked in agriculture. Over half of workplaces (52.9%)

lacked latrines within 50 metres, and among those with latrines, 80.7% were deemed inadequate. Most workplaces lacked handwashing facilities (91.8%) and access to clean water within 500 metres (80.0%). Additionally, 88.4% of participants reported the absence of toilet paper or water at their workplace. In 11.3% of cases, latrine contents were used as fertiliser.

Most households (60.5%) had never heard of Bilharzia, with Ruhango District having the highest proportion (66.4%). The main sources of information about Bilharzia were community gatherings (43.1%), community health workers (37.8%), and media (33.1%).

Only 36.6% of participants had heard about soil-transmitted helminths (STH) transmission. The primary source of information on STH was community health workers (61.1%). A total of 29.3% of households reported that a member had passed a worm in stool or vomited a worm. In 82.6% of cases, community health workers were identified as the main source of hygiene reminders.

Conclusion

The survey revealed critical insights into the current WASH infrastructure, practices, and knowledge gaps in Bugesera and Ruhango Districts. The findings highlight the urgent need to address deficiencies in water, sanitation, and hygiene (WASH), and to strengthen Social and Behaviour Change (SBC) initiatives. Achieving the interruption of Bilharzia and intestinal worm transmission by 2027 will require coordinated, multisectoral efforts and active community engagement. District-specific strategies should be developed to reflect local needs. Access to safe water remains a significant challenge, particularly in Bugesera. These findings can inform policymakers and planners in designing targeted interventions and allocating resources effectively.

1. Background and justification

The inadequate provision of safe water, sanitation, and hygiene (WASH) services is a significant global health concern, contributing to diarrheal diseases, preventable deaths, and developmental issues, particularly affecting children (Tsinda et al., 2021; World Health Organization, 2019). The global disease burden, accounting for 3.3% of global deaths and 4.6% of global disability-adjusted life years (DALYs), can be attributed to the measurable impacts of insufficient WASH practices as of 2016 (WHO, 2019). This equates to nearly 2 million avoidable deaths and 123 million preventable DALYs annually. Particularly, children under the age of 5 are disproportionately affected by inadequate WASH, with 13% of all deaths and 12% of all DALYs in this age group linked to insufficient WASH conditions (WHO, 2019). In developing countries, access to safe water, adequate sanitation, and proper hygiene practices remains a significant challenge, impacting public health outcomes and contributing to the burden of preventable diseases.

Sub-Saharan Africa bears the greatest disease burden from inadequate WASH, with 53% of all WASH-related deaths and 60% of all WASH-related DALYs occurring in this region. Furthermore, almost one-fifth of all deaths among children under 5 years old could be prevented with improved WASH practices (WHO, 2019).

The disease burden is associated with inadequate WASH for the most of major diseases, adverse health outcomes, and injuries in developing countries where the broader community risks are associated with unsafe sewage disposal or usage. These challenges are particularly pronounced in sub-Saharan Africa, where a considerable portion of the population lacks access to basic sanitation facilities and clean water sources. Rwanda, situated in East Africa, exemplifies many of the WASH-related issues prevalent across the region (Ntakarutimana et al., 2021). Despite improvements in Rwanda's access to drinking water and sanitation, challenges persist, especially in rural areas where water scarcity remains a key issue. Despite notable progress in recent years, Rwanda continues to grapple with inadequate WASH infrastructure and practices, especially in rural areas. The country's hilly terrain and dense population exacerbate the challenges of water access and sanitation, making it difficult to implement and maintain effective WASH solutions. Limited access to clean water sources and sanitation facilities increases the risk of waterborne diseases, including soil-transmitted helminths (STH) and schistosomiasis (SCH), which disproportionately affect vulnerable communities, such as children and those living in poverty (WHO, 2019).

In Rwanda, the mortality rate attributed to WASH per 100,000 population stands at 19.3. Key diseases associated with this include diarrheal diseases, STH, SCH, and protein-energy malnutrition (Sarkar et al., 2024; WHO, 2019). In Rwanda, the general prevalence of S. mansoni infection was 7.4% (school interquartile range [IQR] 0-8%) when CCA trace results were deemed negative, and 36.1% (school IQR 20-47%) when trace results were considered positive. Additionally, the prevalence identified by KK was 2.0%, with an average infection intensity of 1.66 eggs per gram (Ruberanziza et al., 2020). Parasitological assessments using CCA and Kato-Katz methods revealed an overall infection prevalence of 24% and 0.8%,

respectively. Bathing children in open water bodies was significantly associated with infection, and pre-SAC looked after by siblings were twice as likely to be infected compared to those cared for by mothers. The findings underscore the need for tailored control interventions targeting pre-SAC, including adapted chemotherapy and community-based deworming campaigns, to reduce their exposure to open water bodies and improve treatment coverage (Rujeni et al., 2022).

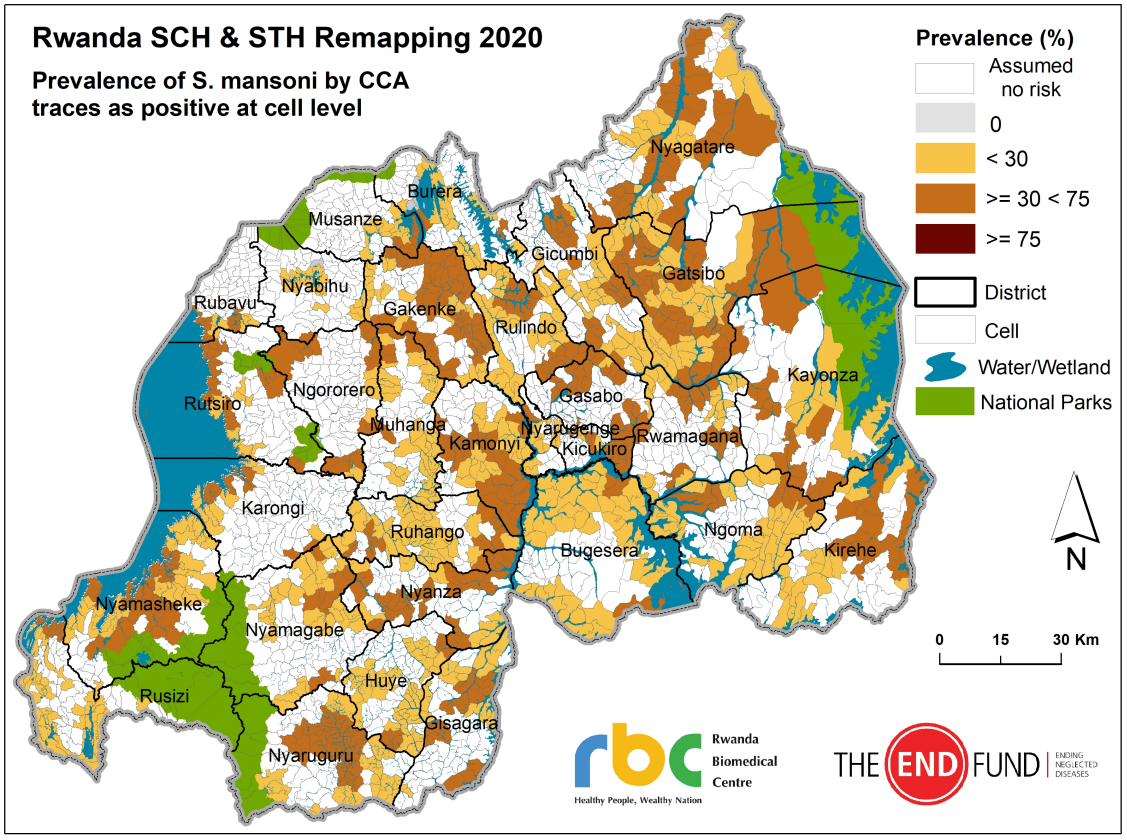


Figure 1.1: *Distribution of High- and Low-Risk Mapping Units for Schistosoma mansoni Infections in Rwanda*

In the National Strategy for Transformation (NST-1), the Rwandan government acknowledges water as a catalyst for driving economic and social advancement. Within the social transformation pillar of NST-1, the objective is to "nurture Rwandans into a competent and proficient populace with high living standards and a secure and harmonious society." The NST-1 outlines the government's pledge to attain universal access to WASH services by 2024. However, achieving these goals requires addressing political and governance issues that influence WASH service delivery. Identifying barriers and opportunities to enhance WASH services and foster pro-poor transformations is paramount (Tsinda et al., 2021).

In light of this, a comprehensive need assessment is imperative to evaluate the existing WASH infrastructure across various administrative levels. This assessment aims to identify the strengths, weaknesses, and gaps in coverage, accessibility, and functionality of WASH

facilities in two districts Bugesera and Ruhango. Additionally, it seeks to pinpoint specific communities or areas within each administrative level that are at heightened risk for STH and SCH transmission due to inadequate WASH facilities, poor sanitation practices, or limited access to clean water sources. Beyond infrastructure assessment, the evaluation extends to encompass an in-depth analysis of local behaviors, cultural practices, and socio-economic factors influencing WASH practices and sanitation behaviors, particularly those pertinent to STH and SCH transmission. Moreover, this assessment endeavours to gauge the level of community engagement and participation in WASH-related activities, including hygiene promotion campaigns and community-led total sanitation initiatives. The primary objective of this needs assessment is to formulate actionable recommendations and priority interventions customized for each administrative level. This includes reinforcing WASH/SBCC interventions for the prevention and control of STH and SCH, with a specific emphasis on integrating IoT technologies where applicable and suitable to improve efficacy and long-term viability.

Rwanda, despite notable progress in recent years, continues to grapple with inadequate WASH infrastructure and practices, especially in rural areas. The country's hilly terrain and dense population exacerbate the challenges of water access and sanitation, making it difficult to implement and maintain effective WASH solutions. Limited access to clean water sources and sanitation facilities increases the risk of waterborne diseases, including STH and SCH, which disproportionately affect vulnerable communities, such as children and those living in poverty (Tsinda et al., 2021).

Furthermore, cultural beliefs, socio-economic factors, and historical contexts influence WASH behaviors and practices in Rwanda. Deep-seated cultural norms, coupled with limited awareness and resources, may hinder the adoption of improved WASH practices at the community level. Addressing these complex challenges requires a multifaceted approach that considers socio-cultural dynamics, economic disparities, and environmental factors (Ekane et al., 2012).

In response to these challenges, the Rwandan government, in collaboration with international partners and non-governmental organizations, has embarked on various initiatives to improve WASH conditions nationwide. These efforts include infrastructure development, behavior change campaigns, and community engagement programs aimed at promoting sustainable WASH practices (UNICEF, 2018). Despite these efforts, gaps persist in WASH coverage and implementation, underscoring the need for targeted interventions and comprehensive assessments to inform evidence-based decision-making.

Against this backdrop, conducting a thorough needs assessment is essential to identify priority areas for intervention, assess the effectiveness of existing WASH programs, and develop tailored strategies to address the specific challenges faced by communities in Rwanda. Such assessments provide valuable insights into the root causes of WASH-related issues and inform the design of context-specific interventions aimed at improving public health outcomes and enhancing overall quality of life.

1.1. Objectives

(1) To evaluate the current WASH infrastructure in Bugesera and Ruhango districts

(2) Identify high-risk communities for STH and SCH transmission due to inadequate WASH facilities and poor sanitation practices.

(3) Conduct a comprehensive assessment of local behaviors, cultural practices, and socio-economic factors influencing WASH and sanitation practices.

(4) Assess community engagement and participation in WASH activities, including hygiene promotion and sanitation initiatives.

(5) To develop recommendations for targeted interventions to reduce the transmission of bilharzia and intestinal worms

2. Procedures and Methods

2.1. Study design

This cross-sectional study assessed WASH/SBCC needs in Bugesera and Ruhango districts. This design allows data collection at a single point, capturing a snapshot of WASH infrastructure, practices, and behaviours.

2.2. Study area

The survey sample was conducted in 40 villages, 20 in Bugesera Districts and three in Ruhango districts.

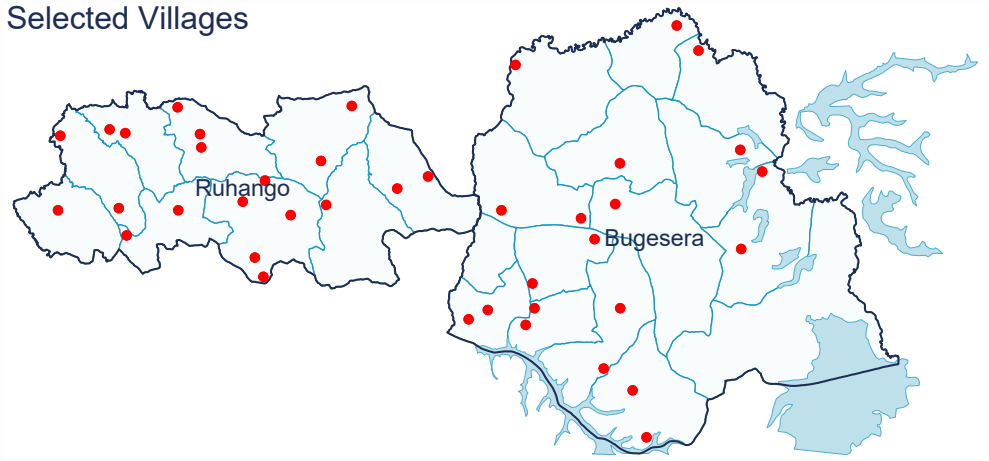


Figure 2.1: *Distribution of the selected villages for needs assessment in Bugesera and Ruhango districts*

The villages were randomly selected to ensure representativeness across Ruhango and Bugesera districts.

2.3. Sampling techniques and sample size

The study employed systematic random sampling to select households. Household heads, including husbands, wives, or responsible adults aged 18 years and older, were interviewed alternately in subsequent samples. Initially, households were chosen randomly, followed by systematic random sampling for subsequent selections.

Table 2.1: *List of selected villages in Ruhango and Bugesera districts*

District	Sector	Cell	Village	Number HHs
Ruhango	Bweramana	Buhanda	Gikarabiro	26
Ruhango	Bweramana	Rubona	Bugari	26
Ruhango	Byimana	Kamusenyi	Gasharu	26
Ruhango	Byimana	Mpanda	Kanyarira	26
Ruhango	Byimana	Nyakabuye	Gatobotobo	26
Ruhango	Kabagali	Munanira	Remera	26
Ruhango	Kinazi	Burima	Mirambi	26
Ruhango	Kinazi	Kinazi	Nyabisindu	26
Ruhango	Kinihira	Bweramvura	Nyagisenyi	26
Ruhango	Kinihira	Nyakogo	Rusizi	26
Ruhango	Mbuye	Kabuga	Nyakabanda	26
Ruhango	Mbuye	Mwendo	Ipate	26
Ruhango	Mwendo	Gishweru	Rubona	26
Ruhango	Mwendo	Nyabibugu	Rukeri	26
Ruhango	Ntongwe	Kebero	Nyabitare	26
Ruhango	Ruhango	Buhoro	Gako	26
Ruhango	Ruhango	Bunyogombe	Rubazi	26
Ruhango	Ruhango	Munini	Kirima	26
Ruhango	Ruhango	Nyamagana	Gutamba	26
Ruhango	Ruhango	Rwoga	Kavumu	26
Bugesera	Gashora	Biryogo	Buhoro	26
Bugesera	Gashora	Ramiro	Karusine Ii	26
Bugesera	Juru	Musovu	Cyingaju	26
Bugesera	Kamabuye	Kampeka	Mparo	26
Bugesera	Kamabuye	Biharagu	Rubugu	26
Bugesera	Mareba	Bushenyi	Kagogo	26
Bugesera	Mareba	Rango	Gihoko	26
Bugesera	Mayange	Kagenge	Kiruhura	26
Bugesera	Musenyi	Gicaca	Gihari	26
Bugesera	Musenyi	Nyagihunika	Nyakajuri	26
Bugesera	Mwogo	Rugunga	Nyarukombe	26
Bugesera	Ngeruka	Murama	Gakurazo	26
Bugesera	Ngeruka	Nyakayenzi	Nyakayenzi	26
Bugesera	Ntarama	Kibungo	Kagoma I	26
Bugesera	Nyamata	Maranyundo	Rugarama	26
Bugesera	Nyarugenge	Gihinga	Ntungamo	26
Bugesera	Nyarugenge	Ngenda	Rugasa	26
Bugesera	Rilima	Kimaranzara	Amizero	26
Bugesera	Ruhuha	Bihari	Masenga Ii	26
Bugesera	Ruhuha	Ruhuha	Mubano	26
Total				1,040

A two-stage sampling technique was used for participant selection:

(1) Random selection of villages in Bugesera and Ruhango districts

(2) Systematic selection of households within the selected villages.

The estimated sample size for the community was 1,000 participants from both Districts. To calculate the sample size of community members, the calculation assumed a population proportion with satisfactory knowledge of WASH, STHs, and SCH at 50%, a confidence level of 95% (equivalent to a Z-score of 1.96), and a precision level of 3%. We adjusted for the population size in each district to correct for finite population effects. Assuming 20 villages per district, this equates to interviewing approximately 25 households per village.

Since the needs assessment used mixed methods, qualitative methods included Key Informant Interviews with stakeholders engaged in controlling STHs and SCHs and selected members of hygiene clubs. Six key informants were chosen from each district, making 12 key informants. Additionally, each district hosted 2 Focus Group Discussions (FGD) involving 5-7 participants, resulting in 2 to 28 participants across Bugesera and Ruhango.

2.4. Study participants

The study participants included heads of households and other adult members (18+ years) to provide information on household WASH practices, socio-economic status, and cultural practices.

Community leaders, such as village chiefs, elders, and religious leaders, offered insights into community-level practices, local governance, and the cultural and religious practices affecting WASH behaviours.

Local government officials, including district health officers, provided information on local health policies, current WASH infrastructure, and disease prevalence data. Healthcare providers, such as community health workers, shared insights on community health issues, particularly WASH-related diseases, and the effectiveness of current health education campaigns. NGO representatives, especially field workers and project managers, provided insights into current and past WASH projects, community engagement strategies, and challenges faced.

2.5. Recruitment and selection criteria

Households: Random sampling of households within Bugesera and Ruhango districts to ensure diverse representation.

Community Leaders and Local Government Officials: Purposeful sampling to include individuals with extensive knowledge of local WASH conditions and governance.

Healthcare Providers: Selection of providers working in community health centers and clinics within the target districts.

NGOs: Identify organisations actively involved in WASH initiatives in the target areas.

Heads of schools: in case there is a school in a cell selected, the headmaster was included among key informants

2.6. Data collection methods

Surveys and Questionnaires: For household and general community members to gather quantitative data on WASH practices and health outcomes.

Focus Group Discussions (FGDs): With community leaders and NGO representatives to gather qualitative data on community perceptions and experiences.

Key Informant Interviews (KIIs): With local government officials, healthcare providers, and private sector representatives to gain detailed insights into WASH infrastructure and challenges.

Observational Studies: On-site assessments of water sources, sanitation facilities, and hygiene practices in homes, schools, and public areas.

2.7. Quality assurance

Data collectors were trained to ensure standardisation and reliability of data collection procedures. Pre-testing of survey instruments was conducted to identify and address any issues or ambiguities during training. Regular supervision and monitoring were implemented to maintain data quality and adherence to study protocols.

2.8. Data entry and management

Data were collected on tablets and sent to the central database daily. While in the field, team leaders checked for the accuracy and completeness of the data daily

2.9. Data analysis plan and expected use of data

1. Data Cleaning and Preparation

Data from surveys, interviews, and focus group discussions were transferred from the server into a database or spreadsheet to facilitate data cleaning. Any inconsistencies, missing values and errors in the dataset were addressed. For qualitative data, a coding scheme was developed to categorise the responses.

2. Descriptive Statistics

Frequencies and percentages for categorical variables (e.g., access to clean water and sanitation facilities) were calculated. Means, medians, and modes were calculated for continuous variables (e.g., average WASH facilities per community). Standard deviations, ranges, and interquartile ranges were calculated to understand the spread of the data. The latest versions of the Stata software were used.

3. Inferential Statistics

To determine significant differences between groups (e.g., comparing WASH practices in Bugesera vs. Ruhango, t-tests, chi-square tests, or ANOVA were used. Regression analysis was done to identify predictors of WASH-related health outcomes (e.g., logistic regression to

predict the likelihood of STH or SCH infections based on WASH practices).

4. Qualitative Data Analysis

A thematic analysis was done to identify common themes and patterns in the transcripts of interviews and focus group discussions. The NVivo or Atlas.ti software was used to code and categorise data for the thematic analysis. Also, content analysis was done by quantifying the presence of certain words, phrases, or themes to provide insights into community perceptions and behaviours. A predefined framework was used to categorize and interpret qualitative data about the study objectives.

5. Data Interpretation

- The results were compared with existing literature and studies to contextualise the results.
- Areas where WASH infrastructure or practices are lacking were highlighted.
- The implications of the findings were discussed for policy and practice, including recommendations for improving WASH services and promoting SBC interventions.

6. Reporting the Results

- Tables and graphs were used to present quantitative data.
- Quotes from interviews and case studies were used to illustrate key qualitative findings.
- The results were interpreted in the context of the study objectives and broader WASH and public health frameworks.

2.10. Human subject issues

Although this study employs non-invasive approaches, ethical approval was sought from the Rwanda National Ethics Committee (RNEC) to ensure adherence to ethical standards. Before the commencement of the study, participants were thoroughly informed about the study's objectives, procedures, potential risks, and benefits to secure voluntary participation. All data collected were anonymised and coded to maintain confidentiality and protect participants' identities. Written informed consent was obtained from all adult participants, and parental or guardian consent was required for child participants. Additionally, assent was sought from children capable of providing it. The ethical considerations and safeguards are in place to ensure the study upholds the highest standards of research integrity and participant welfare.

2.11. Data sharing and publication

Data collected from the needs assessment in Bugesera and Ruhango districts adhered to Rwandan laws and ethical standards regarding health data collection. Any publications from this study will acknowledge the collaborative efforts of all parties involved and ensure proper recognition of contributions from individuals directly involved in achieving the results or supporting the program. This includes attributing authorship per standard academic and ethical practices.

2.12. Team composition

The assessment required ten interviewers per district, totalling twenty interviewers and the lead consultant. Each team needed a field car to facilitate transportation, enabling the completion of fieldwork within five days.

2.13. Training Workshop

To ensure a standardized data collection process, a three-day training workshop, including a one-day pre-test, was organised. Participants received instruction and refreshers on essential data collection techniques during this training.

1. Training Objectives

General Training for all team members:

(1) Approaching Village Authorities:

- Gain permission from village authorities
- Understand contact procedures
- Handle refusals effectively

(2) Using Tablets and Paper-Based Forms:

- Learn to use tablets for data collection
- Familiarize with paper-based data collection forms as a backup

(3) Conducting Interviews:

- Develop skills for conducting effective and reliable interviews
- Additional Training for Team Leaders and Interviewers

(4) Ensuring Data Completeness:

- Check and correct recorded information for completeness

(5) Problem Solving in the Field:

- Address and resolve issues that may arise during fieldwork

3. Preliminary Findings

3.1. Sociodemographic characteristics

1. Distribution of households by District

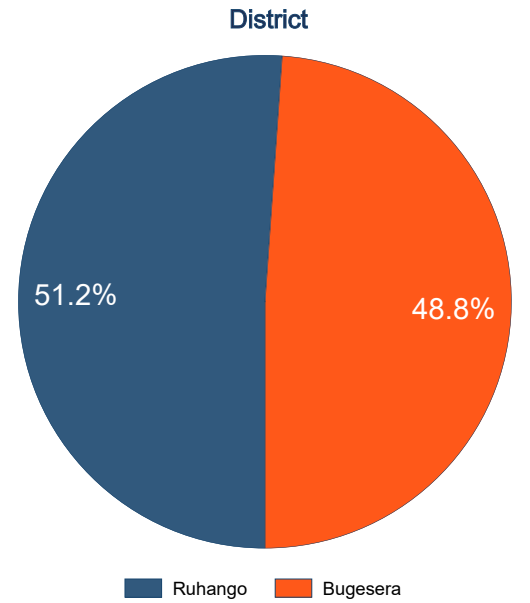


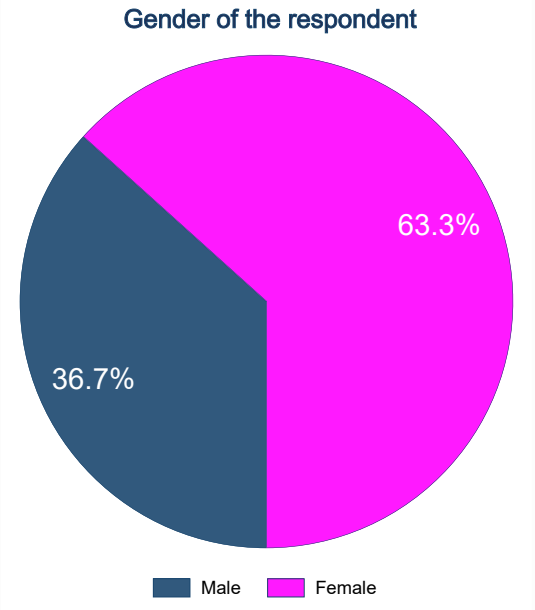
Figure 3.1: *Proportion of surveyed households by District*

Overall 1,011 households were surveyed during the needs assessment for WASH and social behaviour change (WASH/SBC) to interrupt transmission of Bilharzia and Intestinal worms by 2027 in Bugesera and Ruhango districts. Ruhango district accounted for 51.2% of the surveyed households, while Bugesera district accounted for 48.8% (Figure 3.1).

2. Distribution of the respondents by gender

Figure 3.2: *Proportion of surveyed households by District*

The majority of respondents were female in 63.3% of cases, while male respondents represented 36.7% (Figure 3.6). The difference between districts was significant (p=0.038), where the proportion of females was 60.2% and 66.5%, respectively, for the Ruhango and Bugesera districts.



3. Distribution of the respondents by age groups

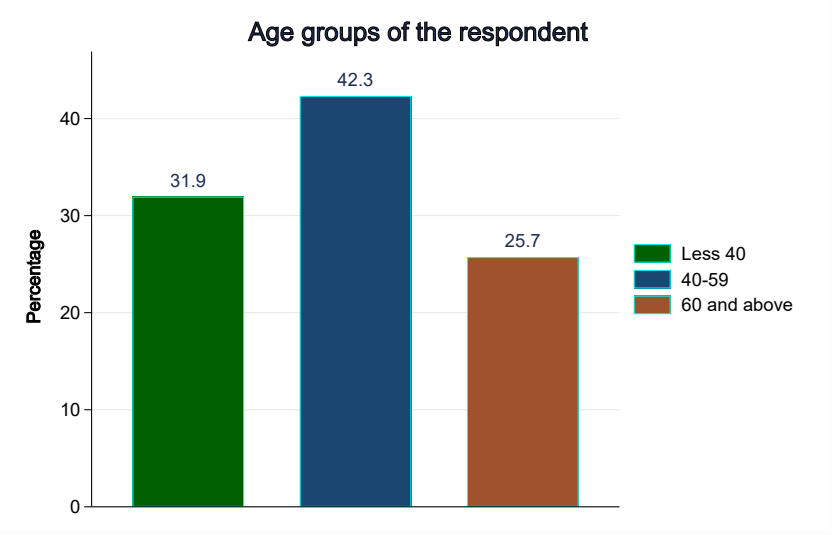


Figure 3.3: *Distribution by age of the respondent*

Most of the respondents were aged between 40 to 59 years (42.3%) followed by respondents aged less than 40 years in 31.9% of cases and participants aged 60 years and above in 25.7% of cases (Figure 3.3)f

4. Distribution of the respondents by Religion

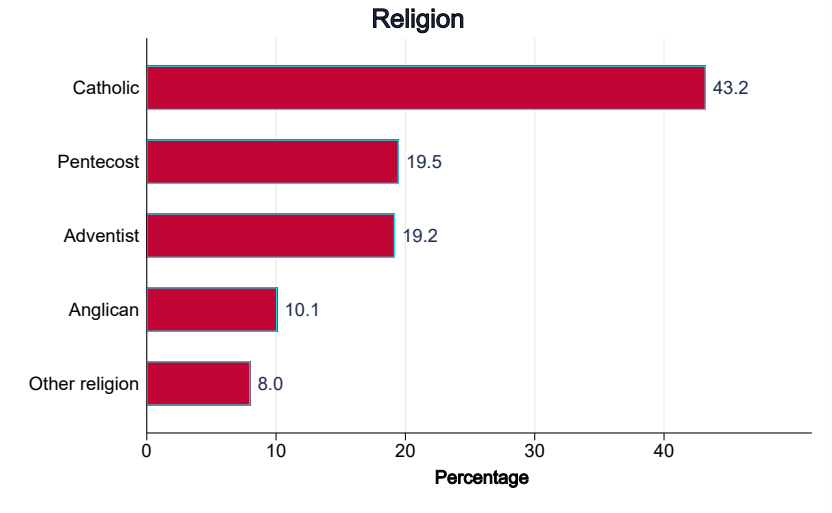


Figure 3.4: *Religion of the respondent*

The majority of respondents belong to the catholic church (43.2%), followed by the Pentecost church (19.5%), Adventist church (19.2%), Anglican church (10.1%) and other churches in

8.0% of cases (Figure 3.4).

5. Distribution of the respondents by marital status

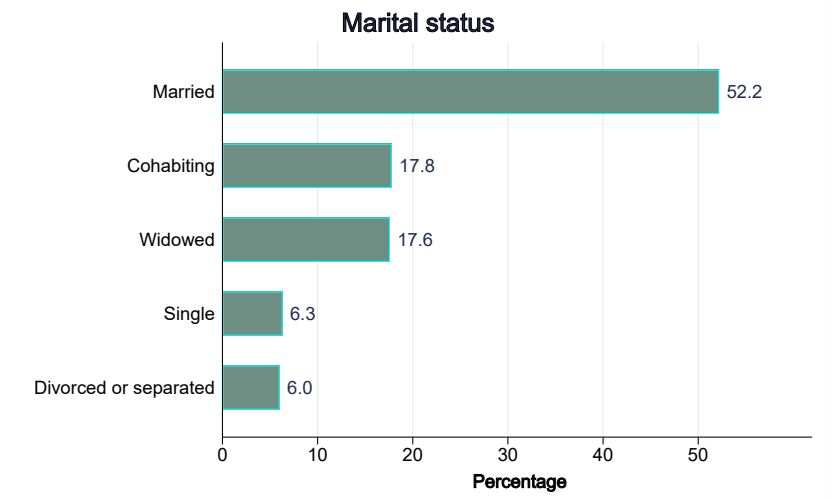


Figure 3.5: *Marital status of the respondent*

Over half of respondents (52.2%) were married, and 17.8% were cohabiting. However, 17.6% of cases were widowed, 6.3% were single, and 6.0% were either divorced or separated (Figure 3.5).

6. Distribution of the respondents by literacy level

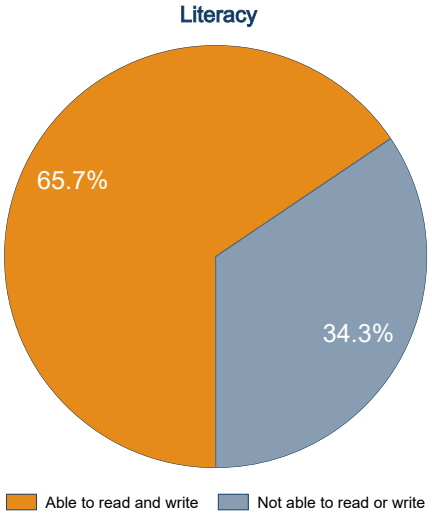


Figure 3.6: *Proportion of surveyed households by District*

The majority of respondents were are able to read and write in 65.7% of cases (Figure 3.6). However, 34.3% of respondents are not able to read or write.

7. Distribution of the respondents by education

The biggest proportion of respondents had a primary education level (55.1%), and only 10.8% of respondents had a secondary or university education level. However, there were 34.1% of the respondents who had no formal education (Figure 3.7).

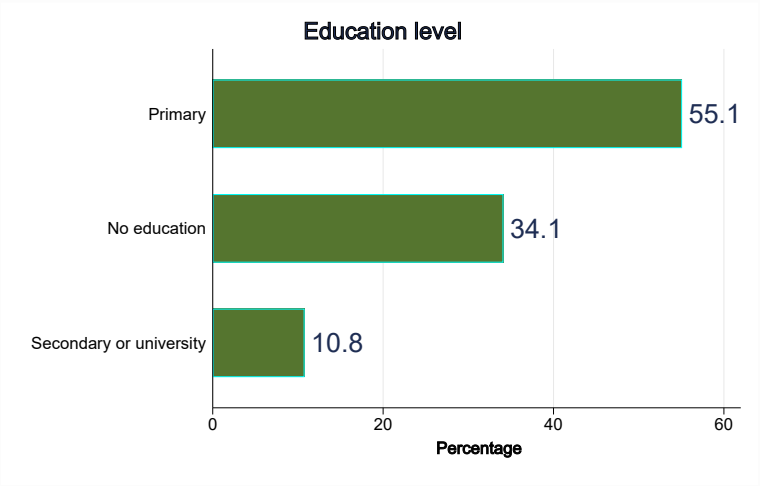


Figure 3.7: *Education of the respondent*

8. Distribution of the respondents by occupation

Figure 3.8 shows that Respondents were predominantly farmers in 77.0% of cases, followed by respondents who reported not having any job (8.6%) and daily labourers (5.8%)

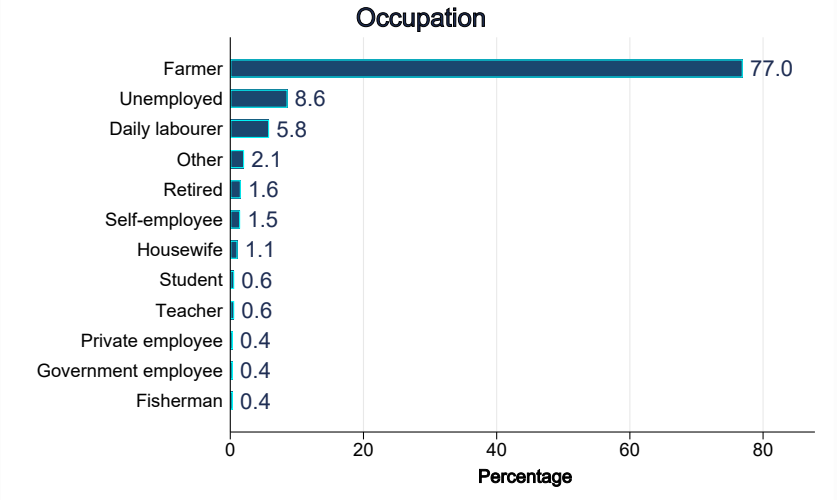


Figure 3.8: *Occupation of the respondent*

3.2. Households Information

1. Average amount of money spent daily

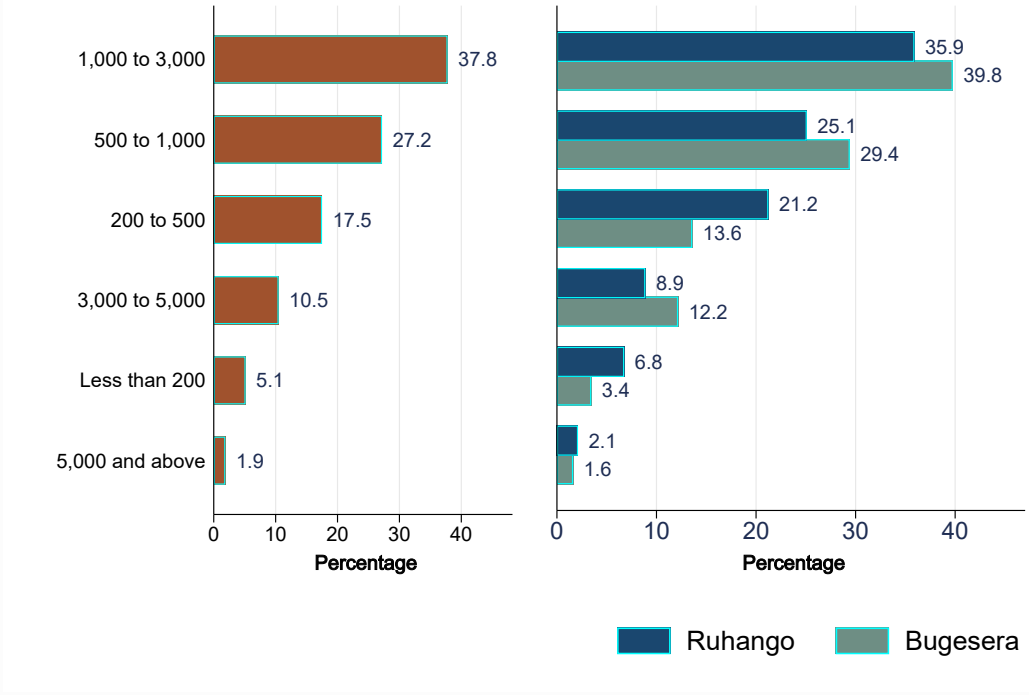


Figure 3.9: *Average amount of money spent on daily basis*

Most households reported that the Amount spent daily (RWF) was 1,000 to 3,000 in 37.8% of cases. Other Amount spent daily (RWF) included 500 to 1,000 (27.2%), 200 to 500 (17.5%), 3,000 to 5,000 (10.5%) and less than 200 (5.1%) as shown in Table 3.1. Bugesera district showed the highest proportion of households spending 1,000 to 3,000 with 39.8% of cases as compared to Ruhango district (35.9%), and the difference was statistically significant (p=0.002).

Regarding gender, male respondents belonged to households that showed the highest proportion of 1,000 to 3,000 with 40.2% of cases as compared to households with female respondents (36.4%), and the difference was statistically significant (p=0.015). Concerning age group, respondents less than 40 years belonged to households that showed the highest proportion of 1,000 to 3,000 with 44.6% of cases as compared to households with respondents between 40 and 59 years (37.1%), and the difference was highly statistically significant (p=0.000).

Looking at religion, Pentecost respondents belonged to households that showed the highest proportion of 1,000 to 3,000 with 43.1% of cases as compared to households with Anglican respondents (41.2%), but the difference was not significant (p=0.122).

Table 3.1: *(B3) Distribution of households amount spent daily (rwf)*

	Amount spent daily (RWF)						Total	p-value
	Less than 200	200 to 500	500 to 1,000	1,000 to 3,000	3,000 to 5,000	5,000 and above		
District								
Ruhango	6.8	21.2	25.1	35.9	8.9	2.1	518	0.002
Bugesera	3.4	13.6	29.4	39.8	12.2	1.6	493	
Total	5.1	17.5	27.2	37.8	10.5	1.9	1,011	
Gender								
Male	2.7	19.4	24.0	40.2	12.4	1.3	371	0.015
Female	6.6	16.4	29.1	36.4	9.4	2.2	640	
Total	5.1	17.5	27.2	37.8	10.5	1.9	1,011	
Age group								
Less 40	3.4	9.9	27.9	44.6	12.1	2.2	323	0.000
40 to 59	5.1	17.8	26.2	37.1	11.9	1.9	428	
60 and above	7.3	26.5	28.1	30.4	6.2	1.5	260	
Total	5.1	17.5	27.2	37.8	10.5	1.9	1,011	
Religion								
Catholic	5.5	18.5	25.9	36.8	11.7	1.6	437	0.122
Pentecost	4.1	9.6	30.5	43.1	10.7	2.0	197	
Anglican	5.9	10.8	30.4	41.2	9.8	2.0	102	
Adventist	3.6	25.3	24.7	35.1	9.3	2.1	194	
Other religion	8.6	21.0	28.4	32.1	7.4	2.5	81	
Total	5.1	17.5	27.2	37.8	10.5	1.9	1,011	
Marital status								
Married	3.4	16.3	27.5	38.1	12.5	2.3	528	0.000
Cohabiting	2.8	10.6	23.9	47.8	13.3	1.7	180	
Single	4.7	15.6	29.7	35.9	12.5	1.6	64	
Widowed	9.6	29.2	29.8	27.0	3.4	1.1	178	
Divorced or separated	14.8	16.4	24.6	39.3	3.3	1.6	61	
Total	5.1	17.5	27.2	37.8	10.5	1.9	1,011	
Literacy								
Able to read and write	3.3	14.9	24.2	41.1	14.3	2.1	664	0.000
Not able to read or write	8.6	22.5	32.9	31.4	3.2	1.4	347	
Total	5.1	17.5	27.2	37.8	10.5	1.9	1,011	
Education								
No education	9.0	21.7	31.9	31.0	4.9	1.4	345	0.000
Nursery	3.4	17.2	24.2	40.4	13.1	1.6	557	
Primary	1.8	5.5	27.5	45.9	14.7	4.6	109	
Total	5.1	17.5	27.2	37.8	10.5	1.9	1,011	

Comparing the distribution by marital status, cohabiting respondents belonged to households that showed the highest proportion of 1,000 to 3,000 with 47.8% of cases as compared to households with divorced or separated respondents (39.3%), and the difference was highly statistically significant (p=0.000).

Regarding literacy, respondents who are able to read and write belonged to households that showed the highest proportion of 1,000 to 3,000 with 41.1% of cases as compared to households with respondents who are not able to read or write (31.4%), and the difference was

highly statistically significant (p=0.000). Concerning education level, respondents with primary education belonged to households that showed the highest proportion of 1,000 to 3,000 with 45.9% of cases as compared to households with respondents with nursery level (40.4%), and the difference was highly statistically significant (p=0.000).

2. Main source of water for domestic use

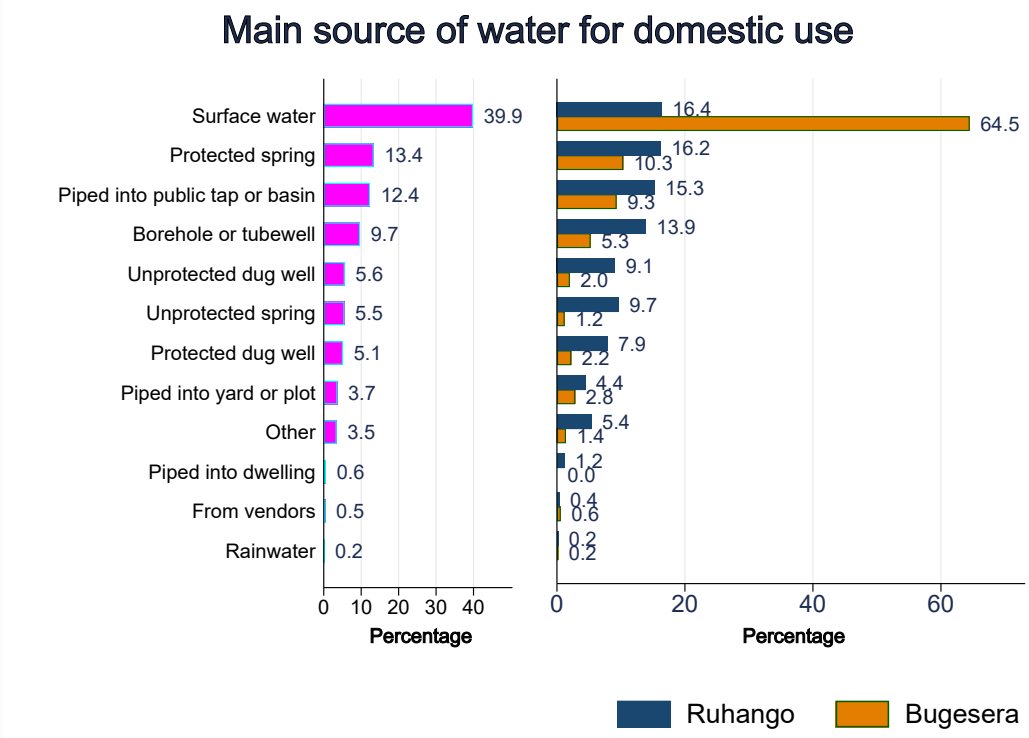


Figure 3.10: *Main source of water for domestic use*

As shown in Table A1, most households reported that the Main water source for domestic use was surface water in 39.9% of cases. Other main sources of water for domestic use included protected springs (13.4%), piped into public taps or basins (12.4%), borehole or tubewell (9.7%), and unprotected dug wells (5.6%). Bugesera district showed the highest proportion of surface water with 64.5% of cases as compared to Ruhango district (16.4%), and the difference was highly statistically significant (p=0.000).

Regarding gender, female respondents belonged to households that showed the highest proportion of surface water, with 42.8% of cases, as compared to households with male respondents (34.8%). Still, the difference was not significant (p=0.069). Concerning the age group, respondents less than 40 years belonged to households with the highest proportion of surface water, with 47.4% of cases, compared to households with respondents between 40 and 59 years (39.0%), and the difference was statistically significant (p=0.002).

Looking at religion, Anglican respondents belonged to households that showed the highest proportion of surface water with 55.9% of cases as compared to households with Pentecost respondents (53.8%), and the difference was highly statistically significant (p=0.000).

Table 3.2: *(B4) Main source of water for domestic use*

	Main source of water for domestic use						
	Surface water	**Protected spring**	**Piped into public tap or basin**	**Borehole or tube-well**	**Unprotected dug well**	**Unprotected spring**	**Protected dug well**
District							
Ruhango	16.4	16.2	15.3	13.9	9.1	9.7	7.9
Bugesera	64.5	10.3	9.3	5.3	2.0	1.2	2.2
Total	39.9	13.4	12.4	9.7	5.6	5.5	5.1
Gender							
Male	34.8	15.1	14.6	8.6	6.5	7.3	4.9
Female	42.8	12.3	11.1	10.3	5.2	4.5	5.3
Total	39.9	13.4	12.4	9.7	5.6	5.5	5.1
Age group							
Less 40	47.4	13.0	12.4	10.5	4.0	4.0	4.6
40-59	39.0	12.1	11.9	11.2	6.1	4.9	5.4
60 and above	31.9	15.8	13.1	6.2	6.9	8.5	5.4
Total	39.9	13.4	12.4	9.7	5.6	5.5	5.1
Religion							
Catholic	33.2	16.5	11.9	9.4	6.9	5.9	7.8
Pentecost	53.8	9.6	8.6	10.7	5.6	1.5	2.5
Anglican	55.9	4.9	12.7	5.9	6.9	4.9	2.0
Adventist	27.3	17.0	19.6	12.4	3.1	6.7	2.6
Other religion	51.9	7.4	6.2	7.4	3.7	11.1	7.4
Total	39.9	13.4	12.4	9.7	5.6	5.5	5.1
Marital status							
Married	39.0	14.4	12.7	9.7	5.5	4.7	4.4
Cohabiting	47.2	9.4	13.9	12.2	4.4	6.7	5.0
Single	40.6	14.1	15.6	6.2	3.1	3.1	7.8
Widowed	33.7	12.4	11.8	8.4	6.7	7.3	6.7
Divorced or separated	42.6	18.0	3.3	9.8	9.8	6.6	4.9
Total	39.9	13.4	12.4	9.7	5.6	5.5	5.1
Literacy							
Able to read and write	36.3	13.3	15.1	9.3	6.0	5.7	5.4
Not able to read or write	46.7	13.5	7.2	10.4	4.9	5.2	4.6
Total	39.9	13.4	12.4	9.7	5.6	5.5	5.1
Education							
No education	47.8	13.3	7.5	10.4	4.3	5.2	4.1
Primary	35.4	13.1	14.5	10.1	6.8	6.1	5.0
Secondary or university	37.6	14.7	16.5	5.5	3.7	3.7	9.2
Total	39.9	13.4	12.4	9.7	5.6	5.5	5.1

Comparing the distribution by marital status, cohabiting respondents belonged to households that showed the highest proportion of surface water with 47.2% of cases as compared to

households with divorced or separated respondents (42.6%), and the difference was statistically significant (p=0.028).

Regarding literacy, respondents who are not able to read or write belonged to households that showed the highest proportion of surface water with 46.7% of cases as compared to households with respondents who are able to read and write (36.3%), and the difference was statistically significant (p=0.001). Concerning education level, respondents with no education belonged to households that showed the highest proportion of surface water with 47.8% of cases as compared to households with respondents with primary education (37.6%), and the difference was statistically significant (p=0.001).

3. Time to get water from the closest safe water source

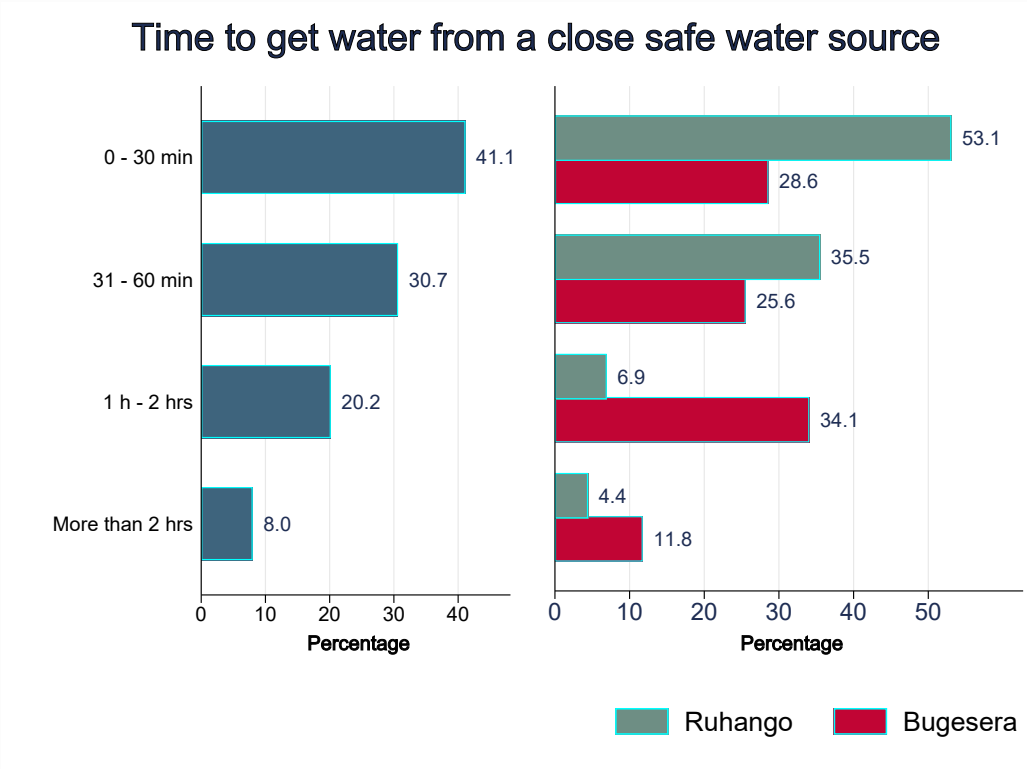


Figure 3.11: *Time to get water from a close safe water source*

Most households reported that the Time to the closest safe water source was 0 - 30 min in 41.1% of cases. Other Times to the closest safe water source included 31 - 60 min (30.7%), 1h - 2 hrs (20.2%) and more than 2 hrs (8.0%) as shown in Table 3.3.

Table 3.3: *(B5) Time to get water from a close safe water source*

	Time to a close safe water source					
	0 - 30 min	31 - 60 min	1 h - 2 hrs	More than 2 hrs	Total	p-value
District						
Ruhango	53.1	35.5	6.9	4.4	518	0.000
Bugesera	28.6	25.6	34.1	11.8	493	
Total	41.1	30.7	20.2	8.0	1,011	
Gender						
Male	41.5	32.9	19.7	5.9	371	0.240
Female	40.9	29.4	20.5	9.2	640	
Total	41.1	30.7	20.2	8.0	1,011	
Age group						
Less 40	37.2	29.4	25.1	8.4	323	0.042
40-59	40.7	33.9	18.5	7.0	428	
60 and above	46.9	26.9	16.9	9.2	260	
Total	41.1	30.7	20.2	8.0	1,011	
Religion						
Catholic church	47.8	30.9	14.2	7.1	437	0.000
Pentecost churches	36.5	24.9	27.4	11.2	197	
Anglican church	30.4	38.2	27.5	3.9	102	
Adventist church	41.2	33.0	19.6	6.2	194	
Other	29.6	28.4	27.2	14.8	81	
Total	41.1	30.7	20.2	8.0	1,011	
Marital status						
Married	42.8	31.2	18.8	7.2	528	0.271
Cohabiting	33.9	33.3	26.1	6.7	180	
Single	48.4	31.2	14.1	6.2	64	
Widowed	41.0	27.5	20.8	10.7	178	
Divorced/ separated	41.0	26.2	19.7	13.1	61	
Total	41.1	30.7	20.2	8.0	1,011	
Able to read and write						
Yes	40.8	33.0	19.1	7.1	664	0.085
No	41.8	26.2	22.2	9.8	347	
Total	41.1	30.7	20.2	8.0	1,011	
Education						
No education	41.2	27.5	20.9	10.4	345	0.104
Primary	42.9	31.1	19.2	6.8	557	
Secondary/ university	32.1	38.5	22.9	6.4	109	
Total	41.1	30.7	20.2	8.0	1,011	

4. Perception of the price to access safe water

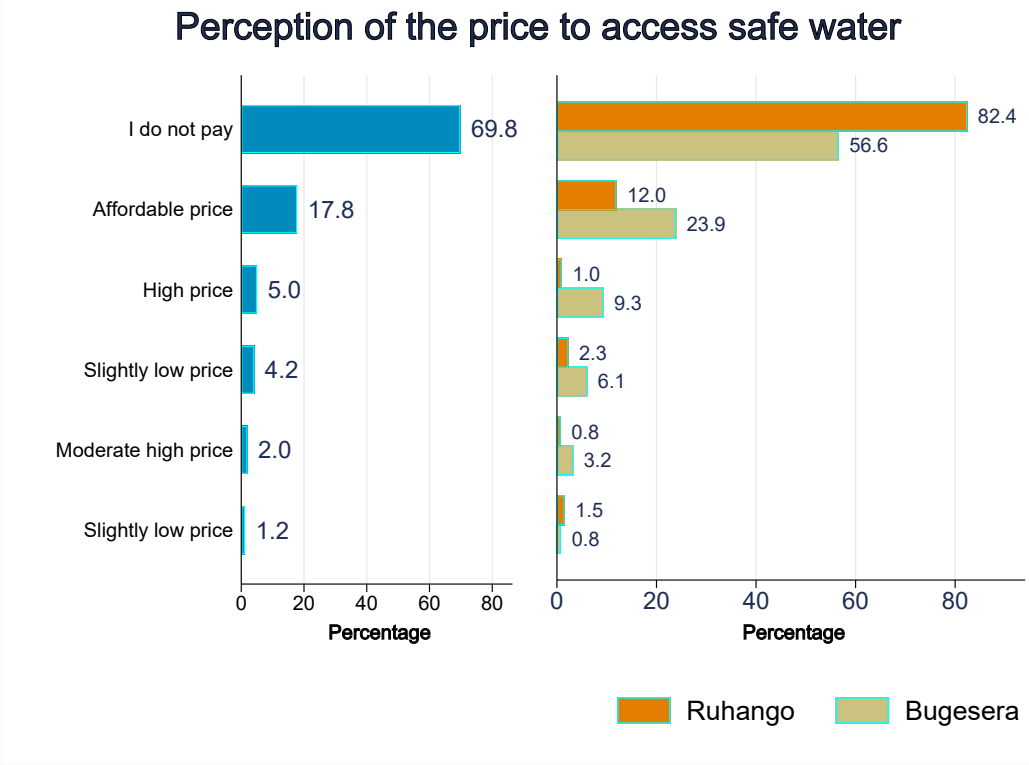


Figure 3.12: *Perception of the price to access safe water*

Most households reported that perception of the price to access safe water where I do not pay in 69.8% of cases. Other Perceptions of the price to access safe water included affordable price (17.8%), high price (5.0%), slightly low price (4.2%) and moderately high price (2.0%) as shown in Table 3.4.

Table 3.4: *(B6) Perception of the price to access safe water*

	Perception of the price to access safe water							
	I do not pay	*Slightly low price*	*Affordable price*	*Slightly low price*	*Moderate high price*	*High price*	*Total*	*p-value*
District								
Ruhango	82.4	1.5	12.0	2.3	0.8	1.0	518	0.000
Bugesera	56.6	0.8	23.9	6.1	3.2	9.3	493	
Total	69.8	1.2	17.8	4.2	2.0	5.0	1,011	
Gender								
Male	69.8	1.3	15.6	5.7	2.2	5.4	371	0.402
Female	69.8	1.1	19.1	3.3	1.9	4.8	640	
Total	69.8	1.2	17.8	4.2	2.0	5.0	1,011	
Age group								
Less 40	67.5	0.9	22.6	2.5	0.3	6.2	323	0.012
40-59	72.9	0.9	15.0	4.2	3.0	4.0	428	
60 and above	67.7	1.9	16.5	6.2	2.3	5.4	260	
Total	69.8	1.2	17.8	4.2	2.0	5.0	1,011	
Religion								
Catholic church	71.9	1.1	15.8	3.9	1.8	5.5	437	0.246
Pentecost churches	73.6	0.0	15.7	3.6	1.5	5.6	197	
Anglican church	70.6	1.0	13.7	3.9	3.9	6.9	102	
Adventist church	64.4	2.1	22.7	6.2	1.5	3.1	194	
Other	61.7	2.5	27.2	2.5	2.5	3.7	81	
Total	69.8	1.2	17.8	4.2	2.0	5.0	1,011	
Marital status								
Married	68.2	1.5	18.0	5.5	2.5	4.4	528	0.234
Cohabiting	71.7	0.6	16.7	3.9	0.0	7.2	180	
Single	65.6	3.1	25.0	1.6	0.0	4.7	64	
Widowed	74.2	0.0	15.2	2.2	2.8	5.6	178	
Divorced/ separated	70.5	1.6	19.7	1.6	3.3	3.3	61	
Total	69.8	1.2	17.8	4.2	2.0	5.0	1,011	
Able to read and write								
Yes	67.5	1.4	18.8	4.4	2.0	6.0	664	0.218
No	74.4	0.9	15.9	3.7	2.0	3.2	347	
Total	69.8	1.2	17.8	4.2	2.0	5.0	1,011	
Education								
No education	72.8	0.9	15.9	4.3	2.3	3.8	345	0.104
Primary	69.8	1.1	18.0	4.1	2.2	4.8	557	
Secondary/ university	60.6	2.8	22.9	3.7	0.0	10.1	109	
Total	69.8	1.2	17.8	4.2	2.0	5.0	1,011	

5. Treating water for drinking

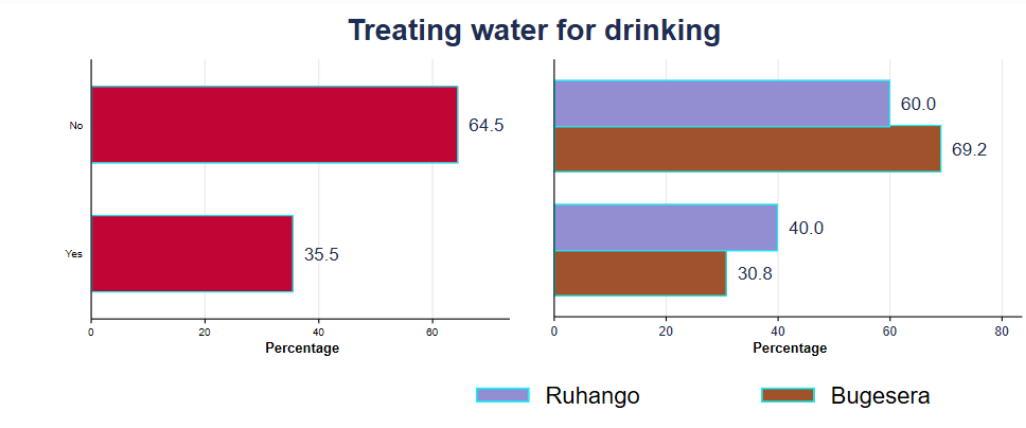


Figure 3.13: *Treating water for drinking*

The majority of households reported not treating water for drinking (64.5%) while households treating water for drinking represented 35.5% of cases (Table 3.5). Bugesera district showed the highest proportion of households not treating water for drinking with 69.2% of cases as compared to Ruhango district (60.0%), and the difference was statistically significant (p=0.002).

Regarding gender, male respondents belonged to households that showed the highest proportion not treating water for drinking with 66.8% of cases as compared to households with female respondents (63.1%), but the difference was not significant (p=0.233). Concerning age group, respondents between 40 and 59 years belonged to households that showed the highest proportion not treating water for drinking with 66.1% of cases as compared to households with respondents less than 40 years (63.8%), but the difference was not significant (p=0.626).

Looking at religion, Anglican respondents belonged to households that showed the highest proportion not treating water for drinking with 72.5% of cases as compared to households with Catholic respondents (67.0%), and the difference was statistically significant (p=0.004). Comparing the distribution by marital status, divorced or separated respondents belonged to households that showed the highest proportion not treating water for drinking with 77.0% of cases as compared to households with cohabiting respondents (68.3%), and the difference was statistically significant (p=0.044).

Regarding literacy, respondents who are not able to read or write belonged to households that showed the highest proportion not treating water for drinking with 71.8% of cases as compared to households with respondents who are able to read and write (60.7%), and the difference was highly statistically significant (p=0.000). Concerning education level, respondents with no education belonged to households that showed the highest proportion not treating water for drinking with 72.8% of cases as compared to households with respondents with nursery level

(63.4%), and the difference was highly statistically significant (p=0.000).

Table 3.5: *(B7) Distribution of households treat water for drinking*

	Treat water for drinking				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	207	40.0	311	60.0	518	0.002
Bugesera	152	30.8	341	69.2	493	
Total	359	35.5	652	64.5	1,011	
Gender						
Male	123	33.2	248	66.8	371	0.233
Female	236	36.9	404	63.1	640	
Total	359	35.5	652	64.5	1,011	
Age group						
Less 40	117	36.2	206	63.8	323	0.626
40 to 59	145	33.9	283	66.1	428	
60 and above	97	37.3	163	62.7	260	
Total	359	35.5	652	64.5	1,011	
Religion						
Catholic	144	33.0	293	67.0	437	0.004
Pentecost	69	35.0	128	65.0	197	
Anglican	28	27.5	74	72.5	102	
Adventist	91	46.9	103	53.1	194	
Other religion	27	33.3	54	66.7	81	
Total	359	35.5	652	64.5	1,011	
Marital status						
Married	208	39.4	320	60.6	528	0.044
Cohabiting	57	31.7	123	68.3	180	
Single	23	35.9	41	64.1	64	
Widowed	57	32.0	121	68.0	178	
Divorced or separated	14	23.0	47	77.0	61	
Total	359	35.5	652	64.5	1,011	
Literacy						
Able to read and write	261	39.3	403	60.7	664	0.000
Not able to read or write	98	28.2	249	71.8	347	
Total	359	35.5	652	64.5	1,011	
Education						
No education	94	27.2	251	72.8	345	0.000
Nursery	204	36.6	353	63.4	557	
Primary	61	56.0	48	44.0	109	
Total	359	35.5	652	64.5	1,011	

6. Reasons for not treating water for drinking

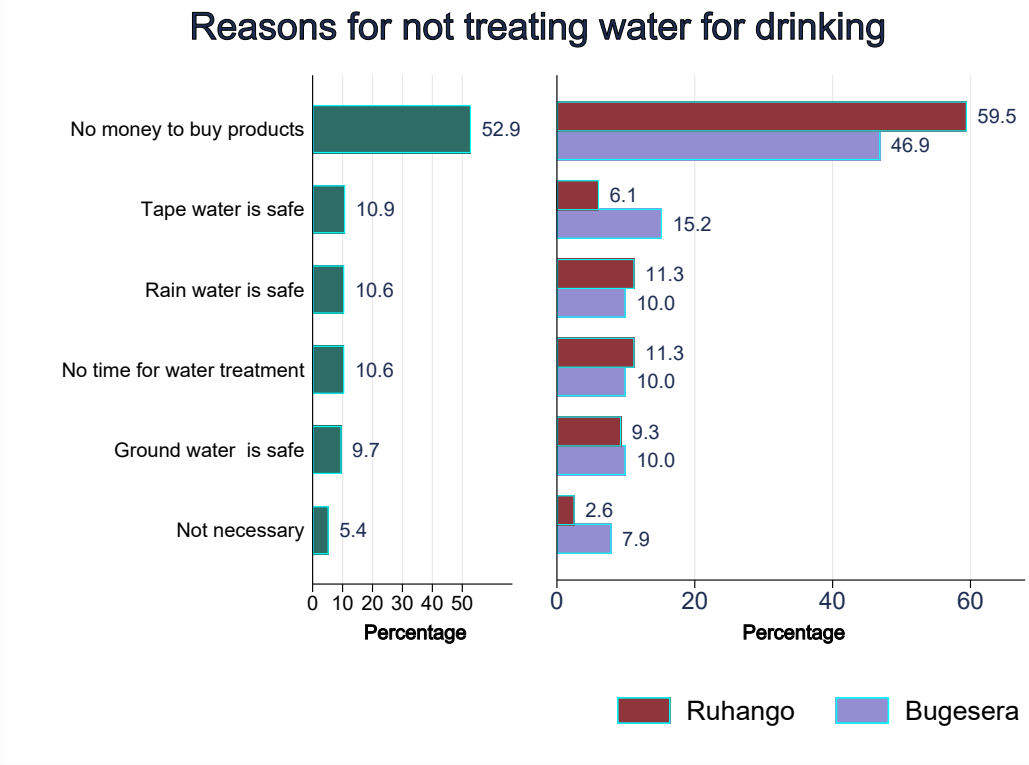


Figure 3.14: *Reasons for not treating water for drinking*

Most households reported that reasons for not treating water for drinking were no money to buy products (chemicals, charcoal, wood) in 52.9% of cases. Other Reasons for not treating water for drinking included tape water is already treated by WASAC (10.9%), no time for water treatment (10.6%), not necessary (10.6%) and groundwater is safe (9.7%) as shown in Table 3.6.

Table 3.6: *(B8) Reasons for not treating water for drinking*

	Reasons for not treating water for drinking								
	No money for products	*No time for treatment*	*Tape water already treated*	*Ground water is safe*	*Rain water is safe*	*Not necessary*	*Other*	*Total*	*p-value*
District									
Ruhango	59.5	11.3	6.1	9.3	0.3	11.3	2.3	311	0.000
Bugesera	46.9	10.0	15.2	10.0	0.0	10.0	7.9	341	
Total	52.9	10.6	10.9	9.7	0.2	10.6	5.2	652	
Gender									
Male	53.2	9.7	10.9	10.1	0.4	11.7	4.0	248	0.736
Female	52.7	11.1	10.9	9.4	0.0	9.9	5.9	404	
Total	52.9	10.6	10.9	9.7	0.2	10.6	5.2	652	
Age group									
Less 40	51.5	12.1	10.2	10.2	0.5	10.2	5.3	206	0.280
40-59	50.5	12.4	11.0	8.5	0.0	13.1	4.6	283	
60 and above	58.9	5.5	11.7	11.0	0.0	6.7	6.1	163	
Total	52.9	10.6	10.9	9.7	0.2	10.6	5.2	652	
Religion									
Catholic church	51.9	11.3	8.5	10.6	0.3	11.9	5.5	293	0.418
Pentecost churches	48.4	13.3	16.4	6.2	0.0	8.6	7.0	128	
Anglican church	66.2	4.1	9.5	12.2	0.0	5.4	2.7	74	
Adventist church	53.4	12.6	9.7	7.8	0.0	12.6	3.9	103	
Other	50.0	5.6	14.8	13.0	0.0	11.1	5.6	54	
Total	52.9	10.6	10.9	9.7	0.2	10.6	5.2	652	
Marital status									
Married	52.5	12.5	13.1	8.1	0.3	10.9	2.5	320	0.198
Cohabiting	49.6	9.8	8.9	13.0	0.0	10.6	8.1	123	
Single	53.7	9.8	4.9	9.8	0.0	17.1	4.9	41	
Widowed	52.1	6.6	10.7	10.7	0.0	9.1	10.7	121	
Divorced/ separated	66.0	10.6	6.4	8.5	0.0	6.4	2.1	47	
Total	52.9	10.6	10.9	9.7	0.2	10.6	5.2	652	
Able to read and write									
Yes	50.4	11.4	12.7	8.9	0.0	10.9	5.7	403	0.253
No	57.0	9.2	8.0	10.8	0.4	10.0	4.4	249	
Total	52.9	10.6	10.9	9.7	0.2	10.6	5.2	652	
Education									
No education	57.0	8.8	7.2	11.2	0.4	10.0	5.6	251	0.041
Primary	51.6	11.3	14.2	7.6	0.0	9.9	5.4	353	
Secondary/ university	41.7	14.6	6.2	16.7	0.0	18.8	2.1	48	
Total	52.9	10.6	10.9	9.7	0.2	10.6	5.2	652	

7. Types of water treatment

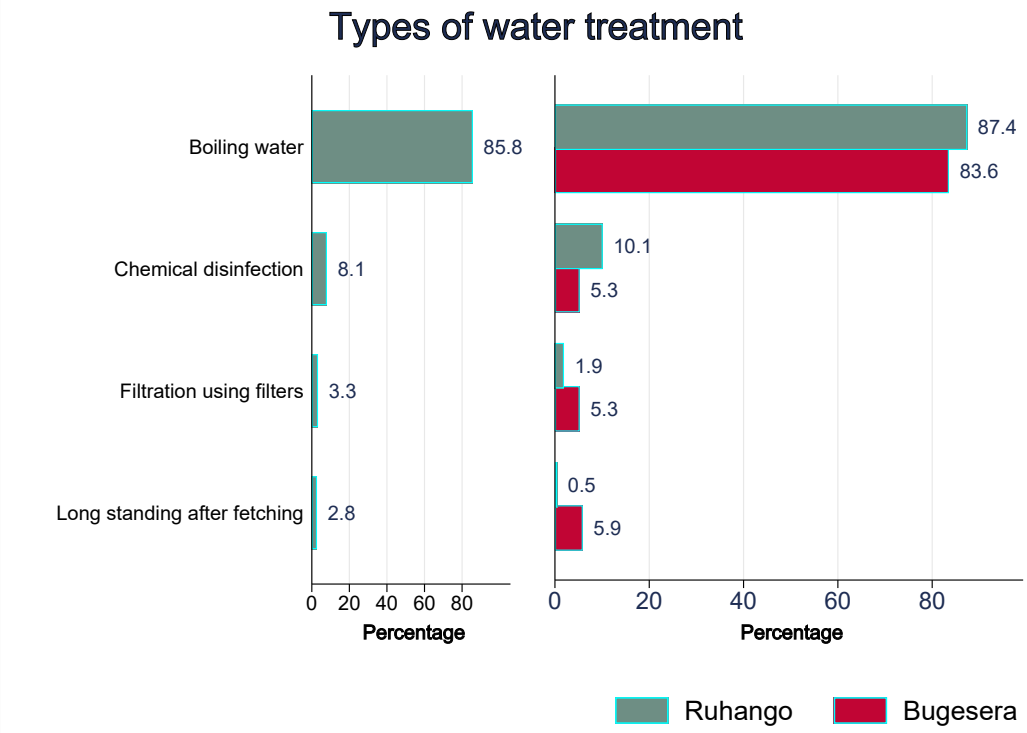


Figure 3.15: *Types of water treatment*

Most households reported that Types of water treatment were boiling water in 85.8% of cases. Other Types of water treatment included chemical disinfection (8.1%), filtration using filters (3.3%) and other (1.7%) as shown in Table 3.7.

Table 3.7: *(B9) Types of water treatment*

	Types of water treatment						
	Boiling water	Filtration using filters	Chemical disin-fection	Long stand-ing	Other	Total	p-value
District							
Ruhango	87.4	1.9	10.1	0.0	0.5	207	0.004
Bugesera	83.6	5.3	5.3	2.6	3.3	152	
Total	85.8	3.3	8.1	1.1	1.7	359	
Gender							
Male	90.2	1.6	4.9	0.8	2.4	123	0.261
Female	83.5	4.2	9.7	1.3	1.3	236	
Total	85.8	3.3	8.1	1.1	1.7	359	
Age group							
Less 40	84.6	1.7	9.4	1.7	2.6	117	0.708
40-59	84.1	4.1	9.0	1.4	1.4	145	
60 and above	89.7	4.1	5.2	0.0	1.0	97	
Total	85.8	3.3	8.1	1.1	1.7	359	
Religion							
Catholic church	84.7	2.1	10.4	0.0	2.8	144	0.013
Pentecost churches	76.8	8.7	8.7	2.9	2.9	69	
Anglican church	75.0	10.7	10.7	3.6	0.0	28	
Adventist church	93.4	0.0	5.5	1.1	0.0	91	
Other	100.0	0.0	0.0	0.0	0.0	27	
Total	85.8	3.3	8.1	1.1	1.7	359	
Marital status							
Married	83.2	4.3	8.7	1.9	1.9	208	0.884
Cohabiting	87.7	1.8	7.0	0.0	3.5	57	
Single	87.0	4.3	8.7	0.0	0.0	23	
Widowed	89.5	1.8	8.8	0.0	0.0	57	
Divorced/ separated	100.0	0.0	0.0	0.0	0.0	14	
Total	85.8	3.3	8.1	1.1	1.7	359	
Able to read and write							
Yes	83.5	2.7	10.3	1.1	2.3	261	0.038
No	91.8	5.1	2.0	1.0	0.0	98	
Total	85.8	3.3	8.1	1.1	1.7	359	
Education							
No education	91.5	5.3	1.1	1.1	1.1	94	0.030
Primary	86.3	2.5	9.3	1.0	1.0	204	
Secondary/ university	75.4	3.3	14.8	1.6	4.9	61	
Total	85.8	3.3	8.1	1.1	1.7	359	

8. Means to store treated water

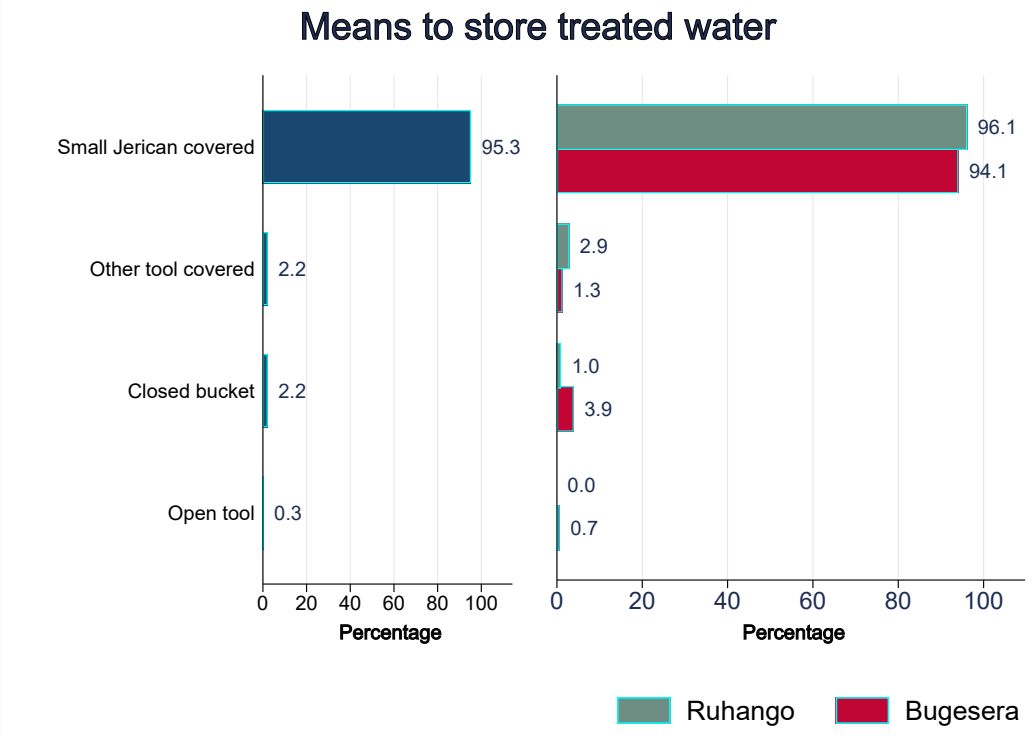


Figure 3.16: *Means to store treated water*

Most households reported that Means to store treated water were small jerrican covered in 95.3% of cases. Other Means to store treated water included closed bucket (2.2%), other tool covered (2.2%) and open tool (0.3%) as shown in Table 3.8.

Table 3.8: *(B10) Means to store treated water*

	Means to store treated water				Total	p-value
	Small Jerican covered	Closed bucket	Open tool	Other tool covered		
District						
Ruhango	96.1	2.9	0.0	1.0	207	0.118
Bugesera	94.1	1.3	0.7	3.9	152	
Total	95.3	2.2	0.3	2.2	359	
Gender						
Male	94.3	2.4	0.8	2.4	123	0.570
Female	95.8	2.1	0.0	2.1	236	
Total	95.3	2.2	0.3	2.2	359	
Age group						
Less 40	96.6	1.7	0.0	1.7	117	0.354
40-59	95.2	3.4	0.0	1.4	145	
60 and above	93.8	1.0	1.0	4.1	97	
Total	95.3	2.2	0.3	2.2	359	
Religion						
Catholic church	93.8	3.5	0.7	2.1	144	0.566
Pentecost churches	97.1	0.0	0.0	2.9	69	
Anglican church	89.3	7.1	0.0	3.6	28	
Adventist church	97.8	0.0	0.0	2.2	91	
Other	96.3	3.7	0.0	0.0	27	
Total	95.3	2.2	0.3	2.2	359	
Marital status						
Married	93.3	2.9	0.5	3.4	208	0.869
Cohabiting	98.2	1.8	0.0	0.0	57	
Single	95.7	4.3	0.0	0.0	23	
Widowed	98.2	0.0	0.0	1.8	57	
Divorced/ separated	100.0	0.0	0.0	0.0	14	
Total	95.3	2.2	0.3	2.2	359	
Able to read and write						
Yes	95.4	2.3	0.4	1.9	261	0.845
No	94.9	2.0	0.0	3.1	98	
Total	95.3	2.2	0.3	2.2	359	
Education						
No education	93.6	3.2	0.0	3.2	94	0.860
Primary	96.1	2.0	0.5	1.5	204	
Secondary/ university	95.1	1.6	0.0	3.3	61	
Total	95.3	2.2	0.3	2.2	359	

9. Household own a toilet or latrine

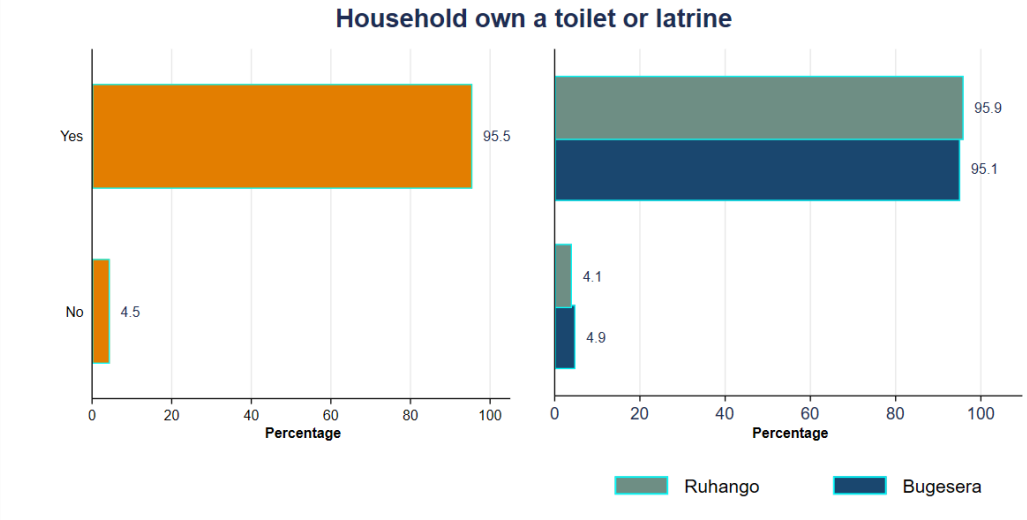


Figure 3.17: *Household own a toilet or latrine*

As shown in Table A2, most households reported own a toilet or latrine (95.5%) while households not own a toilet or latrine represented 4.5% of cases. Ruhango district showed similar proportion of households own a toilet or latrine with 95.9% of cases compared to Bugesera district (95.1%), the difference was not significant (p=0.530).

Regarding gender, male respondents belonged to households that showed the highest proportion own a toilet or latrine with 96.0% of cases as compared to households with female respondents (95.3%), but the difference was not significant (p=0.632). Concerning age group, respondents between 40 and 59 years belonged to households that showed the highest proportion own a toilet or latrine with 96.3% of cases as compared to households with respondents less than 40 years (95.4%), but the difference was not significant (p=0.585).

Looking at religion, Pentecost respondents belonged to households that showed the highest proportion own a toilet or latrine with 95.9% of cases as compared to households with Catholic respondents (95.9%), but the difference was not significant (p=0.863). Comparing the distribution by marital status, married respondents belonged to households that showed the highest proportion own a toilet or latrine with 97.7% of cases as compared to households with cohabiting respondents (94.4%), and the difference was statistically significant (p=0.001).

Regarding literacy, respondents who are able to read and write belonged to households that showed the highest proportion own a toilet or latrine with 97.9% of cases as compared to households with respondents who are not able to read or write (91.1%), and the difference was highly statistically significant (p=0.000). Concerning education level, respondents with primary education belonged to households that showed the highest proportion own a toilet or latrine with 99.1% of cases as compared to households with respondents with nursery level (97.1%),

and the difference was highly statistically significant (p=0.000).

Table 3.9: *(B11) Distribution of households own a toilet or latrine*

	Own a toilet or latrine				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	497	95.9	21	4.1	518	0.530
Bugesera	469	95.1	24	4.9	493	
Total	966	95.5	45	4.5	1,011	
Gender						
Male	356	96.0	15	4.0	371	0.632
Female	610	95.3	30	4.7	640	
Total	966	95.5	45	4.5	1,011	
Age group						
Less 40	308	95.4	15	4.6	323	0.585
40 to 59	412	96.3	16	3.7	428	
60 and above	246	94.6	14	5.4	260	
Total	966	95.5	45	4.5	1,011	
Religion						
Catholic	419	95.9	18	4.1	437	0.863
Pentecost	189	95.9	8	4.1	197	
Anglican	96	94.1	6	5.9	102	
Adventist	186	95.9	8	4.1	194	
Other religion	76	93.8	5	6.2	81	
Total	966	95.5	45	4.5	1,011	
Marital status						
Married	516	97.7	12	2.3	528	0.001
Cohabiting	170	94.4	10	5.6	180	
Single	60	93.8	4	6.2	64	
Widowed	167	93.8	11	6.2	178	
Divorced or separated	53	86.9	8	13.1	61	
Total	966	95.5	45	4.5	1,011	
Literacy						
Able to read and write	650	97.9	14	2.1	664	0.000
Not able to read or write	316	91.1	31	8.9	347	
Total	966	95.5	45	4.5	1,011	
Education						
No education	317	91.9	28	8.1	345	0.000
Nursery	541	97.1	16	2.9	557	
Primary	108	99.1	1	0.9	109	
Total	966	95.5	45	4.5	1,011	

10. Criteria for an improved latrine

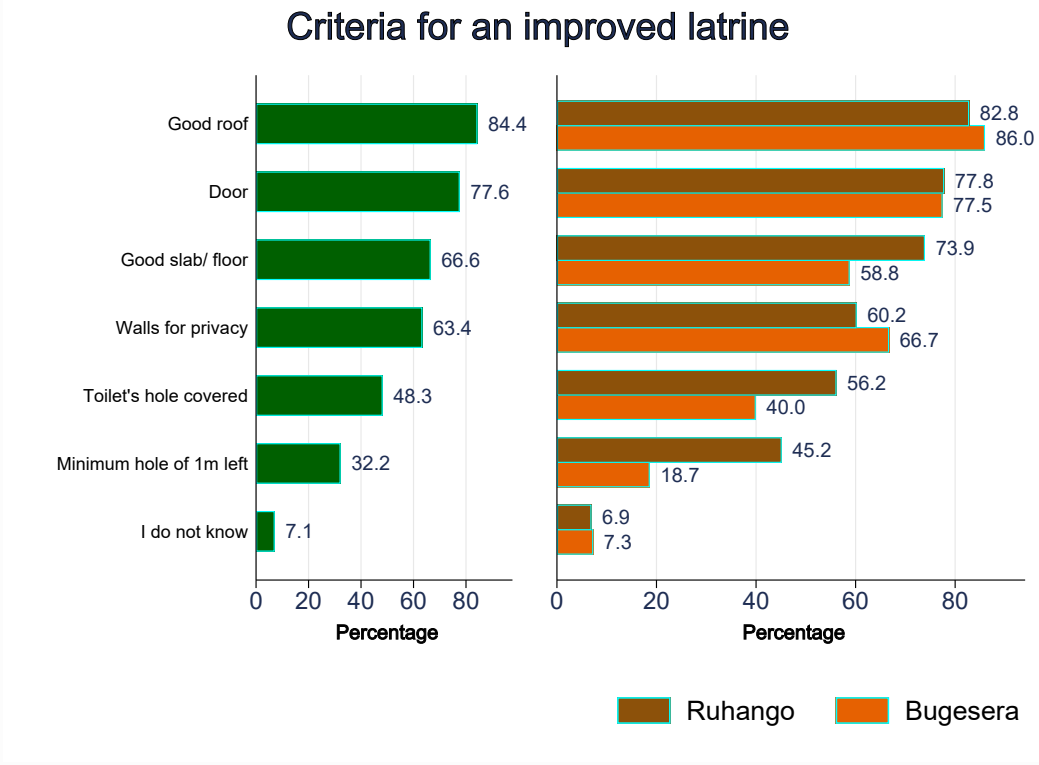


Figure 3.18: *Criteria for an improved latrine*

Most households reported that Criteria for an improved latrine were good roof in 84.4% of cases. Other Criteria for an improved latrine included door (77.6%), good slab/ floor (66.6%), walls for privacy (63.4%) and toilet's hole covered (48.3%) as shown in Table 3.10.

Table 3.10: *(B13) Criteria for an improved latrine*

	Criteria for an improved latrine							
	Good roof	**Door**	**Good slab/ floor**	**Walls for privacy**	**Toilet's hole covered**	**Minimum hole of 1m left**	**I do not know**	**Total**
District								
Ruhango	82.8	77.8	73.9	60.2	56.2	45.2	6.9	57.6
Bugesera	86.0	77.5	58.8	66.7	40.0	18.7	7.3	50.7
Total	84.4	77.6	66.6	63.4	48.3	32.2	7.1	54.2
Gender								
Male	86.0	77.6	66.0	63.6	48.0	35.8	5.1	54.6
Female	83.4	77.7	66.9	63.3	48.4	30.2	8.3	54.0
Total	84.4	77.6	66.6	63.4	48.3	32.2	7.1	54.2
Age group								
Less 40	87.0	78.9	65.6	62.5	48.3	25.7	5.3	53.3
40-59	85.3	77.8	68.2	65.2	50.5	33.9	6.5	55.3
60 and above	79.6	75.8	65.0	61.5	44.6	37.7	10.4	53.5
Total	84.4	77.6	66.6	63.4	48.3	32.2	7.1	54.2
Religion								
Catholic church	82.2	74.8	69.1	59.7	51.3	38.2	7.3	54.7
Pentecost churches	88.8	77.7	64.0	70.6	45.2	27.9	4.1	54.0
Anglican church	86.3	84.3	59.8	61.8	42.2	21.6	8.8	52.1
Adventist church	84.5	80.4	68.6	63.9	51.0	28.4	7.2	54.9
Other	82.7	77.8	63.0	66.7	40.7	33.3	11.1	53.6
Total	84.4	77.6	66.6	63.4	48.3	32.2	7.1	54.2
Marital status								
Married	86.0	77.7	70.6	66.9	50.2	37.1	6.2	56.4
Cohabiting	84.4	78.9	58.9	60.6	46.7	24.4	3.9	51.1
Single	82.8	76.6	64.1	60.9	48.4	21.9	10.9	52.2
Widowed	80.3	77.0	66.3	57.9	46.6	30.3	11.8	52.9
Divorced/ separated	83.6	77.0	57.4	60.7	41.0	29.5	6.6	50.8
Total	84.4	77.6	66.6	63.4	48.3	32.2	7.1	54.2
Able to read and write								
Yes	87.5	80.4	71.7	66.9	54.1	33.9	3.6	56.9
No	78.4	72.3	56.8	56.8	37.2	29.1	13.8	49.2
Total	84.4	77.6	66.6	63.4	48.3	32.2	7.1	54.2
Education								
No education	78.6	73.3	58.3	58.6	38.6	29.0	14.5	50.1
Primary	87.8	79.5	70.4	66.6	52.6	34.8	3.2	56.4
Secondary/ university	85.3	81.7	73.4	62.4	56.9	29.4	3.7	56.1
Total	84.4	77.6	66.6	63.4	48.3	32.2	7.1	54.2

11. Criteria of improved latrine fulfilled by household's toilet

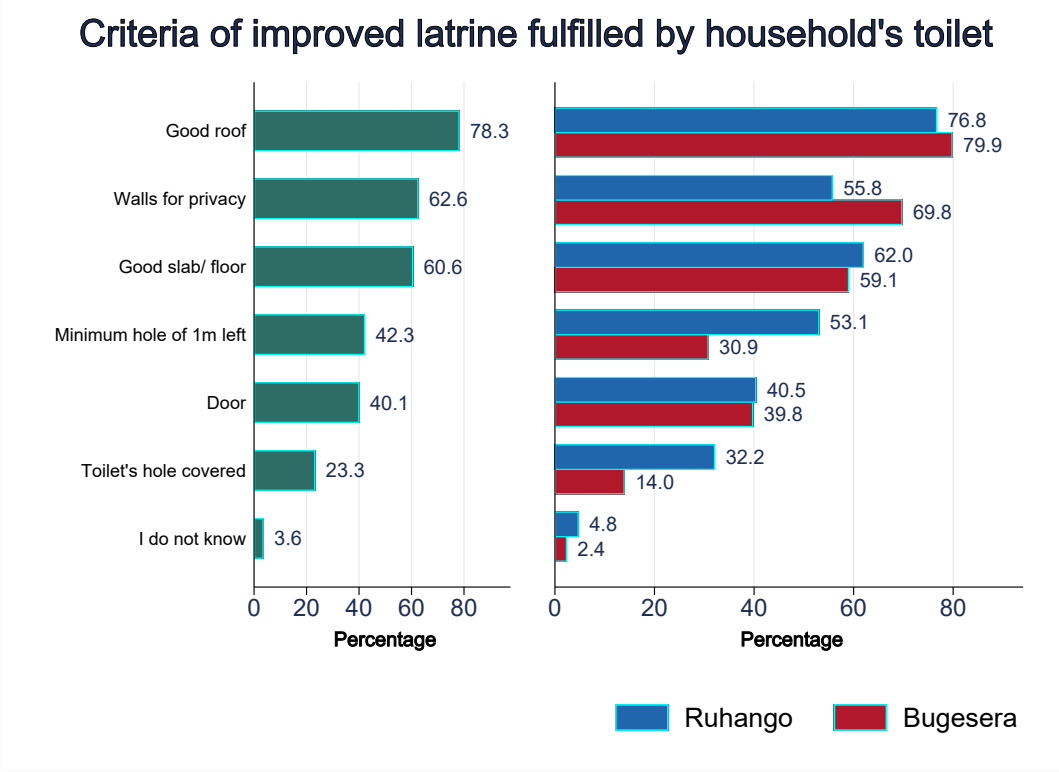


Figure 3.19: *Criteria of improved latrine fulfilled by household's toilet*

Most households reported that Criteria fulfilled by toilet were good roof in 78.3% of cases. Other Criteria fulfilled by toilet included walls for privacy (62.6%), good slab/ floor (60.6%), minimum hole of 1m minimum left (42.3%) and door (40.1%) as shown in Table 3.11.

Table 3.11: *(B14) Criteria for an improved latrine*

	Criteria for an improved latrine							
	Good roof	**Walls for privacy**	**Good slab/ floor**	**Minimum hole of 1m left**	**Door**	**Toilet's hole covered**	**I do not know**	**Total**
District								
Ruhango	76.8	55.8	62.0	53.1	40.5	32.2	4.8	46.4
Bugesera	79.9	69.8	59.1	30.9	39.8	14.0	2.4	42.3
Total	78.3	62.6	60.6	42.3	40.1	23.3	3.6	44.4
Gender								
Male	77.6	57.4	61.9	42.6	41.8	23.6	3.1	44.0
Female	78.7	65.8	59.8	42.1	39.2	23.2	3.9	44.7
Total	78.3	62.6	60.6	42.3	40.1	23.3	3.6	44.4
Age group								
Less 40	77.8	62.7	59.5	41.8	40.8	19.3	3.9	43.7
40-59	80.5	62.8	62.2	39.8	38.0	23.8	4.0	44.4
60 and above	75.1	62.2	59.2	47.2	42.9	27.9	2.6	45.3
Total	78.3	62.6	60.6	42.3	40.1	23.3	3.6	44.4
Religion								
Catholic church	73.3	58.0	63.0	46.9	38.3	27.7	4.4	44.5
Pentecost churches	82.5	63.5	59.3	38.6	37.0	19.6	3.2	43.4
Anglican church	76.3	63.4	44.1	32.3	40.9	17.2	3.2	39.6
Adventist church	83.9	67.8	66.1	42.2	43.3	24.4	2.8	47.2
Other	83.3	72.2	58.3	38.9	50.0	13.9	2.8	45.6
Total	78.3	62.6	60.6	42.3	40.1	23.3	3.6	44.4
Marital status								
Married	79.6	65.7	65.9	48.1	44.0	24.6	2.0	47.1
Cohabiting	75.1	57.2	52.6	37.0	34.7	20.2	3.5	40.0
Single	80.7	64.9	63.2	40.4	50.9	28.1	5.3	47.6
Widowed	79.0	63.1	56.1	36.9	35.7	22.9	4.5	42.6
Divorced/ separated	71.9	49.1	49.1	24.6	24.6	17.5	14.0	35.8
Total	78.3	62.6	60.6	42.3	40.1	23.3	3.6	44.4
Able to read and write								
Yes	80.9	62.5	63.8	43.9	44.1	26.4	2.3	46.3
No	72.6	62.9	53.8	38.8	31.8	16.7	6.4	40.4
Total	78.3	62.6	60.6	42.3	40.1	23.3	3.6	44.4
Education								
No education	73.9	63.4	55.9	38.3	33.6	19.3	5.8	41.5
Primary	80.0	62.3	62.9	44.2	40.1	25.4	2.8	45.4
Secondary/ university	81.9	61.9	61.9	43.8	59.0	23.8	1.9	47.8
Total	78.3	62.6	60.6	42.3	40.1	23.3	3.6	44.4

12. How deep was the toilet pit when initially created

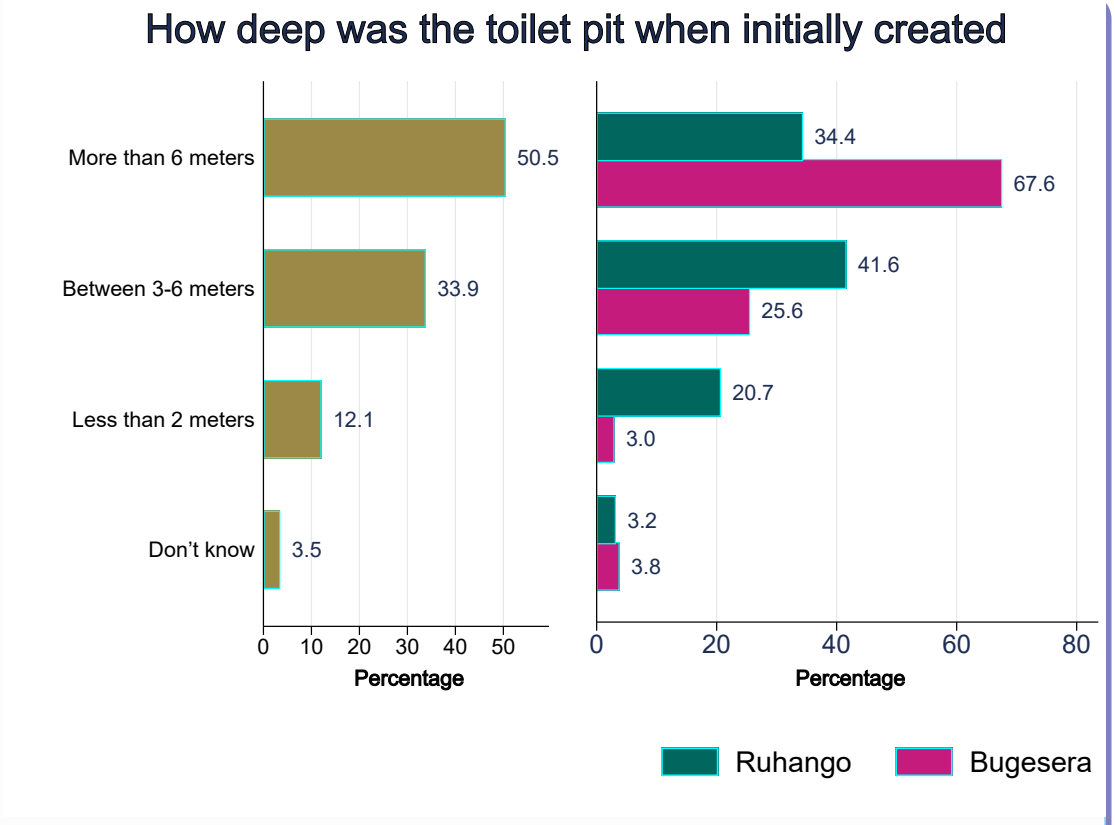


Figure 3.20: *How deep was the toilet pit when initially created*

Most households reported that the depth of toilet pits when created was more than 6 m in 50.5% of cases. Other Depth of toilet pits, when created, included between 3-6 m (33.9%), between 1 and 2m (11.9%), don't know (3.5%) and less than 1m (0.2%) as shown in Table 3.12.

Table 3.12: *(B15) How deep was the toilet pit when initially created*

	Depth of toilet pit when created					Total	p-value
	Less than 1m	Between 1 and 2m	Between 3-6 m	More than 6 m	Don't know		
District							
Ruhango	0.4	20.3	41.6	34.4	3.2	497	0.000
Bugesera	0.0	3.0	25.6	67.6	3.8	469	
Total	0.2	11.9	33.9	50.5	3.5	966	
Gender							
Male	0.3	10.7	33.7	53.9	1.4	356	0.053
Female	0.2	12.6	33.9	48.5	4.8	610	
Total	0.2	11.9	33.9	50.5	3.5	966	
Age group							
Less 40	0.0	11.4	27.3	55.8	5.5	308	0.012
40-59	0.5	13.8	36.7	46.4	2.7	412	
60 and above	0.0	9.3	37.4	50.8	2.4	246	
Total	0.2	11.9	33.9	50.5	3.5	966	
Religion							
Catholic church	0.2	15.3	33.4	48.0	3.1	419	0.146
Pentecost churches	0.5	11.6	32.8	52.9	2.1	189	
Anglican church	0.0	12.5	39.6	41.7	6.2	96	
Adventist church	0.0	5.9	34.9	55.4	3.8	186	
Other	0.0	7.9	28.9	57.9	5.3	76	
Total	0.2	11.9	33.9	50.5	3.5	966	
Marital status							
Married	0.2	11.4	33.5	52.5	2.3	516	0.151
Cohabiting	0.0	12.9	30.0	52.9	4.1	170	
Single	0.0	8.3	28.3	53.3	10.0	60	
Widowed	0.6	12.6	38.9	44.9	3.0	167	
Divorced/ separated	0.0	15.1	39.6	37.7	7.5	53	
Total	0.2	11.9	33.9	50.5	3.5	966	
Able to read and write							
Yes	0.0	10.2	33.2	53.2	3.4	650	0.014
No	0.6	15.5	35.1	44.9	3.8	316	
Total	0.2	11.9	33.9	50.5	3.5	966	
Education							
No education	0.6	13.6	36.6	45.4	3.8	317	0.049
Primary	0.0	11.5	34.4	51.0	3.1	541	
Secondary/ university	0.0	9.3	23.1	63.0	4.6	108	
Total	0.2	11.9	33.9	50.5	3.5	966	

13. Know that the standard pit toilet must have a minimum of 6 meters

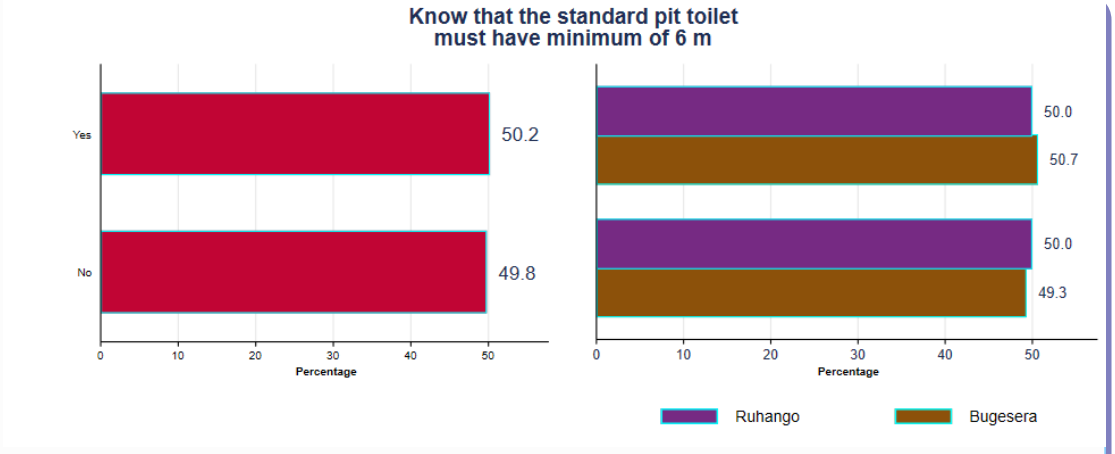


Figure 3.21: *Know that the standard pit toilet must have a minimum of 6 m*

A half of households reported know that pit toilet must be of 6 meters (50.2%) while households not know that pit toilet must be of 6 meters represented 49.8% of cases (Table 3.13). Bugesera district showed the highest proportion of households know that pit toilet must be of 6 meters with 50.7% of cases as compared to Ruhango district (50.0%), but the difference was not significant (p=0.893).

Regarding gender, male respondents belonged to households that showed the highest proportion know that pit toilet must be of 6 meters with 55.5% of cases as compared to households with female respondents (47.5%), but the difference was not significant (p=0.095). Concerning age group, respondents aged 60 years and above belonged to households that showed the highest proportion know that pit toilet must be of 6 meters with 57.9% of cases as compared to households with respondents between 40 and 59 years (50.7%), but the difference was not significant (p=0.051).

Looking at religion, Pentecost respondents belonged to households that showed the highest proportion know that pit toilet must be of 6 meters with 53.9% of cases as compared to households with Adventist respondents (53.0%), but the difference was not significant (p=0.877). Comparing the distribution by marital status, married respondents belonged to households that showed the highest proportion know that pit toilet must be of 6 meters with 57.1% of cases as compared to households with widowed respondents (46.7%), and the difference was statistically significant (p=0.006).

Regarding literacy, respondents who are able to read and write belonged to households that showed the highest proportion know that pit toilet must be of 6 meters with 51.6% of cases as compared to households with respondents who are not able to read or write (47.7%), but the difference was not significant (p=0.407). Concerning education level, respondents with nursery level belonged to households that showed the highest proportion know that pit toilet must be

of 6 meters with 54.0% of cases as compared to households with respondents with primary education (50.0%), but the difference was not significant (p=0.154).

Table 3.13: *(B16) Distribution of households know that pit toilet must be of 6 meters*

	Know that pit toilet must be of 6 meters				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	163	50.0	163	50.0	326	0.893
Bugesera	77	50.7	75	49.3	152	
Total	240	50.2	238	49.8	478	
Gender						
Male	91	55.5	73	44.5	164	0.095
Female	149	47.5	165	52.5	314	
Total	240	50.2	238	49.8	478	
Age group						
Less 40	58	42.6	78	57.4	136	0.051
40 to 59	112	50.7	109	49.3	221	
60 and above	70	57.9	51	42.1	121	
Total	240	50.2	238	49.8	478	
Religion						
Catholic	106	48.6	112	51.4	218	0.877
Pentecost	48	53.9	41	46.1	89	
Anglican	27	48.2	29	51.8	56	
Adventist	44	53.0	39	47.0	83	
Other religion	15	46.9	17	53.1	32	
Total	240	50.2	238	49.8	478	
Marital status						
Married	140	57.1	105	42.9	245	0.006
Cohabiting	37	46.2	43	53.8	80	
Single	7	25.0	21	75.0	28	
Widowed	43	46.7	49	53.3	92	
Divorced or separated	13	39.4	20	60.6	33	
Total	240	50.2	238	49.8	478	
Literacy						
Able to read and write	157	51.6	147	48.4	304	0.407
Not able to read or write	83	47.7	91	52.3	174	
Total	240	50.2	238	49.8	478	
Education						
No education	77	44.5	96	55.5	173	0.154
Nursery	143	54.0	122	46.0	265	
Primary	20	50.0	20	50.0	40	
Total	240	50.2	238	49.8	478	

14. Reasons for not digging standard pit toilet of 6 meters

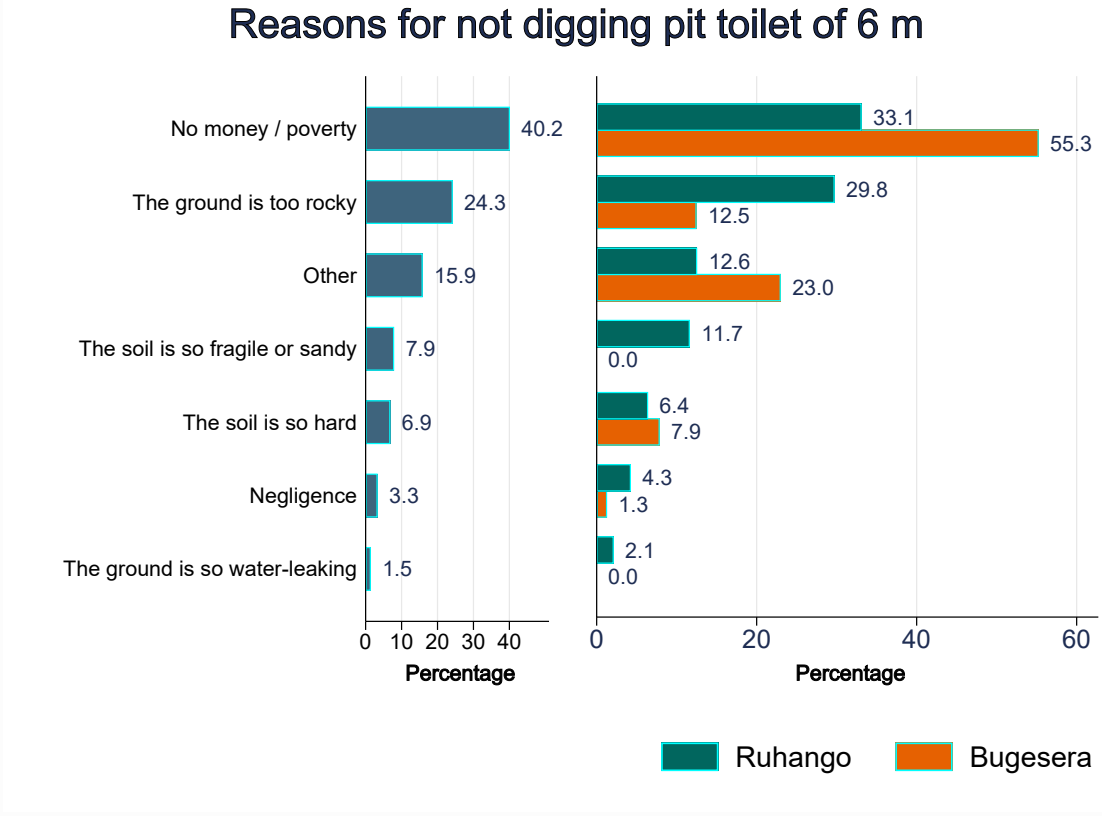


Figure 3.22: *Reasons for not digging standard pit toilet of 6 m*

Most households reported that the reason for not digging a pit toilet of 6 meters was no money/poverty in 40.2% of cases. Other Reasons for not digging a pit toilet of 6 meters included the ground being too rocky (24.3%), (15.9%), the soil being fragile or sandy (7.9%), and the soil being so hard (6.9%) as shown in Table 3.14.

Table 3.14: *(B17) Reasons for not digging standard pit toilet of 6 meters*

	Reasons for not digging pit toilet of 6 meters							Total	p-value
	The soil is so fragile or sandy	The ground is so water-leaking	The soil is so hard	The ground is too rocky	Negligence	No money / poverty	Other		
District									
Ruhango	11.7	2.1	6.4	29.8	4.3	33.1	12.6	326	0.000
Bugesera	0.0	0.0	7.9	12.5	1.3	55.3	23.0	152	
Total	7.9	1.5	6.9	24.3	3.3	40.2	15.9	478	
Gender									
Male	9.1	3.7	8.5	26.2	4.3	32.9	15.2	164	0.030
Female	7.3	0.3	6.1	23.2	2.9	43.9	16.2	314	
Total	7.9	1.5	6.9	24.3	3.3	40.2	15.9	478	
Age group									
Less 40	7.4	0.7	5.1	23.5	2.9	32.4	27.9	136	0.001
40-59	6.8	0.9	8.1	26.2	5.0	41.6	11.3	221	
60 and above	10.7	3.3	6.6	21.5	0.8	46.3	10.7	121	
Total	7.9	1.5	6.9	24.3	3.3	40.2	15.9	478	
Religion									
Catholic church	10.6	1.4	6.9	25.7	3.2	37.2	15.1	218	0.000
Pentecost churches	13.5	0.0	7.9	29.2	3.4	28.1	18.0	89	
Anglican church	1.8	0.0	7.1	17.9	0.0	62.5	10.7	56	
Adventist church	0.0	4.8	6.0	27.7	2.4	39.8	19.3	83	
Other	6.2	0.0	6.2	3.1	12.5	56.2	15.6	32	
Total	7.9	1.5	6.9	24.3	3.3	40.2	15.9	478	
Marital status									
Married	10.2	1.6	6.5	29.8	4.9	34.7	12.2	245	0.016
Cohabiting	2.5	2.5	8.8	22.5	2.5	37.5	23.8	80	
Single	7.1	0.0	0.0	14.3	3.6	42.9	32.1	28	
Widowed	7.6	1.1	8.7	19.6	1.1	51.1	10.9	92	
Divorced/ separated	6.1	0.0	6.1	9.1	0.0	54.5	24.2	33	
Total	7.9	1.5	6.9	24.3	3.3	40.2	15.9	478	
Able to read and write									
Yes	8.9	2.3	6.2	26.0	3.6	35.2	17.8	304	0.034
No	6.3	0.0	8.0	21.3	2.9	48.9	12.6	174	
Total	7.9	1.5	6.9	24.3	3.3	40.2	15.9	478	
Education									
No education	5.8	0.0	8.1	19.7	2.9	50.3	13.3	173	0.001
Primary	10.2	2.3	5.3	27.9	3.0	36.2	15.1	265	
Secondary/ university	2.5	2.5	12.5	20.0	7.5	22.5	32.5	40	
Total	7.9	1.5	6.9	24.3	3.3	40.2	15.9	478	

15. Place children defecate before age to toilet

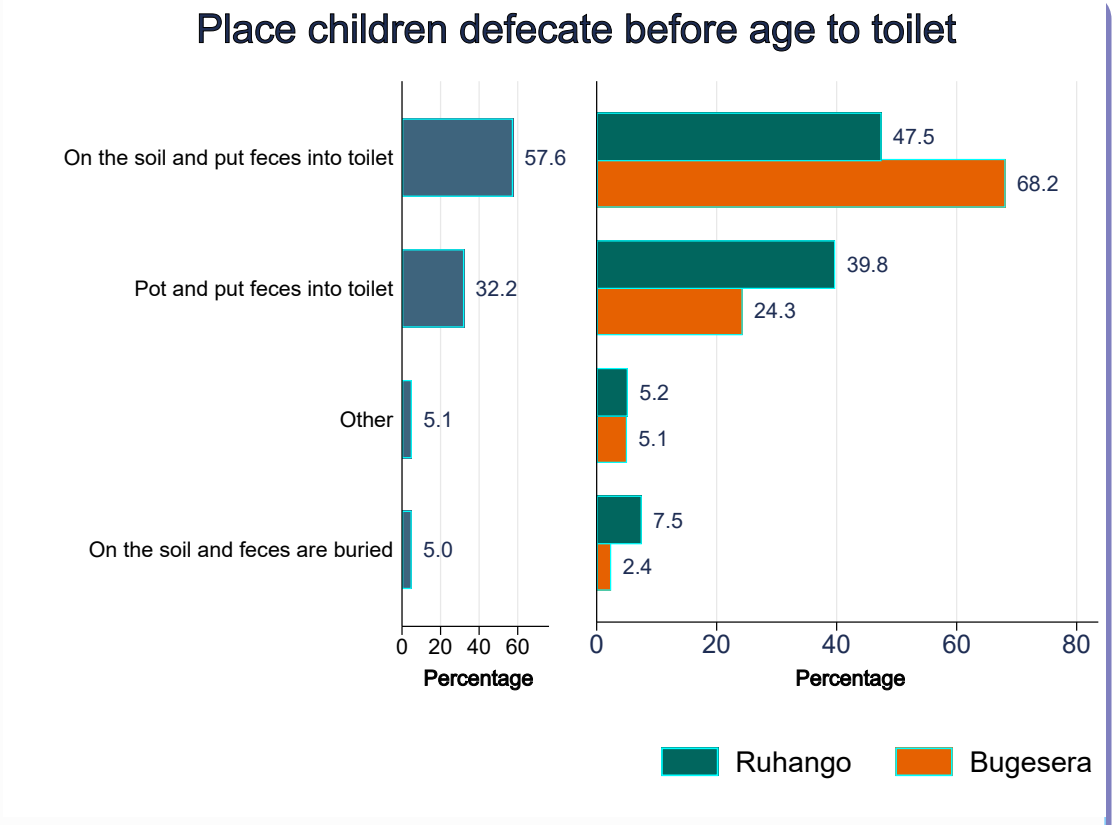


Figure 3.23: *Place children defecate before age to toilet*

Most households reported that Place children defecate before age to toilet were on the soil and put feces into toilet in 57.6% of cases. Other Place children defecate before age to toilet included pot and put feces into toilet (32.2%), other (5.1%) and on the soil and feces are buried (5.0%) as shown in Table 3.15.

Table 3.15: *(B19) Place cildren defecate before age to toilet*

	Place children defecate before age to toilet				Total	p-value
	Pot and we put feces into toilet	On the soil and we put feces into toilet	On the soil and feces are buried	Other		
District						
Ruhango	39.8	47.5	7.5	5.2	518	0.000
Bugesera	24.3	68.2	2.4	5.1	493	
Total	32.2	57.6	5.0	5.1	1,011	
Gender						
Male	36.4	53.4	3.5	6.7	371	0.014
Female	29.8	60.0	5.9	4.2	640	
Total	32.2	57.6	5.0	5.1	1,011	
Age group						
Less 40	37.2	54.5	4.3	4.0	323	0.000
40-59	31.5	60.7	5.1	2.6	428	
60 and above	27.3	56.2	5.8	10.8	260	
Total	32.2	57.6	5.0	5.1	1,011	
Religion						
Catholic church	31.6	55.4	5.7	7.3	437	0.015
Pentecost churches	29.9	64.0	3.6	2.5	197	
Anglican church	30.4	57.8	9.8	2.0	102	
Adventist church	39.7	53.6	2.6	4.1	194	
Other	25.9	63.0	4.9	6.2	81	
Total	32.2	57.6	5.0	5.1	1,011	
Marital status						
Married	34.8	58.3	3.4	3.4	528	0.000
Cohabiting	34.4	57.2	5.6	2.8	180	
Single	34.4	46.9	4.7	14.1	64	
Widowed	26.4	55.1	9.6	9.0	178	
Divorced/ separated	18.0	70.5	4.9	6.6	61	
Total	32.2	57.6	5.0	5.1	1,011	
Able to read and write						
Yes	38.3	52.9	4.2	4.7	664	0.000
No	20.7	66.6	6.6	6.1	347	
Total	32.2	57.6	5.0	5.1	1,011	
Education						
No education	20.6	67.0	6.4	6.1	345	0.000
Primary	33.9	56.7	4.8	4.5	557	
Secondary/ university	60.6	32.1	1.8	5.5	109	
Total	32.2	57.6	5.0	5.1	1,011	

16. Household always have water and soap for hand washing

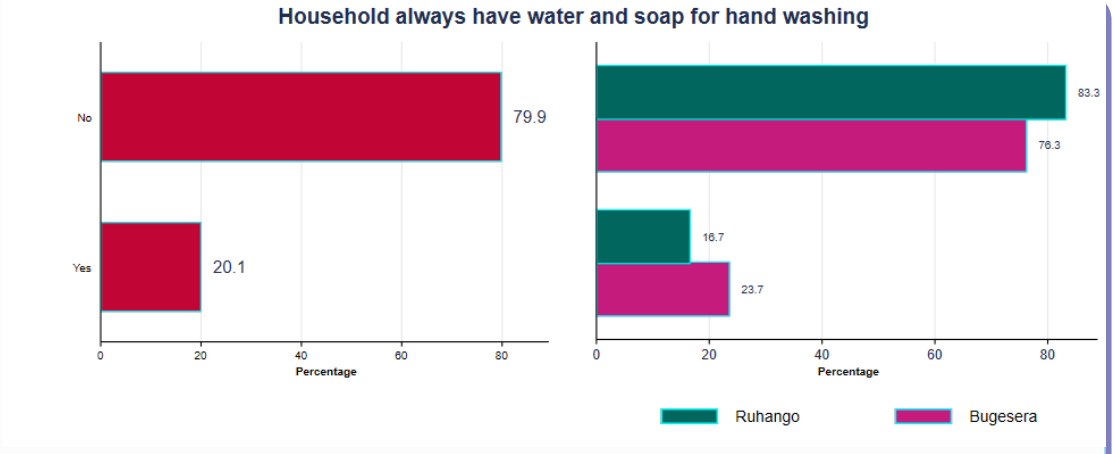


Figure 3.24: *Household always have water and soap for hand washing*

Table 3.16 shows the biggest proportion of households reported not having water and soap for hand washing (79.9%) while households having water and soap for hand washing represented 20.1% of cases. Ruhango district showed the highest proportion of households not having water and soap for hand washing with 83.3% of cases as compared to Bugesera district (76.3%), and the difference was statistically significant (p=0.007).

Regarding gender, male respondents belonged to households that showed the highest proportion not having water and soap for hand washing with 80.1% of cases as compared to households with female respondents (79.8%), but the difference was not significant (p=0.934). Concerning age group, respondents aged 60 years and above belonged to households that showed the highest proportion not having water and soap for hand washing with 83.7% of cases as compared to households with respondents between 40 and 59 years (81.1%), and the difference was statistically significant (p=0.036).

Looking at religion, Anglican respondents belonged to households that showed the highest proportion not having water and soap for hand washing with 82.3% of cases as compared to households with Adventist respondents (81.7%), but the difference was not significant (p=0.288). Comparing the distribution by marital status, divorced or separated respondents belonged to households that showed the highest proportion not having water and soap for hand washing with 94.3% of cases as compared to households with widowed respondents (85.0%), and the difference was statistically significant (p=0.019).

Regarding literacy, respondents who are not able to read or write belonged to households that showed the highest proportion not having water and soap for hand washing with 87.3% of cases as compared to households with respondents who are able to read and write (76.3%), and the difference was highly statistically significant (p=0.000). Concerning education level, respondents with no education belonged to households that showed the highest proportion not

having water and soap for hand washing with 87.4% of cases as compared to households with respondents with nursery level (79.3%), and the difference was highly statistically significant (p=0.000).

Table 3.16: *(B20) Distribution of households have water and soap for hand washing*

	Have water and soap for hand washing				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	83	16.7	414	83.3	497	0.007
Bugesera	111	23.7	358	76.3	469	
Total	194	20.1	772	79.9	966	
Gender						
Male	71	19.9	285	80.1	356	0.934
Female	123	20.2	487	79.8	610	
Total	194	20.1	772	79.9	966	
Age group						
Less 40	76	24.7	232	75.3	308	0.036
40 to 59	78	18.9	334	81.1	412	
60 and above	40	16.3	206	83.7	246	
Total	194	20.1	772	79.9	966	
Religion						
Catholic	80	19.1	339	80.9	419	0.288
Pentecost	41	21.7	148	78.3	189	
Anglican	17	17.7	79	82.3	96	
Adventist	34	18.3	152	81.7	186	
Other religion	22	28.9	54	71.1	76	
Total	194	20.1	772	79.9	966	
Marital status						
Married	115	22.3	401	77.7	516	0.019
Cohabiting	38	22.4	132	77.6	170	
Single	13	21.7	47	78.3	60	
Widowed	25	15.0	142	85.0	167	
Divorced or separated	3	5.7	50	94.3	53	
Total	194	20.1	772	79.9	966	
Literacy						
Able to read and write	154	23.7	496	76.3	650	0.000
Not able to read or write	40	12.7	276	87.3	316	
Total	194	20.1	772	79.9	966	
Education						
No education	40	12.6	277	87.4	317	0.000
Nursery	112	20.7	429	79.3	541	
Primary	42	38.9	66	61.1	108	
Total	194	20.1	772	79.9	966	

17. Flies circulating in household

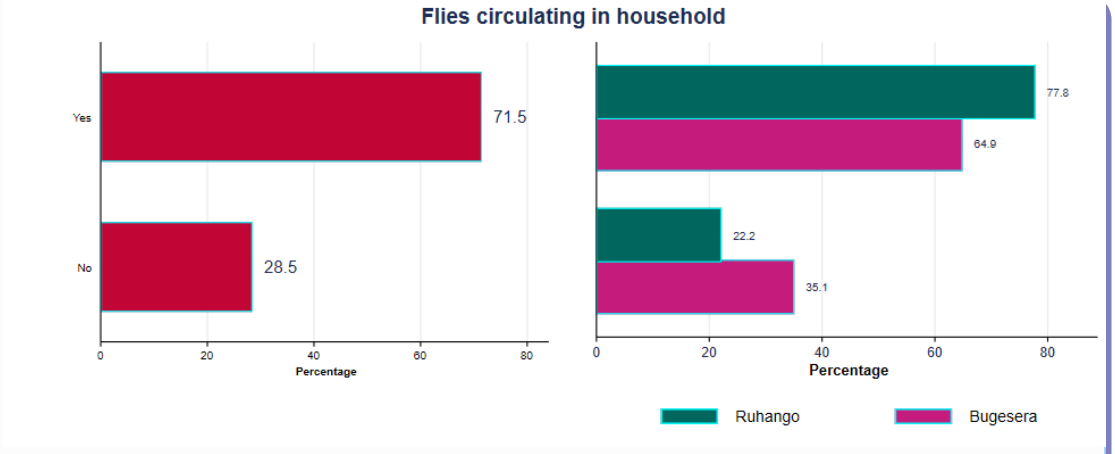


Figure 3.25: *Flies circulating in household*

Most households reported having flies circulating in household (71.5%) while those not having flies circulating in household represented 28.5% of cases (Table 3.17). Ruhango district showed the highest proportion of households having flies circulating in household with 77.8% of cases as compared to Bugesera district (64.9%), and the difference was highly statistically significant (p=0.000).

Regarding gender, male respondents belonged to households that showed the highest proportion having flies circulating in household with 72.2% of cases as compared to households with female respondents (71.1%), but the difference was not significant (p=0.698). Concerning age group, respondents between 40 and 59 years belonged to households that showed the highest proportion having flies circulating in household with 75.7% of cases as compared to households with respondents aged 60 years and above (70.4%), and the difference was statistically significant (p=0.027).

Looking at religion, Adventist respondents belonged to households that showed the highest proportion having flies circulating in household with 75.8% of cases as compared to households with Catholic respondents (71.4%), but the difference was not significant (p=0.504). Comparing the distribution by marital status, divorced or separated respondents belonged to households that showed the highest proportion having flies circulating in household with 80.3% of cases as compared to households with widowed respondents (73.6%), but the difference was not significant (p=0.380).

Regarding literacy, respondents who are able to read and write belonged to households that showed the highest proportion having flies circulating in household with 71.8% of cases as compared to households with respondents who are not able to read or write (70.9%), but the difference was not significant (p=0.752). Concerning education level, respondents with nursery level belonged to households that showed the highest proportion having flies circulating in

household with 74.7% of cases as compared to households with respondents with no education (70.4%), and the difference was statistically significant (p=0.003).

Table 3.17: *(B21) Distribution of households have flies circulating in household*

	Have flies circulating in household				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	403	77.8	115	22.2	518	0.000
Bugesera	320	64.9	173	35.1	493	
Total	723	71.5	288	28.5	1,011	
Gender						
Male	268	72.2	103	27.8	371	0.698
Female	455	71.1	185	28.9	640	
Total	723	71.5	288	28.5	1,011	
Age group						
Less 40	216	66.9	107	33.1	323	0.027
40 to 59	324	75.7	104	24.3	428	
60 and above	183	70.4	77	29.6	260	
Total	723	71.5	288	28.5	1,011	
Religion						
Catholic	312	71.4	125	28.6	437	0.504
Pentecost	139	70.6	58	29.4	197	
Anglican	72	70.6	30	29.4	102	
Adventist	147	75.8	47	24.2	194	
Other religion	53	65.4	28	34.6	81	
Total	723	71.5	288	28.5	1,011	
Marital status						
Married	376	71.2	152	28.8	528	0.380
Cohabiting	125	69.4	55	30.6	180	
Single	42	65.6	22	34.4	64	
Widowed	131	73.6	47	26.4	178	
Divorced or separated	49	80.3	12	19.7	61	
Total	723	71.5	288	28.5	1,011	
Literacy						
Able to read and write	477	71.8	187	28.2	664	0.752
Not able to read or write	246	70.9	101	29.1	347	
Total	723	71.5	288	28.5	1,011	
Education						
No education	243	70.4	102	29.6	345	0.003
Nursery	416	74.7	141	25.3	557	
Primary	64	58.7	45	41.3	109	
Total	723	71.5	288	28.5	1,011	

18. Cockroaches circulating in household

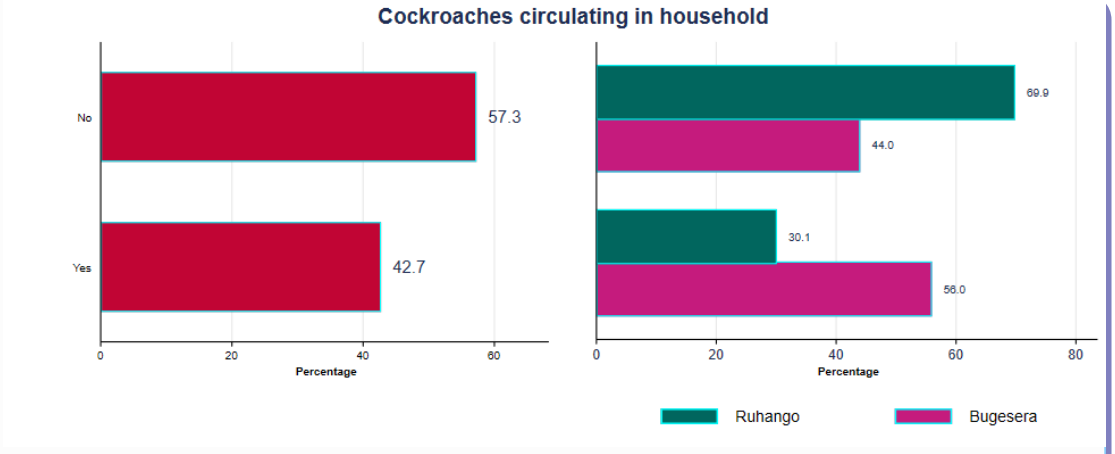


Figure 3.26: *Cockroaches circulating in household*

The majority of households reported not having cockroaches circulating in household (57.3%) while households having cockroaches circulating in household represented 42.7% of cases (Table 3.18). Ruhango district showed the highest proportion of households not having cockroaches circulating in household with 69.9% of cases as compared to Bugesera district (44.0%), and the difference was highly statistically significant (p=0.000).

Regarding gender, female respondents belonged to households that showed the highest proportion not having cockroaches circulating in household with 58.1% of cases as compared to households with male respondents (55.8%), but the difference was not significant (p=0.470). Concerning age group, respondents aged 60 years and above belonged to households that showed the highest proportion not having cockroaches circulating in household with 61.5% of cases as compared to households with respondents between 40 and 59 years (56.1%), but the difference was not significant (p=0.267).

Looking at religion, Catholic respondents belonged to households that showed the highest proportion not having cockroaches circulating in household with 60.4% of cases as compared to households with Pentecost respondents (60.4%), but the difference was not significant (p=0.089). Comparing the distribution by marital status, widowed respondents belonged to households that showed the highest proportion not having cockroaches circulating in household with 61.2% of cases as compared to households with divorced or separated respondents (59.0%), but the difference was not significant (p=0.193).

Regarding literacy, respondents who are not able to read or write belonged to households that showed the highest proportion not having cockroaches circulating in household with 59.4% of cases as compared to households with respondents who are able to read and write (56.2%), but the difference was not significant (p=0.330). Concerning education level, respondents with no education belonged to households that showed the highest proportion not having cockroaches

circulating in household with 58.3% of cases as compared to households with respondents with nursery level (57.8%), but the difference was not significant (p=0.416).

Table 3.18: *(B22) Distribution of households have cockroaches circulating in household*

	Have cockroaches circulating in household				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	156	30.1	362	69.9	518	0.000
Bugesera	276	56.0	217	44.0	493	
Total	432	42.7	579	57.3	1,011	
Gender						
Male	164	44.2	207	55.8	371	0.470
Female	268	41.9	372	58.1	640	
Total	432	42.7	579	57.3	1,011	
Age group						
Less 40	144	44.6	179	55.4	323	0.267
40 to 59	188	43.9	240	56.1	428	
60 and above	100	38.5	160	61.5	260	
Total	432	42.7	579	57.3	1,011	
Religion						
Catholic	173	39.6	264	60.4	437	0.089
Pentecost	78	39.6	119	60.4	197	
Anglican	51	50.0	51	50.0	102	
Adventist	88	45.4	106	54.6	194	
Other religion	42	51.9	39	48.1	81	
Total	432	42.7	579	57.3	1,011	
Marital status						
Married	219	41.5	309	58.5	528	0.193
Cohabiting	91	50.6	89	49.4	180	
Single	28	43.8	36	56.2	64	
Widowed	69	38.8	109	61.2	178	
Divorced or separated	25	41.0	36	59.0	61	
Total	432	42.7	579	57.3	1,011	
Literacy						
Able to read and write	291	43.8	373	56.2	664	0.330
Not able to read or write	141	40.6	206	59.4	347	
Total	432	42.7	579	57.3	1,011	
Education						
No education	144	41.7	201	58.3	345	0.416
Nursery	235	42.2	322	57.8	557	
Primary	53	48.6	56	51.4	109	
Total	432	42.7	579	57.3	1,011	

19. Household ever-used human excreta as fertilizer

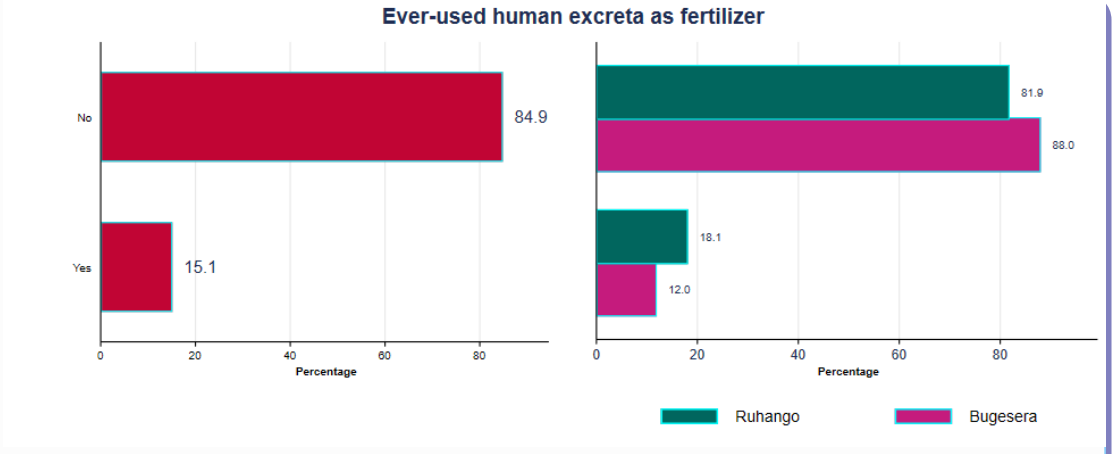


Figure 3.27: *Household ever-used human excreta as fertilizer*

As shown in Table 3.19, most households reported not use human excreta as fertilizer (84.9%) while households use human excreta as fertilizer represented 15.1% of cases. Bugesera district showed the biggest proportion of households not use human excreta as fertilizer with 88.0% of cases as compared to Ruhango district (81.9%), and the difference was statistically significant (p=0.006).

Regarding gender, female respondents belonged to households that showed the highest proportion not use human excreta as fertilizer with 86.4% of cases as compared to households with male respondents (82.2%), but the difference was not significant (p=0.073). Concerning age group, respondents less than 40 years belonged to households that showed the highest proportion not use human excreta as fertilizer with 89.5% of cases as compared to households with respondents aged 60 years and above (84.6%), and the difference was statistically significant (p=0.011).

Looking at religion, Other religion respondents belonged to households that showed the highest proportion not use human excreta as fertilizer with 96.3% of cases as compared to households with Pentecost respondents (85.8%), and the difference was statistically significant (p=0.002). Comparing the distribution by marital status, widowed respondents belonged to households that showed the highest proportion not use human excreta as fertilizer with 88.8% of cases as compared to households with cohabiting respondents (86.7%), but the difference was not significant (p=0.335).

Regarding literacy, respondents who are not able to read or write belonged to households that showed the highest proportion not use human excreta as fertilizer with 86.5% of cases as compared to households with respondents who are able to read and write (84.0%), but the difference was not significant (p=0.308). Concerning education level, respondents with primary education belonged to households that showed the highest proportion not use human

excreta as fertilizer with 89.9% of cases as compared to households with respondents with no education (86.4%), but the difference was not significant (p=0.112).

Table 3.19: *(B23) Distribution of households use human excreta as fertilizer*

	Use human excreta as fertilizer				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	94	18.1	424	81.9	518	0.006
Bugesera	59	12.0	434	88.0	493	
Total	153	15.1	858	84.9	1,011	
Gender						
Male	66	17.8	305	82.2	371	0.073
Female	87	13.6	553	86.4	640	
Total	153	15.1	858	84.9	1,011	
Age group						
Less 40	34	10.5	289	89.5	323	0.011
40 to 59	79	18.5	349	81.5	428	
60 and above	40	15.4	220	84.6	260	
Total	153	15.1	858	84.9	1,011	
Religion						
Catholic	67	15.3	370	84.7	437	0.002
Pentecost	28	14.2	169	85.8	197	
Anglican	26	25.5	76	74.5	102	
Adventist	29	14.9	165	85.1	194	
Other religion	3	3.7	78	96.3	81	
Total	153	15.1	858	84.9	1,011	
Marital status						
Married	88	16.7	440	83.3	528	0.335
Cohabiting	24	13.3	156	86.7	180	
Single	9	14.1	55	85.9	64	
Widowed	20	11.2	158	88.8	178	
Divorced or separated	12	19.7	49	80.3	61	
Total	153	15.1	858	84.9	1,011	
Literacy						
Able to read and write	106	16.0	558	84.0	664	0.308
Not able to read or write	47	13.5	300	86.5	347	
Total	153	15.1	858	84.9	1,011	
Education						
No education	47	13.6	298	86.4	345	0.112
Nursery	95	17.1	462	82.9	557	
Primary	11	10.1	98	89.9	109	
Total	153	15.1	858	84.9	1,011	

20. Types of water bodies close to households

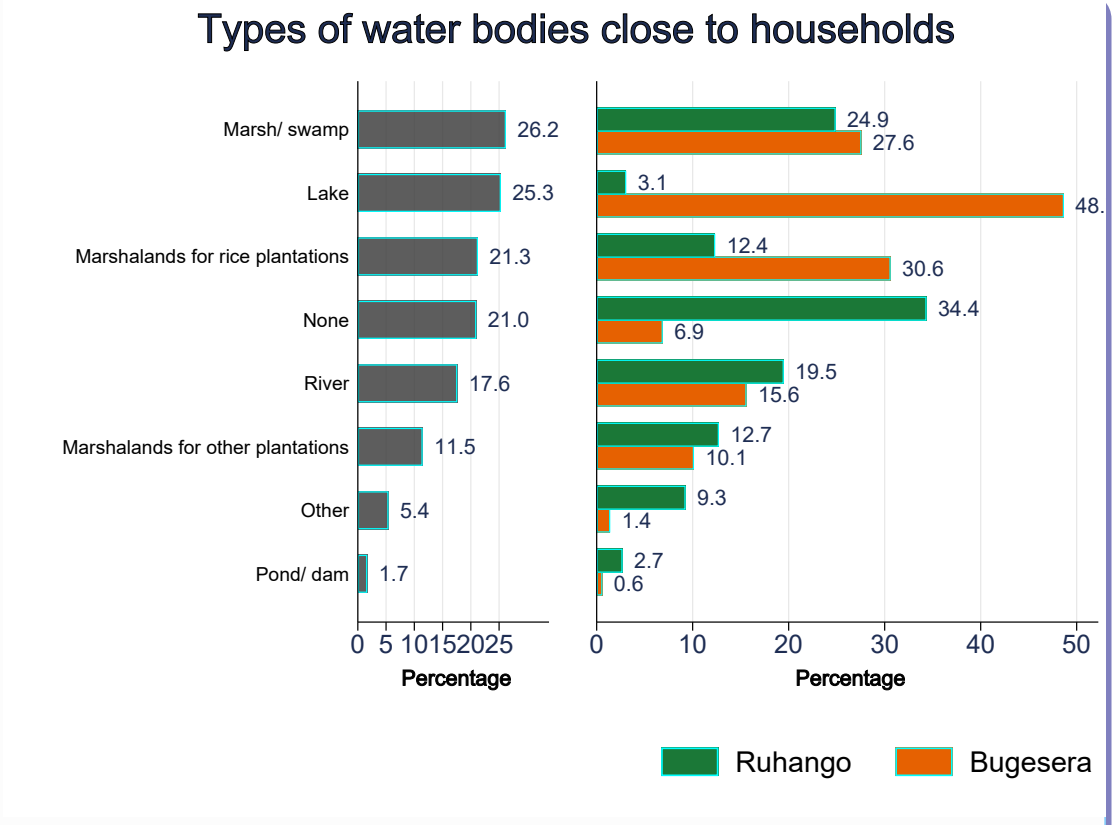


Figure 3.28: *Types of water bodies close to households*

Most households reported that Types of water bodies close to households were marsh/ swamp in 26.2% of cases. Other Types of water bodies close to households included lake (25.3%), marshalands for rice plantations (21.3%), none (21.0%) and river (17.6%) as shown in Table 3.20.

Table 3.20: *(B24) Types of water bodies close to households*

	Types of water bodies close to households								
	Marsh/ swamp	**Lake**	**Marsh-lands for rice**	**None**	**River**	**Marsh-lands for other**	**Other**	**Pond/ dam**	**Total**
District									
Ruhango	24.9	3.1	12.4	34.4	19.5	12.7	9.3	2.7	14.9
Bugesera	27.6	48.7	30.6	6.9	15.6	10.1	1.4	0.6	17.7
Total	26.2	25.3	21.3	21.0	17.6	11.5	5.4	1.7	16.2
Gender									
Male	27.2	24.8	19.4	22.6	18.3	11.1	4.6	1.9	16.2
Female	25.6	25.6	22.3	20.0	17.2	11.7	5.9	1.6	16.2
Total	26.2	25.3	21.3	21.0	17.6	11.5	5.4	1.7	16.2
Age group									
Less 40	23.8	31.9	22.6	21.1	13.6	9.6	5.6	0.6	16.1
40-59	26.6	22.9	22.4	18.7	18.5	11.9	5.1	2.6	16.1
60 and above	28.5	21.2	17.7	24.6	21.2	13.1	5.8	1.5	16.7
Total	26.2	25.3	21.3	21.0	17.6	11.5	5.4	1.7	16.2
Religion									
Catholic church	24.5	22.0	14.2	25.6	16.0	10.3	8.5	0.7	15.2
Pentecost churches	25.4	32.5	26.4	20.3	15.2	10.7	6.1	0.5	17.1
Anglican church	19.6	41.2	20.6	10.8	19.6	6.9	2.0	4.9	15.7
Adventist church	27.8	19.1	29.4	16.0	19.6	17.5	1.0	3.6	16.8
Other	42.0	21.0	28.4	22.2	24.7	11.1	2.5	1.2	19.1
Total	26.2	25.3	21.3	21.0	17.6	11.5	5.4	1.7	16.2
Marital status									
Married	26.5	24.2	22.3	22.0	19.5	10.4	4.7	2.1	16.5
Cohabiting	26.1	35.0	20.6	16.7	15.6	14.4	3.3	2.2	16.7
Single	14.1	26.6	14.1	25.0	14.1	10.9	10.9	0.0	14.5
Widowed	27.0	20.2	21.9	21.3	17.4	12.9	6.2	1.1	16.0
Divorced/ separated	34.4	19.7	19.7	19.7	11.5	8.2	9.8	0.0	15.4
Total	26.2	25.3	21.3	21.0	17.6	11.5	5.4	1.7	16.2
Able to read and write									
Yes	24.5	23.3	20.6	22.6	18.2	11.4	5.4	1.8	16.0
No	29.4	29.1	22.5	17.9	16.4	11.5	5.5	1.4	16.7
Total	26.2	25.3	21.3	21.0	17.6	11.5	5.4	1.7	16.2
Education									
No education	29.9	29.9	22.0	16.8	16.5	10.4	4.9	1.4	16.5
Primary	25.1	19.6	22.1	22.8	19.4	12.7	6.1	1.4	16.2
Secondary/ university	20.2	40.4	14.7	24.8	11.9	8.3	3.7	3.7	15.9
Total	26.2	25.3	21.3	21.0	17.6	11.5	5.4	1.7	16.2

21. Time (in minutes) it takes to arrive at the closest water body

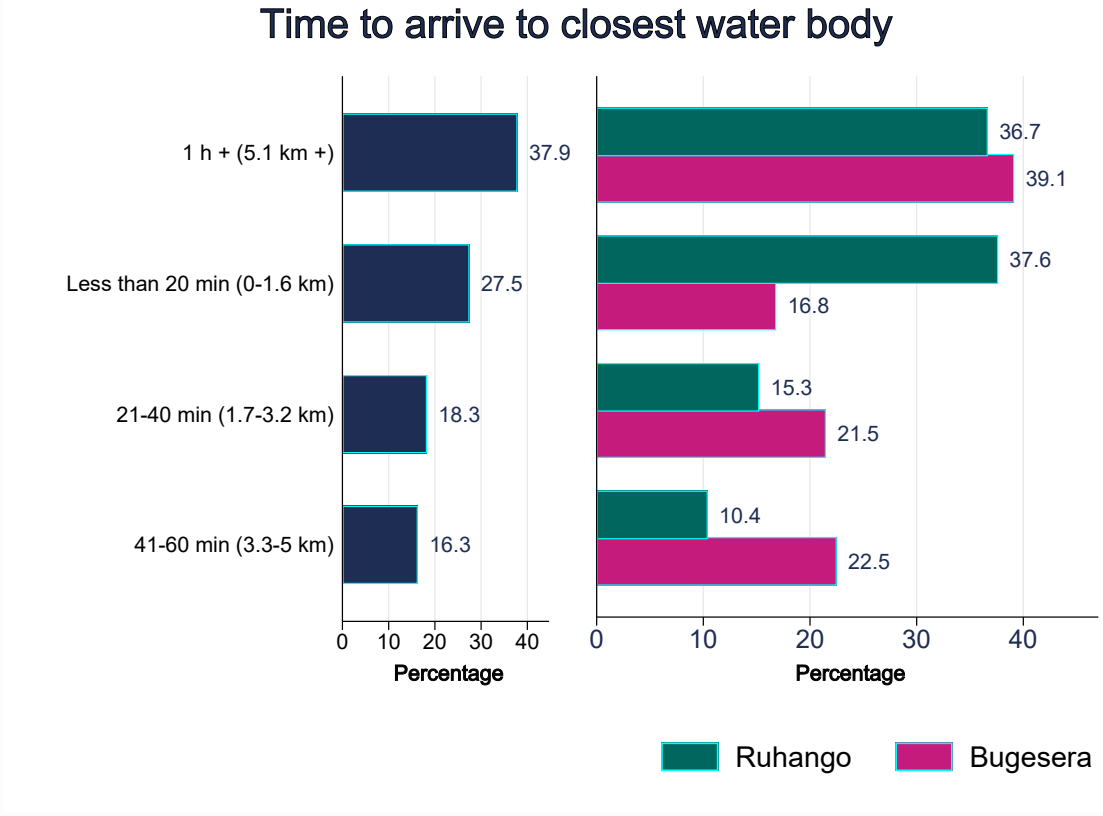


Figure 3.29: *Time (in minutes) it takes to arrive at the closest water body*

Most households reported that the time to arrive at the closest water body was 1h + (5.1 km +) in 37.9% of cases. Other times to arrive at the closest water body they were less than 20 min (0-1.6 km) (27.5%), 21-40 min (1.7-3.2 km) (18.3%) and 41-60 min (3.3-5 km) (16.3%) as shown in Table 3.21.

Table 3.21: *(B25) Time (in minutes) it takes to arrive to the closest water body*

	Time to arrive to the closest water body					
	Less than 20 min (0-1.6 km)	21-40 min (1.7-3.2 km)	41-60 min (3.3-5 km)	1 h (5.1 km)	Total	p-value
District						
Ruhango	37.6	15.3	10.4	36.7	518	0.000
Bugesera	16.8	21.5	22.5	39.1	493	
Total	27.5	18.3	16.3	37.9	1,011	
Gender						
Male	25.1	20.5	14.8	39.6	371	0.255
Female	28.9	17.0	17.2	36.9	640	
Total	27.5	18.3	16.3	37.9	1,011	
Age group						
Less 40	26.6	19.2	13.6	40.6	323	0.456
40-59	28.3	18.5	18.7	34.6	428	
60 and above	27.3	16.9	15.8	40.0	260	
Total	27.5	18.3	16.3	37.9	1,011	
Religion						
Catholic church	32.0	17.4	12.8	37.8	437	0.016
Pentecost churches	25.4	17.3	13.2	44.2	197	
Anglican church	24.5	20.6	24.5	30.4	102	
Adventist church	24.7	20.1	20.6	34.5	194	
Other	18.5	18.5	22.2	40.7	81	
Total	27.5	18.3	16.3	37.9	1,011	
Marital status						
Married	28.0	18.4	15.5	38.1	528	0.860
Cohabiting	26.1	17.2	17.8	38.9	180	
Single	26.6	26.6	9.4	37.5	64	
Widowed	28.1	16.3	18.0	37.6	178	
Divorced/ separated	26.2	18.0	21.3	34.4	61	
Total	27.5	18.3	16.3	37.9	1,011	
Able to read and write						
Yes	27.7	18.5	15.7	38.1	664	0.891
No	27.1	17.9	17.6	37.5	347	
Total	27.5	18.3	16.3	37.9	1,011	
Education						
No education	26.7	16.2	19.7	37.4	345	0.043
Primary	29.4	19.9	14.7	35.9	557	
Secondary/ university	20.2	16.5	13.8	49.5	109	
Total	27.5	18.3	16.3	37.9	1,011	

22. Household member ever been absent to work/ school because of intestinal worms related disease

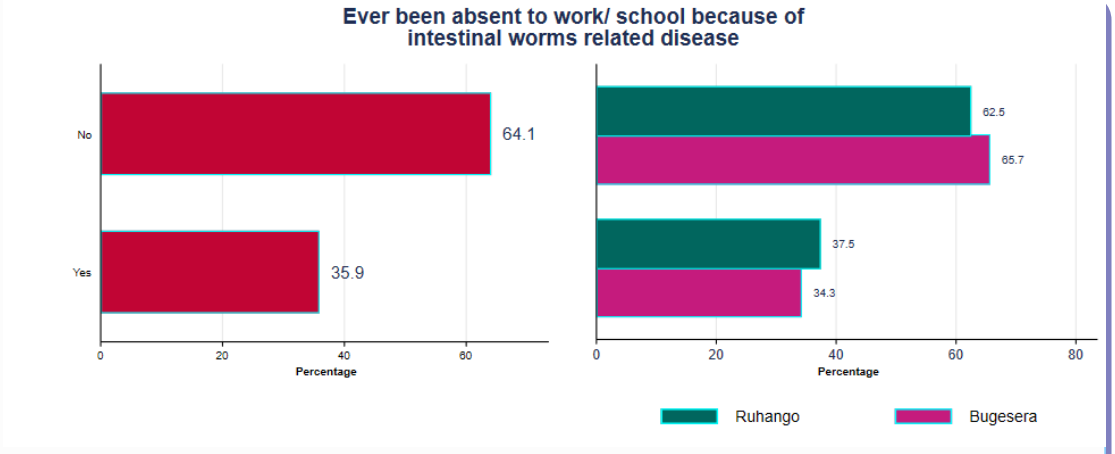


Figure 3.30: *Household member has ever been absent to work/ school because of intestinal worms related disease*

Most households reported not having been absent from work or school because of STH (64.1%), while households having been absent from work or school because of STH represented 35.9% of cases (Table 3.22). Bugesera district showed the highest proportion of households not having been absent from work or school because of STH with 65.7% of cases as compared to Ruhango district (62.5%), but the difference was not significant (p=0.293).

Regarding gender, male respondents belonged to households that showed the highest proportion not having been absent to work or school because of STH with 68.5% of cases as compared to households with female respondents (61.6%), and the difference was statistically significant (p=0.027). Concerning age group, respondents aged 60 years and above belonged to households that showed the highest proportion not having been absent from work or school because of STH with 71.2% of cases as compared to households with respondents less than 40 years (63.2%), and the difference was statistically significant (p=0.017).

Looking at religion, Catholic respondents belonged to households that showed the highest proportion not having been absent from work or school because of STH with 68.2% of cases as compared to households with Adventist respondents (66.5%), and the difference was statistically significant (p=0.032). Comparing the distribution by marital status, widowed respondents belonged to households that showed the highest proportion not having been absent from work or school because of STH with 68.5% of cases as compared to households with cohabiting respondents (64.4%), but the difference was not significant (p=0.724).

Regarding literacy, respondents who are not able to read or write belonged to households that showed the highest proportion not having been absent from work or school because of STH with 65.1% of cases as compared to households with respondents who are able to read

and write (63.6%), but the difference was not significant (p=0.620). Concerning education level, respondents with primary education belonged to households that showed the highest proportion not having been absent from work or school because of STH with 73.4% of cases as compared to households with respondents with no education (64.9%), but the difference was not significant (p=0.063).

Table 3.22: *(B26) Distribution of households have been absent to work or school because of sth*

	Have been absent to work or school because of STH				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	194	37.5	324	62.5	518	0.293
Bugesera	169	34.3	324	65.7	493	
Total	363	35.9	648	64.1	1,011	
Gender						
Male	117	31.5	254	68.5	371	0.027
Female	246	38.4	394	61.6	640	
Total	363	35.9	648	64.1	1,011	
Age group						
Less 40	119	36.8	204	63.2	323	0.017
40 to 59	169	39.5	259	60.5	428	
60 and above	75	28.8	185	71.2	260	
Total	363	35.9	648	64.1	1,011	
Religion						
Catholic	139	31.8	298	68.2	437	0.032
Pentecost	87	44.2	110	55.8	197	
Anglican	39	38.2	63	61.8	102	
Adventist	65	33.5	129	66.5	194	
Other religion	33	40.7	48	59.3	81	
Total	363	35.9	648	64.1	1,011	
Marital status						
Married	197	37.3	331	62.7	528	0.724
Cohabiting	64	35.6	116	64.4	180	
Single	24	37.5	40	62.5	64	
Widowed	56	31.5	122	68.5	178	
Divorced or separated	22	36.1	39	63.9	61	
Total	363	35.9	648	64.1	1,011	
Literacy						
Able to read and write	242	36.4	422	63.6	664	0.620
Not able to read or write	121	34.9	226	65.1	347	
Total	363	35.9	648	64.1	1,011	
Education						
No education	121	35.1	224	64.9	345	0.063
Nursery	213	38.2	344	61.8	557	
Primary	29	26.6	80	73.4	109	
Total	363	35.9	648	64.1	1,011	

23. Ever seen or heard household member passing a worm in stool/ vomiting worm

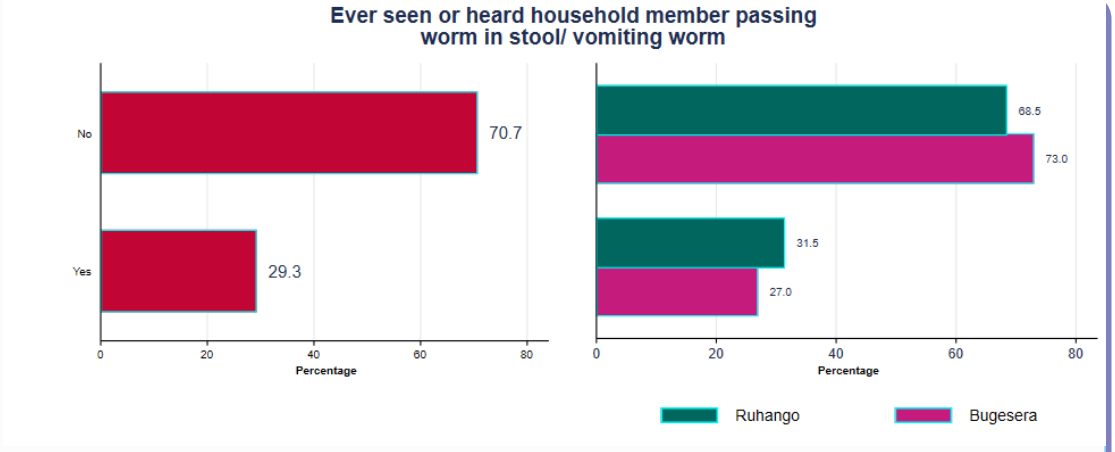


Figure 3.31: *Ever seen or heard household member passing a worm in stool/ vomiting worm*

Table 3.23 shows the biggest proportion of respondents reported never seen or heard household members passing a worm in the stool or vomit worm (70.7%) while 29.3% ever passed a worm in the stool or vomit worm. Bugesera district showed the highest proportion of household members not passing worm in stool or vomit worm with 73.0% of cases as compared to Ruhango district (68.5%), but the difference was not significant (p=0.117).

Regarding gender, male respondents belonged to households that showed the highest proportion not passing worm in stool or vomit worm with 73.9% of cases as compared to households with female respondents (68.9%), but the difference was not significant (p=0.096). Concerning age group, respondents aged 60 years and above belonged to households that showed the highest proportion not pass worm in stool or vomit worm with 80.4% of cases as compared to households with respondents less than 40 years (69.3%), and the difference was highly statistically significant (p=0.000).

Looking at religion, Adventist respondents belonged to households that showed the highest proportion not passing worm in stool or vomit worm with 76.3% of cases as compared to households with Catholic respondents (73.5%), and the difference was statistically significant (p=0.023). Comparing the distribution by marital status, widowed respondents belonged to households that showed the highest proportion not pass worm in stool or vomit worm with 79.2% of cases as compared to households with single respondents (73.4%), but the difference was not significant (p=0.061).

Regarding literacy, respondents who are able to read and write belonged to households that showed the highest proportion not passing worm in stool or vomit worm with 70.9% of cases as compared to households with respondents who are not able to read or write (70.3%), but the difference was not significant (p=0.838). Concerning education level, respondents with no

education belonged to households that showed the highest proportion not passing worm in stool or vomit worm with 72.2% of cases as compared to households with respondents with nursery level (70.2%), but the difference was not significant (p=0.734).

Table 3.23: *(B27) Distribution of households member who ever pass worm in stool or vomit worm*

	Pass worm in stool or vomit worm				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	163	31.5	355	68.5	518	0.117
Bugesera	133	27.0	360	73.0	493	
Total	296	29.3	715	70.7	1,011	
Gender						
Male	97	26.1	274	73.9	371	0.096
Female	199	31.1	441	68.9	640	
Total	296	29.3	715	70.7	1,011	
Age group						
Less 40	99	30.7	224	69.3	323	0.000
40 to 59	146	34.1	282	65.9	428	
60 and above	51	19.6	209	80.4	260	
Total	296	29.3	715	70.7	1,011	
Religion						
Catholic	116	26.5	321	73.5	437	0.023
Pentecost	68	34.5	129	65.5	197	
Anglican	38	37.3	64	62.7	102	
Adventist	46	23.7	148	76.3	194	
Other religion	28	34.6	53	65.4	81	
Total	296	29.3	715	70.7	1,011	
Marital status						
Married	171	32.4	357	67.6	528	0.061
Cohabiting	54	30.0	126	70.0	180	
Single	17	26.6	47	73.4	64	
Widowed	37	20.8	141	79.2	178	
Divorced or separated	17	27.9	44	72.1	61	
Total	296	29.3	715	70.7	1,011	
Literacy						
Able to read and write	193	29.1	471	70.9	664	0.838
Not able to read or write	103	29.7	244	70.3	347	
Total	296	29.3	715	70.7	1,011	
Education						
No education	96	27.8	249	72.2	345	0.734
Nursery	166	29.8	391	70.2	557	
Primary	34	31.2	75	68.8	109	
Total	296	29.3	715	70.7	1,011	

3.3. WASH at workplace

1. Description of the workplace

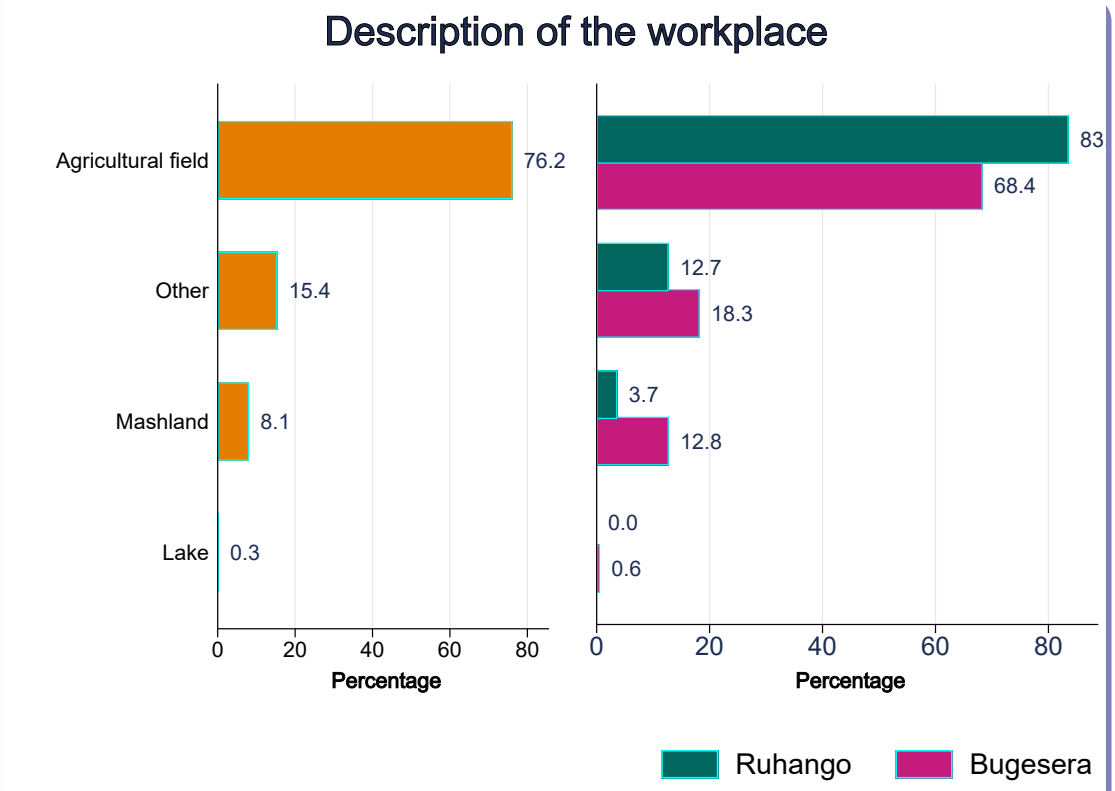


Figure 3.32: *Description of the workplace*

Most participants reported working in agricultural fields in 76.2% of cases. Other Descriptions of the workplace included other (15.4%), marshland (8.1%) and lake (0.3%) as shown in Table A3.

Table 3.24: *(B29) Description of the workplace*

	Description of the workplace					
	Agricultural field	Mashland	Lake	Other	Total	p-value
District						
Ruhango	83.6	3.7	0.0	12.7	518	0.000
Bugesera	68.4	12.8	0.6	18.3	493	
Total	76.2	8.1	0.3	15.4	1,011	
Gender						
Male	72.8	8.4	0.8	18.1	371	0.033
Female	78.1	8.0	0.0	13.9	640	
Total	76.2	8.1	0.3	15.4	1,011	
Age group						
Less 40	74.3	8.7	0.6	16.4	323	0.022
40-59	79.0	9.3	0.0	11.7	428	
60 and above	73.8	5.4	0.4	20.4	260	
Total	76.2	8.1	0.3	15.4	1,011	
Religion						
Catholic church	76.7	5.3	0.2	17.8	437	0.106
Pentecost churches	76.1	11.2	0.5	12.2	197	
Anglican church	71.6	11.8	1.0	15.7	102	
Adventist church	79.4	9.3	0.0	11.3	194	
Other	71.6	8.6	0.0	19.8	81	
Total	76.2	8.1	0.3	15.4	1,011	
Marital status						
Married	79.9	8.9	0.2	11.0	528	0.000
Cohabiting	77.8	8.9	0.0	13.3	180	
Single	48.4	10.9	1.6	39.1	64	
Widowed	70.8	4.5	0.6	24.2	178	
Divorced/ separated	83.6	6.6	0.0	9.8	61	
Total	76.2	8.1	0.3	15.4	1,011	
Able to read and write						
Yes	76.8	8.0	0.2	15.1	664	0.635
No	74.9	8.4	0.6	16.1	347	
Total	76.2	8.1	0.3	15.4	1,011	
Education						
No education	73.9	8.7	0.6	16.8	345	0.000
Primary	80.3	8.6	0.2	11.0	557	
Secondary/ university	62.4	3.7	0.0	33.9	109	
Total	76.2	8.1	0.3	15.4	1,011	

2. Time it takes to go to work (Roundtrip)

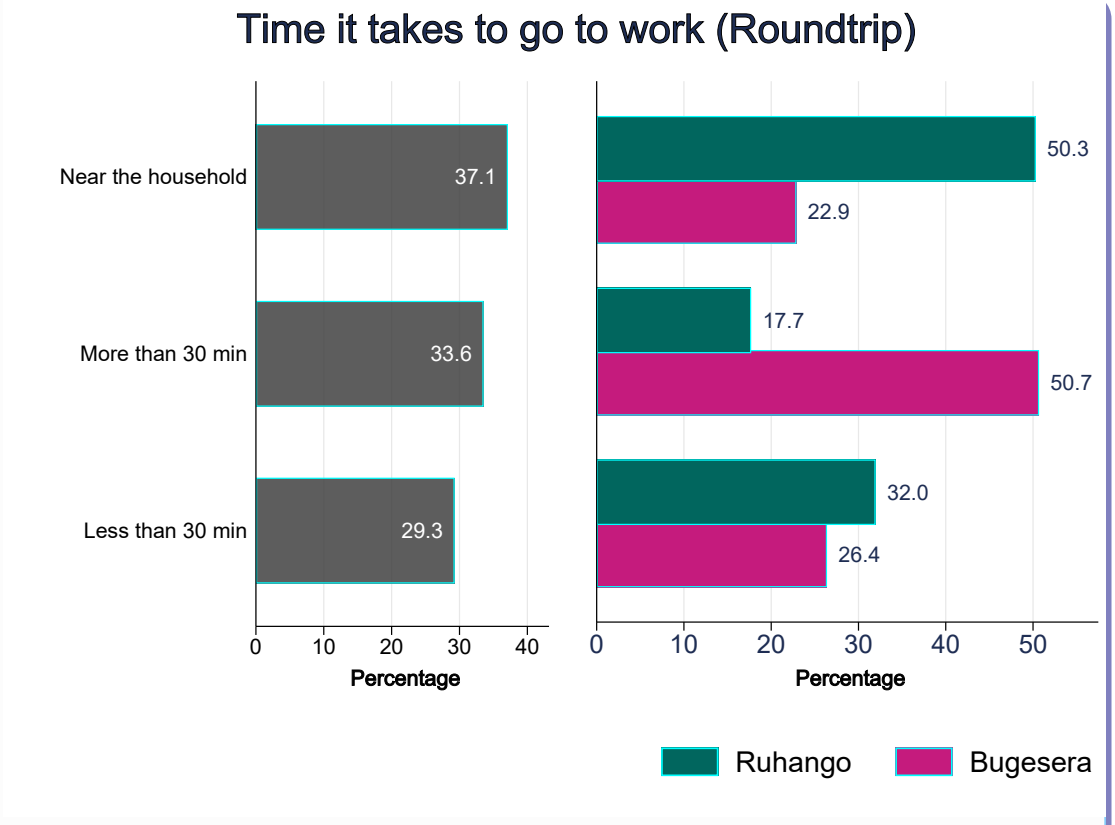


Figure 3.33: *Time it takes to go to work (Roundtrip)*

Most households reported that the Time it takes to go to work (Roundtrip) was near the household in 37.1% of cases. Other Time it takes to go to work (Roundtrip) included more than 30 min (33.6%) and less than 30 min (29.3%) as shown in Table 3.25.

Table 3.25: *(B30) Time it takes to go to work (Roundtrip)*

	Time it takes to go to work (Roundtrip)						Total	p-value
	Near the household		Less than 30 min		More than 30 min			
	N	%	N	%	N	%		
District								
Ruhango	233	50.3	148	32.0	82	17.7	463	0.000
Bugesera	98	22.9	113	26.4	217	50.7	428	
Total	331	37.1	261	29.3	299	33.6	891	
Gender								
Male	116	34.6	98	29.3	121	36.1	335	0.374
Female	215	38.7	163	29.3	178	32.0	556	
Total	331	37.1	261	29.3	299	33.6	891	
Age group								
Less 40	75	26.0	82	28.5	131	45.5	288	0.000
40-59	144	35.6	137	33.9	123	30.4	404	
60 and above	112	56.3	42	21.1	45	22.6	199	
Total	331	37.1	261	29.3	299	33.6	891	
Religion								
Catholic church	170	44.2	107	27.8	108	28.1	385	0.000
Pentecost churches	55	30.4	52	28.7	74	40.9	181	
Anglican church	24	27.3	19	21.6	45	51.1	88	
Adventist church	64	37.2	68	39.5	40	23.3	172	
Other	18	27.7	15	23.1	32	49.2	65	
Total	331	37.1	261	29.3	299	33.6	891	
Marital status								
Married	179	36.6	145	29.7	165	33.7	489	0.000
Cohabiting	43	26.2	49	29.9	72	43.9	164	
Single	18	39.1	16	34.8	12	26.1	46	
Widowed	73	52.9	36	26.1	29	21.0	138	
Divorced/ separated	18	33.3	15	27.8	21	38.9	54	
Total	331	37.1	261	29.3	299	33.6	891	
Able to read and write								
Yes	224	37.0	184	30.4	197	32.6	605	0.503
No	107	37.4	77	26.9	102	35.7	286	
Total	331	37.1	261	29.3	299	33.6	891	
Education								
No education	102	36.4	74	26.4	104	37.1	280	0.014
Primary	202	39.3	161	31.3	151	29.4	514	
Secondary/ university	27	27.8	26	26.8	44	45.4	97	
Total	331	37.1	261	29.3	299	33.6	891	

3. Workplace has any latrine within 50 meters

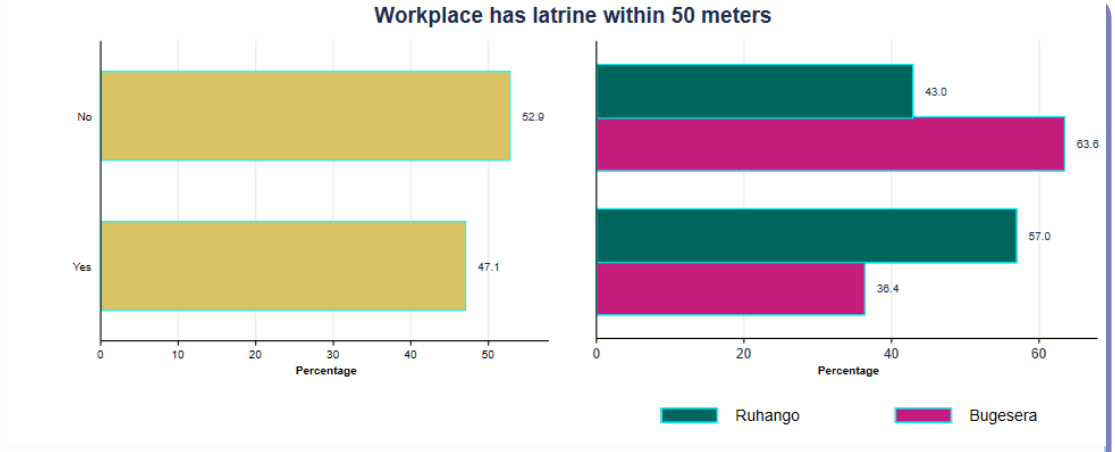


Figure 3.34: *Workplace has any latrine within 50 meters*

Most workplaces do not have latrines within 50 meters (52.9%), while those reported workplace has latrines within 50 meters represented 47.1% of cases (Table 3.26). Bugesera District showed the highest proportion of households not workplace has latrines within 50 meters with 63.6% of cases.

Most households reported not workplace having latrine within 50 meters (52.9%) while those workplace having latrine within 50 meters represented 47.1% of cases (Table 3.26). Bugesera district showed the highest proportion of households not workplace having latrine within 50 meters with 63.6% of cases as compared to Ruhango district (43.0%), and the difference was highly statistically significant (p=0.000).

Regarding gender, female respondents belonged to households that showed the highest proportion not workplace having latrine within 50 meters with 53.4% of cases as compared to households with male respondents (51.9%), but the difference was not significant (p=0.669). Concerning age group, respondents less than 40 years belonged to households that showed the highest proportion not workplace having latrine within 50 meters with 59.4% of cases as compared to households with respondents between 40 and 59 years (53.0%), and the difference was statistically significant (p=0.002).

Looking at religion, Anglican respondents belonged to households that showed the highest proportion not workplace having latrine within 50 meters with 60.2% of cases as compared to households with Pentecost respondents (58.0%), but the difference was not significant (p=0.143). Comparing the distribution by marital status, divorced or separated respondents belonged to households that showed the highest proportion not workplace having latrine within 50 meters with 61.1% of cases as compared to households with cohabiting respondents (61.0%), but the difference was not significant (p=0.101).

Regarding literacy, respondents who are not able to read or write belonged to households that showed the highest proportion not workplace having latrine within 50 meters with 60.1% of cases as compared to households with respondents who are able to read and write (49.4%), and the difference was statistically significant (p=0.003). Concerning education level, respondents with no education belonged to households that showed the highest proportion not workplace having latrine within 50 meters with 58.6% of cases as compared to households with respondents with nursery level (52.7%), and the difference was statistically significant (p=0.001).

Table 3.26: *(B32) Distribution of households workplace having latrine within 50 meters*

	Workplace having latrine within 50 meters				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	264	57.0	199	43.0	463	0.000
Bugesera	156	36.4	272	63.6	428	
Total	420	47.1	471	52.9	891	
Gender						
Male	161	48.1	174	51.9	335	0.669
Female	259	46.6	297	53.4	556	
Total	420	47.1	471	52.9	891	
Age group						
Less 40	117	40.6	171	59.4	288	0.002
40 to 59	190	47.0	214	53.0	404	
60 and above	113	56.8	86	43.2	199	
Total	420	47.1	471	52.9	891	
Religion						
Catholic	198	51.4	187	48.6	385	0.143
Pentecost	76	42.0	105	58.0	181	
Anglican	35	39.8	53	60.2	88	
Adventist	82	47.7	90	52.3	172	
Other religion	29	44.6	36	55.4	65	
Total	420	47.1	471	52.9	891	
Marital status						
Married	244	49.9	245	50.1	489	0.101
Cohabiting	64	39.0	100	61.0	164	
Single	22	47.8	24	52.2	46	
Widowed	69	50.0	69	50.0	138	
Divorced or separated	21	38.9	33	61.1	54	
Total	420	47.1	471	52.9	891	
Literacy						
Able to read and write	306	50.6	299	49.4	605	0.003
Not able to read or write	114	39.9	172	60.1	286	
Total	420	47.1	471	52.9	891	
Education						
No education	116	41.4	164	58.6	280	0.001
Nursery	243	47.3	271	52.7	514	
Primary	61	62.9	36	37.1	97	
Total	420	47.1	471	52.9	891	

4. Workplace has adequate latrine with slab, lid, roof and door

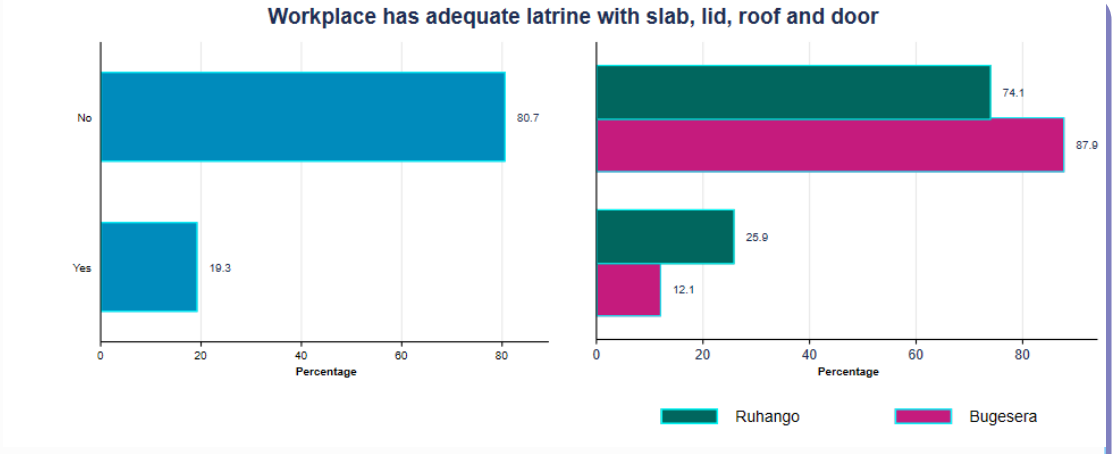


Figure 3.35: *Workplace has adequate latrine with slab, lid, roof and door*

The majority of households reported not workplace having adequate latrine (80.7%) while households workplace having adequate latrine represented 19.3% of cases (Table 3.27). Bugesera district showed the highest proportion of households not workplace having adequate latrine with 87.9% of cases as compared to Ruhango district (74.1%), and the difference was highly statistically significant (p=0.000).

Regarding gender, female respondents belonged to households that showed the highest proportion not workplace having adequate latrine with 81.8% of cases as compared to households with male respondents (78.8%), but the difference was not significant (p=0.267). Concerning age group, respondents between 40 and 59 years belonged to households that showed the highest proportion not workplace having adequate latrine with 82.9% of cases as compared to households with respondents aged 60 years and above (79.9%), but the difference was not significant (p=0.274).

Looking at religion, Other religion respondents belonged to households that showed the highest proportion not workplace having adequate latrine with 89.2% of cases as compared to households with Anglican respondents (88.6%), and the difference was statistically significant (p=0.010). Comparing the distribution by marital status, divorced or separated respondents belonged to households that showed the highest proportion not workplace having adequate latrine with 87.0% of cases as compared to households with cohabiting respondents (85.4%), but the difference was not significant (p=0.196).

Regarding literacy, respondents who are not able to read or write belonged to households that showed the highest proportion not workplace having adequate latrine with 88.5% of cases as compared to households with respondents who are able to read and write (77.0%), and the difference was highly statistically significant (p=0.000). Concerning education level, respondents with no education belonged to households that showed the highest proportion

not workplace having adequate latrine with 87.1% of cases as compared to households with respondents with nursery level (80.0%), and the difference was highly statistically significant (p=0.000).

Table 3.27: *(B33) Distribution of households workplace having adequate latrine*

	Workplace having adequate latrine				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	120	25.9	343	74.1	463	0.000
Bugesera	52	12.1	376	87.9	428	
Total	172	19.3	719	80.7	891	
Gender						
Male	71	21.2	264	78.8	335	0.267
Female	101	18.2	455	81.8	556	
Total	172	19.3	719	80.7	891	
Age group						
Less 40	63	21.9	225	78.1	288	0.274
40 to 59	69	17.1	335	82.9	404	
60 and above	40	20.1	159	79.9	199	
Total	172	19.3	719	80.7	891	
Religion						
Catholic	93	24.2	292	75.8	385	0.010
Pentecost	30	16.6	151	83.4	181	
Anglican	10	11.4	78	88.6	88	
Adventist	32	18.6	140	81.4	172	
Other religion	7	10.8	58	89.2	65	
Total	172	19.3	719	80.7	891	
Marital status						
Married	103	21.1	386	78.9	489	0.196
Cohabiting	24	14.6	140	85.4	164	
Single	12	26.1	34	73.9	46	
Widowed	26	18.8	112	81.2	138	
Divorced or separated	7	13.0	47	87.0	54	
Total	172	19.3	719	80.7	891	
Literacy						
Able to read and write	139	23.0	466	77.0	605	0.000
Not able to read or write	33	11.5	253	88.5	286	
Total	172	19.3	719	80.7	891	
Education						
No education	36	12.9	244	87.1	280	0.000
Nursery	103	20.0	411	80.0	514	
Primary	33	34.0	64	66.0	97	
Total	172	19.3	719	80.7	891	

5. Latrine is dirty (by human excreta)

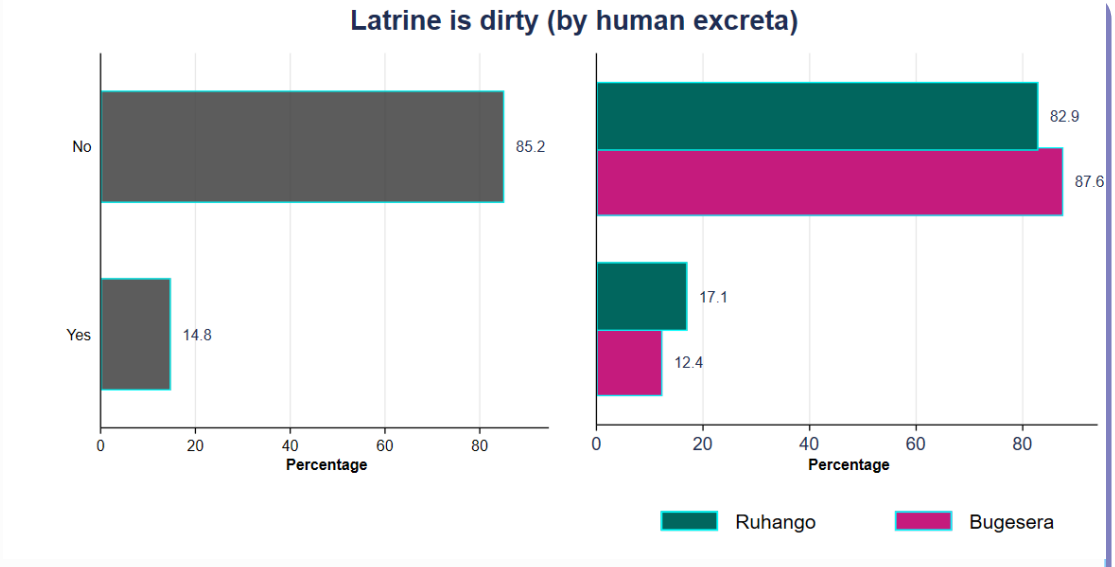


Figure 3.36: *Latrine is dirty (by human excreta)*

As shown in Table 3.28, most households reported not latrine being dirty (by human excreta) (85.2%) while households latrine being dirty (by human excreta) represented 14.8% of cases. Bugesera district showed the biggest proportion of households not latrine being dirty (by human excreta) with 87.6% of cases as compared to Ruhango district (82.9%), and the difference was statistically significant (p=0.049).

Regarding gender, female respondents belonged to households that showed the highest proportion not latrine being dirty (by human excreta) with 85.8% of cases as compared to households with male respondents (84.2%), but the difference was not significant (p=0.512). Concerning age group, respondents less than 40 years belonged to households that showed the highest proportion not latrine being dirty (by human excreta) with 89.6% of cases as compared to households with respondents between 40 and 59 years (83.7%), and the difference was statistically significant (p=0.033).

Looking at religion, Pentecost respondents belonged to households that showed the highest proportion not latrine being dirty (by human excreta) with 88.4% of cases as compared to households with Adventist respondents (87.8%), but the difference was not significant (p=0.301). Comparing the distribution by marital status, divorced or separated respondents belonged to households that showed the highest proportion not latrine being dirty (by human excreta) with 92.6% of cases as compared to households with single respondents (89.1%), but the difference was not significant (p=0.194).

Regarding literacy, respondents who are not able to read or write belonged to households that showed the highest proportion not latrine being dirty (by human excreta) with 86.0% of cases

as compared to households with respondents who are able to read and write (84.8%), but the difference was not significant (p=0.632). Concerning education level, respondents with nursery level belonged to households that showed the highest proportion not latrine being dirty (by human excreta) with 86.4% of cases as compared to households with respondents with no education (84.3%), but the difference was not significant (p=0.399).

Table 3.28: *(B34) Distribution of households latrine being dirty (by human excreta)*

	Latrine being dirty (by human excreta)				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	79	17.1	384	82.9	463	0.049
Bugesera	53	12.4	375	87.6	428	
Total	132	14.8	759	85.2	891	
Gender						
Male	53	15.8	282	84.2	335	0.512
Female	79	14.2	477	85.8	556	
Total	132	14.8	759	85.2	891	
Age group						
Less 40	30	10.4	258	89.6	288	0.033
40 to 59	66	16.3	338	83.7	404	
60 and above	36	18.1	163	81.9	199	
Total	132	14.8	759	85.2	891	
Religion						
Catholic	64	16.6	321	83.4	385	0.301
Pentecost	21	11.6	160	88.4	181	
Anglican	17	19.3	71	80.7	88	
Adventist	21	12.2	151	87.8	172	
Other religion	9	13.8	56	86.2	65	
Total	132	14.8	759	85.2	891	
Marital status						
Married	68	13.9	421	86.1	489	0.194
Cohabiting	29	17.7	135	82.3	164	
Single	5	10.9	41	89.1	46	
Widowed	26	18.8	112	81.2	138	
Divorced or separated	4	7.4	50	92.6	54	
Total	132	14.8	759	85.2	891	
Literacy						
Able to read and write	92	15.2	513	84.8	605	0.632
Not able to read or write	40	14.0	246	86.0	286	
Total	132	14.8	759	85.2	891	
Education						
No education	44	15.7	236	84.3	280	0.399
Nursery	70	13.6	444	86.4	514	
Primary	18	18.6	79	81.4	97	
Total	132	14.8	759	85.2	891	

6. Latrine is a shallow hole near a water body or an agricultural field

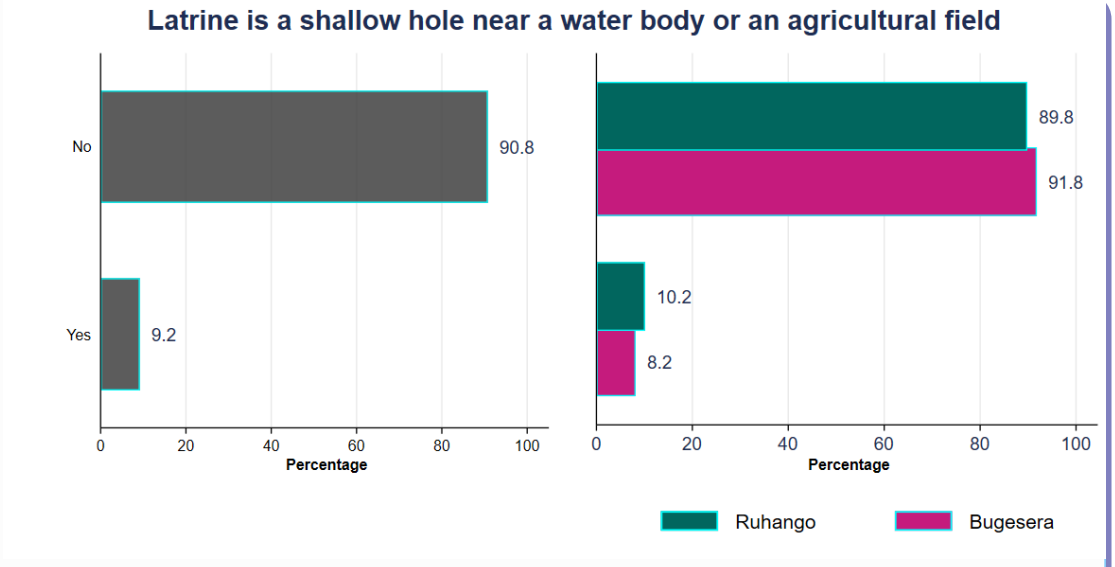


Figure 3.37: *Latrine is a shallow hole near a water body or an agricultural field*

Most households reported latrine not being a shallow hole near a water body or field (90.8%) while households latrine being a shallow hole near a water body or field represented 9.2% of cases (Table 3.29). Bugesera district showed the highest proportion of households not latrine being a shallow hole near a water body or field with 91.8% of cases as compared to Ruhango district (89.8%), but the difference was not significant (p=0.309).

Regarding gender, female respondents belonged to households that showed the highest proportion not latrine being a shallow hole near a water body or field with 92.1% of cases as compared to households with male respondents (88.7%), but the difference was not significant (p=0.086). Concerning age group, respondents less than 40 years belonged to households that showed the highest proportion not latrine being a shallow hole near a water body or field with 92.0% of cases as compared to households with respondents aged 60 years and above (90.5%), but the difference was not significant (p=0.679).

Looking at religion, Other religion respondents belonged to households that showed the highest proportion not latrine being a shallow hole near a water body or field with 93.8% of cases as compared to households with Pentecost respondents (92.3%), but the difference was not significant (p=0.633). Comparing the distribution by marital status, divorced or separated respondents belonged to households that showed the highest proportion not latrine being a shallow hole near a water body or field with 96.3% of cases as compared to households with single respondents (91.3%), but the difference was not significant (p=0.667).

Regarding literacy, respondents who are not able to read or write belonged to households that showed the highest proportion not latrine being a shallow hole near a water body or field

with 92.0% of cases as compared to households with respondents who are able to read and write (90.2%), but the difference was not significant (p=0.410). Concerning education level, respondents with no education belonged to households that showed the highest proportion not latrine being a shallow hole near a water body or field with 92.1% of cases as compared to households with respondents with nursery level (90.9%), but the difference was not significant (p=0.265).

Table 3.29: *(B35) Distribution of households latrine being a shallow hole near a water body or field*

	Latrine being a shallow hole near a water body or field				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	47	10.2	416	89.8	463	0.309
Bugesera	35	8.2	393	91.8	428	
Total	82	9.2	809	90.8	891	
Gender						
Male	38	11.3	297	88.7	335	0.086
Female	44	7.9	512	92.1	556	
Total	82	9.2	809	90.8	891	
Age group						
Less 40	23	8.0	265	92.0	288	0.679
40 to 59	40	9.9	364	90.1	404	
60 and above	19	9.5	180	90.5	199	
Total	82	9.2	809	90.8	891	
Religion						
Catholic	40	10.4	345	89.6	385	0.633
Pentecost	14	7.7	167	92.3	181	
Anglican	10	11.4	78	88.6	88	
Adventist	14	8.1	158	91.9	172	
Other religion	4	6.2	61	93.8	65	
Total	82	9.2	809	90.8	891	
Marital status						
Married	47	9.6	442	90.4	489	0.667
Cohabiting	17	10.4	147	89.6	164	
Single	4	8.7	42	91.3	46	
Widowed	12	8.7	126	91.3	138	
Divorced or separated	2	3.7	52	96.3	54	
Total	82	9.2	809	90.8	891	
Literacy						
Able to read and write	59	9.8	546	90.2	605	0.410
Not able to read or write	23	8.0	263	92.0	286	
Total	82	9.2	809	90.8	891	
Education						
No education	22	7.9	258	92.1	280	0.265
Nursery	47	9.1	467	90.9	514	
Primary	13	13.4	84	86.6	97	
Total	82	9.2	809	90.8	891	

7. Toilet paper or water is available in the toilet

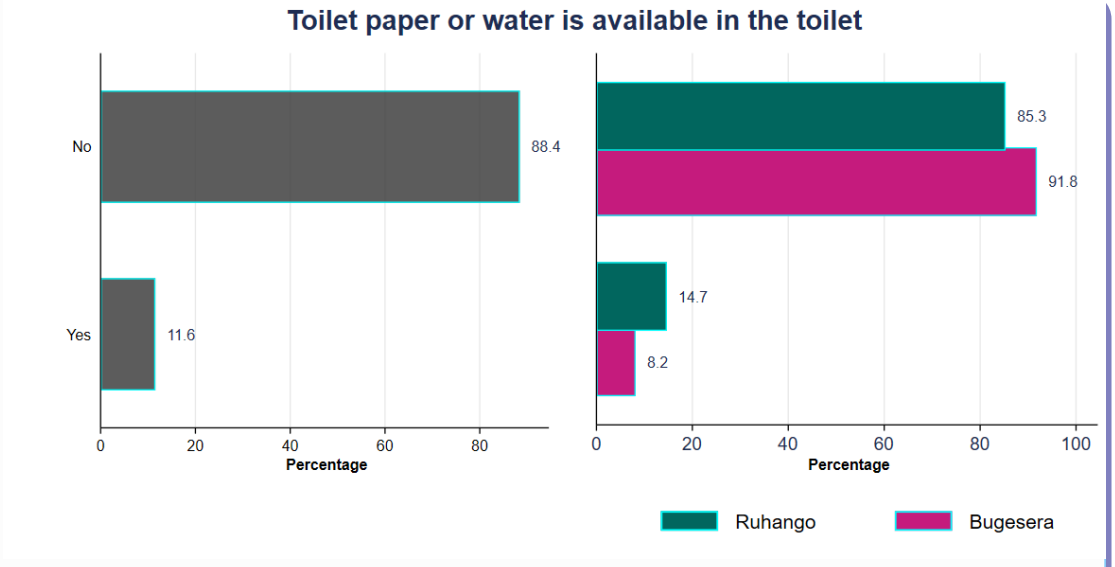


Figure 3.38: *Toilet paper or water is available in the toilet*

Table 3.30 shows the biggest proportion of participants reported no toilet paper or water being available at workplace (88.4%) while households toilet paper or water being available represented 11.6% of cases. Bugesera district showed the highest proportion of households no toilet paper or water being available with 91.8% of cases as compared to Ruhango district (85.3%), and the difference was statistically significant (p=0.002).

Regarding gender, female respondents belonged to households that showed the highest proportion no toilet paper or water being available with 89.9% of cases as compared to households with male respondents (86.0%), but the difference was not significant (p=0.074). Concerning age group, respondents between 40 and 59 years belonged to households that showed the highest proportion no toilet paper or water being available with 89.1% of cases as compared to households with respondents aged 60 years and above (88.4%), but the difference was not significant (p=0.808).

Looking at religion, Other religion respondents belonged to households that showed the highest proportion no toilet paper or water being available with 93.8% of cases as compared to households with Anglican respondents (92.0%), but the difference was not significant (p=0.238). Comparing the distribution by marital status, divorced or separated respondents belonged to households that showed the highest proportion no toilet paper or water being available with 96.3% of cases as compared to households with widowed respondents (91.3%), but the difference was not significant (p=0.146).

Regarding literacy, respondents who are not able to read or write belonged to households that showed the highest proportion no toilet paper or water being available with 92.3% of cases as

compared to households with respondents who are able to read and write (86.6%), and the difference was statistically significant (p=0.013). Concerning education level, respondents with no education belonged to households that showed the highest proportion no toilet paper or water being available with 91.8% of cases as compared to households with respondents with nursery level (89.3%), and the difference was highly statistically significant (p=0.000).

Table 3.30: *(B36) Distribution of households toilet paper or water being available*

	Toilet paper or water being available				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	68	14.7	395	85.3	463	0.002
Bugesera	35	8.2	393	91.8	428	
Total	103	11.6	788	88.4	891	
Gender						
Male	47	14.0	288	86.0	335	0.074
Female	56	10.1	500	89.9	556	
Total	103	11.6	788	88.4	891	
Age group						
Less 40	36	12.5	252	87.5	288	0.808
40 to 59	44	10.9	360	89.1	404	
60 and above	23	11.6	176	88.4	199	
Total	103	11.6	788	88.4	891	
Religion						
Catholic	54	14.0	331	86.0	385	0.238
Pentecost	20	11.0	161	89.0	181	
Anglican	7	8.0	81	92.0	88	
Adventist	18	10.5	154	89.5	172	
Other religion	4	6.2	61	93.8	65	
Total	103	11.6	788	88.4	891	
Marital status						
Married	67	13.7	422	86.3	489	0.146
Cohabiting	17	10.4	147	89.6	164	
Single	5	10.9	41	89.1	46	
Widowed	12	8.7	126	91.3	138	
Divorced or separated	2	3.7	52	96.3	54	
Total	103	11.6	788	88.4	891	
Literacy						
Able to read and write	81	13.4	524	86.6	605	0.013
Not able to read or write	22	7.7	264	92.3	286	
Total	103	11.6	788	88.4	891	
Education						
No education	23	8.2	257	91.8	280	0.000
Nursery	55	10.7	459	89.3	514	
Primary	25	25.8	72	74.2	97	
Total	103	11.6	788	88.4	891	

8. Workplace has hand washing facility with soap and water

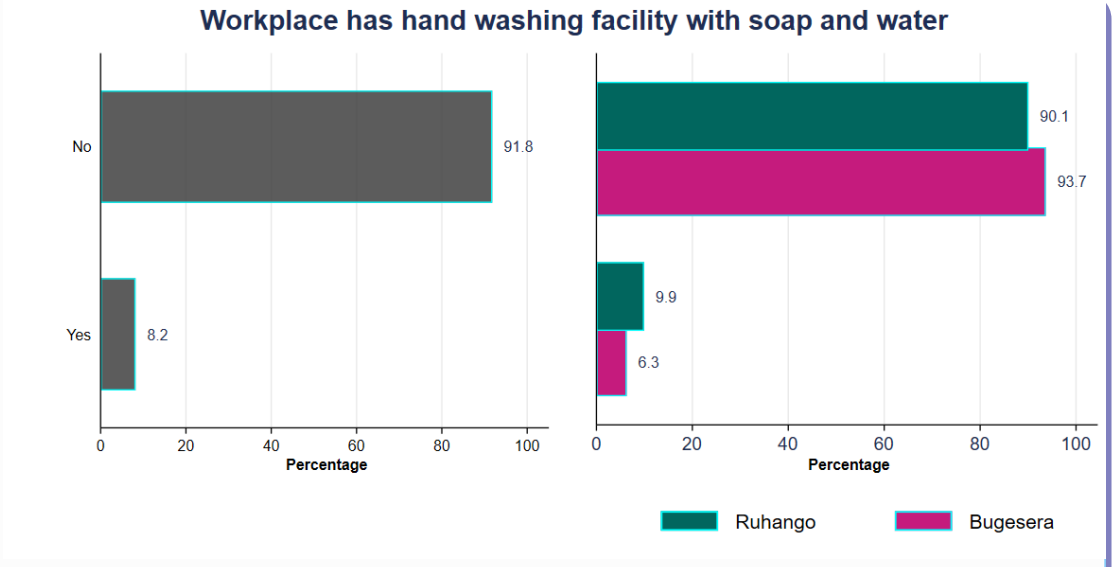


Figure 3.39: *Workplace has hand washing facility (lavabo, local made kandagira ukarabe, etc.) with soap and water*

Most workplaces do not have hand washing facilities (91.8%) while those workplace having hand washing facility represented 8.2% of cases (Table 3.31). Bugesera district showed the highest proportion of households not workplace having hand washing facility with 93.7% of cases as compared to Ruhango district (90.1%), and the difference was statistically significant (p=0.049).

Regarding gender, female respondents belonged to households that showed the highest proportion not workplace having hand washing facility with 93.0% of cases as compared to households with male respondents (89.9%), but the difference was not significant (p=0.098). Concerning age group, respondents aged 60 years and above belonged to households that showed the highest proportion not workplace having hand washing facility with 94.0% of cases as compared to households with respondents between 40 and 59 years (91.8%), but the difference was not significant (p=0.344).

Looking at religion, Other religion respondents belonged to households that showed the highest proportion not workplace having hand washing facility with 93.8% of cases as compared to households with Pentecost respondents (93.4%), but the difference was not significant (p=0.787). Comparing the distribution by marital status, divorced or separated respondents belonged to households that showed the highest proportion not workplace having hand washing facility with 98.1% of cases as compared to households with widowed respondents (92.8%), but the difference was not significant (p=0.381).

Regarding literacy, respondents who are not able to read or write belonged to households that

showed the highest proportion not workplace having hand washing facility with 94.4% of cases as compared to households with respondents who are able to read and write (90.6%), but the difference was not significant (p=0.052). Concerning education level, respondents with no education belonged to households that showed the highest proportion not workplace having hand washing facility with 94.3% of cases as compared to households with respondents with nursery level (93.2%), and the difference was highly statistically significant (p=0.000).

Table 3.31: *(B37) Distribution of households workplace having hand washing facility*

	Workplace having hand washing facility				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	46	9.9	417	90.1	463	0.049
Bugesera	27	6.3	401	93.7	428	
Total	73	8.2	818	91.8	891	
Gender						
Male	34	10.1	301	89.9	335	0.098
Female	39	7.0	517	93.0	556	
Total	73	8.2	818	91.8	891	
Age group						
Less 40	28	9.7	260	90.3	288	0.344
40 to 59	33	8.2	371	91.8	404	
60 and above	12	6.0	187	94.0	199	
Total	73	8.2	818	91.8	891	
Religion						
Catholic	32	8.3	353	91.7	385	0.787
Pentecost	12	6.6	169	93.4	181	
Anglican	9	10.2	79	89.8	88	
Adventist	16	9.3	156	90.7	172	
Other religion	4	6.2	61	93.8	65	
Total	73	8.2	818	91.8	891	
Marital status						
Married	46	9.4	443	90.6	489	0.381
Cohabiting	12	7.3	152	92.7	164	
Single	4	8.7	42	91.3	46	
Widowed	10	7.2	128	92.8	138	
Divorced or separated	1	1.9	53	98.1	54	
Total	73	8.2	818	91.8	891	
Literacy						
Able to read and write	57	9.4	548	90.6	605	0.052
Not able to read or write	16	5.6	270	94.4	286	
Total	73	8.2	818	91.8	891	
Education						
No education	16	5.7	264	94.3	280	0.000
Nursery	35	6.8	479	93.2	514	
Primary	22	22.7	75	77.3	97	
Total	73	8.2	818	91.8	891	

9. Workplace has access to clean water within 500 meters

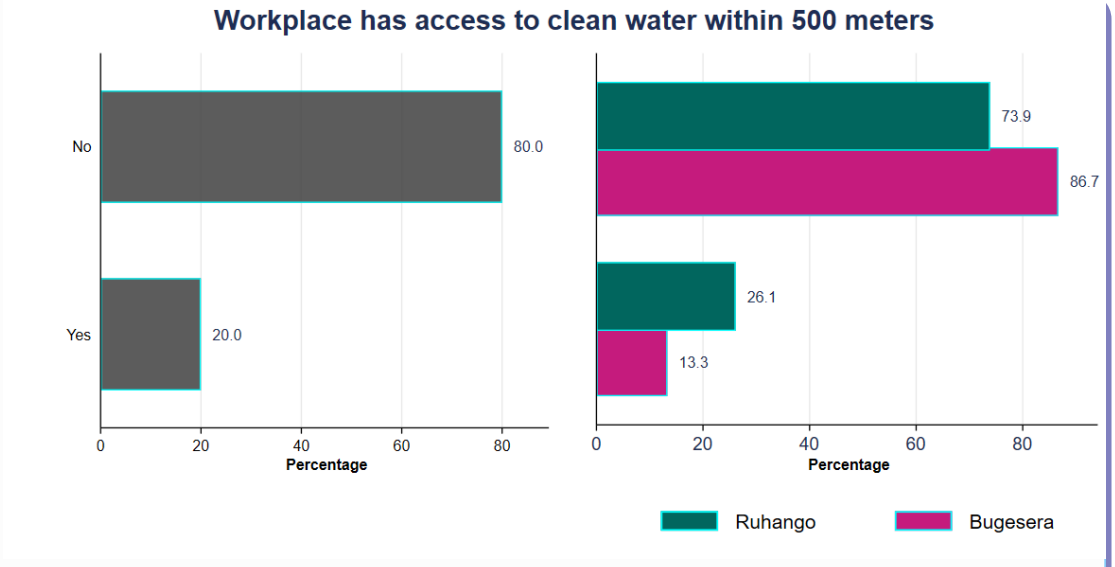


Figure 3.40: *Workplace has access to clean water within 500 meters*

The majority of households reported workplace not having access to clean water within 500 meters (80.0%) while households workplace having access to clean water within 500 meters represented 20.0% of cases (Table 3.32). Bugesera district showed the highest proportion of households not workplace having access to clean water within 500 meters with 86.7% of cases as compared to Ruhango district (73.9%), and the difference was highly statistically significant (p=0.000).

Regarding gender, female respondents belonged to households that showed the highest proportion not workplace having access to clean water within 500 meters with 81.5% of cases as compared to households with male respondents (77.6%), but the difference was not significant (p=0.162). Concerning age group, respondents between 40 and 59 years belonged to households that showed the highest proportion not workplace having access to clean water within 500 meters with 82.2% of cases as compared to households with respondents less than 40 years (79.2%), but the difference was not significant (p=0.282).

Looking at religion, Pentecost respondents belonged to households that showed the highest proportion not workplace having access to clean water within 500 meters with 85.1% of cases as compared to households with Anglican respondents (84.1%), and the difference was statistically significant (p=0.007). Comparing the distribution by marital status, divorced or separated respondents belonged to households that showed the highest proportion not workplace having access to clean water within 500 meters with 85.2% of cases as compared to households with cohabiting respondents (84.8%), but the difference was not significant (p=0.291).

Table 3.32: *(B38) Distribution of households workplace having access to clean water within 500 meters*

	Workplace having access to clean water				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	121	26.1	342	73.9	463	0.000
Bugesera	57	13.3	371	86.7	428	
Total	178	20.0	713	80.0	891	
Gender						
Male	75	22.4	260	77.6	335	0.162
Female	103	18.5	453	81.5	556	
Total	178	20.0	713	80.0	891	
Age group						
Less 40	60	20.8	228	79.2	288	0.282
40 to 59	72	17.8	332	82.2	404	
60 and above	46	23.1	153	76.9	199	
Total	178	20.0	713	80.0	891	
Religion						
Catholic	73	19.0	312	81.0	385	0.007
Pentecost	27	14.9	154	85.1	181	
Anglican	14	15.9	74	84.1	88	
Adventist	51	29.7	121	70.3	172	
Other religion	13	20.0	52	80.0	65	
Total	178	20.0	713	80.0	891	
Marital status						
Married	105	21.5	384	78.5	489	0.291
Cohabiting	25	15.2	139	84.8	164	
Single	8	17.4	38	82.6	46	
Widowed	32	23.2	106	76.8	138	
Divorced or separated	8	14.8	46	85.2	54	
Total	178	20.0	713	80.0	891	
Literacy						
Able to read and write	131	21.7	474	78.3	605	0.069
Not able to read or write	47	16.4	239	83.6	286	
Total	178	20.0	713	80.0	891	
Education						
No education	46	16.4	234	83.6	280	0.000
Nursery	97	18.9	417	81.1	514	
Primary	35	36.1	62	63.9	97	
Total	178	20.0	713	80.0	891	

Regarding literacy, respondents who are not able to read or write belonged to households that showed the highest proportion not workplace having access to clean water within 500 meters with 83.6% of cases as compared to households with respondents who are able to read and write (78.3%), but the difference was not significant (p=0.069). Concerning education level, respondents with no education belonged to households that showed the highest proportion not workplace having access to clean water within 500 meters with 83.6% of cases as compared

to households with respondents with nursery level (81.1%), and the difference was highly statistically significant (p=0.000).

10. Workplace latrine content is used as a fertilizer

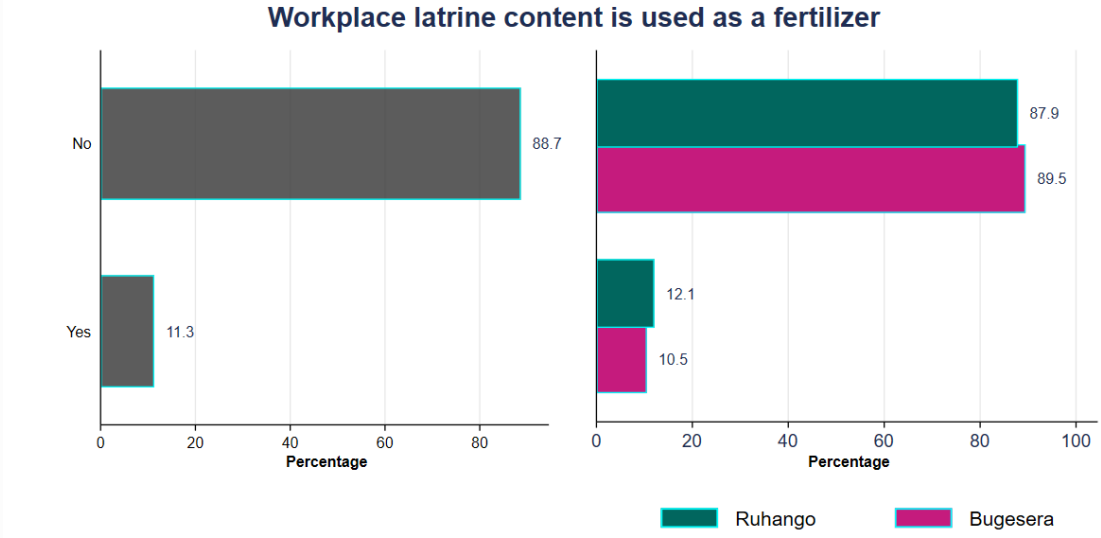


Figure 3.41: *Workplace latrine content is used as a fertilizer*

As shown in Table 3.33, most households reported workplace latrine content not being used as a fertilizer (88.7%) while workplace latrines content being used as a fertilizer represented 11.3% of cases. Bugesera district showed the biggest proportion of households not workplace latrine content being used as a fertilizer with 89.5% of cases as compared to Ruhango district (87.9%), but the difference was not significant (p=0.457).

Regarding gender, female respondents belonged to households that showed the highest proportion not workplace latrine content being used as a fertilizer with 89.6% of cases as compared to households with male respondents (87.2%), but the difference was not significant (p=0.273). Concerning age group, respondents less than 40 years belonged to households that showed the highest proportion not workplace latrine content being used as a fertilizer with 90.3% of cases as compared to households with respondents aged 60 years and above (88.9%), but the difference was not significant (p=0.490).

Looking at religion, Other religion respondents belonged to households that showed the highest proportion not workplace latrine content being used as a fertilizer with 96.9% of cases as compared to households with Pentecost respondents (90.6%), but the difference was not significant (p=0.150). Comparing the distribution by marital status, single respondents belonged to households that showed the highest proportion not workplace latrine content being used as a fertilizer with 95.7% of cases as compared to households with cohabiting respondents (90.9%), but the difference was not significant (p=0.097).

Regarding literacy, respondents who are not able to read or write belonged to households that showed the highest proportion not workplace latrine content being used as a fertilizer with 88.8% of cases as compared to households with respondents who are able to read and write (88.6%), but the difference was not significant (p=0.924). Concerning education level, respondents with primary education belonged to households that showed the highest proportion not workplace latrine content being used as a fertilizer with 89.7% of cases as compared to households with respondents with no education (88.6%), but the difference was not significant (p=0.944).

Table 3.33: *(B39) Distribution of households workplace latrine content being used as a fertilizer*

	Workplace latrine content being used as a fertilizer				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	56	12.1	407	87.9	463	0.457
Bugesera	45	10.5	383	89.5	428	
Total	101	11.3	790	88.7	891	
Gender						
Male	43	12.8	292	87.2	335	0.273
Female	58	10.4	498	89.6	556	
Total	101	11.3	790	88.7	891	
Age group						
Less 40	28	9.7	260	90.3	288	0.490
40 to 59	51	12.6	353	87.4	404	
60 and above	22	11.1	177	88.9	199	
Total	101	11.3	790	88.7	891	
Religion						
Catholic	48	12.5	337	87.5	385	0.150
Pentecost	17	9.4	164	90.6	181	
Anglican	13	14.8	75	85.2	88	
Adventist	21	12.2	151	87.8	172	
Other religion	2	3.1	63	96.9	65	
Total	101	11.3	790	88.7	891	
Marital status						
Married	59	12.1	430	87.9	489	0.097
Cohabiting	15	9.1	149	90.9	164	
Single	2	4.3	44	95.7	46	
Widowed	14	10.1	124	89.9	138	
Divorced or separated	11	20.4	43	79.6	54	
Total	101	11.3	790	88.7	891	
Literacy						
Able to read and write	69	11.4	536	88.6	605	0.924
Not able to read or write	32	11.2	254	88.8	286	
Total	101	11.3	790	88.7	891	
Education						
No education	32	11.4	248	88.6	280	0.944
Nursery	59	11.5	455	88.5	514	
Primary	10	10.3	87	89.7	97	
Total	101	11.3	790	88.7	891	

3.4. Individual information on Knowledge and Attitudes

1. Ever heard about Bilharzia

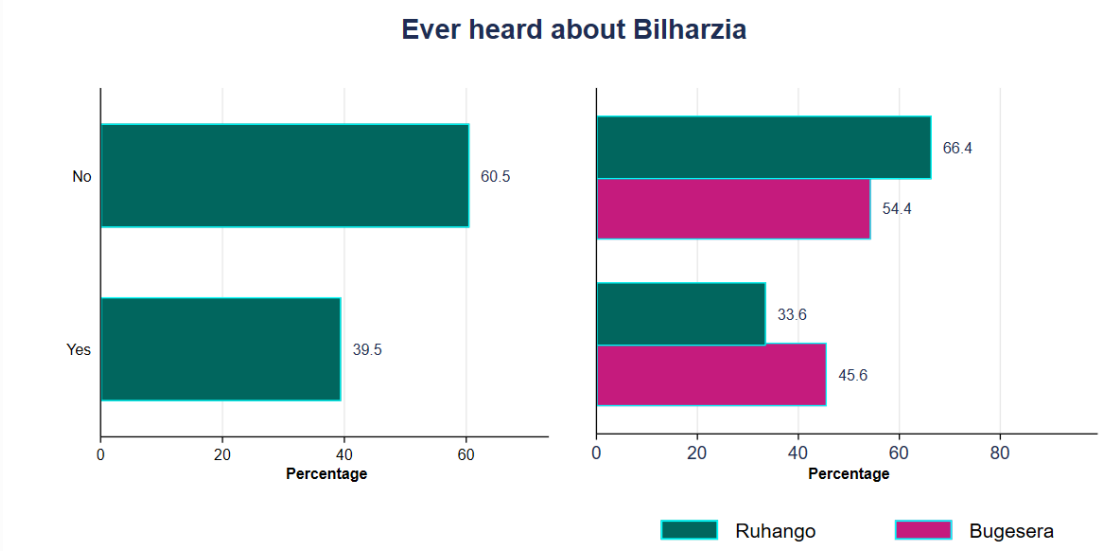


Figure 3.42: *Ever heard about Bilharzia*

Most households reported never heard about Bilharzia (60.5%) while households ever heard about bilharzia represented 39.5% of cases (Table A4). Ruhango district showed the highest proportion of households never heard about bilharzia with 66.4% of cases as compared to Bugesera district (54.4%), and the difference was highly statistically significant (p=0.000).

Regarding gender, female respondents belonged to households that showed the highest proportion never heard about bilharzia with 61.7% of cases as compared to households with male respondents (58.5%), but the difference was not significant (p=0.311). Concerning age group, respondents aged 60 years and above belonged to households that showed the highest proportion never heard about bilharzia with 70.4% of cases as compared to households with respondents between 40 and 59 years (57.5%), and the difference was statistically significant (p=0.001).

Looking at religion, Catholic respondents belonged to households that showed the highest proportion never heard about bilharzia with 67.0% of cases as compared to households with Pentecost respondents (60.4%), and the difference was statistically significant (p=0.002). Comparing the distribution by marital status, single respondents belonged to households that showed the highest proportion never heard about bilharzia with 73.4% of cases as compared to households with divorced or separated respondents (65.6%), and the difference was statistically significant (p=0.039).

Regarding literacy, respondents who are not able to read or write belonged to households that showed the highest proportion never heard about bilharzia with 70.0% of cases as compared

to households with respondents who are able to read and write (55.6%), and the difference was highly statistically significant (p=0.000). Concerning education level, respondents with no education belonged to households that showed the highest proportion never heard about bilharzia with 70.4% of cases as compared to households with respondents with nursery level (57.6%), and the difference was highly statistically significant (p=0.000).

Table 3.34: *(C1) Distribution of households ever heard about bilharzia*

	Ever heard about Bilharzia				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	174	33.6	344	66.4	518	0.000
Bugesera	225	45.6	268	54.4	493	
Total	399	39.5	612	60.5	1,011	
Gender						
Male	154	41.5	217	58.5	371	0.311
Female	245	38.3	395	61.7	640	
Total	399	39.5	612	60.5	1,011	
Age group						
Less 40	140	43.3	183	56.7	323	0.001
40 to 59	182	42.5	246	57.5	428	
60 and above	77	29.6	183	70.4	260	
Total	399	39.5	612	60.5	1,011	
Religion						
Catholic	144	33.0	293	67.0	437	0.002
Pentecost	78	39.6	119	60.4	197	
Anglican	51	50.0	51	50.0	102	
Adventist	91	46.9	103	53.1	194	
Other religion	35	43.2	46	56.8	81	
Total	399	39.5	612	60.5	1,011	
Marital status						
Married	217	41.1	311	58.9	528	0.039
Cohabiting	82	45.6	98	54.4	180	
Single	17	26.6	47	73.4	64	
Widowed	62	34.8	116	65.2	178	
Divorced or separated	21	34.4	40	65.6	61	
Total	399	39.5	612	60.5	1,011	
Literacy						
Able to read and write	295	44.4	369	55.6	664	0.000
Not able to read or write	104	30.0	243	70.0	347	
Total	399	39.5	612	60.5	1,011	
Education						
No education	102	29.6	243	70.4	345	0.000
Nursery	236	42.4	321	57.6	557	
Primary	61	56.0	48	44.0	109	
Total	399	39.5	612	60.5	1,011	

2. Source of information about Bilharzia

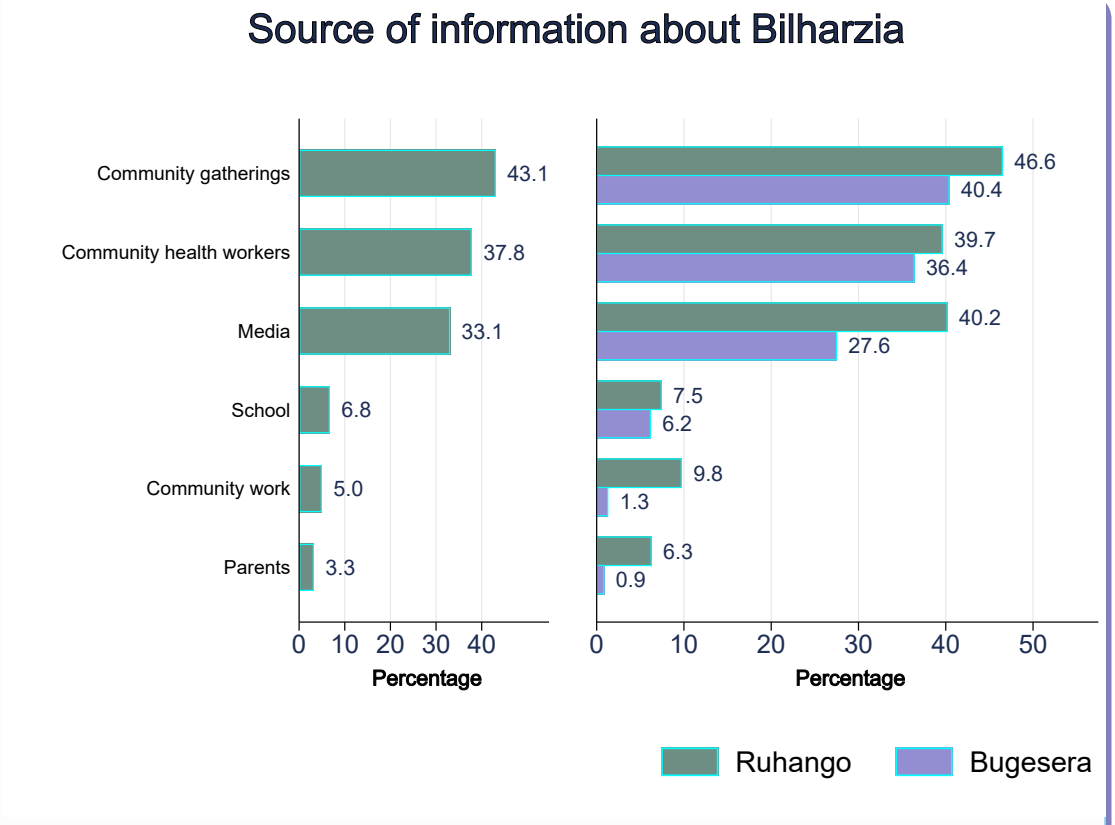


Figure 3.43: *Source of information about Bilharzia*

Most households reported that Source of information about Bilharzia were community gatherings in 43.1% of cases. Other Source of information about Bilharzia included community health workers (37.8%), media (33.1%), other (13.5%) and school (6.8%) as shown in Table 3.35.

Table 3.35: *(C2) Source of information about Bilharzia*

	Source of information about Bilharzia					
	Community gather-ings	**Community health workers**	**Media**	**Other**	**School**	**Community work**
District						
Ruhango	46.6	39.7	40.2	6.3	7.5	9.8
Bugesera	40.4	36.4	27.6	19.1	6.2	1.3
Total	43.1	37.8	33.1	13.5	6.8	5.0
Gender						
Male	40.3	38.3	37.0	11.7	5.2	4.5
Female	44.9	37.6	30.6	14.7	7.8	5.3
Total	43.1	37.8	33.1	13.5	6.8	5.0
Age group						
Less 40	37.1	31.4	37.1	12.1	11.4	2.9
40-59	49.5	42.9	33.0	11.5	3.8	8.2
60 and above	39.0	37.7	26.0	20.8	5.2	1.3
Total	43.1	37.8	33.1	13.5	6.8	5.0
Religion						
Catholic church	38.2	36.8	35.4	13.9	6.2	3.5
Pentecost churches	51.3	29.5	32.1	12.8	5.1	5.1
Anglican church	35.3	41.2	33.3	13.7	13.7	2.0
Adventist church	49.5	46.2	29.7	11.0	6.6	9.9
Other	40.0	34.3	34.3	20.0	2.9	2.9
Total	43.1	37.8	33.1	13.5	6.8	5.0
Marital status						
Married	40.6	39.6	33.6	13.8	5.5	6.0
Cohabiting	45.1	26.8	34.1	9.8	9.8	0.0
Single	35.3	29.4	41.2	0.0	23.5	5.9
Widowed	51.6	45.2	21.0	22.6	4.8	8.1
Divorced/ separated	42.9	47.6	52.4	9.5	0.0	4.8
Total	43.1	37.8	33.1	13.5	6.8	5.0
Able to read and write						
Yes	44.4	39.0	34.2	10.5	8.8	5.1
No	39.4	34.6	29.8	22.1	1.0	4.8
Total	43.1	37.8	33.1	13.5	6.8	5.0
Education						
No education	34.3	36.3	27.5	27.5	0.0	4.9
Primary	47.9	38.6	34.7	8.5	4.2	4.7
Secondary/ university	39.3	37.7	36.1	9.8	27.9	6.6
Total	43.1	37.8	33.1	13.5	6.8	5.0

3. Frequency of information on Bilharzia per month

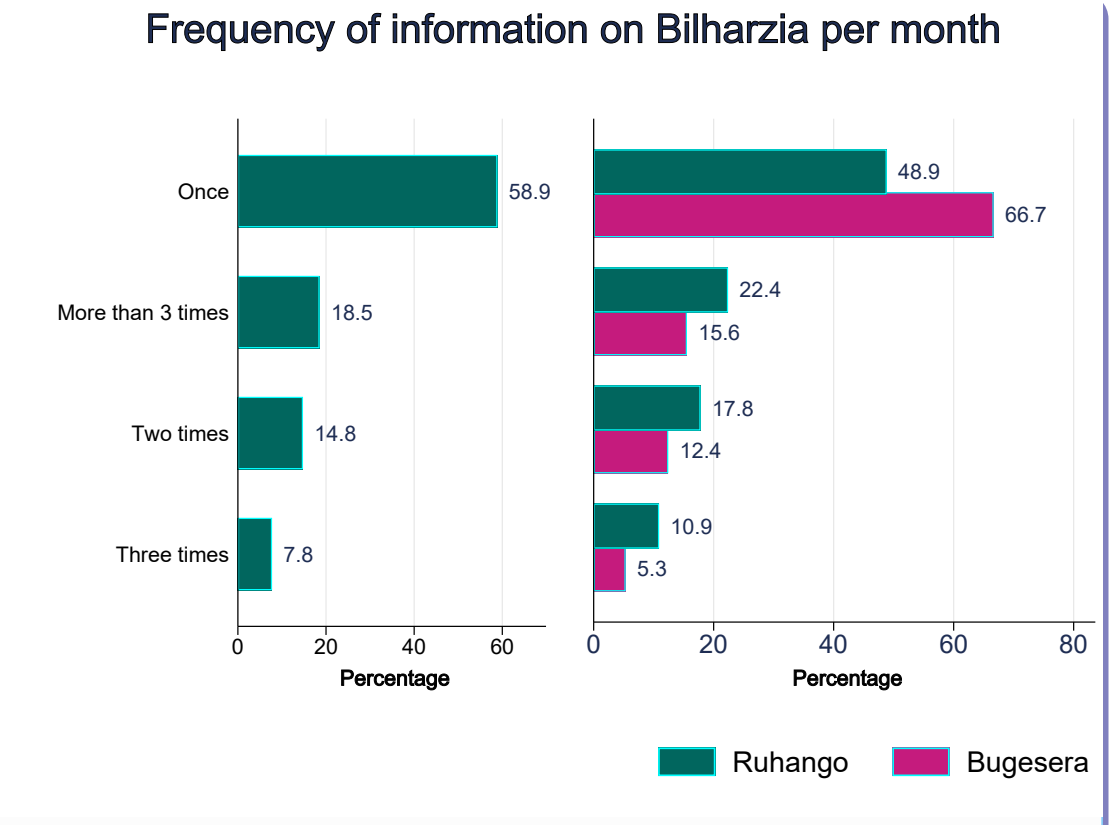


Figure 3.44: *Frequency of information on Bilharzia per month*

Most households reported that the Frequency of information on Bilharzia per month was once in 58.9% of cases. Other Frequency of information on Bilharzia per month included more than 3 times (18.5%), two times (14.8%) and three times (7.8%) as shown in Table 3.36. Bugesera district showed the highest proportion of once with 66.7% of cases as compared to Ruhango district (48.9%), and the difference was statistically significant (p=0.003).

Regarding gender, male respondents belonged to households that showed the highest proportion of once with 59.1% of cases as compared to households with female respondents (58.8%), but the difference was not significant (p=0.951). Concerning age group, respondents aged 60 years and above belonged to households that showed the highest proportion of once with 62.3% of cases as compared to households with respondents between 40 and 59 years (60.4%), but the difference was not significant (p=0.460). Looking at religion, Anglican respondents belonged to households that showed the highest proportion of once with 76.5% of cases as compared to households with Pentecost respondents (60.3%), but the difference was not significant (p=0.222).

Table 3.36: *(C3) Distribution of households frequency of information on bilharzia per month*

	Frequency of information on Bilharzia per month				Total	p-value
	Once	Two times	Three times	More than 3 times		
District						
Ruhango	48.9	17.8	10.9	22.4	100.0	0.003
Bugesera	66.7	12.4	5.3	15.6	100.0	
Total	58.9	14.8	7.8	18.5	100.0	
Gender						
Male	59.1	13.6	7.8	19.5	100.0	0.951
Female	58.8	15.5	7.8	18.0	100.0	
Total	58.9	14.8	7.8	18.5	100.0	
Age group						
Less 40	55.0	15.0	8.6	21.4	100.0	0.460
40 to 59	60.4	17.0	7.7	14.8	100.0	
60 and above	62.3	9.1	6.5	22.1	100.0	
Total	58.9	14.8	7.8	18.5	100.0	
Religion						
Catholic	53.5	16.0	6.2	24.3	100.0	0.222
Pentecost	60.3	14.1	10.3	15.4	100.0	
Anglican	76.5	9.8	3.9	9.8	100.0	
Adventist	56.0	15.4	12.1	16.5	100.0	
Other religion	60.0	17.1	2.9	20.0	100.0	
Total	58.9	14.8	7.8	18.5	100.0	
Marital status						
Married	58.1	16.1	7.4	18.4	100.0	0.693
Cohabiting	52.4	13.4	9.8	24.4	100.0	
Single	64.7	11.8	11.8	11.8	100.0	
Widowed	67.7	16.1	4.8	11.3	100.0	
Divorced or separated	61.9	4.8	9.5	23.8	100.0	
Total	58.9	14.8	7.8	18.5	100.0	
Literacy						
Able to read and write	56.6	16.3	8.8	18.3	100.0	0.229
Not able to read or write	65.4	10.6	4.8	19.2	100.0	
Total	58.9	14.8	7.8	18.5	100.0	
Education						
No education	68.6	10.8	3.9	16.7	100.0	0.176
Nursery	56.4	16.9	8.1	18.6	100.0	
Primary	52.5	13.1	13.1	21.3	100.0	
Total	58.9	14.8	7.8	18.5	100.0	

Comparing the distribution by marital status, widowed respondents belonged to households that showed the highest proportion of once with 67.7% of cases as compared to households with single respondents (64.7%), but the difference was not significant (p=0.693).

Regarding literacy, respondents who are not able to read or write belonged to households that showed the highest proportion of once with 65.4% of cases as compared to households with respondents who are able to read and write (56.6%), but the difference was not significant

(p=0.229). Concerning education level, respondents with no education belonged to households that showed the highest proportion of once with 68.6% of cases as compared to households with respondents with nursery level (56.4%), but the difference was not significant (p=0.176).

4. Ever heard about Bilharzia transmission mode, prevention, signs & symptoms, or treatment

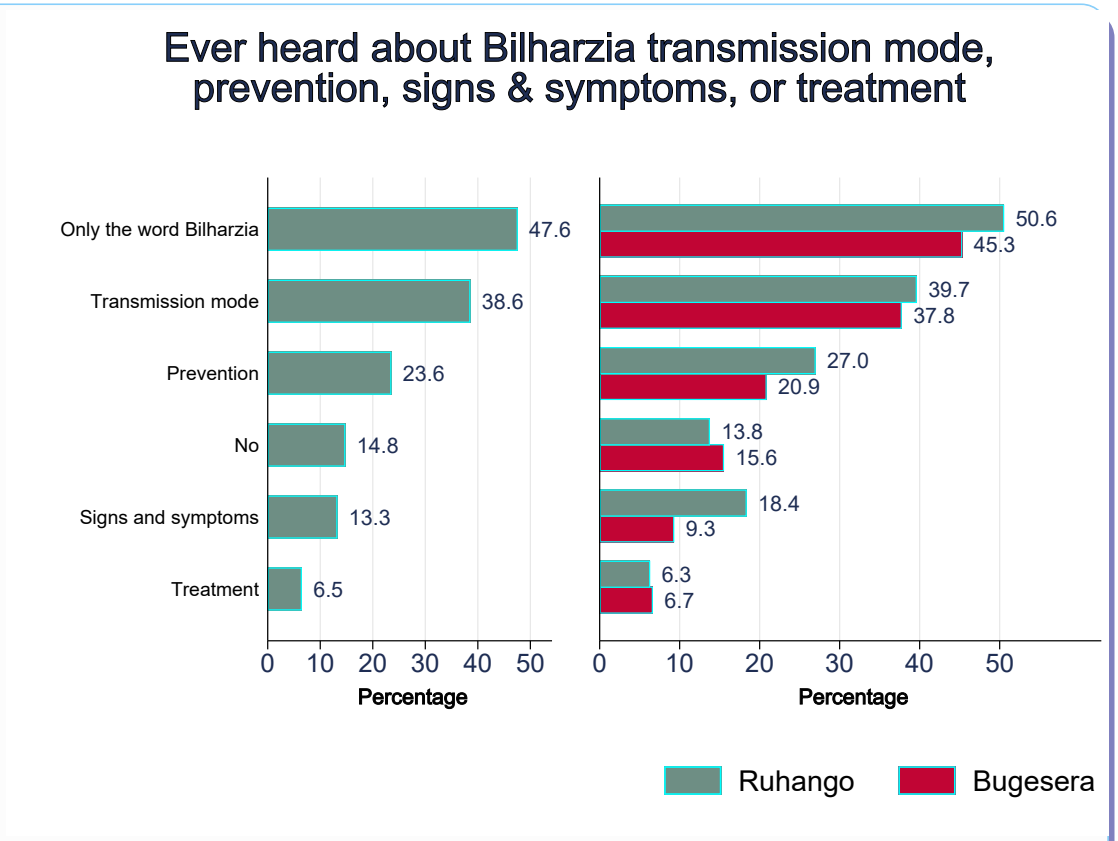


Figure 3.45: *Ever heard about Bilharzia transmission mode, prevention, signs & symptoms, or treatment*

Most households reported ever heard only the word bilharzia about SCH transmission, prevention, symptoms, or treatment were (47.6%). Others ever heard about transmission mode (38.6%), prevention (23.6%), no (14.8%) and signs and symptoms (13.3%) as shown in Table 3.37.

Table 3.37: *(C4) Heard about SCH transmission, prevention, symptoms, or treatment*

	Heard about SCH transmission, prevention, symptoms, or treatment					
	Only the word Bilharzia	**Transmission mode**	**Prevention**	**No**	**Signs and symp-toms**	**Treatment**
District						
Ruhango	50.6	39.7	27.0	13.8	18.4	6.3
Bugesera	45.3	37.8	20.9	15.6	9.3	6.7
Total	47.6	38.6	23.6	14.8	13.3	6.5
Gender						
Male	51.9	40.3	24.0	9.7	13.0	6.5
Female	44.9	37.6	23.3	18.0	13.5	6.5
Total	47.6	38.6	23.6	14.8	13.3	6.5
Age group						
Less 40	45.0	36.4	22.1	19.3	12.9	7.9
40-59	49.5	40.1	25.3	9.9	15.4	6.0
60 and above	48.1	39.0	22.1	18.2	9.1	5.2
Total	47.6	38.6	23.6	14.8	13.3	6.5
Religion						
Catholic church	48.6	38.2	22.2	12.5	13.2	4.9
Pentecost churches	47.4	41.0	19.2	14.1	10.3	5.1
Anglican church	37.3	33.3	21.6	27.5	11.8	11.8
Adventist church	53.8	40.7	27.5	11.0	14.3	5.5
Other	42.9	37.1	31.4	17.1	20.0	11.4
Total	47.6	38.6	23.6	14.8	13.3	6.5
Marital status						
Married	48.8	41.9	25.8	12.4	13.8	6.9
Cohabiting	45.1	32.9	15.9	18.3	12.2	6.1
Single	41.2	35.3	23.5	29.4	11.8	0.0
Widowed	48.4	40.3	27.4	12.9	16.1	6.5
Divorced/ separated	47.6	23.8	19.0	19.0	4.8	9.5
Total	47.6	38.6	23.6	14.8	13.3	6.5
Able to read and write						
Yes	45.4	43.1	25.1	13.2	15.9	7.5
No	53.8	26.0	19.2	19.2	5.8	3.8
Total	47.6	38.6	23.6	14.8	13.3	6.5
Education						
No education	54.9	26.5	17.6	18.6	5.9	3.9
Primary	46.6	41.1	23.7	12.7	14.0	5.9
Secondary/ university	39.3	49.2	32.8	16.4	23.0	13.1
Total	47.6	38.6	23.6	14.8	13.3	6.5

5. How does Bilharzia infection get transmitted to a person

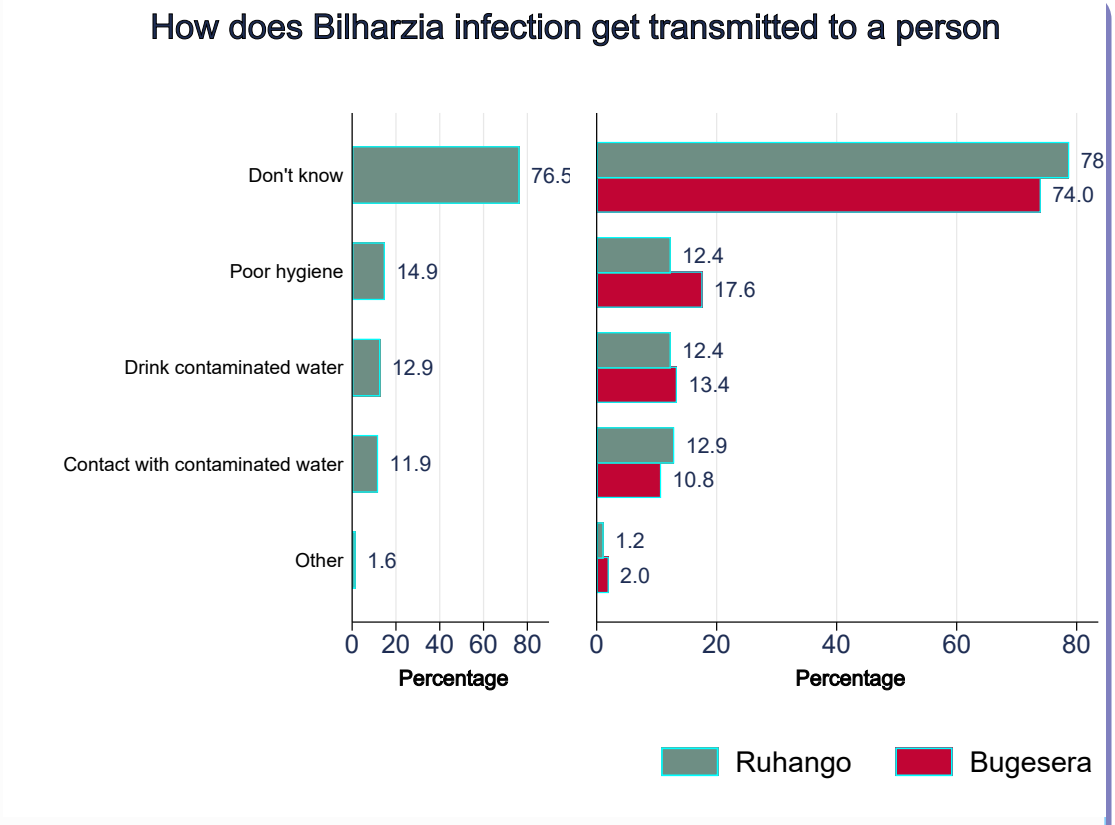


Figure 3.46: *How does Bilharzia infection get transmitted to a person*

Most households did not know how SCH infection get transmitted to a person in 76.5% of cases. Other reported modes of SCH infection included poor hygiene (14.9%), drink contaminated water (12.9%), contact with contaminated water of marshlands or lakes, etc. (11.9%), and other modes of transmissions (1.6%) as shown in Table 3.38.

Table 3.38: *(C5) How does SCH infection get transmitted to a person*

	How does SCH infection get transmitted to a person				
	Don't know	**Poor hygiene**	**Drink contaminated water with cercaria**	**Contact with contaminated water of marshlands, lakes, etc.**	**Other**
District					
Ruhango	78.8	12.4	12.4	12.9	1.2
Bugesera	74.0	17.6	13.4	10.8	2.0
Total	76.5	14.9	12.9	11.9	1.6
Gender					
Male	73.3	16.4	15.6	13.5	1.6
Female	78.3	14.1	11.2	10.9	1.6
Total	76.5	14.9	12.9	11.9	1.6
Age group					
Less 40	78.6	16.1	9.9	8.7	1.9
40-59	72.0	17.1	16.4	14.3	1.4
60 and above	81.2	10.0	10.8	11.9	1.5
Total	76.5	14.9	12.9	11.9	1.6
Religion					
Catholic church	78.9	12.8	11.7	10.8	1.4
Pentecost churches	75.6	16.2	13.7	10.7	1.5
Anglican church	77.5	18.6	11.8	10.8	1.0
Adventist church	70.1	18.0	16.5	15.5	2.6
Other	79.0	11.1	9.9	13.6	1.2
Total	76.5	14.9	12.9	11.9	1.6
Marital status					
Married	75.0	15.2	14.6	14.0	1.5
Cohabiting	72.8	18.9	11.7	7.8	1.7
Single	84.4	9.4	6.2	9.4	4.7
Widowed	79.2	14.6	11.2	11.8	1.1
Divorced/ separated	83.6	8.2	13.1	8.2	0.0
Total	76.5	14.9	12.9	11.9	1.6
Able to read and write					
Yes	70.8	18.7	16.1	15.4	1.8
No	87.3	7.8	6.6	5.2	1.2
Total	76.5	14.9	12.9	11.9	1.6
Education					
No education	87.8	7.2	6.4	5.5	1.4
Primary	73.1	16.2	16.0	14.2	1.3
Secondary/ university	57.8	33.0	17.4	20.2	3.7
Total	76.5	14.9	12.9	11.9	1.6

6. How Human can spread Bilharzia

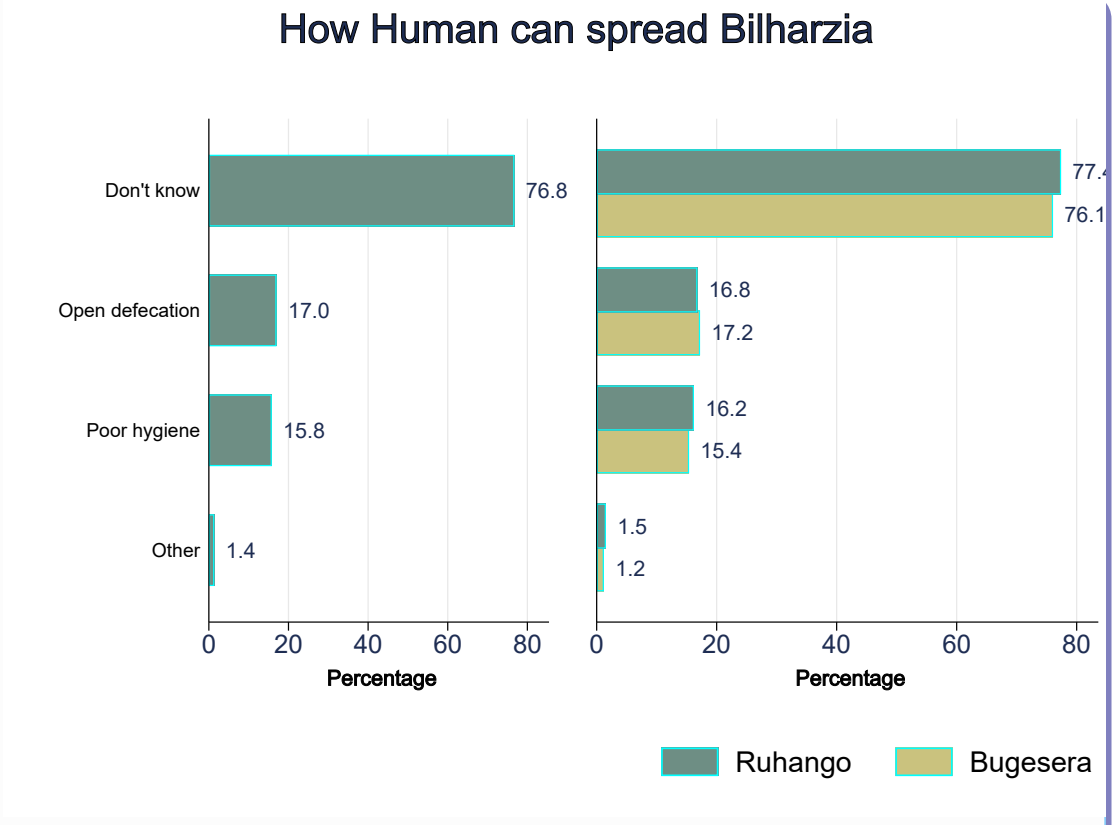


Figure 3.47: *How Human can spread Bilharzia*

Most households reported not knowing how human can spread Bilharzia in 76.8% of cases. Others reported that human can spread Bilharzia by open defecation (17.0%), poor hygiene (15.8%) or other ways (1.4%) as shown in Table 3.39.

Table 3.39: *(C6) How Human can spread Bilharzia*

	How Human can spread Bilharzia			
	Don't know	**Open defecation**	**Poor hygiene**	**Other**
District				
Ruhango	77.4	16.8	16.2	1.5
Bugesera	76.1	17.2	15.4	1.2
Total	76.8	17.0	15.8	1.4
Gender				
Male	73.0	18.9	18.3	1.6
Female	78.9	15.9	14.4	1.2
Total	76.8	17.0	15.8	1.4
Age group				
Less 40	81.1	14.2	13.0	1.5
40-59	70.8	21.5	20.1	1.6
60 and above	81.2	13.1	12.3	0.8
Total	76.8	17.0	15.8	1.4
Religion				
Catholic church	78.3	15.8	15.3	0.7
Pentecost churches	77.2	14.7	14.2	2.0
Anglican church	78.4	13.7	19.6	2.0
Adventist church	71.1	24.2	18.0	2.1
Other	79.0	16.0	12.3	1.2
Total	76.8	17.0	15.8	1.4
Marital status				
Married	75.6	17.8	16.3	1.5
Cohabiting	72.2	20.6	18.3	0.6
Single	90.6	7.8	6.2	1.6
Widowed	78.1	15.7	16.3	2.2
Divorced/ separated	82.0	13.1	13.1	0.0
Total	76.8	17.0	15.8	1.4
Able to read and write				
Yes	71.8	20.9	19.6	1.8
No	86.2	9.5	8.6	0.6
Total	76.8	17.0	15.8	1.4
Education				
No education	87.5	8.4	8.4	0.6
Primary	72.9	19.7	18.3	1.4
Secondary/ university	62.4	30.3	26.6	3.7
Total	76.8	17.0	15.8	1.4

7. Bilharzia is a disease that can NOT cause severe morbidity or death

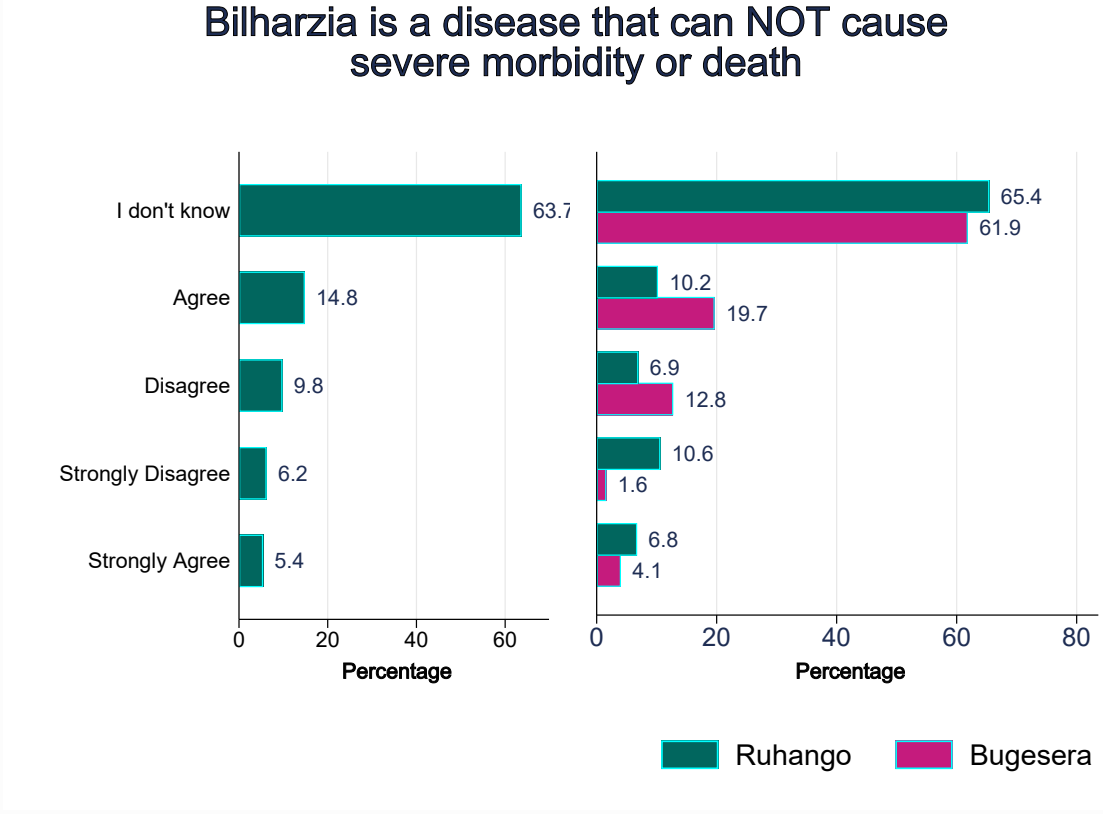


Figure 3.48: *Bilharzia is a disease that can NOT cause severe morbidity or death*

Most households reported not knowing that Bilharzia can cause severe morbidity or death in 63.7% of cases. Others agreed that Bilharzia can NOT cause severe morbidity or death (14.8%), disagreed (9.8%), strongly disagreed (6.2%) and strongly agreed (5.4%) as shown in Table 3.40.

Table 3.40: *(C7) Bilharzia is a disease that can NOT cause severe morbidity or death*

	Bilharzia can NOT cause severe morbidity or death						
	Strongly Agree	Agree	Disagree	Strongly Dis-agree	I don't know	Total	p-value
District							
Ruhango	6.8	10.2	6.9	10.6	65.4	518	0.000
Bugesera	4.1	19.7	12.8	1.6	61.9	493	
Total	5.4	14.8	9.8	6.2	63.7	1,011	
Gender							
Male	6.5	16.2	10.5	8.1	58.8	371	0.106
Female	4.8	14.1	9.4	5.2	66.6	640	
Total	5.4	14.8	9.8	6.2	63.7	1,011	
Age group							
Less 40	6.5	12.4	10.8	4.3	65.9	323	0.110
40-59	5.1	16.6	11.2	7.5	59.6	428	
60 and above	4.6	15.0	6.2	6.5	67.7	260	
Total	5.4	14.8	9.8	6.2	63.7	1,011	
Religion							
Catholic church	5.7	15.6	8.5	6.4	63.8	437	0.271
Pentecost churches	2.5	16.2	12.2	6.1	62.9	197	
Anglican church	2.9	16.7	12.7	2.9	64.7	102	
Adventist church	8.2	10.3	7.7	8.2	65.5	194	
Other	7.4	16.0	12.3	4.9	59.3	81	
Total	5.4	14.8	9.8	6.2	63.7	1,011	
Marital status							
Married	7.0	13.4	9.8	7.6	62.1	528	0.131
Cohabiting	3.3	15.6	13.9	4.4	62.8	180	
Single	4.7	17.2	4.7	9.4	64.1	64	
Widowed	3.9	18.0	7.3	5.1	65.7	178	
Divorced/ separated	3.3	13.1	9.8	0.0	73.8	61	
Total	5.4	14.8	9.8	6.2	63.7	1,011	
Able to read and write							
Yes	6.6	14.3	11.4	7.7	59.9	664	0.000
No	3.2	15.9	6.6	3.5	70.9	347	
Total	5.4	14.8	9.8	6.2	63.7	1,011	
Education							
No education	2.6	13.6	6.4	2.3	75.1	345	0.000
Primary	6.5	15.1	10.4	8.8	59.2	557	
Secondary/ university	9.2	17.4	17.4	5.5	50.5	109	
Total	5.4	14.8	9.8	6.2	63.7	1,011	

8. It is important to periodically screen for Bilharzia and intestinal worms

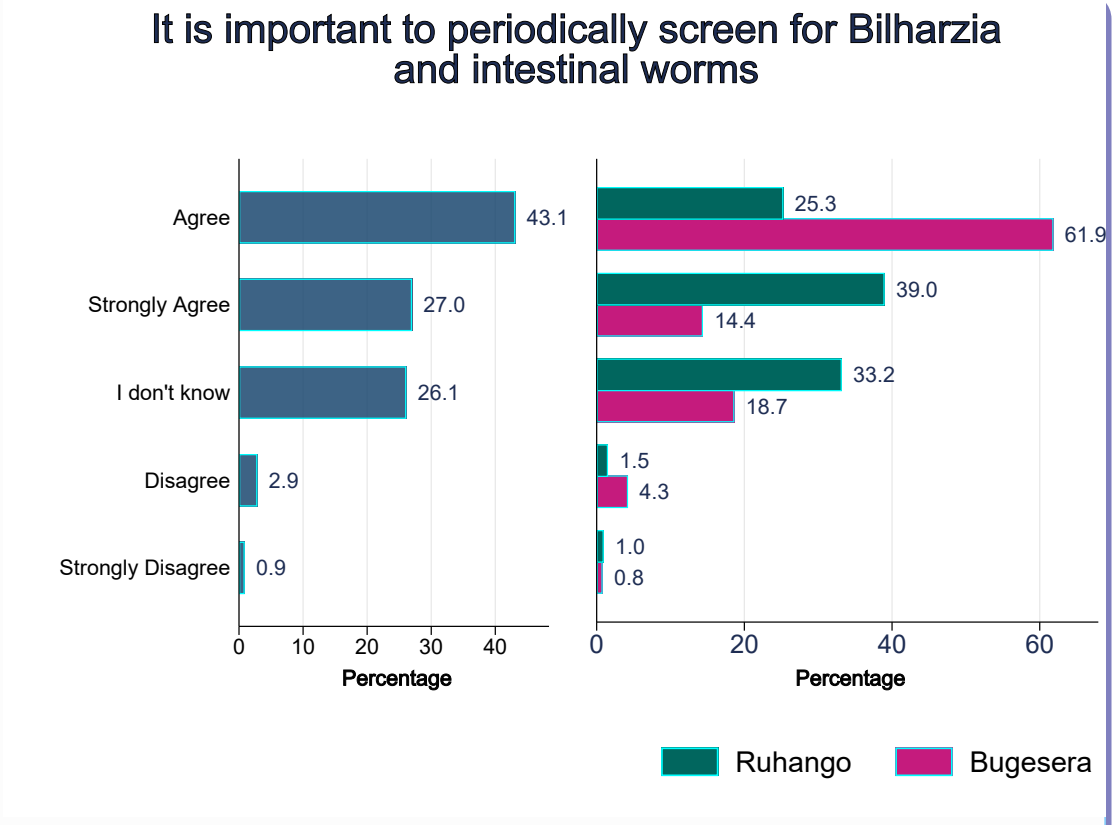


Figure 3.49: *It is important to periodically screen for Bilharzia and intestinal worms*

Most households agreed that it is important to screen for STH and SCH in 43.1% of cases. Others strongly agreed (27.0%), disagreed (2.9%), strongly disagreed (0.9%) and reported don't know in 26.1% of cases (Table 3.41).

Table 3.41: *(C8) It is important to periodically screen for Bilharzia and intestinal worms*

	It is important to screen for STH and SCH						
	Strongly Agree	Agree	Disagree	Strongly Dis-agree	I don't know	Total	p-value
District							
Ruhango	39.0	25.3	1.5	1.0	33.2	518	0.000
Bugesera	14.4	61.9	4.3	0.8	18.7	493	
Total	27.0	43.1	2.9	0.9	26.1	1,011	
Gender							
Male	29.9	42.0	2.7	0.5	24.8	371	0.515
Female	25.3	43.8	3.0	1.1	26.9	640	
Total	27.0	43.1	2.9	0.9	26.1	1,011	
Age group							
Less 40	24.5	43.3	1.9	0.6	29.7	323	0.406
40-59	28.5	44.4	2.8	1.2	23.1	428	
60 and above	27.7	40.8	4.2	0.8	26.5	260	
Total	27.0	43.1	2.9	0.9	26.1	1,011	
Religion							
Catholic church	28.6	41.0	3.2	0.7	26.5	437	0.019
Pentecost churches	19.3	48.2	2.0	1.0	29.4	197	
Anglican church	21.6	52.9	5.9	0.0	19.6	102	
Adventist church	33.5	34.5	2.6	1.5	27.8	194	
Other	28.4	50.6	0.0	1.2	19.8	81	
Total	27.0	43.1	2.9	0.9	26.1	1,011	
Marital status							
Married	29.0	41.7	1.5	0.6	27.3	528	0.071
Cohabiting	26.7	48.3	3.3	1.1	20.6	180	
Single	28.1	35.9	4.7	0.0	31.2	64	
Widowed	21.9	43.8	6.2	2.2	25.8	178	
Divorced/ separated	24.6	45.9	1.6	0.0	27.9	61	
Total	27.0	43.1	2.9	0.9	26.1	1,011	
Able to read and write							
Yes	31.2	42.3	2.3	1.1	23.2	664	0.000
No	19.0	44.7	4.0	0.6	31.7	347	
Total	27.0	43.1	2.9	0.9	26.1	1,011	
Education							
No education	18.0	46.4	4.3	0.6	30.7	345	0.000
Primary	30.9	40.9	2.5	1.3	24.4	557	
Secondary/ university	35.8	44.0	0.0	0.0	20.2	109	
Total	27.0	43.1	2.9	0.9	26.1	1,011	

9. It is important to take periodically tablets Bilharzia and intestinal worms

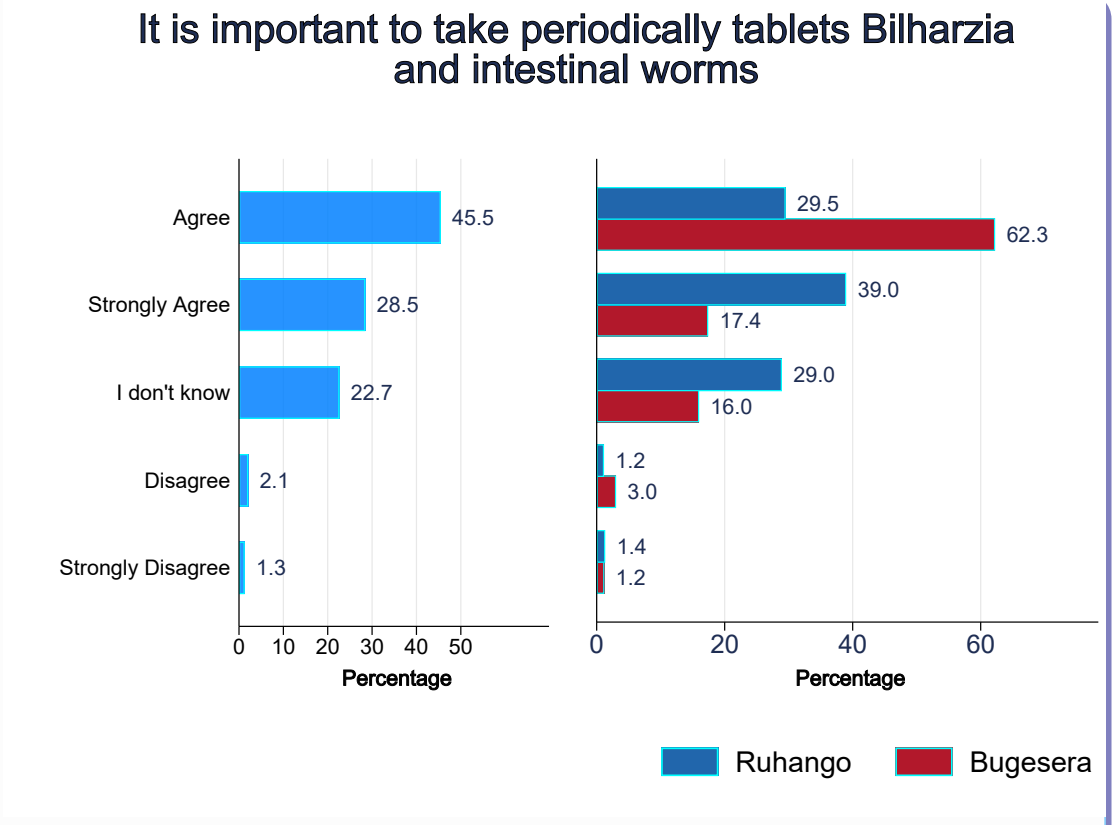


Figure 3.50: *It is important to take periodically tablets Bilharzia and intestinal worms*

Most households agreed that it is important to take tablets STH and SCH in 45.5% of cases. Others strongly agreed (28.5%), disagreed (2.1%) and strongly disagreed (1.3%) as shown in Table 3.42.

Table 3.42: *(C9) It is important to take periodically tablets Bilharzia and intestinal worms*

	It is important to take tablets STH and SCH						
	Strongly Agree	Agree	Disagree	Strongly Dis-agree	I don't know	Total	p-value
District							
Ruhango	39.0	29.5	1.2	1.4	29.0	518	0.000
Bugesera	17.4	62.3	3.0	1.2	16.0	493	
Total	28.5	45.5	2.1	1.3	22.7	1,011	
Gender							
Male	30.5	43.4	1.9	1.6	22.6	371	0.741
Female	27.3	46.7	2.2	1.1	22.7	640	
Total	28.5	45.5	2.1	1.3	22.7	1,011	
Age group							
Less 40	25.4	45.5	2.2	1.5	25.4	323	0.390
40-59	31.5	45.6	2.6	1.2	19.2	428	
60 and above	27.3	45.4	1.2	1.2	25.0	260	
Total	28.5	45.5	2.1	1.3	22.7	1,011	
Religion							
Catholic church	28.8	44.6	1.4	0.9	24.3	437	0.093
Pentecost churches	22.8	51.3	2.5	0.5	22.8	197	
Anglican church	28.4	52.0	2.0	1.0	16.7	102	
Adventist church	30.9	38.7	4.1	3.1	23.2	194	
Other	34.6	44.4	0.0	1.2	19.8	81	
Total	28.5	45.5	2.1	1.3	22.7	1,011	
Marital status							
Married	30.1	43.2	2.1	1.1	23.5	528	0.336
Cohabiting	30.6	46.1	1.7	3.3	18.3	180	
Single	26.6	43.8	1.6	0.0	28.1	64	
Widowed	25.3	48.3	2.2	0.6	23.6	178	
Divorced/ separated	19.7	57.4	3.3	0.0	19.7	61	
Total	28.5	45.5	2.1	1.3	22.7	1,011	
Able to read and write							
Yes	33.9	42.8	2.0	1.5	19.9	664	0.000
No	18.2	50.7	2.3	0.9	28.0	347	
Total	28.5	45.5	2.1	1.3	22.7	1,011	
Education							
No education	18.6	51.6	1.4	0.9	27.5	345	0.000
Primary	32.9	42.4	2.5	1.4	20.8	557	
Secondary/ university	37.6	42.2	1.8	1.8	16.5	109	
Total	28.5	45.5	2.1	1.3	22.7	1,011	

10. When I pass blood in stool or feel abdominal discomfort in my intestines I should go to health facility

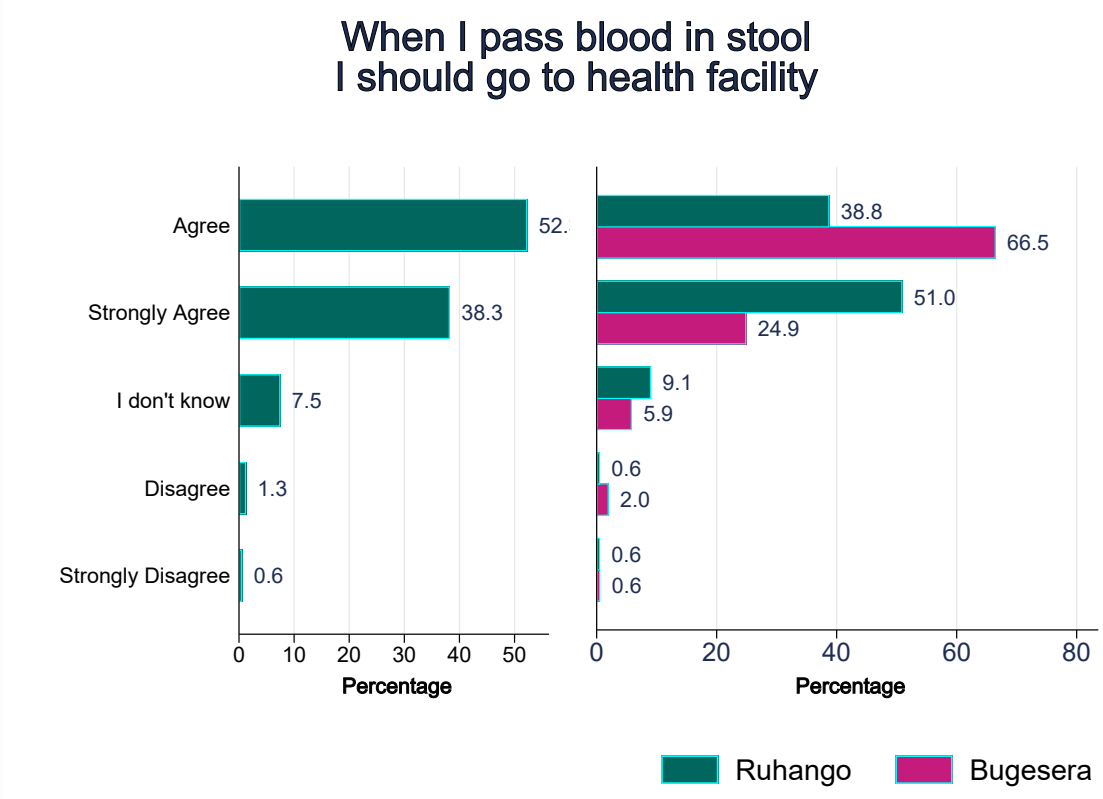


Figure 3.51: *When I pass blood in stool or feel abdominal discomfort in my intestines I should go to health facility*

Most households agreed that when blood in stool, they should go to health facility in 52.3% of cases. Other strongly agreed (38.3%), disagreed (1.3%) and strongly disagreed (0.6%) as shown in Table 3.43.

Table 3.43: *(C10) When I pass blood in stool or feel abdominal discomfort in my intestines I should go to health facility*

	When blood in stool, should go to health facility						
	Strongly Agree	Agree	Disagree	Strongly Dis-agree	I don't know	Total	p-value
District							
Ruhango	51.0	38.8	0.6	0.6	9.1	518	0.000
Bugesera	24.9	66.5	2.0	0.6	5.9	493	
Total	38.3	52.3	1.3	0.6	7.5	1,011	
Gender							
Male	39.4	51.8	0.5	0.5	7.8	371	0.583
Female	37.7	52.7	1.7	0.6	7.3	640	
Total	38.3	52.3	1.3	0.6	7.5	1,011	
Age group							
Less 40	36.5	53.9	1.9	0.9	6.8	323	0.079
40-59	40.2	53.3	0.7	0.5	5.4	428	
60 and above	37.3	48.8	1.5	0.4	11.9	260	
Total	38.3	52.3	1.3	0.6	7.5	1,011	
Religion							
Catholic church	40.3	48.3	2.1	0.5	8.9	437	0.045
Pentecost churches	29.9	64.0	1.0	0.5	4.6	197	
Anglican church	34.3	60.8	0.0	0.0	4.9	102	
Adventist church	42.8	46.4	0.5	1.0	9.3	194	
Other	42.0	49.4	1.2	1.2	6.2	81	
Total	38.3	52.3	1.3	0.6	7.5	1,011	
Marital status							
Married	42.2	48.3	0.9	0.6	8.0	528	0.213
Cohabiting	35.6	58.3	0.6	1.1	4.4	180	
Single	37.5	50.0	3.1	0.0	9.4	64	
Widowed	30.9	57.3	1.7	0.6	9.6	178	
Divorced/ separated	34.4	57.4	3.3	0.0	4.9	61	
Total	38.3	52.3	1.3	0.6	7.5	1,011	
Able to read and write							
Yes	42.8	49.7	1.1	0.5	6.0	664	0.001
No	29.7	57.3	1.7	0.9	10.4	347	
Total	38.3	52.3	1.3	0.6	7.5	1,011	
Education							
No education	29.0	58.8	1.4	0.6	10.1	345	0.002
Primary	41.8	50.1	1.3	0.7	6.1	557	
Secondary/ university	49.5	43.1	0.9	0.0	6.4	109	
Total	38.3	52.3	1.3	0.6	7.5	1,011	

11. Ever been diagnosed with Bilharzia in the past year

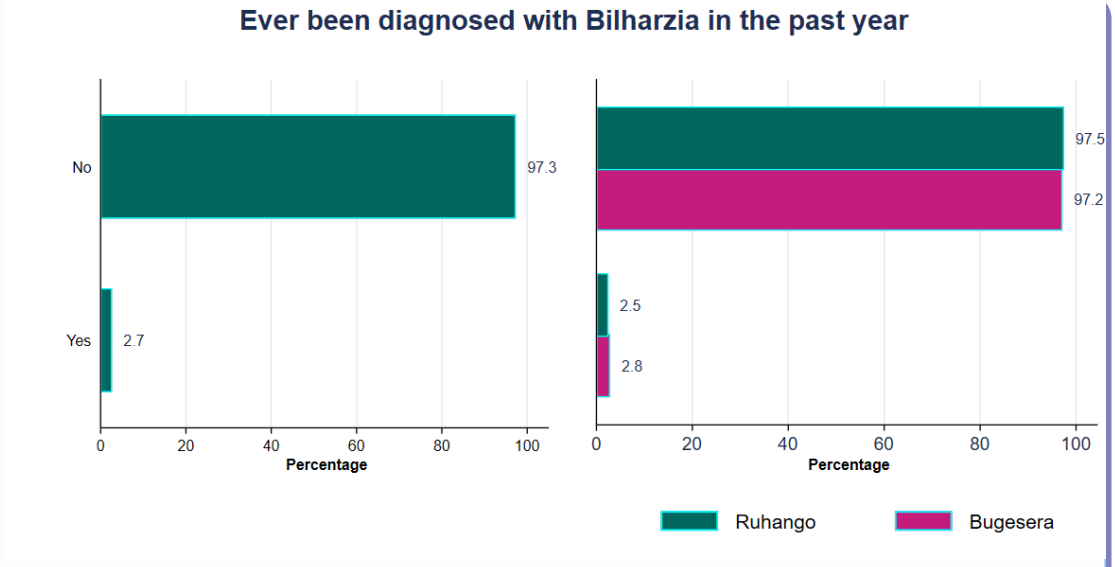


Figure 3.52: *Ever been diagnosed with Bilharzia in the past year*

Table 3.44 shows the biggest proportion of households reported never been diagnosed with sch in the past year (97.3%) while households ever been diagnosed with sch in the past year represented 2.7% of cases. Ruhango district showed the highest proportion of households never been diagnosed with sch in the past year with 97.5% of cases as compared to Bugesera district (97.2%), but the difference was not significant (p=0.745).

Regarding gender, female respondents belonged to households that showed the highest proportion never been diagnosed with sch in the past year with 97.5% of cases as compared to households with male respondents (97.0%), but the difference was not significant (p=0.659). Concerning age group, respondents aged 60 years and above belonged to households that showed the highest proportion never been diagnosed with sch in the past year with 98.5% of cases as compared to households with respondents less than 40 years (98.5%), and the difference was statistically significant (p=0.035).

Looking at religion, Catholic respondents belonged to households that showed the highest proportion never been diagnosed with sch in the past year with 98.6% of cases as compared to households with Other religion respondents (97.5%), but the difference was not significant (p=0.079). Comparing the distribution by marital status, single respondents belonged to households that showed the highest proportion never been diagnosed with sch in the past year with 100.0% of cases as compared to households with divorced or separated respondents (98.4%), but the difference was not significant (p=0.597).

Regarding literacy, respondents who are not able to read or write belonged to households that showed the highest proportion never been diagnosed with sch in the past year with 97.7% of

cases as compared to households with respondents who are able to read and write (97.1%), but the difference was not significant (p=0.603). Concerning education level, respondents with no education belonged to households that showed the highest proportion never been diagnosed with sch in the past year with 98.3% of cases as compared to households with respondents with primary education (98.2%), but the difference was not significant (p=0.270).

Table 3.44: *(C11) Distribution of households ever been diagnosed with sch in the past year*

	Ever been diagnosed with SCH in the past year				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	13	2.5	505	97.5	518	0.745
Bugesera	14	2.8	479	97.2	493	
Total	27	2.7	984	97.3	1,011	
Gender						
Male	11	3.0	360	97.0	371	0.659
Female	16	2.5	624	97.5	640	
Total	27	2.7	984	97.3	1,011	
Age group						
Less 40	5	1.5	318	98.5	323	0.035
40 to 59	18	4.2	410	95.8	428	
60 and above	4	1.5	256	98.5	260	
Total	27	2.7	984	97.3	1,011	
Religion						
Catholic	6	1.4	431	98.6	437	0.079
Pentecost	8	4.1	189	95.9	197	
Anglican	6	5.9	96	94.1	102	
Adventist	5	2.6	189	97.4	194	
Other religion	2	2.5	79	97.5	81	
Total	27	2.7	984	97.3	1,011	
Marital status						
Married	17	3.2	511	96.8	528	0.597
Cohabiting	4	2.2	176	97.8	180	
Single	0	0.0	64	100.0	64	
Widowed	5	2.8	173	97.2	178	
Divorced or separated	1	1.6	60	98.4	61	
Total	27	2.7	984	97.3	1,011	
Literacy						
Able to read and write	19	2.9	645	97.1	664	0.603
Not able to read or write	8	2.3	339	97.7	347	
Total	27	2.7	984	97.3	1,011	
Education						
No education	6	1.7	339	98.3	345	0.270
Nursery	19	3.4	538	96.6	557	
Primary	2	1.8	107	98.2	109	
Total	27	2.7	984	97.3	1,011	

12. Ever heard about intestinal worms

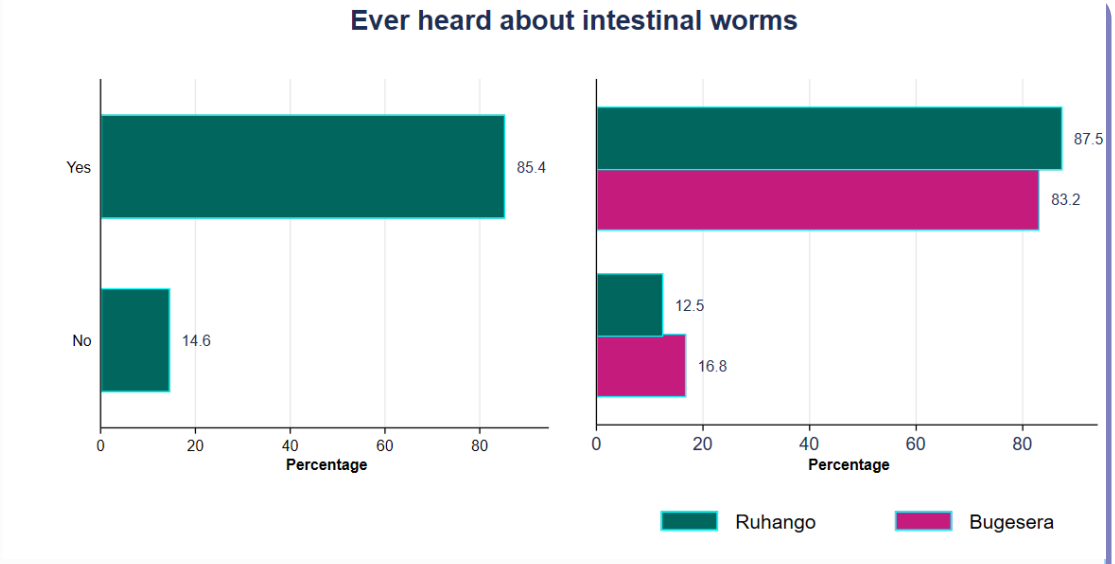


Figure 3.53: *Ever heard about intestinal worms*

13. Ever heard about intestinal worms transmission mode, prevention, signs & symptoms, or treatment

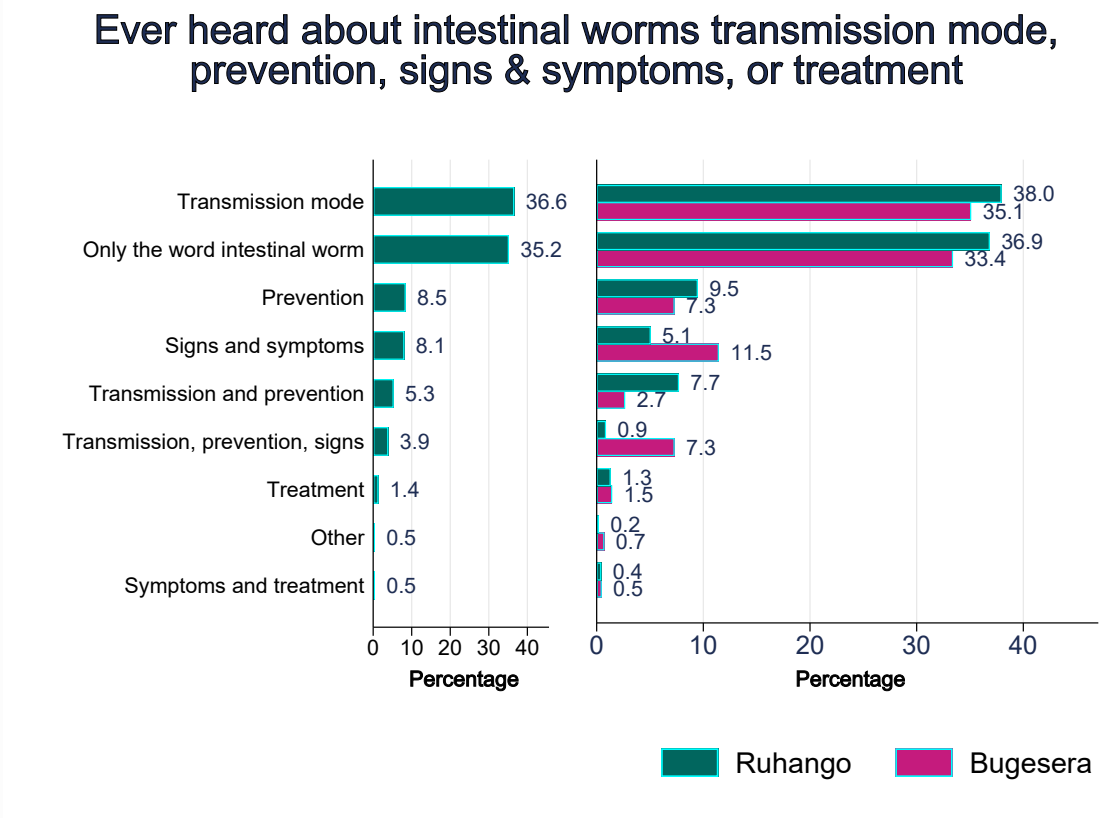


Figure 3.54: *Ever heard about intestinal worms transmission mode, prevention, signs & symptoms, or treatment*

Most participants reported ever heard about STH transmission mode in 36.6% of cases. Other ever heard about STH prevention (8.5%), signs and symptoms (8.1%) and transmission and prevention (5.3%) or only the word intestinal worms (35.2%) as shown in Table 3.45.

Table 3.45: *(C13) Ever heard about STH transmission mode, prevention, symptoms, or treatment*

	Ever heard about STH transmission mode, prevention, symptoms, or treatment					
	Transmission mode	*Only the word intestinal worms*	*Prevention*	*Signs & symptoms*	*Transmission and pre-vention*	*Transmission, prevention signs and treatment*
District						
Ruhango	38.0	36.9	9.5	5.1	7.7	0.9
Bugesera	35.1	33.4	7.3	11.5	2.7	7.3
Total	36.6	35.2	8.5	8.1	5.3	3.9
Gender						
Male	35.1	37.3	8.2	7.8	5.0	4.4
Female	37.5	34.0	8.6	8.3	5.5	3.7
Total	36.6	35.2	8.5	8.1	5.3	3.9
Age group						
Less 40	39.3	28.1	11.9	9.3	3.7	3.7
40-59	35.4	34.8	8.2	7.4	7.4	4.8
60 and above	35.5	44.7	4.6	7.8	3.7	2.8
Total	36.6	35.2	8.5	8.1	5.3	3.9
Religion						
Catholic church	35.9	38.6	10.1	6.0	4.1	2.7
Pentecost churches	47.0	26.2	6.0	11.3	3.6	4.2
Anglican church	34.9	32.6	5.8	11.6	5.8	5.8
Adventist church	35.5	33.7	9.3	7.0	9.9	4.1
Other	20.3	46.4	7.2	10.1	4.3	7.2
Total	36.6	35.2	8.5	8.1	5.3	3.9
Marital status						
Married	37.9	34.4	8.2	7.4	5.8	4.1
Cohabiting	35.5	33.5	12.9	11.0	2.6	1.3
Single	27.9	41.9	7.0	9.3	7.0	4.7
Widowed	35.6	36.9	5.4	7.4	6.0	6.7
Divorced/ separated	38.9	37.0	7.4	7.4	5.6	1.9
Total	36.6	35.2	8.5	8.1	5.3	3.9
Able to read and write						
Yes	36.9	33.3	9.8	8.5	4.7	4.2
No	36.0	39.1	5.9	7.3	6.6	3.5
Total	36.6	35.2	8.5	8.1	5.3	3.9
Education						
No education	35.0	38.5	5.3	8.1	6.4	4.2
Primary	37.3	35.4	9.5	8.7	4.8	2.7
Secondary/ university	38.1	24.7	12.4	5.2	5.2	9.3
Total	36.6	35.2	8.5	8.1	5.3	3.9

14. Source of information about about intestinal worms

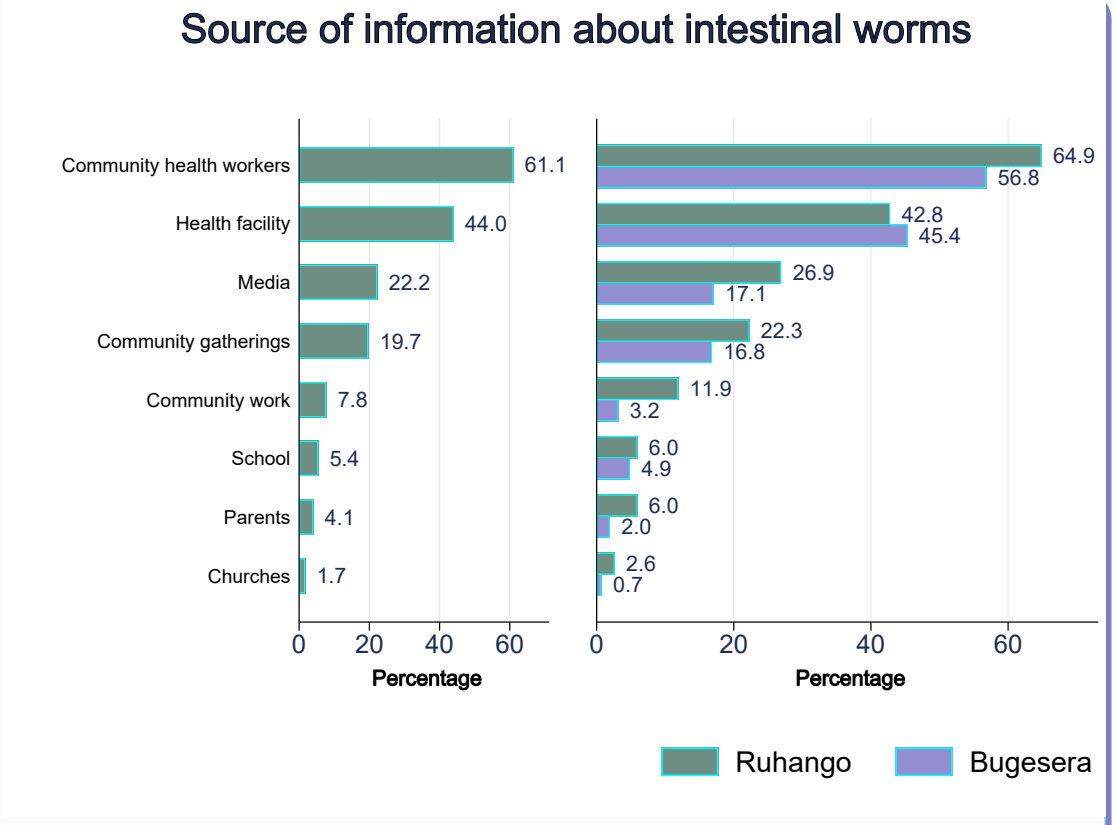


Figure 3.55: *Source of information about about intestinal worms*

Most households reported that source of information about about STH were community health workers in 61.1% of cases. Other Source of information about about STH included health facility (44.0%), media (22.2%), community gatherings (19.7%) and community work (7.8%) as shown in Table 3.46.

Table 3.46: *(C14) Source of information about about STH*

	Source of information about about STH					
	Community health workers	**Health facility**	**Media**	**Community gather-ings**	**Community work**	**Other**
District						
Ruhango	64.9	42.8	26.9	22.3	11.9	3.3
Bugesera	56.8	45.4	17.1	16.8	3.2	8.3
Total	61.1	44.0	22.2	19.7	7.8	5.7
Gender						
Male	61.4	38.6	26.0	19.7	7.2	5.0
Female	60.8	47.2	20.0	19.7	8.1	6.1
Total	61.1	44.0	22.2	19.7	7.8	5.7
Age group						
Less 40	58.5	41.9	23.0	15.6	6.3	5.9
40-59	62.5	46.8	21.5	23.4	9.6	5.1
60 and above	61.8	41.9	22.6	18.4	6.5	6.5
Total	61.1	44.0	22.2	19.7	7.8	5.7
Religion						
Catholic	60.1	41.6	23.4	17.9	7.3	5.2
Pentecost	56.0	44.6	20.2	18.5	4.8	6.0
Anglican	65.1	50.0	17.4	11.6	4.7	7.0
Adventist	69.2	41.3	23.8	25.0	14.0	4.1
Other religion	53.6	55.1	23.2	29.0	5.8	10.1
Total	61.1	44.0	22.2	19.7	7.8	5.7
Marital status						
Married	62.8	44.6	27.7	20.6	9.1	5.4
Cohabiting	55.5	45.2	14.2	18.1	7.1	5.2
Single	51.2	39.5	30.2	20.9	4.7	0.0
Widowed	64.4	45.6	15.4	18.8	6.7	8.7
Divorced or separated	61.1	35.2	11.1	18.5	3.7	5.6
Total	61.1	44.0	22.2	19.7	7.8	5.7
Literacy						
Able to read and write	59.9	46.2	23.9	19.3	7.7	5.6
Not able to read or write	63.3	39.8	19.0	20.4	8.0	5.9
Total	61.1	44.0	22.2	19.7	7.8	5.7
Education						
No education	63.6	38.9	17.0	19.8	7.8	7.4
Primary	60.9	45.5	24.8	18.2	7.2	4.6
Secondary or university	54.6	51.5	24.7	26.8	10.3	6.2
Total	61.1	44.0	22.2	19.7	7.8	5.7

15. How are intestinal worm infections transmitted to a human

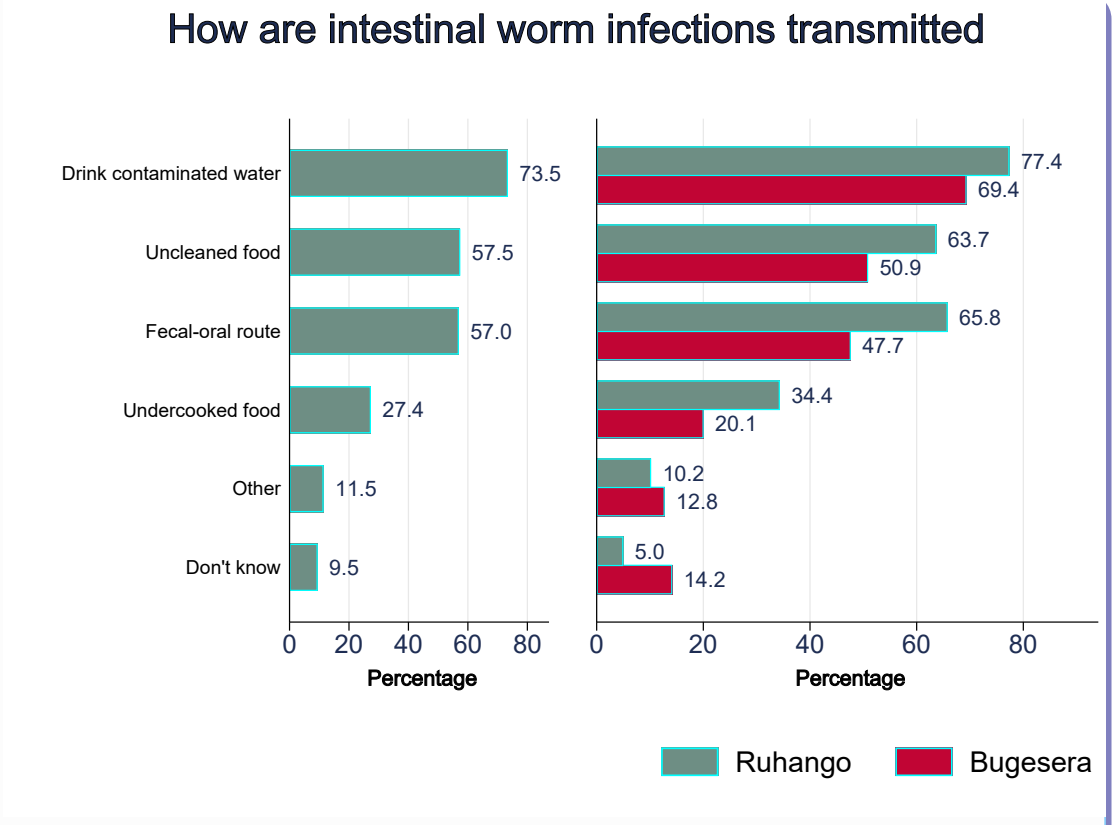


Figure 3.56: *How are intestinal worm infections transmitted to a human*

Most households reported that STH infections are transmitted by drinking contaminated water in 73.5% of cases. Other STH infection transmissions included uncleaned food (57.5%), fecal-oral route (57.0%), undercooked food (27.4%) and other (11.5%) as shown in Table 3.47.

Table 3.47: *(C15) How are STH infections transmitted*

	How are STH infections transmitted					
	Drink contaminated water	**Uncleaned food**	**Fecal-oral route**	**Undercooked food**	**Other**	**Don't know**
District						
Ruhango	77.4	63.7	65.8	34.4	10.2	5.0
Bugesera	69.4	50.9	47.7	20.1	12.8	14.2
Total	73.5	57.5	57.0	27.4	11.5	9.5
Gender						
Male	77.1	57.7	60.9	27.5	10.0	7.8
Female	71.4	57.3	54.7	27.3	12.3	10.5
Total	73.5	57.5	57.0	27.4	11.5	9.5
Age group						
Less 40	70.0	60.4	56.7	26.3	14.2	9.3
40-59	76.9	60.7	55.6	28.7	10.5	7.0
60 and above	72.3	48.5	59.6	26.5	9.6	13.8
Total	73.5	57.5	57.0	27.4	11.5	9.5
Religion						
Catholic church	75.7	58.8	58.6	27.9	10.1	7.6
Pentecost churches	69.5	55.8	50.3	24.9	15.7	11.2
Anglican church	74.5	50.0	57.8	26.5	7.8	15.7
Adventist church	73.2	61.9	60.8	28.9	10.8	7.7
Other	70.4	53.1	54.3	28.4	14.8	12.3
Total	73.5	57.5	57.0	27.4	11.5	9.5
Marital status						
Married	77.8	59.7	58.0	28.4	12.1	6.8
Cohabiting	71.1	60.6	58.9	28.9	9.4	10.6
Single	60.9	56.2	59.4	31.2	17.2	14.1
Widowed	71.9	48.9	54.5	23.6	10.7	13.5
Divorced/ separated	60.7	55.7	47.5	21.3	8.2	13.1
Total	73.5	57.5	57.0	27.4	11.5	9.5
Able to read and write						
Yes	76.7	61.9	62.2	30.0	11.1	5.9
No	67.4	49.0	47.0	22.5	12.1	16.4
Total	73.5	57.5	57.0	27.4	11.5	9.5
Education						
No education	68.7	47.2	50.1	23.2	11.3	17.1
Primary	76.5	61.4	59.1	27.1	12.2	5.9
Secondary/ university	73.4	69.7	67.9	42.2	8.3	3.7
Total	73.5	57.5	57.0	27.4	11.5	9.5

16. How can humans spread intestinal worms

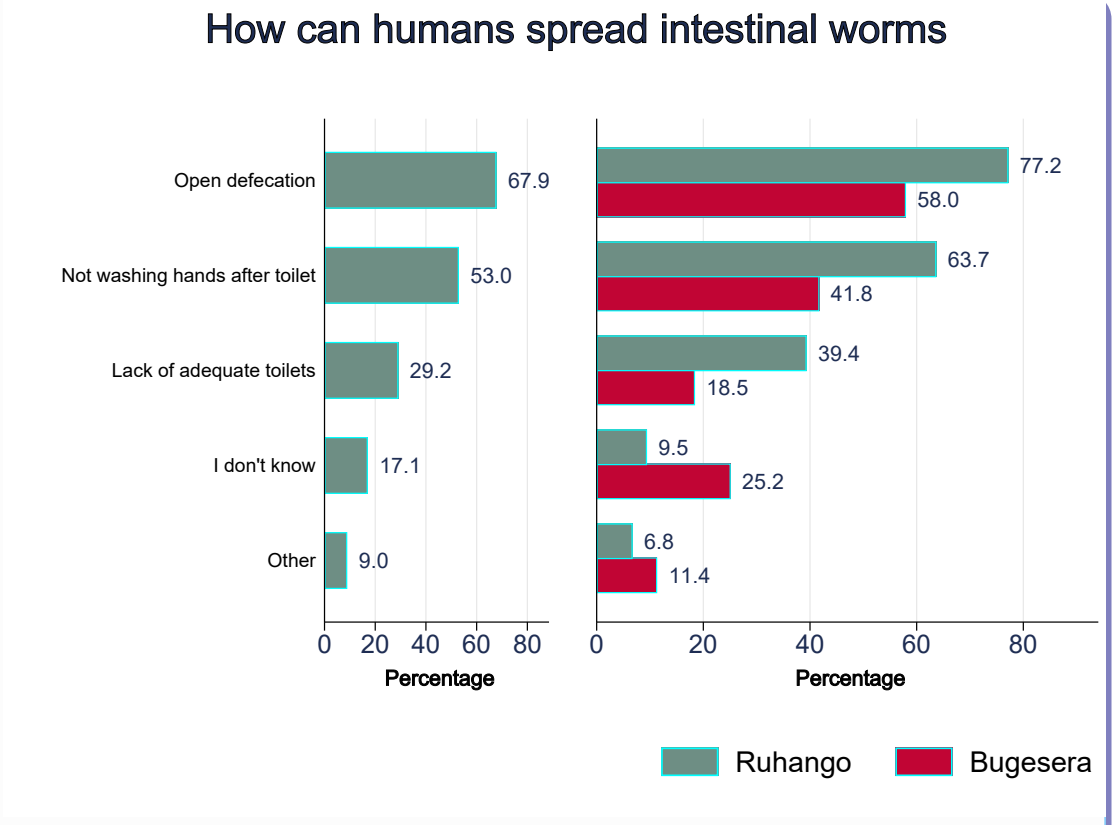


Figure 3.57: *How can humans spread intestinal worms*

Most households reported that humans can spread intestinal worms through open defecation in 67.9% of cases. Other humans spread of intestinal worms included not washing hands after toilet (53.0%), lack of adequate toilets preventing flies (29.2%), i don't know (17.1%) and other (9.0%) as shown in Table 3.48.

Table 3.48: *(C16) How can humans spread intestinal worms*

	How can humans spread intestinal worms				
	Open defecation	**Not washing hands after toilet**	**Lack of adequate toilets preventing flies**	**I don't know**	**Other**
District					
Ruhango	77.2	63.7	39.4	9.5	6.8
Bugesera	58.0	41.8	18.5	25.2	11.4
Total	67.9	53.0	29.2	17.1	9.0
Gender					
Male	74.4	59.6	31.0	12.4	8.1
Female	64.1	49.2	28.1	19.8	9.5
Total	67.9	53.0	29.2	17.1	9.0
Age group					
Less 40	62.2	50.5	27.2	21.1	10.2
40-59	72.7	57.5	32.2	11.7	8.9
60 and above	66.9	48.8	26.5	21.2	7.7
Total	67.9	53.0	29.2	17.1	9.0
Religion					
Catholic church	71.4	55.6	32.3	16.2	6.9
Pentecost churches	66.5	43.1	23.9	18.8	13.2
Anglican church	54.9	56.9	22.5	25.5	6.9
Adventist church	68.6	57.7	28.9	12.4	8.2
Other	66.7	46.9	34.6	18.5	14.8
Total	67.9	53.0	29.2	17.1	9.0
Marital status					
Married	72.0	57.2	32.0	12.7	9.7
Cohabiting	66.7	54.4	28.3	17.8	9.4
Single	54.7	46.9	25.0	34.4	4.7
Widowed	63.5	46.6	23.0	22.5	6.7
Divorced/ separated	62.3	37.7	29.5	19.7	13.1
Total	67.9	53.0	29.2	17.1	9.0
Able to read and write					
Yes	73.3	58.7	33.1	11.7	9.8
No	57.3	42.1	21.6	27.4	7.5
Total	67.9	53.0	29.2	17.1	9.0
Education					
No education	59.4	44.3	21.4	26.7	7.5
Primary	72.0	55.8	30.9	12.6	10.8
Secondary/ university	73.4	66.1	45.0	10.1	4.6
Total	67.9	53.0	29.2	17.1	9.0

17. How often are you reminded/ taught about practicing hygiene including hand washing

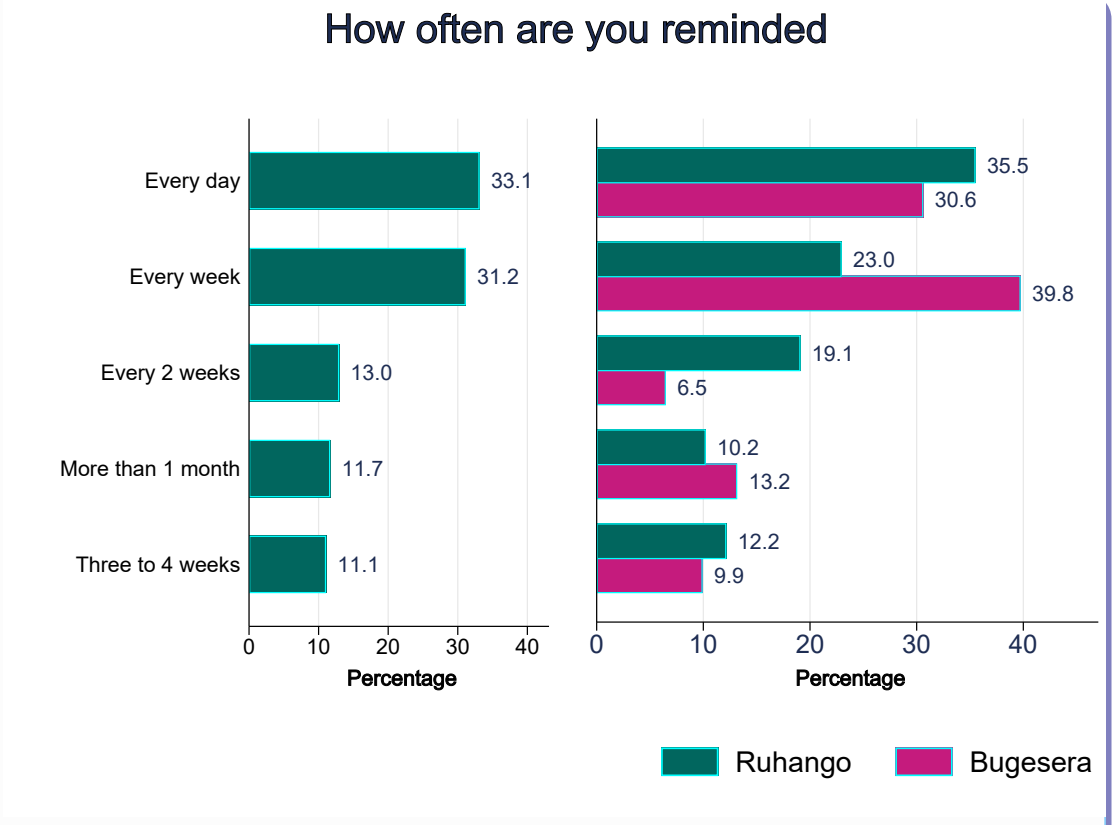


Figure 3.58: *How often are you reminded/ taught about practicing hygiene including hand washing*

As shown in Table 3.49, most households reported that the Times reminded about practicing hygiene was every day in 33.1% of cases. Other Times reminded about practicing hygiene included every week (31.2%), every 2 weeks (13.0%), more than 1 month (11.7%) and three to 4 weeks (11.1%). Ruhango district showed the highest proportion of every day with 35.5% of cases as compared to Bugesera district (30.6%), and the difference was highly statistically significant (p=0.000).

Regarding gender, female respondents belonged to households that showed the highest proportion of every day with 34.2% of cases as compared to households with male respondents (31.3%), but the difference was not significant (p=0.796). Concerning age group, respondents aged 60 years and above belonged to households that showed the highest proportion of every day with 37.3% of cases as compared to households with respondents less than 40 years (36.8%), and the difference was statistically significant (p=0.006).

Table 3.49: *(C17) Distribution of households times reminded about practicing hygiene*

	Times reminded about practicing hygiene					Total	p-value
	Every day	Every week	Every 2 weeks	Three to 4 weeks	More than 1 month		
District							
Ruhango	35.5	23.0	19.1	12.2	10.2	518	0.000
Bugesera	30.6	39.8	6.5	9.9	13.2	493	
Total	33.1	31.2	13.0	11.1	11.7	1,011	
Gender							
Male	31.3	31.3	13.5	12.4	11.6	371	0.796
Female	34.2	31.1	12.7	10.3	11.7	640	
Total	33.1	31.2	13.0	11.1	11.7	1,011	
Age group							
Less 40	36.8	28.5	11.1	9.0	14.6	323	0.006
40 to 59	27.8	33.9	15.7	13.6	9.1	428	
60 and above	37.3	30.0	10.8	9.6	12.3	260	
Total	33.1	31.2	13.0	11.1	11.7	1,011	
Religion							
Catholic	38.9	25.4	14.9	11.0	9.8	437	0.001
Pentecost	31.5	38.6	8.1	12.2	9.6	197	
Anglican	25.5	31.4	11.8	14.7	16.7	102	
Adventist	22.7	36.6	14.4	10.3	16.0	194	
Other religion	40.7	30.9	12.3	6.2	9.9	81	
Total	33.1	31.2	13.0	11.1	11.7	1,011	
Marital status							
Married	30.9	34.3	14.8	11.0	9.1	528	0.012
Cohabiting	30.6	33.3	9.4	10.0	16.7	180	
Single	45.3	20.3	10.9	9.4	14.1	64	
Widowed	34.3	27.5	14.6	10.7	12.9	178	
Divorced or separated	44.3	19.7	4.9	18.0	13.1	61	
Total	33.1	31.2	13.0	11.1	11.7	1,011	
Literacy							
Able to read and write	32.5	32.1	13.1	11.4	10.8	664	0.709
Not able to read or write	34.3	29.4	12.7	10.4	13.3	347	
Total	33.1	31.2	13.0	11.1	11.7	1,011	
Education							
No education	31.6	30.4	12.2	11.9	13.9	345	0.877
Nursery	33.9	31.6	13.3	11.0	10.2	557	
Primary	33.9	31.2	13.8	9.2	11.9	109	
Total	33.1	31.2	13.0	11.1	11.7	1,011	

Looking at religion, Other religion respondents belonged to households that showed the highest proportion of every day with 40.7% of cases as compared to households with Catholic respondents (38.9%), and the difference was statistically significant (p=0.001). Comparing the distribution by marital status, single respondents belonged to households that showed the highest proportion of every day with 45.3% of cases as compared to households with divorced or separated respondents (44.3%), and the difference was statistically significant (p=0.012).

Regarding literacy, respondents who are not able to read or write belonged to households that

showed the highest proportion of every day with 34.3% of cases as compared to households with respondents who are able to read and write (32.5%), but the difference was not significant (p=0.709). Concerning education level, respondents with primary education belonged to households that showed the highest proportion of every day with 33.9% of cases as compared to households with respondents with nursery level (33.9%), but the difference was not significant (p=0.877).

18. Who reminds the hygiene practice

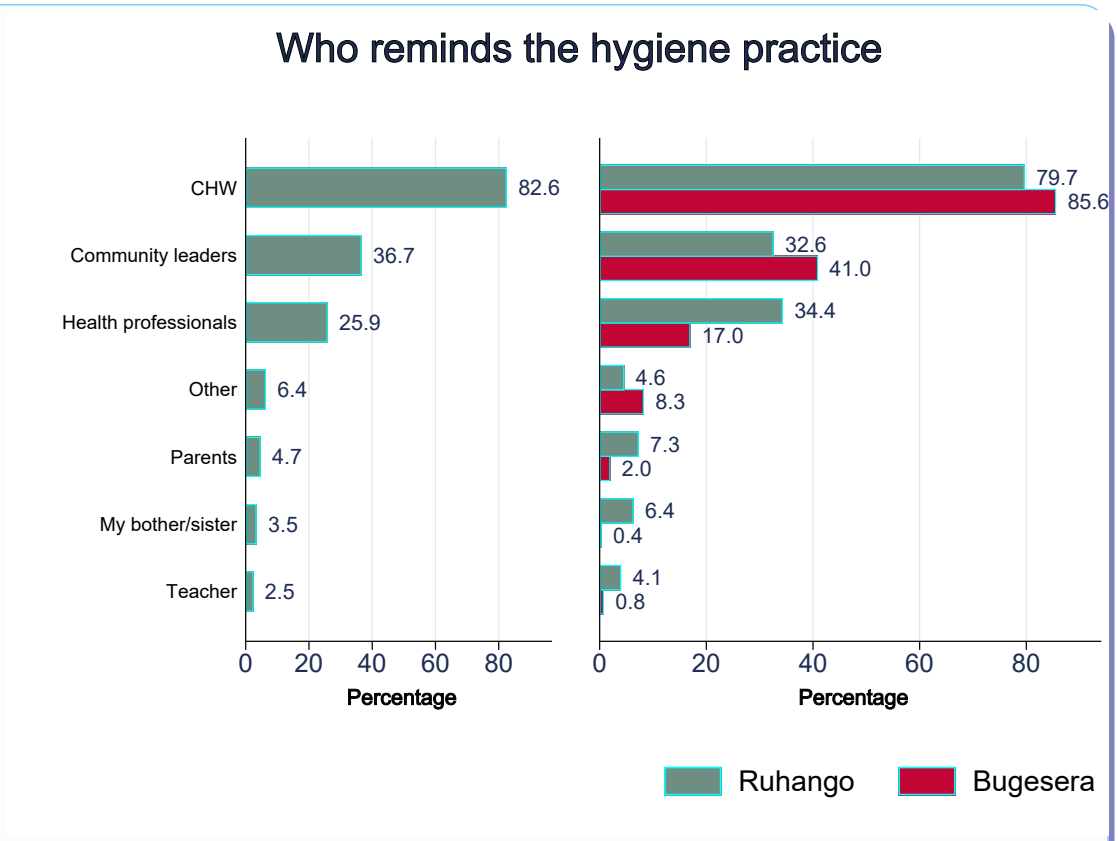


Figure 3.59: *Who reminds the hygiene practice*

Most participants reported that persons reminding the hygiene practice were CHW in 82.6% of cases. Other who reminds the hygiene practice included community leaders (36.7%), health professionals (25.9%), other (6.4%) and parents (4.7%) as shown in Table 3.50.

Table 3.50: *(C18) Who reminds the hygiene practice*

	Who reminds the hygiene practice					
	CHW	**Community leaders**	**Health profes-sionals**	**Other**	**Parents**	**My bother/sister**
District						
Ruhango	79.7	32.6	34.4	4.6	7.3	6.4
Bugesera	85.6	41.0	17.0	8.3	2.0	0.4
Total	82.6	36.7	25.9	6.4	4.7	3.5
Gender						
Male	83.6	35.8	27.2	5.7	4.0	4.0
Female	82.0	37.2	25.2	6.9	5.2	3.1
Total	82.6	36.7	25.9	6.4	4.7	3.5
Age group						
Less 40	83.0	39.3	25.4	7.4	5.6	2.8
40-59	84.3	34.3	26.6	3.7	4.2	4.2
60 and above	79.2	37.3	25.4	9.6	4.6	3.1
Total	82.6	36.7	25.9	6.4	4.7	3.5
Religion						
Catholic church	81.5	34.8	27.5	5.5	4.6	4.1
Pentecost churches	80.7	40.6	23.9	6.1	4.1	2.5
Anglican church	81.4	31.4	25.5	7.8	6.9	3.9
Adventist church	85.6	37.1	27.3	5.2	4.6	4.1
Other	87.7	43.2	19.8	13.6	4.9	0.0
Total	82.6	36.7	25.9	6.4	4.7	3.5
Marital status						
Married	84.5	38.1	28.2	5.5	4.0	3.0
Cohabiting	81.1	36.7	25.6	5.0	4.4	6.1
Single	73.4	39.1	23.4	12.5	12.5	4.7
Widowed	80.3	36.0	20.8	7.9	5.6	2.2
Divorced/ separated	86.9	24.6	24.6	8.2	1.6	1.6
Total	82.6	36.7	25.9	6.4	4.7	3.5
Able to read and write						
Yes	82.4	36.1	29.8	6.2	6.2	4.7
No	83.0	37.8	18.4	6.9	2.0	1.2
Total	82.6	36.7	25.9	6.4	4.7	3.5
Education						
No education	82.9	36.5	18.6	7.8	1.7	1.2
Primary	82.8	37.3	28.9	5.7	5.0	3.9
Secondary/ university	80.7	33.9	33.9	5.5	12.8	8.3
Total	82.6	36.7	25.9	6.4	4.7	3.5

19. What are the signs of someone infected by intestinal worms

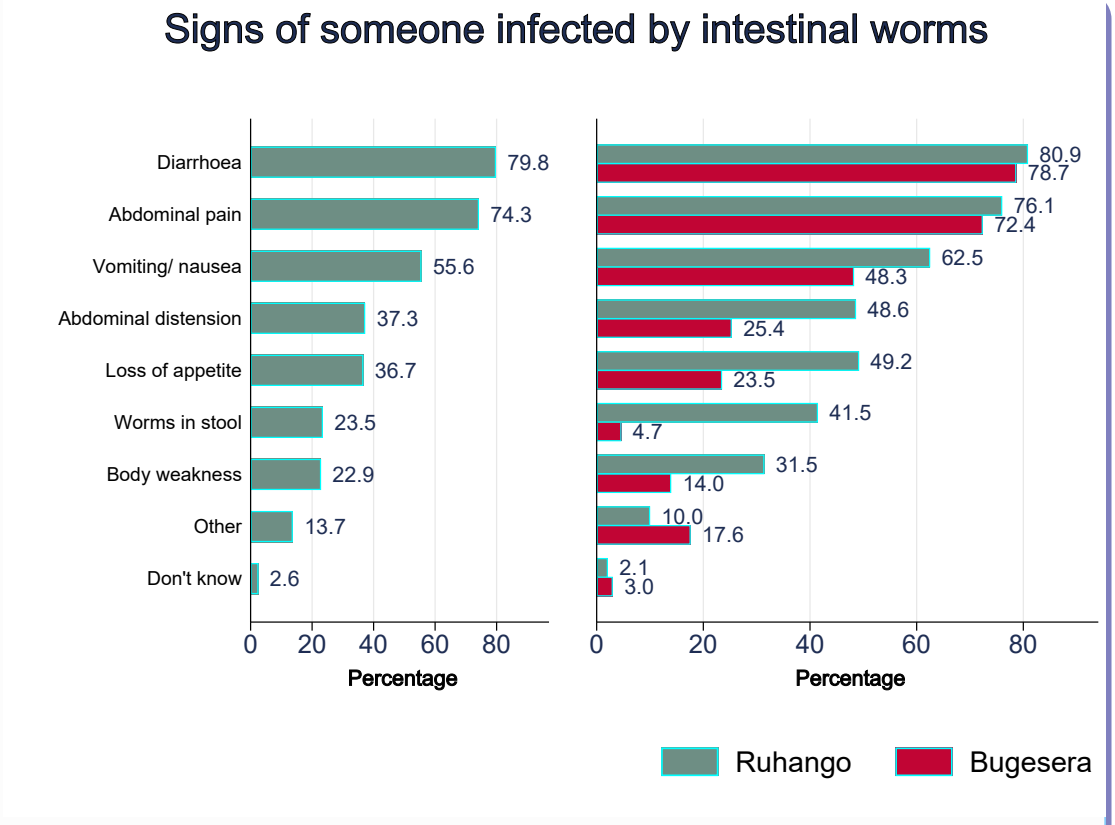


Figure 3.60: *What are the signs of someone infected by intestinal worms*

Most participants reported that the signs of someone infected by STH are diarrhoea in 79.8% of cases. Other signs of someone infected by STH included abdominal pain (74.3%), vomiting/ nausea (55.6%), abdominal distension (37.3%) and loss of appetite (36.7%) as shown in Table 3.51.

Table 3.51: *(C19) What are the signs of someone infected by STH*

	What are the signs of someone infected by STH					
	Diarrhoea	**Abdominal pain**	**Vomiting/ nausea**	**Abdominal distension**	**Loss of appetite**	**Worms in stool**
District						
Ruhango	80.9	76.1	62.5	48.6	49.2	41.5
Bugesera	78.7	72.4	48.3	25.4	23.5	4.7
Total	79.8	74.3	55.6	37.3	36.7	23.5
Gender						
Male	76.3	73.3	54.4	39.4	40.2	25.1
Female	81.9	74.8	56.2	36.1	34.7	22.7
Total	79.8	74.3	55.6	37.3	36.7	23.5
Age group						
Less 40	83.3	74.0	57.6	31.9	31.9	20.7
40-59	80.1	75.7	56.8	39.3	38.1	25.0
60 and above	75.0	72.3	51.2	40.8	40.4	24.6
Total	79.8	74.3	55.6	37.3	36.7	23.5
Religion						
Catholic church	79.9	74.4	56.1	41.6	37.1	26.1
Pentecost churches	81.7	75.1	50.3	28.4	31.0	16.2
Anglican church	78.4	73.5	55.9	25.5	34.3	17.6
Adventist church	82.0	74.7	59.3	44.3	47.9	29.9
Other	71.6	71.6	56.8	33.3	24.7	19.8
Total	79.8	74.3	55.6	37.3	36.7	23.5
Marital status						
Married	78.8	76.3	58.7	43.2	40.9	26.3
Cohabiting	86.1	68.9	51.1	24.4	29.4	17.8
Single	78.1	73.4	51.6	28.1	31.2	18.8
Widowed	76.4	73.6	53.4	37.1	36.5	24.2
Divorced/ separated	82.0	75.4	52.5	34.4	27.9	19.7
Total	79.8	74.3	55.6	37.3	36.7	23.5
Able to read and write						
Yes	82.2	76.1	59.0	37.3	39.2	27.1
No	75.2	70.9	49.0	37.2	32.0	16.7
Total	79.8	74.3	55.6	37.3	36.7	23.5
Education						
No education	76.5	72.2	49.9	36.2	31.6	18.0
Primary	80.3	75.4	57.6	38.2	38.1	26.4
Secondary/ university	88.1	75.2	63.3	35.8	45.9	26.6
Total	79.8	74.3	55.6	37.3	36.7	23.5

20. What is the treatment of intestinal worms

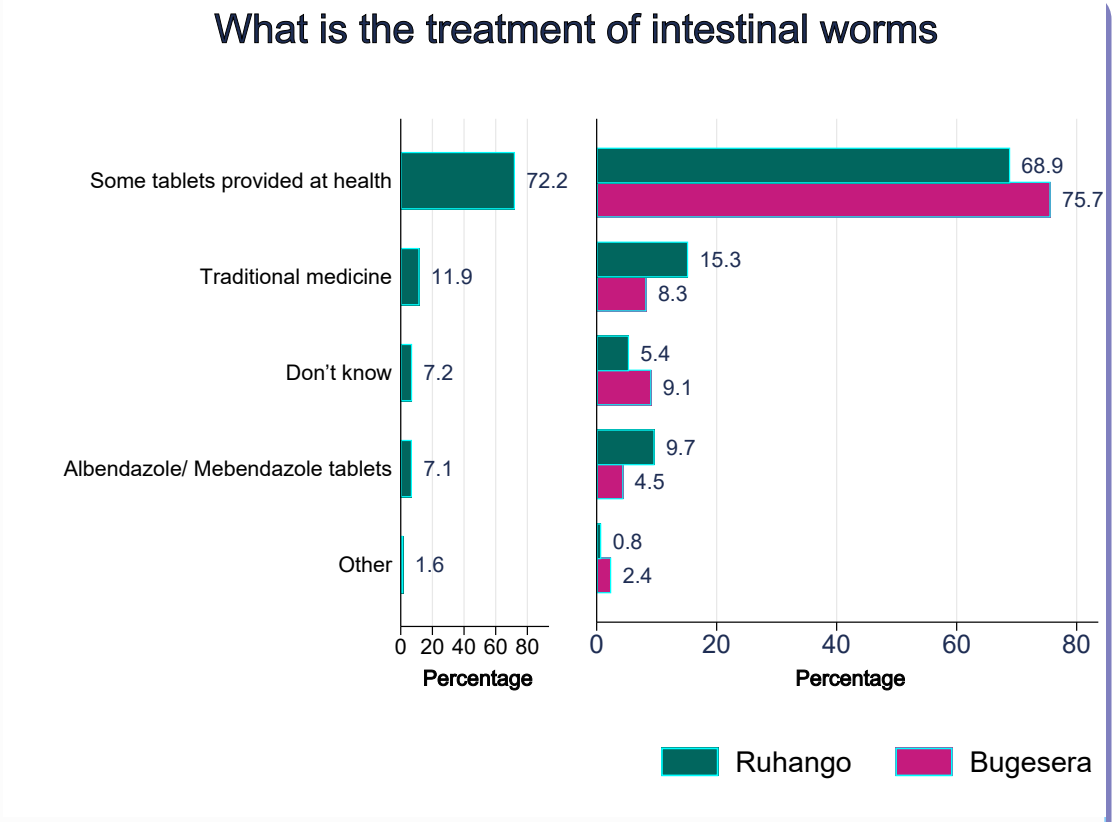


Figure 3.61: *What is the treatment of intestinal worms*

Most households reported that the What is the treatment of STH was some tablets provided at health facility, pharmacy in 72.2% of cases. Other What is the treatment of STH included traditional medicine (11.9%), don't know (7.2%), albendazole/ mebendazole tablets (7.1%) and other (1.6%) as shown in Table 3.52. Bugesera district showed the highest proportion of some tablets provided at health facility, pharmacy with 75.7% of cases as compared to Ruhango district (68.9%), and the difference was highly statistically significant (p=0.000).

Regarding gender, female respondents belonged to households that showed the highest proportion of some tablets provided at health facility, pharmacy with 73.6% of cases as compared to households with male respondents (69.8%), but the difference was not significant (p=0.192). Concerning age group, respondents less than 40 years belonged to households that showed the highest proportion of some tablets provided at health facility, pharmacy with 74.9% of cases as compared to households with respondents between 40 and 59 years (73.8%), and the difference was statistically significant (p=0.043).

Looking at religion, Anglican respondents belonged to households that showed the highest proportion of some tablets provided at health facility, pharmacy with 84.3% of cases as compared to households with Pentecost respondents (75.6%), and the difference was statistically significant

(p=0.027). Comparing the distribution by marital status, divorced or separated respondents belonged to households that showed the highest proportion of some tablets provided at health facility, pharmacy with 80.3% of cases as compared to households with cohabiting respondents (78.9%), and the difference was statistically significant (p=0.036).

Regarding literacy, respondents who are able to read and write belonged to households that showed the highest proportion of some tablets provided at health facility, pharmacy with 73.0% of cases as compared to households with respondents who are not able to read or write (70.6%), and the difference was statistically significant (p=0.005). Concerning education level, respondents with primary education belonged to households that showed the highest proportion of some tablets provided at health facility, pharmacy with 76.1% of cases as compared to households with respondents with nursery level (72.5%), and the difference was statistically significant (p=0.001).

Table 3.52: *(C20) Distribution of households what is the treatment of sth*

	What is the treatment of STH						
	Albendazole/Mebendazole tablets	Some tablets provided at health facility, pharmacy	Traditional medicine	Don't know	Other	Total	p-value
District							
Ruhango	9.7	68.9	15.3	5.4	0.8	518	0.000
Bugesera	4.5	75.7	8.3	9.1	2.4	493	
Total	7.1	72.2	11.9	7.2	1.6	1,011	
Gender							
Male	8.1	69.8	10.8	9.2	2.2	371	0.192
Female	6.6	73.6	12.5	6.1	1.2	640	
Total	7.1	72.2	11.9	7.2	1.6	1,011	
Age group							
Less 40	6.8	74.9	8.0	8.7	1.5	323	0.043
40 to 59	7.5	73.8	12.6	4.7	1.4	428	
60 and above	6.9	66.2	15.4	9.6	1.9	260	
Total	7.1	72.2	11.9	7.2	1.6	1,011	
Religion							
Catholic	6.9	68.4	14.9	7.6	2.3	437	0.027
Pentecost	5.6	75.6	10.7	7.1	1.0	197	
Anglican	2.9	84.3	4.9	7.8	0.0	102	
Adventist	9.8	75.3	9.3	4.6	1.0	194	
Other religion	11.1	61.7	13.6	11.1	2.5	81	
Total	7.1	72.2	11.9	7.2	1.6	1,011	
Marital status							
Married	9.3	70.8	10.2	8.0	1.7	528	0.036
Cohabiting	2.2	78.9	11.7	5.6	1.7	180	
Single	7.8	56.2	20.3	12.5	3.1	64	
Widowed	6.2	72.5	14.6	5.6	1.1	178	
Divorced or separated	4.9	80.3	9.8	4.9	0.0	61	
Total	7.1	72.2	11.9	7.2	1.6	1,011	
Literacy							
Able to read and write	8.7	73.0	11.1	5.7	1.4	664	0.005
Not able to read or write	4.0	70.6	13.3	10.1	2.0	347	
Total	7.1	72.2	11.9	7.2	1.6	1,011	
Education							
No education	4.3	70.4	12.2	10.4	2.6	345	0.001
Nursery	7.5	72.5	12.6	6.1	1.3	557	
Primary	13.8	76.1	7.3	2.8	0.0	109	
Total	7.1	72.2	11.9	7.2	1.6	1,011	

21. Intestinal worms cannot be prevented

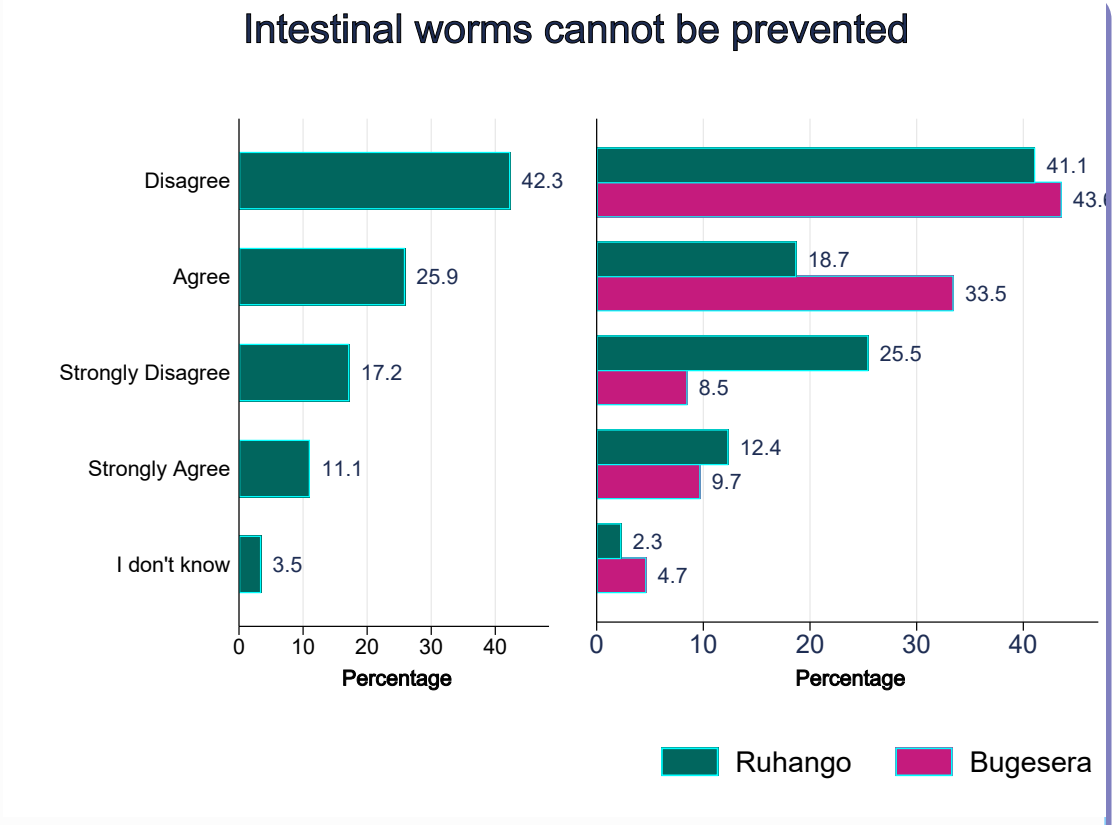


Figure 3.62: *Intestinal worms cannot be prevented*

Most participants disagreed that Intestinal worms cannot be prevented in 42.3% of cases and agreed (25.9%), strongly disagreed (17.2%) and strongly agreed (11.1%) as shown in Table 3.53.

Table 3.53: *(C21) Intestinal worms cannot be prevented*

	Intestinal worms cannot be prevented						
	Strongly Agree	Agree	Disagree	Strongly Dis-agree	I don't know	Total	p-value
District							
Ruhango	12.4	18.7	41.1	25.5	2.3	518	0.000
Bugesera	9.7	33.5	43.6	8.5	4.7	493	
Total	11.1	25.9	42.3	17.2	3.5	1,011	
Gender							
Male	12.7	23.5	44.5	17.0	2.4	371	0.269
Female	10.2	27.3	41.1	17.3	4.1	640	
Total	11.1	25.9	42.3	17.2	3.5	1,011	
Age group							
Less 40	9.0	23.8	47.1	17.0	3.1	323	0.002
40-59	12.4	25.5	43.0	17.8	1.4	428	
60 and above	11.5	29.2	35.4	16.5	7.3	260	
Total	11.1	25.9	42.3	17.2	3.5	1,011	
Religion							
Catholic church	12.4	25.9	43.2	14.9	3.7	437	0.074
Pentecost churches	8.6	30.5	42.1	16.8	2.0	197	
Anglican church	10.8	21.6	48.0	13.7	5.9	102	
Adventist church	11.3	23.2	35.6	26.8	3.1	194	
Other	9.9	27.2	46.9	12.3	3.7	81	
Total	11.1	25.9	42.3	17.2	3.5	1,011	
Marital status							
Married	12.5	21.2	43.9	20.1	2.3	528	0.011
Cohabiting	11.7	28.9	43.9	12.8	2.8	180	
Single	7.8	25.0	43.8	18.8	4.7	64	
Widowed	8.4	34.3	37.1	13.5	6.7	178	
Divorced/ separated	8.2	34.4	37.7	14.8	4.9	61	
Total	11.1	25.9	42.3	17.2	3.5	1,011	
Able to read and write							
Yes	11.4	22.1	44.6	19.9	2.0	664	0.000
No	10.4	33.1	38.0	12.1	6.3	347	
Total	11.1	25.9	42.3	17.2	3.5	1,011	
Education							
No education	9.6	32.2	39.4	12.2	6.7	345	0.000
Primary	12.2	23.3	44.3	18.0	2.2	557	
Secondary/ university	10.1	19.3	41.3	29.4	0.0	109	
Total	11.1	25.9	42.3	17.2	3.5	1,011	

22. You also get intestinal worms when you take sweets foods/ drinks

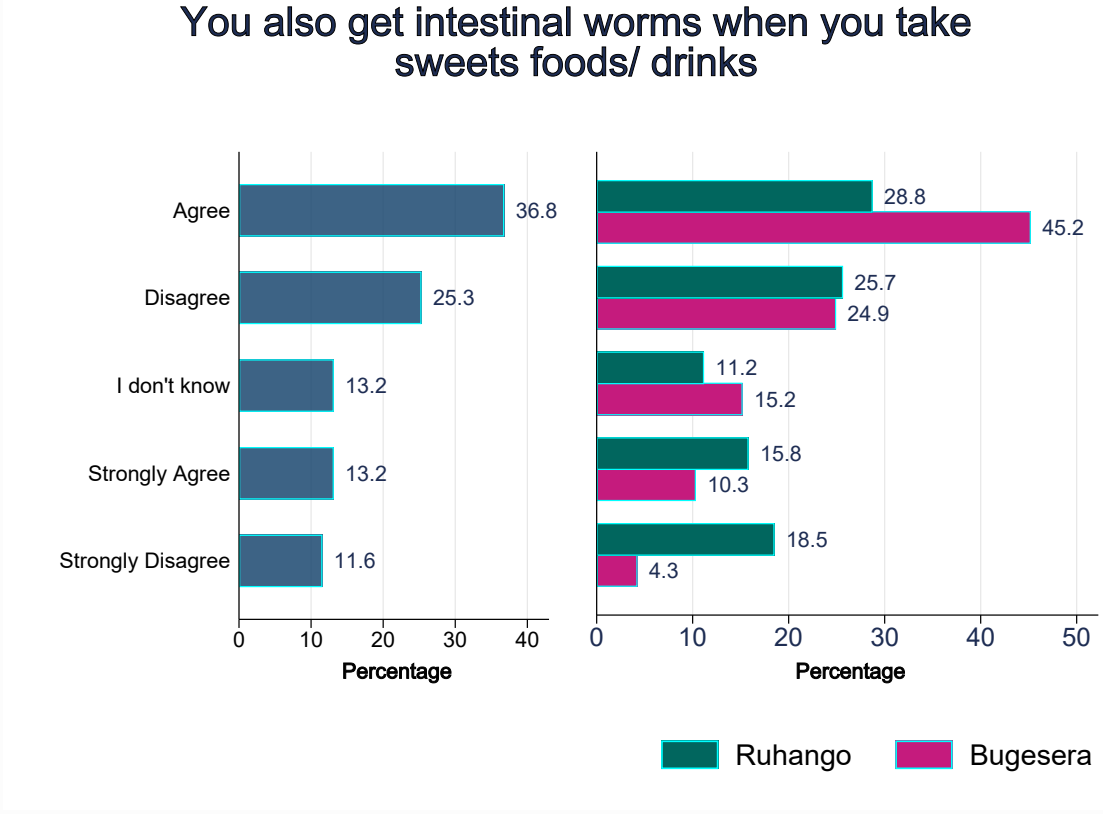


Figure 3.63: *You also get intestinal worms when you take sweets foods/ drinks*

Most participants agreed that someone get STH when taking sweets foods/ drinks in 36.8% of cases, and disagreed (25.3%), strongly agreed (13.2%), and strongly disagreed (11.6%) as shown in Table 3.54.

Table 3.54: *(C22) You also get intestinal worms when you take sweets foods/ drinks*

	You also get STH when you take sweets foods/ drinks						
	Strongly Agree	Agree	Disagree	Strongly Dis-agree	I don't know	Total	p-value
District							
Ruhango	11.2	28.8	25.7	18.5	15.8	518	0.000
Bugesera	15.2	45.2	24.9	4.3	10.3	493	
Total	13.2	36.8	25.3	11.6	13.2	1,011	
Gender							
Male	12.7	36.7	25.9	11.1	13.7	371	0.976
Female	13.4	36.9	25.0	11.9	12.8	640	
Total	13.2	36.8	25.3	11.6	13.2	1,011	
Age group							
Less 40	11.1	37.8	25.4	12.1	13.6	323	0.236
40-59	15.0	37.6	26.6	10.5	10.3	428	
60 and above	12.7	34.2	23.1	12.7	17.3	260	
Total	13.2	36.8	25.3	11.6	13.2	1,011	
Religion							
Catholic church	11.4	36.6	25.2	12.4	14.4	437	0.000
Pentecost churches	12.7	40.1	29.4	7.1	10.7	197	
Anglican church	12.7	40.2	23.5	7.8	15.7	102	
Adventist church	17.0	33.0	24.7	19.1	6.2	194	
Other	14.8	34.6	19.8	4.9	25.9	81	
Total	13.2	36.8	25.3	11.6	13.2	1,011	
Marital status							
Married	14.2	35.6	25.6	12.3	12.3	528	0.638
Cohabiting	13.9	38.3	25.6	11.1	11.1	180	
Single	6.2	43.8	23.4	14.1	12.5	64	
Widowed	11.8	33.7	25.3	10.1	19.1	178	
Divorced/ separated	13.1	44.3	24.6	8.2	9.8	61	
Total	13.2	36.8	25.3	11.6	13.2	1,011	
Able to read and write							
Yes	12.8	33.6	27.3	14.2	12.2	664	0.000
No	13.8	42.9	21.6	6.6	15.0	347	
Total	13.2	36.8	25.3	11.6	13.2	1,011	
Education							
No education	12.5	41.2	23.5	7.0	15.9	345	0.001
Primary	14.4	35.2	25.3	12.7	12.4	557	
Secondary/ university	9.2	31.2	31.2	20.2	8.3	109	
Total	13.2	36.8	25.3	11.6	13.2	1,011	

23. You can live with intestinal worms without any harm

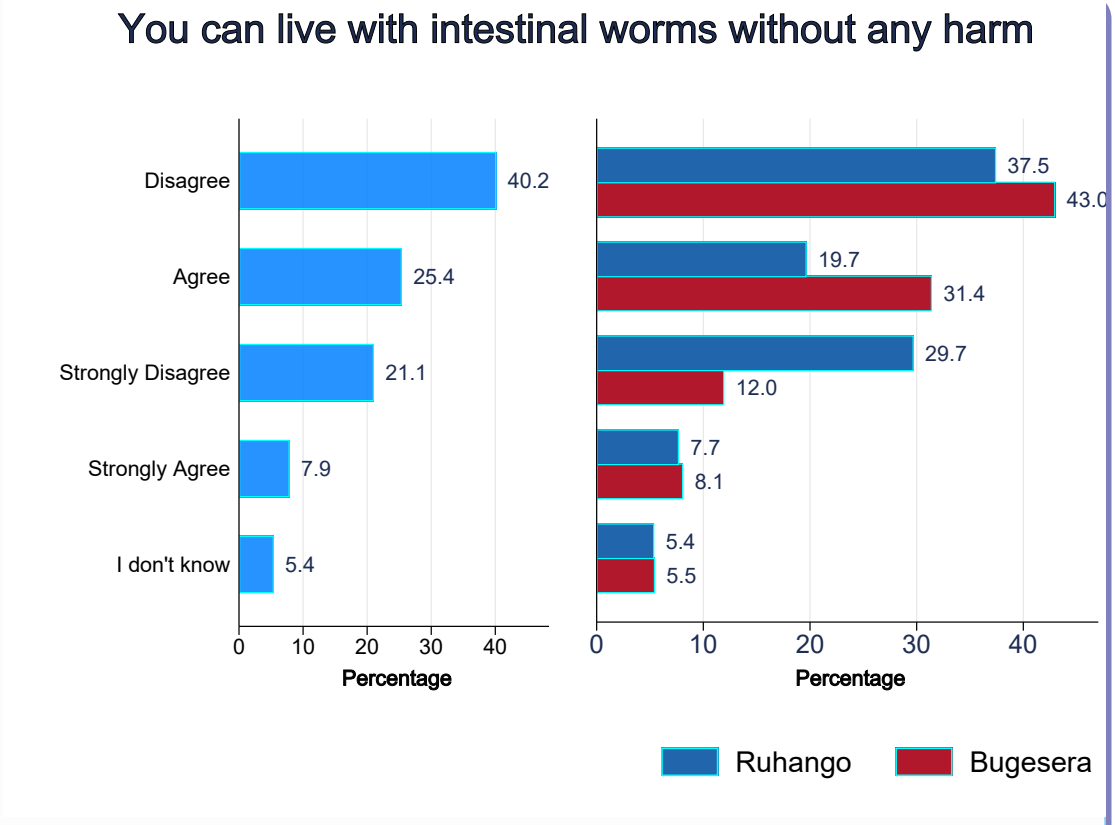


Figure 3.64: *You can live with intestinal worms without any harm*

Most participants disagreed that You can live with STH without any harm in 40.2% of cases, and agreed (25.4%), strongly disagreed (21.1%) and strongly agreed (7.9%) as shown in Table 3.55.

Table 3.55: *(C23) You can live with intestinal worms without any harm*

	You can live with STH without any harm					Total	p-value
	Strongly Agree	Agree	Disagree	Strongly Dis-agree	I don't know		
District							
Ruhango	7.7	19.7	37.5	29.7	5.4	518	0.000
Bugesera	8.1	31.4	43.0	12.0	5.5	493	
Total	7.9	25.4	40.2	21.1	5.4	1,011	
Gender							
Male	8.4	25.3	36.9	22.6	6.7	371	0.383
Female	7.7	25.5	42.0	20.2	4.7	640	
Total	7.9	25.4	40.2	21.1	5.4	1,011	
Age group							
Less 40	8.4	27.6	38.4	18.9	6.8	323	0.273
40-59	8.6	24.1	42.5	21.3	3.5	428	
60 and above	6.2	25.0	38.5	23.5	6.9	260	
Total	7.9	25.4	40.2	21.1	5.4	1,011	
Religion							
Catholic church	8.9	23.8	39.8	21.7	5.7	437	0.039
Pentecost churches	7.6	28.4	43.7	15.2	5.1	197	
Anglican church	3.9	16.7	50.0	20.6	8.8	102	
Adventist church	6.2	28.9	33.5	27.3	4.1	194	
Other	12.3	29.6	37.0	17.3	3.7	81	
Total	7.9	25.4	40.2	21.1	5.4	1,011	
Marital status							
Married	8.5	23.7	39.6	22.9	5.3	528	0.780
Cohabiting	7.8	27.8	41.7	17.2	5.6	180	
Single	4.7	28.1	34.4	21.9	10.9	64	
Widowed	7.3	27.0	42.1	18.5	5.1	178	
Divorced/ separated	8.2	26.2	41.0	23.0	1.6	61	
Total	7.9	25.4	40.2	21.1	5.4	1,011	
Able to read and write							
Yes	8.3	24.8	38.6	23.9	4.4	664	0.009
No	7.2	26.5	43.2	15.6	7.5	347	
Total	7.9	25.4	40.2	21.1	5.4	1,011	
Education							
No education	6.7	25.8	44.1	15.4	8.1	345	0.014
Primary	8.3	25.3	38.8	23.5	4.1	557	
Secondary/ university	10.1	24.8	34.9	26.6	3.7	109	
Total	7.9	25.4	40.2	21.1	5.4	1,011	

24. Herbs for traditional medicines treat well intestinal worms than modern medicine

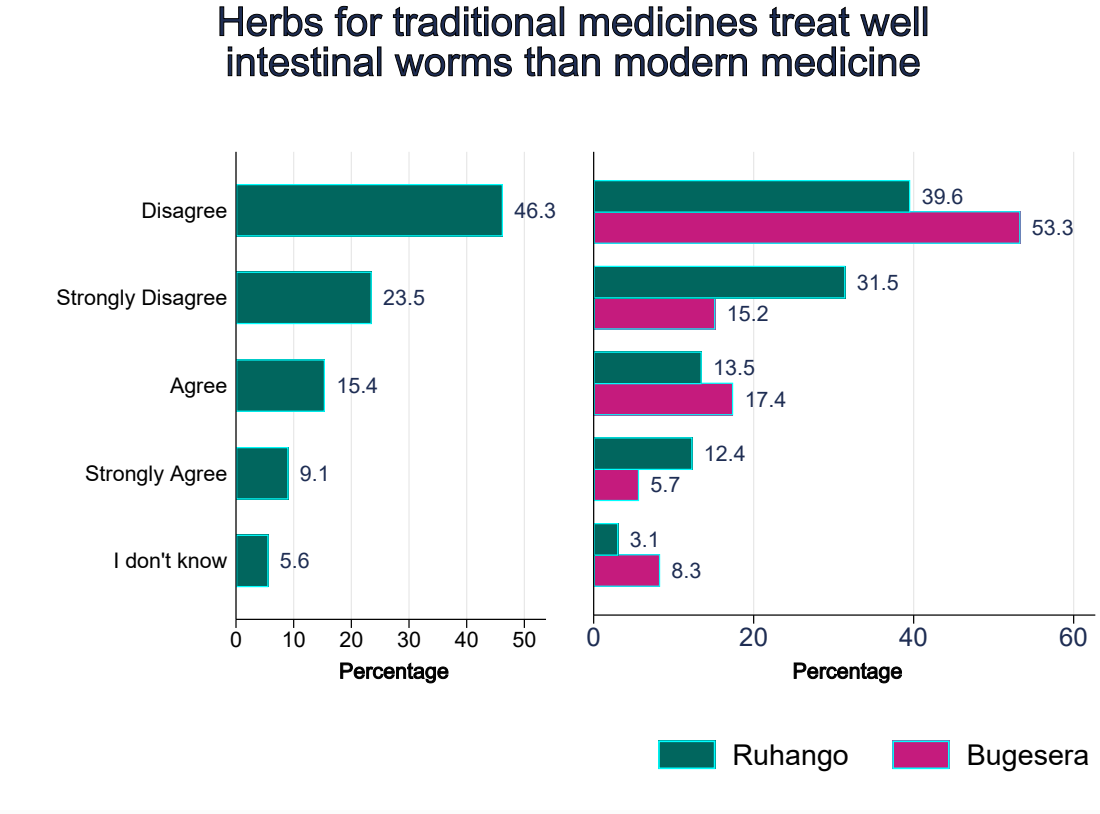


Figure 3.65: *Herbs for traditional medicines treat well intestinal worms than modern medicine*

Most participants disagreed that Herbs treat well STH than modern medicine in 46.3% of cases, and strongly disagreed (23.5%), agreed (15.4%) and strongly agreed (9.1%) as shown in Table 3.56.

Table 3.56: *(C24) Herbs for traditional medicines treat well intestinal worms than modern medicine*

	Herbs treat well STH than modern medicine						
	Strongly Agree	Agree	Disagree	Strongly Dis-agree	I don't know	Total	p-value
District							
Ruhango	12.4	13.5	39.6	31.5	3.1	518	0.000
Bugesera	5.7	17.4	53.3	15.2	8.3	493	
Total	9.1	15.4	46.3	23.5	5.6	1,011	
Gender							
Male	8.9	13.5	47.2	24.8	5.7	371	0.742
Female	9.2	16.6	45.8	22.8	5.6	640	
Total	9.1	15.4	46.3	23.5	5.6	1,011	
Age group							
Less 40	7.1	12.1	46.7	28.2	5.9	323	0.010
40-59	8.9	16.6	49.8	20.8	4.0	428	
60 and above	11.9	17.7	40.0	22.3	8.1	260	
Total	9.1	15.4	46.3	23.5	5.6	1,011	
Religion							
Catholic church	12.1	13.7	45.5	23.8	4.8	437	0.123
Pentecost churches	7.1	16.2	50.8	20.3	5.6	197	
Anglican church	6.9	19.6	50.0	16.7	6.9	102	
Adventist church	6.7	16.5	41.2	30.4	5.2	194	
Other	6.2	14.8	46.9	22.2	9.9	81	
Total	9.1	15.4	46.3	23.5	5.6	1,011	
Marital status							
Married	8.5	13.6	44.3	27.8	5.7	528	0.006
Cohabiting	9.4	10.0	56.7	19.4	4.4	180	
Single	14.1	18.8	37.5	20.3	9.4	64	
Widowed	8.4	22.5	44.4	18.0	6.7	178	
Divorced/ separated	9.8	23.0	47.5	18.0	1.6	61	
Total	9.1	15.4	46.3	23.5	5.6	1,011	
Able to read and write							
Yes	8.7	13.1	45.9	26.8	5.4	664	0.003
No	9.8	19.9	47.0	17.3	6.1	347	
Total	9.1	15.4	46.3	23.5	5.6	1,011	
Education							
No education	9.6	18.8	47.5	16.8	7.2	345	0.000
Primary	9.2	14.5	46.7	24.6	5.0	557	
Secondary/ university	7.3	9.2	40.4	39.4	3.7	109	
Total	9.1	15.4	46.3	23.5	5.6	1,011	

25. Ever been diagnosed with intestinal worms in the past 12 months

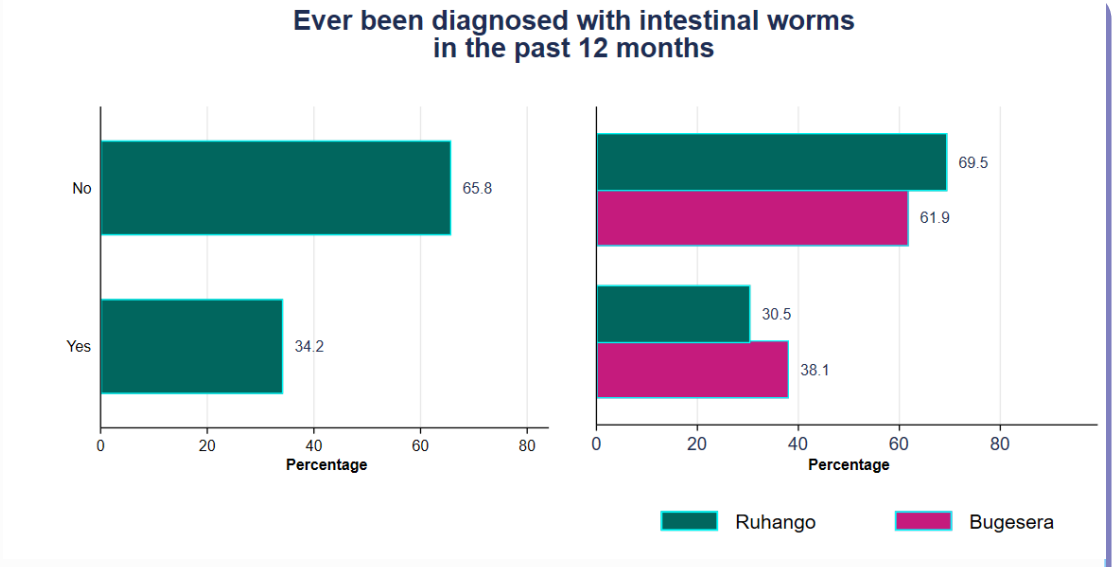


Figure 3.66: *Ever been diagnosed with intestinal worms in the past 12 months*

The majority of households reported not having intestinal worms in the past 12 months (65.8%) while households having intestinal worms in the past 12 months represented 34.2% of cases (Table 3.57). Ruhango district showed the highest proportion of households not having intestinal worms in the past 12 months with 69.5% of cases as compared to Bugesera district (61.9%), and the difference was statistically significant (p=0.011).

Regarding gender, female respondents belonged to households that showed the highest proportion not having intestinal worms in the past 12 months with 65.8% of cases as compared to households with male respondents (65.8%), but the difference was not significant (p=0.997). Concerning age group, respondents aged 60 years and above belonged to households that showed the highest proportion not having intestinal worms in the past 12 months with 75.0% of cases as compared to households with respondents between 40 and 59 years (64.3%), and the difference was statistically significant (p=0.001).

Looking at religion, Catholic respondents belonged to households that showed the highest proportion not having intestinal worms in the past 12 months with 70.3% of cases as compared to households with Adventist respondents (68.0%), and the difference was statistically significant (p=0.019). Comparing the distribution by marital status, widowed respondents belonged to households that showed the highest proportion not having intestinal worms in the past 12 months with 75.3% of cases as compared to households with divorced or separated respondents (73.8%), and the difference was statistically significant (p=0.015).

Regarding literacy, respondents who are not able to read or write belonged to households that showed the highest proportion not having intestinal worms in the past 12 months with 68.3% of

cases as compared to households with respondents who are able to read and write (64.5%), but the difference was not significant (p=0.222). Concerning education level, respondents with no education belonged to households that showed the highest proportion not having intestinal worms in the past 12 months with 69.6% of cases as compared to households with respondents with primary education (64.2%), but the difference was not significant (p=0.187).

Table 3.57: *(C25) Distribution of households have intestinal worms in the past 12 months*

	Have intestinal worms in the past 12 months				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	158	30.5	360	69.5	518	0.011
Bugesera	188	38.1	305	61.9	493	
Total	346	34.2	665	65.8	1,011	
Gender						
Male	127	34.2	244	65.8	371	0.997
Female	219	34.2	421	65.8	640	
Total	346	34.2	665	65.8	1,011	
Age group						
Less 40	128	39.6	195	60.4	323	0.001
40 to 59	153	35.7	275	64.3	428	
60 and above	65	25.0	195	75.0	260	
Total	346	34.2	665	65.8	1,011	
Religion						
Catholic	130	29.7	307	70.3	437	0.019
Pentecost	81	41.1	116	58.9	197	
Anglican	38	37.3	64	62.7	102	
Adventist	62	32.0	132	68.0	194	
Other religion	35	43.2	46	56.8	81	
Total	346	34.2	665	65.8	1,011	
Marital status						
Married	200	37.9	328	62.1	528	0.015
Cohabiting	65	36.1	115	63.9	180	
Single	21	32.8	43	67.2	64	
Widowed	44	24.7	134	75.3	178	
Divorced or separated	16	26.2	45	73.8	61	
Total	346	34.2	665	65.8	1,011	
Literacy						
Able to read and write	236	35.5	428	64.5	664	0.222
Not able to read or write	110	31.7	237	68.3	347	
Total	346	34.2	665	65.8	1,011	
Education						
No education	105	30.4	240	69.6	345	0.187
Nursery	202	36.3	355	63.7	557	
Primary	39	35.8	70	64.2	109	
Total	346	34.2	665	65.8	1,011	

26. Aware of the health risks associated with inadequate WASH practices

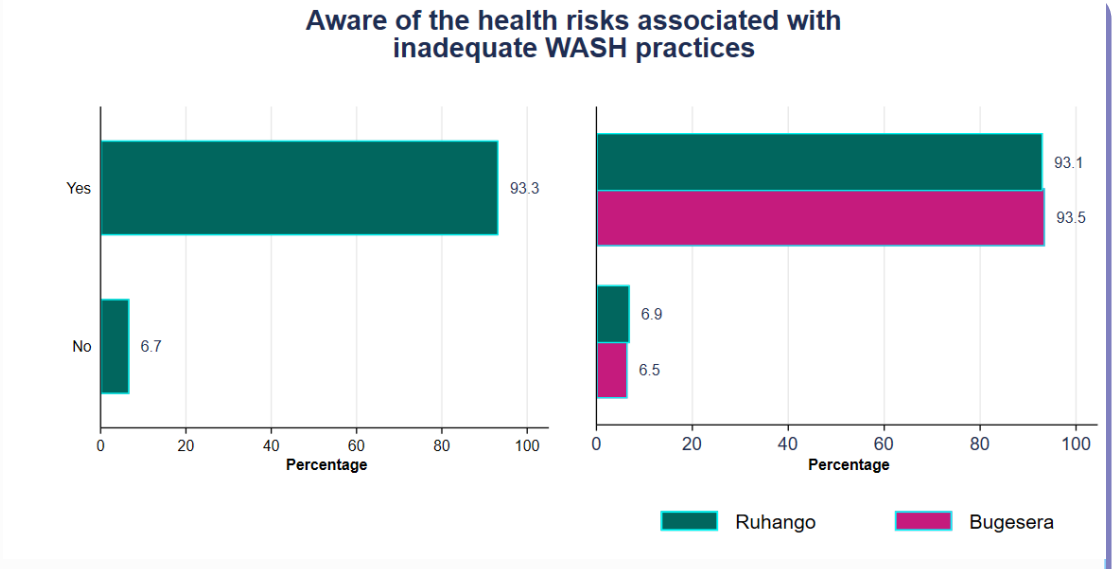


Figure 3.67: *Aware of the health risks associated with inadequate WASH practices*

As shown in Table 3.58, most households reported being aware of risks associated with inadequate wash (93.3%) while households not being aware of risks associated with inadequate wash represented 6.7% of cases. Bugesera district showed the biggest proportion of households being aware of risks associated with inadequate wash with 93.5% of cases as compared to Ruhango district (93.1%), but the difference was not significant (p=0.771).

Regarding gender, male respondents belonged to households that showed the highest proportion being aware of risks associated with inadequate wash with 93.8% of cases as compared to households with female respondents (93.0%), but the difference was not significant (p=0.611). Concerning age group, respondents between 40 and 59 years belonged to households that showed the highest proportion being aware of risks associated with inadequate wash with 94.6% of cases as compared to households with respondents less than 40 years (92.9%), but the difference was not significant (p=0.276).

Looking at religion, Anglican respondents belonged to households that showed the highest proportion being aware of risks associated with inadequate wash with 98.0% of cases as compared to households with Pentecost respondents (93.9%), but the difference was not significant (p=0.234). Comparing the distribution by marital status, married respondents belonged to households that showed the highest proportion being aware of risks associated with inadequate wash with 94.5% of cases as compared to households with single respondents (93.8%), but the difference was not significant (p=0.421).

Regarding literacy, respondents who are able to read and write belonged to households that showed the highest proportion being aware of risks associated with inadequate wash with

94.0% of cases as compared to households with respondents who are not able to read or write (91.9%), but the difference was not significant (p=0.218). Concerning education level, respondents with primary education belonged to households that showed the highest proportion being aware of risks associated with inadequate wash with 98.2% of cases as compared to households with respondents with nursery level (93.5%), and the difference was statistically significant (p=0.042).

Table 3.58: *(C26) Distribution of households being aware of risks associated with inadequate wash*

	Aware of risks associated with inadequate WASH				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	482	93.1	36	6.9	518	0.771
Bugesera	461	93.5	32	6.5	493	
Total	943	93.3	68	6.7	1,011	
Gender						
Male	348	93.8	23	6.2	371	0.611
Female	595	93.0	45	7.0	640	
Total	943	93.3	68	6.7	1,011	
Age group						
Less 40	300	92.9	23	7.1	323	0.276
40 to 59	405	94.6	23	5.4	428	
60 and above	238	91.5	22	8.5	260	
Total	943	93.3	68	6.7	1,011	
Religion						
Catholic	401	91.8	36	8.2	437	0.234
Pentecost	185	93.9	12	6.1	197	
Anglican	100	98.0	2	2.0	102	
Adventist	182	93.8	12	6.2	194	
Other religion	75	92.6	6	7.4	81	
Total	943	93.3	68	6.7	1,011	
Marital status						
Married	499	94.5	29	5.5	528	0.421
Cohabiting	166	92.2	14	7.8	180	
Single	60	93.8	4	6.2	64	
Widowed	161	90.4	17	9.6	178	
Divorced or separated	57	93.4	4	6.6	61	
Total	943	93.3	68	6.7	1,011	
Literacy						
Able to read and write	624	94.0	40	6.0	664	0.218
Not able to read or write	319	91.9	28	8.1	347	
Total	943	93.3	68	6.7	1,011	
Education						
No education	315	91.3	30	8.7	345	0.042
Nursery	521	93.5	36	6.5	557	
Primary	107	98.2	2	1.8	109	
Total	943	93.3	68	6.7	1,011	

27. Received any education or training on WASH practices

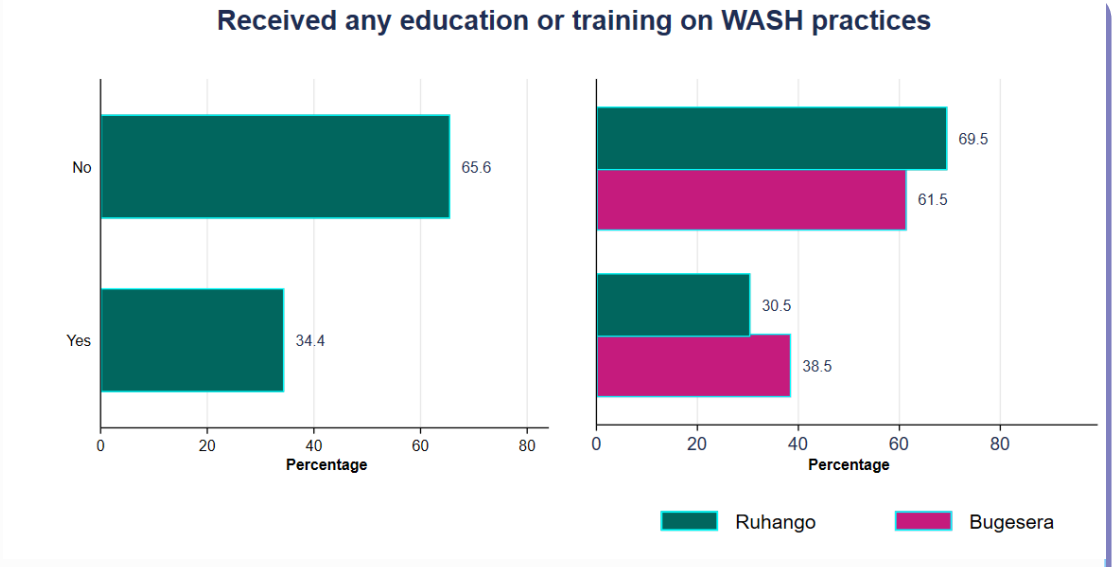


Figure 3.68: *Received any education or training on WASH practices*

Most households reported not ever received any education or training on wash practices (65.6%) while households ever received any education or training on wash practices represented 34.4% of cases (Table 3.59). Ruhango district showed the highest proportion of households not ever received any education or training on wash practices with 69.5% of cases as compared to Bugesera district (61.5%), and the difference was statistically significant (p=0.007).

Regarding gender, male respondents belonged to households that showed the highest proportion not ever received any education or training on wash practices with 67.7% of cases as compared to households with female respondents (64.4%), but the difference was not significant (p=0.290). Concerning age group, respondents aged 60 years and above belonged to households that showed the highest proportion not ever received any education or training on wash practices with 70.4% of cases as compared to households with respondents less than 40 years (65.0%), but the difference was not significant (p=0.143).

Looking at religion, Catholic respondents belonged to households that showed the highest proportion not ever received any education or training on wash practices with 70.9% of cases as compared to households with Adventist respondents (64.9%), and the difference was statistically significant (p=0.022). Comparing the distribution by marital status, single respondents belonged to households that showed the highest proportion not ever received any education or training on wash practices with 79.7% of cases as compared to households with married respondents (66.3%), but the difference was not significant (p=0.107).

Regarding literacy, respondents who are not able to read or write belonged to households that showed the highest proportion not ever received any education or training on wash practices

with 67.7% of cases as compared to households with respondents who are able to read and write (64.5%), but the difference was not significant (p=0.299). Concerning education level, respondents with no education belonged to households that showed the highest proportion not ever received any education or training on wash practices with 68.7% of cases as compared to households with respondents with nursery level (64.1%), but the difference was not significant (p=0.320).

Table 3.59: *(C27) Distribution of households ever received any education or training on wash practices*

	Received education on WASH practices				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	158	30.5	360	69.5	518	0.007
Bugesera	190	38.5	303	61.5	493	
Total	348	34.4	663	65.6	1,011	
Gender						
Male	120	32.3	251	67.7	371	0.290
Female	228	35.6	412	64.4	640	
Total	348	34.4	663	65.6	1,011	
Age group						
Less 40	113	35.0	210	65.0	323	0.143
40 to 59	158	36.9	270	63.1	428	
60 and above	77	29.6	183	70.4	260	
Total	348	34.4	663	65.6	1,011	
Religion						
Catholic	127	29.1	310	70.9	437	0.022
Pentecost	78	39.6	119	60.4	197	
Anglican	42	41.2	60	58.8	102	
Adventist	68	35.1	126	64.9	194	
Other religion	33	40.7	48	59.3	81	
Total	348	34.4	663	65.6	1,011	
Marital status						
Married	178	33.7	350	66.3	528	0.107
Cohabiting	67	37.2	113	62.8	180	
Single	13	20.3	51	79.7	64	
Widowed	66	37.1	112	62.9	178	
Divorced or separated	24	39.3	37	60.7	61	
Total	348	34.4	663	65.6	1,011	
Literacy						
Able to read and write	236	35.5	428	64.5	664	0.299
Not able to read or write	112	32.3	235	67.7	347	
Total	348	34.4	663	65.6	1,011	
Education						
No education	108	31.3	237	68.7	345	0.320
Nursery	200	35.9	357	64.1	557	
Primary	40	36.7	69	63.3	109	
Total	348	34.4	663	65.6	1,011	

28. Who provided the education or training

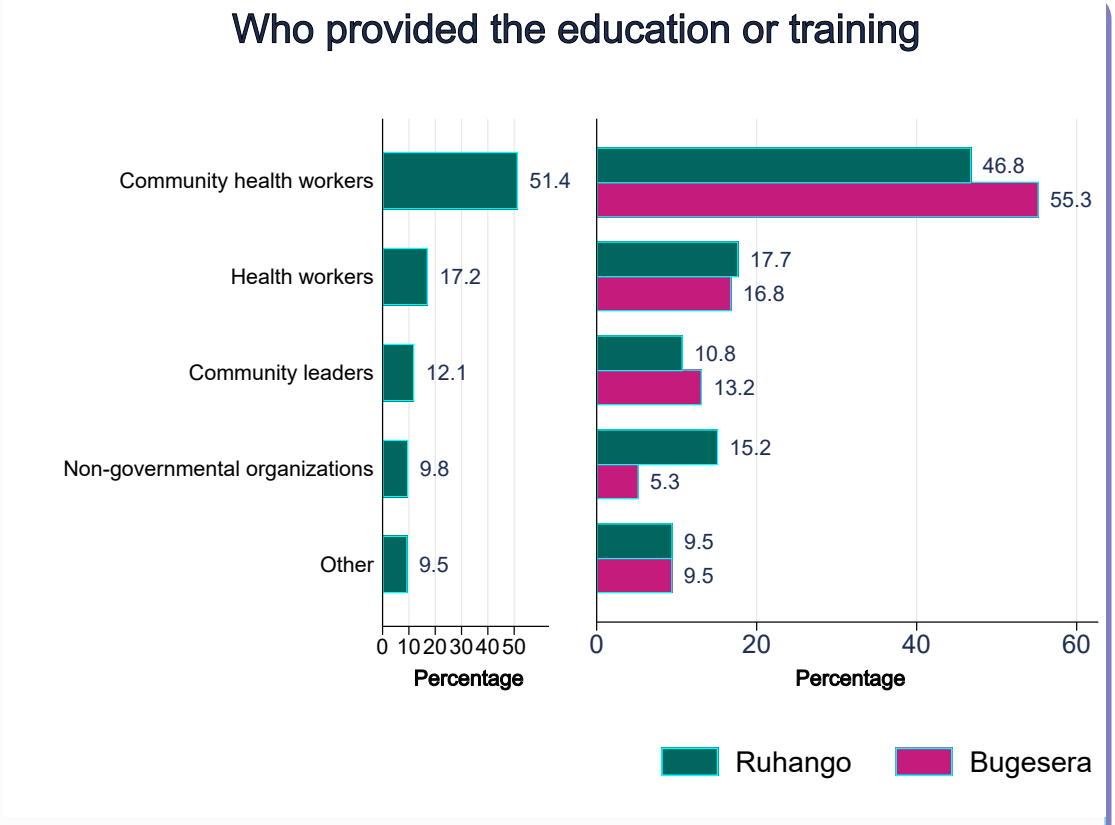


Figure 3.69: *Who provided the education or training*

As shown in Table 3.60, most households reported that the Who provided the education or training was community health workers in 51.4% of cases. Other Who provided the education or training included health workers (17.2%), community leaders (12.1%), non-governmental organizations (9.8%) and other (9.5%). Bugesera district showed the highest proportion of community health workers with 55.3% of cases as compared to Ruhango district (46.8%), and the difference was statistically significant (p=0.035).

Regarding gender, female respondents belonged to households that showed the highest proportion of community health workers with 53.9% of cases as compared to households with male respondents (46.7%), but the difference was not significant (p=0.392). Concerning age group, respondents aged 60 years and above belonged to households that showed the highest proportion of community health workers with 58.4% of cases as compared to households with respondents less than 40 years (51.3%), but the difference was not significant (p=0.794).

Looking at religion, Other religion respondents belonged to households that showed the highest proportion of community health workers with 60.6% of cases as compared to households with Catholic respondents (52.8%), but the difference was not significant (p=0.244).

Table 3.60: *(C28) Distribution of households who provided the education or training*

	Who provided the education or training					Total	p-value
	Health workers	Community health workers	Non-governmental organizations	Community leaders	Other		
District							
Ruhango	17.7	46.8	15.2	10.8	9.5	158	0.035
Bugesera	16.8	55.3	5.3	13.2	9.5	190	
Total	17.2	51.4	9.8	12.1	9.5	348	
Gender							
Male	21.7	46.7	10.8	10.0	10.8	120	0.392
Female	14.9	53.9	9.2	13.2	8.8	228	
Total	17.2	51.4	9.8	12.1	9.5	348	
Age group							
Less 40	15.9	51.3	9.7	11.5	11.5	113	0.794
40 to 59	18.4	48.1	12.0	12.7	8.9	158	
60 and above	16.9	58.4	5.2	11.7	7.8	77	
Total	17.2	51.4	9.8	12.1	9.5	348	
Religion							
Catholic	16.5	52.8	6.3	10.2	14.2	127	0.244
Pentecost	11.5	50.0	15.4	15.4	7.7	78	
Anglican	14.3	50.0	11.9	14.3	9.5	42	
Adventist	26.5	47.1	10.3	8.8	7.4	68	
Other religion	18.2	60.6	6.1	15.2	0.0	33	
Total	17.2	51.4	9.8	12.1	9.5	348	
Marital status							
Married	20.8	46.1	9.6	15.2	8.4	178	0.095
Cohabiting	13.4	56.7	10.4	10.4	9.0	67	
Single	7.7	46.2	0.0	23.1	23.1	13	
Widowed	9.1	65.2	9.1	7.6	9.1	66	
Divorced or separated	29.2	41.7	16.7	0.0	12.5	24	
Total	17.2	51.4	9.8	12.1	9.5	348	
Literacy							
Able to read and write	20.8	47.9	11.0	11.4	8.9	236	0.068
Not able to read or write	9.8	58.9	7.1	13.4	10.7	112	
Total	17.2	51.4	9.8	12.1	9.5	348	
Education							
No education	11.1	56.5	7.4	13.0	12.0	108	0.286
Nursery	20.0	51.0	9.5	11.0	8.5	200	
Primary	20.0	40.0	17.5	15.0	7.5	40	
Total	17.2	51.4	9.8	12.1	9.5	348	

Comparing the distribution by marital status, widowed respondents belonged to households that showed the highest proportion of community health workers with 65.2% of cases as compared to households with cohabiting respondents (56.7%), but the difference was not significant (p=0.095). Regarding literacy, respondents who are not able to read or write belonged to households that showed the highest proportion of community health workers with 58.9% of cases as compared to households with respondents who are able to read and write (47.9%),

but the difference was not significant (p=0.068). Concerning education level, respondents with no education belonged to households that showed the highest proportion of community health workers with 56.5% of cases as compared to households with respondents with nursery level (51.0%), but the difference was not significant (p=0.286).

29. How often do you deworm your household

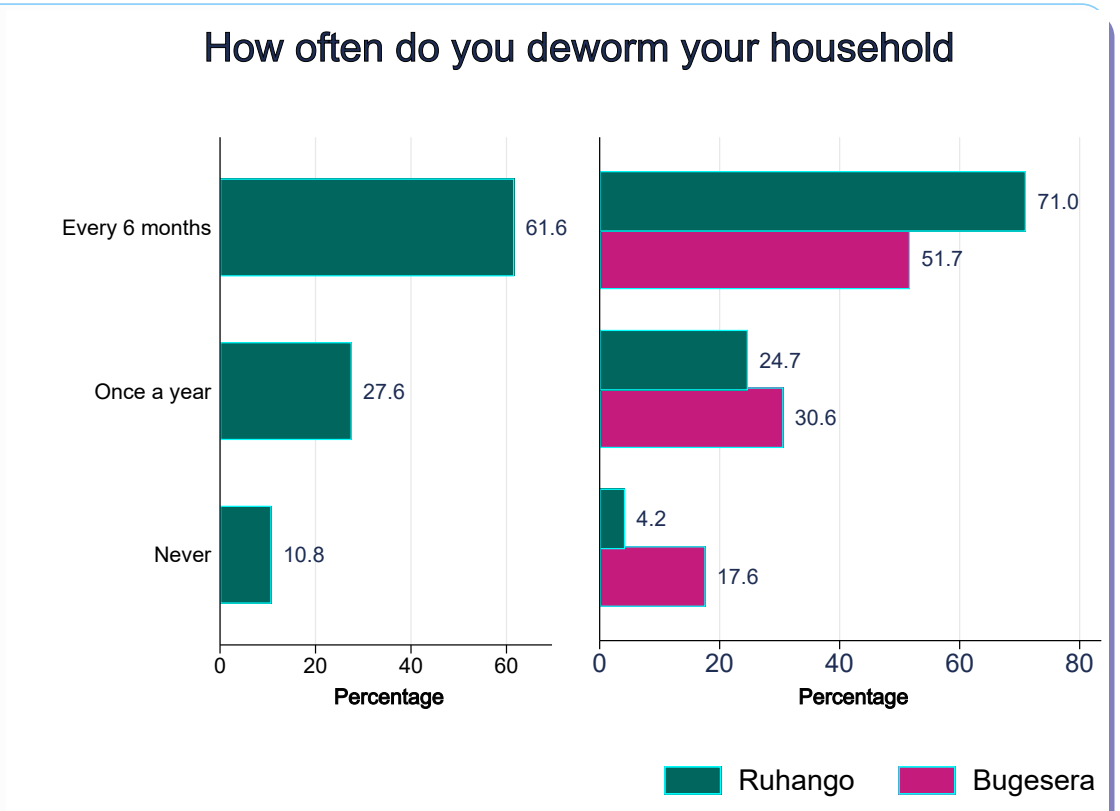


Figure 3.70: *How often do you deworm your household*

As shown in Table 3.61, most households reported that the How often do you deworm your household was every 6 months in 61.6% of cases. Other How often do you deworm your household included once a year (27.6%) and never (10.8%). Ruhango district showed the highest proportion of every 6 months with 71.0% of cases as compared to Bugesera district (51.7%), and the difference was highly statistically significant (p=0.000).

Regarding gender, female respondents belonged to households that showed the highest proportion of every 6 months with 62.2% of cases as compared to households with male respondents (60.6%), but the difference was not significant (p=0.097). Concerning age group, respondents between 40 and 59 years belonged to households that showed the highest proportion of every 6 months with 65.0% of cases as compared to households with respondents less than 40 years (62.5%), but the difference was not significant (p=0.078).

Table 3.61: *(C29) Distribution of households how often do you deworm your household*

	How often do you deworm your household						Total	p-value
	Every 6 months		Once a year		Never			
	N	%	N	%	N	%		
District								
Ruhango	368	71.0	128	24.7	22	4.2	518	0.000
Bugesera	255	51.7	151	30.6	87	17.6	493	
Total	623	61.6	279	27.6	109	10.8	1,011	
Gender								
Male	225	60.6	96	25.9	50	13.5	371	0.097
Female	398	62.2	183	28.6	59	9.2	640	
Total	623	61.6	279	27.6	109	10.8	1,011	
Age group								
Less 40	202	62.5	85	26.3	36	11.1	323	0.078
40 to 59	278	65.0	113	26.4	37	8.6	428	
60 and above	143	55.0	81	31.2	36	13.8	260	
Total	623	61.6	279	27.6	109	10.8	1,011	
Religion								
Catholic	273	62.5	114	26.1	50	11.4	437	0.024
Pentecost	118	59.9	60	30.5	19	9.6	197	
Anglican	49	48.0	41	40.2	12	11.8	102	
Adventist	132	68.0	47	24.2	15	7.7	194	
Other religion	51	63.0	17	21.0	13	16.0	81	
Total	623	61.6	279	27.6	109	10.8	1,011	
Marital status								
Married	360	68.2	116	22.0	52	9.8	528	0.000
Cohabiting	96	53.3	65	36.1	19	10.6	180	
Single	35	54.7	16	25.0	13	20.3	64	
Widowed	99	55.6	60	33.7	19	10.7	178	
Divorced or separated	33	54.1	22	36.1	6	9.8	61	
Total	623	61.6	279	27.6	109	10.8	1,011	
Literacy								
Able to read and write	431	64.9	170	25.6	63	9.5	664	0.010
Not able to read or write	192	55.3	109	31.4	46	13.3	347	
Total	623	61.6	279	27.6	109	10.8	1,011	
Education								
No education	189	54.8	109	31.6	47	13.6	345	0.026
Nursery	364	65.4	142	25.5	51	9.2	557	
Primary	70	64.2	28	25.7	11	10.1	109	
Total	623	61.6	279	27.6	109	10.8	1,011	

Looking at religion, Adventist respondents belonged to households that showed the highest proportion of every 6 months with 68.0% of cases as compared to households with Other religion respondents (63.0%), and the difference was statistically significant (p=0.024). Comparing the distribution by marital status, married respondents belonged to households that showed the highest proportion of every 6 months with 68.2% of cases as compared to households with widowed respondents (55.6%), and the difference was highly statistically significant (p=0.000).

Regarding literacy, respondents who are able to read and write belonged to households that showed the highest proportion of every 6 months with 64.9% of cases as compared to households with respondents who are not able to read or write (55.3%), and the difference was statistically significant (p=0.010). Concerning education level, respondents with nursery level belonged to households that showed the highest proportion of every 6 months with 65.4% of cases as compared to households with respondents with primary education (64.2%), and the difference was statistically significant (p=0.026).

30. Attended any health education in the past 12 months

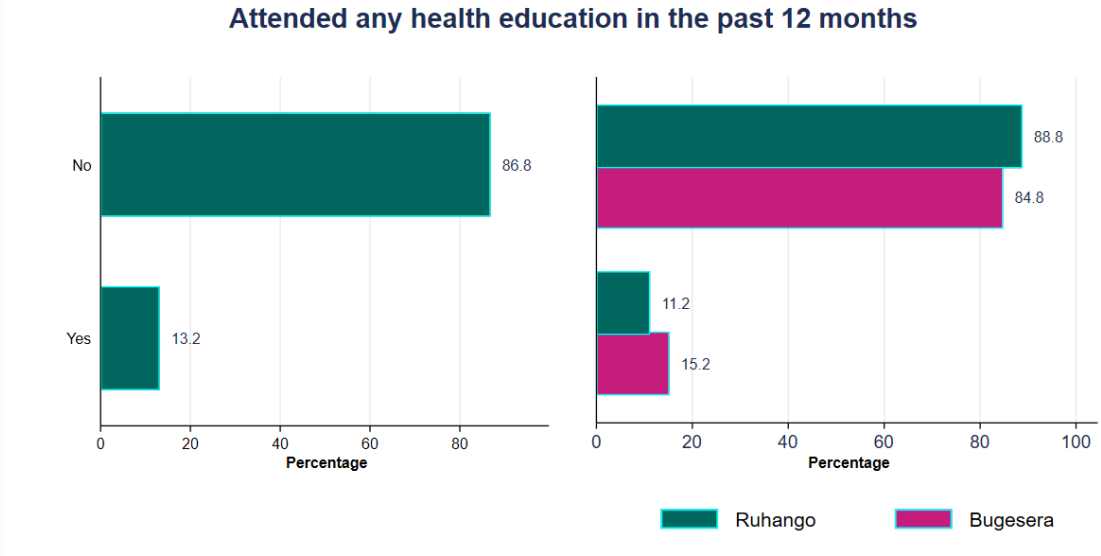


Figure 3.71: *Attended any health education in the past 12 months*

Table 3.62 shows the biggest proportion of households reported not ever attended any health education in the past 12 months (86.8%) while households ever attended any health education in the past 12 months represented 13.2% of cases. Ruhango district showed the highest proportion of households not ever attended any health education in the past 12 months with 88.8% of cases as compared to Bugesera district (84.8%), but the difference was not significant (p=0.059). Regarding gender, female respondents belonged to households that showed the highest proportion not ever attended any health education in the past 12 months with 87.0% of cases as compared to households with male respondents (86.5%), but the difference was not significant (p=0.818). Concerning age group, respondents aged 60 years and above belonged to households that showed the highest proportion not ever attended any health education in the past 12 months with 91.5% of cases as compared to households with respondents less than 40 years (86.1%), and the difference was statistically significant (p=0.029).

Looking at religion, Other religion respondents belonged to households that showed the highest proportion not ever attended any health education in the past 12 months with 92.6% of cases

as compared to households with Adventist respondents (88.1%), but the difference was not significant (p=0.177). Comparing the distribution by marital status, single respondents belonged to households that showed the highest proportion not ever attended any health education in the past 12 months with 95.3% of cases as compared to households with widowed respondents (88.8%), but the difference was not significant (p=0.131).

Table 3.62: *(C30) Distribution of households ever attended any health education in the past 12 months*

	Attended health education in the past 12 months				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	58	11.2	460	88.8	518	0.059
Bugesera	75	15.2	418	84.8	493	
Total	133	13.2	878	86.8	1,011	
Gender						
Male	50	13.5	321	86.5	371	0.818
Female	83	13.0	557	87.0	640	
Total	133	13.2	878	86.8	1,011	
Age group						
Less 40	45	13.9	278	86.1	323	0.029
40 to 59	66	15.4	362	84.6	428	
60 and above	22	8.5	238	91.5	260	
Total	133	13.2	878	86.8	1,011	
Religion						
Catholic	54	12.4	383	87.6	437	0.177
Pentecost	32	16.2	165	83.8	197	
Anglican	18	17.6	84	82.4	102	
Adventist	23	11.9	171	88.1	194	
Other religion	6	7.4	75	92.6	81	
Total	133	13.2	878	86.8	1,011	
Marital status						
Married	70	13.3	458	86.7	528	0.131
Cohabiting	30	16.7	150	83.3	180	
Single	3	4.7	61	95.3	64	
Widowed	20	11.2	158	88.8	178	
Divorced or separated	10	16.4	51	83.6	61	
Total	133	13.2	878	86.8	1,011	
Literacy						
Able to read and write	106	16.0	558	84.0	664	0.000
Not able to read or write	27	7.8	320	92.2	347	
Total	133	13.2	878	86.8	1,011	
Education						
No education	27	7.8	318	92.2	345	0.001
Nursery	87	15.6	470	84.4	557	
Primary	19	17.4	90	82.6	109	
Total	133	13.2	878	86.8	1,011	

Regarding literacy, respondents who are not able to read or write belonged to households that

showed the highest proportion not ever attended any health education in the past 12 months with 92.2% of cases as compared to households with respondents who are able to read and write (84.0%), and the difference was highly statistically significant (p=0.000). Concerning education level, respondents with no education belonged to households that showed the highest proportion not ever attended any health education in the past 12 months with 92.2% of cases as compared to households with respondents with nursery level (84.4%), and the difference was statistically significant (p=0.001).

31. Number of programs attended

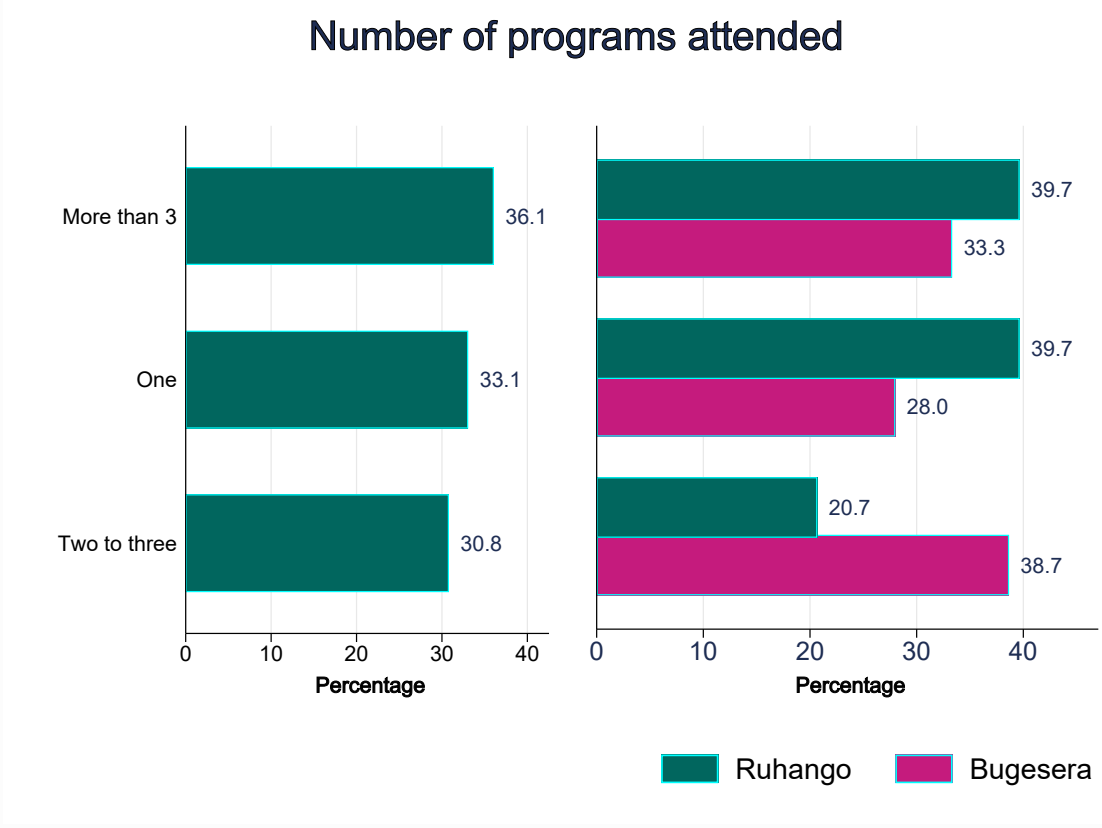


Figure 3.72: *Number of programs attended*

Most households reported that the Number of programs attended was more than 3 in 36.1% of cases. Other Number of programs attended included one (33.1%) and two to three (30.8%) as shown in Table 3.63. Ruhango district showed the highest proportion of more than 3 with 39.7% of cases as compared to Bugesera district (33.3%), but the difference was not significant (p=0.077).

Regarding gender, male respondents belonged to households that showed the highest proportion of more than 3 with 38.0% of cases as compared to households with female respondents (34.9%), but the difference was not significant (p=0.640). Concerning age group, respondents

aged 60 years and above belonged to households that showed the highest proportion of more than 3 with 50.0% of cases as compared to households with respondents less than 40 years (35.6%), and the difference was statistically significant (p=0.024).

Table 3.63: *(C31) Distribution of households number of programs attended*

	Number of programs attended						Total	p-value
	One		Two to three		More than 3			
	N	%	N	%	N	%		
District								
Ruhango	23	39.7	12	20.7	23	39.7	58	0.077
Bugesera	21	28.0	29	38.7	25	33.3	75	
Total	44	33.1	41	30.8	48	36.1	133	
Gender								
Male	18	36.0	13	26.0	19	38.0	50	0.640
Female	26	31.3	28	33.7	29	34.9	83	
Total	44	33.1	41	30.8	48	36.1	133	
Age group								
Less 40	10	22.2	19	42.2	16	35.6	45	0.024
40 to 59	24	36.4	21	31.8	21	31.8	66	
60 and above	10	45.5	1	4.5	11	50.0	22	
Total	44	33.1	41	30.8	48	36.1	133	
Religion								
Catholic	18	33.3	15	27.8	21	38.9	54	0.113
Pentecost	7	21.9	13	40.6	12	37.5	32	
Anglican	9	50.0	4	22.2	5	27.8	18	
Adventist	9	39.1	9	39.1	5	21.7	23	
Other religion	1	16.7	0	0.0	5	83.3	6	
Total	44	33.1	41	30.8	48	36.1	133	
Marital status								
Married	20	28.6	25	35.7	25	35.7	70	0.422
Cohabiting	10	33.3	9	30.0	11	36.7	30	
Single	0	0.0	2	66.7	1	33.3	3	
Widowed	10	50.0	2	10.0	8	40.0	20	
Divorced or separated	4	40.0	3	30.0	3	30.0	10	
Total	44	33.1	41	30.8	48	36.1	133	
Literacy								
Able to read and write	34	32.1	32	30.2	40	37.7	106	0.733
Not able to read or write	10	37.0	9	33.3	8	29.6	27	
Total	44	33.1	41	30.8	48	36.1	133	
Education								
No education	10	37.0	9	33.3	8	29.6	27	0.418
Nursery	31	35.6	26	29.9	30	34.5	87	
Primary	3	15.8	6	31.6	10	52.6	19	
Total	44	33.1	41	30.8	48	36.1	133	

Looking at religion, Other religion respondents belonged to households that showed the highest proportion of more than 3 with 83.3% of cases as compared to households with Catholic respondents (38.9%), but the difference was not significant (p=0.113). Comparing

the distribution by marital status, widowed respondents belonged to households that showed the highest proportion of more than 3 with 40.0% of cases as compared to households with cohabiting respondents (36.7%), but the difference was not significant (p=0.422).

Regarding literacy, respondents who are able to read and write belonged to households that showed the highest proportion of more than 3 with 37.7% of cases as compared to households with respondents who are not able to read or write (29.6%), but the difference was not significant (p=0.733). Concerning education level, respondents with primary education belonged to households that showed the highest proportion of more than 3 with 52.6% of cases as compared to households with respondents with nursery level (34.5%), but the difference was not significant (p=0.418).

32. How often does your community engage in activities to improve WASH conditions

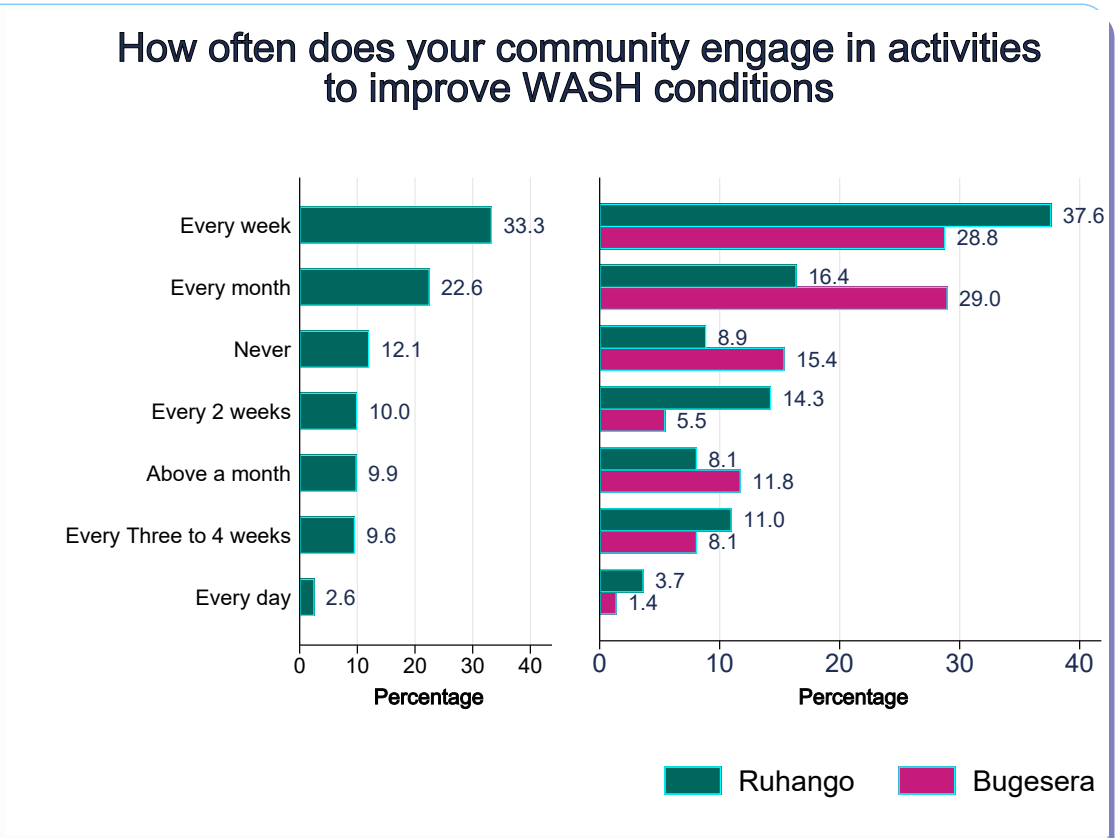


Figure 3.73: *How often does your community engage in activities to improve WASH conditions*

Most participants reported that community engage in activities to improve WASH conditions every week in 33.3% of cases. Other communities engage in activities to improve WASH conditions every month (22.6%), every 2 weeks (10.0%) and above a month (9.9%) as shown in Table 3.64.

Most households reported that the Frequency community engage in WASH activities was every week in 33.3% of cases. Other Frequency community engage in WASH activities included every month (22.6%), never (12.1%), every 2 weeks (10.0%) and above a month (9.9%) as shown in Table 3.64. Ruhango district showed the highest proportion of households spending every week with 37.6% of cases as compared to Bugesera district (28.8%), and the difference was highly statistically significant (p=0.000).

Regarding gender, female respondents belonged to households that showed the highest proportion of every week with 34.2% of cases as compared to households with male respondents (31.8%), but the difference was not significant (p=0.108). Concerning age group, respondents between 40 and 59 years belonged to households that showed the highest proportion of every week with 34.8% of cases as compared to households with respondents aged 60 years and above (33.8%), and the difference was statistically significant (p=0.004).

Looking at religion, Catholic respondents belonged to households that showed the highest proportion of every week with 37.1% of cases as compared to households with Adventist respondents (33.5%), and the difference was statistically significant (p=0.004). Comparing the distribution by marital status, married respondents belonged to households that showed the highest proportion of every week with 35.0% of cases as compared to households with widowed respondents (34.3%), but the difference was not significant (p=0.944).

Regarding literacy, respondents who are not able to read or write belonged to households that showed the highest proportion of every week with 37.2% of cases as compared to households with respondents who are able to read and write (31.3%), but the difference was not significant (p=0.091). Concerning education level, respondents with no education belonged to households that showed the highest proportion of every week with 37.1% of cases as compared to households with respondents with primary education (32.1%), but the difference was not significant (p=0.290).

Table 3.64: *(C32) Distribution of households frequency community engage in wash activities*

	Frequency community engage in WASH activities								
	Never	Every day	Every week	Every 2 weeks	Every Three to 4 weeks	Every month	Above a month	Total	p-value
District									
Ruhango	8.9	3.7	37.6	14.3	11.0	16.4	8.1	518	0.000
Bugesera	15.4	1.4	28.8	5.5	8.1	29.0	11.8	493	
Total	12.1	2.6	33.3	10.0	9.6	22.6	9.9	1,011	
Gender									
Male	9.2	2.2	31.8	10.0	11.9	23.2	11.9	371	0.108
Female	13.8	2.8	34.2	10.0	8.3	22.2	8.8	640	
Total	12.1	2.6	33.3	10.0	9.6	22.6	9.9	1,011	
Age group									
Less 40	15.2	3.4	31.0	8.4	7.7	23.2	11.1	323	0.004
40 to 59	7.0	2.3	34.8	12.6	9.6	24.1	9.6	428	
60 and above	16.5	1.9	33.8	7.7	11.9	19.2	8.8	260	
Total	12.1	2.6	33.3	10.0	9.6	22.6	9.9	1,011	
Religion									
Catholic	11.2	2.3	37.1	8.2	11.2	19.0	11.0	437	0.004
Pentecost	13.2	2.5	32.0	5.1	8.1	30.5	8.6	197	
Anglican	12.7	2.0	26.5	17.6	9.8	19.6	11.8	102	
Adventist	11.3	4.1	33.5	11.3	10.3	20.6	8.8	194	
Other religion	14.8	1.2	24.7	18.5	2.5	30.9	7.4	81	
Total	12.1	2.6	33.3	10.0	9.6	22.6	9.9	1,011	
Marital status									
Married	10.2	2.8	35.0	10.8	7.8	22.9	10.4	528	0.944
Cohabiting	15.0	2.2	29.4	8.9	11.7	23.3	9.4	180	
Single	12.5	1.6	28.1	12.5	10.9	25.0	9.4	64	
Widowed	15.2	2.8	34.3	7.9	11.2	19.7	9.0	178	
Divorced or separated	9.8	1.6	32.8	9.8	13.1	23.0	9.8	61	
Total	12.1	2.6	33.3	10.0	9.6	22.6	9.9	1,011	
Literacy									
Able to read and write	10.8	2.6	31.3	10.4	10.5	23.0	11.3	664	0.091
Not able to read or write	14.4	2.6	37.2	9.2	7.8	21.6	7.2	347	
Total	12.1	2.6	33.3	10.0	9.6	22.6	9.9	1,011	
Education									
No education	13.9	2.6	37.1	8.4	8.4	21.7	7.8	345	0.290
Nursery	11.3	2.7	31.2	10.2	10.1	22.4	12.0	557	
Primary	10.1	1.8	32.1	13.8	11.0	25.7	5.5	109	
Total	12.1	2.6	33.3	10.0	9.6	22.6	9.9	1,011	

33. Any community-led initiatives to promote good hygiene practices

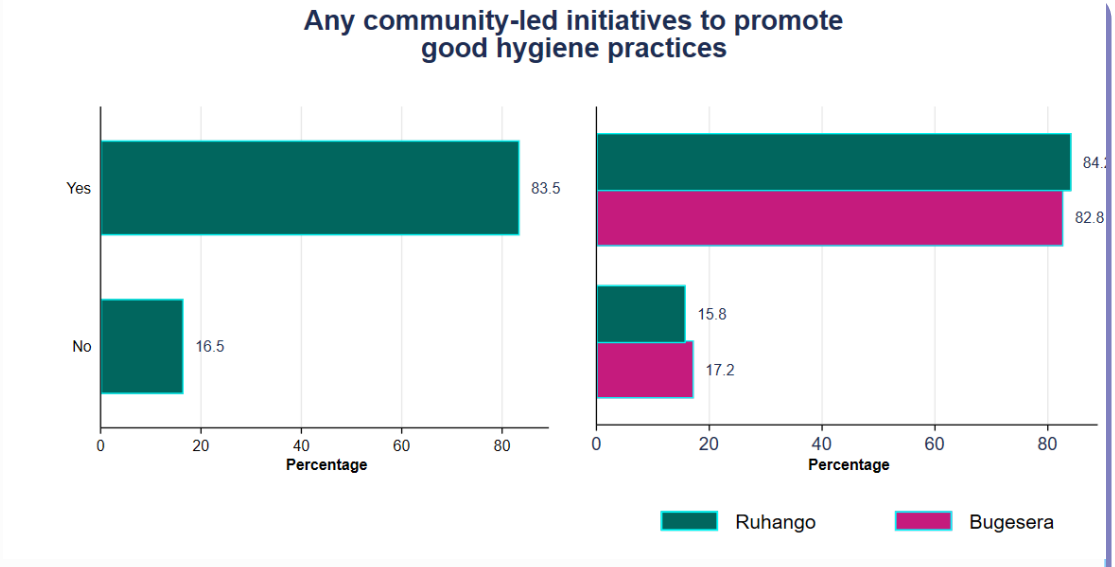


Figure 3.74: *Any community-led initiatives to promote good hygiene practices*

Most households reported having initiatives to promote good hygiene (83.5%) while those not having initiatives to promote good hygiene represented 16.5% of cases (Table 3.65). Ruhango district showed the highest proportion of households having initiatives to promote good hygiene with 84.2% of cases as compared to Bugesera district (82.8%), but the difference was not significant (p=0.546).

Regarding gender, male respondents belonged to households that showed the highest proportion having initiatives to promote good hygiene with 85.7% of cases as compared to households with female respondents (82.2%), but the difference was not significant (p=0.146). Concerning age group, respondents between 40 and 59 years belonged to households that showed the highest proportion having initiatives to promote good hygiene with 85.0% of cases as compared to households with respondents aged 60 years and above (83.1%), but the difference was not significant (p=0.471).

Looking at religion, Adventist respondents belonged to households that showed the highest proportion having initiatives to promote good hygiene with 86.6% of cases as compared to households with Other religion respondents (85.2%), but the difference was not significant (p=0.497). Comparing the distribution by marital status, married respondents belonged to households that showed the highest proportion having initiatives to promote good hygiene with 86.7% of cases as compared to households with divorced or separated respondents (83.6%), and the difference was statistically significant (p=0.046).

Regarding literacy, respondents who are able to read and write belonged to households that showed the highest proportion having initiatives to promote good hygiene with 84.8% of cases

as compared to households with respondents who are not able to read or write (81.0%), but the difference was not significant (p=0.121). Concerning education level, respondents with primary education belonged to households that showed the highest proportion having initiatives to promote good hygiene with 85.3% of cases as compared to households with respondents with nursery level (84.4%), but the difference was not significant (p=0.443).

Table 3.65: *(C33) Distribution of households have initiatives to promote good hygiene*

	Have initiatives to promote good hygiene				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	436	84.2	82	15.8	518	0.546
Bugesera	408	82.8	85	17.2	493	
Total	844	83.5	167	16.5	1,011	
Gender						
Male	318	85.7	53	14.3	371	0.146
Female	526	82.2	114	17.8	640	
Total	844	83.5	167	16.5	1,011	
Age group						
Less 40	264	81.7	59	18.3	323	0.471
40 to 59	364	85.0	64	15.0	428	
60 and above	216	83.1	44	16.9	260	
Total	844	83.5	167	16.5	1,011	
Religion						
Catholic	355	81.2	82	18.8	437	0.497
Pentecost	167	84.8	30	15.2	197	
Anglican	85	83.3	17	16.7	102	
Adventist	168	86.6	26	13.4	194	
Other religion	69	85.2	12	14.8	81	
Total	844	83.5	167	16.5	1,011	
Marital status						
Married	458	86.7	70	13.3	528	0.046
Cohabiting	143	79.4	37	20.6	180	
Single	49	76.6	15	23.4	64	
Widowed	143	80.3	35	19.7	178	
Divorced or separated	51	83.6	10	16.4	61	
Total	844	83.5	167	16.5	1,011	
Literacy						
Able to read and write	563	84.8	101	15.2	664	0.121
Not able to read or write	281	81.0	66	19.0	347	
Total	844	83.5	167	16.5	1,011	
Education						
No education	281	81.4	64	18.6	345	0.443
Nursery	470	84.4	87	15.6	557	
Primary	93	85.3	16	14.7	109	
Total	844	83.5	167	16.5	1,011	

34. Initiatives to promote good hygiene practices

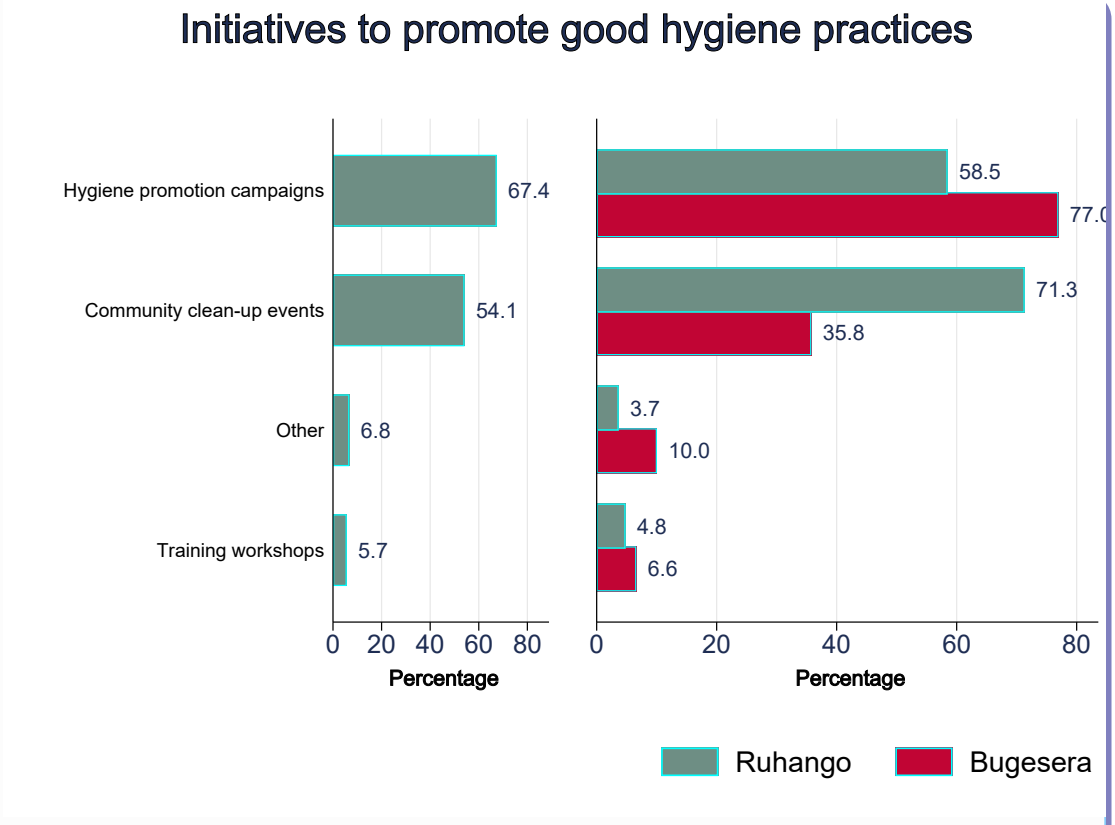


Figure 3.75: *Initiatives to promote good hygiene practices*

Most participants reported that initiatives to promote good hygiene were hygiene promotion campaigns in 67.4% of cases, community clean-up events (54.1%), and training workshops (5.7%) as shown in Table 3.66.

Table 3.66: *(C34) Initiatives to promote good hygiene*

	Initiatives to promote good hygiene			
	Hygiene promotion campaigns	**Community clean-up events**	**Other**	**Training workshops**
District				
Ruhango	58.5	71.3	3.7	4.8
Bugesera	77.0	35.8	10.0	6.6
Total	67.4	54.1	6.8	5.7
Gender				
Male	65.7	58.2	5.7	5.3
Female	68.4	51.7	7.4	5.9
Total	67.4	54.1	6.8	5.7
Age group				
Less 40	67.0	52.3	8.7	4.5
40-59	67.9	56.6	6.3	6.3
60 and above	67.1	52.3	5.1	6.0
Total	67.4	54.1	6.8	5.7
Religion				
Catholic church	64.5	58.0	6.2	4.8
Pentecost churches	70.1	47.3	7.8	7.2
Anglican church	70.6	45.9	5.9	3.5
Adventist church	64.9	57.7	8.3	6.0
Other	78.3	52.2	4.3	8.7
Total	67.4	54.1	6.8	5.7
Marital status				
Married	63.3	57.9	8.1	6.6
Cohabiting	75.5	47.6	4.9	3.5
Single	63.3	63.3	10.2	4.1
Widowed	72.7	46.9	4.9	5.6
Divorced/ separated	70.6	51.0	2.0	5.9
Total	67.4	54.1	6.8	5.7
Able to read and write				
Yes	68.7	56.8	6.0	5.9
No	64.8	48.8	8.2	5.3
Total	67.4	54.1	6.8	5.7
Education				
No education	64.8	49.5	7.5	5.0
Primary	67.4	57.0	5.5	6.6
Secondary/ university	75.3	53.8	10.8	3.2
Total	67.4	54.1	6.8	5.7

35. Feeling that these programs have changed WASH practices

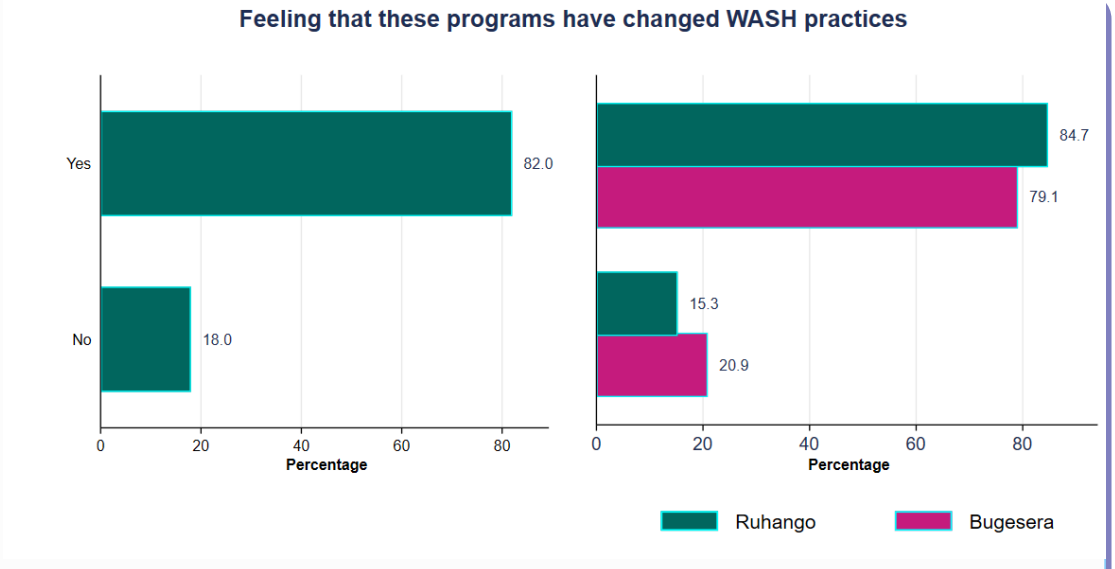


Figure 3.76: *Feeling that these programs have changed WASH practices*

Most participants reported feeling that these programs have changed WASH practices (82.0%) while those reported not feeling that these programs have changed WASH practices represented 18.0% of cases (Table 3.67). Ruhango District showed the highest proportion of households feeling that these programs have changed wash with 84.7% of cases.

The majority of households reported feeling that hygiene initiatives changed wash (82.0%) while households not feeling that hygiene initiatives changed wash represented 18.0% of cases (Table 3.67). Ruhango district showed the highest proportion of households feeling that hygiene initiatives changed wash with 84.7% of cases as compared to Bugesera district (79.1%), and the difference was statistically significant (p=0.020).

Regarding gender, male respondents belonged to households that showed the highest proportion feeling that hygiene initiatives changed wash with 82.7% of cases as compared to households with female respondents (81.6%), but the difference was not significant (p=0.636). Concerning age group, respondents between 40 and 59 years belonged to households that showed the highest proportion feeling that hygiene initiatives changed wash with 84.6% of cases as compared to households with respondents aged 60 years and above (82.3%), but the difference was not significant (p=0.086).

Looking at religion, Adventist respondents belonged to households that showed the highest proportion feeling that hygiene initiatives changed wash with 86.1% of cases as compared to households with Pentecost respondents (82.7%), but the difference was not significant (p=0.401). Comparing the distribution by marital status, married respondents belonged to households that showed the highest proportion feeling that hygiene initiatives changed wash

with 85.8% of cases as compared to households with widowed respondents (82.0%), and the difference was statistically significant (p=0.006).

Table 3.67: *(C35) Distribution of households feeling that hygiene initiatives changed wash*

	Feeling that hygiene initiatives changed WASH				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	439	84.7	79	15.3	518	0.020
Bugesera	390	79.1	103	20.9	493	
Total	829	82.0	182	18.0	1,011	
Gender						
Male	307	82.7	64	17.3	371	0.636
Female	522	81.6	118	18.4	640	
Total	829	82.0	182	18.0	1,011	
Age group						
Less 40	253	78.3	70	21.7	323	0.086
40 to 59	362	84.6	66	15.4	428	
60 and above	214	82.3	46	17.7	260	
Total	829	82.0	182	18.0	1,011	
Religion						
Catholic	355	81.2	82	18.8	437	0.401
Pentecost	163	82.7	34	17.3	197	
Anglican	79	77.5	23	22.5	102	
Adventist	167	86.1	27	13.9	194	
Other religion	65	80.2	16	19.8	81	
Total	829	82.0	182	18.0	1,011	
Marital status						
Married	453	85.8	75	14.2	528	0.006
Cohabiting	136	75.6	44	24.4	180	
Single	47	73.4	17	26.6	64	
Widowed	146	82.0	32	18.0	178	
Divorced or separated	47	77.0	14	23.0	61	
Total	829	82.0	182	18.0	1,011	
Literacy						
Able to read and write	554	83.4	110	16.6	664	0.100
Not able to read or write	275	79.3	72	20.7	347	
Total	829	82.0	182	18.0	1,011	
Education						
No education	276	80.0	69	20.0	345	0.453
Nursery	464	83.3	93	16.7	557	
Primary	89	81.7	20	18.3	109	
Total	829	82.0	182	18.0	1,011	

Regarding literacy, respondents who are able to read and write belonged to households that showed the highest proportion feeling that hygiene initiatives changed wash with 83.4% of cases as compared to households with respondents who are not able to read or write (79.3%), but the difference was not significant (p=0.100). Concerning education level, respondents with

nursery level belonged to households that showed the highest proportion feeling that hygiene initiatives changed wash with 83.3% of cases as compared to households with respondents with primary education (81.7%), but the difference was not significant (p=0.453).

36. Interested in attending future WASH education programs

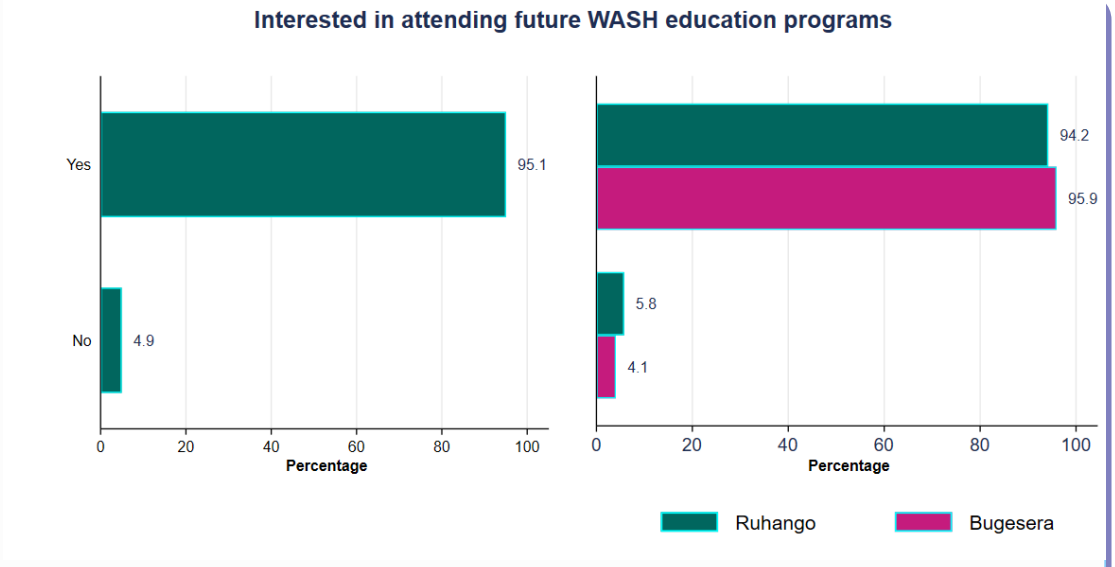


Figure 3.77: *Interested in attending future WASH education programs*

As shown in Table 3.68, most households reported interested in attending future wash education (95.1%) while households not interested in attending future wash education represented 4.9% of cases. Bugesera district showed the biggest proportion of households interested in attending future wash education with 95.9% of cases as compared to Ruhango district (94.2%), but the difference was not significant (p=0.204).

Regarding gender, male respondents belonged to households that showed the highest proportion interested in attending future wash education with 95.1% of cases as compared to households with female respondents (95.0%), but the difference was not significant (p=0.917). Concerning age group, respondents less than 40 years belonged to households that showed the highest proportion interested in attending future wash education with 98.5% of cases as compared to households with respondents between 40 and 59 years (98.1%), and the difference was highly statistically significant (p=0.000).

Looking at religion, Pentecost respondents belonged to households that showed the highest proportion interested in attending future wash education with 96.4% of cases as compared to households with Other religion respondents (96.3%), but the difference was not significant (p=0.721). Comparing the distribution by marital status, single respondents belonged to households that showed the highest proportion interested in attending future wash education with 98.4% of cases as compared to households with divorced or separated respondents (96.7%),

and the difference was statistically significant (p=0.003). Regarding literacy, respondents who are able to read and write belonged to households that showed the highest proportion interested in attending future wash education with 97.0% of cases as compared to households with respondents who are not able to read or write (91.4%), and the difference was highly statistically significant (p=0.000).

Table 3.68: *(C36) Distribution of households interested in attending future wash education*

	Interested in attending future WASH education				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	488	94.2	30	5.8	518	0.204
Bugesera	473	95.9	20	4.1	493	
Total	961	95.1	50	4.9	1,011	
Gender						
Male	353	95.1	18	4.9	371	0.917
Female	608	95.0	32	5.0	640	
Total	961	95.1	50	4.9	1,011	
Age group						
Less 40	318	98.5	5	1.5	323	0.000
40 to 59	420	98.1	8	1.9	428	
60 and above	223	85.8	37	14.2	260	
Total	961	95.1	50	4.9	1,011	
Religion						
Catholic	412	94.3	25	5.7	437	0.721
Pentecost	190	96.4	7	3.6	197	
Anglican	98	96.1	4	3.9	102	
Adventist	183	94.3	11	5.7	194	
Other religion	78	96.3	3	3.7	81	
Total	961	95.1	50	4.9	1,011	
Marital status						
Married	506	95.8	22	4.2	528	0.003
Cohabiting	174	96.7	6	3.3	180	
Single	63	98.4	1	1.6	64	
Widowed	159	89.3	19	10.7	178	
Divorced or separated	59	96.7	2	3.3	61	
Total	961	95.1	50	4.9	1,011	
Literacy						
Able to read and write	644	97.0	20	3.0	664	0.000
Not able to read or write	317	91.4	30	8.6	347	
Total	961	95.1	50	4.9	1,011	
Education						
No education	315	91.3	30	8.7	345	0.000
Nursery	538	96.6	19	3.4	557	
Primary	108	99.1	1	0.9	109	
Total	961	95.1	50	4.9	1,011	

Concerning education level, respondents with primary education belonged to households

that showed the highest proportion interested in attending future wash education with 99.1% of cases as compared to households with respondents with nursery level (96.6%), and the difference was highly statistically significant (p=0.000).

37. Source of information about health and hygiene

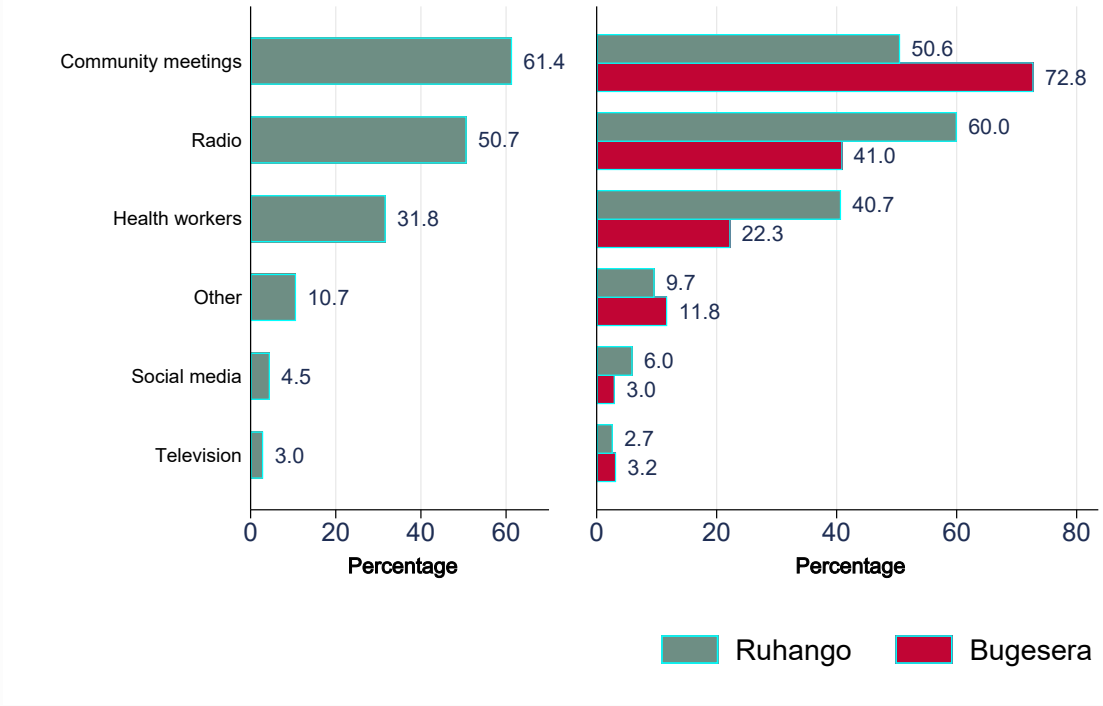


Figure 3.78: *Source of information about health and hygiene*

Most participants reported that the main source of information about health and hygiene were community meetings in 61.4% of cases. Other Source of information about health and hygiene included radio (50.7%), health workers (31.8%), other (10.7%) and social media (4.5%) as shown in Table 3.69.

Table 3.69: *(C37) Source of information about health and hygiene*

	Source of information about health and hygiene					
	Community meetings	**Radio**	**Health workers**	**Other**	**Social media**	**Television**
District						
Ruhango	50.6	60.0	40.7	9.7	6.0	2.7
Bugesera	72.8	41.0	22.3	11.8	3.0	3.2
Total	61.4	50.7	31.8	10.7	4.5	3.0
Gender						
Male	57.1	58.2	32.9	8.6	6.5	3.5
Female	63.9	46.4	31.1	11.9	3.4	2.7
Total	61.4	50.7	31.8	10.7	4.5	3.0
Age group						
Less 40	61.3	53.3	33.1	12.4	7.7	4.6
40-59	64.0	47.9	34.3	10.3	3.3	3.0
60 and above	57.3	52.3	25.8	9.2	2.7	0.8
Total	61.4	50.7	31.8	10.7	4.5	3.0
Religion						
Catholic church	57.2	54.9	32.3	10.8	4.1	2.5
Pentecost churches	65.5	42.6	25.9	12.7	4.1	4.6
Anglican church	66.7	45.1	32.4	11.8	2.0	2.9
Adventist church	61.3	55.2	35.6	9.3	6.2	2.6
Other	67.9	44.4	33.3	7.4	7.4	2.5
Total	61.4	50.7	31.8	10.7	4.5	3.0
Marital status						
Married	61.7	56.2	33.0	9.5	4.7	2.7
Cohabiting	61.7	47.2	32.8	11.1	6.1	5.0
Single	59.4	50.0	31.2	15.6	7.8	4.7
Widowed	61.2	44.9	24.7	10.7	2.8	2.2
Divorced/ separated	60.7	31.1	39.3	14.8	0.0	0.0
Total	61.4	50.7	31.8	10.7	4.5	3.0
Able to read and write						
Yes	58.1	57.1	34.9	11.4	6.5	4.2
No	67.7	38.6	25.6	9.2	0.9	0.6
Total	61.4	50.7	31.8	10.7	4.5	3.0
Education						
No education	68.1	38.0	27.0	10.7	0.9	0.6
Primary	58.0	56.4	33.4	10.8	4.3	3.6
Secondary/ university	57.8	62.4	38.5	10.1	17.4	7.3
Total	61.4	50.7	31.8	10.7	4.5	3.0

38. Ever heard about Mass Drug Administration

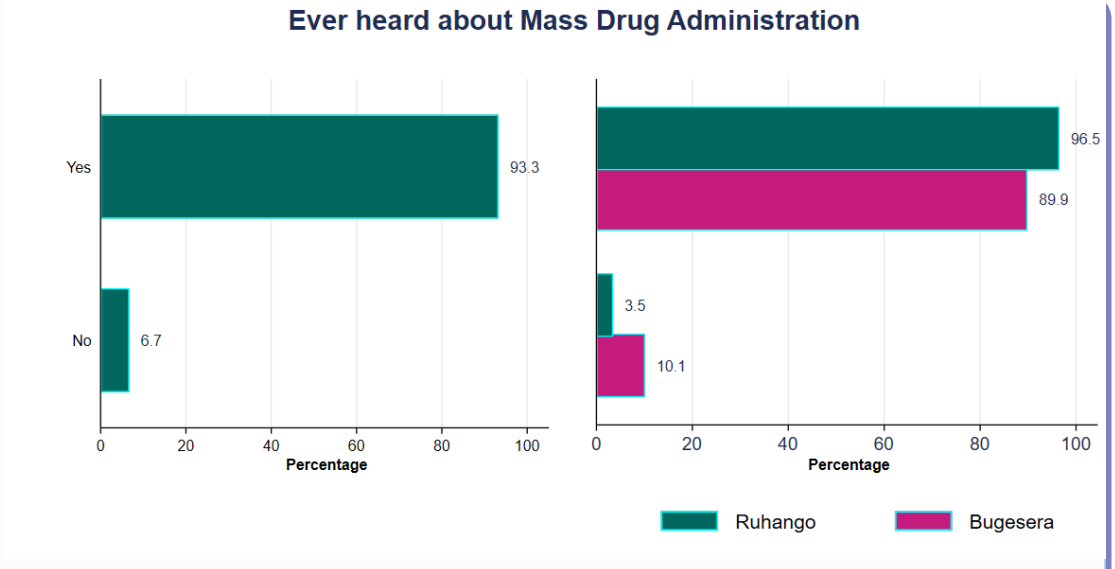


Figure 3.79: *Ever heard about Mass Drug Administration*

Most households reported ever heard about mass drug administration (93.3%) while households not ever heard about mass drug administration represented 6.7% of cases (Table 3.70). Ruhango district showed the highest proportion of households ever heard about mass drug administration with 96.5% of cases as compared to Bugesera district (89.9%), and the difference was highly statistically significant (p=0.000).

Regarding gender, male respondents belonged to households that showed the highest proportion ever heard about mass drug administration with 93.5% of cases as compared to households with female respondents (93.1%), but the difference was not significant (p=0.804). Concerning age group, respondents less than 40 years belonged to households that showed the highest proportion ever heard about mass drug administration with 95.0% of cases as compared to households with respondents between 40 and 59 years (93.7%), but the difference was not significant (p=0.074).

Looking at religion, Adventist respondents belonged to households that showed the highest proportion ever heard about mass drug administration with 95.4% of cases as compared to households with Other religion respondents (95.1%), but the difference was not significant (p=0.275). Comparing the distribution by marital status, cohabiting respondents belonged to households that showed the highest proportion ever heard about mass drug administration with 95.6% of cases as compared to households with married respondents (94.3%), but the difference was not significant (p=0.064).

Regarding literacy, respondents who are able to read and write belonged to households that showed the highest proportion ever heard about mass drug administration with 95.0% of cases

as compared to households with respondents who are not able to read or write (89.9%), and the difference was statistically significant (p=0.002). Concerning education level, respondents with primary education belonged to households that showed the highest proportion ever heard about mass drug administration with 96.3% of cases as compared to households with respondents with nursery level (95.3%), and the difference was highly statistically significant (p=0.000).

Table 3.70: *(C38) Distribution of households ever heard about mass drug administration*

	Ever heard about Mass Drug Administration				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	500	96.5	18	3.5	518	0.000
Bugesera	443	89.9	50	10.1	493	
Total	943	93.3	68	6.7	1,011	
Gender						
Male	347	93.5	24	6.5	371	0.804
Female	596	93.1	44	6.9	640	
Total	943	93.3	68	6.7	1,011	
Age group						
Less 40	307	95.0	16	5.0	323	0.074
40 to 59	401	93.7	27	6.3	428	
60 and above	235	90.4	25	9.6	260	
Total	943	93.3	68	6.7	1,011	
Religion						
Catholic	409	93.6	28	6.4	437	0.275
Pentecost	181	91.9	16	8.1	197	
Anglican	91	89.2	11	10.8	102	
Adventist	185	95.4	9	4.6	194	
Other religion	77	95.1	4	4.9	81	
Total	943	93.3	68	6.7	1,011	
Marital status						
Married	498	94.3	30	5.7	528	0.064
Cohabiting	172	95.6	8	4.4	180	
Single	58	90.6	6	9.4	64	
Widowed	158	88.8	20	11.2	178	
Divorced or separated	57	93.4	4	6.6	61	
Total	943	93.3	68	6.7	1,011	
Literacy						
Able to read and write	631	95.0	33	5.0	664	0.002
Not able to read or write	312	89.9	35	10.1	347	
Total	943	93.3	68	6.7	1,011	
Education						
No education	307	89.0	38	11.0	345	0.000
Nursery	531	95.3	26	4.7	557	
Primary	105	96.3	4	3.7	109	
Total	943	93.3	68	6.7	1,011	

39. Source of information about Mass Drug Administration

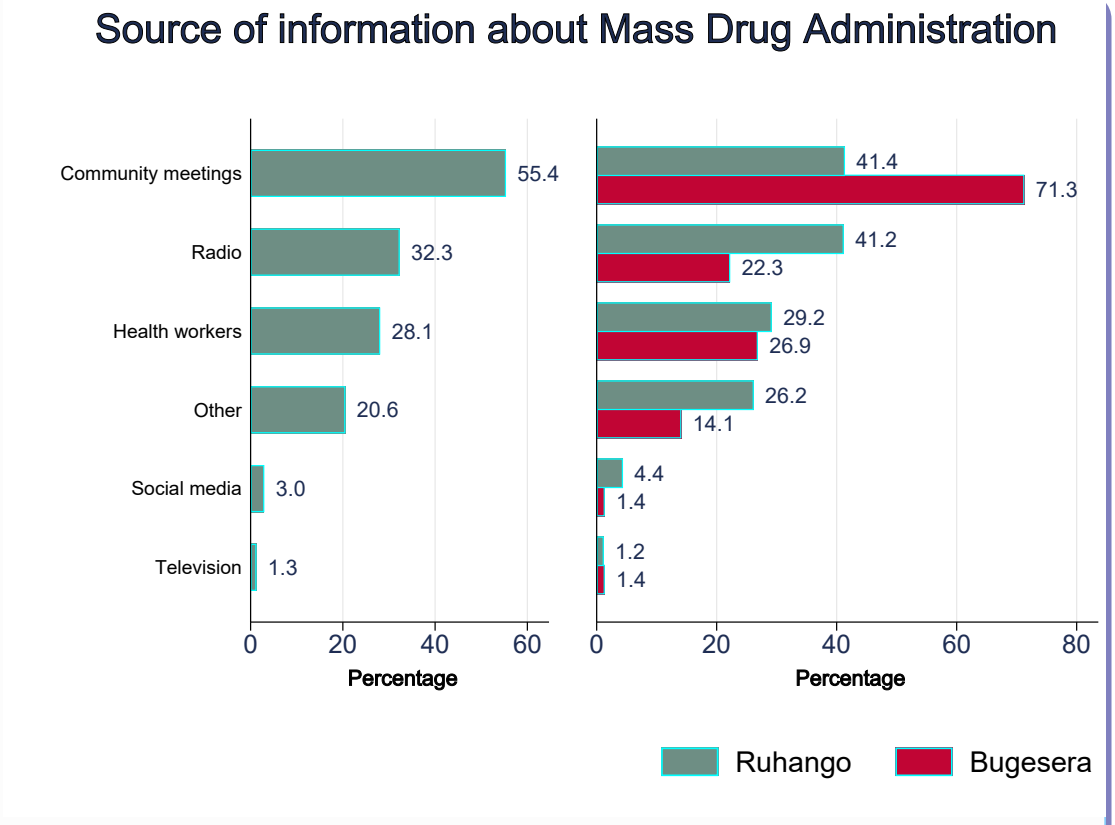


Figure 3.80: *Source of information about Mass Drug Administration*

Most households reported that the main source of information about MDA were community meetings in 55.4% of cases. Other sources of information about MDA included radio (32.3%), health workers (28.1%), other (20.6%) and social media (3.0%) as shown in Table 3.71.

Table 3.71: *(C39) Source of information about MDA*

	Source of information about MDA					
	Community meetings	**Radio**	**Health workers**	**Other**	**Social media**	**Television**
District						
Ruhango	41.4	41.2	29.2	26.2	4.4	1.2
Bugesera	71.3	22.3	26.9	14.1	1.4	1.4
Total	55.4	32.3	28.1	20.6	3.0	1.3
Gender						
Male	54.2	40.1	30.5	15.9	4.0	2.3
Female	56.1	27.8	26.7	23.3	2.4	0.7
Total	55.4	32.3	28.1	20.6	3.0	1.3
Age group						
Less 40	58.7	35.2	27.7	20.1	2.3	1.3
40-59	56.1	29.4	28.7	21.7	3.0	1.7
60 and above	49.8	33.6	27.7	19.1	3.8	0.4
Total	55.4	32.3	28.1	20.6	3.0	1.3
Religion						
Catholic church	50.9	34.4	27.0	22.6	1.7	1.2
Pentecost churches	63.1	26.7	17.3	21.2	2.2	1.7
Anglican church	62.6	26.4	36.3	14.3	2.2	2.2
Adventist church	53.5	41.6	31.9	16.8	6.5	1.1
Other	57.1	19.5	40.3	24.7	3.9	0.0
Total	55.4	32.3	28.1	20.6	3.0	1.3
Marital status						
Married	54.7	37.6	26.4	20.9	2.4	1.0
Cohabiting	60.0	25.9	30.6	16.5	4.1	2.4
Single	50.0	29.3	36.2	22.4	3.4	0.0
Widowed	56.3	29.7	24.1	20.3	3.2	1.3
Divorced/ separated	50.0	16.1	39.3	28.6	3.6	1.8
Total	55.4	32.3	28.1	20.6	3.0	1.3
Able to read and write						
Yes	52.7	36.7	29.6	21.3	3.8	1.6
No	60.8	23.5	25.1	19.0	1.3	0.6
Total	55.4	32.3	28.1	20.6	3.0	1.3
Education						
No education	61.1	23.9	25.5	18.3	1.6	0.3
Primary	51.6	34.7	27.9	22.8	3.6	1.1
Secondary/ university	57.8	45.6	37.3	15.7	3.9	4.9
Total	55.4	32.3	28.1	20.6	3.0	1.3

40. Purpose of Mass Drug Administration

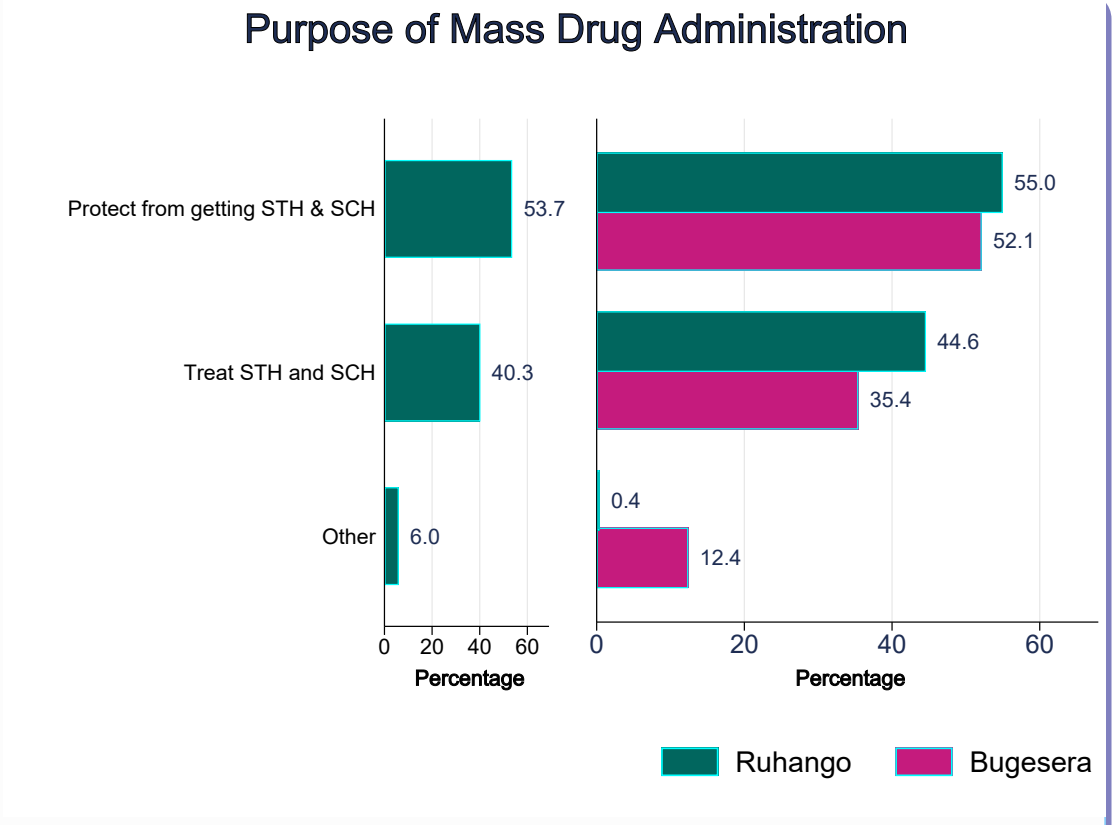


Figure 3.81: *Purpose of Mass Drug Administration*

As shown in Table 3.72, most households reported that the Purpose of Mass Drug Administration was protect the population in 53.7% of cases. Other Purpose of Mass Drug Administration included treat sth and sch (40.3%) and other (6.0%). Ruhango district showed the highest proportion of protect the population with 55.0% of cases as compared to Bugesera district (52.1%), and the difference was highly statistically significant (p=0.000).

Regarding gender, male respondents belonged to households that showed the highest proportion of protect the population with 57.3% of cases as compared to households with female respondents (51.5%), but the difference was not significant (p=0.177). Concerning age group, respondents less than 40 years belonged to households that showed the highest proportion of protect the population with 58.6% of cases as compared to households with respondents between 40 and 59 years (52.1%), but the difference was not significant (p=0.076).

Looking at religion, Other religion respondents belonged to households that showed the highest proportion of protect the population with 62.3% of cases as compared to households with Anglican respondents (60.4%), and the difference was statistically significant (p=0.016).

Table 3.72: *(C40) Distribution of households purpose of mass drug administration*

	Purpose of Mass Drug Administration						Total	p-value
	Protect the population		Treat STH and SCH		Other			
	N	%	N	%	N	%		
District								
Ruhango	275	55.0	223	44.6	2	0.4	500	0.000
Bugesera	231	52.1	157	35.4	55	12.4	443	
Total	506	53.7	380	40.3	57	6.0	943	
Gender								
Male	199	57.3	131	37.8	17	4.9	347	0.177
Female	307	51.5	249	41.8	40	6.7	596	
Total	506	53.7	380	40.3	57	6.0	943	
Age group								
Less 40	180	58.6	106	34.5	21	6.8	307	0.076
40 to 59	209	52.1	166	41.4	26	6.5	401	
60 and above	117	49.8	108	46.0	10	4.3	235	
Total	506	53.7	380	40.3	57	6.0	943	
Religion								
Catholic	210	51.3	181	44.3	18	4.4	409	0.016
Pentecost	87	48.1	74	40.9	20	11.0	181	
Anglican	55	60.4	29	31.9	7	7.7	91	
Adventist	106	57.3	70	37.8	9	4.9	185	
Other religion	48	62.3	26	33.8	3	3.9	77	
Total	506	53.7	380	40.3	57	6.0	943	
Marital status								
Married	260	52.2	211	42.4	27	5.4	498	0.072
Cohabiting	103	59.9	53	30.8	16	9.3	172	
Single	36	62.1	21	36.2	1	1.7	58	
Widowed	80	50.6	70	44.3	8	5.1	158	
Divorced or separated	27	47.4	25	43.9	5	8.8	57	
Total	506	53.7	380	40.3	57	6.0	943	
Literacy								
Able to read and write	345	54.7	250	39.6	36	5.7	631	0.623
Not able to read or write	161	51.6	130	41.7	21	6.7	312	
Total	506	53.7	380	40.3	57	6.0	943	
Education								
No education	156	50.8	126	41.0	25	8.1	307	0.003
Nursery	278	52.4	221	41.6	32	6.0	531	
Primary	72	68.6	33	31.4	0	0.0	105	
Total	506	53.7	380	40.3	57	6.0	943	

Comparing the distribution by marital status, single respondents belonged to households that showed the highest proportion of protect the population with 62.1% of cases as compared to households with cohabiting respondents (59.9%), but the difference was not significant (p=0.072). Regarding literacy, respondents who are able to read and write belonged to households that showed the highest proportion of protect the population with 54.7% of cases as compared to households with respondents who are not able to read or write (51.6%), but the difference was not significant (p=0.623). Concerning education level, respondents with primary

education belonged to households that showed the highest proportion of protect the population with 68.6% of cases as compared to households with respondents with nursery level (52.4%), and the difference was statistically significant (p=0.003).

41. Source of information about health issues

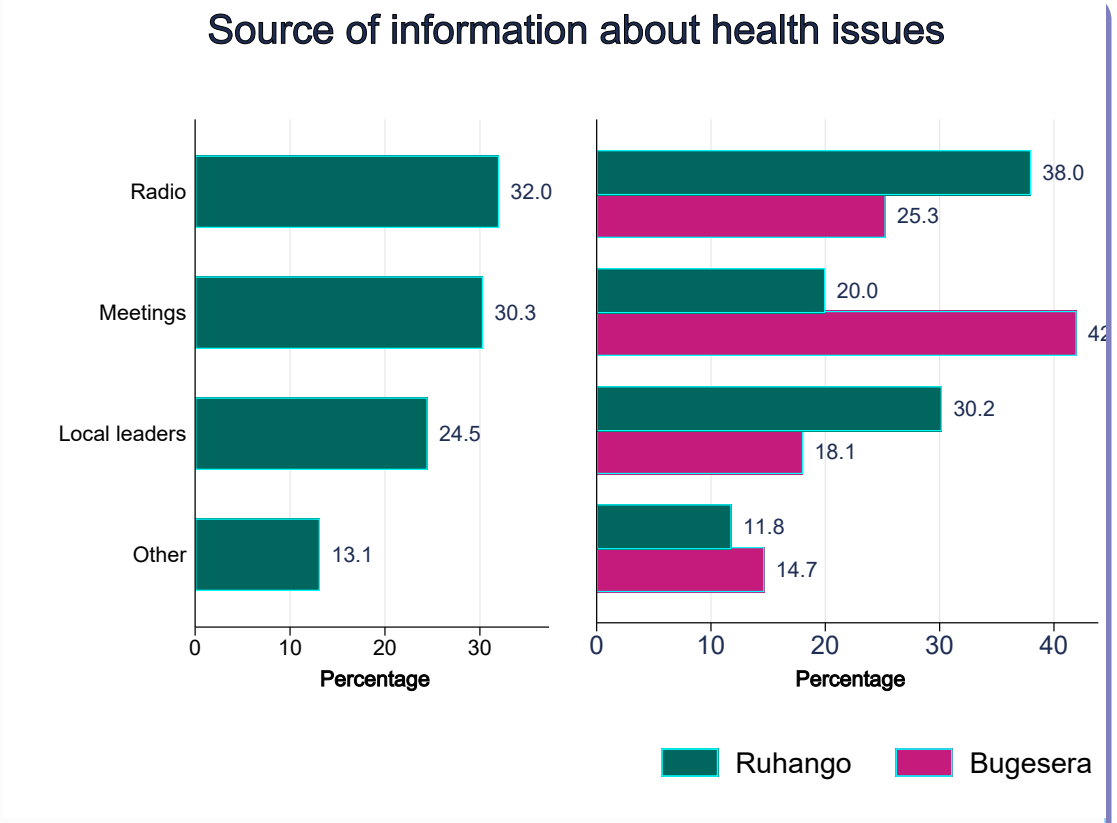


Figure 3.82: *Source of information about health issues*

Most households reported that the Source of information about health issues was radio in 32.0% of cases. Other Source of information about health issues included meetings (30.3%), local leaders (24.5%) and other (13.1%) as shown in Table 3.73. Ruhango district showed the highest proportion of radio with 38.0% of cases as compared to Bugesera district (25.3%), and the difference was highly statistically significant (p=0.000).

Regarding gender, male respondents belonged to households that showed the highest proportion of radio with 38.3% of cases as compared to households with female respondents (28.4%), and the difference was statistically significant (p=0.007). Concerning age group, respondents aged 60 years and above belonged to households that showed the highest proportion of radio with 36.2% of cases as compared to households with respondents less than 40 years (34.2%), but the difference was not significant (p=0.084).

Table 3.73: *(C41) Distribution of households source of information about health issues*

	Source of information about health issues				Total	p-value
	Radio	Meetings	Local leaders	Other		
District						
Ruhango	38.0	20.0	30.2	11.8	100.0	0.000
Bugesera	25.3	42.0	18.1	14.7	100.0	
Total	32.0	30.3	24.5	13.1	100.0	
Gender						
Male	38.3	25.1	24.2	12.4	100.0	0.007
Female	28.4	33.4	24.7	13.6	100.0	
Total	32.0	30.3	24.5	13.1	100.0	
Age group						
Less 40	34.2	30.6	20.2	15.0	100.0	0.084
40 to 59	27.9	32.9	26.7	12.5	100.0	
60 and above	36.2	25.5	26.4	11.9	100.0	
Total	32.0	30.3	24.5	13.1	100.0	
Religion						
Catholic	35.5	26.9	24.7	13.0	100.0	0.067
Pentecost	28.7	35.9	19.3	16.0	100.0	
Anglican	28.6	24.2	28.6	18.7	100.0	
Adventist	32.4	31.4	25.9	10.3	100.0	
Other religion	24.7	40.3	27.3	7.8	100.0	
Total	32.0	30.3	24.5	13.1	100.0	
Marital status						
Married	34.9	27.9	22.7	14.5	100.0	0.288
Cohabiting	29.7	31.4	24.4	14.5	100.0	
Single	29.3	31.0	24.1	15.5	100.0	
Widowed	29.7	35.4	27.2	7.6	100.0	
Divorced or separated	22.8	33.3	33.3	10.5	100.0	
Total	32.0	30.3	24.5	13.1	100.0	
Literacy						
Able to read and write	36.1	25.2	24.6	14.1	100.0	0.000
Not able to read or write	23.7	40.7	24.4	11.2	100.0	
Total	32.0	30.3	24.5	13.1	100.0	
Education						
No education	23.5	38.4	25.7	12.4	100.0	0.000
Nursery	35.8	28.2	23.7	12.2	100.0	
Primary	38.1	17.1	24.8	20.0	100.0	
Total	32.0	30.3	24.5	13.1	100.0	

Looking at religion, Catholic respondents belonged to households that showed the highest proportion of radio with 35.5% of cases as compared to households with Adventist respondents (32.4%), but the difference was not significant (p=0.067). Comparing the distribution by marital status, married respondents belonged to households that showed the highest proportion of radio with 34.9% of cases as compared to households with widowed respondents (29.7%), but the difference was not significant (p=0.288).

Regarding literacy, respondents who are able to read and write belonged to households that

showed the highest proportion of radio with 36.1% of cases as compared to households with respondents who are not able to read or write (23.7%), and the difference was highly statistically significant (p=0.000). Concerning education level, respondents with primary education belonged to households that showed the highest proportion of radio with 38.1% of cases as compared to households with respondents with nursery level (35.8%), and the difference was highly statistically significant (p=0.000).

42. Received a deworming tablet in the past 6 months

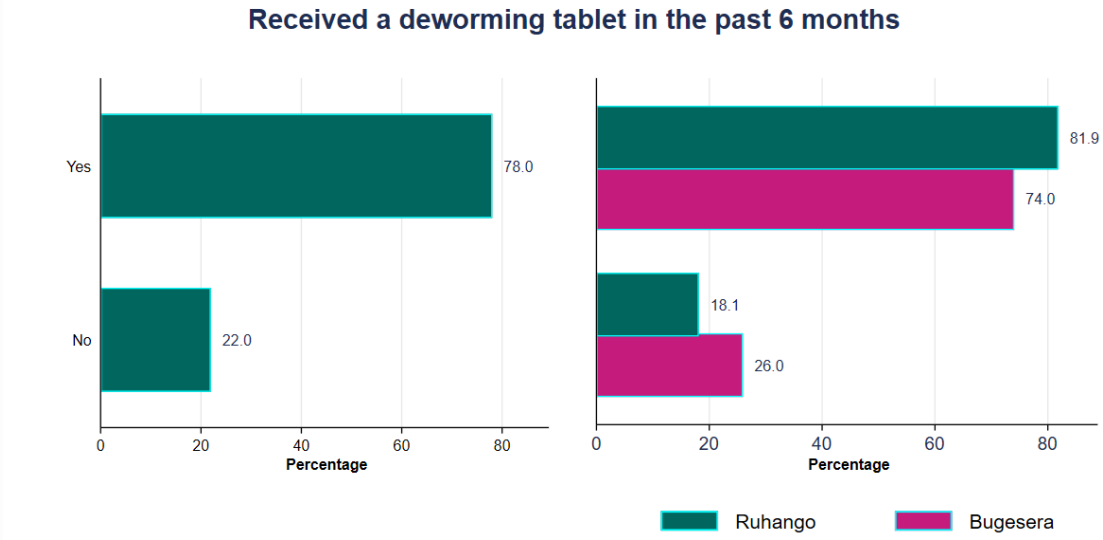


Figure 3.83: *Received a deworming tablet in the past 6 months*

Table 3.74 shows the biggest proportion of households reported ever received deworming tablets in past 6 months (78.0%) while households not ever received deworming tablets in past 6 months represented 22.0% of cases. Ruhango district showed the highest proportion of households ever received deworming tablets in past 6 months with 81.9% of cases as compared to Bugesera district (74.0%), and the difference was statistically significant (p=0.003).

Regarding gender, female respondents belonged to households that showed the highest proportion ever received deworming tablets in past 6 months with 81.6% of cases as compared to households with male respondents (72.0%), and the difference was highly statistically significant (p=0.000). Concerning age group, respondents less than 40 years belonged to households that showed the highest proportion ever received deworming tablets in past 6 months with 80.5% of cases as compared to households with respondents between 40 and 59 years (79.7%), and the difference was statistically significant (p=0.034).

Looking at religion, Pentecost respondents belonged to households that showed the highest proportion ever received deworming tablets in past 6 months with 81.2% of cases as compared to households with Anglican respondents (79.4%), but the difference was not significant

(p=0.702).

Table 3.74: *(C42) Distribution of households ever received deworming tablets in past 6 months*

	Ever received deworming tablets in past 6 months				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	424	81.9	94	18.1	518	0.003
Bugesera	365	74.0	128	26.0	493	
Total	789	78.0	222	22.0	1,011	
Gender						
Male	267	72.0	104	28.0	371	0.000
Female	522	81.6	118	18.4	640	
Total	789	78.0	222	22.0	1,011	
Age group						
Less 40	260	80.5	63	19.5	323	0.034
40 to 59	341	79.7	87	20.3	428	
60 and above	188	72.3	72	27.7	260	
Total	789	78.0	222	22.0	1,011	
Religion						
Catholic	333	76.2	104	23.8	437	0.702
Pentecost	160	81.2	37	18.8	197	
Anglican	81	79.4	21	20.6	102	
Adventist	151	77.8	43	22.2	194	
Other religion	64	79.0	17	21.0	81	
Total	789	78.0	222	22.0	1,011	
Marital status						
Married	417	79.0	111	21.0	528	0.252
Cohabiting	135	75.0	45	25.0	180	
Single	45	70.3	19	29.7	64	
Widowed	140	78.7	38	21.3	178	
Divorced or separated	52	85.2	9	14.8	61	
Total	789	78.0	222	22.0	1,011	
Literacy						
Able to read and write	525	79.1	139	20.9	664	0.276
Not able to read or write	264	76.1	83	23.9	347	
Total	789	78.0	222	22.0	1,011	
Education						
No education	260	75.4	85	24.6	345	0.123
Nursery	448	80.4	109	19.6	557	
Primary	81	74.3	28	25.7	109	
Total	789	78.0	222	22.0	1,011	

Comparing the distribution by marital status, divorced or separated respondents belonged to households that showed the highest proportion ever received deworming tablets in past 6 months with 85.2% of cases as compared to households with married respondents (79.0%), but the difference was not significant (p=0.252).

Regarding literacy, respondents who are able to read and write belonged to households that

showed the highest proportion ever received deworming tablets in past 6 months with 79.1% of cases as compared to households with respondents who are not able to read or write (76.1%), but the difference was not significant (p=0.276). Concerning education level, respondents with nursery level belonged to households that showed the highest proportion ever received deworming tablets in past 6 months with 80.4% of cases as compared to households with respondents with no education (75.4%), but the difference was not significant (p=0.123).

43. Type of deworming tablets received

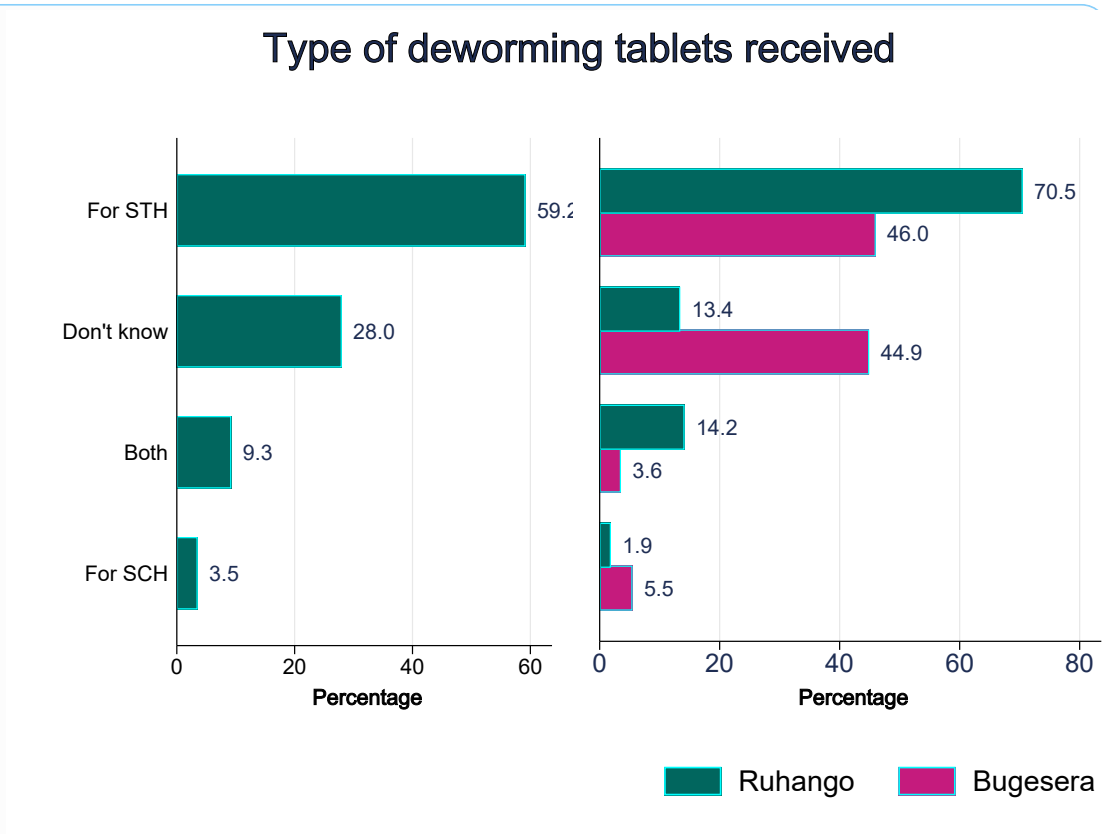


Figure 3.84: *Type of deworming tablets received*

Most households reported that the Type of deworming tablets received was for sth in 59.2% of cases. Other Type of deworming tablets received included don't know (28.0%), both (9.3%) and for sch (3.5%) as shown in Table 3.75. Ruhango district showed the highest proportion of for sth with 70.5% of cases as compared to Bugesera district (46.0%), and the difference was highly statistically significant (p=0.000).

Regarding gender, male respondents belonged to households that showed the highest proportion of for sth with 62.2% of cases as compared to households with female respondents (57.7%), but the difference was not significant (p=0.053). Concerning age group, respondents aged 60 years and above belonged to households that showed the highest proportion of for sth

with 68.6% of cases as compared to households with respondents between 40 and 59 years (57.2%), and the difference was statistically significant (p=0.001).

Looking at religion, Catholic respondents belonged to households that showed the highest proportion of for sth with 64.3% of cases as compared to households with Adventist respondents (61.6%), and the difference was highly statistically significant (p=0.000).

Table 3.75: *(C43) Distribution of households type of deworming tablets received*

	Type of deworming tablets received					
	For STH	For SCH	Both	Don't know	Total	p-value
District						
Ruhango	70.5	1.9	14.2	13.4	100.0	0.000
Bugesera	46.0	5.5	3.6	44.9	100.0	
Total	59.2	3.5	9.3	28.0	100.0	
Gender						
Male	62.2	4.9	10.5	22.5	100.0	0.053
Female	57.7	2.9	8.6	30.8	100.0	
Total	59.2	3.5	9.3	28.0	100.0	
Age group						
Less 40	55.0	1.9	8.8	34.2	100.0	0.001
40 to 59	57.2	5.3	12.3	25.2	100.0	
60 and above	68.6	2.7	4.3	24.5	100.0	
Total	59.2	3.5	9.3	28.0	100.0	
Religion						
Catholic	64.3	4.2	8.7	22.8	100.0	0.000
Pentecost	55.0	1.9	6.9	36.2	100.0	
Anglican	53.1	4.9	6.2	35.8	100.0	
Adventist	61.6	0.7	15.9	21.9	100.0	
Other religion	45.3	9.4	6.2	39.1	100.0	
Total	59.2	3.5	9.3	28.0	100.0	
Marital status						
Married	59.5	4.1	11.3	25.2	100.0	0.067
Cohabiting	52.6	3.0	6.7	37.8	100.0	
Single	48.9	0.0	11.1	40.0	100.0	
Widowed	66.4	2.9	6.4	24.3	100.0	
Divorced or separated	63.5	5.8	5.8	25.0	100.0	
Total	59.2	3.5	9.3	28.0	100.0	
Literacy						
Able to read and write	60.4	3.8	10.5	25.3	100.0	0.065
Not able to read or write	56.8	3.0	6.8	33.3	100.0	
Total	59.2	3.5	9.3	28.0	100.0	
Education						
No education	56.5	2.3	5.4	35.8	100.0	0.003
Nursery	59.6	4.7	11.4	24.3	100.0	
Primary	65.4	1.2	9.9	23.5	100.0	
Total	59.2	3.5	9.3	28.0	100.0	

Comparing the distribution by marital status, widowed respondents belonged to households that showed the highest proportion of for sth with 66.4% of cases as compared to households with

divorced or separated respondents (63.5%), but the difference was not significant (p=0.067).

Regarding literacy, respondents who are able to read and write belonged to households that showed the highest proportion of for sth with 60.4% of cases as compared to households with respondents who are not able to read or write (56.8%), but the difference was not significant (p=0.065). Concerning education level, respondents with primary education belonged to households that showed the highest proportion of for sth with 65.4% of cases as compared to households with respondents with nursery level (59.6%), and the difference was statistically significant (p=0.003).

44. Reasons for not receiving the deworming tablets

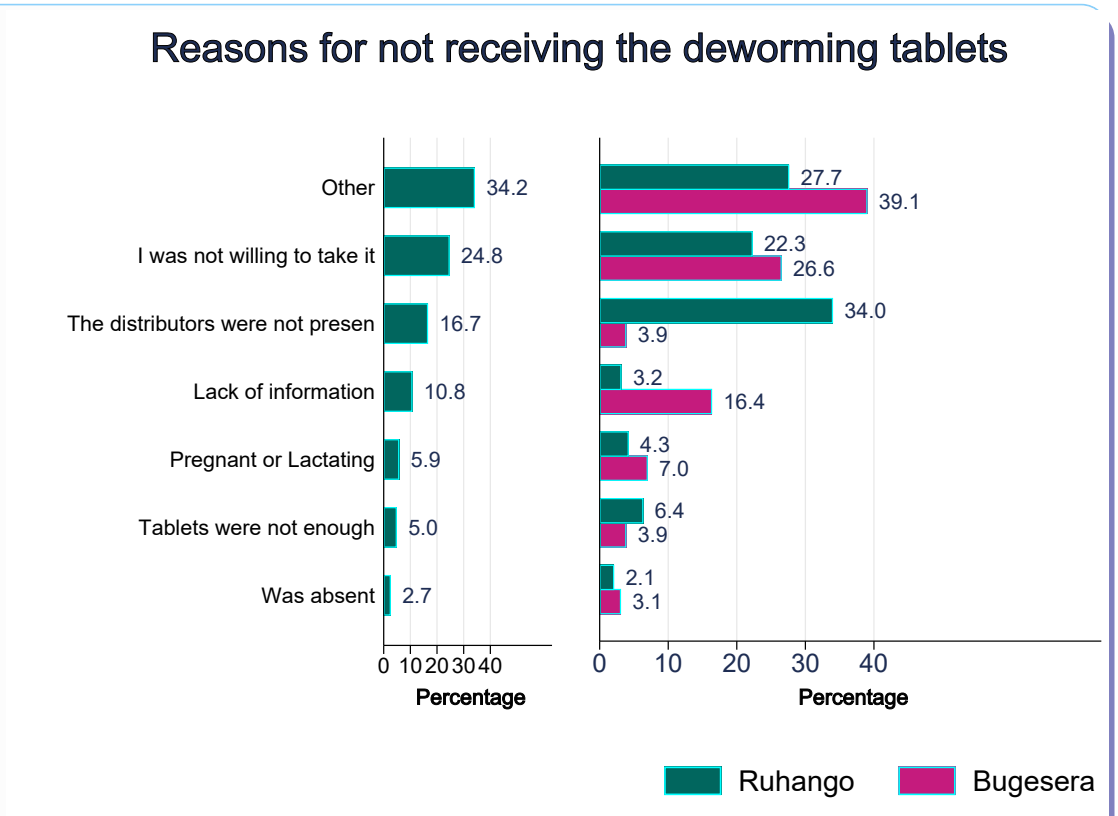


Figure 3.85: *Reasons for not receiving the deworming tablets*

As shown in Table 3.76, most households reported that the Reasons for not receiving deworming tablets was other in 34.2% of cases. Other Reasons for not receiving deworming tablets included i was not willing to take it (24.8%), the distributors were not present (16.7%), lack of information (10.8%) and pregnant or lactating (5.9%). Bugesera district showed the highest proportion of other with 39.1% of cases as compared to Ruhango district (27.7%), and the difference was highly statistically significant (p=0.000).

Table 3.76: *(C44) Distribution of households reasons for not receiving deworming tablets*

	Reasons for not receiving deworming tablets								
	Tablets were not enough	I was not willing to take it	The distributors were not present	Pregnant or Lactating	Lack of information	Was absent	Other	Total	p-value
District									
Ruhango	6.4	22.3	34.0	4.3	3.2	2.1	27.7	94	0.000
Bugesera	3.9	26.6	3.9	7.0	16.4	3.1	39.1	128	
Total	5.0	24.8	16.7	5.9	10.8	2.7	34.2	222	
Gender									
Male	5.8	30.8	12.5	0.0	11.5	3.8	35.6	104	0.007
Female	4.2	19.5	20.3	11.0	10.2	1.7	33.1	118	
Total	5.0	24.8	16.7	5.9	10.8	2.7	34.2	222	
Age group									
Less 40	4.8	19.0	9.5	14.3	17.5	1.6	33.3	63	0.006
40 to 59	6.9	24.1	18.4	4.6	9.2	5.7	31.0	87	
60 and above	2.8	30.6	20.8	0.0	6.9	0.0	38.9	72	
Total	5.0	24.8	16.7	5.9	10.8	2.7	34.2	222	
Religion									
Catholic	5.8	27.9	18.3	3.8	9.6	0.0	34.6	104	0.097
Pentecost	5.4	16.2	10.8	10.8	21.6	2.7	32.4	37	
Anglican	9.5	9.5	9.5	9.5	14.3	0.0	47.6	21	
Adventist	0.0	32.6	23.3	4.7	2.3	9.3	27.9	43	
Other religion	5.9	23.5	11.8	5.9	11.8	5.9	35.3	17	
Total	5.0	24.8	16.7	5.9	10.8	2.7	34.2	222	
Marital status									
Married	6.3	31.5	16.2	6.3	8.1	0.9	30.6	111	0.001
Cohabiting	6.7	8.9	20.0	11.1	11.1	6.7	35.6	45	
Single	0.0	26.3	5.3	5.3	31.6	0.0	31.6	19	
Widowed	0.0	28.9	23.7	0.0	7.9	0.0	39.5	38	
Divorced or separated	11.1	0.0	0.0	0.0	11.1	22.2	55.6	9	
Total	5.0	24.8	16.7	5.9	10.8	2.7	34.2	222	
Literacy									
Able to read and write	4.3	25.2	18.7	5.8	11.5	3.6	30.9	139	0.715
Not able to read or write	6.0	24.1	13.3	6.0	9.6	1.2	39.8	83	
Total	5.0	24.8	16.7	5.9	10.8	2.7	34.2	222	
Education									
No education	7.1	23.5	12.9	3.5	10.6	2.4	40.0	85	0.776
Nursery	3.7	25.7	18.3	7.3	11.9	1.8	31.2	109	
Primary	3.6	25.0	21.4	7.1	7.1	7.1	28.6	28	
Total	5.0	24.8	16.7	5.9	10.8	2.7	34.2	222	

Regarding gender, male respondents belonged to households that showed the highest proportion of other with 35.6% of cases as compared to households with female respondents (33.1%), and the difference was significant (p=0.007). Concerning age group, respondents

aged 60 years and above belonged to households that showed the highest proportion of other with 38.9% of cases as compared to households with respondents less than 40 years (33.3%), and the difference was statistically significant (p=0.006).

Looking at religion, Anglican respondents belonged to households that showed the highest proportion of other with 47.6% of cases as compared to households with Other religion respondents (35.3%), but the difference was not significant (p=0.097). Comparing the distribution by marital status, divorced or separated respondents belonged to households that showed the highest proportion of other with 55.6% of cases as compared to households with widowed respondents (39.5%), and the difference was statistically significant (p=0.001).

Regarding literacy, respondents who are not able to read or write belonged to households that showed the highest proportion of other with 39.8% of cases as compared to households with respondents who are able to read and write (30.9%), but the difference was not significant (p=0.715). Concerning education level, respondents with no education belonged to households that showed the highest proportion of other with 40.0% of cases as compared to households with respondents with nursery level (31.2%), but the difference was not significant (p=0.776).

45. Preferred channel to get community informed about Mass Drug Administration

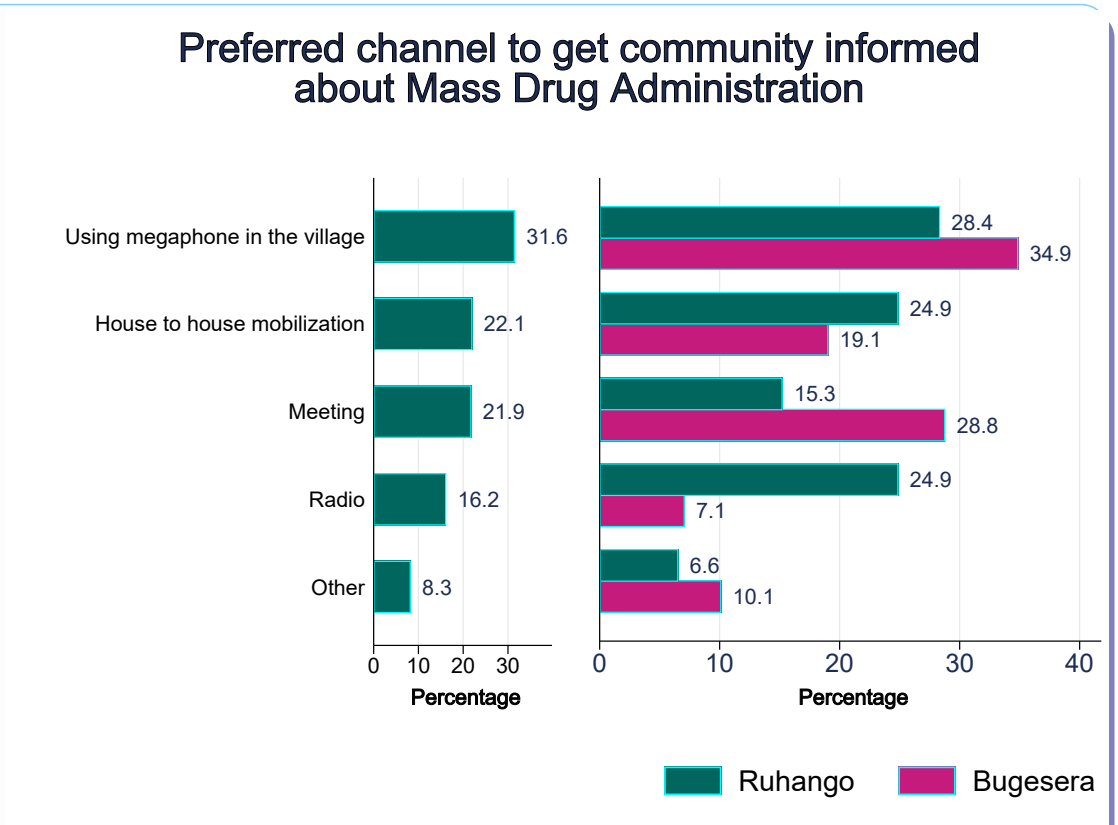


Figure 3.86: *Preferred channel to get community informed about Mass Drug Administration*

Most households reported that the preferred channel to get informed about MDA was using megaphone in the village in 31.6% of cases. Other preferred channel to get informed about MDA included house to house mobilization (22.1%), meeting (21.9%), radio (16.2%) and other (8.3%) as shown in Table 3.77.

Table 3.77: *(C45) Preferred channel to get community informed about Mass Drug Administration*

	Preferred channel to get informed about MDA					
	Using mega-phone in the village	House to house mobiliza-tion	Meeting	Radio	Other	Total
District						
Ruhango	28.4	24.9	15.3	24.9	6.6	2,590
Bugesera	34.9	19.1	28.8	7.1	10.1	2,465
Total	31.6	22.1	21.9	16.2	8.3	5,055
Gender						
Male	26.4	23.5	22.1	21.0	7.0	1,855
Female	34.5	21.2	21.7	13.4	9.1	3,200
Total	31.6	22.1	21.9	16.2	8.3	5,055
Age group						
Less 40	34.1	16.4	21.4	17.0	11.1	1,615
40-59	32.2	22.0	21.0	17.1	7.7	2,140
60 and above	27.3	29.2	23.8	13.8	5.8	1,300
Total	31.6	22.1	21.9	16.2	8.3	5,055
Religion						
Catholic church	32.0	25.4	17.2	18.3	7.1	2,185
Pentecost churches	33.5	20.8	22.3	13.2	10.2	985
Anglican church	34.3	17.6	28.4	9.8	9.8	510
Adventist church	28.9	17.5	24.2	20.6	8.8	970
Other	27.2	23.5	32.1	9.9	7.4	405
Total	31.6	22.1	21.9	16.2	8.3	5,055
Marital status						
Married	28.8	20.3	22.5	19.5	8.9	2,640
Cohabiting	37.8	21.1	21.1	11.1	8.9	900
Single	35.9	18.8	20.3	15.6	9.4	320
Widowed	29.2	27.5	21.3	15.2	6.7	890
Divorced/ separated	39.3	27.9	21.3	6.6	4.9	305
Total	31.6	22.1	21.9	16.2	8.3	5,055
Able to read and write						
Yes	31.5	20.8	18.4	19.3	10.1	3,320
No	31.7	24.5	28.5	10.4	4.9	1,735
Total	31.6	22.1	21.9	16.2	8.3	5,055
Education						
No education	33.6	22.6	27.8	11.3	4.6	1,725
Primary	30.7	22.8	18.1	18.9	9.5	2,785
Secondary/ university	29.4	16.5	22.0	18.3	13.8	545
Total	31.6	22.1	21.9	16.2	8.3	5,055

46. Preferred way to distribute deworming tablets

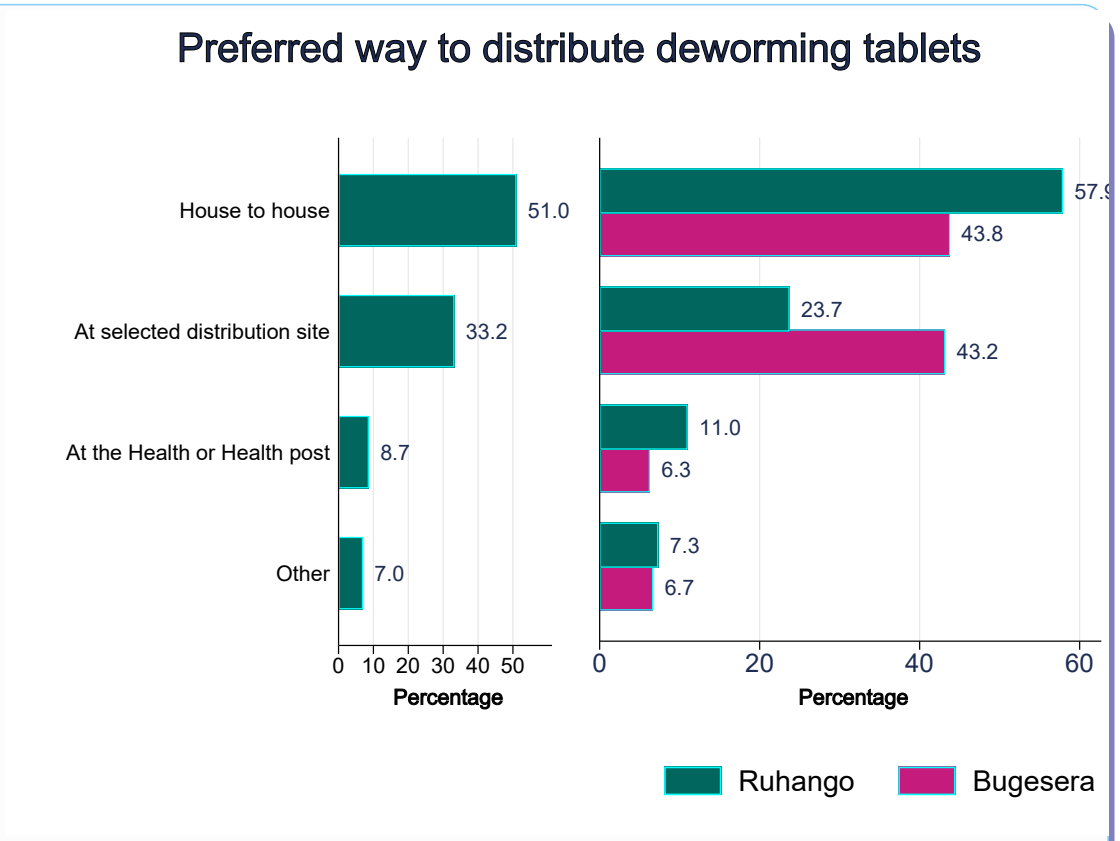


Figure 3.87: *Preferred way to distribute deworming tablets*

Most households reported that the Preferred way to distribute deworming tablets was house to house in 51.0% of cases. Other Preferred way to distribute deworming tablets included at selected distribution site (33.2%), at the health or health post (8.7%) and other (7.0%) as shown in Table 3.78. Ruhango district showed the highest proportion of house to house with 57.9% of cases as compared to Bugesera district (43.8%), and the difference was highly statistically significant (p=0.000).

Regarding gender, male respondents belonged to households that showed the highest proportion of house to house with 56.3% of cases as compared to households with female respondents (48.0%), but the difference was not significant (p=0.066). Concerning age group, respondents aged 60 years and above belonged to households that showed the highest proportion of house to house with 61.2% of cases as compared to households with respondents between 40 and 59 years (49.8%), and the difference was highly statistically significant (p=0.000).

Looking at religion, Catholic respondents belonged to households that showed the highest proportion of house to house with 57.9% of cases as compared to households with Other religion respondents (54.3%), and the difference was statistically significant (p=0.015). Comparing the distribution by marital status, widowed respondents belonged to households that showed the

highest proportion of house to house with 55.6% of cases as compared to households with married respondents (53.8%), but the difference was not significant (p=0.064).

Table 3.78: *(C46) Distribution of households preferred way to distribute deworming tablets*

	Preferred way to distribute deworming tablets				Total	p-value
	House to house	At selected distribu-tion site	At the Health or Health post	Other		
District						
Ruhango	57.9	23.7	11.0	7.3	100.0	0.000
Bugesera	43.8	43.2	6.3	6.7	100.0	
Total	51.0	33.2	8.7	7.0	100.0	
Gender						
Male	56.3	28.6	8.4	6.7	100.0	0.066
Female	48.0	35.9	8.9	7.2	100.0	
Total	51.0	33.2	8.7	7.0	100.0	
Age group						
Less 40	44.6	39.0	8.4	8.0	100.0	0.000
40 to 59	49.8	36.7	7.7	5.8	100.0	
60 and above	61.2	20.4	10.8	7.7	100.0	
Total	51.0	33.2	8.7	7.0	100.0	
Religion						
Catholic	57.9	29.1	7.6	5.5	100.0	0.015
Pentecost	42.6	41.6	8.1	7.6	100.0	
Anglican	44.1	39.2	9.8	6.9	100.0	
Adventist	46.4	31.4	11.3	10.8	100.0	
Other religion	54.3	32.1	8.6	4.9	100.0	
Total	51.0	33.2	8.7	7.0	100.0	
Marital status						
Married	53.8	30.3	8.0	8.0	100.0	0.064
Cohabiting	42.2	43.3	10.0	4.4	100.0	
Single	43.8	35.9	10.9	9.4	100.0	
Widowed	55.6	28.1	10.1	6.2	100.0	
Divorced or separated	47.5	41.0	4.9	6.6	100.0	
Total	51.0	33.2	8.7	7.0	100.0	
Literacy						
Able to read and write	49.2	35.2	9.0	6.5	100.0	0.201
Not able to read or write	54.5	29.4	8.1	8.1	100.0	
Total	51.0	33.2	8.7	7.0	100.0	
Education						
No education	51.9	32.8	7.8	7.5	100.0	0.552
Nursery	50.3	32.7	10.1	7.0	100.0	
Primary	52.3	37.6	4.6	5.5	100.0	
Total	51.0	33.2	8.7	7.0	100.0	

Regarding literacy, respondents who are not able to read or write belonged to households that showed the highest proportion of house to house with 54.5% of cases as compared to households with respondents who are able to read and write (49.2%), but the difference was

not significant (p=0.201). Concerning education level, respondents with primary education belonged to households that showed the highest proportion of house to house with 52.3% of cases as compared to households with respondents with no education (51.9%), but the difference was not significant (p=0.552).

47. Best channel to deliver message about Mass Drug Administration

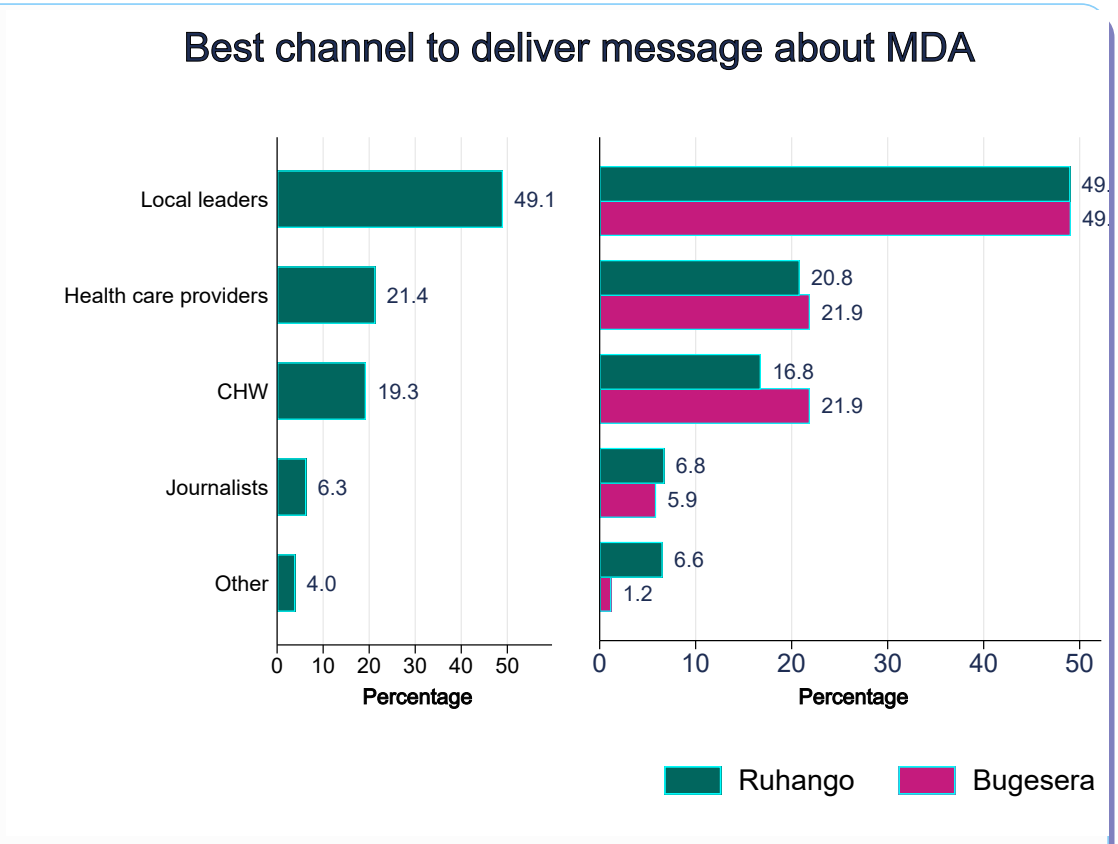


Figure 3.88: *Best channel to deliver message about Mass Drug Administration*

As shown in Table 3.79, most households reported that the Best channel to deliver message about MDA was local leaders in 49.1% of cases. Other Best channel to deliver message about MDA included health care providers (21.4%), chw (19.3%), journalists (6.3%) and other (4.0%). Bugesera district showed the highest proportion of local leaders with 49.1% of cases as compared to Ruhango district (49.0%), and the difference was highly statistically significant (p=0.000). Regarding gender, male respondents belonged to households that showed the highest proportion of local leaders with 53.1% of cases as compared to households with female respondents (46.7%), and the difference was highly statistically significant (p=0.000). Concerning age group, respondents between 40 and 59 years belonged to households that showed the highest proportion of local leaders with 50.5% of cases as compared to households with respondents aged 60 years and above (48.1%), but the difference was not significant (p=0.231). Looking at religion, Anglican respondents belonged to households that showed

the highest proportion of local leaders with 52.9% of cases as compared to households with Pentecost respondents (50.3%), and the difference was statistically significant (p=0.022).

Table 3.79: *(C47) Distribution of households best channel to deliver message about mda*

	Best channel to deliver message about MDA						
	Local leaders	Health care providers	CHW	Journalists	Other	Total	p-value
District							
Ruhango	49.0	20.8	16.8	6.8	6.6	518	0.000
Bugesera	49.1	21.9	21.9	5.9	1.2	493	
Total	49.1	21.4	19.3	6.3	4.0	1,011	
Gender							
Male	53.1	25.3	11.6	6.7	3.2	371	0.000
Female	46.7	19.1	23.8	6.1	4.4	640	
Total	49.1	21.4	19.3	6.3	4.0	1,011	
Age group							
Less 40	48.0	21.7	20.4	7.7	2.2	323	0.231
40 to 59	50.5	19.9	20.3	5.4	4.0	428	
60 and above	48.1	23.5	16.2	6.2	6.2	260	
Total	49.1	21.4	19.3	6.3	4.0	1,011	
Religion							
Catholic	47.8	23.6	16.7	6.2	5.7	437	0.022
Pentecost	50.3	12.7	25.9	6.6	4.6	197	
Anglican	52.9	17.6	18.6	7.8	2.9	102	
Adventist	48.5	27.3	18.0	5.7	0.5	194	
Other religion	49.4	21.0	21.0	6.2	2.5	81	
Total	49.1	21.4	19.3	6.3	4.0	1,011	
Marital status							
Married	47.7	22.2	18.4	7.2	4.5	528	0.515
Cohabiting	51.1	22.8	20.0	4.4	1.7	180	
Single	53.1	21.9	17.2	4.7	3.1	64	
Widowed	45.5	18.5	22.5	7.9	5.6	178	
Divorced or separated	60.7	18.0	18.0	1.6	1.6	61	
Total	49.1	21.4	19.3	6.3	4.0	1,011	
Literacy							
Able to read and write	51.7	20.8	16.7	6.9	3.9	664	0.030
Not able to read or write	44.1	22.5	24.2	5.2	4.0	347	
Total	49.1	21.4	19.3	6.3	4.0	1,011	
Education							
No education	45.8	21.4	23.5	5.2	4.1	345	0.081
Nursery	49.0	22.1	17.8	6.6	4.5	557	
Primary	59.6	17.4	13.8	8.3	0.9	109	
Total	49.1	21.4	19.3	6.3	4.0	1,011	

Comparing the distribution by marital status, divorced or separated respondents belonged to households that showed the highest proportion of local leaders with 60.7% of cases as compared to households with single respondents (53.1%), but the difference was not significant (p=0.515). Regarding literacy, respondents who are able to read and write belonged to

households that showed the highest proportion of local leaders with 51.7% of cases as compared to households with respondents who are not able to read or write (44.1%), and the difference was statistically significant (p=0.030). Concerning education level, respondents with primary education belonged to households that showed the highest proportion of local leaders with 59.6% of cases as compared to households with respondents with nursery level (49.0%), but the difference was not significant (p=0.081).

48. Social Mobilization interventions being implemented

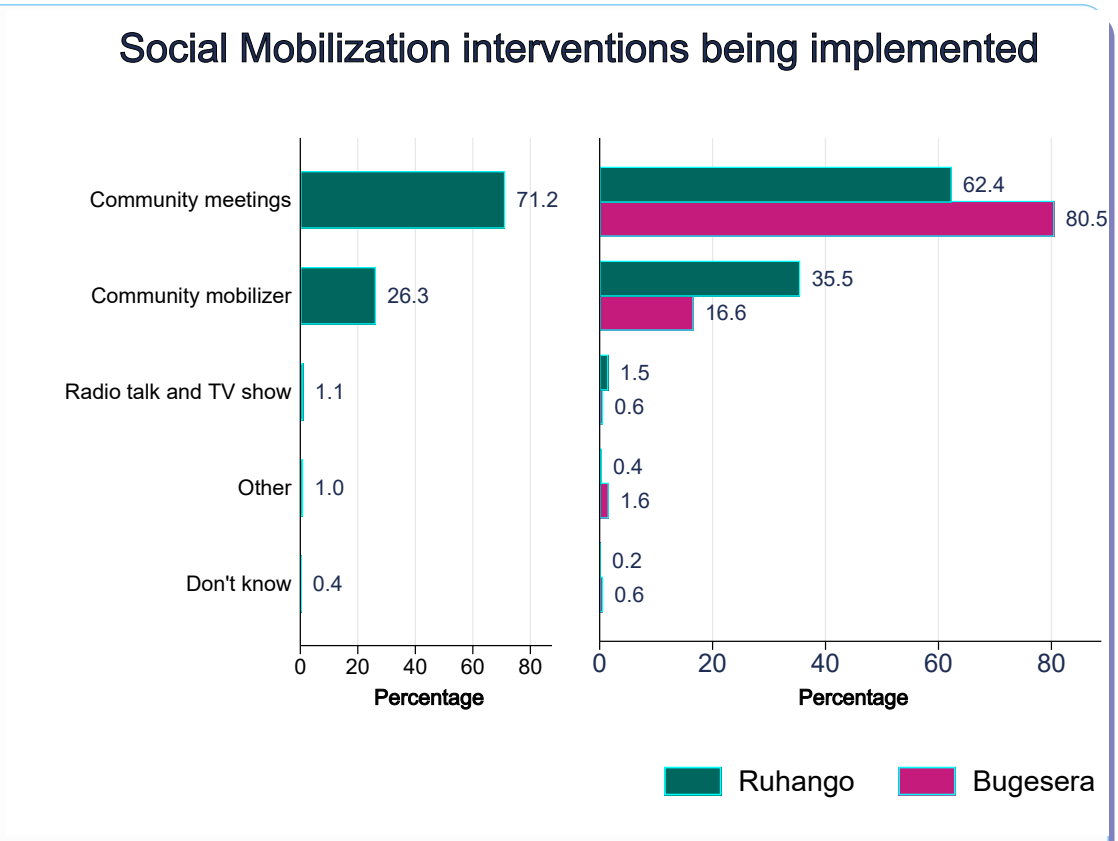


Figure 3.89: *Social Mobilization interventions being implemented*

Most households reported that the Social mobilization interventions implemented was community meetings in 71.2% of cases. Other Social mobilization interventions implemented included community mobilizer (26.3%), radio talk and tv show (1.1%) and other (1.0%) as shown in Table 3.80. Bugesera district showed the highest proportion of community meetings with 80.5% of cases as compared to Ruhango district (62.4%), and the difference was highly statistically significant (p=0.000). Regarding gender, female respondents belonged to households that showed the highest proportion of community meetings with 72.7% of cases as compared to households with male respondents (68.7%), but the difference was not significant (p=0.167).

Table 3.80: *(C48) Distribution of households social mobilization interventions implemented*

	Social mobilization interventions implemented						
	Community meet-ings	Community mobi-lizer	Radio talk and TV show	Don't know	Other	Total	p-value
District							
Ruhango	62.4	35.5	1.5	0.2	0.4	518	0.000
Bugesera	80.5	16.6	0.6	0.6	1.6	493	
Total	71.2	26.3	1.1	0.4	1.0	1,011	
Gender							
Male	68.7	29.9	0.5	0.3	0.5	371	0.167
Female	72.7	24.2	1.4	0.5	1.2	640	
Total	71.2	26.3	1.1	0.4	1.0	1,011	
Age group							
Less 40	73.7	22.9	1.9	0.3	1.2	323	0.203
40 to 59	70.3	28.0	0.7	0.0	0.9	428	
60 and above	69.6	27.7	0.8	1.2	0.8	260	
Total	71.2	26.3	1.1	0.4	1.0	1,011	
Religion							
Catholic	68.4	29.5	0.9	0.7	0.5	437	0.121
Pentecost	74.1	23.4	0.5	0.0	2.0	197	
Anglican	78.4	20.6	1.0	0.0	0.0	102	
Adventist	69.1	27.8	2.1	0.5	0.5	194	
Other religion	75.3	19.8	1.2	0.0	3.7	81	
Total	71.2	26.3	1.1	0.4	1.0	1,011	
Marital status							
Married	69.7	28.0	1.3	0.2	0.8	528	0.138
Cohabiting	76.1	21.1	1.7	0.0	1.1	180	
Single	71.9	28.1	0.0	0.0	0.0	64	
Widowed	72.5	23.0	0.6	1.7	2.2	178	
Divorced or separated	65.6	34.4	0.0	0.0	0.0	61	
Total	71.2	26.3	1.1	0.4	1.0	1,011	
Literacy							
Able to read and write	69.7	27.9	1.2	0.5	0.8	664	0.426
Not able to read or write	74.1	23.3	0.9	0.3	1.4	347	
Total	71.2	26.3	1.1	0.4	1.0	1,011	
Education							
No education	74.8	22.9	0.6	0.6	1.2	345	0.166
Nursery	68.8	29.1	1.3	0.4	0.5	557	
Primary	72.5	22.9	1.8	0.0	2.8	109	
Total	71.2	26.3	1.1	0.4	1.0	1,011	

Concerning age group, respondents less than 40 years belonged to households that showed the highest proportion of community meetings with 73.7% of cases as compared to households with respondents between 40 and 59 years (70.3%), but the difference was not significant (p=0.203). Looking at religion, Anglican respondents belonged to households that showed the highest proportion of community meetings with 78.4% of cases as compared to households with

Other religion respondents (75.3%), but the difference was not significant (p=0.121). Comparing the distribution by marital status, cohabiting respondents belonged to households that showed the highest proportion of community meetings with 76.1% of cases as compared to households with widowed respondents (72.5%), but the difference was not significant (p=0.138).

Regarding literacy, respondents who are not able to read or write belonged to households that showed the highest proportion of community meetings with 74.1% of cases as compared to households with respondents who are able to read and write (69.7%), but the difference was not significant (p=0.426). Concerning education level, respondents with no education belonged to households that showed the highest proportion of community meetings with 74.8% of cases as compared to households with respondents with primary education (72.5%), but the difference was not significant (p=0.166).

3.5. Observation of Toilet and Cleanness

1. Household has adequate latrine

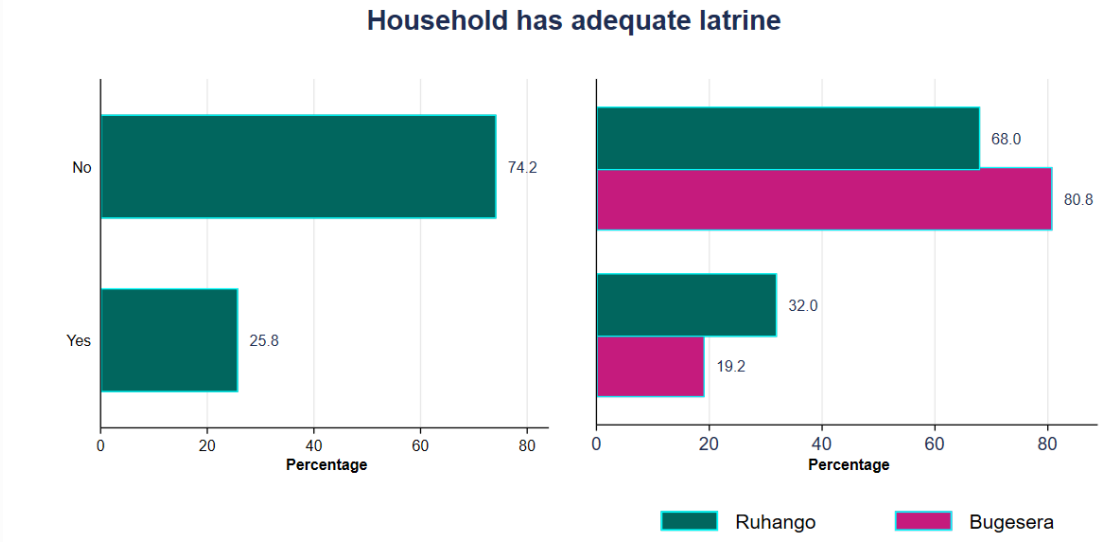


Figure 3.90: *Household has adequate latrine*

The majority of households reported not having adequate latrine (74.2%) while households having adequate latrine represented 25.8% of cases (Table A6). Bugesera district showed the highest proportion of households not having adequate latrine with 80.8% of cases as compared to Ruhango district (68.0%), and the difference was highly statistically significant (p=0.000).

Regarding gender, female respondents belonged to households that showed the highest proportion not having adequate latrine with 74.6% of cases as compared to households with male respondents (73.6%), but the difference was not significant (p=0.733). Concerning age group, respondents between 40 and 59 years belonged to households that showed the highest proportion not having adequate latrine with 74.5% of cases as compared to households with respondents less than 40 years (74.4%), but the difference was not significant (p=0.963).

Looking at religion, Anglican respondents belonged to households that showed the highest proportion not having adequate latrine with 84.4% of cases as compared to households with Pentecost respondents (77.2%), and the difference was statistically significant (p=0.028). Comparing the distribution by marital status, divorced or separated respondents belonged to households that showed the highest proportion not having adequate latrine with 84.9% of cases as compared to households with cohabiting respondents (80.0%), but the difference was not significant (p=0.069).

Regarding literacy, respondents who are not able to read or write belonged to households that showed the highest proportion not having adequate latrine with 81.6% of cases as compared to households with respondents who are able to read and write (70.6%), and the difference

was highly statistically significant (p=0.000). Concerning education level, respondents with no education belonged to households that showed the highest proportion not having adequate latrine with 81.4% of cases as compared to households with respondents with nursery level (73.0%), and the difference was highly statistically significant (p=0.000).

Table 3.81: *(E1) Distribution of households have adequate latrine*

	Have adequate latrine				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	159	32.0	338	68.0	497	0.000
Bugesera	90	19.2	379	80.8	469	
Total	249	25.8	717	74.2	966	
Gender						
Male	94	26.4	262	73.6	356	0.733
Female	155	25.4	455	74.6	610	
Total	249	25.8	717	74.2	966	
Age group						
Less 40	79	25.6	229	74.4	308	0.963
40 to 59	105	25.5	307	74.5	412	
60 and above	65	26.4	181	73.6	246	
Total	249	25.8	717	74.2	966	
Religion						
Catholic	127	30.3	292	69.7	419	0.028
Pentecost	43	22.8	146	77.2	189	
Anglican	15	15.6	81	84.4	96	
Adventist	45	24.2	141	75.8	186	
Other religion	19	25.0	57	75.0	76	
Total	249	25.8	717	74.2	966	
Marital status						
Married	147	28.5	369	71.5	516	0.069
Cohabiting	34	20.0	136	80.0	170	
Single	18	30.0	42	70.0	60	
Widowed	42	25.1	125	74.9	167	
Divorced or separated	8	15.1	45	84.9	53	
Total	249	25.8	717	74.2	966	
Literacy						
Able to read and write	191	29.4	459	70.6	650	0.000
Not able to read or write	58	18.4	258	81.6	316	
Total	249	25.8	717	74.2	966	
Education						
No education	59	18.6	258	81.4	317	0.000
Nursery	146	27.0	395	73.0	541	
Primary	44	40.7	64	59.3	108	
Total	249	25.8	717	74.2	966	

2. Latrine wall is dirty by human excreta

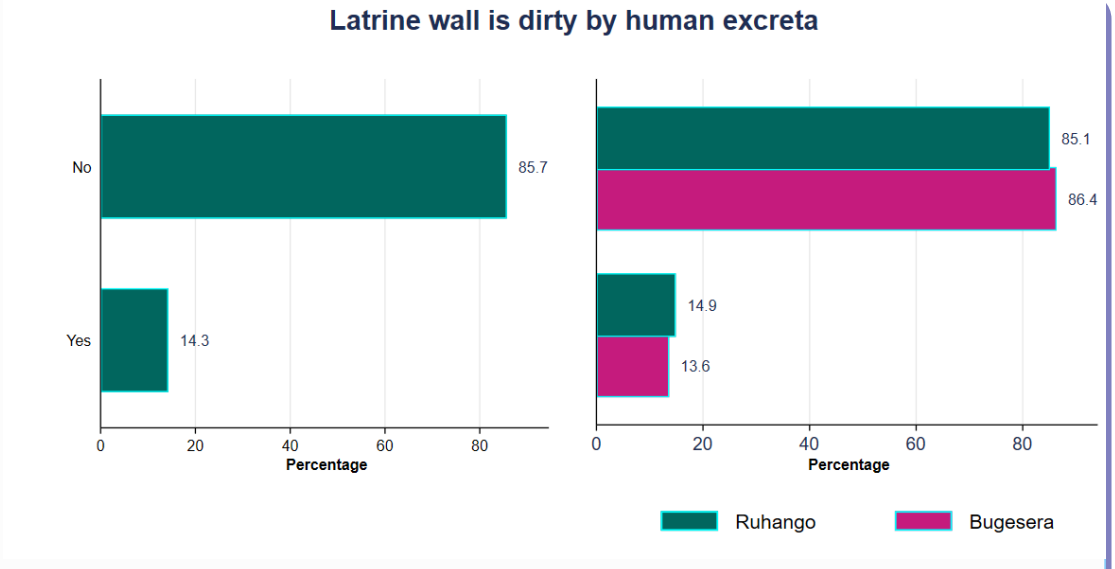


Figure 3.91: *Latrine wall is dirty by human excreta*

As shown in Table 3.82, most households reported not having dirty latrine walls by human excreta (85.7%) while households having dirty latrine walls by human excreta represented 14.3% of cases. Bugesera district showed the biggest proportion of households not having dirty latrine walls by human excreta with 86.4% of cases as compared to Ruhango district (85.1%), but the difference was not significant (p=0.581).

Regarding gender, female respondents belonged to households that showed the highest proportion not having dirty latrine walls by human excreta with 86.1% of cases as compared to households with male respondents (85.1%), but the difference was not significant (p=0.683). Concerning age group, respondents less than 40 years belonged to households that showed the highest proportion not having dirty latrine walls by human excreta with 88.0% of cases as compared to households with respondents between 40 and 59 years (85.2%), but the difference was not significant (p=0.337).

Looking at religion, Catholic respondents belonged to households that showed the highest proportion not having dirty latrine walls by human excreta with 88.1% of cases as compared to households with Pentecost respondents (87.8%), but the difference was not significant (p=0.135). Comparing the distribution by marital status, divorced or separated respondents belonged to households that showed the highest proportion not having dirty latrine walls by human excreta with 92.5% of cases as compared to households with single respondents (90.0%), but the difference was not significant (p=0.146).

Regarding literacy, respondents who are able to read and write belonged to households that showed the highest proportion not having dirty latrine walls by human excreta with 86.6% of

cases as compared to households with respondents who are not able to read or write (83.9%), but the difference was not significant (p=0.251). Concerning education level, respondents with primary education belonged to households that showed the highest proportion not having dirty latrine walls by human excreta with 91.7% of cases as compared to households with respondents with nursery level (86.3%), but the difference was not significant (p=0.057).

Table 3.82: *(E2) Distribution of households have dirty latrine walls by human excreta*

	Have dirty latrine walls by human excreta				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	74	14.9	423	85.1	497	0.581
Bugesera	64	13.6	405	86.4	469	
Total	138	14.3	828	85.7	966	
Gender						
Male	53	14.9	303	85.1	356	0.683
Female	85	13.9	525	86.1	610	
Total	138	14.3	828	85.7	966	
Age group						
Less 40	37	12.0	271	88.0	308	0.337
40 to 59	61	14.8	351	85.2	412	
60 and above	40	16.3	206	83.7	246	
Total	138	14.3	828	85.7	966	
Religion						
Catholic	50	11.9	369	88.1	419	0.135
Pentecost	23	12.2	166	87.8	189	
Anglican	18	18.8	78	81.2	96	
Adventist	33	17.7	153	82.3	186	
Other religion	14	18.4	62	81.6	76	
Total	138	14.3	828	85.7	966	
Marital status						
Married	69	13.4	447	86.6	516	0.146
Cohabiting	27	15.9	143	84.1	170	
Single	6	10.0	54	90.0	60	
Widowed	32	19.2	135	80.8	167	
Divorced or separated	4	7.5	49	92.5	53	
Total	138	14.3	828	85.7	966	
Literacy						
Able to read and write	87	13.4	563	86.6	650	0.251
Not able to read or write	51	16.1	265	83.9	316	
Total	138	14.3	828	85.7	966	
Education						
No education	55	17.4	262	82.6	317	0.057
Nursery	74	13.7	467	86.3	541	
Primary	9	8.3	99	91.7	108	
Total	138	14.3	828	85.7	966	

3. Latrine floor is dirty by human excreta

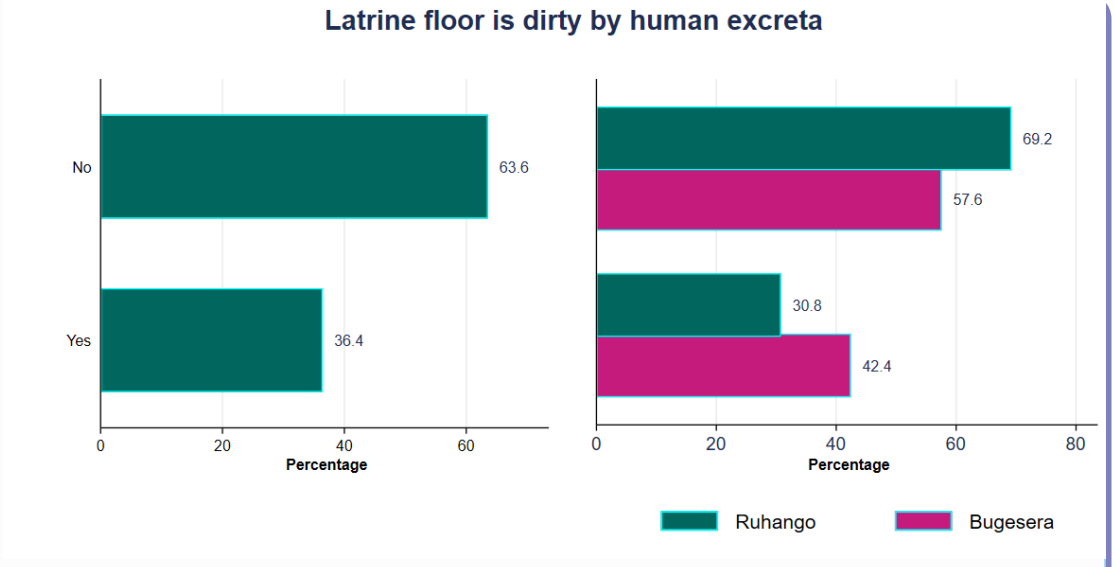


Figure 3.92: *Latrine floor is dirty by human excreta*

Most households reported not having dirty latrine floor by human excreta (63.6%) while households having dirty latrine floor by human excreta represented 36.4% of cases (Table 3.83). Ruhango district showed the highest proportion of households not having dirty latrine floor by human excreta with 69.2% of cases as compared to Bugesera district (57.6%), and the difference was highly statistically significant (p=0.000).

Regarding gender, male respondents belonged to households that showed the highest proportion not having dirty latrine floor by human excreta with 66.3% of cases as compared to households with female respondents (62.0%), but the difference was not significant (p=0.178). Concerning age group, respondents less than 40 years belonged to households that showed the highest proportion not having dirty latrine floor by human excreta with 67.9% of cases as compared to households with respondents aged 60 years and above (64.2%), but the difference was not significant (p=0.090).

Looking at religion, Adventist respondents belonged to households that showed the highest proportion not having dirty latrine floor by human excreta with 69.4% of cases as compared to households with Pentecost respondents (66.1%), and the difference was statistically significant (p=0.001). Comparing the distribution by marital status, married respondents belonged to households that showed the highest proportion not having dirty latrine floor by human excreta with 64.9% of cases as compared to households with widowed respondents (62.9%), but the difference was not significant (p=0.910).

Regarding literacy, respondents who are able to read and write belonged to households that showed the highest proportion not having dirty latrine floor by human excreta with 67.8%

of cases as compared to households with respondents who are not able to read or write (54.7%), and the difference was highly statistically significant (p=0.000). Concerning education level, respondents with primary education belonged to households that showed the highest proportion not having dirty latrine floor by human excreta with 75.9% of cases as compared to households with respondents with nursery level (67.8%), and the difference was highly statistically significant (p=0.000).

Table 3.83: *(E3) Distribution of households have dirty latrine floor by human excreta*

	Have dirty latrine floor by human excreta				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	153	30.8	344	69.2	497	0.000
Bugesera	199	42.4	270	57.6	469	
Total	352	36.4	614	63.6	966	
Gender						
Male	120	33.7	236	66.3	356	0.178
Female	232	38.0	378	62.0	610	
Total	352	36.4	614	63.6	966	
Age group						
Less 40	99	32.1	209	67.9	308	0.090
40 to 59	165	40.0	247	60.0	412	
60 and above	88	35.8	158	64.2	246	
Total	352	36.4	614	63.6	966	
Religion						
Catholic	144	34.4	275	65.6	419	0.001
Pentecost	64	33.9	125	66.1	189	
Anglican	49	51.0	47	49.0	96	
Adventist	57	30.6	129	69.4	186	
Other religion	38	50.0	38	50.0	76	
Total	352	36.4	614	63.6	966	
Marital status						
Married	181	35.1	335	64.9	516	0.910
Cohabiting	66	38.8	104	61.2	170	
Single	23	38.3	37	61.7	60	
Widowed	62	37.1	105	62.9	167	
Divorced or separated	20	37.7	33	62.3	53	
Total	352	36.4	614	63.6	966	
Literacy						
Able to read and write	209	32.2	441	67.8	650	0.000
Not able to read or write	143	45.3	173	54.7	316	
Total	352	36.4	614	63.6	966	
Education						
No education	152	47.9	165	52.1	317	0.000
Nursery	174	32.2	367	67.8	541	
Primary	26	24.1	82	75.9	108	
Total	352	36.4	614	63.6	966	

4. Toilet paper or water is available in the Toilet

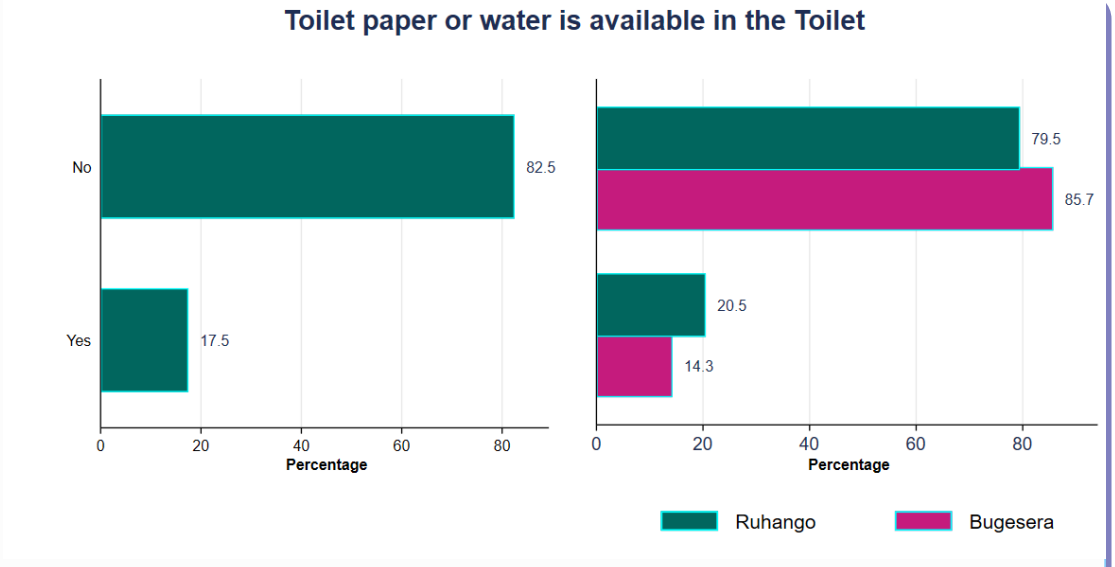


Figure 3.93: *Toilet paper or water is available in the Toilet*

Table 3.84 shows the biggest proportion of households reported not having toilet paper or water in the toilet (82.5%) while households having toilet paper or water in the toilet represented 17.5% of cases. Bugesera district showed the highest proportion of households not having toilet paper or water in the toilet with 85.7% of cases as compared to Ruhango district (79.5%), and the difference was statistically significant (p=0.011).

Regarding gender, male respondents belonged to households that showed the highest proportion not having toilet paper or water in the toilet with 83.4% of cases as compared to households with female respondents (82.0%), but the difference was not significant (p=0.565). Concerning age group, respondents aged 60 years and above belonged to households that showed the highest proportion not having toilet paper or water in the toilet with 86.6% of cases as compared to households with respondents less than 40 years (82.5%), but the difference was not significant (p=0.106).

Looking at religion, Pentecost respondents belonged to households that showed the highest proportion not having toilet paper or water in the toilet with 86.8% of cases as compared to households with Other religion respondents (84.2%), but the difference was not significant (p=0.317). Comparing the distribution by marital status, divorced or separated respondents belonged to households that showed the highest proportion not having toilet paper or water in the toilet with 90.6% of cases as compared to households with cohabiting respondents (85.9%), but the difference was not significant (p=0.218).

Regarding literacy, respondents who are not able to read or write belonged to households that showed the highest proportion not having toilet paper or water in the toilet with 88.3% of cases

as compared to households with respondents who are able to read and write (79.7%), and the difference was statistically significant (p=0.001). Concerning education level, respondents with no education belonged to households that showed the highest proportion not having toilet paper or water in the toilet with 88.0% of cases as compared to households with respondents with nursery level (81.3%), and the difference was statistically significant (p=0.001).

Table 3.84: *(E4) Distribution of households have toilet paper or water in the toilet*

	Have toilet paper or water in the toilet				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	102	20.5	395	79.5	497	0.011
Bugesera	67	14.3	402	85.7	469	
Total	169	17.5	797	82.5	966	
Gender						
Male	59	16.6	297	83.4	356	0.565
Female	110	18.0	500	82.0	610	
Total	169	17.5	797	82.5	966	
Age group						
Less 40	54	17.5	254	82.5	308	0.106
40 to 59	82	19.9	330	80.1	412	
60 and above	33	13.4	213	86.6	246	
Total	169	17.5	797	82.5	966	
Religion						
Catholic	77	18.4	342	81.6	419	0.317
Pentecost	25	13.2	164	86.8	189	
Anglican	22	22.9	74	77.1	96	
Adventist	33	17.7	153	82.3	186	
Other religion	12	15.8	64	84.2	76	
Total	169	17.5	797	82.5	966	
Marital status						
Married	97	18.8	419	81.2	516	0.218
Cohabiting	24	14.1	146	85.9	170	
Single	14	23.3	46	76.7	60	
Widowed	29	17.4	138	82.6	167	
Divorced or separated	5	9.4	48	90.6	53	
Total	169	17.5	797	82.5	966	
Literacy						
Able to read and write	132	20.3	518	79.7	650	0.001
Not able to read or write	37	11.7	279	88.3	316	
Total	169	17.5	797	82.5	966	
Education						
No education	38	12.0	279	88.0	317	0.001
Nursery	101	18.7	440	81.3	541	
Primary	30	27.8	78	72.2	108	
Total	169	17.5	797	82.5	966	

5. Household has hand washing facility with soap and water

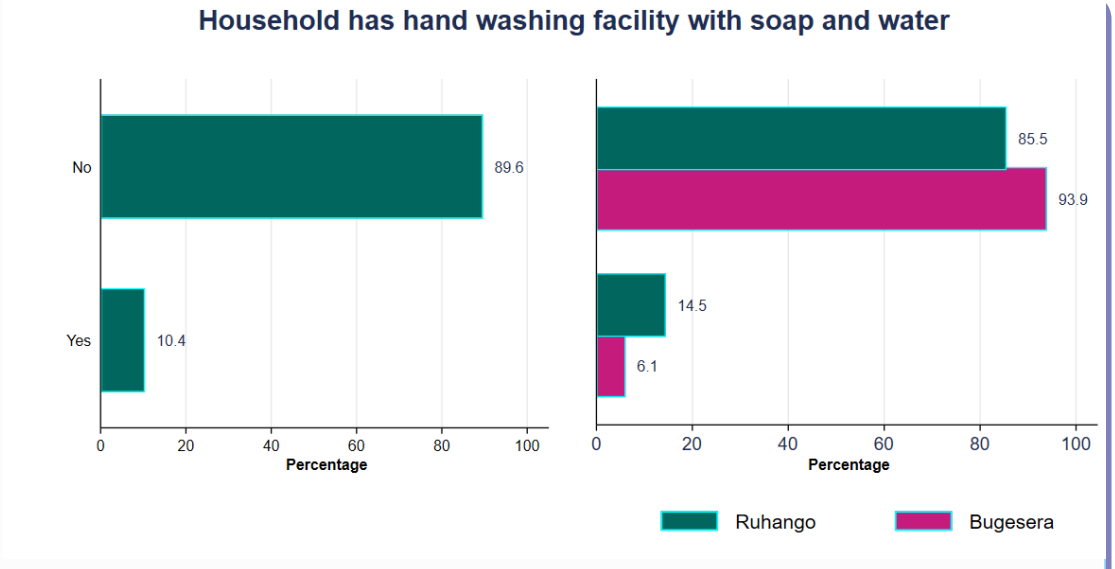


Figure 3.94: *Household has hand washing facility with soap and water*

Most households reported not having handwashing facility with soap and water (89.6%) while those having handwashing facility with soap and water represented 10.4% of cases (Table 3.85). Bugesera district showed the highest proportion of households not having handwashing facility with soap and water with 93.9% of cases as compared to Ruhango district (85.5%), and the difference was highly statistically significant (p=0.000).

Regarding gender, male respondents belonged to households that showed the highest proportion not having handwashing facility with soap and water with 91.1% of cases as compared to households with female respondents (88.8%), but the difference was not significant (p=0.237). Concerning age group, respondents less than 40 years belonged to households that showed the highest proportion not having handwashing facility with soap and water with 91.3% of cases as compared to households with respondents aged 60 years and above (90.8%), but the difference was not significant (p=0.199).

Looking at religion, Anglican respondents belonged to households that showed the highest proportion not having handwashing facility with soap and water with 92.2% of cases as compared to households with Pentecost respondents (90.9%), but the difference was not significant (p=0.804). Comparing the distribution by marital status, divorced or separated respondents belonged to households that showed the highest proportion not having handwashing facility with soap and water with 98.4% of cases as compared to households with cohabiting respondents (92.8%), and the difference was statistically significant (p=0.045).

Regarding literacy, respondents who are not able to read or write belonged to households that showed the highest proportion not having handwashing facility with soap and water with

94.2% of cases as compared to households with respondents who are able to read and write (87.2%), and the difference was highly statistically significant (p=0.000). Concerning education level, respondents with no education belonged to households that showed the highest proportion not having handwashing facility with soap and water with 93.6% of cases as compared to households with respondents with nursery level (89.0%), and the difference was highly statistically significant (p=0.000).

Table 3.85: *(E5) Distribution of households have handwashing facility with soap and water*

	Have handwashing facility with soap and water				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	75	14.5	443	85.5	518	0.000
Bugesera	30	6.1	463	93.9	493	
Total	105	10.4	906	89.6	1,011	
Gender						
Male	33	8.9	338	91.1	371	0.237
Female	72	11.2	568	88.8	640	
Total	105	10.4	906	89.6	1,011	
Age group						
Less 40	28	8.7	295	91.3	323	0.199
40 to 59	53	12.4	375	87.6	428	
60 and above	24	9.2	236	90.8	260	
Total	105	10.4	906	89.6	1,011	
Religion						
Catholic	47	10.8	390	89.2	437	0.804
Pentecost	18	9.1	179	90.9	197	
Anglican	8	7.8	94	92.2	102	
Adventist	22	11.3	172	88.7	194	
Other religion	10	12.3	71	87.7	81	
Total	105	10.4	906	89.6	1,011	
Marital status						
Married	61	11.6	467	88.4	528	0.045
Cohabiting	13	7.2	167	92.8	180	
Single	10	15.6	54	84.4	64	
Widowed	20	11.2	158	88.8	178	
Divorced or separated	1	1.6	60	98.4	61	
Total	105	10.4	906	89.6	1,011	
Literacy						
Able to read and write	85	12.8	579	87.2	664	0.000
Not able to read or write	20	5.8	327	94.2	347	
Total	105	10.4	906	89.6	1,011	
Education						
No education	22	6.4	323	93.6	345	0.000
Nursery	61	11.0	496	89.0	557	
Primary	22	20.2	87	79.8	109	
Total	105	10.4	906	89.6	1,011	

6. Observable flies in the toilet

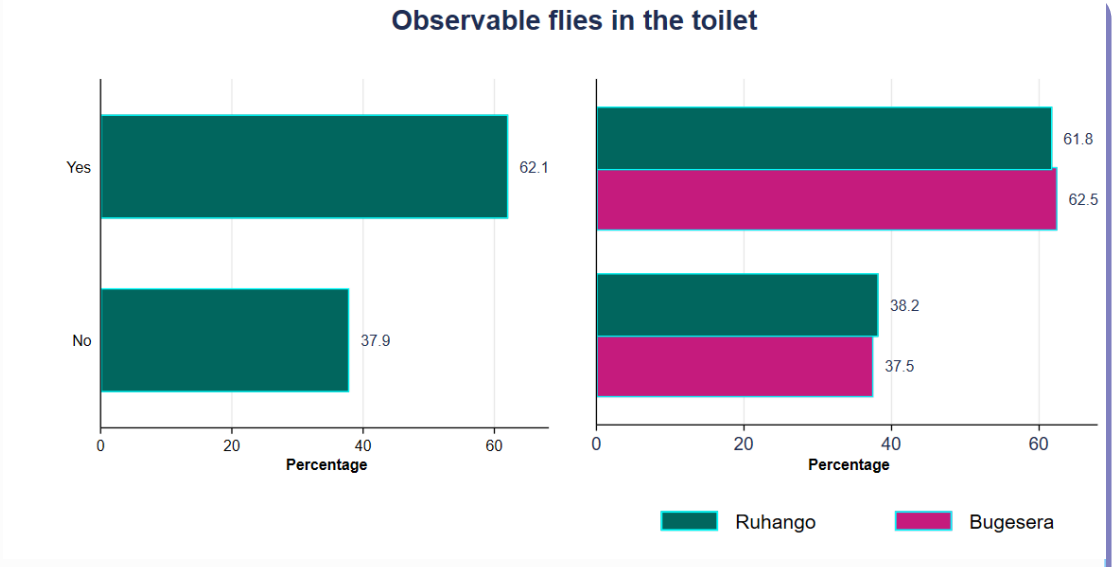


Figure 3.95: *Observable flies in the toilet*

The majority of households reported having flies in the toilet (62.1%) while households not having flies in the toilet represented 37.9% of cases (Table 3.86). Bugesera district showed the highest proportion of households having flies in the toilet with 62.5% of cases as compared to Ruhango district (61.8%), but the difference was not significant (p=0.822).

Regarding gender, male respondents belonged to households that showed the highest proportion having flies in the toilet with 62.6% of cases as compared to households with female respondents (61.8%), but the difference was not significant (p=0.796). Concerning age group, respondents between 40 and 59 years belonged to households that showed the highest proportion having flies in the toilet with 65.0% of cases as compared to households with respondents aged 60 years and above (63.0%), but the difference was not significant (p=0.110).

Looking at religion, Anglican respondents belonged to households that showed the highest proportion having flies in the toilet with 72.9% of cases as compared to households with Catholic respondents (62.3%), but the difference was not significant (p=0.201). Comparing the distribution by marital status, widowed respondents belonged to households that showed the highest proportion having flies in the toilet with 64.7% of cases as compared to households with single respondents (63.3%), but the difference was not significant (p=0.924).

Regarding literacy, respondents who are not able to read or write belonged to households that showed the highest proportion having flies in the toilet with 64.9% of cases as compared to households with respondents who are able to read and write (60.8%), but the difference was not significant (p=0.217). Concerning education level, respondents with no education belonged to households that showed the highest proportion having flies in the toilet with 66.6% of cases

as compared to households with respondents with nursery level (62.3%), and the difference was statistically significant (p=0.003).

Table 3.86: *(E6) Distribution of households have flies in the toilet*

	Have flies in the toilet				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	307	61.8	190	38.2	497	0.822
Bugesera	293	62.5	176	37.5	469	
Total	600	62.1	366	37.9	966	
Gender						
Male	223	62.6	133	37.4	356	0.796
Female	377	61.8	233	38.2	610	
Total	600	62.1	366	37.9	966	
Age group						
Less 40	177	57.5	131	42.5	308	0.110
40 to 59	268	65.0	144	35.0	412	
60 and above	155	63.0	91	37.0	246	
Total	600	62.1	366	37.9	966	
Religion						
Catholic	261	62.3	158	37.7	419	0.201
Pentecost	113	59.8	76	40.2	189	
Anglican	70	72.9	26	27.1	96	
Adventist	110	59.1	76	40.9	186	
Other religion	46	60.5	30	39.5	76	
Total	600	62.1	366	37.9	966	
Marital status						
Married	317	61.4	199	38.6	516	0.924
Cohabiting	106	62.4	64	37.6	170	
Single	38	63.3	22	36.7	60	
Widowed	108	64.7	59	35.3	167	
Divorced or separated	31	58.5	22	41.5	53	
Total	600	62.1	366	37.9	966	
Literacy						
Able to read and write	395	60.8	255	39.2	650	0.217
Not able to read or write	205	64.9	111	35.1	316	
Total	600	62.1	366	37.9	966	
Education						
No education	211	66.6	106	33.4	317	0.003
Nursery	337	62.3	204	37.7	541	
Primary	52	48.1	56	51.9	108	
Total	600	62.1	366	37.9	966	

7. Observable flies in the compound

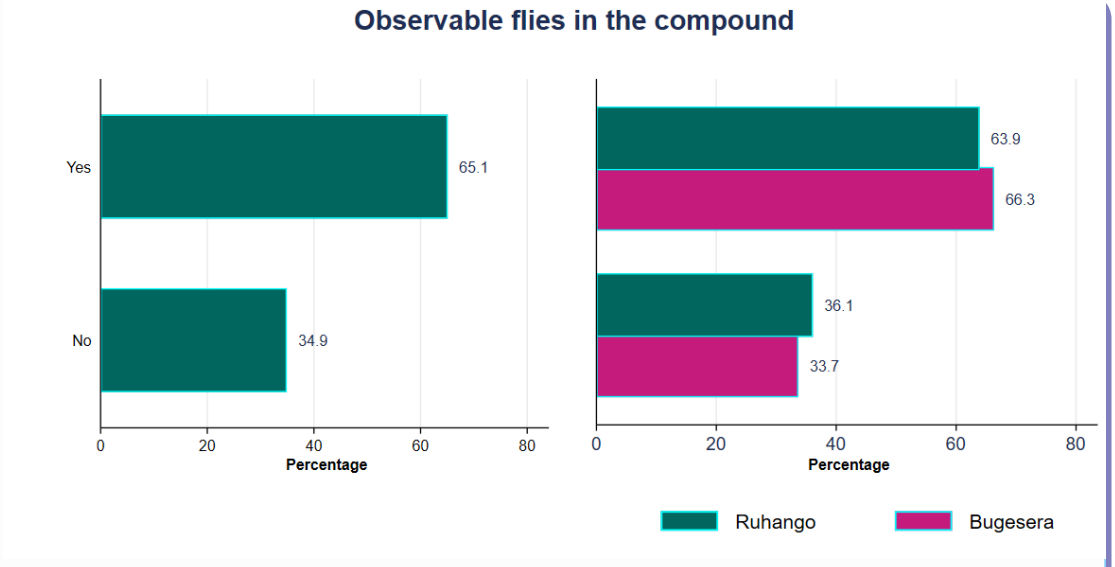


Figure 3.96: *Observable flies in the compound*

As shown in Table 3.87, most households reported having flies in the compound (65.1%) while households not having flies in the compound represented 34.9% of cases. Bugesera district showed the biggest proportion of households having flies in the compound with 66.3% of cases as compared to Ruhango district (63.9%), but the difference was not significant (p=0.418).

Regarding gender, female respondents belonged to households that showed the highest proportion having flies in the compound with 66.1% of cases as compared to households with male respondents (63.3%), but the difference was not significant (p=0.376). Concerning age group, respondents between 40 and 59 years belonged to households that showed the highest proportion having flies in the compound with 65.7% of cases as compared to households with respondents less than 40 years (65.0%), but the difference was not significant (p=0.930).

Looking at religion, Anglican respondents belonged to households that showed the highest proportion having flies in the compound with 77.5% of cases as compared to households with Other religion respondents (67.9%), and the difference was statistically significant (p=0.019). Comparing the distribution by marital status, widowed respondents belonged to households that showed the highest proportion having flies in the compound with 65.7% of cases as compared to households with married respondents (65.7%), but the difference was not significant (p=0.964).

Regarding literacy, respondents who are not able to read or write belonged to households that showed the highest proportion having flies in the compound with 66.3% of cases as compared to households with respondents who are able to read and write (64.5%), but the difference was not significant (p=0.563). Concerning education level, respondents with no education belonged to households that showed the highest proportion having flies in the compound with 69.9%

of cases as compared to households with respondents with nursery level (65.4%), and the difference was highly statistically significant (p=0.000).

Table 3.87: *(E7) Distribution of households have flies in the compound*

	Have flies in the compound				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	331	63.9	187	36.1	518	0.418
Bugesera	327	66.3	166	33.7	493	
Total	658	65.1	353	34.9	1,011	
Gender						
Male	235	63.3	136	36.7	371	0.376
Female	423	66.1	217	33.9	640	
Total	658	65.1	353	34.9	1,011	
Age group						
Less 40	210	65.0	113	35.0	323	0.930
40 to 59	281	65.7	147	34.3	428	
60 and above	167	64.2	93	35.8	260	
Total	658	65.1	353	34.9	1,011	
Religion						
Catholic	264	60.4	173	39.6	437	0.019
Pentecost	130	66.0	67	34.0	197	
Anglican	79	77.5	23	22.5	102	
Adventist	130	67.0	64	33.0	194	
Other religion	55	67.9	26	32.1	81	
Total	658	65.1	353	34.9	1,011	
Marital status						
Married	347	65.7	181	34.3	528	0.964
Cohabiting	113	62.8	67	37.2	180	
Single	42	65.6	22	34.4	64	
Widowed	117	65.7	61	34.3	178	
Divorced or separated	39	63.9	22	36.1	61	
Total	658	65.1	353	34.9	1,011	
Literacy						
Able to read and write	428	64.5	236	35.5	664	0.563
Not able to read or write	230	66.3	117	33.7	347	
Total	658	65.1	353	34.9	1,011	
Education						
No education	241	69.9	104	30.1	345	0.000
Nursery	364	65.4	193	34.6	557	
Primary	53	48.6	56	51.4	109	
Total	658	65.1	353	34.9	1,011	

8. Observable trash in the compound

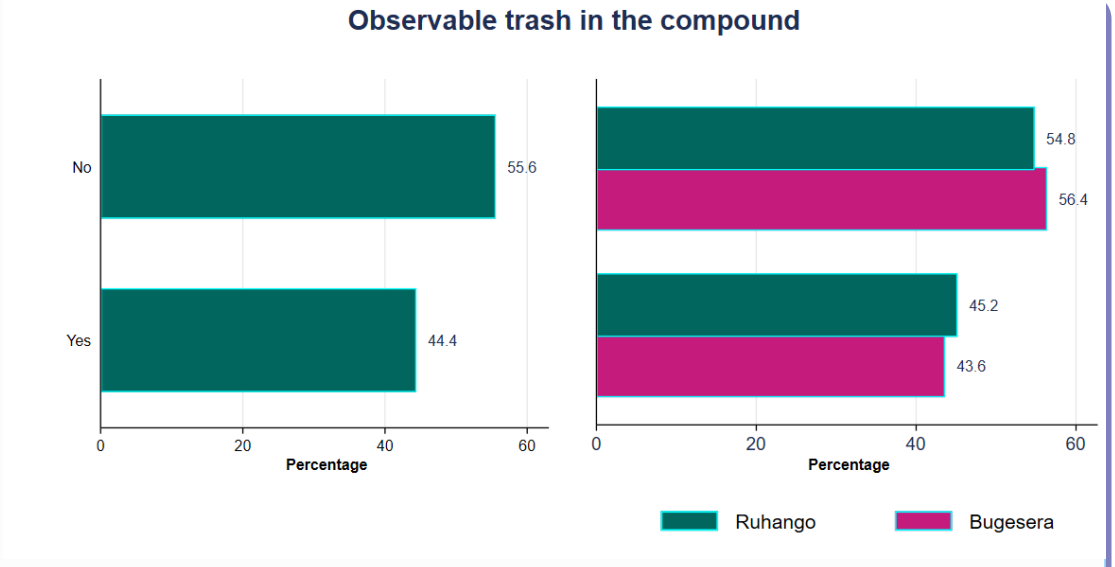


Figure 3.97: *Observable trash in the compound*

Most households reported not having trashes in the compound (55.6%) while households having trashes in the compound represented 44.4% of cases (Table 3.88). Bugesera district showed the highest proportion of households not having trashes in the compound with 56.4% of cases as compared to Ruhango district (54.8%), but the difference was not significant (p=0.617).

Regarding gender, female respondents belonged to households that showed the highest proportion not having trashes in the compound with 56.6% of cases as compared to households with male respondents (53.9%), but the difference was not significant (p=0.413). Concerning age group, respondents less than 40 years belonged to households that showed the highest proportion not having trashes in the compound with 59.8% of cases as compared to households with respondents aged 60 years and above (59.2%), and the difference was statistically significant (p=0.013).

Looking at religion, Adventist respondents belonged to households that showed the highest proportion not having trashes in the compound with 58.2% of cases as compared to households with Catholic respondents (58.1%), but the difference was not significant (p=0.053). Comparing the distribution by marital status, married respondents belonged to households that showed the highest proportion not having trashes in the compound with 57.2% of cases as compared to households with widowed respondents (56.2%), but the difference was not significant (p=0.654).

Regarding literacy, respondents who are able to read and write belonged to households that showed the highest proportion not having trashes in the compound with 56.0% of cases as compared to households with respondents who are not able to read or write (54.8%), but the

difference was not significant (p=0.700). Concerning education level, respondents with primary education belonged to households that showed the highest proportion not having trashes in the compound with 63.3% of cases as compared to households with respondents with nursery level (55.1%), but the difference was not significant (p=0.215).

Table 3.88: *(E8) Distribution of households have trashes in the compound*

	Have trashes in the compound				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	234	45.2	284	54.8	518	0.617
Bugesera	215	43.6	278	56.4	493	
Total	449	44.4	562	55.6	1,011	
Gender						
Male	171	46.1	200	53.9	371	0.413
Female	278	43.4	362	56.6	640	
Total	449	44.4	562	55.6	1,011	
Age group						
Less 40	130	40.2	193	59.8	323	0.013
40 to 59	213	49.8	215	50.2	428	
60 and above	106	40.8	154	59.2	260	
Total	449	44.4	562	55.6	1,011	
Religion						
Catholic	183	41.9	254	58.1	437	0.053
Pentecost	88	44.7	109	55.3	197	
Anglican	59	57.8	43	42.2	102	
Adventist	81	41.8	113	58.2	194	
Other religion	38	46.9	43	53.1	81	
Total	449	44.4	562	55.6	1,011	
Marital status						
Married	226	42.8	302	57.2	528	0.654
Cohabiting	89	49.4	91	50.6	180	
Single	29	45.3	35	54.7	64	
Widowed	78	43.8	100	56.2	178	
Divorced or separated	27	44.3	34	55.7	61	
Total	449	44.4	562	55.6	1,011	
Literacy						
Able to read and write	292	44.0	372	56.0	664	0.700
Not able to read or write	157	45.2	190	54.8	347	
Total	449	44.4	562	55.6	1,011	
Education						
No education	159	46.1	186	53.9	345	0.215
Nursery	250	44.9	307	55.1	557	
Primary	40	36.7	69	63.3	109	
Total	449	44.4	562	55.6	1,011	

4. Findings from facility survey

4.1. Water Availability

1. Have water back-up plan in case of water interruption

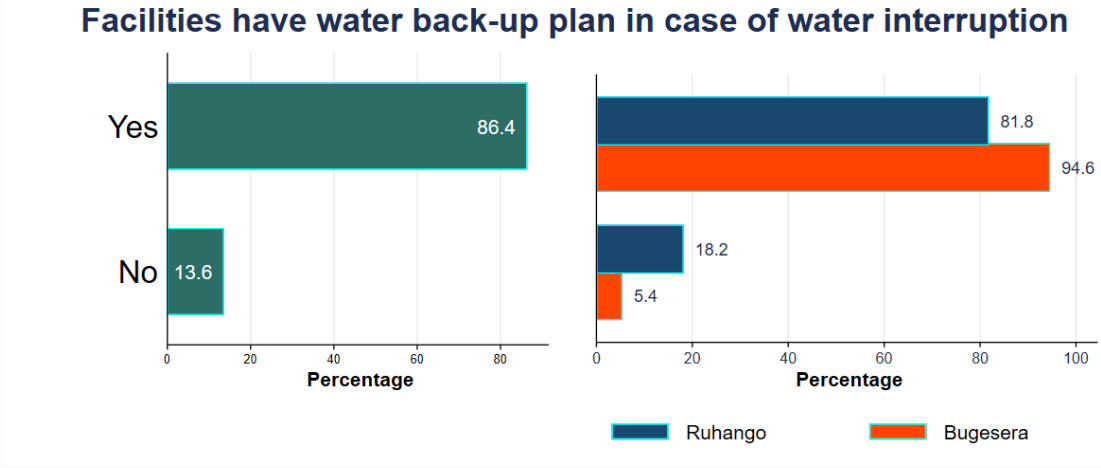


Figure 4.1: *Household has adequate latrine*

The majority of facilities reported have water back-up plan in case of water interruption (86.4%) while facilities not have water back-up plan in case of water interruption represented 13.6% of cases (Table 4.1). Bugesera district showed the highest proportion of facilities have water back-up plan in case of water interruption with 94.6% of cases as compared to Ruhango district (81.8%), but the difference was not significant (p=0.069).

Regarding facility type, health facilities showed the highest proportion having water back-up plan in case of water interruption with 89.1% of cases as compared to schools (84.2%), but the difference was not significant (p=0.763).

Table 4.1: *(G4) Distribution of households have water back-up plan in case of water interruption*

	Have water back-up plan in case of water interruption				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	54	81.8	12	18.2	66	0.069
Bugesera	35	94.6	2	5.4	37	
Total	89	86.4	14	13.6	103	
Facility type						
Health facility	41	89.1	5	10.9	46	0.763
School	33	84.6	6	15.4	39	
Public places	15	83.3	3	16.7	18	
Total	89	86.4	14	13.6	103	

4.2. Sanitation

1. Have toilet on the premises that is accessible

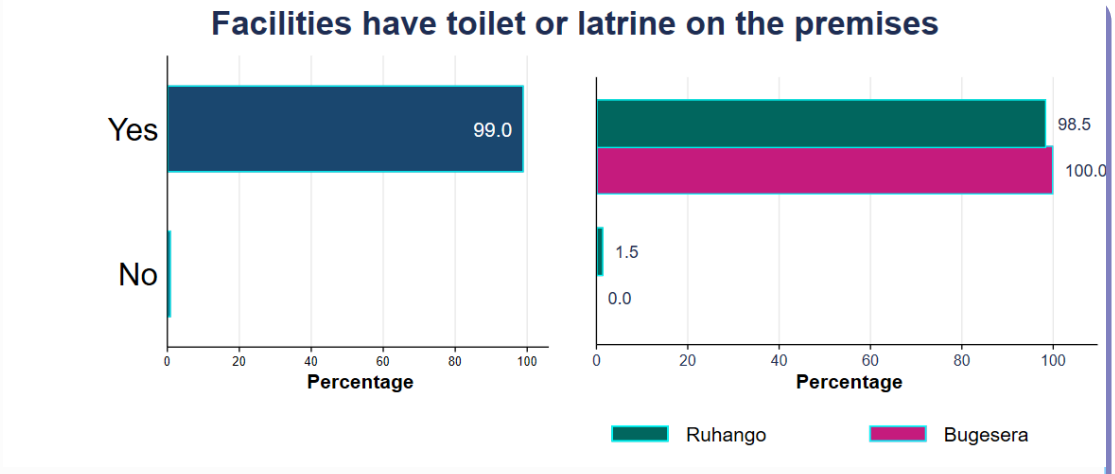


Figure 4.2: *Household has adequate latrine*

As shown in Table 4.2, most facilities reported have toilet or latrine on the premises (99.0%) while facilities not have toilet or latrine on the premises represented 1.0% of cases. Bugesera district showed the biggest proportion of facilities have toilet or latrine on the premises with 100.0% of cases as compared to Ruhango district (98.5%), but the difference was not significant (p=0.452).

Concerning facility type, health facilities showed the highest proportion have toilet or latrine on the premises with 100.0% of cases as compared to schools (98.2%), but the difference was not significant (p=0.092).

Table 4.2: *(H1) Distribution of households have toilet or latrine on the premises*

	Have toilet or latrine on the premises				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	65	98.5	1	1.5	66	0.452
Bugesera	37	100.0	0	0.0	37	
Total	102	99.0	1	1.0	103	
Facility type						
Health facility	46	100.0	0	0.0	46	0.092
School	39	100.0	0	0.0	39	
Public places	17	94.4	1	5.6	18	
Total	102	99.0	1	1.0	103	

4.3. Conditions for infection prevention and control

1. Facility have trained staff on WASH services

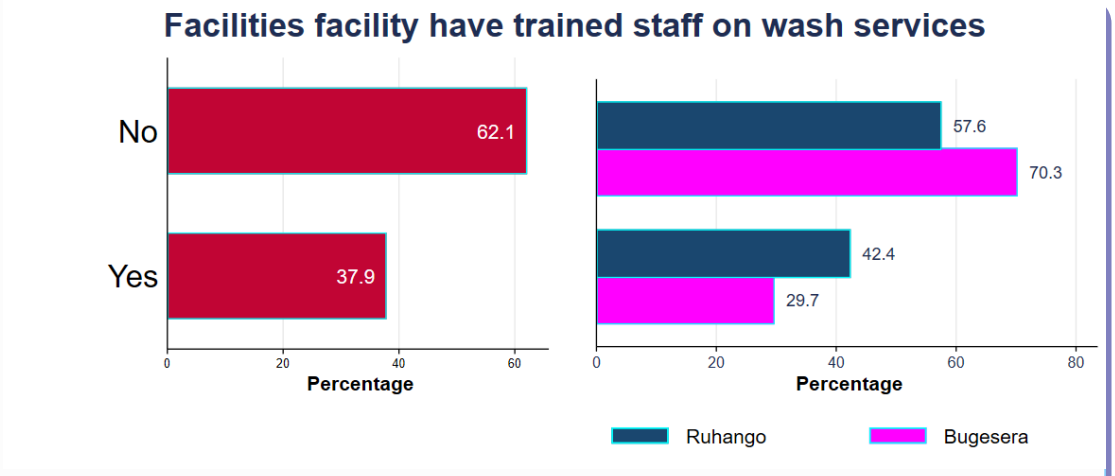


Figure 4.3: *Household has adequate latrine*

The majority of facilities reported not facility have trained staff on wash services (62.1%) while facilities facility have trained staff on wash services represented 37.9% of cases (Table 4.3). Bugesera district showed the highest proportion of facilities not facility have trained staff on wash services with 70.3% of cases as compared to Ruhango district (57.6%), but the difference was not significant (p=0.203).

Comparing by facility type, health facilities showed the highest proportion not facility have trained staff on wash services with 67.4% of cases as compared to schools (57.9%), but the difference was not significant (p=0.595).

Table 4.3: *(J3) Distribution of households facility have trained staff on wash services*

	Facility have trained staff on WASH services				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	28	42.4	38	57.6	66	0.203
Bugesera	11	29.7	26	70.3	37	
Total	39	37.9	64	62.1	103	
Facility type						
Health facility	15	32.6	31	67.4	46	0.595
School	16	41.0	23	59.0	39	
Public places	8	44.4	10	55.6	18	
Total	39	37.9	64	62.1	103	

2. Facility have person in charge of hygiene

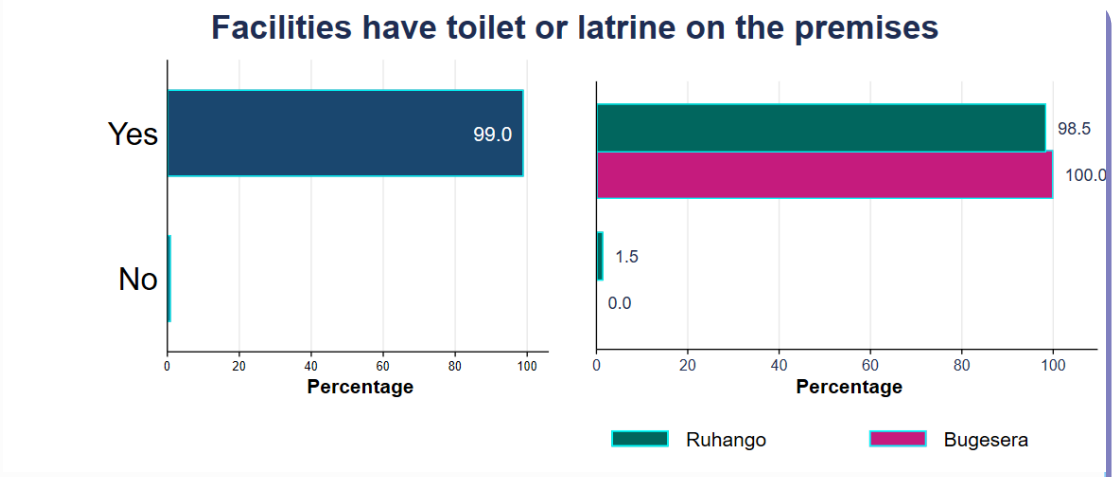


Figure 4.4: *Household has adequate latrine*

As shown in Table 4.4, most facilities reported facility have person in charge of hygiene (91.3%) while facilities not facility have person in charge of hygiene represented 8.7% of cases. Bugesera district showed the biggest proportion of facilities facility have person in charge of hygiene with 94.6% of cases as compared to Ruhango district (89.4%), but the difference was not significant (p=0.370).

Comparing by facility type, health facilities showed the highest proportion facility have person in charge of hygiene with 95.7% of cases as compared to schools (87.7%), but the difference was not significant (p=0.267).

Table 4.4: *(J4) Distribution of households facility have person in charge of hygiene*

	Facility have person in charge of hygiene				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	59	89.4	7	10.6	66	0.370
Bugesera	35	94.6	2	5.4	37	
Total	94	91.3	9	8.7	103	
Facility type						
Health facility	44	95.7	2	4.3	46	0.267
School	35	89.7	4	10.3	39	
Public places	15	83.3	3	16.7	18	
Total	94	91.3	9	8.7	103	

4.4. Observation of toilet and cleanness

1. Facility has adequate latrine

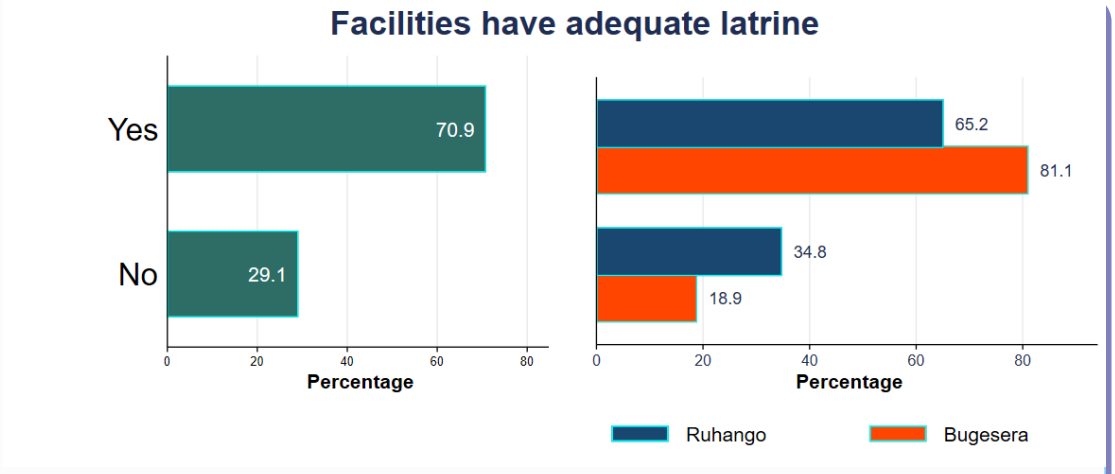


Figure 4.5: *Household has adequate latrine*

The majority of facilities reported have adequate latrine (70.9%) while facilities not have adequate latrine represented 29.1% of cases (Table 4.5). Bugesera district showed the highest proportion of facilities have adequate latrine with 81.1% of cases as compared to Ruhango district (65.2%), but the difference was not significant (p=0.088).

Regarding facility type, health facilities showed the highest proportion have adequate latrine with 78.3% of cases as compared to schools (64.9%), but the difference was not significant (p=0.116).

Table 4.5: *(L1) Distribution of households have adequate latrine*

	Have adequate latrine				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	43	65.2	23	34.8	66	0.088
Bugesera	30	81.1	7	18.9	37	
Total	73	70.9	30	29.1	103	
Facility type						
Health facility	36	78.3	10	21.7	46	0.116
School	23	59.0	16	41.0	39	
Public places	14	77.8	4	22.2	18	
Total	73	70.9	30	29.1	103	

2. Latrine wall is dirty by human excreta

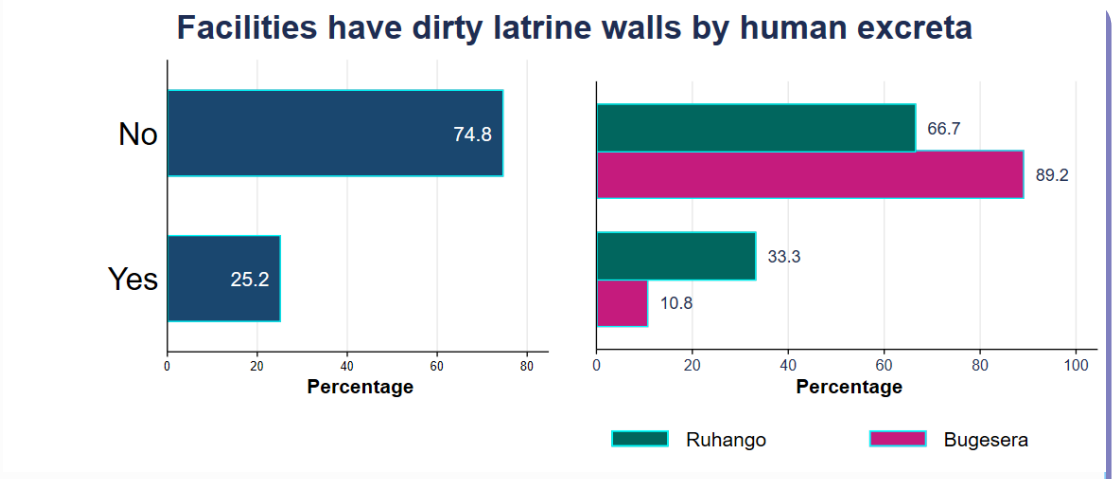


Figure 4.6: *Latrine wall is dirty by human excreta*

As shown in Table 4.6, most facilities reported not have dirty latrine walls by human excreta (74.8%) while facilities have dirty latrine walls by human excreta represented 25.2% of cases. Bugesera district showed the biggest proportion of facilities not have dirty latrine walls by human excreta with 89.2% of cases as compared to Ruhango district (66.7%), and the difference was statistically significant (p=0.012).

Concerning facility type, health facilities showed the highest proportion not have dirty latrine walls by human excreta with 84.8% of cases as compared to schools (66.7%), and the difference was statistically significant (p=0.016).

Table 4.6: *(L2) Distribution of households have dirty latrine walls by human excreta*

	Have dirty latrine walls by human excreta				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	22	33.3	44	66.7	66	0.012
Bugesera	4	10.8	33	89.2	37	
Total	26	25.2	77	74.8	103	
Facility type						
Health facility	7	15.2	39	84.8	46	0.016
School	16	41.0	23	59.0	39	
Public places	3	16.7	15	83.3	18	
Total	26	25.2	77	74.8	103	

3. Latrine floor is dirty by human excreta

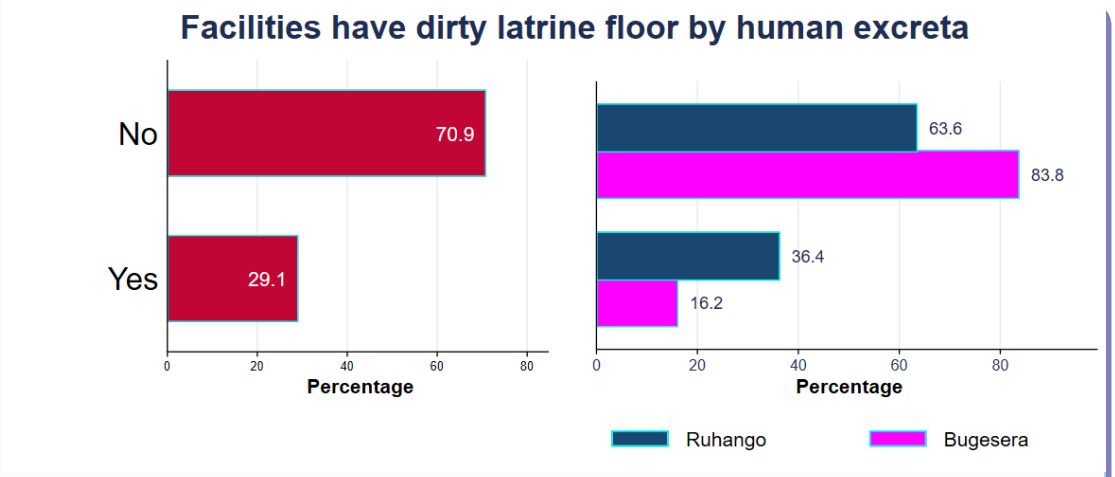


Figure 4.7: *Latrine floor is dirty by human excreta*

The majority of facilities reported not have dirty latrine floor by human excreta (70.9%) while facilities have dirty latrine floor by human excreta represented 29.1% of cases (Table 4.7). Bugesera district showed the highest proportion of facilities not have dirty latrine floor by human excreta with 83.8% of cases as compared to Ruhango district (63.6%), and the difference was statistically significant (p=0.031).

Comparing by facility type, health facilities showed the highest proportion not have dirty latrine floor by human excreta with 78.3% of cases as compared to schools (64.9%), and the difference was statistically significant (p=0.038).

Table 4.7: *(L3) Distribution of households have dirty latrine floor by human excreta*

	Have dirty latrine floor by human excreta				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	24	36.4	42	63.6	66	0.031
Bugesera	6	16.2	31	83.8	37	
Total	30	29.1	73	70.9	103	
Facility type						
Health facility	10	21.7	36	78.3	46	0.038
School	17	43.6	22	56.4	39	
Public places	3	16.7	15	83.3	18	
Total	30	29.1	73	70.9	103	

4. Toilet paper or water is available in the Toilet

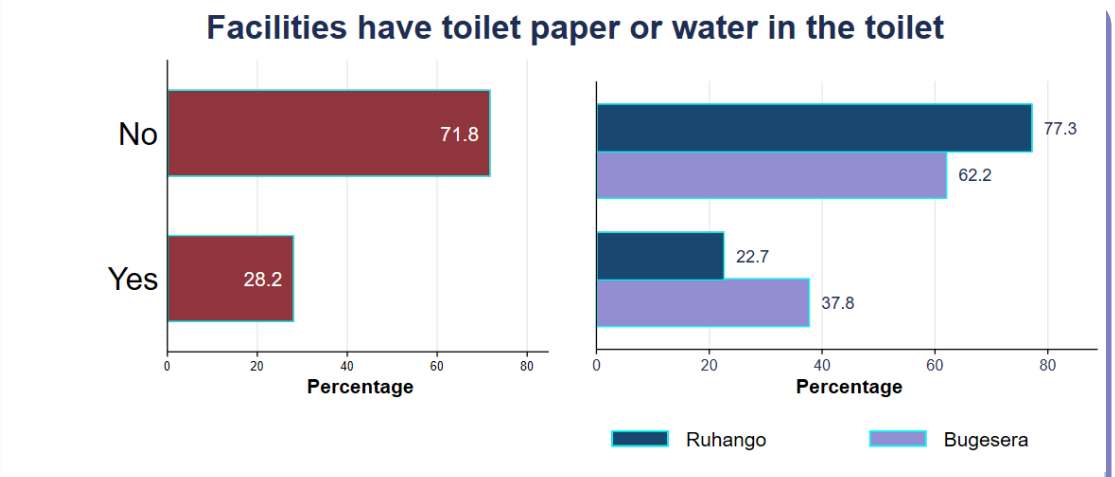


Figure 4.8: *Toilet paper or water is available in the Toilet*

As shown in Table 4.8, most facilities reported not have toilet paper or water in the toilet (71.8%) while facilities have toilet paper or water in the toilet represented 28.2% of cases. Ruhango district showed the biggest proportion of facilities not have toilet paper or water in the toilet with 77.3% of cases as compared to Bugesera district (62.2%), but the difference was not significant (p=0.102).

Comparing by facility type, schools showed the highest proportion not have toilet paper or water in the toilet with 75.4% of cases as compared to health facilities (67.4%), and the difference was statistically significant (p=0.010).

Table 4.8: *(L4) Distribution of households have toilet paper or water in the toilet*

	Have toilet paper or water in the toilet				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	15	22.7	51	77.3	66	0.102
Bugesera	14	37.8	23	62.2	37	
Total	29	28.2	74	71.8	103	
Facility type						
Health facility	15	32.6	31	67.4	46	0.010
School	5	12.8	34	87.2	39	
Public places	9	50.0	9	50.0	18	
Total	29	28.2	74	71.8	103	

5. Household has hand washing facility with soap and water

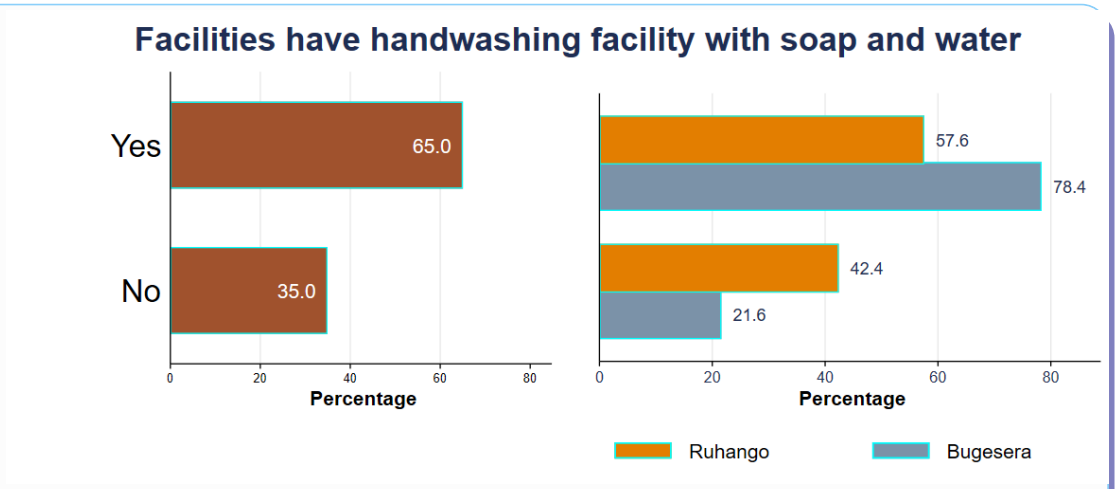


Figure 4.9: *Household has hand washing facility with soap and water*

The majority of facilities reported have handwashing facility with soap and water (65.0%) while facilities not have handwashing facility with soap and water represented 35.0% of cases (Table 4.9). Bugesera district showed the highest proportion of facilities have handwashing facility with soap and water with 78.4% of cases as compared to Ruhango district (57.6%), and the difference was statistically significant (p=0.034).

Regarding facility type, health facilities showed the highest proportion have handwashing facility with soap and water with 82.6% of cases as compared to schools (50.9%), and the difference was highly statistically significant (p=0.000).

Table 4.9: *(L5) Distribution of households have handwashing facility with soap and water*

	Have handwashing facility with soap and water				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	38	57.6	28	42.4	66	0.034
Bugesera	29	78.4	8	21.6	37	
Total	67	65.0	36	35.0	103	
Facility type						
Health facility	38	82.6	8	17.4	46	0.000
School	16	41.0	23	59.0	39	
Public places	13	72.2	5	27.8	18	
Total	67	65.0	36	35.0	103	

6. Observable flies in the toilet

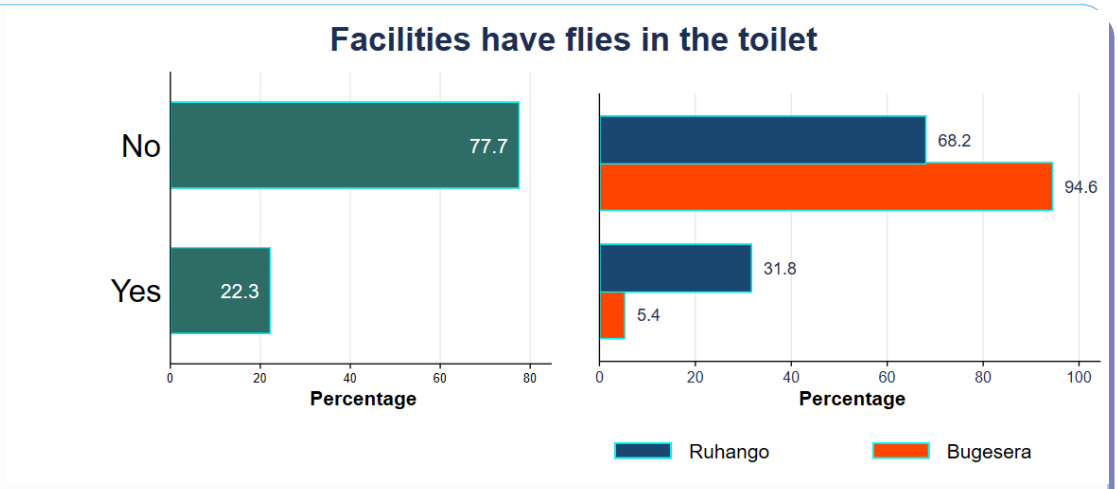


Figure 4.10: *Observable flies in the toilet*

The majority of facilities reported not have flies in the toilet (77.7%) while facilities have flies in the toilet represented 22.3% of cases (Table 4.10). Bugesera district showed the highest proportion of facilities not have flies in the toilet with 94.6% of cases as compared to Ruhango district (68.2%), and the difference was statistically significant (p=0.002).

Regarding facility type, health facilities showed the highest proportion not have flies in the toilet with 87.0% of cases as compared to schools (70.2%), but the difference was not significant (p=0.082).

Table 4.10: *(L6) Distribution of households have flies in the toilet*

	Have flies in the toilet				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	21	31.8	45	68.2	66	0.002
Bugesera	2	5.4	35	94.6	37	
Total	23	22.3	80	77.7	103	
Facility type						
Health facility	6	13.0	40	87.0	46	0.082
School	13	33.3	26	66.7	39	
Public places	4	22.2	14	77.8	18	
Total	23	22.3	80	77.7	103	

7. Observable flies in the compound

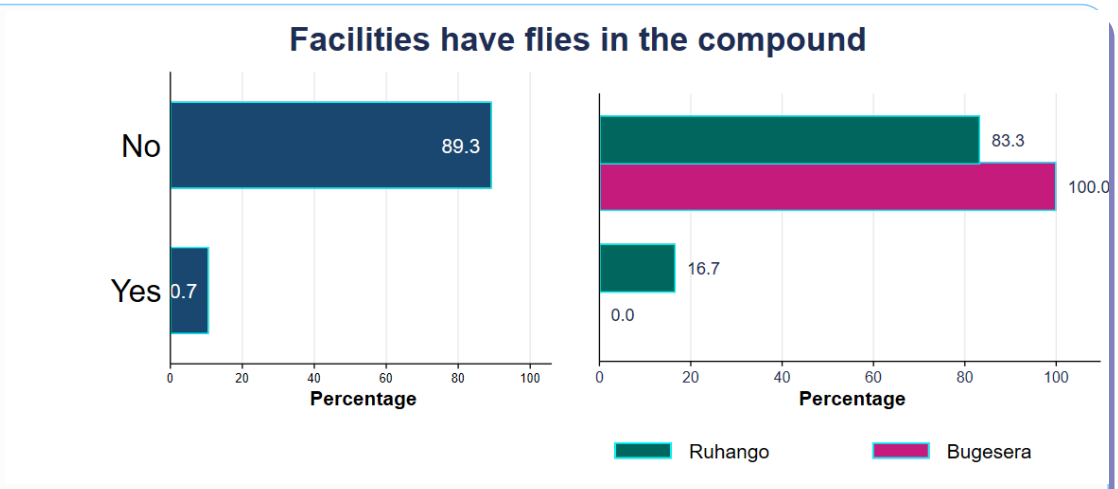


Figure 4.11: *Observable flies in the compound*

As shown in Table 4.11, most facilities reported not have flies in the compound (89.3%) while facilities have flies in the compound represented 10.7% of cases. Bugesera district showed the biggest proportion of facilities not have flies in the compound with 100.0% of cases as compared to Ruhango district (83.3%), and the difference was statistically significant (p=0.009).

Concerning facility type, health facilities showed the highest proportion not have flies in the compound with 97.8% of cases as compared to schools (82.5%), and the difference was statistically significant (p=0.042).

Table 4.11: *(L7) Distribution of households have flies in the compound*

	Have flies in the compound				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	11	16.7	55	83.3	66	0.009
Bugesera	0	0.0	37	100.0	37	
Total	11	10.7	92	89.3	103	
Facility type						
Health facility	1	2.2	45	97.8	46	0.042
School	7	17.9	32	82.1	39	
Public places	3	16.7	15	83.3	18	
Total	11	10.7	92	89.3	103	

8. Observable trash in the compound

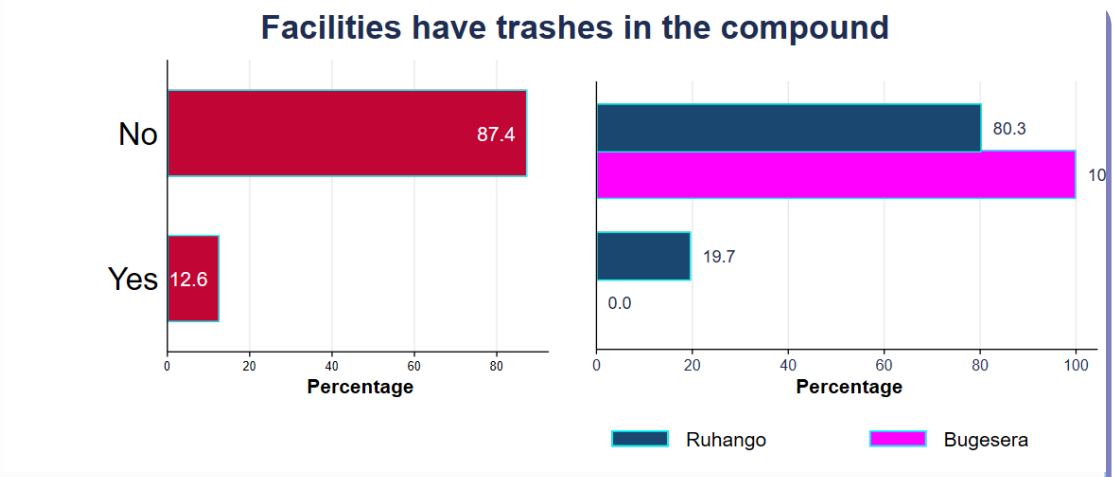


Figure 4.12: *Observable trash in the compound*

The majority of facilities reported not have trashes in the compound (87.4%) while facilities have trashes in the compound represented 12.6% of cases (Table 4.12). Bugesera district showed the highest proportion of facilities not have trashes in the compound with 100.0% of cases as compared to Ruhango district (80.3%), and the difference was statistically significant (p=0.004).

Comparing by facility type, health facilities showed the highest proportion not have trashes in the compound with 91.3% of cases as compared to schools (84.2%), but the difference was not significant (p=0.431).

Table 4.12: *(L8) Distribution of households have trashes in the compound*

	Have trashes in the compound				Total	p-value
	Yes		No			
	N	%	N	%		
District						
Ruhango	13	19.7	53	80.3	66	0.004
Bugesera	0	0.0	37	100.0	37	
Total	13	12.6	90	87.4	103	
Facility type						
Health facility	4	8.7	42	91.3	46	0.431
School	7	17.9	32	82.1	39	
Public places	2	11.1	16	88.9	18	
Total	13	12.6	90	87.4	103	

5. Findings from Qualitative survey

This analysis synthesizes the key themes and insights derived from the focus group discussion regarding water access, quality, sanitation facilities, hygiene practices, and community engagement related to WASH in the Bugesera and Bugesera Districts.

5.1. Water Access and Quality

Primary water sources

The main sources of water in the community include public taps (e.g., Rwakibirizi), private suppliers (e.g., Jibu), and natural bodies such as lakes and rivers (e.g., Mukonko). However, tap water is supplied infrequently, and many residents face challenges accessing all sources due to long distances, population pressure, and inadequate infrastructure.

In Bugesera District, swamp water is the most commonly used source, although participants widely considered it unsafe. Underground water pumps are available in some locations, but access remains limited. Some households purchase water, although this option is only feasible for those with sufficient financial means.

Participants reported primarily relying on lake water, natural springs, and WASAC-supplied piped water, reflecting inconsistent access to safe drinking water. Economic factors significantly influence these choices, as lake water is more affordable but perceived as less safe.

Reliability of water sources

Participants reported that water availability is often unreliable, particularly during the dry season, resulting in long queues and dependence on less safe sources. In many areas, tap water is supplied only once a week, increasing reliance on alternatives such as swamps and underground pumps.

The cost of water—ranging from 400 to 500 RWF per jerry can—poses a significant barrier for low-income households, often forcing them to use unsafe water sources.

Water availability also varies by season, with better access during the rainy period. Additional challenges include long distances to water points, especially in mountainous regions. These factors contribute to persistent reliance on lower-quality water sources throughout the year.

Water quality and water treatment practices

Participants consistently raised concerns regarding water safety, particularly the poor quality of water sourced from swamps and other non-WASAC sources. Many expressed doubts about the safety of available water, citing risks of contamination due to inadequate sanitation and improper storage practices.

Water treatment practices were limited, with most households relying on boiling. Some participants believed tap water was already treated, contributing to complacency in water treatment. The general perception was that available water was of poor quality, often contaminated by

debris, unclean containers, and insufficient treatment.

Only a small proportion of participants reported treating water before use, typically through boiling or the use of commercial products such as Sur'eau. Participants highlighted a lack of accessible water treatment options and emphasised the need for community education on safe water handling and treatment methods.

Key challenges identified included the unreliable supply of water from natural sources, insufficient infrastructure (e.g., public taps), long distances to water sources, and the high cost of purchasing clean water. These factors collectively limited accessibility to safe drinking water.

5.2. Sanitation Facilities

Types of toilet facilities, cleanliness and availability

Toilet facilities primarily consist of pit latrines, particularly in rural areas, while a limited number of modern toilets exist in urban settings. Participants reported multiple challenges, including poor maintenance, lack of sanitation infrastructure (e.g., roofs, doors), and inadequate cleaning supplies. The condition of existing facilities frequently fails to meet basic hygiene standards, raising significant health concerns. Water scarcity and limited awareness of proper sanitation practices further hinder the maintenance of hygiene. Most latrines are constructed from local materials, contributing to concerns about cleanliness and long-term durability.

Waste management and challenges in sanitation

Respondents reported inadequate waste collection services, resulting in visible waste accumulation in public areas and increased health risks. In rural areas, community-led initiatives involve repurposing certain types of waste for agricultural use; however, education on proper disposal remains limited. Financial constraints continue to hinder access to appropriate waste disposal services. While some residents use pit latrines and natural methods, participation in formal waste management programmes is inconsistent. Waste is often deposited in communal bins, suggesting the existence of a basic yet insufficient collection system. Broader sanitation efforts are further challenged by water scarcity and varying levels of awareness and behaviour. Additionally, cultural norms and economic limitations impede improvements in sanitation infrastructure.

5.3. Hygiene Practices

Handwashing and hygiene awareness

Hand hygiene practices remain inconsistent despite ongoing community mobilisation efforts. Community health workers promote handwashing, but sustaining these behaviours has been challenging post-COVID-19. Limited access to clean water and soap—due to both supply issues and financial barriers—continues to hinder routine practice. Although awareness of handwashing benefits is widespread, actual adherence is constrained by infrastructural and economic limitations.

Hygiene education and hygiene promotion

Community health workers receive ongoing training—often supported by organisations such as WaterAid—to promote hygiene and prevent disease. They serve as key agents in educating the population, though their efforts are constrained by inconsistent support and limited coverage.

Despite these efforts, hygiene promotion faces multiple barriers. Water scarcity remains a major impediment to maintaining hygiene standards. Cultural beliefs and individual perceptions also influence hygiene practices, sometimes conflicting with recommended behaviours. Additionally, resource limitations—such as insufficient firewood for boiling water—further hinder effective implementation.

While some training is provided by NGOs and community health workers, the frequency, coverage, and effectiveness of these interventions vary significantly across communities.

5.4. Knowledge and Awareness

Health risks awareness

Understanding of Diseases: Participants demonstrated an understanding of the health risks associated with inadequate WASH practices, particularly schistosomiasis (bilharzia), intestinal worms, and skin infections.

Knowledge Gaps and Misconceptions: Despite this awareness, knowledge gaps remain regarding the transmission routes and prevention of these diseases.

Health and Socio-Economic Impacts: Participants acknowledged that poor hygiene contributes not only to disease but also to poverty and, in severe cases, death.

Sources of Information

Health information is primarily disseminated through community health workers, local leaders, and radio broadcasts. These sources are widely trusted, particularly when messages are endorsed by the Ministry of Health. In contrast, there is scepticism towards unverified information found online, which is perceived as less reliable. However, access to media remains limited for some residents, especially in rural areas.

5.5. Community Engagement

Community Engagement in WASH Activities

Community members engage in collective initiatives to improve WASH conditions, including regular cleaning campaigns such as Umuganda and Igitondo cy'Isuku. These activities foster hygiene awareness and encourage community involvement, though participation is not universal. The success of such initiatives depends on sustained engagement, personal accountability, and support from local authorities. There is a recognised need for increased resources and continuous education to enhance WASH services and assist vulnerable populations.

Cultural practices and challenges in engagement

Community health workers and village representatives often operate without compensation, which undermines their motivation and effectiveness. While community members actively participate in WASH initiatives such as hygiene mornings and Umuganda (community clean-up), limited awareness and persistent traditional practices—such as using swamp water—continue to hinder behavioural change. Although some participants reported no specific cultural barriers to WASH, others highlighted that certain beliefs negatively influence hygiene practices and resistance to change remains in parts of the community. Suggested improvements include increasing access to clean water, upgrading infrastructure, and expanding community education on hygiene and sanitation.

5.6. Specific Health Risks (STH and SCH)

Understanding of intestinal worms and bilharzia, prevalence and impact

Bilharzia and intestinal worms remain highly prevalent, largely due to inadequate hygiene and sanitation. Participants demonstrated awareness of intestinal worms, frequently linking them to poor hygiene practices. Exposure to swamp water was widely recognised as a key risk factor for bilharzia. While community mobilisation efforts and treatment programmes exist, participants highlighted the need for more consistent implementation and greater emphasis on preventive education. Community health workers and radio broadcasts were identified as trusted and effective sources of health information. Participants also noted the economic burden of intestinal worm infections on households, reinforcing the importance of improved hygiene.

Prevention and Treatment Practices

Community health workers (CHWs) distribute deworming medication, but uptake remains low due to misconceptions and logistical barriers. Although Mass Drug Administration (MDA) campaigns are known, awareness of their benefits and adherence remains limited. Community mobilisation efforts and treatment programmes exist but require greater consistency and education on prevention. Suggested strategies include improving access to medication, enhancing public awareness of MDA effectiveness, and promoting protective practices, such as wearing gear in marshes and maintaining proper hygiene.

5.7. Challenges identified

- Water Scarcity: A major constraint on the maintenance of hygiene and sanitation practices.
- Cultural Beliefs: Misconceptions about hygiene and reliance on unsafe water sources persist in some communities.
- Financial Constraints: Limited financial capacity restricts access to waste management services and water treatment products.

- Infrastructure Deficiencies: Inadequate sanitation facilities and inefficient waste management systems pose significant challenges.
- Barriers to Deworming Programmes: Misconceptions regarding treatment efficacy and cultural beliefs continue to limit community participation.

5.8. Suggestions for Improvement

Recommendations include establishing regular deworming schedules, enhancing hygiene education, and addressing cultural beliefs that hinder treatment uptake. Door-to-door medication distribution and intensified community education are suggested to improve treatment adherence. Increasing access to clean water, particularly through infrastructure investment, remains a priority. Ongoing hygiene education should target children and community leaders to foster long-term behavioural change. Public gatherings can be leveraged to reinforce hygiene messages, while community health workers and radio remain trusted channels for health communication. Social mobilisation campaigns should emphasise hygiene and prevention of soil-transmitted helminths (STH) and schistosomiasis (SCH).

5.9. Conclusion

The focus group discussion provided valuable insights into the Water, Sanitation, and Hygiene (WASH) challenges in Bugesera and Ruhango Districts. Key issues included unreliable water sources, inadequate sanitation facilities, and insufficient hygiene practices, compounded by limited community awareness and engagement. While awareness of WASH importance is increasing, persistent barriers such as water scarcity, cultural beliefs, and poor infrastructure continue to hinder progress.

Participants emphasised the urgent need for improved infrastructure, hygiene education, and meaningful community involvement. These findings underscore the importance of locally tailored, multi-sectoral interventions, supported by local authorities and health stakeholders. Integrating community knowledge into programme design can enhance the effectiveness of interventions, ultimately improving WASH conditions and public health outcomes in these districts.

6. Conclusion and Recommendations

The needs assessment of Water, Sanitation, and Hygiene (WASH) and Social Behaviour Change (SBC) in Bugesera and Ruhango Districts identified significant gaps and disparities, particularly in access to basic services and knowledge related to soil-transmitted helminths (STH) and schistosomiasis (SCH). Survey data highlighted deficiencies in infrastructure, practices, and awareness, underscoring the urgent need for targeted WASH and SBC interventions. Achieving the goal of interrupting transmission of bilharzia and intestinal worms by 2027 will require coordinated, multisectoral efforts and active community engagement. Strategies must be context-specific and tailored to the unique needs of each district.

Recommendations

Based on the assessment of water, sanitation and hygiene (WASH) conditions in households and workplaces in Bugesera and Ruhango Districts, the following recommendations are proposed to address identified gaps and enhance both WASH and Behavioural and Social Change (BSC) initiatives:

- Prioritise areas with low coverage of basic water, sanitation and hygiene services by implementing targeted interventions and allocating adequate resources.
- Advocate for increased investment in community water supply systems, with a particular focus on underserved areas.
- Strengthen sanitation and hygiene infrastructure and practices in households, health facilities and workplaces.
- Design and implement hygiene promotion campaigns to raise community awareness and encourage adoption of improved hygiene behaviours.
- Foster multi-sectoral partnerships between government entities, the private sector and non-governmental organisations to expand WASH infrastructure and awareness, especially in hard-to-reach or high-need areas.
- Promote community engagement through participatory WASH programmes and health education to facilitate sustainable behaviour change at the grassroots level.
- Advocate for policy reforms and increased budgetary allocations that position WASH as a national priority, ensuring long-term commitment and support.
- Ensure the availability of screening for soil-transmitted helminths (STH) and schistosomiasis (SCH), and increase community awareness of the importance of regular testing.
- Deliver mass drug administration (MDA) to all communities in highly endemic areas for STH and SCH, accompanied by community sensitisation to encourage participation and understanding.

By implementing these recommendations, Rwanda can make significant progress in improving WASH and BSCbin Bugesera and Ruhango Districts. This will ultimately lead to better health outcomes and enhanced quality of life for all citizens, and serve as the model for other areas.

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Appendix A. Additional Tables

Annex A1: *Distribution of indicators about water*

	Proportion of households accessing water within 30 minutes	*Proportion of households using surface water*	*Proportion of households treating water for drinking*	*Proportion of households using piped water*	*Total*
District					
Ruhango	53.1%	16.4%	40.0%	20.8%	32.6%
Bugesera	28.6%	64.5%	30.8%	12.2%	34.0%
Total	41.1%	39.9%	35.5%	16.6%	33.3%
Gender					
Male	41.5%	34.8%	33.2%	19.1%	32.1%
Female	40.9%	42.8%	36.9%	15.2%	33.9%
Total	41.1%	39.9%	35.5%	16.6%	33.3%
Age group					
Less 40	37.2%	47.4%	36.2%	14.9%	33.9%
40-59	40.7%	39.0%	33.9%	16.6%	32.5%
60 and above	46.9%	31.9%	37.3%	18.8%	33.8%
Total	41.1%	39.9%	35.5%	16.6%	33.3%
Education					
No education	41.2%	47.8%	27.2%	9.3%	31.4%
Primary	42.9%	35.4%	36.6%	19.9%	33.7%
Secondary or university	32.1%	37.6%	56.0%	22.9%	37.2%
Total	41.1%	39.9%	35.5%	16.6%	33.3%

Annex A2: *Distribution of indicators about sanitation*

	Proportion of households owning a toilet or latrine	*Proportion of households knowing that the pit toilet must be 6 meters*	*Proportion of households having water and soap for handwash-ing*	*Proportion of households using human excreta as fertilizer*	*Total*
District					
Ruhango	95.9%	31.5%	16.0%	18.1%	40.4%
Bugesera	95.1%	15.6%	22.5%	12.0%	36.3%
Total	95.5%	23.7%	19.2%	15.1%	38.4%
Gender					
Male	96.0%	24.5%	19.1%	17.8%	39.4%
Female	95.3%	23.3%	19.2%	13.6%	37.9%
Total	95.5%	23.7%	19.2%	15.1%	38.4%
Age group					
Less 40	95.4%	18.0%	23.5%	10.5%	36.8%
40-59	96.3%	26.2%	18.2%	18.5%	39.8%
60 and above	94.6%	26.9%	15.4%	15.4%	38.1%
Total	95.5%	23.7%	19.2%	15.1%	38.4%
Education					
No education	91.9%	22.3%	11.6%	13.6%	34.9%
Primary	97.1%	25.7%	20.1%	17.1%	40.0%
Secondary or university	99.1%	18.3%	38.5%	10.1%	41.5%
Total	95.5%	23.7%	19.2%	15.1%	38.4%

Annex A3: *Distribution of indicators about workplace sanitation*

	Proportion of participants working in agricultural	*Proportion of workplaces having latrine within 50 meters*	*Proportion of workplace having access to clean water within 500 meters*	*Proportion of workplace having adequate latrine*	*Proportion of workplace with toilet paper or water available*	*Proportion of workplace latrine content being used as a fertilizer*	*Proportion of workplace having hand washing facility*	*Total*
District								
Ruhango	83.6%	51.0%	23.4%	23.2%	13.1%	10.8%	8.9%	30.6%
Bugesera	68.4%	31.6%	11.6%	10.5%	7.1%	9.1%	5.5%	20.5%
Total	76.2%	41.5%	17.6%	17.0%	10.2%	10.0%	7.2%	25.7%
Gender								
Male	72.8%	43.4%	20.2%	19.1%	12.7%	11.6%	9.2%	27.0%
Female	78.1%	40.5%	16.1%	15.8%	8.8%	9.1%	6.1%	24.9%
Total	76.2%	41.5%	17.6%	17.0%	10.2%	10.0%	7.2%	25.7%
Age group								
Less 40	74.3%	36.2%	18.6%	19.5%	11.1%	8.7%	8.7%	25.3%
40-59	79.0%	44.4%	16.8%	16.1%	10.3%	11.9%	7.7%	26.6%
60 and above	73.8%	43.5%	17.7%	15.4%	8.8%	8.5%	4.6%	24.6%
Total	76.2%	41.5%	17.6%	17.0%	10.2%	10.0%	7.2%	25.7%
Education								
No education	73.9%	33.6%	13.3%	10.4%	6.7%	9.3%	4.6%	21.7%
Primary	80.3%	43.6%	17.4%	18.5%	9.9%	10.6%	6.3%	26.6%
Secondary or university	62.4%	56.0%	32.1%	30.3%	22.9%	9.2%	20.2%	33.3%
Total	76.2%	41.5%	17.6%	17.0%	10.2%	10.0%	7.2%	25.7%

Annex A4: *Distribution of indicators about Bilharzia Knowledge*

	Proportion of households who agreed that when blood in stool, should go to health facility	*Proportion of households who agreed that it is important to take tablets STH and SCH*	*Proportion of households who agreed that it is important to screen for STH and SCH*	*Proportion of households ever heard about Bilharzia*	*Proportion of households who agreed that Bilharzia can NOT cause severe morbidity or death*	*Proportion of households ever been diagnosed with SCH in the past year*	*Total*
District							
Ruhango	89.8%	68.5%	64.3%	33.6%	17.0%	2.5%	45.9%
Bugesera	91.5%	79.7%	76.3%	45.6%	23.7%	2.8%	53.3%
Total	90.6%	74.0%	70.1%	39.5%	20.3%	2.7%	49.5%
Gender							
Male	91.1%	73.9%	72.0%	41.5%	22.6%	3.0%	50.7%
Female	90.3%	74.1%	69.1%	38.3%	18.9%	2.5%	48.9%
Total	90.6%	74.0%	70.1%	39.5%	20.3%	2.7%	49.5%
Age group							
Less 40	90.4%	70.9%	67.8%	43.3%	18.9%	1.5%	48.8%
40-59	93.5%	77.1%	72.9%	42.5%	21.7%	4.2%	52.0%
60 and above	86.2%	72.7%	68.5%	29.6%	19.6%	1.5%	46.3%
Total	90.6%	74.0%	70.1%	39.5%	20.3%	2.7%	49.5%
Education							
No education	87.8%	70.1%	64.3%	29.6%	16.2%	1.7%	45.0%
Primary	91.9%	75.2%	71.8%	42.4%	21.5%	3.4%	51.0%
Secondary or university	92.7%	79.8%	79.8%	56.0%	26.6%	1.8%	56.1%
Total	90.6%	74.0%	70.1%	39.5%	20.3%	2.7%	49.5%

Annex A5: *Distribution of indicators about intestinal worms Knowledge*

	Proportion of households being aware of risks associated with inadequate WASH	*Proportion of households ever heard about intestinal worms*	*Proportion of households who agreed that you also get STH when you take sweets foods/ drinks*	*Proportion of households who agreed that intestinal worms cannot be prevented*	*Proportion of households that have intestinal worms in the past 12 months*	*Proportion of households who agreed that you can live with STH without any harm*	*Proportion of households who agreed that herbs treat well STH than modern medicine*	*Total*
District								
Ruhango	93.1%	87.5%	40.0%	31.1%	30.5%	27.4%	25.9%	47.9%
Bugesera	93.5%	83.2%	60.4%	43.2%	38.1%	39.6%	23.1%	54.4%
Total	93.3%	85.4%	50.0%	37.0%	34.2%	33.3%	24.5%	51.1%
Gender								
Male	93.8%	86.0%	49.3%	36.1%	34.2%	33.7%	22.4%	50.8%
Female	93.0%	85.0%	50.3%	37.5%	34.2%	33.1%	25.8%	51.3%
Total	93.3%	85.4%	50.0%	37.0%	34.2%	33.3%	24.5%	51.1%
Age group								
Less 40	92.9%	83.6%	48.9%	32.8%	39.6%	35.9%	19.2%	50.4%
40-59	94.6%	87.9%	52.6%	37.9%	35.7%	32.7%	25.5%	52.4%
60 and above	91.5%	83.5%	46.9%	40.8%	25.0%	31.2%	29.6%	49.8%
Total	93.3%	85.4%	50.0%	37.0%	34.2%	33.3%	24.5%	51.1%
Education								
No education	91.3%	82.0%	53.6%	41.7%	30.4%	32.5%	28.4%	51.4%
Primary	93.5%	86.7%	49.6%	35.5%	36.3%	33.6%	23.7%	51.3%
Secondary or university	98.2%	89.0%	40.4%	29.4%	35.8%	34.9%	16.5%	49.1%
Total	93.3%	85.4%	50.0%	37.0%	34.2%	33.3%	24.5%	51.1%

Annex A6: *Distribution of indicators about observed households' WASH*

	Proportion of households having flies in the compound	*Proportion of households having flies in the toilet*	*Proportion of households having trashes in the compound*	*Proportion of households having dirty latrine floor by human excreta*	*Proportion of households having adequate latrine*	*Proportion of households having toilet paper or water in the toilet*	*Proportion of households having dirty latrine walls by human excreta*	*Proportion of households having handwashing facility with soap and water*	*Total*
District									
Ruhango	63.9%	59.3%	45.2%	29.5%	30.7%	19.7%	14.3%	14.5%	34.6%
Bugesera	66.3%	59.4%	43.6%	40.4%	18.3%	13.6%	13.0%	6.1%	32.6%
Total	65.1%	59.3%	44.4%	34.8%	24.6%	16.7%	13.6%	10.4%	33.6%
Gender									
Male	63.3%	60.1%	46.1%	32.3%	25.3%	15.9%	14.3%	8.9%	33.3%
Female	66.1%	58.9%	43.4%	36.2%	24.2%	17.2%	13.3%	11.2%	33.8%
Total	65.1%	59.3%	44.4%	34.8%	24.6%	16.7%	13.6%	10.4%	33.6%
Age group									
Less 40	65.0%	54.8%	40.2%	30.7%	24.5%	16.7%	11.5%	8.7%	31.5%
40-59	65.7%	62.6%	49.8%	38.6%	24.5%	19.2%	14.3%	12.4%	35.9%
60 and above	64.2%	59.6%	40.8%	33.8%	25.0%	12.7%	15.4%	9.2%	32.6%
Total	65.1%	59.3%	44.4%	34.8%	24.6%	16.7%	13.6%	10.4%	33.6%
Education									
No education	69.9%	61.2%	46.1%	44.1%	17.1%	11.0%	15.9%	6.4%	33.9%
Primary	65.4%	60.5%	44.9%	31.2%	26.2%	18.1%	13.3%	11.0%	33.8%
Secondary or university	48.6%	47.7%	36.7%	23.9%	40.4%	27.5%	8.3%	20.2%	31.7%
Total	65.1%	59.3%	44.4%	34.8%	24.6%	16.7%	13.6%	10.4%	33.6%

Appendix B. Standard Operating Procedures (SOPs)

Effective Date: _____
Prepared by: _____
Approved by: _____

Purpose

This Standard Operating Procedure (SOP) outlines the processes and procedures for conducting a needs assessment in the Bugesera and Ruhango districts. The goal of the study is to evaluate current WASH practices and social behaviors to develop strategies to interrupt the transmission of Bilharzia and intestinal worms by 2027.

Scope

This SOP applies to all team members involved in the needs assessment, including fieldworkers, data collectors, analysts, and coordinators. It covers the preparation, data collection, data analysis, and reporting phases of the study.

Responsibilities

- **Team Leader**: Oversee all study activities, ensure adherence to the SOP, and coordinate with local authorities.
- **Fieldworkers/ Data Collectors**: Conduct interviews, surveys, and observations, collect biological samples, and ensure accurate data recording.
- **Data Analysts**: Analyze collected data and prepare reports.
- **Community Liaison**: Facilitate communication between the research team and the community.
- **Health Workers/ Local Coordinators**: Assist with participant mobilization and align the study with community health needs.

Procedures

Preparation

(1) **Training**:

- Conduct a three-day training workshop for all team members, including a one-day pre-test.
- Train fieldworkers on data collection techniques, using tablets, conducting interviews, and sample collection.
- Train team leaders on data verification and problem-solving in the field.

(2) **Community Engagement**:

- Meet with local leaders to explain the study's objectives and obtain necessary permissions.
- Distribute information sheets and consent forms to the community.

Data Collection

(1) **Interviews and Surveys**:

- Approach selected households and obtain consent from participants.
- Conduct structured interviews and surveys using tablets.
- Record responses accurately and check for completeness.

(2) **Observations**:

- Observe WASH facilities in households and public areas.
- Document the conditions and practices related to water, sanitation, and hygiene.

Data Management and Analysis

(1) **Data Entry**:

- Enter collected data into a secure database.
- Verify the accuracy of data entries.

(2) **Data Analysis**:

- Analyze the data to identify current WASH practices, social behaviors, and gaps in infrastructure.
- Use statistical software to interpret the data and generate reports.

Reporting and Dissemination

(1) **Report Writing**:

- Prepare a comprehensive report detailing the study findings, including prevalence data, risk factors, and recommendations.
- Ensure the report is clear, concise, and well-organized.

(2) **Dissemination**:

- Share the findings with relevant stakeholders, including local leaders, health authorities, and community members.
- Use the data to inform policy guidance and plan interventions for Bilharzia and intestinal worm elimination programs.

Quality Assurance

- Conduct regular team meetings to review progress and address any issues.
- Perform random checks on data entries to ensure accuracy.
- Adhere to ethical guidelines and maintain confidentiality of participant information.

Safety Considerations

- Report any safety incidents to the team leader immediately.

Appendix C. Script for Introduction of Research Team

This script is for you to use as reference when you make your first introductions in the village. It covers the most important information that should be explained to the government and church officials in the villages and study participants. Feel free to put any part or all of this script into your own words

Hello. My name is _____. My colleagues and I are from Ministry of Health. We have been assigned to your village to collect information on water, sanitation, and hygiene (WASH) practices and social behavior change (SBC) efforts to help interrupt the transmission of Bilharzia and intestinal worms by 2027. This study is conducted on behalf of the Ministry of Health, in collaboration with some NGOs, and the University of Rwanda, with the support of The END Fund.

The main objective of our study is to assess current water, sanitation, and hygiene (WASH) practices and social behaviors in the Bugesera and Ruhango districts to develop strategies for interrupting the transmission of bilharzia and intestinal worms by 2027. The results of this survey will play a critical role in providing policy guiding in the development of strategies that can help interrupt the transmission of these parasitic infections by 2027. We will conduct interviews and surveys with community members to gather information on WASH practices and social behaviors randomly from 38 villages in Ruhango and Bugesera Districts. We will also observe and document the WASH facilities in your households and communities. We will work closely with local leaders and health workers to ensure that our study aligns with the health needs and priorities of the community. We would very much appreciate your participation. All the information we collect will be used only for the purposes indicated above. Only the survey coordinators who oversee this study will have access to the data. The responses you provide and the information you give us access to will be kept strictly confidential and will not be shown to other persons.

Our visit to your village may take less than 3 hours, and perhaps as many as 4 hours if we have to wait for all participants from selected households. Participation in this assessment is voluntary. You and your community members can choose not to participate and can withdraw at any step of the screening. However, we hope that you and your community will participate fully, as information from your village is important.

If you have any questions or need further information, please do not hesitate to contact: Dr. Vedaste Ndahindwa (Tel: 0788 454 613; email: `ndahindwa@gmail.com`).

Thank you for welcoming us into your community and for your participation.

Appendix D. Consent for Interview and Focus Group Discussion

Study Title:
Needs Assessment in Areas of Bugesera and Ruhango Districts: Water, Sanitation and Hygiene (WASH) and Social Behaviour Change (WASH/SBC) to Interrupt Transmission of Bilharzia and Intestinal Worms by 2027.

Participant Identification Code: |____|____|____|____|____|____|____|

Introduction:

Hello, my name is _____. I work with Rwanda NGOs Forum on HIV/AIDS and Health Promotion. You are invited to participate in a research study conducted by Rwanda NGO Forum on HIV/AIDS and Health Promotion in collaboration with with Rwanda Biomedical center and THE END FUND. This study aims to assess the needs related to water, sanitation, and hygiene (WASH) and social behavior change (SBC) in Bugesera and Ruhango districts to develop strategies to interrupt the transmission of Bilharzia and intestinal worms by 2027.

Before you decide whether or not to participate, it is important for you to understand why the research is being conducted and what it will involve. Please read the following information carefully and feel free to ask any questions if anything is unclear.

Purpose of the Study:

The purpose of this study is to identify the current needs and challenges related to water, sanitation, and hygiene (WASH), as well as social behavior change (SBC) practices, in order to design effective interventions to interrupt the transmission of Bilharzia and intestinal worms by 2027.

Procedures:

If you agree to participate in this study, you will be asked to participate in an interview or focus group discussion that will take approximately 30 minutes.

Risks and Discomforts:

You may feel uncomfortable answering some personal questions. You are free to skip any questions you do not wish to answer. There are no significant risks associated with participating in this study.

Benefits:

There are no direct benefits to you for participating in this study. However, the information obtained from this research may help improve WASH and SBC interventions in your community, potentially reducing the incidence of Bilharzia and intestinal worm infections.

Confidentiality:

All information collected in this study will be kept confidential. Your identity will not be revealed in any reports or publications resulting from this study. The data will be stored securely and only the research team will have access to it.

Voluntary Participation:

Your participation in this study is entirely voluntary. You are free to withdraw from the study at any time without any penalty or loss of benefits to which you are otherwise entitled. If you choose to withdraw, any data collected from you will be destroyed upon your request.

Compensation:

You will not receive any compensation for participating in this study.

Contact Information:

If you have any questions or concerns about this study, you may contact:

- Dr. Vedaste NDAHINDWA at 0788 454 613.
- Nooliet KABANYANA, Executive Secretary, Rwanda NGOs Forum on HIV/AIDS and Health Promotion at 0783 699 602.
- Dr. Aimable MBITUYUMUREMYI, Division Manager of Malaria and Other Parasitic Diseases, Rwanda Biomedical Center (RBC), at 0788 486 256.

For questions about your rights as a research participant, you may contact the Secretary of the Rwanda National Ethics Committee (RNEC): Dr Marie Francoise MUKANYANGEZI at 0788 672 656.

Consent:

By signing below, you are indicating that you have read and understood the information provided above, that you have had the opportunity to ask questions, and that you agree to participate in this study.

Consent:

I, _____, from Village.: _____

Cell: _____ Sector: _____ District:_____

I have been informed about this survey. I hereby agree to participate in this Focus Group Discussion. I recognize that my consent to participate is voluntary and that I am free to withdraw this consent and quit this project at any time, and that doing so will not cause me any penalty or loss of benefits that I would otherwise be entitled to enjoy.

If agree to participate in this study.

Participant's Name: _____

Signature: _____ Date: _____

Researcher's Name: _____

Signature:_____ Date: _____

Appendix E. Inyandiko yo Kwemera ku Bushake Kwitabira Ubushakashatsi

Umutwe w'Ubushakashatsi:
Ubushakashatsi ku isuku, isukura, imyumvire n'imyitwarire bukorerwa mu turere twa Bugesera na Ruhango bugamije kunoza gahunda yo guhagarika ikwirakwizwa ry'inzoka zo mu nda na bilariziyoze bitarenze umwaka wa 2027.

Kode Iranga Uwitabiriye: |____|____|____|____|____|____|____|

Iriburiro:

Muraho. Nitwa _____, nkorera Ihuriro ry'imiryango Nyarwanda itari iya Leta ishinzwe kurwanya icyorezo cya SIDA no Guteza imbere Ubuzima. Utumiwe kwitabira ubushakashatsi bwukorwa n'Ihuriro ry'imiryango Nyarwanda itari iya Leta ishinzwe kurwanya icyorezo cya SIDA no Guteza imbere Ubuzima gifatanyije n'ikigo cy'igihugu gishinzwe ubuzima (RBC) hamwe n'ikigo THE END FUND. Ubu bushakashatsi bugamije gusuzuma ibikenewe bijyanye n'amazi, isuku, n'isuku, n'imihindagurikire y'imyitwarire mu turere twa Bugesera na Ruhango hagamijwe gushyiraho ingamba zo guhagarika ikwirakwizwa rya bilariziyoze n'inzoka zo mu nda bitarenze 2027.

Mbere yo guhitamo niba wabugiramo uruhare, ni ngombwa kuri wowe gusobanukirwa impamvu ubushakashatsi burimo gukorwa n'icyo bukubiyemo. Nyamuneka soma amakuru akurikira witonze kandi wumve neza. Ubaze ikibazo icyo ari cyo cyose niba hari ikintu kidasobanutse.

Intego y'Ubushakashatsi:

Intego y'ubu bushakashatsi ni ukumenya ibikenewe n'ibibazo bijyanye n'amazi, isuku n'isukura, hamwe no guhindura imyitwarire, hagamijwe gutegura ingamba zifatika zo guhagarika kwanduza inzoka ya bilariziyoze ndetse n'inzoka zo mu nda bitarenze umwaka wa 2027.

Uko bikorwa:

Niba wemeye kugira uruhare muri ubu bushakashatsi, urasabwa kwitabira ikiganiro cyangwa ibiganiro by'itsinda bizatwara iminota igera kuri 30.

Ingaruka n'ibibi:

Urashobora kumva bitakugwa neza mu gihe wasubiza ibibazo bimwe na bimwe bikureba. Ufite uburenganzira bwo gusimbuka ibibazo byose udashaka gusubiza. Nta ngaruka zikomeye zijyanye no kwitabira ubu bushakashatsi.

Inyungu:

Nta nyungu zitaziguye kuri wowe zo kwitabira ubu bushakashatsi. Nyamara, amakuru yakuwe muri ubu bushakashatsi ashobora gufasha kunoza ibikorwa by'amazi, isuku n'isukura ndetse no guhindura imyumvire n'imyitwarire mu gace utuyemo, bishobora kugabanya kwandura indwara ya bilharziya n'inzoka zo mu nda.

Amabanga:

Amakuru yose yakusanyirijwe muri ubu bushakashatsi azabikwa mu ibanga. Umwirondoro wawe wawe ntuzagaragazwa muri raporo cyangwa ibitabo bivuye muri ubu bushakashatsi. Amakuru azabikwa neza kandi itsinda ry'ubushakashatsi ryonyine niryo rizabigeraho.

Kugira uruhare mu bushakashatsi ku bushake:

Kuba wagira uruhare muri ubu bushakashatsi ni ku bushake bwawe rwose. Ufite n'uburenganzira bwo kubuvamo igihe icyo ari cyo cyose nta gihano cyangwa gutakaza inyungu waba ufite mu bundi bundi buryo. Mu gihe uhisemo kuva muri ubu bushakashatsi, amakuru yose watanze azateshwa agaciro mu gihe ubisabye.

Indishyi

Ntabwo uzahabwa indishyi zo kwitabira ubu bushakashatsi.

Uwo wabaza uramutse wifuza gusobanuza kuri ubu bushakashatsi

Niba ufite ikibazo cyangwa impungenge kuri ubu bushakashatsi, ushobora guhamagara:

- Dr. Vedaste Ndahindwa kuri Tel 0788 454 613.
- Nooliet KABANYANA kuri Tel 0783 699 602.
- Dr. Aimable MBITUYUMUREMYI, kuri Tel 0788 486 256.

Ku bibazo bijyanye n'uburenganzira bwawe nk'uwitabira ubushakashatsi, ushobora kuvugana n'Umunyamabanga wa Komite y'imyitwarire y'u Rwanda (RNEC): Dr Marie Francoise MUKANYANGEZI kuri Tel 0788672656.

Kwemera

Mu gusinya aha hasi, uraba werekanye ko wasomye kandi wunvise amakuru yatanzwe haruguru, ko wagize amahirwe yo kubaza ibibazo, kandi ko wemeye kwitabira ubu bushakashatsi.

Kwiyemerera:

Jyewe, _____, Umudugudu: _____

Akagari: _____ Umurenge: _____ Akarere:_____

Namenyeshejwe ibijyanye n'ubushakashatsi. Nemeye kugira uruhare muri ubu bushakashatsi nk'ubukorerwaho. Nzi ko uburenganzira bwanjye bwo kwitabira ari ku bushake kandi ko mfite uburenganzira bwo kuvanaho iki cyemezo kandi nkaba nava muri ubu bushakashatsi igihe icyo ari cyo cyose, kandi ko kubikora bidashobora kunkururira igihano cyangwa gutakaza inyungu cyangwa Ibyiza byo kwishimira.

Nemeye kwitabira ubu bushakashatsi.

Izina ry'uwitabiriye: _____

Umukono: _____ Itariki: _____

Izina ry'Umushakashatsi: _____

Umukono:_____ Itariki: _____

Appendix F. Consent Form for to Participate in the Household Survey

Study Title:
Needs Assessment in Areas of Bugesera and Ruhango Districts: Water, Sanitation and Hygiene (WASH) and Social Behaviour Change (WASH/SBC) to Interrupt Transmission of Bilharzia and Intestinal Worms by 2027.

Household Identification Code: |____|____|____|____|____|____|____|

Introduction:

Hello, my name is _____. I work with Rwanda NGOs Forum on HIV/AIDS and Health Promotion. You are invited to participate in a research study conducted by Rwanda NGO Forum on HIV/AIDS and Health Promotion in collaboration with with Rwanda Biomedical center and End Fund. This study aims to assess the needs related to water, sanitation, and hygiene (WASH) and social behavior change (SBC) in Bugesera and Ruhango districts to develop strategies to interrupt the transmission of Bilharzia and intestinal worms by 2027.

Before you decide whether or not to participate, it is important for you to understand why the research is being conducted and what it will involve. Please read the following information carefully and feel free to ask any questions if anything is unclear.

Purpose of the Study:

The purpose of this study is to identify the current needs and challenges related to water, sanitation, and hygiene (WASH), as well as social behavior change (SBC) practices, in order to design effective interventions to interrupt the transmission of Bilharzia and intestinal worms by 2027.

Procedures:

If you agree to participate in this study, you will be asked to:

(1) provide information on your household's water, sanitation, and hygiene practices.
(2) share your knowledge and behaviors related to preventing Bilharzia and intestinal worm infections.
(3) allow the researchers to observe and document the WASH facilities in your household or community.

Risks and Discomforts:

You may feel uncomfortable answering some personal questions. You are free to skip any questions you do not wish to answer. There are no significant risks associated with participating in this study.

Benefits:

There are no direct benefits to you for participating in this study. However, the information obtained from this research may help improve WASH and SBC interventions in your community, potentially reducing the incidence of Bilharzia and intestinal worm infections.

Confidentiality:

All information collected in this study will be kept confidential. Your identity will not be revealed in any reports or publications resulting from this study. The data will be stored securely and only the research team will have access to it.

Voluntary Participation:

Your participation in this study is entirely voluntary. You are free to withdraw from the study at any time without any penalty or loss of benefits to which you are otherwise entitled. If you choose to withdraw, any data collected from you will be destroyed upon your request.

Compensation:

You will not receive any compensation for participating in this study.

Contact Information:

If you have any questions or concerns about this study, you may contact:

- Dr. Vedaste NDAHINDWA at 0788 454 613.
- Nooliet KABANYANA, Executive Secretary, Rwanda NGOs Forum on HIV/AIDS and Health Promotion at 0783 699 602.
- Dr. Aimable MBITUYUMUREMYI, Division Manager of Malaria and Other Parasitic Diseases, Rwanda Biomedical Center (RBC), at 0788 486 256.

For questions about your rights as a research participant, you may contact the Secretary of the Rwanda National Ethics Committee (RNEC): Dr Marie Francoise MUKANYANGEZI at 0788 672 656.

Consent:

By signing below, you are indicating that you have read and understood the information provided above, that you have had the opportunity to ask questions, and that you agree to participate in this study.

Consent:

I, _____, from Village.: _____

Cell: _____ Sector: _____ District:_____

I have been informed about this survey. I hereby agree to participate in this Focus Group Discussion. I recognize that my consent to participate is voluntary and that I am free to withdraw this consent and quit this project at any time, and that doing so will not cause me any penalty or loss of benefits that I would otherwise be entitled to enjoy.

If agree to participate in this study.

Participant's Name: _____

Signature: _____ Date: _____

Researcher's Name: _____

Signature:_____ Date: _____

Appendix G. Inyandiko yo Kwemera ku Bushake Kwitabira Ubushakashatsi

Umutwe w'Ubushakashatsi:
Ubushakashatsi ku isuku, isukura, imyumvire n'imyitwarire bukorerwa mu turere twa Bugesera na Ruhango bugamije kunoza gahunda yo guhagarika ikwirakwizwa ry'inzoka zo mu nda na bilariziyoze bitarenze umwaka wa 2027.

Kode Iranga Urugo: |____|____|____|____|____|____|____|

Iriburiro:

Muraho. Nitwa _____, nkorera Ihuriro ry'imiryango Nyarwanda itari iya Leta ishinzwe kurwanya icyorezo cya SIDA no Guteza imbere Ubuzima. Utumiwe kwitabira ubushakashatsi bwukorwa n'Ihuriro ry'imiryango Nyarwanda itari iya Leta ishinzwe kurwanya icyorezo cya SIDA no Guteza imbere Ubuzima gifatanyije n'ikigo cy'igihugu gishinzwe ubuzima (RBC) hamwe n'ikigo THE END FUND. Ubu bushakashatsi bugamije gusuzuma ibikenewe bijyanye n'amazi, isuku, n'isuku, n'imihindagurikire y'imyitwarire mu turere twa Bugesera na Ruhango hagamijwe gushyiraho ingamba zo guhagarika ikwirakwizwa rya bilariziyoze n'inzoka zo mu nda bitarenze 2027.

Mbere yo guhitamo niba wabugiramo uruhare, ni ngombwa kuri wowe gusobanukirwa impamvu ubushakashatsi burimo gukorwa n'icyo bukubiyemo. Nyamuneka soma amakuru akurikira witonze kandi wumve neza. Ubaze ikibazo icyo ari cyo cyose niba hari ikintu kidasobanutse.

Intego y'Ubushakashatsi:

Intego y'ubu bushakashatsi ni ukumenya ibikenewe n'ibibazo bijyanye n'amazi, isuku n'isukura, hamwe no guhindura imyitwarire, hagamijwe gutegura ingamba zifatika zo guhagarika kwanduza inzoka ya bilariziyoze ndetse n'inzoka zo mu nda bitarenze umwaka wa 2027.

Uko bikorwa:

Niba wemeye kugira uruhare muri ubu bushakashatsi, urasabwa:

(1) gutanga amakuru ku birebana n'mazi mukoresha mu rugo rwawe, ibijyanye n'isuku hamwe n'isukura (urugero: gukoresha ubwiherero).
(2) gusangira ubumenyi bwawe n'imyitwarire ijyanye no kwirinda inzoka ya bilariziyoze hamwe n'inzoka zo mu nda.
(3) kwemerera abashakashatsi kureba no kwandika ibikoresho byifashishwa ku mazi, isuku n'isukura mu rugo rwawe cyangwa aho utuye.

Ingaruka n'ibibi:

Urashobora kumva bitakugwa neza mu gihe wasubiza ibibazo bimwe na bimwe bikureba. Ufite uburenganzira bwo gusimbuka ibibazo byose udashaka gusubiza. Nta ngaruka zikomeye zijyanye no kwitabira ubu bushakashatsi.

Inyungu:

Nta nyungu zitaziguye kuri wowe zo kwitabira ubu bushakashatsi. Nyamara, amakuru yakuwe muri ubu bushakashatsi ashobora gufasha kunoza ibikorwa by'amazi, isuku n'isukura ndetse no guhindura imyumvire n'imyitwarire mu gace utuyemo, bishobora kugabanya kwandura indwara ya bilharziya n'inzoka zo mu nda.

Kugira ibanga:

Amakuru yose yakusanyirijwe muri ubu bushakashatsi azabikwa mu ibanga. Umwirondoro wawe wawe ntuzagaragazwa muri raporo cyangwa ibitabo bivuye muri ubu bushakashatsi. Amakuru azabikwa neza kandi itsinda ry'ubushakashatsi ryonyine niryo rizabigeraho.

Kugira uruhare mu bushakashatsi ku bushake:

Kuba wagira uruhare muri ubu bushakashatsi ni ku bushake bwawe rwose. Ufite n'uburenganzira bwo kubuvamo igihe icyo ari cyo cyose nta gihano cyangwa gutakaza inyungu waba ufite mu bundi bundi buryo. Mu gihe uhisemo kuva muri ubu bushakashatsi, amakuru yose watanze azateshwa agaciro mu gihe ubisabye.

Indishyi

Ntabwo uzahabwa indishyi zo kwitabira ubu bushakashatsi.

Uwo wabaza uramutse wifuza gusobanuza kuri ubu bushakashatsi

Niba ufite ikibazo cyangwa impungenge kuri ubu bushakashatsi, ushobora guhamagara:

- Dr. Vedaste Ndahindwa kuri Tel 0788 454 613.
- Nooliet KABANYANA kuri Tel 0783 699 602.
- Dr. Aimable MBITUYUMUREMYI, kuri Tel 0788 486 256.

Ku bibazo bijyanye n'uburenganzira bwawe nk'uwitabira ubushakashatsi, ushobora kuvugana n'Umunyamabanga wa Komite y'imyitwarire y'u Rwanda (RNEC): Dr Marie Francoise MUKANYANGEZI kuri Tel 0788672656.

Kwemera

Mu gusinya aha hasi, uraba werekanye ko wasomye kandi wunvise amakuru yatanzwe haruguru, ko wagize amahirwe yo kubaza ibibazo, kandi ko wemeye kwitabira ubu bushakashatsi.

Kwiyemerera:

Jyewe, _____, Umudugudu: _____

Akagari: _____ Umurenge: _____ Akarere:_____

Namenyeshejwe ibijyanye n'ubushakashatsi. Nemeye kugira uruhare muri ubu bushakashatsi nk'ubukorerwaho. Nzi ko uburenganzira bwanjye bwo kwitabira ari ku bushake kandi ko mfite uburenganzira bwo kuvanaho iki cyemezo kandi nkaba nava muri ubu bushakashatsi igihe icyo ari cyo cyose, kandi ko kubikora bidashobora kunkururira igihano cyangwa gutakaza inyungu cyangwa Ibyiza byo kwishimira.

Nemeye kwitabira ubu bushakashatsi.

Izina ry'uwitabiriye: _____

Umukono: _____ Itariki: _____

Izina ry'Umushakashatsi: _____

Umukono:_____ Itariki: _____

Focus Group Discussion Guide

Welcome and Introduction

- Welcome participants and thank them for their time.
- Introduce yourself and the purpose of the discussion.
- Explain the objectives of the needs assessment on WASH and SBC in Bugesera and Ruhango districts.
- Emphasize confidentiality and that there are no right or wrong answers.
- Obtain verbal consent for participation and audio recording

Ice Breaker

Ask participants to introduce themselves and share one thing they enjoy about their community.

Discussion Topics and Questions

Topic 1: Water Access and Quality

(1) Primary Water Sources:

- What are your main sources of water for drinking?
  Muri aka gace, ni hehe h'ingebxi mukura amazi yo kunywa?
- How reliable are these water sources throughout the year?
  Ugereranyije, aya mazi mwizera kuyabona mute mu gihe cyumwaka

(2) Water Quality:

- How would you describe the quality of the water you use?
  Amazi mukoresha muri aka gace mubona afite ubuziranenge bungana iki?
- Do you or your neighbors treat water before using it? If yes, how?
  Abatuye aka gace batunganyabate amazi mbere yo kuyanywa?

(3) Challenges:

- What challenges do you face in accessing clean water?
  Muri rusange ni izihe mbogamizi muhura nazo zo kubona amazi meza?

Topic 2: Sanitation Facilities

(1) Sanitation Practices:

- What types of toilet facilities are commonly used in your community?
  Ni ubuhe bwoko bw'umusarani abatuye aka gace bakoresha?
- How do you feel about the cleanliness and availability of these facilities?
  Mubona mute ubwiherero bwo muri aka gace n'isuku zabwo?

(2) Waste Management:

- How is waste (human and other types) managed in your community?
  Ni gute imyanda ishyingurwa muri aka gace?

(3) Challenges:

- What are the main challenges you face regarding sanitation?
  Ni izihe mbogamizi muhura nazo zijyanye n'isuku n'isukura?

Topic 3: Hygiene Practices

(1) Handwashing:

- How do household members wash their hands?
  Ni gute abagize ingo muri aka gace bibuka gukaraba intoki?
- Is soap always available for handwashing near the toilets?
  Ingo zikunze kutegura isabune yo gukaraba intoke?

(2) Hygiene Education:

- Have you received any education or training on good hygiene practices? From whom?
  Ni izihe nyigisho cyangwa amahugurwa mwabonye kubyerekeye isuku? Ni nde wayatanze, ni kangahe mujya muyahabwa, abera hehe?

(3) Challenges:

- What obstacles do you encounter in maintaining good hygiene?
  Ni izihe mbogamizi muhura nazo ku binjyanye n'isuku muri rusange?

Topic 4: Knowledge and Awareness

(1) Health Risks:

- What are the health risks associated with poor WASH practices?
  Ni izihe ngaruka zijyanye no kugira isuku nkeya

(2) Sources of Information:

- How do you usually receive information about health and hygiene? Which sources do you trust the most?
  Ni gute mujya mubona amakuru ajyanye n'ubuzima cyangwa isuku? Ni ayahe makuru mukenze kwizera cyane?

Topic 5: Social Behavior and Community Engagement

(1) Community Activities:

- What activities does your community engage in to improve WASH conditions?
  Ni ibihe bikorwa imidugudu yanyu yitabira mu rwego rwo kuzamura isuku n'isukura muri aka gace?
- How effective do you think these activities are?
  Ni gute mubona izi bikorwa bitanga umusaruro?

(2) Cultural Practices:

- What cultural beliefs or practices that affect WASH behaviors in your community?
  Ni iyihe myizerere ishingiye ku muco yaba ituma isuku n'isukura bitagerwaho neza muri aka gace?

(3) Community Participation:

- How involved is your community in initiatives to promote better WASH practices?
  Ni gute abatuye umudugudu bitabira ingamba zigamije kunoza isuku n'isukura?

(4) Suggestions for Improvement:

- What suggestions do you have for improving water access, sanitation, and hygiene in your community?
  Ni ibihe bitekerezo mwatanga ngo hazamurwe kubona amazi meza, isuku n'isukura muri uyu mudugudu?
- How can the community be more engaged in these improvements?
  Ni gute abatuye uyu mudugudu barushaho kwitabira ibi bikorwa?

Topic 6: Specific to Bilharzia and Intestinal Worms

(1) What can you tell us about STHs? Probe: examples, causes, prevention
Ni iki mwatubwira mwaba muzi ku nzoka zo munda? Tanga ingero, ikibitera, uko zirindwa

(2) What can you tell us about SCH? Probe with meaning of SCH, examples, causes, prevention
Ni iki mwatubwira mwaba muzi kuei birariziyoze? Tanga ingero, ikibitera, uko zirindwa

(3) What are the interventions do you know for STH and SCH control? Probe with prevention and case management
Ni izihe ngamba muzi zigamije gukumira birariziyoze n'indwara zo mu nda? Ku bijyanye no kwizirinda n'uko zivurwa

(4) What do you know about Mass Drug Administration for STH and SCH? Probe with how it is conducted in their areas, what are deworming tablets administered, their perception on it, strength and weakness of it.
Ni iki muzi ku miti itangwa igamije kwirinda inzoka zo mu nda? Itangwa ite muri aka gace, ni ibihe binini bitangwa, abantu babifata bate, ni izhe ntege nke mubonama cg imbaraga bifite?

(5) Where do you normally get information from about STHs, SCH and MDA? Probe with most used source of information, most trusted source of information.
Ni hehe mukunze kubona amakuru ajyanye na birariziyoze, inzoka zo mu nda ndetse n'itangwa ry'ibinini by'inzoka? Nihe mukura amakuru yizewe?

(6) What do you think is the best way for social mobilization (deliver message) for STH, SCH, and MDA?
Ni ubuhe buryo mwumva bwaba bwiza mu gukangura imbaga ku byerekeye birariziyoze, inzoka zo mu nda no gutanga ibinini by'inzoka?

(7) What do you think that prevent people from getting deworming tablets?
Mutekereza ari iki kibuza abantu bamwe gufata ibinini by'inzoka?

(8) What do think that can be improved or added in social mobilization interventions for STHs, SCH, and MDA?
Ni iki mwumva cyakosoka mu bukangurambaga bw'ingamba zigamije kurwanya birariziyoze, inzoka zo mu nda no gufata ibinini by'inzoka?

Summary:

- Summarize the key points discussed.
- Ask participants if there is anything else they would like to add.

Next Steps:

- Explain the next steps in the needs assessment process.
- Thank the participants for their valuable insights and time.

Notes for Facilitator:

- Ensure that all participants have an opportunity to speak and share their views.
- Be mindful of cultural sensitivities and ensure a respectful and inclusive discussion environment.
- Use probing questions to gather more in-depth responses when necessary.

Key Informant Interview Guide

Introduction

Welcome and Introduction

- Thank the key informant for their time and participation.
- Introduce yourself and the purpose of the interview.
- Explain the objectives of the needs assessment on WASH and SBC in Bugesera and Ruhango districts.
- Emphasize confidentiality and that their insights are valuable for the study.
- Obtain verbal consent for participation and audio recording.

Background Information

Could you please introduce yourself and describe your role in the community or organization?

Interview Topics and Questions

Topic 1: Water Access and Quality

(1) Primary Water Sources:

- What are the main sources of water for the communities in this district?
  Ni hehe h'ingenzi abaturage bakura amazi bakoresha buri munsi
- How would you assess the reliability and sufficiency of these water sources?
  Mubona ayo mazi abaturage bakoresha yizewe ate cg ahagije bingana iki?

(2) Water Quality:

- How would you describe the quality of water available to the communities?
  Ni gute mubona ubuziranenge y'aya mazi abaturage bakoresha
- What measures are currently in place to ensure water safety?
  Ni izihe ngamba ziri muri aka karere kugira ngo abaturage babone amazi meza?

(3) Challenges:

- What are the major challenges related to water access and quality in this district?
  Ni izihe mbogamizi abaturage bafite zo kubona amazi meza muri aka Karere?

Topic 2: Sanitation Facilities

(1) Sanitation Practices:

- What types of sanitation facilities are commonly used in the communities?
  Ni ubuhe bwoko bw'ubwiherero bukunze kuboneka inaha?
- How do you evaluate the accessibility and adequacy of these facilities?
  Ni gute mubona ubuziranenge bw'ubwiherero abaturage bakoresha?

(2) Waste Management:

- How is waste, particularly human waste, managed in these communities?
  Ni gute imyanda ishyingurwa muri aka gace, cyane cyane imyanda yitumwa n'abantu?

(3) Challenges:

- What are the key challenges related to sanitation facilities and waste management?
  Ni izihe mbogamizi zirebana n'isukura cg gushyingura imyanda muri kano gace?

Topic 3: Hygiene Practices

(1) Handwashing and Hygiene:

- What are the common hygiene practices in the communities, especially regarding handwashing?
  Ni iyihe myitwarire irebana n'isuku yiganje inaha, cyane cyane irebana no gukaraba intoki?
- How accessible are hygiene products like soap and clean water for handwashing?
  Ni gute abaturage babasha kubona ibikoresho by'isuku n'isabuni cg amazi meza yo gukaraba intoki?

(2) Hygiene Promotion:

- Are there any ongoing programs or initiatives promoting good hygiene practices? Who conducts these programs?
  Haba nari gahunda ihari igamije guteza imbere isuku muri aka gace?

(3) Challenges:

- What obstacles do community members face in maintaining good hygiene?
  Ni izihe mbogamizi abaturage bagira mu bijyanye no kubungabumba isuku?

Topic 4: Knowledge and Awareness

(1) Health Risks Awareness:

- How aware are community members about the health risks associated with poor WASH practices, specifically bilharzia and intestinal worms? What are the common misconceptions or gaps in knowledge regarding these issues?
  Ni gute baba abaturage b'inaha bazi ingaruka zijyanye n'umwanda, cyane cyane kuri birariziyoze n'inzoka zo mu nda?

(2) Sources of Information:

- What are the primary sources of information about health and hygiene for the communities? Which sources are considered most trustworthy?
  Ni hehe abaturage bakura amakuru yerekeye isuku n'isukura? Ni ayahe makuru abaturage bakunze kwizera cyane?

Topic 5: Social Behavior and Community Engagement

(1) Community Activities:

- How involved are community members in activities aimed at improving WASH conditions?
  Ni gute abaturage bitabira ibikorwa bigamije kuzamura isuku n'isukura?
- What role do local leaders and organizations play in these initiatives?
  Ni uruhe ruhare abayobozi mu nzego z'ibanze bagira muri ibi bikorwa?

(2) Cultural and Social Practices:

- Are there any cultural beliefs or practices that influence WASH behaviors in these communities? Can you provide examples?
  Haba hari imyizerere ishingiye ku muco yaba ibangamiye ingamba z'isuku n'isukura mu midugudu?

(3) Behavior Change:

- What behaviors need to change to reduce the transmission of bilharzia and intestinal worms?
  Ni iyihe myumvire yakagombye guhinduka kugira ngo hagabanuke ikwirakwira rya birariziyoze n'inzoka zo mu nda?
- What strategies have been effective in promoting behavior change in these areas?
  Ni izihe ngamba zatanze umusaruro mu guhindura imyifatire muri utu duce?

(4) Community Participation:

- How active is the community in participating in hygiene promotion campaigns and sanitation initiatives?
  Ni gute abaturage bitabira ubukangurambaga kw'isuku n'isukura?

(5) Support and Resources:

- What support or resources are needed to improve WASH conditions and promote better hygiene practices?
  Ni ubuhe bufasha cyangwa ubushobozi bukenewe kugirango isuku n'isukura biza-muke muri aka gace?

Topic 6: Specific to Bilharzia and Intestinal Worms

(1) Disease Prevalence and Impact:

- How prevalent are bilharzia and intestinal worms in the districts?
  Birariziyoze n'inzoka zo munda biri ku kigera kingana iki muri aka gace?
- What impact do these diseases have on the community's health and wellbeing?
  Ni izihe ngaruka izi ndwara zigira kubuzima no ku mibereho myiza y'abatuye aka gace?

(2) Prevention Practices:

- What practices are followed to prevent the transmission of these diseases?
  Ni izihe ngamba mukurukiza zigamije gukumira ikwirakwiza ry'izi ndwara?

(3) Prevention and Treatment:

- What measures are in place for the treatment of bilharzia and intestinal worms? How effective are these measures?
  Ni izihe ngamba ziri muri aka gace zigamije kuvura birariziyoze n'inzoka zo mu nda?

(4) Government and NGO Initiatives:

- What are the key government and NGO initiatives addressing WASH and SBC in the district?
  Ni izihe ngamba za Leta n'iz'imiryango itari iya Leta zigamije gusubiza ibibazo by'isuku n'isukura ndetse no guhindura imyumvire muri aka Karere
- How successful have these initiatives been in addressing the issues?
  Ni uwuhe musaruro izi ngamba zatanze?

(5) Recommendations:

- Based on your experience, what are your recommendations for improving WASH services and SBC to combat bilharzia and intestinal worms?
  Ugendeye ku bunararibonye bwawe, ni izihe nama watanga zigamije kuzamura urugero rw'isuku n'isukura no kurwanya birariziyoze n'inzoka zo mu nda?

Summary:

- Summarize the key points discussed during the interview.
- Ask the key informant if they have any additional comments or suggestions.

Next Steps:

- Explain the next steps in the needs assessment process.
- Thank the key informant for their valuable insights and time.

Notes for Facilitator:

- Ensure to probe further into responses to gather in-depth information.
- Be respectful of the key informant's time and knowledge.
- Adapt questions as necessary based on the informant's expertise and role.

Household Questionnaire

Introduction
Hello, my name is _____. I work with Rwanda NGOs Forum on HIV/AIDS and Health Promotion. You are invited to participate in a research study conducted by Rwanda NGO Forum on HIV/AIDS and Health Promotion in collaboration with with Rwanda Biomedical center and End Fund. This study aims to assess the needs related to water, sanitation, and hygiene (WASH) and social behavior change (SBC) in Bugesera and Ruhango districts to develop strategies to interrupt the transmission of Bilharzia and intestinal worms by 2027.

Questionnaire Number: |____|____|____|____|

1. Demographic and Socio-economic Information

No	Questions	Answers/ codes	Skip to
A1	Date of interview *Itariki amakuru akusanyirijwe ho*	___ ___/___ ___/___ ___ ___ ___ *dd mm yyyy*	
A2	Interviewer's name *Izina ry'ubaza*	_____	
A3	Team leader's name *Izina ry'umugenzuzi*	_____	
A4	District *Akarere*	○ *Bugesera* ○ *Ruhango*	
A5	Sector *Umurenge*	|____|____|____|____|	
A6	Cell *Akagari*	|____|____|____|____|____|____|	
A7	Village *Umudugudu*	|____|____|____|____|____|____|____|____|	
A8	Interviewee's relationship to the household head *Isano ubazwa afitanye na nyirurugo*	○ *Household head (Nyirurugo)* ○ *Spouse (Uwo bashakanye)* ○ *Adult child (Umwana mukuru)* ○ *Grand father (Sogokuru)* ○ *Grand mother (Nyogokuru)* ○ *Other, specify (Abandi, bavuge)* _____	
A9	How old are you? *Ufite imyaka ingahe?*	|____|____|____|	
A10	What is your gender? *Igitsina cy'ubazwa*	○ *Male (Gabo)* ○ *Female (Gore)*	

No	Questions	Answers/ codes	Skip to
A11	What is your religion *Ni irihe dini ryawe*	○ *Catholic church (Gatolika)* ○ *Pentecost churches (Pentekote)* ○ *Anglican church (Anglikane)* ○ *Adventist church (Adventiste)* ○ *Muslim (Umusilamu)* ○ *Jehovah's witness (Umuhamya wa Yehova)* ○ *Other, specify (Ibindi, sobanura)* _____	
A12	What is your marital status *Ufite irihe ranga mimerere?*	○ *Married (Narashatse)* ○ *Cohabiting (Tubana tutarasezeranye)* ○ *Single (Ingaragu)* ○ *Widowed (Umupfakazi)* ○ *Divorced (Twahawe gatanya)* ○ *Separated (Twaratandukanye)*	
A13	Are you able to read and write? *Uzi gusoma no kwandika?*	○ *Yes (Yego)* ○ *No (Oya)*	
A14	Completed education level *Ni iki cyiciro cy'amashuri warangije?*	○ *No education (Ntayo)* ○ *Nursery (Ayincuke)* ○ *Primary (Abanza)* ○ *Secondary (Ayisumbuye)* ○ *University (Kaminuza)* ○ *Vocational (Imyuga)* ○ *Literacy classes only (Gusoma no kwandika gusa)*	
A15	How many years have you lived in this village? *Ni imyaka ingahe umaze uba muri uyu mudugudu*	Years: |____|____|____|	
A16	What is your major occupation currently? *Ni uwuhe murimo ukora*	○ *Have no Job (Nta kazi mfite)* ○ *Farmer (Umuhinzi)* ○ *Fisherman (Umurobyi)* ○ *Daily labourer (Nyakabyizi)* ○ *Teacher (Umwarimu)* ○ *Student (Umunyeshuri)* ○ *Government employee (Umukozi wa Leta)* ○ *Private employee (Umukozi w'Abikorera)* ○ *Self-employee (Uwikorera)* ○ *Housewife (Nkorera urugo rwanjye)* ○ *Retired (Mu kiruhuko cy'izabukuru)* ○ *Other, specify (Ibindi, sobanura)* _____	
A17	Household number *Nomero iranga urugo*	|____|____|____|____|	
A18	Name of the household head *Izina ry'umukuru w'urugo*	_____	

2. Households Information

No	Questions	Answers/ codes	Skip to
Household information on socio-economic and STH exposure			
B1	How many are you in your households? *Muri bangahe muri uru rugo?*	|____|____|	
B2	How many children under 5 years are there in your households? *Ni abana bangahe bari munsi y'imyaka 5 bari muri uru rugo?*	|____|	
B3	On average, what amount in RWF do you spend on daily basis? *Ugereranyije, urugo rwanyu rukoresha amafaranga angahe (RWF) ku munsi?*	○ *Less than 200 (Munsi ya 200)* ○ *Between 200 and 500 (Hagati ya 200 na 500)* ○ *Between 500 and 1.000 (Hagati ya 500 na1,000)* ○ *Between 1,000 and 3,000 (Hagati ya 1,000 na 3,000)* ○ *Between 3,000 and 5,000 (Hagati ya 3,000 na 5,000)* ○ *Between 5,000 and 10,000 (Hagati ya 5,000 na 10,000)* ○ *10,000 and above (10,000 no kuzamura)*	
B4	What is your main source of water for domestic use? *Ni hehe mukura amazi mukoresha muri uru rugo rwanyu?*	○ *Protected dug well (Iriba ryubakiye)* ○ *Unprotected dug well (Iriba ritubakiye)* ○ *Borehole or tubewell (Amazi aturutse mu butaka/ Nayikondo)* ○ *Protected spring (Iriba rusange ryubakiye)* ○ *Unprotected spring (Iriba rusange ritubakiye)* ○ *Rainwater (Amazi y'imvura)* ○ *Surface water (Amazi atemba n'adatemba/ Imigezi, ibiyaga, ibishanga, ibidendezi)* ○ *Piped into dwelling (Amazi ari mu nzu)* ○ *Piped into yard or plot (Amazi mu rugo/ mu mbuga)* ○ *Piped into public tap (Ivomo/ Robine rusange)* ○ *Bottled water (Amazi ari mu icupa)* ○ *Tanker truck (Ikamyo itwara amazi)* ○ *From vendors (Kubacuruza amazi)* ○ *Other, specify (Ibindi, sobanura)* _____	
B5	How long does it normally take you to fetch water (Roundtrip) including queuing time or wait to fill the water vessel (in minutes)? *Bitwara igihe kingana iki (mu minota) kujya no kuva kuvoma amazi ku ivomo ry'ibanze, ubariyemo igihe utegereza ngo uvome?*	○ *0 - 30 min (Hagati y'iminota 0 na 30)* ○ *31 - 60 min (Hagati y'iminota 31 na 60)* ○ *1h - 2hrs (Hagati y'isaha n'abiri)* ○ *More than 2 hrs (Hejuru y'amasaha 2)*	
B6	If you pay to access the safe water, how would you classify the price for you? *Niba amazi mukoresha muyishyura, wagereranya ute igiciro cyayo ku bwanyu?*	○ *I do not pay (Sinishyura)* ○ *Slightly low price (Kiri hasi gato)* ○ *Affordable price (Kirakwiye)* ○ *Slightly low price (Kiri hejuru gato)* ○ *Moderate high price (Kirihejuru bigereranyije)* ○ *High price (Kirahanitse)*	

No	Questions	Answers/ codes	Skip to
B7	Do you treat water for drinking in your household? *Mwaba mutunganya amazi yo kunywa?*	○ *Yes (Yego)* ○ *No (Oya)*	Yes ➟ B9
B8	If NO, why you do not treat water for drinking? *Niba ari oya, ni ukubera iki mudatunganya amazi yo kunywa?*	○ *No money to buy products (chemicals, charcoal, wood) (Ntamafaranga yo kugura imiti isukura cg amakara/inkwiti byo gukoresha)* ○ *No time for water treatment (Ntamwanya wo kuyasukura ngira)* ○ *Tape water is already treated by WASAC (Amazi ya WASAC aba asukuye)* ○ *Ground water (Iriba) is safe (Amazi yiriba aba yizewe)* ○ *Rain water is safe (Amazi y'imvura aba yizewe)* ○ *Not necessary (Si ngombwa)* ○ *Other, specify (Ibindi, sobanura)* _____	
B9	If YES, what kind of treatment? *Niba ari yego, mukoresha iki musukura amazi yo kunywa?*	○ *Boiling water (Guteka amazi)* ○ *Filtration using filters (Kuyungurura ukoresheje filitre)* ○ *Filtration using other means (Kuyungurura ukoresheje ubundi buryo)* ○ *Chemical disinfection (e.g Sur-eau) (Gukoresha imiti yabugenewe (Sur-eau))* ○ *Storage - Long standing after fetching (Kuyabika igihe kirekire agacayuka)* ○ *Other, specify (Ibindi, sobanura)* _____	
B10	What means do you use to store treated water? *Ni ibihe bikoresho mukoresha mubika amazi mwasukuye cyangwa mwatunganyije?*	○ *Small Jerican <6L tightly covered (Ijerekani nto ipfundikiye neza)* ○ *Closed bucket (Indobo ipfundikiye)* ○ *Open tool (Igikoresho kidapfundikiye)* ○ *Any other tool tightly covered (Ikindi gikoresho gipfundikiye neza)*	
B11	Does your household own a toilet or latrine? *Mwaba mufite umusarani?*	○ *Yes (Yego)* ○ *No (Oya)*	Yes ➟ B13
B12	If NO, where do your household member defecate? *Niba ari oya, mukoresha ubuhe bwiherero?*	○ *Neighbours (Kujya mubaturanyi)* ○ *Public Toilettes (Ubwiherero rusange)* ○ *Schools (Kumashuri)* ○ *Church (Kurusengero)* ○ *Bush/ banana plantation (Mu bihuru/ mu rutoki)* ○ *Other, specify (Ibindi, sobanura)* _____	
B13	According to you, what are the criteria for an improved latrine? *Ku bwawe, ni ibiki bigize umusarane wujuje ubuziranenge?*	□ *I do not know (Simbizi)* □ *Minimum hole of 1m minimum left (Umwobo ufite byibura metero 1)* □ *Good slab/ floor (Umwobo utwikiriye neza)* □ *Walls for privacy (Inkuta zitanga ubwiherero)* □ *Good roof (Umusarani usakaye)* □ *Door (Umusarani ukinze)* □ *Toilet's hole covered (Umwobo w'umusarane upfundikiye)*	DN ➟ B15

No	Questions	Answers/ codes	Skip to
B14	What criteria of an improved latrine do your household's toilet/latrine fulfill? *Muri ibyo bigize ubuziranenge by'umusarane, ni ibihe umusarane wanyu waba wujuje?*	☐ *I do not know (Simbizi)* ☐ *Minimum hole of 1m minimum left (Umwobo ufite byibura 1m)* ☐ *Good slab/ floor (Umwobo utinze cg utwikiriye neza)* ☐ *Walls for privacy (Inkuta zitanga ubwiherero)* ☐ *Good roof (Umusarani usakaye)* ☐ *Door (Umusarani ukinze)* ☐ *Toilet's hole covered (Umwenge w'umusarani ufundikirwa)*	
B15	How deep in meters was the pit of your toilet when you initially created it? *Umusarane wanyu wari ufite umwobo wa metero zingahe igihe wacukurwaga?*	○ *Less than 1m (Munsi ya metero imwe)* ○ *Between 1 and 2m (Hagati ya metero 1 - 2)* ○ *Between 3-6 m (Hagati ya metero 3 - 6)* ○ *More than 6 m (Hejuru ya metero 6)* ○ *Don't know (Simbizi)*	> 6 ➟ B18 DN ➟ B18
B16	Do you know that the standard toilet must have minimum of 6 meters of the pit? *Waba uzi ko umwobo w'umusarane wakagombye kuba ufite byibura metero 6?*	○ *Yes (Yego)* ○ *No (Oya)*	
B17	What are reasons for not digging dip your toilet until the standard of 6 meters? *Ni yihe mpamvu yatumye mudacukura umusarane wujuje byibura metero 6?*	○ *The soil is so fragile or sandy (Ubutaka buroroshye)* ○ *The ground is so water-leaking (Ubutaka budafata amazi)* ○ *The soil is so hard (Ubutaka bukomeye cyane)* ○ *The ground is too rocky (Ubutaka ni urutare)* ○ *Negligence (Kutabyitaho)* ○ *No money / poverty (Nta mafaranga/ Ubukene)* ○ *Other, specify (Ibindi, sobanura)* _____	
B18	At which age does your child start using the toilet? *Ni ku yihe myaka umwana wanyu atangira gukoresha umusarani?*	|____|____|	
B19	Before the age of using the toilet, where does he/she defecate and where you dispose feces? *Umwana utaratangira gukoresha umusarani, yituma he/ akoresha iki, umwanda ushyirwa he?*	○ *Pot and we put feces into toilet (Kwituma ku kintu nyuma tugashyira mu musarane)* ○ *On the soil and we put feces into toilet (Kwituma hasi, nyuma tugashyira mu musarane)* ○ *On the soil and feces are buried (Kwituma hasi, hanyuma tukarenzaho igitaka)* ○ *Other, specify (Ibindi, sobanura)* _____	
B20	Do the household always have water and soap for hand washing at toilet? *Ese urugo rwanyu ruhorana amazi n'isabune iruhande y'ubwiherero?*	○ *Yes (Yego)* ○ *No (Oya)*	
B21	Do you see flies circulating in your household? *Mujya mubona isazi ziguruka mu nzu yanyu?*	○ *Yes (Yego)* ○ *No (Oya)*	
B22	Do you see cockroaches circulating in your household? *Mujya mubona ibinyenzi mu nzu yanyu?*	○ *Yes (Yego)* ○ *No (Oya)*	

No	Questions	Answers/ codes	Skip to
B23	Does your household use or ever-used human excreta as fertilizer in farming? *Hari ubwo mukoresha cyangwa mwigeze mukoresha ibyo mwitumye nk'ifumbire?*	○ *Yes (Yego)* ○ *No (Oya)*	
Household information on SCH Exposure			
B24	What types of water bodies are close to your household? (Many options are possible) *Ni ubuhe bwoko bw'ibyuzi nk'ibiyaga, ibishanga, imigezi, cyangwa ibindi byaba bibegereye)*	☐ *None (Ntabyo)* ☐ *Lake (Ikiyaga)* ☐ *Marshalands for rice plantations (Ibishanga by'umuceri)* ☐ *Marshalands for other plantations (Ibishanga by'indi myaka)* ☐ *Marsh/ swamp (Ibishanga)* ☐ *River (Umugezi/ uruzi)* ☐ *Pond/ dam (Ibidamu)* ☐ *Other, specify (Ibindi, sobanura)* _____	
B25	How much time (in minutes) does it take you from your household to arrive to the close water bodies (lakes, marshlands) by easy walk? (One way) *Hari urugendo rungana iki (mu minota) kugira ngo ugere aho ibyuzi biri hafi biri umuntu agenda bisanzwe?*	○ *Less than 20 min (0-1.6 km) (Munsi y'iminota 20 (0-1.6 km)* ○ *21-40 min (1.7-3.2 km) (Iminota 21-40 (1.7-3.2 km))* ○ *41-60 min (3.3-5 km) (Iminota 41-62 (3.3-5 km))* ○ *1 h + (5.1 km +) (Isaha kuzamura + (5.1 km +))*	
Impact of STH & SCH at Household level			
B26	Has any household member or child ever been absent to work/ school because of intestinal worms related disease? *Hari umuntu cyangwa umwana wo muri uru rugo wigeze asiba akazi cyangwa ishuri mucyeka ko yabitewe n'inzoka zo mu nda?*	○ *Yes (Yego)* ○ *No (Oya)*	
B27	Have you ever seen or heard any household member passing a worm in stool/ vomiting worm? *Mwaba mwarigeze mubona cyangwa mwumva ugize urugo rwanyu yituma cg aruka inzoka zo mu nda?*	○ *Yes (Yego)* ○ *No (Oya)*	
B28	How old was he/she the recent time passing a worm in stool/ vomiting worm? *Ubwo biheruka, yari afite imyaka ingahe igihe yitumaga cyangwa aruka inzoka?*	|____|____| Years *Imyaka* |____|____| Months *Amezi*	

3. WASH in workplaces

No	Questions	Answers/ codes	Skip to
B29	Description of the workplace *Aho mukorera imirimo*	○ *Agricultural field (Umurima)* ○ *Mashland (Igishanga)* ○ *Lake (Ikiyaga)* ○ *Other, specify (Ahandi, havuge)* _____	

No	Questions	Answers/ codes	Skip to
B30	How long (minutes) does it normally take you to go to work (Roundtrip)? *Bitwara igihe kingana iki(muminota) kujya no kuva ku kazi kawe ka buri munsi?*	○ *Near the household (Hafi yo mu rugo)* ○ *Less than 30 min (Munsi yiminota 30)* ○ *More than 30 min (Hejuru y'iminota 30)*	
B31	How long do you stay in your workplace? *Umara igihe kingana iki ku kazi ka buri munsi, utarataha?*	|____|____| Hours *(Amasaha)*	
B32	The workplace has any kind of latrine within 50m *Aho bakorera hari ubwiherero muri metero 50?*	○ *Yes (Yego)* ○ *No (Oya)*	
B33	Workplace has adequate latrine with slab, lid, roof, door? *Aho bakorera hari ubwiherero bwujuje ibyangombwa, butinze, bupfundikiye, busakaye, bukinze?*	○ *Yes (Yego)* ○ *No (Oya)*	
B34	Available Latrine is dirty (by human excreta)? *Ubwiherero buhari bwandujwe n'umwanda w'abantu?*	○ *Yes (Yego)* ○ *No (Oya)*	
B35	Available latrine is a shallow hole near a water body or an agricultural field? *Ubwiherero buhari ni akobo gato kari hafi y'amazi cg umurima?*	○ *Yes (Yego)* ○ *No (Oya)*	
B36	Toilet paper or water is available in the Toilet? *Ubwiherero burimo urupapuro rw'isuku cyangwa amazi byo kwihanagura nyuma yo gukoresha ubwiherero?*	○ *Yes (Yego)* ○ *No (Oya)*	
B37	Workplace has hand washing facility (lavabo, local made kandagira ukarabe, etc.) with soap and water? *Aho bakorera hafite aho bakarabira intoki (kandagira ukarabe - lavabo - Akajerekani) byujuje ibyangombwa (amazi n'isabune)?*	○ *Yes (Yego)* ○ *No (Oya)*	
B38	Workplace has access to clean water within 500m? *Aho bakorera hari amazi meza muri metero 500?*	○ *Yes (Yego)* ○ *No (Oya)*	
B39	Workplace latrine content is used as a fertilizer? *Umwanda wo mu musarani bawukoresha bafumbira imirima/ igishanga?*	○ *Yes (Yego)* ○ *No (Oya)*	

4. Individual information on Knowledge and Attitudes

No	Questions	Answers/ codes	Skip to
Knowledge and Attitudes towards Bilharzia			
C1	Have you ever heard about Bilharzia? *Mwigeze mwumva indwara ya Birariziyoze?*	○ *Yes (Yego)* ○ *No (Oya)*	No ➟ C5

No	Questions	Answers/ codes	Skip to
C2	Where did you get information about Bilharzia? *Ni hehe wakuye amakuru yerekeye Birariziyoze?*	☐ *School (Ishuri)* ☐ *Community health workers (Umujyanama w'ubuzima)* ☐ *Media (Itangazamakuru)* ☐ *Health professionals (Abakozi bo kwa muganga)* ☐ *Parents (Ababyeyi)* ☐ *Churches (Mu rusengero)* ☐ *Community gatherings (Inteko zabaturage)* ☐ *Community work (Umuganda)* ☐ *Other, specify (Ibindi, sobanura)* _____	
C3	If YES, what is the frequency of information on Bilharzia per month ? *Ni inshuro zingaye ujya ubona amakuru yerekeye Birariziyoze mu kwezi*	○ *Once (Inshuro 1)* ○ *Two times (Inshuro 2)* ○ *Three times (Inshuro 3)* ○ *More than 3 times (Hejuru ya 3)*	
C4	if YES, have you ever heard about its transmission mode, prevention, signs & symptoms, and treatment? *Wigeze wumva ibijyanye n'uko Birariziyoze yandura, uko yirindwa, ibimenyetso byayo n'uko ivurwa?*	☐ *Only the word Bilharzia (Numva bavuga Birariziyoze gusa)* ☐ *No (Oya)* ☐ *Transmission mode (Uko yandura)* ☐ *Prevention (Uko yirindwa)* ☐ *Signs & symptoms (Ibimenyetso byayo)* ☐ *Treatment (Uko ivurwa)* ☐ *Other, specify (Ibindi, sobanura)* _____	
C5	How does Bilharzia infection get transmitted to a person? *Ni gute umuntu yandura Birariziyoze?*	☐ *Contact with contaminated water of marshlands, lakes, etc. (Kujya mu mazi cyangwa ibyuzi yanduye)* ☐ *Drink contaminated water with cercaria (Kunywa amazi yanduye)* ☐ *Poor hygiene (Isuku nkeya)* ☐ *Don't know (Simbizi)* ☐ *Other, specify (Ibindi, sobanura)* _____	
C6	How Human can spread Bilharzia? *Ni ubuhe buryo abantu bakwirakwiza Birariziyoze*	☐ *Open defecation (Kwituma kugasozi)* ☐ *Poor hygiene (Isuku nkeya)* ☐ *Don't know (Simbizi)* ☐ *Other, specify (Ibindi, sobanura)* _____	
To which extend do you agree with the following statements about Bilharzia Ni kuruhe rugero wemeranya n'abavuga ibi bikurkira ku birebana n'indwara ya Birariziyoze?			
C7	Bilharzia is a disease that can NOT cause severe morbidity or death *Birariziyoze ni indwara itatera kuremba cyangwa urupfu*	○ *Strongly Agree (Ndabyemera cyane)* ○ *Agree (Ndabyemera)* ○ *Disagree (Simbyemera)* ○ *Strongly Disagree (Simbyemera na gato)* ○ *I don't know (Simbizi)*	

No	Questions	Answers/ codes	Skip to
C8	It is important to periodically screen for Bilharzia and intestinal worms *Ni ngombwa kwisuzumisha bihoraho Birariziyoze n'izindi nzoka zo munda*	○ *Strongly Agree (Ndabyemera cyane)* ○ *Agree (Ndabyemera)* ○ *Disagree (Simbyemera)* ○ *Strongly Disagree (Simbyemera na gato)* ○ *I don't know (Simbizi)*	
C9	It is important to take periodically tablets Bilharzia and intestinal worms *Ni ngombwa gufata buri gihe ibinini ya Birariziyoze n'inzoka*	○ *Strongly Agree (Ndabyemera cyane)* ○ *Agree (Ndabyemera)* ○ *Disagree (Simbyemera)* ○ *Strongly Disagree (Simbyemera na gato)* ○ *I don't know (Simbizi)*	
C10	When I pass blood in stool or feel abdominal discomfort in my intestines I should go to health facility *Igihe mbonye amaraso mu musarani igihe nitumye cyangwa numva ntameze neza mu nda, nagombye kujya kwa muganga*	○ *Strongly Agree (Ndabyemera cyane)* ○ *Agree (Ndabyemera)* ○ *Disagree (Simbyemera)* ○ *Strongly Disagree (Simbyemera na gato)* ○ *I don't know (Simbizi)*	
C11	Have you or anyone in your household been diagnosed with Bilharzia in the past year? *Haba hari umuntu muri uru rugo warwaye birariziyoze?*	○ *Yes (Yego)* ○ *No (Oya)*	
Knowledge and Attitudes towards Intestinal worms			
C12	Have you ever heard about intestinal worms? *Waba warigeze wumva amakuru ajyanye n'inzoka zo munda?*	○ *Yes (Yego)* ○ *No (Oya)*	No ➟ C15
C13	If YES, have you ever heard also about its transmission mode, prevention, signs & symptoms, and treatment *Waba warigeze wumva uko inzoka zo mu nda zandura, uko zirindwa, ibimenyetso byazo, n'uko zivurwa?*	○ *Only the word intestinal worms (Numva bavuga inzoka zo munda gusa)* ○ *Transmission mode (Uko yandura)* ○ *Prevention (Uko yirindwa)* ○ *Signs & symptoms (Ibimenyetso byayo)* ○ *Treatment (Uko ivurwa)* ○ *Other, specify (Ibindi, sobanura)* _____	
C14	Where did you get information about intestinal worms? *Ni hehe wakuye amakuru arebana n'inzoka zo mu nda?*	□ *School (Ishuri)* □ *Community health workers (CHW) (Umujyanama w'ubuzima)* □ *Media (Itangazamakuru)* □ *Health facility (Ku kigo nderabuzima)* □ *Parents (Ababyeyi)* □ *Churches (Mu rusengero)* □ *Community gatherings (Inteko zabaturage)* □ *Community work (Umuganda)* □ *Other, specify (Ibindi, sobanura)* _____	

No	Questions	Answers/ codes	Skip to
C15	How are intestinal worm infections transmitted to a human? *Ni gute abantu bandura inzoka zo mu nda?*	☐ *Fecal-oral route (Kudakaraba intoke nyuma yo kwituma)* ☐ *Drink contaminated water (Kunywa amazi yanduye)* ☐ *Uncleaned food (Ibiribwa bidasukuye neza)* ☐ *Undercooked food (Ibiribwa bidatetse neza)* ☐ *Don't know (Simbizi)* ☐ *Other, specify (Ibindi, sobanura)* _____	
C16	How can humans spread intestinal worms? *Ni gute abantu bakwirakwiza inzoka zo mu nda?*	☐ *Open defecation (Kwituma ku gasozi)* ☐ *Not washing hands regularly (after toilet) (Kudakaraba intoki nyuma)* ☐ *Lack of adequate toilets preventing flies (Kutirinda isazi zo mu bwiherero)* ☐ *I don't know (Simbizi)* ☐ *Other, specify (Ibindi, sobanura)* _____	
C17	How often are you reminded/ taught about practicing hygiene including hand washing? *Ni inshuro zingahe mujya mukangurirwa kugira isuku harimo no gukaraba intoki?*	○ *Every day (Buri munsi)* ○ *Every week (Buri cyumweru)* ○ *Every 2 weeks (Buri byumweru 2)* ○ *Three to 4 weeks (Hagati y'ibyumweru 3 na 4)* ○ *More than 1 month (Hejuru y'ukwezi)*	
C18	Who reminds you the hygiene practice? *Ni bande bakunze kubakangurira kugira isuku?*	☐ *Parents (Ababyeyi)* ☐ *My bother/sister (Abo tuvukana)* ☐ *Teacher (Umwarimu)* ☐ *CHW (Umujyanama w'ubuzima)* ☐ *Health professionals (Umukozi wo kwa muganga)* ☐ *Community leaders (Abayobozi b'ibanze)* ☐ *Other, specify (Ibindi, sobanura)* _____	
C19	What are the signs of someone infected by intestinal worms? *Ni ibihe bimenyetso umuntu agira iyo arwaye inzoka zo munda?*	☐ *Abdominal distension (Gutumba mu nda)* ☐ *Vomiting/ nausea (Kuruka cyangwa iseseme)* ☐ *Loss of appetite (Kunanirwa kurya)* ☐ *Abdominal pain (Kuribwa mu nda)* ☐ *Worms in stool (Kwituma inzoka zo munda)* ☐ *Diarrhoea (Impiswi)* ☐ *Body weakness (Gucika intege)* ☐ *Don't know (Simbizi)* ☐ *Other, specify (Ibindi, sobanura)* _____	
C20	What do you think is the treatment of intestinal worms? *Ni uwuhe muti utekereza ko uvura inzoka zo mu nda?*	○ *Albendazole/ Mebendazole tablets (Albendazole/ Mebendazole)* ○ *Some tablets provided at health facility/ pharmacy (Ibinini byo kwa muganga/ farumasi)* ○ *Traditional medicine (Imiti gakondo)* ○ *Don't know (Simbizi)* ○ *Other, specify (Ibindi, sobanura)* _____	

No	Questions	Answers/ codes	Skip to
To which extend do you agree with the following statements about intestinal worms Ni kuruhe rugero wemeranya n'abavuga ibi bikurkira ku birebana n'indwara y'inzoka zo munda?			
C21	Intestinal worms cannot be prevented *Inzoka zo munda ntizishobora kwirindwa*	○ *Strongly Agree (Ndabyemera cyane)* ○ *Agree (Ndabyemera)* ○ *Disagree (Simbyemera)* ○ *Strongly Disagree (Simbyemera na gato)* ○ *I don't know (Simbizi)*	
C22	You also get intestinal worms when you take sweets foods/ drinks *Ushobora kwandura inzoka zo mu nda igihe ufashe ibiyo cyangwa ibinyobwa biryohereye*	○ *Strongly Agree (Ndabyemera cyane)* ○ *Agree (Ndabyemera)* ○ *Disagree (Simbyemera)* ○ *Strongly Disagree (Simbyemera na gato)* ○ *I don't know (Simbizi)*	
C23	You can live with intestinal worms without any harm *Ushobora kubana n'inzoka zo munda ntacyo zigutwaye*	○ *Strongly Agree (Ndabyemera cyane)* ○ *Agree (Ndabyemera)* ○ *Disagree (Simbyemera)* ○ *Strongly Disagree (Simbyemera na gato)* ○ *I don't know (Simbizi)*	
C24	Herbs for traditional medicines treat well intestinal worms than modern medicine *Imiti ya kinyarwanda ivura neza inzoka zo munda kurusha imiti yo kwa muganga*	○ *Strongly Agree (Ndabyemera cyane)* ○ *Agree (Ndabyemera)* ○ *Disagree (Simbyemera)* ○ *Strongly Disagree (Simbyemera na gato)* ○ *I don't know (Simbizi)*	
C25	Have you or anyone in your household been diagnosed with intestinal worms in the past 12 months? *Haba hari umuntu wo muri uru rugo waba yarasuzumwemo inzoka zo munda mu mezi 12 ashize?*	○ *Yes (Yego)* ○ *No (Oya)*	
General Knowledge and Awareness			
C26	Are you aware of the health risks associated with inadequate WASH practices? *Waba uzi ingaruka z'ubuzima zo kudakora isuku n'isukura?*	○ *Yes (Yego)* ○ *No (Oya)*	
C27	Have you received any education or training on WASH practices? *Waba warigeze uhugurwa ku bijyanye n'isuku n'isukura?*	○ *Yes (Yego)* ○ *No (Oya)*	No ➟ C29
C28	If YES, who provided the education or training? *Niba ari yego, ninde wabahuguye?*	○ *Health workers (Umukozi wo kwa muganga)* ○ *Community health workers (Umujyanama w'ubuzima)* ○ *Non-governmental organizations (Ikigo kitabogamiye kuri Leta)* ○ *Community leaders (Umuyobozi w'ibanze)* ○ *School (Ishuri)* ○ *Other, specify (Ibindi, sobanura)* _____	

No	Questions	Answers/ codes	Skip to
C29	How often do you deworm your household? *Ni mu gihe kingana iki mukunze gufata imiti y'inzoka muri uru rugo?*	○ *Every 6 months (Buri mezi atandatu)* ○ *Once a year (Rimwe mu mwaka)* ○ *Never (Nta na rimwe)*	
Social Behavior and Community Engagement			
C30	Have you attended any health education in the past 12 months? *Haba hari amahugurwa ku buzima waba waritabiriye mu mezi 12 ashize?*	○ *Yes (Yego)* ○ *No (Oya)*	No ➟ C32
C31	If yes, how many programs have you attended? *Niba ari yego, ni inyigisho zingahe witabiriye?*	○ *1 (1)* ○ *2-3 (2 - 3)* ○ *More than 3 (Hejuru ya 3)*	
C32	How often does your community engage in activities to improve WASH conditions? *Ni inshuro zingahe uyu mudugudu wanyu witabira ibikorwa by'isuku n'isukura?*	○ *Never (Nta na rimwe)* ○ *Every day (Buri munsi)* ○ *Every week (Buri cyumweru)* ○ *Every 2 weeks (Buri byumweru bibiri)* ○ *Every Three to 4 weeks (Hagati y'ibyumweru 3-4)* ○ *Every month (Buri kwezi)* ○ *Above a month (Hejuru y'ukwezi)*	
C33	Are there any community-led initiatives to promote good hygiene practices? *Haba hari ingaba zafashwe zo kwimakaza isuku muri uyu mudugudu?*	○ *Yes (Yego)* ○ *No (Oya)*	No ➟ C35
C34	If YES, what kind of initiatives? *Niba ari yego, ni izihe ngamba?*	☐ *Hygiene promotion campaigns (Ubukangurambaga bw'isuku)* ☐ *Community clean-up events (Ibihe byo gukora isuku mu mudugudu)* ☐ *Training workshops (Amahugurwa)* ☐ *Other, specify (Ibindi, sobanura)* _____	
C35	Do you feel that these programs have changed your WASH practices? *Mwaba mwumva se izi gahunda zarahinduye uburyo mwitabira isuku n'isukura muri uyu mudugudu?*	○ *Yes (Yego)* ○ *No (Oya)*	
C36	Would you be interested in attending future WASH education programs? *Waba wifuza kuzitabira gahunda z'inyigisho ku isuku n'isukura mu gihe kiri imbere?*	○ *Yes (Yego)* ○ *No (Oya)*	
C37	How do you receive information about health and hygiene? *Ni gute ukunze kubona amakuru arebana n'ubuzima cyangwa ibirebana n'isuku?*	☐ *Radio (Radiyo)* ☐ *Television (Televiziyo)* ☐ *Community meetings (Inama z'umudugudu)* ☐ *Health workers (Umukozi wo kwa muganga)* ☐ *Social media (Imbuga nkoranyambaga)* ☐ *Other, specify (Ibindi, sobanura)* _____	

No	Questions	Answers/ codes	Skip to
Knowledge and Attitudes towards Mass Drug Administration			
C38	Have you ever heard about Mass Drug Administration? *Wigeze wumvaho uburyo bwo guha abantu benshi ibinini by'inzoka?*	○ *Yes (Yego)* ○ *No (Oya)*	No ➟ C42
C39	If heard about Mass Drug Administration, where did you get the information? *Niba warumviseho uburyo bwo guha abantu benshi ibinini by'inzoka, nihe wakuye amakuru kuri yo?*	□ *Radio (Radiyo)* □ *Television (Televiziyo)* □ *Community meetings (Inama z'umudugudu)* □ *Health workers (Umukozi wo kwa muganga)* □ *Social media (Imbuga nkoranyambaga)* □ *Other, specify (Ibindi, sobanura)* _____	
C40	What is the purpose of Mass Drug Administration? *Gutanga ibinini by'inzoka ku bantu benshi biba bigamije iki?*	○ *To protect the population from getting STH and SCH (Gukingira abaturage kugirango batandura inzoka zo munda na bilariziyoze)* ○ *To treat STH and SCH (Kuvura inzoka zo munda na Bilariziyoze)* ○ *Other, specify (Ibindi, sobanura)* _____	
C41	Where do you most get information about health issues? *Ubusanzwe nihe h'ingenzi ukunda gukura amakuru ku byerekeye ubuzima?*	○ *Radio (Radiyo)* ○ *Newspapers (Ibinyamakuru)* ○ *TV (Televiziyo)* ○ *Meeting (Inama)* ○ *Internet search (Gushakisha kuri murandasi)* ○ *Text message (Mesage kuri telephone)* ○ *Local leaders (Abayobozi b'inzego z'ibanze)* ○ *Church (Mu rusengero)* ○ *Other, specify (Ibindi, sobanura)* _____	
C42	Have you received a deworming tablet in the past 6 months? / *Waba warahawe ibinini by'inzoka mu mezi 6 ashize?*	○ *Yes (Yego)* ○ *No (Oya)*	No ➟ C44
C43	If received deworming tablets, which tablets did you receive? *Niba warahawe ibinini by'inzoka, n'izihe waherewe ibinini?*	○ *For STH (Ikinini kivura inzoka zo munda)* ○ *For SCH (Ibinini bivura Bilariziyoze)* ○ *Both (Ibinini bivura inzoka zo munda na Bilariziyoze)* ○ *Don't know (Simbizi)*	➟ C45
C44	If not, what were the reasons for not receiving the tablets? *Niki cyatumye udahabwa ibinini?*	○ *Tablets were not enough (Ibinini byabaye bike)* ○ *I was not willing to take it (Nta mpamvu yuko nagombaga gufata ikinini)* ○ *The distributors were not present (Abatanga ibinini ntabwo bari bahari)* ○ *Other, specify (Ibindi, sobanura)* _____	

No	Questions	Answers/ codes	Skip to
C45	What is the best channel of your preference to get community members informed about Mass Drug? *Ni ubuhe buryo ubona bukunogeye bwakoreshwa mu kumenyekanisha gahunda y'itangwa ry'ibinini mu baturage?*	○ *Radio (Radiyo)* ○ *Newspapers (Ibinyamakuru)* ○ *TV (Televiziyo)* ○ *Meeting (Inama)* ○ *Text message (Gukoresha mesage)* ○ *House to house mobilization (Kumenyesha urugo ku rundi)* ○ *Using megaphone in the village (Gukoresha micoro mu mudugudu)* ○ *Other, specify (Ibindi, sobanura)* _____	
C46	What is the best way of your preference to distribute deworming tablets? *Ni ubuhe buryo ubona bukunogeye bwakoreshwa mu gutanga ibinini by'inzoka?*	○ *At the Health or Health post (Ku kigo nderabuzima cyangwa ku ivuriro ry'ibanze)* ○ *At selected distribution site (Kuri site yateguwe gutangirwaho ibinini)* ○ *House to house (Inzu ku yindi)* ○ *During afternoon hours (Mu masaha yo ku gica-munsi)* ○ *Other, specify (Ibindi, sobanura)* _____	
C47	Who do you think best deliver to you the message about Mass Drug Administration/ *Ninde wumva ubagezaho ubutumwa ku buryo bunogeye ku byerekeye gutanga ibinini by'inzoka?*	○ *Journalists (Abanyamakuru)* ○ *Telecommunication companies (Ibigo by'itumanaho)* ○ *Health care provider (Abavura)* ○ *Local leaders (Abayobozi b'inzego z'ibanze)* ○ *Other, specify (Ibindi, sobanura)* _____	
C48	What are the Social Mobilization interventions being implemented in your area? *Ni ibihe bikorwa by'ubukangurambaga bikorwa aho mutuye?*	○ *Community meetings (Inama z'abaturage)* ○ *Community mobilizer (Abukangurambaga)* ○ *Radio talk and TV show (Ibiganiro kuri Radiyo na Televiziyo)* ○ *Other, specify (Ibindi, sobanura)* _____	

5. Open-Ended Questions

No	Questions	Answers/ codes	Skip to
D1	Are there any traditional or cultural practices that impact WASH behaviors in your community? *Haba hari ibikorwa cyangwa imyemerere bishingiye ku muco byaba bingamiye isuku n'isukura muri uyu mudugudu?* *Niba ari yego, nibihe?*	_____ _____ _____	
D2	What improvements do you think are needed in your community's sanitation facilities? *Ni ibiki mwumva byagombye kwitabwaho ku-gira ngo isuku n'isukura byiyongere muri uyu mudugudu?*	_____ _____ _____	

No	Questions	Answers/ codes	Skip to
D3	What are challenges do you face in accessing clean water in your community? *Ni izihe mbogamizi muhura nazo zijyanye no kubona amazi meza hano mutuye?*	_____ _____ _____	
D4	What suggestions do you have for improving WASH conditions and reducing the transmission of Bilharzia and intestinal worms in your community? *Ni izihe nama watanga zo kwongera ikigero cy'isuku n'isukura, mu kugabanya ikwirakwizwa ry'ubwandu bwa Birariziyoze n'inzoka zo munda muri uyu mudugudu?*	_____ _____ _____	
D5	What do you think that needs improvement or to be added in the current Social Mobilization intervention for STH and SCH? *Ni iki ubona cyakosorwa cyangwa cyakongerwa mu bukangurambaga ku nzoka zo munda na Bilariziyoze?*	_____ _____ _____	

6. Observation of Toilet and Cleanness

No	Questions	Answers/ codes	Skip to
E1	Household has adequate latrine (with slab, lid, roof, door)? *Urugo rufite ubwiherero bwujuje ibyangombwa (Umusarani utinze, upfundikiye,usakaye, ukinze)?*	○ *Yes (Yego)* ○ *No (Oya)*	
E2	Latrine wall is dirty by human excreta? *Inkuta z'ubwiherero zandujwe n'umwanda w'abantu?*	○ *Yes (Yego)* ○ *No (Oya)*	
E3	Latrine floor is dirty by human excreta? *Mu bwiherero hasi ha handujwe n'umwanda w'abantu?*	○ *Yes (Yego)* ○ *No (Oya)*	
E4	Toilet paper or water is available in the Toilet? *Ubwiherero burimo urupapuro rw'isuku cyangwa amazi byo kwihanagura nyuma yo gukoresha ubwiherero?*	○ *Yes (Yego)* ○ *No (Oya)*	
E5	Household has hand washing facility (lavabo, local made kandagira ukarabe, etc.) with soap and water? *Urugo rufite aho bakarabira intoki (kandagira ukarabe - lavabo - akajerekani) byujuje ibyangombwa (amazi n'isabune)?*	○ *Yes (Yego)* ○ *No (Oya)*	
E6	Observable flies in the toilet? *Mu bwiherero hagaragaramo isazi?*	○ *Yes (Yego)* ○ *No (Oya)*	

No	Questions	Answers/ codes	Skip to
E7	Observable flies in the compound? *Mu rugo, iruhande y'ubwiherero cyangwa hafi y'ahaterekwa ibintu hagaragara isazi?*	○ *Yes (Yego)* ○ *No (Oya)*	
E8	Observable trash in the compound? *Hari imyanda yandagaye mu mbuga?*	○ *Yes (Yego)* ○ *No (Oya)*	

Health Facility Questionnaire

1. Location

No	Questions	Answers/ codes	Skip to
F1	Date of data collection *Itariki amakuru akusanyirijwe ho*	___ ___/___ ___/___ ___ ___ ___ dd mm yyyy	
F2	Start time of data collection *Isaha ikiganiro gitangiriyeho*	|___ ___:___ ___| hh min	
F3	Interviewer's name *Izina ry'ubaza*	_____	
F4	Team leader's name *Izina ry'umugenzuzi*	_____	
F5	District *Akarere*	○ *Bugesera* ○ *Ruhango*	
F6	Sector *Umurenge*	|____|____|____|____|	
F7	Cell *Akagari*	|____|____|____|____|____|____|	
F8	Health facility *Izina ry'ivuliro*	|____|____|____|____|	
F9	Type of health facility *Ubwoko bw'ivuliro?*	○ *District hospital (Ibitaro by'akarere)* ○ *Health centre (Ikigo nderabuzima)* ○ *Health post (Poste de sante)* ○ *Clinic (Ivuliro ryigenda)* ○ *Dispensary (Disipanseri)* ○ *Other, specify (Ibindi, sobanura)* _____	
F10	Latitude	|____|____|.|____|____|____|____|____|	
F11	Longitude	|____|____|.|____|____|____|____|____|	

2. Water Availability

No	Questions	Answers/ codes	Skip to
G1	What is the most commonly used source of water for the facility at this time? *Amazi mukoresha muri iki kigo muyakura hehe?*	○ *Piped into facility (Amazi ari mu nyubako)* ○ *Piped to facility yard or ground (Amazi mu kigo/ mu mbuga)* ○ *Piped to public tap (Ivomo/ Robine rusange)* ○ *Piped water to neighbor (Amazi ya robine iri mu baturanyi)* ○ *Borehole or tube well (Amazi aturutse mu butaka/ Nayikondo)* ○ *Dug well - protected (Iriba ryubakiye)* ○ *Dug well - unprotected (Iriba ritubakiye)* ○ *Water from spring - protected (Amazi y'isoko yubakiye)* ○ *Water from spring - unprotected (Amazi y'isoko itubakiye)* ○ *Rainwater (Amazi y'imvura)* ○ *Surface water (Amazi atemba n'adatemba/ Imigezi, ibiyaga, ibishanga, ibidendezi)* ○ *Bottled water (Amazi ari mu icupa)* ○ *Tanker truck (Ikamyo itwara amazi)* ○ *Cart with small tank (Amazi ya tanki nto cg ingunguru baheka ku ngorofani nini, cg ingunguru ikururwa n'inka/indogobe)* ○ *From vendors (Kubacuruza amazi)* ○ *Other, specify (Ibindi, sobanura)* _____ ○ *Don't know (Simbizi)*	
G2	Is water available from this source on the facility premise (in building or within facility grounds)? IF YES, ASK: May I see water from this source that is available today? If the water is inside the facility building, please show me that. Otherwise, show me the water elsewhere on the premises. *Ese amazi aboneka kuri iyi nkomoko ari mu nyubako cyangwa ku butaka bw'inyubako? NIBA ARI YEGO, BAZA: Ese nabona amazi aturuka kuri iyi nkomoko aboneka uyu munsi? Niba amazi ari mu nyubako, mwabinyereka. Niba atari mu nyubako, Mwanyereka ahandi muyakura hafi y'ikigo?*	○ *Yes, observed inside the facility (Yego, yabonetse imbere mu nyubako)* ○ *Yes, observed within the grounds of the facility (Yego, yabonetse hanze mu kigo)* ○ *Yes, reported, not seen (Yego, byavuzwe ariko ntibyabonetse)* ○ *No, or available only outside the facility grounds (Oya, aboneka gusa hanze y'ikigo)*	
G3	Is water available (from the main source or any backup source) at all times the facility is open for services? *Ese amazi aboneka (avanye ku nkomoko nyamukuru cyangwa izindi nkomoko zishobora gufasha) igihe cyose ikigo gifunguye ku bikorwa?*	○ *Always available, no interruptions (Aboneka buri gihe, nta guhagarara)* ○ *Often available, some interruptions of less than 2 hours per day (Akenshi araboneka, abura rimwe na rimwe, ariko igihe kitarenze amasaha 2 ku munsi)* ○ *Sometimes available, frequent or prolonged interruptions of more than 2 hours per day (Rimwe na rimwe aboneka, abura kenshi cyangwa igihe kirekire kirenze amasaha 2 ku munsi)*	
G4	Is there any water back-up plan in case of water interruptions? *Mwaba mufite uburyo bw'ingoboka mu gihe amazi yabuze mu kigo?*	○ *Yes (Yego)* ○ *No (Oya)*	No ➟ H1

No	Questions	Answers/ codes	Skip to
G5	Is YES, what is the back-up you have in case of water interruptions? *Niba ari YEGO, ni ubuhe buryo bw'ingoboka mufite?*	○ *Water tanks (Ikigega cy'amazi)* ○ *Tanker truck (Imodoka zizana amazi)* ○ *Get water from outside the facility (Kuvoma amazi hanze y'ikigo)* ○ *Rainwater (Amazi y'imvura)* ○ *Bottled water (Amazi yo mu macupa)* ○ *Other, specify (Ibindi, sobanura)* _____	

3. Sanitation

No	Questions	Answers/ codes	Skip to
H1	Is there a toilet (latrine) on the premises that is accessible for general outpatient service patients or staff? *Hari ubwiherero muri iki kigo bushobora gukoreshwa n'abarwayi rusange cyangwa abakozi?*	○ *Yes (Yego)* ○ *No (Oya)*	No ➟ H12
H2	On average, how many clients do to received per day including inpatients? *Ugereranyije, ni abantu bangahe babagana kuri iki kigo ku munsi, ubariyemo n'abarwayi bari mu bitaro?*	|____|____|____|____|	
H3	How many toilets do you have in the facility? *Ni ubwiherero bungahe mufite muri iki kigo?*	|____|____|	
H4	Among them, how many toilets have locks and inside outside? *Muri ubwo bwiherero, ni bungahe bufungirwa imbere n'inyuma?*	|____|____|	
H5	Among them, how many toilets are dedicated to men? *Muri ubwo bwiherero, ni bungahe bugenewe abagabo?*	|____|____|	
H6	Among them, how many toilets are dedicated to women? *Muri ubwo bwiherero, ni bungahe bugenewe abagore?*	|____|____|	
H7	Among them, how many toilets are dedicated to disabled persons? *Muri ubwo bwiherero, ni bungahe bugenewe ababana n'ubumuga?*	|____|____|	
H8	Among them, how many toilets do not have any indication of whom should be using it? *Muri ubwo bwiherero, ni bungahe butagaragaza uwo bugenewe?*	|____|____|	

No	Questions	Answers/ codes	Skip to
H9	IF YES: What type of toilet? May I see the toilet? *NIBA ARI YEGO: Ni ubuhe bwoko bw'ubwiherero? Nshobora kubureba?*	○ *Flush toilet to sewer system (Umusarani urekura amazi upfundikiye ufite amatiyo yohereza mu cyobo rusange cyubakiye)* ○ *Flush toilet to septic tank (Umusarani upfundikiye wohereza amazi mu itanki / mu byobo byubakiye)* ○ *Flush to pit latrine (Umusarani upfundikiye wohereza amazi mu cyobo cyitubagiye)* ○ *Flush to somewhere else (Umusarani wohereza imyanda ahandi)* ○ *Flush, don't know where (Umusarani wohereza imyanda ahandi hatazwi)* ○ *Ventilated improved pit latrine (Umisarani w'icyobo utinze neza ufite ubuhumekero)* ○ *Pit latrine with slab (Umisarani w'icyobo utinze neza ufite aho bahagarara habugenewe)* ○ *Pit latrine without slab/ open pit (Umisarani w'icyobo kirangaye (udatinze))* ○ *Composting toilet (Umusarani w'ibyumba bavidura, Ecosan)* ○ *No toilet facility, bush, field (Ntamusarani, mu gisambu, ku gasozi)*	
H10	Is there a usable (available, functional, private) toilet for outpatient service patients and visitors? *Hari ubwiherero bwakoreshwa (buboneka, bukora, bwihariye) ku bagana serivisi rusange n'abashyitsi?*	○ *Yes, available, functional, private and close to unit (Yego, buraboneka, burakora, burihariye, kandi buri hafi unite)* ○ *Yes, available, functional, private, but not close to unit (Yego, buraboneka, burakora, burihariye, ariko ntabwo buri hafi ya unite)* ○ *Not available or not functional or not private (Ntabwo buboneka cyangwa ntabwo bukora cyangwa ntabwo bwihariye)*	
H11	Is there a usable (available, functional, private) toilet specifically for female outpatient service patients and visitors? *Hari ubwiherero bukoreshwa n'abagore (buboneka, bukora, bwihariye) bahabwa serivisi rusange n'abashyitsi?*	○ *Yes, available, functional, private and close to unit (Yego, buraboneka, burakora, burihariye, kandi buri hafi unite)* ○ *Yes, available, functional, private, but not close to unit (Yego, buraboneka, burakora, burihariye, kandi buri hafi unite)* ○ *Not available or not functional or not private (Ntabwo buboneka cyangwa ntabwo bukora cyangwa ntabwo bwihariye)*	
H12	Is there a bin with a lid on it for disposal of used menstrual hygiene products in or close to the women's toilet? *Hari igikoresho gifunze cyabugenewe cyo kubikamo ibikoresho by'isuku y'imihango byakoreshejwe mu bwiherero bw'abagore cyangwa hafi yabwo?*	○ *Yes, observed (Yego, nakibonye)* ○ *Yes, reported, not seen (Yego, ariko sinakibonye)* ○ *Not available (Nta gihari)*	
H13	Is there a private area with soap and water for women to use for cleaning themselves? *Hari ahantu hihariye hari isabune n'amazi abakobwa bashobora gukoresha mu kwisukura?*	○ *Yes, observed (Yego, nakibonye)* ○ *Yes, reported, not seen (Yego, ariko sinakibonye)* ○ *Not available (Nta gihari)*	

4. Conditions for Infection Prevention and Control

No	Questions	Answers/ codes	Skip to
Now I would like to know about items for infection prevention and control available in this service site today. For each item that I ask about, please show me the item. *Ubu ndashaka kumenya ibikoresho byo gukumira no kugenzura indwara biboneka muri iyi serivisi uyu munsi. Ku gikoresho cyose mbaza, nyamuneka ngerekereho.*			
J1A	Clean running water (piped water supply, or covered bucket with tap) *Amazi meza ya ava muri robine (amazi azanwa mu nyubako, cyangwa agasaho gafunze gafite robine)?*	○ *Yes, observed (Yego, nakibonye)* ○ *Yes, reported, not seen (Yego, ariko sinakibonye)* ○ *Not available (Ntacyo)*	
J1B	Soap (bar or liquid) for hand hygiene *Isabune (ndende cyangwa isukika) yo gukaraba intoki?*	○ *Yes, observed (Yego, nakibonye)* ○ *Yes, reported, not seen (Yego, ariko sinakibonye)* ○ *Not available (Ntacyo)*	
J1C	Alcohol-based handrub *Alukolo yo gukaraba intoki*	○ *Yes, observed (Yego, nakibonye)* ○ *Yes, reported, not seen (Yego, ariko sinakibonye)* ○ *Not available (Ntacyo)*	
J1D	Waste bin with lid and plastic bin liner clearly marked, for example, by label or colour, for infectious non-sharp waste *Igikoresho kibikwamo imyanda gifite umufuniko n'ikimenyetso cya pulasitiki kigaragaza neza, urugero ko intego cyangwa ku ibara, gikoreshwa mu gukusanya imyanda yanduye ariko idakomeretsa*	○ *Yes, observed (Yego, nakibonye)* ○ *Yes, reported, not seen (Yego, ariko sinakibonye)* ○ *Not available (Ntacyo)*	
J1E	Does the waste for infectious non-sharp waste have a functional foot pedal to open it? *Ese icyo gikoresho kibikwamo imyanda yanduye ariko idakomeretsa gifite umufatizo w'ikirenge ukora gifungurwa?*	○ *Yes, observed (Yego, nakibonye)* ○ *Yes, reported, not seen (Yego, ariko sinakibonye)* ○ *Not available (Ntacyo)*	
J1F	Sharps container (safety box) *Igikoresho kibikwamo ibikoresho bikomeretsa*	○ *Yes, observed (Yego, nakibonye)* ○ *Yes, reported, not seen (Yego, ariko sinakibonye)* ○ *Not available (Ntacyo)*	

No	Questions	Answers/ codes	Skip to
J2	How does this facility dispose of wastes? *Nigute iki kigo gishyingura imyanda yo muri kigo?*	○ *Burn using incinerator – protected (Itwikirwa muri cyuma (incinerator) - yubakiye)* ○ *Burn using incinerator – no protection (Itwikirwa muri cyuma (incinerator) - itubakiye)* ○ *Burn using drum/brick – protected (Itwikirwa muri ahabugenewe (burner) - yubakiye)* ○ *Burn using drum/brick – no protection (Itwikirwa muri ahabugenewe (burner) - itubakiye)* ○ *Open burning: open pit or flat ground – protected (Itwikirwa hanze mu cyobo cg mu mbuga - hubakiye)* ○ *Open burning: open pit or flat ground - no protection (Itwikirwa hanze mu cyobo cg mu mbuga - hatubakiye)* ○ *Dump without burning: flat ground – protected (Irundwa ahantu h'imbuga - hubakiye)* ○ *Dump without burning: flat ground – no protection (Irundwa ahantu h'imbuga - hatubakiye)* ○ *Dump without burning: covered pit or pit latrine (protected) (Irundwa mu cyobo gitwikiriye - hubakiye)* ○ *Dump without burning: open-pit – no protection (Irundwa mu cyobo kirangaye - hatubakiye)* ○ *Stored for removal offsite: stored in covered container (Ibikwa mu kintu gipfundikiye mbere yo gutwarwa)* ○ *Stored for removal offsite: stored unprotected (Ibikwa mu kintu kidapfundikiye mbere yo gutwarwa)* ○ *Other, specify:* _____	
J3	Does the facility have trained staff on WASH services *Ivuliro rifite umukozi wahuguwe ku mazi, isuku n'isukura?*	○ *Yes (Yego)* ○ *No (Oya)*	
J4	Does the facility have person(s) in charge of hygiene (cleaning toilets, . . .) *Ese ivuliro rifite umukozi ushinzwe isuku (gusukura ubwiherero n'ibindi)*	○ *Yes (Yego)* ○ *No (Oya)*	

5. Availability of drugs

No	Questions	Answers/ codes	Skip to
Now I would like to know about tablets for biharzia and intestinal worms. For each item that I ask about, please show me the item. *Ubu ndashaka kumenya imiti ivura inzoka mufite. Kuri buri muti mbaza uwunyereke niba uhari.*			
K1	Praziquantel	○ *At least one not expired (Hari byibura umwe utararenza igihe)* ○ *Available but expired (Urahari, ariko wataye igihe)* ○ *Reported available but not seen (Bavuga ko uhari, ariko sinawubonye)* ○ *Not available today (Ntawuhari uyu munsi)* ○ *Never available (Ntujya uhaba na rimwe)*	
K2	Albendazole	○ *At least one not expired (Hari byibura umwe utararenza igihe)* ○ *Available but expired (Urahari, ariko wataye igihe)* ○ *Reported available but not seen (Bavuga ko uhari, ariko sinawubonye)* ○ *Not available today (Ntawuhari uyu munsi)* ○ *Never available (Ntujya uhaba na rimwe)*	
K3	Mebendazole	○ *At least one not expired (Hari byibura umwe utararenza igihe)* ○ *Available but expired (Urahari, ariko wataye igihe)* ○ *Reported available but not seen (Bavuga ko uhari, ariko sinawubonye)* ○ *Not available today (Ntawuhari uyu munsi)* ○ *Never available (Ntujya uhaba na rimwe)*	

6. Observation of Toilet and Cleanness

No	Questions	Answers/ codes	Skip to
E1	Facility has adequate latrine (with slab, lid, roof, door)? *Ivuliro rifite ubwiherero bwujuje ibyangombwa (Umusarani utinze, upfundikiye,usakaye, ukinze)?*	○ *Yes (Yego)* ○ *No (Oya)*	
E2	Latrine wall is dirty by human excreta? *Inkuta z'ubwiherero zandujwe n'umwanda w'abantu?*	○ *Yes (Yego)* ○ *No (Oya)*	
E3	Latrine floor is dirty by human excreta? *Mu bwiherero hasi ha handujwe n'umwanda w'abantu?*	○ *Yes (Yego)* ○ *No (Oya)*	
E4	Toilet paper or water is available in the Toilet? *Ubwiherero burimo urupapuro rw'isuku cyangwa amazi byo kwihanagura nyuma yo gukoresha ubwiherero?*	○ *Yes (Yego)* ○ *No (Oya)*	

No	Questions	Answers/ codes	Skip to
E5	Facility has hand washing facility (lavabo, local made kandagira ukarabe, etc.) with soap and water? *Ivuliro rifite aho bakarabira intoki (kandagira ukarabe - lavabo - akajerekani) byujuje ibyan-gombwa (amazi n'isabune)?*	○ *Yes (Yego)* ○ *No (Oya)*	
E6	Observable flies in the toilet? *Mu bwiherero hagaragaramo isazi?*	○ *Yes (Yego)* ○ *No (Oya)*	
E7	Observable flies in the compound? *Mu mbuga, iruhande y'ubwiherero cyangwa hafi y'ahaterekwa ibintu hagaragara isazi?*	○ *Yes (Yego)* ○ *No (Oya)*	
E8	Observable trash in the compound? *Hari imyanda yandagaye mu mbuga?*	○ *Yes (Yego)* ○ *No (Oya)*	

School Questionnaire

1. Location

No	Questions	Answers/ codes	Skip to
N1	Date of data collection *Itariki amakuru akusanyirijwe ho*	___ ___/___ ___/___ ___ ___ ___ *dd mm yyyy*	
N2	Start time of data collection *Isaha ikiganiro gitangiriyeho*	|___ ___:___ ___| *hh min*	
N3	Interviewer's name *Izina ry'ubaza*	_____	
N4	Team leader's name *Izina ry'umugenzuzi*	_____	
N5	District *Akarere*	○ *Bugesera* ○ *Ruhango*	
N6	Sector *Umurenge*	|____|____|____|____|	
N7	Cell *Akagari*	|____|____|____|____|____|____|	
N8	School name *Izina ry'ishuri*	_____	
N9	School type *Icyiciro ishuriribarizwamo?*	○ *ECD (Irerero)* ○ *Nursery (Ay'incuke)* ○ *Primary (Amashuri abanza)* ○ *Secondary (Amashuri yisumbuye)* ○ *Groupe scolaire (Urwunge rw'amashuri)* ○ *University (Kaminuza)* ○ *Other, specify (Ibindi, sobanura)* _____	
N10	If ECD, where is it hosted *Niba ari Irerero, ni hehe ibera?*	○ *Home Based ECD (Irerero ryo mu ngo)* ○ *Community based ECD (Irerero ry'umudugudu)* ○ *Center based ECD (Irerero mu kigo cyabugenewe)*	
N11	Latitude	|____|____|.|____|____|____|____|____|	
N12	Longitude	|____|____|.|____|____|____|____|____|	

2. Water Availability

No	Questions	Answers/ codes	Skip to
P1	What is the most commonly used source of water for the school at this time? *Amazi mukoresha muri iki kigo muyakura hehe?*	○ *Piped into facility (Amazi ari mu nyubako)* ○ *Piped into facility yard or ground (Amazi mu kigo/ mu mbuga)* ○ *Piped into public tap (Ivomo/ Robine rusange)* ○ *Protected dug well (Iriba ryubakiye)* ○ *Unprotected dug well (Iriba ritubakiye)* ○ *Borehole or tubewell (Amazi aturutse mu butaka/ Nayikondo)* ○ *Protected spring (Iriba rusange ryubakiye)* ○ *Unprotected spring (Iriba rusange ritubakiye)* ○ *Rainwater (Amazi y'imvura)* ○ *Surface water (Amazi atemba n'adatemba/ Imigezi, ibiyaga, ibishanga, ibidendezi)* ○ *Bottled water (Amazi ari mu icupa)* ○ *Tanker truck (Ikamyo itwara amazi)* ○ *From vendors (Kubacuruza amazi)* ○ *Other, specify (Ibindi, sobanura)* _____ ○ *Don't know (Simbizi)*	
P2	Is water available from this source on the school premise (in building or within school grounds)? IF YES, ASK: May I see water from this source that is available today? If the water is inside the school building, please show me that. Otherwise, show me the water elsewhere on the premises. *Ese amazi aboneka kuri iyi nkomoko ari mu nyubako cyangwa ku butaka bw'inyubako? NIBA ARI YEGO, BAZA: Ese nabona amazi aturuka kuri iyi nkomoko aboneka uyu munsi? Niba amazi ari mu nyubako, mwabinyereka. Niba atari mu nyubako, Mwanyereka ahandi muyakura hafi y'ikigo?*	○ *Yes, observed inside the school (Yego, yabonetse imbere mu nyubako)* ○ *Yes, observed within the grounds of the school (Yego, yabonetse hanze mu kigo)* ○ *Yes, reported, not seen (Yego, byavuzwe ariko ntibyabonetse)* ○ *No, or available only outside the school grounds (Oya, aboneka gusa hanze y'ikigo)*	
P3	Is water available (from the main source or any backup source) at all times the school is open? *Ese amazi aboneka (avanye ku nkomoko nya-mukuru cyangwa izindi nkomoko zishobora gufasha) igihe cyose ishuri rifunguye?*	○ *Always available, no interruptions (Aboneka buri gihe, nta guhagarara)* ○ *Often available, some interruptions of less than 2 hours per day (Akenshi araboneka, abura rimwe na rimwe, ariko igihe kitarenze amasaha 2 ku munsi)* ○ *Sometimes available, frequent or prolonged interruptions of more than 2 hours per day (Rimwe na rimwe aboneka, abura kenshi cyangwa igihe kirekire kirenze amasaha 2 ku munsi)*	
P4	Is there any water back-up plan in case of water interruptions? *Mwaba mufite uburyo bw'ingoboka mu gihe amazi yabuze mu kigo?*	○ *Yes (Yego)* ○ *No (Oya)*	No ➟ P1
P5	Is YES, what is the back-up you have in case of water interruptions? *Niba ari YEGO, ni ubuhe buryo bw'ingoboka mufite?*	○ *Water tanks (Ikigega cy'amazi)* ○ *Tanker truck (Imodoka zizana amazi)* ○ *Get water from outside the facility (Kuvoma amazi hanze y'ikigo)* ○ *Rainwater (Amazi y'imvura)* ○ *Bottled water (Amazi yo mu macupa)* ○ *Other, specify (Ibindi, sobanura)* _____	

3. Sanitation

No	Questions	Answers/ codes	Skip to
Q1	Is there a toilet (latrine) on the premises that is accessible for students or staff? *Hari ubwiherero muri iki kigo bushobora gukoreshwa n'abanyeshuri cyangwa abakozi?*	○ *Yes (Yego)* ○ *No (Oya)*	No ➟ Q12
Q2	How many students do you have in this school? *Ni abanyeshuri bangahe biga muri iki kigo?*	|____|____|____|____|	
Q3	How many toilets do you have in the school? *Ni ubwiherero bungahe mufite muri iki kigo?*	|____|____|	
Q4	Among them, how many toilets have locks and inside outside? *Muri ubwo bwiherero, ni bungahe bufungirwa imbere n'inyuma?*	|____|____|	
Q5	Among them, how many toilets are dedicated to boys and men? *Muri ubwo bwiherero, ni bungahe bugenewe abahungu/ abagabo?*	|____|____|	
Q6	Among them, how many toilets are dedicated to girls or women? *Muri ubwo bwiherero, ni bungahe bugenewe abakobwa cyangwa abagore?*	|____|____|	
Q7	Among them, how many toilets are dedicated to disabled persons? *Muri ubwo bwiherero, ni bungahe bugenewe ababana n'ubumuga?*	|____|____|	
Q8	Among them, how many toilets do not have any indication of whom should be using it? *Muri ubwo bwiherero, ni bungahe butagaragaza uwo bugenewe?*	|____|____|	

No	Questions	Answers/ codes	Skip to
Q9	IF YES: What type of toilet? May I see the toilet? *NIBA ARI YEGO: Ni ubuhe bwoko bw'ubwiherero? Nshobora kubureba?*	○ *Flush toilet to sewer system (Umusarani urekura amazi upfundikiye ufite amatiyo yohereza mu cyobo rusange cyubakiye)* ○ *Flush toilet to septic tank (Umusarani upfundikiye wohereza amazi mu itanki / mu byobo byubakiye)* ○ *Flush to pit latrine (Umusarani upfundikiye wohereza amazi mu cyobo cyitubagiye)* ○ *Flush to somewhere else (Umusarani wohereza imyanda ahandi)* ○ *Flush, don't know where (Umusarani wohereza imyanda ahandi hatazwi)* ○ *Ventilated improved pit latrine (Umisarani w'icyobo utinze neza ufite ubuhumekero)* ○ *Pit latrine with slab (Umisarani w'icyobo utinze neza ufite aho bahagarara habugenewe)* ○ *Pit latrine without slab/ open pit (Umisarani w'icyobo kirangaye (udatinze))* ○ *Composting toilet (Umusarani w'ibyumba bavidura, Ecosan)* ○ *No toilet facility, bush, field (Ntamusarani, mu gisambu, ku gasozi)*	
Q10	Is there a usable (available, functional, private) toilet for visitors? *Hari ubwiherero bwakoreshwa (buboneka, bukora, bwihariye) ku bashyitsi?*	○ *Yes, available, functional, private and close to unit (Yego, buraboneka, burakora, burihariye, kandi buri hafi unite)* ○ *Yes, available, functional, private, but not close to unit (Yego, buraboneka, burakora, burihariye, ariko ntabwo buri hafi ya unite)* ○ *Not available or not functional or not private (Ntabwo buboneka cyangwa ntabwo bukora cyangwa ntabwo bwihariye)*	
Q11	Is there a usable (available, functional, private) toilet specifically for female visitors? *Hari ubwiherero bukoreshwa n'abagore (buboneka, bukora, bwihariye) cyangwa n'abashyitsi b'igitsina gore?*	○ *Yes, available, functional, private and close to unit (Yego, buraboneka, burakora, burihariye, kandi buri hafi unite)* ○ *Yes, available, functional, private, but not close to unit (Yego, buraboneka, burakora, burihariye, kandi buri hafi unite)* ○ *Not available or not functional or not private (Ntabwo buboneka cyangwa ntabwo bukora cyangwa ntabwo bwihariye)*	
Q12	Is there a bin with a lid on it for disposal of used menstrual hygiene products in or close to the women's toilet? *Hari igikoresho gifunze cyabugenewe cyo kubikamo ibikoresho by'isuku y'imihango byakoreshejwe mu bwiherero bw'abagore cyangwa hafi yabwo?*	○ *Yes, observed (Yego, nakibonye)* ○ *Yes, reported, not seen (Yego, ariko sinakibonye)* ○ *Not available (Nta gihari)*	
Q13	Is there a private area with soap and water for women to use for cleaning themselves? *Hari ahantu hihariye hari isabune n'amazi abakobwa bashobora gukoresha mu kwisukura?*	○ *Yes, observed (Yego, nakibonye)* ○ *Yes, reported, not seen (Yego, ariko sinakibonye)* ○ *Not available (Nta gihari)*	

4. Conditions for Infection Prevention and Control

No	Questions	Answers/ codes	Skip to
Now I would like to know about items for infection prevention and control available in this service site today. For each item that I ask about, please show me the item. *Ubu ndashaka kumenya ibikoresho byo gukumira no kugenzura indwara biboneka muri iyi serivisi uyu munsi. Ku gikoresho cyose mbaza, nyamuneka ngerekereho.*			
R1A	Clean running water (piped water supply, or covered bucket with tap) *Amazi meza ya ava muri robine (amazi azanwa mu nyubako, cyangwa agasaho gafunze gafite robine)?*	○ *Yes, observed (Yego, nakibonye)* ○ *Yes, reported, not seen (Yego, ariko sinakibonye)* ○ *Not available (Ntacyo)*	
R1B	Soap (bar or liquid) for hand hygiene *Isabune (ndende cyangwa isukika) yo gukaraba intoki?*	○ *Yes, observed (Yego, nakibonye)* ○ *Yes, reported, not seen (Yego, ariko sinakibonye)* ○ *Not available (Ntacyo)*	
R1C	Alcohol-based handrub *Alukolo yo gukaraba intoki*	○ *Yes, observed (Yego, nakibonye)* ○ *Yes, reported, not seen (Yego, ariko sinakibonye)* ○ *Not available (Ntacyo)*	
R2	How does this facility dispose of waste? *Nigute iki kigo gishyingura imyanda yo muri kigo?*	○ *Burn using incinerator – protected (Itwikirwa muri cyuma (incinerator) - yubakiye)* ○ *Burn using incinerator – no protection (Itwikirwa muri cyuma (incinerator) - itubakiye)* ○ *Burn using drum/brick – protected (Itwikirwa muri ahabugenewe (burner) - yubakiye)* ○ *Burn using drum/brick – no protection (Itwikirwa muri ahabugenewe (burner) - itubakiye)* ○ *Open burning: open pit or flat ground – protected (Itwikirwa hanze mu cyobo cg mu mbuga - hubakiye)* ○ *Open burning: open pit or flat ground - no protection (Itwikirwa hanze mu cyobo cg mu mbuga - hatubakiye)* ○ *Dump without burning: flat ground – protected (Irundwa ahantu h'imbuga - hubakiye)* ○ *Dump without burning: flat ground – no protection (Irundwa ahantu h'imbuga - hatubakiye)* ○ *Dump without burning: covered pit or pit latrine (protected) (Irundwa mu cyobo gitwikiriye - hubakiye)* ○ *Dump without burning: open-pit – no protection (Irundwa mu cyobo kirangaye - hatubakiye)* ○ *Stored for removal offsite: stored in covered container (Ibikwa mu kintu gipfundikiye mbere yo gutwarwa)* ○ *Stored for removal offsite: stored unprotected (Ibikwa mu kintu kidapfundikiye mbere yo gutwarwa)* ○ *Other, specify: _____*	
R3	Does the school have trained staff on WASH services *Ishuri rifite umukozi wahuguwe ku mazi, isuku n'isukura?*	○ *Yes (Yego)* ○ *No (Oya)*	

No	Questions	Answers/ codes	Skip to
R4	Does the school have person(s) in charge of hygiene (cleaning toilets, . . .) *Ese Ishuri rifite umukozi ushinzwe isuku (gusukura ubwiherero n'ibindi)*	○ *Yes (Yego)* ○ *No (Oya)*	

5. Observation of Toilet and Cleanness

No	Questions	Answers/ codes	Skip to
E1	School has adequate latrine (with slab, lid, roof, door)? *Ishuri rifite ubwiherero bwujuje ibyangombwa?*	○ *Yes (Yego)* ○ *No (Oya)*	
E2	Latrine wall is dirty by human excreta? *Inkuta z'ubwiherero zandujwe n'umwanda w'abantu?*	○ *Yes (Yego)* ○ *No (Oya)*	
E3	Latrine floor is dirty by human excreta? *Mu bwiherero hasi ha handujwe n'umwanda w'abantu?*	○ *Yes (Yego)* ○ *No (Oya)*	
E4	Toilet paper or water is available in the Toilet? *Ubwiherero burimo urupapuro rw'isuku cyangwa amazi byo kwihanagura nyuma yo gukoresha ubwiherero?*	○ *Yes (Yego)* ○ *No (Oya)*	
E5	School has hand washing facility (lavabo, local made kandagira ukarabe, etc.) with soap and water? *Ishuri rifite aho bakarabira intoki (kandagira ukarabe - lavabo - akajerekani) byujuje ibyangombwa (amazi n'isabune)?*	○ *Yes (Yego)* ○ *No (Oya)*	
E6	Observable flies in the toilet? *Mu bwiherero hagaragaramo isazi?*	○ *Yes (Yego)* ○ *No (Oya)*	
E7	Observable flies in the compound? *Mu mbuga, iruhande y'ubwiherero cyangwa hafi y'ahaterekwa ibintu hagaragara isazi?*	○ *Yes (Yego)* ○ *No (Oya)*	
E8	Observable trash in the compound? *Hari imyanda yandagaye mu mbuga?*	○ *Yes (Yego)* ○ *No (Oya)*	

Pulic areas Questionnaire

1. Location

No	Questions	Answers/ codes	Skip to
N1	Date of data collection *Itariki amakuru akusanyirijwe ho*	___ ___/___ ___/___ ___ ___ ___ *dd mm yyyy*	
N2	Start time of data collection *Isaha ikiganiro gitangiriyeho*	|___ ___:___ ___| *hh min*	
N3	Interviewer's name *Izina ry'ubaza*	_____	
N4	Team leader's name *Izina ry'umugenzuzi*	_____	
N5	District *Akarere*	○ *Bugesera* ○ *Ruhango*	
N6	Sector *Umurenge*	|____|____|____|____|	
N7	Cell *Akagari*	|____|____|____|____|____|____|	
N8	School name *Izina ry'ishuri*	_____	
N9	School type *Icyiciro ishuriribarizwamo?*	○ *ECD (Irerero)* ○ *Nursery (Ay'incuke)* ○ *Primary (Amashuri abanza)* ○ *Secondary (Amashuri yisumbuye)* ○ *Groupe scolaire (Urwunge rw'amashuri)* ○ *University (Kaminuza)*	
N10	If ECD, where is it hosted *Niba ari Irerero, ni hehe ibera?*	○ *Home Based ECD (Irerero ryo mu ngo)* ○ *Community based ECD (Irerero ry'umudugudu)* ○ *Center based ECD (Irerero mu kigo cyabugenewe)*	
N11	Latitude	|____|____|.|____|____|____|____|____|	
N12	Longitude	|____|____|.|____|____|____|____|____|	

2. Water Availability

No	Questions	Answers/ codes	Skip to
P1	What is the most commonly used source of water for the school at this time? *Amazi mukoresha muri iki kigo muyakura hehe?*	○ *Piped into facility (Amazi ari mu nyubako)* ○ *Piped into facility yard or ground (Amazi mu kigo/ mu mbuga)* ○ *Piped into public tap (Ivomo/ Robine rusange)* ○ *Protected dug well (Iriba ryubakiye)* ○ *Unprotected dug well (Iriba ritubakiye)* ○ *Borehole or tubewell (Amazi aturutse mu butaka/ Nayikondo)* ○ *Protected spring (Iriba rusange ryubakiye)* ○ *Unprotected spring (Iriba rusange ritubakiye)* ○ *Rainwater (Amazi y'imvura)* ○ *Surface water (Amazi atemba n'adatemba/ Imigezi, ibiyaga, ibishanga, ibidendezi)* ○ *Bottled water (Amazi ari mu icupa)* ○ *Tanker truck (Ikamyo itwara amazi)* ○ *From vendors (Kubacuruza amazi)* ○ *Other, specify (Ibindi, sobanura)* _____ ○ *Don't know (Simbizi)*	
P2	Is water available from this source on the school premise (in building or within school grounds)? IF YES, ASK: May I see water from this source that is available today? If the water is inside the school building, please show me that. Otherwise, show me the water elsewhere on the premises. *Ese amazi aboneka kuri iyi nkomoko ari mu nyubako cyangwa ku butaka bw'inyubako? NIBA ARI YEGO, BAZA: Ese nabona amazi aturuka kuri iyi nkomoko aboneka uyu munsi? Niba amazi ari mu nyubako, mwabinyereka. Niba atari mu nyubako, Mwanyereka ahandi muyakura hafi y'ikigo?*	○ *Yes, observed inside the school (Yego, yabonetse imbere mu nyubako)* ○ *Yes, observed within the grounds of the school (Yego, yabonetse hanze mu kigo)* ○ *Yes, reported, not seen (Yego, byavuzwe ariko ntibyabonetse)* ○ *No, or available only outside the school grounds (Oya, aboneka gusa hanze y'ikigo)*	
P3	Is water available (from the main source or any backup source) at all times the school is open? *Ese amazi aboneka (avanye ku nkomoko nya-mukuru cyangwa izindi nkomoko zishobora gufasha) igihe cyose ishuri rifunguye?*	○ *Always available, no interruptions (Aboneka buri gihe, nta guhagarara)* ○ *Often available, some interruptions of less than 2 hours per day (Akenshi araboneka, abura rimwe na rimwe, ariko igihe kitarenze amasaha 2 ku munsi)* ○ *Sometimes available, frequent or prolonged interruptions of more than 2 hours per day (Rimwe na rimwe aboneka, abura kenshi cyangwa igihe kirekire kirenze amasaha 2 ku munsi)*	
P4	Is there any water back-up plan in case of water interruptions? *Mwaba mufite uburyo bw'ingoboka mu gihe amazi yabuze mu kigo?*	○ *Yes (Yego)* ○ *No (Oya)*	No ➟ P1
P5	Is YES, what is the back-up you have in case of water interruptions? *Niba ari YEGO, ni ubuhe buryo bw'ingoboka mufite?*	○ *Water tanks (Ikigega cy'amazi)* ○ *Tanker truck (Imodoka zizana amazi)* ○ *Get water from outside the facility (Kuvoma amazi hanze y'ikigo)* ○ *Rainwater (Amazi y'imvura)* ○ *Bottled water (Amazi yo mu macupa)* ○ *Other, specify (Ibindi, sobanura)* _____	

3. Sanitation

No	Questions	Answers/ codes	Skip to
Q1	Is there a toilet (latrine) on the premises that is accessible for students or staff? *Hari ubwiherero muri iki kigo bushobora gukoreshwa n'abanyeshuri cyangwa abakozi?*	○ *Yes (Yego)* ○ *No (Oya)*	No ➟ Q12
Q2	How many students do you have in this school? *Ni abanyeshuri bangahe biga muri iki kigo?*	|____|____|____|____|	
Q3	How many toilets do you have in the school? *Ni ubwiherero bungahe mufite muri iki kigo?*	|____|____|	
Q4	Among them, how many toilets have locks and inside outside? *Muri ubwo bwiherero, ni bungahe bufungirwa imbere n'inyuma?*	|____|____|	
Q5	Among them, how many toilets are dedicated to boys and men? *Muri ubwo bwiherero, ni bungahe bugenewe abahungu/ abagabo?*	|____|____|	
Q6	Among them, how many toilets are dedicated to girls or women? *Muri ubwo bwiherero, ni bungahe bugenewe abakobwa cyangwa abagore?*	|____|____|	
Q7	Among them, how many toilets are dedicated to disabled persons? *Muri ubwo bwiherero, ni bungahe bugenewe ababana n'ubumuga?*	|____|____|	
Q8	Among them, how many toilets do not have any indication of whom should be using it? *Muri ubwo bwiherero, ni bungahe butagaragaza uwo bugenewe?*	|____|____|	

No	Questions	Answers/ codes	Skip to
Q9	IF YES: What type of toilet? May I see the toilet? *NIBA ARI YEGO: Ni ubuhe bwoko bw'ubwiherero? Nshobora kubureba?*	○ *Flush toilet to sewer system (Umusarani urekura amazi upfundikiye ufite amatiyo yohereza mu cyobo rusange cyubakiye)* ○ *Flush toilet to septic tank (Umusarani upfundikiye wohereza amazi mu itanki / mu byobo byubakiye)* ○ *Flush to pit latrine (Umusarani upfundikiye wohereza amazi mu cyobo cyitubagiye)* ○ *Flush to somewhere else (Umusarani wohereza imyanda ahandi)* ○ *Flush, don't know where (Umusarani wohereza imyanda ahandi hatazwi)* ○ *Ventilated improved pit latrine (Umisarani w'icyobo utinze neza ufite ubuhumekero)* ○ *Pit latrine with slab (Umisarani w'icyobo utinze neza ufite aho bahagarara habugenewe)* ○ *Pit latrine without slab/ open pit (Umisarani w'icyobo kirangaye (udatinze))* ○ *Composting toilet (Umusarani w'ibyumba bavidura, Ecosan)* ○ *No toilet facility, bush, field (Ntamusarani, mu gisambu, ku gasozi)*	
Q10	Is there a usable (available, functional, private) toilet for visitors? *Hari ubwiherero bwakoreshwa (buboneka, bukora, bwihariye) ku bashyitsi?*	○ *Yes, available, functional, private and close to unit (Yego, buraboneka, burakora, burihariye, kandi buri hafi unite)* ○ *Yes, available, functional, private, but not close to unit (Yego, buraboneka, burakora, burihariye, ariko ntabwo buri hafi ya unite)* ○ *Not available or not functional or not private (Ntabwo buboneka cyangwa ntabwo bukora cyangwa ntabwo bwihariye)*	
Q11	Is there a usable (available, functional, private) toilet specifically for female visitors? *Hari ubwiherero bukoreshwa n'abagore (buboneka, bukora, bwihariye) cyangwa n'abashyitsi b'igitsina gore?*	○ *Yes, available, functional, private and close to unit (Yego, buraboneka, burakora, burihariye, kandi buri hafi unite)* ○ *Yes, available, functional, private, but not close to unit (Yego, buraboneka, burakora, burihariye, kandi buri hafi unite)* ○ *Not available or not functional or not private (Ntabwo buboneka cyangwa ntabwo bukora cyangwa ntabwo bwihariye)*	
Q12	Is there a bin with a lid on it for disposal of used menstrual hygiene products in or close to the women's toilet? *Hari igikoresho gifunze cyabugenewe cyo kubikamo ibikoresho by'isuku y'imihango byakoreshejwe mu bwiherero bw'abagore cyangwa hafi yabwo?*	○ *Yes, observed (Yego, nakibonye)* ○ *Yes, reported, not seen (Yego, ariko sinakibonye)* ○ *Not available (Nta gihari)*	
Q13	Is there a private area with soap and water for women to use for cleaning themselves? *Hari ahantu hihariye hari isabune n'amazi abakobwa bashobora gukoresha mu kwisukura?*	○ *Yes, observed (Yego, nakibonye)* ○ *Yes, reported, not seen (Yego, ariko sinakibonye)* ○ *Not available (Nta gihari)*	

4. Conditions for Infection Prevention and Control

No	Questions	Answers/ codes	Skip to
Now I would like to know about items for infection prevention and control available in this service site today. For each item that I ask about, please show me the item. *Ubu ndashaka kumenya ibikoresho byo gukumira no kugenzura indwara biboneka muri iyi serivisi uyu munsi. Ku gikoresho cyose mbaza, nyamuneka ngerekereho.*			
R1A	Clean running water (piped water supply, or covered bucket with tap) *Amazi meza ya ava muri robine (amazi azanwa mu nyubako, cyangwa agasaho gafunze gafite robine)?*	○ *Yes, observed (Yego, nakibonye)* ○ *Yes, reported, not seen (Yego, ariko sinakibonye)* ○ *Not available (Ntacyo)*	
R1B	Soap (bar or liquid) for hand hygiene *Isabune (ndende cyangwa isukika) yo gukaraba intoki?*	○ *Yes, observed (Yego, nakibonye)* ○ *Yes, reported, not seen (Yego, ariko sinakibonye)* ○ *Not available (Ntacyo)*	
R1C	Alcohol-based handrub *Alukolo yo gukaraba intoki*	○ *Yes, observed (Yego, nakibonye)* ○ *Yes, reported, not seen (Yego, ariko sinakibonye)* ○ *Not available (Ntacyo)*	
R2	How does this public area dispose of waste? *Nigute iki kigo gishyingura imyanda yo muri kigo?*	○ *Burn using incinerator – protected (Itwikirwa muri cyuma (incinerator) - yubakiye)* ○ *Burn using incinerator – no protection (Itwikirwa muri cyuma (incinerator) - itubakiye)* ○ *Burn using drum/brick – protected (Itwikirwa muri ahabugenewe (burner) - yubakiye)* ○ *Burn using drum/brick – no protection (Itwikirwa muri ahabugenewe (burner) - itubakiye)* ○ *Open burning: open pit or flat ground – protected (Itwikirwa hanze mu cyobo cg mu mbuga - hubakiye)* ○ *Open burning: open pit or flat ground - no protection (Itwikirwa hanze mu cyobo cg mu mbuga - hatubakiye)* ○ *Dump without burning: flat ground – protected (Irundwa ahantu h'imbuga - hubakiye)* ○ *Dump without burning: flat ground – no protection (Irundwa ahantu h'imbuga - hatubakiye)* ○ *Dump without burning: covered pit or pit latrine (protected) (Irundwa mu cyobo gitwikiriye - hubakiye)* ○ *Dump without burning: open-pit – no protection (Irundwa mu cyobo kirangaye - hatubakiye)* ○ *Stored for removal offsite: stored in covered container (Ibikwa mu kintu gipfundikiye mbere yo gutwarwa)* ○ *Stored for removal offsite: stored unprotected (Ibikwa mu kintu kidapfundikiye mbere yo gutwarwa)* ○ *Other, specify: _____*	
R3	Does the public area have trained staff on WASH services *Ikigo rifite umukozi wahuguwe ku mazi, isuku n'isukura?*	○ *Yes (Yego)* ○ *No (Oya)*	

No	Questions	Answers/ codes	Skip to
R4	Does the public area have person(s) in charge of hygiene (cleaning toilets, . . .) *Ese ikigo gifite umukozi ushinzwe isuku (gusukura ubwiherero n'ibindi)*	○ *Yes (Yego)* ○ *No (Oya)*	

5. Observation of Toilet and Cleanness

No	Questions	Answers/ codes	Skip to
E1	Public area has adequate latrine (with slab, lid, roof, door)? *Ikigo rifite ubwiherero bwujuje ibyangombwa?*	○ *Yes (Yego)* ○ *No (Oya)*	
E2	Latrine wall is dirty by human excreta? *Inkuta z'ubwiherero zandujwe n'umwanda w'abantu?*	○ *Yes (Yego)* ○ *No (Oya)*	
E3	Latrine floor is dirty by human excreta? *Mu bwiherero hasi ha handujwe n'umwanda w'abantu?*	○ *Yes (Yego)* ○ *No (Oya)*	
E4	Toilet paper or water is available in the Toilet? *Ubwiherero burimo urupapuro rw'isuku cyangwa amazi byo kwihanagura nyuma yo gukoresha ubwiherero?*	○ *Yes (Yego)* ○ *No (Oya)*	
E5	Public area has hand washing facility (lavabo, local made kandagira ukarabe, etc.) with soap and water? *Ikigo gifite aho bakarabira intoki (kandagira ukarabe - lavabo - akajerekani) byujuje ibyangombwa (amazi n'isabune)?*	○ *Yes (Yego)* ○ *No (Oya)*	
E6	Observable flies in the toilet? *Mu bwiherero hagaragaramo isazi?*	○ *Yes (Yego)* ○ *No (Oya)*	
E7	Observable flies in the compound? *Mu mbuga, iruhande y'ubwiherero cyangwa hafi y'ahaterekwa ibintu hagaragara isazi?*	○ *Yes (Yego)* ○ *No (Oya)*	
E8	Observable trash in the compound? *Hari imyanda yandagaye mu mbuga?*	○ *Yes (Yego)* ○ *No (Oya)*	