



MINISTRY OF INFRASTRUCTURE

Electricity Access Roll Out Program (EARP)

**ABBREVIATED RESETTLEMENT ACTION PLAN FOR THE
CONSTRUCTION OF 55,7 KM OF MEDIUM VOLTAGE AND
107 KM OF LOW VOLTAGE IN NGORORERO DISTRICT
(NDARO, BUNGWE, BWIRA AND GATUMBA SECTOR**

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ACRONYMS AND ABBREVIATIONS

1. **ARAP:** Abbreviated Resettlement Action Plan
2. **EDPRS:** Economic Development and Poverty Reduction Strategy
3. **ESMF:** Environmental and Social Management Framework
4. **GoR:** Government of Rwanda
5. **PAP:** Project Affected Persons
6. **RAP:** Resettlement Action Plan
7. **RPF:** Resettlement Policy Framework
8. **RoW:** Right of Way
9. **MININFRA :** Ministry for Infrastructure
10. **MINECOFIN:** Ministry of Finance and Economic Planning

DEFINITIONS OF TERMS USED IN THIS DOCUMENT

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

1. **“Affected People”**

“Affected people”, refers to people who are directly affected socially and economically by World Bank-assisted investment projects caused by:

- a. Relocation or loss of shelter
- b. Loss of assets or access to assets loss of income sources or means of livelihood, whether or not the affected persons must move to another location;
- 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. **“Associated projects”** means any subprojects or activities which are directly related to the planned electrical construction activities.

3. **“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.

4. **“Environmental and Social Management Framework (ESMF)”** is a safeguard instrument (document) which will set out a mechanism to determine and assess future potential environmental and social impacts of the project funded activities. The framework will set out mitigation, monitoring and institutional measures to be taken during design, implementation and operation of the project activities to eliminate adverse environmental and social impacts, offset them, or reduce them to acceptable levels. This instrument will be prepared as a separate and stand-alone document to be used in conjunction with this RPF.

5. **“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.

6. “**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.

7. “**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.

8. “**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.

9.” **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.

10. “**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.

11.” **Land acquisition**” means the taking of or alienation of land, buildings or other assets thereon for purposes of the Project.

12. “**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.

13. “**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.

14.” **Full 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;

15. “**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;

16. “**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 transporting building materials to the construction site; c. any labor and contractors’ fees; and d) any registration costs.

17. “**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,

18. “**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 electrical line construction will be prepared and will be consistent with the provisions of the RPF.

19. “**Resettlement Action Plan**”: see Resettlement and Compensation Plan above,

20. “**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 characterized by low nutrition levels, low or no education, lack of employment or revenues, old age, ethnic minority and/or gender bias.

EXECUTIVE SUMMARY

The Government of Rwanda (GoR) through the Ministry for Infrastructure (MININFRA), has proposed the launch of a National Electricity Rollout Program (EASP) to realize the primary target of the Economic Development and Poverty Reduction Strategy (EDPRS) for the electricity sector of tripling access to electricity by 2012 to about 16 percent of households and at least 50 percent of identified public institutions in health, education and local administration. This will require about 160,000+ new grid connections, and also include efforts to reach rural consumers and service providers currently off the national grid.

In this process, the Electricity Access Rollout Program with the support of the World Bank has identified the construction of 55, 7 km of medium voltage and 107 km of low voltage in Ngororero district (Ndaro, Bungwe, Bwira and Gatumba sectors) as one subproject that will increase connection. The construction of the MV lines implies a need for the destruction of crops and trees, thus leads to the poor production of yields from the affected people or PAPs. This therefore principally triggers World Bank Operational Policy OP4.12 on involuntary resettlement and Rwanda laws on expropriation and land ownership. In accordance with the World Bank Policy OP 4.12 a resettlement action/compensation plan must be developed to be submitted to World Bank for approval.

This is therefore the duly prepared Abbreviated Resettlement Action Plan (ARAP) by the project in line with all the necessary requirements outlined in the Resettlement Policy Framework (RPF) document. The main elements of the ARAP are: public consultation, documentation and valuation of assets, disclosure of entitlement, preparing of alternatives, compensation and resettlement, addressing grievances, monitoring and reporting.

This report principally describes the activities of the project that is proposed and the associated impact arising there from. The section on valuation on destroyed properties/assets highlights the existing crops and trees in the right of way (RoW), brief biography of the Project Affected Persons (PAPs) and the magnitude of the loss. The report also describes the process used in the valuation of existing crops and Trees in the project sites. The census was done by a team from the PAPs, the village and cell representatives and respective sector officials as well as EARP team indicating who will lose crops, including trees and the valuation of the destroyed properties

The main objective of this Abbreviated Resettlement Action Plan is to ensure just compensation of the PAPs for the loss of crops and trees in the project sites that were destroyed or cleared in the process from surveying to the end of line construction activities.

The persons to be compensated were meaningfully consulted and participated in planning and implementing the compensation process. Before and during the creation of this documentation, meetings were held on site to inform the PAPs that their properties might at some point be destroyed or cleared to make way for the construction of MV lines. In the meetings, PAPs got to know how the compensations will be done and their major role in the Project activities. The total compensation budget for the property to be destroyed is 83,136,529 Rwfs to be compensated to 433 PAPs. In addition to that, around 15,000,000 Rwfs will cover monitoring and evaluation activities.

The PAPs, EARP, Cells, the Sectors and districts participated in the surveys, reviews and the signing of all documentation related to the compensation process. EARP/EWSA will provide compensation for crops through the District and ensure all PAPs receive their cash through their Personal Bank accounts. The EARP, Districts and Sectors will ensure that the eligible PAPs are compensated. EARP together with the District will be responsible for monitoring and reporting the implementation of the ARAP.

Any aggrieved party may ask for justification of the decisions from the Resettlement and Compensation Committee, but should the answer still be unsatisfactory, they may appeal to the local leadership starting with the Cell, Sector and District leaders. If the grievances are not resolved in this way, local courts should be used. If the case is not resolved it will proceed to the Land Commission and then to the Courts of Law. EARP will ensure that all PAPs understand the complaints procedure and will ensure each party involved fulfils its duties to the PAPs ensuring just compensation.

1. INTRODUCTION AND SUBPROJECT BACK GROUND

This document is an ARAP for the construction of Mv and Lv lines in Districts of Ngororero. It was prepared by the Government of Rwanda (GoR) as one of the requirement by the World Bank and other development partners to support the development of rural electrification in four sectors (Ndaro, Nyange, Bwira and Bungwe of Ngororero District. The efforts have been led by EDCL as the Executing Agency for the rural electrification Projects. EDCL/EARP aims at improving rural electrification, infrastructure services and local economic development.

1.1. Objectives

The overall objective of the proposed project in Ngororero District is to support Rwanda's electrification process by delivering basic services that will improve living conditions and promote local economic development. The key objective of this study is to work with Ngororero Districts and the Ministry of Infrastructure (MININFRA) in taking the outputs of the Feasibility Studies and Preliminary Engineering Designs consultancy to the next higher level of providing the: (i) Detailed Engineering Designs for the final short listed MV lines, (ii) associated Bills of Quantities (BOQ), (iii) associated Engineers Cost Estimates, (iv) associated Construction Grade Drawings and (v) associated Bidding Document Packages.

2. LEGAL AND REGULATORY FRAMEWORK

The land law of 2013 determines modalities of how land in Rwanda can be allocated, acquired, transferred, used and managed. It also establishes principles applied to rights recognised over land tenure in Rwanda.

This chapter underlines aspects from the National Constitution, land law, and expropriation law relevant to the ARAP.

2.1. Relevant legislation in Rwanda

2.1.1. Land law in Rwanda

The Organic Law No.43/2013 of 16/06/2013 governing land in Rwanda serves the purpose to determine modalities of allocating, acquisition, transfer, use and management of land in Rwanda.

Under this law and relevant to this study are the definitions given to:

Land tenure: the system by which land is held, describing the rights, responsibilities and restrictions that are attached to the land holder.

Expropriation: an act of taking away individuals' land by the State due to public interest in circumstances and procedures provided by law and subject to fair and prior compensation.

With reference to article 4 of this law on Equal right to land, it is stated that all forms of discrimination, such as that based on sex or origin, in relation to access to land and the enjoyment of real rights shall be prohibited.

Every person who is in possession of land, acquired either in accordance with custom, or granted by a competent authority, or by purchase, is the recognized proprietor under an emphyteutic lease in accordance with the provisions of this law. An Emphyteutic lease is a long term lease of land from the Government by the title holder, in this case a period of 20 years, 49 years, 99 years, as per stated in land title lease document. Most of the land ownership documents are emphyteutic leases from Government for a specific period, renewable then.

Any Rwandan citizen is entitled to be granted freehold title to land reserved for residential, industrial, commercial, social, cultural or scientific services. Freehold rights shall apply only to developed land where infrastructures are erected and its extent shall be strictly limited to the area of land that is necessary to support the authorized developments on the land and their amenity.

Certifying that the land has been allocated or leased shall be evidenced by a certificate of land registration issued by the registrar of land titles.

The land owner shall enjoy full rights to exploit his/her land in accordance with the provisions of this Law and other laws.

The State recognizes the right to freely own land and shall protect the land owner from being dispossessed of the land whether totally or partially, except in case of expropriation due to public interest.

All buildings, crops and other works found on land that have been performed by the land owner using his/her money or otherwise are presumed to be his / hers.

However, this does not prohibit any other person to own buildings, crops and any other works on other person land in accordance with procedures provided for by this Law, other laws or agreement with the land owner.

The Organic Land Law also provides two types of formal land tenure: full ownership/ freehold and long term leasehold. Following the recent privatization of State owned lands, very few land users currently hold either type of land tenure. Therefore, the Organic Land Law recognizes existing rights, whether written or unwritten, under both civil law and customary practices through new national land tenure arrangements. Efforts are being made under the Law (Article 7) to formalize

land ownership, especially those acquired through customary means. For instance, rural populations with customary land rights are being encouraged to register their land through decentralized land institutions like; the District Land Bureau, Sector Land Committees and Cell Land Committees (Ministerial Order N° 001/2006 of 26/09/2006 determining the structure of Land Registers, the responsibilities and the functioning of the District Land Bureau).

All types of land tenure must be in compliance with the designated land use and environmental protection measures as outlined in the Land Use Master Plan (Organic Land law N0. 08/2005 of 14/07/2005, article 6).

The law also recognizes the private ownership of the land except the marshlands which are owned by the Government.

In order to confirm this private ownership, the Government has completed registration of all lands and provided lease title to the owners. It is from the land titles that the study is able to understand category of land use for each Project Affected Person (PAP)/ Displaced person and also determine who the rightful land owner is, in the process of the asset inventory.

2.1.2. National Law on Expropriation in Public Interest

The objective of this law (Law No. 32/2015 of 11/06/2015) relating to expropriation in the public interest) is to elaborate the procedures relating to expropriation in the public interest. Under this law, the following definitions are important to note:

- An act of public interest- is an act of Government, public institution, non-governmental organization, legally accepted associations operating in the country or of an individual, with an aim of a public interest.
- Just compensation-refers to an indemnity equivalent to the value of land and the activities performed thereon given to the expropriated person and calculated inconsideration of market prices.
- Person to be expropriated refers to 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 and public institutions.
- Article 23: Appointment of valuers for land and property incorporated thereon

After the final decision to expropriate in the public interest is taken, the organ wishing to carry out expropriation in the public interest shall immediately look for valuers to conduct valuation of land

and property incorporated thereon. The valuation of land and property incorporated thereon shall be conducted by valuers certified by the Institute of Real Property Valuers in Rwanda.

1.3. Eligibility for compensation

Eligibility for compensation is enshrined under the Rwandan constitution (Article 29) and the Expropriation Law of 11/06/2015. The two laws regulate and give entitlement to those affected, whether or not they have written customary or formal tenure rights.

The person to be expropriated is defined under article (2) of the Expropriation Law to mean any person or legal entity who is to have his or her private property transferred due to public interest, in which case they shall be legally entitled to payment of compensation.

Article 26: Proof of rights to land and property incorporated thereon for persons to be expropriated the owner of land designated for expropriation in the public interest shall provide land titles and documentary evidence that he/she is the owner of property incorporated on land. He/she shall also provide a civil status certificate and a document evidencing his/her chosen matrimonial regime in case of a married person. However, a person dispossessed of land or unlawfully occupying land or having developed activities on land on which such activities are prohibited after the enactment of relevant laws shall receive no compensation.

Law no.32/2015 of 11/06/2015 Article 28: Criteria for determining fair compensation states that without prejudice to other laws, the value of land and property incorporated thereon to be expropriated in the public interest shall be calculated on the basis of their size, nature and location and the prevailing market rates. The compensation for disruption caused by expropriation to be paid to the expropriated person shall be equivalent to five percent (5%) of the total value of his/her property expropriated.

2.1.3. Classification of Valuation of property

With reference to article 21 of the expropriation law, Property to be valued for just compensation is classified in two:

1. Land;
2. Activities that were carried out on the land including; different crops, forests, any buildings or any other activity aimed at efficient use of land or its productivity.

Article 22 states that without prejudice to other laws, the value of land and the activities thereon that belong to the person expropriated shall be calculated considering their size, nature and location and considering the prevailing market prices.

2.2. Procedures for Expropriation and award of just compensation

Article 14 of national expropriation law of 11/06/2015 decides on the relevance of a project of expropriation in the public interest where the committee in charge of monitoring of projects of expropriation in the public interest at the level of competent authority finds that the project is relevant, it shall submit in writing its decision to the District Council or Kigali City Council or the Ministry in charge of land within at least fifteen (15) days after the consultative meeting with the concerned population. Where the committee finds that the project is not relevant, it shall inform the person that requested for expropriation and the persons that had to be expropriated in the way and within the period provided for in Paragraph One of this Article.

Article 15 of national expropriation law: Approval of expropriation in the public interest

On the basis of the decision of the Committee in charge of monitoring projects for expropriation in the public interest at the competent authority level, the relevant organ provided under Article 9 of this Law shall within fifteen (15) days of receiving the decision of the relevant Committee approve expropriation in the public interest.

Article 16: Publication of the decision on a project for expropriation in the public interest

The decision provided for under Article 15 of this Law shall be announced on at least one of the radio stations with a wide audience in Rwanda and in at least one of Rwanda-based newspapers with a wide readership in order for the relevant parties to be informed thereof. If necessary, any other means of communication shall be used.

The list of holders of rights registered on land titles and property incorporated on land shall be posted in a publicly accessible place at the office of the City of Kigali, the District, the Sector and the Cell of the place in which the land is located.

The publication of the decision on a project for expropriation in the public interest and the list of holders of rights registered on land titles and property incorporated on land shall be done within fifteen (15) days of approving expropriation in the public interest

Article 17: Value of activities developed after the publication of the decision of expropriation in the public interest

After the publication of the decision on expropriation in the public interest and the list of holders of rights registered on land titles and property incorporated on land, the land owner shall not develop any other long-term activities on the land. Otherwise, such activities shall not be compensable during expropriation.

Article 18: Application for review of the decision on expropriation in the public interest

Any person affected by the decision on expropriation in the public interest shall have the right to request for review of the decision before the organ directly higher than the one having taken the decision. The appeal shall be made within thirty (30) days from the day of the publication of the decision. The appellant shall indicate in writing the grounds for his/her appeal. The authority before which the appeal is made must decide on the appeal and inform the appellant in writing within thirty (30) days of receiving the request for review of the decision on expropriation in the public interest. The decision must be in writing and indicate the grounds there for.

Article 20: Application for review of the list of persons to be expropriated

Within fifteen (15) days from the publication of the initial list of persons to be expropriated, any person affected by expropriation in the public interest shall have the right to apply to the organ having made the list for its review and indicate the grounds for his/her application. The organ having made the list must decide on the application for review of the list within seven (7) working days of receiving the application.

Article 21: Approval of the list of those to be expropriated

Within seven (7) working days of taking the decision provided under Paragraph two of Article 20 of this Law, the District or City of Kigali Mayor or the relevant Minister shall approve the list of the persons to be expropriated which serves as a basis for drawing up an inventory of the property to be expropriated.

Article 36: Time frame for payment of fair compensation

The approved fair compensation shall be paid within a period not exceeding one hundred and twenty (120) days from the day of its approval by the District or City of Kigali Council or the relevant Ministry.

If fair compensation is not paid within the period provided under Paragraph One of this Article, expropriation shall become null and void unless otherwise agreed upon between the expropriator and the person to be expropriated.

Subsequent to receiving fair compensation, the expropriated person shall have a period not exceeding one hundred and twenty (120) days to relocate.

However, the person to be expropriated shall not be allowed to plant crops that require more than one hundred and twenty (120) days of growth before they can be harvested. Comparison between National Legislation and WB OP 4.12 .This section compares differences between the laws of Rwanda related to expropriation and the World Bank's safeguards on Involuntary Resettlement. In this project, where the Rwanda law differs with the Bank's OP 4.12' the latter will apply or take precedence. The promulgation of the new Expropriation Law introduces a legal framework within which expropriation activities must be conducted, and above all, attempts to bring Rwandan legislation more in line with international best practice requirements.

3. PROJECTS IMPACTS AND RESETTLEMENT IMPLICATIONS

Attempt has been made to avoid expropriation as much as possible as per the primary criteria of development scheme for Phase selected projects. However, the impact on a few properties could not be avoided even after applying all necessary measures, this will include, trees and crops. The main goal of ARAP is to minimize negative impact that may result from project implementation.

3.1. Land acquisition process.

National land acquisition process is being supplemented by the development and implementation of this ARAP that seeks to adhere to the requirements of the World Bank policy on involuntary resettlement (OP 4.12) and National Expropriation law no 32/2015 of 11/06/2015. The stakeholder engagement and socio-economic data collection required to develop this ARAP took place through a series of site visits to the concerned districts between May and June 2015 and June and July 2016. In light of synergies between the ESIA and the ARAP development process for the entire project, an integrated approach to stakeholder engagement, consultation and socio-economic data collection was adopted. In this line, inventory and valuation of trees, Crops and structures to be affected was conducted.

3.2. Approach of ARAP preparation:

The ARAP preparation followed the following key essential stages:

- Identification of project impacts and affected populations was achieved by-
 - Reviewing the map of the extent of proposed Mv lines diversions.
 - Reviewing the Socio-economic Impact Assessment report;

- Consultation with affected populations on suggestions regarding mitigation measures and preferred development opportunities;
- Reviewing the detailed Engineering Design

Review of legal framework for land acquisition and compensation for Rwanda;

- An Entitlement Matrix was drawn indicating which people are affected, entitled to what compensation and cut-off date after which any intruders are ineligible were also determined;

Valuation of property: The full replacement cost was used to determine the value of affected assets and the valuer referred to established market prices for property to confirm his values

- A detailed budget was drawn covering; cost of compensation, cost of ARAP implementation, and the Monitoring and Evaluation of the entire ARAP. The detailed budget has a close link to the implementation schedule;
- Monitoring and implementation plans were drawn. The implementation schedule covers all activities of the resettlement process that were planned, that is, consultations, ARAP, formal establishment of grievance mechanism, agreement of LRP and agreement on the resettlement sites.
- ARAP, implementation of the LRP, monitoring and evaluation. Monitoring was discussed based on performance monitoring, impact monitoring and complete external audit;
- Information from the stakeholder engagement enabled the study to describe organizational responsibilities and establish a formal grievance redress mechanism;

Some of the more relevant activities mentioned above and applied in the process of preparing the ARAP are discussed in a little more detail hereafter:

Key Informant Interviews (KI), Village-Level Discussions and Focus Group Discussions (FGDs) were also used in the exercise:

One-on-one key informant interviews, cell and village-level discussions and FGDs were applied to understand the extent of potential resettlement-related impacts of the Project's land acquisition process, as well as other relevant issues. The outcomes of these consultations were used to fine-tune the scope and strategy for the next stage of data collection.

In each project site, the FGDs were held with: (i) local government leaders; and (ii) general public meetings with the communities that will be affected.

4. WORLD BANK SAFEGUARD POLICY

The World Bank policy on involuntary resettlement (OP 4.12) emphasizes that any development project should avoid or minimize involuntary resettlement and where this is not feasible, it should compensate for lost assets at full replacement cost, and assist the displaced persons in improving or at least restoring their livelihoods and standards of living in real terms relative to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher. The World Bank OP 4.12, Annex A (Paragraphs 17-31), describes the scope (level of detail) and the elements that a resettlement plan should include:

a) WB OP 4.12. (6a) demands that the resettlement plan includes measures to ensure that displaced persons are (i) informed about their options and rights, (ii) consulted on, offered choices among others and provided with technically and economically feasible resettlement alternatives, and (iii) provided prompt and effective compensation at full replacement costs. b) WB OP 4.12 (8) requires that particular attention should be paid to the needs of vulnerable groups among those displaced such as those below the poverty line, landless, elderly; women and children and indigenous peoples and ethnic minorities. c) WB OP4.12 (12a) states that for households depending on land for their livelihoods preference should be given to land based solutions; however, payment of cash compensation for lost assets may be appropriate where livelihoods are land-based but the land taken for the project is a small fraction (less than 20%) of the affected asset and the residual is economically viable. d) WB OP4.12 Para (6 b & c) state that in case of physical relocation, displaced persons should be (i) provided with assistance (such as moving allowances) during relocation; and (ii) provided with residential housing, or housing sites, or, as required, agricultural sites for which a combination of productive potential, location advantages, and other factors is at least equivalent to the advantages of the old site. e) WB. OP 4.12 (13 a) stipulates that any displaced persons and their communities and any host communities receiving them should be provided with timely and relevant information, consulted on resettlement options and offered opportunities to participate in planning, implementing and monitoring resettlement. In addition, displaced persons should be offered support after displacement, for a transition period, based on a reasonable estimate of the time likely to be needed to restore their livelihood and standards of living; and provided with development assistance in addition to compensation measures such as land preparation, credit facilities, training, or job opportunities. f) WB OP4.12 Para 13 (a) requires that appropriate and accessible grievance mechanisms are established to sort out any issues arising.

4.1. Comparison between National Legislation and WB OP 4.12

This section compares differences between the laws of Rwanda related to expropriation and the World Bank's safeguards on Involuntary Resettlement. In this project, where the Rwanda law differs with the Bank's OP 4.12' the latter will apply or take precedence. The promulgation of the new Expropriation Law introduces a legal framework within which expropriation activities must be conducted, and above all, attempts to bring Rwandan legislation more in line with international best practice requirements.

4.2. Gap Analysis between Rwandan Expropriation Law and WB Op 4.12

Despite this, there are still some gaps between the national Rwandan legislation and the World Bank Policy OP 4.12. These relate to the general principles for resettlement, eligibility criteria, the notification period for expropriation and resettlement, and the procedures required throughout the resettlement process. The key differences are as follows.

a) Avoid Resettlement: While OP 4.12 stipulates that projects should first avoid involuntary resettlement as much as possible, there are no similar provisions in Rwandan national legislation, which states that 'expropriation of land will be done when deemed necessary for public purposes.' Secondly, the notification period under national legislation requires that property must be handed over 120 days after financial compensation has been paid, while OP 4.12 requires that displacement must not occur until all necessary measures for resettlement are in place including assisting the PAPs with relocation.

b) Meaningful and participative consultation: OP 4.12 requires that persons to be expropriated should be meaningfully consulted and that the PAPs should have the opportunity to participate in planning and design of resettlement programs. The Rwandan Expropriation Law only stipulates that affected peoples be fully informed of expropriation issues and that the public interest will always override any individual interest. Indeed, the law prohibits anyone to hinder the expropriation process based solely on "self-centred" reasons.

c) Eligibility determination: According to the Bank policy (OP 4.12) eligibility determination of the PAPs entitles those who have formal rights, those with claims to land, and those with no recognizable legal right to compensation; but under the Rwanda Expropriation law compensation is limited only those land titles and or recognizable customary or written evidence of land ownership, persons recognized as legal occupants and owners of the expropriated land and property thereon. The World Bank OP4.12 policy is much broader and includes both legal and illegal occupants of the land.

d) Notification period required: The Rwandan new expropriation law requires that property must be handed over 120 days after financial compensation has been paid, while OP4.12 requires that displacement must not occur before all necessary measures for resettlement are in place, not only compensation.

e) Fair and just compensation: The Expropriation Law provides for fair and just compensation to expropriated peoples eligible for compensation, the definition of 'fair and just' is not clearly defined, and therefore there is a risk that Project Affected People's livelihoods may not be restored or improved after compensation and resettlement.

5. PUBLIC CONSULTATION

According to the World Bank resettlement policy, affected persons and host communities are supposed to be meaningfully consulted early in the planning process and encouraged to participate in the planning and implementation of the resettlement program. While preparing this ARAP, the affected persons were informed about their options and rights pertaining to resettlement. Hence, consultation meetings with PAPs were held to discuss issues related to compensation. EARP and the Districts of Ngororero held meetings with the local communities in order to inform them about the planned subproject.

The local communities were fully involved in all the processes of the development of this ARAP and they were informed about the construction of the proposed Mv lines. Upon identification of the households that will be affected by the project, EARP and Ngororero District organized meetings with the PAPs to discuss compensation requirements and concerns. The District arranged meetings for the negotiations with the local communities to discuss the alternatives for compensation and the proposed site that seemed to be suitable for the project.

i. Verification and Disclosure of entitlements

Public consultations took place from the initial stage of ARAP preparation with the local community and PAPs involved in the process of documentation and valuation of their assets. The ARAP will be disclosed after its preparation and the mean of communication will be Kinyarwanda.

ii. Main issues raised by the PAPs during the first meeting held.

The issues raised at the consultation meetings are summarized in the table below, along with the responses given by the committee comprised of EARP staff (Social and Environment specialists), and District and Sector officials.

Table1: Issues of PAPs and responses given

Issues	Responses
Valuing affected assets (crops and trees)	The valuation of the crops trees and houses will be done with reference to current laws applied in Rwanda.
How to know the amount of money to be compensated?	All PAPs will be involved in determining the type of compensation. At each valuation form, the amount of money to be compensated will be also displayed.
How will I receive my money?	All payment will be made directly to PAP personal bank accounts or SACCOs and other Banks operating in Rwanda.
Employment	The PAPs will be given priority in recruiting during construction works as manpower.

iii. Attitudes of PAPs towards Approved EARP project Sites

The consultations with several stakeholders including PAPs indicated that most of the people did support the construction of the proposed MV lines. This was attributed to the fact that these people already knew the importance associated with the construction of the MV lines.

6. GRIEVANCE REDRESS MECHANISM

It is very important that appropriate and accessible grievance mechanisms are established to sort out any issues arising in connection with resettlement and compensation. During the implementation of the project activities it is likely that disputes/disagreements between the project implementers and the affected persons will occur. Grievances may arise from members of communities who are dissatisfied with the eligibility criteria, resettlement measures, compensation packages/rates and ownership of property etc. Other grievances may include family issues like death of eligible PAPs and thus disputes between heirs and other family members, divorce/separation of spouses and missing PAPs on the register among others. It is therefore necessary to establish channels through which aggrieved people could file their complaints so as to ensure successful project development and implementation. This chapter sets out the measures to be used to manage grievances that will arise.

6.1. Overview of the process

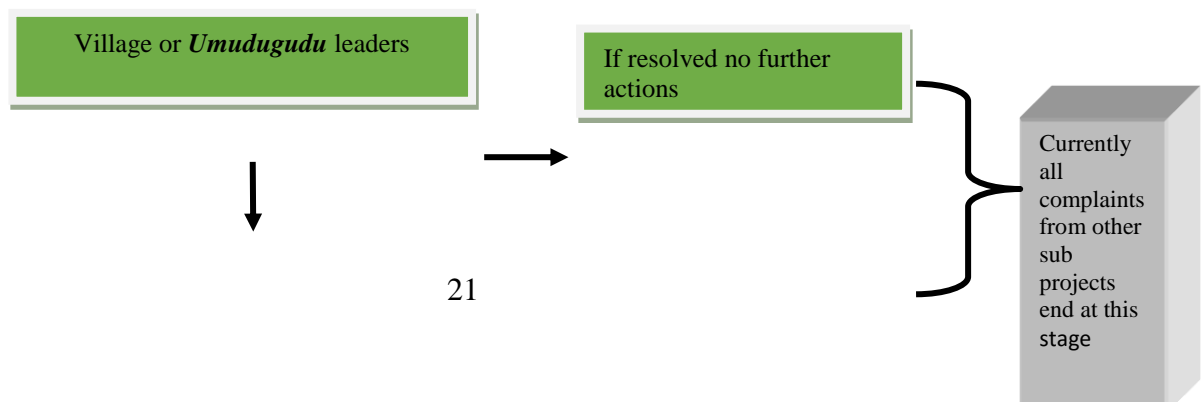
- i. Through sensitization meetings during the initial stages of the valuation process, the PAPs were informed of the different grievance mechanisms in place for them to lodge their complaints and dissatisfactions as stipulated by Article 17 of the Expropriation Law.

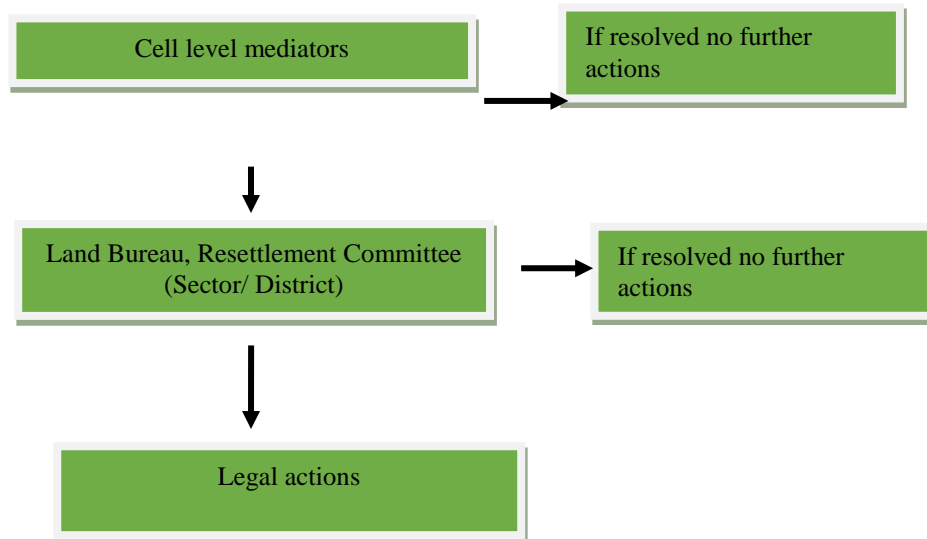
- ii. The project will use a local mechanism, which includes resettlement committees and local leaders of the affected people as well as the representative of the PAPs. These will ensure equity across cases, eliminate nuisance/un-genuine claims and satisfy legitimate claimants. They will also ensure that there is transparency, access and flexibility of the procedure for the PAPs.
- iii. The process of grievance redress will start with registration of the grievances to be addressed for reference, and to enable progress updates of the cases.
- iv. The response time will depend on the issue to be addressed but it should be addressed with efficiency.

As per article 26, in case the person expropriated is not satisfied with the value determined for the land and the activities carried out thereon, the Land Commission at the level (in our case the District level) on which the issue is shall request him or her in writing, to hire a legally accepted expert or the survey office as professionals in value verification for which he or she shall pay, in order to provide alternative value.

If this alternative value is rejected by the commission, the expropriated person shall appeal to the land commission at the immediate superior level with in a period not exceeding fifteen (15) working days, which shall provide its decision in a period not exceeding 30 days from date of receipt of the appeal. In case the expropriated person is not satisfied with the decision of the Land Commission appealed to, he or she shall file the case with competent Court. However, the value approved by the Land Commission at the immediate superior level shall be given to the expropriated person in order not to stop the activities while waiting for the court decision.

Figure 2. Steps when Affected Person (PAP) declares a complaint





7. ASSET INVENTORY AND PROPERTY VALUATION

Asset inventory and valuation to be done in District, for the proposed Mv line construction. The valuation process is an entire field operation that involves professional Valuers and local authorities, in local meetings, explaining to the affected communities the manner in which the valuation would be done.

- Plots of land to be measured with tape measure to determine the size. This will be done in the presence of the Displaced persons and the committee chosen to follow-up the Asset inventory and valuation.
- Houses if any to be measured by tape measure, type and quantity of construction materials used on the houses will be determined, state of the structure also determined, all were done in the presence of the affected owner and valuation committee.
- Crops valuation criteria based on area of coverage, in other cases number of standing crops and age.
- Trees valuation criteria based on number of trees, age and type of tree.
- All this data was entered into individual valuation field sheets for each plot of land and for each affected person. Each of these were verified by the valuation committee, verified by the affected person, who signed against the sheet. These sheets were signed off by the Cell and Sector authorities before they are sent to the District land commission for endorsement and for payment processing.

Basis of calculation for compensation value of land, houses, crops and trees:

7.1. Land

Land to land compensation could have been the best option, however, there is no land adequate in size, vicinity as the displaced land, it is therefore proposed that agreement with the Displaced person to have cash compensation for affected property instead of land to land.

For the land price, reference is from the current land pricing legislation, Ministerial order No. 002/16.01 of 26/04/2010 determining the reference land price outside Kigali city. The unit prices determined per square Comparison between National Legislation and WB OP 4.12

This section compares differences between the laws of Rwanda related to expropriation and the World Bank's safeguards on Involuntary Resettlement. In this project, where the Rwanda law differs with the Bank's OP 4.12' the latter will apply or take precedence. The promulgation of the new Expropriation Law introduces a legal framework within which expropriation activities must be conducted, and above all, attempts to bring Rwandan legislation more in line with international best practice was considered.

ENTITLEMENT MATRIX

With reference to the local expropriation law, persons eligible for compensation when displaced are those with recognized land lease title certification of ownership or recognized claim to the land or activities that were carried out on the land including; different crops, forests, any buildings or any other activity aimed at efficient use of land or its productivity.

7.2. Entitled persons

Categories of persons identified during the census and baseline survey that are eligible for compensation as a result of land acquisition and involuntary resettlement are described hereafter:

7.3. Agricultural land owner

This refers to displaced persons that possess land lease titles certified by the National land commission or those with recognizable claim of the land. It refers to individuals or a group of individuals.

7.4. Crop/Tree owner

It refers to persons that cultivated crops or trees on land within the expropriated area. Common crops in this area are; maize, beans, bananas, sorghum, sweet potatoes, cassava.

Crop/tree owners could be; (i) those that also own the land, (ii) renting the land for cultivation, (iii) care taking for the land owner.

Likely groups that could be eligible to this resettlement exercise such as; businesses, social network infrastructure, are also affected by the expropriation exercise.

Entitlement matrix proposes eligibility and payments for the losses triggered by the project (e.g. land, housing, trees, crops, land etc). Hence, based on analysis of the impact of the project and the criteria for eligibility, the following entitlement matrix is developed on categories of Displaced and host communities according to losses and their entitlement benefits. Table 9 shows the entitlement benefits.

7.5. Verification and Disclosure of entitlements

The local community and Displaced Persons shall be involved in the process of documentation and valuation of their assets. Property valuation forms shall be presented to Displaced Persons for verification, once they are comfortable with the proposed full replacement cost for their property, they signed or thumb pressed in ink against their names as a sign of agreement. These documents will then be shared with the Cell and Sector authorities who countersign as a sign of approval and authorization of legal process.

8. DESCRIPTION OF RELEVANT ORGANISATIONS' RESPONSIBILITIES

The Table below gives the summary of responsibility and roles that should be played by every institution during the preparation of ARAP for EARP subprojects implementation.

Organization	Responsibility
District + Safeguards team	<ul style="list-style-type: none"> ✓ Screening of sub-projects to identify resettlement and compensation requirements ✓ Preparation and Implementation of ARAP District of the District to create Resettlement and Compensation Committee; ✓ Provision of capacity building and technical support relating to resettlement and compensation activities
District authorities and REG-EDCL	<ul style="list-style-type: none"> ✓ Review and sign off of all documentation (e.g. completed ARAPs, grievance forms, consultation plans); ✓ Review and sign off of all documentation (e.g. completed ARAPs, grievance forms, consultation plans); Participation in documentation of assets ✓ Compensation of ARAP Responsible in monitoring and implementation

PAPs	Participation in census/measurement and valuation of assets
District and Resettlement and Compensation Committees	<ul style="list-style-type: none"> ✓ Identification of land for replacement and effective consultation at the sector level, cell level, and at village level (Umudugudu) ✓ Representation of PAPs; Facilitate coordination of information collation activities (such as surveys, supervising documentation) for monitoring purposes, in accordance with procedures put in place by the District authorities; ✓ Elect a representative of the Committee to act as Project Liaison Officer who has regular contact with PAPs and can lead consultation, public participation and grievance mechanisms Responsible for ensuring that grievance mechanisms meet the requirements of the RPF legislation.

8.1. Roles of MININFRA during Land and assets measurements

MININFRA played an oversight role in monitoring and ensuring that the process of surveying the land was done in an open and transparent manner and in the presence of all the PAPs. The District informed the PAPs in advance and within adequate time on the dates when the social assessment, survey and measurements, and valuation of their properties were conducted; and insisted upon the presence of the PAPs in all meetings and documentation of assets.

8.2. District working with MININFRA is also to:

1. Ensure that the ARAP process is implemented successfully;
2. Payment of compensation is done;
3. Work together with the District to ensure that complaints are dealt with and that the A-RAP is implemented smoothly and efficiently.

8.3. Roles of the PAPs

The primary role of the PAPs during the process of property census/measuring land and assessing property thereon is to be physically present and ascertain that indeed the measurements are correct and to their satisfaction. Upon being adequately satisfied with the measurements, their signatures will be given as proof of approval.

8.4. Roles of the District

The technical staff (Civil Engineer) of the District played an important role during survey and valuation of land targeted for the implementation of the EARP sub-projects. The key roles for the District in preparation and implementation of the ARAP included the following:

1. Ensuring that all the money required for expropriation as made available on time and affected persons are fairly compensated on time as required by law and before the implementation of the project;
2. Ensuring that all the complaints concerning expropriation are timely addressed.

Include the role of EARP PIU

9. IMPLEMENTATION AND MONITORING FRAMEWORK

The civil works for rehabilitation and construction of MV lines, in the respective Districts is planned to start in June of 2017. Monitoring of the ARAP 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 ARAP occurs. The monitoring will be carried out by a committee composed of District representatives, representative at the Sector & cell level, women and youth representatives from the Sectors, and the Social Safeguards Specialist, to ensure that all of the responsible implementing agencies follow the schedule and comply with the principles of the ARAP. Suggested key 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 ARAP implementation;
- Number of PAPs effectively compensated and aggregated amount disbursed compensation (actual versus planned);
- Number of complaints including total received, total justified, and 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 or the Districts) the referral and the subject matter.

Suggested performance/evaluation indicators include:

- ✓ Total nature and level of all complaints received, resolved;

9.1.Table 4.Plan for Monitoring, evaluating and reporting

Item	Main activities	Responsible institution	Frequency of monitoring
Public consultation	Consultation meeting with the PAPs	District and EDCL/EARP	Twice a month
Data Base	Updating census results	EARP	When needed
Disclosure of Entitlement	Display to the PAPs the results of the census	District sectors +EARP	After assets valuation
Compensation	Follow up and monitoring of PAPs livelihoods	District and Sector	Compensation should be completed before works starts, the period is stipulated in the national law on expropriation

9.2.Resettlement Implementation Completion report

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

The ARAP implementation report will include (but not be limited to) the following information:

- ✓ Background of the ARAP 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 affected persons, 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; and,
- ✓ Lessons learned from the A-RAP implementation

10. BUDGET

no	Item	PAPs	amount
1	Compensation for damaged properties	433	83,136,529
2	Monitoring and Evaluation	-	15,000,000
	Total		98136529

The estimated budget is Eighty-Five Million, Free Hundred and Eight Thousand Nine Hundred Fifty Nine Rwanda Francs (98,136,529 frw).

LIST OF ANNEXES:

Include the table summarizing prices used in valuation

Rates of Valuation of Crops

IMBUTO

Type of Crop	Unity	Age	Value (rwf)
Inanasi Ananas Pineapple	Cluster		300/Plan /180000 Par are
Ananas	Are		180000
Ibinyomoro Prunier du japon Tree Tomato	Plant	0 to 1 year	1300
		1 to 3 years	2550
		3 to 5 years	2000
Umwembe Manguier Mango	Plant	0 to 1 year	3450
		1 to 3 years	7000
		3 to 5 years	9000
Ipera Goyavier Guava	Plant	0 to 2 years	3450
		2 to 4 years	7000
		3 to 5 years	9000
Ipapayi Papaye Papaya	Plant	0 to 1 years	1200
		1 to 3 years	10700
		3 et plus	9000
Avocat Avocatier Avocado	Plant	0 to 1 years	4005
		1 to 3 years	13020
		≥ 3 years	24060
Coeur de boeuf	Plant	0 to 1 year	1750
		1 to 3 years	2500
		3 to 5 years	5550
Marakuja	Plant	0 to 1 year	1500

		1 to 3 years	4000
		3 to 5 years	3250
Les agrumes	Plant	0 to 3 years	4650
		3 to 5 years	6150
		5 et plus	12150
Ibindi biti Other fruit trees (not listed in the crop valuation document	Plant	0 to 2 years	2100
		2 to 4 years	4500
		4 to 5 years	5500
IBINYAMISOGWE			
Ibishyimbo Haricots Beans	Are		2250
Petit pois	Are		2600
Arachide	Are		6750
Soya	Are		250/plant 3750/are
IBINYAMPEKE			
Amasaka Sorgho Sorghum	Are		3500
Umuceri Riz Rice	Are		14000
Umuceli udatonoye/ padi	Are		14000
Ingano	Are		4500
Ibigori	Are		4200
Uburo	Are		3000
IBINYABIJUMBA			
Amateke Colocases	Plant, are		80/plant, 20,000/are
Imyumbati Manioc Cassava	Plant, are		90/plant, 40500/are
Ibirayi	Are		80/plant 24000/are
Ibikoro	Are		80/plant 16000/are
Ibijumba	Are		80/plant 20000/are
Urutoki Banane Banana	Mat	0 to 1 year	500
	Mat	≥ 1 years	2500
	Are	0 to 1 year	22000
	Are	≥ 1 year	110000
IMBOGA/LEGUMES			
Tomates	Are		75000
	Plant	0 to 1 year	1300
	Plant	1 to 3 years	2550
Intoryi	Are		75000
Karoti	Are		60000
Salade	Are		30000

Celeri	Are		30000
Courge	Are		30000
Manioc/ Isombe	Are		300/plant 60000/are
Izindi mboga	Are		30000
Urusenda Pilipili	Plant	0 to 6 Months	150
	Plant	≥ 1 years	650
	Are	0 to 6 Months	15000
	Are	≥ 1 years	65000
Amashu	Are		150/plant 45000 are
Ibitunguru	Are		250/plant 60000/are
Canne a sucre	Are		50000

CULTURES D'EXPORTATION/ INGENGABUKUNGU

Ipamba	Are		3000
Itabi	Are		75000
Kawa	Are	0 to 3 years	40000 are/2500 plant
		3 to 10 years	44800 are /2800 plant
		10 et plus	48000 are /3000/plant
Ibireti	Are	0 to 1 years	52000/250 par plant
		1 to 3 years	135200/650 par plant
Icyayi	Are	0 to 3 years	52500/ 500 par plant
Quinquina/ikinini	Are	3 et plus	64050/ 610 par plant
		0 to 3 years	60000/600 par plant
Moringa trees	Plant	0 to 1 year	1000
		1 to 3 years	4005
		3 to 5 years	5500
		≥ 5 years	7500
Macadamia	Plant	0 to 2 years	8265
		2 to 5 years	18300
		5 to 15 years	24060
		15 et plus	32325
Vanilla	Plant	0 to 1 year	1500
		1 to 3 years	4000
		3 to 5 ears	5250
		5 et plus	8205

IBITI BITANGA IMITI

Ibiti bitanga imiti(Umuravumba, igicuncu, umweya,..... Medicinal crops)	Plant		2800
IBYATSI BY' AMATUNGO			
Urubingo Penissetum Elephant Grass	Are		10000
Tripsacum, vetiveri, setariya, kikuyu grass, mucyayicyayi/citronelle	Are	En production	5000/ 100 par piece
Desmodium, Luseme, mukuna, trefle en production	Are	En production	10000
Sisal(umugwegwe), bambou(umugano)	Pce	En production	250
Urwuri rutunganiye	Are		350000/are
INDABO			
Indabo (indabo zerera Umwaka	Pce		1000
Indabo (Ibiti byo mu busitani)	Pce		5000
Pasparum.....	m ²		620
IBITI BYO GUKORA URUGO			
Imiyenzi Euphorbes	Cluster	Young Age	105
		Average	525
Imihate Dracaenas	Cluster	Young age	125
		Average	575
Spurges	Plant	Aged	920
Imiyenzi nu rugo Enclos d'euphorbes Spurge enclosure	M	Young age	270
		Aged	920
		Average	420
		Aged	920
Imihate y'urugo Enclos de Dracaenas	M	Young age	285
		Average	860
Enclos de roseau cg Imiseke	M		1850
Enclos de sipure	M		1250
Enclos de bougainviere	M		2250
Enclos de roseau cg Imiseke	M		1850
Enclos de sipure	M		1250
	M		2250

Enclos de bougainviere			
Urugo rw'imitobotobo	M	Jeunes	270
	M	Moyennes	420
Umuvumu Ficus Ficus Imivumu	Plant	Young age	270
		Average	860
		Aged	2860 to 4290
Umuko	Plant	Young age	270
		Average	450
Ibindi biti Other trees not specified	Plant	Young age	105
		Average	270
		Aged	450
Ikibonobono Ricin Castor Oil Plant	Plant	Young age	105
		Average	575
		Aged	715
IBITI BYO KUBAZA			

Sipure – Cypres Gereveliya – Greveleia Gasiya – Acacia Pinusi – Pinus Umusave – Markhamia Sederela – Terminalia	<i>Plant, are</i>	Young	286/plant, 7150/are
		3 to 5 years	572 to 858/plant, 13,585/are
		6 to 10 years	1287 to 2145/plant, 22,880/are
		≥ 10 years	4290 to 5720/plant, 57,200/are
Murier, iboberi	Plant	0 to 2 years	1000
		2 to 3 years	2000
		3 et plus	6150
Ibiti bibazwa: (Filawo, araucaria, cypres, grevellela, Masopsis, acacia, Indongo, Pinus, Lilas, Markhamia, Umusave, Jacaranda, Sakaranda, cedrela, Terminaria, etc	Are	Jeunes	7150/286 par plant
	Are	3 to 5 years	13585/ 572 par plant
	Are	6 to 10 years	22880/ 1287 to 2145 par plant
	Are	Sciable	57200/ 4290 to 5720 par plant

IMIZINGA N'IBYUZI			
Imizinga/Ibyima bya Kinyarwanda	Pce		3000
Imizinga/Ibyima bya Kijyambere	pce		12500
Ibyuzi	are		240000

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Murier, iboberi	plant	0 to 2 years	1000
		2 to 3 years	2000
		3 et plus	6150
Ibiti bibazwa: (Filawo, araucaria, cypres, grevellela, Masopsis, acacia, Indongo, Pinus, Lilas, Markhamia, Umusave, Jacaranda, Sakaranda, cedrela, Terminaria, etc	are	Jeunes	7150/286 par plant
	are	3 to 5 years	13585/ 572 par plant
	are	6 to 10 years	22880/ 1287 to 2145 par plant
	are	Sciable	57200/ 4290 to 5720 par plant

IMIZINGA N'IBYUZI			
Imizinga/Ibyima bya Kinyarwanda	pce		3000
Imizinga/Ibyima bya Kijyambere	pce		12500
Ibyuzi	are		240000