REPUBLIC OF RWANDA



Ministry of Infrastructures (MININFRA)

Water and Sanitation Corporation Limited (WASAC)

FEASIBILITY STUDY, DETAILED DESIGNS AND SUPERVISION OF WORKS FOR THE CONSTRUCTION OF SAKE WATER SUPPLY SYSTEM PROJECT (PHASES I & II)



RESETTLEMENT ACTION PLAN REPORT (RAP)

JUNE, 2023

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ACRONYMS & ABBREVIATIONS

AfDB : African Development Bank

ARAP : Abbreviated Resettlement Action Plan

DDS : District Development Strategy

DEC : District Executive Committee

DLB : District Land Bureau

DOSC : District One Stop Center

DSP : District Strategic Plan

ESIA : Environmental and social Impact Assessment

EICV : Enquête Intégrale sur les Condition de Vie des Ménages

ESAP : Environment and Social Assessment Procedures

ESIA : Environmental and Social Impact Assessment

GIS : Geographic Information System (GIS)

GRC : Grievance Redressing Committee

HIV : Human Immunodeficiency Virus

ICT : Information and Communication Technology

IRPV : Institute of Real Property Valuers

LAC : Land Adjudication Committee

LC : Local Council

LRCs : Local Resettlement Committee

MINECOFIN : Ministry of Finance and Economic Planning

MININFRA : Ministry of Infrastructures

MoE : Ministry of Environment

NGOs : Non-Government Organizations

NLC : National Land Commission

NISR : National Institute of Statistics of Rwanda

NST1 : National Strategy for transformation 1

OS : Operational Safeguard

Feasibility Study, Detailed Designs and Supervision of Works for the Construction of Sake Water Supply System Project (Phase I & II)
Resettlement Action Plan

PAP : Project Affected People

RAP : Resettlement Action Plan

RDB : Rwanda Development Board

REMA : Rwanda Environment management Authority

RLMUA : Rwanda Land Management and Use Authority

RWB : Rwanda Water Resources Board

SACCO : Savings and Credit Cooperative Organization or Society

SDG : Sustainable Development Goals

ToRs : Terms of reference

WASAC : Water and Sanitation Corporation Ltd

WATSAN : Water, Sanitation and Hygiene

WSS : Water Supply System

DEFINITIONS OF TERMS USED IN THIS DOCUMENT

Unless the context dictates otherwise, the following terms shall have the following meanings:

- "Affected people" refers to people who are directly affected socially and economically by African Development Bank (AfDB) assisted investment projects caused by:
 - a. Relocation or loss of shelter;
 - b. Loss of assets or access to assets loss of income sources or means of livelihood, whether or not the affected persons must move to another location; or
 - c. The involuntary restriction or access to legally designated parks and protected areas results in adverse impacts on the livelihood of the displaced persons.
- "Census" means a field survey carried out to identify and determine the number of Project
 Affected Persons (PAP), their assets and potential impacts; in accordance with the procedures,
 satisfactory to the relevant government authorities, and the African Development Bank
 Safeguards.
- 3. "Compensation" means the payment in kind, cash or other assets given in exchange for the taking of land, or loss of other assets, including fixed assets thereon, in part or whole.
- 4. "Cut-off date" is the date of commencement of the census of PAPs within the project area boundaries. This is the date on and beyond which any person whose land is occupied for project use, will not be eligible for compensation.
- 5. "Project affected persons" (PAPs) means persons who, for reasons of the involuntary taking or voluntary contribution of their land and other assets under the project, result in direct economic and or social adverse impacts, regardless of whether or not the said Project affected persons physically relocate. These people may have their:
 - Standard of living adversely affected, whether or not the Project Affected Person must move to another location;
 - Right, title, interest in any house, land (including premises, agricultural and grazing land) or any other fixed or movable asset acquired or possessed, temporarily or permanently, adversely affected;
 - c. Access to productive assets adversely affected, temporarily or permanently; or
 - d. Business, occupation, work or place of residence or habitat adversely affected.

- 6. "Involuntary Displacement" means the involuntary taking of land resulting in direct or indirect economic and social impacts caused by:
 - a. Loss of benefits from use of such land;
 - b. Relocation or loss of shelter;
 - c. Loss of assets or access to assets; or
 - d. Loss of income sources or means of livelihood, whether or not the project affected person has moved to another location.
- 7. "Involuntary Land Acquisition" is the taking of land by government or other government agencies for compensation, for the purposes of a public project against the will of the landowner. The landowner may be left with the right to negotiate the amount of compensation proposed. This includes land or assets for which the owner enjoys uncontested customary rights.
- 8. "Land acquisition" means the taking of or alienation of land, buildings or other assets thereon for purposes of the Project.
- 9. "Rehabilitation Assistance" means the provision of development assistance in addition to compensation such as land preparation, credit facilities, training, or job opportunities, needed to enable project affected persons to improve their living standards, income earning capacity and production levels; or at least maintain them at pre-project levels.
- 10. "Resettlement and Compensation Plan", also known as a "Resettlement Action Plan (RAP)" or "Resettlement Plan" is a resettlement instrument (document) to be prepared when subproject locations are identified. In such cases, land acquisition leads to physical displacement of persons, and/or loss of shelter, and /or loss of livelihoods, denial or restriction of access to economic resources. RAP is prepared by the party impacting on the people and their livelihoods. RAPs contain specific and legally binding requirements to be abided by to resettle and compensate the affected party before implementation of the project activities causing adverse impacts.
- 11. "Resettlement Assistance" means the measures to ensure that project affected persons who may require to be physically relocated are provided with assistance such as moving allowances, residential housing or rentals whichever is feasible and as required, for ease of resettlement during relocation,
- 12. "Vulnerable Groups" refers to:

Widows, the disabled, marginalized groups, low-income households and informal sector operators; Incapacitated households – those no one fit to work and;

Child-headed households and street children

Including among other things, persons characterised by low nutrition levels, low or no education, lack of employment or revenues, old age, ethnic minority and/or gender bias.

13. Cut-Off-Date:

Normally the cut-off date is described as the date for beginning of the socio-economic census and asset inventory of PAPs. Persons (encroachers) entering and/or occupying land in the project area after this date and not included in the first inventory of PAPs will not be considered eligible for compensation or resettlement assistance. Similarly, fixed assets such as structures, crops/trees established after the cut-off date will not be compensated.

EXECUTIVE SUMMARY

I. Compensation Summary Sheet

N°	Variables	Data
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A. General				
1	Region/Province/Department	Eastern Province of Rwanda		
2	Municipality/District	Ngoma District		
3	Sectors	Gashanda, Jarama, Karembo, Kazo, Kibungo, Mugesera, Murama, Mutenderi, Remera, Rukira, Rurenge, Rukumberi, Sake and Zaza.		
4	Activity(ies) that trigger resettlement	Non-Applicable		
5	Project overall cost	34,138,718,240 Rwf: Phase I: 15,731,648,382Rwf Phase II: 18,407,069,858 Rwf		
6	Overall resettlement cost	622,731,286 RwF		
7	Applied cut-off date (s)	17 th May 2022		
8	Dates of consultation with the people affected by the project (PAP)	16 th May, 2022 -27 th June, 2022 & 14 th to 16 th September 2022		
9	Dates of the negotiations of the compensation rates / prices	November 2022 –January 2023		
	B. Specific information			
10	Number of people affected by the project (PAP)	-28 PAPs for construction of main infrastructures (<i>Phase I</i>) -2,872 PAPs affected by pipeline network installation (<i>Phase I</i>) -8 PAPs for construction of main infrastructures (<i>Phase II</i>) -9,739 PAPs affected by pipeline network installation (<i>Phase II</i>)		
11	Number of Physically displaced	Non		
12	Number of economically displaced	Non		
13	Number of affected households	3,009		
14	Number of females affected	-847 females affected (Phase I) - 3992 females affected (Phase II)		
15	Number of vulnerable affected	1,605		
16	Number of major PAP	31 having more than 1 million RwF		
17	Number of minor PAP	12,608		
18	Number of total right-owners and beneficiaries	Beneficiaries: 686,103 (Projection 2035); -344,581 Beneficiaries (Phase I)		
		-341,522 Beneficiaries (Phase II)		
19	Number of households losing their shelters	Non		
20	Total area of lost arable/productive lands (ha)	51,158 sqmeters		
21	Number of households losing their crops and/or revenues	2,802		
22	Total areas of farmlands lost (ha)	51,158 sqmeters		
23	Estimation of agricultural revenue lost (RwF)	-154,369,231 RwF (Phase I) -271,597,145 RwF (Phase II)		
24	Number of buildings to demolish totally	Non		
25	Number of buildings to demolish totally at 50%	Non		
26	Number of buildings to demolish totally at 25%	Non		
27	Number of tree-crops lost			
	No contrar of a consequent literature to along all the	Non		
28	Number of commercial kiosks to demolish	11011		

Ī	30	Number of community-level service infrastructures disrupted	Non
		or dismantled	
	31	Number of households whose livelihood restoration is at risk	Non

The importance of adequate water supply and sanitation services serve as drivers for socio-economic development, poverty reduction and improvement of public health. Access to drinking water is also a basic amenity, ranked among the highest priority public services by Rwanda's population. It contributes to the enhancement of hygiene and sanitation hence reduce most of water borne diseases as well as contribute to alleviation of poverty within the project covered areas through improvement of socio-economic activities.

Reference to EICV5 published in 2016/2017 and socioeconomic survey conducted in 2020, Ngoma District is supplied by old water distribution network, the water sources are not well developed and most of the population collects water far from their residential homes.

In this line, Rwanda has received a loan from African Development Bank (AfDB) and intends to apply a portion of it to conduct the feasibility detailed studies, as well as the execution and supervision of the Sake Water Supply System project in order to increase the access to clean water in the district. The present Resettlement Action Plan is among the planned feasibility studies.

Thus, the main objectives of the project are (i) to achieve 100% access to clean water supply in the target area, (ii) contribute to the enhancement of hygiene and sanitation and (iii) contribute to alleviation of poverty within the area through improvement of socio-economic activities.

The preparation of this Resettlement Action Plan was conducted following procedures aligned in the Law on environment and in compliance with AfDB safeguards policies. Furthermore, a combination of desk study, field surveys on socioeconomic conditions of PAPs and assessment of their affected properties and assets, as well as valuation of the lands, crops and other assets to be expropriated/compensated have been accomplished.

The characteristics of main water infrastructures to be constructed in this project including their capacities have been highlighted for the intake, water treatment plant, water stocking reservoirs, pumping stations, pressure breakers and pipelines network.

The Rwandan national laws and regulations have been reviewed and their relevancy to Sake water supply systems project highlighted. In the same line, institutions relevant to the project have been mentioned and their missions, roles and responsibilities reported. Furthermore, the AfDB Involuntary Resettlement Policy was considered which is designed to ensure that the disruption of the livelihood of people in the project's area is minimized, and that the displaced persons, if any, will receive resettlement assistance so as to improve their living standards.

The socioeconomic profile of Ngoma District has been documented in extensor, and socioeconomic assessment of project affected persons (PAPs) was conducted, highlighting their current living conditions and pointing out the potential impacts of the Sake WSS project to them.

During the construction of main water infrastructures such as water treatment plant (WTP) and water tanks, there will be for both phases 37 files for which 33 are individual lands and crops partially affected, 1 property belonging to the Church, 1 for Bralirwa Company and 2 for Government of Rwanda, all partially impacted and totalizing 51,158 square meters. Concerning pipeline network installation, there will be 12,611 files on the total length of 487 kilometers where different annual crops and trees will be affected and compensated.

Valuation and compensation exercises were accomplished for all affected assets including lands, crops and plantation of trees affected during construction of main infrastructures as well as crops and trees affected during installation of water pipes. The total cost for expropriation/compensation of affected lands and crops for construction of main infrastructures will be 275,396,382 RwF, while the total cost for compensation of affected crops and trees for pipeline network installation will be 347,334,904 RwF.

Tables and figures illustrating the total amount of expropriation/compensation of all affected lands and other properties during water infrastructures construction and pipeline network installation have been reported.

It is obvious that the present document will be reviewed and approved by the Client and Ngoma District's Authorities. As the Contractor has been recruited, the planned activities have started for the execution of Sake WSS project.

CHAPTER I: GENERAL ASPECTS

1.1. Introduction

Rwanda has committed to reach SDGs targets by 2030 through the different programs such as the NST1 and 7 years Government Program with the aim of achieving universal access to basic water and sanitation services by 2024. The importance of adequate water supply and sanitation services serves

as drivers for socio-economic development, poverty reduction and public health. This is fully acknowledged in Rwanda's flagship policy documents and political goals.

Furthermore, access to drinking water is also a basic amenity, ranked among the highest priority public services by Rwanda's population. It reduces time spent on fetching water and has a positive impact on school attendance, in particular for girls. Women's life is strongly affected by unsafe, distant water supply and poor sanitation as women are generally responsible for water collection and handling, for household hygiene and caring of the sick.

Ngoma District is situated in Eastern part of the country, less endowed with natural sources of water, a part the three lakes Bilira, Mugesera and Sake connected to Akagera River. The problem of water availability has been highlighted in all Sectors of Ngoma District; the existing water supply systems cannot meet the demand due to the rapid growing population.

According to EICV5, 82.6 % of the Households in Ngoma District have access to improved water compared to 87.4 % at national level. This is quite a good improvement but should be more enhanced because the national target is 100 % by 2024. Moreover, the quality and quantity of the water supply has not reached a satisfactory level, insufficient water production and a large volume of water leakages cause intermittent water supply in some areas. Reference to socioeconomic survey in Ngoma District (2020), 17.4 % of population use improved water from various sources (unprotected spring and well, surface water, Tank truck, etc.)

In this line, through the loan received from the African Development Bank (AfDB), Water and Sanitation Corporation Ltd (WASAC) representing the Government of Rwanda intends to apply a portion of it to the Feasibility Study, Detailed designs and Supervision of the Construction of Sake Water Supply System Project, both Phases I and II (33,000 m³/day delivered).

The implementation of such a development project will surely require lands acquisition for the construction of water infrastructures as well as the installation of pipeline network with implications of expropriation/compensation of project affected persons (PAPs) and/or resettlement of some of them, if need will be.

1.2. Objectives and tasks of the Project

The project has three objectives:

To achieve 100% access to clean water supply in the target area;

Contribute to the enhancement of hygiene and sanitation hence reducing water borne diseases;

Contribute to alleviation of poverty within the area through improvement of socio-economic activities in the target area.

The main tasks of the project consist of (i) developing final designs with drawings, (ii) construction details, cross-sections, final quantities, costs, technical specifications, tender documents, operating manuals and health as well as safety plans; (iii) the supervision of construction works.

1.3. Project location

The project is located in Ngoma District, one of the seven districts comprising the Eastern Province and covering an area of eight hundred sixty-seven-point seventy-four square kilometres (867.74 Km²). Ngoma District is subdivided into fourteen (14) Sectors, sixty-four (64) Cells and four hundred and seventy-three (473) Villages (Imidugudu). It is limited by Rwamagana District in the North-West, by Kayonza District in the North-East, by Bugesera District in the Western part, by Kirehe District in the East and by the Republic of Burundi in the South.

The project will focus on construction of Sake water supply system project in its phases I and II, which will produce 33,000 m³/day in the water treatment plant and has a long distribution network. The proposed water supply networks will serve across the 14 Sectors of the District namely Gashanda, Jarama, Karembo, Kazo, Kibungo, Remera, Mugesera, Rukumberi, Rurenge, Sake, Zaza, Murama, Mutender and Rukira.

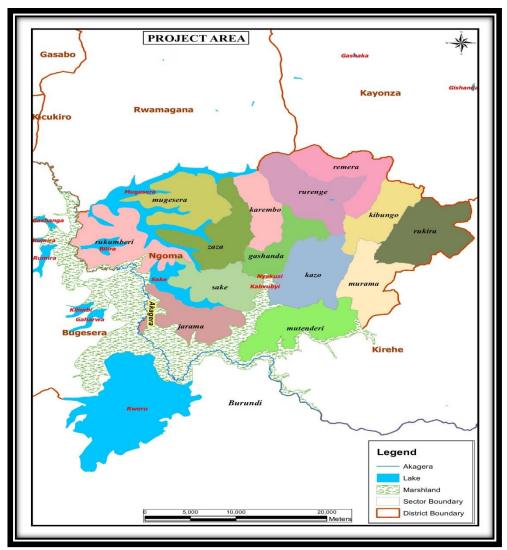


Figure 1: Map of the project location

1.4. Target groups

1.5. Prioritized infrastructures

The main infrastructures to be constructed in this project include: the intake, water treatment plant, water stocking reservoirs, pumping stations, pressure breakers and pipelines network.

The proposed WSS will have an intake located at X = 546299.949 m; Y = 4769238.585 m; Z = 1333.996 m in Zaza Sector, Nyagasozi Cell and Sugira village. From this intake raw water shall be pumped with

the help of 3 horizontal pumps of 500 m³ /h at a head of 50 m via three parallel discharge pipes DN 400 PN 10 and flows by gravity.

The pumped raw water from the intake shall be treated at Water Treatment Plant (WTP) located at X = 546246.948 m; Y = 4768920.369 m; and Z = 1369.000 m in Zaza Sector, Nyagasozi Cell, and Sugira Village. The WTP shall be constructed with 3 treatment channels.

After treatment, the treated water shall be pumped to the main reservoir RS 1 (8,000 m 3) located at X = 549844.693 m; Y= 4762281.438 m; Z= 1551m in Karembo Sector, Akaziba Cell, and Rwamuhimbura Village. Then, treated water shall be kept in 14 others reservoirs with the capacity ranging from RS 10 having 50m 3 to RS 3 and RS 11 containing each 3,000 m 3 .

Six booster pump stations will be installed with six pumps: (i) from RS 8 there shall be a booster pump station (a single pump with 195 m³/h and a head of 100m with a discharge pipe of DN315) that will pump water into reservoir RS 14; (ii) from RS 2 there shall be a booster pump station (3 pumps each having 320 m³/h with a head of 250 m) that will pump water into reservoir RS 3; (iii) from RS 4 there will be a pipeline that will discharge by pumping (a single pump with 130 m³ /h and a head of 75 m with a discharge pipe of DN 315) into reservoir RS 5; (iv) from RS 4 there shall be a pipeline that will discharge by pumping (a single pump with 145 m³/h and a head of 100 m with a discharge pipe of DN 315) into reservoir RS 6.

Concerning pressure breakers, from RS 6 there shall be a pipeline that will discharge and serves Murama, Mutenderi and Kibungo Sectors through 2 pressure breakers respectively located at X = 563040.590 m; Y = 4759162.642 m and Z = 1580.969 m and Z = 1443 m in Murama Sector, Muvumba Cell and Kibimba Village.

The discharge pipes shall parallel be laid and each pipeline shall have DN varying between 450 mm and 500 mm. The large part of pipeline network will serve by gravity several sectors and cells of Ngoma District. The proposed water supply distribution system for this Project should take 487 Km long.

Table 1: Location of main water infrastructures and their capacity

N°	Location (Sector/Cell/Village)	Tanks/Reservoirs
1	Remera/ Bugera/Gatare	1,500m³
2	Kibungo/Cyasemakamba/Kiruhura	2,000m³ & booster pump
3	Kazo/Karama/Kabimba	3,000m³
4	Gashanda/Mutsindo/Kanyinya	2,500m³ & booster pump
5	Karembo/Akaziba/ Rwamuhimbura	8,000m³
6	Sake/Nkanga /Kanazi	1,000m ³ & booster pump
7	Sake/Kibonde/Nyagasani	1,500m³
8	Zaza/Nyagasozi /Sugira	3,000m³ at WTP
9	Kibungo/ Gahima/Nyamigina	500m³ (RS 6)
10	Rukira/Kibatsi/Rugabagaba	200m³ (RS 7)
11	Rukira/Nyinya/Ruhama	50 m ³ (RS 12)
12	Kazo/ Umukamba/Umukamba	200 m ³ (RS 11)

1.6. Scope of RAP study

The scope of work undertaken during the Resettlement Action plan preparation included:

- ♣ In-depth review of technical documents and miscellaneous articles published or reported on the project;
- Analysis of the legal and institutional framework;
- ♣ Surveying of the project areas, census of the Project Affected Persons (PAPs), assessment of their affected lands, properties and other assets thereon;
- Conduct socioeconomic assessment of the PAPs;
- Valuation of the lands, properties and other assets likely to be expropriated / compensated;
- Prepare potential budget sheets showing itemized best compensation costs;
- Definition and analysis of an appropriate institutional framework: their roles and responsibilities in project implementation;
- Resettlement Action Plan report has been elaborated and submitted.

CHAPTER II: METHODOLOGY

2.1. General methodology

The preparation of this Resettlement Action Plan was through a combination of desk study, surveying of the project areas, assessment of affected lands and properties, socioeconomic survey of PAPs, their assets and properties as well as pre-valuation of the lands and properties thereon to be expropriated/compensated.

The desk study specifically concerned review of project documents and analysis of the proposed interim reports. The documents consulted include: preliminary technical designs and maps of project sites, report on the environmental and social impacts assessment, and document on the establishment of the location for proposed water infrastructures, miscellaneous technical reports of District Development Plan, District Development Strategy related to Ngoma District.

The field survey consisted on identification and socioeconomic assessment of the PAPs as well as census and measurement of their lands, properties and crops thereon which will be affected by implementation of the project.

Preliminary consultations were initiated in Sectors and Cells' administration entities where most of potential project affected persons inhabit. That approach was meant to collect primary and complementary information in order to assess which will be the impacts of the project to local communities and on the environment in general.

The Data collection was done using questionnaire approved and recommended by WASAC for environmental studies (ESIA-ARAP and RAP). A short training session was dedicated to the survey team in order to comprehend the quality of questionnaires and has covered the following activities:

Familiarize all surveyors with the questionnaire, including accuracy of the survey, range of potential answers to questions rose, sensitiveness of the questions if any, etc.;

Test the surveyors for their learning ability, knowledge, interviewing skills, and so on;

Decide how to resolve confusing issues related to interviewing, when and how to promptly do it.

2.2. Valuation methodology

In order to carry out this assignment of properties' valuation in the project areas, a summary on valuation methodology is here presented in order to provide a clear sense on how the value was given.

The valuers were instructed to:

- -State the extent of the process of collecting, confirming and reporting data;
- -Collect, verifies, analyze and reconcile data that are available to support the conclusion;
- -Include and explain all calculations showing how data have been applied. Applicability of comparable, reasons for acceptance or rejection of data and draft adjustments must be included;
- -Describing all information considered, procedures followed and the reasoning that supports the analysis, opinions and conclusions;
- -Establish inventory lists of properties and other assets pre-valuated.
- -Data collection and valuation of the existing structures (buildings)
- -Usually, buildings are valuated according to their size, types of materials utilized and the aging state of structure. During this valuation, it was recognized that in this project there was no existing structure affected by construction activities.

Valuation for crops

Crops were valued according to the established prices by the Council of Certified Real Property Valuers in Rwanda and in line with provisions of the Rwanda Expropriation Law.

Data collection and valuation of the existing plantations

A valuation form has been utilized which describes different type of trees, size and ages. In addition, crops that can be harvested after at least 6 months have been recorded as well as some perennial crops like bananas, mangoes, avocado and papaya.

Measurement of land areas

Measurement of land area was based on surveying data got from the land boundaries shown by the land owner and the neighbors. This has been confirmed by the land legal document called "certificate of land title. Additionally, GIS shaper files have been provided by the technical services in Ngoma District.

Private land and compensation

The new land Law, especially concerning private ownership of land and compensation procedures of such land acquired by Government for purpose of public interest, provides a room for negotiation over the value of land, based on-going market value. In other words, PAPs are allowed to negotiate for the suitable compensation. The financial compensation will be the last option and the land value was calculated with reference to the benchmark prices for land and property set annually by the Council of Certified Real Property Valuers in Rwanda.

CHAPTER III: LEGAL AND INSTITUTIONAL FRAMEWORK

3.1. Legal Framework

The legal framework lays the foundation for four key elements of the RAP: (i) approach to land access and management, (ii) establishing rates of expropriation /compensation values, (iii) determining eligibility for compensation and resettlement assistance, including livelihood initiatives and (iv) establishing mechanisms to resolve grievances raised by affected persons in relation to compensation and eligibility.

The Legal framework which governs land acquisition, expropriation /compensation procedures and resettlement activities are as following:

3.1.1. The Constitution of the Republic of Rwanda

The Rwandan Constitution, promulgated in 2003 and revised in December 2015, recognizes ownership of property and every person's right to private property (Article 34). Consequently, private property, whether individually or collectively owned is inviolable.

Exceptionally, the right to property may be overruled in the case of public interest. In such a case, circumstances and procedures are determined by the law and subject to fair and prior compensation (Article 34).

Article 35 stipulates that private ownership of land and other rights related to land are granted by the State. The constitution provides that a Law should be in place to specify modalities of acquisition, transfer and use of land.

3.1.2. National Land Law, 2021

This Law determines modalities of acquisition, registration, allocation, possession, transfer, management and use of land in Rwanda. As the project will affect lands hence compensation, based on this law is relevant to the project.

Article 3 of the law reaffirms that the State has absolute supreme power to manage all lands situated in its national territorial boundaries which it exercises in the general interest with a view to ensuring rational economic and social development in accordance with laws. Under Article 6, a Rwandan is entitled to freehold tenure.

Article 9 stipulates that a person who acquired land through inheritance, succession, purchase, donation, exchange, land sharing or legal grant by competent authorities, owns it in accordance with one of the following tenure modalities: (i) emphyteutic lease; (ii) freehold.

Without prejudice to provisions of Article 9 of this Law, lands are allocated by the State in form of emphyteutic lease and land concession. The emphyteutic lease and land concession period does not exceed ninety-nine (99) years which may be renewed.

When the emphyteutic lease period expires, the lease period for a Rwandan is renewed automatically. A Prime Minister's Order determines modalities for land allocation and acquisition, emphyteutic lease, State land concession and lease, the exact duration of emphyteutic lease and State land concession and lease and its renewal.

3.1.3. Law N° 32/2015 Relating to Expropriation in the Public Interest

This Law determines procedures relating to expropriation in the public interest. Since the project is in the public interest, this law will be applied during expropriation and compensation exercise of the people affected by the project and it will be the same for potential additional compensation issues. In fact, Article 2 defines expropriation in the public interest as, an act based on power of Government, public institutions and local administrative entities with legal personality to remove a person from his/her property in the public interest after fair compensation.

Furthermore, fair compensation is defined as, 'an indemnity equivalent to the value of land and the activities performed thereon given to the person to be expropriated and calculated in consideration of market prices as well as compensation for disturbance due to expropriation'.

Article 3 notes that, "No person shall hinder the implementation of the program of expropriation in the public interest on pretext of self-centered interests".

Article 17 states that after the publication of a decision on expropriation in the public interest, completed with a list of holders of rights registered on land titles and property incorporated on land, land owners shall not develop any long-term activities on the land, and otherwise such activities shall not be compensable during expropriation.

In terms of valuation, Article 22 states that land values and prices for property consistent with the prevailing market rates shall be established by the Institute of Real Property Valuers in Rwanda.

Article 23 states that independent valuers certified by the Institute of Real Property Valuers in Rwanda should conduct valuation of land and property.

In accordance with Article 25, the valuation of land and property should be conducted in the presence of the landowner/property owner or their lawful representatives, and in the presence of representatives of local administrative entities.

According to Article 26 land titles must be produced as evidence of ownership, and evidence of marital status as applicable. Any person dispossessed of land, or unlawfully occupying land, or having developed activities prohibited after the enactment of relevant laws shall receive no compensation.

Article 27 reaffirms that compensation for land must include any improvements on the land and compensation for disruption associated with expropriation.

Article 28 notes that the value of land and property should be calculated on the basis of size, nature and location and the prevailing market rates. The compensation for disruption caused by expropriation to be paid to the expropriated person shall be equivalent to five percent (5%) of the total value of his/her property expropriated. Article 32 refers to sign-off by the owner once he/she is satisfied with the valuation.

Article 33 allows for any person not satisfied with the valuation to contest in writing within seven days. Any person contesting the assessed value must engage the services of a valuer recognized by the Institute of Real Property Valuers in Rwanda, at their own expense, to carry out a counterassessment of the value.

Under Article 34 if unsatisfied the matter may be referred to the courts. However, the compensation will be paid pending the court decision so as not to delay expropriation.

In terms of payment of compensation, Article 35 notes that, 'fair compensation can be paid in monetary form in the Rwandan currency or in any other form mutually agreed upon by the expropriator and the person to be expropriated'. The fair compensation must be paid to the

expropriated person before he/she relocates.

Article 36 notes that compensation must be paid within 120 days of approval by the Ministry, or otherwise becomes null and void, unless mutually agreed otherwise. After payment, the affected person has a further 120 days to relocate. In this time, they should not plant any crops that would take more than 120 days of growth before harvesting.

Article 38 stipulates that compensation shall be deposited into a bank account with a recognized locally-based bank or financial institution. When, in case of joint ownership, compensation must be paid to more than one person, such as family or a legally married spouse, compensation will be deposited into an account which requires co-authorization to withdraw money.

Article 39 allows for payment of compensation in-kind as opposed to cash. During public consultation with PAPs, all have confirmed that they need compensation in cash not in kind.

3.1.4. Law on Environment, 2018

This Law determines modalities for protecting, conserving and promoting the environment. Given the nature of this project and based on this law, the project activities are classified under this project that must undergo an Environmental Impact Assessment before obtaining authorization for its implementation.

3.1.5. Law N°49/2018 of 13/08/2018 determining the use and management of water resources in Rwanda.

This law determines the use and management of water resource in Rwanda. This law governs both natural and artificial water and their boundaries and provides guidelines and principles. The Sake WSS project will comply with this law by the protection and rational use of water resources which constitute the obligations of each and every person and project. In addition, as stipulated in the law, the contractor will avoid dumping, spilling or depositing anything that may pollute water resources.

3.1.6. Law on mining and quarry operations N° 58/218 of 13/08/2018.

This Law governs mining and quarry operations in Rwanda. It applies to activities of exploitation, mining, trading and processing of minerals and quarry. It caters with rights of landowner in a licenced area of activities relating to quarry licence application, transfer of quarry licences, rights and responsibilities of the holder of a quarry licence, relinquishment of a quarry licence area and cancellation of a quarry licence.

Quarries and borrow pits will be required for collection of borrowing materials dedicated to water infrastructures construction in Sake project implementation. This law will be enforced during project implementation by ensuring quarries are approved by the districts and restoration plans are provided and implemented at the end of the project.

3.1.7. Law governing the preservation of air quality and prevention of air pollution in Rwanda, 2016

This Law determines modalities for preservation of air quality and prevention of air pollution in Rwanda. As per this law, the project will implement measures aimed at the preservation of air quality as well as all elements or activities likely to affect air quality or pollute the atmosphere in the project areas by watering excavated areas in dry season and ensure the use of equipment with low gas emissions.

3.1.8. Law governing biodiversity in Rwanda, 2021.

The purpose of this law is to conserve, manage protect and promote biological diversity. It governs conservation, management, protection and promotion of biological diversity. The law highlights about conservation, management, protection and promotion of wildlife, their parts and derivatives. Trade in specimens of species.

3.1.9. Law regulating Labour in Rwanda. No 66/2018 of 30/08/2018.

This law regulates labour in Rwanda. It applies employment relations based on employment contract between employee and employer in private and public services, apprentices, interns, self-employed person, informal sector etc.., with regards to right of salary, occupational health and safety and the right to form trade unions and employers' associations. This law provides also tight sanctions to individuals or private agencies employing children in hazardous work

3.1.10. Law N° 17/2010 of 12/05/2010 Establishing and Organizing the Real Property Valuation Profession in Rwanda.

Article 27 introduces the various valuation methods that may be applied to determine the fair Market value of property, Article 28 discusses the *Comparable Prices Method*, whereby the valuer shall compare prices by referring to the prices recently assigned to a real property that is similar or comparable to the real property subject to valuation.

Article 29 discusses the *Comparison Method*, whereby, when comparable prices are not available for land in a particular area, the valuer may use comparable prices of similarly classified land from other areas of the country. Article 30 notes that, where sufficient comparable prices are not available to determine the value of improved land, the *Replacement Cost Approach* shall be used to determine the value of improvements to land by taking real property as a reference.

Article 31 states that the valuer shall use whatever combination of the methods he/she considers best suited to determine the current market value, and the methods used shall be clearly explained in a valuation report.

The Institute of Real Property Valuers in Rwanda (IRPV) was established in 2010 pursuant to the law $N^{\circ}17/2010$ of 12/05/2010 establishing and organizing the real property valuation profession in Rwanda.

The valuation during the RAP processes has been done by locally certified valuers. In order to be recognized as a real property valuer in Rwanda, a person must be a member of the Institute. A Council for the Regulation of the Real Property Valuation Professionals in Rwanda is established as a regulatory agency. The Institute proposes regulations, guidelines and standards for valuation while the function of approval lies with the Council. A register of real property valuers is maintained by the Council who can enter or remove a real property valuer from the register of certified valuers. The Chairperson of the Council approves valuation and is equivalent to the Chief Government Valuer in other jurisdictions.

The Institute has the following responsibilities:

To analyze and find solutions to all problems related to the real property valuation profession;

To analyze and find solutions to all problems related to the conduct of real property valuers;

To exchange information related to the real property valuation profession;

To promote the real property valuation profession in Rwanda;

To prepare regulations and guidelines governing the real property valuation profession;

To prepare real property valuation standards;

To advocate for real property valuers in Rwanda and represent their interest abroad;

3.1.11. Relevant Orders

3.1.11.1. Ministerial Order N° 001/2006 of 26/09/2007 determining the Structure of Land Registers

This ministerial order determines the structure of Land Registers, and the responsibilities and functions of the District Land Bureau. The responsibilities of the land bureau include among others: (i) to implement land registration, (ii) keep land registers, (iii) monitor and approve activities pertaining to valuation of land and property and (iv) demarcate as well as approve land cadastral maps. The rural population with customary land rights is being encouraged to register their land through these institutions.

3.1.11.2. Ministerial Order N° 001/2008 of 01/04/2008 determining requirements and procedures for Land lease.

In accordance with the provision of Article 4 of the Organic Law, any person is allowed to lease private state-owned land, parastatal owned land, and private City of Kigali owned land or private District owned land.

The Article 8 of the Order stipulates that the emphyteutic lease of land is passed through a contract. The contract of emphyteutic lease is signed for public institutions by the District Land Officer of the District where the Land is located.

The length of emphyteutic lease corresponds to the one provided for by the Presidential Order N° 30/01 of 29/06/2007 determining the exact number of years of land lease in accordance with the land use.

3.1.11.3. Ministerial Order establishing the list of projects that must undergo environmental impact assessment, instructions, requirements and procedures to conduct an environmental impact assessment, 2019.

The order specifies the works, activities and projects that have to undertake an environmental impact assessment. The order highlights the list of works, activities and projects that must undergo a full environmental impact assessment before being granted authorization for their implementation.

3.1.11.4. Ministerial Order N° 002/2008 Determining Modalities of Land Registration

The Ministerial Order includes dispute resolution procedures in relation to land registration, including the use of a Cell Land Adjudication Committee (LAC). The LACs are comprised of five members, supplemented by five members of the particular village (*imidugudu*) where demarcation and adjudication is taking place. The cell executive secretary acts as the LAC secretary, although he or she has no voting rights.

Article 17 grants parties to a dispute the right to take that dispute to the LAC. Where disputes are resolved with the assistance of the LAC, the parties are bound by that agreement, and may not later raise the issue.

Article 20 provides procedures for the LAC when hearing disputes, including that the hearing is open to the public and announced eight days in advance.

3.1.11.5. Presidential Order N° 30/01 of 29/06/2007

This Order determines the exact number of the years of land leases in accordance with land categories and designated uses. Land categories referred to in this Order are: (i) private State land, (ii) private Kigali City and private District land, and (iii) individual land.

While, the Presidential Order N° 54/01 of 2006 was determining the structure, the responsibilities, the functioning and the composition of Land Committees. Article 9 of the Order gives the office of the land committee independence in the discharge of its daily technical duties. Therefore, it receives no instructions from any other organ.

3.1.11. 6. AfDB Involuntary Resettlement Policy, 2003

Policy Goal, Objectives and Guiding Principles

The primary goal of the involuntary resettlement policy is to ensure that when people must be displaced, they are treated equitably, and that they share in the benefits of the project that involves their resettlement.

The objectives of the policy are to ensure that the disruption of the livelihood of people in the project's area is minimized, ensure that the displaced persons receive resettlement assistance so as to improve their living standards, provide explicit guidance to Bank staff and to borrowers, and set up a mechanism for monitoring the performance of the resettlement programs.

Most importantly, the guiding principles stipulate that resettlement action plan (RAP) should be prepared and based on a development approach that addresses issues of the livelihood and living standards of the displaced person as well as compensation for loss of assets, using a participatory approach at all stages of project design and implementation.

Compensation at the full replacement cost for loss of lands and other assets should be paid prior to project implementation with the view to improve the former living standards, income earning capacity and production levels of the affected population. The improvement of these living standards should also apply to host communities.

In addition, the needs of disadvantaged groups (landless, female headed households, children, elderly, minority ethnic, religious and linguistic groups, etc.) must be at the Centre of the development approach.

Economic benefits and costs should be applied to determine project feasibility with regard to resettlement. The full costs of resettlement activities necessary to achieve the objectives of the project should be included in the total costs of the project. The costs of resettlement like the costs of other project activities are treated as a charge against the economic benefits; and any net benefits to resettles (as compared to the "without-project" circumstances) should be added to the benefits stream of the project.

Economic and social considerations should be taken into account in determining the requirements for compensation. Under the present policy, only displaced population having formal legal rights to land or assets and those who can prove entitlement under the country's customary laws are considered and will be fully compensated for loss of land or other assets. However, a third category

of displaced persons who have no recognizable legal right or claim to the land they are occupying in the project area will be entitled to resettlement assistance in lieu of compensation for land.

Nevertheless, at the minimum, under the Bank's policy (with no contradiction to the borrower's legislation), land, housing, and infrastructure will be provided to the adversely affected population, including indigenous groups, ethnic, religious and linguistic minorities, and pastoralists who may have usufruct rights to the land or other resources taken for the project.

The borrower will be required to prepare a full resettlement action plan (RAP) for any project that involve a significant number of people (200 or more persons) who would need to be displaced with a loss of assets, or access to assets or reduction in their livelihood. The full resettlement action plan will be released as a supplement document to the Environmental and Social Impact Assessment (ESIA) summary for Bank's financed projects involving involuntary resettlement issues.

For any project involving the resettlement of less than 200 persons, an abbreviated resettlement action plan will be released together with the environmental annex of the Bank's Appraisal Report. The full resettlement action plan and the abbreviated resettlement action plan (refer to as resettlement plan) should be posted in the Bank's Public Information Center (PIC) and the Bank's web site for public review and comments in accordance to the Bank's disclosure policy and the Bank's Environmental and Social Assessment Procedures (ESAP 2001).

Implementation Strategies

The resettlement program should be based on a development approach. Provision must be made for cultural sites and social/psychological concerns. For greater transparency and fairness, all stakeholder groups will be involved at an early stage in the project design. Community participation in operation and resettlement strategy will lead to a better development approach. The resettlement plan will be made accessible to the displaced population and relevant other stakeholders in a form, manner and language that are comprehensible to them.

Adequate assistance for transport, temporary accommodation, housing, service provision as well as training for capacity building and land ownership issues should be addressed in the resettlement action plan. Provisions should also be made for counseling and dispute settlement. The payments for

compensation should be independently monitored and accurate records kept for all transactions. A timetable, detailed budget and implementation, monitoring and evaluation arrangements are also important issues to be addressed in the plan.

3.2. National Institutional Framework

3.2.1. The Ministry of Environment (MOE)

The Ministry of Environment (MOE) was established to ensure the conservation, protection and development of the environment. MoE has the vision of protecting the environment for the safeguard of green and climate resilient Rwanda for growth of the economy. It, therefore, also oversees the environmental aspects of the water and sanitation sector and is responsible for the coordination and implementation of legislation and policies relating to the environmental and social impacts of cleaned water production and consumption.

The MoE will be responsible for developing institutional and human resources capacities in the sector of environment and natural resources and sub-sectors during the project implementation and governing resettlement arrangements through the Land Bureaus.

The Ministry of Environment will develop and disseminate the environment and climate change policies, strategies and programs through:

The development of strategies to promote partnership and enhance capacity of private sector to invest in activities of environment and climate change for sustainable economic development;

The development of laws and regulations to ensure protection of the environment and conservation of natural ecosystems;

The development of institutional and human resources capacities in environment and climate change;

To monitor and evaluate the implementation and mainstreaming of environment and climate change policies, strategies and programs across all sectors, especially productive sector;

To oversee and evaluate institutions under its supervision by providing guidance on the implementation of specific programs to be realized by the institutions under its supervision and local government.

3.2.2. Ministry of Infrastructure (MININFRA)

The Ministry of Infrastructure is the parent ministry of the Water and Sanitation Corporation (WASAC). It covers the following sectors: transport; energy; housing and human settlement; water and sanitation. The mission and purpose of the ministry of infrastructure is to ensure the sustainable development of infrastructures and contribute to economic growth with a view to enhancing the quality of life of the population including the resettled people.

3.2.3. Water and Sanitation Corporation (WASAC Ltd)

WASAC Ltd is the entity setup to manage the water and sanitation services in Rwanda and was created by the law Nº 87/03 of 16/08/2014. The company was created in the on-going government reform intended to deliver water and sanitation utility sufficiently focused to deliver new infrastructure; efficient and effective service delivery; build a strong people capability; and meet key national milestones. It is expected to reverse the status quo that includes inadequate planning and investments; inefficient and wasteful operations; inadequate institutional management focus; improve viability and autonomy; and establish a sustainable and customer-centric utility to deliver an important mandate that touches people of all walks of life. The mission of the company is providing quality, reliable and affordable water and sewerage services through continuous innovations and detailed care to customers' needs.

When the component of water treatment facility will start, WASAC Ltd as implementation Agency will play a critical technical role but also in the implementation of ESMP and RAP as well as conditions of ESIA approval to be issued by Rwanda Development Board

3.2.4. Rwanda Environment Management Authority (REMA)

REMA was established in 2004 to act as the implementation agency of environment related policies and laws in Rwanda. Under supervision of the Ministry of Environment, from the Law n°63/2013 of 27/08/2013 determining the mission, organization and functioning of REMA, it has the legal mandate for national environmental protection, conservation, promotion and overall management, including advisory to the government on all matters pertinent to the environment and climate change. Key responsibilities of REMA are as follows:

Advice the Government on policies, strategies and legislation related to the management of the environment as well as the implementation of environment related international conventions, whenever deemed necessary;

Conduct through inspection of environmental management in order to prepare a report on the status of environment in Rwanda that shall be published every two (2) years;

Put in place measures designed to prevent climate change and cope with its impacts;

Conduct studies, research, investigations and other relevant activities in the field of environment including RAP and publish the findings;

Closely monitor and assess development programs to ensure compliance with the laws on environment during their preparation and implementation;

Participate in the preparation of activities strategies designed to prevent risks and other phenomena which may cause environmental degradation and propose remedial measures;

Provide, where it is necessary, advice and technical support to individuals or entities engaged in natural resources management and environmental conservation;

Prepare, publish and disseminate education materials relating to guidelines and laws relating to environmental management and protection and reduce environmental degradation risks;

Monitor and supervise impact assessment, environmental audit, strategic environmental assessment and any other environmental study including RAP. REMA may authorize in writing, any other person to analyze and approve these studies. The ESIA review has been delegated to Rwanda Development Board.

3.2.5. Rwanda Water Resources Board (RWB)

The Rwanda Water Resources Board was established under the Law N°06/2017 of 03/02/2017 establishing the Rwanda Water and Forest Authority and determining its mission, organization and functioning. The Authority has the following main mission:

To implement policies, laws, strategies and Government decisions related to the management of natural water resources;

To advise Government, monitor and coordinate the implementation of strategies related to the management of natural water resources;

To assist public and private institutions in charge of management of natural water resources in a bid to fight erosion;

To prepare appropriate management and support districts in the management of natural water resources;

Assist in the establishment of standards and regulations relating to the management of natural water resources.

3.2.6. National Land Authority (NLA)

The National Land Authority is responsible for putting in place and operationalizing an efficient system of land administration, use and management that secures land ownership, promotes investment in land for socio-economic development and poverty reduction. The responsibilities of NLA are:

- Put in place mechanisms which procure security of land tenure for the promotion of investments in land;
- Promote proper allocation of land, and proper use of land resources, according to their potential;
- Avoid the splitting up of plots, and to promote their regrouping in order to bring about optimum production;
- ♣ Establish of mechanisms which facilitate an optimum exploitation of land, targeting the social-economic development of the country;
- ♣ The land management would be oriented towards a more profitable and sustainable production, by making good choices among methods of land development;
- ♣ Develop methods that protect land resources from various types of land degradation;
- Establish institutional frameworks which enable land to become more valuable in the economy or at the market;
- Promote research as well as the education of the public on all aspects concerning land tenure,
 management, and transactions;
- ♣ Establish order and discipline in the allocation of land, as well as in land transactions in order to control the pressure on land, inappropriate development, speculation and trafficking of land;

- ♣ Involve and sensitize the public at all levels in order to ensure protection of the environment and good management of the land;
- Ensure the sustainable use of wetlands.

3.2.7. Rwanda Development Board (RDB)

The Law No 46/2013 of 16/06/2013 establishing Rwanda Development Board (RDB) has determined also its mission, organization and functioning. One of the important missions of RDB is fast-tracking development activities and facilitates the Government and Private Sector to undertake an active role. This a one stop institution bringing together several government bodies in Rwanda focused at promoting investment in Rwanda. Initially the responsibility for reviewing and approving EIA reports was entrusted to REMA, this duty has now been transferred to the newly created Rwanda Development Board (RDB) where a department of EIA has been created and tasked with review and approvals of all ESIA reports for proposed projects and programs before they are approved for implementation.

Concerning Resettlement Action Plan (RAP), the Ministry of Infrastructures (MININFRA) will ensure that all laws, policies and environmental and Social Standards are adhered to, in collaboration with the Rwanda Development Board (RDB) and Rwanda Environmental Management Authority (REMA).

3.2.8. District Level Implementation

District Authorities: the district authorities in the Project Area are the coordinating bodies for resettlement activities at the district level. The district-level departments provide a review and monitoring role, and provide political and administrative support in the implementation of the RAP.

District Land Bureau: The District Land Bureau (DLB) which is in District One Stop Center (DOSC) is the executive body responsible for ensuring activities undertaken complies with National and District level Land Use Master Plans. The responsibilities of the land bureau include among others to implement land registration, keep land registers, monitor and approve activities pertaining to valuation of land and property, and demarcate and approve land cadastral maps.

It will be used in this RAP implementation as much as possible in order to ensure that communities are consulted, and that community is present at an early stage

The District Land Bureau will play a major role in RAP implementation by:

- Establishing Local Resettlement Committees at Sector/ Cell level;
- Clarifying the policies and operational guidelines of Local Resettlement Committees;
- ♣ Coordinating and supervising RAP implementation by Local Resettlement Committees;
- Assessing the validity of land tenure rights of affected persons, assisting in titling, and providing the land use permit for any new project activities;
- Ensuring effective grievance mechanisms are in place.

District Land Commission: this is a consultative/ advisory institution which has the mandate to monitor and evaluate work done by the District Land Bureau. As an advisory body, the District Land Commission is in charge of establishing Sector/Cell Land Committees.

Land Adjudication Committees: land Adjudication Committees (LACs) are a traditional legal institution implemented only when there is conflict over land ownership. Only when disputes are referred to them will they have a role to play, in conflict and dispute resolution. A key role is the management of land ownership conflicts, part of which involves helping vulnerable people to appeal in case of grievances.

Sector / Cell Land Committees: Sector and Cell level Land Committees liaise with the District Land Bureaus and play a role in public awareness rising, including facilitating extensive consultation with the affected people. They also approve land use changes at Sector and Cell level and ensure alignment with the Land Use Master Plans. They provide information on current local land use and land tenure, and ensure project grievance mechanisms meet legislative requirements.

Local Resettlement Committees: a number of Local Resettlement Committees (LRCs) will be also setup by the District Land Bureaus at the sector, cell and village levels as appropriate. These are made up of a mix of district experts and community representatives. They will include sector land managers and agronomists, Cell executive secretaries, village leader, as well as at least three projectaffected representatives from each affected village; including at least one female and one potentially vulnerable person.

The LRCs will participate in the compensation, valuation and sign-off process, and play a role in

reviewing grievances at the village level. They will be involved in participatory monitoring of the Project. They also play a key role in identifying potentially vulnerable households.

3.3. Roles and responsibilities of involved Institutions

An appropriate institutional framework for all concerned parties including the project Developer is important for successful of water supply system project and land acquisition and compensation. It is important to ensure timely establishment and effective functioning of appropriate institutions/organizations mandated to plan and implement the project, including land acquisition and compensation.

Obviously, the overall coordination of the implementation of the RAP once finished and approved will be dedicated to WASAC which oversees all resettlement planning and coordinates all issues relating to the compensation. WASAC will do this in close collaboration with local authorities at all levels falling within the project area. The roles and responsibilities of various actors are summarized in table below:

Table 2: Roles and responsibilities of various institutions

Institution	Roles and responsibilities	
MINALOC/Ngoma District	Ownership of the project and contribute to the smooth running of the	
	all phases WSS Project;	
	Participate in consultations and awareness campaigns among	
	population;	
	In collaboration with the Consultant, accomplish valuation processes of	
	affected assets and provide needed documents to the project affected	
	persons;	
	Coordinate the project's activities in harmony with the other existing	
	projects executed in the District;	
	Highlight the socio-economic advantages of the project and indicate to	
	the population the areas which will be utilized for water infrastructures	
	installation (Water treatment plant, Reservoirs, Sources to manage	
	etc);	
	Avail water and sanitation permanent staff at the District level that will	
	collaborate with others in project implementation.	

WASAC Ltd	Conduct tender processes for the recruitment of Contractor and		
	Consultant Companies in relation with Ngoma WSS project		
	implementation;		
	Payment of contracts dedicated to the implementation and supervision		
	of the project;		
	Daily monitoring of the project's implementation;		
	Payment of expropriation/compensation fees for the affected assets;		
	Oversee the implementation of RAP and enhance the capacity of the		
	PAPs;		
	Give support to the Consultants for collection of all information		
	regarding the production of Resettlement Action Plan (RAP) and ESIA		
	reports;		
	Overall monitoring and evaluation of resettlement implementation (i.e.,		
Consultant	In collaboration with WASAC Ltd and Ngoma District, conduct		
	consultations and awareness campaigns for the presentation and		
	impregnation of the project to local population;		
	With support from the District and WASAC Ltd, accomplish valuation		
	processes of affected assets, produce valuation forms and collect all		
	information regarding the production of RAP and ESIA reports;		
	With support from the District and WASAC Ltd participate in the election		
	of Grievance Redressing Committees and ensure their training;		
	Elaborate the RAP and ESIA documents and their submission to the		
	Client (WASAC Ltd);		
	Contribution to the implementation and monitoring of RAP in		
	collaboration with WASAC Ltd.		

	Owning the project and allow the water pipeline route passing through		
Project Affected	their own lands without land compensation;		
Persons (PAPs)	Accomplish/execute excavation works where the water pipeline will pass		
	and be paid for works done;		
	Accept fair compensation for their affected lands and assets;		
	Take care and participate in the maintenance of placed water		
	infrastructures in their living administrative entities;		
	Pay freely all water bills in order to facilitate repair and maintenance of		
	water infrastructures;		
	Accept to offer their lands to be utilized by the project while they are		
	waiting compensation procedures;		
	Constitute required portfolio for the payment of affected lands and other		
	assets (land title, bank account, identification information etc).		
	Project Affected People are those who will be directly impacted by the		
	project involuntary resettlement activities and hence they are considered		
	as the main stakeholder at local level. Their insight in the composition of		
REMA	Within this Ngoma water supply system project, REMA will have a		
	dedicated environmental and Social Management responsibility directed		
	to the environmental and social risks related to project implementation.		
MININFRA	MININFRA will also take the lead in project preparation and in the		
	planning and implementation of the project working in concert with		
	WASAC and other Institutions. The ministry will also ensure that all laws,		
	policies and environmental and Social Standards are adhered to, in		
	collaboration with the RDB and REMA.		

Ministry of Finance and	MINECOFIN will be responsible for timely disbursing of the compensation		
Economic Planning	funds to the respective commercial banks. In the case that PAPs own		
(MINECOFIN)	commercial bank accounts, the money will be transferred directly to		
	individual bank accounts but if PAPs have accounts with SACCOs then the		
	commercial banks will transfer to the SACCO accounts.		
Ministry of Environment	The MoE will be responsible for developing institutional and human		
(MoE)	resources capacities in the sector of environment and natural resources		
	during the implementation and governing resettlement arrangements		
	through the Land Bureaus.		
Rwanda Land Management	The key responsibility of RLMA is registering land, issuing and keeping		
and use Authority	land authentic deeds and any other information relating to land. RLMA		
(RLMA)	will ensure that PAPs have timely access to their land documents to		
	enable them receive their compensation packages.		
National Land Commission	The main responsibilities of the National Land Commission are		
(NLC)	monitoring the implementation of land administration and land use		
	management procedures and guidelines. One of its specific roles is to		
	monitor and approve expropriation of land repossessed in public		
	interest to accommodate activities with a national character. There are		
	also land Commissions and land Committees at District, Sector and Cell		
	levels. The National Land Commission will also play a key role in grievance		
	resolution. These committees will receive support to handle any		
	grievances arising from expropriation and resettlement processes.		

Council for Regulation of the The valuation during the RAP processes will be carried out by locally certified valuers. In order to be recognized as a real property valuer in **Real Property Valuation** Rwanda, a person must be a member of the Institute. A Council for the Regulation of the Real Property Valuation Professionals in Rwanda is established as a regulatory agency. The Institute proposes regulations, guidelines and standards for valuation while the function of approval lies with the Council. A register of real property valuers is maintained by the Council who can enter or remove a real property valuer from the register District Land Commission and Approving land use changes at District/ Sector/ Cell level and ensuring Sector/ Cell Land Committees alignment with the Land Use Master Plan; Approving land expropriation; Provision of information on current land use, land tenure and PAPs; Playing a role in ensuring effective Grievance Redressing Mechanisms are in place that meets legislative requirements (the Resettlement and Compensation Committees will be responsible for ensuring that these mechanisms meet the requirements of the RAP). The DLOs will be responsible for ensuring activities undertaken comply with the National and District level Land Use Master Plans. They will assess the validity of land tenure rights of affected persons and eventually provide the land use permit for the new activity proposed by the project. In addition, they will be responsible for ensuring that effective and independent grievance mechanisms are in place. They will also be used

District Executive	As per the expropriation law, at the District level, expropriation shall be		
Committees (DEC)	carried out by the District Executive Committees after considering the		
	decision of the Land Commission at the District level.		
	As such it's the District Executive Committee that will approve		
	expropriation of the persons identified during the RAP process. The		
	District has an Environmental and Social Management Specialist who		
	ensure compliance with AfDB regulations in the implementation of		
Local Councils (LC)	The Local Councils will play the following roles: Mobilize the general		
	community and project Affected Persons; Witness the process of land		
	survey, census of affected property and persons; Verify Project Affected		
	Persons; Grievance resolution and Monitoring of RAP activities.		
Non-Governmental	NGOs & CSOs will be involved in the implementation process of the		
Organizations and Civil	Resettlement Action Plan. Activities they can be involved in may include		
Society Organizations.	witnessing the RAP process, training of PAPs in financial literacy and GRC		
(NGOs & CSOs)	in their roles, overseeing of livelihood restoration programs, monitoring		
	and evaluation of the RAP activities etc.		

CHAPTER IV: SOCIOECONOMIC PROFILE OF NGOMA DISTRICT

4.1. Population and demography

The total population of Ngoma District is 338,562 inhabitants among which 162,388 are males and 176,174 are females (NISR, 2012). The Sectors of Rukumberi and Rurenge are the most populated with 34,021 and 34,312 inhabitants respectively while the Sectors of Karambo and Gashanda are less populated; with 17,948 and 19,333 inhabitants respectively. While the national average annual population growth rate was 3 %, during the period (2018-2020), it was 4.3 % in Eastern Province and 3.7 % in Ngoma District. The sex composition of the Ngoma District population indicates that Females are predominant in almost all sectors of the district except in Kibungo, Mutenderi and Remera.

4.2. Population settlements

According to EICV5 88.1 % of the population in Ngoma District live in planned settlements (Imidugudu) compared to 49.2 % at national Level. Based on these figures it can be seen that there is a drop in the percentage of the population living in Imidugudu and it is a paradox and difficult to comprehend since one would have expected a rise in the population living in Imidugudu as it has always been since the launch of Imidugudu settlements in the District. EICV5 also reported the figure of 0.9 % as the percentage of the population living in unplanned settlements compared to 8.7 % at National level.

4.3. Health

According to EICV4, 78.1 % of the Households in Ngoma District have at least one member with health insurance. The fertility rate in Ngoma Districts is 4.6 % which is very high by all standards and yet only the current use of contraceptives is 57.2 % among the women who wish to use any method of contraceptives and 47.2 % among the women who wish to use modern methods of contraceptives.

In fact, at present family planning in Ngoma District stands at 57.2 % this is rather low if we have to attain a population growth rate of less than 2 % by 2020. Early childhood mortality rate in children under 5 years is 75 children out of 1000 which is also high.

The percentage of people accessing health facilities is also very low, 58 % of the Households surveyed

say they don't visit health faculties when they are sick due to lack of money while 31.7 % say that they don't visit health facilities because the facilities are too far.

Prevalence of malaria among children is 7.7 % which is among the highest in the country, prevalence of HIV in the District is 1.7 % which is encouraging given that in 2010 when EICV 3 was published AIDS prevalence nationwide was 3 %, we have to continue working hard, however, so that we drive the HIV prevalence further down. With all these issues, there is a need for the construction of health infrastructures and to conduct sensitization sessions where possible to alleviate health issues mentioned above.

4.4. Education

Ngoma District has 77 primary schools with 933 classrooms and a classroom/pupils ration of 92 pupils with enrolment at the beginning of the school calendar is 43,573 (50.66 % for boys and 42,433 (49, 34 %) for girls the total being 86,006 pupils. The dropout rates for the same period are 2.9 % for boys and 3.1 percent for girls.

In the secondary section Ngoma has 531 class rooms with a total population of 16,368 students, 7,945 boys and 8,423 girls in both lower and upper secondary sections and a classroom/student ratio of 31 students per class. 4,737 boys (49 %) and 4,996 girls (51 %) were enrolled at the beginning of the school calendar in the lower secondary section while 3,208 boys (48 %) and 3,427 girls (52 %) were also enrolled in upper secondary section the same period. The school dropout rates so far for 2017 are 7 % for boys and 5 % for girls, a rise in dropout rates compared to 2016. In 2016, the school dropout rates were 2 % for boys and 3 % for girls. Although the dropout rates are not alarming, we should not have any child dropping out of schools. More efforts will be made to ensure that no pupil drops out. The classroom student ration is also good since we have only 31 students per classroom (Socioeconomic survey, 2020).

4.5. Energy

According to EICV5 18.1 % of the households in Ngoma District use electricity distributor as primary source of lighting compared to 27.1 % at national level. This is to say that most of the district households use other sources of energy for lighting such as lantern (2.2 % in EICV5) compared to 3.7 % at national level.

The main sources of energy for lighting used by both female and male-headed households in Ngoma District is kerosene with 80.3 % for female headed households compared to 76.2 % for male headed ones. Although the number of households using electricity for lighting has increased since 2010 it is still very low by all standards.

Ngoma District is still experiencing limited access to electricity as a main source of energy for lighting and most of the households (76.1 %) use the lantern as a main source of energy for lighting. The smokes from paraffin burnt in the lanterns pollute environment and are harmful to human health especially for children.

Limited access to energy for lighting is also a limiting factor to economic growth especially industrial activities and other diversified income generating activities essential to improve the living conditions of the population in the District. Ngoma District has the lowest forest cover rate (3.2 %) in the country. Over exploitation of forest resources is due to very high reliance over biomass energy. According to EICV3, 97.2 % of households utilise biomass energy for cooking. In addition to this, wood remains the widely material used in construction of houses, 40.7 % of houses have their walls made of tree poles and mud (*Socioeconomic survey*, 2020).

4.6. Information and Communication Technology (ICT)

According to EICV5 report, 2 % of population in Ngoma District own computers compared to 3.3 % report at national level. Also, 96.9 % of the population in Ngoma doesn't know how to use a computer according to EICV4 and only 3.1percent of the population are confident about how to use a computer. As regards the use of internet, only 0.6 % of the population regularly use it, 0.4 % often use internet compared to 0.5 % at National level while 29.1 % don't use internet at all compared to 23.5 % at national level.

The District shall have to redouble its efforts in the IT sector to help the country make a breakthrough

and realize its dream in information technology. The following table compares ownership of ICT devices in Ngoma District between 2010 and 2015 when EICV3, EICV4 and EICV 5 were respectively produced.

Table 3: ICT devices in Ngoma District

ICT devices	EICV 3	EICV 4	EICV5
Mobile phone	45 %	60 %	64.3 %
Computer	0.6 %	1 %	2 %
Radio	69 5	61.5 %	73.9 %
TV set	2.4 %	2.2 %	5.6 %

Source: Socioeconomic survey (2020)

The statistics in the table above indicate a remarkable increase in the use of mobile phones, the use of mobile phones with different applications has actually revolutionized communication and eased transactions between individuals thus facilitating doing business.

4.7. Transport sector

According to EICV5 97.1 % of the population access the nearest road in 19 minutes or less compared to 93.4 % reported at national level. In terms of accessibility of public transport i.e. the shortest possible distance walked to get public means of transport (0-19 minutes) 97.1 % of the households are able to access public transport services as per EICV5 compared to 93.4 % reported by EICV5.

Regarding ownership of means of transport, EICV5 reports that 27.7 % of the households in Ngoma District own bicycles compared to 13.3 % to national level and 0.8 % of the households own motorcycles as per EICV5 compared to 1.0 % reported at national level. Ngoma District is nationally known as one of the few districts in the country where women use bicycles as means of transport.

4.8. Services sector

In Ngoma District, two components constitute the service sector, mainly commercial and banking services very limited and concentrated in commercial centres. The District has nine (9) upgraded trading centres with modern markets found in Rukumberi, Jarama, Sake, Rukira, Mutenderi, Gashanda, Karembo, Remera and Kibungo sectors.

Ngoma has also 3 selling points located in Remera sector, Rebezo in Kibungo sector and Kugiturusu in Kazo sector. There is only one hotel recently opened at the Catholic parish in Ngoma town and another yet to be completed also in Ngoma town.

With regard to banking services, 45.9 % of the households in Ngoma have at least one member with a bank account. This is a remarkable increase from 37.8 which was recorded in 2010. The District possesses a number of financial institutions such as "Banque Populaire" with branches in Kibungo Sector and sub-branches in Rukira, Mutenderi and Sake. There is also GT bank, Bank of Kigali and Urwego Opportunity Bank all based in Kibungo Sector. There are also Micro finance institutions and 14 Umurenge SACCOs.

Apart from Umurenge SACCOs, there are other credit saving cooperative societies like Umwalimu SACCO and CSS Zigama all based in Kibungo Sector. It is hoped that as financial literacy in the District increases the number of financial institutions will also increase (Socioeconomic survey, 2020).

4.9. Agriculture development

According to EICV4, 91.6 % of the women and 93 % of the men are employed in agriculture; this gives 92.3 % on the average of the people employed in the agricultural sector. The rest of the population are either employed in the service or informal sectors.

The main food crops grown in Ngoma District in the order of their importance are: dry beans (96.2 %), cooking banana (92.1 %), maize (90 %), sweet potatoes (84.4 %) and Cassava (76.8 %). The main cash crops are coffee, sunflower, and pepper.

Despite a number of challenges like late arrival of inputs and adverse weather, visible strides have been made in agriculture. According to Seasonal Agricultural Survey – 2017, the yield of major crops in Ngoma is as follows: maize with 1,223 kg/Ha, sorghum with 453 kg/Ha, rice with 2,690 kg/Ha, cassava with 1,888 kg/Ha, cooking bananas with 4,674 kg/Ha, beer bananas with 4,988 kg/ Ha and

beans with 647 kg/Ha. The strategy in the agricultural sector shall be to continue enhancing ways to improve the yield and total production per hectare with a view to helping the country realize its targets and make the citizens of Ngoma self-sufficient in food production and production for the market.

Table 4: Ngoma priority crops and productivity

No	Crops	Productivity (T/ha) in 2019
1	Maize	3-4.2
2	Rice	5.5-6.5
3	Beans	1-1.2
4	Soja	1-1.2
5	Cassava	25-26

4.10. Small industries

The industrial sector is very small and needs a lot of support and stimulus especially in the area of agro-processing where the District has higher comparative advantage over the neighbouring Districts.

There are only three (3) small processing plants for bananas and pineapples as well as nine (9) coffee washing stations. It is clear that these are not enough, so that the DDS being elaborated has put in place strategies for the establishment of medium agro processing industries for palm oil, pineapples, bananas, tomatoes and fertilizers to improve the current status (Socioeconomic survey, 2020).

CHAPTER V: SOCIO-ECONOMICAL CHARACTERISTICS OF HOUSEHOLDS IN PROJECT AREA

5.1. Gender status

The results obtained from the survey of 383 sampled heads of households have shown that there

were more male headed (58.6 %) than female headed households (41.4 %) in area surveyed. Moreover, the results further indicated that female headed households were on the increase especially in Kibungo and Gashanda Sectors. Females headed households are the sole providers of the all family's needs (foods, school fees, health care, clothes etc...), they are working very hard and suffer all the time. Fair compensation of their affected assets as well as their involvement in project's activities will greatly alleviate their suffering and increase family income.

Among the households sampled, the average household size ranged between 4.0 persons in Gashanda and 4.4 persons in Rukira. Nevertheless, a large percentage of households had more than 5 persons. Household size does not vary significantly among the fourteen survey sectors, the median value was also four (4), meaning that 50 % of households have 4 or 5 members.

5.2. Marital status

The results from socioeconomic survey of sampled households indicated that 68.2 % (261) of respondents were married, out of which 13 % (50) were single. Moreover, about 6 % (25) of respondents were divorced and 12.2 % (47) were widowed. Concerning the age, almost 77 % of the respondents were below the age of 34, and the numbers of young person will continue to grow rapidly during the next 5-10 years.

5.3. Education and literacy

The socioeconomic survey was interested in both the literacy levels of the household members as well as the educational attainment of the head of household. The rate of acceptance and adoption of development programmes aimed at improvement health and sanitation status of the people will largely depend on their education status. Furthermore, the literacy level of a population gives a good indication that this population has the potentiality to participate in socio-economic development.

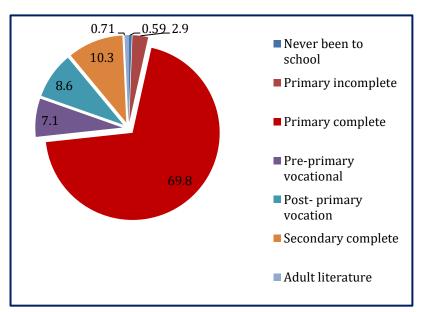


Figure 2: Education and literacy of households

The results obtained have indicated that heads of households aged 58.6 in average have successfully completed the primary school cycle. The majority (69.8 %) of the respondents had primary education while 7.1 % had no formal education (Pre-primary vocational) and only 10.3 % of the respondents had only secondary education.

Only 0.59 % of the respondents have never been to school, while about 2.90 % have not completed their primary education. Finally, 8.6 % of the respondents had a post primary vocational training education. In survey zone, only 0.71 % (3) of respondents has completed adult literacy.

5.4. Employment/Occupation

As any other rural area in Rwanda or elsewhere in developing countries, the majority of population (79.4 %) is engaged in subsistence farming. The number of people depending on agriculture may increase to 85 % if we include those employed in agricultural wage labour.

The off-farm opportunities are very limited as most of them require a certain level of post primary education or having participated in vocational training programs. Therefore, only 3.13 % of populations have ventured in self-employment outside the farm, and only 3.13 % hold regular jobs as government civil servants in education, local administration, health, and others.

It is also important to note that the low level of literacy is likely to affect negatively agricultural productivity through low levels of agricultural technologies and adoptions such as the proper use of organic manure and other chemical fertilizers, and the application of pesticides.

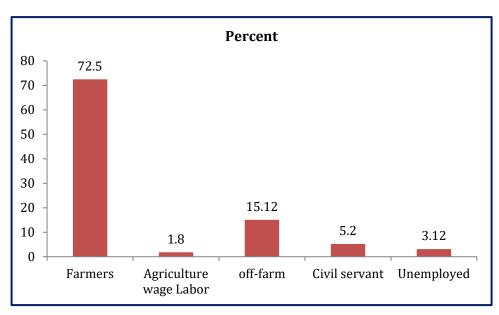


Figure 3: Primary occupations of the respondents' households

Agriculture is still considered as the major employer of Ngoma population. The majority of farmers (72.50 %) in the household survey reported cultivating crops, and more than one quarter (28 %) reported raising animals. The most common crops planted are maize, rice, beans, soja, banana, cassava and beans, and the most common animals raised are goats, cattle, and chicken. Additionally, because of the fluctuating nature of the crop yield, respondents rely on additional sources of income to meet household needs.

Surprisingly, only 15.12 % of respondents have declared to be involved in off –farm. About 2.26 % are employees in "others" category that includes among others: help in construction, security or guards, working in small local pubs, and most of them work on part time basis and they can't meet their livelihoods without supplements from farming (Socioeconomic survey, 2020).

5.5. Ownership of a house

In the surveyed area, the table below has shown that a large majority of respondents (97.7 %) had

their own houses and very few of them were having either rental houses or they were living with the relatives.

Table 5: Ownership of a house among households

House	Distribution of respondents		
ownership	Frequency	Percentage	
Own	374	97.7	
Rental	7	1.8	
Others	2	0.5	
Total	383	100	

As conclusion, the housing as a basic need of human beings has been met in case of most of the respondents living in the Project zone.

5.6. Characteristics of houses utilized by households

Status of houses utilized by surveyed households is relatively good. Concerning the wall materials of the house, over 40.3 % of these have mud floors with covered cement compared to 30.3 % at national level. In a similar trend, the roofing materials of the surveyed households have metal sheets compared to 67.3 % at national level. Moreover, 61.5 % of the surveyed households have tree trunks with muds compared to 23.1 % at national level and 6.7 % of surveyed households have tree trunks with muds and cement compared to 14.1 % at national level.

For roofing materials of the dwelling, 95.7 % of recorded houses have metal sheets while for floor materials of the dwelling, 72.1 % of recorded houses have beaten earth compared to 68.2 % at national level, 17.6 % of recorded houses have cement compared to 25.8 % at national level.

5.7. Household Assets

Asset ownership is an important indicator of wealth and is a useful proxy for characterizing livelihood security of households. Evidence has shown that access to assets affects the livelihoods of people. The table below depicts the different items of assets belonging to surveyed households in the project area. With the exception of mobile phone owned by 87.9 % of the majority of households, key assets

such as bicycle, wooden chair and sewing machines all owned by significantly higher percentage of households in the project area.

Moreover, 73.9 % of households possess a radio compared to 73.9 % at national level. As far as ownership of means of transportation is concerned, more than half of the respondents (53.8 %) own a bicycle and 2.60 % own a motorcycle. Furthermore, respondents possessed a range of electronic materials, including radios (73.9) and television sets (1.7 %).

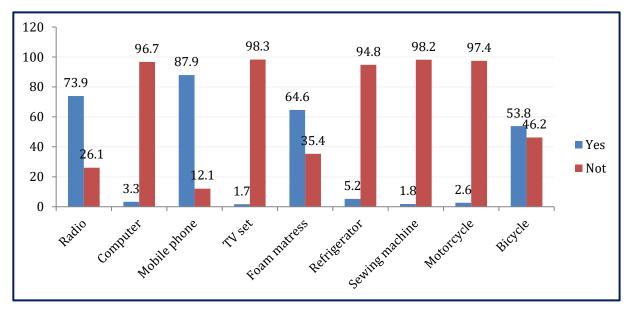


Figure 4: Percentage of household assets

5.8. Sources of revenues for households

In the socioeconomic survey, one household income was calculated for all economically active household members. The results have shown that the majority of surveyed households have mentioned several sources of revenue for one economically active household member. Among them, 299 households have at least two economically active household members; 61 households have up to three economically active household members; 23 households have up to four economically active members; and ten households have up to five economically active household members.

The table below clearly shows that the majority of all economically active household members sampled cultivates their own crops (60.5 %) and has their own livestock (12.27). Some were government employees (5.48 %) and privately employed persons (2.4 %) were also included

(Socioeconomic survey, 2020).

The self-employed, who include shop and other business owners accounted for 9.4 % of the respondents. Only single cases were seasonal workers or paid farm labourers.

Table 6: Sources of households' income

Sources of income	Frequency	Percent
Own agriculture	230	60.05
Own livestock breeding animal products	47	12.27
Civil employment	21	5.48
Self-employment	36	9.40
Private employment	19	4.96
Labour paid	14	3.66
Occasional jobs	16	4.18
Total	383	100

Household income was estimated on the basis of revenue from the sale of crops, livestock and other farming products, and the other paid economic activities that have been mentioned. The annual household income for 383 respondents varies between 350,000 RwF and 650.00 RwF with an average of 351,697 RwF (median 425,000 RwF). Dividing the household income by all household members, the average annual per capita income is 87,924 RwF (median 120,000 RwF).

5.9. Expenditures for households

The figure below shows the statistics of expenditures for surveyed households on an annual basis.

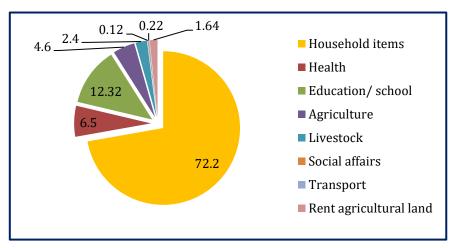


Figure 5: Annual expenditures for surveyed households

Overall, households spend between 280,000 Rwf and 400,000 Rwf a year. The average amount is 340,000 RwF per year. This is much less than the figures given for household income. Dividing the expenditure figures by all household members, the average annual per capita expenditure is 76,500 RwF.

5.10. Land tenure system-status and constraints

The National Land Law 2021, in its Article 3 reaffirms that the State has absolute supreme power to manage all lands situated in its national territorial boundaries which it exercises in the general interest with a view to ensuring rational economic and social development in accordance with laws.

Nevertheless, concerning land tenure, the Law provides two types of formal land tenure: full ownership/ freehold and long term leasehold. Subsequently, this Land Law recognizes existing rights, whether written or unwritten, under both civil law and customary practices through new national land tenure arrangements.

In its Article 7 the law formalizes land ownership, especially for those acquired through customary means. In such cases, most of the populations in rural zones of Ngoma District with customary/indigenous land rights have been encouraged to register their land through decentralized District Land Bureau, Sector and Cell Land Committees.

It is obvious that for the implementation of Sake Water Supply System Project (Phases I & II), individual/private or public lands are being acquired, after fair compensation, for construction of

main water infrastructures and several superficies of crops and trees are destroyed for water pipeline network installation.

Therefore, WASAC and project managers have applied the Article 2 of the Law N° 32/2015 relating to expropriation/compensation in the case of public interest, which defines expropriation in the public interest as, an act based on power of Government, public institutions and local administrative entities with legal personality to remove a person from his/her property in the public interest after fair compensation.

As prerequisite to expropriation/compensation final process, valuation exercises for lands to be acquired by the project or crops and trees to be destroyed during water pipeline network installation have been well conducted, without any constraint from the owners of compensated assets or public properties managers. Up today, the execution of project's activities is done in conformity with national Laws aforementioned without constraints.

The severe limitation faced by population in Ngoma District is land scarcity which is aggravated by the fact that most farms have multiple, scattered plots, many of them tiny. In reality, the high density of population reaching 393 persons per sq.km exerts pressure on natural resources such as land, at the extent that the predominant subsistence agriculture is practiced on small sized land: 23.9 % of the households cultivate on less than 0.3 ha, 47.4 % of households cultivate on the lands equivalent between 0.3 and 0.9 ha, and only 3.2 % cultivate on 3 ha and above (Ngoma DDS, 2018-2024 & EICV3).

5.11. Risks and Livelihood vulnerabilities

In all Sectors of Ngoma District, the lack of enough land for agriculture combined with traditional techniques utilized in land cultivation has as serious consequence: low production and productivity, leading to high risk of malnutrition and poorest leaving conditions. For example, based on cultivated and harvested areas during Season A 2020, the production of beans was 579 Kg/hectare, 3,605 for paddy rice, 1,982 for maize and 12,960 Kg/hectare for bananas.

In Ngoma District, the average annual per capita income is 87,924 RwF (median 120,000 RwF) and the average annual per capita expenditure is 76,500 RwF. Therefore, the surplus balance between average annual per capita income and average annual per capita expenditure is very minimal, to such

an extent that there is a high risk the families may fall into the inability to provide for the basic needs of members (lack of school fees, shortage of food leading to malnutrition, lack or insufficient health care etc....).

The problem of water availability has been reported in all Sectors of Ngoma District. The existing water supply systems cannot meet the demand due to the rapid growing population, insufficient water production and a large volume of water leakages causing intermittent water supply. Moreover, the deterioration of water sources is making an adverse impact on water production due to high turbidity, at an extent that 28.1 % of households still drink water surface from rivers or lakes, 3 % drink water from unprotected springs and 1.4 % use water from unprotected well.

The main consequence and vulnerability identified following the serious problem of poor water supply and sanitary conditions is the increasing of diseases such as diarrhoea, intestinal parasites, elephantiasis, typhoid, scabies, skin eczema due to lack of hygiene among people and livestock (Socioeconomic survey, 2020).

In Ngoma District, the percentage of people accessing health facilities is low, 58 % of the households surveyed say they don't visit health faculties when they are sick due to lack of money while 31.7 % say that they don't visit health facilities because the facilities are too far. Consequently, mortality rate increases; early childhood mortality rate in children under 5 years is 75 children out of 1000 which is high ((District Development Strategy, 2018-2024).

5.12. Socioeconomic opportunities

- 1. Ngoma District plans to develop industries that will be used to process the raw material from agricultural activities so as to achieve the agriculture value chain. Industries to be built will be mostly based on: rice, banana, pineapple, milk and palm oil processing industries as well as fertilizer making industry.
- **2.** Concerning tourism development, the District will construct: (i) modern beaches along different available lake shores, (ii) development of waterway transportation, (iii) rehabilitation of Lake Sake Road Belt, and (iv) construction of Gisaka Museum.

- **3.** Develop eco-tourism activities in Mugesera-Ruvubu wetlands complex, harboring a rich biodiversity including the Rusumo Falls tourist site.
- **4.** Fish farming development in lakes Bugesera, Bilira, Sake and wetlands areas all along Akagera River, in order to harvest a fish yield of 20,000 tons per year.
- **5.** Establish processing units of fruits (passion fruits, pineapple, avocados and Japanese plums), which can promote off-farm employment and increase value addition.
- **6.** Establish a paper factory from the large quantity of papyrus, which will provide employment for the population, but also manufactured products (i.e. paper, card board and ceiling).
- **7.** Ngoma District is geographically located in infrastructure zone: the railway line will pass through the District and provide employment for the population.

CHAPTER VI: CONSULTATIONS AND AWARENESS CAMPAIGNS ON THE SAKE WSS PROJECT

Different consultations with local administrative authorities and awareness campaigns among local population were conducted at Cell levels in Ngoma District by representatives from WASAC Ltd and the Consultant team in charge of RAP elaboration.

The consultation and awareness meetings were held from 13th to 16th September 2022 in Ngoma District, precisely in the following administration entities: (i) Gafunzo, Rukoma, Nkanga and Kibonde Cells of Sake Sector, (ii) Nyagasozi Cell of Zaza Sector, (iii) Karama Cell of Kazo Sector, (iv) Akaziba Cell of Karembo Sector and Bugera Cell of Remera Sector.

In every consultation and awareness meeting, the following five key points were presented and fruitful exchange conducted between the local administrative authorities, resident population and delegates aligned by WASAC and the Consultant:

- ♣ Brief presentation of the Sake Water Supply System: its components and advantages to beneficiaries;
- ♣ Inform local population, especially Project Affected Persons (PAPs) about compensation processes and modalities of payment;
- Constitution of required portfolio for the payment of compensation values for the affected lands and other assets (land title, bank account, identification information etc...);
- ♣ Raising an agreement upon the contribution of decentralized administration and local population in the successful implementation of the project;
- ♣ Election and set up Grievance Redressing committees (GRC) for help in solving raised complaints from PAPs
- Any other business.

6.1. Presentation of the Sake Supply System project and its components and advantages

The representative of WASAC Ltd in charge of awareness and compensation, Madame Umutoni Angele has briefly informed the local population about the project, its components and advantages dedicated to local people and at the country level as well.

Concerning the components of the project, the main infrastructures to be constructed include: the intake, water treatment plant, water stocking reservoirs, pumping stations, pressure breakers and pipeline network distributed in twelve Cells of Ngoma District.

The intake and water treatment plant will be located in Sugira Village, Nyagasozi Cell of Zaza Sector. The treated water shall be pumped to the main reservoir RS 1 (8,000 m³) which will be located at Rwamuhimbura Village, Akaziba Cell of Karembo Sector, then kept in 10 others reservoirs with different capacities.

The discharge pipes shall parallel be laid and each pipeline and shall have DN varying between 450 mm and 500 mm. The large part of pipeline network will serve by gravity several Sectors and Cells of Ngoma District. From the hydraulic design, the proposed water supply distribution system for this Project should take 487 Km long.

Moreover, Madame Angele has informed the audience that with the availability of cleaned water, there will be eradication of waterborne diseases, availability of cleaned water for daily consummation for local population and their cattle, improvement of sanitation among households as well as other water consummation usage. They have been invited to take care of proposed infrastructures which will be installed in their areas. The local population has expressed their thankful words to WASAC and representatives of Ngoma District, because they were facing water shortage in general.

6.2. Awareness and Consultation meeting held at Karama Cell, Kazo Sector

On 14th September 2022, a consultation and awareness meeting was held at Karama Cell of Kazo Sector, chaired by the Executive Secretary of the Cell named Uwimpuhwe Venancie. During the meeting, the Consultant has explained to the population the components and importance of Sake Water Supply System project, and has linked this to the national target of providing cleaned water to all Rwandans (100%) by 2024.

After the presentation, the local population has accepted to contribute to the smooth implementation of the project through accomplishment of the followings:

- ♣ Owning the project and allow the water pipeline route passing through their own lands without land compensation;
- Accomplish/execute excavation works where the water pipeline will pass and be paid for works done;
- Accept fair compensation for their affected lands and assets;
- ♣ Take care and participate in the maintenance of placed water infrastructures in their living administrative entities;
- ♣ Pay freely all water bills in order to facilitate repair and maintenance of water infrastructures;
- ♣ Constitute required portfolio for the payment of affected lands and other assets (land title, bank account, identification information etc...).

The representative of WASAC Ltd in charge of awareness and compensation, Madame Umutoni Angele helped by the Consultant' team have supported the local community for election of Grievance Redressing Committees (GRC) which will help the managers of the project to solve all raised constraints brought by the project affected persons.

The composition of the GRC's members in Karama Cell was as follows:

-Niyotwagira Jean Damascene, telephone number 0785243201;

- -Munezero Edison, with telephone number 0785261423; and
- -Musawokwigenga Shadia, with telephone number 0784825035.

6.3. Awareness and Consultation meeting held at Akaziba Cell, Karembo Sector

The same day on 14th September 2022, a consultation and awareness meeting was held at Akaziba Cell and chaired by the Sector veterinary Mister Niyitanga Jean Paul. During the meeting, the Consultant has explained to the population the components and importance of Sake Water Supply system and and raised awareness for an effective contribution of local population in the successful implementation of the project. After the presentation, the population has agreed to provide their contributuion as follows:

- ♣ Owning the project and allow the water pipeline route passing through their own lands without land compensation;
- Accomplish/execute excavation works where the water pipeline will pass and be paid for works done;
- Accept fair compensation for their affected lands and assets;
- ♣ Take care and participate in the maintenance of placed water infrastructures in their living administrative entities;
- ♣ Pay freely all water bills in order to facilitate repair and maintenance of water infrastructures;
- ♣ Constitute required portfolio for the payment of affected lands and other assets (land title, bank account, identification information etc...).

The representative of WASAC Ltd in charge of awareness and compensation, Madame Umutoni Angele helped by the Consultant' team have supported the local community for election of Grievance Redressing Committee which will help the managers of the project to solve all raised constraints brought by the project affected persons. The composition of the GRC's members in

Akaziba Cell was as follows:

- -Hategekimana Jean Claude, with telephone number 0780952674;
- -Ndayambaje Francois, with telephone number 0783874144;
- -Ishimwe Odile, with telephone number 0789955081;
- -Cyungura Egide, with telephone number 0784530392;
- -Nibogore Consolee, with telephone number 0784665560; and
- -Sindayigaya Modeste, with telephone number 0782596308.

6.4. Awareness and Consultation meeting held at Nkanga and Kibonde of Sake Sector

For Nkanga and Kibonde Cells located in Sake Sector, a consultation and awareness meeting was held at Sake City on 15th September 2022 and chaired by SEDO Mister UWIRAGIYE Samuel.

During the meeting, the Consultant has explained to the population the components and importance of Sake Water Supply system and has raised awareness for an effective contribution of local population in the successful implementation of the project. After the presentation, the population has agreed to provide their contributuion as follows:

- ♣ Owning the project and allow the water pipeline route passing through their own lands without land compensation;
- Accomplish/execute excavation works where the water pipeline will pass and be paid for works done;
- Accept fair compensation for their affected lands and assets;
- ♣ Take care and participate in the maintenance of placed water infrastructures in their living administrative entities;
- ♣ Pay freely all water bills in order to facilitate repair and maintenance of water infrastructures;

♣ Constitute required portfolio for the payment of affected lands and other assets (land title, bank account, identification information etc...).

The representative of WASAC Ltd in charge of awareness and compensation, Madame Umutoni Angele helped by the Consultant' team have supported the local community for election of Grievance Redressing Committee which will help the managers of the project to solve all raised constraints brought by the project affected persons. The composition of the GRC's members in Nkanga and Kibonde Cells was as follows:

A. Nkanga Cell:

- Nyirinkindi Innocent, with telephone number 0785905525;
- Sebahungu J. Baptiste, with telephone number 0789720222;
- Bankundiye Irene, with telephone number 0784353950.

B. Kibonde Cell:

- Usabamungu Azalias, with telephone number 0733907319;
- Nyiramugisha Cecile, with telephone number 0783236488;
- Ntirandekura Jean Bosco, with telephone number 0780665874;
- Mukandikubwimana D., with telephone number 0725859362.

6.5. Awareness and Consultation meeting held at Gafunzo and Rukoma of the Sake Sector

For Gafunzo and Rukoma Cells located in Sake Sector, a consultation and awareness meeting was held at Gafunzo on 15th September 2022 and chaired by Ngendabanga Jean Nepomuscene the Executive Secretary of the Gafunzo Cell.

During the meeting, the Consultant has explained to the population the components and importance of Sake Water Supply System and has linked this with the national target to provide cleaned water to all Rwandans (100%) by 2024. He has also raised awareness for an effective contribution of local population in the successful implementation of the project, and as consequence, the population has agreed to provide their contributuion as follows:

- ♣ Owning the project and allow the water pipeline route passing through their own lands without land compensation;
- Accomplish/execute excavation works where the water pipeline will pass and be paid for works done;
- ♣ Accept fair compensation for their affected lands and assets;
- ♣ Take care and participate in the maintenance of placed water infrastructures in their living administrative entities;
- ♣ Pay freely all water bills in order to facilitate repair and maintenance of water infrastructures;
- ♣ Constitute required portfolio for the payment of affected lands and other assets (land title, bank account, identification information etc...).

The representative of WASAC Ltd in charge of awareness and compensation, Madame Umutoni Angele helped by the Consultant' team have supported the local community for election of Grievance Redressing Committee which will help the managers of the project to solve all raised complaints brought by the project affected persons. The composition of the GRC's members in Gafunzo and Rukoma Cells was as follows:

A. Gafunzo Cell:

- Museyimana Solange, with telephone number 0780529760;
- Kabenge Edison, with telephone number 0780780248;
- Semubuga Straton, with telephone number 0786787864.

B. Rukoma Cell:

- Nizeyimana Fortune, with telephone number 0783800108;

- Dusabimana Xavier, with telephone number 0785094456;
- Sindikubwabo Celestin, with telephone number 0786081183.

6.6. Awareness and Consultation meeting held at Nyagasozi Cell, ZAZA Sector

At Nyagasozi Cell, Musigiyimana Balthazal, the Exective Secretary and Umutoni Angele, the Consultation and Community awareness Officer from WASAC have officially started the meeting on 16th September2022 by presenting the objectives of the mission and asked the team of Consultant to present themselves to participants. Then after, the Consultant has exposed to the population the components and importance of Sake Water Supply System, and has linked the project to national target aiming to provide cleaned water at the country level (100%) by 2024.

The local population has expressed thankful words to the Government of Rwanda, through Ngoma District and WASAC, for the execution of Sake WSS project in their administrative entities, because there was scarcity of enough cleaned water in the area. They have accepted their contribution to the smooth running of the project through the followings:

- Owning the project and allow the water pipeline route passing through their own lands without land compensation;
- Accomplish/execute excavation works where the water pipeline will pass and be paid for works done;
- Accept fair compensation for their affected lands and assets;
- ♣ Take care and participate in the maintenance of placed water infrastructures in their living administrative entities;
- ♣ Pay freely all water bills in order to facilitate repair and maintenance of water infrastructures;
- ♣ Constitute required portfolio for the payment of affected lands and other assets (land title, bank account, identification information etc...).

The representative of WASAC Ltd in charge of awareness and compensation, Madame Umutoni Angele helped by the Consultant' team have supported the local community for election of Grievance Redressing Committee which will help the managers of the project to solve all raised complaints brought by the project affected persons. The composition of the GRC's members in Nyagasozi Cell was as follows:

- Nzamwitakuze Epiphanie, with telephone number 0785083410;
- Nshimiyimana Celestin, with telephone number 0782274315;
- Nshimiyimana Alexis, with telephone number 0788289457;
- Muhire Innocent, with telephone number 0786789410;
- Nsabimana Etienne, with telephone number 0783661034;
- Musabyimana Jeanne, with telephone number 0789534345;
- Nizeyimana J. Baptiste, with telephone number 0780481126;
- Mukandayisenga Egidia, with telephone number 0784032321;
- Uzabakiriho Francine, with telephone number 0785763191;
- Mukandahayo Claudine, with telephone number 0786120382;
- Nzamurambaho Emmanuel, with telephone number 0783761390;
- Mugaba Emmanuel, with telephone number 0785962013.

6.7. Awareness and Consultation meeting held at Bugera Cell, Remera Sector

At Bugera Cell located in Remera Sector, Siriyake Jean Pierre, the Land manager of the Sector has chaired on 16th September 2022, a consultation and awareness meeting gathering the representatives from WASAC, the Consultant team composed by the Valuer and other RAP experts as well as the local population. He passed the message to the Consultant who has exposed to the population the components and importance of Sake Water Supply System, and

has linked the project to national target aiming to provide cleaned water at the country level (100%) by 2024.

The local population has expressed thankful words to the Government of Rwanda, through Ngoma District and WASAC, for the execution of Sake WSS project in their administrative entities, because there was scarcity of enough cleaned water in the area and accepted to provide their contribution as follows:

- Owning the project and allow the water pipeline route passing through their own lands without land compensation;
- Accomplish/execute excavation works where the water pipeline will pass and be paid for works done;
- Accept fair compensation for their affected lands and assets;
- ♣ Take care and participate in the maintenance of placed water infrastructures in their living administrative entities;
- ♣ Pay freely all water bills in order to facilitate repair and maintenance of water infrastructures;
- ♣ Constitute required portfolio for the payment of affected lands and other assets (land title, bank account, identification information etc...).

In Bugera Cell, there was no election of grievance redressing committee; the attendance of local community in the meeting was very low.

6.8. Any other business

In other business, the head of Consultant team has informed the local population that this water project is one of the promises formulated by His Excellence the President of the Republic to Rwandans that by 2024 all the people will be provided with safe drinking water and connected to electricity national grid.

Therefore, they are requested to contribute in smooth implementation of the project, especially in providing their own lands for pipeline installation without compensation fees as well as ensure maintenance of constructed water infrastructures.

CHAPTER VII: CENSUS AND SOCIOECONOMIC ASSESSMENT OF

7.1. Category of vulnerable persons among affected households

The results of socioeconomic survey dedicated to project affected persons have shown that 12.7 % of respondents among project affected persons living in rural zones are in Category 1 with reference to living conditions categorization (Ibyiciro by'ubudehe).

Ubudehe is a social stratification program depending on income among households. In February 2015, the Minister for Local Government and Social Affairs has launched a new four Ubudehe poverty categories 1-2-3 and 4 which were as follows:

Category 1: Very poor and vulnerable citizens who were homeless and unable to feed themselves without assistance.

Category 2: Citizens who were able to afford some form of rented or low-class owned accommodation, but who were not gainfully employed and could only afford to eat once or twice a day.

Category 3: Citizens who were gainfully employed or were even employers of labor. This category included small farmers who had moved beyond subsistence farming, or owners of small and medium-scale enterprises.

Category 4: Citizens classified under this category were Chief Executive Officers of big businesses, employees who had full-time employment with organization, industries or companies, government employees, owners of shops or markets and owners of commercial transport vehicles or trucks.

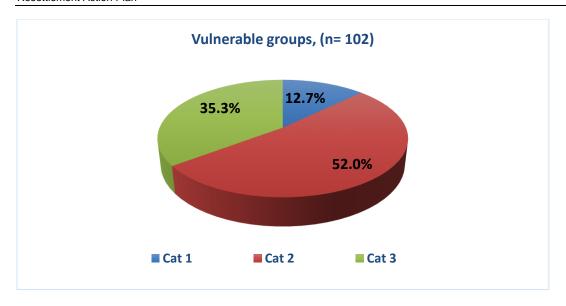


Figure 6: Vulnerable groups among PAPs

7.2. Size of household income

From the results obtained, in average 27.4 % of respondents households sampled in different areas have size of household income aggregated between 1,000 and 5,000 RwF on a monthly basis, 24.5 % having between 6,000 and 10,000 RwF, while 3.9 % in average have size of household income between 51,000 and 300,000 Rwandan francs. This indicates that more than a quarter of Ngoma population are living in conditions of extreme poverty.

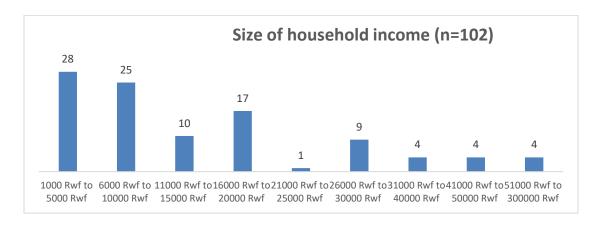


Figure 7: Size of household income

7.3. Source of water consumed

From the results obtained, in average 7.8 % of respondents households sampled in different areas of the four Sectors were collecting water at home, 29.4 % consumed water from spring water protected and 44.1 % were using water collected from spring water unprotected while 18.6 % consumed water from surface water including lake and river.

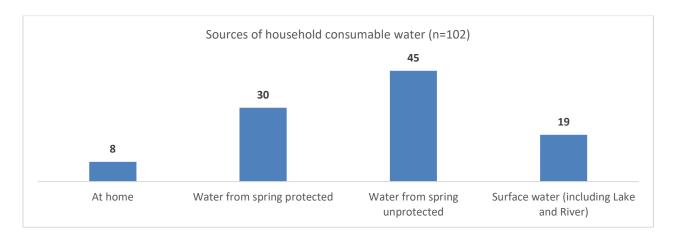


Figure 8: Sources of water consumed

These results show that the project will provide clean water to over 63 percent of the entire population of Ngoma District. This will be a great contribution to achieve the Government' objective dedicated to provide cleaned water to 100 percent of Ngoma District's population.

7.4. Time utilized to fetch water and come back

7.5. Quantity of consumable water per day

In the surveyed areas, 45.1 % consume daily between 20 and 40 l of clean water, 37.2 % consume between 60 and 80 l per day and the rest 17.6 % consumes more than 100 lit of water per day. The project comes at the right time to improve the health and sanitary conditions of the Ngoma population.

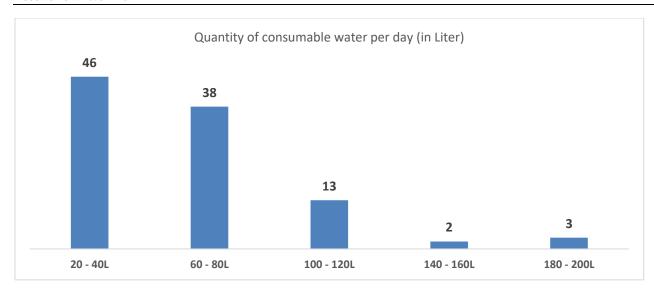


Figure 9: Quantity of consumed water per day

7.6. Willingness to connect water

The results from the survey have shown that 90.1 % are willing to connect water in this project because they utilize more time and walk long distance to fetch water and come back while 6,8 % (7 out of 9) who do not willing to connect water are in the majority households whose sources of consumable water are close to their house, utilizing less than 10 minutes to go and come back.

Two households out of nine (2/9) whom don't want to be connected even though they are fetching water at more than 20 minutes away have declared to get a monthly income less than 10,000 Frw (6,000 Frw for one and 7,000 Frw for the other) and are classified in category 2 of Ubudehe.

The "not applicable" category concerns a household already connected and supplied with water in the residential house.

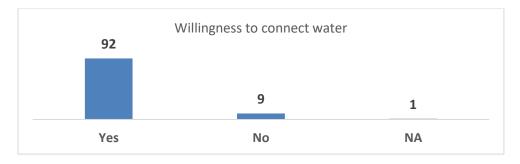


Figure 10: Willingness to connect water

7.7. Expenses on water connection for households willing to connect

Expenses on water connection for households willing to connect as expressed by respondents in Ngoma District are as follows: 66.3 % are willing to pay monthly bills totalizing between 1,000 to 5,000 Rwandan francs, 11.9 % have explained to pay bills totalizing between 11,000 and 20,000, while only one person (1.1 %) is willing to pay bills between 31,000 to 50,000 Rwandan francs. Eight respondents (8.7 %) have expressed that they don't have any monthly income and wish to be connected to water system without payment.

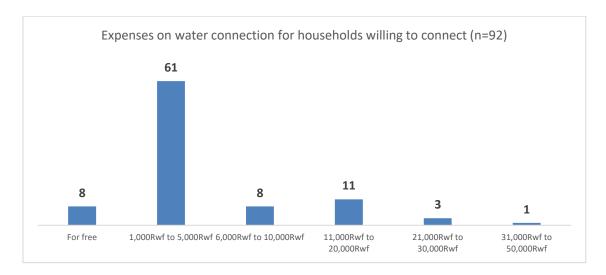


Figure 11: Expenses on water connection per household

7.8. Types of sanitation utilities utilized by PAPs

The results have shown that more than 78.4 % of our respondents utilize pit latrine without slab and 19.6 % utilize pit latrine with slap. Only 0.98 % utilizes flush to pit latrine and another 0.98 % utilizes flush to septic tank. The project comes at the right time to improve the health and sanitary conditions of the Ngoma population.

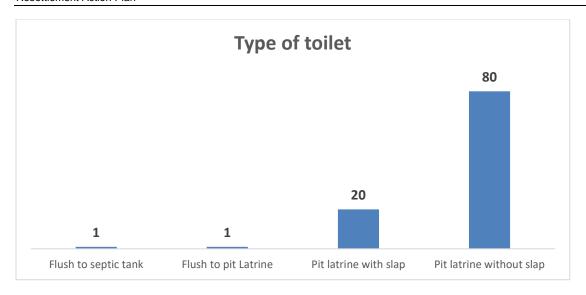


Figure 12: Types of sanitation facilities

7.9. Who fetch water for households?

As you will see on the graphic below, most of the time, the categories of family members who fetch water for household are children (boys and girls) totalizing 41.2 %. Once they will have water from a short distance through the implementation of Sake water supply system project, this will help them to get enough time for studying and share with parents other income generating activities.

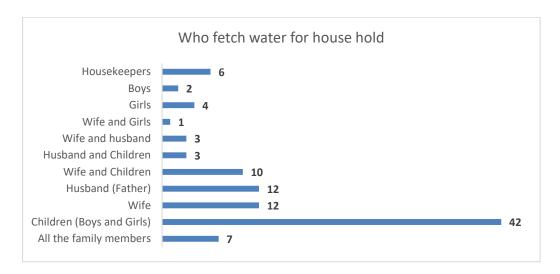


Figure 13: Who fetch water for household

7.10. Waterborne diseases mentioned among PAPs

The graphic below shows the percentage of waterborne diseases' occurrence as mentioned by respondents during field surveys. The origin of waterborne disease is the bad quality of water source where people are fetching consumable water. It appears on the graphic that Giardia and Amoeba are coming on the front line with respectively 33.1 % and 25.2 % followed by flue reaching 19.7 %.

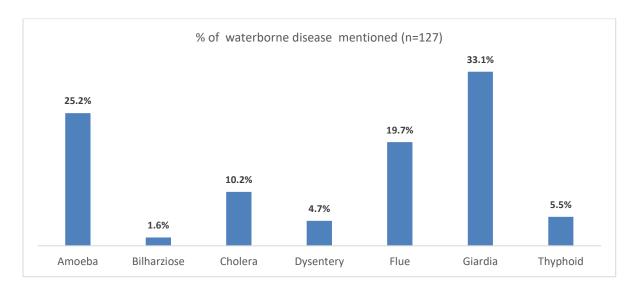


Figure 14: Waterborne diseases mentioned among PAPs

7.11. Specific impacts of the project to PAPs

Table 7: Specific impacts of the project mentioned by PAPs

	Specific impacts mentioned by PAPs							
	Specific impact	Number of respondents	%					
1	Reduce the burden on women and allow them to engage in more productive activities	19	6.1%					
2	New businesses will be connected to water supply	12	3.8%					
3	Increased time savings (reduction of number of hours spent looking for water) associated with having water close to home	40	12.8%					
4	Watering livestock which generates more income when sold	26	8.3%					
5	Increase agricultural production (for instance, watering green gardens will generate income through the sale of green vegetable	15	4.8%					

6	Come disposable to the community in the project zone	23	7.4%
7	Lives would be more comfortable and better	38	12.2%
8	Reduction of number of cases of dysenteries like diarrhoea, cholera and typhoid in the project zone	52	16.7%
9	Construction of sanitary latrines and changes in hygiene behaviour	22	7.1%
10	Great social cohesion (reduce dispute at the spring taps)	9	2.9%
11	Increase attendance rate of children	19	6.1%
12	Improve the nutritional status of the households through the consumption of green vegetable	37	11.9%
		312	

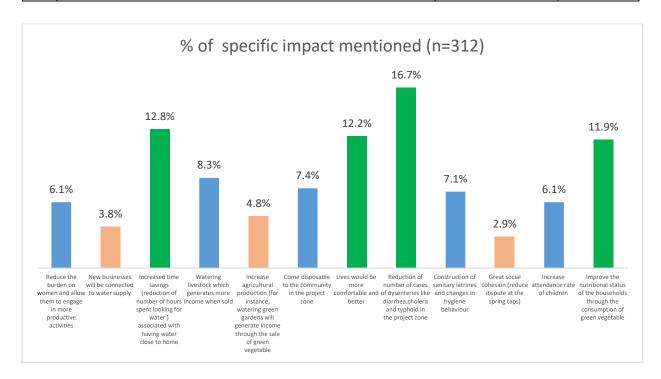


Figure 15: Specific impacts of the project mentioned by PAPs

The first specific positive impact generated by Sake WSS project to population is the reduction of number of cases of dysenteries like diarrhoea, cholera and typhoid in the zones covering the project (16.7 %). This is followed by the increased time saving (reduction of number of hours spent looking water) because people will have water closer to their residential homes (12.8 %), their lives would be more comfortable and enjoyable (12.2 %) and there will be improvement of the nutritional status

of the households through the consumption of green vegetable. These results obtained reflect exactly the objectives of the project as set by the Government and the donors.

In summary, during the socioeconomic survey of the PAPs, the respondents have revealed that the most significant impacts of the project which will affect their lives after completion of the planned phases are the followings:

- Reduce the burden on children especially girls and allow them to engage in more productive activities;
- There will be creation of new businesses generated through water supply;
- Increased time saving (reduction of number of hours spent looking for water) because water will be connected near their residential houses;
- ♣ There will be water for livestock which will generate more income when sold;
- ♣ There will be increased agricultural production (through watering green gardens and generate income through the sale of green vegetable;
- Reduction of number of cases of dysenteries like diarrhoea, cholera and typhoid in the Project zone due to disposal of cleaned water to the community in the Project zone;
- ♣ There will be great social cohesion (reduce dispute at the spring taps) and lives would be more comfortable and enjoyable;
- There will be increased school attendance rate of children;
- Availability of water for sanitary latrines and changes in hygiene behaviour;
- ♣ Availability of water in the project areas will lead to increased agriculture products, raising nutritional status among households through the consumption of green vegetable as well as development of livestock in Ngoma District.

Concerning the impact dedicated to losss of land to the project, this was alleviated by fair compensation of affected PAPs, who managed to by new lands in the area as substitution to the lost lands and have continued the agriculture activities as usually.

7.12. Training of PAPs on Financial Literacy

7.12.1. Objectives of the training on Financial Literacy

The objectives of these training sessions will be as follows:

- ♣ To create awareness through financial education campaigns among the participants on how to plan and use their financial resources obtaining from WASAC;
- To enhance the understanding of participants through training sessions and discussions on the concept of financial literacy (use of money) for their own development;
- To prepare and equip participants with the necessary skills and knowledge for becoming successful in their future businesses.

7.12.2. Training sessions

The training sessions will be conducted as soon as the Consultant will receive the authorization and means from the Client. The training report on financial literacy will be included in RAP report.

7.13. Land requirement for the project

During the first phase of the project, 48,256 squaremeters of land were required from the project affected persons, valuated and are actually used for construction of main infrastructures. While, during the second phase of the project, only 2,902 squaremeters of lands have been valuated and will be used for construction of main infrastructures. These lands belonged to individual persons, a church, a beer browery company called Bralirwa and only two plots belong to the Governement.

Concerning the direct impact of loss of lands to the project, a total valuated cost of 275,396,382 Rwandan francs will be disbursed by the project for compensation of 51,158 squaremeters of lands dedicated to construction of main infrastructures. Indirect impact may occur in case after a certain period of time, some infrastructures could not be used and destroyed or the Government through WASAC would decide to relocate them elsewhere.

CHAPTER VIII: GRIEVANCES REDRESSING MECHANISMS

8.1. Preamble

The Articles 33 and 34 of the Expropriation Law N° 32/2015 of 11/06/2015 provide complaints procedures for individuals whom are dissatisfied with the value attributed to their properties' compensation. The Article 33 stipulates that dissatisfied persons have a period of 10 days from the application for counter valuation by the private person requested by the owner to be expropriated. This application should be done within 7 days after the approval of the valuation report by the expropriator.

8.2. Common types of grievances and disputes in resettlement process

In practice, grievances and disputes which are most likely to occur during the implementation of a resettlement program are the following:

- ✓ Misidentification of assets or mistakes in valuing these;
- ✓ Disputes over plot limits, either between the affected person and the Project, or between two neighbors;
- ✓ Dispute over the ownership of a given asset (two individuals claim to be the owner of this asset);
- ✓ Disagreement over the valuation of a plot or other asset; and
- ✓ Successions, divorces, and other family issues, resulting in disputes between heirs and other family members, over ownership or ownership shares for a given asset.

8.3. Grievance Management Mechanism

The experience has shown that many grievances derive from misunderstandings of the Project policy, or result from neighbor conflicts, which can usually be solved through adequate mediation using customary rules.

Most grievances can be settled with additional explanation efforts and some mediation using

customary disputes settlement mechanisms: (i) through explanations (for instance explain in detail how the Project calculated the complainant's compensation and that the same rules have been applied to all; or (ii) through arbitration, resorting to elders or individuals well-regarded by the community and external to it.

In contrast, resorting to the judicial system often results in long delays before a case is processed, and may result in significant expenses to the complainant, so that it requires a complex mechanism, involving experts and lawyers, which can fall well beyond the complainant's control and be counterproductive to him/her.

Also, courts may declare themselves not competent for matters related to informally owned property. Therefore, the Project will put in place an extra-judicial mechanism for managing grievances and disputes arising from the resettlement process will be based on explanation and mediation by third parties.

Each of the affected persons will be able to trigger this mechanism, while still being able to resort to the judicial system. Procedures relevant to this amicable mechanism are detailed below and include three different levels:

- ✓ Registration of the complaint, grievance or dispute case by WASAC's staff in collaboration
 with local authorities;
- ✓ Processing of the grievance or dispute until closure is established (within 15 days) based on evidence that acceptable action was taken by WASAC; and
- ✓ In the event where the complainant is not satisfied with action taken by WASAC as a result of the complaint, an amicable mediation can be triggered involving a mediation committee independent from the Project.

8.3.1. Complaint resolution through Grievance Redressing Committee (GRC)

Complaints that cannot be closed through amicable resolution mechanism to the complainant's satisfaction will be handed over to an elected Grievance Redressing Committee (GRC).

The Grievance Redressing Committee is composed by elected representatives from local communities, social experts aligned by the Consultant and Contractor's offices, the representative

of Gender cluster (WNC/CNF) as well as representatives of local government administration at decentralized level. The hierarchical positions in GRC management are as following:

- The President of GRC;
- The Vice President of GRC;
- The Secretary of GRC;
- ♣ Advisers (may be local Government leaders at Umudugudu or Cell level or Abunzi).

The principal roles of GRC's hierarchical committee are as following: (i) receive the complaints, (ii) schedule the meeting of extended committee for an assessment of the raised issues, then examine these and find solutions accordingly, (iii) report to the advanced levels decision taken for all examined complaints, (iv) continue the follow up of raised complaints during all phases of project implementation.

The main function of the Committee would be arbitration and negotiation based on transparent and fair hearing of the cases of the parties in dispute between PAPs and the implementing agencies for local government.

The Committee gives solution to grievances related to compensation amounts, delays in payment of compensation or provision of different type of resettlement assistance.

8.3.2. Processes and time frame for complaints resolution

Complaints will be filled and kept in grievance *Logbook/ or Register* that will be distributed to GRC free of charge, this register will be available to the hierarchical level for verification of the complaint and an investigation will be carried out by the hierarchical committee members to verify its authenticity. There after a resolution approach will be selected based on the findings.

The Grievance Redressing Committee will ensure that each complaint has a specific reference number and is appropriately tracked, and recorded actions are completed.

Therefore, the *Logbook* will contain records of the person responsible for an individual complaint, and records dates for the following events:

- Date the complaint was reported;

- Date the grievance Log was added onto the project database;
- Date information on proposed corrective action sent to complainant (if appropriate);
- The date the complaint was closed out; and
- Date response was sent to complainant.

Table 8: Processes and timeframe for complaint resolution

Stage	Process	Duration
First	Since most of complaints during the execution of works involve directly	24 hours
stage	the Contractor, at first the Aggrieved Party (AP) will take his/her	
(a)	grievance to the Contractor's representative site Manager (CSM) whom	
	may redress the issue. Whenever the PAP is not satisfied, the complaint	
	will be transferred to the GRC at Cell level for further consultation and	
	trying to find a solution.	
(b)	The Aggrieved Party may choose to escalate the grievance to the Abunzi	Not fixed
	(Mediation Committee).	
Second	On receipt of the complaint, the GRC at Cell level will endeavor to resolve	1-2 days at
stage	it immediately. In case the Cell level fails to solve the complaint, it will	Cell level
	be escalated to the Sector level. If unsuccessful, then notifies District	1-2days at
	Officials.	Sector level
Third	The District Officials where the project activities are being implemented	1 – 5 days
stage	will endeavor to address and resolve the complaint and inform the	
	Aggrieved Party. The District Authority will refer the complaint to the	
	Project Implementation Unit with other unresolved grievances for their	
	consideration.	
Forth	If at the District level the complaint remains unresolved or the	1 – 7 days
stage	complainant is dissatisfied with the outcome, he/she is free to refer the	
	matter to the Court of Law, and follow the next processes of laws.	

The decision of the action to be taken will be communicated to all involved parties mainly in written form. Through citizen engagement meetings, the PAPs will be informed of the different grievance mechanisms and resolution processes in order to lodge their complaints and dissatisfactions.

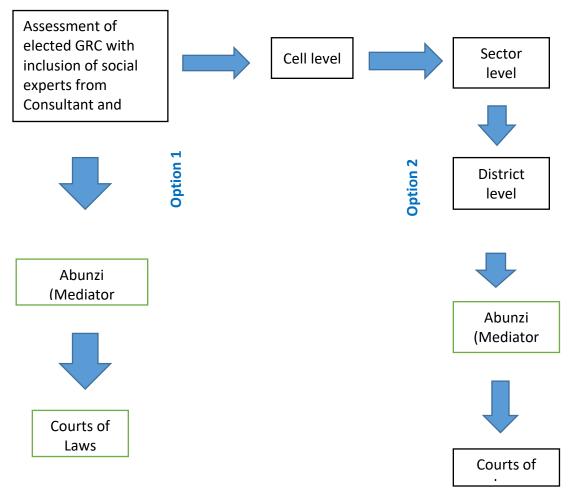


Figure 16: Illustration of the Grievance Resolution Processes

8.4. Elected Grievance Redressing Committees for Sake WSS

It is well known that many grievances derive from misunderstandings of the project policy, or result from neighbor conflicts, which can usually be solved through adequate mediation using customary rules. Furthermore, in most cases, grievances can be derived also from misapplication of proposed mitigation measures consigned in Environmental and Social Management Plan (ESMP) elaborated for a development project.

In this line, Grievance Redressing Committees (GRC) are elected by local population including Project Affected Persons (PAPs), during awareness and consultation meetings, in order to help project managers and local Administration to get fair solutions for raised constraints through additional explanation efforts and some mediation using customary disputes settlement mechanisms.

The committees would have as main function arbitration and negotiation based on transparent and fair hearing of the cases of the parties in dispute between PAPs and the implementing agencies. The committees help in giving solutions to grievances related to non-accepted compensation amounts, delays in payment of compensations, disputes rose from affected lands, properties and other assets. Grievance resolution is encouraged to be resolved at Cell level, as they are aware of and involved in the whole process.

Concerning Sake Water Supply System Project, Grievance Redressing Committees were elected in Seven (7) following Cells: Akaziba, Gafunzo, Karama, Kibonde, Nkanga, Nyagasozi and Rukoma

Table N° 9: List of elected Grievance Redressing Committees for Sake WSS

1. Karama Cell

Niyotwagira jean	М	078524320	Kazo	Karama	Kabimba
Damascene		1			
Munezero Edison	М	078526142	Kazo	Karama	Kabimba
		3			
Musawokwigenga	F	078482503	Kazo	Karama	Karenge
Shadia		5			

2. Akaziba Cell

Hategekimana Jean	М	078095267	Karembo	Akaziba	Rwamuhimbur
Claude		4			a
Ndayambaje Francois	М	078387414	Karembo	Akaziba	Rwamuhimbur
		4			a
Ishimwe Odile	F	078995508	Karembo	Akaziba	Rwamuhimbur
		1			a
Cyungura Egide	M	078453039	Karembo	Akaziba	Ngara
		2			

Nibogore Consolee	F	078466556 0	Karembo	Akaziba	Ngara
Sindayigaya Modeste	М	078259630 8	Karembo	Akaziba	Ngara

3. Rukoma Cell

Names	Gender	Telephone	Sector	Cell	Village
Nizeyimana Fortune	F	0783800108	Sake	Rukoma	Isangano
Dusabimana Xavier	M	0785094456	Sake	Rukoma	Musenyi
Sindikubwabo Celesti	M	0786081183	Sake	Rukoma	Akagoma

4. Gafunzo Cell

Museyimana Solange	F	0780529760	Sake	Gafunzo	Gumba
Kabenge Edison	М	0780780248	Sake	Gafunzo	Mubuga 1
Semubuga Straton	M	0786787864	Sake	Gafunzo	Sovu

5. Nkanga Cell

Nyirinkindi Innocent	M	0785905525	Sake	Nkanga	Kanazi
Sebahungu J. Baptiste	M	0789720222	Sake	Nkanga	Kanazi
Bankundiye Irene	F	0784353950	Sake	Nkanga	Kanazi

6. Kibonde Cell

Usabamungu Azalias	M	0733907319	Sake	Kibonde	Umucyo
Nyiramugisha Cecile	F	0783236488	Sake	Kibonde	Umucyo

Ntirandekura Jean	М	0780665874	Sake	Kibonde	Umucyo
Bosco					
Mukandikubwimana D.	F	0725859362	Sake	Kibonde	Kidakamwa

7. Nyagasozi Cell

Nzamwitakuze	F	078508341	Zaza	Nyagasozi	Sugira
Epiphanie		0			
Nshimiyimana Celestin	М	078227431	Zaza	Nyagasozi	Sugira
		5			
Nshimiyimana Alex	M	078828945	Zaza	Nyagasozi	Sugira
		7			
Muhire Innocent	M	078678941	Zaza	Nyagasozi	Mu Kiyovu
		0			
Nsabimana Etienne	M	078366103	Zaza	Nyagasozi	Mugiperefe
		4			
Musabyimana Jeanne	F	078953434	Zaza	Nyagasozi	Mukiyovu
		5			
Nizeyimana J. Baptiste	M	078048112	Zaza	Nyagasozi	Akabuga
		6			
Mukandayisenga Egidia	F	078403232	Zaza	Nyagasozi	Irebero
		1			
Uzabakiriho Francine	F	078576319	Zaza	Nyagasozi	Irebero
		1			
Mukandahayo Claudine	F	078612038	Zaza	Nyagasozi	Akabuga
		2			
Nzamurambaho	M	078376139	Zaza	Nyagasozi	Rwancuro
Emmanuel		0			
Mugaba Emmanuel	M	078596201	Zaza	Nyagasozi	Rwancuro
		3			

8.5. Training of elected Grievance Redressing Committees (GRCs)

8.5.1. Preamble

During consultation and awareness meetings with the communities of aforementioned Sectors, the Grievance Redressing Committees were elected for helping in redressing the raised grievances in a fair and transparent manner, in line with the Rwandan legal framework. Expunge

It is in this framework; WASAC in collaboration with ITEC Engineering (Rwanda) Ltd will organize the training of elected grievance redressing committees, in order to explain them their roles and responsibilities and to reinforce their knowledge on handling the grievances in a fair and transparent manner. All this will be organized in compliance with the Rwandan legal framework and the process of submission and raising grievances for the sustainable resolution. The training will be held once the Client will avail authorization and training needs.

8.5.2. Objectives of the training

The objective of the training of GRCs is to explain them their roles and responsibilities and to reinforce their knowledge on handling the grievances in a fair and transparent manner in line with the Rwandan legal framework and the processes of submission and raising grievances for the sustainable resolution.

Specific Objectives

Upon completion of the module, the participants will be able to:

- Explain the Grievance Redressing Committee;
- Explain the levels and responsibilities of GRC;
- Explain the process and timeframe for grievance resolution;
- Explain the processes in complaint resolution by grievance Redressing Committee;
- Explain how to elaborate the report/ Keeping Grievance Logbook etc....

CHAPTER IX: ASSESSED POTENTIAL IMPACTS OF THE PROJECT IN PHASES I & II

9.1. Impacts of the project on lands and other assets in Phase I

During the construction of main water infrastructures such as water treatment plant (WTP) and water tanks, there will be 28 files; among these are 26 belonging to individual persons which lands and crops were partially affected, 1 property for the Church and 1 property for the Bralirwa Company also partially impacted.

The total cost for expropriation/compensation of affected lands and crops for construction of main infrastructures will be **247,576,993 RwF**.

Concerning pipeline network installation, there will be 2,872 files on the total length of 147 km where different annual crops and trees will be affected and compensated. The total cost for compensation of affected crops and trees for pipeline network installation will be 86,184,459 RwF.

The summary of the assessed impacts including loss of lands and other assets are given in the following table:

Table 9: Assessed impacts of the Sake WSS project implementation

N°	Nature of project component	Valuation			
		Files number	Area covered	Estimated Compensation	
1	PAPs at Pipeline	2,872 Files	147 Km	RwF 86,184,459	
2	PAPs at main Infrastructures	28 Files	48,256 Square meters	RwF 247,576,993	
3	Total Property Owners (Main Infrastructures + Pipeline network)	2,900 Files	-	RwF 333,761,452	
4	Coverage of Infrastructures domains	28	26 Covered individual domain 1 Church domain 1 Bralirwa domain	-	

9.2. Impacts of the project on lands and other assets in Phase II

During the construction of main water infrastructures such as water treatment plant (WTP) and water tanks, there will be 9 files; among these are 7 belonging to individual persons which lands and crops were partially affected, 2 properties for the Government of Rwanda also partially impacted.

The total cost for expropriation/compensation of affected lands and crops for construction of main infrastructures will be **27,819,389RwF**.

Concerning pipeline network installation, there will be *9,739* files on the total length of 340 km where different annual crops and trees will be affected and compensated. The total cost for compensation of affected crops and trees for pipeline network installation will be *261,150,445 RwF*.

The summary of the assessed impacts including loss of lands and other assets are given in the following table:

Table 10: Assessed impacts of the Sake WSS project implementation (Phase II)

N°	Nature of project component	Valuation			
		Files number	Area covered	Valuated Compensation	

1	PAPs at Pipeline network	9,739 Files	340 Km	RwF 261,150,445
2	PAPs at main Infrastructures	9 Files	2,902 Square meters	RwF 27,819,389
3	Total Property Owners (Main Infrastructures + Pipeline network)	9,748 Files	-	RwF 288,969,834
4	Coverage of Infrastructures domains	9	7 Covered individual domain 2 Government of Rwanda	-

9.3. Entitlement matrix

The project affected persons were categorized as shown in the table below:

Table 11: Entitlement Matrix

Categor	Type of Loss	ENTITLEMENTS				
y of		Compensation for	Compensation for	Compensation	Moving	Other
PAPs		loss of structures	loss of land	for loss of	Allowan	assistance
				income activity	ce	
Property	Loss of land		Land acquired for			Payment of
Owners			construction of			disturbance allowance (5%)
			Water			(3%)
			infrastructures will			
			be fair compensated			
			before civil works			
	Temporary		Payment of rental			Payment of
	loss of land due to camp		fees for land utilized			disturbance allowance
	site		during an agreed			(5%)
	installation and		upon period			
	borrowing					

	sources of construction materials Loss of		In this project there	vill be no loss of star	ucturo	
	structure		In this project there will be no loss of structure			
	Loss of Trees			Payment cash for compensation based on type, age and productive value of affected tree		Disturbance allowance (5%)
	Loss of different types of crops			Payment of cash compensation equivalent to the market value of the crop which has been given.		Disturbance allowance (5%)
Propert y lease holders/ Tenant	Loss of rental accommoda tion			Tenants are relieved of the 3 to 4 months rental costs upon an agreement		
	Loss of different types of crops cultivated there			Payment of cash compensation based on type, age and productive value of affected crop		Disturbance allowance (5%)
Informal dwellers	Loss of business	There will be no loss of structure in this project.	For loss of land: compensation of the land at market price shall be considered.			For loss of informal businesses, the local Authority will relocate them to the nearby free markets

				that are
				distributed
				across their
				administrative
				entity.
				The local
				Authority may
				assist for
				rental fees
				during an
				agreed upon
				period.
All PAPs	Loss of	Payment of cash		The PAPs will
(whethe	assets due	compensation for		have right to
r owner,	to	any assets	 	 salvage
tenant	temporary	affected. For loss		materials
or	land	of small		without
informal	acquisition	businesses, there		deduction
dweller)		may be		from
		construction of		compensation
		new selling points,		
		etc		
				Disturbance
				allowance
				(5%)

9.4. Analysis between Rwanda Expropriation Law and AfDB Policy on Resettlement and Compensation

There are a lot of resemblances and some differences between the Rwandan expropriation Law and AfDB Policy on Resettlement and Compensation. The key resemblances are related to the general principles of procedure for compensation, valuation and compensation, consultation with PAPs and their participation, compensation before works start and the differences in timeframe for the affected property to be expropriated as well as for eligibility (Table N° 10 below).

Table 12: Comparison between Rwandan Legislation and AfDB Policy on Resettlement and Compensation

	T	T	
Principles	Rwanda Legislation	AfDB's Involuntary Resettlement Policy (IRP)	Conformity or Divergence
Procedure for compensation	In Rwandan legislation, a procedure for compensation must be triggered when a project requires the acquisition, use or restricted access to land, buildings and structures, crops, facilities or services, or, if it requires the acquisition, use or restricted access to natural resources used by a community or group of persons.	In AfDB safeguard policies which include Involuntary Resettlement Policy (IRP), a procedure for compensation must be triggered when a project requires the acquisition, use or restricted access to land, buildings and structures, crops, facilities or services, or, if it requires the acquisition, use or restricted access to natural resources used by a community or group of persons.	There is no gap to fill, in both the Rwandan legislation and the AfDB safeguard policy the procedure for compensation is the same.
Valuation and compensation	The national expropriation Law No 32/2015 of 11/6/2015 gives provisions for valuation of land and property incorporated thereon and payment of fair compensation. This law informs also the criteria for determining fair compensation. Without prejudice to other laws, the value of land and property incorporated thereon to be expropriated in the public interest shall be calculated on the basis of their size, nature and location and the	The IRP guiding principles stipulates that if the involuntary resettlement and land acquisition become inevitable the principle of equity and transparency shall be applied. The human rights of project-affected persons must be fully upheld and the process of compensation and resettlement must be fair and transparent to afford the PAPs the opportunity to share in its benefits	In both the National Expropriation Law and the AfDB Involuntary Resettlement Policy, the process of compensation and resettlement must be fair and transparent to afford the PAPs the opportunity to share in its benefits

Principles	Rwanda Legislation	AfDB's Involuntary Resettlement Policy (IRP)	Conformity or Divergence
Participation	prevailing market prices. The law stipulates that the affected person receive fair and just compensation. The Rwandan law on	From the Operational Safeguard 2	In both the National
and consultation with PAPs	Expropriation stipulates that project affected persons should be fully informed on	(OS2) for involuntary resettlement – land acquisition, displacement and compensation	Expropriation Law and the AfDB Involuntary Resettlement Policy, the process of PAPs to effectively be consulted
	expropriation procedures and participate in planning and implementation of these activities.	to PAPs, the specific objective of OS2 highlights' that: (i) as much as possible, avoid involuntary resettlement or minimize its	and have given the opportunity to participate in the planning and implementation of expropriation and compensation activities are
	The law gives right to any person affected by the decision on expropriation for public interest to request for review of the decision before the organ directly higher than the one having taken the decision. That appeal shall be made within thirty	formulation and implementation of involuntary resettlement and	equally considered.
	days from the day of the publication of the decision.	compensation activities.	
Compensation before works start	Upon agreement on the total compensation value of affected property, based on established unit market	It is expected that the compensation procedures will be completed before the works start.	It is equivalent subject that the PAP has access to the amount deposited in his bank's account before work

Principles	Rwanda Legislation	AfDB's Involuntary Resettlement Policy (IRP)	Conformity or Divergence
	prices, compensation		start and be relocated if
	procedures shall be		need will be.
	accomplished before works		
	start. This doesn't		
	systematically concern cases		
	of disagreement over the		
	amount of compensation,		
	incomplete file, or dispute		
	between rightful claimants.		
Timeframe for	Rwanda expropriation law	From the Operational Safeguard 2	A cut- off date should be
the affected	stipulates a timeframe upon	(OS2) for involuntary	applied.
property to be	when the property to be	resettlement-land acquisition,	The approach, which states
expropriated	expropriated must be	displacement and compensation	that displacement, must
	handed over which is 90 days	to PAPs, displacement must not	not occur before necessary
	after compensation has been	occur before necessary measures	measures for resettlement
	paid.	for resettlement are in place.	are in place shall be
		These include compensation and	prioritized.
		other measures required for	
		relocation and preparation and	
		provision of facilities of	
		resettlement sites, where	
		required.	
		A timeframe (cut-off date) shall be	
		applied; people who encroach on	
		the area after the cut-off date will	
		be not entitled to compensation	
		or resettlement assistance.	

Principles	Rwanda Legislation	AfDB's Involuntary Resettlement Policy (IRP)	Conformity or Divergence
Eligibility	Article 26 of the law requires	From the Operational Safeguard	The approach of
	the owner of land	for involuntary resettlement and	operational safeguard shall
	designated for expropriation	land acquisition, the owner of	be more appropriate for
	in the public interest shall	land designated for expropriation	determining eligibility due
	provide land titles and	in the public interest shall provide	to the fact that many of
	documentary evidence that	land titles and documentary	those who farm the lands
	he/she is the owner of	evidence that he/she is the owner	don't own it, although they
	property incorporated on	of property. But the criteria for	may have depended on
	land.	eligibility include individual not	farming on such lands for
	He/she shall also provide a	having formal legal rights to land	their livelihood. As such,
	civil status certificate and a	but has occupied it and developed	they shall be compensated
	document evidencing	activities through an agreement	for assets and assisted in
	his/her chosen matrimonial	with the owner, the latter are only	order to maintain at least
	regime in case of a married	compensated for assets other	their pre-project level of
	person.	than land.	welfare.

CHAPTER X: DESCRIPTION OF COMPENSATION AND RESETTLEMENT STRATEGIES

10.1. Eligibility Criteria

The following categories of Project Affected Persons (PAPs) have been considered as eligible for compensation during the expropriation/compensation process:

- Land owners where land will be taken by the project activities (land lease will be applied);
- Owners of houses and/or other structures which will be affected by project activities and

compensated accordingly;

 Owners of crops, trees, traditional medicine plants, flowers located within project affected land as measured and counted by the surveyor team.

10.2. Cut-Off Date

Normally the cut-off date is described as the date for beginning of the socio-economic census and asset inventory of PAPs. Persons (encroachers) entering and/or occupying land in the project area after this date and not included in the first inventory of PAPs will not be considered as eligible for compensation or resettlement assistance. Similarly, fixed assets such as structures, crops/trees established after the cut-off date will not be compensated.

The cut-off date could also be the date the project area was delineated, prior to the census, provided that there has been an effective public dissemination of information on the area delineated, and systematic and continuous dissemination subsequent to the delineation to prevent further population influx.

In Sake WSS project, reference to Resettlement Action Plan's principal activity of census and assets inventory belonging to PAPs, the start of the survey was on 17th May 2022 which was set as the eligibility Cut-Off Date for the project.

10.3. Resettlement and Compensation Entitlements

10.3.1. Preamble

Any project leading to losses of the community's properties requires adequate compensation of the affected people with due verification of their entitlements. In reference with the relevant Rwandan policy and law as well as international standards on Involuntary Resettlement, affected persons, respective to their legal status are eligible for some form of compensation if they have occupied the land before the entitlement cut-off date. The main losses, which occuring in this project, are land losses and loss of crops, trees and flowers. Compensation for perennial and seasonal crops will be done based on the requirements of national Law N° 32/2015 of 11/06/2015 relating to expropriation in the public interest.

10.3.2. Types of compensation payments

During awareness and consultation meetings with project affected persons, assets owners have preferred compensation for affected assets in cash. Land which will be utilized during the pipeline installation will be temporally impacted as after pipes' installation phase, land owner will use his/her land as usually. This means that land payment will be the case for acquired lands by the project, and also crops, trees and flowers will be compensated.

10.3.3. Methods of compensation

Individual and household compensation will be made in cash and/or through assistance in the knowledge with presence of both man and wife. The joint account will be opened in recognized bank or any other financial institution/micro finance.

Local Banks and micro-finance institutions should work closely with the local administration at this level to encourage the use of their facilities, which will positively influence the growth of the local economies.

10.3.4. Valuation methods

The replacement cost approach is based on the premise that the costs of replacing productive assets is based on damages caused by the project implementation. These costs are taken as a minimum estimate of the value of measures that will reduce the damage or improve on on-site management practices and thereby prevent damage. The approach involves direct replacement of expropriated assets and covers an amount that is sufficient for asset replacement, moving expenses and other transaction costs.

Concerning data collection and valuation of the existing structures (buildings), usually buildings are valuated according to their size, types of materials utilized and the aging state of structure. During this valuation in the project, it was constated that there was no existing structure affected by construction activities.

Concerning crops, these were valued according to the established prices by the Council of Certified Real Property Valuers in Rwanda and in line with provisions of the Rwanda Expropriation Law.

Concerning valuation of existing plantations, a valuation form has been utilized which describes different type of trees, size and ages. In addition, crops that can be harvested after at least 6 months have been recorded as well as some perennial crops like bananas, mangoes, avocado and papaya.

Measurement of land areas was based on surveying data got from the land boundaries shown by the land owner and the neighbours. This has been confirmed by the land legal document called "Certificate of land title. Additionally, GIS shaper files have been provided by the land service in Ngoma District.

Concerning private ownership land and compensation, the new land Law, especially concerning private ownership of land and compensation procedures of such land acquired by Government for purpose of public interest, provides a room for negotiation over the value of land, based on-going market value. In other words, PAPs are allowed to negotiate for the suitable compensation. The financial compensation will be the last option and the land value has been calculated with reference to the benchmark prices for land and property set annually by the Council of Certified Real Property Valuers in Rwanda.

10.4. Resettlement allowances and livelihood support to the PAPs

All the affected population will get compensated according to the affected assets as well as obtain the 5% of their compensation packages as disturbance allowance. As per Rwandan law, this is supposed to cater for livelihood restoration and any other costs incurred during the relocation process. In addition, these people are supposed to salvage all the building materials they can, after demolition of their structures. But this will not happen in Sake WSS project, because there will be no existing structure affected by construction or pipeline installation activities. Furthermore, vulnerable households identified will be forwarded to the District Authorities, for appropriate assistance.

Financial literacy training will be done as part of livelihood restoration. Financial literacy training will be proposed after disclosure of compensation packages and before payment. This will enable the proper utilisation of compensation money so that PAPs can restore their livelihoods.

10.5. Different forms of resettlement and compensation facilities

Eligibility, entitlements and compensation are generally the most scrutinised components of resettlement because of both the cost implications for the project proponent and the livelihood implications for PAPs. Therefore, compensation of the assets affected was the determined option aplied on Sake Water Supply System project.

The compensation facilities have and continue to be given all around the project area and the following highlits are the compensation stategies applied:

- ♣ The land acquisition and other compensation exercises are carried out in compliance with Rwandan law;
- Any affected lands, crops and trees are and will be compensated using the respective rates provided by Institute of Real Property Valuers (IRPV);
- ♣ Replacement values (i.e. market value plus all relevant transaction costs, legal fees and expenses) will be used for the calculation of all compensation, including land, crops and trees;
- ♣ The process of land acquisition, including identification of affected plots and owners/users, have been carried out by consultant aligned by WASAC and designated project teams.
- These Project teams have entered into negotiated settlements with affected landowners and land users wherever possible. Where no agreement on compensation can be reached, WASAC may have to resort to expropriation, according to the process described in the Rwandan Expropriation Law, under the control of the competent authorities and courts of law. But this case has not happened in Sake WSS project.
 - Amongst others, this may apply in situation where the landowner is unknown (absentee landowner) as well as in situation where good faith negotiation do not achieve a mutually acceptable agreement.
- ♣ Affected people will have access to grievance mechanism, which has been established suggested in this Resettlement Action Plan.

CHAPTER XI: EXPROPRIATION AND COMPENSATION

11.1 Valuation of expropriation/compensation of affected properties (phase I)

Table 13: Total valuation costs for Main infrastructures and Pipeline network (Phase I)

	Total valuation cost for main infrastructures									
N°	District	Sector	Cell	Village	Infrastructures	Superficies affected	Valuated cost [Rwf]			
1	NGOMA	Zaza	Nyagasozi	Sugira	Water Treatment Plant (WTP)	29,335 Sqmeters	164,634,138.81			
2	NGOMA	Sake	Kibonde	Nyagasani	Tanks	2,476.18 Sqmeters	13,213,133.41			
3	NGOMA	Gashanda	Mutsindo	Kanyinya	Tank	2,313.251 Sqmeters	11,489,020.44			
4	NGOMA	Remera	Bugera	Gatare	Tank	1,381.224 Sqmeters	12,634,078.41			
5	NGOMA	Kazo	Karama	Kabimba	Tanks	1,595.5 Sqmeters	2,867,368.61			
6	NGOMA	Karembo	Akaziba	Rwamuhimbura	Tanks	9,814.62 Sqmeters	31,566,898.65			
7	NGOMA	Kibungo	Cyasemakamba	Kiruhura	Tanks	1,340.5 Sqmeters	11,172,355			
			Total				247,576,993			
8	8 NGOMA Total valuation cost for Pipeline Network 2,872 files/147 km									

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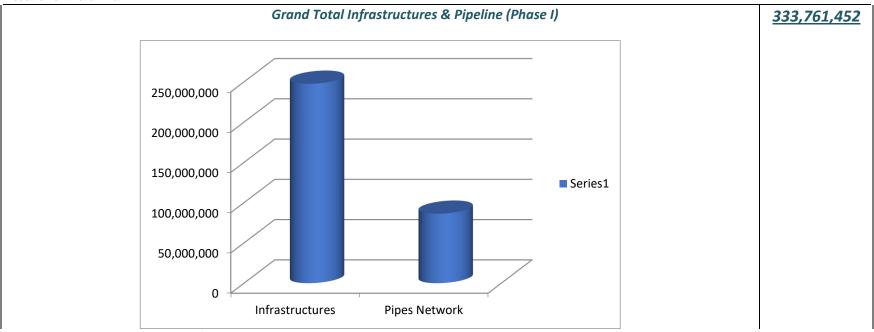


Figure 17: Illustration of expropriation/compensation cost of infrastructures & Pipeline (Phase I)

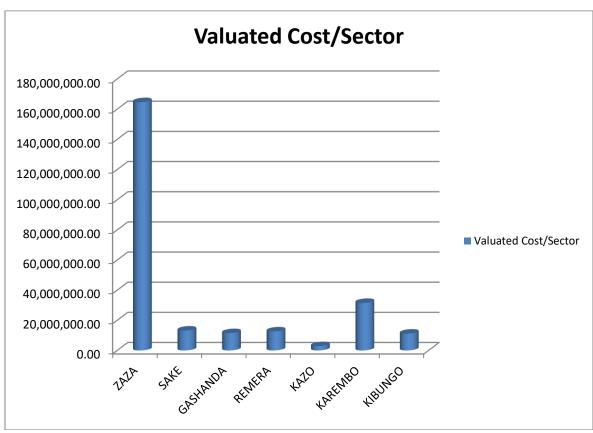


Figure 18: Illustration of the cost of Main Infrastructures valuated per Sector (Phase I)

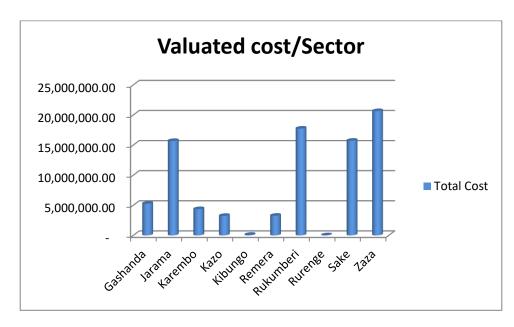


Figure 19: Illustration of the cost of Pipeline Network valuated per Sector (Phase I)

Table 14: Sake WSS detailed list of Affected Properties for main infrastructures construction and their total compensation values (Phase I and part of Phase 2)

S/NO	OUVRAGE	UPI	OWNER NAME	ID OF OWNER	SECTOR	CELL	VILLA GE	AREA AFFE CTED (SQM)	LAND VALUE /SQM	LAND COST	OTHER PROPER TIES COST	TYPE OF PROPER TIES	TOTAL COST	COMPE NSATION	GRAND TOTAL /RWF
			HABARU												
		5/06/14	GIRA	11982801		NYAGA	SUGI					INZU, INSINA,			
1	WTP	/01/2254	DIOGENE	67574057	ZAZA	SOZI	RA	1016	3500	3556000	51188690	IMYEMBE	54744690	2737234.5	57,481,924.5
			NSHIMIYI												
			MANA	11987801		NYAGA	SUGI					INZU, INSINA,			
2	WTP	NO TITLE	CELESTIN	53571020	ZAZA	SOZI	RA	285	3500	997500	1943377.91	IMIYENZI	2940877.91	147043.896	3,087,921.806
		5/06/14	KAZUNGU	11976801		NYAGA	SUGI				_				
3	WTP	/01/2338	THOMAS	02076246	ZAZA	SOZI	RA	690	3500	2415000	0	-	2415000	120750	2,535,750
	VA/TD	5/06/14	KAZUNGU	11976801	7474	NYAGA	SUGI	0.67	2500	2024500			2024500	454725	2 406 225
4	WTP	/01/2335	THOMAS	02076246	ZAZA	SOZI	RA	867	3500	3034500	0	- INIZII IDIEENECI	3034500	151725	3,186,225
5	WTP	5/06/14 /01/2341	KAZUNGU THOMAS	11976801 02076246	ZAZA	NYAGA SOZI	SUGI RA	15802	3500	55307000	509600	INZU, IBIFENESI, IMIGANO	55816600	2790830	58,607,430
- 3	WIP	5/06/14	KAZUNGU	11976801	ZAZA	NYAGA	SUGI	15802	3500	55307000	509600	IIVIIGANO	22910000	2790830	58,007,430
6	WTP	/01/2252	THOMAS	02076246	ZAZA	SOZI	RA	3253	3500	11385500	0	_	11385500	569275	11,954,775
- 0	VVIF	5/06/14	KAZUNGU	11976801	ZAZA	NYAGA	SUGI	3233	3300	11383300	0	-	11383300	309273	11,934,773
7	WTP	/01/2339	THOMAS	02076246	ZAZA	SOZI	RA	1364	3500	4774000	0	_	4774000	238700	5,012,700
	***	5/06/14	KAZUNGU	11976801	27 (27 (NYAGA	SUGI	1501	3300	177 1000			177 1000	230700	3,012,700
8	WTP	/01/2336	THOMAS	02076246	ZAZA	SOZI	RA	868	3500	3038000	0	-	3038000	151900	3,189,900
		5/06/14	KAZUNGU	11976801		NYAGA	SUGI								,,
9	WTP	/01/2250	THOMAS	02076246	ZAZA	SOZI	RA	263.8	3500	923300	0	-	923300	46165	969,465
		5/06/14	MVUYE	11983801		NYAGA	SUGI								
10	WTP	/01/2247	KURE E.	52918087	ZAZA	SOZI	RA	1101	3500	3853500	184200	AMASAKA	4037700	201885	4,239,585
		5/06/14	MVUYE	11983801		NYAGA	SUGI								
11	WTP	/01/2253	KURE E.	52918087	ZAZA	SOZI	RA	1394.6	3500	4881100	227200	AMASAKA	5108300	255415	5,363,715
			MWIZE	11993802		NYAGA	SUGI								
12	WTP	NO TITLE	YIMANA	03967063	ZAZA	SOZI	RA	350	3500	1225000	64400	INTURUSU	1289400	64470	1,353,870
13	WTP	5/06/14	EGLISE ANGLICAN	11962800	ZAZA	NYAGA	SUGI	1063.3	3500	3721550	4000	ANACAKA ACACIA	3725550	186277.5	2 011 927 5
13	WIP	/01/2340	(HABAKU	61021173	ZAZA	SOZI	RA	1003.3	3500	3/21550	4000	AMASAKA, ACASIA	3/25550	1802/7.5	3,911,827.5
		/01/2340	BAHO JOHN)	610211/3		3021	KA								
<u> </u>			UZAMU												
			KUNDA			NYAGA	SUGI								
14	WTP	NO TITLE	GLORIOSE		ZAZA	SOZI	RA	1017	3500	3559500	1500	IBISHYIMBO	3,561,000	178050	3,739,050
			NTABA										, , ,		, ,
		5/06/13	KURE	11983801		KIBO	NYAGA					INSINA, IBIJUMBA,			
15	TANK	/02/2904	VINCENT	47730048	SAKE	NDE	SANI	379.5	4093	1553293.5	113990.7	PAPAYI	1667284.2	83364.21	1,750,648.41
		5/06/13	MUSABYI	11954700		KIBO	NYAGA					IMYUMBATI, IBITI,			
16	TANK	/02/2905	MANA	39429086	SAKE	NDE	SANI	1232.68	4093	5045359.24	368,641	INSINA	5,414,000	270700.022	5,684,700

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			DANCILE												
17	TANK	5/06/13 /02/2906	MUSABYI MANA DANCILE	11954700 39429086	SAKE	KIBO NDE	NYAGA SANI	864	4093	3536352	1,966,300	INZU, INSINA, IPERA, INDIMU	5,502,652	275132.6	5,777,785
18	TANK	SUCCESSION	RWESI NGIMBI J.PAUL	11980801 36586150	GASHA NDA	MUTSI NDO	KANYI NYA	2313.251	4726	10932424.2	9500	GEREVERIA	10941924.2	547096.211	11,489,020.44
19	TANK		MUTU MYINKA AGNES		REME RA	BUGE RA	GATA RE	1381.224	5601	7736235.62	4296220	INZU, INTURUSU, GEREVERIA	12032455.6	601622.781	12,634,078.41
20	TANK	5/06/04 /03/2716	NYIRARU DODO PERUTH	11946700 20317028	KAZO	KARA MA	KABI MBA	93.631	1352	126589.112	31600	AMASAKA, URUBINGO	158189.112	7909.4556	166,098.5676
21	TANK	5/06/04 /03/2713	NIZEYI MANA FAUSTIN	11950800 34417174	KAZO	KARA MA	KABI MBA	1090.322	1352	1474115.34	498721.25	IBIKAKARUBAMBA, INSINA, IKIRARO	1972836.59	98641.8297	2,071,478.424
22	TANK	5/06/04 /03/2718	MUKABARA MBIRWA FRANCOISE	11953700 34782027	KAZO	KARA MA	KABI MBA	411.547	1352	556411.544	43390	INSINA, INDABO	599801.544	29990.0772	629,791.6212
23	TANK	SUCCESSION	CARITAS KAYITESI	11962700 76473190	KARE MBO	AKAZI BA	RWAMU HIMBURA	4609.624	2667	12293867.2	830390.792	IBISHYIMBO, INSINA, VOKA, IMISAVE	13124258	656212.9	13,780,470.9
24	TANK	SUCCESSION	KAYITARA MIRWA M. Claire		KARE MBO	AKAZI BA	RWAMU HIMBURA	831	2667	2216277	233160	IMISAVE, IBISHYIMBO	2449437	122471.85	2,571,908.85
25	TANK	5/06/03 /01/3076	NZARAMBA DEO	11958800 00316039	KARE MBO	AKAZI BA	RWAMU HIMBURA	3,334	2667	8891778	484850	INSINA, URUBINGO	9376628	468831.4	9,845,459.4
26	TANK	5/06/03 /01/888	KAMPIRE BUDENSI YANA	11954700 38442063	KARE MBO	AKAZI BA	RWAMU HIMBURA	1040	2667	2773680	2339710	INSINA	5113390	255669.5	5,369,059.5
27	TANK	5/06/05 /01/3476	KIRENGA PROVI DENCE	11979701 08101129	KIBU NGO	CYASEMA KAMBA	KIRU HURA	465	5815	2703975	13,000	GEREVERIA, INDABO	2,716,975	135848.75	2,852,824
28	TANK	5/06/05 /01/2002	BRALIRWA		KIBU NGO	CYASEMA KAMBA	KIRU HURA	875.5	5815	5091032.5	2,832,330	SEPTIC TANK, IGIPANGU	7,923,363	396168.125	8,319,531
			TOTAL												247,576,993

11.2 Valuation of expropriation/compensation of affected properties (phase II)

Table 15: Total valuation cost for Main infrastructures and Pipeline network (Phase II)

	Total valuation cost for main infrastructures								
N°	District	Sector	Cell	Village	Infrastructures	Superficies affected	Valuated cost [Rwf]		
1	NGOMA	Kibungo	Gahima	Nyamigina	Tank 500m ³ (RS12)	1,509 Sqmeters	9,018,132		
2	NGOMA	Rukira	Kibatsi	Rubagabaga	Tank 200m ³ (RS7)	597 Sqmeters	5,146,560		
3	NGOMA	Rukira	Nyinya	Ruhama	Tank 50m ³ (R7)	193 Sqmeters	4,295,619		
4	NGOMA	Kazo	Umukamba	Umukamba	Tank 50m ³ (R11)	603 Sqmeters	9,359,078		
<u> </u>	Total								
5	5 NGOMA <i>Total valuation cost for Pipeline Network</i> 9,739 files/340 km								

Grand Total Infrastructures & Pipeline (Phase II)

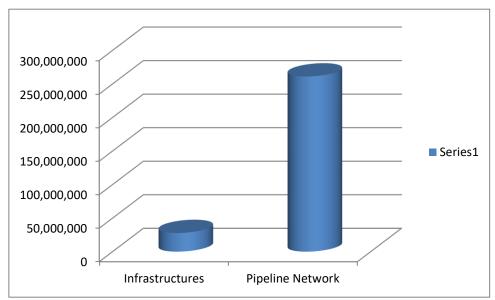


Figure 20: Illustration of expropriation/compensation cost of infrastructures & Pipeline (Phase II)

288,969,834

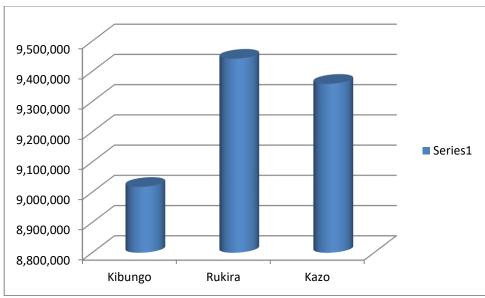


Figure 21: Illustration of the cost of main infrastructures (Phase II)

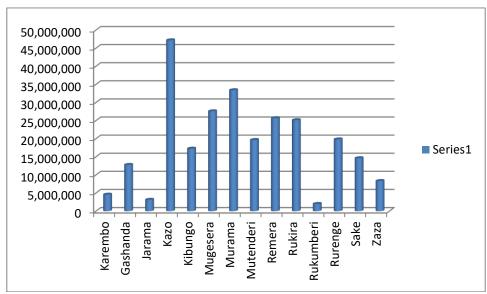


Figure 22: Illustration of the cost of Pipeline Network valuated per Sector (Phase II)

Table 16: Sake WSS detailed list of affected properties for Main Infrastructures construction and their total compensation values (Phase II)

										5 %	
	Capacity					Owner -Name				disturbance	
N	and Code	District	Sector	Cell	Village	(PAPs)	UPI	Land cost	Crops Cost	allowance	Total Amount
	500					MUKABARANGA	3/06/05/02		•		
1	m3(RS12)	Ngoma	Kibungo	Gahima	Nyamigina	Aisha	/1916	7,896,597	692,100	429,435	9,018,132
	200 m3					GOVERNMENT	5/06/05/02				
2	(RS7)	Ngoma	Rukira	Kibatsi	Rubagabaga	OF RWANDA	/4990	808,015	2,815,000	181,151	3,804,166
						HABIMFURA					
						Emily					
						MUKAZITONI	5/06/05/02				
		Ngoma	Rukira	Kibatsi	Rubagabaga	Christine	/33	388,970	889,500	63,924	1,342,394
						NKURIKIYINKA	5/06/10/02				
3	50 m3 (R7)	Ngoma	Rukira	Nyinya	Ruhama	Charles	/2231	3,234,466	856,600	204,553	4,295,619
	200 m3					UWIZEYIMANA	5/06/4/05				
4	(R11)	Ngoma	Kazo	Umukamba	Umukamba	Vestine	/510	764,956	1,147,500	95,623	2,008,079
						MUSABYEMARIYA					
						Godelene					
						TURAYAMBAZA	5/06/4/05				
		Ngoma	Kazo	Umukamba	Umukamba	Laurent	/505	894,505	1,079,500	98,700	2,072,705
						MUKAMUGANGA	5/06/4/05				
		Ngoma	Kazo	Umukamba	Umukamba	Julienne	/509	394,816	671,500	53,316	1,119,632
						GOVERNMENT	5/06/4/05				
		Ngoma	Kazo	Umukamba	Umukamba	OF RWANDA	/511	475,013	722,500	59,876	1,257,389
						MUKAMUHIGIRWA	5/06/4/05				
		Ngoma	Kazo	Umukamba	Umukamba	Agnes	/508	1,190,617	1,572,500	138,156	2,901,273
	Total										27,819,389

CHAPTER XII: MONITORING-EVALUATION AND REPORTING

12.1. Preamble

The aim of this chapter dedicated to monitoring and evaluation in RAP of the Sake Water Supply System will serve to highlight that the RAP will be effectively implemented and that any challenges or issues raised will be addressed promptly.

In fact, monitoring exercise provides the raw data to quantify the progress in project implementation and by this way is the measurement through time of how the planned objectives will be reached or not, while an evaluation exercise provides to the collected data the value. During the evaluation exercise learning occurs, questions are answered, recommendations are formulated and improvements are suggested. Monitoring and Evaluation are typically divided into three components, defined as: (i) input monitoring, (ii) output monitoring and (iii) outcome evaluation.

12.2. Input -Output monitoring and Outcome evaluation

Input monitoring

Input (or progress) monitoring measures whether inputs are delivered on planned schedule and as defined in the Land Acquisition and Compensation Framework. The measured inputs are the services, resources or goods that contribute to achieve outputs and, ultimately, desired outcomes. Input monitoring is done internally on an on-going basis, often as part of the project general management system or quality assurance system.

Output Monitoring

Output (or performance) monitoring looks at the direct measurable results of the inputs. For example: the number of people who have received expropriation/compensation values or persons who have completed a provided WASAC's apprentice course. Input and output monitoring together keep track of project's implementation efficiency, and indicate whether changes need to be made to make the project's implementation more efficient. The output monitoring is also done internally.

Outcome Evaluation

In RAP report production, the outcome (or impact) evaluation defines the extent to which the project inputs and outputs are likely to achieve the objectives of the land acquisition and resettlement program. Examples of outcome evaluation: an effectiveness of livelihood restoration.

Outcome evaluation, together with the output monitoring results, indicate whether the program is genuinely working and should continue to be implemented as it is, or whether fundamental changes have to be made. A credible external independent group usually carries out the outcome evaluation.

Outcome evaluation typically uses a wide variety of indicators. For example, most people feel reluctant to reveal the true amount of their income. Therefore, some indirect indicators can be used to assess if the project affected people are improving their livelihoods and standard of living. Such indicators can include school attendance, or the purchase of certain items such as vehicles or household appliances.

12.3. Monitoring Indicators for land acquisition and resettlement process

A joint implementation team will conduct internal monitoring of day-to-day on-going activities. The table below shows the key performance monitoring indicators mostly for payment of acquired lands and resettlement process.

Table N° 18: Abbreviated monitoring plan for land acquisition and resettlement process

	Indicators	Source of Information	Frequency					
	Input Indicators							
O۷	Overall spending							
•	Cash compensation	Financial reports	Quarterly					
•	General implementation services & overhead							
•	Number of full time staff dedicated to land acquisition & resettlement processes	Reports from WASAC Human Resource (HR)	Quarterly					
		Department ;						
		Reports from District and						
		Sector concerned						

•	Number of consultation and awareness meetings held in project areas including local population, among them PAPs.	Reports on number of meetings held including attendance lists of participants	Quarterly
•	Number of vehicles, computers, GPSs, and other equipment relevant to the resettlement & land acquisition programme	Reports on Counts from procurement Departements of WASAC & District	Quarterly
•	Number of PAPs by categories (consistent with categories in the entitlement matrix)	Reports on assets inventory and census of PAPS (checking continuously)	Quarterly
	Output Indicators		
•	Number of people who received cash compensation	Data management System (WASAC & District reports)	Monthly
•	Number of individuals whose compensation agreements have been signed.	Data management system (WASAC & District	Monthly
•	Number of households that have taken up the resettlement in kind.	reports)	
•	Number of people who have managed to rebuild their houses.		
•	Number of individuals who have replaced their property		
•	Number of individuals who have re-established their businesses.		

12.4. Compliance monitoring

The compliance monitoring has an objective to identify obstacles to progress of compensation, lands acquisition and resettlement processes so that measures can be put in place for proper implementation of the RAP. This component of monitoring and evaluation will include a review of internal monitoring and reporting procedures to ascertain whether they are being undertaken in conformity with this RAP.

During the implementation of the Resettlement Action Plan (RAP), there will be a monthly inspection and evaluation mission conducted by the Consultant in collaboration with WASAC's staff

at the District level, which will be sanctioned by a monthly report submitted to the Client with copy sent to District administration authority.

In order to better monitor the progress in the accomplishment of the project and especially the smooth implementation of RAP's activities, quarterly and annual reports will also be produced and submitted To Whom It May Concern.

Furthermore, it will concern also a review of internal monitoring records as basis for identifying any potential areas of non-compliance, any recurrent problems or potentially disadvantaged groups or households. The compliance monitoring will include:

- Review of the RAP, and other project related documents that were relevant for the monitoring, including various progress and monitoring reports;
- ♣ Review of the grievances lists and action taken to find solutions to those complaints;
- Detailed discussions with the WASAC and the whole implementation team and contractors;
- Consultations with some households that were resettled, if any;
- Consultations with a selected sample of land owners/users impacted by the Sake water supply system project who may have registered complaints about the project and its activities executed;
- Discussions with Government representatives from Cell, Sectors, Districts to National level.

12.5. Completion Audit

WASAC will arrange services of an external compliance Auditor to check whether the implementation of the program complies with the present framework and international requirements (AfDB OS 2). The scope of works of the compliance Auditor will include the following tasks:

Assessing the overall compliance with the RAP commitments shall be accomplished. This include interviewing some affected households and businesses to measure the extent to which project-affected people's standards of living and livelihood are being restored or enhanced, and gathering their opinions on compensation delivery, resettlement and grievances' management;

- In addition, the assessment will focus to establish whether the quality of life and livelihoods of affected households are restored; this includes a review of any livelihood restoration / rehabilitation programs for affected households to help offset the impacts of displacement;
- Check on any systemic grievances that may have been left outstanding;

Methods to assess whether livelihoods are restored will be carefully designed. These will mainly include quantitative surveys, resulting in a comparison with the baseline data. This should be done over a statistically significant sample of affected households chosen from all components of the Project.

In addition, the Completion Audit will use qualitative approaches to gather data and assess households' standards of living. Particular attention should be paid to assessing the impact of land acquisition and resettlement on the circumstances of vulnerable households. It is recommendable that the same Consultant who will carry out Compliance Monitoring could undertake the Completion Audit.

CHAPTER XIII: IMPLEMENTATION SCHEDULE

The following table shows the sequence of planned activities for the implementation of the Resettlement Action Plan, from the signature of Contract between WASAC and the Consultant to the RAP completion monitoring report for Sake water supply system project.

Table 17: Proposed Implementation Schedule and Estimated cost for Monitoring & Evaluation

Items	Planned Activities	Responsible Institutions	Timing	Estimated cost for M & E (RwF)
Public Consultations and Awareness	Informing local population including PAPs about scheduled RAP activities and their roles in its preparation and implementation.	WASAC Consultant (RAP team) Government's Decentralized Institutions (District-Sector & Cells)	16 th May to 27 June 2022; 13 th to 16 th September 2022; May 2023	2,850,000
Database collection	Documentation and Valuation exercises of affected lands, crops, trees and other properties.	Consultant (RAP team) Government's Decentralized Institutions (District-Sector & Cells)	May to June 2022 May, 2023	9,540,000
Entitlements disclosure	Displaying to PAPs the final results of valuation processes and signature of their completed valuation forms	Consultant (RAP team) Government's Decentralized Institutions (District-Sector & Cells); WASAC	July to December 2022 June 2023	2,100,000
Compensation agreements	Final negociation of compensation and signature of agreed forms by local Administrative Authorities and thensfer of these to WASAC.	Consultant (RAP team) Government's Decentralized Institutions (District-Sector & Cells)	December 2022 to February 2023	1,250,000

Effective	Acceptance of	WASAC	March 2023	WASAC &
compensation process	Compensation forms by MINECOFIN and transfer of money to the Bank accounts of PAPs	& MINECOFIN	up to Now	MINECOFIN Functioning Budgets
Monitoring and Supervision of RAP Implementation	Follow up the effective RAP implementation	WASAC & Government's Decentralized Institutions (District- Sector & Cells)	March 2023 to the End of Project	5,760,000
	21,500,000			

CHAPTER XIV: TOTAL BUDGET FOR COMPENSATION AND RAP IMPLEMENTATION

The Tables Nos 14 to 17 presented in Chapter XI highlight the "Total valuation costs for Main Infrastructures and Pipeline networks installation", respectively in Phases I and II of Sake Water Supply System Project.

Per phase, the valuated costs for Resettlement action Plan (RAP) implementation will be as follows:

Table 18: Budget for compensation and RAP implementation

Phases	Valuated cost per Category	Total amount (RwF)
	Total valuation cost for construction of Main Infrastructures	247,576,993
Phase I	Total valuation cost for pipeline network installation	86,184,459
	Grand total valuation costs for both	247,576,993 + 86,184,459 =
	Infrastructures & Pipelines installation	333,761,452 <i>RwF</i>
	Total valuation cost for construction of Main Infrastructures	27,819,389
Phase II	Total valuation cost for pipeline network installation	261,150,445
	Grand total valuation costs for both	27,819,389 + 261,150,445 =
	Infrastructures & Pipelines installation	288, 969,834 RwF

It appears from the Table presented above that the overall cost of the preparation and implementation of the Resettlement Action Plan (RAP) dedicated to Sake WSS project in its two phases (I & II) will totalize *622,731,286* Rwandan francs. Let's propose that ten percent (10 %) of the overall cost will be allocated to the monitoring and supervision activities of RAP implementation, means *62, 273,129* Rwandan francs. Therefore, the budget to be allocated for RAP compensation and implementation will globaly totalizes *685,004,415* RwF. It is obvious that during RAP implementation, the presented figures will be refined accordingly.

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African Development Bank, December 2013: Integrated Safeguards System-Policy Statement and Operational Safeguards

World Bank, 2001: Bank Operational Policies 4.01 on Environmental Assessment
Republic of Rwanda, MININFRA: National Human Settlement Policy in Rwanda, July 2004
Law N° 32/2015 Relating to Expropriation in the Public Interest

Law N° 17/2010 of 12/05/2010, e stablishing and organizing the Real Property Valuation Profession in Rwanda

Law N°49/2018 of 13/08/2018 determining the use and management of water resources in Rwanda

National Land Law, 2021

Law $N^{\circ}49/2018$ of 13/08/2018 determining the use and management of water resources in Rwanda Law $N^{\circ}66/2018$ of 30/08/2018 regulating Labour in Rwanda

Ministerial Order N° 002/2008 Determining Modalities of Land Registration

Ngoma District Development Plan 2008-2012

Law N° 58/218 of 13/08/2018 on mining and quarry operations

Law governing biodiversity in Rwanda, 2021

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