

REPUBLIC OF RWANDA



MINISTRY OF FINANCE AND ECONOMIC PLANNING

Access to Finance for Recovery and Resilience Project (Parent project-P175273 and additional financing-P179999)

UPDATED ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

September-2023

EXECUTIVE SUMMARY

The Covid-19 crisis pandemic has had a negative influence on several nations around the world, including Rwanda, which is attempting to restore its economy. The Government of Rwanda (GoR) established an Economic Recovery Fund (ERF) in April 2020 to support severely affected businesses so that they can survive, resume operations, and safeguard employment to recover its economy and overcome pandemic shocks. The GoR also requested assistance from the World Bank through the Access to Finance for Resilience and Recovery project to address the difficulties and limitations the COVID-19 pandemic had placed on Rwanda's business sector. The goal of the project is to expand access to capital for businesses by solving market shortcomings such as a lack of liquidity and the need for long-term financing sources to support investments in business expansion and adaptation.

Project Development Objective (PDO); The project development objective is to increase access to finance and support recovery and resilience of businesses affected by the COVID-19 pandemic. The Project is composed of the following components.

Component 1: Liquidity and recovery facility. The primary goal of this component is to help companies overcome their short- and long-term financial constraints and assist them in transforming their operations for the post-COVID-19 era. The component offers lines of credit (LoC) to Financial Institutions (FIs) to enable business continuity by on-lending to significantly be impacted and/or strategically essential sectors and enterprises. This component has the following **sub-components 1.1.** (Microbusinesses Credit line) will provide financial to SMEs and informal sector; **sub-component 1.2.** (Refinancing Credi line) will support refinancing of existing loans in priority sectors as determined by the GoR through the Steering Committee, **sub-component 1.3.** (Working Capital and Investment Credit Line) will support investments in Rwanda to facilitate economic recovery and the preservation and creation of jobs through the provision of long-term sources of funding currently lacking in the market while **sub-component 1.4.** (Sustainability Linked Financing) is an additional component to increase PCM and support BRD's lending activity

Component 2: Risk-sharing facility. This component aims at enhancing, scaling up, and expanding existing risk-sharing solutions (PCG and de-risking schemes) with the goal of reaching SMEs in sectors most severely affected by the COVID-19 pandemic. The component has the following sub-components; **Sub-component 2.1.** (Partial credit guarantee) that supports the gradual capital increase for BDF's PCG upon fulfillment of PBCs to strengthen its operation. Generally, this sub-component aims to strengthen the operation of the BDF's PCG scheme and increase the overall

number and value of guarantees issued. **Sub-component 2.2.** (Bridge lending window for vulnerable SMEs) funds the creation of a new financial de-risking tool to cushion SMEs against compounding climatic shocks.

Component 3. Institutional Strengthening and Implementation Support. This component focuses on three key areas to strengthen capacity at various levels to support project implementation: (a) Technical assistance to project beneficiaries; (b) Technical assistance and capacity building for Implementing agencies (IAs), and (c) project management and monitoring. Additional funds are being requested to increase the support and activities aimed at further strengthening BDF implementation capacity and to support project management and monitoring. This component has the following subcomponents: **Sub-component 3.1.** (Strengthening Firms' capability for resilience and recovery) supports firms through the provision of tailored Business Development Services (BDS) and technical assistance to address constraints on the demand side, **Sub-component 3.2.** (Institutional Strengthening) enhances the capacity of the implementing agencies, and **sub-component 3.3.** (Project management and Monitoring) supports all aspects of project management such as project staffing and their training; procurement and FM; environmental and social framework (ESF) implementation and compliance; monitoring and evaluation (M&E); equipment and operating costs; communication as well as knowledge management. The Project has a fourth (**Component 4:** Contingency Emergency Response) Component that can be activated in case of a relevant emergency event.

Project activities with Environmental and Social Safeguards implications: Under AFIRR parent project, Environmental and Social risks are classified as substantial, with potential risks and impacts mostly related to the Liquidity and implementing facility with US\$160 million (about 58 percent of the project funds) targeting large companies and SMEs in manufacturing sectors like agro-processing, construction materials, light manufacturing and cross-cutting enablers, as well as the limited institutional capacity of BDF and their clients (SMEs) to manage the E&S risks. At the start of the project, the institution (BDF) lacked ESMSs, qualified environmental and social risk management staff, and prior experience in implementing similar projects. However, project activities anticipated impacts are ware site-specific, reversible and are addressed through application of standard mitigation measures and compliance with relevant national laws and World Bank's ESS 9 requirements and other ESSs that apply¹. To date, BDF has qualified staff in charge

¹ PAD; Access to finance for recovery and resilience project (P175273); June 2021

of environmental and social risk management and the project has provided capacity training Environmental and Social risk assessment and management. The project implementation process continues to adhere to all loan covenants, procurement, environmental and social standards (ESS), and financial management criteria (FM), and the overall project implementation progress is deemed to be "Satisfactory."²

Under the proposed AFIRR-AF, the E&S risk rating of the subproject activities remains Substantial² with site-specific and reversible impacts which can be addressed through standard mitigation measures and compliance with relevant national laws, the World Bank's ESS 9 requirements, and other applicable ESSs. The potential E&S risks and impacts are mostly like those of the parent project, mostly related to the Liquidity and Recovery Facility. The facility, which has the largest share of the total AF budget targets PFIs, large companies and SMEs in different sectors, including the transport and tourism sector, agro-processing, construction materials, light manufacturing, and cross-cutting enablers. There are minimal E&S risks that can result from MSEs under Subcomponents 1.1 and 1.4. Stakeholder consultations and rigorous subproject screening for E&S risks and impacts before onlending, especially under Subcomponent 1.3. will be done for onlending to highly impacted and/or strategically important sectors and firms, the client must have cleared Environmental and Social Impact Assessments (ESIAs), where applicable before disbursement and ensure the establishment of site-specific GRMs before implementation.

Purpose for updating ESMF: Updating the ESMF is one of the requirements for receiving the additional financing, with specific objective of realigning the management project Environmental and Social aspects of the proposed AF-activities to conform to the requirements of World Bank's Environmental and Social Safeguards Policies. Thus, this Updated ESMF document presents the Environmental and Social Management Framework (ESMF) for Access to Finance for Recovery and Resilience Project (P175273) and its additional Financing (P179999). The purpose of this document is to ensure that both AFIRR parent project and its additional financing are implemented in accordance with the World Bank's operational guidelines, safeguards, as well as national environmental and social protection laws and regulations. This updated ESMF therefore outlines the framework and mechanisms for environmental and social impact screening, determining extent of required assessment of environmental and social impacts arising from proposed project implementation, and gives generic guidance on appropriate mitigation measures, and institutional

² PAD; additional finance for the access to finance for recovery and resilience project (P179999)

arrangements for monitoring. Where necessary, site specific Environmental and Social Management Plans shall be prepared during project implementation.

Policy framework

- National Environment and Climate Change Policy, 2019
- Small and Medium Enterprises (SME) Development Policy, 2010
- Rwanda Wildlife policy, 2013
- National Industrial Policy, 2011
- Health Sector Policy, 2015
- National Biodiversity Strategy and Action Plan, 2016
- National Strategy for Transformation (NST1)
- Green Growth and Climate Resilience Strategy

Legal framework

- The constitution of the Republic of Rwanda as revised in 2015
- Law N°48/2018 OF 13/08/2018 on Environment
- Law N° 064/2021 of 14/10/2021 Law governing biological diversity
- Law N° 27/2021 of 10/06/2021 governing land in Rwanda
- Law N° 66/2018 of 30/08/2018 Law regulating labour in Rwanda
- Law N° 58/2018 of 13/08/2018 on mining and quarry operations
- Law N° 32/2015 of 11/06/2015 relating to expropriation in the public interest
- Presidential order N° 058/01 of 23/04/2021 establishing the national land use and development master plan
- Law No 001/ 2019 of 15/04/2019 Ministerial Order establishing the list of projects that must undergo environmental impact assessment, instructions, requirements and procedures to conduct an environmental impact assessment
- Law N° 02/MIFOTRA/22 of 30/08/2022 Ministerial Order on occupational safety, employees' and employers' organizations, child employment, employment of a foreigner, the child and circumstantial leave
- LAW N° 064/2021 OF 14/10/2021 Governing Biological Diversity
- Regulations No 002 of 26/04/2018 governing e-waste management in Rwanda
- Law N°59/2008 of 10/09/2008 on prevention and punishment of gender- based violence
- Law N°68/2018 of 30/08/2018 determining offences and penalties in general

World Bank Environmental and Social Safeguards Policies

The following World Bank's Environmental and Social standards (ESSs) are applicable;

- ESS1: Assessment and Management of Environmental and Social Risks and Impacts
- ESS2: Labour and Working Conditions
- ESS3: Resource Efficiency and Pollution Prevention and Management
- ESS4: Community Health and Safety
- ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources
- ESS 8: Cultural Heritage
- ESS 9: Financial Intermediaries
- ESS10: Stakeholder Engagement and Information Disclosure.

In addition to the ESMF, the Project's Stakeholder Engagement Plan (SEP), Environmental and Social Commitment Plan, and Gender Action Plan of the parent project have been updated and approved by the Bank to incorporate, additional sectors (of tourism and transport) for the AF. Therefore, these updated instruments will apply to both the AFIRR parent project (P 175273) and its Additional Financing (P 179999). In addition to the above-mentioned tools, the ESMS of the apex PFIs will also apply to both the parent and AF projects. The apex PFIs will continue to ensure their ESMSs are cascaded to PFIs and SMEs through participation agreements and the project's ESMF. These documents will further reflect the *World Bank E&S and the Environmental Health and Safety Guidelines*. PFIs will be required to monitor and report on the entire World Bank-financed portfolio to the apex PFIs in a manner acceptable to the World Bank. Furthermore, the apex PFIs will monitor and supervise the E&S performance of the PFIs and their portfolio exposures on the different credit lines. The PFI will make sure that supported subprojects comply with both national and World Bank environmental and social requirements based on the subproject E&S risk category, and the site-specific ESIA or ESMP prepared. PFIs must also report to BRD on a quarterly basis on the status of the mitigating measures and management plans recommended in the ESIA or ESMP. Chapter7 provides procedures for managing anticipated environmental and social risks associated with sub projects.

Stakeholder consultation. Key project stakeholders were identified and consulted to raise their awareness of the project, collect their views, and concerns about the project; with much focus put on additional financing. Eleven (11) commercial banks, 49 microfinance institutions (including Zigama CSS and 48 Umurenge SACCOs), 7 business owners (including 2 construction materials units, 1 rice cooperative, 2 agro-processing units, a poultry and tailoring unit) implementing agencies (BRD and BDF), 6 public institutions participating in the project (REMA, RDB, RLMUA,

Kigali City and 2 Districts) and a youth platform (RYAF) were contacted during the appraisal of the parent project while 6 transport operators, 4 public institutions (MININFRA, Kigali City, RSSB and BRD). Four (4) companies involved in tourism and 3 companies involved in Energy sector (VER, Vivo Energy and Vitol) were consulted during the preparation of the AF. The loan arrears, insufficient liquidity, lack of collateral by clients, were raised as the main challenges faced by financial institutions (FIs). While the disruptions and slowdowns resulting from Covid-19 containment measures seriously impacted the availability of raw materials and packaging materials under the manufacturing sector, thus causing price hiking of most construction materials. The agricultural sector faced agricultural input and natural hazards during the Covid-19 period. The old fleet and limited number of buses vis-à-vis high demand, limited licensing duration, limited logistics (luxury cars), high rental charges, limited packaging materials which are environmentally friendly, lack of land for charging areas facilities, e-wastes management were also included among the concerns associated with the AF.

Capacity building. For the effective implementation of the updated ESMF and E&S instruments such as SEP and ESCP, capacity building for those responsible for implementing sub-projects both at Apex-FI and PFI levels is required. Mobilization meetings, awareness campaigns, and training on environmental and social standards (ESSs) will be required for the following institutions and personnel, BRD and BDF staff, PFIs' E&S focal persons and, site specific Grievance Redress Committees (GRCs) among others. Capacity building will cover topic not limited to applicable national E&S regulations and World Bank Environmental and Social Standards, Environmental and Social risks/impacts associated with AFIRR project activities, occupational health and safety awareness, prevention, and management.

Institutional and Coordination Arrangements. Both AFIRR parent project and AFIRR AF will be implemented by Apex-FIs (BRD and BDF) through their Single Project Implementation Units (SPIUs) under the coordination of MINECOFIN/PCT. The E&S safeguard activities will be executed by BEs and regularly monitored by their respective PFIs and BRD PIU. The BEs and PFIs shall provide quarterly reports on the E&S performance of its financed activities and submit them to PFI and BRD respectively. They should also report to PFIs and BRD immediately, and no later than 48 hours after taking knowledge about emergency situations related to or affecting the sub-project, which has or may have a material adverse effect on the environment, the affected communities, the public or workers. The report should provide details on the date of occurrence, causes of the incident, number of casualties, action taken, and mitigation measures put in place to avoid such occurrences. BRD PIU may compile incident reports from PFIs and BEs and submit to PCT for

endorsement and immediate reporting to the World Bank/AIIB. The PFIs and BRD PIU may carry out an E&S due diligence and produce a report.

Monitoring, evaluation and reporting. MINECOFIN through the PCT has the overall responsibility for coordinating the project, and E&S safeguards. BRD will provide technical support in the review of sub-project screening reports prepared by the PFIs and ESIA/ESMP prepared by the BEs, coordinating stakeholder engagement, monitoring the implementation of mitigation measures across sub-project sites, and building the capacity of PFIs and BEs as well as project stakeholders on E&S safeguards implementation and compliance. The BRD PIU will prepare E&S reports and submit monitoring reports on the environmental, social, health, and safety (ESHS) performance of the Project, including but not limited to the implementation of the ESCP, status of preparation and implementation of E&S instruments required under the ESCP, stakeholder engagement activities, and functioning of the grievance mechanism(s), challenges encountered during the reporting period and proposed corrective measures/way forward to PCT on bi-annually basis, and MINECOFIN will prepare and submit Semi-annual reports to the Bank throughout the project implementation. The deadline for submitting these reports is 45 days following the conclusion of each reporting period.

Grievance Redress Mechanism (GRM): Rwanda Grievance Mechanisms are well catered for in the Ministerial Order No. 002/2008 of 2008 determining modalities of land registration provides enough consideration for grievance mechanisms³. Throughout the project's development and operation, BDF and PFIs will make sure that employees from directly financed projects, sub-borrowers, and possibly affected parties are kept well informed. A variety of channels, including but not restricted to in-person encounters, written complaints, phone hotlines, telephone conversations, e-mail, information booths, and open-door policies, are required for complaints to be lodged. If a complainant is not satisfied with the resolutions at all project levels, he/she free to take the matter to the appropriate legal or judicial authority as per Rwandan laws. Project affected communities and individuals may also submit their complaint to the World Bank's Independent Inspection Panel which determines whether harm occurred, or could occur, because of World Bank non-compliance with its policies and procedures. BRD will maintain a centralized GRC for regular communication, monitoring, and grievance handling from PFI and sub-project level GRCs. The

³ *Project Implementation Manual-Version 01-PIM-AFFIR-October 20,2021*

affected people can also submit complaints directly to BRD GRC if their comments are not adequately addressed at their GRC level. A consolidated GRCs report shall bi-annually be submitted to PCT at MINECOFIN, and a summary published at BRD website.

Lesson learnt. The project has made significant progress during the first year of implementation and has enabled a path to develop new and innovative risk sharing instruments to support MSME access to finance in Rwanda². All participating institutions have incorporated environmental and social clauses into loan agreements using the ESMS as a model. Due to this, borrowers' projects now better integrate environmental and social concerns.

BRD, BDF and PFIs conducted environmental, social, and OHS inspections on a regular basis during financed subproject's implementation. Most of the noncompliance noted included: workers not wearing appropriate PPEs, workers not fully aware of the worker's GRM; waste and debris not collected immediately and transported. In cases of accidents, BRD conducts Root Cause Analysis (RCA), and after a Safeguard Corrective Action Plan (SCAP) is prepared and implemented. Construction projects are required to prepare and adopt an extensive contractor's environmental and social management plan, which has increased the contractors' ownership of ESIA.

BRD and BDF have a team of E&S staff who date to date conduct robust E&S project monitoring and on-site inspection to ensure that all subprojects supported by AFIRR project comply with environmental and social regulations. As a result, the project implementation continues to meet all loan covenants as well as requirements for procurement, environmental and social standards (ESS), and financial management (FM). As a result, the project's overall implementation progress is graded as "Satisfactory". With the addition of AF, the project's overall risk rating has changed from substantial to moderate with substantial environmental and social (E&S) risks concerns². BRD and its Implementing Partners conducted environmental, social, and OHS inspections usually on a weekly basis during subproject implementation. Noncompliance was addressed and corrected immediately by the contractor's team/safety officers.

However, the project implementation team is committed to providing TA and ongoing monitoring to incorporate the lessons learnt during the project's first phase of implementation, which will help to mitigate these risks. The total cost for updated ESMF implementation, including environmental and social instruments preparation, monitoring of ESMPs, capacity building, and auditing is estimated at US \$352,000.

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ABBREVIATIONS AND ACRONYMS

AIIB	: Asian Infrastructure Investment Bank
AFIRR	: Access to Finance for Recovery and Resilience Project
BDF	: Business Development Fund
BRD	: Banque Rwandaise de Development Plc (Development Bank of Rwanda)
COMESA	: Common Market for Eastern and Southern Africa
EAC	: East African Community
EIS	: Environmental Impact Statement
ERF	: Economic Recovery Fund (ERF)
E&S	: Environmental and Social
ESCP	: Environmental and Social Commitment Plan
ESF	: Environmental and Social Framework
ESIA	: Environmental and Social Impact Assessment
ESMP	: Environmental and Social Management Plan
ESMF	: Environmental and Social Management Framework
ESMS	: Environmental and Social Management System
ESS	: Environmental and Social Standards
FI	: Financial Institution
GBV	: Gender Based Violence
GDP	: Gross Domestic Product
GEMS	: Geo-Enabling Initiative for Monitoring and Supervision
GRC	: Grievance Redress Committee
GRiF	: Global Risk Financing Facility
IDA	: International Development Association
LMP	: Labour Management Plan
MINECOFIN	: Ministry of Finance and Economic Planning
MSME	: Micro, Small and Medium Enterprises
NST	: National Strategy for Transformation
PBC	: Performance-Based Condition
PCG	: Partial credit guarantee
PCT	: Project Coordination Team
PFI	: Participating Financial Institution
RDB	: Rwanda Development Board
REMA	: Rwanda Environment Management Authority
SACCO	: Savings and Credit Cooperative Organization
SEP	: Stakeholder Engagement Plan
SME	: Small Medium Enterprise

DEFINITION OF TERMS

1. **Emergency:** Is an abnormal incident posing a threat to the safety of workers, the environment or property at a facility or site which can be brought under control using the resources and procedures for emergency response in place for the facility or site.
2. **Environment:** Is the surroundings in which a person, animal and plants live or operate. It is composed of the lithosphere, atmosphere, and hydrosphere.
3. **Social:** Issues which pertain to project-affected people and their communities and workers and related to socioeconomic status, vulnerability, gender, gender identity, human rights, sexual orientation, cultural heritage, labour and working conditions, health and safety and participation in decision making.
4. **Vulnerable people:** People or groups of people who may be more adversely affected by project impacts than others by virtue of characteristics such as their gender, gender identity, sexual orientation, religion, ethnicity, indigenous status, age (including children, youths and the elderly), physical or mental disability, literacy, political views, or social status. Vulnerable individuals and/or groups may also include, but are not limited to, people in vulnerable situations, such as people living below the poverty line, the landless, single-headed households, natural resource dependent communities, migrant workers, refugees, internally displaced people, or other displaced persons who may not be protected through national legislation and/or public international law.
5. **Environmental aspect:** is an element of an organization's activities, products or services that can interact with the environment.
6. **Social Aspects:** Are the commonalities among people within a specific culture. Social aspects may include the following: language. norms. rules.
7. **Environmental impact:** Any change to the environment, whether adverse or beneficial, wholly or partially resulting from a facility's activities, products or services.
8. **Social Impact:** Means any significant or positive changes that solve or at least address social injustice and challenges. Businesses or organizations achieve these goals through conscious and deliberate efforts or activities in their operations and administrations.
9. **Environmental and Social Management Framework (ESMF)** is an instrument that examines the risks and impacts when a project consists of a series of subprojects with risks and impacts that cannot be determined until the subprojects' details are identified. The ESMF sets out the principles, rules, standards, and procedures to assess the

environmental and social risks and impacts. This instrument is required for medium to high risks project and prepared before project appraisal.

- 10. Environmental and Social Due Diligence (ESDD)** is an assessment and analysis of environmental and social risks and opportunities associated with a Project to assist the Bank in deciding whether to provide support for the intended project and, if so, the way in which environmental and social risks and impacts will be addressed in the assessment, development and implementation of the project.
- 11. Environmental and Social Risks** are potential negative consequences to an activity that result from its impacts (or perceived impacts) on the bio-physical environment (air, water, soil, biodiversity) or socio-economic environment (e.g., employees, customers, residents).
- 12. Grievance Redress Mechanism (GRM)** is a set of process and procedures designed to receive and resolve concerns and grievances of project-affected parties arising in connection with the project using an understandable and transparent process that provides timely feedback to the complainants in a language they understand, without any retribution and monitor the implementation of taken decisions. The grievance mechanism is proportionate to the risks and impacts of the project and operates in an independent and objective manner.
- 13. Grievance Redress Committee (GRC)** is a special committee put in place at the project or subproject management unit to strengthen GRM throughout the project/subproject life cycle.
- 14. Grievance Redress Service (GRS)** is an avenue for project affected parties (individuals and communities) to submit complaints associated with a Donor-financed project to the Donor (e.g., World Bank) and give him a reasonable opportunity to respond. The GRS enhances the donor's responsiveness and accountability to project- affected communities by ensuring that grievances are promptly reviewed and addressed.
- 15. List of BRD excluded business/activities** is a list that defines the types of projects that BRD does not finance, either directly or indirectly through financial institution clients or participating financial institutions (PFIs).
- 16. Environmental and Social Standards (ESSs)** are operational procedures designed to help Borrowers to manage the environmental and social (E&S) risks and impacts of a project, and improve their E&S performance, through a risk and outcomes-based approach.
- 17. Environmental and Social Impact Assessment (ESIA) or full ESIA** is an instrument to identify and assess the potential environmental and social impacts of a proposed project, evaluate alternatives and design appropriate mitigation, management, and monitoring

measures. It is a condition for all projects screened to have significant impacts and this assessment instrument is prepared prior to the commencement of works.

18. Environmental and Social Management Plan (ESMP) or partial ESIA is an instrument that details (a) the measures to be taken during the implementation and operation of a project to eliminate or offset adverse environmental and social impacts, or to reduce them to acceptable levels; and (b) the actions needed to implement these measures. It is required for all projects with moderate impacts/risks before the commencement of works.

The ESMP may also be a site-specific plan that consists of a set of cost-effective mitigation, monitoring, and institutional measures to be taken during construction and operation phases to eliminate, offset or reduce identified adverse environmental and social impacts to acceptable levels. It is an integral part of a full or partial ESIA.

19. Environmental issues are defined as problems within the planet's systems (air, water, soil, etc.) that have developed because of human interference or unsustainable use of the planet's biodiversity.

20. Emergency control Plan: events cannot be avoided but it is possible to reduce their frequency of occurrence and severity of damage with effective preparation/planning. This can be accomplished by developing emergency response plans that address immediate concerns.

21. Stakeholder refers to individuals or groups who: (a) are affected or likely to be affected by the project (project-affected parties, PAPs); and (b) may have an interest in the project (other interested parties).

Chapter1 : INTRODUCTION

1.1 General Context

Rwanda is a small landlocked country in Eastern Africa with arable land estimated at 46.7% of the total area of 26,338 km² and a population of 13,246,394 persons (NISR, 2022) with 51.5% female and 48.5% male. Most of the population (72.1%) live in rural areas. The country is on its transformation from a low-income to a middle-income country status by 2035 and high-income country status by 2050. The Gross Domestic Product (GDP) growth reached 9.4 % in 2019, increasing from 8.6 % in 2018 and 4% in 2017, mostly driven by large public investments and implementing the National Strategy for Transformation (NST1). Agriculture remained crucial for the country's economic growth and reduction of poverty as it employed 70 percent of workers, accounting for about 24 percent of GDP in 2019. Transport and trade accounted for 14 percent of GDP, and manufacturing for around 9 percent of GDP in 2019. The country saw new subsectors emerging, such as dynamic eco-tourism business and food-processing, while existing industries expanded. The Government of Rwanda (GoR) projected a GDP expansion of 8% before the Covid-19 outbreak.

After the outbreak of Covid-19 pandemic, the GoR has put in place measures to control the pandemic. However, the implementation of Covid-19 containment measures (lockdown, social distancing, temporary closures, and reduced business operations, etc.) sharply curtailed economic activities in 2020, causing a 3.4% drop in economic growth in 2020 and leading to its first recession since 1994. The majority of Micro, Small and Medium Enterprises (MSMEs) and large enterprises (LEs) in the country were considerably affected. As a response to Covid-19 crisis, the GoR established an Economic Recovery Fund (ERF) in April 2020 to support economic activity and businesses hit by Covid-19 pandemic so that they can survive, resume operations and safeguard employment. In 2021, the GoR received funds from different donors under the World Bank leadership to implement the Access to Finance for Recovery and Resilience Project (AFIRR). This project aims at increasing access to finance and support the recovery and resilience of businesses severely hit by the Covid-19 pandemic. From its start in 2021 till now, the project made significant progress during the first year of implementation and enabled a path to develop new and innovative risk sharing instruments to support MSME access to finance in Rwanda. The country's economy experienced a remarkable recovery with 10.9 percent GDP growth compared to its 3.4 percent contraction during the pandemic. However, inflation, driven

mainly by domestic food and utility prices, increased to 13.9 percent in December 2022 compared to 0.8 percent in 2021. Furthermore, the country continues to be among the most vulnerable countries to weather and climate shocks, which are a key risk to the continuation of economic recovery.

To continue building a robust growth, the GoR obtained \$100 Million USD of additional finance (AF) with the objective to expand current investment support to facilitate economic recovery through the provision of long-term sources of funding. The AF shall address the growing demand for financing from project beneficiaries to cover capital expenses, as well as operating expenses and working capital in strategic and priority sectors, as well as investments in sectors with high growth potential. More specifically, AF will cover the (i) Microbusiness credit line, (ii) refinancing credit line, with special focus to tourism and transport as priority sectors; (iii) working capital and investment credit line, (iv) sustainability linked bond (SLB), (v) bridge lending window, institutional strengthening and (vi) project management and monitoring.

While the parent project is co-financed by the World Bank (WB) through International Development Association (IDA), Asian Infrastructure Investment Bank (AIIB) and Global Risk Financing Facility (GRiF), the AF is solely supported by the World Bank through IDA. The total cost of both parent project and AF is US \$ 357.5 Million, including US \$250 million from World Bank Group (IDA), US \$ 100 Million from Asian Infrastructure Investment Bank (AIIB) and US \$ 7.5 Million from Global Risk Financing Facility (GRiF) and the WB remains the lead co-financier. However, the project is expected to mobilize a total of US\$220 million in private capital, including US\$160 million through counterpart financing and guarantees and US \$ 60 million through the JCERP established to support the SLB. The entire AFIRR project (both parent project and AF) will be implemented by *Banque Rwandaise de Development Plc (BRD)* and Business Development Fund (BDF) under the coordination of the Ministry of Finance and Economic Planning (MINECOFIN).

The Project seeks to prioritize selected sectors based on GoR's strategic priorities and development strategy, namely agro-processing; construction materials; light manufacturing; and cross-cutting enablers of the aforementioned sectors. The tourism and transportation – in

particular public transport⁴ in the prioritized sectors will also be included during the additional financing. Linked value chains, that provide inputs to, or take outputs from, the target sectors are also eligible. Support for energy efficient, and climate friendly capital investments, including for climate adaptation and mitigation, will also be prioritized. The project components remain unchanged under AF and comprise of liquidity and recovery facility (Component 1), risk sharing facility (Component 2), Institutional Strengthening and Implementation Support (Component 3) and Contingency Emergency Response Component (Component 4). The potential environmental and social (E&S) risks and impacts associated with both the parent project and AF are mostly related to Component 1, Component 2 and Component 3 with high significance in the 1st component. Component 1 targets large companies and SMEs in key manufacturing sectors such as agro-processing, construction materials, light manufacturing and cross-cutting enablers as well as sustainable linked bonds. Under this Component, the project will support businesses expansion and adaptation as well as new investments necessary for the recovery of the economy through provision of lines of credit (LoC) and long-term sources of funding (working capital and investment loans) under Subcomponent 1.3, refinancing existing loans (Subcomponent 1.2) in GoR's priority sectors, sustainable linked bonds (Subcomponent 1.4) and financing of microbusinesses (Subcomponent 1.1). Component 2 will enhance, scale up and expand existing risk-sharing solutions in a bid to reach severely affected MSMEs in priority sectors. Low to medium impacts are anticipated in Component 3 due to the limited capacity of the implementing entities (FIs and their clients) to manage the E&S risks.

1.2 Purpose and scope of the ESMF

Since the exact sites of the sub-projects are yet unknown, this Environmental and Social Management Framework (ESMF) provides guidance on how environmental and social issues must be identified, analysed, and managed. The ESMF seeks to make sure that each subproject's development cycle incorporates the concepts of environmental and social sustainability. Accordingly, the ESMF identifies environmental and social standards that are applicable to the project, sub-project screening criteria, environmental and social impacts for likely subprojects, risk mitigation strategies, institutional capacity assessments of the implementing agencies, capacity building strategies, and an estimate of the budget needed for ESMF implementation. Therefore, specific standards and processes in this ESMF will be crucial for evaluating potential

⁴ The credit facility will finance electric buses and associated charging infrastructure for public transport.

environmental and social consequences of subprojects, aid in identifying the eligibility of subprojects, and determine their environmental and social implications.

1.3 Rational for updating ESMF

The parent project which became effective on October 21st, 2021, and all required E&S safeguards tools, Environmental and Social Management Framework (ESMF) inclusive, were prepared, approved and disclosed. However, the ESMF for the parent project cleared and disclosed in February 2022 does not include transport and tourism among the project priority sectors. It was deemed necessary to revise the existing ESMF to ensure it also includes additional sectors under AF. This tool is important as it informs the design and gives guidance on the selection of eligible subprojects for AFIRR financing, the management of environmental and social risks and impacts associated with the project to be financed and corresponding environmental and social instruments to be prepared as part of the implementation of AFIRR activities, as well as the guidance on the project's institutional arrangements.

1.4 Objectives

The objectives of the present updated ESMF include:

- Examine the environmental and social risks and impacts of projects submitted for financing;
- Establish clear procedures and methodologies for environmental and social impacts assessments, planning, review, approval, and implementation of subprojects to be financed by AFIRR project;
- Prescribe project arrangements for the preparation and implementation of subprojects to adequately address World Bank sustainability issues;
- Propose mitigation measures that will effectively address identified negative impacts, and to outline a simple Environmental and Social Management Plan (ESMP);
- Specify appropriate roles and responsibilities, and outline the necessary reporting procedures, for managing and monitoring environmental and social concerns related to subprojects;
- Determine the capacity building and technical assistance needed to successfully implement the provisions of the updated ESMF; and
- Develop the budgetary needs required to implement the updated ESMF requirements.

Subcomponent 1.4 - Sustainability Linked Financing - has been added under AF as a new Subcomponent under AFIRR component one. The transport and tourist sectors will benefit greatly from this component. Proposed AFIRR AF project activities are mainly intended to scale up the AFIRR parent project activities and support transport and tourism sectors, hence it was deemed necessary to update the ESMF to direct the implementation of AF-Activities as well. Thus, the primary objective of updating this ESMF is to offer instructions on how environmental and social aspects of proposed AF project activities shall be identified, evaluated, and managed. As a result, this ESMF has been updated as necessary to mostly serve this objective, notably in accordance with National and the World Bank's Environmental and Social Safeguards Policy standards.

This ESMF outlines the framework and mechanisms for environmental and social impact screening, determining the extent of required/necessary environmental assessments and assessing the environmental and social impacts resulting from the implementation AFIRR parent AF activities (transport and Tourism sectors). It also provides general guidance on appropriate mitigation measures, and institutional arrangements for monitoring. It is important to note that site specific Environmental and Social Management Plans shall be prepared during project implementation where necessary.

The following steps were involved in updating the ESMF for the AFIRR project;

- Collecting baseline data on environmental and social components of the project areas;
- Stakeholders' engagement and consultations;
- Preparation of screening procedures to be used while screening subproject activities
- Identifying positive and negative environmental and social impacts and risks
- Designing environmental and social mitigation measures;
- And proposing environment and social management plans.

1.5 Methodology for updating ESMF

The study for updating the ESMF was conducted by the BRD E&S Team using the following approach and methodology:

a) Desk review

The preparation of ESMF involved a review of the existing baseline information and literature material. A detailed review and analysis of the national relevant E&S regulations and policies as well as World Bank ESF and other relevant documents (socio-economic reports, project appraisal documents, etc.) were done.

b) Public consultations

Various consultations with potential project beneficiaries were arranged to raise awareness of the project and get their views for the proper project implementation and ownership. Due to local restriction measures for Covid-19 pandemic control whereby small group meetings (maximum 20 people) were only permitted, the phone calls were also used to interact with potential project beneficiaries and stakeholders. Consultations were conducted with the following objectives;

- To provide an opportunity for people to be affected to get clear, accurate and comprehensive information about the AFIRR parent project and its additional financing as well as its anticipated environmental and social impacts;
- To provide an opportunity for people that will be affected by the project to give their views, raise their concerns and also give possible alternative arrangements that may assist in the development and implementation AFIRR and its additional financing in order to avert associated environmental and social impacts;
- To provide opportunities to avoid and resolve disputes and reconcile conflicting interests by the stakeholders of the project; and,
- To enhance transparency and accountability in decision-making.

Before appraisal of the parent project, consultations with INSHUTI NZIZA Cooperative and Mushimiyimana Leocadie, respectively tailoring shop and poultry businesses led women and Rwanda Youth in Agribusiness Forum (RYAF), an agribusiness platform for youth, were arranged to assess issues faced with the traditionally underserved groups (women, youth and disabled persons) and determine how to address them in order to avoid discrimination and ensure their inclusiveness in the project. Furthermore, separate meetings with commercial banks and Umurenge SACCOs, the potential PFIs; Ruliba Clays Ltd, a construction material unit as well as phone calls of manufacturing units (juice and wine processing and construction materials), rice cooperative and representatives of Apex-FIs and key government agencies were conducted. The BRD, BDF, REMA, RDB, RLMUA, Kigali City and Districts of Rubavu and Kayonza, respectively represented by Housing and Infrastructure portfolio Manager, Head of Advisory & Consulting Department, Division Manager of Environmental Compliance and Enforcement Division, Environmental Expert, Head of Surveying, Land Use and Mapping Department and Environmental Officers of Kigali City and Districts were contacted.

During the negotiation for Additional Financing (AF), consultations with public institutions involved in transport, transport operators and Energy Sector Companies was also done to disseminate the project information on public e-bus financing, receive their feedback and determine how to address issues raised if any. The Ministry of Infrastructure (MININFRA), City of Kigali (CoK) and Rwanda Social Security Board (RSSB) are public institutions contacted by Rwanda Development Bank (BRD). The buses operators contacted include Volcano Express Ltd, Jali Transport Ltd, RITCO Bus express Ltd, Yahoo Car Express Ltd, Kigali Bus Service (KBS) and Royal Express Ltd. Other partners invited to the meeting include VER, Vivo Energy and Vitol. In addition, appointments from some companies involved in the involved in the tourism sector were requested and one on one consultations held with each company's representative. A stakeholders' Engagement Plan (SEP) has been prepared with an aim of creating a common understanding and actively involving all project affected persons and other stakeholders in a timely manner by providing them with sufficient opportunity to voice their opinions and concerns about the project performance.

Chapter2 : PROJECT DESCRIPTION

2.1 Project Areas and Beneficiaries

Rwanda, as many other countries in the world, has been facing with Covid-19 pandemic since Mid-March 2020 which disrupted many businesses and pushed the economy into recession. Reports indicate that the country's GDP dropped by 3.4% in 2020 compared to a projected expansion of 8 percent before the pandemic outbreak. Both MSMEs and large companies across the country were adversely hit by Covid-19 pandemic. The AFIRR project was designed as an efficient response to the pandemic for the recovery of the national economy. It will cover private businesses seriously hit by Covid-19 within the whole country as well as new investments in the priority sectors (agro-processing, light manufacturing, textile and garments, construction materials, linked value chains) and any other sector recommended by the GoR and Donor) to respond to the threat posed by the pandemic and strengthen the national economy.

The direct project beneficiaries are firms affected by the Covid-19 pandemic, both MSMEs (informal sector inclusive) and large companies, targeting to adapt, expand, resume and/or start new businesses. These will receive financing either directly or via credit lines extended to PFIs. Women, youth and vulnerable people led MSMEs and LEs are also targeted as part of the Project to ensure these underserved categories are included in the project and can access finance. The project support will be open to all economic sectors with priority to key manufacturing sectors like agro-processing; construction materials; light manufacturing; and cross-cutting enablers of the aforementioned sectors. The AF also includes tourism and transportation in the prioritized sectors. Linked value chains, that provide inputs to, or take outputs from, the target sectors are also eligible. Support for energy efficient, and climate friendly capital investments, including for climate adaptation and mitigation, will also be prioritized. An additional sub-component, relating to Sustainability linked bond (SLB), was included to increase project capital mobilized (PCM) and support BRD's lending activity.

The MSMEs and large enterprises are defined in the table below and can be used as the detailed eligibility criteria for beneficiaries.

Table 1: Current definition of firms by size

Enterprise size	Annual Sales (RWF, millions)	Number of Employees
Micro	<1	1–2
Small	1-20	3–20
Medium	20-500	21–100
Large	>500	>100

Source: Entrepreneurship Development Policy (MINICOM, 2020)

However, as per the Project Implementation Manual (PIM) of the parent project, the enterprise size changes as follows:

Types of business	Annual Turnover (sales' revenue)
Small Enterprise	Above 50 Million Frw to 500 Million Frw
Medium Enterprise	Above 500 Million Frw to 1.0 Billion Frw
Large Enterprise	Above 1.0 Billion Frw

Source: AFIRR Project Implementation Manual (PIM) (2021)

2.2. Project Development Objective (PDO)

The project development objective is to increase access to finance and support recovery and resilience of businesses affected by the COVID-19 pandemic. The PDO of the AF remains the same as the parent project.

2.2 Project Components

The AFIRR project is composed of the following components:

- **Component 1:** Liquidity and recovery facility. This component has the following sub-components 1.1. Microbusinesses Credit line sub-component 1.2. Refinancing Credi line, sub-component 1.3. Working Capital and Investment Credit Line and sub-component 1.4. Sustainability Linked Financing which is an additional component to increase PCM and support BRD's lending activity introduced under AFIRR AF

- **Component 2:** Risk-sharing facility, with the following sub-components; Sub-component 2.1. Partial credit guarantee and Sub-component 2.2. Bridge lending window for vulnerable SMEs
- **Component 3.** Institutional Strengthening and Implementation Support. This component has the following subcomponents: Sub-component 3.1. Strengthening Firms' capability for resilience and recovery, Sub-component 3.2. Institutional Strengthening and sub-component 3.3. Project management and Monitoring.
- **Component 4:** Contingency Emergency Response that can be activated in case of a relevant emergency event.

The AF will maintain the structure and design of the parent project's components and strategically scale up support through some of the subcomponents. The AF will also introduce a new facility through Component 1 aimed at further building institutional resilience and long-term sustainability of DFIs in Rwanda by scaling up efforts to mobilize private capital. Component 1 will have a total allocation of US\$95 million, from which US\$30 million will go to scale up support through the microbusiness credit line. The rest will be distributed among the working capital and investment credit line and the new SLB subcomponent. The targeted sectors remain the same as the parent project, with the addition of the tourism and transportation sectors.

Table 2. AFIRR Parent and AF project Components and costings (USD in Millions)

Component	Agency	Original Financing			Current status	Proposed AF
		IDA	AIB	GRiF		
Component 1 - Liquidity and Recovery Facility		105.5	100		126	95
Subcomponent 1.1 - Microbusinesses Credit Line	BDF	8.0			8.0	8.0
Subcomponent 1.2 - Refinancing Credit Line	BRD	37.5			-	
Subcomponent 1.3 - Working Capital and Investment Credit Line	BRD	60.0	100		118	45
Sub component 1.4- sustainability linked financing	BRD	n.a			n.a	20
Component 2. Risk sharing		35		5	0.91	3
Subcomponent 2.1 - Partial Credit Guarantee	BDF	30			0.91	
Subcomponent 2.2 - Bridge Lending Window	BDF	5	5	5		3
Component 3 - Institutional Strengthening and Implementation Support		9.5		2.5	2.2	2
Subcomponent 3.1 - Strengthening Firms' Capability for Resilience and Recovery	BRD/BDF	3.8				
Subcomponent 3.2 - Institutional Strengthening	BRD/BDF	1.3	2.5			1.5
Subcomponent 3.3 - Project Management and Monitoring	BRD/BDF/MINECO FIN	4.4			2.2	0.5
Component 4 -Contingent Emergency Response Component	n.a	n.a				
Total Project Financing (Mommitments)		150	100	7.5	129.1	100
Private mobilization					84	136
Total project cost (AFIRR+AFIRR AF+PCM)						USD 577.5

Source: PAD, Additional Finance for the Access to Finance for Recovery and Resilience Project (P179999)

Component 1: Liquidity and Recovery Facility (US\$300.5 million)

Component 1 focuses on addressing firms' short- and long-term financial needs to help them withstand the crisis, grow their business and build resilience, specifically strengthening climate resilience. This component is aligned with GCRF's Pillar (ii) Protecting People and Preserving Jobs and Pillar (iii) Strengthening Resilience. The facility will continue to provide lines of credit (LoC) to Financial Institutions (FIs) for on-lending to highly impacted and/or strategically important

sectors and firms to support economic recovery and business continuity. The AF will include a new subcomponent to support BRD's mobilization of private capital.

Component 1 has four subcomponents, namely (1) Microbusinesses credit line, (2) Refinancing credit line, (3) working capital and investment credit line and (4) Sustainability linked financing. BDF and BRD will implement the first and the last three subcomponents respectively. The details by subcomponent are provided below:

Subcomponent 1.1 Microbusinesses Credit Line (US\$38 million)

The objective of this facility is to provide financial support to MMSEs, the informal sector inclusive. The proceeds of the line of credit (LoC) will be on-lent by BDF through MFIs, mainly SACCOs, to final beneficiaries. The project flexibility allows for both working capital and investment loans. It is expected that most of the loan demand will be for financing MSEs urgent liquidity and working capital needs, but as businesses start to adapt recover, the LoC is also expected to support the purchase of small capital assets to support business activity. Fiscal and monetary responses to the COVID-19 pandemic adopted by the GoR have limited effect in reaching the informal economy. In the meantime, the strain on incomes resulting from the lockdown and decline in activities and consumption has significantly impacted informal workers, women, and other - typically underserved- segments close to the poverty line. SACCOs, particularly those in rural areas, serve the most vulnerable segments and have become increasingly vulnerable and short on liquidity to continue lending to their clients. Potentially viable MSEs face shortages of working capital and access to resources to maintain their operation and basic needs. To protect those businesses and jobs and to stimulate consumption of households, the subcomponent will support MSEs via SACCOs.

BDF will also provide financing to women led MSEs as part of this activity. Participating SACCOs will be required to report gender disaggregated data from their activities and specific outreach activities will be undertaken to ensure women led MSEs are able to access finance. Local women's associations, business organizations and community associations will be key partners in this outreach and BDF in its outreach will also specifically target women led MSEs.

Subcomponent 1.2 Refinancing Credit Line (US\$37.5 million)

The LoC will support refinancing of existing loans in priority sectors as determined by GoR and will be managed by BRD. This LoC will lend to banks, MFIs (banks and limited companies) to support enterprises through refinancing of existing financial commitments to ease hardship

caused by the COVID-19 crisis. Target beneficiaries include all firms in priority sectors affected by the pandemic. There will be a specific focus on refinancing women led firms under this component. It is expected that the refinancing credit line starts disbursement guided by the criteria established by the Steering Committee, which includes transport as priority sector.

Subcomponent 1.3 Working Capital and Investment Credit Line (US\$205 million)

The objective of this facility is to support investments in Rwanda to facilitate economic recovery and jobs through the provision of long-term sources of funding currently lacking in the market. This subcomponent is expected to enable increased investments and exports regionally and globally and/or substituting imports with local production, including supporting jobs that can transition the population from subsistence agriculture. The window will provide an LoC for on lending purposes to support investment financing for fixed assets acquisition, operational expenditure related to building scale and working capital to high growth potential investments that will sustainably drive economic recovery.

BRD will act both as retailer and wholesaler of the funds to other PFIs. The objective of BRD acting as a retailer will be to fill in for market failures where private commercial banks are not yet providing needed finance, particularly considering heightened perceived risks amid the pandemic. BRD already has specific criteria in place for determining those cases in which they act as a primary finance provider, including the offer of the first refusal for banks already serving loan applicants. The facility will target existing venture and expansion-ready firms that seek expansion capital. The support will be open to all economic sectors with priority given to key manufacturing sectors.

The target beneficiaries will include large companies and SMEs, who will receive financing either directly, or via credit lines extended to PFIs. Financing can be used to cover capital expenses (CAPEX) such as machinery, technology, and inputs, as well as operating expenses (OPEX) and working capital related to high growth-potential investments. The majority of financing will be provided through on-lending via PFIs. Direct lending will only be undertaken in the following situations: (i) the proposed investment financing has a risk profile that does not fall within the acceptable limit of PFIs; (ii) syndicated transactions, where BRD acts as the lead arranger. BRD will not compete with PFIs – the direct lending will be a market making or gap filling measure and

is expected to be redirected to wholesale financing as PFIs start entering these more difficult to reach segments.

Eligible firms must demonstrate that they were liquid and solvent before the crisis and must not have as their main activity any of those mentioned in the exclusion list applicable for this Project (Annex 1). They must provide business and financing plans, demonstrating the financial viability of the proposed investment and its contribution to economic recovery (job creation). They will also be required to contribute a minimum of 30 percent of the total project cost as counterpart financing. There is no minimum or maximum investment size. BRD has established a preliminary pipeline of investments totaling US\$119 million.

Subcomponent 1.4 Sustainability Linked Financing(US\$20 million)

This is an additional subcomponent to the project proposed to increase PCM and support BRD's lending activity. BRD will use project resources to develop a sustainable linked bond (SLB) issuance program in local currency. This approach is designed to further leverage the additional AFIRR financing to allow BRD to borrow in the local capital market by establishing a credit enhancement structure to support the issuance program.

The BRD sustainability-linked issuance program is expected to align closely with BRD's broader strategic objectives of promoting sustainable economic development in Rwanda and reducing poverty alongside measurable KPIs. The KPIs shall be: (a) Environmental & Social Governance management, (b) women-led project finance and (c) affordable housing. The issuance program will incorporate lessons and experience from the first issuance into future issuances. Subsequent issuances will vary in terms of tenor and level of credit enhancement. The SLB Framework will dictate how this subcomponent will be implemented.

Component 2: Risk-sharing Facility (US\$43 million)

This component aims at enhancing and scaling up the existing PCG scheme in BDF, and the development of two new de-risking schemes to provide liquidity and insurance instruments in support of MSMEs in the event of climatic shocks. The component is aligned with GCRF Pillar (i) Responding to Food Security and Pillar (iv) Strengthening Policies, Institutions and Investments for Rebuilding Better. Project support to the enhancement of the PCG scheme is designed around the accomplishment of performance-based conditions (PBCs). The design of de-risking

instruments aims at strengthening the financial resilience of target beneficiaries and PFIs to future shocks to support increased access to finance in vulnerable sectors. No additional resources are being requested to support implementation of subcomponent 2.1. Additional US\$3 million have been requested to scale the rollout of the BLW instrument and the Backstop insurance mechanism envisaged under sub-component 2.2

Subcomponent 2.1 - Partial credit guarantee (US\$30 million)

The subcomponent will maintain its original funding allocation. However, the parameters to measure and monitor PBC 2 need to be adjusted, with regards to the original baseline. The implementation period will also need to be extended to accomplish the adjusted PBC. This sub-component aims to strengthen the operation of the BDF's PCG scheme and increase the overall number and value of guarantees issued. The upgraded PCG is expected to increase the uptake in the market and at least 35 percent of the guarantees are expected to be in the agriculture sector including agribusiness SMEs based on the PCG data, therefore supporting the strengthening of climate resilience of MSMEs in Rwanda. To fully onboard the PFIs, the timeline to achieve the PBCs will need to be extended by two years given that the new PCG policy and procedure will be rolled out in 2023. PBC 2 was designed to align the PCG portfolio growth with capital needs to maintain a healthy leverage ratio. However, the trigger for the capital injection needs to be adjusted due to the lower-than-expected baseline once the project started implementation. The BDF PCG guarantee portfolio stands at RWF 13 billion (US\$11.6 million equivalent) as of February 2023 as opposed to the stated baseline of RWF 26 billion (US\$23.4 million equivalent) at project preparation. The PBC 2 was designed to trigger the disbursement of US\$7 million each to maintain a targeted leverage ratio while allowing the PCG to grow and expand its coverage. Triggers were set at the PCG portfolio of RWF 30 billion (US\$27 million equivalent), RWF 40 billion (US\$35.9 million equivalent), RWF 50 billion (US\$44.9 million equivalent), and RWF 65 billion (US\$58.4 million equivalent).

Despite a lower baseline, the robust PCG policies and procedures and the introduction of the BLW are expected to regain PFIs' interest in the PCG. The liquidity injection through the ERF and other development projects will continue to stimulate PFIs' lending activities. BDF plans to introduce further improvements to effectively handle many small guarantees. In addition, BDF is in the process of becoming a regulated non-bank financial institution by BNR. Potential regulatory incentives regarding risk weights and capital cost for financial institutions using PCGs could

further improve the PCG market uptake. Considering the favorable outlook, BDF anticipates a strong increase in demand for the PCG, expanding the guaranteed portfolio to RWF 55 billion in 2027. With the current capital of RWF 15 billion, the leverage will exceed two times in 2024. The project proposes the below adjustments in the PBC2 definition and total capital injection of US\$21 million to keep the leverage below two while the BDF works on increasing market uptake and rebuilding confidence. The disbursement of the remaining US\$7 million will be tied to the introduction of a new product or procedures to handle small guarantees in a cost-effective manner. With the envisaged capital injection, BRD will significantly dilute its total shareholding in BDF.

Subcomponent 2.2. Bridge lending window for vulnerable SMEs (US\$13 million)

This subcomponent will fund the creation of a new financial de-risking tool to cushion SMEs against compounding climatic shocks. The tool will consist of a bridge-lending facility (Bridge Lending Window [BLW]) that will provide short term lending to climatic shock-affected vulnerable SMEs through BDF and a backstop insurance mechanism to protect BLW's capital from depletion. Climatic shocks, resulting from changes in temperature, precipitation, and their distributions, include droughts, floods, and landslides.

Resources to establish and capitalize the BLW in BDF were provided through AFIRR and since inception, the BLW component has made significant progress towards its implementation and operationalization. Activities completed to date include conducting extensive market research and engaging in consultations with PFIs and eligible borrowers to ensure the final product design meets their specific requirements, drafting the necessary operational and legal documents. The BLW Policies and Procedures Manual outlines the policy and procedural terms and conditions that will govern the partnership between the BDF and PFIs and the agreement covering the PCG and BLW which will be signed by both BDF and PFIs. The BLW is expected to start operating by the end of 2023. The BLW loan becomes available to borrowing MSMEs and PFIs when the MSME's business operations have been considerably affected by one of the following shock events: (i) floods/excess rain, (ii) droughts/lack of rain and (iii) landslides.

The AF is expected to increase the size of bridge loans available to MSMEs. Aligned to the initial design of the BLW, it will continue to provide concessional bridge loans as immediate liquidity to

climatic shock affected MSMEs, with the objective of strengthening their financial resilience to shocks.

Component 3: Institutional Strengthening and Implementation Support (US\$14 million)

This component focuses on three key areas to strengthen capacity at various levels to support project implementation: (i) technical assistance to project beneficiaries; (ii) technical assistance and capacity building for implementing agencies, and (iii) project management and monitoring. This component is fully aligned with GCRF Pillar (iv) Strengthening Policies, Institutions and Investments for Rebuilding Better. Additional funds are being requested to increase the support and activities aimed at further strengthening BDF implementation capacity and to support project management and monitoring.

Subcomponent 3.1 Strengthening Firms' capability for resilience and recovery (US\$3.8 million)

The objective of this subcomponent is to support firms through the provision of tailored Business Development Services (BDS) and technical assistance to address constraints on the demand side. BRD and BDF will provide TA services under this subcomponent. BDS support to MSEs, through BDF, aims to address the lack of capacity to develop bankable business plans, the poor quality of financial statements and records, digital skills, the inability to manage risk, the lack of knowledge of business development and management, and so on. It will also include regular tailored coaching and mentoring support by BDF depending on the needs and the capacity of SMEs. In parallel, BRD will provide technical advisory support to growth oriented and high potential firms that plan to expand their operations or diversify their products and services in sectors which have domestic, regional and international market links, such as manufacturing, agro-processing etc.

This subcomponent will provide support to firms to successfully access the resources and financial support designed under components 1 and 2. The project aims to provide integrated support to enable firms to effectively benefit from the provided financing and recover from the impact of the pandemic and thrive. The TA aims to address the challenges businesses face in terms of financial literacy, maintaining financial records and bookkeeping, digital literacy and access and adapting to the new economic realities by reformulating their targeted segment/customer base, marketing strategy and by providing technical advisory support for

expansion and diversification of products and services. BRD and BDF will provide targeted and tailored support to formal large and medium enterprises on one hand and small and micro enterprises on the other as their needs and challenges are different. Trainings to address gender specific constraints will be included to address gaps in communications skills, negotiation, leadership etc., depending on the gaps identified. Trainings will be structured keeping in mind women-specific constraints that may include logistical access/transport, childcare and family responsibilities etc. to ensure that women have equitable access.

Interventions under this subcomponent will follow two tracked approaches for the provision of business development support: one focusing on Small and Micro Enterprises and the second focusing on high potential large, medium and small enterprises. Accordingly, the implementation will also be differentiated. BDF will provide structured business development trainings as well as one-to-one coaching and mentoring to small and micro enterprises by leveraging its existing business advisory services and its extensive presence at the district level. The individualized TA to support the well-established firms will be provided by BRD through targeted technical advisory support on value chain assessment, technology assessment, environment compliance, business expansion and turnaround strategies etc.

Subcomponent 3.2 Institutional Strengthening (US\$5.3 million)

The success of the project is heavily dependent on the capacity of its implementing agencies (BRD and BDF). This subcomponent will finance the TA support to upgrade the operations of BRD and BDF. The upgraded operations will also continue to support the expansion of access to finance for MSMEs beyond the project.

BDF has already identified the main aspects to be addressed as part of this strategy. The project will provide TA to support the BDF's effort to revamp the PCG. The priority areas to be supported by the Project TA will focus on improving policies and operational procedures to (a) decrease the high rejection rate on guarantee claims, (b) improve the calculation of the guarantee coverage, (c) collection of fees, and (d) capacity building of staff in BDF PFIs, among others.

The initial phase of consultations with lenders has already started. The project will provide international expertise and cover other TA costs including workshops, and training programs. The marketing and awareness campaigns for PFIs and other stakeholders will be self-financed by the

BDF. In addition, funds will be provided to BDF to strengthen their capacity and systems to enable the effective implementation of the de-risking instruments under component 2.

BDF will carry out activities for this subcomponent. Financial institutions and insurers will be included in the planning and design of the BLW and the insurance backstop from the start. Through a collaboration with the International Finance Corporation (IFC), the project team will deliver customized trainings and capacity building to both government and private sector stakeholders on the technical aspects of the program, as well as disaster risk financing principles. Discussions will be held with all stakeholders to determine the best suited and most cost-effective potential insurer(s) to underwrite the insurance product and to ultimately place the product in the market. This subcomponent will also provide resources to explore the potential of developing a national disaster risk financing strategy with MINECOFIN. This subcomponent will be co-financed by a recipient executed grant of US\$3.5 million from GRiF, implemented through a traditional IPF modality.

Subcomponent 3.3 Project management and Monitoring (US\$4.9 million)

The subcomponent will support all aspects of project management related to (a) project staffing and their training; (b) procurement and financial management; (c) environmental and social implementation and compliance; (d) monitoring and evaluation (M&E); (e) equipment and operating costs; and (f) communication and knowledge management.

During both parent project and AF implementation, the project is expected to mobilize a total of US\$220 million in private capital, including US\$160 million through counterpart financing and guarantees and US\$60 million through the JCERP established to support the SLB. This will bring the total project cost to US\$ 577.5.

Component 4: Contingency Emergency Response Component (CERC) (US\$0 million)

This component is a contingency component that can be activated in case of a relevant emergency event. Following an eligible crisis or emergency, the Borrower may request the World Bank to re-allocate project funds to support an emergency response. Once triggered, this component will draw from the then uncommitted loan resources under the project to address the emergency.

2.3 Project institutional arrangement

Through MINECOFIN, funds from the World Bank and AIIB will be given to the GoR. The GoR will assume the currency risk and lend money in local currency (FRW) to PIEs, who will then lend it to MSMEs and BEs either directly or via PFIs.

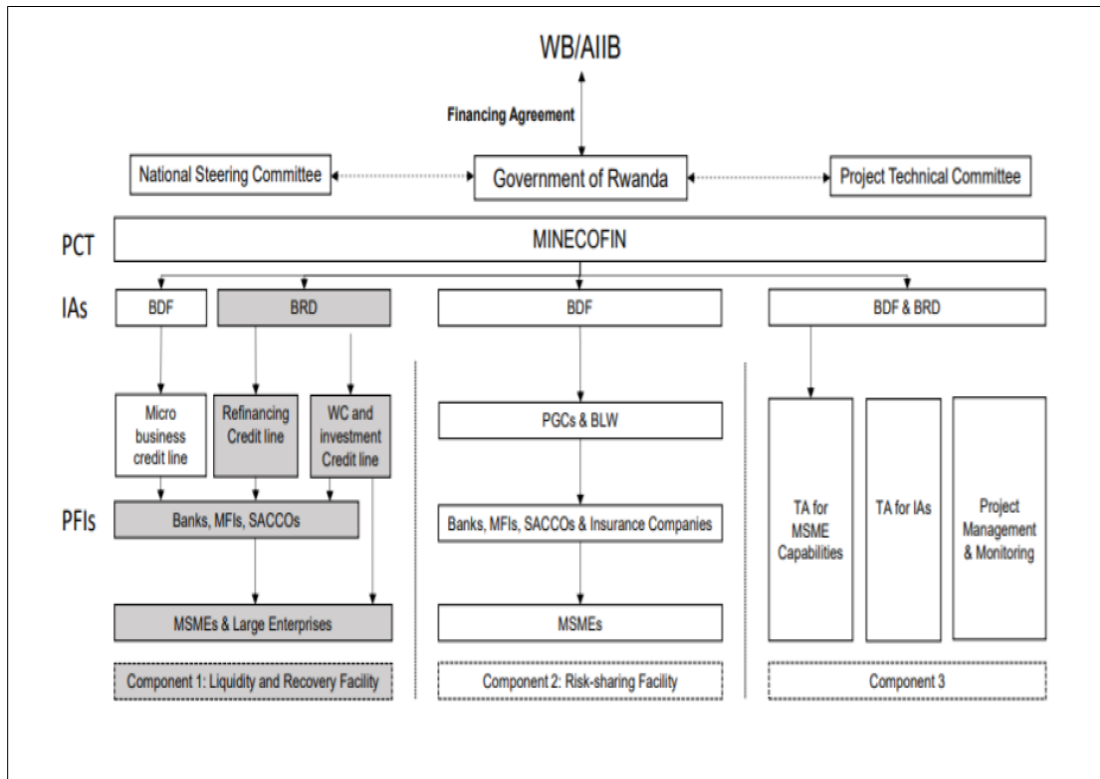


Figure 1. Project Institutional arrangement

Source : Project Implementation Manual, Version 01-PIM-AFIRR – October 20, 2021

- MINECOFIN has an overall project coordination responsibility.
- BRD will be responsible of Subcomponent 1.2 - Refinancing Credit Line and Subcomponent 1.3 - Working Capital (WC) and Investment Credit Line. It will also handle day-to-day project implementation, including project reporting, M&E, FM, procurement, and implementation and monitoring of Environmental and Social Standards (ESS) instruments prepared under the project, while,
- BDF will implement Subcomponent 1.1 - Micro-businesses Credit Line and Component 2- Risk-sharing Facility and will also manage day-to-day project implementation, including project reporting, M&E, FM, procurement, and implementation and monitoring of Environmental and Social Standards (ESS) instruments prepared under the project.

Chapter3 : POLICY, INSTITUTIONAL AND LEGAL FRAMEWORK

This section of the ESMF outlines and reviews the existing legislations, policies and institutions and identifies requirements as well as gaps and conflicts of the relevant legal and institutional arrangements that would guide the development of the project in line with the national and international laws applicable to AFIRR project. Rwanda being a signatory to various international conventions and laws, it is important that national projects are in line with these laws and as such some of the relevant international conventions are reviewed in this chapter.

3.1 National Environmental and Social Management requirements

3.1.1 Policy framework

a) National Environment and Climate Change Policy

In the past two decades, Rwanda took a strategic decision to pursue a green growth approach to development and committed to mainstream environment and climate change issues into national development processes. In this regard, a national policy on environment and climate change was put in place in 2019 to replace the 2003 environment policy.

The environment and climate change policy targets to have a clean and healthy environment which is resilient to climate variability and supports a high quality of life for every citizen and a sustainable socio-economic development through a rational management and utilization of resources. The policy is also linked with key global policy considerations including sustainable development goals (SDGs), African Union agenda 2063, East Africa Community (EAC) vision 2050, EAC climate change master plan (2011-2031) and multilateral environmental agreements (MEA). Under this policy, environment and climate change aspects are reflected in all key priority areas of the country, especially critical sectors already identified for strengthening, namely agriculture, urbanization, infrastructure and land use management, energy, water and sanitation.

The smooth implementation of the policy will focus on (i) strengthening monitoring and evaluation, (ii) environmental and social assessments, (iii) biodiversity and ecosystem management, (iv) pollution and waste management and (v) climate change and adaptation.

The AFIRR will integrate the Rwanda Environmental and climate change policy into its implementation by protecting, restoring or maintaining both the quality of ecological and systems

functions, involving all stakeholders in project activities and improving/ maintaining public health and safety.

b) Small and Medium Enterprises (SME) Development Policy

The country has an SME development policy of 2010 that aims at promoting a culture of entrepreneurship among Rwandans, facilitating SMEs access to business development services (i.e. training, access to market information and markets, etc.), putting in place mechanisms for SMEs to access appropriate business financing, simplifying the fiscal and regulatory framework for SMEs growth and developing an appropriate institutional framework for SMEs development (resources, coordination and capacity at an institutional level, etc.).

The current project is in line with SME development policy as it will provide working capital and investment loans to support business expansion and adaptation as well as new investments necessary for the economic recovery and support de-risking instruments to strengthen the financial resilience of target beneficiaries and PFIs to future shocks stimulating increased lending to the manufacturing sector. The project will also provide technical assistance to SMEs to address the lack of capacity to develop bankable business plans, the poor quality of financial statements and records, digital skills, the inability to manage risk, the lack of knowledge of business development and management, etc. It will also include regular coaching and mentoring support depending upon the needs and the capacity of MSEs.

c) National Industrial Policy

The industrial sector in Rwanda is currently small and contributes to around 15 per cent of GDP. The construction and manufacturing are the largest industrial sub-sectors with 52 and 43 percent of industrial output respectively (MINICOM, 2010). Manufacturing makes up 7 per cent of total GDP, predominantly in food processing and beverages and tobacco. Other sub-sectors of manufacturing are negligible in total GDP. Though small, the manufacturing sector grew by 8% for the fiscal year 2017/18 from 6% in the previous financial year (NISR, 2019) and has been growing steadily. Industrial development is structured upon two economic pillars of domestic production and export competitiveness. These pillars are built upon the foundation of a strong enabling environment.

The industrial policy prioritizes inclusive economic growth, job creation, and private sector-led development with a focus on high-value intensive agriculture and agro-processing, manufacturing, tourism, and knowledge-based services and ICT. Since the adoption of the National Industrial Policy in 2011; several critical policy interventions and strategies have also been developed such as Made in Rwanda policy, Entrepreneurship Development Policy (EDP), Special economic zones (SEZ) policy, the Domestic Market Recapturing Strategy (DMRS), the National Export Strategy, SMEs strategy, the National Export Strategy and Cross Border trade strategy.

This project is in line with the national industrial policy and associated policies as it will provide support to the main industrial subsectors, the manufacturing and construction through improving liquidity's availability and access to finance as well as institutional strengthening. It will increase private sector investments, enable export growth and diversification, creation of off farm employment and income and industrial development.

d) Health Sector Policy

In accordance with the national Labour law No 66/2018 of 30/08/2018, an employer is responsible to maintain the health, safety and welfare of the workers at his workplace and all persons who frequent the enterprise. In order to prevent and fight occupational accidents and diseases, an employer shall (i) assess risks of occupational accidents and diseases, (ii) develop occupational safety and health plan and monitor its implementation, (iii) prevent risks of occupational accidents and diseases, (iv) fight occupational accidents and diseases and (v) adapt modalities of preserving occupational health and security of employees with new technology. The employer declares to the management of the social security body in Rwanda and the Inspectorate of Labour where the enterprise is located, occupational accident, disease or death in accordance with relevant Laws. The AFIRR project will trigger this policy as it will emphasize more on beneficiaries' sensitization on prevention and management of occupational health and safety risks. It will ensure the compliance with OHS obligations by all business owners and PFIs in all project workplace.

e) National Biodiversity Strategy and Action Plan

This strategy defines the objectives and priorities for the conservation and sustainable management of biodiversity. The plan includes hillsides and wetlands and protected areas as some of the areas that need to be conserved. The strategy focuses on five major areas i.e., improved conservation of protected areas and wetlands; sustainable use of biodiversity in natural

ecosystems and agroecosystems; rational use of biotechnology; development and strengthening of policy, institutional, legal and human resources frameworks; and equitable sharing of benefits derived from the use of biological resources. The Action Plan consists of urgent and priority actions which are attainable in a period of five years. AFIRR will trigger this policy by protecting natural habitats within the project area or in its surroundings, whether protected or not, wetlands downstream the project site, limiting deforestation, etc.

f) National Strategy for Transformation (NST1)

The National Strategy for Transformation (NST1) entails interventions to enable the transformation journey towards achieving Vision 2050 aspirations.

It merges the 7 Year Government Program (2017-2024) and the national medium term development strategy, which were previously standalone documents. It integrates far-sighted, long-range global and regional commitments by embracing: (i) the Sustainable Development Goals (SDGs), (ii) the African Union Agenda 2063 and its First 10-Year Implementation Plan 2014-2023, (iii) the East African Community (EAC) Vision 2050 and (iv) the COP 21 Paris Agreement on Climate Change and other agreements.

The NST1 focuses on three pillars, mainly Economic Transformation, Social Transformation and Transformational Governance and considers the seven (7) cross-cutting areas to attain inclusive and sustainable development: Capacity Development, HIV/AIDS and Non-Communicable Diseases, Disability and Social Inclusion, Gender and Family Promotion, Regional Integration and International Positioning, Disaster Management, Environment and Climate Change. The objectives of the economic and social transformation pillars include (i) Create decent jobs for economic development and poverty reduction, (ii) Accelerate Urbanization to facilitate economic growth, (iii) Promote industrial development, export promotion and expansion of trade-related infrastructure, (iv) Develop and promote a service-led and knowledge-based economy, (v) Increase agriculture and livestock quality, productivity and production, (vi) Sustainably exploit natural resources and protect the environment; (vii) Move towards a Poverty Free Rwanda, (viii) Ensure a Quality Healthy Population, (ix) Develop a Competitive and Capable Rwandan Population, (x) Ensure Quality of education for all aiming at building a knowledge-based economy and (xi) Transition to a Modern Rwandan Household in urban and rural areas.

The AFIRR is in line with NST1's economic pillar related to accelerating economic growth and development founded on the private Sector, knowledge and local natural resources. This will be achieved through (i) creation of decent and productive jobs for economic development, (ii) promotion of industrialization and attaining a structural shift in the export base to high-value goods and services, (iii) increase of domestic savings and positioning Rwanda as a hub for financial services to promote investments and (iv) promoting sustainable management of the environment and natural resources to transition Rwanda towards a Green Economy.

g) Green Growth and Climate Resilience Strategy

Rwanda adopted the national Green Growth and Climate Resilience Strategy (GGCRS) in 2011 with the vision for Rwanda to be a developed climate-resilient and low-carbon economy by 2050. The strategy sets a framework for mainstreaming climate change and the green growth approach in national socio-economic planning as well as mechanisms for mobilizing funding to finance programs identified in the process. A number of actions to be implemented are highlighted, and their roll-out will contribute to boosting employment, especially for youth and other groups with high levels of vulnerability to climate change.

The GGCRS purpose is threefold:

- (a) To guide national policy and planning in an integrated way;
- (b) To mainstream climate change into all sectors of the economy;
- (c) To position Rwanda to access international funding to achieve climate resilience and low carbon development.

The GGCRS stipulates 4 strategic objectives:

- Achieve energy security and a low-carbon energy supply that supports the development of green industry and services and avoids deforestation;
- Achieve sustainable land use and water resource management that results in food security, appropriate urban development and preservation of biodiversity and ecosystem Services; and
- Ensure social protection, improved health and disaster risk reduction that reduces vulnerability to climate change impacts.

The mainstreaming and implementation of the GGCRS is mandated to the ministry responsible for environment and climate change, which is currently the Ministry of Environment. The AFIRR project is in accordance with Rwanda GGCRS as it focuses on economic growth recovery and poverty reduction while addressing both climate change adaptation and mitigation.

3.1.2 Legal and Regulatory framework

This section describes the relevant policies and strategies, legal instruments, institutional arrangement and framework applicable to the implementation of AFIRR with respect to environmental and social compliance.

a) Rwandan Constitution

The constitution is the supreme law of the country. Any law, decision or act contrary to this Constitution is without effect. The Articles 22 and 53 of the Constitution of the Republic of Rwanda, promulgated in 2003 and revised in December 2015, articulate the rights and responsibilities of all citizens and the role of the state regarding the environment by providing that every citizen is entitled to a healthy and satisfying environment and that every person has the duty to protect, safeguard and promote the environment respectively. The guidance of the Constitution on environmental preservation and management as a cross cutting issue is reflected in the National Vision 2050 and the National Policy on Environment of 2017. The Constitutional rights as articulated in Vision 2020 and Vision 2050 and Environment and climate change Policy are given effect by the Law No. 48/2018 of 13/08/2018 on environment.

The Constitution also recognizes the ownership of property and every person's right to private property. Under Article 34 of the Rwandan constitution, every citizen has a right to private property, whether personal or owned in association with others. Furthermore, it states that private property, whether individually or collectively owned, is inviolable. However, this right can be interfered with in the case of public interest, in circumstances and procedures determined by law and subject to fair and prior compensation. Article 35 stipulates that private ownership of land and other rights related to land are granted by the State. The constitution provides that a law should be in place to specify modalities of acquisition, transfer and use of land.

Both AFIRR and AF activities are likely to have adverse environmental and social impacts on land, water, biodiversity and air resources. The mitigation measures for environmental protection across all sites will be guided by the law No 48/2018 of 13/08/2018 on Environment and law No 32/2015 of 11/06/2015 relating to expropriation in the public interest.

b) Law on Environment

The most relevant legislation for this study is the Law on Environment. The legislation sets out the general legal framework for Environment protection and management in Rwanda. It centers on avoiding and reducing disastrous consequences on Environment.

The Ministry of Environment puts in place the instructions and procedures for the environment conservation. REMA has the legal mandate for national environmental protection, conservation, promotion and overall management, including advisory to the Government on all matters pertinent to the environment and climate change.

Until very recently, REMA was responsible for the approval of ESIA reports; this responsibility has now been transferred to Rwanda Development Board (RDB) where there is a department for ESIA, responsible for review and approval of all ESIA reports.

This project will observe law No 48/2018 of 13/08/2018 on the environment by preparing Environmental and Social Impact Assessment (ESIAs) or Environmental and Social Management Plans (ESMPs) to ensure reduction of disastrous consequences on the community and environment in its activities. It will also monitor the compliance with social and environmental mitigation measures in all sites.

c) Law governing land in Rwanda

The law No 27/2021 of 10/06/2021 governing land in Rwanda is the law that determines modalities of acquisition, registration, allocation, possession, transfer, management and use of land in Rwanda. It also establishes the principles applicable to rights recognized over all lands situated on Rwanda's national territory and all rights united or incorporated with land, whether naturally or artificially.

According to the Law, land in Rwanda is categorized into two: individual land and public land. The latter is also subdivided into two categories: the state land in public domain and the state land in private domain. The Article 59 of the land law stipulates that the state establishes the national

land use and development master plan. The City of Kigali or a District land use and development master plan is established by an Order of the Minister in charge of economic planning. As per the Article 61 of the same law, a person or organ using land has an obligation to comply with the land use and development master plan.

Both AFIRR parent project and AF activities will require land for their implementation. However, all activities shall respect the land use plan and master plan of the area where the project is located. The ownership should be acquired through willing seller – willing buyer basis or donation by the Government.

d) Ministerial order N°001/2019 of 15/04/2019 establishing the list of projects that must undergo an environment impact assessment, instructions, requirements and procedures to conduct environmental impact assessment

Articles 3, 4 and 5 and the appendices I & II of this Order specify the works, activities and projects that must undertake a full environmental and social impact assessment (ESIA), partial ESIA or no ESIA before being granted permission to commence. The present project is classified under Industry, warehouse and storage facility, commercial facilities as well as agriculture and infrastructure development. Both AFIRR parent project and AF will comply with the requirements of the above regulation during its implementation.

e) Ministerial order N°001/2021 of 08/02/2021 establishing the list of projects that must undergo environmental audit, instructions and procedures for conducting environmental audit

The Article 3 and the Appendices of this Order specify the works, activities and projects that must undertake an environmental and social audit (ESA) while Articles 4 to 10 depict procedures for conducting ESA. As per the law, the ESA is conducted on existing projects for which an ESIA/ESMP has been carried out or not. The present project is classified under Industry, warehouse and storage facility, commercial facilities as well as agriculture and infrastructure development that may require an environmental and social audit. Both AFIRR parent project and AF will comply with the requirements of the above regulation during its implementation.

f) Law n° 66/2018 of 30/08/2018 regulating labor in Rwanda

Workers will elect representatives who will form a committee that will act as the Workers Grievance Redress Committee. As mandated by article 102 of the law regulating labor in Rwanda, the employees' representatives amicably settle individual labor disputes between employers and employees. If employees' representatives fail to settle the disputes amicably, the concerned party refers the matter to the labor inspector of the area where the enterprise is located. In the case of this program, it will be the District where activities are being carried out. If the Labor Inspector of the District fails to settle the dispute due to the nature of the case or conflict of interests, he/she refers the dispute to the Labor Inspector at the national level stating grounds to refer such a dispute. If amicable settlement fails at the national level, the case is referred to the competent court.

In any case, the PIU will be informed from the beginning of any worker's grievances and provide insight and mediation if possible. The matter will be referred to the labor inspector only if the PIU fails to do the mediation.

The law requires that collective labor disputes be directly notified to the labor inspector of the area by the workers' representatives. Within this framework, any collective labor disputes that will arise under the program, will be addressed to labor inspector at District level for assessment and settlement. In case of escalation, the matter will be referred to the national level.

Before escalating the collective labor dispute, the PIU though the Environmental and Social Specialists will be alerted. Necessary investigations will be conducted, and the contractor will be duly approached. The matter will be referred to the labor inspector only if the PIU and workers' representatives fail at amicable settlement.

g) Law of Forests in Rwanda

Law n°47bis/2013 of 28/06/2013 determining the management and utilization of forests in Rwanda. It is the main law that regulates and controls forest management in Rwanda by ensuring forest conservation, sustainable use and enhancement of the productive capacity of forests, to provide for the promotion of tree planting and through the creation of forest reserves in which human activities are strictly controlled. ***Specifically, the law will provide guidance for afforestation and other tree nursery projects under Housing and Human settlement projects.***

h) Ministerial order N°2 of 17/05/2012 determining conditions for occupational and health safety

This order aims to improve health, safety, and general wellbeing of workers and workplaces by promoting occupational health and safe practices to **eliminate occupational accidents and diseases**, hence achieve **better productivity in the workplaces**. In addition, it provides for the protection of persons other than those at work against hazards to health and safety arising out of or in connection with activities of persons at work. Environmental and health risks, article 29 which related to the control of air pollution, noise and vibration stipulates that when there is any dust, fume or other impurity which are harmful to persons employed, protected measure shall be taken to protect employee against inhalation of dusts or fume or its accumulation on the workplace. For noise and vibration, the article indicates that all practicable protective measures shall be taken by the employer to protect the safety of workers and against the noise by reducing elimination or control of such sound or protecting them against the vibration. All project workers will be safeguarded, and occupational health and safety of the employees will be kept at high standard; all workers will be trained regarding the concept of hazard avoidance, accident investigation/risk assessment and prevention, worker man compensation law, PPE usage and first Aid, the detail will be available in Labour Management Procedure prepared under these projects type.

i) Regulations N° 002 of 26/04/2018 governing e-waste management in Rwanda

The project is expected to have an environmental impact related to waste management in all its components. The management of waste will follow the regulations in Rwanda to make sure the produced waste does not cause harm to the environment and human health. Referring to the regulations on E-waste in Rwanda in its Article 10: Any person who wishes to recycle e-waste shall: Have an Environmental Impact Assessment (EIA) undertaken before establishing e-waste facility; An environmental Audit (AU) for existing facilities; Have the state-of-the-art facility complying with all the environmental standards in terms of emissions, effluents, noise e-waste treatment and disposal. Article 20: any collector and transporter of e-waste shall ensure that e-waste collected is stored in proper and secured manner till is sent to the licensed dismantler or recycler; Ensure that no damage is caused to the environment and human health, during storage and transportation of e-waste Article 22: Any recycler shall; Ensure that the facility and recycling processes are in accordance with the standards published by the national standard body; Ensure that the recycling processes do not have any adverse effect on human health and environment; Ensure that the residues generated thereof are disposed of in a hazardous waste treatment

storage facility for disposal. Article 24: any producer shall be responsible to: provide information to the regulatory authority on the subsequent year's projected imports of any electrical and electronic equipment products; Provide information to recyclers on how to dismantle their product at the end of life and the location of any hazardous substances or items within the product. Article 25: The consumer of electrical and electronic equipment shall: Ensure that e-waste is segregated from other forms of waste and is taken to licensed refurbishes, collection centers, dismantler or recyclers; Ensure that e-waste is not resold or auctioned or exchanged; maintain records of e-waste generated and make such records available for scrutiny by the Regulatory Authority. As these projects are expected to produce e-waste especially in the construction and demolition phases of the project, stakeholders should bear in mind their harmfulness and the way to eliminate them from environment. The existing Enviro-Serve functioning in Bugesera industrial park will be the platform of all electronic waste from used materials and other relevant stakeholders should make sure that this waste is removed and transported safely from households to this official recycling facility.

j) Guidelines on the management of waste disposal site/dumpsites (landfill)

Waste disposed of on the Site must be compacted and covered monthly with a minimum of 150 millimeters of soil. Burning of waste on the Site will only be allowed under the permission of the Regulatory Agency confirming that it does not have a detrimental impact on the environment and operation of the Site. Disposal of dead animals, rejected carcasses, parts of dead animals, contaminated food, food rests or any edible material must be immediately carried out when brought onto the Site by burying it in trench and covered with at least 500 millimeters soil. The registered person must take steps to ensure that the Site is operated in a manner that will prevent the creation of nuisance conditions or health hazards. The registered person must apply sufficient dust control measures to prevent windblown dust from causing nuisance conditions or health hazards. Wind-blown litter leaving the Site must be collected daily. The waste which will be produced by the project activities except electronic waste produced by solar panels and batteries and other hazardous waste which should be managed in a special way, all remaining concerning municipal solid waste will be taken to the district dumpsites. The districts dumpsites were installed and complied with these guidelines. The electronic waste will be managed by respecting the regulations on e-waste as discussed above.

k) Law N°59/2008 of 10/09/2008 on prevention and punishment of gender- based violence

The Law is aimed at preventing and suppressing the gender- based violence. Chapter ii: of this law provides for prevention and protection against gender based violence, while Chapter iii: provides for cases and penalties for gender based violence. This law will be relied on extensively to cater for workers at both construction and operation phase of the project

l) Law N°68/2018 of 30/08/2018 determining offences and penalties in general

This Law sets out general principles governing offences and penalties as well as the offences and penalties in general. Chapter v provides for sexual offences and offences against morality. Therefore, all investments supported under AFIRR parent project and AFIRR AF must be done in accordance with this law.

3.2 International conventions

Rwanda being a signatory to some of the international conventions that are relevant to the AFIRR, it is imperative that proposed subprojects and activities are screened considering the commitments made under such conventions:

Table 3: International Conventions/Obligations applicable to Rwanda

Convention	Objective
The African Convention on the Conservation of Nature (1968)	To encourage individual and joint action for the conservation, utilization and development of soil, water, flora and fauna for the present and future welfare of mankind, from an economic, nutritional, scientific, educational, cultural and aesthetic point of view.
The Ramsar Convention (1971) on wetlands of International Importance	To stop the progressive encroachment on and loss of wetland now and in the future, recognizing the fundamental ecological functions of wetlands and their economic, cultural, scientific and recreational values
The Protection of World and Cultural Heritage convention (1972)	To establish an effective system of collective protection of the cultural and natural heritage of outstanding universal values
The Convention on the International Trade in	to protect certain endangered species from overexploitation by means of a system of import/export permits

Endangered Species of Wild Flora and Fauna (CITES 1973)	
The Vienna Convention for the protection of the Ozone Layer (1985)	to protect human health and the environment against adverse effects resulting from modification of the ozone layer
Montreal Protocol on Substances that deplete the Ozone layer (1987)	To protect the ozone layer by taking precautionary measures to control global emissions of substances that deplete it.
The Basel Convention on the trans-boundary Movement of Hazardous Wastes and their disposal -1989	to reduce trans-boundary movements of waste subject to a minimum consistent to the environmentally sound and different effects of such wastes and to minimizing the amount and toxicity of hazardous wastes generated and ensuring their environmentally sound management
Convention on Biological Diversity- (CBD 1992)	to promote diversity and sustainable use and encourage equitable sharing of benefits arising out of the utilization of genetic resources
United Nations Framework Convention on Climate Change (UNFCCC, 1992)	To regulate the levels of greenhouse gases concentration in the atmosphere to avoid the occurrence of climate change on a level that would impede sustainable economic development,
International human rights laws	International Covenant on Economic, Social and Cultural Rights of 16 December 1966; the International Covenant on Civil and Political Rights of 16 December 1966 and its two optional protocols; the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment of 10 December 1984 and its optional protocol; the Convention on the Rights of the Child of 20 November 1989 and its two optional protocols; the International Convention on the elimination of all forms of racial Discrimination of 21 December 1965; and the Convention on the Elimination of All Forms of Discrimination against Women of 18 December 1979 and its optional protocol.

<p>International humanitarian law and the law of neutrality</p>	<p>Includes the four Geneva Conventions of 12 August 1949 and the two protocols of 8 June 1977. The law of neutrality, especially the 1907 Hague Convention Respecting the Rights and Duties of Neutral Powers and Persons in Case of War on Land is also useful in countries neighboring armed conflict.</p>
<p>International criminal law</p>	<p>Includes the Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, and the Protocol against the Smuggling of Migrants by Land, Sea and Air, both of which supplement the United Nations Convention Against Transnational Organized Crime of 15 November 2000.</p>
<p>United Nations Convention to combat Desertification (UNCCD, 1994)</p>	<p>to combat desertification and mitigate the effects of drought in countries experiencing serious drought and or desertification</p>
<p>The FAO International Code of Conduct on the Distribution and Use of Pesticides</p>	<p>The revised version of the Code, adopted in 2002, sets out a vision of shared responsibility between the public and private sectors, especially the pesticide industry and government, to ensure that pesticides are used responsibly, delivering benefits through adequate pest management without significant adverse effects on human health or the environment</p>
<p>The ILO core labor standards,</p>	<p>The core labor standards are a set of four fundamental, universal and indivisible human rights which focus on ensuring amongst other; freedom from forced labor, freedom from child labor, freedom from discrimination at work, freedom to form and join a union, and to bargain collectively. These are the minimum 'enabling rights' people need to defend and improve their rights and conditions at work, to work in freedom and dignity, and to develop in life. These Standards are consistent with the provisions in the Constitution of the Republic of Uganda which prohibits forced labor in employment.</p>

3.2.1 Institutional framework for environmental and social management in Rwanda

The institutional framework for environmental management is currently enshrined in the Law 48/2018 of 13/08/2018 on Environment.

a) Ministry of Environment (MoE)

This Ministry of Environment (MoE) is the coordinating institution of Environment and Natural Resources Sector in Rwanda. It has the following main responsibilities:

- ✓ To develop and disseminate the environment and climate change policies, strategies and programs;
- ✓ To monitor and evaluate the implementation and mainstreaming of environment and climate change policies, strategies and programs across all sectors, especially productive sectors;
- ✓ To oversee and evaluate institutions under its supervision by providing guidance on the implementation of specific programs to be realised by the institutions under its supervision and local government, and
- ✓ To mobilise the necessary resources for the development, protection and conservation of the environment for the climate change adaptation and mitigation.

The MoE will monitor the implementation of E&S requirements and climate change aspects by the project and provide guidance, where need be.

b) Rwanda Environment Management Authority (REMA)

Rwanda Environment Management Authority (REMA) was established in 2004 to act as the implementing organ of environment-related policies and laws in Rwanda. REMA is also tasked to coordinate different environmental protection activities undertaken by environmental promotion agencies; to promote the integration of environmental issues in development policies, projects, plans and programs; to coordinate implementation of Government policies and decisions taken by the Board of Directors and ensure the integration of environmental issues in national planning among concerned departments and institutions within the Government; to advise the Government with regard to the legislation and other measures relating to environmental management or implementation of conventions, treaties and international agreements relevant to the field of environment as and when necessary; to make proposals to the Government in the field of environmental policies and strategies; etc.

REMA will fully be involved in the implementation of this project through (i) provision, where necessary, of advice and technical support in environmental conservation, (ii) closely monitoring the implementation of E&S activities and supervise environmental audit, strategic environmental assessment or any other environmental study to ensure compliance with national environmental regulations during their preparation and implementation and (iii) conducting inspection of E&S management across project sites.

c) Rwanda Development Board (RDB)

Rwanda Development Board (RDB) was created by Organic Law N° 53/2008 of 02/09/2008 with a mission of improving the well-being of all Rwandans by fast-tracking development, catalyzing sustainable economic growth, and creating prosperity for all. According to the recent restructuring of government institutions, RDB was assigned the responsibility of reviewing the ESIA report and authorizing the project to proceed by issuing Conditions of approval and an ESIA certificate.

d) Local Governments

Both AFIRR parent project and AF will be implemented in different districts of Rwanda, but the sites are not yet confirmed. Under the general guidelines and procedure for ESIA, each district is tasked to perform the following functions:

- At the request of RDB, review Project briefs to advise on Terms of Reference;
- Provide information or advice to developers and ESIA Experts when consulted during the ESIA process;
- At the request of RDB, review ESIA reports and provide comments to RDB;
- Assist RDB in organizing public hearings;
- Host public hearings as well as individual consultations;
- Gather written comments from public and transmit them to RDB; and
- To be actively involved in the implementation of Environmental and Social Management and Monitoring Plan (EMMP) and work closely with all concerned Stakeholders.

3.3 World Bank Environmental and Social Standards

The preparation of this ESMF has been proposed so that the project complies with World Bank Environment and Social Framework (ESF). This ESMF demonstrates and ensures that the project

preparation and implementation meet the applicable requirements of the World Bank's environmental and social standards (ESSs);

1. Assessment and Management of Environmental and Social Risks and Impacts (ESS1);
2. Labour and Working Conditions (ESS2),
3. Resource Efficiency and Pollution Prevention and Management (ESS3),
4. Community Health and Safety (ESS4);
5. Land Acquisition, Restrictions on Land Use and Involuntary Resettlement (ESS5);
6. Biodiversity Conservation and Sustainable Management of Living Natural Resources (ESS6);
7. Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities (ESS7)
8. Cultural Heritage (ESS8);
9. Financial Intermediaries (ESS9)
10. Stakeholder Engagement and Information Disclosure (ESS10).

Except for ESS7, all other environmental and social Standards (ESSs) are relevant to the AFIRR parent project.

Assessment and Management of Environmental and Social Risks and Impacts (ESS1)

The Environmental and Social Standard 1 (ESS1) applies to all projects for which the World Bank investment project financing is sought. The ESS1 establishes the importance of (i) the borrower's existing environmental and social framework in addressing the risks and impacts of the project; (ii) an integrated environmental and social assessment to identify the risks and impacts of a project; (iii) effective community engagement through disclosure of project related information, consultation and effective feedback; and (iv) management of environmental and social risks and impacts by the borrower throughout the project life cycle.

The World Bank requires that all environmental and social risks and impacts of the project be addressed as part of the environmental and social assessment conducted in accordance with ESS1. The main E&S risks and impacts of the project are expected to be related to labor and working conditions, OHS, community health and safety risks, dust and noise emissions, water/energy use, generation of waste and soil and water pollution at the subproject level,

discrimination and sexual harassment. Environmental and social tools will be prepared in compliance with ESS1 and national regulations and implemented throughout the project life cycle.

3.3.1 Comparison between Rwandan and World Bank EA System

This section compares the similarities and differences between the National requirements and the World Bank ESS1. Some gaps identified between the national Rwandan legislation and the World Bank Environmental and Social Standard (ESS) on Assessment and Management of Environmental and Social Risks and Impacts (ESS1) are presented below:

Table 4: Differences between Rwanda E&S regulations and World Bank ESS1

Item	National Standards	World Bank ESS1	Gap	Bridging Measures
Project environmental and social risk categorization/ classification	National Regulations classify projects under three categories 1, 2 and 3 (Impact level IL1, IL2, IL3)	Depending on the type, location, sensitivity and scale of the project, nature and magnitude of its potential impacts, borrower capacity and commitment, and contextual factors, the WB classifies the proposed projects into High, Substantial, Moderate or Low risk.	While the WB classification of projects is based on potential risks and impacts, the sensitivity of receiving environment (environmental and social), borrower capacity and commitment, and contextual factors, the national categorization is mainly based on size of project.	AFIRR subprojects will be classified based on WB ESF and will follow the most equivalent category in national Regulations.
Environmental and Social instruments	In Rwanda only full ESIA, partial ESIA SEA and Environment Audit are regulated instruments	Recognizes various environmental and social risk management instruments including SEA, ESIA, ESMF, SEP, RPF, RAP, ESCP, etc. depending on the project.	Though national regulations recognize environmental and social aspects, but there is no provision to prepare ESMF, ESMS and ESCP	For investments with significant impacts/ risks, all relevant E&S tools (ESMS, ESMF, SEP, RPF, etc.) will be prepared and implemented based on WB ESF requirements
Assessment of alternatives	The national law on environment and ESIA procedures requires lead agency to explore project alternatives but is silent about avoiding, minimizing involuntary resettlement.	Requires borrower to consider feasible alternative project designs to avoid or minimize land acquisition or restrictions on land use, especially where this would result in physical or economic displacement, while balancing environmental, social, and financial costs and benefits, and paying	While WB policy requires the borrower to explore alternatives that avoid or minimize resettlement impacts, the national regulations only require the provision of compensation	For investment proposed under AFIRR, alternatives should be assessed to avoid or minimize involuntary resettlement and other sensitive areas.

		particular attention to gender impacts and impacts on the poor and vulnerable.		
Consultation and participation	The consultation and participation are recognized as important during ESIA study	ESS1 recognizes the importance of early and continuing engagement and meaningful consultation with stakeholders	The National regulation does not recognize Stakeholder engagement and disclosure of appropriate information in accordance with ESS10	Apply ESS10 requirements during the project implementation
Documents Approval and Disclosure	The law specifies the Institution competent for ESIA, ESMP review and approval (i.e., RDB) but remains silent on its disclosure. It also assigns REMA for the review of other environmental and social documents regulated in Rwanda but again remains silent on their disclosure	ESS 1 and ESS10 require that prepared documents are approved by the Bank and disclosed at WB external website	National regulations remain silent on the disclosure of approved documents	Comply with the requirements of ESS10 for documents disclosure
Implementation and Monitoring	The law gives the monitoring responsibility to the project implementer as well as REMA.	The Bank has the responsibility to monitor the environmental and social performance of the project in line with legal agreement including ESCP on an ongoing basis.		The implementation and monitoring of the project should be in line with national and WB requirements.

<p>Grievance Mechanism and accountability</p>	<p>The responsibility is given to local administration and courts depending on matter's level.</p>	<p>Complies with World bank that requires project proponents/borrowers to ensure that a grievance mechanism for the project is in place, as early as possible in project development to address specific E&S concerns raised by affected persons (or others) in a timely fashion. Where possible, such grievance mechanisms will utilize existing formal or informal grievance mechanisms suitable for project purposes, supplemented as needed with project-specific arrangements designed to resolve disputes in an impartial manner.</p>	<p>National environmental regulations do not provide for specific grievance mechanisms during the implementation of a given project</p>	<p>Grievance redress mechanism will be established at project level, PFI level and site level</p>
<p>Inclusion of women, People Living With Disabilities (PLWD), and youth</p>	<p>The national regulation remains silent on the inclusion of women, youth and PLWDs in the E&S process but calls for involving all affected and interested parties, without distinction, in the process.</p>	<p>The ESF requires consultations with affected people and other interested parties as well as specific individuals or groups as disadvantaged including women, youth, disabled people to ensure that all potential E&S risks and impacts are identified and addressed</p>	<p>National E&S regulations do not provide for particular attention to traditionally underserved groups (women, youth and PLWDs) in the E&S assessment and the implementation of a given project</p>	<p>AFIRR project to ensure inclusion of special groups (women, youth and PLWDs)</p>

Labour and Working Conditions (ESS2)

The ESS 2 recognizes the importance of employment creation and income generation in the pursuit of poverty reduction and inclusive economic growth. It has the following objectives:

- To promote health and safety at work;
- To promote the fair treatment, nondiscrimination and equal opportunity of project workers;
- To protect project workers, including vulnerable workers such as women, persons with disabilities, children (of working age, in accordance with this ESS) and migrant workers, contracted workers, community workers and primary supply workers, as appropriate;
- To prevent the use of all forms of forced labor and child labor;
- To support the principles of freedom of association and collective bargaining of project workers in a manner consistent with national law;
- To provide project workers with accessible means to raise workplace concerns.

For the compliance with this ESS2, the borrower needs to prepare and adopt labor management procedures (LMP) with provisions on (i) Working conditions and management of workers relationships including terms and conditions of work, nondiscrimination and equal opportunity and workers organizations; (ii) protection of the work force with focus on child labor and minimum age as well as forced labor; (iii) grievance redress mechanisms; (iv) occupational health and safety and (v) fair treatment of all workers including direct, contracted, community, and primary supply workers and Government civil servants, where applicable. These are also reflected in the Law No 66/2018 of 30/08/2018 regulating labour in Rwanda.

Comparative table of ESS2 and Rwanda’s policies related to environmental and social safeguards, gaps and recommendations

Environmental and Social Standard	Summary of Core Requirements	Environmental and Social Assessment	Gap and Recommendation
ESS2: Labour and Working Conditions	ESS 2 recognizes how Borrowers can promote sound worker-management relationships and enhance the development benefits of a project by treating workers in the project fairly and providing safe and healthy working conditions	Law N° 66/2018 of 30/08/2018 regulating labour in Rwanda. The law provides for the rights and duties of employers and workers; guarantees trade unions and freedom of associations and establishes the Labour Commission to mediate and act in respect of all labour issues. Chapter V (Occupational Health and Safety) prescribes the duty of an employer to ensure that every worker works under	There is a need to strengthen Workers organization to ensure that grievance mechanism systems are set up. More focus should be given to industry standards for occupational health and safety of workers as well as issues of child labor and forced labor. A Labour Management Procedures and

		<p>satisfactory, safe and healthy conditions. This law will be relied on extensively to cater for workers at both construction and operation phase of the project</p>	<p>Grievance Redress Mechanism will be established.</p> <p>Employees should sign Code of Conduct (CoC). The CoC should include strong wording regarding Sexual Exploitation and Abuse (SEA), Sexual Harassment (SH) and should be translated into local language.</p> <p>As precautionary measure, all sub-projects will be screened on risks related labour and working conditions</p>
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An important workforce is expected to be deployed during the AFIRR project implementation. Not only BRD’s employees will oversee the execution of this project, but also PFIs, sub-borrowers, contractors and service providers will be involved in this project. All responsible implementers (BRD, BDF, PFIs and borrowers) will have to coordinate internal labour management and OHS aspects for the smooth running of this project. The ESS2 is relevant for this project because it directly applies to:

- project workers and employees of BRD, BDF, benefiting PFIs and sub-borrowers in relation to their labor and working conditions as well as their current policies and organizational structure for managing these aspects;
- occupational health and safety (OH) risks management in the workplace.

For the compliance with ESS2, the Labor Management Plan (LMP) is needed to identify and address issues associated with employment and working conditions, occupational health and safety risks and project related grievances. Though the Rwanda labour law captures all requirements of ESS2, it does not provide for the LMP preparation. The AFIRR project prepared a combined Labour Management Procedures (LMP) included in the ESMSs for the Apex-FI and PFIs in accordance with national labour law and the requirements under ESS2 and ESS9. The

World Bank's team reviewed the BRD's human resources policy and concluded that it was comprehensive enough to address labor management during project implementation. Same policy will be maintained for AFIRR parent project and its additional financing.

Resource Efficiency and Pollution Prevention and Management (ESS3)

The ESS3 recognizes that economic activities, including manufacturing, agriculture, etc., often generate pollution to air, water, soil and use resources that may threaten the welfare of current and future generations and the environment at the local, regional, and global levels. It also recognizes that more efficient and effective resource use, pollution prevention and greenhouse gases (GHG) emission avoidance, and mitigation technologies and practices have become more accessible and achievable.

This standard targets to (i) promote the sustainable use of resources, including energy, water and raw materials, (ii) avoid or minimize adverse impacts on human health and the environment by avoiding or minimizing pollution from project activities, (iii) avoid or minimize project-related emissions of short and long-lived climate pollutants, (iv) avoid or minimize generation of hazardous and non-hazardous waste, (v) minimize and manage the risks and impacts associated with pesticide use. For compliance with this standard, the project implements technically and financially feasible measures for improving efficient energy, water and raw materials consumption as well as other resources. Such measures integrate the principles of cleaner production into product design and production processes to conserve all resources. Furthermore, it avoids or reduces the release of pollutants to air, water and land due to routine, nonroutine, accidental circumstances, and with the potential for local, regional, and transboundary impacts.

Comparative table of ESS3 and Rwanda's policies related to environmental and social safeguards, gaps and recommendations

Environmental and Social Standard	Summary of Core Requirements	Environmental and Social Assessment	Gap and Recommendation
ESS3: Resource Efficiency and Pollution Prevention and Management	This ESS sets out the requirements to address resource efficiency and pollution	Law N°48/2018 of 13/08/2018. On environment; Chapter ii: (Fundamental principles that govern environmental conservation)	Though there are regulatory instruments to promote resource efficiency, address pollution and waste management issues in Rwanda, there are

	<p>prevention and management throughout the project life cycle since economic activity and urbanization often generate pollution to air, water, and land, and consume finite resources that may threaten people and ecosystem services.</p>	<p>Article 3 ensures application of precautionary principle. Article 4 ensures the principle of environmental sustainability while article 5 ensures application of polluter pays principle Law N°49/2018 of 13/08/2018 determining the use and management of water resources in Rwanda (Chapter iv: protection of water resources); Article 24; requires protecting water quantity and quality, and ensures that except activities related to the protection of the perimeter, any other activity is subjected to prior authorization of the Minister</p>	<p>challenges in the effective implementation of these regulatory instruments. More focus must be put on effective waste management, water management, efficient use of natural resources and prevention of water pollution by runoffs.</p> <p>As precautionary measure, all sub-projects will be screened on risks related to resource efficiency and pollution prevention and Management</p>
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This standard is relevant for this project as most of the potential subprojects to be financed under manufacturing sector are anticipated to have potential E&S risks and impacts, including air, soil and water pollution, increased solid and liquid non-hazardous and hazardous waste and odor at the sub-borrower level. These impacts will be mitigated through the implementation of cost-effective mitigation measures by the implementing agencies. The measures for the management of air pollution, hazardous and nonhazardous wastes, chemicals and hazardous materials and pesticides are included in this ESMF and will be detailed in site specific ESIA or ESMP based on the assessment of impacts and risks. They will also be integrated in the loan and sub-loan agreements during project implementation.

However, the E&S risks of subprojects that might cause significant pollution impacts will be rated as high and will be considered ineligible for financing. The Project has adopted the exclusion list of activities that are assessed as high risk as detailed in the ESCP. The exclusion list should be used with the screening procedure/list to be included in the ESMF (Annex 1).

Community Health and Safety (ESS4)

The ESS4 recognizes that project activities, equipment and infrastructure can increase community exposure to risks and impacts. Furthermore, communities that are already subjected to impacts from climate change may also experience an acceleration or intensification of impacts due to project activities. Therefore, this standard addresses the health, safety, and security risks and impacts on project-affected communities and the corresponding responsibility of Borrowers to avoid or minimize such risks and impacts, with particular attention to people who, because of their particular circumstances, may be vulnerable.

Comparative table of ESS4 and Rwanda’s policies related to environmental and social safeguards, gaps and recommendations

Environmental and Social Standard	Summary of Core Requirements	Environmental and Social Assessment	Gap and Recommendation
ESS4: Community Health and Safety	ESS4 address the health, safety, and security risks and impacts on project-affected communities and the corresponding responsibility of Borrowers to avoid or minimize such risks and impacts, with particular attention to people who, because of their particular circumstances, may be vulnerable.	The constitution of the Republic of Rwanda as revised in 2015; Article 21 ensures the right to good health; and Article 22 ensures the right to live in a clean and healthy environment Law N° 66/2018 of 30/08/2018 regulating labour in Rwanda; Chapter V (Occupational Health and, Safety), prescribes the duty of an employer to ensure that every worker works under satisfactory, safe and healthy conditions.	Beyond ensuring good health and safety for the project affect persons there is a need to pay much attention to vulnerable groups in project communities As precautionary measure, all sub-projects will be screened on community health and safety risks.

The Standard’s objectives include (i) anticipating and avoiding adverse impacts on the health and safety of project-affected communities during the project life cycle from both routine and nonroutine circumstances, (ii) promotion of quality and safety, and considerations relating to climate change, in the design and construction of infrastructure, including dams, (iii) avoiding or minimizing community exposure to project-related safety risks, diseases and hazardous materials, (iv) establishment of effective measures to address emergency events and (v) ensuring

that the safeguarding of personnel and property is carried out in a manner that avoids or minimizes risks to the project-affected communities. The requirements for (i) community health and safety regarding infrastructure and equipment design and safety, traffic and road safety, safety of services, ecosystem services, community exposure to health issues, emergency and preparedness response, management and safety of hazardous materials and (ii) security personnel shall be implemented to address risks and impacts associated with the project.

The implementation of the manufacturing sectors that may be supported by this project might cause impacts associated with community health and safety. These include air, soil, and water pollution; solid wastes and wastewater discharges, hazardous and non-hazardous waste; energy use and resource depletion. Such impacts will be identified, assessed, and addressed within the scope of the BRD and BDF, and PFI's ESMSs in accordance with ESS4 requirements. Sub-projects that might be associated with significant impacts rated as High risk will be considered ineligible for financing. The Project has adopted the exclusion lists of activities (Annexes 1) that are assessed the as high risk as detailed in the ESCP. The exclusion list should be used with the screening checklist (Annex 4) to be included in the ESMF.

In a bid to comply with ESS4 requirements and in line with this ESMF, ESCP, and BRD and BDF ESMSs and based on results of subprojects' screening, site specific ESIA's for subprojects with substantial risk, ESMPs for subprojects with medium risk or summary projects reports (SPR) incorporating mitigation measures related to the potential community health and safety risks and impacts for subprojects will be prepared, implemented, and monitored. For the sexual exploitation and abuse (SEA) and sexual harassment (SH) risks, the Apex-FIs will prepare a GBV Action Plan to establish GBV reporting channels and survivor-centric referral pathways that will cover PFIs and the MSMEs. The GBV action will be cascaded to the PFIs, large enterprises, and SMEs. It is expected that most SMEs have a low capacity to manage GBV related risks and the Project will provide targeted training to manage these risks.

Land Acquisition, restrictions on land Use and Involuntary Resettlement (ESS5)

As per the ESS5, the projects involving land acquisition and restrictions on land use can have negative impacts on communities and persons. They may cause physical displacement (relocation, loss of residential land or loss of shelter), economic displacement (loss of land, assets

or access to assets, leading to loss of income sources or other means of livelihood) or both. The term “involuntary resettlement” refers to these impacts. Resettlement is considered involuntary when affected persons or communities do not have the right to refuse land acquisition or restrictions on land use that result in displacement.

The ESS5 has the following objectives:

- To avoid involuntary resettlement or, when unavoidable, minimize involuntary resettlement by exploring project design alternatives;
- To avoid forced eviction;
- To mitigate unavoidable adverse social and economic impacts from land acquisition or restrictions on land use by: (a) providing timely compensation for loss of assets at replacement cost and (b) assisting displaced persons in their efforts to improve, or at least restore, their livelihoods and living standards, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher;
- To improve living conditions of poor or vulnerable persons who are physically displaced, through provision of adequate housing, access to services and facilities, and security of tenure;
- To conceive and execute resettlement activities as sustainable development programs, providing sufficient investment resources to enable displaced persons to benefit directly from the project, as the nature of the project may warrant;
- To ensure that resettlement activities are planned and implemented with appropriate disclosure of information, meaningful consultation, and the informed participation of those affected.

The standard applies to permanent or temporary physical and economic displacement resulting from the following types of land acquisition or restrictions on land use undertaken or imposed in connection with the project implementation: (i) land rights or land use rights acquired or restricted through expropriation or other compulsory procedures in accordance with national law; (ii) land rights or land use rights acquired or restricted through negotiated settlements with property owners or those with legal rights to the land, if failure to reach settlement would have resulted in expropriation or other compulsory procedures; (iii) restrictions on land use and access to natural resources that cause a community or groups within a community to lose access to resource usage where they have traditional or customary tenure, or recognizable usage rights; (iv) relocation of

people without formal, traditional, or recognizable usage rights, who are occupying or utilizing land prior to a project specific cut-off date; (v) displacement of people as a result of project impacts that render their land unusable or inaccessible; (vi) restriction on access to land or use of other resources including communal property and natural resources such as marine and aquatic resources, timber and non-timber forest products, fresh water, medicinal plants, hunting and gathering grounds and grazing and cropping areas; (vii) land rights or claims to land or resources relinquished by individuals or communities without full payment of compensation; and (viii) land acquisition or land use restrictions occurring prior to the project, but which were undertaken or initiated in anticipation of, or in preparation for the project.

This ESS5 does not apply to impacts on incomes or livelihoods that are not a direct result of land acquisition or land use restrictions imposed by the project. Furthermore, it does not apply to voluntary, willing seller- willing buyer (WSWB) transactions. However, where such voluntary land transactions may result in the displacement of persons other than the seller, who occupy, use or claim rights to the land in question, this ESS will apply. It does not apply to land use planning or the regulation of natural resources to promote their sustainability on a regional, national or subnational level (including watershed management, groundwater management, fisheries management, and coastal zone management) nor apply to management of refugees from, or persons internally displaced by, natural disasters, conflict, crime or violence.

As per this ESS5, the Affected persons and therefore eligible to compensation, may be classified as follows:

- Persons who have formal legal rights to land or assets;
- Persons who do not have formal legal rights to land or assets, but have a claim to land or assets that is recognized or recognizable under national law;
- or persons who have no recognizable legal right or claim to the land or assets they occupy or use.

The AFIRR AF activities are not anticipated to lead to any displacement, loss of assets and restriction of access to sources of livelihood. BRD and BDF ESMSs will include the screening mechanism, which will include a protocol requiring subproject application to include documentation that they own any land they will use or that any land they will use or will acquire for the project is exclusively on a willing seller willing buyer (WSWB) basis.

Biodiversity Conservation and sustainable management of living natural resources (ESS6)

The ESS6 recognizes that conserving biodiversity and sustainably managing living natural resources are fundamental to sustainable development and maintaining core ecological functions of habitats, including forests and biodiversity they support, is very important. Biodiversity often underpins ecosystem services valued by humans. The impacts on biodiversity can therefore often adversely affect the delivery of ecosystem services. This ESS addresses biodiversity conservation and sustainable management of primary production and harvesting of living natural resources.

The requirements of this ESS are applied to all projects that potentially affect biodiversity or habitats, either positively or negatively, directly or indirectly, or that depend upon biodiversity for their success. Biodiversity is defined as the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species, between species, and of ecosystems. Impacts on biodiversity can therefore often adversely affect the delivery of ecosystem services. Habitat is defined as a terrestrial, freshwater, or marine geographical unit or airway that supports assemblages of living organisms and their interactions with the nonliving environment.

Comparative table of ESS 6 and Rwanda’s policies related to environmental and social safeguards, gaps and recommendations

Environmental and Social Standard	Summary of Core Requirements	Environmental and Social Assessment	Gap and Recommendation
ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	This ESS recognizes that protecting and conserving biodiversity and sustainably managing living natural resources are fundamental to sustainable development. It addresses sustainable management of	Law N° 064/2021 of 14/10/2021 governing biological diversity in Rwanda; Article 4 of this law categorizes wildlife species into three (3) categories: category I is composed of critically endangered species, found in Annex I of this Law; category II is composed of endangered species, found in Annex II	Screening should involve the determination of critical or Natural Habitat. More attention should be given to the protection of livelihood sources for project affected parties during the implementation

	<p>primary production and harvesting of living natural resources and recognizes the need to consider the livelihood of project-affected parties, including Indigenous Peoples, whose access to, or use of, biodiversity or living natural resources may be affected by a project</p>	<p>of this Law; and category III is composed of vulnerable species, found in Annex III of this Law. Article 32:ensures conservation of wildlife species and their habitats and prohibits the following acts: 1) taking or destroying an egg or a nest of any wild animal; 2)capturing, stressing or removing animal species from their habitat, harming them, transporting, hawking, utilizing, possessing, selling or purchasing them; 3) destroying, cutting, mutilating, collecting or removing any wild plant species, picking fruits, transporting, hawking, utilizing, possessing, selling and purchasing, or seedlings or of wild plant species; 4) destroying, altering or degrading natural habitats of wild animal and plant species; 5) erecting infrastructure in protected areas. The article further states that the acts cited in items 2, 3, 4 and 5 may be carried out upon a permit of the Authority.</p>	<p>of project activities. The Interventions supported under the project are expected to comply with relevant laws and regulations. As precautionary measures, all subprojects will be subjected to environmental and social screening.</p>
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Though subprojects which might adversely impact biodiversity conservation and sustainable management of living natural resources will not be eligible for financing under AFIRR project, the

standard remains relevant for AFIRR project. The proposed investment is likely to have potential adverse impacts on natural habitats including wetlands, underground and open water bodies, and soil if no adequate mitigation measures are implemented. This requires that AFIRR project designs appropriate conservation and mitigation measures to avoid or reduce adverse impacts on these ecosystems or their functions. The project has an exclusion list that precludes the inclusion of activities that involve the conversion of natural habitats and/or ecologically sensitive areas. The exclusion list (Annex 1) should be used with the screening procedure to be included in the ESMF. Consistent with the Project's ESMF, ESCP, and the institutional ESMSs for BRD and BDF, subprojects will be screened for potential risks and impacts on biodiversity and living natural resources; and based on the screening result, ESIA, ESMPs or SPR will be prepared, implemented and monitored as required.

Cultural Heritage (ESS8)

Cultural heritage is important as a source of valuable scientific and historical information, as an economic and social asset for development, and as an integral part of people's cultural identity and practice. This standard recognizes that the cultural heritage provides continuity in tangible and intangible forms between the past, present and future and sets out measures designed to protect cultural heritage throughout the project life cycle. The ESS8 aims at protecting cultural heritage from the adverse impacts of project activities and supporting its preservation, addressing cultural heritage as an integral aspect of sustainable development, promoting both meaningful consultations with stakeholders regarding cultural heritage and equitable sharing of benefits from the use of cultural heritage.

The requirements of this ESS8 apply to all projects that are likely to have risks or impacts on cultural heritage including (a) projects involving excavations, demolition, movement of earth, flooding, or other changes in the physical environment/ environmental beauty; (b) projects located within a legally protected area or a legally defined buffer zone; (c) projects located in or in the vicinity of a recognized cultural heritage site or (d) projects specifically designed to support the conservation, management and use of cultural heritage. The requirements apply to cultural heritage regardless of whether or not it has been legally protected or previously identified or disturbed. They also apply to intangible cultural heritage only if a physical component of a project

will have a material impact on such cultural heritage or if a project intends to use such cultural heritage for commercial purposes.

ESS8 is applicable to AFIRR parent project since some of its activities may interfere with physical cultural heritage resources that need to be protected. However, the subprojects rated high, and which might adversely impact cultural heritage will not be eligible for financing within the scope of this project. The proposed investments will be screened for their potential risks and impacts on cultural heritage and based on the result of the screening, ESIA, ESMP, or SPR will be prepared, implemented, and monitored as required and shall incorporate chance finds procedures to provide guidance for managing previously unknown cultural heritage like graves that may be encountered during project implementation. Though the AF does not apply ESS8, the updated ESMF will address impacts on physical cultural resources and will also include “chance finds procedures” applicable as appropriate throughout the project life cycle. The Chance finds procedures are reflected in Annex 7.

Financial Intermediaries (ESS9)

Financial Intermediaries (FIs) are public and private financial services providers that receive financial support from the World Bank, either directly from the Bank or the Borrower, or through the Borrower or other FIs.

The FIs may be national and regional development banks, which channel financial resources to a range of economic activities across industry sectors. This ESS9 applies to Financial Intermediaries (FIs) and other FIs that receive financing or guarantee the FIs.

For compliance with the ESS9 requirements, each FI will put in place and maintain an environmental and social management system (ESMS) to identify, manage, and monitor the environmental and social risks and impacts of FI subprojects on an ongoing basis. The ESMS will be commensurate with the nature and magnitude of environmental and social risks and impacts of FI subprojects, the types of financing, and the overall risk aggregated at the portfolio level. Where the FI can demonstrate that it already has an ESMS in place, it will provide adequate evidence of such an ESMS, indicating which elements (if any) will be enhanced or modified to meet the requirements of this ESS9.

Both AFIRR parent project and AF will continue to be relevant to this standard as financial institutions, BRD and BDF, will directly receive funds from the World Bank and will also provide financing to other FIs, the participating financial institutions (PFIs). As such, the Apex-FIs will have the primary responsibility to oversight and monitor and the E&S risks and impacts management for the beneficiary enterprises in accordance with the project's updated ESMF, ESCP, SEP, and the ESMSs for BRD and BDF. Consistent with ESS9 requirements, the ESMSs for BRD and BDF will be cascaded to the benefitting PFI's, excluding SACCOs. BRD and BDF will ensure that PFIs have ESMS procedures in place, which are acceptable to the Ministry of Economic Planning and Finance (MINECOFIN). PFIs will monitor the entire World Bank-financed portfolio and report to the Apex-FIs (BRD and BDF) while the Apex-FIs will be required to monitor and supervise the E&S performance of the PFIs and their portfolio exposures and report to MINECOFIN. The World Bank will in turn monitor the MINECOFIN and Apex FIs.

Stakeholder Engagement and Information disclosure (ESS10)

This ESS recognizes the importance of open and transparent engagement between the Borrower and project stakeholders as an essential element of good international practice. Effective stakeholder engagement can improve the environmental and social sustainability of projects, enhance project acceptance, and make a significant contribution to successful project design and implementation. It must be read in conjunction with other ESSs.

This standard is relevant for the project since the project's borrower will identify and engage with stakeholders throughout the project period, commencing such engagement as early as possible in the project development process and in a timeframe that enables meaningful consultations with stakeholders on project design. Through meaningful consultations, the project borrower will provide stakeholders with timely, relevant, understandable, and accessible information and interact with them in a culturally appropriate manner, which is free of manipulation, interference, coercion, discrimination and intimidation. The process of stakeholder engagement will involve the following: (i) stakeholder identification and analysis; (ii) planning how the engagement with stakeholders will take place; (iii) disclosure of information; (iv) consultation with stakeholders; (v) addressing and responding to grievances; and (vi) reporting to stakeholders. The Project borrower shall maintain and disclose as part of the E&S assessment, a documented record of stakeholder engagement, including a description of the stakeholders consulted, a summary of the

feedback received and a brief explanation of how the feedback was considered, or the reasons why it was not.

Comparative table of ESS 6 and Rwanda’s policies related to environmental and social safeguards, gaps and recommendations

Environmental and Social Standard	Summary of Core Requirements	Environmental and Social Assessment	Gap and Recommendation
<p>ESS10: Stakeholder Engagement and Information Disclosure</p>	<p>This recognizes the importance of open and transparent engagement between the Borrower and project stakeholders as an essential element of good international practice.</p>	<p>Law N° 32/2015 of 11/06/2015 relating to expropriation in the public interests; Article 11 of the Expropriation Law stipulates that the relevant organ, after receiving the request for expropriation, shall examine the basis of that project proposal. In case it approves the basis of the project proposal, the relevant Land Committee shall request, in writing, the District Council concerned to convene a consultative meeting of the population where the land is located, at least within a period of thirty (30) days after receipt of the application for expropriation, and indicating the date, time and the venue where the meeting is to be held. The relevant competent authority shall take a decision within a period of at least fifteen (15) days after the consultative meeting with the population.</p> <p>Ministerial order N°001/2019 of 15/04/2019 establishing the list of projects that must undergo environmental impact assessment, instructions, requirements and procedures to conduct environmental impact assessment; Article 10: ensures Public participation during the process of environmental impact assessment.</p>	<p>The use of the Stakeholder Engagement Plan is an add on to the public information and consultation process which should be focused on. Additionally, a Grievance Redress Mechanism must be developed for affected / host communities</p>

The preparation of a stakeholder engagement plan (SEP) and disclosure of information are conditional for compliance with the ESS10 requirements. During the AFIRR AF negotiation and

in line with ESS10, the SEP was updated, got cleared by the World Bank and disclosed both at Apex-FIs websites and World bank external website. The information disclosure on the project through various consultations is undergoing to raise awareness on the project and enhance its ownership by the identified stakeholders.

3.4 World Bank industry Sector Guidelines

The World Bank Group General Environmental, Health and Safety (EHS) Guidelines⁵ will also be important to this Project, and they will act as technical reference documents containing information on cross-cutting environmental, health and safety issues potential. These *World Bank Group General Environmental, Health and Safety Guidelines will provide guidance when dealing with EHS issues*. The General guidelines will be used together with the industry Sector EHS guidelines. AFIRR parent project and its additional financing will comply with WB industry Sector EHS guidelines such as those under General manufacturing, Infrastructure (Tourism and hospitality development, Mining as well as those under agribusiness/food production.

The Environmental, OHS and community HS issues, air emission, wastewater, hazardous materials management, noise pollution, energy consumption, risk of fire and explosion as well as biological and chemical hazards, etc. are among the anticipated issues to be handled. These guidelines provide specific recommendations and performance indicators to monitor to minimize risks to communities. Thus, AFIRR parent project and its additional financing will observe these guidelines.

⁵ *Environmental, health, and safety general guidelines (English)*. IFC E&S Washington, D.C.: World Bank Group.

Chapter4 : ENVIRONMENT AND SOCIAL BASELINE CONDITIONS

Both AFIRR parent project and AF will be implemented throughout the country by BRD and BDF. This section describes the overall baseline condition of Rwanda in terms of bio physical environment, as well as the socio economic and cultural attributes.

4.1 Physical environment

Rwanda is a mountainous landlocked country, located in Central Africa, at latitude 2.00 S and longitude 30.00 E, bordered to its south by Burundi for about 290km, Tanzania to its east for 217 km, Uganda to its north for 169km and the Democratic Republic of Congo (DRC) to its west for 217 km. Rwanda has a total surface area of 26, 338 sq. km of which the total land area is 24, 948 sq. km and 1, 390 sq. km is land and water respectively.

4.1.1 Climate

Rwanda enjoys a tropical temperate climate due to its high altitude. The average annual temperature ranges between 16°C and 22°C, without significant variations. Rainfall is abundant although it has some irregularities. Winds are generally around 1-3 m/s. In the highland regions of the Congo - Nile ridge, the average temperatures range between 15 and 17°C and the rainfall is abundant. The volcanic region has much lower temperatures that can go below 10°C in some places. In areas with intermediary altitude, the average temperatures vary between 19 and 21°C and the average rainfall is around 1000 mm/year. Rainfall is less irregular, and sometimes causes periods of drought, especially in the Eastern and lowland of Southern Province of Rwanda. In the lowlands (East and Southeast), temperatures are higher and at times can go beyond 30°C in February and July-August. Rainfall is less abundant in that region (750 to 900 mm/year).

Weather in Rwanda is determined by the rainfall patterns. Thus, the climate of the country is characterized by an alternation of four seasons of which two are wet and the other two are dry. However, rainfall is generally well distributed throughout the year, despite some irregularities. Eastern and Southern regions (i.e., Nyagatare, Rwamagana and Gatsibo of the Eastern Province and Gisagara in Southern Province) are more affected by prolonged droughts while the Northern and Western regions (Gakenke, Nyamasheke, Karongi, Rutsiro, Nyabihu) as well as Nyaruguru District of the Southern Province experience abundant rainfall that may cause catastrophic

landslides and flooding. The quantity of total annual rainfall varies between 800 mm in the Northeast of Rwanda and 1600 mm in the National Park of Nyungwe (Wisumo) and in the highlands of the Northwest. A decrease in rainfall is generally observed from West to East.

4.1.2 Relief

Rwanda has a hilly and mountainous relief with an altitude ranging between 900 m and 4,507 m. The components of that relief are:

- *Congo-Nil Ridge* overlaying Kivu Lake with an altitude between 2,500 m and 3,000 m. It is dominated in the Northwest by the volcanic ranges consisting of five volcanic massifs of which the highest is Kalisimbi with 4,507 m;
- *The central plateau* represents a relief of hills with an altitude ranging between 1,500 m and 2,000 m;
- *The lowlands of the East* are dominated by a depression characterized by hills with more or less round top and 1,000 to 1,500 m in altitude. The lowlands of the South-West in Bugarama plain with an altitude of 900 m are part of the tectonic depression of the African Rift Valley.

4.1.3 Hydrology

Rwanda has abundant water resources, but with large untapped water reserves. Water resources consist of the freshwater systems of lakes, rivers, wetlands, and groundwater, all replenished by rainfall through a dense drainage network that channels water to most parts of the country. Surface water in Rwanda occupies a total of 135,295 ha, or 5.3 percent of the country's land area, which includes 101 lakes and 861 rivers (NISR, 2021). According to the National Water Resources Master Plan, for management purposes, the country has been divided into four levels of catchments. The most widely used are the level 1 catchments, composed of nine catchments. A catchment is an area of land where precipitation collects and drains off into a common outlet, such as a river, lake, or other body of water. Catchment planning and management is based on the principles of Integrated Water Resources Management (IWRM) to which Rwanda has been committed since 2011 (GoR, 2011b).

Hydrologically, Rwanda is located at the pinnacle of two main river basins: the Nile basin and the Congo basin, which are composed of the Nyabarongo, Mwogo, Mbirurume, Muvumba, Mukungwa, Rugezi, Akanyaru, Akagera, Sebeya, Koko, Pfunda, Rusizi and Ruhwa rivers

and their tributaries (RWFA, 2019b). Rwanda shares some of these water resources with neighbouring countries. Rivers Rusizi, Akanyaru, Akagera and Cyohoha south and Lake Rweru are shared with Burundi; River Akagera with Tanzania; the Muvumba River with Uganda; and Lake Kivu and Rusizi River with the Democratic Republic of Congo (Figure 3).

Table 5 and Figure 2 summarises information on the major lakes and the water resources network of Rwanda respectively.

Table 5. Water resources network of Rwanda

Group	Lakes	Characteristics
Lakes of the north	Kivu	<ul style="list-style-type: none"> Depth: 478 – 480 m Low oxygen content
	Burera, Ruhondo and smaller ones like Karago	<ul style="list-style-type: none"> High altitude lakes Relatively acidic Deep lakes Low biodiversity and phytoplankton
Lakes of the center	Muhazi	Av. Depth: 3 – 5m
Lakes of Bugesera	Rweru, Cyohoha south, Cyohoha north, Kidogo, Gashanga, Rumira, Kilimbi, Gaharwa	<ul style="list-style-type: none"> Av. Depth: 3-5m High PH High turbidity High PH and organic content.
Lakes of Gisaka	Mugesera, Birira and Sake	
Lakes of Nasho Basin	Mpanga, Cyambwe and Nasho	
Lakes of Akagera National Park	Ihema, Kivumba, Hago, Mihindi, Rwanyakizinga	Lakes of Akagera National Park

Adapted from Chemonics International Inc. 2003⁶, Kabalisa 2006⁷, NBI 2005⁸.

⁶Chemonics International Inc. (2008). *Rwanda Environmental Threats and Opportunities Assessment 2008 Update*. EPIQ IQC Contract No. EPP-I-00-03-00014-00, Task Order 02. Biodiversity Analysis and Technical Support for USAID/Africa, USAID, Kigali.

⁷ Kabalisa V. P., (2006). *Analyse contextuelle en matière de Gestion Intégrée des Ressources en Eau au Rwanda, Document de Travail pour l'ONG Protos (Rapport final)*.

⁸ NBI (2005). *National Nile Basin Water Quality Monitoring Report for Rwanda*. Nile Transboundary Environmental Action Project, Nile Basin Initiative (NBI), Kigali.

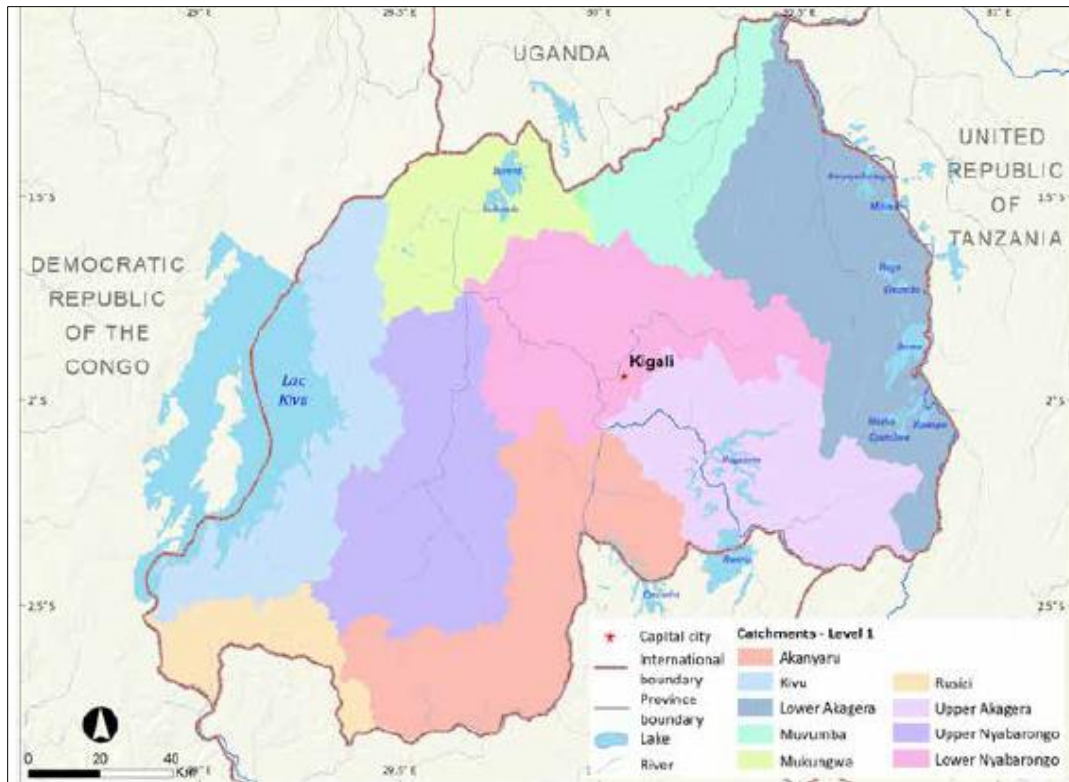


Figure 2. water resources network of Rwanda (L1 Catchment)

Rwanda has a dense hydrographical network of $\pm 2 \text{ km/km}^2$ (length of the superficial flow network by km^2 of surface). Nyabarongo and Akagera rivers are closely associated with vast marshes and numerous shallow lakes found along these rivers. The ecology of these ecosystems is very dynamic and complex. Marshland vegetation and the size of the lakes change continuously with the rainfall and the flow rate of the rivers. The hydrographic network is very limited in the District of Nyagatare and Gatsibo but becomes so dense in Western Province (Nyamasheke, Karongi, Rutsiro and Nyabihu), Southern Province (Nyaruguru) and Northern Province (Gakenke) of Rwanda. Very few small rivers, some of them erratic and intermittent, are observed in Eastern Province while permanently abundant and big rivers dominate the South, West and North.

4.1.4 Underground water

The Rwandan underground water is dominated by the water of wetlands covering some 278,000 ha. The catchment/watershed of these wetlands are the many hills that catch rainwater and drain slowly to the lower areas where the marshlands modify the movement of water in the channel network by lowering the peak flow and volume of flood discharges. Groundwater in most of these marshland's areas is found at a depth of 8 m. The marshlands provide recharge of the ground

water through percolation during water retention time in the area. The outflow of the underground renewable water resource is estimated at 66m³/s. Out of this, the 22,000 known sources contribute an output of 9m³/s. In general, little information is available on underground resources. The total area of marshlands of Rwanda is estimated at about 278,000 ha which are partially exploited depending on their degree of flooding.

4.1.5 Lakes

Rwanda has some 28 lakes of significant size and 73 lakes of small size. Six largest are located entirely within the national territory: Ruhondo, Burera, Muhazi, Mugesera, Ihema and Rwanyakizinga. Three others, Rweru, Cyohoha and Kivu, are shared with neighboring countries. The largest and most spectacular is Lake Kivu. It lies at 1,460 m above sea level and is 90 km long (North-South) and 49 km wide (East-West). From an average depth of 220 m, it plunges to a maximum depth of 475 m. Lake Kivu has a rough, jagged coast and contains numerous islands of which is the largest. Lake Kivu lies on the border with Congo in Western Rwanda at the foot of the volcanoes. Although there is a species of small edible fish in the lake, it is poor in fauna, but rich in volcanic substances. Great volumes of dissolved methane gases exist in its deep waters, which have begun to be developed as an energy source. Lake Kivu drains to the south into Lake Tanganyika by the swiftly descending Rusizi River (*Figure 3*).

4.1.6 Wetlands

Wetlands (*Figure 3*) cover a total area of 278,000 ha or about 10.6 % of the national territory. They include a variety of ecosystems, ranging from large, permanently flooded swampy peatlands to smaller, seasonally flooded wetlands with more mineral soil. In the highlands of the Northwest, there are Burera and Ruhondo lakes as well as the marshland of Rugezi. In the Central and the Eastern part of the country, wide marshes are those of Nyabarongo, Akanyaru and Akagera rivers. Many lakes connect with rivers and most of them are located in the Akagera National Park. The main swamps are Akanyaru (30,000 ha) on the border with Burundi, Mugesera-Rweru in the Southeast, Akagera swamp along the Tanzania border in the East, Nyabarongo (10,000 ha) and the Rugezi wetlands (5,000 ha) and Mukungwa and Base wetlands in the North. The wetlands serve as troughs for sediment particles and play an important role in the national water balance by acting as a buffer, thus reducing the maximal flow rates during the rainy season and maintaining a relatively high flow rate during the dry season. Currently, an estimated 94,000 ha have been brought under agriculture, the large majority of this being spontaneous agriculture with

maize, sweet potatoes and beans. In addition, the wetlands are used for a variety of traditional activities including the collection of leaves to make handicrafts, extensive grazing and making of bricks. Wetlands also provide a spawning habitat for fish and are of great significance for biodiversity conservation.



Figure 3. Wetlands, Lakes and major Rivers in Rwanda

Given the importance that the Government of Rwanda attaches to wetlands, Rwanda ratified the RAMSAR Convention (or convention on wetlands) in 2003 and has already registered on the RAMSAR list the site of Rugezi and identified other potential sites that will be registered in the future, like the complex of Mugesera-Rweru, Kamiranzovu marshes and the wet zones of the Akagera National Park. In addition, an action plan for the implementation of the RAMSAR Convention was developed in June 2004. Table 6 highlights some of the main types of wetlands found in Rwanda and their features.

Table 6. Types of swamps in Rwanda, functions and vegetation

No	Type	Type of Soil	Type of vegetation	Function	Some examples	Observations
1	High altitude swamps	Peaty (developed peat)	<i>Miscanthus violaceus</i> , <i>Cyperus latifolius</i> , <i>Lobelia</i> , <i>Ericaceae</i> , <i>Sphagnum</i>	Water reserve, Water source swamp, biodiversity reserve	Kamiranzovu, Rugezi	Source, biodiversity and water reserve Swamp
2	Volcanic highland Swamps					Swamps closed by basaltic flows
2.1.	Buberuka volcanic highlands	Peaty	<i>Reclaimed - under crop</i>	Unique Ecosystem in Rwanda	Mutobo	
2.2	Cyangugu Volcanic Highlands	Peaty	<i>Cyperus papyrus</i> , <i>Syzygium</i>	Water reserve, water source mash, filter Swamp	Gishoma, Mushaka	
3	Central plateau Swamps	Mineralized soil (Clay sandy, limono sandy)	<i>Cyperus latifolius</i> ,	Water reserve, Agricultural production	Mwogo Runukangoma Ruziramigozi Rwasave, Base Nyabugogo	This group consists of a number of important Swamps often drained by agriculture and livestock
4	Swamps of Kanyaru-Nyabarongo and Akagera Basins	Organic with less developed peat	<i>Cyperus papyrus</i> , <i>Phoenix reclinata</i> , <i>Syzygium cordatum</i>	Water reserve, water source Swamp Dam	Ngenda, Rwabosoro, Sake, Mugesera	All the Swamps around lakes in Bugesera and in the Akagera National Parc, peaty
5	Swamps in the East	Vertisol	<i>Typha domingensis</i> <i>Polygonum pulchrum</i>	Water reserve	Rwagitima, Kanyonyomba Ntende	This type of Swamp appears in Umutara and part of Byumba

6	Swamps of Bugarama depression.	Mineralized and vertisol Swamps	<i>Typha</i> , <i>Pragmites mauritianum</i>	Agriculture production	Bugarama, Muganza	This type is unique in Rwanda and is conducive to rice cultivation
7	Swamps on the edge of Lake Kivu	Mineralized Swamps	<i>Cyperus papyrus</i> <i>Cyperus latifolius</i> <i>Typha</i>	Biodiversity	Mugonero, Koko	

4.1.7 Soils and land use

The Rwandan pedology is characterized by six types of soils namely: Soils derived from schistose, sandstones and quartzite formations (50%); Soils derived from granite and gneissic formations (20%); Soils derived from basic intrusive rocks (10%); Soils derived from recent volcanic materials (10%); Soils derived from old volcanic materials (4%) and Alluvial and colluvial soils (6%). There is also an assortment of deposits of minerals such as tin, wolfram, Colombo tantalite and gold with the mining sector playing significant role in the national economy and as one of the key drivers of foreign direct investment in the country. Rwanda's soils contain many of the metal compounds found in laterite soils, but are generally lighter, more fertile, more workable, and less problematic to farmers than true laterite soils. There are two sub zones, with vastly different soils. To the northwest and the lower portions of the larger river valleys are very fertile volcanic soils covering approximately 10% of the country. Elsewhere, the largely metamorphic bedrock has produced generally poor quality with fertility varying and depending on extent of erosion and leaching. As per the new National Land Use and Development Master Plan for the next 30 years (2020-2050), 47.2% (12,433km²) of Rwanda's land is agricultural land (both arable and pastureland), 29.3% (7,725 km²) forest, 15.1% (3,980km²) settlements and infrastructures, roads inclusive and 8.5% (2,200km²) of water bodies, wetlands and their buffer zones.

4.1.8 Air

The air pollution from dust particles and vehicle emission is increasingly growing. Exposure to poor air quality can cause a variety of health problems such as respiratory infections, cardiovascular disease, strokes and lung cancer. The inventory of air pollution sources in Rwanda (REMA, 2018) showed 2,227 deaths were attributed to ambient air pollution in 2012. In the same period, the top cause of morbidity in health centers of Rwanda was acute respiratory infections, accounting for 21.7% of all patients admitted to health centers and 6.8% of patients admitted to hospitals. Respiratory infections are the largest cause of deaths in children under the age of five in Rwanda. During the dry season, there is a marked increase in air borne diseases due to dust particles emission especially in urban areas (REMA, 2009). Poorly maintained roads, old mopeds, motorcycles and vehicles cause an increasing concentration of different air pollutants (Henninger, 2009).

The air pollution resulting from construction and manufacturing subsectors are expected to increase during the AFIRR implementation since the number of operational processing units is anticipated to increase. Adequate mitigation measures should be proposed to minimize air pollution levels as well as diseases and ill-health effects associated with air emissions from industrial sources.

4.2 Biological Environment

Rwanda is covered with diverse ecosystems that include mountains, forests, gallery forests, savannahs, wet and aquatic zones, wood and agro ecosystems. All these ecosystems have a rich flora and fauna. From the initial environment assessment, the proposed subprojects do not affect any critical natural habitats, as they will be implemented in the areas reserved for industrial activities or already under use.

4.2.1 Protected areas

Rwanda has nine Protected Areas covering a land area of 232,000 ha, about 9.11 percent of the country (Figure 4). The land use balance sheet 2050, in the proposed National Land Use and Development Master Plan 2020-2050, has set 37.7 percent of the country's surface to be set aside for conservation purposes. This is expected to meet the global set targets of 27 percent as stipulated by the SDGs (GoR, 2020⁹). Three of the protected areas are transboundary. These are the Greater Virunga landscape bordering Rwanda, Uganda, DRC (1,500,000 ha), Kagera Trans Frontier Conservation Area shared by Rwanda, Tanzania, and Uganda (25,000 ha), and Nyungwe-Kibira between Rwanda and Burundi (117,100 ha)

The Akagera National Park (ANP) combines wetland and savanna habitats and has one of the most diverse fauna of the African continent, with over 500 bird species recorded. The Nyungwe National Park (NNP) is one of the most biologically important montane rainforests in central Africa, with more than 260 species of trees and shrubs, 260 species of birds, 100 species of orchid and 13 species of primates. The area forms the watershed for 70% of Rwanda's streams and feeds both the Congo and Nile basins. The Volcanoes National Park (VNP) hosts 245 plant species, 180 bird species and 115 mammal species, including the mountain gorilla *beringei*. The

⁹ Concise Sector Working Paper: Revising Rwanda's Green Growth and Climate Resilience Strategy. Kigali: Republic of Rwanda.

Nyungwe and Volcanoes parks form part of the Albertine Rift biodiversity ‘hotspot’ and have been ranked as high-priority conservation sites, both for their species richness and for endemic and IUCN listed threatened species; of 38 surveyed sites in the Rift, Volcanoes is ranked first and Nyungwe third.



Figure 4. Protected areas in Rwanda
Source: Rwanda

Rwanda has a range of protected areas which includes national parks (Akagera, Nyungwe and Volcanoes National Park); forest reserves (Gishwati, Iwawa Island and Mukura forest reserves); forests of cultural importance (Buhanga forest); and wetlands of global importance (Rugezi-Burera-Ruhondo wetland complex) and some forest reserves like Muvumba Acacia forest gallery. Nyungwe, Mukura-Gishwati and Volcano National Park) are highland forests with a high degree of biological diversity and rare animal species, such as mountain gorillas, Ruwenzori colobus monkeys and golden chimpanzees. There are other forests of cultural importance (Busaga forest

in Muhanga district) and other remnant natural forests which are more or less protected by law (Figure 4; Table 7)

Table 7 Major forest protected areas and other natural forests in Rwanda

Name of the protected site	Conservation status and threats
Akagera National Park	<ul style="list-style-type: none"> ▪ The park has a management plan for the period 2006-2010 setting the community-based approach conservation as a priority ▪ Threats includes poaching, existence of water hyacinth weed in lakes, bush fires during the dry season, illegal grazing and fishing ▪ Isolation constitutes a significant threat to species with small population size such as lions, elephants and rhinoceros
Nyungwe National Park	<ul style="list-style-type: none"> ▪ There is a need to have a management plan for harvesting trees planted in buffer zone ▪ Threats includes poaching, mining, bamboo harvesting, bushfires associated with beekeeping and the <i>Sericostachys scandens</i>
Volcanoes National Park	<ul style="list-style-type: none"> ▪ Promotion of community-based conservation and eco-tourism ▪ Threats include poaching, agriculture encroachment, wood cutting for firewood and construction, bamboo harvesting, water collection, medicinal plant collection and beehive placement
Gishwati Forest	<ul style="list-style-type: none"> ▪ The clear-cutting the forest has resulted in recurrent landslides and floods ▪ Threats includes encroachment for farming and grazing land ▪ Efforts are being made to restore the forest and the conservation efforts are focused on the restoration through enrichment with local species, demarcation of boundaries of the reserve with stones or a live fence of fast growing species and promotion of community-based conservation, ▪ Natural self-rehabilitation and a natural regeneration of primary; and high value species are progressively colonizing the forestland (<i>Carapa grandiflora</i>, <i>Entandrophagrama excelsum</i>, <i>Symohonia globulifera</i>) are being observed as a result of protection efforts.
Mukura Forest	<ul style="list-style-type: none"> ▪ Threats includes agriculture, fuel wood collection, beekeeping, collection of liana, and cattle grazing in the forest.
Busaga forest	<ul style="list-style-type: none"> ▪ important wildlife fauna and flora biodiversity is also important (snakes, monkeys, birds, jackals, etc.).
Buhanga forests	<ul style="list-style-type: none"> ▪ The conservation of the forest is mainly due to its cultural interests which consider the forest as sacred. ▪ The forest has acquired a status of protected area in 2005 by a Cabinet Decision and they are plans to develop eco-tourism in the forest.
Gallery Forests in Eastern Province	<ul style="list-style-type: none"> ▪ Threats include encroachment for agriculture, bushfires, search for medicinal plants, fuel wood collection and conflicts between the population and the wildlife fauna of the forest that is damaging their crops, informal management actions for conservation are taking place including awareness raising in school, preparation of strategic plan for the management of the forest, sensitization of the local population, and research activities especially in Makera forest (74 ha in Kirehe districts)

Species diversity:

Rwanda is home to 402 mammal species (about 40 percent of Africa's mammalian species); 1,061 bird species, 293 reptile and amphibian species and 5,793 higher plant species (REMA, 2019¹⁰). Mountain gorillas (*Gorilla beringei beringei*) generate important tourism revenue and are found in only two other countries – Uganda and the DRC. The Chimpanzee (*Pan troglodyte*), another critically endangered species, has about 500 individuals. There are many other primates including endemic species that have made Rwanda a primatologist's paradise (GoR, 2020⁹). The Red List Index (RLI) shows trends in overall extinction risk for species and is used by governments to track their progress towards targets for reducing biodiversity loss. The RLI index for Rwanda remained stable to 0.88 between 1993-2020 (UNEP, 2020¹¹)

4.2.3 Biodiversity in agricultural systems

a) Croplands

Rwanda agricultural land presently covers around 55.8 % of the total surface area of the country and is continuously cultivated. The time between two growing seasons is the only period of respite. These areas have various crops that play an essential role in the national economy. These crops are usually grouped in two categories: subsistence and cash crops. Some of the food crops include sorghum, beans (*Phaseolus vulgaris*), eleusine (*Eleusine corocana*), Colocases (*Colocasia antignorum*), maize (*Zea mays*), rice (*Oryza sativa*), wheat (*Triticum sp*), barley (*Hordeum vulgare*), peas (*Pisum sativum*), sojabean (*Soja hispada*), peanut (*Arachis hypogea*), sweet potato (*Ipomea durcis*), potato, cassava (*Manihot esculanta*) and banana (*Musa spp*).

The importance of each crop varies according to regions. Some crops, like bananas, potatoes, different varieties of wheat, sorghums and beans are subject to high commercial trade. Potatoes, beans, cassava and bananas are present everywhere for the daily diet of the people. The cash crops are very few and limited to coffee, tea and pyrethrum.

b) Pastoral zones

In Rwanda, the essential part of animal husbandry is comprised of one family ownership with a small number of animals per household. As agriculture occupies the biggest portion of land, the

¹⁰ REMA, (2015) Rwanda State of Environment and Outlook 2015. Kigali: Rwanda Environment Management Authority

¹¹ UNEP, (2020) Sustainable Development Goals scorecard. Nairobi: United Nations Environment Programme

cows graze in paddocks, on roadsides, and in some parts of marginal lands. This obliges farmers to adopt the zero grazing or semi-permanent farming and grow fodder crops such as *Tripsacum laxum*, *Setaria spp*, *Desmodeum spp*, *Pennisetum purpureum*, *Mucuna pruriensis*, *Cajanus cajan*, *Calliandra calothyrsus*, *Leucaena diverifolia*, *Sesbania sesban*, etc.

However, one can notice the development of ranching in Nyagatare, Gatsibo, Kirehe and Kayonza Districts of Eastern Province and Gishwati area in Nyabihu District of West. Other pastoral land is very limited across the country. These areas are prone to bush fires, trampling and sometimes overgrazing. The latter is the main cause of reduction of the biological diversity as it exterminates the threatened species along with pyrophile species with small bromatological value, such as *Eragrostis spp*, *Sporobolus spp* and *Digitaria spp*.

c) Forestry and tree cultivation

Tree planting in Rwanda was limited to some plants around households such as *Ficus thoningii*, *Euphorbia tirucalli*, *Erythrina abyssinica*, *Vernonia amygdalina*, *Dracaena afromontana*, etc., but cultivation of woody perennials for timber, energy uses, or other services was not customary.

The first forest plantations were created in 1920 and 1948 and only consisted of Eucalyptus. Later on, other tree species were introduced. These included *Pinus spp*, *Callistris spp*, *Grevillea robusta*, *Cedrella spp*, *Cupressus spp*. The Arboretum of Ruhande (Huye District) has 206 species among which 146 feuillus, 56 resinous and a species of bamboo.

Those species proved to be dangerous for the biological patrimony because they drain and further acidify soils that already are acidic, which in turn causes reduction or even extermination of the undergrowth. Thus, planting those species eventually leads to erosion.

The tree-covered surface area was estimated at 256,300 hectares in 1998. Despite efforts of diversifying tree species, it was estimated that 99 % of planted trees consisted of Eucalyptus spp. The replacement of those trees by agroforestry species, such as *Grevillea*, *Cedrella*, *Maesopsis*, *Calliandra*, *Leucena* proves to be of urgent need, including developing agroforestry in agricultural zones.

4.3 Socio-Economic Environment

4.3.1 Population and demographic characteristics

Rwanda is classified among the densely populated countries of the world. The Fifth Rwanda Population and Housing Census of 2022 places Rwanda's population at 13,246,394 residents, of which 6,817,065 (51.5%) are women and 6,429,326 (48.5%) men. The population density increased from 415 inhabitants per square kilometer in 2012 to 503 persons/Km² in 2022. The Eastern Province has the highest population (26.9%), but the City of Kigali remains the most densely populated.

The population of Rwanda is still largely rural, with 72.1% living in rural areas. The majority of the population of Rwanda lives in private households with an average size of 4.3 persons. Households are a bit smaller in urban areas with 4.0 persons. The proportion of young people (below 30 years) dropped from 70.3% in 2012 to 65.3% in 2022 and is expected to be 54.3% by 2050. People aged 65 and above account for only 3% of the resident population; this has consequences in that the demographic dependency ratio, measuring the number of potential dependent persons per 100 persons of productive age, is 93 at national level (NISR, 2012).

According to the findings of Rwanda's 5th Population and Housing Census, a total of 7,976,132 residents are of working age (16 years and over), with females making up 52.5 percent of this population and males' 47.5 percent. At the time of the census, 3,592,736 people were working, with 1,674,100 women and 1,918,636 men. Males had a greater employment-to-population ratio (52.4%) than did females (40.2 percent). Elementary professions involving the completion of simple and ordinary tasks had the highest frequency (50.2 percent) of all occupation types. These occupations account for 52.7% of employed women and 47.9% of employed men, respectively. According to census data, the gender occupational segregation index at the four-digit level of occupation was 0.332, meaning that 32 percent of Rwanda's employed male and female populations would need to switch professions in order to cease occupational segregation. The segregation index rate is 14.8% when utilizing a one-digit level of occupation.

According to the census, roughly 81.3 percent of children between the ages of 6 and 17 are now enrolled in school; of these, slightly more females (84.6 percent) than men (79.8 percent) are doing so. Additionally, the Census shows that more men (6.7%) than women (5.5%) had never attended school. In contrast to rural areas, where more girls (82.3%) than males (78.1%) are currently enrolled in school, more males (85.3%) than females (84.6%) are currently enrolled in school in urban areas. However, in both urban (males: 5.3 percent vs females: 4.5 percent) and rural (males: 7.4 percent vs females: 5.8 percent) areas, the percentage of men who have never attended school is larger than that of women.

Health insurance improves access to health care, thus promoting good health. At the national level, 90.4 percent of Rwanda's population has health insurance coverage under the public program known as "Mutuelle de santé," with 90.9 percent of women and 89.9 percent of males being covered by this program, respectively. This indicates that Mutuelle de Santé in Rwanda provides health insurance to nine out of ten men and women. The population in rural areas (females:93.8% vs males:93.1%) is likely to have a higher insurance coverage by Mutuelle de santé than persons residing in urban areas (females:83.1% vs males:81.9%). More females in both rural and urban areas are more likely to have a higher proportion of insurance coverage than their men counterparts. According to the World Economic Forum's 2022 Global Gender Gap Report, which tracks progress on relative differences between women and men in terms of health, education, economy, and politics, Rwanda is rated sixth among 153 nations in terms of narrowing gender inequalities.

4.3.2 Human settlements

a) Rural settlements

For years, rural settlements in Rwanda have been and continue to be scattered in some regions of the country. For a long time, they have been characterized by unplanned occupation of space, thus doing harm to environment by wastage of land and soil erosion. However, in December 1996, the Government adopted a national human settlement policy aimed at establishing an improved rural human settlement model, grouping settlements in villages generally known as IMIDUGUDU, which meet the criteria of environmental viability through the reorganization of the national space, land reform, improved housing quality, etc.

b) Urban settlements

Urbanization is occurring fast throughout Rwanda, as evidenced by expansion of unplanned urban settlements in cities and their surroundings. In 2015, the urbanization policy was put in place to discourage the proliferation of unplanned residential areas with a view to improving sanitary and security conditions and provide decent houses and socio-economic infrastructure. NISR (2014) indicates that the urban population increased from 4.6% in 1978 and 16.5% in 2012. This population reached 27.9% in 2022 (NISR, 2022). The current Rwandan population is projected to reach 16,396,633 in 2032 and 23,558,616 in 2052 and the urban settlement including 101 cities and towns will host 70% of the entire population by 2050 (i.e., 15.4 million on 1,754km²).

The current project will mostly be implemented in urban and suburban areas. As per the national land use and development master plan 2020-2050 (GoR, 2020), the urbanization hierarchy has been established with an estimated urban population for each city: Kigali city as capital, with 3.0 to 3.8 million of residents; three satellite cities (Rwamagana, Bugesera and Muhanga) with 650,000 to 1.0 million of residents, eight secondary cities (Musanze, Rubavu, Rusizi, Nyagatare, Huye, Karongi, Kayonza, and Kirehe) with populations between 250,000 to 650,000 residents and 16 districts towns (Gisagara, Nyanza, Ruhango, Kamonyi, Nyamagabe, Nyaruguru, Ngoma, Gatsibo, Rulindo, Gakenke, Burera, Gicumbi, Rutsiro, Nyabihu, Ngororero, Nyamasheke) with populations between 100,000 to 250,000 residents and 73 “urban settlements, or emerging centres with 20,000 to 10,000 residents.” These urban centers include Byimana, Kinazi, Gitwe-Buhanda in Ruhango District, Kaduha and Gasarenda in Nyamagabe and Nyagasambu in Rwamagana. Musanze District has Byangabo and Remera-Ruhondo, while Rulindo has Kinihira,

Base among others. Birambo, Shyembe and Mugonero among others in Karongi also feature on the list of urban zones.

4.3.3 Agriculture

Agriculture is the main socio-economic activity in Rwanda. It is an important sector of the Rwandan economy with a contribution of 33% to the GDP. The agriculture production system is based on small family exploitations whose production is consumed by the owners. The systems of crops are complex, based on the diversification of productions and the association of crops. The little use of chemical fertilizers and pesticides, the low level of equipment and the very limited use of research-based technologies result in small yields which are also very vulnerable to climatic changes.

The extensive agriculture practiced by the Rwandan population contributes to the degradation of environment. The agriculture intensification at the level of projects was often realized without taking into account the adverse environmental impacts from inputs like fertilizers, pesticides, herbicides etc.

4.3.4 Energy and transport

The current Master plan 2020-2050 intends to bring in a consolidated master plan in six thematic areas that are urbanization and rural settlement, Agriculture, Infrastructure, Industrial development, and Environmental component.

In Rwanda, woody fuels, biomass wastes, methane gas of Lake Kivu representing 57 billion m³ and solar energy are the sources of energy used in households, industries, and handcrafts. About 85% of the country's primary energy consumption is based on biomass, 11% from petroleum products (transport, electricity generation and industrial use) and 4% from hydro sources for electricity.

The transport sector is generally dominated by road transport. In the sub sector of air transport, the country has two international airports (Kigali and Kamembe) and aerodromes (Huye, Rubavu and Musanze) used in internal transport. Water transport is used mainly on Lake Kivu for connecting districts of the Western Province, mostly Rusizi and Rubavu. Rwanda continues to

invest in roads, rail, and water transport infrastructure with the intent of dramatically reducing the cost of transport to businesses and individuals.

4.3.5 Industrial development

The industry sector of Rwanda is modest and dominated with manufacturing sector. In 2011, the formal industrial sector consisted of 4,752 firms of which 97% were manufacturing, 2% construction and 1% mining and quarrying firms. The majority of these firms were micro (employing less than 10 persons) while SMEs account for 6.1% and large firms (employing more than 100 persons) only 0.8% of all firms in the sector. Though large firms accounted for less than 1% of all firms, they employ 46% of the total workforce in the sector, which corresponds to 15,566 workers. This is growing steadily as it contributed about 17 % to the country's GDP in 2019. Reports indicate that manufacturing sector grew by 8% for 2017/18 fiscal year from 6% in the previous financial year.

The Rwandan industrial sector is currently engaged in the production and processing of the following:

- ***Construction materials***

The construction of buildings and roads infrastructure is consistently growing, and this is leading to high demand for construction materials including cement, electric cables, steel materials, clay, and granite products (tiles, bricks and paving blocks), float glass, roofing sheets, light items, aluminum products, wood products, paints and varnishes and plastic tubes.

- ***Light manufacturing***

This includes textile and garments, pharmaceuticals, soaps and detergents, reagents, body care products and cosmetics, packaging materials, plastic goods, wooden furniture and insecticides, paper tissues, plastic goods, papers, chemicals.

The textile and garments are still small with only one major textile manufacturing company (UTEXRWA), a number of sizeable, small to medium scale operators, knitting cooperatives and a silk sector, which is in its infancy stage.

Given the unique characteristics of the Rwandan market, the following local production options seem most promising: (i) Manufacture of mosquito bed nets for malaria prevention, (ii) processing

of cotton, wool, and other woven fabric for use in uniforms and work wear; weaving bed sheets and towels; (iii) new garments manufacturing like fast-moving consumer goods (detergents, body care products, paper tissues, plastic goods, papers, chemicals, beverages, textiles, leather and footwear and cosmetics).

Most of the packaging materials needed in the country are imported and the manufacturing of corrugated paper and carton board boxes, unprinted paper labels, small paper bags and sacks, paper containers, etc. would be the most promising opportunity on the domestic market.

- ***Agro-processing***

This is a flourishing sector that contributes up to a third of Rwanda's GDP. It is a major source of employment and income, thus providing access to food and other necessities for large groups of the population. The Rwandan agro-processing comprises of processing locally available raw materials to produce products such as wine, beer, soft drinks, flour, sugar, rice, cheese, honey, cooking oil, tea, coffee, leather and footwear, essential oils among others.

- ***Electronic and automotive manufactured goods*** such as phones, computers, and vehicle-assembly.

The economy is heavily dependent on the growing sector as primarily and fully manufactured exports from Rwanda found a big market in the EAC region due to their high quality and strategic positioning of the country. The light manufacturing, agro-processing inclusive and construction materials will be supported by the present project. Since the adoption of the National Industrial Policy in 2011 and to increase the local domestic and foreign supply of manufactured goods, the Government has put in place the Special Economic Zone (SEZ) and 9 Industrial parks in Bugesera, Rwamagana, Muhanga, Nyagatare, Musanze, Huye, Nyabihu, Rusizi, and Kicukiro, is aimed at addressing shortcomings in the business environment by developing infrastructure, streamlining business regulations, and facilitating fast-moving investors.

The country has access to several regional and international markets through different free trade agreements like EAC, COMESA, World trade organization (WTO) declarations, etc. These

installations are sometimes sources of pollution because of their air emissions, wastes, liquid (waste waters) or gaseous (dust, smoke, smell), and noise. Mines and quarries are found on hills surrounding all potential project sites.

4.3.6 Tourism

The tourism sector contributed 14.9% to the country's GDP in 2018 and the country experienced its highest annual growth in tourism revenue in 2019 with over 1.63 million visitors visiting the country and US \$498 Million in earnings from US \$438 Million in 2017. The tourism industry is projected to generate US \$800 Million by 2024. However, the tourism sector was seriously hit by the spread of the Covid-19 pandemic and missed out on about US \$10 million in March and April 2020 alone. Temporary closure of hotels and restaurants, restrictions on travel and movement of people, including tourists, negatively impacted the tourism industry. The hotels and restaurant and transport are projected to be supported through refinancing of existing financial commitments to cope with the pandemic impacts.

4.3.7 Cultural resources in Rwanda

The national cultural resources are composed of the tangible cultural heritage (buildings, monuments, landscapes, books, works of art and artifacts, etc.) and intangible cultural heritage (practices, representations, expressions, folklore, traditions, language, and knowledge, and natural heritage including culturally significant landscapes, and biodiversity).

The tangible cultural heritage in the country includes museums, caves and rocks with bas-reliefs marking the legendary or historically events that occurred on the site, churches and other colonial buildings, sacred hills, forests and trees with legendary history, thermal springs and wells used for ritual purposes, etc. Rwanda has 6 museums that make up the Institute of National Museums of Rwanda (INMR) including (i) King's Palace in Rukari, Nyanza District; (ii) Ethnographic Museum in Huye District, (iii) Kigali Genocide Memorial at Gisozi, Gasabo District, (iv) Rwanda Art Museum, formerly the Presidential Palace Museum in Kanombe, Kicukiro District, (v) Kandt House Museum in Nyarugenge, Nyarugenge District and (vi) Museum of the Environment, near Lake Kivu in Karongi District.

The King's Palace is the reconstruction of the traditional royal residence, a beautifully crafted thatched dwelling in Nyanza, the former capital of the kingdom in Rwanda. The Ethnographic

Museum, a gift from the King Baudouin of Belgium in late 1980s, displays historical, ethnographic, artistic, and archaeological artefacts accompanied by visual aids, giving visitors a rich insight into the Rwandan culture. Three museums are located within Kigali City. Kigali Genocide Memorial at Gisozi, inaugurated in 2004, is the final resting place for more than 250,000 victims of the Genocide against the Tutsi. Beyond this main memorial center, there are other memorials across the country, including the Genocide Memorial of Nyanza, Ntarama, Nyamata, Murambi, Camp Kigali Belgian Monument, etc.

The second museum is the Rwanda Art Museum that displays contemporary artworks from the country and abroad. The flight debris from the presidential jet shot down on April 6th, 1994, are within the garden of the Museum and remain a heritage site. The Kandt House Museum is another cultural heritage site within the City of Kigali.

It was the residence of the first Germany colonial governor of Rwanda, Richard Kandt, until the early 1900s. It includes three main parts: (i) the social, economic, and political life of Rwandans before the colonial period, (ii) the experience of the Rwanda citizens during the colonial period and (iii) the history of Kigali before, during and after the colonial period. The environmental Museum, located in the Western Province, mostly presents traditional herbal medicine garden.

The caves in Musanze District; rocks of Ndaba, Kamegeri, Ngarama, Shali, etc., Kibeho holy area, thermal springs of Bugarama, Buhanga kwa Gihanga natural forest, etc. are many other cultural resources across the whole country.

As per the Law No 28/2016 of 22/07/2016 on the preservation of cultural heritage and traditional knowledge, the intangible cultural heritage can be divided into two:

- Oral tradition, oral literature, songs, cultural dances, rituals and taboos, intangible art, crafts and folklore, festivals, cultural events, knowledge, and practices;
- documentary heritage: rare manuscripts, pictures, slideshows, and speeches.

The above law provides for the protection of Rwandan cultural heritage, both tangible and intangible resources.

4.3.8 Environmental Component

The Rwanda's economy development is also dependent on environment and natural resources like air, land, biodiversity, water and minerals. Though the AFIRR project sites and activities are not yet confirmed, the support to manufacturing and construction sectors is anticipated to result in the E&S concerns below:

- labor and working conditions,
- OHS, community health and safety risks,
- dust and noise emissions,
- water/energy pollution,
- generation of waste;
- soil and water pollution at the subproject level
- Gender based violence/ sexual harassment.

These are expected to be site-specific, reversible and can be addressed through standard mitigation measures. The environmental and natural resources issues will be addressed during the implementation of this project.

Chapter5 : PUBLIC CONSULTATION AND PARTICIPATION

5.1 Introduction

Stakeholder engagement is the basis for building strong, constructive and responsive relationships with project beneficiaries and stakeholders and improve project ownership for the successful implementation of a project's environmental and social impacts. It helps in highlighting the socio-economic and environment concerns and impacts that could arise from the project and coming up with appropriate mitigation measures. Consultation has also been found to develop a sense of stakeholder ownership of the project and the realization that their concerns are taken seriously, and that the issues they raise, if relevant, will be addressed in the updated ESMF and will be considered during project design refinement

In the framework of the parent project, the consultation and engagement process were held between June 1st and 30th, 2021 and focused on providing information on the AFIRR project to 76 project stakeholders, identifying potential impacts and offering the opportunity for alternatives or objections to be raised by the potentially affected parties, Government agencies and other stakeholders. Due to the Covid-19 restriction measures, face-to-face meetings and phone calls with some potential project beneficiaries were organized to raise awareness on the project and get a feedback from them. Separate meetings with 11 commercial banks (BK, Cogebanque, Equity Bank, I&M Bank, KBC, BPR, Access Bank, GT Bank, NCBA, ECOBANK, Bank of Africa), Cooperative bank (Zigama CSS) and 48 Umurenge SACCOs, 1 Construction material (Ruliba Clays) as well as phone calls of a steel manufacturing unit (Master Steel Limited), rice cooperative (CooprORIZ Ntende), 2 agro-processing units (juice and wine processing units) and 2 microbusiness owners (tailoring workshop, poultry) were conducted.

One online meeting with Commercial Banks and ZIGAMA CSS on one side and a series of physical meetings with Umurenge SACCOs on the other hand, were organized. The consultations with project implementing agencies (BRD and BDF) and key public institutions including REMA, RDB, RLMUA, Kigali City and Districts (Kayonza and Rubavu), respectively represented by the Division Manager of Environmental Compliance and Enforcement Division, Environmental Expert, Head of Surveying, Land Use and Mapping Department, and Environmental Officers of Kigali City and Districts of Kayonza and Rubavu were also held. The list of both physically and virtually

consulted people is presented in Annex 10. Further consultations and workshops were held during the project implementation phase through awareness campaigns and the preparation of ESIA/ESMP studies in all selected subproject areas of Kigali City and participating Districts to ensure the effective and efficient implementation of the project's ESMF. All project stakeholders at all times are involved in the consultation process and given equal access to information. Special attention was also given to vulnerable groups, in particular women, youth, persons with disabilities.

5.2 Public consultations for additional financing

The GoR received additional financing (AF) for AFIRR of US\$ 100 Million to address the growing demand for financing from private businesses through the provision of financial relief, risk-sharing instruments, and long-term sources of funding to businesses. This AF will maintain the structure and design of the parent project and strategically scale up support through some of the subcomponents. More specifically, it will focus on transport, tourism as well as sustainable linked bond (SLB). Consultations with key actors in transport sector were contacted by BRD on April 24 and 26th, 2023 starting with public institutions (MININFRA, City of Kigali, RSSB) and later inviting buses operators. Eight (8) transport operators (namely KBS, RFTC, YAHOO CAR EXPRESS Ltd, ROYAL EXPRESS, EBENEZER, RITCO, KIVU BELT EXPRESS, JALI TRANSPORT Ltd, and Volcano Express Ltd). The Vivo Energy Rwanda (VER), Vivo Energy and Vitol were also invited. VER is the leading supplier of fuels and lubricants to Rwanda's fast-growing construction industry, power plants, and transport sector while VIVO deals with circularity within the construction sector. The meetings were chaired by Byiringiro Alfred, Chief Technical Advisor in the Ministry of Infrastructure (MININFRA) at the Ministry Headquarters.

The contacted transport agencies are operating either within the City of Kigali (KBS, Royal Express Ltd) or upcountry (RITCO, Kivu Belt, Ebenezer, RFTC, Volcano Express Ltd, etc.). The list of transport agencies and public institutions and companies involved in the tourism sector is presented in Annex 10. A separate meeting with public institutions was held on April 24, 2023, before the meeting with buses operators. with transport and Tour operators were held on April 24 and 26th and 6th Sept 2023 respectively.

5.3 Findings from Public Consultation Meeting

a) Public institutions

As explained above, public institutions playing a key role in the transport sector, and therefore in the successful implementation of AFIRR AF were met with BRD team to explain the AF and its contribution to transport sector, discuss on issues/ challenges faced with transport sector, the applicability of e-buses and propose mitigation measures. They were informed that BRD through AFIRR AF project will provide loans to transport operators to purchase or refinance electric buses and the fund is not eligible to land for charging areas and other relevant infrastructures. The contacted public institutions appreciated the project and promised their support for its successful implementation. To solve the land issues within Kigali, the City of Kigali agreed to avail 2.4 ha public land to be developed for charging infrastructures and other relevant facilities at Nyanza area of Kicukiro District. The GoR will also provide additional land as required. MININFRA informed participants that it is soon starting dedicated buses lanes pilot line that will give priority to buses to decongest main corridors during peak hours. Additionally, the fare system is proposed to be distance based rather than being flat fare as of now.

There are many benefits expected from AFIRR project such as job creation, rural economy, and national economy improvement, etc. However, they pointed out that the project may also generate negative impacts, mostly spent batteries. The authorities consulted urged the project to minimize those negative impacts by developing adequate and stringent mitigation measures and thorough monitoring during implementation.

b) Meeting with transport operators

As mentioned above, two separate meetings with transport operators were organized on April 24 and 26th, 2023. Both meetings were chaired by BYIRINGIRO Alfred, the Chief Technical Advisor in charge of Transport in the Ministry of Infrastructure. The discussions focused on additional financing and eligible activities, challenges in transport sector in general and particularly in e-mobility, technical specification of e-buses that will be purchased to revamp the public transport sector where there is a challenge of reduction of buses in public transport.

In addition to the above, the following were identified as key challenges in the transport sector:

- Old Fleets, causing expensive maintenance (O&M) and low uptime cashflow constraints; failure to secure insurance policies and low collateral value;
- Limited number of buses vis-a-vis high demand;
- Low access to finance by buses operators due to lack of collaterals and own contribution;
- Limited Licensing duration,
- Insufficient road infrastructures that cannot support timetable operations

Financing the purchase of new buses to replace old fleets and increase their number, developing new road infrastructures, issuance of 8 year license by RURA for buses operators, are some of the proposed mitigation measures to transport challenges.

With regard to e-buses, the following issues were raised, and mitigation measures proposed:

- ✓ *Land reserved for the charging area for e-buses:* Operators estimate at 153 charging stations and other relevant facilities and their constructions will require land which should be availed by the Government of Rwanda (GoR).
- ✓ *Caring Capacity of the E-buses to be procured:* Buses operators agreed with experts to have e-buses with 70-pax capacity with consideration of people with disabilities and having 12m long buses to be compatible with our existing road infrastructures.
- ✓ *Battery capacity:* the expert team (VGM) recommended to have a battery that can operate a minimum of 280km per charge; this proposal is estimated to operate the whole day in the CoK referring to existing kilometer travelled by buses;
- ✓ *Good quality buses supply:* The meeting identified potential suppliers of electric buses and found Korea, China and Germany as good market.
- ✓ *Disposal of e-wastes:* The e-buses are anticipated to generate e-wastes that need to be properly managed. Each e-buses operator should have a Memorandum of Understanding (MoU) with Enviroserve Rwanda Green Park (ERGP) for the proper management of e-wastes.

Chapter6 : POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS AND GUIDELINES FOR MITIGATIONS

6.1 Introduction

The new construction, rehabilitation, and expansion of manufacturing and construction materials infrastructures, their operations, refinancing of existing financial commitments of enterprises to ease hardship caused by the Covid-19 crisis and support economic recovery and strengthening the institutional capacity of implementing agencies and their clients (MSMEs and large enterprises) are likely to result in E&S risks and impacts. The support in transport and tourism may also have E&S risks and impacts.

In relation to AFIRR AF project, the potential environmental risks and impacts are mostly related to the Liquidity and Recovery Facility (component 1) and the limited institutional capacity (component 3) of the various implementing financial institutions and their clients to manage the E&S risks. The potential risks and impacts associated with the manufacturing sector include air, soil and water pollution, unpleasant odors and wastes generation (wastewater or hazardous and non-hazardous wastes), e-wastes inclusive, occupational health and safety (OHS) and community health and safety risks, unsustainable use and degradation of natural resources (mostly raw materials, energy, water). The light manufacturing industry related risks and impacts may encompass air and noise pollution, soil and water pollution; wastes including wastewater and hazardous waste, energy use and resource depletion. Under the construction materials sector (e.g., granite tiles, cement, roofing sheets, and tiles etc.), the potential risks and impacts include particulate pollutants (smoke, dust, soot, etc.) causing air pollution, soil and water pollution, noise pollution, pressure on the natural resource base, energy use, OHS and community health and safety. The disposal of used batteries, and road accidents are also some of the issues associated with transport sector. All these risks and impacts are expected to be site-specific, reversible and addressed through appropriate mitigation measures and compliance with relevant national laws and World Bank ESSs requirements.

On the other hand, the potential social risks and impacts are mostly related to the Liquidity and Recovery Facility (Component 1) and Risk-sharing Facility (Component 2) and the limited institutional capacity of the implementing institutions to manage the E&S risks as well as the amount of funds directed to the investment line of credit targeting the manufacturing sector. The

predicted social risks and impacts are mainly be related to non-discrimination, equitable access to finance, lack of participation of small SACCOs and MSMEs in remote areas and marginalized areas due to lack of access to timely and appropriate information on available opportunities for financing; and possible exclusion of women and youth-led businesses, vulnerable and marginalized community members and persons with disability among the MSMEs due to limited efforts from Apex-FIs and PFIs regarding strategies/approaches to address specific needs to ensure successful participation of these groups in accessing the offered product.

The overall, the environmental and social risks associated with this project, both parent project and AF, are rated substantial. This section identifies potential impacts that could arise from AFIRR AF activities both during the construction and operation phases.

6.2 Positive Impacts

The AFIRR AF implementation across the country will bring about many positive impacts. The identified risks and impacts for different phases of the project cycle are discussed in the following sections:

6.2.1 Impact during Planning and Design phase

a) Employment opportunities and income generation

During the planning and design period, new jobs will be created for the skilled and unskilled labour to carry out surveys and prepare designs and study reports. The unskilled labour will be sourced from the local residents. Women and youth will also be given an opportunity to secure employment. The employment will provide income to workers and their families to enable them to satisfy their family needs.

b) Skills transfer

Some designs assignments may require international expertise and the local skilled and unskilled labour are expected to work with the international experts. This process of working together will impart local labour knowledge and skills in the preparation of study and designs.

6.2.2 Impacts during construction phase

a) Employment and income generation

The parent project provided loans to different categories of people/ enterprises to run their businesses. The construction of new factories or rehabilitation and expansion of existing infrastructures; construction of affordable houses, the supply of construction materials, etc. are some of the businesses that improved employment opportunities across the country and provided income to workers and their families to meet their needs. The supply of e-buses and construction of required e-buses infrastructures, support of tourism operators, policies development, etc. are labour intensive and the required labour in this regard will create employment opportunity both to the local and international community. The Project implementers, PFIs and end-beneficiaries will also require labour force for the execution of targeted activities. The project clients shall continue committing to a policy that gives priority to the locals in the neighborhood at the time of hiring casual or skilled labour.

Though difficult to assess, the indirect employment opportunities were created within local communities through the provision of services to the construction and supply teams, such as the sale of food and beverages, accommodation renting and transport. Some truck and machine owners earned money from renting out their vehicles for various construction and supply activities (clearing, excavations, loading, transport, among others). All the above activities generated income to direct and indirect project beneficiaries, improve social welfare in the long run and stimulate overall economic growth. This is anticipated to continue with both parent project and AF activities.

b) Increased public revenues

The revenues are expected to be collected by both the national and local authorities from the procurement of construction materials, equipment, employees' salaries, VAT on materials and services, among others.

c) Capacity building of some project beneficiaries

During the construction phase, skills and knowledge of the labour force will be strengthened to ensure their good performance. The capacity building will be done through training, workshops, awareness campaigns, etc.

6.2.3 Impacts during operation phase

a) Increased and sustained production for recovery of development gains

Before the outbreak of the Covid-19 pandemic, the country enjoyed strong economic growth rates leading to new business prospects. Agriculture, manufacturing, construction, hospitality, trade, transport, etc. are among the business opportunities that enabled Rwandans to lift out of poverty. However, this trend changed with the covid-19 crisis which seriously harmed the continued growth in these sectors. In 2020, hotels and restaurants, the most affected subsector, dropped by 40 percent from a growth of 10 percent in 2019, followed by the education which dropped by 38 percent from 2 percent in 2019, and transport activities with a 24 percent drop from 12 percent in 2019. Furthermore, construction activities and the industry sector also decreased by 6 % and 4 % respectively. Wholesale and retail trade services contracted 3.5 percent and financial services 5.3 percent (NISR, 2020). The agriculture sector only increased by 1% due to heavy rains and floods.

With the support to manufacturing and construction materials sectors along with the gradual recovery of the hospitality sector, the country's economy significantly recovered and AFIRR parent project played a key role in that regard. It has addressed the issue of liquidity and finance access for businesses in 1 year of its implementation. It has disbursed 48.5 percent of its total IDA allocation and 71 percent of the AIIB allocation. Many businesses of project beneficiaries resumed, expanded and new investments created and maintained. This improved the production of construction materials and manufacturing sectors, created and maintained employment and recovered development gains of the country. This trend will be maintained under AF activities.

b) Increased access to finance by MSMEs and large companies

During the Covid-19 crisis period, the MSMEs and large Enterprises affected by the pandemic suffered from lack of liquidity and difficulties in accessing to finance. At that time, 33 % of MSMEs considered the access to finance as their main problem while 79 % of MSMEs confirm that the financial sector does not cover their needs, which hinders their ability to expand their operations, increase output, employment and economic output. The covid-19 crisis coupled with financial issues impacted the continuity of the companies' businesses as well as employment.

The AFIRR parent project not only availed liquidity through provision of working capital and investments at affordable interest rate to various beneficiaries across all corners of the country but also increased access of loans beneficiaries to finance through strengthening risk sharing schemes, thus supporting businesses recovery and improving productivity. The PFIs increased the disbursement of loans and other financial services to various sectors under the scope of this project since the high-risk perception was mitigated. This trend is anticipated to continue throughout the entire project life cycle.

c) Capacity building of project beneficiaries

During the parent project implementation, beneficiaries were capacitated on different topics like bankable business plan development and management, financial statements and records, expansion of operations or diversification of products and services in sectors with domestic, regional and international market links, compliance with environmental and social mitigation measures, etc. The capacity building was done through training and workshops and has imparted skills and knowledge to beneficiaries required for increased and sustained production of their businesses. Most PFIs that partnered with BRD/AFIRR were not familiar with E&S requirements and did not have E&S policies. Through capacity building, the buy-in level of PFIs staff on E&S aspects increased.

The effective use of e-buses cannot be possible without the availability of specialized technical skills and knowledge for repair, maintenance, operation. Training of drivers and technicians is mandatory for the adoption of e-buses technologies.

d) Increased number of businesses benefitting from AFIRR interventions

Due to project awareness, improvement in access to finance, availability of liquidity both for new investments and refinancing existing financial commitments to ease hardship caused by the pandemic, an increase in the number of financed businesses and volume of loans extended to beneficiaries as a result of the implementation of this project is anticipated. Viable businesses will be diversified and sustained, and this will continue throughout the AF phase.

e) **Credit guarantee and enhanced access to loans/ credits**

The adverse weather, pests and diseases are the major peril affecting crops and domestic animals in Rwanda and which are difficult to predict and prevent. Crop damages and animal losses will result in low productivity, thus leading to lower revenues for farmers. This can cause reluctance of financial institutions (FIs) to provide loans and difficulties in paying back loans by borrowers. Therefore, the companies, especially MSMEs hit by Covid-19 pandemic, are unable to access loans due to lack of collateral by borrowers or lack of willingness to provide loans by financial institutions.

The protection of loans through guarantee funds will stimulate the willingness of both borrowers with a poor credit profile and FIs.

During its implementation, the AFIRR project will scale up and strengthen the BDF partial credit guarantee (PCG) to protect loans and support access to finance by MSMEs affected by the COVID-19 pandemic and new investments. This will facilitate the uptake of the AFIRR investment by borrowers without collaterals or fearing to access loans. This will increase production and improve sustainability of MSME production by giving access to finance. The capacity of financial institutions to offer loans will also be increased because weather hazards risks and liquidity issues have diminished.

6.3 Negative Impacts

As depicted above, the main E&S risks and impacts associated with the project are related to Occupational Health and Safety (OHS) and community health and safety, air and noise pollution, unsustainable use and degradation of natural resources (water/energy use), generation of wastes (wastewater, hazardous and non-hazardous wastes), odor, and soil and water pollution at the subproject level, non-discrimination, equitable access to finance, lack of participation of SACCOs and MSMEs in remote areas and marginalized areas due to lack of access to timely and appropriate information on available opportunities for financing, sexual abuse and exploitation, sexual harassment.

6.3.1 Potential adverse impacts

a) Design and Planning and construction Phase

The design and planning phase of this project will involve identification of sites and suitable areas for construction/ expansion, sources of materials to be supplied, waste dumping sites and undertaking detailed feasibility studies. The expected adverse impact at this stage concerns conflict over project beneficiaries due to disagreement and misunderstanding. All best practices, like stakeholder's involvement, should be considered to ensure that the planning and designs take into account the environmental and social aspects.

The adverse impacts expected during the construction phase include:

(i) Air pollution

There will be movement of construction equipment, trucks and humans at various project sites. Dust and exhaust fumes expected from earth moving activities by machineries, transport and equipment/ materials construction are anticipated to excessively increase levels of air dust and exhaust fumes, thus causing air pollution. This issue is also anticipated during the construction of charging sites and other relevant infrastructures for e-buses. Various types of pollutants, greenhouse gas production and dust are likely to be produced and emitted into the atmosphere.

The issue can be mitigated through the following measures:

- Workers will be provided with personal protective equipment where needed;
- Burning of any kinds of waste or construction materials will be avoided;
- Site wastes will be disposed of in approved dumping site.
- Water will be applied to active construction/expansion areas to prevent/suppress visible dust.
- Vehicle speeds will be set on unpaved surfaces.
- Vehicles and construction equipment will be inspected and maintained/repaired regularly.
- Use of low noise-producing machinery or equipment (machinery with quieter alternatives)

(ii) Pressure on water and energy

The high-water demand for certain processes (cleaning, cooling, surface treatment, construction works, etc.) is expected throughout the construction phase in manufacturing and construction materials sectors. This is likely to result in water depletion or reduction of water availability, thus impacting on humans and biodiversity. The energy consumption also increases during the construction phase as a result of increase in activities requiring energy like hoisting, transportation, concreting, welding, etc. This impact/ risk is medium to high depending upon the volume and nature of works to be implemented in a given project site. The significance of impact increases with the volume and nature of works.

The following are proposed for the mitigating water and energy depletion:

- Adopt proper water management measures to minimize water losses / wastage and use efficiently; damaged water facilities (pipes, tanks, etc) should immediately be repaired in all sites
- Promote the use of high technology construction techniques that minimize heating, cooling, ventilation, and lighting energy consumption;
- Use equipment with energy saving devices;
- Collect and use rainwater where possible;
- Raise awareness on water and energy use efficiency among workers/ users.

(iii) Increased waste and Soil and water contamination

During the construction of various infrastructures, heavy machinery, such as excavators, graders, wheel loaders, etc. may be used for earth moving construction works. This equipment will require re-fueling, maintenance works, repair works, which are likely to result in oil spillage. In the absence of adequate mitigation measures, contamination of soils and run-off ending in the receiving water bodies could cause soil and water quality degradation and disruption of surface and ground water systems and flows.

Various types of waste are anticipated to be generated but dumping construction waste/ spoil in haphazard manner may cause soil, surface and ground water pollution near the construction sites and breeding site for mosquitoes. It is therefore proposed to clean the area and dump/dispose of

the construction spoils at the dumping site approved by the local authority to avoid any adverse impact on health and well-being of people. The impacts are of short duration and medium in significance and will be reversible with a proper management.

Appropriate waste disposal methods have to be adopted. Construction machinery and project vehicles should be maintained only in service stations and approved areas. Proper care should also be taken while locating the above utilities/ facilities so as to minimize the soil and water pollution.

Dustbins for collection of domestic wastes at the camp or construction site should be provided. The collected wastes should be disposed of in landfills approved by the District.

(iv) Soil erosion

During the construction of new infrastructures, rehabilitation and expansion of existing infrastructures, excavated soils or demolitions from construction and borrow areas will be exposed to mostly water and wind, resulting in increased erosion. This can lead to property damages downstream, sedimentation of receiving waters, silting and blockage of neighboring infrastructures likes roads as well as degrading the aesthetic views of the landscape. The erosion that will occur during the construction will be minimal and localized in the areas where excavation will take place only. The impact duration is only expected to be felt during the construction phase.

Most of the above impacts/ risks are very low, of short duration and localized in the areas where excavation will take place and could be controlled by the management plans. The proper management of borrow and quarry areas will be implemented during construction phase. Soil erosion and land degradation occurring during the construction phase of the project can be avoided through:

- Clear only areas earmarked for construction;
- Dispose of the excavated soils immediately after excavation/ demolitions completion;
- Construct retention ditches below the construction area to control erosion risks where applicable;

(v) **Occupational and community Health and Safety risks**

Occupational and community diseases

During the construction phase, workers will be subjected to situations that could be detrimental to their health and safety. Indeed, the subproject will employ enough labour force for its timely completion. Communicable diseases are likely to be disseminated due to manpower increase and interactions among the workers, local community or with service providers such as food vendors, especially during peak demand for manpower. Not forgetting transmission of AIDS/HIV and other communicable diseases like malaria, diarrhea, etc., from workers that have migrated to the project site in search of employment plus locals willing to spend more due to increased income from construction wages. Furthermore, the open pits may create additional habitats for water borne disease vectors.

There will also be noise pollution from labour force and vehicles in some project activities within the site and construction machinery. However, it will not be a significant issue, since the construction areas, mostly industrial parks, are large and far away from residential areas.

The production of wastes during construction, including debris and packages and insufficient hygienic measures (like lack of sanitation facilities) can also pose health risks, mainly hygiene related diseases, to workers and local communities. The impacts are likely to be low to medium since serious measures will be put in place to protect workers' health and duly enforced. In a bid to control occupational and community health risks, the following are proposed:

- Prevention and mitigation procedures for occupational health hazards that may be encountered (e.g., working in adverse weather conditions, moving machinery and motorized equipment, working at heights or in confined spaces, repetitive motions, falling objects, exposure to heat, loud noises, hazardous materials, etc.) by using appropriate personal protective equipment (PPE), respecting measures for infectious diseases control like Covid-19 restriction measures, etc. as per the respective ESMSs, ESMF, World Bank Group General Environmental Health and Safety Guidelines, national laws and other relevant regulations;
- Fire prevention and evacuation procedures, including compliance with the relevant GoR's policies and laws, and WBG EHSGs requirements.
- Prevention and mitigation procedures for community health risks including traffic, diseases propagation, etc.

- Rehabilitation of borrow areas immediately after use;
- Regular sensitization on ways of occupational health hazards prevention, importance of proper hygiene during the operation of this project.
- Works should be executed during daytime

Occupational and community safety risks

Different types of accidents at the site are likely to increase due to increase in manpower and traffic as well as scope of works. A few examples include injuries caused by handling of construction equipment or from stepping on or using sharp objects, fire outbreak, accidents (traffic, falling objects, etc.), Furthermore, the open pits may create additional habitats for possible safety issues for people and livestock (drowning in deep/steep pits).

Besides health issues (including fatalities and injuries), some undesired effects like crime (theft) are likely to increase as a result of social interaction. Increase of gender-based violence (GBV) cases, prostitutions or other sexual offences and use of child labour are also predicted due to increased employment opportunities. The impact will be of short duration and reversible but can be of a high magnitude if not well managed.

The proposed mitigation measures include:

- Prevention and mitigation procedures for occupational hazards that may be encountered (e.g., working in adverse weather conditions, moving machinery and motorized equipment, working at heights or in confined spaces, repetitive motions, falling objects, exposure to heat, loud noises, hazardous materials, etc.);
- Fire prevention and evacuation procedures, including compliance with the with relevant GoR's policies and laws, and WBG EHSs requirements;
- Prevention and mitigation procedures for community health and safety risks including traffic as well as unsafe areas;
- Installing temporary signs and/or fences around all unsafe areas to prevent members of the public, including children, from entering the areas.
- Provide appropriate personal protective equipment for all workers and ensure workers use the proper PPE during all work activities.

- Regular sensitization on ways of occupational health and safety hazards prevention, importance of proper hygiene during the operation of this project.

(vi) Loss of properties

Due to the expansion of existing businesses and increase in newly financed investments, there will be temporary or permanent land acquisition for construction sites, leading to loss of land and assets (houses, crops, trees, grasses). This shall have an adverse impact on the livelihood of the Project Affected People (PAPs). This impact is expected to be low in terms of significance as most of the pieces of land that might be required for new construction or expansion are likely to be acquired through willing seller and willing buyer (WSWB) approach, owned by the loan beneficiaries or are provided by the Government. As mentioned above, any activity resulting or anticipated to result in permanent or temporary physical or economic displacement shall be ineligible for AFIRR AF financing.

In a bid to avoid any land acquisition issue likely to arise, the project requests land ownership proof for all subprojects applicants to ensure each subproject beneficiary uses his own land or land without conflict.

(vii) Loss of biodiversity

During the implementation of this project, additional land will be required for the rehabilitation and expansion of existing investments or new businesses, transmission and distribution of electricity and telecommunication services to project areas, construction of charging areas and other required facilities, etc. Trees and other plant species within the construction area must be removed or maintained at a low level to avoid their interference with planned activities. This will lead to biodiversity loss. However, this loss is of low magnitude since the project will be implemented in areas currently under use, mostly industrial parks, commercial and agricultural areas and shall not encroach to sensitive areas like natural habitat, etc.

The tree plantation and garden establishment where possible is suggested to replace trees and grasses likely to be affected by the project and beautify the site.

(viii) Impact on physical cultural resources

The AFIRR AF project activities may interfere with physical cultural heritage resources that need to be protected. The potential project sites (industrial parks, commercial areas, charging areas, etc.) do not accommodate cultural resources, and all subprojects suspected to have significant impacts on cultural resources will not be eligible for financing within the AFIRR AF scope. This means that the impacts on cultural heritage associated with this project are minor.

Though no adverse project impacts on physical cultural heritage, the “chance finds procedures” (Annex 7) will be included in the site specific ESIA or ESMP to manage previously unknown cultural heritage likely to be encountered during project implementation.

b) Operation Phase

(i) Air pollution

During the operation of manufacturing and construction materials facilities and transport of raw materials and end-products, the dust particles, gases (carbon dioxide, sulphur and nitrogen, methane, carbon monoxide etc.) and smoke are expected to be emitted into the atmosphere and exceed the air quality levels, thus leading to air pollution. The air pollution becomes an environmental and health risk depending on toxicity level and quantity of the pollutants in the air as well as the quantity that a person breathes or gets exposed to. Respiratory problems and serious illness like cancer, skin disorder, etc. are among the occupational health risks while the global warming is one of the adverse impacts/ risks.

The impact is medium to substantial depending upon the number and nature of processing units in a given location. In a bid to mitigate the threat of air pollution from processing units, various technologies like

- Use of appropriate air-cleaning devices for trapping or collecting air emissions,
- Industrial energy use efficiency,
- Use and regular maintenance of motorized machinery and equipment with certification of good working conditions to avoid /minimize exhaust fumes and high noise production;
- Reducing the gas production from agriculture activities;
- Use of low noise-producing machinery or equipment (machinery with quieter alternatives);
- Use of hearing protection devices (HPDs);
- Adopting soundproof dry walls, etc.

(ii) Decline in water resources

The manufacturing (agro-processing, light industry, textile and garment inclusive) and construction materials sectors are among the main water consumption sectors. During some part of the production process, water is used for processing, cleaning of products and equipment, cooling, diluting, sanitation, etc. The increased water demand as a result of the development of high-water demanding sectors is expected to minimize water level in water bodies and lead to water scarcity risks, thus putting pressure on aquatic populations or conflicting with other water uses. This impact is of low to moderate significance depending on the nature and location of the manufacturing facility and source of water as the country has numerous freshwater bodies and a good water supply coverage.

In a bid to mitigate the high-water stress in manufacturing and construction materials sectors, the water saving approach should be adopted through:

- Creating awareness in employees on ways to save water in manufacturing and construction materials sectors;
- Installing and using water saving equipment;
- Routine checks and maintenance for pipes and other water facilities;
- Harvesting and using rainwater for some activities;
- Recycling of wastewater and reuse of treated water.

(iii) Pressure on energy and raw materials resources

The energy is needed and predominantly used for production, lighting, telecommunication and other business uses. However, some manufacturing and construction materials units are likely to be located in areas with low voltage and will require increasing production from generation facilities already operating at a lower level or importing electricity from distant sources, etc. distributing to project sites to meet the electricity consumers' demand. As the manufacturing units and commercial businesses increase, the energy consumption is expected to increase and this is likely to result in decline in energy supply and rise energy prices, thus seriously impacting existing and newly manufacturing units, employment, and other businesses. This impact is of moderate to substantial significance in terms of magnitude as the businesses increase and the country faces energy shortage.

On the other side, the priority sectors under the scope of this project require enough raw materials in the processing process. The increased or inefficient use of those materials for manufacturing development, especially construction materials, is likely to lead to shortages on many raw materials. The impacts associated with energy and raw materials use are of medium to substantial magnitude since the country faces energy shortages and enough quantities of raw materials will be imported. The environmental issues directly related to energy and raw materials consumption by the manufacturing sector will include air pollution, climate change, water and soil pollution and waste disposal.

Improving energy and raw materials use efficiency in all manufacturing processes will be key to minimize the energy and raw materials' consumption of manufacturing and commercial equipment and buildings. Using energy-efficient appliances and electronics and operating them efficiently; adopting energy saving measures like turning off machinery and equipment when not in use as well as unnecessary lights, regular maintenance, employees' awareness raising on energy use efficiency, improving the electricity availability in project sites to balance demand and supply where applicable, etc. are some of the best measures for energy use efficiency.

On the other hand, the proposed mitigation measures for unsustainable use of raw materials include:

- Enhancing raw materials and energy use efficiency in the extraction and processing processes;
- Using improved management practices/ innovative development in raw materials extraction to minimize water losses / wastage;
- Promoting recycling and using of waste as raw materials, where applicable, to slowdown raw materials depletion and reduce waste quantity and risks;
- Increasing awareness of sustainability aspects to suppliers and producers.

(iv) Water and soil quality degradation

During AFIRR AF project execution, the support to businesses continuity and new businesses under manufacturing and construction materials sectors will be provided to both MSMEs and large enterprises (LEs). Various types of generated wastes, both liquid and solid, are expected to increase and adversely affect the environment.

The inadequate liquid waste disposal can inflict serious issues on the surrounding environment. Wastewater can leak, spill or run off over the ground and therefore contaminate groundwater and surface water sources that people use for domestic purposes, disrupt the balance of aquatic ecosystems and kill aquatic organisms, or seep into the soil and deteriorate soil fertility, affect plants or destroy natural habitats and cause biodiversity loss. It may impact on human health and have aesthetic concerns (bad smell).

During the cleaning process, wastewater contaminated with oils or soil sediments might be released into water bodies without prior treatment and this will lead to water pollution. They might also lead to soil contamination if released to land before their treatment.

For the project to control the soil and water quality deterioration, the following is proposed:

- The wastewater should be collected in cemented pits and disposed of in the district dumping site to minimize risks of soil and water pollution as well as health and safety risks.
- Properly treat and dispose of solid wastes to keep them from entering water bodies, causing soil pollution or other health risks.
- Educate workers on waste management strategies/ techniques.

(v) Increased risks of occupational and community health and safety

Communicable diseases and other occupational diseases

During the operation phase, labour force will be employed across project sites for the day-to-day running of activities. A part of that labour force may come from outside the site and interactions between workers and surrounding communities are anticipated to lead to community spread of communicable diseases like HIV/AIDS, diarrhoea, hepatitis viruses, etc. if adequate measures are not considered.

The other occupational diseases including respiratory diseases (asthma, allergic alveolitis, chronic pulmonary diseases, etc), skin diseases (allergic contact dermatoses, vitiligo, etc), musculoskeletal disorders, cancer, and other diseases caused by biological agents, physical agents, or chemical agents, etc. are likely to increase because of AFIRR AF implementation. However, no case of occupational diseases was recorded since the commencement of the parent

project. The emissions of dust and exhaust fume that might cause respiratory dysfunctions, noise and vibrations from construction equipment causing temporary or permanent deafness are also anticipated. The unbearable sound is also created during the processing unit's operations, leading to noise pollution. This can cause physical and psychological stress, interference with communication and concentration, productivity loss in the working place.

This impact is of medium to substantial significance in terms of magnitude depending on the type of manufacturing facility or business. Contraction of diseases are usually common in public places but can be controlled through preventive measures.

To avoid or reduce the effects of some of these occupational and community health hazards, it is proposed that the following measures are implemented:

- Compliance with communicable diseases control measures by all workers in the workplace including masks wearing, sanitation facilities (water and soap, hand sanitizer, etc), respect of social distancing, etc as well as other occupational and community health hazards;
- Regular sensitization on ways of occupational and community diseases prevention, importance of proper hygiene during the operation of this project.
- The borrowers/sub-borrowers together with local authorities are required to enforce workers' health and safety measures by using appropriate personal protective equipment (PPE), acquiring medical insurance "Mutuelle de sante" for all workers as a means of affordability of treatment as per the respective ESMSs, ESMF, World Bank Group General Environmental Health and Safety Guidelines, national laws and relevant regulations, and ESSs 1 and

v) ***Occupational and community safety risks***

Different types of accidents at the subproject site are likely to increase due to increase in manpower, activities and traffic. A few examples include injuries caused by handling of construction equipment or from stepping on or using sharp objects, fire outbreak, road accidents, incident in the workplace, The production of wastes during business operations and insufficient hygienic measures (like lack of sanitation facilities) can also pose health risks, mainly hygiene related diseases, to workers and local communities.

Besides OHS issues (including fatalities and injuries), some undesired effects like crime (theft) are likely to increase as a result of social interaction. Increase of gender-based violence (GBV) cases, sexual exploitation abuse (SEA) or other sexual offences and use of child labour are also predicted due to increased employment opportunities.

Depending upon the types of manufacturing units and number of employees, the impact will be of medium to substantial significance in terms of magnitude if not well managed but can be minimized through preventive measures, including:

- Undertaking education and awareness of workers and surrounding communities on avoiding safety risks at the workplace, etc.
- Establishing best safety practices in the workplace (i.e., putting in place warning signs and control-line systems as well as easy-to-follow safety procedures to alert workers near edges,)
- Regular maintenance of the appliances and electronics;
- Provision and use of appropriate protective equipment to sites workers such as wellington boots, helmets, masks, etc.
- Undertaking safety assessment at the site and maintaining records of all incidents and accidents arising from manufacturing facilities and businesses and providing correction measures where needed;
- Enforcing acquiring medical insurance for all workers as a means of affordability of treatment by the business owners, contractor together with local authorities;
- Preparing Gender-based violence (GBV) action plan for the Project by Apex-FIs as part of the updated ESMF and Apex ESMSs as well as cascading down prior to fund disbursement through participation agreement between Apex FI and PFIs.
- Awareness meetings on GBV, child labour and sexual harassment/ prostitutions preventions and gender equity;
- Establishing grievance redress mechanisms to handle site complaints, including social conflicts, etc.

(vi) *Unpleasant odors, increased hazardous and other wastes*

Due to operation of manufacturing units and other microbusinesses, both wastewater and solid waste are likely to increase and adversely impact the environment and health if improperly disposed of. Some will result in emissions of gases into atmosphere, causing air pollution while others may lead to water and soil pollution, emit nauseating odour (bad smell) and have aesthetic concerns.

The waste may also contain a wide range of micro-organisms which are dangerous to public health. Some of the wastes may be explosive or flammable, toxic, carcinogenic, corrosive, infectious or radioactive, electronic and electrical devices, etc. If left inappropriately managed, they can be hazardous and therefore have significant harmful effects on health and the environment, either alone or in contact with other wastes.

Due to operation of e-buses, e-wastes are expected to be produced at the end of battery service life. The poor disposal of used batteries can pose health and safety issues to the ecosystem due the presence of toxic chemicals in their compositional make-up.

Other wastes may be non-hazardous and present no hazard. The waste risks are likely to be significant during the project life cycle.

The appropriate waste disposal techniques should be adopted at each manufacturing unit and the promotion of existing efforts to reduce and recycle waste should be implemented. Generated solid wastes will be collected, transported and disposed of in authorised dumping sites. The biodegradable and non-hazardous wastes (non-toxic wastes) can be collected, composted and used as organic fertilizer. Others may be reused. Wastes that cannot be reusable and compostable shall be recycled where possible or properly disposed of in approved dumping sites.

The thermal, chemical and land disposal (underground injection) are common methods in Rwanda to dispose of hazardous waste that will also be applied here. Some electronic and electrical waste (E-waste like spent batteries) do also possess hazardous elements and compounds. They shall be decontaminated and dismantled, thereafter, items of economic value can be recovered through this process and remaining parts of E-waste such as spent batteries or others can then be recycled where possible or disposed of. In Rwanda, there is only one factory, Enviroserve Rwanda Green Park (ERGP), authorized to dismantle and recycle e-wastes. All businesses likely to generate e-wastes are required to have a partnership agreement with ERGP for the recycling of electric wastes.

The wastewater should also be collected in cemented pits and disposed of in the district dumping site to minimize risks of soil and water pollution as well as health and safety risks. Special attention can be given to hazardous wastes. They can be treated by chemical, thermal and through land disposal.

(vii) Possible discrimination and unequal opportunities to all businesses

The Covid-19 pandemic affected all categories of businesses, both MSMEs and large enterprises but some underserved groups, including women, people with disabilities and youth-led businesses among the MSMEs, have been worse affected by the crisis and its consequences. This crisis led to loss of employment and livelihood by many people, mostly from traditionally excluded groups (women and people with disabilities). The employment level of male labour force is higher than that of women because the sectors that absorb more women workers have not yet seen a recovery of employment levels and continue to drop while other sectors which employ more men, like construction, have a high employment rate. This impact is of low to medium significance in terms of magnitude.

As different businesses are still going on and new ones starting, discrimination in the workplace with regard to some categories of people, especially those with disabilities, is anticipated due to high employment demand and limited labour market. However, this issue will be minor in magnitude since the national labour law prohibits all forms of discrimination and is fully enforced across the country.

For AFIRR AF project to avoid discrimination issues and increase economic recovery and inclusiveness of traditionally excluded groups, the following is proposed:

- Promote and provide support to labour intensive investment projects, intensify awareness campaigns and ensure inclusiveness of underserved groups in the subproject's implementation;
- Significant attention and resources will be drawn towards capacity building and awareness raising within the subprojects;
- Reinforce the national labour law in all workplaces to ensure all categories of people are given equal employment opportunities;
- Establishing grievance redress mechanisms in all subprojects to address complaints, including discrimination if any.

- Work closely with Women, Youth and PLWDs forum for social mobilization and their full participation in AFIRR AF activities;
- Establishing a sound, enabling financial environment for women, disabled people and youth entrepreneurs to access to financial facilities.

(viii) Poor access to finance

Some potential project beneficiaries may not fully be active in this project due to lack of access to timely and appropriate information on the project, especially potential customers in remote and marginalized areas or lack of collateral. To overcome this, the following are proposed:

- Identify all key project stakeholders and raise awareness with them to provide firsthand and timely information on the project and get views from the audience;
- Strengthen and enforce the existing guarantee funds to help ease access to finance for all categories of businesses.

(ix) Limited institutional capacity

Many MSMEs and some large companies in the country suffer from lack of technical and business skills. The AFIRR AF project funded businesses are anticipated to face with the same challenge if no mitigation measures are taken.

This project will enhance the MSMEs' capability for resilience and recovery through the provision of tailored business development services to address constraints on the demand side. It will also strengthen the capacity of Apex-FIs, benefiting PFIs and other project stakeholders in different domains, including environmental and social matters.

6.3.2 Localized Impacts

The AFIRR AF project will be implemented throughout the whole country, both in urban and rural areas. The expected impacts associated with its implementation like air and noise pollution, OHS risks, pressure on water and energy, risks associated with increased waste, etc. will mostly be localized in project activity areas, like industrial parks. These impacts will be smaller scale, site specific and can be mitigated. The stakeholders will be provided with an opportunity to learn how to avoid or mitigate localized impacts from initial subprojects so that measures can be integrated in subsequent activities.

6.3.3 Cumulative Impacts

Many of the subprojects may result in cumulative impacts on humans and natural resources. Cumulative impacts are those that may result from individually small-scale activities with minimal impacts but which over time can combine to have a significant impact. Cumulative impacts can also be defined as impacts that potentially develop from the combined impacts of more than one subproject. Supported investments such those in manufacturing and transport sectors may exert pressure no excessive use of natural resources such as water or other livelihoods, generate negative impact on human health and result into increase in violence and potential breakdown of law and order. These investments my overwhelm the capacity (both local and national) to manage wastes which could occur as result of the expansion of their operations in times to come. Much of these impacts are likely to occur in industrial parks where much of the operations of manufacturing industries are gazzeted. Undertaking close monitoring, education and awareness of employees and surrounding communities on prevention and management measures will be paramount.

Table 8 A summary of potential environmental and social impact mitigation measures

Activity /Potential Impact	Description of Impact	Proposed Mitigation Measures
ESS1: Assessment and management of environmental and social risks and impacts		
Preparation of bidding documents and project screening	Neglect of Environmental and Social issues during implementation	<ul style="list-style-type: none"> • Use National /World Bank’s standard bidding documents. Incorporation of all environmental and social issues. Provide clear implementation arrangement for E&S implementation particularly at the local level. • The design contracts should include sustainability considerations especially on use of energy and water as much as possible • The design, construction, operation and decommissioning of the project activities should follow the national legal requirements, the WBG EHS guidelines and other good international industry practice • Ensure that all activities on the exclusion list (Annex 1) are ineligible for financing under the AFIRR Project. • Comply with the Ministerial Order N° 001/ 2019 of 15/04/2019 establishing the list of projects that must undergo environmental impact assessment.
Deterioration of source of raw materials	Increased pressure exerted on raw materials by supported manufacturing industries	<ul style="list-style-type: none"> • As a general practice, all supported investments will solicit or outsource construction materials from accredited companies/individuals. To ensure that the materials emanate from good sources, the project will ensure the following among suppliers: <ul style="list-style-type: none"> • Presence of valid environmental permit. • Well protected site. • Company avoids storing soil or materials near water ways and on slopes. • Exposed soil and material stockpiles are protected against wind and water erosion.

		<ul style="list-style-type: none"> • Material loads are suitably covered and secured during transportation to prevent the scattering of soil, sand, materials, or dust. • Company backfills shallow pits with excavated material once investigation is over. • Burrow and/or quarry site are fenced, locked and access limited to only authorized persons.
ESS2: Labour and Working Conditions		
Unfair treatment of workers/labor-force	Discrimination and unequal opportunities during labour recruitment	<ul style="list-style-type: none"> • Include Labour management procedures in ESMP.
	Increase in crime and conflicts	<ul style="list-style-type: none"> • Use the Project's Grievance Redress System to resolve localized conflicts.
Occupational health and safety issues	Health hazards (injuries and accidents)	<ul style="list-style-type: none"> • Employ an OHS plan that will outline all OHS risks and provide a strategy for their management. • Ensure all potential hazards such as movable machine parts are labelled. • Raise awareness and educate workers on risks from equipment and ensure they receive adequate training in the use of the equipment. • Provide the workers with adequate PPE and monitor regularly to ensure they are replaced on time when they wear out. • Place visible and readable signs around where there are risks. • Ensure there is security in and around the site to control the movement of people. • Provide safe and secure storage for equipment and materials on the site. • Strict adherence to safety precautions
ESS3: Resource Efficiency and Pollution Prevention and Management		
Solid waste management	Inappropriate waste disposal with	<ul style="list-style-type: none"> • Provide Waste skips or bins to collect waste for appropriate disposal. • Employ a waste management plan. • Use waste minimization techniques such as buying in bulk.

	accompanying health risks and hazards	<ul style="list-style-type: none"> • Allocate responsibilities for waste management and identify all sources of wastes, and ensure wastes are handled by personnel licensed to do so. • Make available suitable facilities for the collection, segregation and safe disposal of the wastes. • Create waste collection areas with clearly marked facilities such as colour coded bins and provide equipment for handling the wastes.
Noise and vibrations	<p>Compaction with machinery</p> <p>Health hazard to workers and general public</p>	<ul style="list-style-type: none"> • Regular maintenance of machinery and equipment • Use equipment with noise suppressing technologies. • Provide workers with PPE against noise e.g., ear plugs. • Place signs around the site to notify people about the noisy conditions. • Regular maintenance of equipment to ensure they remain efficient and effective.
Air quality impacts	<p>Dumping of spoilt material,</p> <p>Dust and exhaust emissions on health of works and public</p>	<ul style="list-style-type: none"> • Sprinkle water on soil before excavation activities and periodically when operations are under way to prevent raising of dusts. • Enclose the structures under construction with dustproof nets. Using efficient machines with low emission technologies for the ones that burn fossil fuels <p>Generally design of the buildings should comply with <i>Rwanda building control regulations, issued by Rwanda Housing Authority</i></p>
ESS4: Community Health and Safety		
Fire risk	<p>Damage to property</p> <p>Potential loss of life</p>	<ul style="list-style-type: none"> • Provide firefighting equipment and in easily accessible areas as well as ensure site personnel are well trained to use them. Also, maintain them regularly. • Create safe and adequate fire and emergency assembly points and make sure they are well labeled. • Provide adequate signages at fire risk areas to caution and inform workers. • Prohibit smoking and naked fires around easily combustible materials such as paints, fuel, etc.

Health and Safety aspects	Accidents and injuries to both workers and the general public;	<ul style="list-style-type: none"> • Comply with the constitution of the Republic of Rwanda as revised in 2015, law N° 66/2018 of 30/08/2018 regulating labour in Rwanda to ensure the health and safety of workers, organizations and the surroundings and the Ministerial order N° 02/MIFOTRA/23 of 01/08/2023 on occupational health and safety, organizations employees' organizations and employers' organizations, child employment, employment of a foreigner and leave.
Labour influx	Risk of social tensions	<ul style="list-style-type: none"> • Recruit labour from sub-projects community as much as possible. • Workers are to be issued with jobs cards to monitor their movements in the site area. • Provide a work registry book for workers to sign in and out. • Educate the workers on proper sanitation methods. • Sensitize the worker on HIV/AIDS. • Ensure operationalization of GRC
Waste management	Inappropriate waste disposal with accompanying health risks and hazards	<ul style="list-style-type: none"> • Waste skips or bins will be provided to collect waste for appropriate disposal. • Employ a waste management plan. • Use waste minimization techniques such as buying in bulk. • Allocate responsibilities for waste management and identify all sources of wastes, and ensure wastes are handled by personnel licensed to do so. • Make available suitable facilities for the collection, segregation and safe disposal of the wastes. • Create waste collection areas with clearly marked facilities such as colour coded bins and provide equipment for handling the wastes. The bins should be coded for plastics, rubber, organics, glass, timber, metals etc. • Ensure all wastes are dumped in their designated areas and through legally acceptable methods and that the bins are regularly cleaned and disinfected. • Assess and create opportunities for regulation, reducing, reusing, recycling, recovering, rethinking and renovation.

		<ul style="list-style-type: none"> • Create adequate facilities for the storage of building materials and chemicals and control access to these facilities. • Ensure bins are protected from rain and animal
ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources		
Loss of flora and faunal habitats	Environmental Degradation	<ul style="list-style-type: none"> • Landscape with indigenous species on completion of construction. • Maintain landscaped gardens, terraces, conservation and management of the vegetation and gardens. Clear vegetation only in construction areas and demarcate areas where no clearing will happen.
Community and Gender-Based Violence	Risks of sexual harassment, underage sex, child labour etc.	<ul style="list-style-type: none"> • Strong and sanctions embedded clauses in loan agreements, contractors' agreements on child labour, sexual harassment etc. • Include clauses in work contracts to as far as practicable utilize local labour and give equal opportunities to women and should not discriminate against vulnerable groups who have the capacity to work; • Conduct background check on workers before employment; • Require signed Code of Conduct from contractors, sub-contractors, workers, and supervising consultants as part of contract.
ESS 8: Cultural heritage		
Sub projects' implementation	Increased risk of project's exposure to cultural heritage	<ul style="list-style-type: none"> • Chance finds procedures" (Annex 7) will be included in the site specific ESIA or ESMP to manage previously unknown cultural heritage likely to be encountered during project implementation
ESS9: Financial Intermediary		
Sub-project screening and financing	Neglect of Environmental and Social issues during implementation	<ul style="list-style-type: none"> • Screen all proposed activities for direct or on-lending financing against the exclusion list set out in the ESMF. • Screen each subproject before determining whether they are eligible to receive support from the Project or not. • ESIA's, ESMP's and SPR's to be prepared by large enterprises and SMEs as appropriate and approved by RDB and reviewed by PFIs before signing sub-loan agreements where required by the National Law and the ESMS and submit implementation status report quarterly after receiving the sub-loans. • Include environmental and social clauses in Loan Agreements related to AFIRR supported sub-projects

ESS10: Stakeholder Engagement and information disclosure		
Ensuring project inclusiveness		<ul style="list-style-type: none"> Disclose updated SEP after WB board approval and it throughout Project implementation Maintain and operate the GRM throughout Project implementation Conducted at project mid-term review (MTR)

In addition to the above ESSs, building designs will comply with *Annex II (Rwanda building Code)* of the Ministerial Order N° 02/CAB.M/019 of 15/04/2019, which establishes guidelines for categorizing buildings and procedures for applying for and granting building permits. The *World Bank Group General Environmental, Health and Safety Guidelines* and the *ESH Industry Sector guidelines* will also be used as technical reference materials for the project, particularly when addressing pertinent cross-cutting ESH concerns. Among the Industrial sector General guidelines applicable to AFIRR parent project and its additional financing will include but not be limited to the following:

- Infrastructure (Tourism and Hospitality Development)
- General manufacturing
- Agribusiness/food production &
- Mining

6.4 Monitoring and reporting of Environmental and Social Indicators

The performance monitoring requires that (i) the various environmental and social instruments (ESIA or ESMP) have been prepared to the required standard, within the required timelines and approved by the responsible entities, (ii) Environmental and social mitigation measures have been or are being implemented, and (iii) subprojects stakeholders and interested parties are participating in all stages of the E&S management and monitoring processes. Furthermore, the monitoring requires to be carried out at the intervention level to assess the performance of the implemented activities. The performance E&S monitoring will be done by the PFIs' staff and overseen by the Apex-FIs Environmental and Social Specialists and the concerned DEO.

Two opportunities will be taken to build a simple system for the monitoring and evaluation of environmental and social impacts:

- a) The E&S Specialist should consider the environmental and social criteria that require measurement (i.e., groundwater levels, levels of income etc.); a list of initial proposals is given below;
- b) Using that list of criteria, a set of indicators can be integrated into the screening forms used in the project approval process in each site. This will ensure flexibility at the subproject design stage, integration of monitoring considerations throughout the subproject cycle, as well as a participatory approach to environmental and social monitoring.

Due to Covid-19 pandemic and its restriction measures and in order to enhance Monitoring and Evaluation (M&E) of AFIRR implementation, efficient M&E tools like Geo-Enabling Initiative for Monitoring and Supervision (GEMS) will be adopted across all project sites and used to collect structured digital data from sites and feed into the project monitoring and evaluation system. This will require capacity strengthening of project staff, PFI staff, clients and its stakeholders, mostly local leaders on M&E system and GEMS tool.

Initial proposals

The key parameters to be considered for different subprojects include monitoring of air pollution, occupational health and safety (OHS), water and soil quality, income generation, waste

management, water and energy use, gender-based violence/ sexual harassment and child labour, etc. The goals of monitoring are to measure the success rate of the project, determine whether interventions have resulted in dealing with negative impacts, whether further interventions are needed, or monitoring is to be extended in some other areas. The monitoring indicators will be very much dependent on specific project contexts.

Monitoring and surveillance of subprojects will take place on a “spot check” basis as it would be impossible to monitor all the subprojects to be financed under the project. The spot checks consist of controlling the establishment of mitigation measures. It is not recommended to collect large amounts of data, but rather to base monitoring on observations by project technicians and stakeholders to determine the trends in indicators.

Monitoring of Participation Process

The following are indicators for monitoring of the participation process involved in the project activities. Number and percentage of affected business owners consulted during the planning stage:

- Level of decision making of project beneficiaries;
- Level of understanding of project impacts and mitigation;
- Effectiveness of local authorities to make decisions;
- Frequency and quality of public meetings;
- Degree of involvement of women or disadvantaged groups in discussions.

The main components of the monitoring plan include environmental and social issues to be monitored; parameters to be monitored; monitoring indicators, methods; frequency of monitoring; institutional responsibilities for monitoring and supervision as well as estimated costs. Site specific monitoring checklists will be prepared by the designers for each subproject and be included as an integral part of site specific ESMP. Monitoring checklist should be prepared using the generic monitoring plan presented within this updated ESMF and respecting significant site-specific impacts and proposed mitigation measures elaborated in site specific ESMP document. The monitoring template is presented in Annex 8.

Each PFI will have a dedicated focal person who will establish communication with Apex-FI and also be responsible for managing environmental and social impacts associated with PFI

intervention under AFIRR scope. The PFI focal person will prepare the compliance report in respect to ESIA/ESMP, which documents the implementation of environmental and social mitigation and protection measures (together with prescribed monitoring activities carried out during the reporting period) on quarterly basis and submit them to PFI Management who will, in turn, share it with the Apex-FI. However, in case of any kind of accident or endangerment of protected environments, reporting of PFI to Apex-FI will be immediate.

The PFI may apply monetary fines if the client/ borrower's performance is found to be in serious contravention of the environmental and social standards and regulations. Monitoring and compliance in accordance with ESMF and site specific ESMPs, including monitoring of implementation of site-specific measures on each subproject/section during project implementation will be undertaken and reported to Apex-FI.

In case of fatalities or major incidents on sites, the PFI will immediately report to Apex-FI. In addition to the Project reports required by the implementing agencies and MINECOFIN and under the Law No 48/2018 of 13/08/2018 on Environment, an environmental and social audit on ESMF implementation will be prepared by the Project at the project end and shared with REMA and the World Bank. The table below indicates project indicators to be monitored and reported against.

Table 9. *Monitoring indicators for AFIRR AF project*

Monitoring parameter	Monitoring Activity/Indicators	Target	Responsibility for monitoring
E&S Instruments			
Approvals and implementation	Number of ESIA/ESMP completed and cleared for subprojects requiring ESIA or ESMP	All required ESIA/ESMP approved	PFI focal person and Apex-FIs Environmental & social Specialist
	Number of permit required for a given project financed under AFIRR AF depending on its nature	All required permits (construction permit, water use permit, etc.) depending upon the nature of the project are approved	PFI focal persons and Apex-Fis E&S Specialist
	Ownership on land acquired for new or expansion of businesses	100 % Willing seller- willing buyer approach, voluntary land donation implemented	PFI focal person and Apex-FIs Environmental & social Specialist
Environmental and Social Standards Training	Number of loans Beneficiaries/ clients, PFIs, and District staff trained	Business owner staff, contractors, PFIs and Apex-FIs business and risks management teams, District staff (Environmental Officer, JADF, Investment officer)	BRD and BDF Environmental and Social Specialist
Reporting	Number of quarterly reports received	Four (4) quarterly reports received	PFI focal person, BRD and BDF Environmental and Social Specialist
	Number of annual reports received	1 annual report received	PFI focal person, BRD and BDF Environmental and Social Specialist
Intervention level Monitoring			

Air pollution levels	Records on PPE use and waste management	<ul style="list-style-type: none"> - - 100% PPE use - Produced waste adequately disposed of - Regular maintenance of motorized machinery and equipment, etc. 	PFIs focal person, MINECOFIN, BRD and BDF Environmental and Social Specialist
Water quantity and availability	<p>Employees' awareness meetings on water use efficiency and water availability report</p> <p>Water saving measures in the workplace</p> <p>Recycling of wastewater and reuse of treated water</p>	<p>Minutes of the meetings, internal communication of guidelines; water availability survey</p> <p>Adopted techniques at the site (equipment, measures, routine checks and maintenance, etc.) that minimize water consumption and regular maintenance reports</p> <p>Existing wastewater management structure</p>	<p>Borrowers/ sub-borrowers, PFIs</p> <p>Borrowers/ sub-borrowers, PFIs, REMA, REG, WASAC</p> <p>Borrowers/ sub-borrowers</p>
Water and soil quality	<p>Soil and water Sampling and analyses</p> <p>Efficient waste management measures in the workplace</p>	<p>Water quality report for 2 years</p> <p>Waste management techniques in place (cemented pits, hazardous waste management, dustbins, parking/ garage, etc.)</p>	Apex-FIs, PFIs, borrowers, REMA, Districts

Erosion	Signs/ forms of erosion and land degradation resulting from AFIRR activities	Only areas earmarked for construction cleared; System for disposal of excavated materials in place	Apex-FIs, PFIs, borrowers/ sub-borrowers, REMA, Districts
Increased risks of occupational and community diseases	Increased cases of communicable diseases such as AIDS/HIV, diarrhea, and other occupational diseases in the project site and its vicinity Adopted measures for Covid-19 crisis control and prevention of other occupational diseases	No significant increase of occupational diseases in the project area versus Baseline data Covid control measures in place, minutes for awareness meetings, PPE use, medical insurance	PFIs, Apex-FIs, MINECOFIN, District, local health centers (Ministry of Health/ MINISANTE) Sub-borrowers/ Borrowers, District, Local health Center
Increased occupational safety risks. (Injuries, fatalities, fire outbreak, etc.)	Reported cases of incidents and accidents Safety best practices established in the workplace (i.e., warning signs, guarding and control-line systems as well as easy-to-follow safety procedures to alert workers near edges,)	No significant increase of accidents and incidents in the project area versus Baseline data Education and awareness of workers and surrounding communities on avoiding safety risks at the workplace Safety signposts/ measures in the workplace Versus Baseline	PFIs, Apex-FIs, MINECOFIN, District Sub-borrowers/ Borrowers, District, Local health Center; Apex – Fis E&S Specialists, PFIs focal persons
Energy and raw materials	Cases of power blackout in the workplace due to energy high demand	Cases reported to REG & repairing	Borrowers/ sub-borrowers, PFIs focal persons, Apex-FIs E&S specialists, District, MINECOFIN
	Efficient equipment in used in extraction/ processing	Technical specifications of equipment used; recycling	Borrowers/ sub-borrowers, PFIs, Apex-FIs E&S Standards

		and use of waste as raw materials	
Loss of properties (land, crops, trees, houses, etc.)	Number of families with affected assets	Proofs of payment through willing seller-willing buyer (WSWB)	Borrowers/ sub-borrowers, PFIs, Apex-FIs, District, MINECOFIN
Loss of biodiversity	Number of planted trees/ created garden (area)	Nature of biodiversity loss and replacement measures	Borrowers, PFIs and Apex-FI E&S specialists
Increased wastes and associated risks	Quantity of e-wastes collected and taken to ERGP for recycling	Valid MoU between project beneficiary and ERGP	Borrowers, PFIs focal persons and Apex-FI E&S specialists
	Number of environmental and health risks complaints raised due to inadequate disposal of wastes	All generated wastes properly disposed of, and no concerns raised	Borrowers/ sub-borrowers, PFIs, Apex-FIs, District, MINECOFIN, MINISANTE
Physical cultural resources	Affected unknow physical cultural heritage	Adopted chance find procedures	Borrowers, PFIs and Apex-FI E&S specialists and District authorities
Employment opportunities	Number of skilled and unskilled workers employed	Significant increase in job creation versus Baseline data	Contractors, sub-borrowers, District and Apex-FIs E&S Specialists
Possible discrimination and unequal opportunities to all businesses	Cases of discrimination and inequality recorded in the project areas	No significant increase versus Baseline data	PFIs, Apex-FIs E&S Specialists
Child labour risks	List of workers, origin (within or outside the project area) and age (records on workers above 18 years old)	No child labour cases in the project area	Borrowers/ sub-borrowers, PFI, Apex-FI and District, MINECOFIN
Gender based violence (GBV), sexual exploitation and abuse (SEA) and sexual harassment (SH) risks	Number of GBV cases recorded	No significant increase of GBV case versus Baseline data	Business owner, PFI, Apex-FI and District
	Number of SEA and SH cases recorded	No significant increase of SEA and SA case versus Baseline data	Business owner, PFI, Apex-FI and District

Poor access to finance	Number of businesses benefitting from AFIRR interventions (women, vulnerable people & youth inclusive) receiving loans	Significant increase in the number of project beneficiaries obtaining loans versus Baseline data	sub-borrowers and Apex-FIs E&S Specialists, PFIs focal persons
	Number of loan recovered	Significant increase in the number of loans repaid versus Baseline data/ loans disbursed	Clients, PFIs, and Apex
	Number of farmers with crops damages and livestock losses due to disasters (heavy rains, drought, diseases)	All affected crops and livestock are timely reported, and insurance paid	Clients, PFIs, District and Apex-FIs, MINECOFIN
Grievance redress mechanisms	Active site-specific Grievance Redress Committees (GRCs)	All grievances received are timely resolved	PFIs, District, Apex-FIs
Stakeholder engagement	Project stakeholders identified and consulted on during implementation	Project affected parties, interested parties and disadvantaged parties involved in the subprojects implementation	Apex-FIs and PFIs and sub-borrowers

6.4.1 Project's strategies for special groups' inclusion

The support to women, youth and disabled persons' entrepreneurs by AFIRR project is crucial to ensure their inclusion in the project implementation and increase the uptake of the project supported activities as well as sustain their businesses. Most of the support will be provided through BDF's scope.

Based on the findings from the social assessment, the following are suggested for AFIRR to include and increase the uptake of its programmers by the targeted special groups:

(i) *Limited access to information:*

The Rapid Gender Assessment (RGA) by MIGEPROF (2020) revealed that a good proportion of women is not informed about the national economic recovery plans. A significantly smaller proportion of women (26%) is aware of the government's economic recovery plan compared to men (52%). Before the start of this project, all key stakeholders will be identified, and meaningful sensitization and awareness meetings will be organized to provide the details on the project and collect feedback from them. All potential project areas, including marginalized corners in remote areas, and all business categories in the key priority sectors under this project should be considered when selecting stakeholders and planning for awareness meetings. Various communication channels and methods, including use of media (radio, TV shows, answering to questions, etc.), working with representatives of these groups, information packaging depending on targeted groups, etc. will be key to raise awareness countrywide.

(ii) *Insufficient business skills*

Some of the MSMEs are managed by women, youth or disabled persons' entrepreneurs with limited skills and capacity. The capacity building will be important to managers and workers to develop competencies and skills needed for the effectiveness and sustainability of businesses.

The Apex-FIs, mostly BDF, will work with the entrepreneurs to identify key training' areas, prepare training programs and provide required capacity building in entrepreneurship and financial literacy. Since the Apex-FIs will on-lend to other financial institutions (Banks, MFIs, etc.) to reach the targeted beneficiaries, the capacity of participating financial institutions (PFIs) on how to successfully target and include women, vulnerable people and youth entrepreneurs will also be strengthened. The guidance on the smooth running (how to plan, start, manage, finance, market, etc.) a business will be offered in the course of this project. The capacity building of various implementing agencies is provided for under component 3 of this project.

(iii) Lack of collaterals and limited access to finance

All financial institutions, both banks and MFIs, ask for collateral for loan. Most entrepreneurs with good business projects are impeded by the lack of such security. BDF is currently running partial credit guarantee fund dedicated to supporting businesses in both agriculture and non-agriculture sectors. The guarantee facility has catered for inclusion of special groups such as women, youth, retrenched civil servants, people with disabilities, veterans, and genocide survivors. There are also grants that have been tailored to address the access to finance needs of women and youth; for example, women and youth grant that targets microbusinesses and the grant is 15% of the approved loan, and a grant supporting youth engaged in dairy sector specifically marketing of milk. The grant provided is at least 50% of the total project cost.

The existing guarantee scheme helps the above special groups to get loans from participating financial institutions (PFIs) without enough collateral. The fund provides these special groups with a guarantee of up to 75% of total risk coverage on loans, whereas other beneficiaries get up to 50% of required guarantees. The existing guarantee scheme will be strengthened through AFIRR project, scaled up and expanded to secure a wider buy in from the PFIs to ensure that the consumption is scaled up to address at a wider scale the issue of access to finance.

BDF has another facility called SACCO refinancing. These are loans provided to the SACCOs to on-lend to their clients. Within the context of ensuring that more outreach is achieved for women and youth, the SACCOs are incentivized by reducing the BDF lending rate by 1% once the SACCO portfolio reaches 40% of women and youth.

The awareness and enforcement of the above guarantee funds and grants are good enough to attract the target special entrepreneurs. As provided for in Component 2 of AFIRR project, the existing guarantee and grant schemes were strengthened, scaled up and expanded to address the issue of finance access, include and reach seriously affected MSMEs, including those led or managed by women, youth, vulnerable groups (genocide survivors, people living with disabilities, veterans, etc.).

6.5.2. Protecting the Work Force

- i. **Child Labour:** The AFIRR project will not support activities/ subprojects which employ children in any manner that is economically exploitative or is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development. With reference to the *new Labour Law N° 66/2018 of 30/08/2018* in Rwanda, the minimum age for admission of children into employment is sixteen (16). However, children may be employed at the age of thirteen (13) to do light work. The minimum age for employment or engagement set out in the World Bank's Environmental and Social Standard 2 is age 14. The project will comply with the National Labour Law and children under the age of 13 will not be employed in both AFIRR parent and AF supported activities. The project will ensure that children under the age of 13, 16 and 18 are not to be employed in hazardous work. All work of persons under the age of 13, 16 and 18 will be subject to an appropriate risk assessment and regular monitoring of health, working conditions, and hours of work.
- ii. **Forced Labour:** AFIRR project will not support enterprises/subprojects/activities that employ forced labour, which consists of any work or service not voluntarily performed that is exacted from an individual under threat of force or penalty. This covers any kind of involuntary or compulsory labour, such as indentured labour, bonded labour, or similar labour-contracting arrangements.
- iii. **Occupational Health and Safety**

AFIRR project will ensure that all supported activities provide a safe and healthy work environment, considering inherent risks in particular sector and specific classes of hazards in the client's work areas, including physical, chemical, biological, and radiological hazards, and specific threats to women. The project will take steps to prevent accidents, injury, and disease arising from, associated with, or occurring in the course of work by minimizing, as far as reasonably practicable, the causes of hazards. The project through site specific ESMPs and contractor's ESMPs will address areas that include the:

- identification of potential hazards to workers, particularly those that may be life-threatening;
- provision of preventive and protective measures, including modification, substitution, or elimination of hazardous conditions or substances;
- training of workers;
- documentation and reporting of occupational accidents, diseases, and incidents; and
- emergency prevention, preparedness, and response arrangements.

iv. **Workers Engaged by Third Parties**

With respect to contracted workers, the AFIRR project will make reasonable efforts to ascertain that the third parties who engage contracted workers are reputable and legitimate organizations and have an appropriate labour management procedure. The project (AFIRR parent and AF) will establish

policies and procedures for managing and monitoring the performance of such third-party employers in relation to the requirements of the ESS 2. In addition, the supported sub-projects will incorporate these requirements in contractual agreements with such third-party. Contracted workers will have access to a grievance mechanism. In cases where the third party employing or engaging the workers is not able to provide a grievance mechanism to such workers, the project's grievance mechanism will be available to the contracted workers.

v. Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH)

SEA/SH risks including sexual exploitation and harassment, underage sex, rape, defilement etc. may arise from interaction between workers of supported subprojects or investments. SEA/SH might also be of concern during Search for jobs and procurement opportunities from supported investment could provide grounds for sexual harassment and exploitation of girls and women. Therefore, proper SEA/SH education, sensitization, trainings and grievance redress mechanisms such as worker profiling will be identified and implemented with strong sanctions embedded clauses in contractors' agreements on child labour, sexual harassment. More so, regarding SEA/SH related to workers, a Code of Conduct will be signed by the workers and will be posted in a visible place on site/workplace.

vi. Generation of noise pollution

As per World Bank Environmental, Health, and Safety (EHS) Guidelines⁵ on noise management, the permissible ambient noise levels in residential, institutional, and educational areas are 55 decibels (dBA) during the day and 45 dBA at night. Those for industrial commercial areas are 70 dBA during the day and night. Loud noises pose a risk to the workers and site personnel since loud noises increase the risk of ear damage and deafness, and there may be an increase in the levels of noise in the construction site owing to the nature of machinery in use and the activities such as excavation. The normal levels of 55 decibels recommended by World Bank Environmental, Health, and Safety (EHS) Guidelines on noise management may be surpassed in the duration of the construction process.

Chapter7 : ENVIRONMENTAL AND SOCIAL MANAGEMENT PROCESS

7.1 Environment and social screening process

Before funds disbursement, all applications for AFIRR AF project funding will be subjected to a screening which should be done to assess for their eligibility for AFIRR financing and potential E&S impacts/risks. The purpose of the screening is to (i) determine if the proposed subprojects are eligible to AFIRR funding, (ii) identify E&S risks associated with the proposed development as well as measures to mitigate adverse impacts, if any, (iii) assess the quality of the project design in terms of E&S compliance, (iv) facilitate informed decision making by providing clear and well-structured analysis of the effects and consequences of the proposed actions, and (v) determine whether a full ESIA or partial ESIA (or ESMP) are needed or not. The screening is a two-step exercise starting with the assessment for the eligibility of the proposed project for AFIRR AF financing against its exclusion list of activities presented in Annex 1 and followed by the determination of the extent to which the project environmental and social analysis is required.

a) Step 1: Screening against the AFIRR Exclusion list of activities

The AFIRR AF and AFIRR parent projects have already prepared an exclusion list of activities, works or subprojects that the Project will refrain from financing as part of Components 1 and 2 as detailed in the ESCP and presented in Annex 1. The Apex-FIs or benefitting PFIs under direct financing or on lending respectively must conduct the screening of all received applications technically feasible to assess their eligibility for AFIRR funding against this exclusion list (Annex 1). Only projects from different subcomponents not falling on the list of excluded activities will be considered as eligible for AFIRR funding and therefore worth pursuing in the next screening step. The subprojects on the AFIRR exclusion list are ineligible and shall be excluded from AFIRR funding.

b) Step 2: Screening for E&S risks and impacts

All projects eligible for AFIRR funding will be considered for the next screening step which consists of assessing the potential E&S risks/impacts and designing their mitigation measures and determining whether the subproject is environmentally feasible and socially acceptable or not and if yes, which environmental and social risk management instruments need to be prepared for compliance with E&S standards requirements of both the borrower and World Bank. The capacity of subprojects implementers (both PFIs and sub-borrowers) to handle E&S aspects throughout the project life cycle will also be assessed to determine remedial actions.

The screening of subprojects by Apex-FIs or PFIs shall be in line with their respective adopted ESMSs, including E&S screening checklists and exclusion lists of activities. The E&S due diligence template will also be used to identify gaps and capacity building needs.

The E&S screening of each submitted subproject for funding will result in its classification into one of the four categories (low, medium, substantial and high) depending on the type, location, sensitivity, and scale of the subproject and the nature and the magnitude of its potential E&S impact. This

classification will be based on the provisions of the World Bank Environmental and Social Framework (ESF) on the Assessment and Management of E&S risks and impacts (ESS1). The screening exercise will be based on the Apex-FIs exclusion list of activities, E&S screening checklist, capacity building needs checklist and relevant E&S regulations of Rwanda and the WB. The AFIRR exclusion list of activities, BRD exclusion list of activities and BDF exclusion list of activities are presented in Annexes 1, 2 and 3 respectively. Before the second step screening process is initiated, the review of plans, designs and technical and financial prefeasibility or feasibility reports are to be undertaken for every subproject submitted for funding to mainstream E&S concerns into the whole subproject review process. Where there is no feasibility study that has started or planned for, discussions on activities proposed for each site may take place and E&S concerns considered.

The final screening results will inform on the potential E&S impacts/risks likely to be associated with the intended subproject and which subproject requires a full ESIA study, partial ESIA (or ESMP) or not. The summary project screening report (SPR) will be prepared for any subproject not requiring an ESIA or ESMP (or falling under low risk category). The PFI or Apex-FI will notify the business owner or client of the findings of subproject screening for E&S risks/ impacts. However, all subprojects rated as High risks under the WB classification system will also be excluded from the AFIRR financing.

For onlending investments, BRD and BDF shall conduct E&S due diligence assessments for each potential sub-borrower in line with the ESMF and approved respective ESMS including the Exclusion List, national laws, ESSs and eligibility criteria for all potential investments prior to disbursement of funds to PFIs to ensure that E&S documents are prepared, disclosed and adopted, in form and substance acceptable to the FIs and the World Bank. The Apex-FIs shall ensure that E&S Screening checklist for subproject categorization and exclusion lists are prepared in form and substance acceptable to the Apex-FIs and the World Bank. For Subcomponent 1.2 subprojects, the Apex-FI or PFIs may (i) confirm whether an E&S instrument (ESIA, ESMP) prepared under country regulations exist and request for it, (ii) request for any or all E&S due diligence conducted so far, if any, or (iii) request for an E&S audit, especially around OHS, labor, GBV issues to be conducted before financing can be authorized.

7.2 Subproject registration process

As per the Rwanda environmental regulations, all subprojects that require a full or partial ESIA shall be registered with the Competent authority, Rwanda Development Board (RDB), before the beginning of subproject environmental assessment (EA) study. In this regard, the business owner or client whose subproject requires full or partial ESIA will hire a Consultant to proceed with the registration of the subproject to RDB.

The first step for subproject registration is the preparation and submission of a proposed subproject in the form of the project brief to RDB by the Consultant on behalf of the developer (client/ business owner). RDB will notice the project brief as the developer's formal application for an EA and records

it. The project brief provides information on the intended subproject as well as the basis for the screening and on which RDB approves the EA Terms of Reference (ToRs) submitted together with the project brief by the Consultant.

It contains the following information:

- a) Name, title and address of the developer;
- b) Name, purpose, objectives and nature of the subproject, including attributes such as size of subproject, design, activities that shall be undertaken during and after the establishment of the project, products and inputs, etc.
- c) Description of the proposed project sites and its surroundings and alternative sites, if any, where the project is to be located.
- d) Description of how the proposed subproject and its location conform to existing laws, regulations and policies governing such project and the use of the site/area proposed for its location.
- e) Any likely environmental impacts that may arise due to implementing various phases/stages of the project and proposed mitigation measures thereto.
- f) Description of any other alternatives, which are being considered (e.g., siting, technology, construction and operation procedures, sources of raw materials, handling of wastes etc., decommissioning/closure and site restoration).
- g) Any other information that may be useful in determining the level of EA required.
- h) Stakeholders in the project implementation

The project brief for all component 1 subprojects will be submitted together with the proposed terms of reference (ToRs) for review and approval. As per the current procedures, the submission is made online by the Consultant. RDB will take a maximum of 15 days to review the project brief, organize a site visit in collaboration with the client and review and approve the submitted ToRs.

The benefiting PFIs or Apex-FIs shall review and validate the ToRs for on-lending and direct financing investments respectively before their submission to BRD for review and clearance.

7.3 ESIA / ESMP preparation requirements

Some sites development will require conducting an ESIA or ESMP (or partial ESIA) before the start of civil works. The ESIA or ESMP study shall be conducted by a Consultant (a firm or individuals) hired by the subproject beneficiary/business owner. The consultants/consultancy firms should be selected from the environmental experts and firms registered with Rwanda Association of Professional Environment Practitioners (RAPEP). The selected experts or firms should have no direct or indirect interests in the subproject. The type of expertise needed in the ESIA/ESMP will vary with the location and magnitude of the project but should in any case include:

- *Environmental Specialist or Occupational Health and Safety Specialist*, with extensive experience in manufacturing value chain or civil engineering activities;

- *Ecologist or Natural Resource Management Specialist* with vast experience in ecosystems management (aquatic ecosystems, land ecosystem, protected areas, etc.)
- *Socio-economist Specialist* in rural economy/development.

The following are steps for the preparation of ESIA or ESMP study:

Scoping

The next stage, after screening and determining that a proposed subproject activity should be subject to the ESIA or ESMP process, is to decide on the scope and contents of the environmental impact statement (EIS). The scoping phase usually establishes important issues to be addressed in the environmental and social impact assessment and eliminate the irrelevant ones.

Under this stage, the Consultant will identify all subprojects impacts/risks likely to be of most importance, those thought to be not significant or negligible, and those with unclear significance. The potential impacts of little concern will be eliminated from the scope of the study while potentially significant and unclear impacts are considered. This assessment will require consultations with the relevant authorities, beneficiaries and stakeholders (affected communities inclusive) as well as other interested parties so that their inputs or comments can be taken into consideration. The field observations and desk review will also be relevant to this phase.

Data collection and stakeholder's consultations

This is a stage where desk review and intense consultations with relevant authorities, stakeholders, affected communities and other interested parties as well as field observations are undertaken by the Consultant.

Through public consultations, desk review and sites observations, relevant data are collected and analyzed, major impacts predicted and investigated in depth, mitigation measures and plans proposed for both adverse and beneficial impacts and compensatory measures recommended for immitigable impacts and monitoring measures developed. All project alternatives are thoroughly examined. Impacts are quantified in terms of magnitude (major, moderate, negligible), extent (regional, local, site specific) and duration (long-term, medium-term and short-term).

Impacts prediction and analysis and determination of impacts significance

The impact identification is a way of predicting the environmental and social consequences of a proposed subproject and its alternatives. For every subproject, through consultations with beneficiaries, stakeholders and sites observations during the scoping, all possible impacts associated with the intended subproject will be listed and justified. The impact prediction should look at both direct and indirect impacts as well as the interactions between them.

The Experts will analyze identified impacts by conducting risk assessment, evaluation and risk management. The impact analysis matrix presented in the next table will be used.

Table 10: Impact analysis matrix

Nature or Status of the Impact: The type of effect the activity would have on the environment		
Status		Description
Positive:		a benefit to the holistic environment
Negative:		a cost to the holistic environment
Neutral:		no cost or benefit
Duration of the Impact: The lifetime of the impact		
Score	Duration	Description
1	Short term	Less than 2 years
2	Short to medium term	2 – 5 years
3	Medium term	6 – 25 years
4	Long term	26 – 45 years
5	Permanent	46 years or more
Extent or Scale of the Impact: The distance from source that impacts may be experienced		
Score	Extent	Description
1	Site specific	Within the site boundary
2	Local	Affects immediate surrounding areas
3	Regional	Extends substantially beyond the site boundary
4	National	Affects country
5	International	Across international borders.
Reversibility of the Impact: To what degree its influence on the relevant environment can be negated.		
Score	Reversibility	Description
1	Completely reversible	Reverses with minimal rehabilitation & negligible residual affects
3	Reversible	Requires mitigation and rehabilitation to ensure reversibility
5	Irreversible	Cannot be rehabilitated completely/rehabilitation not viable
Intensity or Magnitude of the Impact: Severity of the negative and magnitude of positive impacts		
Score	Severe/beneficial effect	Description
1	Low	Little effect - negligible disturbance/benefit
2	Low to moderate	Effects observable - environmental impacts reversible with time
3	Moderate	Effects observable - impacts reversible with rehabilitation
4	Moderate to high	Extensive effects - irreversible alteration to the environment
5	High	Extensive permanent effects with irreversible alteration
		The Probability of the Impact: Describes the likelihood of the impact occurring
Score	Probability	Description
1	Unlikely	Less than 15% sure of an impact occurring
2	Possible	Between 15% and 40% sure of an impact occurring
3	Probable	Between 40% and 60% sure that the impact will occur
4	Highly Probable	Between 60% and 85% sure that the impact will occur
5	Definite	Over 85% sure that the impact will occur
The Consequence (C)		= Magnitude/Intensity (M/I) + Extent (E) + Duration (D) + Reversibility (R)
The Significance (S)		= Consequence (C) x Probability (P)

After the assessment of an impact in accordance with the criteria described above, the significance of an impact can be determined. The various ratings as indicated above are accorded to these criteria. These ratings are then used to calculate a significance (S) rating and are formulated by adding the sum of ratings given to the extent (E), duration (D), Reversibility (R) and intensity (I) and then multiplying the sum with the probability (P) of an impact as follows:

$$\text{Significance (S)} = (E+D+R+I) \times P$$

Table 11: Significance rating

Score out of 100	Significance
1 to 20	Low
21 to 39	Low to Moderate
40 to 60	Moderate
61 to 79	Moderate to high
80 to 100	High

Once the impacts identified and their significance determined, all subproject alternatives will be analyzed, mitigation measures drawn up for the selected option and supplemented with an Environmental and Social Management Plan (ESMP) to guide the developer in the compliance of E&S standards during implementation.

Report preparation

At the completion of the ESIA or ESMP study, the consultant will produce a formal document, termed an environmental impact statement (EIS). This document should provide sufficient information to objectively appraise and either approve or disapprove of a proposed subproject.

The EIS shall have the content outlined in Annex 4 and 5 for a full and partial ESIA report respectively. While there is no limit to number of pages required, the EIS should be concise, addressing only the relevant issues based on logical assumptions and simulations.

Review of the EIS and decision making

At the completion of the study report and in accordance with Rwanda and World Bank's requirements, the Consultants will deposit the ESIA or ESMP report with the developer for review and validation.

The report will be submitted by the consultant to the local Competent Authority, RDB, for review and clearance. The review process will enable the decision-maker to decide whether the EIS is adequate, the information is correct, and whether it is unbiased. If it is, they are then able to use the EIS as information to be considered in determining whether the project should receive consent or not. The submission to RDB is made online.

RDB might provide comments that need to be addressed before the document approval. The respective client's consultant will address all comments and send back the corrected version to whoever provided comments for approval. Where needed, RDB may organize public hearings to get more comments on the environmental impact report and express views on the impact of the proposed development. In case the ESIA, ESMP study report is accepted, RDB issues Condition of approval and Certificate of approval to the client/ subproject owner.

Disclosure of ESIA or ESMP

After EIS clearance by RDB, the concerned PFI or Apex-FI will disclose the approved report by making copies available at its respective website, head office and in District where the subproject is situated. The disclosure of the ESIA or ESMP report means the authorization of the subproject to commence while the rejection means no project funding. This means that each subproject will be permitted to start after the clearance of the full ESIA or partial ESIA (or ESMP) report by RDB and clearance and disclosure by the Bank. The apex FIs shall therefore ensure that E&S documents are prepared, disclosed and adopted in form and substance acceptable to the FIs and the World Bank prior to funds disbursement to PFIs.

Integrating ESIA/ESMP requirements into loans' agreements

The loan agreements between PFI and Apex- FI or Apex/ PFI and Clients/ borrowers will be prepared before the disbursement of funds. The E&S Technical Clauses (ESTC) aligned with the respective Apex-FIs ESMSs and this ESMF requirements will be incorporated in each participation agreement between Apex-FI and benefiting PFI. The loan contracts between each PFI and sub-borrowers or Apex-FI and sub-borrowers will also include the ESTCs.

Monitoring, Audit and reporting

Each subproject requiring full or partial ESIA shall include an Environmental and Social Monitoring Plan (ESMP) which is a part of the EIS. Each PFI or Apex-FI in case of on-lending or direct financing investments respectively shall undertake the monitoring of ESMP implementation by borrowers (business owners).

Furthermore, each Apex-FI will monitor the environmental and social performance of the PFIs and their portfolio exposures on this credit line. The monitoring of environmental and social parameters included in the ESIA/ ESMP study should be an ongoing responsibility of the lead agency.

The ESMP has a monitoring plan that shall set forth specific activities and indications to assess progress and efficiency in the implementation of environmental management measures as set forth by the ESIA/ESMP. The monitoring shall also identify key indicators of the environmental quality and impacts to be monitored and threshold levels above which the impacts are significant, delineate responsibilities specifying who collects data, who acts, what specific actions and costs are involved. The monitoring plan shall include provisions for on-site monitoring during site preparation, construction, and operation phases; future maintenance requirements, and provision for audit during the operation of the project if any.

The environmental and social audit is a type of evaluation intended to identify the environmental and social compliance and management system implementation gaps, along with related corrective actions. It is carried out when development is already in place and used to check on existing practices, assessing the environmental effects of current activities. Under AFIRR project, the environmental and

social audit will be set at the midterm review and end of the project or whenever deemed adequate (in case of reasonable concern like environmental and social legislation, pressure from stakeholders, etc.) and at the request of REMA, the Rwanda environmental regulator or the donor.

The benefiting PFIs should submit their monitoring reports quarterly to their respective Apex-FIs which will compile reports from both direct financing and on-lending investments and submit them to MINECOFIN. The latter will compile reports from Apex-FIs and share with the World Bank with a copy to REMA on bi-annual basis. MINECOFIN shall also submit the first five (5) Environmental and Social Due Diligence (ESDDs) reports conducted for the first 5 benefiting PFIs (under each of the Apex FIs) from components 1 and 2 to the World Bank. BRD and BDF shall ensure that Environment and social monitoring and reporting templates and exclusion lists are prepared in form and substance acceptable to the Apex-FIs and the World Bank.

In case of emergency situations, MINECOFIN shall immediately report to the World Bank any incident or accident related to or affecting the project, which has or may have a material adverse effect on the environment, the affected communities, the public or workers within 48 hours after taking knowledge about such accidents or incidents.

7.4 Mitigation and Management plans

Mitigation measures will be considered starting with the Environmental and Social Assessment process. Impacts identified as severe in the consequence category and/or likelihood category will be further analyzed to identify additional mitigation measures that are potentially available to eliminate or reduce the predicted level of impact. The potential mitigation measures will include vegetation restoration plan, engineering design solutions, stakeholder's participation in finalizing mitigation measures, etc. The mitigation management and monitoring plans (ESMPs) should be designed to counter the identified impacts during the implementation of the works and operational phase.

7.4.1 Guidelines for mitigation measures and management plans

All significant adverse impacts are considered for mitigation. The feasible and cost-effective measures should be designed to reduce potentially significant adverse environmental and social impacts to acceptable levels. Compensatory measures should also be planned for if mitigation measures are not feasible, cost-effective, or sufficient. The mitigation measures are applied to significant impacts arising from the construction and operation phases of various subprojects. The borrowers' contractor/consultant is responsible for determining the cost of mitigation and including such cost as part of its total cost for executing the works. The AFIRR is therefore required to include the mitigation measures as part of the Request for Proposal (RFP) or tender documents for contractors under direct financing to enable them to quote appropriately. The mitigation measures should also be integrated in loans

contracts between PFIs and sub-borrowers. This ESMF will refer to the World Bank industry Sector Guidelines for agribusiness, chemicals and general manufacturing to address potential impacts.

In addition to mitigation measures, management plans will be developed. For each activity, the plan will outline the potential problems that may adversely impact the environment and recommends corrective measures where required, implementation schedule, role and responsibility of the key stakeholders, occurrence, and estimated cost.

7.4.2 Compliance with ESMP Implementation

Monitoring the compliance of subproject implementation with the mitigation measures set out in its ESIA or ESMP will be required. The Apex-FIs Environmental and Social Specialist (ES) in collaboration with Credit administration under Operation Department and District Environmental Officer (DEO) will have responsibility for monitoring the E&S performance, social inclusion inclusive, by PFIs and direct borrowers by reviewing reports and visiting the subprojects, and pursuing the following corrective measures as required.

- (i) If a violation of the ESMP is detected during a site visit, the borrower or PFI will be notified of the violation, and the means of rectification, verbally. The Apex-FI will discuss with the clients a realistic deadline for rectifying the violation;
- (ii) If a violation persists, the verbal warning will be confirmed in writing to the Client at the end of the deadline and a new deadline is provided for rectification;
- (iii) The Apex-FIs or DEO will return to the site on the deadline, and if the violation is still occurring, he will notify the Client in writing of the continuing violation, informing him of actions/measures to be taken by the Apex-FI.

In case of on-lending investments, each PFI will monitor the implementation of ESMP as recommended in the EIS by carrying out site visits, and pursuing the following corrective measures as required.

- (i) If a violation of the ESMP is detected during a site visit, the sub-borrower will be notified of the violation, and the means of rectification, verbally. The PFI will discuss with the sub-borrower a realistic deadline for rectifying the violation;
- (ii) If a violation is again reported to the benefiting PFIs, they will conduct a site visit and, similarly, issue the verbal warning and deadline for rectification;
- (iii) The verbal warning will be confirmed in writing to the sub-borrower if satisfactory progress is made.
- (iv) The benefiting PFIs will return to the site on the deadline, and if the violation is still occurring, he will notify the Client in writing of the continuing violation, informing him of actions/measures to be taken by the PFI.

Chapter8 : INSTITUTIONAL ASSESSMENT, CAPACITY BUILDING AND TECHNICAL ASSISTANCE

The effective implementation of this ESMF AF will require technical capacity in the human resource base of implementing institutions as well as logistical facilitation. Implementers need to understand inherent social and environmental issues and values to be able to clearly identify their indicators. While updating this ESMF, an institutional assessment was inbuilt to identify strengthening needs on social and environmental evaluation, screening, mitigation, and monitoring.

8.1 Institutional Assessment

The entire Project will be implemented by BRD and BDF under the overall coordination of MINECOFIN through its PCT. This will equally coordinate the environmental and social risk management across all implementing agencies. BRD will implement Subcomponent 1.2, 1.3 and 1.4 as well as Component 3 while Subcomponent 1.1, Component 2 and Component 3 will be under BDF responsibility. Each implementing agency will continue coordinating E&S risks associated with activities under its scope.

The BRD has an E&S Team of 3 staff (2 Environmental and Social Safeguards Specialists and one GRM officer) familiar with Rwanda and WB ESF standards who will manage E&S matter under the BRD/AFIRR scope. On the other hand, BDF also has 2 E&S staff (one environmental Safeguards Specialist and one Social Safeguards Specialist) to implement all BDF related environmental and social aspects under the project scope. However, both Apex-FIs E&S teams will need to be strengthened through capacity building for them to manage the tasks mentioned above during AFIRR AF implementation.

8.2 Human Resource Capacity Requirements

The BRD E&S team is made up of 2 Environmental and Social Specialists and one GRM Officer who have been overseeing the E&S standards related issues in BRD operations, including World Bank funded projects. This team will no doubt perform the same responsibilities for the implementation of AFIRR AF subcomponents under BRD. The Environmental Specialist and a Social specialists have been coordinating E&S requirement in BDF.

With the additional financing, the Project will continue to implement E&S aspects in close collaboration with benefiting PFIs and clients. Though most of the potential PFIs do not have full time E&S staff, each PFI designated a focal person who deals with the E&S aspects of the financed subprojects, and this will continue throughout the project life cycle. However, their level of training and technical capacity on environmental and social standards is not sufficient and needs to be enhanced. Over the past one year of implementation, the project trained 22 staff from 11 Commercial banks, 24 staff from

MFIs and more than 95 staff from 95 SACCOs. This capacity building will continue to strengthen the skills of focal points and managers.

Each District also has District environmental officer (DEO) who cares for environmental aspects in the District. The AFIRR AF project may also require the services of DEO during its implementation. Due to limited District budget, workload and capacity limitation, the engagement of that staff is specifically restricted to minor business community level development actions.

The Project might also capacitate DEOs on environmental and social standards implementation and monitoring aspects (i.e., OHS, Grievance Redress Mechanisms, gender equity and GBV, child labor prevention, etc.) to ensure proper environmental and social risks and impacts management under AFIRR.

8.3 Technical Capacity Enhancement

The effective implementation of the updated ESMF and other ESF instruments under AFIRR project (SEP, ESCP, ESMS) requires capacity building for those responsible for implementing sub-projects both at Apex-FI and PFI levels. Mobilization meetings, awareness campaigns, and training on environmental and social standards (ESSs) will be required for the following institutions and personnel:

1. BRD and BDF staff,
2. PFIs' focal persons and/or fulltime E&S staff as appropriate
3. Local Government Authorities (District environmental officers) as appropriate
4. Businesses managers/ borrowers or sub-borrowers
5. Site specific Grievance Redress Committees (GRCs);
6. Contractors who will be contracted to undertake the construction works, if any.
7. Workers and surrounding communities.

Training programs and manuals will be developed for MSMEs, large enterprises and PFIs to guide their capacity building process and implemented by the Environmental and Social Specialists at each Implementing Agency under the coordination of MINECOFIN/PCT. The training shall be conducted three months after project effectiveness.

The Capacity building will cover the following topics:

- National E&S regulations and World Bank Environmental and Social Framework (ESF);
- Overview of AFIRR project and E&S implementation, monitoring and reporting:
 - ✓ Environmental and Social risks/impacts associated with AFIRR project activities
 - ✓ Relevant Environmental and Social Standards for project compliance with E&S standards;
 - ✓ Occupational health and safety awareness, prevention and management within and in the vicinity of the project site;

- ✓ Requirements for implementation, monitoring and reporting
- ✓ Roles and responsibilities in E&S implementation, monitoring and reporting
- Stakeholder engagement, consultation and partnerships;
- Labour management procedures and child labour prevention;
- Awareness campaigns and prevention of communicable diseases, including Covid-19 pandemic
- Creation and operationalization Grievance Redress Mechanism;
- Gender Based Violence (GBV), sexual exploitation and abuse (SEA), sexual harassment (SH) prevention and management, Action Plan and its implementation;
- Management of safety and environmental sanitation on site
- Emergency preparedness and response plan
- Social inclusion in project activities
- Reporting, monitoring and follow up.

Trainings in every site will be launched before performing the construction activities and will continue throughout the project life cycle. The training content will be tailored to items to be implemented. Depending on available resources, some of the trainings will be led by the E&S Specialists of the implementing agencies while others may be given by external E&S specialists hired or invited from academia, NGOs or other government agencies.

Chapter9 : UPDATED ESMF IMPLEMENTATION ARRANGEMENTS AND BUDGET

The updated Environmental and Social Management Framework (ESMF) implementation and budgeting process presented under this section consider institutional arrangements required to implement the environmental and social actions and an estimated cost for its implementation. It is worth noting that the real cost of the mitigation measures will be determined during the preparation of the Environmental and Social Impact Assessment (ESIA)/Environmental and Social Management Plan (ESMPs) for each subproject.

9.1 ESMF Implementation

The Project will be implemented by BRD and BDF under the coordination of MINECOFIN/PCT. In each implementing agency, the Project will continue to be administered through the existing Special Project Implementation Unit (SPIU).

9.2 Disclosure of the updated ESMF

Following its preparation and clearance by the World Bank, the updated ESMF for AFIRR AF will be redisclosed to MINECOFIN, BRD and BDF websites. The World Bank will also redisclose the updated ESMF electronically through its external website.

9.3 Grievance Redress Mechanism

Grievances may arise and vary from one subproject to another or one location to another. Grievance procedures are usually required to ensure that project-affected people (PAPs) can lodge complaints or concerns, without cost and with the assurance of a timely and satisfactory resolution of the issue. The procedures also ensure that the entitlements are effectively transferred to the intended beneficiaries.

Grievance redress mechanisms (GRM) are increasingly important for development projects, where ongoing risks or adverse impacts are anticipated. They serve to prevent and address workers and community concerns, reduce risk, and assist larger processes that create positive social change. The following depicts the Grievance Redress procedures under AFIRR AF project.

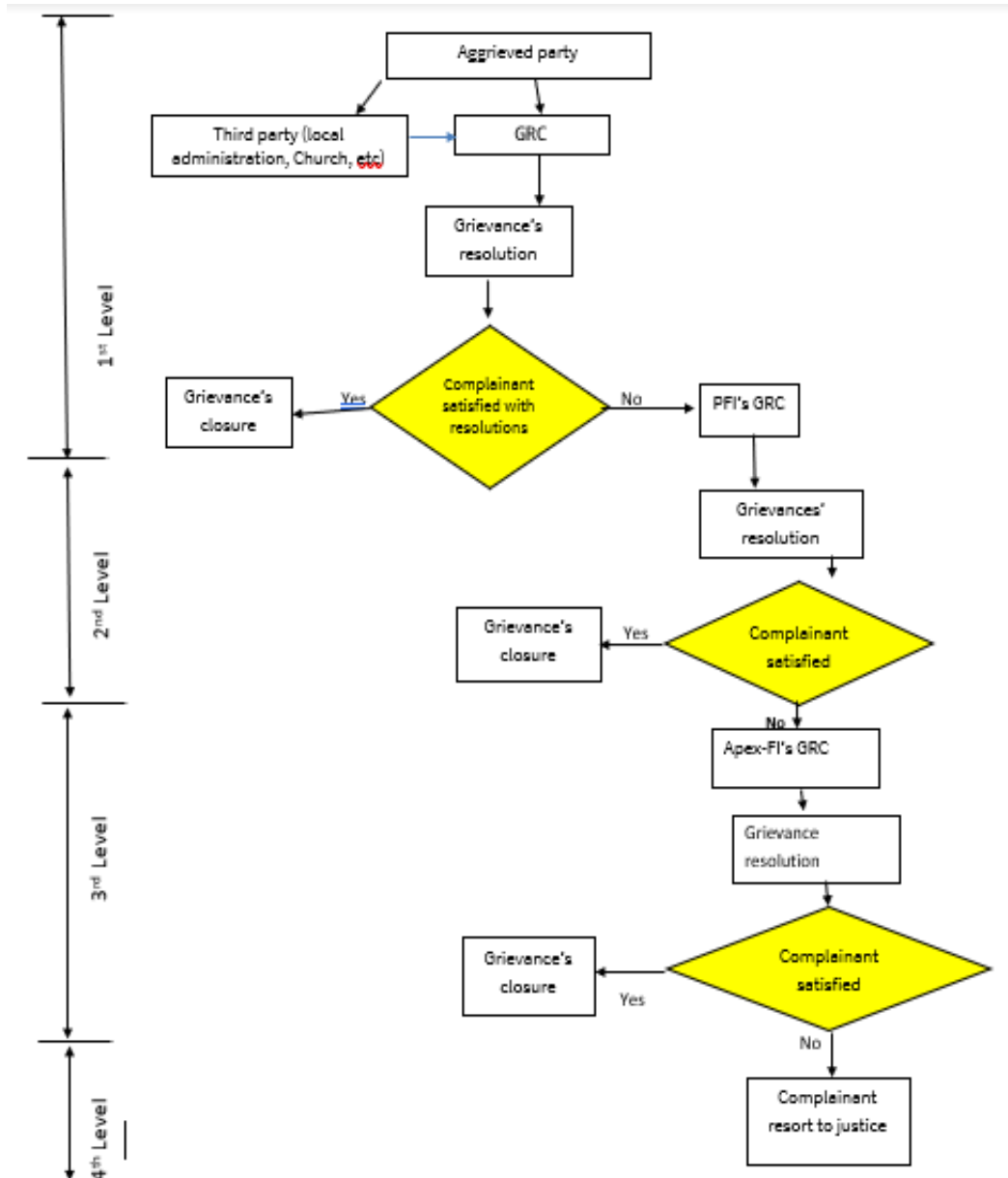


Figure 5: Grievance Redress Mechanism Chart

a) **Established procedures and time frame for Grievance redress mechanism**

The creation of a Grievance Redress Committee (GRC) will be given priority in each project site/ location. As project sites will be scattered in the country and in a bid to assure accessibility for affected people and GRC members, a special GRC may be established at site level and composed of 3 people, namely the sub-borrower, local authority and representative of affected community. This committee will be chaired by the representative of local administration and the sub-borrower or representative of sub-borrowers (where applicable) will be the committee's secretary. The site, like an industrial park, may have one or several borrowers/ sub-borrowers from same or different PFIs. The roles of each GRC member are depicted in the Table below.

Table 12. Roles and responsibilities of the GRC members

S/N	GRC	Roles
1	GRC Chairperson	<ul style="list-style-type: none"> - Convening and chairing the GRC meeting - Receiving of grievances, complaints, or concerns from the complainant and forwarding to Secretary for recording - Responding to the complainant after investigation and resolution of the grievance
2	GRC Secretary	<ul style="list-style-type: none"> - Keeping the GRC logbook and reports; - Logging all complaints from GRC members and other third party and taking minutes of the GRC meeting; - Receiving of grievances, complaints, or concerns from complainant and recording it - Preparing progress reports of the GRC and submit to Chair for approval/ signing
3	GRC Advisor	<ul style="list-style-type: none"> - Advising the GRC, especially on matters related to gender and youth and vulnerable - Receiving of grievances, complaints, or concerns from the complainant and forwarding to Secretary for recording

b) Grievance resolution approach

As indicated in the GRM chart above, all complaints from aggrieved party are submitted to the GRC for recording. The channels of receiving complaints include presentation of complaints via face-to-face meetings, written complaints, telephones, email communication, third party (e.g., farmers' organizations, Church, private sector, etc.). The GRC organizes a field visit and calls for both aggrieved and accused party of grievance resolution session without any undue delay. The local administration, mostly Cell and Sector, where the project is located can also be contacted for assistance. If the aggrieved person raises his/her complaint and does not receive a response or is not satisfied with the resolution, s/he may lodge his/her grievance to the PFI's representative/ focal person. The relevant PFI will then attempt to resolve the problem within 30 days of the complaint being lodged using its existing conflict resolution structure. If no agreement is reached at this stage, then the complaint is dealt with through the Apex-FIs. Where matters cannot be resolved through local routes (GRC, PFI and Apex-FIs), the grievance will be referred to local courts, starting with traditional court, Abunzi. If the issue is not resolved at this stage, then the lower, high court or court of appeal of Rwanda remains an avenue for voicing and resolving these complaints.

c) Grievance Log

The GRC will ensure that each complaint is appropriately tracked and recorded. The logbook will contain record of the persons responsible for an individual complaint, and records of dates for the following events:

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

d) Monitoring Complaints

The PFI will be responsible for:

- Providing the subproject GRC reports on a quarterly basis detailing the number and status of complaints. These reports will be a compilation of reports submitted by GRCs to respective PFIs.
- Any outstanding issues to be addressed; and
- Regular reports, including analysis of the type of complaints, levels of complaints, actions to reduce complaints, and initiator of such action.

In case of direct financing, the Apex-FIs will monitor themselves the management of complaints associated with borrowers' subprojects. The monitoring and reporting template for both direct and on-lending investments is presented in Annex 9.

f) World Bank Grievance Redress Service (GRS)

Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, because of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit <http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service>. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

9.4 Updated ESMF Implementation budget

The Budget for the implementation of the Updated ESMF will mainly consist of the preparation of environmental and social tools and implementation of mitigation measures that will be included in the ESIA, ESMPs and other environmental and social reports. The table below shows the estimated cost for the implementation of the ESMF for the proposed project.

Table 13. Estimated budget for the implementation of Updated ESMF

Component	Broad Activities	Planned Activities	Cost (US\$)	Remarks
Liquidity and recovery facility	Provision of lines of credit (LoC) to Participating Financial institutions (PFIs) for on-lending to highly impacted companies and new investments	Preparation and review of ESMSs for some benefitting PFIs, environmental and social audit, ESIA of some borrowers/sub-borrowers, etc. ESIA/ESMP) and training manuals	100,000	Most of the project environmental and social frameworks will internally be prepared by the implementing agencies and Apex-Fis will support PFIs to have their ESMSs, and borrowers/sub-borrowers to develop/review their ESIA. The can also be used to develop the ESA. The Environmental and Social Audit (ESA) and ESMS or ESIA may be developed by consultants hired by Apex-Fis
		Monitoring of ESMPs of financed subprojects	50,000	Routine monitoring of ESMPs by PFIs, implementing agencies and MINECOFIN during the project period
Institutional Strengthening and Implementation Support	Provision of technical assistance services to implementing agencies and project beneficiaries for capability strengthening	Capacity building of Apex-Fis, PFIs, Clients and Districts	150,000	Training sessions on environmental and social standards (awareness, implementation, monitoring and reporting) will be undertaken in-house E&S team or hired consultants
		Preparation and implementation of Gender Action Plan (GAP)	20,000	Training on gender-based violence (GBV), sexual exploitation (SEA) & sexual harassment (SH) and child labour prevention. The GAP preparation will be done by in-house E&S team
Total			320,000	
Contingency (10%)			32,000	
Grand Total			352,000	

The total cost for the Updated ESMF implementation, including environmental and social documents preparation, monitoring of ESMPs, capacity building and auditing is estimated at US\$ 352,000.

Chapter10 : CONCLUSION AND RECOMMENDATIONS

The new sectors (of Transport and tourism) were not reflected in the existing ESMF. These sectors together with the existing sectors of AFIRR parent project are anticipated to have E&S implications. Therefore, deemed necessary to update the existing ESMF, thus making it comprehensive to comply with both Rwanda and World Bank ESF requirements. The document usually provides guidance on the management of environmental and social impacts and risks, institutional arrangements as well as environmental and social instruments to be prepared as part of the implementation of both AFIRR parent project (P175273) and its additional financing project (P179999) activities.

The policy, legal and institutional frameworks for this framework and the socio-economic baseline project were developed and public consultation and participation meetings were held with transport operators/actors. The increased OHS risks, air emission, soil and water contamination, pressure on water and energy, increased wastes generation, especially e-wastes, etc. were identified as the main risks associated with this project. The guidance for E&S impacts assessment, mitigation as well as implementation, and monitoring were provided. This updated ESMF also has an inbuilt grievance procedure that will be used to address grievances that arise during its implementation. The estimated budget for the updated ESMF remains unchanged and is equal to US \$ 352,000.

Given the nature of the project, the potential adverse risks and impacts range from minimal/low to substantial and can be controlled through proposed mitigation measures. The ESIA or ESMP study will be conducted where required to design adequate site-specific measures to mitigate adverse impacts. Successful implementation of this updated ESMF will depend to a large extent on the involvement and participation of business owners and PFIs. Specifically, it is recommended that:

- Environmental and Social standards awareness and education/training for the key stakeholders and affected communities must be among the key project activities in all sites throughout the project life cycle.
- Environmental and social aspects should be incorporated in all loans or lines of credit agreements between Apex-FIs and PFIs and PFIs and respective borrowers; and
- Monitoring and reporting by PFIs on E&S performance.

The ESMF will regularly be updated (if required), incorporating lessons learned from implementing various components of the project activities, to respond to changing local conditions. It should be reviewed and approved through the national approval process and by the World Bank prior to project implementation as a condition for funds disbursement. This framework will apply to any project activity within the AFIRR project.

ANNEXES

Annex 1: AFIRR Project exclusion list of activities

The following list of activities shall be ineligible for financing under both parent project and Additional Finance (AF):

- Any activities resulting or anticipated result in permanent or temporary physical or economic displacement.
- Any activities involving significant or irreversible impacts or impacts that cannot be easily mitigated.
- Any activities that have significant or irreversible impacts on cultural heritage as defined under ESS 8.
- Production or trade in any product or activity deemed illegal under the Borrower's laws or regulations or ratified international conventions and agreements.
- Production or trade in weapons or munitions
- Gambling, casinos and equivalent enterprises.
- Trade in wildlife or wildlife products regulated under Convention on International Trade in Endangered Species (CITES)
- Production or trade in radioactive materials (this does not apply to the purchase of medical equipment, quality control (measurement) equipment and any equipment where the Association considers the radioactive source to be trivial and/or adequately shielded).
- Production or trade in, or use of unbounded asbestos fibers. This does not apply to purchase and use of bonded asbestos cement sheeting where the asbestos content is less than 20%.
- Drift net fishing in the marine environment using nets more than 2.5 km in length.
- Purchase of logging equipment for use in cutting forests.
- Production or trade in wood or other forestry products other than from sustainably managed forests
- Production or trade in pharmaceuticals subject to international phase outs or bans.
- Production or trade in pesticides/herbicides subject to international phase outs or bans such as potential Ozone Depleting Substances [ODSs] that have been banned in Rwanda.
- Fishing in the marine environment using electric shocks and explosive materials.
- Any activities that would curtail workers fundamental rights. These would include: (i) freedom of association and the effective recognition of the right to collective bargaining; (ii) prohibition of all forms of forced or compulsory labor; (iii) engaging workers in hazardous conditions (which includes construction activities) without appropriate OHS measures as per national laws and ESF/ESSs, and hiring persons under 18; (iv) discrimination/exclusion of workers based on race, color, sex, religion, political opinion, national extraction, or social origin.
- Commercial logging operations in primary tropical moist forests
- Production or trade in products containing Polychlorinated biphenyls (PCBs).
- Production or trade in ozone depleting substances subject to international phase out.

- Production, trade, storage, or transport of significant volumes of hazardous chemicals, or commercial scale usage of hazardous chemicals (includes gasoline, kerosene, and other petroleum products).
- Production or storage or packaging of inflammable material.
- Production or trade or use or storage of dyeing chemicals and dye intermediaries.
- Production or activities that impinge on the lands owned or claimed under adjudication without full documented consent of such peoples.

Annex 2: BRD exclusion list of activities

BRD does not finance the following projects:

- Production or trade in any product or activity deemed illegal under host country laws or regulations or international conventions and agreements, or subject to international bans, such as pharmaceuticals, pesticides/herbicides, ozone depleting substances, PCB's, etc.
- Trade in animals, plants or any natural products not complying with the provisions of the CITES convention;
- Production or trade in weapons and munitions and armed related activities;
- Production or trade in tobacco;
- Gambling, casinos, and equivalent enterprises;
- Production or trade in radioactive materials. This does not apply to the purchase of medical equipment, quality control (measurement) equipment and any equipment where BRD considers the radioactive/nuclear source to be trivial and/or adequately shielded;
- Production or trade in unbonded asbestos fibers and other non-permitted chemicals and polluting substances. This does not apply to purchase and use of bonded asbestos cement sheeting where the asbestos content is less than 20%;
- Drift net fishing in the marine environment using nets more than 2.5 km in length and fishing using electric shocks and explosive materials;
- Purchase of logging equipment for use in cutting forests
- Production or sale of strong alcohol intended for human consumption;
- Any trade related to pornography or prostitution.
- Any operation leading to or requiring the destruction of a critical habitat (both natural and modified habitat or ecologically sensitive areas), or high Conservation value areas or any forestry project which does not implement a plan for improvement and sustainable management;
- Commercial logging operations for use in primary tropical moist forest;
- Production or trade in wood or other forestry products other than from sustainably managed forests;
- Activities which may affect adversely sites of cultural or archaeological significance;
- Transboundary trade in waste or waste products, unless compliant with the Basel Convention and the underlying regulations;
- Trade in goods without required export or import licenses or other evidence of authorization of transit from the relevant countries of export, import and, if applicable, transit;
- Drug and human trafficking;
- Any criminal or outlawed activities;
- Any business prohibited by laws and regulations;
- Terrorism and money laundering activities;

- Any activities that would curtail workers fundamental rights. These would include: (i) freedom of association and the effective recognition of the right to collective bargaining; (ii) prohibition of all forms of forced or compulsory labor; (iii) engaging workers in hazardous conditions (which includes construction activities) without appropriate OHS measures as per national laws, and hiring persons under 18; (iv) discrimination/exclusion of workers based on race, color, sex, religion, political opinion, national extraction, or social origin;
- Activities linked to tax evasions;

In addition, BRD will not use funds from its Development organization if the latter does not offer financing to any activity involving the following:

- Production and distribution or investment in media that are racist, antidemocratic or that advocate discrimination against a part of the population;
- Exploitation of diamond mines and marketing of diamonds where the host country has not adhered to the Kimberley Process;
- Any sector or any service subject to an embargo by the United Nations, European Union and/or France in a particular country and with no absolute or relative restriction regarding the amount;
- Prospection, exploration and mining of coal; land-based means of transport and related infrastructure essentially used for coal; power plants, heating stations and cogeneration facilities essentially fired with coal, as well as associated stub lines
- Nuclear power plants (apart from measures that reduce environmental hazards of existing assets) and mines with uranium as an essential source of extraction;
- Non-conventional prospection, exploration, and extraction of oil from bituminous shale, tar sands or oil sands.

Annex 3: BDF exclusion list of activities

BDF under the “Access to Finance for Recovery and Resilience Project” financing will not provide investments to any projects involving the following activities:

1. Production or trade in any product or activity deemed illegal under Rwandan laws or regulations or international conventions and agreements.
2. Production or trade in weapons or ammunitions.
3. Gambling, casinos and equivalent enterprises.
4. Trade in wildlife or wildlife products regulated under the Convention on International Trade in Endangered Species (CITES).
5. Production or trade in radioactive materials. This does not apply to the purchase of medical equipment, quality control (measurement) equipment and any equipment where the radioactive source to be trivial and/or adequately shielded.
6. Production or trade in or use of unbounded asbestos fibers.
7. Any activities involving significant degradation or conversion of natural and/or critical habitats and/or any activities in legally protected areas.
8. Any activities involving physical and economic displacement in relation to the land acquisition, restriction on land use and involuntary resettlement.
9. Activities damaging to national monuments and other cultural heritage.
10. Unsustainable fishing practices such as drift net fishing in the aquatic environment using nets more than 2.5 km in length, electric shocks, or explosive materials.
11. Production or trade in wood or other forestry products other than from sustainably managed forests.
12. Production or trade in pharmaceuticals, pesticides/herbicides, ozone-depleting substances, polychlorinated biphenyls (PCBs) subject to international phase outs or bans.
13. Production or activities involving harmful or exploitative forms of forced labor or child work.
14. Production or activities that have adverse impacts, including relocation, on the lands, natural resources, or critical cultural heritage subject to traditional ownership or under customary use by historically underserved traditional local communities.
15. Military or police equipment or infrastructures, and equipment or infrastructure which result in limiting people’s individual rights and freedom (i.e., prisons, detention centres of any form) or in violation of human rights.

16. Activities involving live animals for experimental and scientific purposes.
17. Production or trade or use or storage of dyeing chemicals and dye intermediaries.
18. Any activities that would curtail workers fundamental rights. These would include: (i) freedom of association and the effective recognition of the right to collective bargaining; (ii) prohibition of all forms of forced or compulsory labor; (iii) engaging workers in hazardous conditions (which includes construction activities) without appropriate OHS measures as per national laws and WB ESF/ESSs; (iv) discrimination/exclusion of workers based on race, color, sex, religion, political opinion, national extraction, or social origin.

Annex 4: Indicative outline of Environmental and Social Impact Assessment (ESIA) report

The EIA should entail the following¹²:

1. Executive summary of the ESIA report which should be brief and focus on the following matters:

- Name and location of the project;
- Name of the developer
- Name of the agency preparing EIS;
- Methodology for conducting ESIA study
- Main impacts identified;
- Mitigation recommendations;
- Environmental monitoring plan;
- Conclusion and recommendations

2. Introduction, objectives, and methodology: it provides the project context, problems to resolve and objectives, and methodology for ESIA preparation.

3. Description of the proposal and its alternatives. In this part, it is necessary to describe in detail the proposed project and its alternatives including those not subjected to pre-feasibility study or feasibility study. Attention should be concentrated on the comparison of different alternatives. The following are the required contents of the section "*Description of the proposal and its alternatives*":

- The stage of the project cycle where the project is being implemented (pre-feasibility study, feasibility study or design);
- Outlines of the plan for impact prediction and mitigation measures;
- Raw materials, supplies, energy, water and equipment to be used for implementing the project and its alternatives;
- Operational parameters such as capacity and product output;
- Tables, photographs, diagrams and maps;
- Comparison of characteristics of alternatives (extent, location, technology, products, energy and raw materials demands) in the present socio-economic, technical and environmental situation;
- A summary of project technical, economic and environmental characteristics.

4. Policies, legal and institutional frameworks. In this section, the proposal must be shown to be in line with the policies, laws, institutional framework, and development strategy of Rwanda. It also addresses the WB ESF and ESSs as well as the WBG EHSGs.

¹² The content should adhere to World Bank Environmental and Social Framework (ESF) (Environmental and Social Standards 1: Assessment and Management of Environmental and Social Risks and Impacts; ESF, p. 25-26, 2017,) and National guidelines (https://www.rema.gov.rw/fileadmin/user_upload/13-RW_EIA_Guidelines_Final_version1_Nov_2006.pdf)

5. **Description of present (baseline) environmental status** (analysis of initial state). In this section, the environment in the project area should be appropriately described. The following aspects should be presented:
- Environmental baseline conditions (natural and socio-economic);
 - Sensitivity and values (cultural, aesthetic) of the environment in the project area.
6. **Public Consultation:** In this section, the developer is obliged to ensure that all project stakeholders, affected and interested parties as well as vulnerable groups, have adequate input during the ESIA study. The ESIA Experts should identify all stakeholders and therefore undertake comprehensive consultations with them when conducting the impact study
7. **Impact identification and assessment.** In this section, the spatial and temporal scope of the impacts and characteristics of different impacts (whether positive or negative, direct or indirect, their intensity, extent, and significance) should be presented for the project and also for all alternatives considered. The following aspects should be presented:
- Assessment of all impacts to the local population;
 - Environmental database, study methods and assumptions;
 - Limitations and reliability of the data and study results;
 - Compliance with the environmental standards and license issuing procedures;
 - Significance of impacts, criteria and standards used for assessment of impact significance;
 - Measures to avoid and mitigate impacts.

In this section, methods of data collection, methods and criteria used for assessing the degree of danger and significance of impacts must be indicated. Cumulative impacts must be emphasized. A summary table of impacts for each alternative should be provided.

8. Analysis of alternatives

The main content of this section is the comparison of the main positive and negative impacts, impact mitigation and monitoring measures of alternatives. The environmentally suitable alternative is determined based on the following aspects:

- Impacts with largest effects, measures for avoiding, mitigating and managing them;
- Impacts for which the developer has committed to take prevention measures and unavoidable impacts;
- Allocation of cost and benefit between the levels, partners and population of the project area;
- Information on protection measures or resettlement, acquiring opinions of the public;
- Environmental improvement opportunities.

9. Environmental and social management and monitoring plan (ESMP).

In this section, tasks to ensure the implementation of mitigation measures and monitoring of impacts should be presented. This is a plan for monitoring and management of impacts during the implementation and operation of the project. This plan includes the following contents:

✓ ***Environmental and social management plan (ESMP)***

- Adverse impact for each planned activity
- Description of proposed mitigation measures for each adverse impact.
- Implementation schedule including indicators, costs, etc.
- Assignment of responsibility for implementation.
- Estimated cost.

✓ ***Environmental and social monitoring plan***

The matrix has been developed for the impact monitoring to facilitate the monitoring framework which includes the following:

- Adverse impact,
- Parameters to be monitored,
- Indicators for measuring the impact,
- Method used for verification,
- Frequency of monitoring,
- Responsibility,
- Costs involved.

✓ ***Implementation arrangements***

- Institutional arrangement,
- Grievance redress mechanisms,
- Capacity building required,
- Implementation schedule and estimated budget,
- Monitoring and reporting procedures.

10. Conclusion and recommendations

11. Annexes where tables, drawings, maps, documents and information used as reference should be presented.

Annex 5: Suggested Content of Environmental and Social Management Plan report

The ESMP report or partial ESIA (or limited ESIA) should cover the following¹³:

1. Executive summary of the ESMP

This section should be brief and focus on following:

- Name and location of the project;
- Name of the developer
- Name of the agency preparing EIS;
- Methodology for conducting ESMP study;
- Main impacts identified;
- Mitigation recommendations;
- Environmental monitoring plan;
- Conclusion and recommendations

2. Introduction

It provides the project context, problems to resolve and objectives.

3. Policies, legal and institutional frameworks.

In this section, the intended project must be shown to be in line with policies, laws, institutional framework and development strategy of Rwanda.

4. Description of present (baseline) environmental status

In this section, the environment in the project area should be appropriately described. The following aspects should be presented:

- Environmental baseline conditions (natural and socio-economic);
- Sensitivity and values (cultural, aesthetic) of environment in the project area.

5. **Public Consultation:** In this section, the developer is obliged to ensure that all project stakeholders, affected and interested parties as well as vulnerable groups, have adequate input during the ESIA study. The ESIA Experts should identify all stakeholders and therefore undertake comprehensive consultations with them when conducting the impact study.

6. Potential Impacts identification and Mitigation measures

¹³ The content should adhere to World Bank Environmental and Social Framework (ESF) (Environmental and Social Standards 1: Assessment and Management of Environmental and Social Risks and Impacts; ESF, p. 25-26, 2017,) and National guidelines (https://www.rema.gov.rw/fileadmin/user_upload/13-RW_EIA_Guidelines_Final_version1_Nov_2006.pdf)

In this section, the spatial and temporal scope of the impacts and characteristics of different impacts (whether positive or negative, direct or indirect, their intensity, extent and significance) should be presented for the project and also for all alternatives considered. The following aspects should be presented:

- Assessment of all impacts to the environment;
- Environmental database, study methods and assumptions;
- Compliance with the environmental standards and license issuing procedures;
- Measures to avoid and mitigate impacts.

Cumulative impacts must also be emphasized.

7. Environmental and social management and monitoring plan (ESMP).

In this section, tasks to ensure the implementation of mitigation measures and monitoring of impacts should be presented. This is a plan for monitoring and management of impacts during the implementation and operation of the project. This plan includes the following contents:

✓ ***Environmental and social management plans (ESMP)***

- Adverse impact for each planned activity
- Description of proposed mitigation measures for each adverse impact;
- Implementation schedule including indicators, costs, etc.;
- Assignment of responsibility for implementation;
- Estimated cost.

✓ ***Environmental and social monitoring plans (ESMP)***

The matrix has been developed for the impact monitoring to facilitate the monitoring framework which includes the following:

- Adverse impact,
- Parameters to be monitored,
- Indicators for measuring the impact,
- Method used for verification,
- Frequency of monitoring,
- Responsibility,
- Costs involved.

✓ ***Implementation arrangements***

- Institutional arrangement,
- Grievance redress mechanisms,
- Capacity building required,
- Implementation schedule and estimated budget,
- Monitoring and reporting procedures.

Annex 6: List of physically and virtually consulted people

1. Apex-FIs and Public institutions consulted.

S/N	Names	Position	Institution	Contact
1	Mandera Nelson	Housing and Infrastructure portfolio Manager	BRD	0787482902
2	Kagarama John	Head, Advisory & Consulting Department	BDF	0788308599
3	Icyimpaye Beatha	Division Manager of Environmental Compliance and Enforcement Division	REMA	0783535500
4	Munyandinda Alain	Environmental Expert,	RDB	0788521930
5	Rutagengwa Alexis	Head of Surveying, Land Use and Mapping Department	RLMUA	0788866479
6	Umuhorakeye Alice	Environmental Officer	Kigali City	0788818646
7	Harelimana Innocent	Environmental Officer	Rubavu District	0788776202
8	Mudenge Jean Paul	Environmental Officer	Kayonza District	0788642401

2. Participating Commercial Banks (PFIs) and Microfinance Institutions (MFIs) Consulted

S/No	Names	Position	Institution	Contact Email
1	Celine S. UWIZEYE	Corporate Relation Manager	Bank of Kigali	<i>suwizeye@bk.rw</i>
2	Rita Mbabazi NZARAMBA	Relationship Manager	Bank of Kigali	<i>rnzaramba@bk.rw</i>
3	Songa RWAMUGIRE	Head of Corporate	COGEBANQUE	<i>S_rwamugire@cogebank.com</i>
4	Polepole KAYUMBA	Head of SME	COGEBANQUE	
5	Joel KAYONGA	Commercial Director	COGEBANQUE	<i>j.kayonga@cogebank.com</i>
6	Fernand KAMANZI	Head of Treasury	Equity Bank	<i>fernand.kamanzi@equitybank.co.rw</i>
7	Paul MUCYO Januario	Head of Corporate Banking	Equity Bank	<i>mucyo.januario@equitybank.co.rw</i>
8	Samuel NKUBITO	Head of Personal Banking	Equity Bank	<i>Samuel.nkubito@equitybank.co.rw</i>
9	Hans MUGANZI	Head of Corporate	I&M BANK	<i>Hans.muganzi@imbank.co.rw</i>
10	Johnny MATABISHI	Head of Corporate banking	KCB	<i>jmatabishi@rw.kcbbankgroup.com</i>
11	Gilbert RUKUNDO	Head of Business Banking	BPR	<i>Gilbert.rukundo@bpr.rw</i>
12	Yves NKUNDIMFURA	Relationship Manager	GT Bank	<i>yves.nkundimfura@gtbank.com</i>
13	Joel GATANAZI		GT Bank	<i>joel.gatanazi@gtbank.com</i>
14	Brenda MUTONI	Relationship Manager	NCBA	<i>Brenda.Mutoni@ncbagroup.com</i>
15	Vincent SIBOMANA	Relationship Manager	ECOBANK	<i>vsibomana@ecobank.com</i>

16	Vianney BIZIMANA	Head of Corporate	ECOBANK	<i>vbizimana@ecobank.com</i>
17	Capt Alphonse RURANGIRWA	Head of Finance	ZIGAMA CSS	<i>rurangirwa@zigamacss.rw</i>
18	Emmanuel MUGISHA		Access Bank	<i>Emmanuel.mugisha@accessbankplc.com</i>
19	William Peter KABEJA	Head of Corporate	Bank of Africa (BOA)	<i>wkabeja@boarwanda.com</i>

3. Participating Microfinance Institutions (SACCOs) Consulted

S/N	Name of the Participant	Institution	Position	Phone number
1	IRAGUHA Eric	ISANGE NGOMA SACCO	Loan Officer	0788605101
2	Rukundo Juvenal	Tsimbura SACCO	Loan Officer	0788674541
3	Nsabimana Diogene	Coopec Ubumwe/Nyakaliro	Manager	0788637199
4	Manirakiza Thierry	Coopec Ubumwe/Nyakaliro	Loan Officer	0788479844
5	Tuyisenge Emeline	Girubukire SACCO Buyoga	Loan Officer	0783089111
6	Nyiransabimana Peruth	Umusingi Rwaza SACCO	Manager	0783187071
7	Mbonimpa Aloys	Imirasire Y' iterambere Kigarama	Manager	0788833447
8	Rwigema Thacien	SACCO Ngarama	Manager	0788841803
9	Mukeshimana Marie Jose	SACCO Ganaheza Nyagisozi	Manager	0788745216
10	NSHIMYUMUKIZA Emmanuel	SACCO Ejo Heza	Loan Officer	0788836079
11	Nayigiziki Josiane	SACCO MASORO	Manager	0788831867
12	Bakahirwa Donatha	Tsimbura SACCO	Manager	0785132177
13	Nsegimana Vincent	Indatwa SACCO	Loan Officer	0783033312
14	Ndizeye William	COOPEC-TRASO	Loan Officer	0785792231
15	Nyirahabimana Vestine	Coopebamu SACCO	Loan Officer	0788808497
16	Nzagukirana Godfred	Coopebamu SACCO	Manager	0788645135
17	Habimana Jean D'amour	SACCO Ururyange	Loan Officer	0785429262
18	HABAMUNGU Joseph	Dufatanye Karengera SACCO	Accountant	0783378711
19	Niyigena Hyacinthe	SACCO Gihango	Loan Officer	0783343307
20	Niyigaba Emmanuel	SACCO Gihango	Manager	0788801355
21	Eugenie MUKANTWARI	KARAMBI VISION SACCO	Loan Officer	0783186964
22	Valens NDAYAMBAJE	Girintego SACCO	Loan Officer	0788833149
23	NSHIMIYUMUKIZA Joseph	TERIMBERE SACCO	Loan Officer	0788223812
24	KAREMERA SIKUBWABO JD	SACCO ABISUNGANYE	Loan Officer	0782361092
25	KALISA Placide	SACCO Bigogwe	Loan Officer	0782390857
26	Mukeshimana Claire	SACCO Tugirubukire	Manager	0782808178
27	Uwimana Jeanette	Girintego SACCO	Manager	0788592836
28	Hakurineza Leonidas	SACCO Twambutsanye	Loan Officer	0783585549
29	Bucyana Israel	Rebakure SACCO	Loan Officer	0788651287
30	Dusingizimana Moise	SACCO Kira Buruhukiro	Manager	0788685630
31	BYUKUSENGE Jean de Dieu	Gishamvu Sector	Manager	0788400131
32	RWAGASORE Etienne	SACCO Jarama	Manager	0783555401
33	KAYIRANGA Felix	SACCO Icyerekezo Mushishiro	Manager	0788757082

34	Mahoro Liliose	SACCO WIGISAGARA Muhanga	Loan Officer	0785224449
35	Seraphine KANTARAMA	SACCO WIGISAGARA Muhanga	Manager	0788680640
36	NIYONAMBAZA Joseph	Tugane SACCO Nyabinoni	Loan Officer	0788536202
37	HABIMAMANA Israel	SACCO Ganaheza Nyagisozi	Loan Officer	0785484541
38	Uwayo Robert	Iqihondohondo SACCO	Manager	0788693336
39	Bumbali Machiavel	KARAMBI VISION SACCO	Manager	0788582733
40	Ruzindana Antoine	Abisunganye SACCO	SACCO Manager	0784030358
41	Uwingabire Innocent	SACCO Tugirubukire	Loan Officer	0783715857
42	SEBAGABO	SACCO Twambutsanye	SACCO Manager	0783377451
43	Nyiransabimana Esperence	SANGA SACCO SHYIRA	Loan Officer	0783476608
44	Icyitegetse Marie Pierre Viviane	IZIYIGIHE SACCO	Manager	0788277101
45	UZABAHO Dieu Donne	SACCO Umurava Kigoma	Loan Officer	0788894175
46	Mujawamariya Marie Aime	SACCO Umurava Kigoma	Manager	0788772517
47	Musoni Gratien	SACCO Ingeri GISHAMVU	Loan Officer	0788699421
48	Tuyishime Donatille	SACCO Kira Buruhukiro	Loan Officer	0788805662
49	IRIBAGIZA Rose	ISANGE NGOMA SACCO	Accountant	0783377882
50	Nyiranzabahimana M. Chantal	SACCO Twizigamire Ngera	Manager	0788460261
51	Nkuzumuremyi Valentine	MBAZI ISONGA SACCO	Manager	0788442807
52	UGANASE Clarisse	SACCO icyerekezo Mushishiro	Loan Officer	0782180856
53	Nzigiyimana William	SACCO Ijabo Murambi	Manager	0788531792
54	Higiro Daniel	SACCO MBONEZISONGA	Manager	0783200280
55	Mahoro Elie	Karengera SACCO	Loan Officer	0784106087
56	Ntiringanya Jean De Dieu	SACCO Muyira Dushyigikirane	Manager	0786047117
57	Uwitonze Angelique	Coopec Ingeri Gishamvu	Manager	0788403287
58	NKIRIZA Evariste	Inshuti z imugano	Manager	0784579090
59	Canisius NSHUMBUSHO	MBAZI ISONGA SACCO	Loan Officer	0788899428
60	MANIRAKORA Felicien	Hirwa Rwaniro SACCO	Loan Officer	0784965316
61	DUSABIMANA Elisabeth	sacco RUSARABUYE	Loan Officer	0785702048
62	Tuyisenge Immaculee	Iqihondohondo SACCO	Loan Officer	0788635568
63	Munyembabazi Fabien	IZIYIGIHE SACCO	Loan Officer	0786316503
64	Ingabire Drocelle	SANGA SACCO SHYIRA	Manager	0785603568
65	Mutsinzi Steven	SACCO Ijabo Murambi	Loan Officer	0783364989
66	Murwanashyaka Emmanuel	SACCO Inshuti z'i Mugano	Loan Officer	0789905016
67	IYAKAREMYE Innocent	Hirwa Rwaniro SACCO	Manager	0788771882
68	DUSABE Bernard	SACCO Bigogwe	Manager	0788211923
69	Niyigena Didace	Girubukire SACCO Buyoga	Manager	0788503086
70	Mugabontaganya JB Rene	SACCO Rebakure	Manager	0788883419
71	Muramire James	SACCO Uruyange	Manager	0788909302
72	Nkurunziza Jean Claude	SACCO Muyira Dushyigikirane	Loan Officer	0788689816

4. Consulted Manufacturing, Agro-Processing and Microbusiness Units

SNo	Names	Position	Institution	Contact
1	Isabane Etienne	Manager,	Cooprорiz Ntende	0788532990
2	Mushimiyimana Leocadie	Manager	Poultry project	0788624148
3	Mukarutamu Therese	Chairperson	INKURU NZIZA Cooperative (Tailoring shop)	0782148270
4	Karubera Beline	Business owner	Pineapple processing unit	0784662653
5	Nsabimana Theoneste	Chairman	Cooperative Ingenzi Kabarore owning a wine & juice processing unit	0788237802
6	Balikudembe Joseph	Plant Manager	Master Steel Rwanda	
7	Habumugisha Martin	Plant Manager	Ruliba Clay Ltd	0788475399

Annex 7: Chance finds procedures

Purpose of the chance find procedure.

The chance find procedure is a project-specific procedure that outlines actions required if previously unknown cultural heritage resources are encountered during project implementation. A Chance Find Procedure, as presented in ESS8 and national law on the preservation of cultural heritage and traditional knowledge, is a process that prevents chance finds from being disturbed until an assessment by a competent specialist is made and actions consistent with the requirements are implemented.

Scope of the chance find procedure.

This procedure is applicable to all project activities conducted by the implementing agency, including its own employees, PFIs, contractors and sub-borrowers, that have the potential to uncover a heritage item/site. The procedure details the actions to be taken when a previously unidentified and potential heritage item/site is found during the construction or operation activities. The procedure also outlines the roles and responsibilities and the response times required from both project staff, and any relevant heritage authority.

Induction/Training

All personnel, especially those working on earth movements and excavations, are to be inducted on the identification of potential heritage items/sites and the relevant actions for them with regards to this procedure during the Project induction and regular toolbox talks.

Chance finds procedure

If during project implementation, any person/ worker discovers a physical cultural resource, such as archaeological sites, historical sites, remains and objects, or a cemetery and/or individual graves during excavation or construction, the following steps shall be taken:

- 1) Stop all works in the vicinity of the find, until a solution is found for the preservation of these artefacts, or advice from the relevant authorities is obtained;
- 2) Immediately notify a foreman or direct supervisor who will thereafter notify the site Manager (contractor's Manager, sub-borrower or site E&S staff, if any) and local leaders,
- 3) Record details in Incident Report and take photos of the find;
- 4) Delineate the discovered site or area; secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a night guard shall be arranged until the responsible local authorities take over;
- 5) Preliminary evaluation of the findings by the competent authority (administrative authority of the district where the heritage is located, staff of the Ministry in charge of Culture and its agencies depending on the nature/ type of the heritage). The competent authority, or a Specialist on his behalf, must make a rapid assessment of the site or find to determine its importance. Based on his/ her assessment, the appropriate strategy can be implemented. The significance and importance of the

- findings should be assessed according to the various criteria relevant to cultural heritage such as aesthetic, historic, scientific or research, social and economic values of the find, etc;
- 6) Sites of minor significance (such as isolated or unclear features, and isolated finds) should be recorded immediately by the competent authority, thus causing a minimum disruption to the work schedule of the Contractors or sub-borrowers. The results of the assessment must be reported to the District authority, once completed;
 - 7) In case of significant find, the District can take the matter to higher authorities, including the Ministry of youth and culture and its concerned Agencies. The site/ District staff provides the Heritage team with photos and other information as relevant for identification and assessment of the significance of heritage items.
 - 8) If the find requires thorough investigation, the Ministry must investigate the fact within 2 weeks from the date of notification by District and provide response in writing.
 - 9) Decisions on how to handle the finding shall be taken by the responsible authorities. This could include relocation of the heritage or changes in the layout (such as when finding an irremovable remain of cultural or archaeological importance);
 - 10) Construction works could only resume after permission is granted from the responsible authorities.
 - 11) In case no response received within the 2 weeks period mentioned above, this is considered as authorization to proceed with suspended construction works.

One of the main requirements of the procedure is record keeping. All finds must be registered. Photolog, copies of communication with decision making authorities, conclusions and recommendations/guidance, implementation reports kept.

Additional information

1. Management options for archaeological site

Site avoidance: If the boundaries of the site have been delineated, an attempt must be made to redesign the proposed development to avoid the site. (The fastest and most cost-effective management option)

Mitigation: If it is not feasible to avoid the site through redesign, it will be necessary to sample it using a data collection program prior to its loss. This could include surface collection and/or excavation. (The most expensive and time-consuming management option.)

Site Protection: It may be possible to protect the site through the installation of barriers during the time of the development and/or possibly for a longer term. This could include the erection of high visibility fencing around the site or covering the site area with geotextile and then capping it with fill. The exact prescription would be site- specific.

2. Management of replicable and non-replicable heritage

Different approaches for the finds apply to replicable and non-replicable heritage.

- (i) **Replicable cultural heritage:** these are tangible forms of cultural heritage that can themselves be moved to another location or that can be replaced by a similar structure or natural features to which the cultural values can be transferred by appropriate measures.

Where tangible cultural heritage that is replicable and not critical is encountered, mitigation measures will be applied. The mitigation hierarchy is as follows: (i) avoidance; (ii) minimization of adverse impacts and implementation of restoration measures, in situ, (iii) restoration of the functionality of the cultural heritage, in a different location; (iv) permanent removal of historical and archaeological artefacts and structures and (v) Compensation of loss, where minimization of adverse impacts and restoration not feasible. Most cultural heritage is best protected by in situ preservation, since removal is likely to result in irreparable damage or even destruction of the cultural heritage.

- (ii) **Non-replicable heritage:** may relate to the social, economic, cultural, environmental, and climatic conditions of past people, their evolving ecologies, adaptive strategies, and early forms of environmental management, where the (i) cultural heritage is unique or relatively unique for the period it represents, or (ii) cultural heritage is unique or relatively unique in linking several periods in the same site. Examples of non-replicable cultural heritage may include an ancient city or temple, or a site unique in the period that it represents.

Nonreplicable cultural heritage must not be removed unless all the following conditions are met: (i) there are not technically or financially feasible alternatives to removal; (ii) the overall benefits of the project conclusively outweigh the anticipated cultural heritage loss from the removal.

Any removal of cultural heritage must be conducted using the best available technique advised by relevant authority and supervised by competent authority.

3. Human Remains Management Options

The handling of human remains believed to be archaeological in nature requires communication according to the same procedure described above. There are two possible courses of action:

- ✓ *Avoid:* the development project is redesigned to completely avoid the found remains. An assessment should be made as to whether the remains may be affected by residual or cumulative impacts associated with the development, and properly addressed by a comprehensive management plan.
- ✓ *Exhume:* the exhumation of the remains in a manner considered appropriate by decision makers. This will involve the predetermination of a site suitable for the reburial of the remains. Certain ceremonies or procedures may need to be followed before development activities can recommence in the discovery.

Annex 8: Reporting format of the ESMP implementation progress through direct financing

The Apex-FIs will oversee the implementation of ESMPs by direct borrowers and PFIs and will prepare biannually progress reports and provide record of project implementation, including compliance with requirements of the E&S regulations and site specific ESMPs. Below is key information to be provided in the report.

A. E&S performance by PFIs

1. Financed subprojects and requirements for standards compliance (subprojects, locations, activities, physical progress, screening results, and standards requirements)
2. Key findings/ achievements
 - Overall status of E&S performance as per the respective site-specific ESMPs and ESMS requirements;
 - Stakeholder engagement and Capacity building conducted;
 - Grievances management progress (complaints received, resolved & closed, unresolved, etc);
 - Details of any environmental or social surveys or studies;
3. Incident notifications
4. Challenges encountered during project implementation and lessons learned
5. Recommendations for continual improvement (Corrective actions)

Subproject	Issue	Recommended Actions	Implementation timeframe	Responsible person/ Institution

B. E&S performance by direct borrowers

1. Financed subprojects and requirements for environmental and social standards compliance (subprojects, locations, activities, physical progress, screening results, and environmental and social requirements)
2. Key findings/ achievements
 - Overall status of E&S performance as per the respective site specific ESMPs and ESMS requirements;
 - Stakeholder engagement and Capacity building conducted;
 - Grievances management;
3. Incident notifications
4. Challenges encountered during project implementation and lessons learnt

5. Recommendations for continual improvement (Corrective actions)

Subproject	Issues	Recommended actions	Implementation timeframe	Responsible person/ Institution

Annex 9: Complaint/Grievance Form

Grievance Form		
Grievance Number		Copies to forward to:
Name of the recorder		(Original) Receiver Party
District/ Sector/Cell		(Copy)- Responsible Party
Date		

INFORMATION ABOUT GRIEVANCE

Define the Grievance

INFORMATION ABOUT THE COMPLAINANT

Forms of Receive

Name-Surname		Phone line
Address		Community/Information meetings
Village/ Cell		Mail
Sector/ District		Informal
Signature of Complainant		Other

DETAILS OF GRIEVANCE

1. Access to land and Resources <ul style="list-style-type: none"> Lands Pasture lands House Water Latrines Commercial site Other 	2. Damage to <ul style="list-style-type: none"> House Land Latrines Livestock Means of livelihood Water Road access Other 	3. Damage to Infrastructure or Community Assets <ul style="list-style-type: none"> Road Bridge/ Passageways Power Water sources, canals and water infrastructure for irrigation and animals Drinking water Other 	4. Decrease or Loss of Livelihood <ul style="list-style-type: none"> Agriculture Animal husbandry Beekeeping Small scale trade Other 	5. Traffic accident <ul style="list-style-type: none"> Injury Damage to property Damage to livestock Other
6. Incidents Regarding Expropriation and Compensation (Specify)	7. Resettlement Process (specify)	8. Employment and recruitment (Specify)	9. Construction Camp and Community Relations <ul style="list-style-type: none"> Nuisance from dust Nuisance from noise Vibrations due to explosions Misconduct of the project personal/worker Complaint follow up Other 	10. Other (specify)

Annex 10. List of public institutions, Transport, Tour operators and actors

REPUBLIC OF RWANDA

Date: 24/04 / 2023



MINISTRY OF INFRASTRUCTURE
P.O Box 24 KIGALI

E-mail: info@mininfra.gov.rw

Meeting on Public Transport Service Improvement in the City of Kigali: Private Sector Engagement for Buses Specification

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REPUBLIC OF RWANDA

Date: 26/04/2023



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Meeting: Public Transport Services Improvement Meeting [Private Sector Engagement for E-bus specifications]

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REPUBLIC OF RWANDA

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Meeting: Public Transport Services Improvement Meeting [Private Sector Engagement for E-bus Specifications]

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REPUBLIC OF RWANDA

Date: 26 / 04 / 2023



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E-mail: info@mininfra.gov.rw

Meeting: Public Transport Services Improvement Meeting (Private sector engagement for E-bus Specification)

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Access to Finance for Recovery and Resilience Project-AFIRR

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