

**REPUBLIC OF RWANDA
MINISTRY OF ENVIRONMENT**



RwandaWater and Forestry Authority

Muvumba Multipurpose Dam Development Project



Resettlement Action Plan

March, 2017

DEFINITIONS OF TERMS USED IN THIS DOCUMENT

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

1. “Affected people” refers to people who are directly affected socially and economically by 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.
2. “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 World Bank Safeguard Policies. The meaning of the word shall also embrace the criteria for eligibility for compensation, resettlement and other measures, emanating from consultations with affected communities and the Local Leaders.
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:
 - a. Standard of living adversely affected, whether or not the Project Affected Person must move to another location ;
 - b. 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" refers to agricultural and/or non-agricultural land and any structures thereon whether temporary or permanent and which may be required for the Project.
 9. "Land acquisition" means the taking of or alienation of land, buildings or other assets thereon for purposes of the Project.
 10. "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.
 11. "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 and/or loss, denial or restriction of access to economic resources. RAPs are 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.
 12. "Replacement cost" means replacement of assets with an amount sufficient to cover full replacement cost of lost assets and related transaction costs. In terms of land, this may be categorized as follows;
 13. "Replacement cost for agricultural land" means the pre-project or pre-displacement, whichever is higher, value of land of equal productive potential or use located in the vicinity of the affected land, plus the costs of:
 - a. preparing the land to levels similar to those of the affected land;

- b. any registration, transfer taxes and other associated fees;
- 14. “Replacement cost for houses and other structures” means the prevailing cost of replacing affected structures of the quality similar to or better than that of the affected structures, in an area and. Such costs shall include:
 - a. Building materials
 - b. Transporting building materials to the construction site;
 - c. Any labour and contractors’ fees; and d) any registration costs.
- 15. “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,
- 16. “The Resettlement Policy Framework (RPF)’ is being prepared as an instrument to be used throughout the planned infrastructure development program implementation. The RPF will be publicly disclosed in impacted areas to set out the resettlement and compensation policy, organizational arrangements and design criteria to be applied to meet the needs of the people who may be affected by the program. The Resettlement Action Plans (“RAPs”) for the infrastructure development in the six secondary cities will be prepared consistent with the provisions of this RPF.
- 17. “Resettlement Action Plan”: see Resettlement and Compensation Plan above,
- 18. “Vulnerable Groups” refers to:
 - a. Widows, the disabled, marginalized groups, low income households and informal sector operators;
 - b. Incapacitated households – those no one fit to work and;
 - c. Child-headed households and street children
 - d. 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.

ACRONYMS

GIS: Geographic Information system

GRM: Grievance Redresses Mechanism

KECC: Korean Engineering Consultancy Corporation

PAPs: Project Affected Persons

RAP: Resettlement Action Plan

REMA: Rwanda Environmental Management Authority

RNRA: Rwanda Natural Resources Authority

USD: United States Dollar

RWF: Rwanda Franc

RWFA: Rwanda Water and Forestry Authority

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EXECUTIVE SUMMARY

Muvumba multipurpose dam project is a government project that intends to construct a dam of 30.5m high and will impound 35 million cubic meter of water in Karama, Gatunda and Rukomo sectors and will supply water for domestic use to Karangazi, Rwimiyaga and Nyagatare sectors.

The dam will impound water to be used for domestic water supply, water for irrigation of 7380 ha (net command area) and water for 16 reservoirs for livestock watering. The Project aims to increase the productivity and commercialization of agriculture and livestock products through the implementation of integrated watershed management practices, water-harvesting in main and valley dams, marshland and hillside irrigation. It will help also to increase the quality and quantity of water to supply as it was observed that Nyagatare District suffers from recurrent dry spells resulted to the imbalance between water supply and demand, hence this project will help to avail water to meet the demand of different water users. In addition to the above mentioned uses, this project it will generate hydropower energy.

This document is the Resettlement Action Plan and was prepared by **Rutonde consultancy and Business Company Ltd** on behalf of Korea Engineering Consultants Corporation (KECC), in 2016 and was updated by Rwanda Water and Forestry Authority in 2017.

In 2017, the survey of the proposed projects in Nyagatare District showed that up to **265** families will have to be displaced according to Rwanda settlement policy (2009), and resettled in village known locally as “Imidugudu”. The Rwanda Law requires the Executing Agency of the project to apply for expropriation of the affected property in public interest, and ensures that the Implementing Agency, diligently values the affected property, and duly compensates and facilitates the resettlement process of the PAPs. District of Nyagatare has to follow up the PAPs and support their restoration of livelihoods to a better level or at least a level equivalent to the standard the PAPs were prior to the displacement.

Nyagatare District to this effect required that a Resettlement Action Plan (RAP) be prepared to guide the process of acquisition of the land, valuation and compensation for the land and property thereon, and resettlement of the displaced persons; and in the monitoring of the resettled persons to ensure that their livelihoods are at minimum at level equivalent to the level prior to being expropriated.

The main elements of the RAP for project area: public consultation and engagement with affected citizens on expropriation processes, social assessment of the PAPs, census report of the

PAPs, documentation of assets of the PAPs, disclosure of cut-off point and entitlement, provision of alternatives, compensation and resettlement, addressing grievances, monitoring and reporting of the compensation and resettlement.

In March 2017, Rwanda Water and Forestry Authority hired the East Africa Property Consultants to implement the valuation of the properties to be affected.

The updated total cost of the RAP implementation for Muvumba multipurpose dam project is calculated at **Two Billion Four Hundred Eighty Nine Million Eight Hundred Sixteen Thousand Nine Hundred Thirty Seven Rwandan francs (2,489,816,937 Rwf)** including compensation for the properties (Land Perennial crops and buildings), and the disturbance allowance of 5% (as per Law). Considering the meeting held with Project affected people, the decision to pay the structure in cash was preferred with a justification to build the shelter near the land purchased in different locations.

Socio-economic profile and Loss inventory: The findings shown that 76.6% of PAPs were involved in practicing agriculture while the remaining were involved in other activities. 265 houses will be destroyed and the family members will need to shift to other places by the project with 4 houses located in the buffer of the check dam site, 54 houses located in quarry sites, 34 houses located in the buffer zone of the reservoir while 162 houses are located in the main dam site. In general 1,635 plots will be affected; with 891 entirely affected and households displaced, and other 744 partially impacted without displacement of the households.

Relocation area: 10ha of land located in Nyarurema (3ha) and Rurembo (7ha) are recommended for relocation of PAPs upon their choice. Feasibility studies including of terrain analysis, surface and climatology analysis have shown that land are suitable to be used for residential buildings.

1.1. Compensation costs: Valuation results

Description/Location	Estimated amount of properties valued (Rwf.)
Land Value	834,883,504
Built Structures (Buildings)	415,559,942
Plantation	1,120,810,780
Disturbance Allowance @5%	118,562,711
GRAND TOTAL ESTIMATED VALUE.	2,489,816,937

A Grievance Redress Mechanism (GRM) will be established in accordance with the Resettlement Policy Framework for the project, Rwanda Law guidelines. The GRM will be popularized through sensitization by the Valuation Company and local leaders. The GRM

provides a framework for any aggrieved party to seek review of the decisions of the implementation of the RAP for the project area. The complains will be submitted to Cell level and a committee made of Staff at different levels including Rwanda Water and Forestry Authority, Nyagatare District, Rwanda Land Management and Use Authority, Eastern Province and Sectors will handle any grievance related to resettlement and compensation before and during implementation of the project activities. Filed complain at the Sector level will be gathered by the Sector management and forwarded to Nyagatare District. Efforts will be made to sensitize all those involved to ensure that they use all available avenues under the GRM to resolve any dispute without necessarily going to the Courts of Law.

1. INTRODUCTION

1.1. Description and location of the project

Muvumbadam Project will be developed by the Government of Rwanda. A multipurpose dam was identified with an estimated net irrigated land of 8000ha. The dam site, check dam, spread (submerged area) area, and quarry, and a Buffer zone (silt trap zone) of 50m are fallen in three sectors of Nyagatare District such as Rukomo, Karama and Gatunda. The affected cells are Nyakagarama, Bushara, Cyenkwanzi, Kabuga, Ndego, Nyamirembe and Nyamikamba.

The project site is located in Rukomo Sector, Nyagatare District, and Eastern province of Rwanda. The study area is located between easting 519470.41 – 525915.84m and southings 4850532.1617 – 4847636.070m UTM readings (co-ordinate system ITRF 2005). The area is located on rounded hillside slopes and on the valley bottoms of these hills and mountains. The command area is situated on relatively gentle slopes.

The affected land is of private and government land of **489.02** Hectares that are used for growing crops. This survey area is comprised of submerged area due to Muvumba dam construction, submerged area due to check dam construction, Quarry development area, and Dam facility (spillway, diversion, small hydropower, etc.) area.

The overall objective of the project is to undertake a compensation survey and produce a coherent detailed resettlement report for the Muvumba dam project.

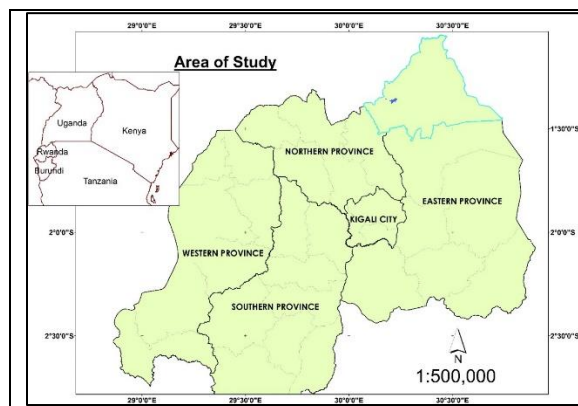


Figure 1 Administrative boundary of

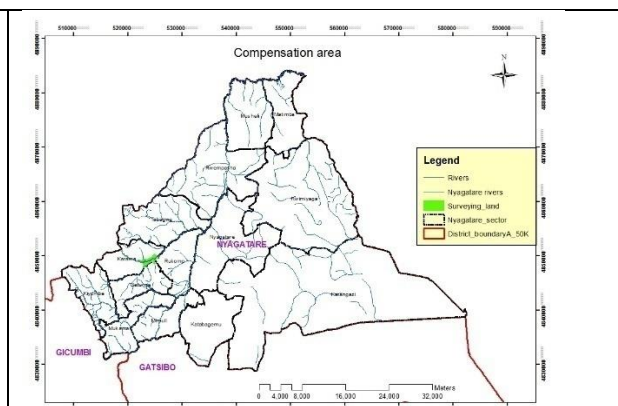


Figure 2 Location of Affected site

study area	
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1.1.1 Project objectives and outputs

The Project aims to increase the productivity and commercialization of agriculture through the implementation of watershed management, water-harvesting in valley dams and hillside irrigation. It will help also to increase water supply as it was observed that in Nyagatare District the quality of domestic water is critical, hence this project will help to increase water uses. The following are the summarized objectives of this project:

- i) Domestic and industrial supply: The residents of Rukomo, Gatunda, Karama, Tabagwe, Nyagatare, Kiyombe, Kabarore, Ngarama, Mimuli Sectors of Nyagatare and Gatsibo Districts will get water for daily domestic uses which is currently serious problem
- ii) Irrigation: The estimated gross command area for this project is 10000ha with 8000ha net, which will be used to grow: Maize, Soya bean, rice, vegetables and fruit trees.
- iii) Flood control: The dam project will help to control flooding at downstream of Umuvumba river because the excess water will be stored in the reservoir.
- iv) Hydro-electric power
- v) Soil conservation: In order to control siltation in the reservoir, watershed will be developed hence watershed will be protected against soil erosion.
- vi) Pollution control by prevention of salts-water intrusion and by providing dilution water for waste water.

The project civil works will engage the construction of dam for water storage along canal system and a significant amount of earth moving will be required. This will enable farmers to take water as and when they need it especially during the dry season when water is low. The dam will hold the water so that it is available for irrigation when the farmer chooses to irrigate.

The objectives of this Resettlement Policy Framework (RPF) are to:

- Establish the resettlement and compensation principles and implementation arrangements for the Muvumba dam construction
- Describe the legal and institutional framework underlying *Rwandan* approaches for resettlement, compensation and rehabilitation;
- Define the eligibility criteria for identification of Project Affected Persons (PAPs) and entitlements;

- Describe the consultation procedures and participatory approaches involving PAPs and other key stakeholders; and
- Provide procedures for filing grievances and resolving disputes.

1.1.2. Delineation of study area for the assessment

Muvumba dam project is located in Nyagatare District. The project area lies between 1° 21' 45''S, 30° 10'30'' E; 1° 21' 15''S, 30° 11'0'' E in upstream (check dam area) and 1° 22' 45''S, 30° 11'45'' E; 1° 21' 0''S, 30° 14'0'' E in the downstream (main dam area)¹. A total of 3 sectors, 8 cells and 14 villages are affected by the project as shown in the table below.

Table 1 Area affected by project

Area	District	Sectors	Cell	Village
Main dam area and Quarry sites	Nyagatare	Gatunda, Rukomo, Karama	Kabuga, Cyenkwanzi, Bushara, Nyakagarama, Nyamirembe, Nyamikamba	Byimana, Huriro, Kabeza, Kaburimbo, Kiyovu, Mabare, Meshero, Nyakibande, Nyamworoma, Rurembo, Uruyenzi
Check dam area	Nyagatare	Karama	Kabuga, Ndego	Rwebishirira, Rukamba, Matereza

Table 2 Mapping Coordinates system

Projected Coordinate System:	ITRF_2005
Projection:	Transverse_Mercator
false_easting:	500000.00
false_northing:	5000000.00
central_meridian:	30.00
scale_factor:	0.99990
Linear Unit:	m

Small scale maps were prepared and printed at A3 format and given to the surveyors to recognize the plot easily. The findings shown that 1,635 plots will be affected by the project while 265 households will be displaced by the current project.

¹ These coordinates are based on WGS84 geographic coordinates system

The computed total area affected by main dam area, check dam area and quarry area is **500.047 hectares** with the net parcel areas (excluding roads, rivers) being **489.02 hectares**.

Tables and map showing the individual parcels affected are shown on the field survey questionnaire results, submitted in separate excel sheet.

1.2. Resettlement area survey

Comprehensive discussions on the impacts that would arise from the Dam construction were conducted with the communities and stakeholders during public consultations. The communities would wish to have full compensation for all the losses incurred including loss of land, loss of livelihood and relocation disturbance to the relocation new areas.

1.3. Scope of the RAP

The aim of this ARAP report provides an action plan that will ensure that the PAPs livelihoods and standards of living are improved or at least maintained at level they were prior to the displacement, or to levels prevailing prior to the beginning of project implementation, whichever is higher. The scope of work undertaken during the RAP preparation included:

- Survey of projected affected area, land and property there on;
- Census of the PAPs including persons and their land, assets and property thereon;
- Socioeconomic assessment of the PAPs;
- Valuation of the land and assets and property thereon to be expropriated;
- Analysis of the objective of resettlement programmes;
- Consultations with Project Affected Persons (PAPs)
- Analysis of the legal framework;
- Analysis of institutional framework covering the identification of agencies responsible for resettlement activities,
- Establishment and popularization of a Grievances Redress Mechanism through evaluation socially and legally available and, affordable and accessible procedures for third party settlement of disputes arising from expropriation and resettlement process.
- Defining relevant organizations' responsibilities for implementing expropriation and resettling of PAPs, including identification of agencies responsible for implementation of the compensation and resettlement actions as well as monitoring of the PAPs during and after resettlement;
- RAP Implementation schedule covering all resettlement activities from preparation through implementation.

- Cost and budget showing itemized best cost for all activities; and,
- Monitoring and evaluation mechanisms-Arrangements for monitoring of resettlement activities by the implementing agency, supplemented by independent monitors as considered appropriate by World Bank.

1.4. Legal and institutional framework

All procedures, practices and mechanisms applied to this water project throughout the resettlement process is done following the existing legislation related to *land tenure, land use* and *resettlement* in Rwanda. These include (i) Law n° 32/2015 of 11/06/2015 relating to expropriation in the public interest¹(ii) Rwandan Constitution, promulgated in 2015 through its different and relevant articles², (iii) Organic Land law No 08/2005 of 14/07/2005³ determining the use and management of land in Rwanda, (iv) Organic law determining legislation around environmental management and protection, (v) Land Expropriation Law No 18/2007 of 19/04/2007⁴, (vi) Presidential Order N° 53/01 of 12/10/2006⁵ determining the structure, the responsibilities, the functioning and the composition of Land Commissions (vii) Ministerial order N°002/16.01OF 26/04/2010⁶ determining the reference land price outside the Kigali City, as well as(viii) the standards of the World Banks OP 4.12 on Involuntary Resettlement⁷. Grievance Resolution Mechanisms must also be following specifically the legal and institutional arrangements for filing grievances or complaints and how those grievances are addressed through formal and informal systems of dispute resolution.

1.5. Institutional framework.

It is for the benefit of both the project and the PAPs to devise a grievance redress mechanism through which complaints and disagreements can be resolved. The grievance framework recommended for this RAP is built on already existing structures within the laws of the GoR and affected community. The project is advised to develop organs involved in resettlement such as Resettlement Steering Committee (RSC) at the District level include the project representatives, the PAPs representatives, the District representative, and relevant key stakeholders.

²Rwandan Constitution, promulgated in 2015 with amendment though 2010 in article 29 stipulates right to own property, inalienable rights, and protection from expropriation.

³ The presidential order no 53/01 of 12/10/2006 refers to the organic law no8/2005 of 14/7/2005 determining the use and management of land in Rwanda.

⁴ The Law No 18/2007 of 19/04/2007 relating to expropriation in the public interests indicates the competent organs, procedures and rights of the expropriated persons and the expropriators for the public interests. It also provides for the valuation of land and property thereon and awards of just compensation.

⁵ The Presidential Order N° 53/01 of 12/10/2006 determines the roles and responsibilities of competent authorities in the compensation process.

⁶ The Ministerial Order N°002/16.01OF 26/04/2010 defines the reference land price outside the Kigali City

⁷ World Bank's Operation Policy (OP 4.12) indicates the safeguards on Involuntary Resettlements and the Rwandan legislation refers to the standards within this OP 4.12.

1.6. Methodology

The preparation of this resettlement action plan result of the combination of desk study and field surveys and census. The desk study involved review of previous study documents and analysis of the proposed project maps; and field surveys to establish the location of the submerged area due to Muvumba dam construction, submerged area due to check dam construction, Quarry site, Dam components (spillway, diversion, small hydropower, etc.) area and related infrastructure. The field survey consisted of conducting household census of identified PAPs; conducting baseline socio-economic survey on the project area as well as census and measurement of lands and crops which are likely to be affected. Discussions with PAPs and key stakeholders including District Administration were also another tools used along the preparation of this RAP.

1.7. Socioeconomic profile of study area

Nyagatare District is Northern_ East of Rwanda, limited by Tanzania in East and Ugandain the North, at the south there is Gatsibo District and Gicumbi District in Western. Nyagatare is the largest District in Rwanda and second most populated district in Rwanda with 466944 inhabitants and a density of 243/km² (**2012 census NISR**). Nyagatare is divided into 14 sectors made of 106 cells and 630 villages .The district has a total area of 1,741 km² where by 1,738 km² is Land and 3 km² is water. The results shown that 92% of affected population is occupied in agriculture while 8% is occupied in other activities.Recent finding research shown that Nyagatare District is suffered by potable water resources, electricity and recreation facilities hence the project development like this would be useful.

Demographics

Gatunda, Rukomo and Karama Sectors occupy 163 km ² with very densely populated and an average of 540.67 inhabitants/km², which is more than the double of Nyagatare District density (268.2 km²). The study area is classified as rural sectors according to 2012 national census. The total population of Gatunda, Rukomo and Karama sectors represents 19.06% of the District population, with respective percentages of 27,879 (5.9%), 34377 (7.37) and 26,727 (5.8%).The area, population and density of the 3 sectors concerned by the project are shown on chat below.

Approach Used To Identifying Project Affected Persons

During the field survey process in the affected area by the project the land ownership was identified and the PAPs was classifies into three groups namely;

- a) People with formal legal rights to the land the occupy
- b) People who do not have formal legal rights to land but have a claim to land that is recognized under national laws. (**Property inheritance, succession law**)
- c) People who have no recognized legal right or claim to the land they occupy (*bought from the owner and not allowed for the transfer due to its use and its*

size)

d) Public land owned by the District but occupied by farmers or COOPERATIVE
The following categories of PAPs was used in identifying groups of PAPs for the purpose of determining socio-economic impacts

Project Affected Persons (PAPs) are those people whose assets may be lost, such as land, property, access to natural resources, which may lose access to economic resources as a result of activities related to project that can be whether permanently or temporarily.

Project Affected Households are groups of PAPs in one household and where one or more of its members are directly affected by The Project for Feasibility Study & Detailed Design for Nyagatare Water Resources Development Project in Muvumba river basin, Rwanda, these include members like the head of household, male, female members, dependent relatives, tenants, etc.

Table3: Description of Households in affected area

Cells	Affected house	Affected plot	Number of affected Households
Bushara	90	568	3124
Kabuga	0	278	1668
Nyakagarama	9	94	423
Cyenkwanzi	66	302	1812
Nyamirembe	96	304	1520
Ndego	0	37	222
Nyamikamba	5	52	234
Total	265	1635	9003

1.6.1. Land ownership

In the area affected by project, generally, land ownership is formal land tenure with long term leasehold following the privatization 09/04/2007 of state owned lands

1.1.3. Socio characteristics

The main land use surrounding and within the project area is agriculture activities (on-farm) and other off-farm activities such as small trade of locally produced products dominated by the crops grown include maize, sorghum, pineapple, beans, bananas, peanuts, sugar cane, trees etc...and commodities imported from Nyagatare town, Uganda, Rukomocentre, and Gicumbi Town.

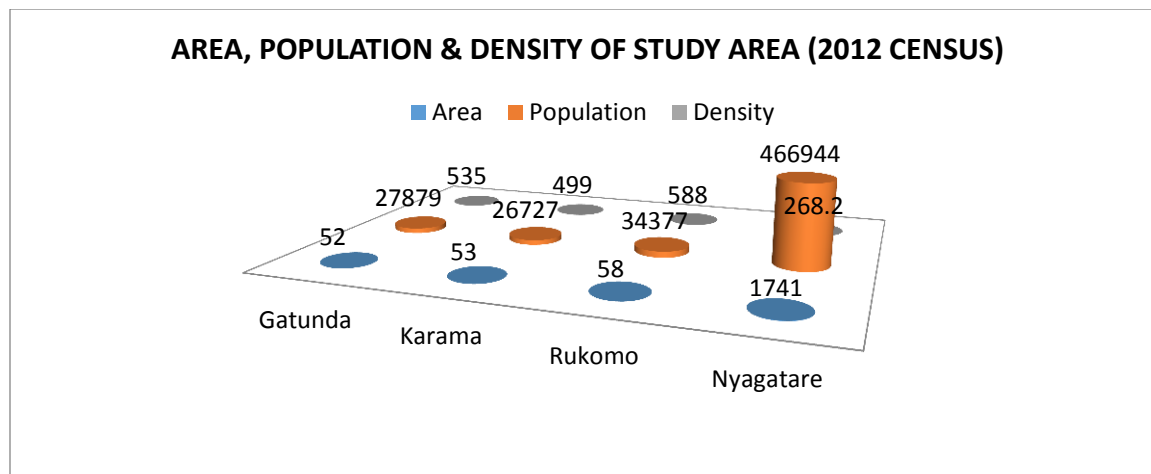


Figure 3Population density in affected SectorsSource: NISR, 2012

1.2. Existing situation of the physical infrastructure in study area

1.2.2. Energy

Access to electricity is still low in the project area where by electricity lines (*Rurembo, Bushara-1 and 2, kaburimbo, Nyarurema*) in the premises but not widely extended through the submerged area apart of Kaburimbocentre and Busharacentre. Firewood and charcoal are the dominant energy sources for cooking.

1.2.3. Connectivity and accessibility

Gatunda, Rukomo and Karama are well connected each other by non-Asphalt roads with soil pavement and this led to good supply and exchange of locally produced products with neighborhood areas.

1.2.4. Water and sanitation

Water pipelines are extended through the submerged area at small scale and pipelines rarely fed then in the project area, the Muvumba River remains an important natural resource because the residents drawing water directly from the river for domestic use and for watering their livestock. Land use surrounding the project area contributes as pollution sources of the Muvumba River

1.2.5. Schools

Including nursery schools, primary and secondary school (9 and 12 years basic education) in the premises include Nyarurema and Bushara-2

1.2.6. Health facilities

In the proximity premises of the potentially submerged area are Nyarurema and Bushara-2.

1.2.7. The challenges

During this survey few problem related to family conflict were occurred, disputes, ownership transfer between the previous land owner and new land owner. Regarding the accessibility to site there was no any problem encountered.

2. POTENTIAL PROJECT IMPACTS

The project for feasibility study & detailed design for Nyagatare water resources development project in Muvumba river basin, Rwanda will lead to only 891 owner of lands being physically and economically displaced. Another 744 households were assessed as being partially affected in terms of partial damage to their property or acquisition of part of their land without impact on the premises.

2.1. Land Ownership

The identified site for the dam is owned by the government and private people. About 489.02 ha of land will be required including 423.62 ha owned by individuals who have the legal right over the different pieces of lands and 65.4 ha belongs to the Districts.

2.2. Loss of livelihoods

Major economic activities in the project area are livestock keeping and agriculture. Major crops grown in the project area include Maize, Beans, Sorghum, Banana, Cassava, Sun flower, Vegetables (cabbages, egg plants, onions, tomatoes and carrots), rice, and potatoes while cows, sheep, goats and poultry are the main livestock. Therefore, the land to be acquired is being utilized in different ways that vary in nature and include:

- Animal grazing
- Agricultural activities
- Water points
- Housing
- Electricity

Figure 4 **Agriculture occupation**, Figure 5 **Clay brick quarry**, Figure 6 **Affected house**, Figure 8 **Affected public infrastructure** and Figure 9 **Perennial crop and agroforestry** illustrate the current land use which will be affected by the project.

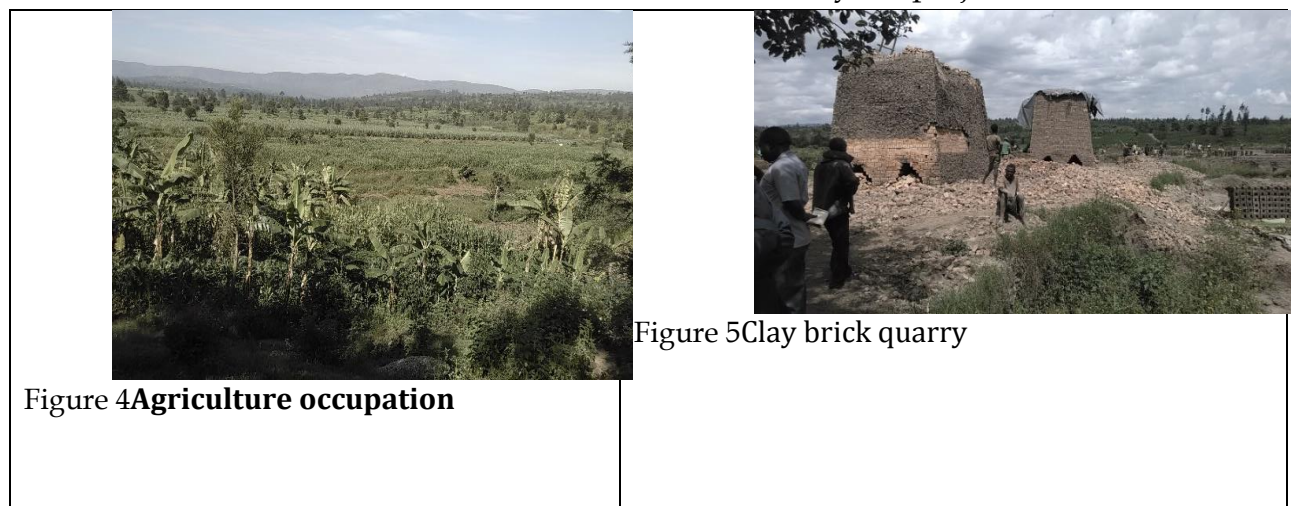




Figure 6 Affected house



Figure 7 Vegetables cultivation



Figure 8 Affected public infrastructure



Figure 9 Perennial crop and agroforestry

2.3. Loss of land

The civil works activities will entail clearing of the vegetation inherent in the project site which includes fruit trees, trees, grass and crops that have been planted and or cultivated by the PAPs. Most of land to be used will permanently be lost to the project activities except for the land for the borrow pit which will be reused by the owners after extraction of clay. The land to be permanently lost includes the flooded area and the area where the dams will be constructed. The dam buffer zone (50m from highest level of water in the dam) will still be used by the owners in a way that ensures erosion control, the area which will be occupied by check dam and extraction quarry zone (to extract clay). They will be trained in emergency safety procedures and all appropriate dam safety measures will be adopted to ensure their protection.

Table 3 Reservoir area

s/n	name	Area (hectare)
1	Check Dam	14.41
2	Main Dam	338.26
Total		353.12

2.4. Buffer zone area

A Buffer zone of 50m width around the reservoir and dam facility area also known as 'Silt trap' was delineated and surveyed. The buffer zone area is as shown in table below.

Table 4 Buffer/ Silt trap zone area

s/n	name	Area (hectare)
1	Check Dam	10.11
2	Dam site	65.4
Total		75.51

2.5. Quarry zone

This area which falls in Nyamirembe cell identified as the potential source of dam construction materials was also surveyed. The computed quarry area is as shown below:

Table 5 Quarry zone area

Total quarry boundary area:	18.785 hectare
(total quarry boundary area minus the area within the submerged and buffer area)	14.34hectare

i. Dam facility

The total area occupied by the main dam and check dam facilities is as shown in the table below:

Table 6 Dambody

Check Dam facility	0.450802 hectares
Main Dam facility	46.046352 hectares
Total area	46.497154 hectares

With considering the area occupied by the rivers, roads etc. the affected area is 501ha with net area of 482.02ha.

Table 7: Affected plot by Check dam (check dam and its buffer)

Sector	Cell	Village	Area of	Area affected	Area	Number
--------	------	---------	---------	---------------	------	--------

			affected plot (ha)	by Buffer zone of check dam	affected by reservoir of check dam	of affected plot
Karama	Ndego	Matereza	9.18	2.88	6.3	37
	Kabuga	Rwebishirira	3.44	2.05	1.39	9
		Rukamba	12.35	5.18	7.17	40
Total			24.97	10.11	14.86	86

Table 8: loss of land due to Main dam (reservoir, dam body & buffer)

Sector	Cells	Village	Affected plot	Area affected by Buffer (ha)	Area occupied by reservoir(ha)
Karama	Bushara	Uruyenzi	308	11.502	56.90
	Bushara	Meshero	184	6.93	51.27
	Bushara	Kiyovu	76	0.124	11.08
	Kabuga	Nyakibande	229	7.58	37.92
	Cyenkwanzu	Rurembo	2	0.84	1.16
	Cyenkwanzu	Kabeza	300	18.02	102.38
Rukomo	Nyakagarama	Mabare	10	1.041	4.36
	Nyakagarama	Nyamworoma	84	8.0	26.50
Gatunda	Nyamikamba	Kaburimbo	52	4.15	14.45
	Nyamirembe	Byimana	45	3.84	14.46
	Nyamirembe	Huriro	259	4.36	77.14
Total			1549	65.387	384.31

Table 9: loss of land due to Quarry and Dam sites

Sector	Cells	Village	Affected plot	Area affected by Buffer
Rukomo	Nyakagarama	Nyamworoma	30	6.9
Gatunda	Nyamirembe	Byimana	17	2.91
	Nyamirembe	Huriro	56	4.53
Total			103	14.34

2.6. Loss of house

The construction of Dam project will also affect cattle sheds and other structures that need to be compensated. Most of identified shelters of the PAPs will be affected only after the dam will be full of water. Nevertheless, PAPs will be compensated and relocated prior to start of civil works in the area where they live.

Table 10 Affected houses by buffer of check dam

Sector	Cell	Village	Number of affected houses
Karama	Ndego	Matereza	1
	Kabuga	Rwebishirira	3
		Rukamba	-
Total			4

Table 11 Affected houses by Quarry

Sector	Cells	Villages	Number of affected houses
Rukomo	Nyamirembe	Huriro	64
Total			64

Table 12 Affected houses by Buffer zone of dam site and reservoir

Sector	Cells	Village	Number of affected houses
Karama	Bushara	Uruyenzi	26
	Bushara	Meshero	-
	Bushara	Kiyovu	-
	Kabuga	Nyakibande	-
	Cyenkwanzzi	Rurembo	-
	Cyenkwanzzi	Kabeza	11
Rukomo	Nyakagarama	Mabare	1
	Nyakagarama	Nyamworoma	4
Gatunda	Nyamikamba	Kaburimbo	-
	Nyamirembe	Byimana	8
	Nyamirembe	Huriro	4
Total			54

Table 13 Affected houses by dam and reservoir

Sector	Cells	Village	Number of affected houses
Karama	Bushara	Uruyenzi	65
	Bushara	Meshero	18
	Bushara	Kiyovu	24
	Kabuga	Nyakibande	8
	Cyenkwanzzi	Rurembo	2
	Cyenkwanzzi	Kabeza	38
Rukomo	Nyakagarama	Mabare	-
	Nyakagarama	Nyamworoma	5
Gatunda	Nyamikamba	Kaburimbo	-
	Nyamirembe	Byimana	-
	Nyamirembe	Huriro	-
Total			160

2.7. Loss of agriculture

Except the land owned by District and given to Cooperative there are no any other consolidated farms for animal grazing or agriculture here only small scale agriculture (animal husbandry and subsistence agriculture) was observed.

Table 14Affected land use/ land cover by buffer area of check dam

Land use	Units	Matereza	Rwebishirira	Rukamba	Total
Beans (ha)	ha	0.08	0.03	0.10	0.20
SOYA	ha	0.01	0.00	0.02	0.03
Peanuts	ha	0.01	0.00	0.01	0.02
Sweet potato	ha	0.02	0.01	0.03	0.05
Irish potato	ha	0.03	0.01	0.04	0.08
Vegetable	ha	0.03	0.01	0.04	0.08
Sorghum	ha	0.18	0.07	0.24	0.48
Maize	ha	0.11	0.04	0.15	0.29
yams	ha	0.01	0.00	0.01	0.03
RICE	ha	0.01	0.00	0.01	0.03
CASSAVA	ha	0.04	0.01	0.05	0.10
WHEAT	ha	0.01	0.00	0.01	0.01
MILLET	ha	0.00	0.00	0.00	0.00
Colocasia	ha	0.00	0.00	0.00	0.00
Sunflower	ha	0.01	0.00	0.01	0.03
Groundnut	ha	0.01	0.00	0.01	0.03
Banana	Number	5140	1,927	6,915	13,982
Pilipili	Number	2	1	3	5
Euphorbia Tirucalli	Number	10	4	13	27
castor oil plant	Number	17	6	23	47
Cyprus	Number	1	0	1	2
Grevilea	Number	17	6	23	46
Acacia sineansis	Number	1	0	2	3
Acacia	Number	4	2	6	12
Pinus	Number	1	0	1	3
MarkhamiaSps	Number	2	1	3	5
Terminalia - sederela	Number	1	0	1	3
IMIKO	Number	2	1	2	5
Dracaena	Number	2	1	2	5
FICUS	Number	0	0	0	0
RIPARIA	Number	0	0	0	0
IGICUNCU	Number	0	1	0	0
UMWENYA	Number	0	1	0	0
VERNONIA Amigdalina	Number	13	5	17	35

IMITAGARA	Number	4	2	6	11
EUCALYPTUS	Number	23	9	31	64
Moringa	Number	1		0	3
pyrethrum	Number	9	3	12	24
Tea	Number	1	0	1	0
patchouli	ha	0	0	0	0
SUGAR CANE	Number	60	22	81	163
Elephant grass	are	5	2	7	15
isombe	Number	5	2	6	12
Pasparum	m2	138.72	5.20	18.66	37.74
CHAYOTTE	Number	1	1	2	4
Orange	Number	1		1	2
Avocado	Number	4	0	5	10
Mango	Number	2	0	2	4
Guyava (Ipera)	Number	0	0	4	9
Tree tomato	Number	2	0	3	6
Papaya	Number	1	0	2	4
PINEAPPLE	Number	19	7	26	52
VETIVERI	are	0.24	0.09	0.32	0.65

Table 15Affected land use/ land cover by check dam

Land use	Units	Matereza	Rwebishirira	Rukamba	Total
Beans (ha)	ha	0.68	0.25	0.91	1.84
SOYA	ha	0.11	0.04	0.14	0.29
Peanuts	ha	0.08	0.03	0.11	0.22
Sweet potato	ha	0.18	0.07	0.24	0.49
Irish potato	ha	0.25	0.09	0.34	0.68
Vegetable	ha	0.26	0.10	0.34	0.70
Sorghum	ha	1.59	0.60	2.14	4.33
Maize	ha	0.97	0.36	1.31	2.64
yams	ha	0.08	0.03	0.11	0.23
RICE	ha	0.10	0.04	0.13	0.26
CASSAVA	ha	0.34	0.13	0.46	0.93
WHEAT	ha	0.05	0.02	0.06	0.13
MILLET	ha	0.01	0.00	0.01	0.03
Colocasia (Amateke)	ha	0.01	0.00	0.02	0.03
Sunflower	ha	0.09	0.03	0.12	0.24
GROUND NUT	ha	0.09	0.03	0.11	0.23
Banana	Number	2203	826	2964	5992
URUSENDA	Number	18	7	24	49

Euphorbia Tirucali	Number	88	33	119	240
castor oil plant (ibibonobono)	Number	156	58	209	423
Cyprus	Number	7	3	9	19
GREVELIA	Number	151	56	203	410
Acacia sineansis	Number	0	0	0	0
ACACIA	Number	40	15	53	108
PINUS	Number	9	3	12	24
Markhamia (umusave)	Number	18	7	24	49
Terminalia - sederela	Number	9	3	12	24
IMIKO	Number	15	6	21	42
IMIHITE	Number	15	6	21	42
FICUS	Number	2	1	3	6
RIPARIA(UMURAVUMBA)	Number	4	2	6	13
IGICUNCU	Number	2	0	2	5
UMWENYA	Number	3	0	5	10
VERNONIA Amigdalina	Number	115	43	155	313
IMITAGARA	Number	38	14	50	102
EUCALYPTUS	Number	210	79	283	572
Moringa	Number	0	0	1	0
pyrethrum	Number	79	30	106	214
Tea	Number	0	0	0	2
patchouli	ha	0.26	0.00	0.36	0.72
SUGAR CANE	Number	539	202	725	1466
(urubingo)	are	49	18	66	133
isombe	Number	0	0	0	0
Pasparum	m ²	0.00	0.00	0.00	0.00
CHAYOTTE	Number	0	0	0	0
Orange	Number	0	0	0	0
Avocado	Number	33	14	44	89
Mango	Number	14	6	18	37
Guyava (Ipera)	Number	3	1	0	0
Tree tomato	Number	18	8	25	50
Papaya	Number	13	5	17	34
PINEAPPLE	Number	173	65	233	472
VETIVERI	are	2.14	0.80	2.88	5.83

Table 16 Affected land use/ land cover by buffer of reservoir and dam sites

Items	Unit	Uruyen zi	Kabez a	Nyamirem be	kiyov u	Kaburim bo	Maba re	Meshe ro	Nyamworo ma	Byima na	Nyakiban de	Rurem bo	Total
Beans (ha)	ha	1.05	1.35	0.88	0.06	0.22	0.06	0.69	0.41	0.22	0.54	0.02	5.51
SOYA	ha	0.10	0.40	0.01	0.01	0.03	0.01	0.11	0.06	0.03	0.08	0.00	0.86
Peanuts	ha	0.10	0.14	0.15	0.01	0.03	0.01	0.08	0.05	0.03	0.07	0.00	0.67
Sweetypatatose	ha	0.19	0.27	0.41	0.03	0.06	0.02	0.18	0.11	0.06	0.14	0.01	1.47
Irish patatoes	ha	0.21	0.64	0.36	0.04	0.08	0.02	0.26	0.15	0.08	0.20	0.01	2.04
Vegetable	ha	0.17	0.42	0.62	0.05	0.08	0.02	0.26	0.15	0.08	0.20	0.01	2.08
Sorghum	ha	1.12	4.05	2.26	0.43	0.52	0.15	1.63	0.96	0.51	1.27	0.05	12.96
Maize	ha	3.45	0.42	0.85	0.08	0.32	0.09	0.99	0.59	0.31	0.78	0.03	7.91
yams	ha	0.07	0.29	0.01	0.04	0.03	0.01	0.09	0.05	0.03	0.07	0.00	0.68
RICE	ha	0.00	0.19	0.28	0.00	0.03	0.01	0.10	0.06	0.03	0.08	0.00	0.78
CASSAVA	ha	0.30	0.95	0.38	0.06	0.11	0.03	0.35	0.21	0.11	0.27	0.01	2.77
WHEAT	ha	0.20	0.00	0.04	0.00	0.02	0.00	0.05	0.03	0.02	0.04	0.00	0.39
MILLET	ha	0.00	0.05	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.01	0.00	0.09
Colocasia (Amateke)	ha	0.01	0.03	0.01	0.00	0.00	0.00	0.01	0.01	0.00	0.01	0.00	0.09
Sunflower	ha	0.07	0.07	0.29	0.00	0.03	0.01	0.09	0.05	0.03	0.07	0.00	0.71
GROUND NUT	ha	0.08	0.05	0.29	0.00	0.03	0.01	0.09	0.05	0.03	0.07	0.00	0.69
Banana	Numb er	10248	1438 9	6661	1349	2155	627	6755	4004	2125	5277	0	53590
URUSENDA	Numb er	56	15	17	1	6	2	18	11	6	14	0	146
Euphorbia Tirucali	Numb er	182	128	98	28	29	8	90	53	28	70	0	715
castor oil plant (ibibonobono)	Numb er	407	166	117	79	51	15	159	94	50	124	0	1261
Cyprus	Numb er	9	18	6	1	2	1	7	4	2	5	0	55
GREVELIA	Numb er	274	195	191	85	49	14	154	91	48	120	0	1222
Acacia sineansis	Numb er	5	0	0	0	0	0	1	1	0	1	0	9

ACACIA	Numb er	93	72	5	25	13	4	40	24	13	32	0	321
PINUS	Numb er	26	14	3	0	3	1	9	5	3	7	0	71
Markhamia (umusave)	Numb er	52	21	12	3	6	2	18	11	6	14	0	145
Terminalia - sederela	Numb er	9	21	5	9	3	1	9	5	3	7	0	73
IMIKO	Numb er	19	29	19	9	5	1	16	9	5	12	0	126
IMIHATE	Numb er	55	11	8	2	5	1	16	9	5	12	0	125
FICUS	Numb er	4	3	1	1	1	0	2	1	1	2	0	15
RIPARIA(UMURAVUMBA)	Numb er	14	5	0	2	1	0	4	3	1	3	0	34
IGICUNCU	Numb er	6	0	1	0	0	0	2	1	0	1	0	12
UMWENYA	Numb er	6	10	1	0	1	0	3	2	1	3	0	27
VERNONIA Amigdalina	Numb er	155	229	113	72	38	11	118	70	37	92	0	934
IMITAGARA	Numb er	78	91	1	15	12	4	38	23	12	30	0	304
EUCALYPTUS	Numb er	139	298	483	117	69	20	215	127	68	168	0	1704
UMUKUYU	Numb er	5	0	0	0	0	0	0	0	0	0	0	5
Coffee	Numb er	0	0	0	0	0	0	0	0	0	0	0	0
Moringa	Numb er	3	1	0	0	0	0	1	1	0	1	0	8
pyrethrum	Numb er	0	389	0	0	26	7	80	48	25	63	0	638
Tea	Numb er	1	3	0	0	0	0	1	0	0	1	0	6

Geranium	Numb er	0	0	0	0	0	0	0	0	0	0	0	0
patchouli	ha	1.31	0.00	0.00	0.00	0.09	0.03	0.27	0.16	0.08	0.21	0.00	2.14
SUGAR CANE	Numb er	661	0	2000	0	176	51	551	326	173	430	0	4369
(urubingo)	are	55	181	3	4	16	5	50	30	16	39	0	398
isombe	Numb er	10	4	5	2	1	0	4	2	1	3	0	33
Pasparum	m2	411.47	199.3 8	5.91	0.00	40.71	11.85	127.6 1	75.65	40.14	99.69	0.00	1012. 41
CHAYOTTE	Numb er	0	5	1	0	0	0	1	1	0	1	0	10
Orange	Numb er	4	0	0	0	0	0	1	1	0	1	0	7
Avocado	Numb er	76	39	37	10	11	3	33	20	11	26	0	266
Mango	Numb er	27	14	22	4	4	1	14	8	4	11	0	110
Coeur de boeuf	Numb er	1	0	0	0	0	0	0	0	0	0	0	1
Guyava (Ipera)	Numb er	3	2	8	2	1	0	3	2	1	2	0	24
Tree tomato	Numb er	6	81	1	1	6	2	19	11	6	15	0	148
Papaya	Numb er	34	14	9	5	4	1	13	8	4	10	0	102
PINEAPPLE	Numb er	107	740	9	0	57	16	177	105	56	138	0	1406
VETIVERI	are	0.15	0.00	10.44	0.00	0.70	0.20	2.19	1.30	0.69	1.71	0.00	17.38

Table 17 Affected land use/ land cover by buffer of reservoir, dam sites

Items	Unit	Uruyen zi	Kabez a	Nyamirem be	kiyov u	Kaburim bo	Mabar e	Mesher o	Nyamworo ma	Byiman a	Nyakiban de	Rurem bo	Total
Beans (ha)	ha	0.22	0.28	0.18	0.01	0.05	0.01	0.14	0.08	0.04	0.11	0.00	1.14
SOYA	ha	0.02	0.08	0.00	0.00	0.01	0.00	0.02	0.01	0.01	0.02	0.00	0.18
Peanuts	ha	0.02	0.03	0.03	0.00	0.01	0.00	0.02	0.01	0.01	0.01	0.00	0.14
Sweetypatatose	ha	0.04	0.06	0.08	0.01	0.01	0.00	0.04	0.02	0.01	0.03	0.00	0.30
Irish patatoes	ha	0.04	0.13	0.07	0.01	0.02	0.00	0.05	0.03	0.02	0.04	0.00	0.42
Vegetable	ha	0.04	0.09	0.13	0.01	0.02	0.01	0.05	0.03	0.02	0.04	0.00	0.43
Sorghum	ha	0.23	0.84	0.47	0.09	0.11	0.03	0.34	0.20	0.11	0.26	0.01	2.68
Maize	ha	0.71	0.09	0.18	0.02	0.07	0.02	0.21	0.12	0.06	0.16	0.01	1.64
yams	ha	0.01	0.06	0.00	0.01	0.01	0.00	0.02	0.01	0.01	0.01	0.00	0.14
RICE	ha	0.00	0.04	0.06	0.00	0.01	0.00	0.02	0.01	0.01	0.02	0.00	0.16
CASSAVA	ha	0.06	0.20	0.08	0.01	0.02	0.01	0.07	0.04	0.02	0.06	0.00	0.57
WHEAT	ha	0.04	0.00	0.01	0.00	0.00	0.00	0.01	0.01	0.00	0.01	0.00	0.08
MILLET	ha	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Colocasia (Amateke)	ha	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Sunflower	ha	0.02	0.01	0.06	0.00	0.01	0.00	0.02	0.01	0.01	0.01	0.00	0.15
GROUND NUT	ha	0.02	0.01	0.06	0.00	0.01	0.00	0.02	0.01	0.01	0.01	0.00	0.14
Banana	Numb er	2120	2977	1378	279	446	130	1398	828	440	1092	0	11088
URUSENDA	Numb er	12	3	4	0	1	0	4	2	1	3	0	30
Euphorbia Tirucali	Numb er	38	26	20	6	6	2	19	11	6	15	0	148
castor oil plant (ibibonobono)	Numb er	84	34	24	16	10	3	33	19	10	26	0	261
Cyprus	Numb er	2	4	1	0	0	0	1	1	0	1	0	11
GREVELIA	Numb er	57	40	39	18	10	3	32	19	10	25	0	253
Acacia sineansis	Numb er	1	0	0	0	0	0	0	0	0	0	0	2
ACACIA	Numb	19	15	1	5	3	1	8	5	3	7	0	66

	er												
PINUS	Numb er	5	3	1	0	1	0	2	1	1	1	0	15
Markhamia (umusave)	Numb er	11	4	2	1	1	0	4	2	1	3	0	30
Terminalia - sederela	Numb er	2	4	1	2	1	0	2	1	1	1	0	15
IMIKO	Numb er	4	6	4	2	1	0	3	2	1	3	0	26
IMIHATE	Numb er	11	2	2	0	1	0	3	2	1	3	0	26
FICUS	Numb er	1	1	0	0	0	0	0	0	0	0	0	3
RIPARIA(UMURAVUMBA)	Numb er	3	1	0	0	0	0	1	1	0	1	0	7
IGICUNCU	Numb er	1	0	0	0	0	0	0	0	0	0	0	3
UMWENYA	Numb er	1	2	0	0	0	0	1	0	0	1	0	6
VERNONIA Amigdalina	Numb er	32	47	23	15	8	2	24	14	8	19	0	193
IMITAGARA	Numb er	16	19	0	3	3	1	8	5	2	6	0	63
EUCALYPTUS	Numb er	29	62	100	24	14	4	44	26	14	35	0	353
UMUKUYU	Numb er	1	0	0	0	0	0	0	0	0	0	0	1
Coffee	Numb er	0	0	0	0	0	0	0	0	0	0	0	0
Moringa	Numb er	1	0	0	0	0	0	0	0	0	0	0	2
pyrethrum	Numb er	0	80	0	0	5	2	17	10	5	13	0	132
Tea	Numb er	0	1	0	0	0	0	0	0	0	0	0	1
Geranium	Numb er	0	0	0	0	0	0	0	0	0	0	0	0
patchouli	ha	0.27	0.00	0.00	0.00	0.02	0.01	0.06	0.03	0.02	0.04	0.00	0.44
SUGAR CANE	Numb er	137	0	414	0	36	11	114	68	36	89	0	904

(urubingo)	are	11	37	1	1	3	1	10	6	3	8	0	82
isombe	Number	2	1	1	0	0	0	1	1	0	1	0	7
Pasparum	m2	85.13	41.25	1.22	0.00	8.42	2.45	26.40	15.65	8.30	20.63	0.00	209.46
CHAYOTTE	Number	0	1	0	0	0	0	0	0	0	0	0	2.02
Orange	Number	1	0	0	0	0	0	0	0	0	0	0	1.43
Avocado	Number	16	8	8	2	2	1	7	4	2	5	0	54.96
Mango	Number	6	3	5	1	1	0	3	2	1	2	0	22.80
Coeur de boeuf	Number	0	0	0	0	0	0	0	0	0	0	0	0.20
Guyava (Ipera)	Number	1	0	2	0	0	0	1	0	0	0	0	4.92
Tree tomato	Number	1	17	0	0	1	0	4	2	1	3	0	30.58
Papaya	Number	7	3	2	1	1	0	3	2	1	2	0	21.03
PINEAPPLE	Number	22	153	2	0	12	3	37	22	12	29	0	290.94
VETIVERI	are	0.03	0.00	2.16	0.00	0.14	0.04	0.45	0.27	0.14	0.35	0.00	3.59

Table 18 Affected land use/ land cover in reservoir and dam sites and quarry

Items	Unit	Uruyenzi	Kabeza	Nyamirembe	kiyovu	Kaburimbo	Mabarwe	Meshero	Nyamworo	Byimana	Nyakibande	Rurembo	Total
Beans (ha)	ha	5.96	7.69	5.02	0.34	1.25	0.37	3.93	2.33	1.24	3.07	0.13	31.34
SOYA	ha	0.55	2.29	0.06	0.08	0.20	0.06	0.62	0.36	0.19	0.48	0.02	4.91
Peanuts	ha	0.58	0.82	0.85	0.08	0.15	0.04	0.48	0.28	0.15	0.38	0.02	3.83
Sweet potato	ha	1.06	1.53	2.32	0.15	0.33	0.10	1.05	0.62	0.33	0.82	0.04	8.34
Irish potato	ha	1.17	3.62	2.02	0.21	0.46	0.14	1.45	0.86	0.46	1.14	0.05	11.58
Vegetable	ha	0.99	2.39	3.52	0.28	0.47	0.14	1.49	0.88	0.47	1.16	0.05	11.84
Sorghum	ha	6.36	23.05	12.88	2.44	2.95	0.86	9.25	5.49	2.91	7.23	0.31	73.73
Maize	ha	19.62	2.40	4.83	0.43	1.80	0.52	5.65	3.35	1.78	4.41	0.19	44.99
yams	ha	0.39	1.66	0.08	0.23	0.16	0.05	0.49	0.29	0.15	0.38	0.02	3.89
RICE	ha	0.01	1.10	1.58	0.00	0.18	0.05	0.56	0.33	0.17	0.43	0.02	4.42
CASSAVA	ha	1.70	5.40	2.14	0.34	0.63	0.18	1.98	1.17	0.62	1.55	0.07	15.78
WHEAT	ha	1.11	0.01	0.23	0.00	0.09	0.03	0.28	0.17	0.09	0.22	0.01	2.23
MILLET	ha	0.01	0.27	0.02	0.00	0.02	0.01	0.06	0.04	0.02	0.05	0.00	0.49
Colocasia (Amateke)	ha	0.05	0.19	0.06	0.02	0.02	0.01	0.07	0.04	0.02	0.05	0.00	0.52
Sunflower	ha	0.43	0.38	1.65	0.00	0.16	0.05	0.51	0.30	0.16	0.40	0.02	4.05
GROUND NUT	ha	0.47	0.26	1.65	0.01	0.16	0.05	0.50	0.29	0.16	0.39	0.02	3.95
Banana	Number	58309	81869	37897	7677	12260	3570	38432	22782	12088	30024	0	304908
URUSENDA	Number	318	86	99	4	33	10	105	62	33	82	0	831
Euphorbia Tirucali	Number	1034	728	559	159	164	48	513	304	161	401	0	4071
castor oil plant (ibibonobono)	Number	2317	942	666	447	289	84	904	536	284	707	0	7176
Cyprus	Number	49	102	33	8	13	4	40	24	13	31	0	316
GREVELIA	Number	1558	1110	1085	482	280	81	876	519	276	685	0	6951
Acacia sineansis	Number	30	0	0	0	2	1	6	4	2	5	0	49
ACACIA	Number	530	410	31	140	73	21	230	136	72	180	0	1824
PINUS	Number	149	79	19	0	16	5	51	30	16	40	0	406
Markhamia (umusave)	Number	299	121	66	18	33	10	104	62	33	81	0	827

Terminalia - sederela	Number	53	121	27	51	17	5	52	31	16	41	0	414
IMIKO	Number	111	164	110	51	29	8	90	53	28	70	0	715
IMIHATE	Number	311	65	45	13	29	8	90	53	28	70	0	712
FICUS	Number	22	17	8	7	4	1	11	7	3	9	0	88
RIPARIA(UMURAVUMBA)	Number	78	27	2	10	8	2	24	14	8	19	0	192
IGICUNCU	Number	34	2	7	0	3	1	9	5	3	7	0	70
UMWENYA	Number	34	55	3	0	6	2	19	11	6	15	0	152
VERNONIA Amigdalina	Number	882	1302	642	410	214	62	670	397	211	523	0	5312
IMITAGARA	Number	445	517	7	86	70	20	218	129	69	170	0	1731
EUCALYPTUS	Number	793	1696	2749	668	390	114	1222	724	384	955	0	9695
UMUKUYU	Number	28	0	0	0	0	0	0	0	0	0	0	28
Coffee	Number	0	1	0	0	0	0	0	0	0	0	0	1
Moringa	Number	20	7	1	0	2	1	6	3	2	5	0	46
pyrethrum	Number	0	2212	0	0	146	43	458	271	144	358	0	3631
Tea	Number	3	17	0	0	1	0	4	2	1	3	0	33
Geranium	Number	0	0	0	0	0	0	0	0	0	0	0	0
patchouli	ha	7.43	0.00	0.00	0.00	0.49	0.14	1.54	0.91	0.48	1.20	0.00	12.19
SUGAR CANE	Number	3764	3	11378	0	1000	291	3133	1857	985	2448	0	24858
(urubingo)	are	315	1029	14	21	91	27	285	169	90	223	0	2264
isombe	Number	56	22	27	9	8	2	24	14	8	19	0	189
Pasparum	m2	2341.15	1134.3 9	33.65	0.00	231.61	67.44	726.04	430.40	228.37	567.21	0.00	5760.2 7
CHAYOTTE	Number	0	28	6	0	2	1	7	4	2	5	0	56
Orange	Number	21	2	1	0	2	0	5	3	2	4	0	39
Avocado	Number	435	223	208	55	61	18	190	113	60	149	0	1511
Mango	Number	155	82	124	21	25	7	79	47	25	62	0	627
Coeur de boeuf	Number	3	0	0	0	0	0	1	0	0	1	0	5
Guyava (Ipera)	Number	17	12	43	11	5	2	17	10	5	13	0	135
Tree tomato	Number	36	462	6	8	34	10	106	63	33	83	0	841
Papaya	Number	192	79	54	27	23	7	73	43	23	57	0	578

PINEAPPLE	Number	611	4210	54	0	322	94	1008	598	317	788	0	8001
VETIVERI	are	0.83	0.00	59.40	0.00	3.97	1.16	12.46	7.39	3.92	9.73	0.00	98.86

The summary of the expected impacts including partial loss of land was shown in the table below:

Table 19: Assessed impact of the projects implementation in area in Rukomo

Item	Quantity
Affected District	Nyagatare
Affected Sector	Rukomo
Affected cells	Nyakagarama
A) Losing houses and assets	
Loosing house and Land	69
B) Land	
Owner loosing House and lands partially	25

Table 20. Assessed impact of the projects implementation in area in Karama

Item	Quantity
Affected District	Nyagatare
Affected Sector	Karama
Affected cells	Bushara, Cyenkwanzi, Kabuga and Ndego
A) Losing houses and assets	
Loosing house and Land	688
B) Land	
Owner loosing House and lands partially	497

Table 21 Assessed impact of the projects implementation in area in Gatunda

Item	Quantity
Affected District	Nyagatare
Affected Sector	Gatunda
Affected cells	Nyamikamba&Nyamirembe
A) Losing houses and assets	
Loosing house and Land	137
B) Land	
Owner loosing House and lands partially	219

2.8. Resettlement measures for each category of eligible PAPs

PAPs were categorized as shown in the table below:

Table 22Entitlement matrix

Type of loss	Application	Definition of entitled person	Compensation policy	Implementation issues
Permanent loss of arable land	Arable land located along the project site	Farmers who have usufruct right to cultivate the land & physically present in the project area	Land for land replacement – (If land is not available in close proximity provide full compensation and if the compensation land is not enough, provide additional cash payment.)	-Identify arable land close to the affected community -List down affected and entitled households -Compensate for lost land as per the valuation law -Compensate for lost crop as per the valuation law
Temporary loss of arable land	Arable land located along the project site	Farmers who have the right to cultivate the land	-Provide compensation of losses	-List down affected and entitled households -Rehabilitate land used temporarily at the end of the construction period - Compensate for crop loss from the temporarily occupied land
Loss of residential area /house/	Housing structures located in the site	-A person who owns housing infrastructure -A person with no formal legal rights or claim structures	-Full compensation payment to cover the loss of housing structure without taking into consideration depreciation -Relocate housing structure to a site which is acceptable to PAPs	-A list of available structure in each affected community -Compensations provided -If agreement has been reached on mode of compensation settlement, provide evidence.
Loss of Rented Houses	Housing structures located in the project area	Tenants who have rented houses in the project area from individual landlords.	Comparable or better dwelling house in the project area for renters (tenants) at same rental costs and displacement compensation equivalent to the	-Tenants (renters) will be compensated inconvenience and compensation will be paid to them
Loss of commercial	Loss of commercial and business activities	Owner of the commercial and business activities	-Full compensation payment to the owner -Relocate business or	-A list of available commercial institutions in each affected

and business activities		who over operates the business at the site of the project area	commercial activity to site acceptable to the affected persons	community -Compensation provided -If agreement has been reached on mode of compensation settlement, provide evidence
Loss of trees	Trees and other plant species located on the land for the structure for the project area, and the project easement areas	Land owner, concession holder, squatters, communities who utilize the land where trees and other plant species are located	Full compensation payment based on type, age and diameter of trees - Provide equivalent land nearby for replanting	-Make inventory of trees -Determine individual need or compensation volumes -An assessment for maintaining that kind of vegetation
Loss of livelihood for Vulnerable households	For loss of farmland, trees, houses (own or rented)	Vulnerable households who lose live farmland and houses -FHH will be given special attention and support for the same benefits as their male counterparts	-Give special support and assistance - TAWSB will be responsible to construct new houses for vulnerable households and provide all the other services to the vulnerable households	- The special support to FHH is because they lack resources, educational qualifications, skills, or work experience compared to men.
Loss of land or house	Source of income & livelihood	-PAPs without formal rights for land (squatters & encroachers)	Provide equivalent land	They may not have other sources of income or livelihood
Loss of land	Loss of income and traditional rights	Those persons who do not physically reside in the project area but have traditional rights to the land	Provide equivalent land	Income could be reduced due to the loss of land

3. CENSUS AND SOCIAL ASSESSMENT OF PAPS

Land surveyor and sociologist identified and assessed the PAPS for the existing property and socioeconomic conditions as well as the impacts that will be occasioned by implementation and operationalization of the project in area.

3.1. List of project affected persons.

Two meetings were organized and held before the survey and assessment of the impact of project implementation. This included one with the general community members from the affected cells; and a second one with a narrowed down list of those initially assessed by surveyor to most likely be impacted by the implementation of the projects. The two meetings were held on 17/11/2015 and on 30/11/2015 respectively. The meetings were held to explain to the PAPS the proposed project activities, the process and purpose of RAP, discussion and agreement on RAP implementation including compilation of the list of PAPS, valuation and social assessment of the PAPS, forms and modalities for compensation, facilitation of the displacement and resettlement of PAPS, following up of PAPS, and the Grievance Redress Mechanism (GRM).

The main findings of the census were that 1635 households will be affected; with 891 entirely affected and households displaced, and another 744 partially impacted without displacement of the households.

The following are social infrastructures which will be affected:

1. Rice crop growing Cooperative
2. Sorghum and Maize Growing Cooperatives
3. Clay brick quarry
4. Stone/ rock quarry

3.2. Socioeconomic assessment of the PAPS

3.2.1 Vulnerable groups/persons

The socio-economic survey identified that over 28.12% of household heads affected are women heading and these are considered vulnerable people among the project affected persons as indicated in the chart below. There was no identified child headed households in the project area.

3.2.2 Number of old persons in the affected households

On average around 1515househeads recorded the presence of elderly persons in their households and the majority approximately 8.7% recorded no presence of elderly persons.

3.2.3 Sources of livelihoods for the affected household heads

The high number of affected households is operating some kind of business activities as the main source of income recorded at 76.6% is involved in agriculture while 23.4% are involved in other activity and unemployed.

Table 23Source of income per affected household

Type of activities	House heads %
Business	5.9%
No job	2.4%
Professional	10.4%
Casual Job	0.6%
Agriculture	76.6%
Self employed	3.9%
permanent job	0.3%
Total	100.0%

3.3 Records keeping

The information in this ARAP were evaluated by the Sector leaders and PAPs and confirmed as true. Both KECC and the Nyagatare District will keep this information including the relevant records and copies.

4. DESCRIPTION OF COMPENSATION AND OTHER RESETTLEMENT ASSISTANCE

4.1 Resettlement allowance

The Government of Rwanda will compensate the PAPs for the listed affected items as valued in **Error! Reference source not found.**below as per agreed to and signed valuation forms. The type and form of compensation will be according to what was agreed to between the Consultancy Company and each representative of the affected households or owner of affected property/land, at the time of signing off of the valuation of forms.

4.2 The different forms of compensation and resettlement facilitation

The suggested options including payment of cash; exchange of land for land; provision of temporary housing for tenants and landowners that have been displaced; integration of informal business owners into existing or planned markets near project area; and organizing of such persons into cooperatives or integrating them into existing cooperatives so as to access public assistance for small enterprise development.

4.3 Eligibility

Eligibility for compensation is as stipulated in the Rwandan Constitution (Article 29), the Expropriation Law of Rwanda (N° 32/2015 of 11/06/2015). These documents regulate and give entitlement to the affected persons. In the Rwandan Expropriation Law the person to be expropriated is defined as “any person or a legally accepted association operating in the country who is to have his or her private property transferred due to public interest as well as legally accepted local administrative entities”.

5. VALUATION OF AND COMPENSATION FOR LOSSES

This section describes the value of losses and determines replacement costs as well as the roles of the different institutions and PAPs during the determination of compensation process. The financial compensation will be the last option and the land value is calculated with reference to the benchmark prices for land and property set annually by the Council of Certified Real Property valuers in Rwanda.

5.1 Compensation for Land

The exchange of land for land was suggested for the affected households whom their houses will be destroyed and was apparently the preferred means of compensation. In this context, the project will allocate approximately 10ha in Gatunda and Karama

Sectors. The total value of the land to be expropriated is eight hundred thirty four millions eight hundred eight three thousands and five hundred and four (834,883,504 RWF). The value of land owned by the Government institutions including wetland will not be expropriated.

5.2. Compensation of structures (Houses)

As it was shown in the tables below the total value requirement for expropriation of affected structures (houses) was **436,337,939 RWF** including check dam, quarry and main dam site

The summary value of the crops is as indicated in the following table:

Valuation of affected houses in check dam site

Table 24. The cost of affected house located in project site

LOCATION PER SECTOR	LOCATION PER CELL	AFFECTED HOUSES	TOTAL VALUE (Rwf.) (INCLUDING DISTURBANCE ALLOWANCE)
KARAMA	BUSHARA	90	147,665,219
	KABUGA	0	0
	NDEGO	0	0
	CYENKWANZI	65	84,483,179
RUKOMO	NYAKAGARAMA	9	15,861,734
GATUNDA	NYAMIKAMBA	5	7,767,921
	NYAMIREMBE	96	180,559,887
TOTAL HOUSES FOR VOLUME 2		265	436,337,939

5.3. Valuation for crops

The crop was subdivided into two categories such as: Seasonal crop (not to be expropriated), and Perennial crop (valuated according to the value accepted by the the Institute of Real Property Valuers in Rwanda (IRPV). The value of crops to be compensated is one billion hundred twenty millions eight hundred ten thousands and seven hundred eighty Rwandan francs (1,120,810,780 RWF)

Table 25. Resettlement measures for each cells

Affected Cells	Number affected Houses	Affected plot/Parcel	Affected area (ha)
Bushara	90	568	137.9
Kabuga	0	278	61.3
Nyakagarama	9	94	39.9
Cyenkwanzi	65	302	122.4
Nyamirembe	96	304	98.6
Ndego	0	37	9.2
Nyamikamba	5	52	18.6
Total	265	1635	487.8

Due to the recommendation of local authorities, it was proposed to have a relocation site for the 265 households whom will be affected by the project. The land required for relocation was determined after considering the area needed for a construction parcel in Rwanda; this plot must be equal $15 \times 20 = 300\text{m}^2$ based on Rwanda Building code (MININFRA, May, 2015) and considering the cadastre map the land for relocation is equal to 10ha.

The total amount required for the resettlement of 265 houses was estimated to be two billions six hundred and fifty millions Rwandan francs (2650 000 000 RWF) if the choice is to resettle affected people by constructing new houses. However it is worth to note that PAPs claimed to have the equivalent value of their houses so as to settle near the area where they will acquire the lands for cultivation.

4. CONSULT WITH PAPS ON ACCEPTABLE ALTERNATIVES

4.1 Verification and disclosure of entitlements

Upon identification of the households that would be affected by the project was completed, Rutonde consulting firm as the Project Social and Environmental Safeguards team, together with Technical Staff from the Nyagatare District with the Nyagatare cell leaders, organized meetings with PAPs to discuss compensation requirements and concerns with the expropriation process and resettlement plans. There have been one meeting for disclosure, on December, 28, 2015 where Rutonde consulting firm and Sectors staff presented the list of affected households before conducting a detailed census and value of PAPs assets for validation by the affected persons.

4.2 Other meetings and consultations

There will be other meeting and consultations with the PAPs, the respective banks, and parties involved in the land exchange programme to discuss how to proceed with the compensation and signing of the agreement and contract documents.

4.3 Main issues raised by the PAPs during the first meeting

The following issues have been raised by the PAPs:

- What is the time frame for compensation?
- What are valuation methods for crops, land and other structures?
- Availability of jobs during construction
- When and how will land be compensated?
- What are the other assistance that project will provides to PAPs

These issues raised by PAPs were responded as follows:

Table 26 Issues of PAPs and responses given

S. No	Gender	Question/comment	Response and how addressed in RAP
1	Female	How does this project help vulnerable people, people with disabilities?	The project will benefit all people and it needs people with the ability to work on the project as well.
2	Female	Priority for jobs should also consider women; women can do the same work.	Priority will include women, there will not be discriminated against women if they are able to accomplish specific task.
3	Male	Raised the issue of employment, he suggested that the local people should be the first ones to be employed project.	The consultant team explained that local people will be involved in the employment, especially those with skills. But those with no skills will be taken as manpower in the project implementation.
4	Male	How will be the expropriation? Will people have a choice on price for their crops or houses destroyed?	The laws of the country will be followed and PAPs will be given a number of options including compensation in kind and/or in cash.
6	Female	The project is genuine and very good for us loss of livelihood and need for	All affected assets will be compensated with reference to existing laws and regulations. The PAPs will be followed

		dwelling places after relocation	closely by the CoK to ensure that your lives are better or at least at the same level as before the project.
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4.4 Agreement on compensation and preparation of contracts

The Concerning institution will prepare a formal agreement for release of the affected property, and compensation for the property and for payments for the expropriated land and property thereon, which was duly explained to the PAPs prior to their signing off. Those who chose cash will be requested to provide their personal Bank accounts where their money will be transferred. The PAPs were all assured that they will only be moved or displaced after receiving their compensation. In case of husband and wife they were all required to sign off and agree to the banking and compensation arrangement.

5. GRIEVANCE REDRESS MECHANISM

In case of any dissatisfied person, it was made clear to the PAPs that the complaint should be recorded and filed by Sectors leadership for onward consideration by the Nyagatare District Land Bureau to handle any resettlement and compensation claim during and before implementation of project. The Rwanda Expropriation Law clearly stipulates the complaints procedures for individuals dissatisfied with the value of their compensation.

In the event that the PAP rejects the value given to his/her property they can ask for justification of the figure from the District land Bureau. Should they still disagree with the value given the District land bureau, they can appeal to courts of law at their own expenses.

If the grievance is not resolved via the District Land Committee/Bureau upholds the original value, the complainant final resort shall be to file the case to the competent Court of Law. According to the Expropriation Law, filing a case in courts of law does not stop expropriation process to be effected. The suing for review of the compensation decision should be done within 15 days after the local appeals decision is made.

As per international standards, grievances logged outside this timeframe may still be valid and legitimate. Customarily, the government expropriation authorities ensure that all affected people have been fully informed, and will issue warnings about the consequences of failure to lodge their complaints in time. Within this customary

procedure, affected people have been informed of the procedures before their assets are taken.

6. IMPLEMENTATION SCHEDULE

The prime objective of the RAP is to ensure that compensation for houses and other properties will be disbursed in time to enable the affected households construct habitable dwelling houses before demolition commences. A minimum of 1 months and a maximum of 3 months will be available. PAPs indicated that a new house can be built within 1-3 months if all the materials have been assembled. The RAP Implementation Schedule has made provision for a series of activities before the Dam construction commences to ensure adequate PAP participation and consultations are carried out, namely:

1. Land acquisition for relocation
2. Compensation to PAP's
3. Construction of new houses
4. Income restoration measures

The activity schedule below elaborates the Muvumba multi-purpose dam construction for implementing the RAP.

Table 27 Implementation schedule

Activities	Year 1				Year 1				Year 1			
	Quarter				Quarter				Quarter			
	1	2	3	4	1	2	3	4	1	2	3	4
i. Disclosure of RAP												
ii. Re-evaluation of assets and properties												
iii. Re activating all the Committees established												
iv. Property valuation committee reviews												
v. Property valuation committee reviews impacts and costs												
vi. The Resettlement / Implementation committee conducts education and awareness creation about RAP procedures and compensation payment												
vii. Project Implementation Unit (PIU) carry out Stakeholder Consultation on the implementation of the RAP												
viii. Compensation payment made for all affected properties and assets												
ix. Skill training identified & organized for PAPs that require skill training												
x. Grievance redress committee addresses complaints and grievances raised by PAPs and ensures that appropriate measures are taken												
xi. Monitoring and Evaluation												
xii. Preparation of completion report by all committees and PIU												

7. TERRAIN ANALYSIS AND FEASIBILITY ANALYSIS FOR RELOCATION SITE

Two sites were recommended for relocation during feasibility study such as Rurembo Site and Bushara Site. The preliminary results had shown the following:

Table 28 Biophysical analysis of recommended relocation site

Items	Bushara	Rurembo
Land fertility	Soil fertile	Soil Fertile (to grow Kitchen garden)
Road	Located at 200m from road	Located at 50m from road
electricity	Available of electricity	Power line located at 100m
Health Center	Located at 1.2km	Located at 1.2km
School	Located at 1.2km to school	Located at 500m
Water tab	No water but with the project water will be supplied (reservoir located at 1.5km)	Water pipe line available
Society	Closed to Village	Closed to Village

Based on Cook Book guide for construction of residential buildings, the slope analysis was conducted after considering the following criteria:

Table 29 Terrain analysis for Bushara site

Slope Categories %	Classes	Recommendation	Area Covered (%)	Remarks
0 -3	Flat	No problem	29.5	Drainage reclamation is high
3 -10	Moderate flat	percent is generally good for housing development and can be used for smaller scale industry, office and commercial	70.3	Many communities will not allow road development over
10 -15	Moderate steep	used for hillside residential development	0.2	Very special practices must be used for road,

				storm water, and sewer development
15 -30	High steeper	Used for Housing after soil conservation measures	0	Soil physical measures are recommended
> 30	Heart attack	Not feasible	0	It is considered as high risk land

As it was observed in the above table; the topography of the land is feasible for residential buildings without any kind of improvement hence Bushara site is still recommended according to the land survey and the discussion with the land officer, agronomist and executive secretary of cell there a possibility of getting 15ha for this site. The affected households required to be relocated here are the farmers from Karama Sector especially in Bushara, Cyenkwanzi, Kabuga and Ndego. The land needed for relocation of 196 households is equal to 7ha and this site can accommodate all of them.

Table 30 Terrain analysis for Nyarurema site

Slope Categories %	Classes	Recommendation	Area Covered (%)	Remarks
0 -3	Flat	No problem	28.4	Drainage reclamation is high
3 -10	Moderate flat	percent is generally good for housing development and can be used for smaller scale industry, office and commercial	71.1	Many communities will not allow road development over
10 -15	Moderate steep	used for hillside residential development	0.5	Very special practices must be used for road, storm water, and sewer development
15 -30	High steeper	Used for Housing after soil conservation measures	0	Soil physical measures are recommended
> 30	Heart attack	Not feasible	0	It is considered as high risk land

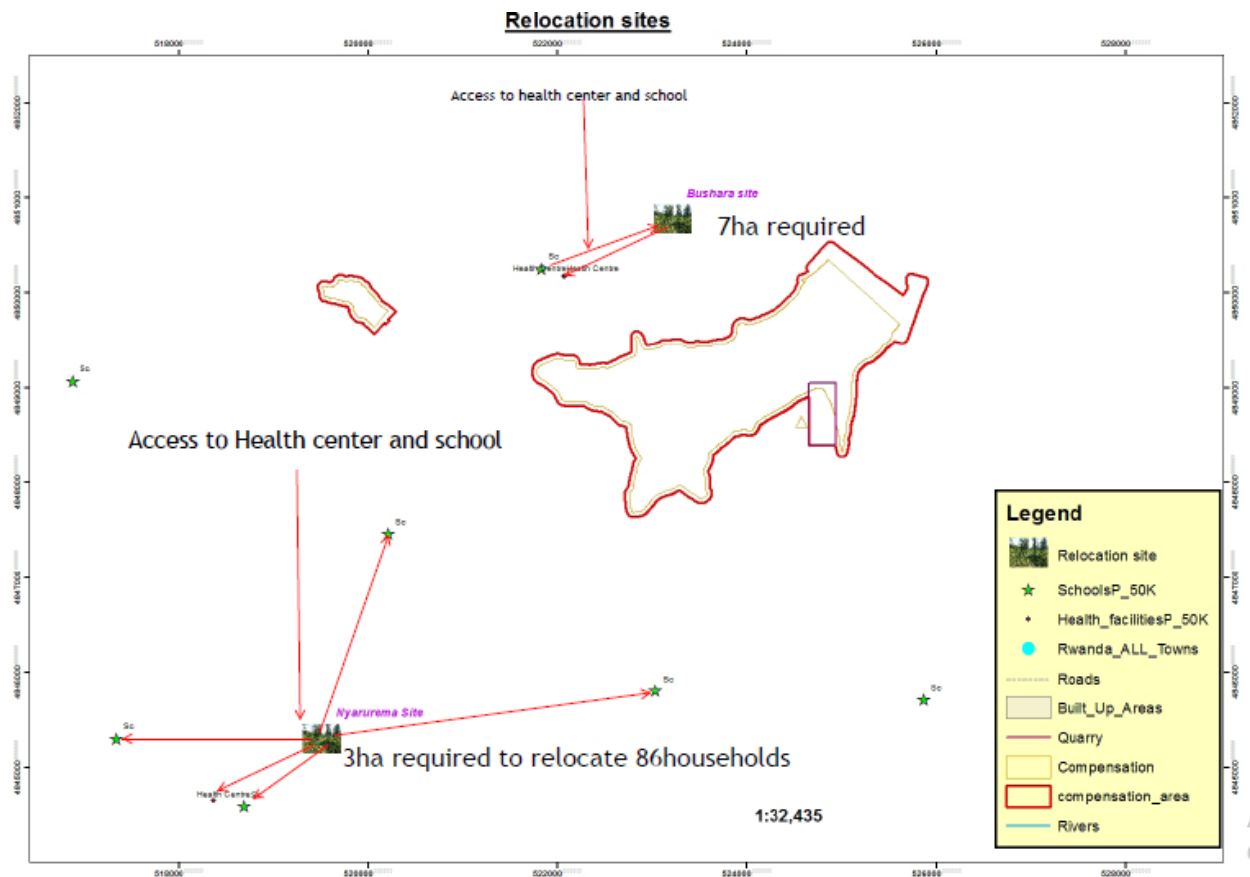


Figure 10 Distance from public infrastructures analysis

As it was shown in the figure above, 7ha will be located in Bushara site while 3ha are located in Nyarurema site, for this site no compensation analysis because the population.

8. ESTIMATED COSTS FOR RESETTLEMENT

Table 31 Estimated cost for resettlement

Item	Main Activities	Responsible institution	Cost (FRw)
Public Consultation	Consultation meeting with the PAPs to inform them on scheduled activities and their roles to accomplish the RAP	Nyagatare District, and collaborating institution	1200 000
Database	Documentation of assets (crops) and Land measurement	Nyagatare District, and collaborating institution	200 000 000
Preparation of alternatives	Comparison and choice of the best alternatives of compensation to the PAPs	Nyagatare District, and collaborating institution	120 000
Compensation and other resettlement measures	Compensation of assets and lands, House and crops	Nyagatare District, and collaborating institution	2,489,816,937
Follow Up of PAPS		Nyagatare District, and collaborating institution	2 500 000
	Assistance to vulnerable people	Nyagatare District, and collaborating institution	10,000,000
Total			2,703,636,937

9. FRAMEWORK FOR MONITORING, EVALUATION AND REPORTING

9.1 Monitoring plan

The civil works for Muvumba Development project is planned to start in January, 2017. Monitoring of the RAP will be carried out during the whole process of land acquisition and the compensation to ensure that the objectives are met and successful implementation of the RAP occurs. The monitoring will be carried out by a committee composed of Nyagatare District representatives, representative at the Sector & cell level and staff in charge of the project staffs, to ensure that all of the responsible implementing agencies follow the schedule and comply with the principles of the RAP.

Suggested monitoring indicators are outlined below and include (and not limited to):

- Number and place of public consultation meetings held with PAPs and local authorities in preparation of, or during RAP implementation;
- Number of PAPs effectively compensated and aggregated amount disbursed compensation (actual versus planned);
- Number of complaints:
 - Total received;
 - Total justified;
 - Total non-justified.

This should include the subject matter for all complaints; an explanation for non-justified complaints;

- Total resolved at various levels including the type of agreement reached;
- Total referred to the legal system/ Courts of Law, including a clarification on who initiated (local leaders, PAP) the referral and the subject matter.

Suggested performance/evaluation indicators include:

Total nature and level of all complaints received, resolved;

Completion of payment within, or after 2 months of estimated completion date indicated in the RAP implementation plan;

- Revival of affected farming activities within 4 months after the compensation payment;
- Submission of monitoring reports at the frequency indicated in the M/E of the RAP implementation report or quarterly.

The table below illustrates the compensation implementation plan and responsible institutions that are expected to oversee the implementation;

Table 32*Plan for Monitoring, evaluating and reporting*

Item	Main Activities	Responsible Institution	Frequency of monitoring
Public consultation	Consultation meeting with the PAPs	Nyagatare District and implementing institution	Twice a month
Database	Updating census results	Nyagatare District and implementing institution	When it's need
Disclosure of entitlement	Display to the PAPs the results of the census.	Nyagatare District and implementing institution	After census and assets valuation
Preparation of alternatives	Follow up of implementation of	Nyagatare District and implementing	Once a week

	proposed alternative	institution	
Compensation and other resettlement measures	Follow up compensation process	Nyagatare District and implementing institution	Once a week
Follow up of PAPs livelihoods	Follow up and monitoring of PAPs livelihoods	Nyagatare District and implementing institution	Once a week

9.2 Resettlement Implementation Completion report

A completion report of the entire resettlement process for this project will be prepared and will include a hand over certificate which will ostensibly provide a verification of when the compensation and assistance were undertaken and to whom these services were provided as well as to indicate that indeed all the compensation has been delivered

The RAP implementation report should include (but not be limited to) the following information:

- Background of the RAP preparation including a description of the project activities, scope of impacts, number of affected persons, and estimate budget.
- Update of its implementation with actual numbers of displaced persons by segments, compensation paid, issues/complaints raised and solutions provided
- Complaints status
- Early assessment of the impacts of resettlement and compensation on affected categories at the time of the report production.
- Total sum disbursed
- Lessons learned from the RAP implementation

10. REFERENCES

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- [9] National Institute of statistic of Rwanda, (2012): National general census
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APPENDICES

APPENDIX 1. List of participant for the meeting of 7th November 2015

#	Name	Identity
1	HABIMANA Fidele	1198380110317022
2	VUMIRIYA Abiriya John	1197780053219033
3	KARUHIJE Alphonse	11969800041000002
4	YANKURIJE Vestine	1198370103584086
5	MUGABO Jean	1194580023086059
6	NGENDAHIMANA SINDIYO	119580056981089
7	MUGABO Jean	1194580023086059
8	MUGABO Jean	1194580023086059
9	MUGABO Jean	114580023086059
10	ALINATWE J Damuur	1198680168351012
11	ALINATWE J Damuur	1198682168351012
12	SEMARIRO Gregoire	1193880014319059
13	MUKARUNYANGE Beatrice	1197770062112049
14	HABYARIMANA Mathias	1196880053449074
15	NYIRANSABIMANA Damaris	1197470092830055
16	KATABIRORA Francois	119748009282400009
17	MukamugangaImmaculee	1196470066113008
18	SOMUKI J Baptiste	1197480092821048
19	TWIZERIMANA Erneste	1198780169038063
20	KARUHIJE Alphonse	11969870004100002
21	HABYARIMANA J Bosco	1197680061461071
22	NGENDABANGA Theoneste	1199658001580012
23	NGENDABANGA Theoneste	11996580001580012
24	BYARUHANGa J Dieu	1197480092800085
25	MUKAKABERA Beatrice	1197370090435059
26	MUREGO Donat	1196780062122028
27	RURIHOSE J Damascene	1197750101004089
28	NZAYITURIMANA Paul	1197180068007150
29	MUSIGIYENDE Simon	1195980062419010
30	MUKAGATARE Therese	1196370063271086
31	NGENDABANGA Theoneste	1196580001580012
32	NGENDABIMIKWA Theoneste	119678000243063
33	SEKABUGA Gilbert	1195780048765037
34	kATABIRORA Francois xvier	1197480092824009

APPENDIX 2. List of participant for the meeting of 15th November 2015

#	Name	Identity
1	RWABUKAMBA Andre	1193580014129084
2	NGURAMURYANGO	1198080150100026
3	MAGIRO Evariste	1195280047477067
4	MUTARATAZA Innocent	1198480179356038
5	BAZIRAKE M Dancille	119647008198027
6	RUSIGARIYE Silas	1195980063067108
7	NDABACYENZE Joasia	1196680063682096
8	BIZABARANDE Thomas	1196280073837080
9	BIKORIMANA J M V	1196680063656080
10	CYIMANA J Damascene	11956800516010042
11	NGEZENUBWO J Baptiste	1197080084788005
12	TIBENEZA Liberathe	1196570061239040
13	NSHIMIYIMANA Evaliste	1197780103638015
14	MPORANYE Donatien	119668006170027
15	MBARUSHIMANA Sylvestre	1195280047475093
16	MBARUBUKEYE Florence	1195280047475093
17	NYIRANDIMUKAGA Petronille	1196570061236079
18	NYIRANDIMUKAGA Petronille	1196570061236079
19	MUSABYIMANA Claude	1197280100403093
20	NDAGIJIMANA Albert	1196680063685057
21	MUKURARINDA Cyprien	1195180027581045
22	TIBENEZA Liberathe	1196570061239040
23	NDAGIJIMANA Albert	1196680063685057
24	NDAGIJIMANA Albert	1196680063685057
25	BAGIRUWUBUSA Damascene	1196680070496075
26	BAGIRUWUBUSA Damascene	1196680070496075
27	NDAGIJIMANA Albert	1196680063685057

Appendix: 4

APPENDIX 4: ANALYSIS FOR DETERMINATION OF THE RATE PER SQUARE METER OF LAND IN THE PROJECT AREA

IGICIRO CY'UBUTAKA						
NO	AMAZINA Y'ABAGURISHIJE N'ABAGUZE	UPI	CELLS	INGANO Y'UBUTAKA	IGICIRO BWAGURISHIJE	RATE/M2
1	Mugisha Sylvestre & Mbonaruzi Alphonse	5/02/02/04/730	Bushara	10850	4,500,000.00	414.75
2	Gasarabwe Peter & Bapfakurera Ernest	5/02/02/04/351	Cyenkwanzu	10535	1,000,000.00	94.92
3	Ndayambaje Emmanuel & Habimana Fidele	5/02/02/01/1285	Gikundamvura	8750	2,500,000.00	285.71
4	Mukajije Virginie & Iraguha Jean Pierre	5/02/02/03/655	Gikagati	4293	2,000,000.00	465.87
5	Nzayarinda Thatienne & Ndongereye Fidele	5/02/02/06/172	Ndego	2447	300,000.00	122.60
6	Ndinkumi Miriam & Ntahombereye Fabien	5/02/02/04/75	Gikundamvura	5767	1,000,000.00	173.40
7	Niyitegeka Ildephonse & Tabaro Augustin	5/02/02/02/673	Cyenkwanzu	685	200,000.00	291.97
8	Ndongereye Fidele & Bitwayiki Pierre Celestin	5/02/02/06/280	Ndego	22872	4,000,000.00	174.89
MOYENNE/AVERAGE						2,024.11
RATE/M2						253.01

2. INYUBAKO.

IMBONERAHAMWE IKUBIYEMO IBICIRO BYA BURI GICE			
			IBICIRO
	Terrassement		frais specifiques
1	Prix Mètre cube de terrassement terre sableuse	total par m ³	1,219
2	Prix Mètre cube de terrassement terre argileuse ou latéritique	total par m ³	1,759
3	Prix Mètre cube de remblai manuel avec apport de terre	total par m ³	2,414
4	Prix de fabrication d'un bloc adobe	total par pce	55
	Fondation		
5	Prix Mètre cube de fondation en moellon avec mortier de ciment	total/m ³	37,475
6	Prix Mètre cube de fondation en moellon avec mortier de terre	total/m ³	19,745
7	Prix mètre cube fondation en briques sèches blocs adobes (RUKARAKARA)	total/m ³	12,313
8	Prix mètre cube de mur de soutènement en moellons au mortier de ciment	total/m ³	37,543
	Elevation		
9	Elevation en pisé	total/m ³	13,691
10	Elevation en briques sèches (RUKARAKARA)	total/m ³	12,637
11	Elévation en briques cuites liées au mortier de ciment	total/m ³	50,237
12	Elévation en RULIBA liées au mortier de ciment	total/m ³	54,376
	Blocs Ruliba de 25/12/95= 35 blocs/m ³		

13	Elévation en briques cuites (RULIBA) liées au mortier de ciment	total/m³	57,171
	Blocs Ruliba de 42/22/18= 53 blocs/m3		
14	Elévation en briques bloc Ciment liées au mortier de ciment	total/m³	46,570
15	Elévation en brique cuite liée au mortier de terre	total/m³	30,941
16	Elévation en brique cuite liée au mortier de terre rejointoyée au mortier de ciment	total/m³	35,739
17	Roofing d'isolation par mètre linéaire	total/m	1,000
18	Prix mètre carré claustra en ciment avec moustiquaire	total/m²	10,581
	Toiture		
19	Prix m² toiture en paille avec bois	total/m²	3,880
20	prix m² toiture en tôles simples avec charpente en bois	total/m²	5,695
21	Prix m² toiture en tôles dures avec charpente en bois	total/m²	7,070
22	Prix m² toiture en tôles dures avec charpente en madrier	total/m²	13,177
23	Prix m² toiture en tôles dures ou tuile Ruliba avec charpente métallique	total/m²	17,149
24	Prix de revient par mètre courant de planche de rive métallique	ml	4,962
25	Prix de revient par mètre courant de planche de rive en bois	ml	1,770
26	Prix mètre carré enduit au ciment	total/m²	3,018
27	Prix mètre carré enduit au sable terre	total/m²	2,108
28	Prix mètre carré enduit au terre	total/m²	1,908
29	Prix m² de Kaolin	total/m²	944
30	Prix mètre carré de chaulage	total/m²	1,082
31	Prix mètre carré de peinture émail	total/m²	3,779
32	Prix mètre carré de peinture latex	total/m²	2,234
	Pavement		
33	Prix mètre carré S/Pavement en briques cuites rejointoyée au mortier de ciment	total/m²	4,074

34	Prix mètre carré S/Pavement en briques cuites non rejointoyée posé tout simplement	total/m²	3,024
35	Prix mètre carré Pavement au ciment lissé sur sous pavement en moellon	total/m²	8,228
	Béton		
36	Béton non armé 200kg/m3	total/m³	71,300
37	Béton non armé 150kg/m3	total/m³	59,390
38	Béton armé 350kg/m3	total/m³	249,950
39	Béton armé 250kg/m3	total/m³	228,950
	Revetement		
40	REVETEMENT EN CARREAU GRANITO	total/m²	23,895
41	REVETEMENT EN BRIQUE CUITE	total/m²	6,133
42	REVETEMENT EN PIERRE DE RUGARIKA	total/m²	8,109
43	REVETEMENT EN CARREAU DE FAÏENCE	total/m²	13,479
	Carreaux de faïence 15*15		
44	REVETEMENT EN CARREAU DE BETON	total/m²	19,579
45	REVETEMENT EN CARREAU DE FAÏENCE	total/m²	13,479
	Carreaux de faïence 25*20		
46	REVETEMENT EN PIERRES TAILLEES	total/m²	13,684
	Plinthe		
47	Plinthe au ciment	total/m	1,494
48	Plinthe en bois raboté	total/m	8,330
49	Plinthe en carreau de faïence	total/m	3,068
50	Plafond en roseau	total/m²	2,493
51	Plafond en Papyrus	total/m²	6,905
52	Plafond en tôle	total/m²	7,795
53	Plafond en triplex ou Unalit	total/m²	7,795
54	Plafond en triplex avec madrier bois rouge	total/m²	15,295

55	Plafond Meuble de languette en bois d'Umusave	total/m²	19,410
56	Plafond Meuble de languette en bois de Libuyu	total/m²	32,390
57	Plafond Meuble de languette en bois de MUVURA	total/m²	36,590
58	Plafond Gyp-sum	total/m²	25,690
	Huisserie		
59	PORTE EN BOIS RUDIMENTAIRE	total/pce	25,200
60	PORTE EN PLANCHE/TRVERSE AVEC SERRURE	total/pce	34,975
61	PORTE PLEINE EN TRIPLEX AVEC CADRE EN BOIS	total/pce	44,575
62	PORTE PLEINE EN TRIPLEX AVEC CADRE METALLIQUE	total/pce	58,575
63	PORTE CADRE ET PANO	total/pce	69,075
64	PORTE EN BOIS DE LUXE (MASSIFS)	total/pce	165,975
65	Porte en RIBUYU	total/pce	159,825
66	FENETRE EN BOIS	total/m2	29,025
67	CACHE RAIL EN BOIS ORDINAIRE	total/m	9,608
68	CACHE RAIL LIBUYU	total/m	15,458
69	PORTE METALLIQUE SIMPLE PLEINE OU VITREE /M2	total	85,958
70	PORTE METALLIQUE DOUBLE PLEINE OU VITRE		178,103
71	FENETRE METALLIQUE EN PROFILES VITREE /M2	total	58,033
72	FENETRE METALLIQUE EN TOLE PLEINE /M2	total/	41,090
73	GRILLAGE METALLIQUE	total/m²	27,358
74	PORTE EN FÛTS PLEINE OU VITREE	total/pce	25,143
75	PLACARD STANDARS A 2 PORTES EN BOIS	total/pce	101,105
76	PLACARD STANDARS A 3 PORTES EN BOIS	total/pce	152,127

77	PLACARD STANDARS A 4 PORTES EN BOIS	total/pce	201,189
	INSTALLATIONS SANITAIRES		
78	CHAUFFE EAU 80 LITRES	total/pce	119,213
79	EVIER SIMPLE INOXIDABLE	total/pce	66,010
80	EVIER DOUBLE INOXIDABLE	total/pce	111,684
81	BAIGNOIRE DOUBLE	total/pce	219,233
82	LAVABO	total/pce	46,370
83	DOUCHES	total/pce	57,538
84	W.C. à l'anglaise	total/pce	102,313
85	W.C. à la turque	total/pce	72,853
87	URINOIR	total/pce	38,053
88	HAND BASIN / LAVE-MAIN	total/pce	39,253
89	MIROIR	total/pce	14,464
90	PORTE SAVON	total/pce	3,876
91	PORTE ESSUIE-MAIN	total/pce	15,005
92	CANALISATION D'EVACUATION	total/ml	6,985
93	RAIN WATER GUTTERS / GOUTTIERES	total/ml	6,284
94	CONSTRUCTION REGARD DE VISITE (0.4*0.4)	total/pce	33,138
95	CONSTRUCTION FOSSE SEPTIQUE (15 USAGE)	total/pce	1,031,424
96	PUITS PERDU (20*1)	total/pce	199,360
97	W.C. RUDIMENTAIRE AVEC DOUCHE (3*2M)	total/pce	414,413

98	PUITS POUR LES EAUX PLUVIALES	total/pce	130,498
	Installations électriques		
99	PRISE DU COURANT SIMPLE + INSTALLATION	total/pce	6,753
	CONNECTION AU RESEAU ELECTRIQUE (VOIR DEVIS ELECTROGAZ). EN CAS D'ABSENCE, CONSIDERER UN FORFAIT DE 100 000 FRW	-	
100	PRISE DE CUISINIERE + INSTALLATION	total/pce	16,623
101	INTERRUPTEUR SIMPLE + INSTALLATION	total/pce	6,753
102	INTERRUPTEUR A TIRAGE + INSTALLATION	total/pce	10,743
103	COFFRET DIVISIONNAIRE A 4 DEPARTS + INSTALLATION	total/pce	12,948
104	COFFRET DIVISIONNAIRE A 6 DEPARTS + INSTALLATION	total/pce	15,153
105	COFFRET DIVISIONNAIRE DE 24 à 36 DEPARTS + INSTALLATION	total/pce	57,573
106	POINT LUMINEUX ORDINAIRE	total/pce	2,803
107	POINT LUMINEUX LAMPE ECONOMIQUE	total/pce	7,003
108	POINT LUMINEUX REGLETTE	total/pce	7,528
109	POINT LUMINEUX CHANDELIER A 3 GRADES	total/pce	75,778
110	EXECUTIVE SECURITY LIGHTS / PROJECTEUR	total/pce	19,813
111	TELEPHONE CONNEXION-VOIR DEVIS RTL	total/pce	131,575

3. IGENAGACIRO RY'IBIHINGWA

Nature of the Crops Ubwoko Bw'ibihingwa	Unit	Mean Price at kg/arc or per Tree	Indemnisation Rate per m ² Igiciro kuri metero kare imwe.
--	------	--	--

		Igiciro ku kiro kimwe cyangwa ku giti kimwe	
Beans Ibishyimbo (0.2 kg/m ²)	M ²	400	80
Peas Amashaza (0.25kg/ m ²)	M ²	500	75
G Nuts Ubunyobwa (0.36kg/ m ²)	M ²	600	216
Wheat Ingano 0.35kg/ m ²)	M ²	180	63
Sorghum Amasaka (0.35kg/ m ²)	M ²	170	60
Maize Ibigori (0.4kg/ m ² /)	M ²	180	72
Millet Uburo (0.5 kg/ m ²)	M ²	600	300
Irish Potatoes Ibirayi (2.8 kg/ m ²)	M ²	100	280
Yams Amateke (3.5 kg/ m ²)	M ²	57	200
Ibikoro (3 kg/ m ²)	M ²	20	60
Potatoes Ibijumba (3kg/ m ²)	M ²	80	240
Casava Imyumbati (2.2 kg/ m ²)	M ²	130	286
Isombe (-)	igiti	1200	1200
Soya beans Soya (0.4 kg/ m ²)	M ²	350	140
Labour Intabire (1 person)	M ²	1000/person	83
Cabbage Amashu (9 plts/ m ²)	M ²	100	900
Onions Ibitunguru (1 kg/m ²)	M ²	400	400

Tomatoes Inyanya (2 kg/ m ²)	M ²	400	800
Intoryi (5 kg/m ²)	M ²	200	1000
Carotes Karoti (1.2 kg/m ²)	M ²	200	240
Salads Saladi (Pieds)	M ²	200	200
Cereris Sereli (Pieds)	M ²	200	200
Other légumes Izindi Mboga (Pieds)	M ²	50	50
Inzuzi (uruyuzi)	Price /plant	4000	4000
Pinaples Inanasi 4 plante/m ²	M ²	350	1350
Ipamba (8kg/arc)	M ²	90	720
Rice Umuceri udatonoye 0.6kg/m ²	M ²	600	360
Tobacco(15 leaves) Itabi (ibibabi 15 ku giti)	M ²		1000
Sugar Canes Ibisheke	M ²		400
	M ²		

FRUITS

IBITI BYERAHO IMBUTO

Nature Ubwoko bw'ibiti	Age Imyaka	Rate /Tree Igiciro ku giti kimwe
1. Seedlings (Ingenwe yubwoko bwibiti byose)	0 -2 amezi	200
2. Maracouja	0 - 1 imyaka	700
Ibinyomoro	Kuva ku mwaka umwe kuzamura	1000
2. Coeur de Boeuf ou Cherimorier	0 - 1 imyaka	800
Umutima w'infizi	Kuva ku mwaka umwe kuzamura	1000
3. Powpow	0 - 1 imyaka	1000
Ipapayi	Kuva ku mwaka umwe kuzamura	2000
4. Oranges and Citron	0 - 1 umwaka	840
Indimu n'amacunga	1 - 2 umwaka	1720
	2 - 3 umwaka	2700
	3 - 4 umwaka	3500
	Kuva ku myaka ine kuzamura	4320
5. Avokado	0 - 1 umwaka	2670
Igiti cya voka	1 - 2 umwaka	5510
	2 - 3 umwaka	8680
	3 - 4 umwaka	12200
	Kuva ku myaka ine kuzamura	16000
6. Amapera n'imyembe	0 - 1 umwaka	1060
	1 - 2 imyaka	2200
	2 - 3 imyaka	3550
	3 - 4 imyaka	4350
	Kuva ku myaka ine kuzamura	5340
7. Other Tree bearing fruits	0 - 1 umwaka	800
Ibindi bita byera imbuto	1 - 2 imyaka	1400
zitavuzwe haruguru	2 - 3 imyaka	2270

	3 - 4 imyaka Kuva ku myaka ine kuzamura	3330 5330
8. Plant Medicine Imiti ya Kinyarwanda (Umuravumba, igicunshu umwenya n'ibindi)	Imito	300
	Iringaniye	600
	Imikuru	1200

Cash Crops

Ibihingwa Ngengabukungu

Nature Ubwoko bw'ibiti	Age Imyaka	Rate /Tree Igicro ku giti kimwe
Cofee Ikawa	0 - 1 umwaka	660
	1 - 2 imyaka	1080
	Kuva ku myaka ibiri kuzamura	1920
Pyrethrum Ibireti	0 - 1 umwaka	45
	1 - 2 imyaka	35
	Kuva ku myaka ibiri kuzamura	24
Tea Icyayi	0 - 1 umwaka	102
	1 - 2 imyaka	150
	2 - 3 imyaka	207
	Kuva ku myaka itatu kuzamura.	243
Quinquina Ikinini	0 - 1 umwaka	123
	1 - 2 imyaka	189
	2 - 3 imyaka	255
	3 - 4 imyaka	222
	4 - 5 imyaka	102
	5 - 6 imyaka	135
	6 - 7 imyaka	243
	Kuva ku myaka irindwi kuzamura	156
Banana	umubyare	1488
Urutoki		
Pili-Pili	igiti	200

Urusenda		
Vetiveri	Price/m²	
Roseaux-Penisetum Imbingo	350	350
Tripsacumu	350	350
Sitariya	350	350
Citronnelle Macyayicyayi	350	350
Sisal Umugwegwe	350	350
Bambou Umugano		300
Euphobes Imiyenzi	Metero	500
Enclo d' euphorbes Urugo rw'imiyenzi	Metero	500
Dracaenas Imihati	Metero	500
Enclo de dracaenas Urugo rw'imihati	Metero	500
Enclo de roseaux Urugo rw'imbingo		1600
Haie de cypres Uruzitiro rwa sipure		1500
Haie d'arbuste Uruzitiro rw'imitobotobo	Mito	200
	Iringaniye	500
	Mikuru	500
Ficus Imivumu	Mito	200
	Iringaniye	1000
	Mikuru (ibazwa)	4000 to 6000
Umuko	Mito	200

	Iringaniye	600
	Mikuru	1000
Autre arbuste Utundi duti tutavuze haruguru ariko twatewe	Duto	100
	Turinganiye	200
	Dukuru	600
Riein Ikibonobono	Gito	100
	Kiringaniye	300
	Gikuru	400
Black- Wattle Barakatsi	Ntoya	200
	Iringaniye	1200 to 1800
	Nkuru	2000 to 3000
Eucalyptus inturusu	Ntoya	300
	3 to 5 years	720
	5 to 10 years	2400
	Nkuru	4000

Ibiti bibazwa

ICYICIRO	INZEGO Z'UMURAMBARARO
I.	Kuva kuri cm 0.8-15
II.	Kuva kuri cm 16-19
III.	Kuva kuri cm 20-29
IV.	Kuva kuri cm 30-39
V.	Kuva kuri cm 40-49
VI.	Kuva kuri cm 50-59
VII.	Kuva kuri cm 60-69

Nature Ubwoko bw'ibiti	Pinus Grevillea	Cypre Cedrela Jacaranda	Eucalyptus Acacia Araucaria Polyciasfulva (umwungu)	Ibiti by'ishyamba kimeza (entandrophragma,etc..)
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FRW	FRW	FRW	FRW	FRW
I.	1000	1200		
II.	2000	2500	4500	5200
III.	3000	4000	4700	5300
IV.	4000	4500	5000	5600
V.	4500	5500	5300	6500
VI.	5000	6000	6000	7500
VII.	5500	6500	6500	8000

Ibiti by'indabyo

Flowers			180
Indabo			180
Garden trees			
Ibiti byo mu busitani			

Appendix: 5GRIEVANCE RESOLUTION FORM

Name (Filer of Complaint): _____			
ID Number: _____ (PAPs ID number)			
Contact Information : _____ (Village ; mobile phone)			
Nature	of	Grievance	or
Complaint: _____			
Date	Individuals Contacted	Summary of Discussion	
_____	_____	_____	
Signature _____ Date: _____			
Signed (Filer of Complaint): _____			
Name of Person Filing Complaint : _____ (if different from Filer)			
Position or Relationship to Filer: _____			
Review/Resolution			
Date of Conciliation Session: _____			
Was Filer Present? :		Yes	No
Was field verification of complaint conducted?		Yes	No
Findings	of	field	investigation:

Summary	of	Conciliation	Session
Discussion: _____			
Issues _____			
Was agreement reached on the issues?		Yes	No
If agreement was reached, detail the agreement below:			
If agreement was not reached, specify the points of disagreement below:			

Signed (Conciliator): _____		Signed (Filer): _____	
Signed: _____			
Independent Observer _____			
Date: _____			