



FIELD INVESTIGATION ON THE LEVEL OF
INCLUSIVENESS FOR PEOPLE WITH DISABILITIES IN
WASH SERVICES

Case study of Ndera and Nyamirambo sectors
(Gasabo and Nyarugenge districts)

Commissioned by UPHLS

A study conducted in May 2018

By **Vincent MURENZI**

Independent consultant

Table of contents

Acronyms	3
0. Introduction.....	4
2. Methodology	6
3. Findings	10
3.1 Introduction	10
3.2 Participants' demographic data.....	10
3.3. Key findings on the questions of the study	11
4. Recommendations.....	28
5 Further areas of research.....	30
References	31
Annexes	32

Acronyms

AIDS	Acquired Immune Deficiency Syndrome
FGD	Focus Group Discussion
GoR	Government of Rwanda
HIV	Human Immune Virus
INGO	International Non-Governmental Organization
MMA	Mixed Methods Approach
PwDs	Persons with Disabilities
UPHLS	Umbrella des Personnes Handicapees de Lutte contre le Sida
WASAC	Water and Sanitation Corporation
WASH	Water, Sanitation and Hygiene

Executive summary

Under the financial support of Disability Right Fund (DRF), The Umbrella of Organizations of Persons with Disabilities in the Fight Against HIV and AIDS and for Health Promotion in Rwanda (UPHLS is implementing the programme entitled "Water, Sanitation and Hygiene for All". In an effort to assess the situation of WASH services in Rwanda, UPHLS conducted a study on the situation of WASH in two sectors of Ndera (Gasabo district) and Nyamirambo (Nyarugenge district). The study was quantitative and qualitative in nature. Methodologically, it used a questionnaire, interview and FGD. In terms of findings, the study found some success: existence of water services in the two sectors and the implementation of the policy regarding WASH services in Rwanda. The Government of Rwanda (GoR)'s commitments and efforts towards promoting WASH services are much appreciated. However, the level of inclusivity is still critical. The following challenges were noted: the assessment found that the WASH facilities observed were mostly inaccessible for persons with disabilities. Few of the PwDs' needs were accommodated. While some WASH facilities had accessibility features, often the surrounding environment and other features failed to meet universal design standards. In some cases, it was perceived that the presence of a ramp made the toilets fully accessible, while other features remained inaccessible (such as toilet seats, handrails and circulation space). Hygiene promotion and infection prevention and control remain also critical. Awareness raising on water, hygiene and sanitation facilities is highly required for both rural and urban areas. In terms of recommendations, a serious note was addressed to the GoR and allied partners to invest in WASH services for All, and for Persons with Disabilities in particular. PwDs should not be left behind. To make it happen, a prior needs assessment should be made, a clear implementation plan designed, a set of national norms and standards adopted and, for ensuring PwDs' participation. the latter should be involved in the whole process.

0. Introduction

The Umbrella of Organizations of Persons with Disabilities in the Fight Against HIV and AIDS and for Health Promotion in Rwanda (UPHLS) under the financial support of Disability Right Fund (DRF) is implementing a projet entitled ‘Water, Sanitation and Hygiene for All’.

In an effort to complement the findings from the desk review, an empirical investigation study to assess the level of inclusiveness in WASH services for PwDs was conducted in two districts of Gasabo (Ndera sector) and Nyarugenge (Nyamirambo sector). The assignment aimed to identify barriers that thwart the access of persons with disabilities and limit them from accessing inclusive WASH services. Ultimately, the study focused on finding out the main challenges faced by PwDs while accessing WASH services and therefore recommended possible solutions for a better future.

The first section presents the methodology that was used during the field investigation, including the administration of the questionnaire, the interview, the focus group discussion, the WASH accessibility and hygiene facilities checklist and observation.

The second section describes the key findings, meaning providing data and information on the level of inclusiveness on WASH services, including successes and challenges and some possible tips that are meant to improve WASH services.

Finally, to act upon, a policy brief was proposed to UPHLS to take action and lead advocacy for the better promotion of safe, accessible, inclusive and quality WASH services for PwDs. The policy was drafted based on PwDs’ wishes, claims, views and thoughts. It also reflected some ideas that we though they could inform future government’s commitments and suitably enhance laws and policies to be enacted further. Without being exhaustive, the investigation highlighted some of the areas of research. The report called upon all scholars to join the continued search of solutions, with insights and highlights to help those who would invest in WASH domain and actually serve as a guidance for all duty bearers.

2. Methodology

This field investigation was carried out in two districts of Gasabo (Ndera Sector) and Nyarugenge (Nyamirambo sector). In order to assess WASH activities in action, we were following a SWOT analysis approach (Strengths, Weaknesses, Opportunities and Threats) in an effort to help participants to identify outstanding needs in regard to the level of inclusiveness in WASH services, identify underlying challenges and, therefore, propose potential ways to help act upon.

The investigation followed a Mix Methods Approach (MMA), mainly quantitative and qualitative. The process was participatory. It involved different people including decision makers at ministry level, policy implementers at district level, service providers, persons with disabilities and others who are connected with WASH services. A direct observation on WASH sites was used to assess the level of inclusiveness. An individual checklist to assess the level of inclusiveness on hygiene facilities was also used.

2.1. Sample population

Overall, the sampling process was purposive. We basically focused on key categories involved in WASH services and programmes and those we thought they were obviously having a clear understanding of WASH services. In an actual sense, the WASH usability was one of the criteria to select WASH beneficiaries. The provision of WASH services was the main factor to select service providers. WASAC people were selected because they were deemed to be water suppliers. WASH site managers were involved too. At policy level, we interviewed the person in charge of WASH services in the Ministry of Health. District Engineers, in charge of infrastructures and structural designs, were involved as regulatory mandates. On the other hand, one person from the INGO dealing with WASH services was interviewed.

S/N	Categories	Number (N)
1	Local authorities (Persons in charge of Social Affairs at sector and cell levels)	4
2	District Engineer in charge of Infrastructures	1
3	WASH users (2 elderly, 2 adults & 2 teenagers with disabilities per sector)	12
4	Water and Sanitation Corporation (WASAC) staff operating in the sectors	2
5	Members of the civil society (free choice: World Vision)	2
6	The person in charge of WASH services at the Ministry of Health level	1
7	Hotel managers	1
	Total	23

2.2. Data collection, entry, analysis and interpretation

2.2.1. Data collection

To collect data, the following techniques were used:

- **Interview:** a semi structured guide will be used for local authorities (**See the annex 2**)
- **Questionnaire:** to check on availability of WASH services for PwDs (**See annex 1**);
- **A focus group discussion (FGD):** an interactive session will be organized with WASH services' users (including men, women, adults, girls and boys aged 18 and above): **See annex 2**. This will be complemented by filling hygiene checklist (**see annex 3**);

- **On-site observation** to measure norms and standards of accessibility on WASH facilities (equipment in installation, access to public and domestic toilets, latrine equipment, septic tanks, emptying trucks and safety on dumping sites, etc): **See annex 4.**

The data collection process aimed to assess how end-users were empirically finding out barriers limiting their accessibility to WASH services. The empirical assessment identified on-site limitations. Quantitative and qualitative information collected on the ground were rigorously analyzed for validity and reliability.

2.2.2 Data entry and analysis

- **Data Entry**

The quantitative data were entered using Excel sheet. Before interpreting the findings, the database sheets were cleaned.

- **Data analysis**

The raw data were subjected to a systematic analytical analysis.

- **Analysis of quantitative data**

The quantitative data were analyzed by the enumerators and the consultant made a summary of conclusive strata, after correlation, control and repeatability of findings.

- **Analysis of qualitative data**

Qualitative data from open-ended questions were presented in a narrative form and others items presented with tables. The analysis of notes from interview and Focus Group Discussion (FGD) were done through the following steps:

- Responses during the focus group discussion and interview were transcribed and cross-checked in order to ensure repeatability of themes;
- Significant statements that pertained to the experience of persons with disabilities in the three districts were extracted: the statements in regard to the main variables and study objectives were sorted out;
- Statements were used to formulate meanings: the researcher carefully listened to the information recorded and related it to the questions of the study;
- Statements were organized into clusters: similar data were categorized on a specific sheet to be correlated;

- Themes/ codes were used to provide full description of the experience: specific records to the phenomenon of disability were isolated from the raw data.
- The consultant returned the description to the original source for confirmation of validity. Finally, a triangulation method was used to ensure consistency, reliability and validity of answers provided.

2.3 Ethical considerations

Before conducting this evaluation, the consultant and UPHLS informed all the stakeholders involved about the work to be done and requested for collaboration and authorization. For matters of inclusiveness, Braille questionnaire were used for those who were visually impaired and Sign Language Interpretation for those who were hearing impaired. Communication tips adapted to persons with intellectual impairments were also used. In the whole process, the principles of confidentiality and dignity were respected. Laws that protect children from any harm or abuse were read and signed by data collectors and the consultant. For matters of PwDs' respect and rights, participants in this investigation had to sign a consent form.

2.4. Limitations

As we expected it initially, we faced three major limitations:

- **Availability of local authorities to participate in the interview:** the person in charge of health at district were all in a training in Musanze at national level. To overcome this challenge, the consultant used a phone call upon people's agreement.
- **Limited knowledge of participants on WASH services, inclusion of PwDs and accessibility standards:** to overcome the challenge, the consultant sat with the participants and explained some of the basics on WASH services, disability inclusion and accessibility standards.
- **The person in charge of WASH in the MoH was replaced** (Zacharie referred the consultant to new appointee: finally the latter was contacted in person.

3. Findings

3.1 Introduction

This section presents the findings of the field investigation that intended to generate data and information on the level of inclusiveness on WASH services. The findings are results of an empirical data gathering process which used quantitative and qualitative methods notably the questionnaire, the interview and the focus group discussion.

3.2 Participants' demographic data

Table 1. Distribution of respondents by gender

Gender Percentage (%)	Frequency
Male 52.2	12
Female 47.8	11
Total 100	23

Source: Our field data (May 2018)

Table 1 indicated that the majority of respondents were male (52.2%) whereas 47.8% of them were female.

Type of disability							Total
Physical	Visual Impairment	Hearing Impairment	Intellectual	Multiple	ADHD	Persons without disabilities	

5	1	1	1	3	2	10	23
---	---	---	---	---	---	----	----

Table 2. Distribution of respondents who had disability versus those who had not disability

Source: Our field data (May 2018)

Table 2 has disaggregated numbers of the study participants according to the disability types. The majority of participants had impairment (13, equal to 56.5%) while 43.5% had no impairment. Of the total number, the highest number include those with physical impairments (5) and multiple impairments (3).

Table 3. Distribution of respondents by academic level

Academic level Percentage (%)		Frequency
Primary level	2	8.7
Secondary level	9	39.1
University level	10	43.5
Vocational level	2	8.7
Total	23	100

Source: Our field data (May 2018)

Table 3 presents data related to academic levels. The study participants were mainly at University level (43.5%) and secondary level (39.1%). 8.7% of them had vocational and primary levels. The reality indicated on the table is that all the study participants had the required level of literacy to respond to the questions addressed to them.

3.3. Key findings on the questions of the study

The following were key findings:

3.3.1 Participants' knowledge about disability

Table 7: How do you assess your level of Knowledge about Disability?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Excellent	5	21.7	21.7	21.7
	Very good	5	21.7	21.7	43.5
	Good	12	52.2	52.2	95.7
	Low	1	4.3	4.3	100.0
	Total	23	100.0	100.0	

Source: Our field data (July 2017)

Table 7 presents the data about the participants' knowledge on disability. Of the 23 respondents, the majority (52.2%) confirmed that they had a good level of knowledge, 21.7% had an excellent and a very good level. Only 4.3% had a low level. In general, the research participants proved to have a relatively acceptable good level of knowledge about disability concepts and issues.

3.3.2. Participants views on WASH services

The results from the focus group discussions (FGD) indicated that PwDs have limitations to perform WASH activities, including:

This is what participants expressed about accessing water services:

Notes from the participant

"We already have a body imbalance, taking another weight will only increase our difficulties and we could not walk at all"

Notes from the FGD, May 2018

This is what participants expressed about using toilet services:

Notes from the participants

"Concerning the use of toilets, people with disabilities (especially pregnant women) have difficulty using toilets in rural areas such as in Ndera and households that are poor in Nyamirambo. 35% of them say that the toilets are traditional (so unable to sit and urinate or defecate). Others (65% have and use them). For those with visual impairments, they have mobility difficulties because the

This is what participants expressed about using carrying on water containers from water points to home addresses:

Notes from the participants

“People with disabilities use the same containers as others to draw water (plastic, metallic buckets, basin, etc.) but often experience difficulties of transport from the water point to home. The majority require support, unlike peers who use bicycles, carts, etc.). They claim for adapted, appropriate devices. This case is more complicated in the rural area of Ndera, where what pumps are often far”.

This is what participants expressed about handling water taps, bathing and washing:

Notes from the participants

“ The very limited number of people with disabilities have the motor skills that allow them to use water pumps. These are hard to handle. Industries should study how to overcome this challenge by making the material easy to handle. These difficulties also affect the use of hygiene equipment that is used at home, which often makes showering and laundry very difficult. This study showed that people with disabilities shower at least once a day (95%) but 5% do not. For the latter, they experience the difficulties of carrying water, rubbing their bodies and standing up”.

oth household

Notes from the FGD, May 2018

and institution level)

Notes from the participants

"As persons with physical disabilities, access to toilets is quite difficult for us, because buildings are not often accessible, and persons using wheelchairs are facing a narrow door, are forced to crawl to do their needs with everything, which, to some extent, are the risks of infections".

Notes from the FGD, May 2018

3.3.3 Onsite observation

Through the on-site observation, we assessed the following:

3.3.3.1 Community Drinking Water Supply

On the basis of the data collected, in the two sectors visited, a total of 4 visited water sources are there and functional. On the other hand, the level of inclusiveness for people with disabilities is still critical. Inadequate amount of water has been noted in general. This was due to the limited number of sources or the limited volume of sources for supply. The capacity of many sources could be improved with rehabilitation. The lack of regular maintenance seems a common problem too. In Ndera, the non-functioning of the water point management committees has been indicated. We also noted some of PwDs were using rainy water avoiding extra cost and distance. About water treatment, few households had treated water. To have potable water, the only method used is boiling.

Area	Water points visited	Observation
Ndera	Humura Centre and Nyandungu	<ul style="list-style-type: none">• The water remains insufficient because there is a system of shedding (from 6h00 to 5h00: the population gets their supplies), from 6am to 11am: site manager provides.• Access to drinking water for the poorest people and persons with impairments is a real problem• The water is very heavy during the rainy season; Existence of unmanaged sources where the population draws drinking water; Water points are not maintained; PwDs know water cuts during the dry season• For both sectors, the issue of water collection remains very crucial in these conditions of

		<p>inadequacy not only of sources but also those functional are low flow, this which causes gatherings and queues</p> <ul style="list-style-type: none"> • The borehole is hard to manoeuvre, so not easily accessible for PwDs. Manual pump still hard for these with mobility and limited functionality. • Water supply systems are to be rehabilitated. All the functional water points are functional but the valves are not regularly replaced. PwDs in their local communities are not supplied with water drinking. • PwDs generally continue to stock up rainy water due to lack of drinking water.
Nyamirambo	Biryogo	<ul style="list-style-type: none"> • The water is insufficient and of quality. The population of Nyamirambo is regularly served. • Access to drinking water for the poorest people and persons with impairments is a real problem • The water is very heavy during the rainy season; Existence of unmanaged sources where the population draws drinking water; Water points are not maintained; PwDs know water cuts during the dry season • For both sectors, the issue of water collection remains very crucial in these conditions of inadequacy not only of sources but also those functional are low flow, this which causes gatherings and queues • Water supply systems are to be rehabilitated. All the functional water points are functional but the valves are not regularly replaced. PwDs in their local communities are not supplied with water drinking. • PwDs generally continue to stock up rainy water due to lack of drinking water.

Source: Our field data, May 2018

3.3.3.2 Basic sanitation in a community setting

In the two surveyed sectors, there are latrines at the household level. However, their structure and use is not always adequate. According to available survey data, more than 95% PwDs' households have adequate latrines, 65% are unsuitable, none practice defecation outdoors and then 45% said they used public toilets while going to the markets. In the two sectors, only 15% of households said they shared a latrine with other households. As for the availability of public latrines and handwashing devices, the number varies between 2-5% but mostly there aren't.

Illustration 1:



Photo: @ Borehole in Ndera Sector



Photo: @ A water tank in Humura Centre

Area	Water points visited functional	Observation
Ndera	Humura Centre and Nyandungu	<ul style="list-style-type: none"> • Latrines exist in almost 95% of households. • In Ndera sector, hand washing facilities are available and there is a block of public latrines. In this sector, handwashing facilities are available to 44.5% of households. • The toilets are of traditional types to fake and are not covered. • Many households have latrines at home and most are individual, no defecation in the air is reported. Almost all latrines no not comfortable, nor accessible for PwDs. As for hand washing, many households keep soap and water at home
Nyamirambo	Biryogo	<ul style="list-style-type: none"> • Latrines exist in almost 95% of households. • In Nyamirambo sector, hand washing facilities are available and there is a block of public

		<p>latrines. In this sector, handwashing facilities are available to 65% of households.</p> <ul style="list-style-type: none"> • The toilets are of traditional types to fake and are not covered. • Many households have latrines at home and most are individual, no defecation in the air is reported. Almost all latrines no not comfortable, nor accessible for PwDs. As for hand washing, many households keep soap and water at home
--	--	---

Illustration 2



Photo: @ Latrine in Humura Centre



Photo: @ Bathroom in Humura Centre

3.3.3.3 Hygiene practices

On handwashing, households in two sectors do not use soap regularly at key times, including after using the toilet and before eating. In Nyamirambo, 75% wash their hands before eating and 86% after the toilet but without soap. In Ndera, the investigators observed that people did not usually wash their hands at key moments and also that they did not know how to do it correctly. On the other hand, the survey concluded that in Nyarugenge, the practice was generally done whereas in

Ndera, 55% did it at key moments.

Illustration 3



Photo: @ Handwashing facilities in rural area (Gasabo)



Photo: @ Handwashing in one hotel in urban area (Gasabo)

As for the management of excreta of children, the majority of households, especially mothers with disabilities (more than 97%) treat it correctly across the 2 sectors. In other words, they throw the excreta into the toilet. Except in educated households, it is rare for households to own and use a pot of defecation for children. In rural areas, hoes and shovels are often used. On the issue of menstrual hygiene, the survey revealed social stigma to women and girls with disabilities. For management, most of women with disabilities use hygienic tissues but those who can afford buying disposable sanitary napkins (ex. Cotex) are not many. They change it in medium 2 - 3 times a day and take a shower more than once a day if possible. Few are also those who talk about it with their mothers and sisters.

3.3.3.4 Diseases

In the two sectors, 75% of the surveyed people said they were mostly diagnosed to have typhoid and malaria. 100% said there were no cases of cholera. For more than half of participants, a major difficulty found is neglected tropical diseases including corporal spots, scars due to limited access to pure and clean water. The reasons for this situation are

mainly the absence or insufficiency of water points on the spot, regular water cuts and the lack of water storage. The absence or non-use of hand washing devices has also been observed in many structures. These two points are strongly related. Without access to adequate water, it is difficult to ensure or even encourage the necessary hygiene practice. In two sectors of Nyamirambo and Ndera, the inadequacy of adequate latrines or the lack of protective equipment for caregivers were noted.

3.3.3.5 WASH in schools

In two schools visited (Humura Centre and Philippe Smaldone), one boarding school and one day school, they both have water points. They have on-site, functional water points. As for sanitation, they do have enough latrines. Compared to the numbers of CwDs they have, a latrine serves about 30 students on average. So, they seem not to be enough and accessible. However, toilet papers and washing hand facilities are there but not enough. Hand washing devices are almost non-existent in schools and where they are, they are not used by children. Waste management in the classrooms are also to be improved.

3.3.3.6 Handwashing

Hand washing is a serious problem in Nyamirambo and Ndera sectors. These problems are related to the lack of information for persons with disabilities and their guiders because on inaccessibility, lack of soap and appropriate devices for washing hands. In addition to this, there is lack of privacy in the design and location of toilets. Norms and standards of accessibility are critical too.

3.3.3.7 Summary of findings (results from the research questions)

Strengths	Weaknesses
<ol style="list-style-type: none"> 1. 95% of PwDs said “yes”, meaning they have access to water, but hardly know hygiene and sanitation. 2. Yes, 95% of persons with disabilities are accessing wash services (mostly persons with physical, hearing and multiple impairments). 3. PwDs’ needs, threats and concerns are not addressed. Participants found their needs unmet. 100% 	<ol style="list-style-type: none"> 1. 13% said persons with visual and intellectual impairments are not easily using WASH services in their locality due to respectively mobility problems and limited level of autonomy. 2. Participants confirmed to meet common challenges related to distance (65%), accessibility (87%) and security (55%). The latter said they were unsettled/unsecured when going to WASH sites alone. In addition to

<p>said "no", meaning that their needs are presented, but no clear response provided.</p> <ol style="list-style-type: none"> 4. Common diseases associated with poor hygiene in the two sectors include malaria, amibia, ascaris. 5. The main sources of water are: rainy seasons and modern water tap. 6. Participants accepted to have a regular access to water very often. They are not running excessive water shortage, 95% confirmed to have a regular access to treated water (treated by WASAC) and rarely at home (treated on their own, by 5%). About distance, the majority access without long distance, no more than 100 metres. The quantity of water per person is commonly more than 15 litres a day. About time, participants said they had to wait for less than 30 minutes. 7. In the two sectors, there are no disease contamination due to septic tanks, open pits and waste materials. Participants acknowledged to have fetch water using safe and clean containers. 8. Mostly, the participants said they had sanitary latrines. 9. Women with disabilities manage their menstruation period as normally as they can. The management of menstruation period depends on everyone's financial status. Once, girls and women get the appropriate 	<p>this, the participants said they had to travel long especially when fetching water during the dry season (summer for instance) and face inaccessibility related challenges.</p> <ol style="list-style-type: none"> 3. Public toilets are very few (confirmed by 100%). 4. Persons with weelchairs hardly access toilets, washrooms and water fountains. 100% said they did not have access. However, 90% accepted they were able to clean their own toilets in families. The big challenge was for persons with visual impairments who required support from peers, relatives and siblings to clean toilets and bathrooms. 5. It is not easy for mothers with physical disabilities including those with fine and motor difficulties treat children's feces, but it can be done unless the mother has a severe disability that cannot allow her to clean her child easily. With the help of others; relative/children or maid the children's cleansing can be taken care of. The big challenge arises for mothers with visual impairment. 6. Children with severe and profound disabilities need more training to access toilet and cleanliness facilities such as soap, handwashing and hand drier devices. The latter are not sometimes reachable. 7. No, the toilets are not sufficiently enlightened to support those with low vision and other visual difficulties. Not everywhere! In
--	---

<p>materials (sanitary pads), they are able to use it with no external support required. They are quite autonomous to do so.</p> <p>10. Yes, PwDs are accessing services meant to manage wastes in their houses and prevent them from vector-borne diseases through providing them with chemicals, vaccines once in a month. Everywhere there are a company in charge of waste discharge.</p> <p>11. Yes, PwDs dispose of their solid and liquid wastes. 100% said the single way they had was through collection.</p> <p>12. PwDs' homes are not exposed to water drainage or polluted water. It depends on someone's level of literacy and economy. Those who are poor, are extremely exposed to. Local authorities support people equally, there is no particular support offered to persons with disabilities. What done is through community work known as Umuganda.</p>	<p>urban areas, the some toilets are sufficiently enlightened but most of them are, most of the toilets are normally enlightened using daylight.</p> <p>8. Main challenges faced by PwDs while accessing WASH services are depending on type of disabilities, mostly those who have visual impairments are the ones mostly affected. Other challenges include long distance to travel to access clean water and reach WASH services in an inaccessible areas.</p>
<p>Opportunities</p>	<p>Threat</p>
<ol style="list-style-type: none"> 1. The Government's political commitment 2. Clear guidelines and regulations 3. Water resources are available 4. Coordination mechanisms in place 	<ol style="list-style-type: none"> 1. Big number of untrained PwDs 2. Limited knowledge on implementation of disability inclusion for WASAC staff and local authorities 3. Policies not moved into practice

Source: Our field survey, May 2018

3.3.3.8 Summary of hygiene assessment

In two sectors, we assessed the level of inclusiveness for PwDs and found out the following:

S/N	Items	Quality & Level of inclusiveness					Comments
		Very good	Good	Fair	To improve	None	
1	Toilet facilities available and accessible			x			They use mostly natural daylight hence hard to use during the night
2	Handwashing facilities available and accessible				x		Not available but few of them use bassins.
3	Cleansing materials (soap, chemicals, air freshener, etc.) available and accessible				x		They only use soaps but no soap dishes or soap holder, other cleansing materials are hardly found.
4	Clean materials for food preparation & dishes for serving available and accessible		x				The materials are available.
5	Treated and potable water available and accessible		x				Public Water taps are the one which are mostly found, they lack water

	(including water tanks, water taps, water dispenser, etc)						tanks storages in their homes
6	Mothers with disabilities disposing of clean facilities for managing babies' feces (available and accessible)			x			Facilities are available but depends on financial status of the family.
7	Water boiled & well covered in clean containers (available and accessible)			x			Water is not mostly boiled only when you are cooking, most people don't drink water.
8	PwDs never barefoot when going to the toilet		x				PwDs are taken care of by their families, they have understood the benefit of wearing shoes.
9	Food bins are stored safely and clean	x					It becomes a good habit
10	Waste management, including manure from livestock products safely and genuinely treated		X				There is a company in charge of waste collection, homes are usually free from waste if the home pays regularly the company.
11	Are WASH services labeled with					x	There are no labels to WASH

	visual symbols to help those with visual disabilities to access information?						services.
--	--	--	--	--	--	--	-----------

Source: Our field survey, May 2018

3.3.3.9 Summary of accessibility audit on WASH facilities

S/N	ITEM	Rating		
		Yes	No	Comments
1	Is the ground accessible? (No holes, stones, etc.)		X	Stones
2	Is the path leading to WASH services accessible?		X	Steep area with steps and stones gravels.
3	Is the sidewalk paved?		X	Stones on the way
4	Is the way surface smooth, level, and slip-resistant?		X	It is hard and deteriorated
5	Is it accessible for people who use wheelchairs, walkers or other mobility aids?		X	It is a highly steep area
6	Is the space needs to be ramped or ramped already?	X		It needs to be ramped

7	Are there steps or stairs?	X		Steps
8	Automatic button to open door is set at a height that can be reached by someone in a wheelchair.		X	Fixed high
9	Width of toilet door openings is a minimum of 915 mm.	X		
10	Doors have levers instead of door knobs.	X		
11	All doors are able to be opened without much effort.	X		
12	Toilet sized enough to accommodate people with wheelchairs		X	Narrow space (under standards)
13	The toilets have handrails to support wheelchair and unsteady users		X	Toilet are mainly traditional
14	Toilets are reachable (not in a hidden and bushy place, no long steps)	X		Toilet mainly near homes, except in Ndera where some are far from residence
15	Standard symbols are used (signs, marks)		X	No standards symbols available

16	Wherever facilities for persons with disabilities are signposted		X	No visual signs available
17	Ramps: Maximum gradient is 1:12		X	No ramps
18	Ramps : Minimum width is 1.2m		X	No ramps
19	Ramps: Finishing surface is not slipping		X	No ramp
20	Ramps: Minimum kerb of 100mm is provided		X	No ramp
21	Stairs: The edges of the treads are delineated by contrasting color		X	There are stairs with no indicating color
22	Handrail is labeled in Braille		X	

Illustration 4



Photo: @Path leading to Biryogo Water Station



Photo: @Biryogo Water Station

3.3.3.10 Sanitary in schools

Sanitary installations present a risk in relation to the control of infections including dust bin disposal, source separation, and disposal of garbage. To this must be added the insufficiency of disinfectant product, the inadequate disinfection of equipment and spaces

and the lack of protection equipment. This risk is high for and older persons with disabilities in general and children with disabilities in particular, more particularly for persons with visual impairments.

4 General Conclusion

In sum, the findings of the field investigation study are not far from the findings of the desk review. Though the policies and laws to promote WASH services are enacted and applied, the assessment found that the WASH facilities observed were mostly inaccessible for persons with disabilities. Rwanda's commitments and efforts towards promoting WASH services are much appreciated. However, few of the PwDs' needs were accommodated. While some had accessibility features, often the surrounding environment and other features failed to meet universal design standards. In some cases, it was perceived that the presence of a ramp made the toilets fully accessible, while other features remained inaccessible (such as toilet seats, handrails and circulation space). Hygiene promotion and infection prevention and control remain also critical. Awareness raising on water, hygiene and sanitation facilities is highly required for both rural and urban areas. With this note, a serious note is addressed to the GoR and allied partners to invest in WASH services for All, and for Persons with Disabilities in particular. PwDs should not be left behind. To make it happen, a prior needs assessment should be made, a clear implementation plan designed, a set of national norms and standards adopted and, for the benefits of PwDs, the latter should be involved in the whole process.

4. Recommendations

For water transportation, participants claim for the following:

4.1. Key recommended tips:

To promote inclusive WASH services for PwDs, the following tips are recommended:

- To access and carry water, the persons with disabilities who participated in this study, many are those who wished to be provided with transport facilities including a tricycle with a reasonable accommodation, and again, with levers easily manipulated. The water pump should also be accessible enough and not be too high. In case this is handled properly, it can allow the person to be independent enough.
- In rural areas where the population uses wells and hand pumps like boreholes, accessible roads should be constructed. It should be put a slab of cement for example, or a ramp, if only to facilitate access and use. Also, these constructions should not only make it possible to reach water but also to improve its hygiene (preventing erosion and stagnation).
- It is highly recommended to see how the toilets can be improved to facilitate use and accessibility. They should be cemented to prevent wastewater from passing through and prevent people with disabilities from falling as the soil is wet. People with physical disabilities want reasonable facilities on the construction of toilets that have inaccessible holes (for rural, traditional toilets), and there should be a support (proper seat) to help those with clumsy movements use it. This also makes people with disabilities more autonomous, without assistance.
- On toilets (whether modern or traditional), need is to put the railings in order to be able to stay straight or to facilitate maneuvers inside (movement when squatting). An accessible toilet space should have at least 90 x 130 cm.

- In the case of showering and laundry, people with disabilities want the showers to have a cement-covered floor and the means of evacuation of water to be possible. Reasonable preparation on the hygiene utensil is also desired for those who have handling difficulties (for example in case the person has difficulty pouring water, a tap could be placed on this container).
- Generally, persons with disabilities should be given appropriate support to access clean drinking water and hygiene facilities, adapted to each and everyone's needs (for instance persons with visual and hearing impairments should be helped with adapted communication to access WASH facilities, persons with physical impairments would need accessible facilities (lowered enough to be reachable), persons with intellectual impairments would be facilitated with adapted devices to help them easily handle water taps, manipulate them on their own and those who have attention deficit would be trained on how they can use water facilities in as much optimally as they can.

4.2 Immediate proposed actions

For improving WASH services for PwDs in the two sectors, the following actions are recommended:

4.2.1 Community Drinking Water Supply:

- Development and protection of water points
- Construction and extension of networks / water points
- Reinforcement of capture of existing networks
- Installation of flexible tanks and water facilities
- Conduct a water quality analysis
- Distribution of water treatment products
- Provision of water support services for proper conservation and treatment
- Awareness on the use of water points, cleanliness and treatment of drinking water

4.2.2 Hygiene and sanitation in community settings:

- Mobilization to build household latrines
- Construction of public latrines
- Mobilization to build devices (near latrine for easy handling and manoeuvring for persons using wheelchairs)
- Awareness of latrine use and hygiene
- Implementation of health rules / codes
- Awareness on menstrual hygiene management
- Sensitization on solid waste management

5 Further areas of research

To ensure better and inclusive WASH services for PwDs are taken into account, the following research topics are proposed:

- The cost of inclusive WASH services in the Rwandan context: is this an issue of programmatic and budgeting level?
- What challenges do Persons with Visual Impairments face while accessing WASH services in rural areas, compared with urban areas?
- What communication barriers are faced by Persons with Hearing Impairments while accessing WASH services in hotels, working places and schools?
- How would the GoR address the bottlenecks identified in the WASH related legal framework and ensure efficiency and harmony in application?
- Inclusiveness in WASH services in Rwanda: a reality or utopia towards meeting the internationally set standards?
- Feasibility study on UPHLS' readiness, engagement and potential towards fulfilling the rights of PwDs in accessing inclusive WASH services delivered by partner members' organizations.

References

- Jones, H. (ed) (2010). *Access to water, sanitation and hygiene: Experiences of disabled schoolchildren*. Stories in Brief 2. WEDC. (1)
- Norman, R. (2010). *Water, Sanitation and Disability in rural West Africa: enhancing access and use of WASH facilities. A summary report of the Mali water and disabilities study*. Messiah College: USA. (2)
- Punch, K. (2005). *Introduction to Social Research: Quantitative and Qualitative Approaches*. London. Sage.
- Rees, C. (1997). *An introduction to research for midwives*. Cheshire: Books for Midwives
- UN (2008). *UN Convention on the Rights of Persons with Disabilities*. New York: United Nations.

Annexes

UBURENGANZIRA BWO GUTANGA AMAKURU

Ubu bushakashatsi bugamije gukusanya amakuru ku bijyanye n'itangwa rya serivisi zijyanye n'Amazi, Isuku n'Isukura no kurebera hamwe uko bigera ku bafite ubumuga mu buryo budaheza. Ikigamijwe ni ukugira ngo serivisi zitangwa zirusheho kunogera abafite ubumuga butandukanye kandi babigereho badahejwe. Ibisubizo uza gutanga turabigira ibanga. Amazina yawe ntabwo azagaragazwa muri raporo izakorwa. Niba wemera kuduha amakuru ku bushake bwaho, ngaho uzuzwa ibisabwa hasi hanyuma ushyireho n'umukono:

Amazina (Inyuguti zibanziriza amazina yawe):

Umukono :

Consent form

This investigation intends to collect information related to WASH services and their level of inclusiveness for PwDs. The idea is to help improve WASH services for the benefits of Persons with Disabilities and promote inclusion for all as well. The responses will be confidentially kept. Your

names will not appear in the report. If you agree to contribute to this investigation, kindly complete the address and affix your signature below:

Names (initials) :.....

Signature :.....

ANNEX 1: Questionnaire for District, sector, WASAC, NGOs staff and WASH site managers

Investigation of the situation of WASH services and their level of inclusiveness for persons with disabilities

Site visited:

District/Sector:

Date:

Completed by:

Participants' socio-demographic identity



Code No:

Sex: 1. Male /__/

2. Female /__/

Age:

Type of disability : 1. Physical /__/ 2. Sensorial (2.1. Visual, 2.2. Hearing) /__/
3. Intellectual /__/ 4. Psychological /__/ 5. Multiple /__/ 6. Others (6.1.Epilepsy,
6.2.Albinos, 6.3.EBD, 6.4 Autism) /__/ 6. Others /__/ 7. None /__/

Academic level: 1. Primary /__/ 2. Secondary /__/ 3. University /__/ 4. Vocational /__/

5. None /__/

Profession: 1. Public servant /__/ 2. Civil servant /__/ 3. Business /__/ 4. Private /__/

Questions

13. What WASH services are they offered here?

13.1. Water

13.2. Sanitation

13.3. Hygiene

14. Do you know some persons who have disability accessing this site? Yes No

If yes, what are the types are you observing here? *Select the code which applies to your answer.*

- 14.1. Physical
- 14.2. Visual
- 14.3. Hearing
- 14.4. Intellectual
- 14.5. Multiple
- 14.6. Other types of disabilities (2.6.1. Epilepsy, 2.6.2. Albinos, 2.6.3. EBD¹, 2.6.4. ADD², 2.6.5 Speech and Communication)

15. How often do you support persons with disabilities while accessing WASH services?

- 15.1. Very regular
- 15.2. Regularly
- 15.3. Not regularly
- 15.4. Never

Specify types of services provided:

.....
.....

16. What are the major threats do they face while accessing this WASH site?

- 16.1. Distance
- 16.2. Accessibility
- 16.3. Security
- 16.4. Protection
- 16.5. Inappropriate facilities.....
- 16.6. Any other (specify).....

17. Have PwDs' needs, threats and concerns been addressed?

- 17.1. Yes
- 17.2. No

If yes, how were they addressed?.....

.....

18. What are the current water and sanitation related or vector-led diseases affecting PwDs?

- 18.1. Diarrhea
- 18.2. Cholera
- 18.3. Thyfoid

¹ Emotional and Behavioural Disorders

² Attention Deficit Disorders

- 18.4. Malaria
- 18.5. Parasitism
- 18.6. Others (specify).....
- 18.7. None

19. Do they access public toilets (eg. Watsan, constructed blocks)? Yes No

20. What is the source of water mainly accessed by PwDs here? *More answers are possible*

- 20.1. River
- 20.2. Lake
- 20.3. Protected deep well
- 20.4. Unprotected deep well
- 20.5. Trucking water
- 20.6. Rain water
- 20.7. Borehole/ hand pump
- 20.8. Modern water tap
- 20.9. Others (specify)
- 20.10. None

21. On question 8, assess how often PwDs access the sources of water?

- If yes, how often?
- 21.1. Very often?
 - 21.2. Often?
 - 21.3. Sometimes
 - 21.4. Never

22. Have PwDs regular access to treated water?

- 22.1. Yes
- 22.2. No

If yes, where? At source At home

23. Are PwDs having sources of water near their homes? Yes No

If yes, how is the distance

- 23.1. Less than 100 metres
- 23.2. More than 100 metres
- 23.3. About 1 kilometre
- 23.4. Others (specify).....

24. If the services provided here include water, how much water is available per person per day?

- 24.1. Less than 15 litres
- 24.2. More than 15 litres
- 24.3. Unlimited
- 24.4. Others (specify).....

25. For how long do PwDs stay at the water source waiting for the queue?

- 25.1. Less than 30 minutes
- 25.2. 30 minutes to one hour
- 25.3. More than one hour
- 25.4. Any other (Specify).....

26. How are the risk of disease contamination are for PwDs due to septic tanks, open pits, waste materials, etc?

- 26.1. Very high
- 26.2. High
- 26.3. Very low
- 26.4. Low
- 26.5. None

27. Are PwDs able to draw water with safely and with clean containers? Yes No

28. If yes, how?

- 28.1. With well covered containers?
- 28.2. With clean containers?
- 28.3. With properly handled containers?
- 28.4. Through a modern tap?

29. What are the most common excretion facilities for PwDs?

- 17.1 Sanitary latrine
- 17.2 Modern toilet with seat
- 17.3 Open pit (unsafe and unprotected)
- 17.4 None

30. Is there a space specifically reserved for PwDs who use a wheelchair for them to use toilets, washrooms or water fountains? Yes

- 18.1 If yes, is the door easily reachable by the Person who uses a wheelchair (door knob fixed at 60 cm at least)? Yes No
- 18.2 If yes, is the space accessible enough to help the PwD manoeuver his wheelchair? Yes No
- 18.3 If yes, are there handrails to help the PwD touch and sit properly? Yes No
- 18.4 If yes, is a water tap easy to handle to flush water after using the toilet? Yes No

19 Are the toilets (public and individual families') accessible enough to be cleaned by Persons with mobility difficulties?

20 How do mothers with physical disabilities including those with fine and motor difficulties treat children's feces? Are there materials or water available for anal cleansing? Are they having

support devices or support human resources to do so (when applicable)? How do they wash clothes?

- 21 How do children with severe and profound disabilities access toilet and cleanliness facilities such as soap, handwashing and hand drier devices?
- 22 How do women with disabilities manage their menstruation period? Are there appropriate materials and support services to do so?
- 23 Are the toilets sufficiently enlightened to support those with low vision and other visual difficulties?
- 24 Are PwDs accessing services meant to manage wastes in their houses and prevent them from vector-borne diseases through providing them with chemicals, vaccines, etc? If yes, how often?
- 25 How do PwDs dispose of their solid and liquid wastes?
 - 25.1 Collection
 - 25.2 Burning
 - 25.3 Burying
 - 25.4 Compost
 - 25.5 Any other (specify).....
- 26 Are PwDs' homes exposed to water drainage problem or polluted water? Are there particular services offered by the local authorities managing hygiene in the locality?

27. State other challenges faced by PwDs while accessing WASH services

.....
.....
.....

27 What do you suggest in terms of solutions for a better way forward? *Give at least three*

.....
.....
.....

28 Additional comments (if any)

.....
.....
.....

ANNEX 2: Interview & FGD guide

Introduction: Hello, my name is Vincent MURENZI, am a consultant hired by UPHLS to gather information on WASH services and their level of inclusiveness for PwDs. You were selected because you have knowledge and experience on the domain. Feel free to provide your ideas, they will be kept confidentially. Your name will not appear in the report.

Guiding notes

1. What do you know about the current situation of WASH services here in the sector in general and for PwDs in particular?
2. What is the local authorities' view of this situation, and what is your own view about it?
3. Do you know about any related policy that is in place?
4. Are WASH services available, accessible and inclusive for persons with disabilities?
5. What do these WASH services miss to be inclusive enough?
6. Do community members know much about how they can support PwDs to access WASH services equally?
7. Are the toilets (public and individual families') available? Are they accessible enough to be cleaned by Persons with mobility difficulties?
8. How do mothers with physical disabilities including those with fine and motor difficulties treat children's feces? Are there materials or water available for anal cleansing? Are they having support devices or support human resources to do so (when applicable)? How do they wash clothes?
9. How do children with severe and profound disabilities access toilet and cleanliness facilities such as soap, handwashing and hand drier devices (if available)?
10. Are the toilets sufficiently enlightened to support those with low vision and other visual difficulties?

11. Are PwDs accessing services meant to manage wastes in their houses and prevent them from vector-borne diseases through providing them with chemicals, vaccines, etc? If yes, how often?
12. How do PwDs dispose of their solid and liquid wastes in this area?
13. Are PwDs' homes exposed to water drainage problem or polluted water? Are there particular services offered by the local authorities managing hygiene in the locality?
14. What are the major challenges limiting PwDs from accessing better and inclusive WASH services?
15. What could be done to render WASH services more inclusive for PwDs?
16. Any additional comments (if any).

ANNEX 3: HYGIENE CHECKLIST

WASH SERVICES FOR PERSONS WITH DISABILITIES

Instruction: Assess the level of inclusiveness for the following, tick where appropriately

S/N	Items	Quality & Level of inclusiveness					Comments
		Very good	Good	Fair	To improve	None	
1	Toilet facilities available and accessible						
2	Handwashing facilities available and accessible						
3	Cleansing materials (soap, chemicals, air freshener, etc.) available and accessible						
4	Clean materials for food preparation & dishes for serving available and accessible						
5	Treated and potable water available and accessible (including water tanks, water taps, water dispenser, etc)						
6	Mothers with disabilities disposing of clean facilities for managing babies' feces (available						

	and accessible)						
7	Water boiled & well covered in clean containers (available and accessible)						
8	PwDs never barefoot when going to the toilet						
9	Food bins are stored safely and clean						
10	Waste management, including manure from livestock products safely and genuinely treated						
11	Are WASH services labeled with visual symbols to help those with visual disabilities to access information?						

ANNEX 4: WASH EQUIPMENT & INSTALLATION ACCESSIBILITY CHECKLIST

S/N	ITEM	Rating		
		Yes	No	N/A ³
1	Is the ground accessible? (No holes, stones, etc.)			
2	Is the path leading to WASH services accessible?			
3	Is the sidewalk paved?			
4	Is the way surface smooth, level, and slip-resistant?			
5	Is it accessible for people who use wheelchairs, walkers or other mobility aids?			
6	Is the space needs to be ramped or ramped already?			
7	Are there steps or stairs?			
8	Automatic button to open door is set at a height that can be reached by someone in a wheelchair.			
9	Width of toilet door openings is a minimum of 915 mm.			
10	Doors have levers instead of door knobs.			
11	All doors are able to be opened without much effort.			
12	Toilet sized enough to accommodate people with wheelchairs			
13	The toilets have handrails to support wheelchair and unsteady users			
14	Toilets are reachable (not in a hidden and bushy place, no			

³ N/A: Not Applicable

	long steps)			
15	Standard symbols are used (signs, marks)			
16	Wherever facilities for persons with disabilities are signposted			
17	Ramps: Maximum gradient is 1:12			
18	Ramps : Minimum width is 1.2m			
19	Ramps: Finishing surface is not slipping			
20	Ramps: Minimum kerb of 100mm is provided			
21	Stairs: The edges of the treads are delineated by contrasting color			
22	Handrail is labeled in Braille			

