

8 Social Baseline Situation



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Figure - Photograph Illustrating Apiculture Activities within the PAOI**Error! Bookmark not defined.**

8.1 Methodology

8.1.1 Study Area

This Social Baseline is informed by data collected in January and February 2022, through two social surveys aimed at investigating and documenting the socio-economic specificities of the communities which own, inhabit, use or are culturally tied to the natural resources affected by the Project Footprint.

A study area for the data collection has been defined based on the spatial reach of potential Project-related impacts. The impacts which have been considered to define the study area are those related to (i) loss of, or loss of access to, land and natural resources, (ii) community health and safety and (iii) water level changes downstream of the dam. The impacts considered for data collection and their associated study areas are outlined in Table 8-1. Figure 8-1 illustrates the overall area covered by the 2022 data collection activities.

Table 8-1 Potential Impacts and Associated Study Areas

Potential Impacts Considered	Spatial Area Associated with Impacts
Involuntary resettlement of individuals and communities.	> Villages impacted by land acquisition (See Table 8-2).
Loss of access to means of livelihoods and natural resources.	
Project-induced in-migration and adverse effects on community health during construction.	> Villages impacted by land acquisition (See Table 8-2). > Corridor of 1.5 km on both sides of the river, from the reservoir down to the Ruzizi's confluence with the Ruhwa.
Impacts on gender-based violence during construction works.	
Impairment or restriction of existing socio-economic activities and means of livelihoods during construction and operation.	
Labour in-flow and risks of gender-based violence during construction.	
Change in water levels and flooding risks along the floodplain downstream of the proposed dam.	> Corridor of 1.5 km on both sides of the river, from the reservoir down to the Ruzizi's confluence with the Ruhwa.
Impacts of community health around the reservoir (e.g. waterborne diseases).	> Corridor of 5 km on both sides of the river, from the reservoir down to the Ruzizi's confluence with the Ruhwa. ¹
Encroachment of the Project's footprint and activities on areas or traditions holding cultural value for local communities.	
¹ The width of the corridor selected to assess community health and cultural heritage impacts is based on research suggesting that a dam's impact on waterborne disease cases can be felt on average within a distance of 5 km (Kibret et al, 2021). Nevertheless, it is worth noting that other researchers have suggested that carry the malaria parasite can cross hundreds of km rather than an average distance of 5 km (Wadman, 2019).	

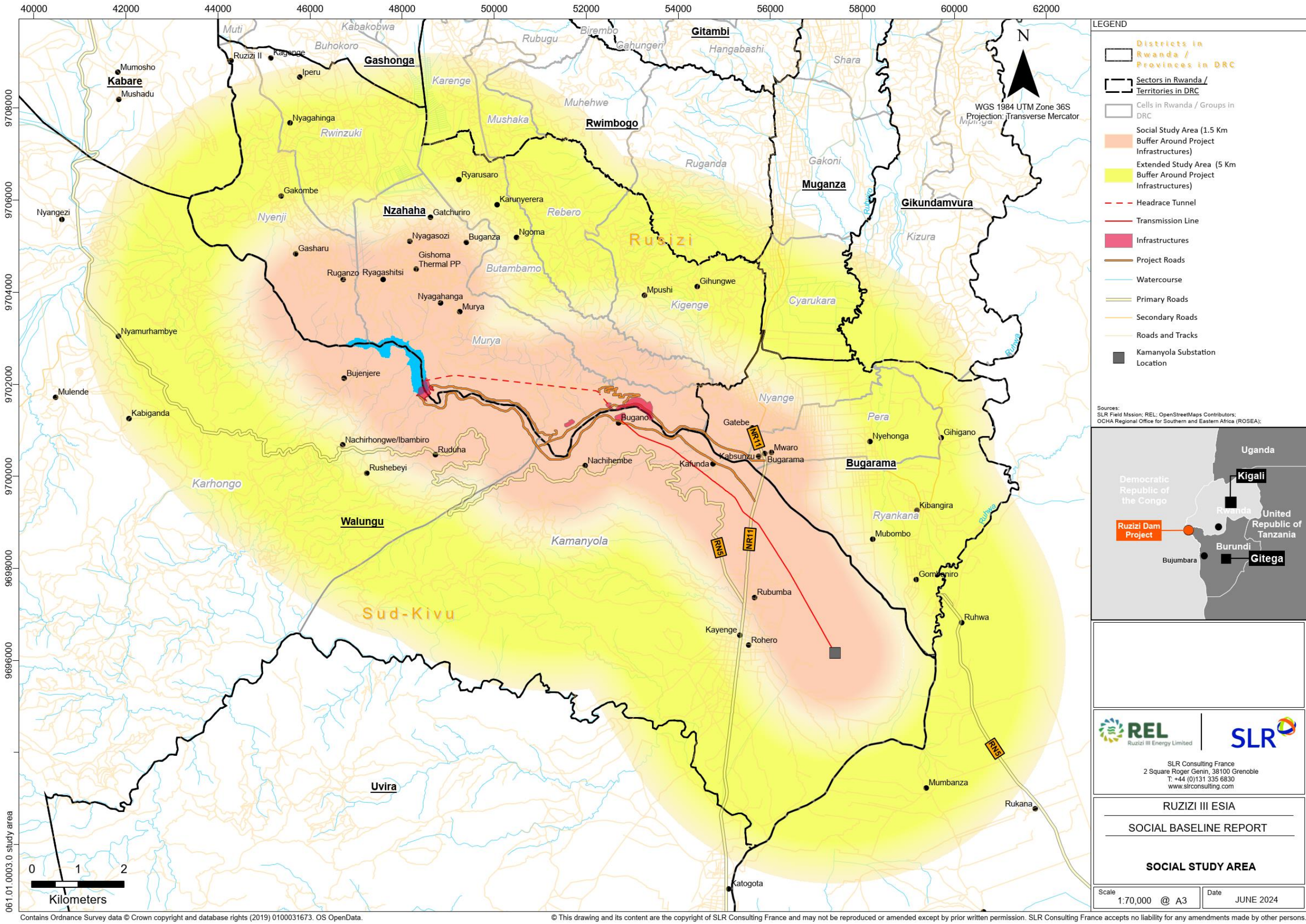


Figure 8-1 Study Area Covered by the Data Collection Activities Performed in 2022



Table 8-2 and Table 8-3 list the villages included in the study area, respectively in Rwanda and DRC, detailing their administrative breakdown.

Table 8-2 Villages Included in the Study Area for the 2022 Studies, Rwanda

Country	Province	District	Sector	Cell	Village	Project Component
Rwanda	Western	Rusizi	Nzahaha	Murya	Nyagahanga	None
					Ryagashitsi	None
					Gatchuriro	None
				Nyenji	Rugunga	None
				Rwinzuki	Murambi	None
				Karenge	Gishoma	None
			Bugarama	Nyange	Gatebe ¹	Access Road
				Pera	Kabusunzu	
				Ryankana	Mwaro	Downstream impacts
					Mubombo	
					Gombaniro	
			Rwinbogo	Kabajoba	Mushaka	None

¹Upstream from the village of Gatebe is officially the village of Gisheke. Although this still figures in official data and maps, it is not counted as a village in SLR's studies because Gisheke village inhabitants left this village since 1995. This village was part of a resettlement program created by the government, the details of which are explained in Section 8.2.2.1 O.

Table 8-3 Villages Included in the Study Area for the 2022 Studies, DRC

Country	Province	Territory	Groupment	Sous-Groupement	Village	Project Component
DRC	Sud-Kivu	Walungu	Kamanyola	Ngweshge	Kayange	Transmission Line
					Nachihembe	
					Kafunda	Access Road
					Bugano	Access Road + Powerhouse
			Karhongo Groupement	Ishamba	Rushebeyi	Reservoir
					Bujenjeri	
					Ibambiro	
					Nachirongwe*	
					Ruduha	

8.1.2 Terminology

The following clarifications on terminology are relevant for the whole document:

- For the sake of consistency, throughout the report the spelling 'Ruzizi' has been used for the Ruzizi River, even though in Rwanda the official orthograph is 'Rusizi'. This alternative spelling has instead been used for the 'Rusizi District', the administrative district where the Project is related in Rwanda.
- Whenever the term 'affected' or 'impacted' is used in relation to villages, communities or population, the impact refers to physical and economic displacement due to land acquisition unless stated otherwise.
- The term 'surveyed population' refers to the quantitative survey of 2022, while 'consulted population / communities / people' refers to the qualitative survey of 2022 unless stated otherwise.
- The term 'Historically Marginalised People (HMP)' has been used throughout the document to address the community known as 'Abashigajwinyuma n'Amateka' in



Rwanda. The term 'Batwa' has been used to describe the same community in DRC. This choice of terminology has been made to reflect the fact that 'Batwa' is considered culturally and politically inappropriate term in Rwanda, although it is widely accepted in DRC.

- Whenever utilised, the term 'household' defines 'a person or a group of related or unrelated people who live together in the same dwelling unit(s), who acknowledge one adult male or female as the head of the household, who share the same housekeeping arrangements and who are considered a single unit' (NISR, 2021).

8.1.3 Primary Data Collection

Unless specified otherwise, all figures and data analysed in this report were collected through two surveys, one qualitative and one quantitative. A first survey was undertaken from 19/01/2022 to 02/02/2022 by SLR social experts, with the aim of gathering socio-economic qualitative data from communities (i) physically or economically impacted by land acquisition and (ii) inhabiting, using or being culturally tied to the natural resources affected by the Project. A second survey was conducted by Ruzizi Energy Limited (REL) from 28/01/2022 to 09/02/2022, to collect socio-economic quantitative data on a sample of households impacted by the Project's land acquisition.

8.1.3.1 Qualitative Social Survey

The qualitative social survey carried out by SLR in January 2022 was designed to achieve the following objectives:

- Map and document the settlements and communities who will be the receptors of impacts during construction and operation, namely:
 - The closest settlements to the project footprints.
 - The communities using the land and natural resources downstream of the future dam, down to the confluence with the Ruhwa River.
 - The communities benefitting from ecosystem services affected by the Project.
- Document the socio-political organisation of communities which may be the receptors of various impacts, including decision-making systems, social hierarchies and conflict resolutions mechanisms.
- Document formal and informal patterns of land tenure and land usage.
- Assess and document the impact of the loss of and loss of access to land and assets affected by the land acquisition.
- Assess and document the presence of any material and immaterial cultural heritage elements.
- Identify vulnerable groups according to local understandings and perceptions of vulnerability.
- Assess the overall public health situation in the study area, documenting the most common diseases, closest health centres, and drinking water and sanitation facilities.
- Assessing and documenting current use of provisioning or cultural ecosystem services by the communities living close the river.
- Assessing gender dynamics across the study area and identifying additional Project-related impacts on women, both due to land acquisition and worker in-flow during construction.

Socio-economic qualitative data was collected through several activities which consisted of on-site observations, focus groups, formal interviews and informal discussions. The following paragraphs describe each of these activities in detail.



A On-Site Observations and Informal Discussions

On-site direct observations have been used to map land use characteristics in the Project Footprint and surrounding areas. Whenever possible, visual observations were enriched by informal discussions with locals performing activities and / or living around the area of interest. The subjects most frequently enquired were cultivators, fish farmers, villagers walking to or from their fields and people going to collect wood, charcoal or any other natural resource for domestic use. Whenever possible, these discussions were undertaken while the concerned activity was being performed, in order to observe social patterns and dynamics around the Project footprint (See Figure 8-2).



Figure 8-2 Informal Discussion with two Female Cultivators Along Bugano's Riverside, DRC (2022)

B Focus Groups

The focus groups undertaken as part of the qualitative survey were designed as to allow the social experts to document (i) the ecosystem services that local communities are currently benefitting from, including water and land uses, and (ii) the livelihood strategies, agricultural practices, (iii) socio-demographic profile and gender dynamics which characterise the communities exploiting and inhabiting the study area. The following focus groups were carried out in each village included in Table 8-2:

- Focus groups with the Village Committee (See Figure 8-3).
- Focus groups with male villagers (Figure 8-4).
- Focus groups with female villagers (Figure 8-5).
- Focus groups with vulnerable people (Figure 8-6).

The sampling for the latter three groups was realised through a gatekeeper methodology.¹ The sample was developed with the help of the Village Head, who was instructed to select three to six people for each focus group. Whenever possible, the focus groups with women were led by a female social expert and translator, while the focus groups with men were led by a male social expert and translator. Complete separation of the two groups allowed the social experts to ensure that sensitive issues surrounding gender-based violence or discrimination could be discussed openly. All focus groups included a final informal discussion where interviewed people

¹ In qualitative social research, gatekeeper sampling describes a sampling strategy whereby the researcher utilises a community's insider as a representative and mediator to access meaningful information on the society which is being studied (Andoh-Arthur, 2019).



were asked to pose any question or concerns, they may have in regards to the Project and the study.

In DRC, the four focus groups were carried out in all villages without any modification. In Rwanda, the following changes were implemented to adapt to the local context:

- Instead of undertaking separate vulnerability focus groups, vulnerable people were included in the gender-separate focus groups. This allowed the social experts to avoid reinforcing the existing sense of marginalisation experienced by vulnerable groups and open up the discussion on vulnerability to non-vulnerable perspectives, which contributed to a richer analysis.
- One additional mixed focus group was undertaken in Gatchuriro, in order to discuss exclusively with members of the Historically Marginalised community living in the Study Area, with the aim of better understanding their vulnerability and their dependency on the natural resources within and surrounding the Project. The findings of the consultation with this community are found in section 8.2.5.1B. In DRC, information on the Batwa community was collected during informal interviews: the findings of this analysis are found in section 8.2.5.2E. A stand-alone study was produced by Anthropolinks in 2023 to investigate the socioeconomic and cultural characteristics of the two communities. The findings of this report have been included in sections 8.2.5.1B and 8.2.5.2E.
- In Mubombo and Gombaniro, two mixed (rather than gender-separate) focus groups were undertaken to explore the impact that changes in water levels have previously had on communities downstream. Gender-based roles were still investigated and women were engaged actively to ensure their voices were represented. Finally, focus groups with Village Committee were also undertaken in each of the villages in the Study Area. These groups aimed to collect demographic and socio-economic data at the village level and enquire about any potential vulnerability or existing issues affecting the community.

The findings of the consultations carried out with women in both DRC and Rwanda are found in section 8.9, while the results of the vulnerability analysis are outlined in section 8.11.

C

Formal Interviews

Formal one-on-one interviews with institutional stakeholders were carried out with Sector Agronomist (see Figure 8-8), Cell Executives and Health Centre Directors in Rwanda, and with Health Centre Directors only in DRC (see Figure 8-7).

Overall, 168 women and 227 men, for a total of 395 people, were engaged as part of the qualitative social survey. An anonymised list of all the interviews carried out as part of the qualitative social survey is presented in Annex E-1. Figure 8-9 shows the geographic distribution of the localities where interviews were carried out in DRC and in Rwanda. This information is further detailed in Table 8-4 for Rwanda and Table 8-5 for DRC, which disaggregate the data by interview type and gender.



Figure 8-3 Focus Group with the Village Committee of Nyagahanga, Rwanda (2022)



Figure 8-4 Focus Group with Men in Ryagashyitsi, Rwanda (2022)



Figure 8-5 Focus Group with Women in Nachirongwe, DRC (2022)



Figure 8-6 Focus Group with Vulnerable People in Kayenge, DRC (2022)



Figure 8-7 Interview with Ibambiro Health Centre, DRC (2022)



Figure 8-8 Interview with Bugarama's Sector Agronomist, Rwanda (2022)



Table 8-4 List of People Interviewed in Rwanda for the Qualitative Survey (2022)

Sector	Cell	Village	Total no. of people interviewed	No. of women interviewed	No. of men interviewed	Interview Type
Nzahaha	Murya	Nyagahanga	13	4	9	Focus groups
		Ryagashitsi	9	4	5	Focus groups
		Gatchuriro	20	1	1	Murya Cell Office
		Stretch from reservoir to powerhouse	6	3	3	Focus group with HMP
	Nyenji	Ruganza	14	6	8	Informal discussions
		Rugunga	1	0	1	Focus groups
	Rwinziki	Murambi	2	0	1	Cell Executive Interview
				0	1	Sector Agronomist
	Karenga	Gishoma	1	0	1	Health Centre Interview
				0	1	Head of cooperative interview
Bugarama	Nyange	Nyange Cell Riverside	6	4	2	Informal discussion
		Gatebe	11	5	6	Focus groups
	Pera	Bugarama	10	4	6	Focus groups
				0	1	Executive of Pera Cell
				0	1	Director of health centre
				0	1	Executive of Nyange Cell
				0	1	Sector Agronomist
				0	1	Director of Rice Cooperative
	Ryankana	Mwaro	10	5	5	Focus groups
		Ryankana Cell riverside	10	5	5	Informal discussion
		Mubombo	22	6	15	Focus group
				0	1	Head of Ryankana Cell
		Gombaniro	29	15	14	Focus group
Rwinbogo	Kabajoba	Mushaka	1	1	0	Health centre interview
Total			180	78	102	

Table 8-5 List of People Interviewed in DRC for the Qualitative Survey (2022)

Groupement	Village	Total no. of people interviewed	No. of women interviewed	No. of men Interviewed	Interview Type
Kamanyola	Bugano	24	2	0	Informal discussion
			9	13	Focus groups
	Kayenge	23	9	11	Focus groups
			0	3	Health Centre
	Kafunda	22	11	9	Focus groups
			2	0	Informal discussion
	Nachihembe	20	10	10	Focus groups
	Rubumba	5	4	1	Health Centre
Downstream riverside	6	2	4	Informal discussion	
Karhongo	Rushebeyi	19	6	13	Focus groups
	Ibambiro	29	10	14	Focus groups
			0	5	Health Centre
	Nachirongwe	23	9	14	Focus groups
	Bujenjeri	22	10	12	Focus groups
	Ruduha	22	0	3	Health Centre
			6	13	Focus groups
Total		215	90	125	

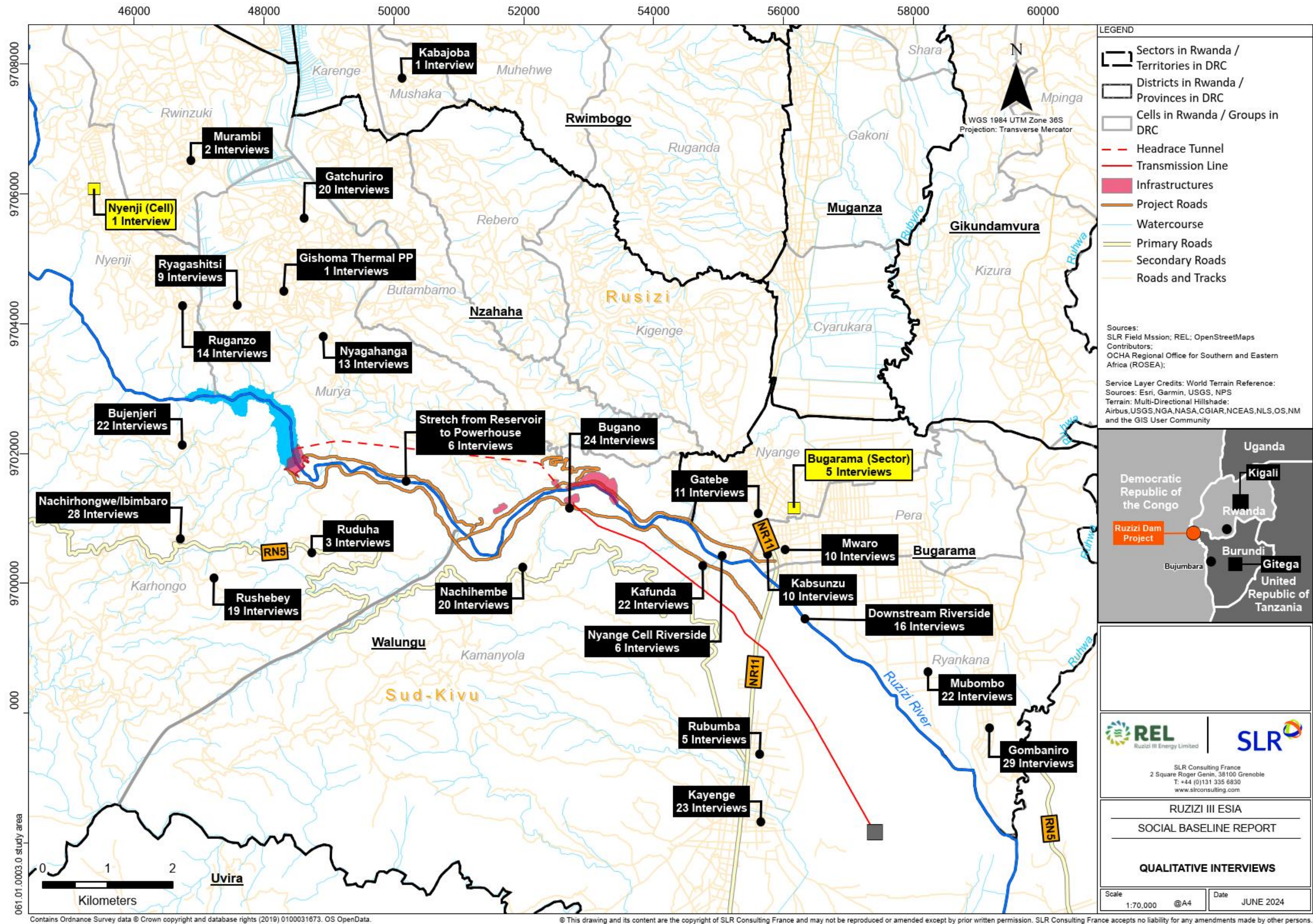


Figure 8-9 Map of Qualitative Interviews (2022)

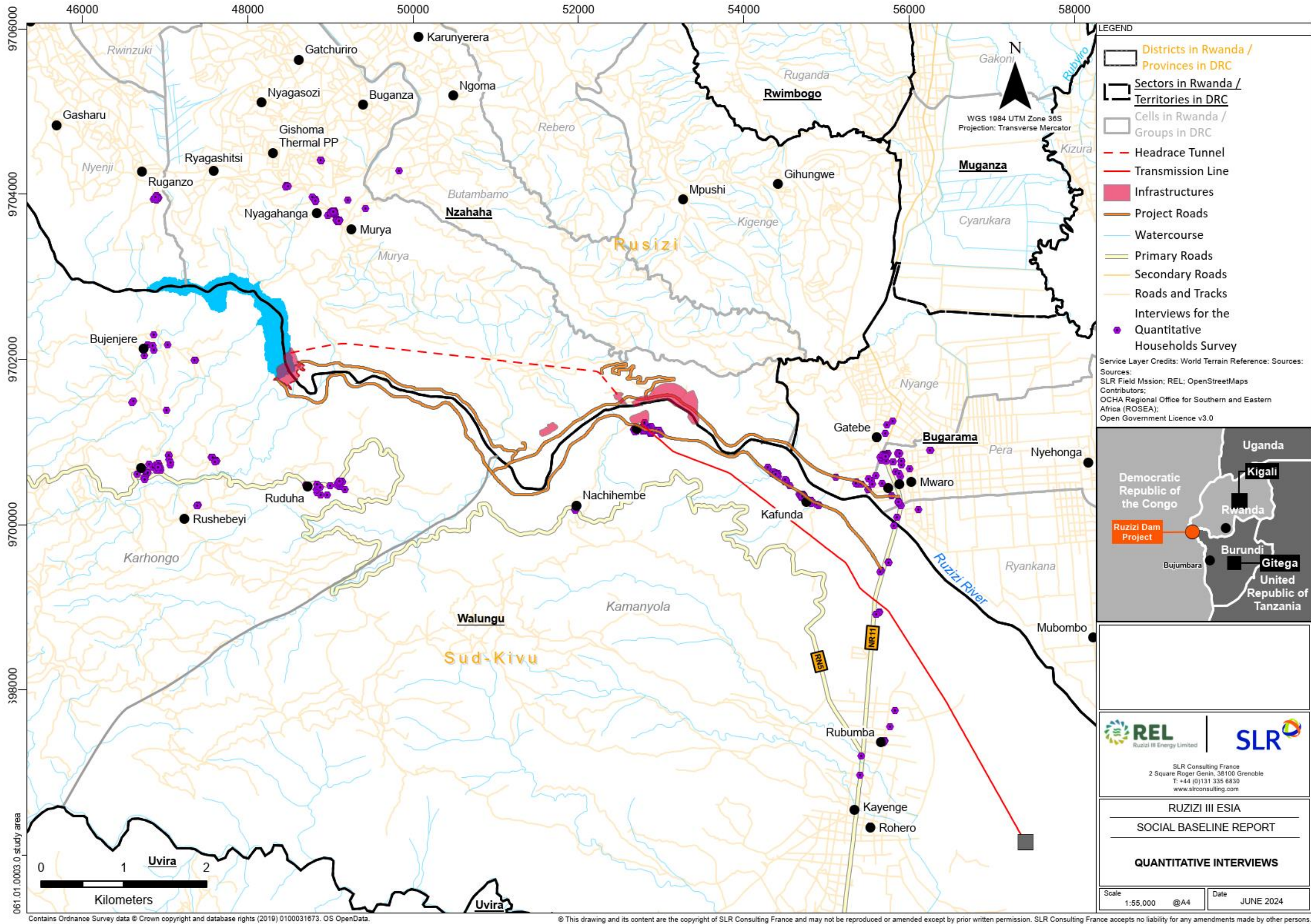


Figure 8-10 – Map of Quantitative Households' Survey (2022)



8.1.3.2 Quantitative Socioeconomic Survey

A quantitative socio-economic survey of households affected by the Project's land take was carried out from 28/01/2022 to 02/09/2022 as part of the resettlement process. The socioeconomic survey consisted of a socio-economic questionnaire administered using electronic forms on smartphones. The objective of the socio-economic questionnaire (See ANNEX E-2) was to collect socio-economic information on the physically and economically displaced households in DRC and Rwanda, which were identified in 2022 through a preliminary census. The information collected as part of the quantitative survey was related to:

- The demographic profile of the surveyed population, including nationality, ethnicity (in the case of DRC only), language, education, religion, age and gender.
- Current livelihood strategies, types of income generating activities, levels of cash circulating in the economy and existing financial management institutions.
- Land owning and renting trends.
- Access to and use of natural resources.

Six hundred and one (601) households were surveyed. This represents a sample of 27% of the affected households, as indicated in the table below. All physically displaced households were purposely included in the survey, the remaining economically displaced households were randomly selected from the census's database. Figure 8-10 shows the geographical distribution of households enquired during the quantitative socio-economic survey.

Table 8-6 Distribution of Households Surveyed During the Quantitative Households' Survey (2022)

Groupement (DRC) / Sector (Rwanda)	Number of Affected Households	Number of Surveyed Households	Sample Size
DRC			
Kamanyola	599	190	32%
Karhongo	947	208	22%
Total	1,546	398	26%
Rwanda			
Bugarama	367	60	16%
Nzahah	336	143	43%
Total	703	203	29%
DRC and Rwanda Total			
Total	2,249	601	27%

8.1.3.3 Historically Marginalized People Studies

An assessment of the situation of the Historically Marginalized People (HMP) in Rwanda impacted by the Project was undertaken by REL. An interview was conducted with the only historically marginalized family impacted by the project in Rwanda. The interview took place on 9 February 2022 in the Ryagashyitsi village, Murya Cell, Nzahaha Sector. with the participation of the Social Economic Development Officer of the Cell.

An assessment based on interviews conducted in DRC by REL; 9 heads of Batwa households in Bujenjere and 8 heads of Batwa households in Ruduha (both in Nyangezi cluster) were interviewed. Focus groups discussions were undertaken on 7 and 12 October 2022 in Kamanyola, Ruduha, and Bujenjere Nyangezi. The interviews gathered additional information on the socio-economic life of the HMP.

A specialist study was undertaken by Anthropolinks in 2023 to investigate the socioeconomic and cultural characteristics of the two communities. Three indigenous people experts



conducted (i) a data desk documentation review, (ii) a 7-day fieldtrip to the Project area (in DRC and Rwanda), and (iii) interviews with two local HMP experts and local leaders.

During the fieldwork, the experts visited Batwa's communities including individuals and households. Data was collected through intensive Interviews and focus group discussions, conducted in Swahili in DRC and in Kinyarwanda in Rwanda. Interviews were conducted with local authority and civil society to collect their view on the subject and to cross-check information. A total of 17 interviews were conducted (7 in DRC and 8 in Rwanda). In addition, the expert's team interviewed HMP leaders and NGOs focusing on protecting the rights of the HMP.



Resettlement committee of Kafunda in the groupement of Kamanyola in DRC



Interview of HMP from Nyange cell in Rwanda

Figure 8-11 – Photographs of Interviews with Resettlement Committees in DRC and HMP in Rwanda

The findings of this report have been included in sections 8.2.5.1B and 8.2.5.2E.

8.1.3.4 Gender

Gender dynamics in the study area were investigated as part of the qualitative survey. SLR investigated the strategies through which men and women access, control and benefit from different livelihoods and resources, and explored attitudes towards and instances of gender-based violence across the Study Area. Data on gender dynamics was collected through four types of interviews:

- Female-led focus groups with women.²
- Gender-based questions to male-led focus groups with men.
- Questions on gender violence and women's access to resources to village committees.
- Informal discussions with female farmers and villagers along the Ruzizi River.

As shown in Table 8-4 and Table 8-5, 42% of interviewed people during the qualitative survey were female.

8.1.3.5 Cultural Heritage

According to the World Bank's Environmental and Social Framework (ESF), the term cultural heritage is defined as encompassing elements of tangible and intangible heritage which may be recognized and valued at a local, regional, national or global level, as follows:

- Tangible cultural heritage includes movable or immovable objects, sites, structures, groups of structures, and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance.

² All questions posed to women about the distribution of tasks, control of resources and the roles and responsibilities expected of them in their society were also posed to men. The only set of questions which were exclusively posed to women revolved around verbal, physical and sexual violence against women and young girls, both at the domestic and village level.



Tangible cultural heritage may be located in urban or rural settings and may be above or below land or under the water.

- Intangible cultural heritage includes practices, representations, expressions, knowledge, skills – as well as the instruments, objects, artifacts and cultural spaces associated therewith – that communities and groups recognize as part of their cultural heritage, as transmitted from generation to generation and constantly recreated by them in response to their environment, their interaction with nature and their history.

Traces of Ruzizi's 'iron age civilization' have been found to the South-West of Kamanyola and to the South of Bugarama. Additionally, archaeological sites have been reported in Kinanira (Nyakabuye Sector), Ruhamandaryya (Nyakabuye Sector), Kabosa (Gitambi Sector) and Mibirizi (Gashonga Sector). However, previous environmental and social studies concluded that no archaeological artefact would be affected by the Project. Officials from the Institute of National Museums of DRC, in Kinshasa, and the Institute of National Museums of Butare, in Rwanda, confirmed that there are no cultural or archaeological sites in the area directly concerned by the Project.³

Based on this premise, no archaeological survey was performed by SLR in 2022. However, all focus groups and interviews with local authorities included targeted questions to locate, describe and document (i) physical sites holding cultural, spiritual or religious importance for groups or individuals within the village and (ii) customs or practices which may be unique or peculiar to any groups within the village or to the village itself. The result of this exercise was the creation of a geographical inventory of all elements of tangible and intangible cultural heritage. The details of the findings on cultural heritage and the inventory of all discovered elements are outlined in Section 8.12.

8.1.4 Secondary Data

Official data on the demographic and socio-economic conditions of the study area has been extracted exclusively from governmental statistics and reports. For Rwanda, secondary data on the study area's societies and economies was available at the national, provincial and district level. For the national and provincial level, all population data has been retrieved by the 2012 Census Database and the 2021 Demographic and Health Survey, which draws from data collected in 2019-2020. For DRC, statistical data was mostly available at national level, through the 2014 Demographic and Health Survey and the 2014 Employment, Informal Sector and Consumption Report, which draw from data dating back to 2012-2013. Data was unavailable at the Sector Level (Rwanda) or Groupement Level (DRC).

8.1.5 Limitations

- The boundaries of the villages are not always well defined. Some villages have been created recently and others have been moved. When GIS data was partial or insufficient, administrative delineations has relied on informants' knowledge and on field observations.
- While the social team in Rwanda included one female expert and one female translator, the team in DRC was exclusively composed by males due to an unplanned logistical constraint. The lack of a female interviewer during the women-only focus groups may have constrained women from providing honest answers on sensitive topics, especially on gender-based violence (GBV). Nevertheless, all of the questions asked by the interviewers in DRC had been designed by a female gender expert and the male interviewers worked in close contact with the female gender expert in Rwanda to ensure consistency in the findings and methodology.
- Given that the use of ethnic labels is legally punishable in Rwanda (see section 8.2.5), it has been deemed most culturally appropriate not to enquire about ethnic differences or

³ source: (African Development Bank, 2015)



tensions in any of the interviews and focus groups carried out in Rwanda. Nevertheless, questions about social exclusion and marginalisation have been posed.

8.2 Demography

8.2.1 Administrative Organisation

Figure 8-12 shows the administrative divisions in the study area.

8.2.1.1 Rwanda

Since 2001, Rwanda's administrative structure has been based on two layers of government – central and local. This decentralised system spans across six administrative entities: provinces, districts, sectors, cells and villages. The country is composed of 4 provinces and the City of Kigali, 30 districts, 416 sectors, 2,148 cells and 14,837 villages.⁴ The province acts as a coordinating organ, ensuring the planning, execution and supervision of the decentralised services. Each province is headed by a government which is elected by the presidential decree. The Western province, which is concerned by the Project, is divided into 7 districts: Karongi, Ngororero, Nyabihu, Nyamasheke, Rubavu, Rutsiru and Rusizi. The Project and all the villages thereby affected are located in the latter.

The district is an autonomous administrative entity responsible for the promotion of democracy and solidarity and represents a basis for development services. Districts are headed by a mayor elected and administered by a district council, through which policies are formulated and adopted. The Rusizi district, concerned by the Project, is divided into 18 sectors: of these, the sectors of Bugarama and Nzahaha are concerned by the Project.

The sector is responsible for the implementation of development programs, the delivery of services and the promotion of social welfare and good governance. The policy organ of the Cell is the Sector Council, which is in charge of approving Sector-level action plans and programs and following up on their implementation. The people who make up the council are (i) Cell representatives, (ii) members of the National Youth Bureau, (iii) members of the National women bureau, (iv) representatives of people with disabilities, women, schools, non-governmental organisations (NGOs), cooperatives and health.

The cell is an entity in charge of providing basic services through a council, an executive secretariat and development consultative committee. Cells are constituted by a council, an executive secretary and an executive committee. The cells concerned by the Project are those of Murya and Nianjyi in the Nzahaha Sector, and Ryankana, Bugarama and Nyange in the Bugarama Sector. The village is the lowest administrative unit, based on the direct participation of citizens and headed by a council and executive committee. The council is made up of all residents aged 18 years old and above and meets once a month. The executive committee is constituted by a village head, an in-charge of security, an in-charge of immigration and emigration, an in-charge of information and training and an in-charge of development. All of these leaders have a mandate of 5 years, and they are elected through a direct universal suffrage.

⁴ Republic of Rwanda – [Government of Rwanda: Administrative structure \(www.gov.rw\)](http://www.gov.rw), accessed on 28/01/2022.

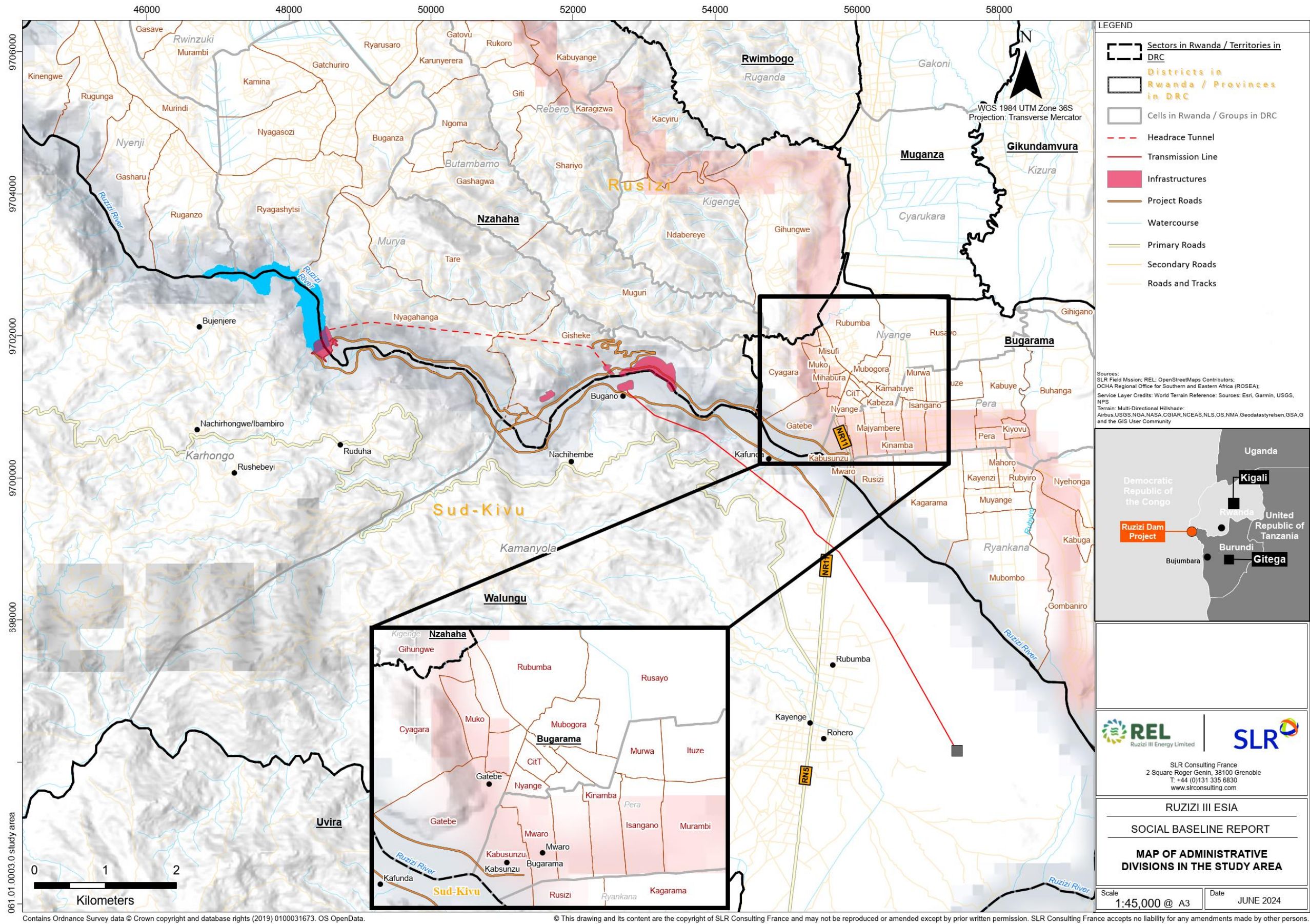


Figure 8-12 Map of Rwandan Administrative Divisions in the Study Area (2022)



8.2.1.2 DRC

Since June 2015, DRC has been divided in 26 Provinces, split into 145 Territories and 35 Cities. The cities are divided into 137 urban townships, whereas the territories are divided into 174 rural townships, 471 sectors and 264 chieftainships. Sectors and Chieftainships are then split into 5,908 Groupements (UNHCR, 2015). The province of Sud Kivu, which is concerned by the Project, is divided in 8 Territories and 3 Townships: Bagira, Ibanda, Kadutu, Fizi, Idjwi, Kabare, Kalehe, Mwenga, Shabunda, Uvira, Walungu. The Territory concerned by the Project is Walungu, which is divided into the Chieftainship of Ngweshe and Kaziba. The two Groupements concerned by the Project are Kamanyola and Karhongo: both Groupements are located in the Chieftainship of Ngweshe.

Hierarchically, after the head of Province stands a Territory Administrator and two Territory Administration Assistants. In each Groupement, there is a Chief who nominates the Village Heads. In Sud-Kivu, the customary authorities are the most decentralised political and administrative authorities, as formalised in the law N°08/016 of 7/10/2008. Village Chiefs are empowered to ensure, in accordance with law 15/015 of the 25th of August 2015, the protection of land and traditional identity. Village Chiefs head a village committee, which is elected by the population and whose mission is to encourage the development of the village, settle disputes and report to the Groupement Chief. The number of committee members is proportional to the number of neighbourhoods and citizens in each village.

8.2.2 Settlement Patterns

8.2.2.1 Rwanda

A Settlement Types in the Study Area

In Rwanda, there are four 4 types of habitat or settlements:

- Clustered or grouped rural settlements, also referred to as *imidugudu*.
- Dispersed or isolated housing, also referred to as scattered settlements.
- Planned urban housing.
- Squatter housing or informal settlements also referred to as *akajagari*.

At national level, about 49% of the Rwandan households are in clustered rural settlements (*Imidugudu*), 34% are in dispersed areas, 14% are in *akajagari* or squatter housing and only 2% are in planned urban housing (NISR, 2021).

The study area is overwhelmingly characterised by organised grouped settlements surrounded by vast areas of cultivable land (see Figure 8-13), which is cultivated by different owners and renters. Plots are often delimited by small trees and ranging in size from 0.01 to 1 hectare for most of the population (See Figure 8-14). The main different between settlements in Bugarama and Nzahaha lies in the higher population density of the villages in Bugarama, which are semi-urban. Additionally, the villages in Nyange, Pera and Ryankana Cells are all surrounded by rice cultivation plots, which take up a high proportion of land surrounding the residential settlements (See Section 8.6.1.3A). Figure 8-33 in section 0 presents the land use in the study area and illustrates the geographical distribution of settlements.

The *umudugudu*, or village, aims to regroup residential buildings and share plotted spaces of surrounding cultivable areas, in order to provide improved infrastructure and access to basic facilities (International Alert, 2015). Ministerial order No. 001/07.05 of 19 May 2009 relating to the implementation of the national program on regrouped settlement defines *umudugudu* as 'a mode of planned settlement of between 100 and 200 houses in an area from 10 to 20 hectares with a possibility of capacity of extension and as far as possible a space provided for various non-agricultural activities.' This settlement style was strongly promoted by a series of governmental policies aimed at solving the land scarcity exacerbated by the influx of returning



refugees after 1994 (Hilhorst and Leeuwen, 1999). The Human Settlement Policy (HSP) was created in 1996 and updated in 2004 and 2009, highlighting the need for planning rural settlements in a centralised and organised way. As part of the HSP, the Government started encouraging residents of scattered housing to move into *imidugudu* (Dale, 2021). Other policies, such as the National Urbanisation Policy of 2015 and the National Strategy for Transformation of 2018, sought to further facilitate the development of connected and well-served rural settlements. These policies are grounded in a wider vision, exemplified by three political frameworks: Vision 2020, Vision 2050 and Economic Development and Poverty Reduction Strategy (EDPRS) 2. These three documents advocate for organised urbanisation as one of the driving factors for economic growth and for infrastructure development.

B Residential Building Types in the Study Area

Houses are usually regrouped in small conglomerations of around 20 families called ‘*Amasibo*’, or neighbourhoods. The types of housing observed in the study area is of three main types:

- House made of mud with sheet metal roof (See Figure 8-15).
- House made of bricks with sheet metal roof (See Figure 8-16).
- House made of wood planks (See Figure 8-17).
- House made of cement (See Figure 8-18).



Figure 8-13 ‘Umidugudu’ Settlement Style in the Village of Nyagahanga, Rwanda



Figure 8-14 Example of Tree Used to Delimitate Plots, Reservoir Area



C

Past Resettlement Processes in Rwanda

The villages in the study area on the Rwandan side have been undergoing several planned population movements, organised by the Ministry of Disaster Management and Refugees Affairs (MIDIMAR) to resettle communities away from hazardous areas. According to the National Risk Atlas, the Rusizi District is susceptible to high risks of erosion and landslide (MIDIMAR, 2014). During the interviews and focus groups, the following resettlement movements have been mentioned by the local communities:

- In 1995, the residents of Gisheke village moved away due to landslides and erosion risks. Most of these people are now living in Gatebe, Kabusunzu, Mwaro, Mubombo and Gombaniro, although they kept their lands in Gisheke, since these are considered largely the most fertile in the area.⁵ Most people moved over time, especially between 2000 and 2011.
- In the early 2000s, several households living in the slopes of Nyagahanga and Ryaghyitsi have been moved away due to landslide risks.
- In the village of Gombaniro, land has been bought by the Government for the construction of houses for people coming from various high-risk zones. There are currently a few plots which are inhabited, and more are awaiting construction. Many of these people have resettled in Ruganzo. SLR has been told that out of 30 families resettled in this village, 20 currently have no land and are renting everything, including land for their house. More families are also being moved into Gombaniro due to the creation of the cement industry CIMERWA: so far, 17 families have been moved so far and more are preparing to settle. The government found them land by buying it off of owners in Gombaniro and gave them land titles.
- The creation of Ruganzo in 2005 came from the movement of 150 families who moved from the slopes close to Gatchuriro. In Ruganzo, only 1 family is originary of the place, and the rest has resettled for different reasons.

⁵ These schemes have added themselves to existing internal population movements after the genocide. For example, people in Mwaro reported that Gisheke was the worst hit village in the area. This led a lot of families to start moving into Mwaro from Gisheke even before the start of official resettlement projects.



Figure 8-15 Mud House with Sheet Metal Roof in Ryagashyitsi



Figure 8-16 Brick House with Sheet Metal Roof



Figure 8-17 Wood Plank House



Figure 8-18 Cement House



8.2.2.2 DRC

In the study area on the DRC side, settlements are less centralised than in Rwanda. Instead, villages are characterised by scattered neighbourhoods quite close to each other, regrouping people from the same family or clan (See Figure 8-19). The neighbourhoods in the village are defined according to the number of inhabitants, which range from 10 to 30 families under the supervision of a village chief called *Nyumba kumi* (in Mashi language).

All of the villages in the study area were created either by population settlement or by natural extension of an existing neighbourhood. Some of the neighbourhoods, like Kayenge in Kamanyola, are so large and densely populated that they are considered to be a village. Some plots are located around the houses, while the riverside plots are all quite far from the residential villages: on the riverside close to Bugano's village, SLR met two female farmers who reported walking over 2 hours from Kamanyola just to work on a rented field on the riverside.



Figure 8-19 Entry into a Neighbourhood of Bugano, DRC

The types of housing observed in the study area are:

- House made of mud with straw roof (See Figure 8-20).
- House made of bricks with straw roof (See Figure 8-21).
- House made of bricks with sheet metal roof (Figure 8-22).
- House made of banana leaves (Figure 8-23).
- Fragile house made of mud and wood (Figure 8-24).



Figure 8-20 House with Brick Wall and Straw Roof, Kafunda



Figure 8-21 Mud House with Straw Roof, Bugano



Figure 8-22 House with Brick Wall and Metal Roof, Kafunda



Figure 8-23 House with Banana Leaf Roof and Wall



Figure 8-24 Example of Fragile Housing in Bugano, DRC



8.2.3 Population

8.2.3.1 Rwanda

Most statistical data on Rwandan demographics is available at the provincial (NISR, 2021) or district level (NISR, 2011). National data on wider population characteristics can be retrieved from the 2012 Census Database.⁶

The 2012 census counted a population of 10,515,973, although it is estimated that in 2022 the national population has reached 13,483,964.⁷ According to Rwanda’s Demographic and Health Survey (2021), the population is relatively young. In rural areas, 42% of the population under 14 and 54% aging 15 to 64. Women head 31% of households in rural Rwanda, with an average household size of 4.3 people. Overall, 22% of households at national level include children who are orphans or not living with their biological parents. As described in Section 8.1.1, the Project is located in the Western Province, which has a population of 2,471,439.

Figure 8-25 shows the distribution of population across the wealth quintiles in the province: it is important to note that the percentage of people in the lowest quintile is the second highest of the country after the South Province.

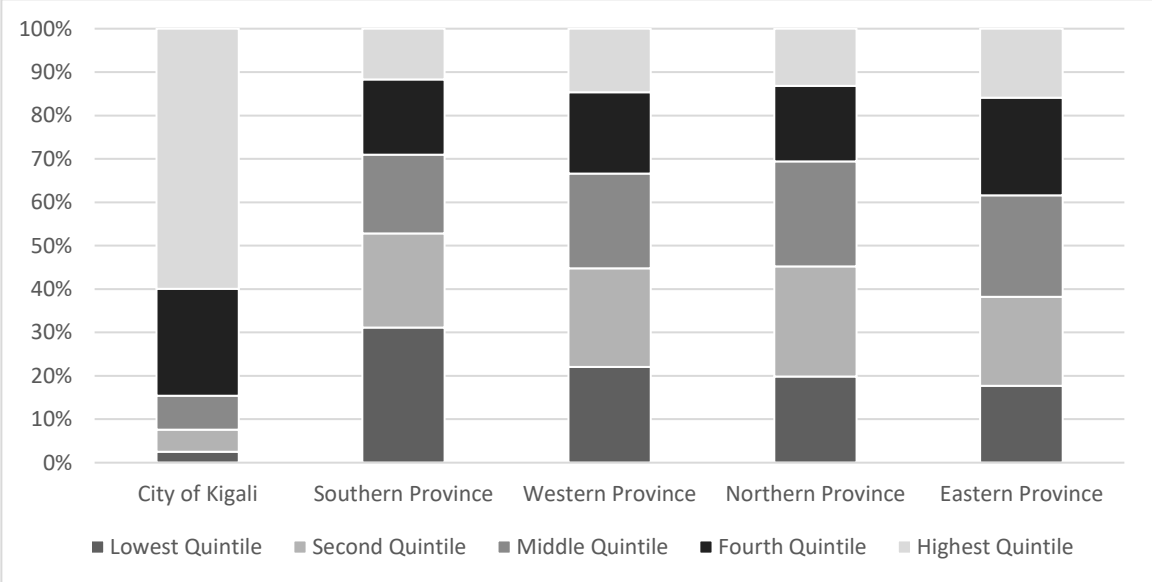


Figure 8-25 Percentage Distribution of Population by Wealth Quintiles (2021)

The Western Province has the highest illiteracy rate for women (18%) and second highest for men (14%) in the country. Additionally, 14% of household members aged 5 have one mild disability, while 6% a more serious disability impacting more than one domain (NISR, 2021).

The Rusizi District is one of the seven districts within the Western Province. The latest statistics on the Rusizi district date back to the last census in 2012. In 2012, the population in Rusizi District amounted to 400,858 people and 83,756 households, with a population density of 418 people per square kilometre. The mean number of children ever born to women 15-49 years old is 4.8, just below the national average of 5.

Although the majority of the district’s population is rural, the urban population went from 63,868 in 2012 to an estimated 137,315 in 2020 (National Urbanisation Strategy, 2015), which would bring the urban population from 15.8% to 34.2%. The population is overwhelmingly of Rwandan nationality (99.80%) with a slight majority of females (52%) over males (48%). The breakdown

⁶ Rwanda Data Portal, Socio-Economic Database Census (2012), <https://rwanda.opendataforafrica.org/pxiuvud/socio-economic-database-census>.

⁷ Worldometer, [Rwanda Population \(2022\) - Worldometer \(worldometers.info\)](https://www.worldometers.info/rwanda/), accessed on 01/03/2022



of the population by age is respectively provided in Figure 8-26. In the Rusizi District, 45% of the population was considered poor and extremely poor in 2011, ranking the district third within the Western Province in terms of poverty levels.

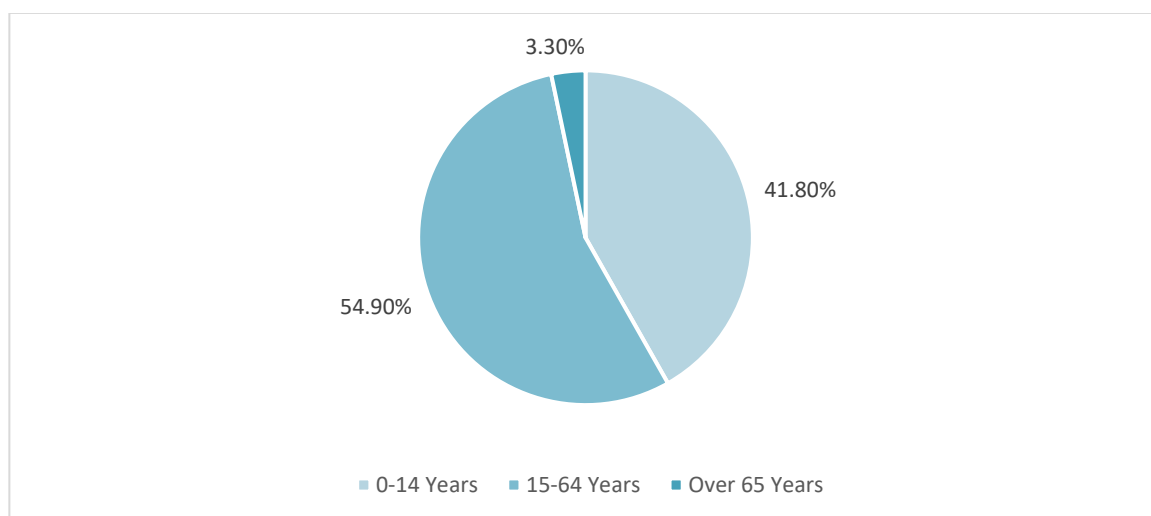


Figure 8-26 - Population of the Rusizi District, by Age Group (2012)

Where possible, the social experts on field gathered data on current population numbers from local authorities. Table 8-7 shows the population data collected on field in the study area, disaggregated by cell and village level. The authorities enquired about these numbers were Cell Executive Secretaries, Sector Agronomists and Village Committees. Whenever possible, they provided exact data on the population. When data was only available at the household level, this was multiplied by the average number of members per household, which was 7 people according to the interviews carried out across villages.

Table 8-7 Estimated Population in the Study Area in 2021, According to Local Authorities (Rwanda)

Sector	Cell	Village	Total Population in 2021
Nzahaha	Total Nzahaha Sector		27,714
	Murya	Total Murya Cell	7,013
		Ryagashyitsi	668
		Nyagahanga	648
	Nyenji	Total Nyenji Cell	4,886
		Ruganzo	820
	Pera	Total Pera Cell	13,000
		Gatebe	920
	Nyange	Total Nyange Cell	11,000
		Kabusunzu	1,117
	Ryankana	Total Ryankana Cell	16,656
		Gombaniro	1,930
		Mubombo	605
		Mwaro	1,989
Bugarama	Pera	Total Pera Cell	13,000
		Gatebe	920
	Nyange	Total Nyange Cell	11,000
		Kabusunzu	1,117



8.2.3.2 DRC

Most statistical data on Congolese demographics is available at provincial level, through the Demographic and Health Survey of 2013-2014 and the Household Living Conditions Survey of 2014. The last population census dates back to 1984, although a new census has been planned since 2012. However, the national population in January 2022 is estimated to be at around 94,260,417 people, making DRC one of the most fast-growing countries in the world with a growth rate of 3.19% (World Population, 2019). The proportion of people under 15 years old is estimated at 51% of the total population. In rural areas, 25.2% of households are woman-headed and 21.8% of children are orphans.

The project is located in the province of Sud Kivu, which had a population of 4,944,662 in 2015.⁸ This province is divided between the eight territories of Fizi, Idjwi, Kabare, Kalehe, Mwenga, Shabunda, Uvira, Walungu and Bukavu Town. Aside from Kinshasa, the province of Sud-Kivu follows Bas-Congo as the second richest province in terms of wealth quintiles, as shown in Figure 8-27 below.

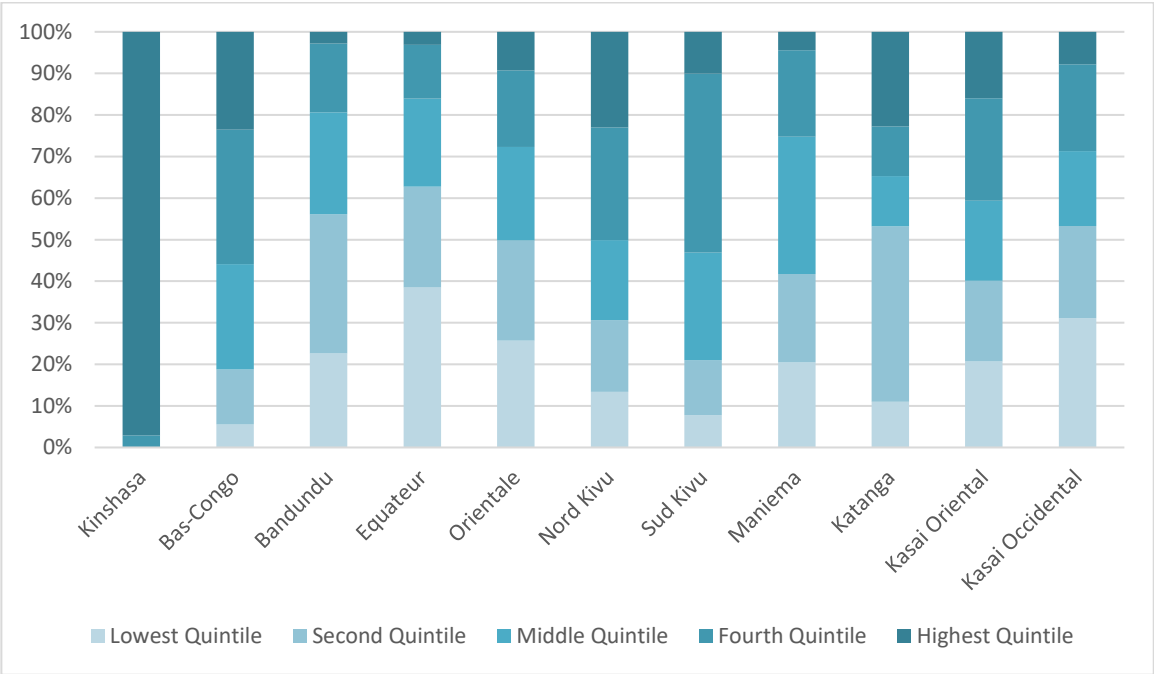


Figure 8-27 Percentage Distribution of Population by Wealth Quintiles in DRC (2014)

Where possible, the social experts on field gathered data on current population numbers from local authorities. Table 8-8 shows the data collected in each of the surveyed villages. The authorities enquired about the number of people and households in each village were the village heads. The average household size is of about 5.7 people (Ministry of Health, 2014).

⁸https://monusco.unmissions.org/sites/default/files/south_kivu_factsheet_eng.pdf#:~:text=South-Kivu%20province%20Population%3A%204944662%20%2876%20persons%2Fkm2%29%20Surface%3A%2065%2C070,Kalehe%2C%20Mwenga%2C%20Shabunda%2C%20Uvira%2C%20Walungu%20%28and%20Bukavu%20Town%29



Table 8-8 Population in the Study Area in 2021, According to Village Chiefs (DRC)

Groupement	Village	Estimated Total No. of People in 2021	Estimated Total No. of Households in 2021	No. of Neighbourhoods
Kamanyola	Kafunda	300	61	4
	Bugano	230	46	2
	Kayenge	10,000	2,000	4 ¹
	Nachihembe	900	180	1 ²
Karhongo	Nachirongwe	495	99	-
	Ibambiro	500	100	-
	Rushebeyi	1,140	228	-
	Bujenjeri	1,225	~245	-
	Ruduha	1,500	~300	-

¹ According to the focus groups, Kayenge is registered not as a village but as the largest neighbourhood of the city of Kamanyola. The 3 neighbourhoods that surround it (Irohero, Kaboya and Rugenge) are also considered as neighbourhoods of Kamanyola but were developed around Kayenge due to the population movements caused by the socio-political insecurity in 1994.

² According to the focus groups, Nachihembe is officially considered a neighbourhood of the village of Bugano rather than a separate village. For the purpose of this study, it has been considered as separate due to its numerous inhabitants and its considerable distance from Bugano.

8.2.4 Education

8.2.4.1 Rwanda

At national level, 50% of females and 55% of males aged 6 and over have some primary education, and 15% and 11% have no education at all. The average number of years of completed education is 3.8 among women and 3.7 among men. Rural residents are twice as likely as urban ones to have no education, 16% of women and 12% of men have none. For the Western Province, the school attendance rate 90.6% for males and 90.7% for females for primary school, but 33.8% and 36.5% respectively for secondary school (NISR, 2021).

The national data confirms the information collected on field. Most of the schools observed in the villages offer basic primary education. The number of kids who do not go to primary school is not very high, as families often use micro-credit associations to pay for school fees. However, secondary school fees are often too expensive, with a fee gap ranging from primary school fees around 12,000 Rwandan francs to secondary school fees of around 50,000 Rwandan francs. A more serious deterrent is the house-to-school distance. Out of 8 villages included in the study, 3 had no schools at all. For some villages, there are several primary school options within a 1.30-hour walk: for example, people in Ryagashyitsi send their children to school in Nygahanga, Murya and Gatchuriro. For other villages schools can be hard to reach. In the village of Ruganzo, most children do not go to school or arrive late, not only because of high poverty levels but mostly because the schools are all over a 2-hour walk, which it makes it very dangerous for small children. Another problem encountered by most schools are related to the few numbers of teachers available. For example, the primary school of Nygahanga has 20 teachers and 15 rooms (of which some were still in construction at the time of the interview) for around 225 children. For a breakdown of the school infrastructure present in the study area, refer to Section 8.8.2.

8.2.4.2 DRC

According to the Demographic and Health Survey in 2014, at national level 19% of women and 8% of men are illiterate. In rural areas, 77% of people go to school, as opposed to 87% in urban areas. In the Sud-Kivu region, 20% of females have had no education as opposed to 6.4% of male adults, while 48.1% of women and 43.9% of men have had incomplete primary education. The data collected in the study area reflects the national situation. The main constraints encountered to school attendance are (i) lack of equipment and basic infrastructure and (ii) walking distance to the closest school. Out of 9 villages included in the study, 4 do not have any



schools. The village of Kayenge has 4 primary schools: due to the small capacity of schools in the other villages of the study area, a lot of children have no option but to walk from 1 to 2 hours to reach the schools in Kayenge. For a breakdown of the school infrastructure present in the study area, refer to Section 8.8.3.

8.2.5 Languages, Religion and Social Groups

8.2.5.1 Rwanda

A Language, Religion and Social Groups in the Study Area

The main religions in the Rusizi district are Catholic (48.5%) and Protestant (43.7%), with a minority of Pentecostal, Methodist and Evangelist Christians. The types of Christianity most frequently observed in the study area are indeed Catholics, Protestants, Pentecostals following the Association des Eglises de Pentecôte au Rwanda (ADEPR), Adventists and Free Methodists in Nzahaha. In addition to these groups, in Bugarama Muslims are also represented around the Bugarama Mosque in Kabusunzu. In Nyange Cell, there is also a small minority of Jews, grouped around the village of Morumba where their church is located, and Jeovah Witnesses. Figure 8-27 gives the distribution of the religions practiced amongst the households surveyed during the quantitative survey in Rwanda.

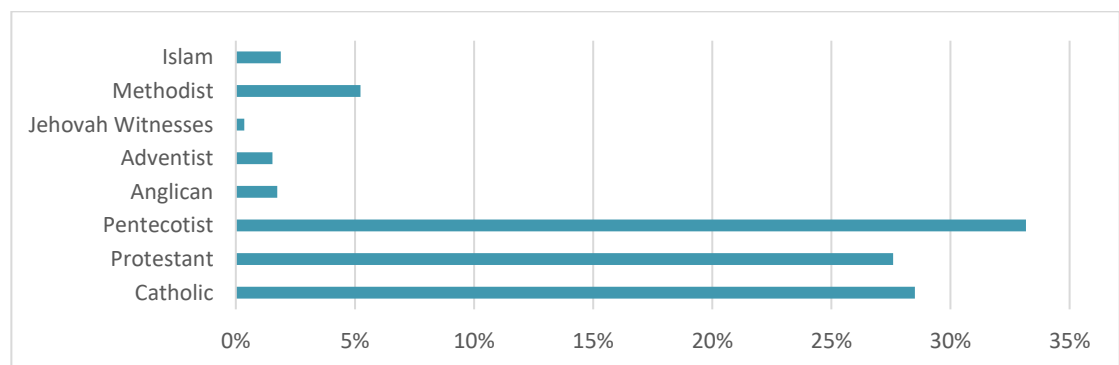


Figure 8-28 Religion Practiced by Surveyed Households in Rwanda (2022)

In terms of language, all people of Rwandese nationality speak Kinyarwanda, while a minority of people also speak Swahili or Mashi, especially on the villages in Bugarama Sector close to the border with DRC. Most of these people are Congolese who crossed the border and now live in Rwanda. The relationship between immigrants and Rwandan national is harmonious, with people frequently sharing families across the border. Pera Cell is the area where most Congolese and Burundians are found within the study area, due to the vicinity of both countries. Their numbers are still, however, extremely low. According to the Pera Cell executive, Congolese and Burundians would represent less than 1.5% of the Cell population. There are seemingly no types of conflict or exclusions with these people: although the process for them to register their land is more complex, SLR met one Burundian that managed to obtain a land title and one Congolese who was in the process of obtaining it.

Speaking of ethnicity has been made illegal by the Government of Rwanda since the 1994 genocide, in an attempt to promote a peaceful recovery from the ethnic tensions that motivated the violence. Laws against ethnic divisionism were passed in 2001 (Law n°47/2001 of 18 December 2001 on the Prevention, Suppression and Punishment of the Crime of Discrimination and Sectarism) and are enshrined in the 2003 constitution through various articles outlawing forms of discrimination and divisionism. Punishment for breaking these laws include lengthy prison sentences and hefty fines. Instead of recognising different communities or special categories of people, the state promotes the paradigm of '*ndi umunyarwanda*' ("I am Rwandan") or Rwandan nationality as the only acceptable identity and asserts that tightly managed political and identity-based discourse is necessary for security. Therefore, it has been deemed most culturally appropriate not to enquire about ethnic differences or tensions in any



of the interviews and focus groups. Nevertheless, questions have been posed about social exclusion and marginalisation. During the interviews, one specific community emerged as more vulnerable and marginalised than others: this community is officially named by the Rwandan Government as 'Abasigajwinyuma Namatekas', or 'Historically Marginalised People'. The following Section describes their characteristics and livelihoods.

B The Abasigajwinyuma Namatekas, or Historically Marginalised People, in the Study Area

The presence of Historically Marginalised People (HMP) in the study area was identified during the 2022 qualitative survey, during which a focus group was carried out with 18 HMP, 9 women and 9 men (see Figure 8-29). A stand-alone study was produced by Anthropolinks in 2023 to investigate the socioeconomic and cultural characteristics of HMP. Unless otherwise specified, the information presented in the paragraphs below has been retrieved from this anthropological study.

B.1 Demographic Characteristics

The *Abasigajwinyuma Namatekas, or Historically Marginalised People (HMP)*, make up around 0.4% of the population of Rwanda and are historically known as the original inhabitants of the country's forests.⁹ Part of the wider Pygmies ethnic group, this community was historically composed of hunter-gatherer forest dwellers whose livelihoods was largely dependent on natural resources. Throughout the 20th century, the marginalisation of the community, historically perceived as at the bottom of the social ladder, was accentuated by land grabbing and commercial expansion into forests due to demographic pressure. In the 1960s, a series of government policies to redistribute land contributed to the dispersal of the HMP. By the end of the 1980s, the last communities living in the forests were expelled from the Volcanoes National Park, the Gishwati Forest or the Nyungwe Forest Reserve. It is estimated that about 1/3 of the community was killed during the genocide, leaving the population at an estimated 33,000 people (CAURWA, 2004).

B.2 Legal Status

Since the Rwandan genocide, the country has adopted a policy of national reconciliation which prohibits ethnic identification. Laws against ethnic divisionism were passed in 2001 (Law n°47/2001 of 18 december 2001 on the Prevention, Suppression and Punishment of the Crime of Discrimination and Sectarism) and are enshrined in the 2003 Constitutions. However, Article 80 of the Constitution recognises HMP as an umbrella term covering different vulnerable groups, including communities of pygmies which have been dispossessed from their ancestral lands and have since been living as a marginalised community in mainstream society.

B.3 Terminology and Self-Identification

The community in Rwanda accept being referred to as *Abasigajwinyuma namateka*, or HMP. This is considered less discriminatory than the term 'Batwa', which is both culturally discriminatory and politically inappropriate, since the use of ethnic labels is legally punishable and self-identification with the Batwa label is perceived as auto discriminatory by the Rwandan administration.

Another term which is frequently used is *Basangwa Butaka* (literally 'the ones who own their lands'). This term is rejected by some people within the community as it does not reflect their contemporary reality, since they are generally landless and working for others.

Interviews also confirmed the historical existence of discriminatory naming practices towards HMP, the members of which can be negatively addressed with Kinyarwanda terms which emphasises false beliefs that the community is uneducated, immoral or uncivilised.

⁹ Batwa People, <https://kwekudee-tripdownmemorylane.blogspot.com/2013/03/batwa-people-one-of-first-people-on.html>, accessed on 23/02/2022.



B.4 *Geographical Distribution and Settlement*

In the Project area, HMP are present in the Bugarama and Nzahaha sectors. The origins of Batwa settlements in Bugarama were not clearly stated during interviews. The community moved to this area after being evicted by government-induced schemes, including forced evacuation from high-risk landslide and flooding area and by Bye Bye Nyakatsi Policy in 2011.¹⁰ According to the Social Affairs Officer, the HM population of Nzahaha is estimated at 9 households, for a total of 57 people (6 households in Murya and 3 households in Butambamo).

B.5 *Lifestyle*

The HMP communities of Bugarama and Nzahaha live together, sometimes in separate neighbourhoods and sometimes in family units mixed with the rest of the community. The practice of social distancing called *ukunena*¹¹ was used to discriminate against HMP before the 1990s and 2000s. While the government has outlawed the practice, during interviews some HMP mentioned that it still exists today.

HMP are generally identified as a separate group by neighbouring communities. Intermarriage is sometimes practiced, although it is constrained by the levels of poverty and stigma associated with the community. The only type of relationship between HMP and non-HMP is related to the labour they provide for other Rwandans. Some of the HMP interviewed reported feeling that other villagers ignore and exclude them from positive development and employment opportunities. Interviewees reported a sense of transborder solidarity with Batwas in DRC, as well as in between other HMP families within the Project area.

Due to financial instability and marginalisation, HMP children are more likely to drop out of school. HMP are also more likely to rely on traditional medicine rather than health centres, although they do have subsidised health insurance through the Rwandan *Ubudehe* Scheme.¹²

B.6 *Governance, Language and Culture*

Although some exceptions exist, HMP are generally absent from local government structures and administration, mainly due poverty, low levels of education and the absence of social connections. Interviews carried out as part of the qualitative survey in 2022 suggested that HMP are organised around a community leader, who represents a group of families residing in numerous Cells.

Most of the cultural specificity of HMP has been lost after their displacement from ancestral lands. However, in the Project area HMP are still known to be musicians, performers, singers and dancers. The dances practiced by the community include *Mundi*, *Rugenyo*, *Mdagirante*, *Imiyoborere*, *Myiza Ibereye Abanyarwanda*, *Ubutabera*, *Ubumwe*, *M'amahoro*, *Izamare Maremare*.

Although it was reported that HMP have a particular intonation, they do not have a traditional language other than Kinyarwanda.

B.7 *Livelihoods*

Poverty, landlessness and discrimination after their forced displacement from ancestral lands, in the Project area HMP are landless, living as tenants or squatters on others' lands (see Box 8-1), and known for not owning any cattle, which is widely perceived as a sign of poverty and low status. They engage in limited agricultural activities during the rainy season, such as *nyiragabura* farming or maintaining small gardens near their houses or on others' fields, which allow them to

¹⁰ The Bye Bye Nyakatsi Policy was a government initiative implemented in Rwanda in 2011. "Nyakatsi" refers to traditional thatched-roof houses commonly found in rural areas. The policy aimed to improve housing conditions and promote modernization by replacing traditional houses with more durable and weather-resistant structures.

¹¹ The practice consists of not sharing the same plate and serving food and drink separately to protect others from the 'impurity' of HMP.

¹² Rwanda's Ubudehe Program is a national approach for poverty reduction that categorizes households to facilitate interventions.



occasionally sell bananas. However, their primary source of income in the project area is occasional daily labor for smallholders (see Box 8-2 and Figure 8-30). These workers got a pay of around 1,000 Francs per day, and some of them get a Vision Umurenge Program allowance of 1,000-1,200 francs per day doing public works, although they don't receive this money regularly.

Historically, the community was known as potters in Rwanda. However, as clay marshes were converted into farmland in the 1980s and pottery making became economically unviable in the 1990s, the practice declined. In the project area, the community used to access clay quarries on the banks of the Ruzizi River, but they were evicted ten years ago as part of the Bye Bye Nyakatsi program and the resettlement of people from high-risk areas. Interviews conducted in 2022 revealed that the families in Murya Cell used to make pottery to exchange for food, but since a cooperative in Rwingbogo took over the land where they obtained clay, they have been unable to continue this activity. Currently, the clay quarries are located 2 to 3 hours away from the homes of the community, and access is sometimes restricted by landlords. The Anthropolinks report mentions that the NGO Caritas purchased a piece of land with a clay quarry to ensure that Batwa have access to it, although the specific location is not provided. Pots are only sold during the dry season for an average price of 200 RWF, making it challenging to generate a sustainable income, especially considering competition from modern materials.

Gathering activities, such as collecting wild plants for personal consumption, are rarely practiced by the community. When they do gather, it is usually on the fields of the farmers they work for.

Box 8-1 Story of a Historically Marginalised Person Living in Ryagashyitsi (from 2022 qualitative survey)

This Historically Marginalised Person with serious mental disabilities. His family was displaced from some land that they used to live in Ryagashyitsi up to 2015, as this area was officially classified as high risk due to landslides. In 2021 his brother managed to buy land off another owner in Ryagashyitsi, making them the only Historically Marginalised family of in area to own land. However, they have been struggling to prove their status as owners of the land and still have not received titles. This man started living on his brother's plot, he sleeps under a banana tree with no bed or house. According to the interviewee, since he is too mentally unstable to work on a field, he goes around begging and depends on his brother's harvest and stealing food from fields for a living.



Figure 8-29 Focus Group with Historically Marginalised People in Gatchuriro (Rwanda)



Figure 8-30 Historically Marginalised Person Working on a Field, Reservoir Area (Rwanda, 2022 Survey)

Box 8-2 Livelihood of a Young Male Historically Marginalised Person (from 2022 qualitative survey)

This young 'Historically Marginalised Person' in his 20s lives in Gatchuriro. His family does not own any land and they do not regularly rent out any fields. They also do not own any cattle or goats and never sell to the market as they do not cultivate for themselves. They usually wake up in the morning and go look for work. Most of the time, work is only available for one day, but occasionally they can find it for more than two days. It is almost never for longer than a week. He gets paid 1,000 francs per day cultivating bananas. He does not self-identify as a 'Historically Marginalised People'.

B.8

Cultural Heritage

The project takes place in an area where the HMP communities have been affected by forced population movements over the last 20-30 years and massive deforestation that has led to loss of forest areas. While hunting, gathering and pottery are still considered essential to their identity and constitute knowledge and skills their immaterial cultural heritage, those practices have been permanently affected by the effects of political events and violence in the region. The interviews conducted in the study area have not revealed the presence of any tangible cultural heritage.

8.2.5.2
Languages, Religion and Ethnicity in the Study Area – DRC

A
Ethnic Groups in the Study Area

The population of DRC is highly diverse, counting 40 ethnic groups and more than 400 tribes. There are four national languages, in addition to French: Kikongo (west), Lingala (Kinshasa and north-west), Swahili (east) and Tshiluba (south). In Sud-Kivu, 13 ethnic groups are represented: Babembe, Babuyu, Babwari, Bafuliru, Bahavu, Balega, Bamasanze, Bahavu, Balega, Banyindu, Barundi, Bashi, Batembo and Bavira and Bajoba. In the territory of Walungo, the main ethnic group present is the Bashi, which represents 80% of the population.

According to the interviews carried out during the qualitative survey, the study area is dominated culturally and demographically by the Bashi. The Bashi are the original landowners and traditional decision-makers, but the other ethnic groups in the village who are minorities have bought the land and are included into the socio-economic and political life of the village. The main minority ethnic groups represented in the study area are the Bafuliru, Banyarwanda, Murega and Barega, with even smaller minorities Barundu, Bayaindu and Babembe. In addition to these ethnic groups, there are two marginalised minority groups: the Batwa and the Banyamulenge. Sections D and E below describe these two groups in greater detail.

The local society is structured around the tribe. Each tribe is tied to land and to a traditional chief. After that, the extended family or clan represents the centre of production, consumption and social solidarity. Clans regroup different families sharing a common ancestor and creating powerful solidarity networks. The two main ethnic groups, the Bashi and Bafuliru, are constituted respectively of 8 and 13 clans.

A considerable number of Banyarwanda (Rwandese) people have installed themselves in various villages after the conflict in 1994. In particular, the village of Kayenge has three new neighbourhoods called Irohero, Kaboya and Rugenge, which have been created to host Rwandan refugees. According to the focus groups, the Banyarwanda community is well integrated with Congolese villagers.

Table 8-9 shows the ethnic group breakdown in each village, according to the data collected during the qualitative survey. Figure 8-31 gives the distribution of households surveyed during the quantitative survey by ethnicity and village.

Table 8-9 Breakdown of Ethnic Groups Present in the Study Area, DRC (2022)

Village	Main ethnic group	Minority ethnic groups	Extreme Minority / Secluded Groups
Kafunda	Bashi	Barega, Banyarwanda, Babembe	None
Bugano			
Nachihembe			
Nachirongwe			
Ibambiro			
Rushebeyi			
Bujenjeri	Bashi	Barega, Banyarwanda, Bafuliro	Batwa
Kayenge		Burundese, Barega, Banyarwanda, Bafuliru	Batwa, Banyamulenge
Ruduha		Barega, Bafuliro, Babembe	Banyamulenge

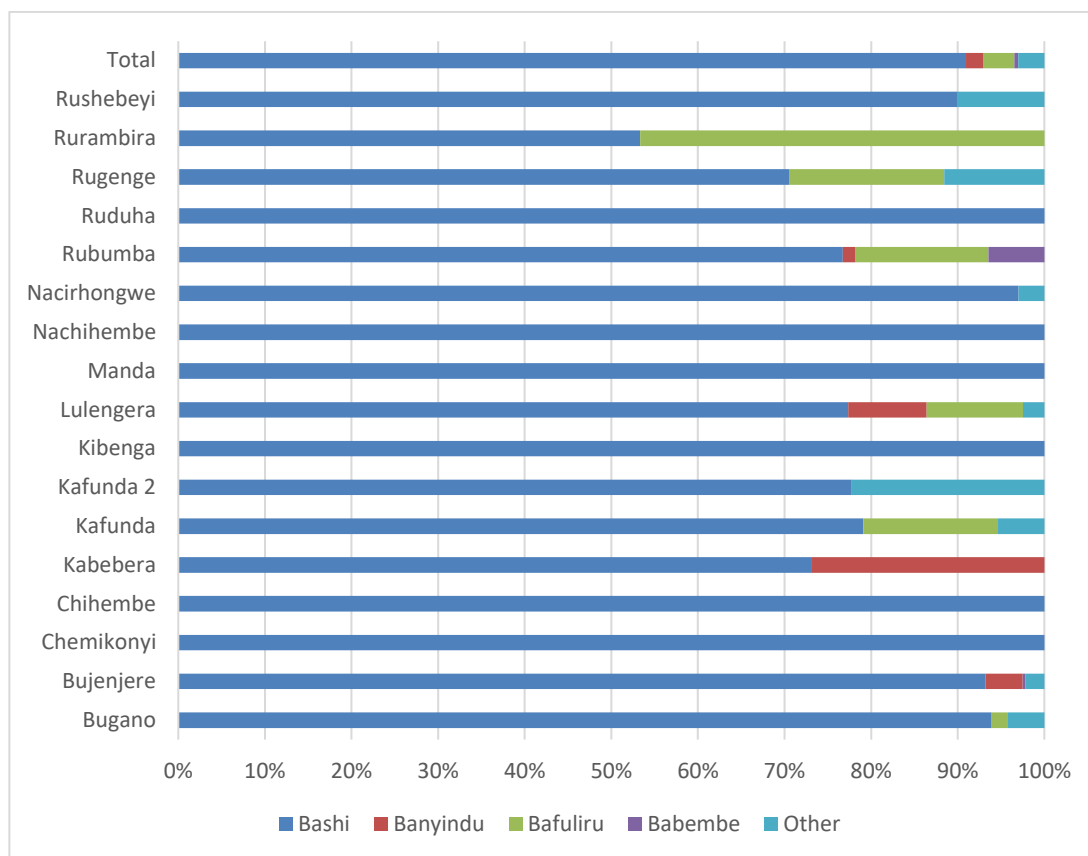


Figure 8-31 Ethnicity Amongst the Households Surveyed in DRC (2022)

B Languages in the Study Area

The two main languages in the study are Mashii and Swahili, with the former being more frequently spoken than the latter. Minority languages spoken alongside Swahili are the languages of the minority ethnic groups, the most frequently spoken of which is the fuliru, the language of the Bafuliru group.

C Religions in the Study Area

The religions of these groups are the same for all ethnic groups apart from the Banyamulenge, with the main two churches being Catholic and Protestant. A large amount of people, other common religions are:

- Communautés des églises libres pentecôtistes en Afrique (CELPA).
- Communautés des églises pentecôtistes au Congo (CEPAC).
- Communautés des églises chrétiennes en Afrique (CECA).

The only other religions found in the Study Area are exclusively practiced by the Batwa and Banyamulenge community. These two groups have their own religious practices meeting in their homes rather than joining public praying groups or utilising natural spaces for prayer.

Figure 8-32 below gives the distribution of the religions practiced amongst the households surveyed during the quantitative survey in DRC.

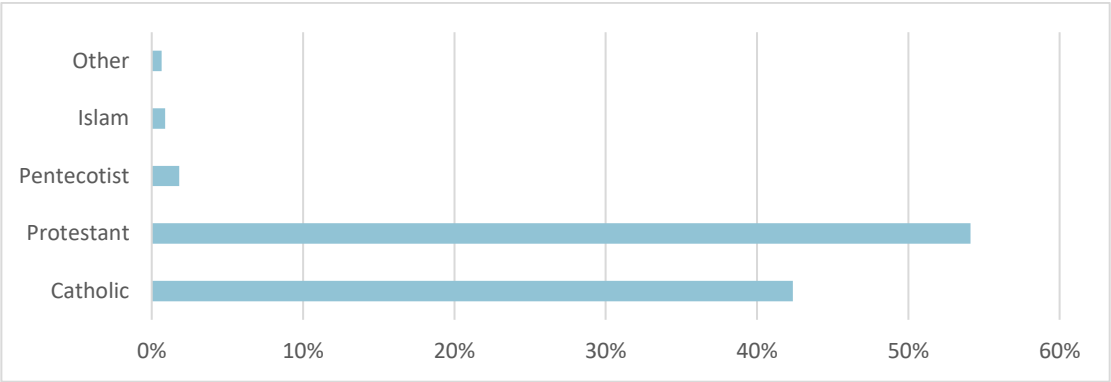


Figure 8-32 Religious Affiliation of Surveyed Household Members in DRC (2022)

D Banyamulenge Community in the Study Area

The Banyamulenge are a group of cattle herders of Rwandan origins. They are often perceived as outsiders and live separately from other groups. The only village where they are present in the study area is Kayenge. The Banyamulenge work as livestock herders rather than agriculturalists and they consider themselves superior to other local ethnic groups, which is why they do not intermix or intermarry. Like the Batwa, they are minoritarian and can be recognised by their looks and accent. They live in separate neighbourhoods and join prayer groups within their homes with different names, including Brahman, Elpag, Cev, Cada and Neno. However, according to interviews and focus groups the Banyamulenge do not appear to be considered as HMP.

E Batwa Community in the Study Area

The presence of Batwa in the study area was identified during the 2022 qualitative survey. A stand-alone study was produced by Anthropolinks in 2023 to investigate the socioeconomic and cultural characteristics of these communities. Unless otherwise specified, the information presented in the paragraphs below has been retrieved from this anthropological study.

E.1 Demographic Characteristics

The Batwa are part of the larger Pygmy Ethnic Group and represent almost 1% of the population in DRC. According to the DGPA Atlas of Indigenous Pygmy Peoples (2012), the Batwa are present in 18 of the 23 'collectivités' in South Kivu, representing around 10% of the national Batwa population¹³. The Batwa of South Kivu were historically known as hunter-gatherer indigenous communities living in the mountainous forests of the region. The community was displaced from their ancestral habitat due to demographic expansion as well as forced expulsion for the creation of national protected areas, most importantly the Kahuzi-Biega National Park. Political conflict and violence caused further displacements in the Ruzizi Plain, where the Batwa are amongst the most exposed to forced enrolment in armed groups and to violence, especially sexual violence against women.

E.2 Legal Status

The Batwa are legally protected under organic Law No. 22/030 of 19/06/2022 on the Promotion and Protection of Indigenous Pygmy People, which aims to fill the legislative gap in the protection and promotion of the rights of indigenous Pygmy peoples in the DRC. Key provisions of the law include the recognition of Pygmy customs, access to justice and social services, full enjoyment of land and resources, participation in decision-making processes, the right to free, prior, and informed consent, and the promotion of socio-economic development plans and the rights of Pygmy women and children.

¹³Batwa People, <https://kwekudee-tripdownmemorylane.blogspot.com/2013/03/batwa-people-one-of-first-people-on.html>, accessed on 23/02/2022



E.3 *Terminology and Self-Identification*

The term Batwa is not considered offensive in DRC. However, other naming practices are equally common in the Project area. The community living in Kamanyola refers to themselves as Bambuti, a Swahili term, while communities that have historically lived with their Bashi neighbours prefer the term Bahrwa, a Mashi term. The terms '*autochtone*' (French for indigenous people) and Pygmies are also used by non-batwa neighbours.

E.4 *Geographical Distribution and Settlement*

In the Project area, the Batwa have been identified in Kamanyola and in Karhongo. In Kamanyola, most Batwa live grouped in the village of Ruguengue, south of Kamanyola town. Some Batwa also live scattered around Kamanyola town, although they tend to no longer identify with the batwa community due to their long-standing integration in the Bashi or the Banyamoubira clans. The Batwa settlement of Ruguengue has an estimated population of 300 people. It was established in 2002 by the NGO PIDP, by Kapupu Diwa Mutimanwa, a well-known indigenous people activist who bought the land for a few batwa families to settle here. These families settled alongside other batwa families that had previously settled in the area, including:

- Families who came from the Ruzizi area in Rwanda and Burundi to exploit the honey-rich forests in the 1970s and settled in the area.
- Families who fled the genocide in Rwanda in 1994-1995.
- Families who came from the Ruzizi area in 1996-1997 to flee conflict in neighbouring areas. They had first settled around the city of Bugano (Kamanyola), which they left in the early 2000s due to insecurity and conflict in the area.

In the Karhongo groupment, Batwa are scattered in Nyangezi, Ruduha, Nachirongwe and Bujenjere. Karhongo is not a structured community but rather consists of isolated individuals with a batwa identity who have integrated into inter-ethnic marriages through various population movements over the past 30 years. In these villages, Batwa identity tends to be concealed due to its association with past discrimination. The qualitative survey carried out in 2022 identified an estimated 15 Batwa households living in Bujenjere village, as well as an estimated 2 households living in Ruduha and Nachirongwe.

E.5 *Lifestyle*

The Batwa communities of Bugarama and Nzahaha live together, sometimes in separate neighbourhoods and sometimes in family units mix with the rest of the community. They are identified as a specific group by neighbouring communities. Inter-marriage is sometimes practiced, although it is constrained by the levels of poverty and stigma associated with them. Interviewees reported a sense of transborder solidarity between Rwanda and DRC, as well as in-between families in the two countries, within the Project area. The only type of relationship between Batwa and non-Batwa related to labour.

Although primary education is free for children, it is reported that Batwa children are regularly turned away because they do not have appropriate clothing, and many are discouraged from attending due to bullying and discrimination. Access to health services is also a challenge for some Batwa.

E.6 *Governance, Language and Culture*

Although some exceptions exist, Batwa are generally absent from local government structures and administration, mainly due to poverty, low levels of education and the absence of social connections. No evidence was found of an internal decision-making structure during the survey. Most of the cultural specificity of Batwa has been lost after their displacement from ancestral lands. However, in the Project area the Batwa are still known to be musicians, performers,



singers and dancers. In Kamanyola, the main dance practiced by the Batwa is the Kubina, or Kushisa.

Although it was reported that the Batwa have a particular intonation, they do not have a traditional language other than Kinyarwanda.

E.7

Livelihoods

Since their forced displacement from ancestral lands, the Batwa in the Project area are facing a continuous depletion of forest resources. Most Batwa are landless, residing as tenants or squatters on others' lands. Even for those who own land, it is often limited to the area their house occupies. In the Karhongo groupement (DRC), some Batwa families still own land individually, but they no longer identify themselves as part of an indigenous Batwa community due to intermarriage and integration into mainstream society.

Currently, the Batwa's main source of income is occasional labour in agriculture in the rainy season, while gathering activities are practiced in the dry seasons. However, gathering activities still take place in farming fields as well as further away in fallow lands. Men predominantly engage in harvesting wild honey, while women collect medicinal and edible plants (Sogho, Moubolé, Mologuo, Bihama), and straw for roofing, which they sell in the local market. The collection of wild resources can be time-consuming and requires permission from landowners. The straw is mainly collected along the riverbanks or near the Ruzizi River. Wild resource collections can be time consuming and require long travel times as well as permission from landowners. It was reported that amongst other areas (*Kirira, Kaboya, Tchapagna*), the surroundings of the city of Bugano (Kamanyola) are used for wild plant collection activities.

The Batwa households in Karhongo practice agriculture on smaller plots compared to non-Batwa communities. On the other hand, the Batwa in Kamanyola do not own any land and depend on non-Batwa landowners for low-income daily work. Some women in Kamanyola have access to small plots through concessions from Bantu landowners, but it is precarious and insufficient. Although some Batwa have small gardens for occasional sales of bananas, they do not meet the households' consumption needs, leading to frequent experiences of hunger.

Pottery, which holds cultural significance for the Batwa, has declined rapidly in the Kamanyola area. Access to clay is mainly ensured through a clay quarry on land purchased by Kapupu Diwa to resettle a Batwa family in 2002. However, the market for pottery has dwindled, and the activity is no longer widely practiced.

While some Batwa own poultry, they do not have livestock due to their lack of land ownership. This absence of livestock is considered an obstacle to intermarriage and is seen as a form of discrimination, as cattle ownership carries social status and economic opportunities.

E.8

Cultural Heritage

The cultural heritage features of the Batwa community of DRC are similar to those described for the HMP communities of Rwanda in section 8.2.5.1B.8.

Likewise, the interviews conducted in the study area have not reveal the presence of any tangible cultural heritage.



8.3 Land Tenure

8.3.1 Rwanda

8.3.1.1 Land Ownership

In Rwanda, the 2003 Constitution revised in 2015 recognises private land ownership. Law no.43/2013 provides equal access to land without discrimination based on sex and origin, providing leases of 99 years for most agricultural land and of up to 49 years for foreigners. Unwritten customary law is recognised by article 201(3), but only when it has not been replaced by a written law.

Land is formally registered through land titles. The management of these is centralised at the Cell level, where a land committee is in charge of registering land, through a process of land titling which has been systematised in 2011. All the villages in the study area are currently in the process of giving out land titles in mass. SLR's social experts have observed a very high number of people queuing to get their land titles in all of the administrative buildings where interviews took place. Nevertheless, land ownership without title still exists. The Executive Secretary of Pera Cell estimated that around 3,000 people (around 23% of the total population) are still without title. In Nzahaha Sector, it was estimated by local authorities that around 30% of people are still without titles. A land title can hold the name of one individual or two individuals in the case of legally wedded couples. It can be bought at the office of the Cell Administration for 40,000 francs and then name on it can be exchanged for 33,000 francs or for 45,000 for each person if the land is divided into different parts. The first question that gets asked is whether land was bought or whether it comes from heritage: in both instances, witnesses are required to confirm this. Once his/her land is approved for a title, the person needs to pay online through a service called IREMBO: it is with proof of that payment that the title is issued at the level of the Sector.

At national level, about 90% of Rwandan households cultivate at least one parcel of land, but 84% of them farm on less than 0.9 hectares (NISR, 2021). When they own any land, most people owning an average of 1/2 hectare of land per family due to the extremely high pressure on land. According to informants, 0.75 hectare is the minimum acceptable size for a plot to feed an average-size family, while 1 is considered comfortable. Nevertheless, land speculation is often a cause of inequality and reinforces the poverty of those that own the least land. As reported in Nyagahanga, there are often owners that own more than a majority and often resell their plots at high prices when others need them: for example, in this village there is one man that owns 10 hectares, while the rest of the village owns less than 1. In both DRC and Rwanda, interviews revealed that the price of 1 hectare on the riverside is currently between 1 and 5 million Rwandan francs according to the exact area, requiring an amount of cash which is unattainable for most households.

8.3.1.2 Land Renting and Nyiragabura

According to focus groups across the study area, renting is the most common way of acquiring cultivable land. Whilst owning a piece of land is seen as normal for those who decide to settle in the villages with their family, renting is seen as the mainstream way of acquiring for (i) those that either live somewhere else and are looking to expand their cultivation activities, (ii) those who sold their land for cash but cannot afford to re-buy it and (iii) those that settle into the village but cannot afford buying a plot. During the focus groups in Nyagahanga, it was estimated that around 20% of people only rent and do not own any land. The importance of renting is further demonstrated by the fact that local definitions of vulnerabilities often revolve around people's ability to afford renting a land plot or a house (See Box 8-3 Access to Land for a Vulnerable Person).



Box 8-3 Access to Land for a Vulnerable Person

One vulnerable man in Ruganzo village does not own a house. He is paying 2,000 francs a month for a hen's cage which he is using as a house. He irregularly finds work on people's fields for a wage, but this contributes very little to his income and in a month he earns only around 1,000 francs from this activity. Since he cannot afford his rent, he is also doing on nyiragabura on someone else's land. He maintains another person's lands and takes care of the harvest during the appropriate season. Once the produce has been harvested, he takes 50% for himself and leaves the rest to the landowner.

Table 8-8 shows the type of tenure type amongst the Rwandan population surveyed in 2022: this reflects the fact that most households in Rwanda have a title but also rent some land, confirming the popularity of this type of land access mechanism.

Table 8-10 Type of land tenure - Rwanda

Land Tenure Type	Man-headed Households (%)	Woman-headed Households (%)	All Households (%)
Households who have a legal landholding title	61%	58%	61%
Households who are renting land	62%	54%	61%
Households who are cultivating through the nyiragabura system	27%	27%	27%

8.3.1.3 Land Conflicts

According to the interviews and focus groups carried out by SLR, conflicts related to land ownership in Rwanda are rare. Nonetheless, a recognised issue throughout the study area is women's difficulty ensuring land tenure security: for a deeper analysis of this issue, refer to Section 8.9.1.1.

The main types of conflict which are observed in the study area related to hereditary rights, plot separations and control of untitled land. In case of a conflict, the main institutions in charge of resolution at village level are the following:

- Inama y'umuryango is an informal family meeting.
- Inshuti z'umuryango (or 'friends of family') is a local committee which meets at village level to resolve small scale conflicts at the domestic level, especially between husband and wife.
- The umudugudu, or village Head, is the third authority in charge of resolving conflicts, especially when they involve more than one family.
- Land committees at cell level and a land manager at sector level have the role of facilitating the work of land registration units.
- Imyangamugayo are community members who contribute to dispute resolution in an informal way, literally 'loyal people'.
- If the conflict still is not resolved, the *Abunzi* committees¹⁴, created by Organic law No. 31/2006 of 14/08/2006 on Organisation, Jurisdiction, Competence and Functioning of the Mediation Committee, deal with all disputes before they can be submitted to the Primary Court in the formal judicial system.

¹⁴ Abunzi committees there are seven in each cell and seven in each sector.



8.3.2 DRC

8.3.2.1 Land Ownership

Historically, in DRC small chiefdoms defined by boundaries of clans or ethnic communities, which were headed by the Mwami (the customary chief) and broken down into smaller units, each with their own customary leader. Viewed as the supreme leader, the Mwami held the power to grant inalienable property rights for some form of payment or tribute. With the advent of colonialism in 1885, the Belgian administration declared all land as a personal estate of Leopold II of Belgium, mixed with concessions reserved to Europeans only. After seizing control in 1965, Mobutu passed the ‘Bakajika Law’, which reclaimed state ownership on all and. Subsequently, the law of 1073 nationalised all lands fully, turning all property into concessions.

Nonetheless, land tenure in Sud Kivu is still mostly reliant on customary rights. According to these, all land belongs to the family of the chief, which has the power to give out the lands to who may want to use them, for the price of a bull or goat. Nowadays, all available land plots have been transferred: consequently, they are all individually owned and transmitted through patrilineal heritage, sale or sharecropping. Titles are not popular throughout the study area. Customary rights are either monetarised or in-cash, through a contract called *Bugule*: this consists of a cash or in-kind payment called *Kalinzi*, which results effectively in a sale. Although the size of land plots varies substantially, the average plot size owned by one household is around 0.5 hectares.

8.3.2.2 Informal Land Use and Sharecropping

Because the land market is increasingly monetarised, a high number of people do not own any land and rely on (i) usage rights given by the family (for example, for wives who have access to the husband’s lands, (ii) sharecropping arrangements and (iii) cash renting. Sharecropping, through a traditional system called *Bwasa*, consists of a short-term agreement where one person agrees to work on one’s land in exchange for 50% of their harvest.

As Table 8-11 shows, amongst the Congolese population surveyed in 2022, it is a lot more common to rent land or have a customary right rather than having a title.

Table 8-11 Type of land tenure, DRC

Land Tenure Type	Man-headed Households (%)	Woman-headed Households (%)	All Households (%)
Households who have a legal landholding title	6%	2%	5%
Households who have a customary property right (Bugule)	41%	22%	35%
Households who have a customary usage right	34%	23%	31%
Households who are renting land	40%	48%	42%
Households who are cultivating through the Bwasa system	41%	39%	40%



8.3.2.3 Land Conflicts

Land conflicts are common throughout the study area. The preponderance of land disputes results mainly from the following issues:

- Incoherence between legal and regulatory texts and customary rules recognized by the Constitution.¹⁵ The most common situations which can arise are that (i) land is given to two different people by the same authority, (ii) land is given to two different people by two different authorities and (iii) land is owned customarily by one person but legally by another.
- Constant reselling and fragmentation of land caused by natural population increase and refugee movements, leading to food insecurity landlessness of vulnerable households.
- Exclusion of women from secure land tenure rights (See 8.9.1.1).
- Interpersonal conflicts relating to contract terms and conditions, land ownership and delimitations and land division within the family or clan.
- Tension between Congolese people and people of Rwandan descent, due to land tensions caused by the migration of Rwandans to Sud-Kivu after the Rwandan Genocide of 1994.

When conflicts arise, the most common ways to resolve them is through the village committee. If the conflict is particularly complicated, it can be brought to the land conflict resolution committee, or Groupe de Réflexion sur les Conflits Fonciers (GRF). The Land Brigades, located in each municipality, acts as technical advisor to the village authority in case of more complex conflicts on land control and real estate.

¹⁵ Ramanantsoa, T.S. (2019) 'Analyse du Régime Foncier et Social Dans les Provinces du Nord Kivu, du Sud Kivu et de l'Ituri en République Démocratique du Congo'.



8.4 Land Use

Figure 8-33 shows an overview of the different land use types observed across the study area.

8.4.1 Land Use in the Reservoir and Dewatered Reach

Figure 8-34 shows a view of the reservoir area from the top. The reservoir and dam site are characterised by a dominance of steep slope cultivation, especially of maize and cassava (Figure 8-37), alongside a minority of flat riverside areas where maize, cassava, fruit trees and bananas are cultivated (Figure 8-35). Where the riverside plots are not flat, it is still common to find small fields of cassava and taro (Figure 8-38). In between different plantations, areas have been observed where manioc is dried on the riverside and where wood is cut for firewood selling. Cultivated areas are mixed with smaller patches of vegetation, as can be seen in Figure 8-39. No house or residential building has been observed in the reservoir and dam site area.

8.4.2 Land Use along Access Roads, at Construction Camps & Powerhouse Site

On the Rwanda side of the Ruzizi River, the current access road from Bugarama to the powerhouse is currently a hotspot of activities which connect the residential villages of Bugarama Sector to the surrounding fields, natural resources and to the Ruzizi River. The existing road is busy with people walking towards and back from water, wood and straw collection, or making their way back and to their fields. At the entrance of the village of Kabusunzu, a large opening onto the Ruzizi with an area for easy crossing to DRC makes it a particularly propitious place for the population to meet at the river for socialisation, water collection, object cleaning, fishing, clothes washing and bathing activities.

On the DRC side, the access road will physically displace some grouped houses, which are part of the riverside villages. For example, Figure 8-22 shows a house in the village of Kafunda, which will be directly impacted by the access road. The village of Bugano is located where the powerhouse will be located (Figure 8-19). The exact number of households displaced by this component is available in the RAP.

Where the access road touches the river, riverside crops have been observed alongside areas of firewood tree growing, charcoal making and fishing.

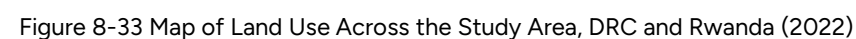




Figure 8-34 Birdseye of the Reservoir Site

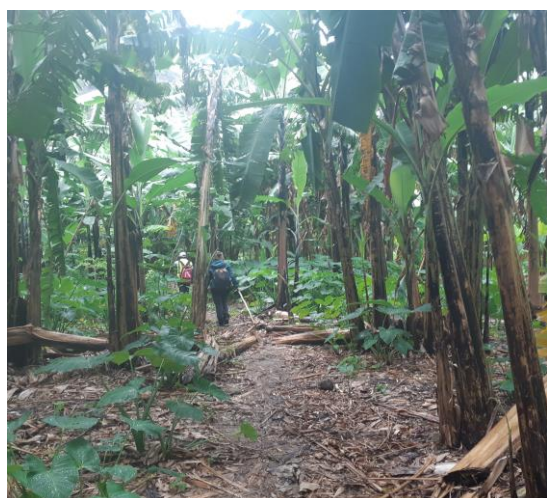


Figure 8-35 Banana Plantation in the Reservoir Area



Figure 8-36 Manioc Drying in the Reservoir Area



Figure 8-37 Steep Slope Cultivation in the Reservoir Area

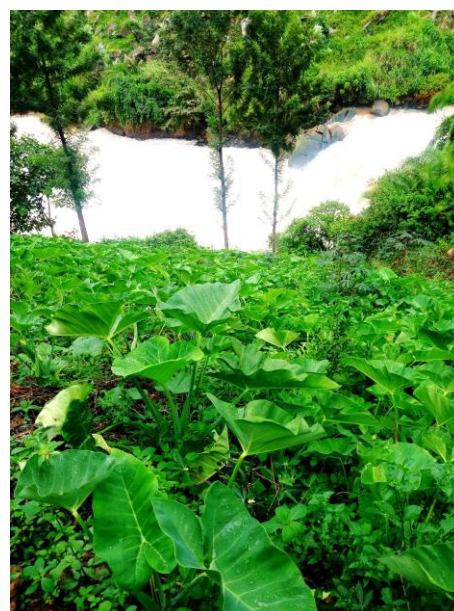


Figure 8-38 Taro Field on Riverside Slope



Figure 8-39 Patches of Cultivation Amongst Vegetation in Reservoir Area



8.4.3 Land Use Along the Transmission Line Alignment

The Transmission Line crosses inhabited and cultivated areas for its 200 metres after leaving the switchyard area. It then goes up the hills during approximately 3 km, crossing areas sparsely cultivated. It then joins the outskirts of Kamanyola town, going through maize fields. It crosses the RN5 road, without affecting any building, and then continues through cultivated areas (maize fields) down to the site of the future Kamanyola Substation (see Figure 8-40).



Figure 8-40 Field of Maize in Transmission Line Station Area, Close to the Future Kamanyola Substation

8.4.4 Land Use Along the Reach of Ruzizi River Downstream of the Project

The areas on the banks of the Ruzizi River downstream of the Project access roads are slightly different on the Rwandese and Congolese sides. In Rwanda, the downstream reach of the Ruzizi is characterised by a riverside plain cultivated predominantly with vegetables, of which tomatoes is the most widely farmed, and with rice.

Figure 8-41 shows a bird-eye view of the crop cultivation plain in Bugarama, with the rice fields showing up at the back of the city. Section D describes rice farming downstream of the Ruzizi in additional detail.

In DRC, the downstream reach of the Ruzizi is characterised by a mixture of riverside banana and maize cultivation, fish farming and irrigated vegetable cultivation. Figure 8-42 shows a bird-eye view of the fish farming ponds and cultivated plots from a hilltop in Rwanda. Figure 8-43 illustrates the irrigation canals which irrigate the plain as they meet with the farming ponds. Section 8.6.5 describes fish farming practices in the downstream reach of the Ruzizi in more detail.



Figure 8-41 Cultivation Plain in Bugarama, Rwanda, before the confluence with Ruhwa River



Figure 8-42 Bird-Eye View of Crop Cultivation and Fish farming Ponds, DRC, at the Confluence with Ruhwa River



Figure 8-43 Irrigation Canals and Fish Farming Ponds, DRC, at the Confluence with Ruhwa River



The people interviewed in the villages downstream on the Rwanda side have all reported some experiences of flooding. This is a problem throughout the Bugarama Sector, but it hits hardest the villages of Gatebe, Kagarama, Rusizi Mubombo and Gombaniro, which are heavily dependent on vegetable cultivation along the river. In 2021, there were three floodings, one in May-April and two in June, on the 4th and on the 18th. The one on June 18th was the worst, as it destroyed 25 hectares of land (Figures Figure 8-44, Figure 8-45 and Figure 8-46). In the village of Gombaniro, farmers reported that during the June floods 5,000 lemon trees were destroyed. One person's land, the closest to the river, was so badly affected that he hasn't been able to cultivate on it since. According to all the people affected, water stayed on land for around 4 months. These villages are also affected by water rises and floods from the Ruhwa, which causes floods lasting around 1 month, around March-April.

According to the focus group carried out with the people who lost their whole harvest due to these floods, they estimated a loss of 3 to 4 million francs for the year.



Figure 8-44 Field in Mubombo Before the Flood on 18/06/2021



Figure 8-45 Field in Mubombo At the End of the Flood on 18/06/2021



Figure 8-46 Field in Mubombo After the Flood on 18/06/2021



8.5 River Uses

All across the study area, the Ruzizi River is perceived as a cultural and economic resource. The following sections reveal how water is used in the villages where the focus groups and interviews were carried out. According to the information collected from farmers and residents in the area, the Ruzizi is mainly used in the following ways:

- Source of domestic water supply.
- River crossing.
- Medicinal and Spiritual Use.
- Irrigation.

The quantitative households survey revealed that households regularly use the Ruzizi River for drinking, bathing, collecting cooking water, preparing manioc on the riverside, washing clothes and praying on the riverbanks, as shown in Table 8-12 below.

Table 8-12 Use of the Ruzizi River by surveyed Households

	Rwanda			DRC		
	Man-headed Households	Woman-headed Households	All Households	Man-headed Households	Woman-headed Households	All Households
Take water for drinking	42%	42%	42%	56%	68%	60%
Bathing	63%	69%	64%	74%	84%	77%
Take water to cook	70%	73%	70%	42%	57%	47%
Preparation of manioc	73%	73%	73%	21%	35%	26%
Washing clothes	75%	77%	75%	58%	77%	64%
Baptism / Praying	36%	19%	34%	22%	28%	24%
Other (medicinal use & watering crops)	12%	8%	12%	34%	26%	31%

8.5.1 Water Supply and Domestic Activities

Across the study areas, all villages use the Ruzizi as a source of domestic water supply. Domestic uses of the riverside water include drinking, cooking, bathing, playing, cleaning objects and washing clothes. During one of the focus groups in DRC, women explained that even when people have taps, they prefer using water from the Ruzizi to drink, because it is deemed to improve health, and to cook, as it is believed to have special properties that make the water boil faster. Additionally, all across the study area it has been observed that the riverside is used for manioc fermentation, manioc drying and manioc grinding for flour making: this is done all season long by women, who dig holes next to the river and fill them with water to let the manioc ferment, and then leave it overnight for a couple of days in order for it to dry (Figure 8-49). There are no specific areas for this activity, which is either practiced by individuals in isolated spots (Figure 8-49) or in groups by multiple people (Figure 8-48). This can be practiced either on flat surfaces or on slopes on flat wooden structures built for this purpose (Figure 8-52). While there are no specific points where water is collected, people tend to perform activities of clothes washing and bathing in open areas where the river offers space to dry the clothes on the grass (Figure 8-50) or to socialise while washing and/or playing in the water (Figure 8-47). It is women who perform these activities with children. Men usually bathe in the river during the day or night, while women themselves shower in buckets at home to avoid attracting unwanted attention. Although this has been mentioned more rarely in Rwanda, in DRC the water is frequently used to facilitate livestock activities. In case of retained placenta of the cow, water from the Ruzizi River is given and the placenta is released within 30 minutes. There is also a belief that the animals (goats and cows) that drink water from the Ruzizi produce a lot of milk and are in good health.

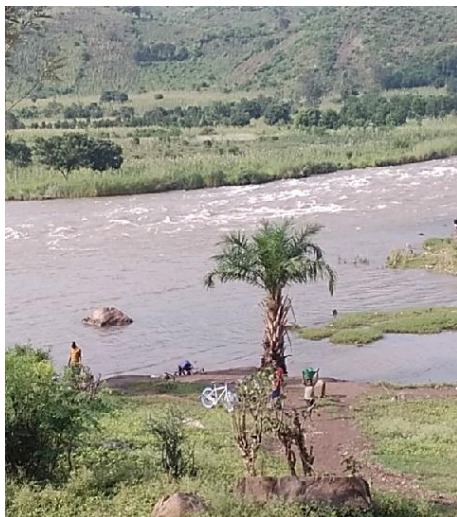


Figure 8-47 Collecting Water, Washing and Bathing Area in Gatebe



Figure 8-48 Manioc Drying Spot Outside of Bugarama



Figure 8-49 Hole for Manioc Fermentation in Gisheke, Rwanda



Figure 8-50 Area for Clothes Drying in DRC, downstream of Kamanyola



Figure 8-51 Manioc Drying in Gisheke, Rwanda



Figure 8-52 Manioc Drying on Slope, Reservoir Area



8.5.2 River Crossing

According to the interviews across the study area, people cross the border regularly by swimming across the river, from Rwanda to DRC and the other way round. The three main reasons why people cross are (i) employment, (ii) commerce and (iii) visiting family.

As for employment, people have mentioned the fact that in DRC, Rwandan workers are paid more than double what they are paid in Rwanda. The average price for paid agricultural work in the study area is 700 francs per day, but in DRC they can get around 2,000 francs. According to Pera Cell Executive, crossing to look for employment is the number one reason for illegal crossings. Before COVID, he estimated that around 3,000 people regularly went to DRC from Pera Cell to look for work on fields. Both men and women cross for paid work, although women do it a lot less frequently, either waiting for a time where the crossing is less physically demanding or looking for areas where the water is low.

In addition to paid work, some men cross the river regularly for produce smuggling. In some areas, there can be small pirogues for crossing, although the most used method is simply swimming with large containers or sacks (Figure 8-53 Figure 8-53). Smuggling of rice, maize and sugar is particularly popular from Rwanda to DRC, while DRC often sends cooking oil over to the Rwandan side. The people employed for this type of work are often young men between 20 and 35 years old. They swim across in dangerous conditions, even when the current is high, and do around 10 trips a day every day on most days in a week. On the downstream stretch of the riverside, informants declared that accidents are frequent when the water is released by Ruzizi II which is unpredictable.

Finally, children, women and men all cross frequently to see family members or socialise with acquaintances on the other side of the river. A family downstream on the DRC side reported that there are around 7 families in the village that have family members they visit regularly across the border. Pera Cell Executive explained that around 27 Congolese families moved into Rwanda from the 1970s and have since then been in close contact with other family members across the border.



Figure 8-53 Sugar Smuggling Across the River, Downstream from Mwaro to Kamanyola



8.5.3 Medicinal and Spirituality Properties

In Rwanda, the Ruzizi water per se is not used for any specific spiritual purposes, with the exception of baptisms which are practiced on the riverside in small points where people gather for praying and religious singing. However, in DRC the healing and spiritual use of water from the Ruzizi has been mentioned throughout all the study area. Overall, the river is seen as a source of protein and livelihood through fishing. It is believed to have healing properties for health and nutrition. The interviewees generally explained the Ruzizi which can cure several illnesses, help with anaemia and malnutrition and increase the quantity and quality of milk for nursing women. Most frequently, people are immersed into the water to cure scabies and all types of wounds, while for more serious illnesses medicine is taken with or mixed with the water from the Ruzizi to increase the beneficial effects. Additionally, women believe that the Ruzizi water has special minerals which help women recover right after giving birth. The water from the Ruzizi is also used for baptisms and for spiritual practices, most notably casting out demons or evil spirits from people's bodies and houses. Baptism ceremonies are done at some places of the Ruzizi River and even prayer sessions are organized at the Ruzizi River and in caves near the river (See Section 8.12.2).

8.5.4 Irrigation

According to the interviews and focus groups carried out, most irrigation takes place from May to September. The different methods used for the irrigation of crops are (i) by hand with buckets, (ii) with a water pump (Figure 8-54) and (iii) through irrigation canals (Figure 8-55).

Irrigating by hand with buckets is by far the most common way of irrigating crops, especially small plants such as tomatoes or peppers.

The irrigation canals are mostly used during May and September, according to the information given by the farmers on the DRC side. These canals usually flood once a year during the rainy season. Even people that live close to irrigational canals seem to prefer using buckets for the smaller plants, whilst they tend to use the canals for bigger plants such as maize and manioc. The existing water canals are perceived by the enquired families as not very effective.

Water pumps get to 300 or 400m, based on information gained on the riverside of Gombanro. They are mainly used in the summer months.



Figure 8-54 Irrigation Pump and Pumping Machine



Figure 8-55 Irrigation Canals, Downstream part of the Study Area in DRC

8.6 Economic Activities

The villages in the study area are predominantly dependent on subsistence agriculture. Nonetheless, cash cropping and agricultural wage labour are important sources of livelihood which households resort to when money is required for basic expenses such as security taxes, medical fees or schooling payments.

In Rwanda, in the Western Province 70% of rural women and 87.5% of men are currently employed: respectively, 46% women and 40% men work in agriculture, 34% women and 31% men in unskilled manual labour. Around 15% of women also engage in commercial activities, as opposed to 12% of men. Although women declared being employed more frequently than their male counterparts, they are generally more likely to perform agricultural labour without being paid, either as a sharecropping agreement in exchange for food or due to the owner refusing to pay them at the end of the work: around 23% of employed women in Rwanda report not being paid for their agricultural work (NISR, 2021). While the Nzahaha Sector is dominated by agricultural activities, Bugarama Sector has a semi-urban economy characterised by a growing proportion of the population which is involved in small businesses and artisanal commerce. According to the Pera Cell Executive, 70% of people cultivate while the remaining 30%



depending on small shops. In Kabusunzu, just under half of the population is dependent on small shops rather than cultivation.

In DRC, at the national level 74% of women report working. Sud Kivu is the region with the highest female employment at 77.4%, followed by Bas-Congo at 77.2%. Out of these, 70% work in agriculture. 75% of men report working. Activities conducted by men are also more diversified with only 45% in agriculture and 36.3% in small commerce. In the study area, small commerce is less frequently found than in Rwanda. Instead, households are almost entirely dependent on livestock and agriculture, with an economy mostly directed towards subsistence.

8.6.1 Agriculture

A Subsistence Crops

Agriculture is amongst the major livelihood strategies both in DRC and Rwanda. Countrywide, in Rwanda the share of land area per major crop are as follows: Pulses (29.5%), Roots and Tubers (25%), Cereals (22.5%), and Banana (18%), fruits (3%) and vegetables (2%) (MINAGRI, 2014). In the study area, subsistence agriculture tends to be centred around cereals, tubers and vegetables. The crops cultivated on the project footprint and around the villages in the study area are maize, manioc, bananas, beans, vegetables, fruit trees. In DRC, Maize is predominant crop cultivated in the plain around Kamanyola. In Rwanda, in terms of crops, coffee is almost exclusively grown at higher altitudes. In the Nzahaha sector, coffee trees have been seen more frequently (See Figure 8-57), whilst downstream of the Bugarama sector the cultivation of soja beans has been observed (See Figure 8-56).

All across the study area, bananas are suffering from an illness called *kirabiragna*, which has been around since 2015. Although bananas are still cultivated in the reservoir area and along the river, they are almost not at all present on the riverside in the Bugarama sector in Rwanda, due not only to the illness but also to the less appropriate soil.



Figure 8-56 Soya Bean Drying in the Village of Mubombo, Rwanda



Figure 8-57 Coffee Plants Cultivated in Ruganzo, Rwanda

According to farmers, the soil is a lot more fertile on the riverside compared to the slopes. The area of Gisheke is believed to be the most fertile strip of land in Rwanda, while Bujenjeri has the same reputation in DRC. Instead, the slopes are dry and unsuitable for most crops, due to the lack of rain, difficulty in irrigating and the effect of erosion and deforestation. In Rwanda, erosion control holes on the slopes are used to recuperate fertilisers that are taken down into the plain



by rain during rainy season, but often this is not enough, and it is difficult to properly fertilise that soil. On the riverside, market gardening is practiced all year round, especially tomatoes and aubergines are cultivated and then easily sold for a higher amount of money than most other crops (See Figure 8-58Figure 8-14). Bugarama's tomatoes are particularly well known in other regions, and they are an important source of livelihoods for local communities.



Figure 8-58 Tomatoes Packed for Market Selling, DRC, Downstream of Kamanyola

8.6.1.2 Agricultural Calendar

Figure 8-59 shows the agricultural calendar of the main crops observed in the study area, for Rwanda and for DRC. This calendar has been developed based on the information collected from the focus groups with cultivators, and from interviews with the sector agronomists of Bugarama and Nzahaha Sectors in the case of Rwanda. It is important to note that in both Rwanda and DRC farmers emphasised that the quality of the soil on the riverside plots makes it possible to cultivate all-year-round. According to the Bugarama and Nzahaha Agronomists, the quietest time in the year is in August, where no crops are generally cultivated. Apart from these two, the calendar can change slightly during all other months, depending on the type of soil and meteorological conditions.

Coffee is cultivated by some households in Rwanda, where some coffee cooperatives exist. Coffee is not cultivated in DRC. Once planted, a coffee tree takes about 4 years to become productive. Then, coffee beans can be harvested between February and May each year.

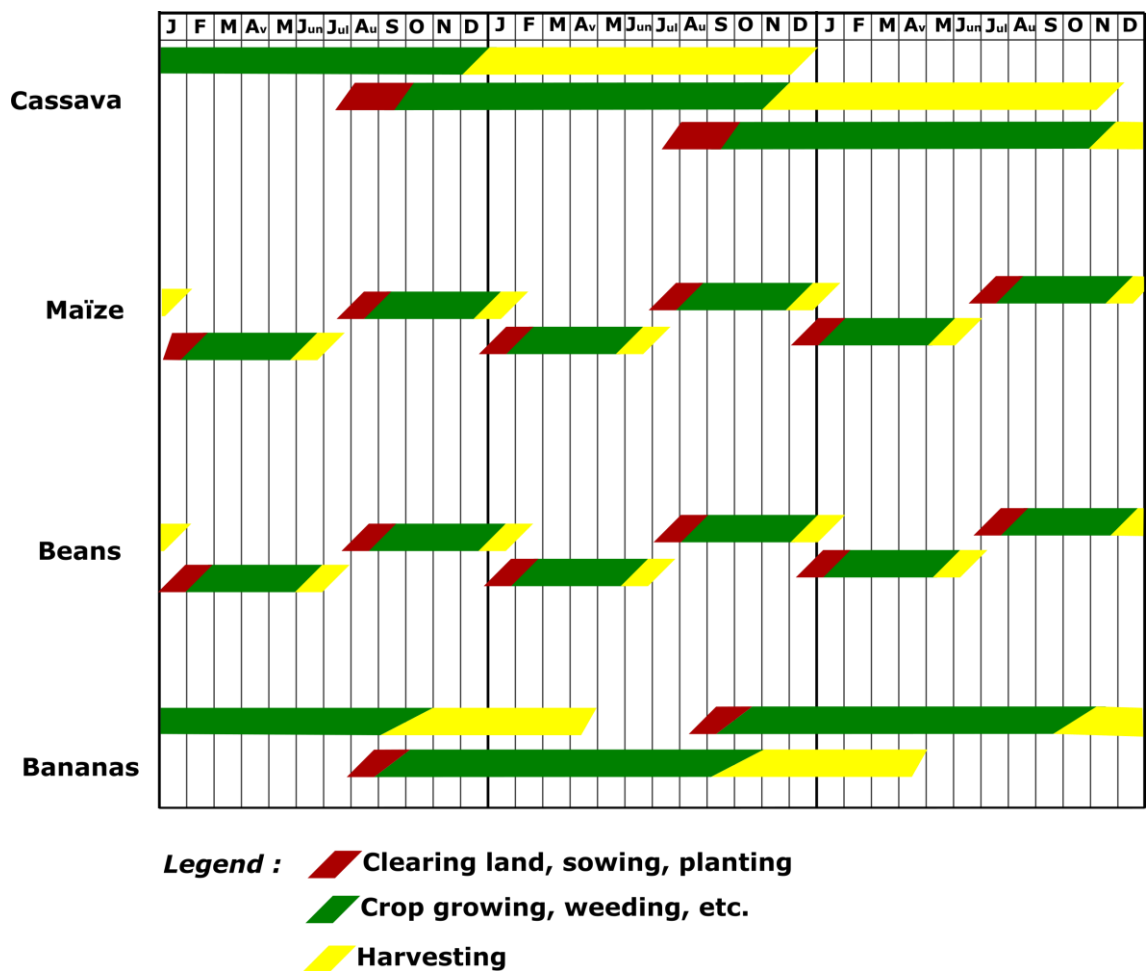


Figure 8-59 Agricultural Calendar (Rwanda and DRC)

8.6.1.3 Commercial Agriculture

A Plantations

According to the interviews carried out across the study area, the only large-scale commercial activities related to agriculture are of two kinds: a mango plantation in Gombaniro and a rice cultivation plain in the Bugarama sector.

On the confluence with the Ruhwa River, after the village of Gombaniro, lies a 15-hectare mango plantation (Figure 8-60). This plantation is part of a programme aimed at supporting deserted army men. The land plots in the plantation are owned by ex-soldiers who were given the plots by the Rwanda Demobilisation and Reintegration Commission, or RDRC, in order to support their reintegration in their respective communities. In practice, local farmers explained that the ex-soldiers pay wage workers to harvest the mangos, which are then processed by a mango processing cooperative in Nyanji Cell.



Figure 8-60 Mango Plantation in Gombaniro, Rwanda

Rice cultivation has only been observed in Bugarama, where the cooperatives Khem, Coimugna, Coprorici, Nibra and Nyankanyuke have a total of 14,000 hectares encompassing 4 Sectors. Out of these, Khem takes water from the Ruhwa and partly from the Ruzizi alongside Coimugna and Coprorici, while Nibra and Nyankanyuke take water from the Ruhwa. Due to a zoning policy implemented by the government in 2016, plots were divided in equal ways and they were put under the control of 4 cooperatives, one per sector. The maximum amount is one block, which is the equivalent of 0.4 hectares. In Bugarama, there are 130 hectares of rice cultivation, when people own between 0.2 and 0.5 hectares each. According to the focus group in Mwaro, people cultivate plots of around 0.125 hectares. On such a plot, 1.5 tonnes of rice are produced in a season. The taxes and customs taken by the cooperative take up quite a lot of the income: on 1.5 tonnes of rice, around 155.000 francs are taken away for tax.

Although seasonal, income from rice cultivation is an important source of livelihood. According to focus groups, in the villages downstream of the study area, the 60% of people that's dependent on agriculture is divided between a 40% in rice and a 20% in other crops, especially vegetables on the riverside. The way in which the cooperatives are organised is that they own the land and the government has been regulating since 2011 the size of lands cultivated by each person, who on average can only own between 1 and 4 plots. They then take the harvest, paying each person around 270 francs per kilogram. One of the main issues that workers complain of is that they have to then pay 1,200 francs per kg in a shop to buy rice to feed their families.

B

Market Selling

The most common type of commercial agriculture across the study area consists of small-scale selling of agricultural produce. Selling produce to markets is more frequent in Bugarama, where the presence of markets makes it easier for people to sell regularly. However, in Nzahaha Sector it is a lot harder to find markets, which makes it rare for people to sell: according to the interviews had here, people have almost no cash revenue and they infrequently sell some produce only when they are in imminent need of cash.



C

Cooperative Selling

In the project area, the only cooperatives which were observed were in Rwanda. According to the interviews and focus groups in DRC, there are no cooperatives or agricultural associations in the villages concerned, which only rely on the support of small-scale NGO schemes for the improvement of their livelihood.

In DRC, small-scale cooperatives have been mentioned for maize and beans. In Rwanda, cooperatives are larger and more frequently used. However, it is important to note that farmers often avoid becoming members of the cooperative due to the high costs of joining. Instead, they may use the cooperative when needed to sell their produce. Table 8-13 shows the cooperatives which were observed in the study area. While this list is not comprehensive, the cooperatives mentioned here are the ones that were flagged to the social survey team as the most famous one and largest in the zone. Smaller and more dispersed cooperatives and processing centres exist for cassava and were often observed in Bugarama (See Figure 8-61).

Table 8-13 Agricultural Cooperatives Used by Farmers in the Study Area, Rwanda (2022)

Sector	Cooperative Name	Cooperative Type
Gashonga	Gashonga Coffee Cooperative	Coffee
Nyakabuye	Rotukanya	
Giheke	Gisuma Coffee	
Gahogo	Turengere Ikawa	
Gashonga	Kinyaga Coffee	
Gahara	Tuzamurane	
Nzahaha	-	Mango
Bugarama	Khem	Rice
	Nyibura	
	Nyankanyuwe	
	COPORICI	
	Coimugna	
	-	Maize
	-	Handicrafts and small craftsmanship

Out of the cooperatives mentioned above, there was one that was mentioned by all the villages producing coffee in Nzahaha: Ruganzo, Ryagashyitsi and Nyagahanga. The director of the cooperative to gather data on coffee production in the region was interviewed. COCAGI Cooperative was founded in 2004 by the current director, without any reliance on NGO funding (See Figure 8-62). Out of 1,114 members, 298 are women and 69 reside in villages in the study area. More specifically, 14 members are from Nyagahanga, 32 are from Ruganzo and 23 are from Ryagashyitsi. In order to be a member, people need to have at least 50 'pieds' of coffee. The cooperative can only accept a maximum of 3 tonnes of coffee per person.

Additionally, people come selling from the villages of Murya, Nzahaha, Rugunga, Gashar, Kinengui, Kabugabo, Gassave, Murambi, Chuberezi and Chiranga.

COCAGI is certified Fair Trade, Rainforest Alliance and UTZ. The cost of joining the cooperative is 46,000 francs for life. With this, members get the following benefits:

- Premium payment to the cooperative transferred either in cash amount or development project.
- Fixed price higher than AEIP national standards.
- Health insurance every year for up to three family members.
- Loans are given without interest to pay for school fees, excess medical expenses and clothes.
- One cow can be given to each family.
- Small-scale loans are given under request to pay for electricity.



The cooperative can process up to 1,500 tonnes of coffee, although it has a larger capacity, has it has to respect the coffee zoning policy created by the Rwandan government in 2016. The cooperative has 23 staff and up to 180 people working on the washing station on a good season. It sells at national level and then mainly to Italy and the United Kingdom.

It is important to note that people have explained that the largest problem with the cooperative is that the membership price or the selling price they get is often lower or the same as their cost to get to the cooperative. Box 8-4 illustrates the experience of a woman selling coffee to a coffee cooperative.

Box 8-4 Story of a Woman from Ruganzo Selling to a Coffee Cooperative

This woman sells coffee to Cocagi cooperative. When she wants to sell, she needs to pay someone for a bike where she is limited in the number of baskets of coffee beans that she can bring up, which are onlten only two buckets. She then needs to leave the bike and catch a bus. When she gets to the cooperative, she is paid a lower price for the beans that are of bad quality. Last time she sold coffee to a coffee cooperative she was paid 120 francs per kilogram in March 2021. After spending money for transport and loosing beans with the quality check, out of 120 she was left with a gain of 40-60 francs.



Figure 8-61 Small Cooperative and Processing Centre for Cassava in Kabusunzu



Figure 8-62 COCAGI Coffee Washing Station, Drying Process

8.6.2 Livestock Farming

Livestock is an important source of revenues for Rwandese and Congolese households alike. However, in Rwanda it is a lot less frequently observed than in DRC. According to the Integrated Housing Living Conditions Survey (EICV3), after the City of Kigali, the western province has the lowest number of cattle-owning households. Figure 8-63 shows the percentage of households owning livestock, disaggregated by province and by type.

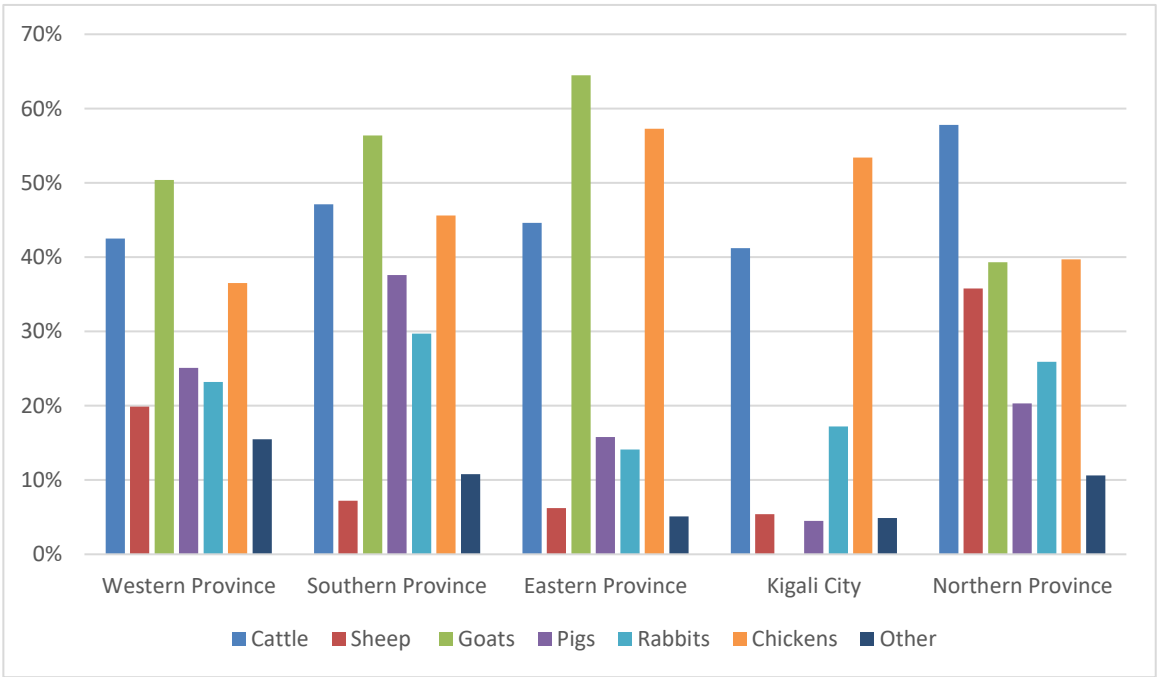


Figure 8-63 Percentage of Households Owning Livestock, by Type and Province in Rwanda (EICV3, 2014)



In DRC, livestock data on a national level is not available. However, amongst the households surveyed during the quantitative survey, livestock farming is more frequently practiced in DRC than it is in Rwanda, as illustrated in Figure 8-64. Just under 70% of surveyed households in DRC own chickens and goats, around 20% and 30% respectively own cows and pigs and 40% own other animals, including rabbits, sheep, ducks, turkeys, guinea pigs, pigeons, cats and dogs. In Rwanda, only around 30% of surveyed households own goats, chickens and pigs and a smaller 20% owns cows.

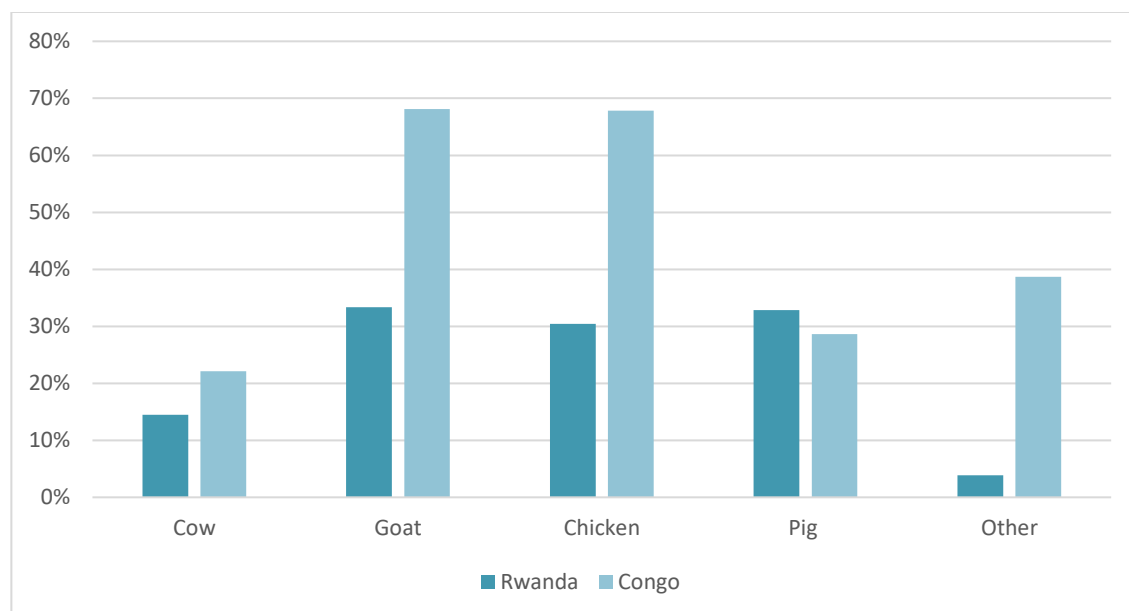


Figure 8-64 Percentage of Households that Own Livestock (2022)

The average number of animals owned is also much higher in DRC than it is in Rwanda (See Table 8-14).

Table 8-14 Average Number of Animals Owned by Farmers (2022)

Number of animals owned		Rwanda			DRC		
		Man-headed Households	Woman-headed Households	All Households	Man-headed Households	Woman-headed households	All Households
Cow	Average	2	1	2	5	5	5
	Max	4	1	4	30	18	30
	Min	1	1	1	1	1	1
Goat	Average	4	3	3	6	5	6
	Max	40	6	40	35	15	35
	Min	1	1	1	1	1	1
Chicken	Average	5	4	5	9	9	9
	Max	35	10	35	45	50	50
	Min	1	1	1	1	1	1
Pig	Average	2	2	2	3	2	2
	Max	7	2	7	16	7	16
	Min	1	1	1	1	1	1



Figure 8-65 Goats Grazing on the Riverside of Gombaniro, Rwanda



Figure 8-66 Cattle Drinking from the Ruzizi Downstream of Kamanyola, DRC

8.6.3 Hunting

According to the social surveys, no households in Rwanda hunt. In the DRC, during the quantitative households' survey, only 34 households (9%) declared having at least one member hunting. Few households hunt monkeys and antelope (only 4 households), while the majority of the hunters are hunting small game.

8.6.4 Fishing

Fishing is practiced all throughout the study area, although it is not a primary activity for any of the households engaged according to the social surveys. The common trends which came out of the interviews are the fact that fishing is an activity exclusively practiced by men and is not an important economic activity. All fishermen said they fish on average 2 to 4 times a week. However, it is important to note that despite the frequency of fishing activities, fishing does not represent an important source of livelihood compared to agriculture. During the focus group in Kabusunzu, men reported that even by fishing multiple times a week, you might only get fish 5 times a month during the wet season, because the depth of the water makes it difficult to find fish. One of the men interviewed reported that he can go 5 days of continuously fishing without finding any fish. Interviews seemed to point to an income of around 1,500 Rwandan francs for 1 kg of fish sold at the market. September to June is considered to be the best season for fishing and the main two types of fishing are with a fishing net (Figure 8-67) or with a fishing pole (Figure 8-68). The frequency of fish buying changes significantly depending on the cash availability of each household. In Nyagahanga, one man reported buying 2 or 3 fish every Saturday from fishermen who come to sell at the village, while another reported buying around 3kg of fish every two weeks to feed 9 people in the family.

Amongst the surveyed population, fishing was reported considerably more frequently in DRC than in Rwanda, by 39% of households as opposed to 13% in Rwanda (See Table 8-15). Equally in DRC and Rwanda, the people who do fish do so multiple times a week. Once that fish is caught, it is utilised mostly for eating and selling alike, as illustrated in



Table 8-16. Of the households that reported selling fish, over 85% stated that they did so in the last month.

Table 8-17 shows the average amount of money made by selling, in Rwandese Francs for Rwanda and Congolese Francs for DRC. Of the households that reported selling fish, over 85% stated that they did so in the last month. On average, Rwandan surveyed households reported having earned around 10,000 RWF last time they sold fish at the market. Similarly, in DRC they reported earning the equivalent of 11,000 RWF. While these numbers are confirmed by the information collected during the qualitative survey, is important to note that due to the low number of people that provided an answer to this question, the data may be inconclusive.

Table 8-15 Percentage of Surveyed Households Who Fish (2022)

	DRC	Rwanda
Man-headed Households	42%	14%
Woman-headed Households	33%	8%
All Households	39%	13%

Table 8-16 Use of Fish Caught by Surveyed Households (2022)

		Mainly Sell	Mainly Eat	Sell and Eat	Total
Rwanda	Man-headed Households	4%	24%	72%	100%
	Woman-headed Households	0%	50%	50%	100%
	All Households	4%	26%	70%	100%
DRC	Man-headed Households	4%	39%	56%	100%
	Woman-headed Households	0%	34%	66%	100%
	All Households	3%	38%	59%	100%

Table 8-17 Average Amount Made the Last Time that Households Sold Fish at the Market (2022)

	DRC	Rwanda
Man-headed Households	44,212	9,000
Woman-headed Households	43,648	-
All Households	44,053	9,000

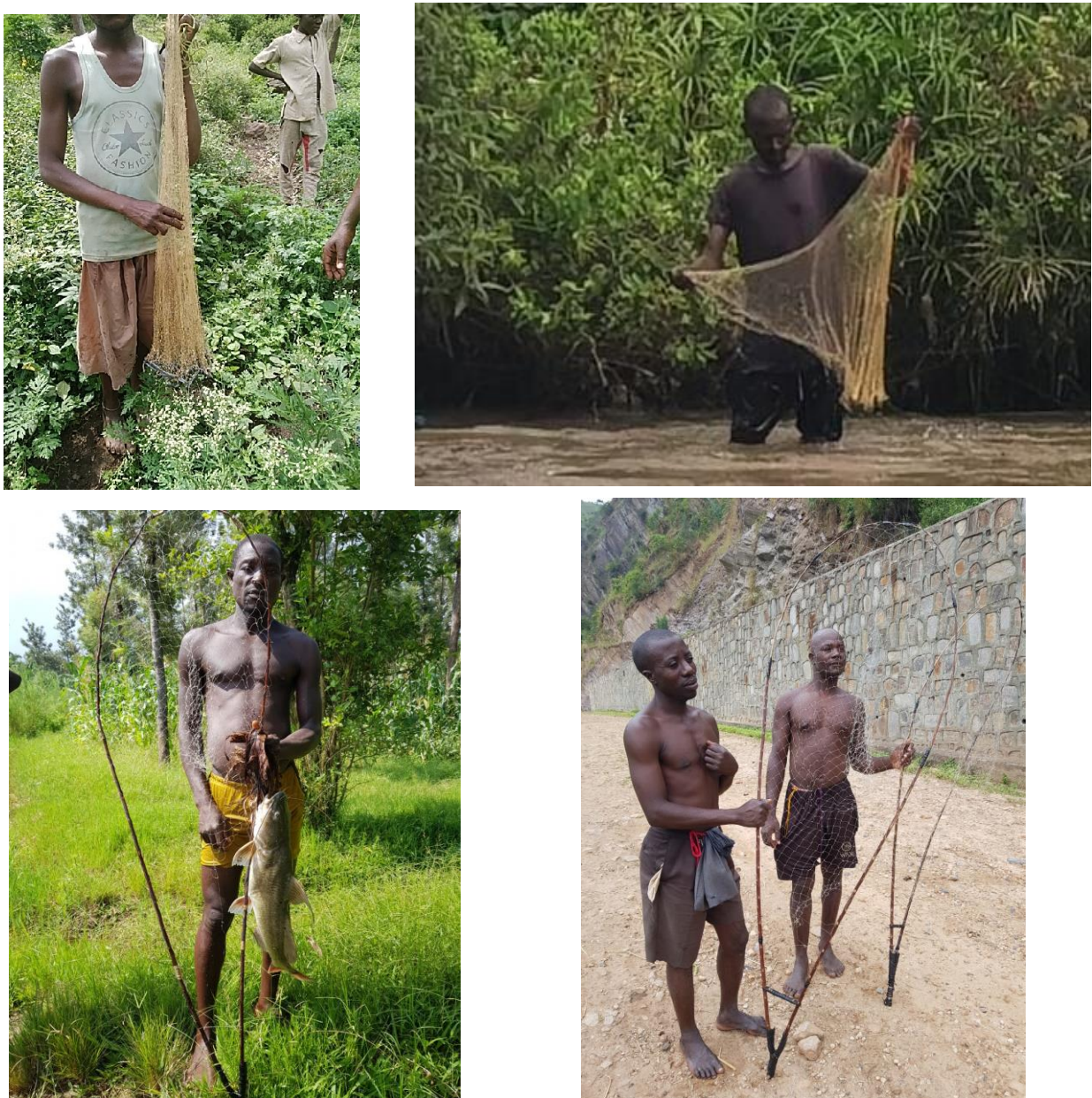


Figure 8-67 Fishermen with Fishing Net, DRC and Rwanda (2022)



Figure 8-68 Fishermen with Fishing Pole, Rwanda (2022)



8.6.5 Fishfarming

The economic importance of fishfarming in the study area is generally low. Only two areas where commercial fish farming activities are carried out have been identified in 2022 (See Figure 8-72). In Rwanda, in the village of Gatebe (Bugarama Sector), one fishfarming company is farming tilapias for the local market on a small scale, with one pond only. In DRC, on the riverside of Kayenge, close to the confluence with the Ruhwa River, there are several fish farming ponds directly alimented by the Ruzizi (See Figure 8-69). Fish farming ponds in Kayenge are sponsored by a FAO program, in collaboration with Biologie ISP Bukavu, with the aim of distributing juveniles to fish farmers to increase fishing activities and fish commercialisation. Some of these ponds are not always used for fish farming and can be used as water reservoirs to water fields during the dry season, as was explained by interviewed people in Kayenge (See Figure 8-70). Figure 8-71 shows a bird-eye view of the fish farming ponds from a hilltop in Rwanda.

About 28 small ponds are also located in the reservoir area. They are used by local farmers to do some small-scale fish farming.

Although interviewed fish farmers did not provide any quantitative information on the volume of fish produced, they generally saw fishfarming as a secondary commercial activity practiced only alongside agriculture.



Figure 8-69 Fish Farming Ponds in Kayenge, DRC (2022)



Figure 8-70 Pond Used as a Water Reservoir in Kayenge, DRC (2022)



Figure 8-71 View of Fish Farming Ponds in Kayenge from Rwandan Hilltop (2022)

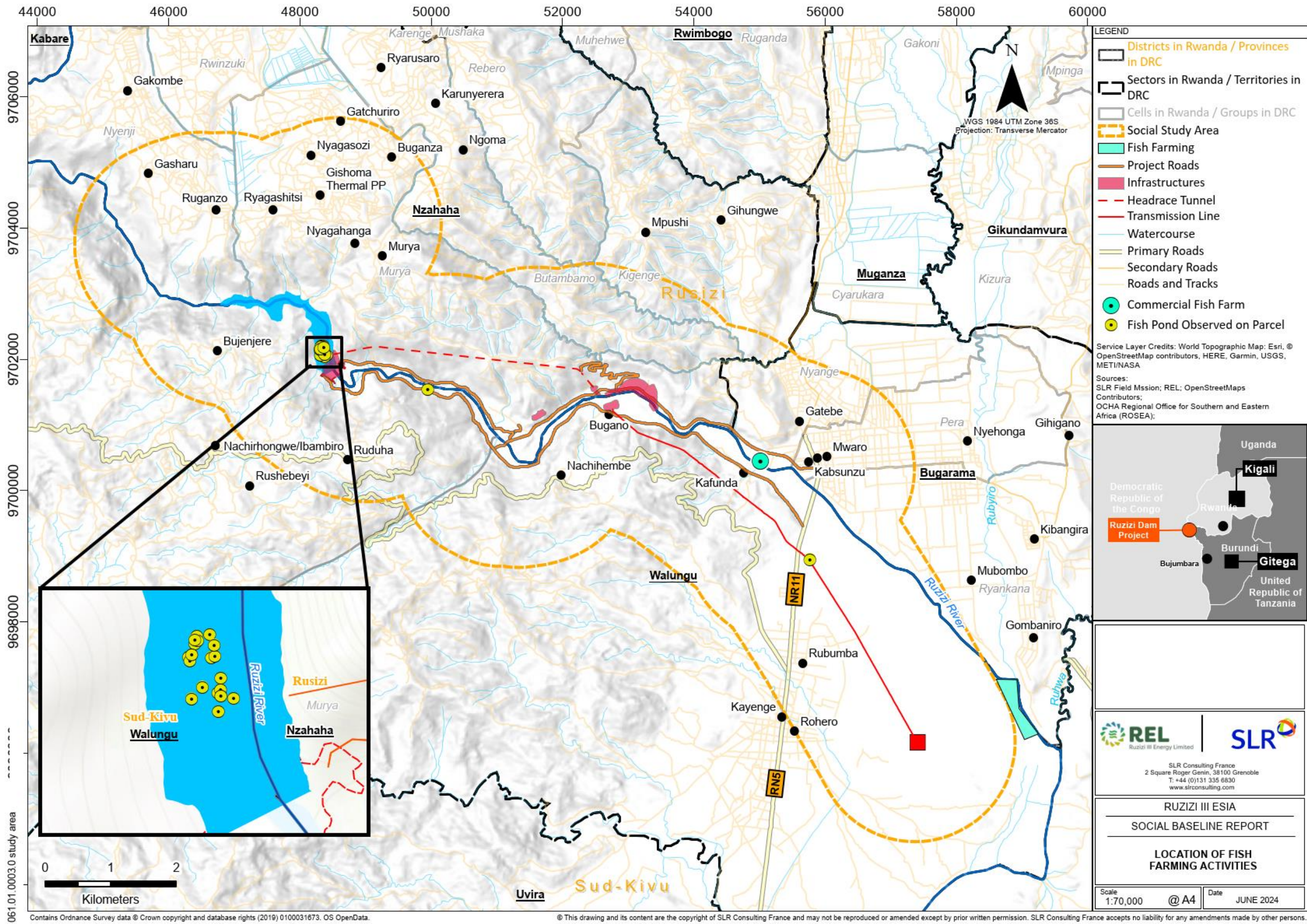


Figure 8-72 Location of Fish Farming Activities Within the Study Area (2022)



8.6.6 Artisanal Activities and Small Commerce

Across the study area, small commerce is limited. Apart from the village of Kabusunzu in Rwanda and the town of Kamanyola in DRC, where some small shops and agricultural processing activities have been identified, very small artisanal activities are infrequently taking place within the villages. These activities usually consist of small kiosks selling produce (Figure 8-73) or small shops (Figure 8-74).

In Rwanda, according to the Nyange Cell executive Secretary, just over half of the Cell's population is entirely or significantly dependent on small trade and artisanal activities. He estimates that 80-90% of women are sewing for a salary, whilst nearly all men (90-100%) are practicing carpentry for a salary. People from surrounding cells often come to Bugarama sector to purchase these services. In Kabusunzu, the people who own a shop or gain a salary are seen as the wealthiest. Men during the focus groups reported that some have very beautiful houses that they rent out, they have workers to take care of their activities and they either move to Kamembe or own a second home for living. The urban jobs which are seen to be providing the best livelihoods are the following:

- Owning a clothes shop.
- Owning a general boutique.
- Owning a bar / restaurant.
- Working in a gas station.
- Working in construction.

There is a general perception that social mobility is not easy in the area, as poor people who still rely on agriculture find it difficult to find the funds to open an activity. Unless they get help by NGO, they often get involved in smaller cash-producing activities of market selling, carpentry of sewing. People in the focus groups reported that they thought that those who own store are often wealthier people who migrated here to open an activity.



Figure 8-73 Small Snack-Bar in the Village of Gombanero, Rwanda (2022)



Figure 8-74 Shop in Kabusunzu (2022)



8.6.7 Access to Banking System, Small-Scale Credit and Savings Associations

All across the study area, in both DRC and Rwanda, banking institutions are not very frequent. For DRC, no national data is available on bank ownership, but the focus groups have revealed that apart from the bigger cities of Kamanyola and Bukavu, people do not rely on banks for their savings. In Rwanda, Ruzizidistrict has one of the lowest rates of bank account ownership, as shown in Figure 8-74.

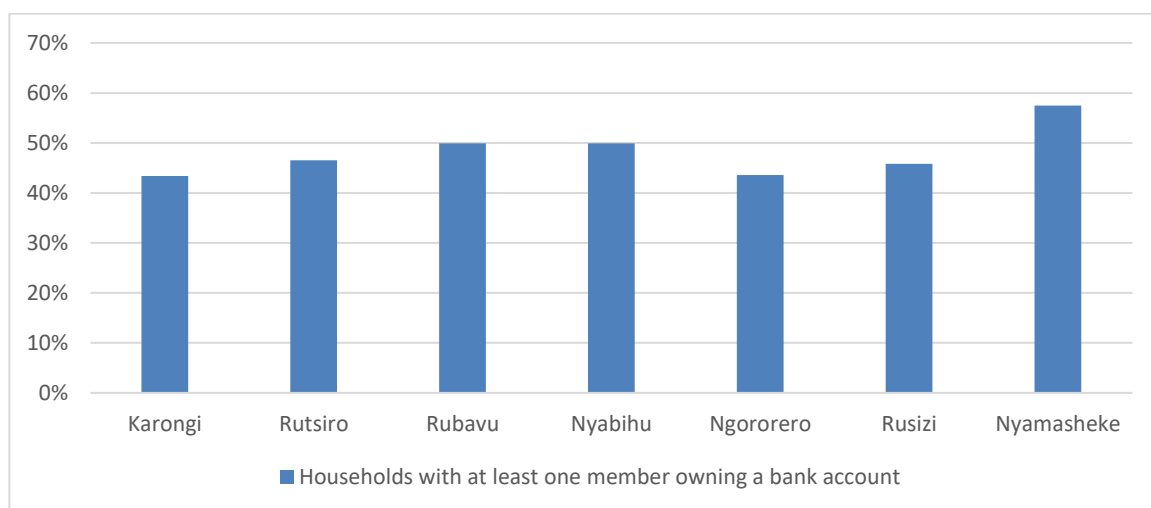


Figure 8-75 Percentage of Households Owning at Least a Bank Account in Rwanda, by Province (NISR, 2020)

In all of the villages in the study area, small saving groups have often been mentioned as the most effective way for people to build savings and obtain small loans. In Rwanda, for those that own land with an official title, property can be used as collateral to gain access to SACCOs (Savings and Credit Cooperative Organization), microfinance organisations based in each sector. The SACCOs in the study area are situated in Bugarama (Uruyange SACCO), Rwinbogo (Balio SACCO) and in Nzahaha (Intsinzi SACCO).

These credit groups are present in both DRC and Rwanda but they tend to charge exorbitant interest rates or require land ownership to access the system. In villages, people use more frequently small scale saving and credit groups. These groups are called *Twoyobake* in Rwanda, whilst in DRC they are known with the French term Association Villageoise D'épargne et De Credit (AVEC) or with other local names, such as *Likirimba*, *Umoja ni nguvu*, MUSO and Solidarity Among Men. In DRC there is usually one committee per village, with a treasurer taken from the village committee. Instead, in Rwanda they can often group a few people with similar financial capacities. Although officially these groups are open to men as well, the number of men part of these groups is extremely low in Rwanda: women often use these when money is needed to pay for health and school fees. Some of the women reported that these groups have helped them to gain some control over their own money and to make decisions about how it is spent. In DRC, these groups seem to be equally used by men and women.

As part of the quantitative households surveyed, questions were asked about access to banking system. Table 8-18 shows that owning a bank account is more common in Rwanda than it is DRC, with very similar rates for woman-headed and man-headed households. Instead, having loans with micro-credit organisation is a lot less frequent, especially for woman-headed households, in both countries but in particular in DRC.

Amongst the households surveyed in 2022, in Rwanda 57% of households have joint bank accounts between the husband and wife. In the DRC very few households have bank accounts but of those that do, 58% of those bank accounts are owned by the husband. In Rwanda, of the households that indicated that they have a microloan, 69% of those loans are held jointly by the



husband and wife, while in the DRC most of the microloans (44%) are in the wife's name and 26% in the husband's name and 26% held jointly.

Table 8-18 Surveyed Households With Access to a Bank Account or Microloan (2022)

		Households with at least one member having a bank account (%)	Households with at least one member having a loan with a micro credit organisation (%)
Rwanda	Man-headed Households	96%	18%
	Woman-headed Households	96%	4%
	All Households	96%	16%
DRC	Man-headed Households	4%	9%
	Woman-headed Households	3%	3%
	All Households	4%	7%

8.6.8 Development Projects and Livelihood Improvement Schemes

The authorities interviewed in the study area mentioned several NGOs which are currently helping vulnerable people and improving livelihoods in the study area. Table 8-19 summarises the organisation currently involved in the study area, alongside their main activities.

Table 8-19 Development Actors Involved in the Study Area (2022)

Country	Village(s)	Project Name	Purpose
Rwanda	Kabusunzu	Caritas	Supporting people in extreme poverty and providing housing for those who are homeless
	Rwinbogo and Rwinzuki Health Centres	Global funding	Paying health worker salaries
	Kabusunzu	Profam	Promoting women's empowerment
		ARCT Rumuka	Promoting women's independence through loans for small shops
		Benevolencia	Supporting vulnerable people
		Mukopaka Shambalet	Supporting women's empowerment
	Whole study area	One Acre Found	Helping people to find land, supporting people with the right seeds, fertilisers and pesticides (program called TUBURA)
	Gatebe	World Vision	Provision on seed sand fertilisers and support of people in category 1 of the Ubudehe Scheme with small-scale loans
		Care International	Helping vulnerable people with small-scale loans and financial management support
	Ryagashyitsi	Compassion Internationale	Helps children paying for school
DRC	Kafunda	GIZ	Gave the village a mill to transform maize and cassava into flour
	Kayenge		Distribution of farming tools, seeds for agricultural processing units
	Kafunda	Foundation Chokola	Supports the population with pig breeding
	Nachihembe		
	Kayenge	FUMU	Management of fish farming activities
		GIPI	
		ASDECEN	Provides agricultural support
		Femme lève-toi	Supports women
		Umoja Wetu	ASK
		Vijana Kazini	ASK
		Terra Renaissance	Construction of schools, latrines and bridges



Country	Village(s)	Project Name	Purpose
		Swaf	Distribution of seeds, animals and poultry to the <i>Abasigajwinyuma Namatekas</i> (Rwanda) or Batwa (DRC) community
		Ami du Kivu	Reforestation
	Nachirongwe	DRISHA	Rural development activities at sous-groupement level
	Ibambiro		
	Rushebeyi		
	Nachirongwe	GEREF	Reforestation
	Ibambiro	IADEL	Supports the population with the development of rabbit breeding
	Rushebeyi	ACEDP	Supports the population with breeding, reforestation and general development works
		Rhukole Kuguma	Supports the population with agriculture, breeding and reforestation



8.7 Community Health

8.7.1 General Community Health Context

Overall, the study area has little access to basic health facilities. Although in Rwanda the health worker system allows people to have access to medicine and medical advice when needed, the health centres are still badly equipped and suffering from various infrastructural and human resources constraints. In DRC, the health centres have extremely low capacity for hospitalisation and treatment. Nevertheless, according to the quantitative survey, 40% of Rwandan and 65% of Congolese surveyed households visited a healthcare facility in the past 12 months, as can be seen in Table 8-20.

Table 8-20 Frequency of Health Facility Visits by Surveyed Households in the 12 Months Preceding the Survey (2022)

		Never been	1 time	2 times	3 times	more than 3 times	Total
Rwanda	Man-headed households	14%	12%	18%	17%	39%	100%
	Woman-headed households	12%	19%	15%	8%	46%	100%
	Total all households	14%	13%	17%	15%	40%	100%
DRC	Men-headed households	7%	7%	11%	9%	66%	100%
	Women-headed households	10%	6%	11%	10%	64%	100%
	Total all households	8%	7%	11%	9%	65%	100%

8.7.1.1 Rwanda

Rwanda’s health system is organised from village to province level. Overall, there are 11 provincial hospitals, 36 district hospitals, 499 health centres and several health posts and health workers located in villages. The 2012 data on the ratio of public health workers to the population shows that the ratio is very high. The ratio of doctor to population is 1:15428. The dentist per population ratio is much higher at 1:91628. There is one nurse for 1,200 people and one midwife for about 23.364 people (NISR, 2021). The western Province has 12 hospitals, two of which are located in the Rusizi district. For the villages in the study area, the only district hospital is Kamembe Hospital.

Hospitals are usually accessed through a referral from health centres. The Rusizi district comprises 15 health centres, with a mean walking distance to health centre in Ruzizi is 56.2 minutes and 44% of households walking under an hour to reach a health centre (NISR, 2021). Health centres are available through an insurance system, where 3,000 Rwandan francs per person provide access to basic health services. In Rusizi District, 91% of women and 92% of men in the highest wealth quintile have insurance coverage, compared to 67% of women and 63% of men in the lowest quintile (NISR, 2021). According to focus groups and interviews in the health centres, the fee to access health insurance is considered quite high and is often difficult to pay for most residents. As shown by Figure 8-76, Rusizi is one of the districts with the lowest percentage of people owning health insurance.

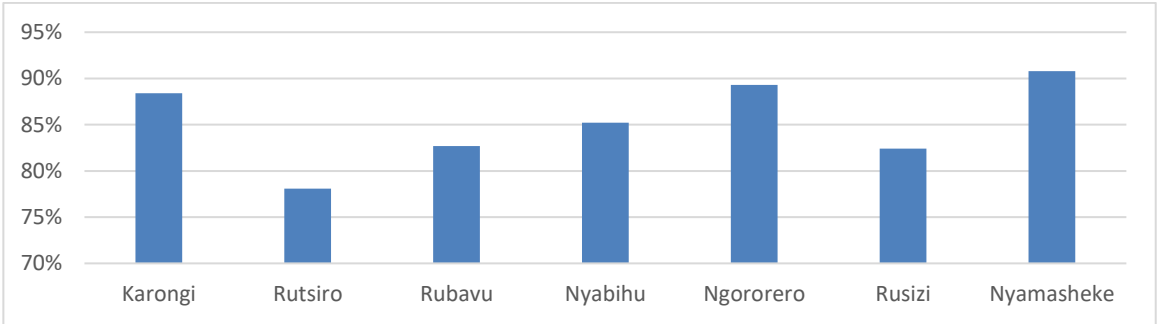


Figure 8-76 Percentage of Households With at Least One Member Covered by Health Insurance (2021)

Health posts are more numerous than health centres and should work as a first contact point for small issues and basic types of treatment. However, the system is not effective across the study area, as no health posts are currently running.

At the bottom of the health pyramid are the health workers, four of which (two men and two women) exist in all of the villages in the study area. The role of health workers is that of diagnosing, referring and supporting residents with the provision of family planning and basic medicine for issues such as fever or dhiarrea. For infectious illnesses such as malaria and COVID-19, health workers are provided with testing kits.



Figure 8-77 Rwinbogo Health Centre, Rwanda (2022)

Figure 8-78 shows all of the health centres identified in the study area, such as the Rwinbogo health centre in Figure 8-77. Table 8-22 summarises the characteristics of the centres visited in the study area in Rwanda, according to the interviews had with the centres’ directors in January 2022.

The main challenges encountered by the health centres were the same in all of the places surveyed. In particular, the centres’ directors flagged the following issues as pivotal in the capacity and efficiency challenges experienced:

- Lack of personnel and extremely long waiting times due to limited human resources.
- Lacking equipment and bad infrastructure (old structures, lacking laboratory equipment and capacity, electricity problems).
- Lack of an ambulance (all centres refer to Kamembe District Hospital’s ambulance, which means that their service is overexploited).



- Late or limited drug delivery (all centres depend on the delivery of medicine by one pharmacy in Kamembe, deliveries are so late that all centres reported being almost out of stock of essential drugs since the last delivery in December).
- Bad road, causing late arrivals and worsening of complicated for pregnant women.

Table 8-21 shows the main illnesses observed in the study area and the most affected groups.

Table 8-22 gives an overview of the capacity of health centres located in the study area in Rwanda.

Table 8-21 Main Illnesses and Affected Groups in Study Area, Rwanda (2022)

Illness	Most affected group	Reported in
Acute Respiratory Infections (ARI) ¹⁶	Whole population, with particularly high cases for adults	Whole Study Area
Malaria	Whole population, with particularly high cases for children under 5 and pregnant women	
Diarrhea	Whole population	
Pneumonia	Whole population	
Rheumatisms and Articulation Problems	Adults, with particularly high cases for the elderly	
Gastritis	Adults	
Diabetes	Adults	
Hypertension	Adults	
Cold and Fever	Children	
Urinary Infections	People aged 15 and over	
Sexually Transmitted Diseases (STDs)	Adults	
Anaemia and Malnutrition	Women, Children aged 6-10 and People with HIV	
Bilharzia	Whole population	Bugarama

¹⁶ The health institutions visited during the qualitative interviews were not gathering data specifically on COVID-19 specifically. However, COVID-19 cases were included in the category of respiratory diseases.

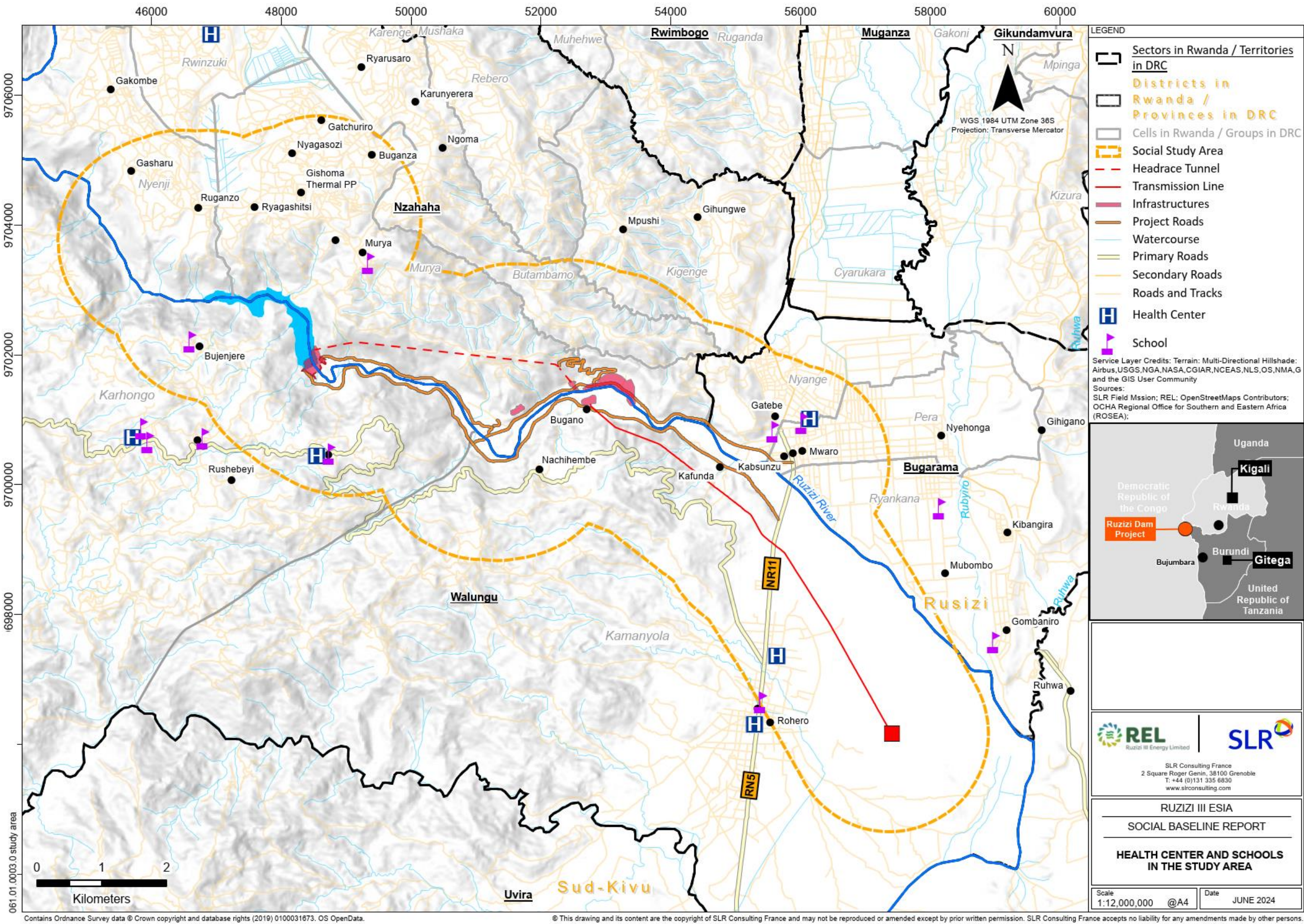


Figure 8-78 – Health Centres and Schools in the Study Area (2022)



Table 8-22 Capacity of Health Centres in the Study Area, Rwanda (2022)

Sector	Hospital Name	Hospital Type	Founded in	Financing	NGOs involved	Origin of patients	Number of patients per day	Number of beds	Ambulance	Total Staff	Number of nurses		Nurse to patient ratio (day)
											Day	Night	
Rwinbogo [RA]	Rwinbogo Health Centre	Catholic Health Centre	1968	Local diocese exclusively	None	Rwinbogo, Nzahaha, Bugarama	120	30	No	22	6	5	1/20
Nzahaha [RB]	Rwinziki Health Centre	Catholic Health Centre	2013	Local diocese + Government + NGO	Global Fund and Dynamic ¹⁷	Nzahaha, Gashonga, Rwinbogo	120	20	No	24	5	5	1/24
Bugarama [RC]	Bugarama Health Centre	Islamic Health Centre	2010	Islamic centre + Government	-	Bugarama, Muganza	350	29	No	29	7	2	1/50

Table 8-23 Capacity of Health Centres in the Study Area, DRC (2022)

Village	Hospital Type	Founded in	Financing	NGOs involved	Origin of patients	Average Number of patients per week	Ambulance	Total Staff	Number of nurses	Nurse to patient ratio (day)
Ibambiro [CA]	Catholic health centre	1982	Diocese of Bukavu	Caritas, Conopro and PAM (malnutrition)	Covers 15 villages	62	No	7	4	1/9
Kayenge [CB]	Confessional health centre	1949	Self-financing through payments	GIZ (financial support and performance review)	Covers 6 villages	65	No	18	12	1/5
Rubumba [CC]	CEPAC Church Health Centre	2002	CEPAC	Life Net International (equipment), Prosanu (malaria), Panzi (sexual violence), Caritas (malnutrition), Coodilusi (HIV)	Covers 9 villages	40	No	13	7	1/6
Ruduha [CD]	CECA	2005	CECA	None	Ruduha village mainly	40	No	2	1	1/20

¹⁷ The Director of the health centre reported that Dynamic is an NGO which provides services to support children from their birth to their 15th year, whilst Global Fund helps by paying the salary of a few nurses.



8.7.1.2 DRC

In DRC, out of 9 villages in the study area, only two have one health centre and one has two, for a total of four health centres. These health centres also cover several other villages outside the project area for primary health care. In the past, these health centres were owned by religious denominations and were subsidized and staffed by these denominations. Currently, the Congolese state manages these health centres. These centres no longer receive subsidies. The functioning of these centres is currently based on the monetisation of care.

The main issues encountered by the health centres were the same in all of the places surveyed. The main challenges included:

- Lack of funds to finance the purchase of medicines, due to the low financial capacity of patients who cannot afford treatment.¹⁸
- Lacking equipment and bad infrastructure (old structures, lacking laboratory equipment and capacity, lack of electricity and water, no separation between the houses and the centre).
- Lack of appropriate beds. Health centres in the study area have between one or two rooms for hospitalisation, with a maximum of 4 beds. In the centre of Kayenge, the social experts on field found that two mothers were sharing a bed and the new borne babies were sleeping on the floor.
- Lack of an ambulance or any appropriate transportation to the hospital. The only public hospital is found in Nyangezi, more than 30 km away from Kamanyola Groupement on a bad quality road. The only ambulance which this hospital owns cannot meet the high needs of the region and is never available to transport those who need to be taken to hospital, according to the interviews with the health centres.

The village of Nachirongwe also has an association called Groupe de Relais Communautaire, or Community Relay Group, which is concerned with increasing community health sensibilisation.

Table 8-23 illustrates the capacity of the health centres observed in the study area. Table 8-24 shows the most common issues treated in the health centres in the study area, alongside their most affected group.

Table 8-24 Most Common Issues Treated in the Health Centres, DRC (2022)

Illness	Most affected group	Reported in
Malaria	Children under 5 and pregnant women	Whole Study Area
Typhoid	Whole population	
Acute Respiratory Infection	Children under 5	
Malnutrition	Children under 10	
STDs	15 to 40-year-old, women and men	
Intestinal Worms	Whole population	
Diarrhoea	Children under 5	
Gastritis	Adults	
Rheumatism	Adults	
Bilharzia	Whole population	
Cholera	Adults	Bujenjeri
Hepatitis B	Adults	Kayenge
Ankylostoma	Whole population	Ibambiro
Amoebiasis	Whole population	
Taenia	Whole population	

¹⁸ These centres is that they all require a payment for treatment. Due to widespread poverty, most people are treated under a credit scheme but are unable to repay the hospital which prevents them from seeking treatment again or causes high debts.



8.7.2 Main Health Issues Treated in the Study Area

8.7.2.1 Vector-Borne Diseases

A Malaria

Across the study area and at national level, malaria remains one of the greatest threats to public health, taking its greatest toll on children under 5 and pregnant women. Health centres reported that the months with the highest malaria cases are during the rainy season, from September to April. Malaria is mostly frequent affecting children younger than 5 years old, pregnant and nursing women.

In Rwanda, malaria is endemic in 11 districts, including Rusizi. In the western province, 64% households have at least one insecticide-treated net (ITN), but only 27% have more than 1. The percentage of positive malaria testing is 3.1% for children aged 6-59 months and 1.7% for women aged 15-49. Both rates are slightly higher than national average for rural areas, respectively of 2.9% and 1.3%. Hospital referral rates for malaria are low: in December 2019, Bugarama health centre hospitalised 33 people, of which 24 adults and 9 children, out of 1,176 malaria diagnosis. In DRC, Sud-Kivu is the region with the highest hospitalisation rate for malaria in the country, with around 49% of hospitalisation being caused by severe malaria cases (Ministry of Health, 2014).

Health centres reported that the months with the highest malaria cases are during the rainy season, mostly from November to February. Table 8-25 shows the number of cases reported by each centre for the months of December-January, which are considered two of the months where exposure to malaria is highest.

Table 8-25 Number of Malaria Cases per Month (December-January), by Health Centre (2022)

Country	Health centre	Number of cases per month (Dec-Jan)	Malaria Case to Total Patient Ratio (monthly)
Rwanda	Rwinbogo	33	1/87
	Rwinzuki	120	1/24
	Bugarama	1,176	1/7
DRC	Ibambiro	200	1/2
	Kayenge	160	1/2
	Rubumba	162	1/2 ¹
	Ruduha	80	1/2

¹ For the health centres of Rubumba and Kayenge, the calculation is based on the data provided by the health centres on the average number of patients per week suggested that around 100% of patients visiting the centre was diagnosed with malaria. Since this is not considered realistic, it has been assumed that during rainy season the numbers of patients would have been higher: the rate of 1/2 has been selected based on this assumption.

In DRFC, malaria is only treated in health centres, aside from traditional herbal remedies. In Rwanda, malaria rapid diagnostic tests are taken by health workers before treatment with artemisinin-based combination therapy (ACT). Most malaria cases can be treated at the level of the village, although some of the more serious cases, especially those affecting children and pregnant women, are sent to the closest health centre. Table 8-26 shows the number of cases by village, based on data collected by health workers in each village.¹⁹

¹⁹ This data was not collected for the villages of Mubombo and Gombaniri. Due to time constraints, this interview focused solely on downstream flooding and did not collect any data on health.



Table 8-26 Estimated number of malaria cases reported between December and January by village, Rwanda (2022)

Village	Number of cases per month (Dec-Jan)	Cases to total population ratio	Distance from the river
Nyagahanga	30	1/22	1.2 km
Ryagashytsi	30	1/22	2.9 km
Ruganzo	30	1/27	1.4 km
Gatebe	50	1/18	Riverside
Kabusunzu	50	1/22	Riverside
Mwaro	60	1/33	Riverside

According to the quantitative survey, in DRC 93% of surveyed households have had malaria in the last 3 months, as opposed to 69% in Rwanda. In Rwanda, more people reported treating malaria by going to the hospital, while in DRC more people have gone to a health worker (See Table 8-27).

Table 8-27 Malaria Treatment by Surveyed Households in the two Years Preceding the Survey (2022)

		Never treated	Health worker	Hospital	With Medicinal Herbs or Plants
Rwanda	Man-headed Households	1%	12%	2%	1%
	Woman-headed Households	-	8%	-	4%
	All Households	-	11%	1%	1%
DRC	Man-headed Households	2%	2%	28%	9%
	Woman-headed Households	6%	5%	27%	14%
	All Households	3%	3%	28%	11%

B

Bhilarzia and Onchocerchiasis

In Rwanda, the only health centre that mentioned Bhilarzia cases is Bugarama health centre. They reported getting around 20-30 cases mostly in the month of September. However, the health centres do not differentiate between intestinal and urinary bhilarzia. Consequently, it is assumed that data on the illness encompasses the two types. In DRC, bhilarzia has been mentioned as a rare illness, infrequently experienced by people living on the Ruzizi plain, around the areas of Bufuliru and Nyangezi. The health centres interviewed support around 1-3 patients a year from this area.

No cases of Onchocerchiasis have been mentioned by any of the health centres.

8.7.2.2 Diarrhea, Acute Respiratory Infections and Fever

Aside from vector-borne diseases, the most frequently treated illnesses in the health centred surveyed are acute respiratory diseases (ARI) and diarrhea. ARIs are one of the leading causes of childhood morbidity and mortality, especially due to pneumonia. Diarrhea is particularly frequent in children, for whom it is still a major cause of death even though the condition can be treated with oral rehydration therapy (ORT). This illness is mostly caused by the consumption of contaminated water and to unhygienic practices in food preparation and disposal of excreta.

In Rwanda, health workers in the interviewed villages explained that drinking water from the Ruzizi river is often what causes cases of dhiarrea. The RDHS (2014) revealed that 18.4% of children under age 5 in the western province had had diarrhea in the 2 weeks preceding the survey, while 28% had had a fever: this makes the western province the one with the highest diarrhea and fever cases in the country.

In DRC, the National Health Survey (2021) found that more than one in five children suffer from diarrhea in the weeks prior to the interview and that 8.2% of children under 5 had symptoms of ARI. This data makes the region the one with the highest number of cases for both illnesses. Table 8-28 shows the number of cases of ARI treated by each of the health centres in the study area.

Table 8-28 Number of ARI Cases Treated by Each Health Centre, DRC and Rwanda (2022)

	Health centre	Number of cases per month
Rwanda	Rwinzuki	1,314
	Rwinbogo	-
	Bugarama	2,500
DRC	Ibambiro	30
	Kayenge	70
	Rubumba	10
	Ruduha	80

According to the quantitative survey, 40% of surveyed households had at least one member who had diarrhoea and 28% had ARI in the three months weeks preceding the survey. In DRC, the reported numbers were respectively 32% and 36% (See Table 8-29).

Table 8-29 Other Illnesses Experienced by Surveyed Households in the Three Months Preceding the Survey (2022)

		Diarrhoea	Respiratory infection
Rwanda	Man-headed Households	40%	27%
	Woman-headed Households	42%	35%
	All Households	40%	28%
DRC	Man-headed Households	31%	35%
	Woman-headed Households	32%	40%
	All Households	32%	36%

8.7.2.3 HIV/AIDS and Other Sexually Transmitted Diseases (STDs)

In both DRC and Rwanda, all the health centres interviewed mentioned STDs and HIV as major challenges, as can be seen in Table 8-30.

Although health centres in both countries are used to treating STDs, in DRC the health centres have reported that it is still considered more common to treat STDs with herbal remedies and village-level treatments rather than seek medical support. People who tend to come in with HIV cases are either young men in the military or young men and women between 20 and 25 years old. The most frequent STDs are syphilis, gonorrhoea, gonococcal disease. Based on national statistics, women seem slightly more likely to seek treatment for STDs more frequently than men, although men are often more exposed than women. In Rwanda, in the western province, 64% of women and 62% of men reported going to a clinic to receive treatment, although only 0.9% of women reported having more than 2 partners in the past 12 months, as opposed to 6.2% of men. Awareness and education about sexual health is still low: in the Rusizi District, only around 4.9% of people use condoms (NISR, 2021).

Acquired immunodeficiency syndrome (AIDS), which is caused by the human immunodeficiency virus (HIV), is one of the most serious public health challenges facing Rwanda and DRC. However, since 2005 HIV prevalence in Rwanda has remained stable at 3%, and new HIV infections have declined from 27 to 8 per 10,000 people (Health Sector Performance Report 2019-2020). The only village in the study area that reported HIV cases is Ruganzo, where there are 10 people who have been diagnosed with HIV in Rwinbogo Health Centre.



Table 8-30 HIV Cases Reported in Health Centres, Rwanda and DRC (2022)

Health Centre	Number of STD Cases per Month	Number of People Under HIV Treatment
Rwinbogo	-	-
Rwinzuki	75	85
Bugarama	-	540
Ibambiro	-	2
Kayenge	-	24
Ruduha	10	-
Rubumba	-	6

8.7.2.4 Malnutrition

Malnutrition was mentioned by all health centres as a major issue. In DRC, Sud-Kivu is the province with the highest level of malnutrition in the country, with a rate of 53% for the province's population (Ministry of Health, 2014). All villages in the DRC side of the study area have more than 10 people suffering from malnutrition, most of which are children under 10. In Ibambiro, around 20 children and 10 pregnant women per month are treated for malnutrition. In Rwanda, according to the DHRS (2014) 33% of Rwandan children aged 6-59 months are stunted, 1% are wasted, 8% are underweight, and 6% are overweight. In the western province, only 18% of children aged 6-23 months were fed a minimum acceptable diet and 41% of children age 6-59 months are anaemic.

In Rwanda, all villages in the study area reported that no more than 10 children are suffering from malnutrition. Ruganzo and Ryagashyitsi have reported malnutrition as a particularly serious issue for women and children. The Bugarama health centre is the one with the largest capacity for malnutrition support, which can be provided for free for people within the categories 1 and 2 of the Ubuduhehe Scheme: currently, 145 people are under a malnutrition support scheme: of these, 40 are children while 105 are adults suffering from HIV.



8.8 Community Infrastructure

8.8.1 Roads

The condition of roads is bad throughout the whole study area. In Rwanda, the only roads in better condition are the ones in the semi-urban Bugarama Sector: here, the village of Kabusunzu presents some asphalted roads, whilst Gatebe, Mwaro, Gombaniro and Mubombo do not (See Figure 8-79 and Figure 8-80). In DRC, the condition of roads across the study area is equally bad in all villages (See Figure 8-81).



Figure 8-79 Road in Nyagahanga (Nzahaha), Rwanda (2022)



Figure 8-80 Road in Gatebe (Bugarama), Rwanda (2022)



Figure 8-81 Road in Bugano, DRC (2022)



8.8.2 Schools

In Rwanda, in the study area all observed schools are built in bricks with windows (See Figure 8-86), but the study area is equally lacking in terms of number of schools. Out of 8 villages, only 5 are covered by one school, of which only one is secondary.

In DRC, most of the study area is not covered by schools. Out of 9 villages, only 5 are covered by one or two schools with Kayenge having 4 schools, for a total of 9 schools. Most of these schools are primary only (See Figure 8-82 and Figure 8-83) and only 2 offer secondary education as well (See Figure 8-83) According to observations carried out on field, all of the schools are badly equipped and have insufficient infrastructure. In particular, the primary school of Nachirongwe only has 6 classes to accommodate children from various villages in Ishamba. Two more classes have been created to study in the CELPA Sinai Church, which has offered its premises for learning (See Figure 8-84 and Figure 8-85).

Table 8-31 summarises the schools observed in the study area, by country, village and school type and Figure 8-78 shows the location of the schools.

Table 8-31 Schools Identified in the Study Area (2022)

Country	Village	School Type	Origin of Students
Rwanda	Nyagahanga	[R1] Primary School	Nyagahanga, Ryagashyitsi, Ruganzo
	Gatebe	[R2] Primary School	Gatebe
	Kabusunzu	[R3] Primary and Secondary School	Mwaro, Gatebe
	Mubombo	[R4] Primary School	Mubombo
	Gombaniro	[R5] Primary School	Gombaniro
DRC	Kayenge	[C1] Two Primary Schools	Kayenge, Kansheyi, Kaboya
		[C2] Kayenge Primary and Secondary School	
	Ruduha	[C3] Primary and Secondary School Ngomo Ruduha	Ruduha
	Nachirongwe	[C4] Primary School	All Ishamba
	Ibambiro	[C5] Primary School	
		[C6] Secondary School	All Ishamba
	Bujenjeri	[C7] Primary School (in construction)	Planned for Bujenjere, Nachirongwe, Mubumbano



Figure 8-82 Primary School in Kayenge (2022)



Figure 8-83 Primary and Secondary School in Ruduha (2022)



Figure 8-84 Primary School in Nachirongwe (2022)



Figure 8-85 CELPA Church used as School in Nachirongwe (2022)



Figure 8-86 Primary School in Nyagahanga (2022)



8.8.3 Water Supply

According to the Rwanda Demographic Health Survey 2020, in Rwanda 80% of households nation-wide have access to an improved water source, with urban households having a much better access (96%) than rural (77%). The most common sources of drinking water in urban households are water piped into the household's dwelling, yard, plot, or neighbour yard (50%) and public taps or standpipes (26%). Rural households obtain their drinking water mainly from protected wells or springs (36%) and public taps or standpipes (31%).

In the Rusizi District, in 2014 27% of people still used an unimproved source of drinking water, making the district lag behind national targets by 12 percentage point (NISR, 2014). Although this aspect may have improved since 2011, interviews across the study area indicated that drinking unimproved water from the river is still a widespread practice. According to the RDHS, 41% of rural households reported having to travel more than 30 minutes (round trip) to obtain drinking water. In the western province, only 54.8% have an improved drinking water facility within a 30-minute walk. In DRC, the proportion of households using safe drinking water increased from 46% in 2007 to 49% in 2013. In rural areas, this proportion went from 24% to 32%, while in urban areas it went from 80% to 85% (Ministry of Health, 2014).

In the study area, a minority of the households interviewed as part of the quantitative households' survey use the Ruzizi River as their main drinking water source, as shown in Table 8-32 below. The Ruzizi River is more used in the downstream areas of the study area, where settlements are closer to the river than in the reservoir area, where they are located at the top of the slopes. Some of the water supply systems observed across the study area were not functioning, while others are either private faucets or paid points: the later were only observed in the Rwandan village of Ruganzo. Out of the functioning water points, almost all were built out of cement or mud with a tap (See Figure 8-87), while only one was a natural spring (Figure 8-88). In Nyange and Pera Cells, wealthier people have taps that do not work very efficiently and often can go on without working for 2 days. Those that cannot afford a tap use the water from the river for all drinking and domestic purposes. In the village of Ryagashyitsi, water has not been working since September and people have to walk an hour to get to a different source. In the study area, only Nyagahanga had a working water point within the village premises. All of the other villages walk until another point, apart from the villages in Bugarama Sector, where it is more common to drink from the riverside for families who cannot afford faucets or bottled water.

As shown in Table 8-33, surveyed households declared the time needed to collect drinking was most frequently less than 30 minutes in Rwanda, and up to one hour in DRC. The majority of households reported taking water several times a day, both in Rwanda (86%) and in DRC (76%), as illustrated in Table 8-34.

Table 8-32 Main Source of Drinking Water Amongst Surveyed Households (2022)

Country / Groupement or Cell	Ruzizi River	Tap / water point	Another river closeby	A spring	Total
DRC	36%	27%	11%	25%	100%
Kamanyola	70%	26%	2%	3%	100%
Karhongo	6%	29%	20%	45%	100%
Rwanda	5%	71%	23%	-	100%
Bugarama	13%	83%	3%	-	100%
Nzahaha	2%	66%	31%	1%	100%
Total	25%	42%	15%	17%	100%



Table 8-33 Time Necessary to Reach a Water Collection Point Amongst Surveyed Households (2022)

	Rwanda			DRC		
	Man-headed Households	Woman-headed Households	All Households	Man-headed Households	Woman-headed Households	All Households
Less than 30 minutes	78%	73%	77%	36%	45%	39%
Between 30 and 1 hour	18%	23%	19%	38%	44%	39%
Between 1 and 2 hours	3%	4%	3%	16%	5%	13%
More than 2 hours	1%	-	-	10%	4%	8%
Total	100%	100%	100%	100%	100%	100%

Table 8-34 Frequency of Water Collection Amongst Surveyed Households (2022)

		Several times a day	Once a day	Once every 2 days	Total
Rwanda	Man-headed Households	86%	13%	1%	100%
	Woman-headed Households	85%	15%	-	100%
	All households	86%	13%	1%	100%
DRC	Man-headed Households	78%	19%	3%	100%
	Woman-headed Households	73%	25%	2%	100%
	All households	76%	21%	3%	100%



Figure 8-87 Public Water Point in Cement with Tap (Nyagahanga, Rwanda).



Figure 8-88 Natural Water Spring (Nyagahanga, Rwanda).

8.8.4 Sanitation and Waste Management

In Rwanda, only 69% of rural households nationwide have access to improved sanitation facilities, of which 69% in rural areas (RDHS, 2015). In western province, 74.6% of people use an improved sanitation facility, whilst 2.5% of people practices open defecation. In DRC, the proportion of households that use an improved sanitary installation is lower, at 17% of rural households overall (Ministry of Health, 2014).



In the study area of both countries, most households had an external latrine, which can be either individual or more frequently shared between multiple houses (See Figure 8-89 and Figure 8-90)



Figure 8-89 Example of an External Non-Shared Latrine in Ryagashyitsi, Rwanda (2022)



Figure 8-90 Example of an External Non-Shared Latrine in Kafunda, DRC (2022)

8.8.5 Source of Energy for Lighting and Cooking

Across the study area, most people reported cooking with firewood due to the high cost of charcoal, while no one reported cooking with gas. When collected, charcoal is often sold, rather than used for cooking. As for lighting, lack of electricity or bad electrification is a widespread issue.

In Rwanda, In the Pera Cell, the Executive Secretary reported that 8 in 12 villages have almost no electricity. All of the other villages also reported having very bad electricity in some houses and no electricity at all in most houses. On the national level, only around 46% of households have electricity on average, with 37% in rural areas and 86% in urban areas (NISR, 2021). Amongst the households interviewed during the quantitative survey, 70% declared they had access to electricity (87% in Bugarama Sector and 63% in Nzahaha Sector).

In DRC, only 14% of households have electricity in their residence. Although 42% of urban areas are electrified, 99.6% of rural areas are not (Ministry of Health, 2014). None of the villages in the study area in DRC are electrified. Amongst the households interviewed during the quantitative survey, 11% declared they had access to electricity (18% in Kamanyola Groupement and 4% in Karhongo Groupement).



8.9 Gender

Rwanda and DRC present a significantly different picture when it comes to gender empowerment and discrimination as observed on a national level. In 2021, Rwanda ranked 66th in the world on the Women Peace and Security Index, despite its 160th position on the Human Development Index, revealing important achievements for women despite low levels of income, health and education (GIWPS, 2021). In 2020, Rwanda was also listed 9th in the world by the Global Gender Gap Index of 2020. However, the gender-based policies developed by the Rwandan government have often been result-oriented and quantitative in nature, failing instead to address deeply ingrained societal norms and power structures within which gender inequalities are embedded (Debusscher, P. and Ansoms, A., 2013).

In DRC, gender discrimination and gender-based violence are major issues. DRC scored 163rd out of 170 countries on the Women Peace and Security (WPS) Index of 2021, gaining the worst score for gender-based violence (GIWPS, 2021). DRC was also listed 149th out of 153 countries in the Global Gender Gap Index of 2020. In particular, the Sud-Kivu province suffered from heightened gender-based violence due to influx of refugees after the 1994 genocide in Rwanda, the following conflicts from 1996 to 2002, and the continuing instances of assaults and isolated violence in the area.

Across the study area, women are not only suffering from a limited access to secure land tenure and having to balance domestic tasks with the work on the fields, but they are also struggling to gain control over their income and develop bargaining power in domestic decisions and economic transactions. While women may officially have access to the same opportunities and resources as men, gender-based focus groups have revealed that women are constrained in their ability to control their access to and use of tools and resources to improve their livelihoods.

The following sections explore the four main elements of gender-based inequality observed in the study area: (i) land tenure insecurity, (ii) little control over resources, (iii) gender-biased distribution of tasks and (iv) gender-based violence.²⁰

8.9.1 Rwanda

8.9.1.1 Land Tenure Insecurity

The majority of females in Rusizi district are small-scale farmers 69.5%, which emphasises women's needs to secure access to a cultivable field for their livelihood (NISR, 2021).

When it comes to land, in Rwanda women can officially inherit land, but they often do not due to the low availability of land. Since men in Rwanda are expected to pay or provide resources for their bride, male children are often prioritised when land is given off to them at the time of their marriage. Land inheritance in Kinyarwanda is defined as a system of 'gift' giving from parents to children. Once families decide to split their land, they need to call neighbours and family on site to act as witnesses to the transaction. When a man gets married, he is given two plots, one for the house and one for cultivation. When a woman gets married, she is given, if available, a plot for cultivation only alongside a material dowry made of objects for the house.

According to focus groups with men and women, the most common way for women to obtain a land title is through an official marriage. When women are legally married, their name will appear on the husband's title once the marriage has been officialised at the Cell. Shared land

²⁰ Gender-Based Violence (GBV) is an umbrella term for any harmful act that is perpetrated against a person's will and that is based on socially ascribed gender differences (World Bank, 2018). The term GBV stems from the 1993 United Nations Declaration on the Elimination of Violence against Women, which defined violence against women as 'any act of gender-based violence that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women'. While GBV disproportionately affects women and girls across the globe, men and boys can also experience GBV and these acts are highly stigmatized and often stay hidden and unreported.



titles for married couples are common: as shown in Figure 8-91, 70% of male-headed households surveyed in 2022 have a land title with the name of the wife alongside the name of the husband. In case of divorce, the property should be legally shared between the husband and the wife.

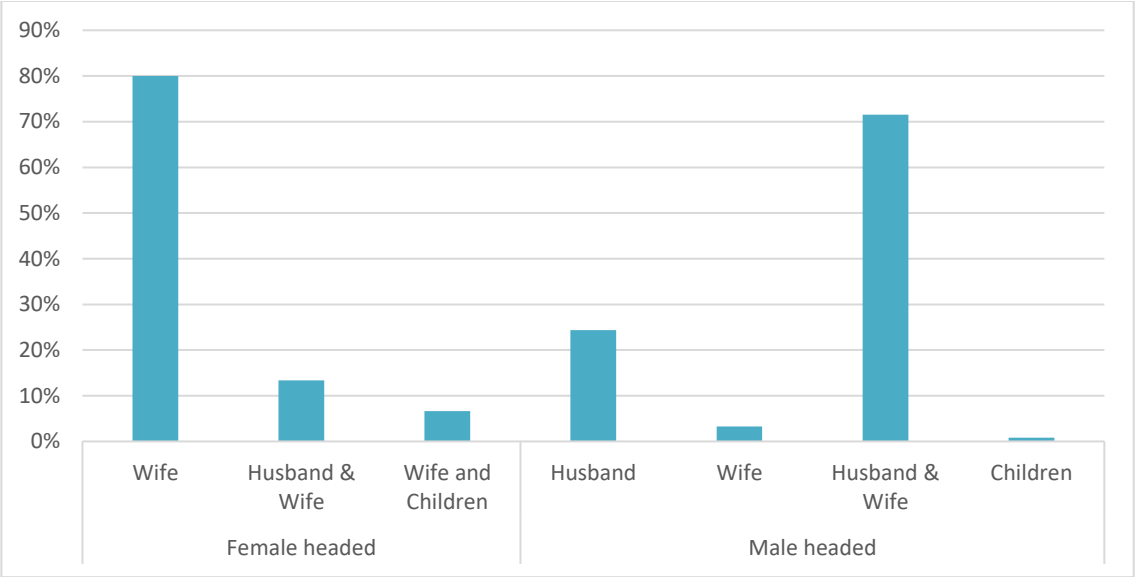


Figure 8-91 Owner of the Land Title Deed by Gender of Household Head, Rwanda (2022)

While the shared titling system is advantageous for legal wives, this poses a problem for the high number of women engaging in a polygamous relationship as non-legal partners. Polygyny is defined by the Government as a practice according to which women report that their partner has one or several other wives. In the Western Province, 7.4% of women report having co-wives, close to the national average of 8% (NISR, 2014). Women interviewed in Mwaro explained that men often avoid marrying a woman in order to keep the land. Culturally polygamy is widely normalised. ‘Unofficial wives’ do not get any legal or financial benefits out of the relationships, and they are often locked in landless conditions working on a plot of land which belongs to the husband and will be taken away at the termination of the relationship. Unofficial wives are seen by Rwandan women as the most vulnerable women in villages. In the Rusizi District, 26.2% of households are headed by females and 6.4% are ‘de facto female-headed households’, i.e. those headed by females in the absence of a male head who is ordinarily present. Due to the higher difficulty in security land without a husband or inheriting property as a widow, these households are more likely to remain landless or homeless (NISR, 2021).

Additionally, it may be more difficult for a woman to buy land. If land is sold within a family, husband and wife will discuss their options and share ideas but it is men who then go and look for buyers/sellers, negotiate the price and carry out the transaction. This has been conformed throughout all interviews during the social surveys. The Box 8-5 below presents the story of a widow losing her 1 hectare of land due to the Project and has expressed her fears regarding her ability to find and negotiate prices for a new plot.



Box 8-5 Story of a Widow with Seven Children in Ruganzo Village

This woman is a widow with seven children, who has been living all her life in the village of Ruganzo. Her kids go from a few months to the age of 19 and they all live in her house. Since she lost her husband, she has been left with the land plot that she inherited through the marriage. She owns 1 hectare and is thanks to this considered to be one of the people with the largest land resources in the village, although this is not enough to feed all of her children. This woman's field will be taken fully by land acquisition. She has already enquired around the village to plan for the land that she will need to buy and she estimates that the price due to speculation will be around 10 million Rwandan francs. She is very worried that compensation will not cover these high costs and that she will need to sell her house and send some children to work to be able to pay for new land. Additionally, she feels that being a woman will make it harder for her to negotiate a fair price, because usually the negotiation phase of land buying is left to men.

8.9.1.2 Access to and Control over Resources

In addition to the issues related to land tenure security, women usually have less control than men their own or the family's income. Out of the 84% of married women who are employed in Rusizi District, 23% were not paid, in contrast with 8% of men. For those that did earn cash, 23% report that they themselves mainly decide how their cash earnings are used and 67% report that they make such decisions jointly with their husbands. Regarding their husband's earnings, 24% said that their husband makes these decisions alone and 70% said that the decisions are made jointly (NISR, 2021). Overall, in the Western Province 61.5% of married women reported feeling that they participate in decisions regarding health, purchases and visits to their family, as opposed 91.6% of men (NISR, 2021).

Table 8-35 shows a breakdown of women's access to and control of resources and the benefits arising from these, according to the focus groups carried out across the study area.

Table 8-35 Access to and Control over Resources in Rwanda, Disaggregated by Gender (2022)

Resource	Access to the resource	Control of the resource	Control of the benefits obtained from the resource
Land	Mostly men	Mostly men	Mostly men
Natural Resources	Equally men and women	Mostly women	Mostly women
Paid Work	Equally men and women	Mostly men	Mostly men
Financial Services (ex. Micro-Credit)	Mostly women	Mostly men	Mostly men
Education	Equally men and women	Mostly men	Mostly men
Domestic Decision-Making	Equally men and women	Mostly men	Mostly men
Village-Level Decision-Making	Equally men and women	Equally men and women	Equally men and women
Healthcare	Equally men and women	Mostly men	Equally men and women

In the Study Area, women reported participating actively to the life of the village and feeling represented by all collective institutions. However, women explained that men often take control of their income, which often results in domestic disagreements because women prioritise health and education expenses whilst men are more likely to spend money less wisely on alcohol, transport or investments which may not bring benefits to the wives. According to NISR (2021), nearly half of women in Rwanda report at least one problem associated with accessing health care for themselves. The least and most common problems women face in accessing health care are getting permission to go for treatment (4%) and getting money for treatment (52%) and distance problems (25%). Lack of the husband's permission or support in finding transportation to a health centre can result in different types of complications: for example, Rwinbogo Health Centre reported that 50 to 70 children die on site each month due to complications caused by late hospital arrivals or attempts at giving birth in the village.



During the focus groups with men and women, the social experts mapped all of the cash expenses of the average household in the study area. Men and women were asked who was in charge of physically making the payment, whose money went into the payment and who decided whether the payment had to be made. Table 8-36 summarises the findings.

Table 8-36 Estimated Household Expenses in the Study Area (2022)

Expense	Amount	Frequency of payment	In-charge of deciding whether to pay	In charge of making the payment	In charge of finding money for the payment
Security Fee (paid to the village security volunteers)	1,000 francs	Monthly	Compulsory	Husband	Husband and wife
Primary School Fees	12,000	Yearly	Husband	Wife	Husband and wife
Secondary School Fee	50,000	Yearly	Husband	Wife	Husband and wife
Health Insurance	3,000	Yearly	Husband	Husband	Husband and wife
Feeding School Program	3,500	Each trimester	Husband	Wife	Husband and wife
Financial Services (ex. Micro-Credit)	500-10,000*	Weekly	Husband	Mostly wife	Husband and wife
Rent	Variable	Variable	Husband	Mostly husband	Husband and wife

**Focus groups in Mwaro revealed that micro-credit associations at the village level are fixed at 500 francs a week, but some wealthier people can pay up to 10,000. The amount of money that can be loaned is proportional to the contribution.*

Micro-credit organisations at village level are often used by women as a way of gaining control over financial resources. In Mwaro, out of 60 members 50 are women and in Gatebe out of 40 members are 30 are women. Unless they own a shop or small activity, women feel that they do not have a valid reason to open a separate bank from their husband. Box 8-6 presents an insight on women's financial lives according to three women in Kabusunzu.

Box 8-6 Story of Three Women's Financial Constraints in Kabusunzu, Rwanda

These three women are married with children. They have irregular access to cash from selling at the market, which is an activity exclusively practiced by women whenever the family is left with agricultural surplus. When women sell, they take the money back home to give it to their husband. In their opinion, it is rare for women to own bank accounts or manage their own shops. The majority of men have multiple women and often mistreat them, some of them may fall in love with a man that already has a wife but does not tell them until they are already pregnant or living together. Before taking any money from the family's resources, wives have to ask for permission: this is a problem in their view, because men have multiple children and try to avoid these expenses to spend money instead on drinking with friends or travelling to other villages to find new wives.

8.9.1.3 Gender-Based Distribution of Tasks

Table 8-37 shows the gender-based separation of tasks at the domestic level. On the basis of the information provided by the focus groups carried out all across the study area, each activity was categorised as practiced exclusively by men / women, practiced mostly by men / women, practiced equally by men and women and practiced by neither. In the case of equal participation, if different activities are practiced by men and women within the same task, this has been specified.



Table 8-37 Distribution of Tasks by Gender, Rwanda (2022)

Activity Type		Nzahaha Sector		Bugarama Sector	
		Practiced by men	Practiced by women	Practiced by men	Practiced by women
Productive Activities	Formal Employment	N / A ²¹			
	Informal Employment	x	x	x	x
	Commerce / Business			x	x
	Subsistence Agriculture	x	x	x	x
	Cash Cropping	x	x	x	x
	Market Selling		x		x
Reproductive Activities	Health of Children and the Elderly		x		x
	Water Collection		x		x
	Firewood Collection		x		x
	Charcoal Collection	x		x	
	Sand Collection	x		x	
	Cooking		x		x
	Washing Clothes and Bathing Children		x		x
	Cleaning / Washing Dishes		x		x
Communitarian Activities	Village-level Associations	x	x	x	x
	Religious Associations	x	x	x	x
	Decision-Making	x	x	x	x
	Micro-credit Associations		x		x

8.9.1.4 Gender-Based Violence

Domestic violence is widespread across the study area. According to provincial-level data, in the Western Province 39% of women aged 15-49 have experienced physical violence and 33% have ever experienced sexual violence, the highest rate in the country (NISR, 2021). The health centres visited during the qualitative survey were all aware of the high numbers of cases of physical and sexual violence against women. They reported that most women deal with these issues at village level, often using committees that can help solve domestic problems or simply seeking help with friends and family. Most health centres, however, reported having been in the situation where someone came as a victim of violence: in this case, they can provide assistance and consultation, and refer the case to the District hospital if the victim is in need of urgent help. Table 8-38 shows the estimated number of women that can turn up with medical issues due to sexual or physical violence.²²

²¹ None of the people interviewed as part of the qualitative survey reported being engaged in formal employment.

²² It is important to note that this figure may be a very rough estimation. The social expert asked the interviewee to think of the months in the past year where this issue was identified most frequently and come up with an estimate of this kind. However, these trends are by no means repeated every month.



Table 8-38 Cases of GBV per Month, by Health Centre in Rwanda (2022)

Health Centre	Average number of cases per month
Rwinbogo	2
Rwinzuki	3
Bugarama	2

During the gender-based focus groups, women have discussed two different types of GBV: domestic and worker-related.

As for the first type, provincial data (NISR, 2021) shows that 32.5%, 38.1 % and 16.8% of women respectively experienced emotional, physical and sexual violence by their husbands. In the western province of Rwanda, 74% of women and 47% of men agree that a husband is justified in beating his wife in at least one of seven circumstances, including if the woman burns the food, argues with him, goes out without telling him, neglects the children, refuses to have intercourse, has sex with someone else or looks in his phone. Women in the study area reported that it is common for women to be shouted at or badly treated by a husband: physical violence is rare, but when it takes place women gather together to support each other and can appeal to the village committee to denounce the bad behaviour. In most of the villages in the Study Area, women reported that issues of sexual violence are frequent, especially between young girls and married men. At domestic level, both verbal and physical violence are recognised by the women as issues that are commonly discussed amongst wives. Extra-marital rape and violence is reported as the most common way in which this plays out. As for worker-related GBV, instances of sexual violence have been found in regard to two previous projects: the Gishoma Geothermal Power Plants in Ryagashitsi and the construction of the Bugarama-to-Gisheke road in Gatebe, Kabusunzu and Mwaro.

A Gishoma Geothermal Power Plant

The Gishoma project is located at the beginning of the village of Ryagashitsi. During a focus group, women reported an experience of gender-based violence during the operation of the plant. The information is summarised in Box 8-7 below.

Box 8-7 Insight on GBV by Women in Ryagashytsi

The interviewed women pointed out a fair-skinned child and explained that he was born out of one of three pregnancies caused by Chinese workers from the Power Plant close to the village. They explained that several workers ‘took advantage’ of young unmarried girls, promising them wealth and a marriage only to get them pregnant and before disappearing. They explained that the unwanted pregnancies were difficult for these women, who were rejected by their families and whose children were perceived as outsiders. The Chinese worker community comes every summer since 2013, they do not live in the village or mix with the villagers in any other way apart from taking advantage of women. In addition to this impact, women also explained that they have been suffering from vibration and wastewater which is thrown into the village during the phases of operation.

B Bugarama-to-Gisheke Road Project for RuziziIII

This project was initiated in 2011 to build the access road that would lead to the RuziziIII dam. According to interviews, works lasted about 2 years and mobilised around 200 workers who resided in Kabusunzu and Gatebe. According to the women in both of these villages, these men were very undisciplined and started dating young women in the village. Many of these girls were not educated on how to protect themselves and unwanted pregnancies occurred. According to the women interviewed during the focus groups, most of these women were ‘tricked into’ having sexual relations with the workers, who in exchange offered them a marriage or relationship. According to the women in Kabusunzu, around 30 girls under 25 years old got pregnant, and a third of these got abortions through natural remedies, which resulted in serious complications for a few women that had to be transferred to the health centre. Additionally, a big problem that was experienced due to this wave of sexual activity was a rise in HIV cases



amongst these young women, who had to go to the Bugarama health centre to get treated but were stigmatised by their family after this. None of the workers in the village actually got married to these girls and they all left the area at the end of the works. Some of them 'took away' some young girls who did not keep in touch with the family and never came back. Women in Mwaro, although far from the road, also reported cases of gender-based discrimination, as many of them were employed by the project to carry out jobs such as moving away the grasses before construction. Not only were women paid around 500 francs per day, which is lower than the average 700-1,000 they could get in agriculture, but they declared they were often fired without any apparent reason.

8.9.2 DRC

8.9.2.1 Land Tenure Insecurity

According to national law, land can be owned by any person, including women and regardless of ethnicity. However, according to traditional customary right, women are unable to own or control land, which they can only access through fathers, brothers or husbands. Under customary rules, female children do not inherit land from their parents. Women leave their father's household when they get married. The groom pays the father of the bride dot, or a bride price, and she becomes part of the household of her husband. Generally, women reported being able to access her husband's land, but restrictions on usage were common, especially in the village. For example, despite being the primary workers on agricultural land, women often cannot control what was planted or how those profits were used. After the husband dies, what happens to women depends on individual cases, but there is no customary law that assures them ownership of the land which her husband's family may try to take. Whether they can use the land or not, the name of women is often not put on the land title.

Polygamy is also a constraint to women's access to land. Despite the predominance of monogamous unions in the DRC, polygamy remains a practice affecting 24% of women in Sud-Kivu (Ministry of Health, 2014). Not owning land can result in a series of complications especially for woman-headed households. In fact, land titles are often necessary as a form of equity for accessing loans, credit and agricultural productive assets. Box 8-8 shows the story of a woman in Bugano riverside who works on a piece of land for her husband.

Box 8-8 Story of a Female Land Renter in Bugano, DRC

This woman is 55 years old, married and has been living in Kamanyola all of her life. Every morning she walks around 2 hours all the way to the riverside right after the village of Bugano. Here, she is renting a square plot of around 25 square meters for the monetary value of 100,000 Congolese francs per year: although she works here alone, it is her husband that decides what to do with the harvest and tells her to go sell produce when necessary. There are 8 more people, all women, working on this field and each person has been given 25 square meters for the harvest. She explained that women are allowed to buy land with cash, but it is considered strange for a woman to do so because she will either already have her family home or she will be married, in which case the husband will be in charge of buying shared lands. She believes that women who live alone as widows will struggle the most due to the difficulty of finding land to buy as a woman. Her husband has a plot that he works on and her work on this rented plot.

8.9.2.2 Access to and Control over Resources

According to the focus groups carried out across the study area, access to and control over resources and their benefits are shared between men and women. As opposed to Rwanda, women reported feeling like they had access to and control over all resources. However, their responses are likely to have been influenced by the fact that the surveyors in DRC were males. The lack of women's awareness regarding their limitations in accessing and using resources may



also be due to lower levels of education, urbanisation and gender empowerment observed in the Congolese side of the study area, in comparison to the Rwandan side.

In addition to discrimination in land, women are discriminated in their access to decision-making and financial empowerment. Out of 40 villages in the territory of Walungu, there are no female chiefs or female committee members. This lack of representation in political power is reflected in a lack of control over productive resources. In the Walungu territory, women involved in a study by Women for Women International reported that men controlled 91% of all household decisions, from the purchase of the house and land to schooling decisions and expenditure of income and sales.²³

8.9.2.3 Distribution of Tasks

Table 8-39 shows the distribution of domestic and village-level tasks disaggregated by gender, based on the information collected during focus groups. Compared to the findings in Rwanda, the division of tasks seems to be more equal in terms of gender. However, the information provided on the gender division of activities may have been influenced by the fact that all of the interviewers in DRC were male.

Table 8-39 Distribution of Tasks by Gender, DRC (2022)

Activity Type		Practiced by men	Practiced by women
Productive Activities	Formal Employment	N / A ²⁴	
	Informal Employment	x	x
	Commerce	x	x
	Subsistence Agriculture	x	x
	Commercial Agriculture	x	x
	Market Selling	x	x
Reproductive Activities	Health of Children and the Elderly	x	x
	Water Collection		x
	Firewood Collection	x	x
	Charcoal Collection	x	x
	Sand Collection	x	x
	Cooking	x	x
	Washing Clothes and Bathing Children		x
	Cleaning / Washing Dishes		x
Communitarian Activities	Village-level Associations	x	x
	Religious Associations	x	x
	Decision-Making	x	x
	Micro-credit Associations	x	x

8.9.3 Gender-Based Violence in DRC

Like in Rwanda, cases of GBV have been mentioned all across the study area. In particular, the Sud-Kivu province suffered from heightened gender-based violence due to influx of refugees after the 1994 genocide in Rwanda, the following conflicts from 1996 to 2002 and the continuing instances of assaults and isolated violence in the area. While gender-based violence was not

²³WFWI (2021), 'A Place to Call Her Own: Land Titling and Gender-Based Violence in South Kivu, DRC, <https://www.iucn.org/news/gender/202104/a-place-call-her-own-land-titling-and-gender-based-violence-south-kivu-drc>, accessed on 08/03/2022.

²⁴ None of the people interviewed as part of the qualitative survey reported being engaged in formal employment.



openly discussed, health centres mentioned dealing with women who report medical problems due to sexual and physical violence, as shown in Table 8-40.

Table 8-40 Cases of GBV per Month, by Health Centre in DRC (2022)

Health Centre	Average number of cases per month
Ibambiro	Rarely
Kayenge	3
Rubumba	2
Ruduha	Rarely



8.10 Security and Human Rights

8.10.1 Rwanda

8.10.1.1 Security

Rwanda currently enjoys high levels of political stability and general security. However, there have been cross-border incursions and armed clashes along the border with DRC and Burundi. Vigilant security forces are limiting raids to brief cross-border attacks in the northwest (particularly Rubavu and Musanze districts) and along the southern border (particularly Rusizi, Nyaruguru, and Nyamagabe districts)²⁵. Several military camps are established on the Rwanda side of the Ruzizi River. In July 2016, Burundi banned public transport vehicles from crossing the border with Rwanda. The border remains closed currently.

8.10.1.2 Human Rights Record

Rwanda ratified Convention No. 87 on Freedom of Association and Protection of the Right to Organise (1948) in 1988 and Convention No. 98 on the Right to Organise and Collective Bargaining (1949) in 1988. The law provides for the right to form and join unions and employer associations, bargain collectively, and strike, but it places restrictions on these rights. The International Trade Union Confederation (ITUC) global rights index reports violation of workers' rights in Rwanda²⁶.

The law prohibits all of the worst forms of child labor. The minimum age for full-time employment is 16, but children ages 13 to 15 are allowed to perform light work in the context of an apprenticeship. The law prohibits children younger than age 18 from participating in physically harmful work, including work underground, under water, at dangerous heights, or in confined spaces; work with dangerous machinery, equipment, and tools, or which involves the manual handling or transport of heavy loads; work that exposes the child to unsafe temperatures or noise levels; and work for long hours or during the night. The 2018 labour law determines the nature of other prohibited forms of work for a child.

The Ministry of Public Service and Labour conducted labour inspections of sectors of the economy known to employ children, focusing on domestic work and the agriculture sector. Observers note considerable political will to address child labour within the Ministry of Education, Ministry of Gender and Family Promotion, but the labour inspectorate remained underfunded and understaffed. The majority of child laborers are working in the agricultural sector and as household domestics. Child labour also exists in isolated instances in cross-border transportation and in the mining industry²⁷.

8.10.1.3 Rule of Law

The Rule of Law in Rwanda is a contentious topic. As many issues in Rwanda, the debate on the Rule of Law is highly polarised. The general picture that emerges is that of a government that builds institutions, such as the Public Procurement Authority, the Office of the Auditor General, the Ombudsman's Office, the Anti-Corruption Unit in the Rwanda Revenue Authority, Maisons d'Accès à la Justice, Commercial Courts, among others. These institutions' tasks and responsibilities are well defined by the law²⁸. At the same time, the government is hesitant to

²⁵ <https://crisis24.garda.com/insights-intelligence/intelligence/country-reports/rwanda>

²⁶ <https://survey.ituc-csi.org/Rwanda.html#tabs-2>

²⁷ Human Rights report from the U.S. Department of State Bureau of Democracy, Human Rights and Labor.

²⁸ Rule of Law Quick Scan Rwanda. Prospects and Challenges. Roelof H. Haverman. 2012, HiiL, The Hague, The Netherlands.



open up political space and freedom of expression. International and national NGOs report human right abuses by the police force, including arbitrary detention or ill-treatment²⁹.

8.10.2 DRC

8.10.2.1 Security

Since the 1990s, the security situation in the eastern area of DRC, and in Sud-Kivu, has been characterized by a succession of armed conflicts. After more than two decades of ongoing violent conflict, armed groups have become an integral feature of the eastern DRC's social-political order. The situation in Sud-Kivu is described by some as a "stable instability"³⁰. Despite a decrease in their number in the recent years, there would still be more than 60 armed groups in Sud-Kivu³¹. The Walungu territory, where the Project is located, would be the territory of Sud-Kivu with the lowest presence of armed groups (only 2 or 3, at its borders with other territories). In 2021, 17 incidents with armed groups (with 22 victims) have been recorded in the Walungu territory (3 near Kamanyola and 2 on the road between Kamanyola and Bukavu), out of a total of 593 incidents with 1,052 victims recorded in Sud-Kivu³².

8.10.2.2 Human Rights Records

The Democratic Republic of the DRC ratified Convention No. 87 on Freedom of Association and Protection of the Right to Organise (1948) in 2001 and Convention No. 98 on the Right to Organise and Collective Bargaining (1949) in 1969. Although the freedom of association and collective bargaining is defined by the Labour Code and is enshrined in the Constitution, the International Trade Union Confederation (ITUC) global rights index reports violation of workers' rights in DRC³³.

The government prohibits all of the worst forms of child labour. The law sets the minimum age for work at 16, and a ministerial order sets the minimum age for hazardous work at 18. The law also stipulates children may not work for more than four hours per day and restricts all minors from transporting heavy items. The Ministry of Labour has responsibility for investigating child labour abuses but had no dedicated child labour inspection service. In 2016 the National Labour Committee adopted an action plan to fight the worst forms of child labour, slated for implementation during the year; however, it has not been implemented. Child labour, including forced child labour, has been reported throughout the country³⁴. Child labour is most common in the informal sector, including in artisanal mining and subsistence agriculture. According to the Ministry of Labour, children are working in mines and stone quarries and as child soldiers, water sellers, domestic workers, and entertainers in bars and restaurants. The commercial sexual exploitation of children also occurred.

8.10.2.3 Rule of Law

Serious human rights issues have been reported about law enforcement and public order bodies in DRC³⁵, including restrictions on free expression and the press, freedom of association,

²⁹ Human Rights report from the U.S. Department of State Bureau of Democracy, Human Rights and Labor, and Human Rights Watch, <https://www.hrw.org/africa/rwanda>

³⁰ Judith Verweijen. 2016, "Stable Instability. Political settlements and armed groups in the Congo". RIFT VALLEY INSTITUTE - USALAMA PROJECT: GOVERNANCE IN CONFLICT

³¹ Kivu Security Tracker, Feb. 2021, The Landscape of Armed Groups in Eastern Congo. Congo Research Group, NYU-Center on International Cooperation. <https://kivusecurity.nyc3.digitaloceanspaces.com/reports/39/2021%20KST%20report%20EN.pdf>

³² Baromètre sécuritaire du Kivu, <https://kivusecurity.org/>

³³ <https://survey.ituc-csi.org/Congo-44-Democratic-Republic-of.html#tabs-1>

³⁴ see for instance the Human Rights report from the U.S. Department of State Bureau of Democracy, Human Rights and Labor.

³⁵ idem



corruption, arbitrary detention, or even abduction or unlawful physical punishment. Human rights abuses from DRC security and police forces have been mostly reported in the eastern part of the country, including South-Kivu. Although the government convicted some officials and punished some security force official who committed abuses, it is reported that authorities do not always investigate, prosecute, or punish the official committing human rights abuses.

8.11 Vulnerable Groups

According to the World Bank Environmental and Social Standard (ESS) N°1, disadvantaged or vulnerable refers to 'those who may be more likely to be adversely affected by the project impacts and/or more limited than others in their ability to take advantage of a project's benefits'. Such individuals and groups are more likely to be excluded from, or unable to participate fully in the consultation process.

According to the European Investment Bank Standard 7, vulnerable groups are those that (a) are usually exposed to several risks and adverse impacts at once; (b) are more sensitive to those risks and impacts, often having been subject to pre-existing discriminations; and (c) have a weaker adaptative capacity for coping with those risks and recovering from those impacts, due to limited access or rights to required assets and/or resources. As a result, they can be disproportionately affected by project-related risks and impacts.

This section describes the vulnerability criteria in Rwanda and in DRC, both from the institutional framework and from the views of the local communities, documented during the social field surveys. The vulnerability criteria considered for the ESIA are then defined.

8.11.1 Rwanda

8.11.1.1 Official Vulnerability Criteria

The Constitution of Rwanda identifies five categories of vulnerable people:

- Survivors of genocide
- Disabled people
- Poor people
- The elderly
- Vulnerable children.³⁶

The national social protection policy presents a more detailed list, including older people, those living with disabilities, young children, female-headed households, genocide survivors, young people and the historically marginalised. As part of this policy, the government delivers a core set of social protection programmes through the Ministry of Local Government (MINALOC), supported by several complementary initiatives delivered by other ministries (MINALOC, 2011). The following section describes all of the main schemes which are currently supporting Rwanda's vulnerable population.

8.11.1.2 Social Policies for Vulnerable People

A Vision Umurenge Program (VUP)

The Vision 2020 *Umurenge* Program (VUP) was introduced in 2008 to link donor support with poverty reduction and public works; by 2014, that program had reached 13% of the poorest Rwandans through wages for public works (Dale, 2021).

³⁶ The Constitution of Republican Rwanda with Amendments (2015), Chapter 5, Article 51, p. 5



The main programme run by MINALOC, and a flagship of the EDPRS 2008–2012, is the Vision 2020 Umurenge Programme (VUP), which contains three pillars: VUP public works, VUP direct support, and VUP financial services. The three pillars represent public works for the poor who are able to work, cash transfers for very poor households without labour capacity, and financial services.

The people interviewed in the study area, reported two types of transfers which are more for people in the villages. These transfers are made into one bank account per family, which is owned by the husband unless the woman lives alone. They are not easy to get as the conditions are strict.

- For elder-headed households (over 65 years old, 7500 francs per person per month (condition is that no one else is present to take care of the old person(s)).
- For vulnerable people, public works such as cleaning roads are given in addition to 30,000 francs per month per person.

B Ingoboka Scheme

The *Ingoboka* is a governmental social policy system where a number of people proportional to the amount of people living in the village is picked randomly by the village head for a special cash loan. People need to voluntarily apply for this, and they are then chosen randomly. In the village of Kabusunzu, 4 people are chosen each year. The loan is 100,000 francs, but it needs to be repaid in each agricultural trimester for a total of 25,000 francs each time. This money is usually used to buy clothes, pay school fees or health insurance, but the scheme is not very population due to the strict repayment requirements.

C Ubudehe Scheme

Awarded the United Nations Public Service Award in 2008, Rwanda's *Ubudehe* Program is a national approach for poverty reduction that categorizes households to facilitate interventions. The poorest households, defined as landless and consistently food insecure, are eligible for extra support through social protection programs (Dale, 2021).

The Ubudehe is a social support scheme reliant on four core categories of social class or needs:

- Category 1: people who have a hard time find food to eat, that cannot pay school fees, that do not have clothes and whose health insurance is paid by the state
- Category 2: people who can find food to eat, can pay health insurance and school fees and can find clothes for their families, but have a hard time finding work
- Category 3: people who can pay secondary school fees, they cultivate enough to be able to sell some surplus and they can pay workers to help on their fields.
- Category 4: people who have an income between 60,000 and 600,000 francs

In the villages studied as part of the SLR mission, no one was identified as part of Category 4.

The breakdown of people for categories 1, 2 and 3, in total number and as a percentage of the total population, is outlined for each of the Cell in the study area, as per Table 8-41.



Table 8-41 Percentage of Population by Category as Registered by the Ubudehe Scheme, by Village (2022)

Sector	Cell	Total Population	% of population in Category 1	% of population in Category 2	% of population in Category 3	% of population in Category 4
Nzahaha	Murya	7,013 people (1302 households)	15.36%	7.52%	69.96%	0%
	Nyenji	4,886 people (999 households)	11.31%	45.54%	43.14%	0%
Bugarama	Pera	12,177 people (2435) ³⁷	14.01%	53.13%	32.85%	0%
	Nyange	11,000 people (2778 households)	14.75%	52.62%	39.20%	0.03%
	Ryankana	13,880 people ³⁸ (2776 households)	12.53%	40.59%	46.86%	0%

D Rwanda Demobilisation and Reintegration Commission

The Rwanda Demobilisation and Reintegration Commission, or RDRC, has been founded in 1997 by a Cabinet decision and approved by a Presidential Decree No.37/01 of 09/04/2002 with the aim of supporting successful demobilization, social and economic reintegration of ex-combatants in their respective communities, with a particular focus on the provision of such support to female, child and disabled ex-combatants.³⁹

E Girinka 'One Cow Per Poor Family' Program

One of the most popular forms of social protection allocated through ubudehe is the Girinka Program, where poor families are given a cow, seen as a way to provide not just nutritional benefits from milk consumption, but financial stability and a sense of personal dignity (Dale, 2021). In the village of Ruganzo, there is one person on this program. People explained during the interview that, although they see cows as one of the most useful solutions to poverty and dependency from agriculture, this program is too limited as only five cows per cell can be provided.

F Genocide Survivors Support and Assistance Fund

The Genocide Survivors Support and Assistance Fund was created in 2008 with the aim of providing vulnerable genocide survivors with support in education, health, shelter, social assistance and income generation. The FARG assistance package comprises the following social policies:

- Social Assistance Cash Transfer Payments of Rw 5,000 per month.
- Education Scholarships.
- Payment of Health Insurance.
- Access to Income Generating Projects.
- Building houses for those which were orphaned, mentally damaged or physically handicapped due to the genocide.

³⁷ Due to the lack of data disaggregated by person, this number has been calculated based on the average number of household members estimated by the executive secretary of the cell (5 people per household)

³⁸ Due to the lack of data disaggregated by person, this number has been calculated based on the average number of household members estimated by the executive secretary of the cell (5 people per household)

³⁹ <http://www.demobrwanda.gov.rw/>, accessed on 04/03/2022.



8.11.1.3 Vulnerability Criteria Identified during the Surveys

The focus groups performed in Rwanda highlighted that the local perception of vulnerability is linked with landlessness and with the physical ability to work. These two elements make people unable to sustain themselves.

8.11.2 DRC

In DRC, the focus groups revealed that the most vulnerable groups are the following:

- Old people.
- Widows and orphans.
- Landless people.
- Disabled people.
- People suffering from chronic illness.
- Extremely poor people.
- Women independently practicing a small agricultural or commercial activity with no or little support.

Differently from Rwanda, in DRC there is no official system to deal with vulnerable people. However, these are known, and the village often helps them with financial support or food. Most of these people are landless.

8.11.3 Vulnerable Groups in the Study Area

8.11.3.1 Vulnerability Criteria Identified during the Social Surveys

On the basis of the discussions had with both vulnerable and non-vulnerable people during the social surveys in January and February 2022, five criteria of vulnerability have been selected on the basis of local definitions and perceptions to identify vulnerable households.

- Woman-headed households, defined as any household headed by a woman.
- Elder-headed households, defined as any household headed by a person over 65 years old living without any 18–64-year-old non-disabled household member.
- Disabled-headed households, defined as any household headed by a mentally or physically disabled person living without any 18–64-year-old non-disabled household member.
- Landless households, defined as any household without any land title, customary ownership right or customary usage right over the land plots cultivated by household members. These households can access land to cultivate only through renting or *nyiragabura* (in Rwanda) or *bwaso* (in DRC) systems.
- Historically Marginalised Households, defined as households including at least one person from the *Abasigajwinyuma Namatekas* (Rwanda) / Batwa (DRC) Community.

These criteria are defined and characterised in the following paragraphs.

A Woman-headed Households

Woman-headed households where the proclaimed head of the household is female. Woman-headed households are vulnerable due to the difficulties that women experience in securing land tenure, to the time and resources necessary to taking care of children and to the fewer opportunities for income available to women.



B Elder-headed Households

Elder-headed households are defined as households with one or more people over 65 years of age without one or more caretaker(s) without disabilities and of an age equal or superior to 18 years old. All of the focus groups and interviews confirm that older people struggle to gain a cash income and even cultivate to feed themselves, due to their physical condition.

C Disabled-headed Households

Disabled-headed households are defined as households with one or more people who declared having any disability, without one or more over 18 caretaker(s) without disabilities. Disabled-headed households are not only more vulnerable because they have a lower income and more limited opportunities to gain wealth, but also because they often have higher expenses due to their disability.

D Landless Households

Landless households are defined as households who reported owning no land (whether in customary or legal ways) and only reported renting or sharecropping instead. All across the study areas, a common theme in all focus groups was that landless people are seen as poor, as they may rent different plots temporarily and struggle at times to find anywhere to cultivate. These people are often reduced to sharecropping arrangements or wage labour on other people's fields. According to the interviews, being landless is the number one indicator of poverty and vulnerability. The story of one landless person is shown in Box 8-9.

Box 8-9 Story of a Homeless Person in Pera Cell, Rwanda

This woman is a homeless elderly Historically Marginalised Person who has been living in Pera Cell all of her life, denying her identity as part of the *Abasigajwinyuma Namatekas* community. She has been put on a list to provide support for homeless people, because her whole family doesn't own any land and has been living in precarious ways in different places. She currently lives in a house rented out by Caritas. When the government managed to give her a land plot and title, her son took ownership of it and sold it for some cash before disappearing with the money. She has now been abandoned by her son and is left begging on the streets with no land or significant source of income. The Pera Cell Executive has put her on an *Umurenge* program, a type of community work scheme that seeks to support vulnerable people.

E Abasigajwinyuma Namatekas (Rwanda) / Batwa (DRC) Households

Historically Marginalised / Batwa Households are defined as households including at least one person from the Historically Marginalised Community in Rwanda or the Batwa community in DRC. Section 8.2.5.1B and 8.2.5.2E. describes the vulnerability of people from the Historically Marginalised Community in Rwanda, and the Batwa community in DRC.

8.11.3.2 Vulnerable Groups in the Surveyed Population

On the basis of the 5 criteria defined above, 38% of the 601 households surveyed during the quantitative household survey are vulnerable (see Table 8-42). Additionally, 8% of all surveyed households (11% in DRC and 2% in Rwanda) fall into more than one category of vulnerability. The two categories that tend to overlap the most and woman-headed households and landless households: Table 8-42 breaks the total vulnerable households down by category. As can be observed, the majority of the vulnerable population consists of woman-headed households, the percentage of which is considerably higher in DRC than it is in Rwanda, and landless people.



Table 8-42 Percentage of Surveyed Households per Vulnerability Category (2022)

Vulnerability Type	% of all surveyed households		
	Rwanda	DRC	Total households
Total Vulnerable households	22%	47%	38%
Woman-headed households	13%	31%	25%
Elder-headed households	1%	1%	1%
Disabled-headed households	9%	3%	5%
Landless households ⁴	-	22%	15%
Historically Marginalised / Batwa Households	2%	1%	1%

Aside from these criteria, it is important to note that the surveyed population is struggling with widespread poverty and lack of cash-producing mechanisms. Overall, 32% of interviewed households (35% in DRC and 27% in Rwanda) reported experiencing days where the household could not eat in the month preceding the survey. In Rwanda, people with low incomes are classified by the government as vulnerable through a social assistance and cash-transfer scheme known as *Ubuduhehe* Scheme, which is popular in the Project area alongside various other small-scale government scheme to support low-income households. Out of the surveyed population, 12% of Rwandan and 4% of DRC households declared receiving some kind of social assistance, revealing that governmental support is much lower in DRC than in Rwanda.



8.12 Cultural Heritage

For the World Bank ESS 8, “cultural heritage provides continuity in tangible and intangible forms between the past, present and future. People identify with cultural heritage as a reflection and expression of their constantly evolving values, beliefs, knowledge and traditions. Cultural heritage, in its many manifestations, is important as a source of valuable scientific and historical information, as an economic and social asset for development, and as an integral part of people’s cultural identity and practice.”

Cultural heritage is defined by the European Investment Bank Standard 10 as “all the various aspects of a community’s past and present that are identified as a reflection and expression of its constantly evolving values, beliefs, knowledge and traditions and which the community considers valuable, and desires to sustain and transmit to future generations.”

The following paragraphs outline the tangible and intangible cultural heritage elements identified within the Study Area.

8.12.1 Tangible Cultural Heritage

The World Bank Environmental and Social Standard (ESS) n°8 describes tangible cultural heritage elements as ‘movable or immovable objects, sites, structures, groups of structures, natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance’. The European Investment Bank Standard 10 states that tangible cultural heritage elements can be monuments, individual buildings, groups of buildings and sites.

8.12.1.1 Nationally and Internationally Recognised Elements of Tangible Cultural Heritage

In DRC there are five natural parks on the UNESCO World Heritage List, and 3 sites on the UNESCO Tentative List. Rwanda has 5 sites inscribed in the UNESCO World Heritage Tentative List. Figure 8-92 shows the location of these sites and Table 8-43 lists them and indicated their distance from the Project footprint.

Table 8-43 UNESCO World Heritage Sites in DRC, Including Distance from the Project (2022)

Country	Site	Status	Distance from the Project
Rwanda	Nyungwe Forest National Park	UNESCO World Heritage Tentative List (2021)	25km
	Gisozi Memorial	UNESCO World Heritage Tentative List (2012)	150km
	Bisesero Memorial	UNESCO World Heritage Tentative List (2012)	70km
	Murambi Memorial	UNESCO World Heritage Tentative List (2012)	75km
	Nyamata Memorial	UNESCO World Heritage Tentative List (2012)	140km
DRC	Garamba National Park	UNESCO World Heritage List (1980)	750km
	Kahuzi-Biega National Park	UNESCO World Heritage List (1980)	100km
	Okapi Wildlife Reserve	UNESCO World Heritage List (1996)	500km
	Salonga National Park	UNESCO World Heritage List (1984)	850km
	Virunga National Park	UNESCO World Heritage List (1979)	400km
	Maputi Cave	UNESCO World Heritage Tentative List (1997)	450km
	Dimba and Ngovo caves	UNESCO World Heritage Tentative List (1997)	1,500km
	Upemba depression	UNESCO World Heritage Tentative List (1997)	700km

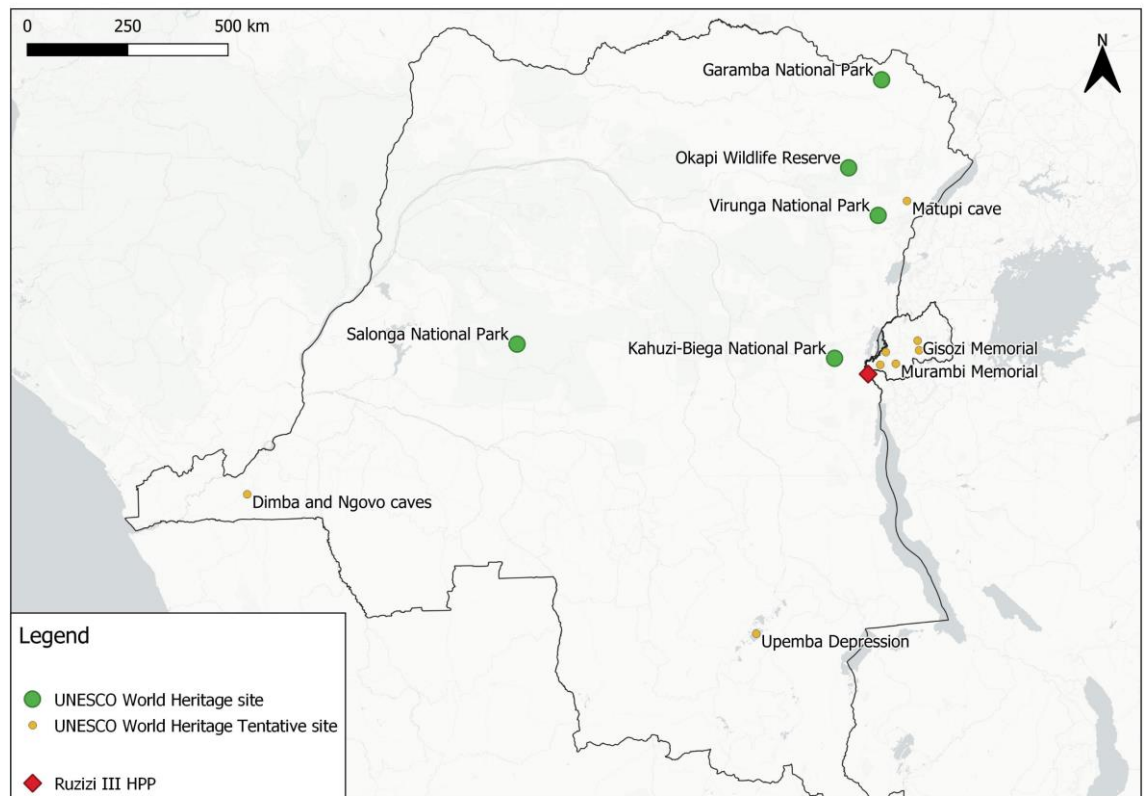


Figure 8-92 Location of UNESCO World Heritage Sites in DRC and Rwanda

8.12.1.2 Elements of Tangible Cultural Heritage of Importance to Local Communities

According to the interviews and focus groups, there are no elements of cultural heritage located in the Project's footprint. The elements of cultural heritage and collective cultural value which were observed in the study area are several churches and two genocide memorials. As for cemeteries, we were informed by all focus groups that most families cannot afford the costs of burying in cemeteries, which are often spare and not numerous due to the intense land pressure. Due to the cost of arranging travel to the cemetery, buying the place and coffin and organising the funeral, most poor families choose to bury around their houses, in their yards or close to the fields where they cultivate. Although each cell has a cemetery, the only village that reported using a cemetery is Nyagahanga, who said that some people go to Nyagasozzi, and Gatebe which uses the one in Nyange Cell. In DRC, 7 individual graves are located in the land plots which will be acquired by the Project.

Figure 8-99 shows the geographical distribution of elements of tangible cultural heritage indicated by the inhabitants of villages within the study area. Table 8-44 summarises their location and their distance from the closest project component.



Table 8-44 Elements of Tangible Cultural Heritage in the Study Area, by Village and Closest Project Component (2022)

Country	Locality	Cultural Heritage Element	Distance from Closest Project Component
Rwanda	Nyagahanga	[R1] Church	130m from access road to core clay borrow area
	Ryagashytsi	[R2] Church	50m from access road to Prospective Basalt Quarry site
	Kabusunzu	[R3] Church	1,250m from the access road
	Ruganzo	[R4] Pentecost Church	500m from the Prospective Basalt Quarry site
	Mwaro	[R5] Adventist Church	250m from the access road
	Mubombo	[R6] Church	2,750m from the access road, 600m from the Ruzizi River
	Gombaniro	[R7] Church	4,500m from the access road, 250m from the Ruzizi River
	Gatebe	[R8] Church	550m from the access road
	Gashonga Sector	[R9] Genocide Memorial (Figure 8-97)	9km north of the Prospective Basalt Quarry site
	Muganza Sector	[R10] Genocide Memorial (Figure 8-98)	6.5 km north of the access road, 6km north of the Powerhouse site
DRC	Kayenge	[C1] Protestant Church	1,500m south-west of the transmission line
		[C2] Brahman Church (Figure 8-93)	1,500m south-west of the transmission line
	Bugano	[C3] Protestant Church (Figure 8-95)	50m from the access road
		[C4] CEV Catholic Church	In the footprint of the access road
		1 grave	In the footprint of the access road
	Nachihembe	[C5] Church	500m from the access road
	Ruduha	[C6] CEPAC Church	1,000m from the landslide protection work and disposal area site
		[C7] CECA Church	900m from the landslide protection work and disposal area site
		1 grave	In the footprint of the access road
	Nachirongwe	[C8] Catholic Church	1,500m from the dam site
		[C9] CELPA Church	1,800m from the dam site
	Rushebeyi	[C10] Catholic Church	2,000m from the dam site
	Ibambiro	[C11] Catholic Church (Figure 8-96)	2,500m from the reservoir
	Bujenjere	[C12] CECA Church	700m from the reservoir
		[C13] CELPA Church	700m from the reservoir
	Kafunda	[C14] Village's Praying Space	20m from the access road
		5 graves	In the footprint of the access road



Figure 8-93 Brahman Church in Kayenge, DRC



Figure 8-94 Church of Ryagashyitsi



Figure 8-95 Protestant Church of Bugano



Figure 8-96 Catholic Church of Ibambiro, DRC



Figure 8-97 Genocide Memorial in Muganza Sector



Figure 8-98 Genocide Memorial in Gashonga Sector

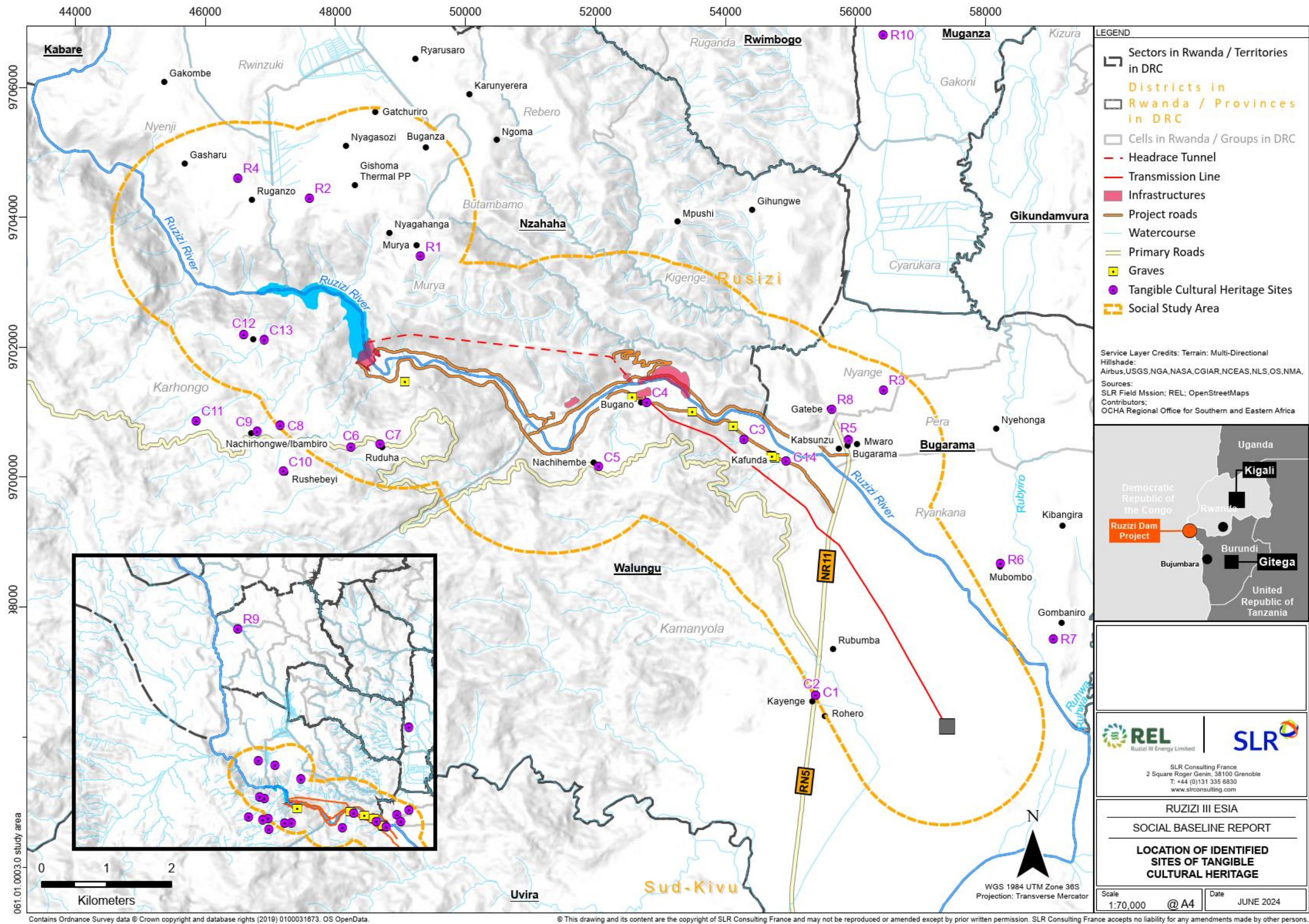


Figure 8-99 Location of Identified Site of Tangible Cultural Heritage (2022)



8.12.2 Intangible Cultural Heritage

The World Bank Environmental and Social Standard (ESS) n°8 and the European Investment Bank Standard 10 both define intangible cultural heritage as *'practices, representations, expressions, knowledge, skills as well as the instruments, objects, artefacts and cultural spaces associated therewith that communities and groups recognize as part of their cultural heritage, as transmitted from generation to generation'*.

In DRC, one element was inscribed in 2021 on the UNESCO Representative List of the Intangible Cultural Heritage of Humanity: the Congolese Rumba. Rwanda does not have any intangible cultural heritage elements inscribed on this list.

Across the whole study area, all villages reported that there was nothing specific or peculiar about any customs, practices or way of being of communities living in or around the village. The only source of intangible cultural heritage observed on field and reported by the informants is the practice of praying and chanting in small natural spots considered to be sacred. It is important to note that these places are not considered sacred per se or worshipped for their natural qualities. Instead, they are made sacred by the very act of religious chanting and individual prayer: as such, they are selected based on their secluded nature. These practices are associated with both Christian believers.

It is important to note that, according to informants, the Ruzizi River itself is not considered having a cultural or spiritual value, both in Rwanda and in DRC. In both countries, in the study area, no element of the landscape or natural feature was identified as having any cultural or spiritual significance for the local communities. Table 8-45 lists the sites of intangible cultural heritage practices identified during the social field survey in the study area and Figure 8-105 localises these elements on the map.

Table 8-45 Intangible Cultural Heritage Practice Sites in the Study Area (2022)

Country	Village	Cultural Heritage Element	Distance from Closest Project Component
Rwanda	Nyagahanga	[R1] Praying spot hidden in vegetation <i>Ubutayu Domuriya</i> (Figure 8-101)	~100 to 150m from the access road to the core clay borrow area
		[R2] Baptism Spot	~10m from the access road and ~30m from a disposal area
	Gatebe	[R3] Praying and Baptism Spot (Figure 8-100Figure 8-99)Figure 8-100	~150m from the access road
	Ruganzo	[R4] Praying spot hidden in vegetation ¹	~600m from the prospective basalt quarry site
DRC	Bugano	[C1] Protestant Baptism Spot Figure 8-101	~20m from the access road
		[C2] Praying spot in a grotto (Figure 8-102Figure 8-103)	In the Transmission Line Right of Way
	Nachihembe	[C3] Protestant baptism spot in a grotto (Figure 8-103Figure 8-102) ²	~200m from the access road and ~150 from the possible border post
	in the Ruzizi river, downstream of the future dam	[C4] Sacred Island for Praying (Figure 8-104Figure 8-104) ³	~50 m from the access road
¹ The Social team was unable to go take a picture and GPS point of this particular spot. However, the village committee and villagers explained that its location is in the opposite direction of where the land acquisition and project will take place, to the north of Nzahaha. ² According to the focus groups in Nachihembe, this spot is particularly well known by Christians in the region, many of whom come from Rwanda, Bukavu and Uvira just to pray. ³ A local informant explained that this site is fairly recent, as it has been used for praying for around 5 months. It has allegedly been chosen because of the strength of the current, since it is believed that the difficulty accessing it makes the prayers more powerful.			



Figure 8-100 Baptism and Religious Chanting Spot in Gatebe (Bugarama), Rwanda (2022)



Figure 8-101 Praying Spot in Nyagahanga, Rwanda (2022)



Figure 8-102 Praying Spot in a Grotto in Nachihembe, DRC (2022)



Figure 8-103 Praying Spot in a Grotto in Bugano, DRC (2022)



Figure 8-104 Island used as a Praying site by communities from DRC, Reservoir Area (2022)

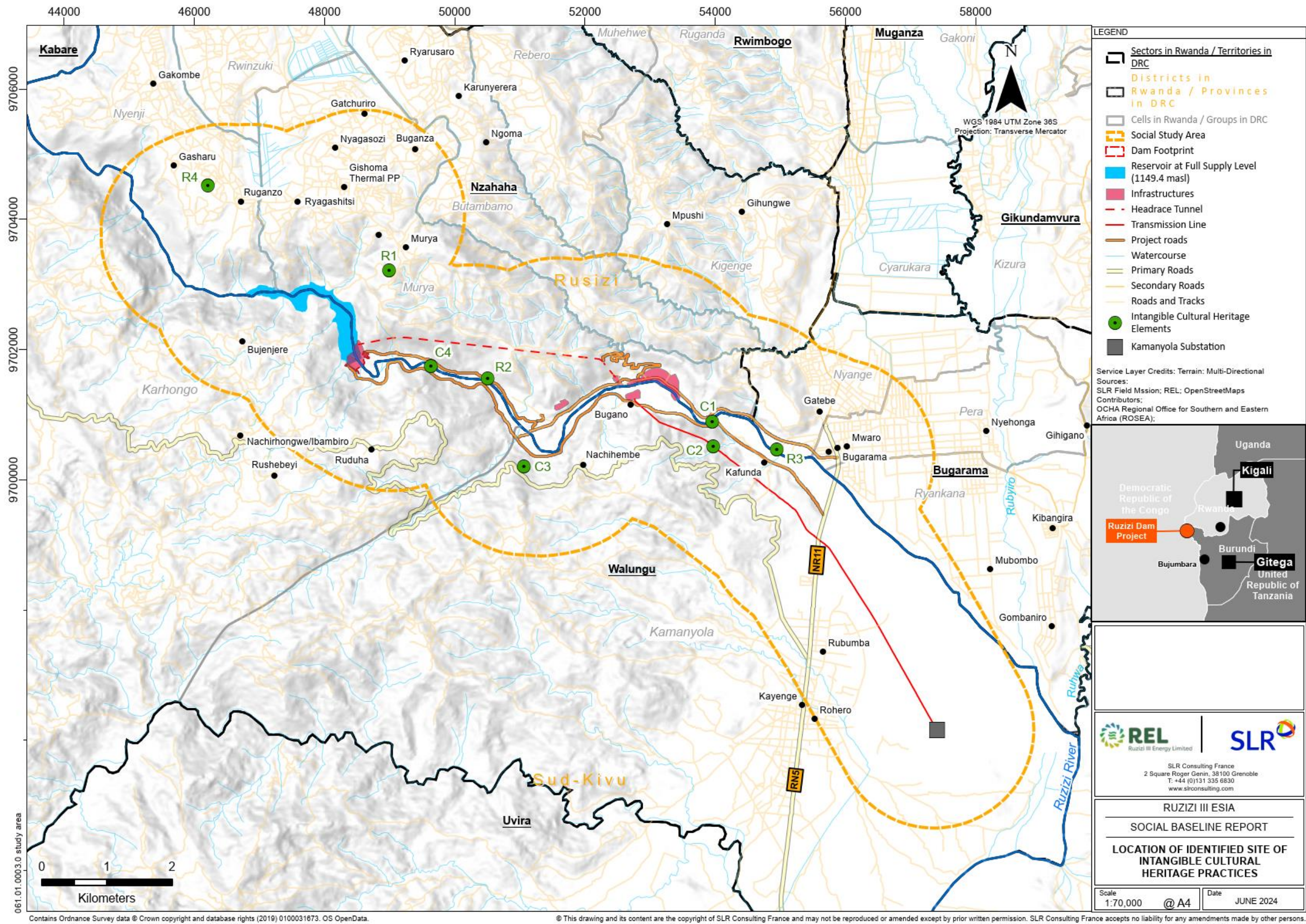


Figure 8-105 Location of Identified Site of Intangible Cultural Heritage Practices (2022)



8.13 Ecosystem Services: Provisioning & Cultural Services

According to the World Bank Environmental and Social Standard (ESS) n°1, ecosystem services are the benefits that people derive from ecosystems. They are organized into four types:

- Provisioning services are the products people obtain from ecosystems and which may include, but is not limited to, food, freshwater, timbers, fibres, and medicinal plants.
- Regulating services are the benefits people obtain from the regulation of ecosystem processes and which may include surface water purification, carbon storage and sequestration, climate regulation, protection from natural hazards.
- Cultural services are the non-material benefits people obtain from ecosystems and which may include natural areas that are sacred sites and areas of importance for recreations and aesthetic enjoyment.
- Supporting services are the natural processes that maintain the other services, and which may include soil formation, nutrient cycling and primary production.

Ecosystem services valued by humans are often underpinned by biodiversity and impacts on biodiversity can often adversely affect the delivery of ecosystem services. Therefore, the identification of ecosystem services requires both social and environmental expertise and stakeholder consultation. While ecosystem services should be considered across multiple topic areas, with an emphasis on interlinkages between social and environmental aspects, the provisioning and cultural services are more related to social components of the environment.

This section is part of the social baseline chapter. Therefore, it presents solely baseline information for provisioning and cultural services.

8.13.1 Provisioning Services

Provisioning services such as provision of food (game meat, cultivated crops, livestock farming, wild-caught fish and aquaculture) have been covered in Section 8.6. The services provided by the Ruzizi River itself have been described in Section 8.5.

8.13.1.1 Collection of Timber Products and Charcoal

A Firewood

According to the interviews and focus groups in the study area, collecting wood is a routine activity for all families in both DRC and Rwanda. This activity is mostly practiced by women according to the interviews in Rwanda, although in DRC it was reported that men collect wood as well (See Figure 8-106).⁴⁰ On average, families need to collect firewood every three days, although people with larger families might even have to go every day or every two days. According to the quantitative survey, 89% of affected households in DRC and 76% of affected households in Rwanda are currently collecting wood near the river multiple times a week (See Table 8-46).

⁴⁰ The different response in Congo may be due to the lack of female surveyors amongst the team working in Congo, which may have influenced the validity of the answers provided by women on gender-related questions.



Table 8-46 Frequency of Firewood Collection Near the River by Surveyed Households (2022)

	DRC	Rwanda
Never	4%	15%
Multiple times a week	89%	76%
Once per week	6%	7%
Once a month	1%	2%
Total	100%	100%

In Rwanda, women explained that men carry wood in two instances only: if women are ill and if they are not married and their mother instructs them to help with wood collection. The trees used for wood cutting are mainly eucalyptus, gravillea and mango. Due to the intense deforestation of the whole study area, the interviews and focus groups carried out have demonstrated that there are no forests left for wood cutting. For most people, the average walk to get wood can go from two to seven hours, depending on where scattered available trees are found. When this can be afforded, to make up for the extremely low availability of natural trees, people may plant certain trees on their own land with the purpose of exploiting them for wood branch collection. The only two instances in which this has been observed on a large scale is in the villages of Ruganzo and Mubombo in Rwanda, where a few families own and can rent out land plots specifically for wood cutting close to the village (See Figure 8-110 and Figure 8-108). In all of the other villages, according to focus groups planting one’s own firewood is a very common practice for those who can afford it, but plots for these are often found away from the villages and closer to the river. Generally, people start walking towards the river and stop wherever they can find trees, sometimes on the riverside but not necessarily. Wood taking can be a time-consuming activity, as described in Box 8-10.

While there is no internal market on wood branches for domestic use, wood is also collected for the fabrication of planks which are used domestically as well as sold for construction purposes. Areas of wood cutting (See Figure 8-109) and fabrication of wood planks have been observed frequently along the riverside (See Figure 8-107).

Box 8-10 Insight on Wood Collection by Three Young Women in Ryagashyitsi

These women explain that wood collection can be an extremely time-consuming activity, whose weight falls exclusively on women. Around their village, wood is so scarce that they have to walk all the way to the Ruzizi around three times a week. They usually leave in the morning around 7 in the morning and come back with some wood around 3 in the afternoon. After this, they are left with more work to do in the fields for the rest of the day. Unless the kids are old enough to go to school, they are obliged to carry them along.

B Charcoal

The fabrication of charcoal is an activity that is solely practiced by men. According to information gathered during the focus groups, it is fabricated at the feet of slopes, close to the river (See Figure 8-111). Usually, it is made by using the trees which are planted and owned by the fabricator in his own plot, or wood is bought to fabricate charcoal at home. Although a minority of households mentioned selling charcoal on some occasions, it was generally reported during interviews that charcoal tends to be produced for domestic use rather than sale.



Figure 8-106 Women Carrying Wood Branches in Gisheke, Rwanda (2022)



Figure 8-107 Plank Cutting for Housing close to the Reservoir Area, Rwanda (2022)



Figure 8-108 Scattered Trees Used for Wood Cutting in Mubombo, Rwanda (2022)



Figure 8-109 Wood Cutting Activities in the Reservoir Area (2022)



Figure 8-110 Private Timber Trees in Quarry Area, Ruganzo (2022)



Figure 8-111 Charcoal Fabrication in the Reservoir Area (2022)



8.13.1.2 Collection of Sand, Straw and Clay

Collection of sand for construction has been mentioned infrequently during the interviews and focus groups. Since sand is difficult to collect in the study area, men tend to go to Kamembe to buy it from shops. However, some have mentioned that men can often go to search for sand further away from the villages: there is no specific place for this type of activity. However, in DRC people reported going to the Ruzizi to search for sand.

Collection of clay has also been infrequently mentioned. This material is associated with the HMP / Batwa communities in Rwanda and DRC (see sections 8.2.5.1B.7 and 8.2.5.2E.7). In Rwanda, HMP reported that they used to collect clay from one specific area in *Rwingbogo* Sector. However, for a few years now a cooperative has been installed on top of this collection point. Since then, they have been making pottery a lot less frequently. The use of clay or earth to make bricks/pottery is done on the banks of the Ruzizi by men and women, according to interviews in DRC. While clay is still collected around the banks of the Ruzizi in the DRC as well as in Rwanda, the specific location of collection points was not provided.

Finally, collection of straw is a popular activity throughout the study area. In DRC, this is one of the most common materials for housing building. In Rwanda, two different types of straw are frequently used, one in cultivation (See Figure 8-113) and one in livestock feeding and construction. Since straw is particularly bulky, the focus groups revealed that it is mostly men that carry out this activity (See Figure 8-112). Straw is generally collected in waiting areas, along the riverbanks or near the Ruzizi River.



Figure 8-112 Men Carrying Straw for Livestock and Construction in Gatebe (2022)



Figure 8-113 Straw Used for Agriculture (2022)

8.13.1.3 Collection of Medicinal Plants and Other Non-Timber Forest Products

According to the interviews and focus groups in the study area, villagers collect various plants for medicinal purposes. The same plants have been mentioned by all villages visited: collecting medicinal plants is not a regular activity and varies depending on necessity, it is usually practiced by women who often go close to the river or around the village to find these plants.

According to the interviews and focus groups in the study area, villagers collect various plants for medicinal purposes. According to the socio-economic quantitative survey, 60% of affected



households in DRC and 56% of affected households in Rwanda collect plants on the riverside, as seen in Table 8-47.

Table 8-47 Percentage of Households Collecting Medicinal Plants by the River (2022)

	DRC	Rwanda
Man-headed households	88%	64%
Woman-headed households	80%	58%
Total all households	60%	56%

As outlined in sections 8.2.5.1B.7 and 8.2.5.2E.7, HMP in Rwanda and the Batwa in DRC still practice some gathering activities, including harvesting wild honey and collecting wild plants for personal consumption. In Rwanda, this is rarely practiced on the fields of the farmers HMP work for. In DRC, gathering activities still take place in farming fields as well as further away in fallow lands. Men predominantly engage in harvesting wild honey, while women collect medicinal and edible plants (Sogho, Moubolé, Mologuo, Bihama), which they sell in the local market. It was reported that amongst other areas (*Kirira, Kaboya, Tchapagna*), the surroundings of the city of Bugano (Kamanyola) are used for wild plant collection activities (see section 8.2.5.2E.7)Communication with residents of the Bugano and Kafunda Villages in the DRC during the May 2024 supplementary survey revealed that traditional medicine is important due to the lack of a clinic.

The focus of this survey was primarily on the impacts on plants collected on hillslope grassland habitats that would arise from the development of the transmission line. Medicinal plants associated with this habitat type comprise of *Umuravumba (Tetradenia riparia)*, *Umuburizi (Gymnanthemum amygdalinum)*, *Lantana ukambensis*, *Ziziphus mucronata* and *Gymnosporia* sp.

Additional indigenous medicinal plants associated with other habitat types include *Erythrina abyssinica*, *Markhamia lutea*, *Markhamia platycalyx* and *Mitragyna rubrostipulata*.Table 8-48 shows plants which have been cited as most often collected and used by the local population during the interviews. The local names are cited in Kinyarwanda, but the same plants are found on both sides of the river.



Table 8-48 Medicinal Plants Mentioned During Interviews (2022)

Plant Name (in Kinyarwanda)	Medicinal Usage
Umuravumba (See Figure 8-114)	Coughs and fevers, nose haemorrhageas and protective powers for children and women walking alone
Umubirizi Ikicamahirwe (See Figure 8-115) Aloe Vera	Intestinal problems and injuries
Akabyeri	Diarrhea
Issogo	
Urubuhu	Vomit and nausea
Ikivuraninda	Bleeding
Umweza	Poisoning
Inyabarasanya	
Igituntu Y'ikiryano	
Umusange	
Umutuku	
Imbonakerakure	Skin
Aloe Vera	Injuries and Int
Igikakarubamba	Intestinal worms
Inzoko	
Umukugutu	
Makasia	
Rugozi	
Kamirampanga	
Muvura	
Umuzibaziba	
Umunkamba	ifumbi, a common mouth bleeding issue
Icyuma	
Igipapayi	Fainting and fever, hepatitis
Umuvemba	Hepatitis
Moringa	Any small illness, such as fever or fatigue
Kabashnkuru	
Kabayeri	
Dodo	Malnutrition
Kankina	Malaria
Itusi y'ikarata	
Urubuhu	Iryaka illness of young babies
Kabayeri	
Umuko	
Kaba	
Shankunu	
Mazi-mbeho	



Figure 8-114 Umuravumba Medicinal Plant, Observed in the Core Clay Borrow Area (2022)



Figure 8-115 Ikicamahirwe Medicinal Plant Observed in Ruganzo Village (2022)



8.13.2 Cultural Services

In the study area no specific use of natural spaces and resources for tourism and recreation has been noted. The only recreation activity observed is children swimming and playing in the river.

During both the focus groups in villages and the informal discussions carried out along the river in Rwanda and DRC, none of the interviewed farmers and authorities reported any perception of the river as holding a particular aesthetic, spiritual, religious or cultural value for the population. However, especially in DRC the water from the river is perceived as carrying a particular cultural and spiritual value. This has been described in Section 0.

The productive value of land seems to be the element that ties local communities to the riverside: interviewed people overwhelmingly agreed that the lands closest to the river are perceived as irreplaceable due to their high fertility and better quality of soil.