THE REPUBLIC OF RWANDA

MINISTRY OF EDUCATION

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF) FOR RWANDA QUALITY BASIC EDUCATION FOR HUMAN CAPITAL DEVELOPMENT

FINAL REPORT

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FINAL REPORT FOR

CONSULTANCY SERVICES FOR THE DEVELOPMENT OF AN ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF) IN THE CONTEXT OF THE QUALITY BASIC EDUCATION FOR HUMAN CAPITAL DEVELOPMENT PROJECT IN RWANDA

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LIST OF ABBREVIATIONS AND ACRONYMS

Abbreviation / acronym	Meaning
DDE	District Director of Education
EA	Environmental assessment (EA)
EIA	Environmental Impact Assessment
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
GRMC	Grievance redress mechanism committee
LODA	Local Administrative Entities Development Agency
MINEDUC	Ministry of Education
QBEHCDP	The Quality Basic Education for Human Capital Development Project
RAPs	Resettlement Action Plans
RDB	Rwanda Development Board
REMA	Rwanda Environmental Management Authority
RLMUA	Rwanda Land Use and Management Authority Rwanda
RWFA	Water and Forest Authority
SMART	Specific, measurable, achievable, realistic and time bound
SPIU	Single Project Implementation Unit
TOR	Terms of Reference
RHA	Rwanda Housing Authority
TOR	Terms of Reference
WASAC	Water and Sanitation Corporation
WB	World Bank
WHO	World Health Organization

EXECUTIVE SUMMARY

About the project

As part of implementation of the Quality Basic Education for Human Capital Development Project in Rwanda, an Environmental and Social Management Framework (ESMF) was developed. The Project seeks to supports the ongoing government's program to phase out double-shifting, and reduce class overcrowding, which is currently the highest priority. Additionally, it will replace existing overage substandard primary classrooms and sanitation facilities and expand access to pre-primary education (pre-school classrooms) to improve pupil's school readiness.

Rationale for ESMF

The ESMF is a methodological document developed at the initial stage of the project. It establishes procedures and forms for individual sub-projects at the stage of their implementation. Implemented sub-projects can have a negative impact on the environment during both construction and operation. The ESMF sets out the procedures and mechanisms as well as practical approaches to be used to ensure the compliance of the project activities with National laws and requirements of the World Bank. This environmental and social management framework (ESMF) has been prepared as a guide for the initial screening of proposed activities for any negative environmental and social impacts, which would require attention prior to project implementation. This project entails a greater range of investments; hence the ESMF was prepared as a framework compatible with World Bank Environmental and Social Standard. The ESMF is also in line with requirements of the Environmental Law (No. 48/2018 of 13/08/2018) determining the modalities for protecting, conserving and promoting the environment in Rwanda, the Ministerial order N° 001/2018 of 24/04/2018 relating to the requirements and procedure for environmental impact Assessment (EIA) in Rwanda, and the Ministerial Order No 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. The WB Environmental and Social Standards triggered by the project of construction of classroom are mainly ESS1 (Environmental Assessment), ESS2 (Labour and Working Conditions) and ESS4 Community Health and Safety.

Potential Environmental and Social Impacts and Mitigation Measures

According to laws regulating Environmental Impacts Assessment in Rwanda and World Bank Environmental and Social Safeguard Policies, depending on their categories (A, B or C), some of the considered sub-projects, will be subject to an environmental assessment. The project activities

will involve construction of new rooms/toilets, extension or rehabilitation of existing classrooms and may include replacement of roofs, windows, floors and indoor partitions, repair of basements and sewer systems. It is anticipated that the construction of new classrooms with a capacity to host more than five hundred (500) people, on a total floor area exceeding one thousand and five hundred square meters (1500 sqm), will be subject to a full environmental impact assessment. It is also anticipated that the construction of classrooms with a capacity to host more than two hundred (200) people but not exceeding five hundred (500) people and with a total floor area exceeding one thousand and five hundred square meters (1500 sqm) will be subject to a partial environmental impact assessment. For each of these project components, the assessment should be done to analyze the project impacts on natural environment (air, water, soil, fauna, and flora) and socioeconomic and cultural environment. They will be mitigated through standard impact mitigation procedures. Mitigation measures will be developed in Environmental and Social Management Plan (ESMP) to indicate how this project complies with World Bank Environmental and Social Standards 1: Assessment and Management of Environmental and Social Risks and Impacts.

The project of Quality Basic Education for Human Capital Development Project in Rwanda will have both positive and negative socioeconomic and environmental impacts. The most probable positive impacts being among others are: job opportunities, increase of population revenues and improved learning facilities to pupils. The possible negative impacts include:

- ✓ Land-taking, displacement of people and loss of natural habitats;
- ✓ Increased risks of accident to workers and local communities
- ✓ Increased risk of pollution to air, land and water

The ESMF provides tools to screen for environmental and social impacts in general, and to mitigate impacts related mostly to ESS 1 (Assessment and Management of Environmental and Social Risks and Impacts), ESS2 (Labour and Woking Conditions); ESS3 (Resources Efficiency and Pollution Prevention), ESS 4 (Community and Health Safety), ESS6 (Biodiversity Conservation and Sustainable Management of Living Natural Resources), ESS 7 Indigenous People/ Sub-Saharan African Historical Undeserved Traditional Local Communities, ESS 8 (Cultural Heritage) and ESS10 (Stakeholder Engagement whereas identified, mitigation of potential risks and impacts related to ESS 5 (Land Acquisition, Restrictions on Land Use and

Involuntary Resettlement will complied with under a separate Resettlement Policy Framework (for any issues related to land-taking) and Process Framework (for resource access restriction issues).

The project has the subprojects mainly falling under categories B and C, according to the Environmental Assessment Policy. An appropriate environmental and social assessment will have to be carried out for Category B. Category C activities would not require the preparation of a separate environmental assessment, and the completed environmental and social checklist will be attached with such sub-project proposal. Since the locations of the infrastructure investments and their potential negative localized impacts could not be determined prior to appraisal, the ESMF has been prepared to ensure appropriate mitigation of potential negative environmental and social impacts are considered.

Project Coordination and Implementation Arrangement and Budget

The Ministry of Education, in its capacity of the government body implementing the state policy in education, is responsible, inter alia, for monitoring the status of the physical infrastructure of education institutions and timely maintenance of all engineering systems of their buildings. The status of education including the education facilities are under the responsibility of the Ministry of Education. The Ministry of Education has established a Single Project Implementation Unit (SPIU) within its Investment Projects to monitor and control the implementation of the Project. The SPIU will be responsible for ESMF development and approval and control over its implementation and for advice to MINEDUC and Contractor on compliance with WB Environmental and Social Standards and national laws in the field of environmental protection during school building construction, extension or rehabilitation and operation. The MINEDUC project SPIU should carefully analyze the project scope, their availability to the project activities and their capacity for the successful implementation of the project and its ESMF. If need be they can suggest additional supporting staff for the project and ESMF implementation.

The estimated total costs for ESMF implementation cannot accurately be estimated because of some project information are not yet available. The total budget is highly influenced by the number of schools of Category A, B and C in each district. The cost for the implementation of this ESMF is estimated 350,000 USD. The key indicative aspects that would require a cost budget include (1) Training and capacity building for the project SPIU; (2) Training and capacity building for District Environment Officers, School Construction, contractor staff and supervisor staff, including the

supporting staff; (3) Trainings and consultation forums with School officials, PAPs and local communities; (4) Preparation of EIA for new and big schools; (5) Preparation of ESMP for replacement of roofs, windows, floors and indoor partitions, repair of basements and sewer systems; (6) Implementation of Environmental and Social Management Plan (ESMP); Monitoring and evaluation of ESMPs; and Implementation of grievance redress mechanism.

Monitoring and Evaluation Framework

The arrangements for monitoring the ESMF and site specific ESMPs will fall under the overall responsibility of the MINEDUC SPIU and Districts. Monthly monitoring and annual evaluations will be conducted to determine whether the monitoring and mitigation measures proposed in the ESMPs for the subproject components are being implemented effectively by the project implementing agencies.

Capacity Assessment, Building and Training

The proposed framework presents the training assessment that shows local project partners are not familiar with World Bank Environmental and Social Standards. They have not implemented project implying these standards and not received related training. They also face the challenges related to coordination. For the successful implementation of the ESMF/ESMPs there is a need to reinforce involvement and participation of local communities in the implementation of suggested mitigation measures. Specifically, the framework recommends:

- Using this framework prior to any project activity;
- Environmental and social awareness and education for the key stakeholders and affected communities;
- Training the MINEDUC SPIU, District environmentalist and School Construction Engineer, School Head masters to implement the ESMF and the screening process;
- Regularly updating this ESMF to respond to changing local conditions;
- Building capacities for developing appropriate information management systems to support the environmental and social management process;
- Providing the necessary support for the successful implementation of the ESMF,

Disclosure of ESMF/ESMPs

Before the implementation of the project, the ESMP for each sub-project shall be prepared to guide the project construction and operation. As required by WB environmental and social safeguards,

the ESMF, ESMP and ESMP checklists are to be disclosed to public stakeholders. If new information arises out of public hearings (may occur in parallel) for the ESMP to be updated, such update shall be made for contracted companies on a mandatory basis. The ESMP may be adjusted/updated by the successful contractor with due account of the contractor's equipment, technology, status of the facility, baseline conditions etc. These adjustments/updates shall be communicated to the SPIU and be subject to approval from the SPIU/the Bank prior to the implementation. The SPIU/the Bank would decide whether these adjustments/updates are substantial enough to trigger additional public hearings. The findings from this Environmental Management Framework will be disseminated to different key stakeholders (Ministry, Districts and schools and surrounding communities for the purpose of disclosure and holding of public hearings. Based on the results of public hearings an agreement will be reached on the eligibility of the proposed activities under the Project.

GENERAL INTRODUCTION

1.1 Background

Within the framework of Education for all and provision of improved learning environment to primary learners, the Government of Rwanda is undertaking a programme to support Rwanda's continuous schools construction and their supporting facilities (toilets). The program supports the ongoing government's program to phase out double-shifting, and reduce class overcrowding, which is currently the highest priority. Additionally, it will replace existing overage substandard primary classrooms, and expand access to pre-primary education (pre-school classrooms) to improve pupil's school readiness. Construction of new schools to reduce current long distances to primary school may also be considered if additional resources are available (decision to be taken before appraisal).

Underinvestment in school construction can be correlated to inadequate learning environments. In 2017, the average pupil per classroom ratio (PCR) in public school was 85 percent. Moreover, 96 percent of primary classrooms are used in double-shifting to keep the average class-size at 43 pupils, and the ratio is 100 percent in the early grades. The enrolment bulge in grade 1 is exacerbated by a large influx of under-age children due to lack pre-primary classes. Overcrowding of early-grade classrooms often reaches more than 60 pupils after double-shifting. The learning conditions worsen even more when pupils learn in sub-quality classrooms. Half of the classrooms are old and substandard; some small classrooms are 35 square meters and are often built with nondurable clay bricks (adobe). Moreover, the lack of local school forces pupils to walk long travels.

In view of above, the Government of Rwanda through the Ministry of Education is designing a Quality Basic Education for Human Capital Development Project. The Project which objective will be to improve the students learning and progression in basic education will be funded through the World Bank IDA allocation to support education sector. In this project, it is anticipated that classrooms and toilets will be constructed. One of the requirements for a World Bank project to be approved is the availability of study report on "Environmental and Social Management Framework (ESMF)" among others; and which cost shall be paid by the Ministry of Education.

1.2 Study objectives

The main objective of this assignment is to develop an environmental and social management framework (ESMF), including the collection of all required data, information and materials. This shall provide clear, comprehensive and practical guidance to MINEDUC and other project implementation entities like Districts, on integrating environmental and social considerations into the project.

The specific objectives of the study are to:

(i) Identify all relevant potential environmental risks and social concerns that may arise as a result of the project and the subprojects that it will support;
(ii) Specify appropriate roles and responsibilities of involved stakeholders in the implementation of the ESMF;
(iii) Develop subproject review procedures as well forms, guidance and checklists to apply technical input for the subprojects;
(iv) Develop a screening procedure to identify the environmental and social issues associated with the subprojects;
(v) Prepare an ESMP that can be applied to manage the identified environmental and social risks and set out the monitoring plan that will be undertaken to confirm correct ESMP delivery;
(vi) Develop the TOR for appropriate safeguards instruments (such as ESIAs) as appropriate and required;
(vii) Review and make an assessment of the capacity of the national project implementation entities, to screen subprojects and monitor the implementation of the project ESMP; and make proposals for capacity enhancement as appropriate;
(viii) Provide estimates for the budget required for project ESMP implementation;
(ix) Develop a public consultation and stakeholder engagement strategy;
(x) Define appropriate environmental and social standards performance indicators; and
(xi) Provide practical information resources for implementing the ESMF

1.3 Scope of work

Task 1: Preparation of an ESMP for Quality Basic Education for Human Capital Development Project that ensures that sufficient guidance is provided to MINEDUC, LODA and local governments in the selection, preparation and implementation of programme activities in order to avoid or minimize environmental and social risks and negative impacts and enhance the environmental and social performance.

This will be accomplished through the development and application of proper selection criteria for specific investment projects, planning that takes into account environmental and social criteria, sound, implementation and monitoring, and disclosure, consultation and feedback. To achieve this objective, the consultant/s will carry out the following tasks through research, interviews and field-work:

(i) Based on a detailed description of the project, its components and the design of specific activities as set-out in approved project documentation, assess the likely environmental and social risks associated with each component and potential subproject;

(ii) Conduct field visits to schools and other educational facilities to assess social and environmental site conditions, practices (including level of compliance with existing social and environmental safeguards legislation and regulations) and verify potential risks and impacts;

(iii) Develop and provide guidance on environmental and social criteria to be used during the identification and selection of schools and other educational facilities or any other area of project operations where social and/or environmental risks are apparent. Also develop a negative list of activities and potential subprojects not recommendable for support, due to their poor environmental or social performance;

(iv) Compile a summary of key domestic legislative, regulatory and administrative regimes, within which the project will operate, with a focus on requirements that will apply to the planning, approval and implementation of subprojects. Provide an overview of the above legislation in relation to the World Bank environmental and social standards, and make recommendations to address the gaps with respect to the project;

(v) Establish a clear understanding of the institutional requirements, roles and responsibilities for adopting and implementing the ESMF. Importantly, this should include a thorough review of the authority and capacity of implementation entities to manage and monitor ESMF

implementation. The ESMF should also consider relevant implications for management procedures, training, staffing and budgeting;

(vi) Develop a screening and assessment methodology for potential subprojects, that will include environmental and social performance criteria, allow an environmental / social risk classification and the identification of appropriate safeguards instruments;

(vii) Develop a stakeholders' consultation and engagement strategy that ensures the involvement of all identified stakeholders and potentially affected persons. The process should put in place mechanisms and plans for information dissemination and disclosure of project related information, as required by the World Bank, such as project environmental and social standards instruments prior and during project implementation;

(viii) Develop an Environmental and Social Management Plan (ESMP) for the project as a whole, to be differentiated from the subproject specific plans that may be required during project implementation. Also Identify all relevant potential environmental risks and social concerns that may arise as a result of the proposed project and specific subprojects. The ESMP should recommend mitigation measures for the potential negative impacts and give associated costs; and clearly indicate the institutional responsibilities for implementation and monitoring of the mitigation measures;

(ix) Identify and describe the required instruments and procedures for managing and monitoring environmental risks and social concerns related to the priority subprojects, such as assessments (e.g. ESIA), management plans (e.g. ESMP, RAPs) and respective monitoring instruments. Also Identify indicators (by subproject type) to measure safeguard implementation that can be used in the overall assessment of the project;

(x) Outline a training and capacity building programme for the institutions responsible for implementing the ESMF.

(xi) Propose realistic and effective arrangements for MINEDUC and other project implementation entities to develop the capacity to manage environmental and social due diligence processes and activities in the project portfolio. Propose reporting lines, review and approval functions; identify the required resources and technical assistance to maintain the Client's capacity for the Program duration and beyond. Develop a process (incl. timeline, budget, organizational requirements, required trainer profiles and expertise) for building and enhancing the capacity of the institutions responsible for implementing the ESMF; and

(xii) Estimate a realistic budget to be allocated for timely implementation of the ESMF in the Program execution phase.

Task 2: Development of specific guidelines for MINEDUC and other project implementation entities to support implementation of the ESMF. This to include:

(i) Generic terms of reference for safeguarding instruments to be applied during project implementation (as set-out in the ESMF). Potential environmental and social due diligence instruments required include: ESIA (incl. ESMP).

(ii) A simple user manual/guidelines and training materials for use in training project implementation entities to support implementation of the ESMF

1.4 Approach to the Study

1.4.1 Review of ESMF World Bank Requirements, National and international Policy institutional and Regulatory Framework

The consultant has reviewed the relevant guidelines, policy, regulatory and institutional framework related to ESMF in the context of the quality basic education for human capital development project in Rwanda. These include guideline and environmental safeguard from the World Bank, international goals, treaties and conventions on environment and Education, and national regulatory and institutional framework that can influence or be influenced by the implementation of the quality basic education for human capital development in Rwanda.This helps to elucidate problems that will need special attention during the implementation of this project.

1.4.1.1 Review of National Policy institutional and Regulatory Framework related ESMF

At the national level, the consultant has reviewed relevant existing laws, policies, regulations frameworks and guidelines with regard to environmental and social risk management, and policy, programs and projects associated with the Education sector. This helped to prepare a summary of domestic legislative and regulatory and administrative regimes within which the project will be implemented. To be reviewed include:

- Rwanda Vision 2020, 2050;
- 7 Years National Transformation Strategy (2017-2024);
- Ordinary Law N° 43/2013 of 16/06/2013 Governing Land in Rwanda, Repealing Organic Law N° 08/2005 of 14/07/2005 Determining the Use and Management of Land in Rwanda;
- Law N° 13/2009 OF 27/05/2009 Regulating Labour in Rwanda;
- Rwanda Building Control Regulations;
- The Environmental New Law (No. 48/2018 of 13/08/2018) determining the modalities for protecting, conserving and promoting the environment;
- Ministerial order N° 001/2018 of 24/04/2018 relating to the requirements and procedure for environmental impact Assessment (EIA);
- Ministerial Order Nº 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.
- Law No 32/2015 of the 11/06/2015 relating to Expropriation in the public interest

1.4.1.2 Review of ESMF World Bank Environmental and Social Standards (ESSs)

The consultant has reviewed the World Bank Environmental and Social Standards (ESSs) applicable to ESMF and demonstrated how these standards will be complied with considering the local context (schools to be rehabilitated). Ten ESSs on Access to Information represent the framework of safeguard mechanisms applied by the WB for the sake of interests of beneficiaries, clients, stakeholders and that of the Bank. Applying these standards allows avoiding adverse

impacts on the environment and people's lives, minimizing and mitigating potential unfavorable environmental and social project and risks and impacts. These WB standards are:

- Environmental and Social Standard 1: Assessment and Management of Environmental and Social Risks and Impacts;
- Environmental and Social Standard 2: Labour and Working Condition
- Environmental and Social Standard 3: Resource Efficiency and Pollution Prevention and Management
- Environmental and Social Standard 4: Community Health and Safety
- Environmental and Social Standard 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement
- Environmental and Social Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources
- Environmental and Social Standard 7: Indigenous Peoples
- Environmental and Social Standard 8: Cultural Heritage
- Environmental and Social Standard 9: Financial Intermediaries
- Environmental and Social Standard 10: Stakeholder Engagement and Information Disclosure

1.4.2 Field surveys

1.4.2.1 Sampling

The consultant conducted field visits to 90 schools of which 30 were model schools and 60 have been selected in consultation with the District Director of Education and the District Engineer. The lists of school samples consulted people are shown in Annex 7. Sampled schools were selected following the following criteria:

- Schools with no land for buildings extension
- Schools with a high number of learners/students (high population)
- Schools built in high risky zone (unstable slope and wetlands)

1.4.2.2 Type of field data collection

The information collected at different sample schools include (1) status and adequacy of school infrastructure facilities (hygiene and sanitation); (2) land availability for extension; (3) local

environmental and school neighbourhood conditions; (4) Compatibility and conflict to the neighbouring social and natural environment**;** (5) aspects that need special attention in land acquiring, school construction. This will help to forecast the possible impacts that would arise from the implementation of the project and its subprojects.

1.4.2.3 Approach to field data collection

The consultant visited sample schools with to collect information on location, status of infrastructure, and views and concerns of local people, respectively. Special attention was paid to key stakeholders (district officials) and local people that may be involved or affected by the project. This exercise through established interview guide helped identifying criteria that will need special attention in the implementation of this project. The exercise also helped identifying the capacity gap and need for the implementation environmental safeguards.

1.4.2.4 Content of consultations

Consultations were conducted with stakeholders who were directly or indirectly affected by the project to better understand the environmental and social systems in the country and the environmental and social concerns of stakeholders. During consultation, stakeholders were asked their views and concerns about the project. This helped to salient issues and concerns to affect different stakeholders and reach agreement on the understanding of these issues and grievances. The consultant ensured a favourable environment free of coercion and intimidation, gender inclusive and inclusive to vulnerable and disadvantaged groups.

At local level consultations were held with district officials (School construction Engineer, Director of Education, Director of one stop centre or Land administration/valuation officer, District Environmental Officer and Director or Headmaster of Visited schools, and local people). The consultation outcome highlighted trade-offs, impacts/risks and social issues and bottlenecks associated with the implementation of this project, as well as the proposed mitigation measures. Moreover, the study outcomes will be disclosed in the workshops and feedbacks will be incorporated in the final report.

1.4.3 Link between the World Bank Environmental Social Standard Framework and National Regulation on Environmental and Social Management Guidelines and data collected on schools' needs

This project is in line within the framework of Rwanda's continuous school construction program to provide improved learning environment to primary learners. The school construction program will support the ongoing government's program to phase out double-shifting, and reduce class overcrowding, which is currently the highest priority. Additionally, it will replace existing overage substandard primary classrooms, and expand access to pre-primary education (pre-school classrooms) to improve pupil's school readiness. Approximately 5,000 furnished classrooms and 7,500 latrines will be financed in schools offering primary education to improve learning conditions for 230,000 pupils. The study analyses the World Bank Environmental Safeguard Standards and National Regulation on Environmental and Social Management Guidelines to have idea on whether or not or which the environmental assessment is needed to categorise project related environmental and social risks and impacts (Category A, Category B, Category C).

1.4.4 Methodological compatibility matrix according specific objectives

Table 1: Compatibility matrix according specific objectives

Objective	Methods and Techniques	Expected results
Identify all relevant potential environmental risks and social concerns that may arise as a result of the project and the subprojects that it will support	Field visits, observation, mapping, pictures, interviews with key stakeholders, review of World Bank and National Environmental and Social Standards documents, review ESMF reports	• Potential environmental impacts identified • Potential social impacts identified • Compatibility and Conflicts of the project and social and natural environment identified
Specify appropriate roles and responsibilities of involved stakeholders in the implementation of the ESMF	Review of relevant national documents on policy, law, institutional and regulatory framework governing ESMF/ESIA; Interviews with key stakeholders	• Identification and analysis of Role and responsibilities of government organisation in the implementation of ESMF • Identification and analysis of capacity REB,MINEDUC Districts, sectors, organisation to implement ESM
Develop subproject review procedures as well forms, guidance and checklists to apply technical input for the subprojects	Develop a guidance document for procedures, forms, checklists to apply technical input for the subprojects	Guidance document for procedures forms, checklists for subprojects.
Develop a screening procedure to identify the environmental and social issues associated with the subprojects	Review of World bank and national guidelines and procedures for screening the projects to not/undergo Environment assessment.	Screening criteria for environmental and social impacts of subprojects. Screening criteria include overpopulation conditions location in high risk zone that may lead to new construction, relocation, rehabilitation or extension of school buildings. Subprojects are categorized in one of the three categories (Category A, Category B or Category C).
Prepare an ESMP that can be applied to manage the identified environmental and social risks and set	Prepare the ESMP, with consideration of World Bank and Rwanda social and environment ESMP requirements.	ESMP with potential social and environmental positive and negative impacts and their enhancement measures

Objective	Methods and Techniques	Expected results
out the monitoring plan that will be undertaken to confirm correct ESMP delivery		
Develop the TOR for appropriate safeguards instruments (such as ESIAs) as appropriate and required	Prepare the TOR, with consideration of World Bank and Rwanda social and environment safeguard instruments	TOR for appropriate safeguards instruments
Review and make an assessment of the capacity of the national project implementation entities, to screen subprojects and monitor the implementation of the project ESMP; and make proposals for capacity enhancement as appropriate	Review and assessment of capacity, gaps and capacity need for the national project implementation entities (MINEDUC, REB, LODA and Districts) to screen subprojects and monitor the implementation of the project ESMP. The assessment will be done through consultation with key staff in those entities	• Organizational and institutional framework for implementing ESMP • Role and responsibility of organisations • Key staff to implement ESMP • Gaps and capacity needs
Provide estimates for the budget required for project ESMP implementation	Costing of activities required for the implementation of ESMP. The costing will cover cost associated with rehabilitation of environmental and social damages and staff allowance to monitor the ESMP implementation	ESMP budget
Define appropriate environmental and social standards performance indicators	Propose a set of indicators to monitor the environmental and social standards performance. Those indicators should be SMART (specific, measurable, achievable, realistic and time bound).	A set of SMART Indicators to monitor the environmental and social standards performance

Objective	Methods and Techniques	Expected results
Provide practical information resources for implementing the ESMF	Provide practical information resources for implementing the ESMF	Guidelines for training and capacity building Guideline for preparing site specific environmental Management and rapid Environmental assessment checklists

1.4.5 Interconnection of methodology phases and activities

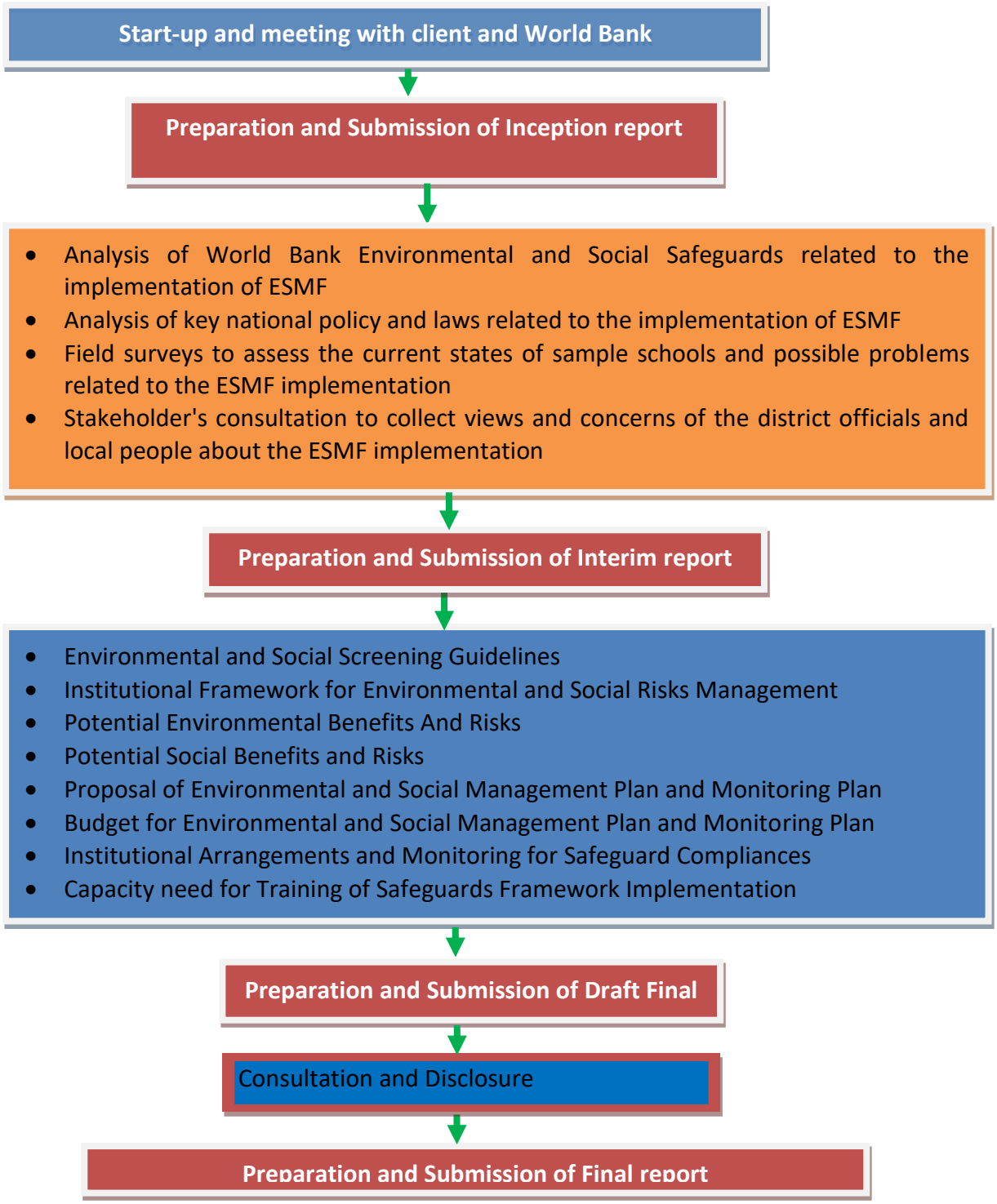

Figure 1: Interconnection of methodology phases and activities

CHAPTER 2: PROJECT DESCRIPTION

2.2 Project components

The project will have multiple sub-components including construction, upgrade and extension of classrooms and sanitation facilities. Looking at the project scope, the project activities will cause environmental and social impacts; hence mitigation measures are needed in advance. Project sub-components will be implemented all over the country; in 30 Districts of Rwanda. Therefore, the mitigation of impacts and risks needs the development of relevant safeguards mechanisms to be developed and applied during and after project implementation. While the project is expected to have positive or beneficial outcomes, unintended outcome is taken into consideration.

Therefore, ESMF requirements related to the project components and sub-components are proposed: These components are (1) Enhancing teacher effectiveness for improved student learning, (2) Improving school environment to support student learning and (3) Developing institutional capacity to strengthen teaching and learning. These project components are described in details in the following section:

2.2.1 Component 1: Enhancing teacher effectiveness for improved student learning

This component will focus on enhancing teacher effectiveness for improved student learning. This includes supporting the development of strong English language proficiency and digital literacy skills of all teachers in government and government-aided schools, strengthening of math and science content knowledge and pedagogy skills for teachers in basic education, and enhancing the preparation of new teachers through strengthening of the 16 TTCs and developing model schools to disseminate innovative teaching and learning practices throughout the country.

2.2.1.1 Subcomponent 1.1: Improve teachers' English language proficiency and digital skills

The objective of this subcomponent is to improve teachers' English language proficiency and digital literacy through development of a facilitated online course and assessment system. This responds to an urgent need, given that the language of instruction from P4 onwards is English and that the increasing demand for ICT to improve teaching practices in Rwanda means that teachers are increasingly required to equip themselves with digital skills.

Course material and assessment tools for English language proficiency are being produced by REB, University of Rwanda-College of Education (UR-CE), and DPs. UNESCO's course material for digital literacy skills is currently being used in Rwanda. The project will review all course material to ensure high quality and relevance to the context of teachers in Rwanda. All course material will be reviewed by REB gender and inclusion specialists to ensure that the content is gender sensitive and inclusive and accessible by all teachers regardless of gender or ability level. Following the review, the project will support the creation of interactive digital

versions of these courses for teachers across the country. Both courses will involve a combination of self-study and face-to-face support from mentors. In addition to the digital version, several print versions of the course material for both courses will be provided to school libraries for teachers to take home and study content.

Assessments will also be developed and help place learners at various levels of competency (from Beginner to Advanced). REB/UR-CE certification indicating the level of proficiency for English and digital literacy will be provided to teachers upon completion of the courses. This certification may be linked to teacher promotion and pay opportunities for teachers. In addition, a module on digital ethics (with guidance on how to address and prevent cybercrimes and cyber bullying) will be developed and teachers will be required to take this course before course completion. The course content and the assessments will be tested and refined over the first year of use in TTCs and model schools (see Subcomponents 1.3 and 1.4) and thereafter will be scaled up to all teachers in the country.

To host these two online courses, the project will rebuild the REB e-learning platform to make it adaptive, user-friendly, and attractive and available for both computer and smartphone use. To mitigate risks related to poor or inconsistent internet access, some content will be made available offline through methods such as data drives and USBs. This platform will serve to train teachers as well as to manage, analyze, and improve teacher learning results and targeting and serve as an important tool for identifying where face-to-face training interventions are most relevant, thereby improving capacity of the system to target specific needs.

2.2.1.2 Subcomponent 1.2: Support professional development of math and science teachers

This subcomponent seeks to modernize instructional tools and enhance the knowledge and pedagogical practice of mathematics and science teachers in upper primary through lower secondary grades (P4–S3). The project will widen the use of scripted lessons for S1 that have already been developed by UR-CE and tested with success in 30 pilot schools,[1] and it will add new lesson scripts for biology in S1, for all four subjects in S2–S3, and for two subjects—mathematics and science and elementary technology—in P4–P6. The project will also provide complementary inputs such as laptop computers, projectors, formative assessment tools, and science kits. Two areas of innovation in mathematics and science education will receive particular support: virtual science labs and project-based learning, for which modules will be implemented in the lower secondary grades (S1–S3), beginning in the 16 TTCs, the 17 model schools, and the 30 pilot schools.

The project will also support a customized training program for mathematics and science teachers in P4–P6 and S1–S3 in the 16 districts not already covered by the Mastercard Foundation (MCF).[2] Completion of the training program will lead to a certificate-level professional development award from UR-CE, thus creating an incentive for teachers to participate and transition to more effective pedagogical practices embedded in the modernized instructional tools. UR-CE will develop and offer online versions of the training program by

[1] Such lessons are aligned to the Rwandan CBC framework and are prepared using open source digital resources. They compensate for teachers' generally weak background in mathematics and science, reduce the burden of lesson preparation, and improve the quality of content presented to students.

[2] The MCF is supporting 14 districts in training teachers in the use of the scripted lessons prepared by UR-CE that are currently available.

subject area. The project will encourage the sharing of good practices among teachers through Communities of Learning, and it will provide training to instructional leaders at the school, sector, and district levels, in mentoring and coaching, to strengthen their capacity and effectiveness in supporting teachers to implement the practices embedded in the new instructional tools.

The project will foster gender equity within this subcomponent by (a) ensuring that women are prioritized to participate as trainers or trainees in the customized training program, (b) including gender-responsive pedagogy in the training program, (c) including a unit on gender equity in the STEM coaching course for school subject leaders and managers, and (d) ensuring that all scripted lessons and exercises are free of gender stereotyping and bias.

The project will support data collection and analysis to monitor implementation and evaluate the impact of the new instructional tools and teacher training and support, with a focus on teacher content knowledge and pedagogical practice and on student learning. It will fund periodic policy workshops and other dissemination activities to foster accountability for results and dialogue informed by the progress of mathematics and science instruction in Rwandan basic education.

2.2.1.3 Subcomponent 1.3: Strengthen the preparation of new teachers

This subcomponent aims to bolster the preservice training of pre-primary and primary teachers in all 16 TTCs, including a comprehensive package of support to TTL leaders, tutors, and students.

TTC leaders and tutors will be supported to effectively manage, coach, support, and assess TTC students through participation in ongoing workshops (focusing on topics including leadership, mentoring, effective use of student performance data, behavior management, conflict resolution, and socio-emotional skill development); online courses in English and digital literacy skills (developed under subcomponent 1.1); and study visits (whereby select members of TTCs will join colleagues from REB to visit regional and international best examples and return to share learning at national, regional, and school levels). The evaluation of TTC tutors' and students' performance will be enhanced through inclusion of innovative approaches including video recording of teaching sessions in TTCs and practice schools followed by self-assessments and feedback from peers and the principal. Portfolios will also be introduced as an assessment strategy to gather samples of best tutor and student work throughout the school year for assessment.

TTC students will be supported through the development of new inclusive textbooks based on the CBC and supplementary learning materials, a mentor program (whereby two regional/international volunteers will live on campus at each TTC and engage with tutors and students to support their English proficiency and digital skills [Subcomponent 1.1]), and high-quality practical training provided through model schools (Subcomponent 1.4). TTC tutors will be guided to provide more targeted support to students based on individual needs through better use of intake assessments and formative assessment strategies.

The teaching and learning environment in all TTCs will be enhanced for optimal student learning. The project will support construction and renovation and provision of ICT facilities and teaching and learning materials. TTCs are boarding facilities with separate buildings for girls and boys—each will receive an Essential Package for Gender-Sensitive Teaching and

Learning to ensure that all students feel safe and comfortable to learn (see Subcomponent 2.4) in a space that is healthy and violence free. Each TTC will be equipped with a set of materials for students with special needs (including braille books, large print books, touch and feel learning materials, abacus, number lines, wheelchairs, canes, pencil holders, and so on) and teachers will be trained on how best to use those materials to enhance student learning.

Communities of practice across all 16 TTCs will be strengthened in this project. Each year of the project, two to three instructional leaders from TTCs will join members of REB and UR-CE to conduct an in-depth institutional review of each TTC, resulting in peer exchanges around institutional strengths and areas for improvement. An electronic journal will be initiated for sharing innovative pedagogical strategies, best practices, and challenges across all TTCs. An annual conference will be initiated whereby TTCs will showcase innovative teaching and learning practices being implemented at their school as well as engage with all organizations, individuals, and DPs working toward enhancing teaching and learning in the country. UR-CE and TTC leaders, tutors, and students may prepare research papers and posters and engage in roundtable discussions on various topics related to pedagogy, curriculum, and technology across TTCs at this conference.

2.2.1.4 Subcomponent 1.4: Develop model schools to support innovative instructional practices

The project will create a dynamic network of 17 'model schools'[3] (16—one near each TTC—and one newly constructed school on the UR-CE campus) to support preservice teacher preparation and in-service teacher development. Rather than replace the current practice schools used by students during their teaching practicums, these model schools will provide an additional 'fully equipped' practice location for students.

Instruction within these schools will be improved through training education leaders and school heads to support teachers, manage schools, and use ICT effectively. Communities of practice will be created in model schools to improve teachers' content knowledge, pedagogical skills, and ICT skills, with online courses and face-to-face instruction to improve the use of English and digital skills in teaching (see Subcomponent 1.1). Mathematics and science teachers will be trained in content knowledge and pedagogy under the mathematics and science subcomponent of the project (see Subcomponent 1.2). Study visits will help teachers integrate new features into their own teaching and learning. School infrastructure will be improved to include a conference room for use by visiting trainers and teachers, video facilities for recording model lessons, a 3-classroom preschool block, teaching and learning materials, equipment for science/ICT/language laboratories, and a set of materials for students with special needs (with accompanying training for teachers on material use). Each model school will be equipped with an Essential Package for Gender Sensitive Teaching and Learning (see Subcomponent 2.4). Coding clubs will be set up so that boys and girls can learn how to code. To support equal participation in coding activities, school-based facilitators will ensure that equal numbers of boys and girls are encouraged to participate in the coding clubs and will engage them in discussions around potential future careers that involve strong coding skills.

Head teachers and teachers within model schools will be given training in how to plan for TTC student teacher practicums and internships: helping student teachers from TTCs to prepare written lesson plans and assessment tools; providing support for classroom management and

[3] The ministry will propose a Kinyarwanda title for these model schools.

conflict resolution; using co-teaching (a form of team teaching in which a more experienced educator works together with another to plan, organize, instruct, and teach) to model effective lessons; and guiding student teachers in the use of ICT and scripts for more effective teaching, and portfolios as a form of assessment. TTCs and model schools will develop frameworks for conducting classroom observations and providing effective feedback, with technical assistant support.

Best practice lessons will be developed in model schools and disseminated to schools across the country. These modern lessons will be based on the Universal Design for Learning (including boys and girls with and without disabilities)[4] and disseminated online and offline. Model school personnel will organize annual open days, conduct workshops for neighboring schools, mentor teachers in nearby schools, and provide support for the induction of new teachers. Head teachers and teachers in model schools, along with SEOs, will provide opportunities for teachers, head teachers, and students from nearby schools to benefit from a short visit to model schools to observe classes and use the science laboratories. In addition, model school personnel will visit other schools to conduct workshops and mentor teachers. These programs will be consistent with teaching standards and include the concept of the mentor as a co-learner. Model schools will highlight innovative instructional practices at the Annual Symposium for Teaching and Learning in Rwanda (see component 1.3). Model school leaders will also participate in an annual gathering with leaders of TTCs to review and enhance their respective teaching and learning experiences.

2.2.2 Component 2: Improving the school environment to support student learning

Under the project, critical issues of overcrowding and long distances to schools will be addressed through the construction of additional classrooms and primary-level new satellite schools. The learning environment for the youngest students will be enhanced through development and launch of an educational entertainment learning program for children in pre-primary through the early primary grades and the provision of a teaching and learning kit to all public pre-primary classrooms in the country. The project will also support an inclusive and gender-sensitive learning environment.

2.2.2.1 Subcomponent 2.1: Reduce overcrowding and distance to schools

Overcrowding in classrooms is a major issue inhibiting learning in Rwanda. To reduce overcrowding, the Government will need to build 22,000 additional classrooms in the next five years. This project will finance the construction of 11,000 furnished classrooms and approximately 14,680 latrines, which is 50 percent of the required school infrastructure. The Government has committed its own budget to construct the remaining 50 percent.

Construction of additional classrooms will begin with the most overcrowded schools. All 30 districts will be covered, and approximately 2 million students in more than 1,400 targeted schools will have their learning conditions improved. Among the planned 11,000 additional classrooms, approximately 9,000 (with more than 12,000 latrines) will be built in existing public schools.[5] The remaining approximately 2,000 classrooms (with more than 2,660 latrines) will be added through construction of separate new schools that are either near the

[4] UNICEF. Nov 29, 2018. Making digital learning accessible for all children in Kenya. https://www.unicef.org/innovation/stories/digitaltextbookkenya.

[5] In this document 'public' schools mean public plus government-aided schools, exclusive of private schools.

largest overcrowded schools or in areas lacking primary schools so that distance to schools from children's homes can be reduced, particularly for the youngest children.

An average of approximately 7.5 classrooms are to be added to each school. Construction for this number of classrooms per site is considered appropriate to implement through the Rwanda 'Home-Grown School Construction Approach (HGSCA)'. This approach, which has been in practice by the Government since 2009, follows a hybrid arrangement combining centralized, decentralized, and community-based activities, with the following features:

- **Capacity for mass production:** On average, construction of 2,000–3,000 classroom per year (plus latrines and school furniture)
- **Timely delivery:** All yearly construction programs delivered in six months, starting on July 1 and ending in December
- **Highly cost-effective:** About half the cost of classic centralized procurement of works
- **Quality construction** through gradual improvement
- **Strong ownership:** Community participation through unskilled labor, resulting in high community ownership and increased social cohesion and peace building

All construction work under this project will adhere to MINEDUC's school construction standards (2009) and the Rwanda Building Code Regulation (2010) that mandate key inclusive design features such as construction of ramps all the way up to higher floors and disability-friendly and gender-segregated sanitation blocks. The regulation also mandates relevant environment and climate disaster mitigation measures such as para-seismic design and flood defence mechanisms. All these features are already effectively incorporated in MINEDUC's standard designs for school infrastructure since 2009.

As the bulk of the construction activities under the HGSCA approach are at the district and sector levels, the supervision capacity of the 30 sectors will be enhanced by the recruitment of 30 civil engineers to supervise the works and 15 field officers to supervise the implementation of the environmental and social standards (ESS). A specific Construction Operations Manual (COM) is developed to describe in detail the roles and responsibilities of all actors under the project-financed 'HGSCA approach', the implementation mechanism, as well as the enhancements agreed upon by the Government and the World Bank to comply with the World Bank's fiduciary requirements and the current Environmental and Social Framework. The project will finance the preparation of site-specific Environmental and Social Management Plans (ESMPs), Resettlement Action Plans (RAPs), Environmental and Social Impact Assessment (ESIA), valuation, and environmental audits.

A School Construction and Maintenance Strategy will be updated under the project to guide the sector's infrastructure development. The new strategy will expand the scope to cover pre-primary and other emerging needs.

2.2.2.2 Subcomponent 2.2: Enrich early learning environment

This subcomponent aims to enhance early learning by pre-primary and lower primary school-age children through the development of engaging educational entertainment content to supplement learning in classrooms. These materials will be accessible through radio, TVs, and phones for children, parents, and teachers in school and at home, so that learning can take place

at any time and in any place. This is particularly important for Rwanda where a large proportion of children remain unenrolled in any pre-primary program.

An audio-visual program will be developed to foster core literacy and numeracy skills, emerging science concepts, and social and emotional skills for students from pre-primary through P3. A local team of educators, researchers, and writers will be trained and supported to develop world-class educational stories that are uniquely Rwandan. The content of the programs will be based on the national curriculum. Key education messages around enrollment, progression, and completion will also be integrated into the content. During development, the content of the programs will be reviewed by gender and inclusion specialists in REB to ensure that it reflects an inclusive and gender-sensitive approach to address existing stereotypes in schools and communities. Content produced through this activity will be available through media broadcast (radio, television, and phones), online through the e-learning platform (see Subcomponent 1.1), and offline (through flash drives provided to schools and communities). Content will be created in both Kinyarwanda and English, with characters and settings that are culturally relevant, and will include educational songs, stories and skits, as well as brief clips.

The project will provide these pre-primary classrooms with a teaching and learning material kit to support children's development in numeracy, literacy, and socioemotional skills. The kit will contain numeracy materials that can be used to classify, sort, make patterns, compare, and count and literacy materials including a set of pre-primary textbooks, blocks, posters, and flashcards so that children can practice their emerging literacy skills. Additionally, the kit will help children learn about the world around them by providing learning material related to vegetables, fruits, animals, tools for different professions, and the human body. The kit will also contain simple pretend play items such as dolls, cars, and items related to arts and culture such as musical instruments. Further, the learning environment of pre-primary classrooms will include items such as posters and wall charts that are designed to support literacy, numeracy, and socioemotional development. Before procurement, the contents of the kit will be reviewed by gender and inclusion specialists at REB to ensure that the materials are accessible to all boys and girls in the pre-primary classrooms. Each kit will include a teacher training manual, outlining optimal maintenance and use of the items in the kit to enhance teaching and learning for students. Each pre-primary classroom will also be equipped with a projector system so that pre-primary teachers are able to integrate audio-visual programs into their lessons.

2.2.2.3 Subcomponent 2.3: Support gender sensitive teaching and learning environment

The project will address critical gender-based issues in Rwandan schools (including high numbers of girls dropping out in secondary school, teen pregnancy, and gender-based violence (GBV) toward both boys and girls in school settings) through two main activities.

The experience of one organization has shown that young Rwandan girls (ages 10–19) eagerly participate in the production and consumption of radio shows and magazines regularly. These have become key platforms for girls to share and receive vital information and engage in conversations around important topics. The project will support the use of these already popular platforms to share education-related messages around gender across the country. Under the project, young girls and boys (ages 10–19 years) will participate in communication and outreach on gender-related education issues including repetition and dropout, sexual and reproductive health, GBV, teen pregnancy, and perceptions and expectations around gender roles and power dynamics, especially within schools. Messages will be delivered 'by the youth

for the youth' through entertaining and engaging ways over national radio stations for maximum reach across the country.

Various organizations in Rwanda have successfully tested gender sensitive approaches in schools on a small scale. Combining different models found to be effective in the country, the project will support the development and piloting of a comprehensive, schoolwide gender-sensitive teaching and learning approach (including interventions for school leaders, teachers, students, staff, and communities) in all model schools (see Subcomponent 1.4). A key feature of the program will be to gather learning that will inform strategies around national scale-up of the approach to be adopted by all schools in the country. School leaders will be supported to ensure that their schools are an equally safe space for male and female teachers and students. Teachers in the model schools will be provided with training and ongoing support to incorporate gender-sensitive pedagogy into their teaching practice in the classroom including critical discussions around the content and instructional strategies used by teachers with students. After-school clubs will be set up for boys and girls to facilitate discussions around key topics including health and hygiene, sexual and reproductive health, teen pregnancy, GBV, perceptions and expectations around gender, leadership skills, and career options. All model school leaders, teachers, staff, and students will be equipped to identify and safely report cases of GBV or sexual violence in and around the schools. Examples of best practices in terms of gender-sensitive approaches will be video documented and shared with other teachers in the country through various online and offline platforms.

2.2.3 Component 3: Developing institutional capacity to strengthen teaching and learning

This component will support the development of institutional capacity to strengthen teaching and learning in Rwanda and upgrade the skills and knowledge of key staff in the single project Implementation units (SPIUs) who manage and implement the project.

2.2.3.1 Subcomponent 3.1: Support quality assurance systems

The project will strengthen key systems and policies that underpin achievement of the PDO and are integral to quality assurance in basic education including teacher recruitment, school inspection, and learning assessments.

Teacher recruitment. The project will support enhancing the current teacher recruitment process through development of national teacher standards that specify the qualifications and content knowledge (including English and ICT proficiency, foundational skills, pedagogical skills, and behavioral attributes) that an applicant to a new teacher post must have, as well as set up a national teacher recruitment practice at the district level. Data on new teachers' skills assessment during the recruitment process will inform the TTC training programs and will support development of an implementation plan for the Cabinet paper on improving teacher preparation and management.

School inspection: The project will bolster the current school inspection system with innovative strategies. Quality assurance of schools in Rwanda is carried out at the national level by the Basic Education Quality Assurance Department (BEQAD)[6] under MINEDUC and at

[6] The BEQAD has 46 national inspectors, 30 of whom are assigned as focal points for each of Rwanda's districts. These focal points receive monthly reports from the DDE based on the regular inspections conducted by the SEOs. After reviewing the reports, the focal points will share report findings with the district mayor and discuss follow-up actions with the DDE.

the local level by SEOs under the supervision of the DDE who is accountable to the Mayor of the District. The effectiveness of the current school inspection system has been constrained by several challenges, including a focus on the enforcement of rules rather than provision of constructive support to schools. This project will help the school inspection system move to a focus on supporting teaching and learning. It will strengthen the ESIA to carry out more effective and efficient school inspections using improved and digitized tools in all 416 sectors across 30 districts, with training and on-site support for SEOs and DEOs.

National learning assessment: The project will strengthen the current national learning assessment by addressing the specific challenges it faces. Rwanda developed its first national learning assessment—LARS—in 2011. Two rounds of LARS[7] have since been completed to evaluate learning outcomes based on the criteria and expectations set by the national curriculum. These efforts, largely financed by DPs, have enabled some capacity to be developed in REB to manage the sample-based evaluation process, but assessments have been sporadic in nature. The project will support (a) a technical review of LARS; (b) development of improved assessment framework, instruments, and methodology; (c) piloting of the new assessment system; (d) implementation of LARS for three rounds during the project cycle (that is, baseline in 2019 or 2020, midline in 2022, and endline in 2024); and (e) completion of comprehensive analyses and national reports to inform policy development and instructional practice.

Regional/international learning assessment: Rwanda intends to benchmark itself against regional and international standards for student achievement. Such measures are pertinent for assessing the education system's performance in producing the human capital required for Rwanda to compete successfully in regional and global markets. As such, the project will support MINEDUC's efforts to gain membership and participate in the next round of an international or regional assessment. Rwanda will produce its national report on the assessment reports to inform policies.

2.2.3.2 Subcomponent 3.2: Strengthen project management, implementation, and monitoring capacity

The project will enhance the capacity of the key implementing agencies to effectively manage and support the project. The project will finance key staff in SPIUs at MINEDUC and REB in key functions, including coordination and management, financial management (FM), procurement, ESS, and operations and planning throughout the project implementation period. It will also support the purchase of equipment and furniture required to make SPIUs fully functional at both MINEDUC and REB, including IT equipment and accessories, office furniture, and vehicles and motorcycles for field visits. In addition, the project will support operating costs for both SPIUs, including maintenance and office stationery.

The Project will enhance project management capacity by (i) financing project planning activities such as development of the annual work plans) and Procurement Plans; (b) supporting monitoring and evaluation (M&E) activities and training on ESS, fiduciary arrangement and requirements, citizens' engagement, and climate disaster management; (c) financing critical

[7] The first round of LARS took place in 2011 and analyzed P3 literacy and numeracy achievements, and the second (LARS II) was done in 2014 and analyzed P2 and P5 literacy and numeracy achievements. LARS III Phase I was conducted in 2018 and analyzed P3 numeracy and literacy achievements, while LARS III Phase 2 was conducted in 2017 and analyzed P6 and S3 literacy and numeracy achievements.

evaluations to capture important innovative approaches; and (d) providing technical assistance (TA) for data management, planning, and M&E, including development of simulation models to project student enrollment, teacher recruitment, and infrastructure needs, informing policy development to reduce repetition and dropout.

CHAPTER 3: ENVIRONMENT AND SOCIAL BASELINE OF THE PROJECT

3.1 Environmental issues at project site

3.1.1 Classrooms environment

In 2017, the average pupil per classroom ratio (PCR) in public school was 85. Moreover, the ratio of 96 for primary classrooms is used in double-shifting to keep the average class-size at 43 pupils, and the ratio is 100 in the early grades. The enrolment bulge in grade 1 is exacerbated by a large influx of under-age children due to lack pre-primary classes. Overcrowding of early-grade classrooms often reaches more than 60 pupils after double-shifting. The learning conditions worsen when pupils learn in sub-quality classrooms. Half of the classrooms are old and substandard. Some classrooms are small 3(5 square meters) and are often built with nondurable clay bricks (adobe). Moreover, the lack of local school forces pupils to walk long travels. (MINEDUC, February 2019)

Field visits revealed that most of primary classrooms are overcrowded even when double-shifting is used. There were some instances of congestion in classrooms in most schools that had learners more than 50. The average number of pupils in classroom in Primary 1, 2, and 3 grades in public schools is 92 (Figure 2). This negatively affects the learning performance.

Figure 2: Internal view of Primary School in Nyagatare (a) and Kayonza Districts (b), showing overcrowded students in classroom

A significant proportion of walls of visited schools were not clean. Dirty walls are not only unappealing but also a distraction to the learners, therefore, affecting their performance. Furthermore, over half (50%) of the classroom floors were dirty. A significant percentage of

the floors had cracks and/or potholes. There was a correlation between the cleanliness of classroom floors and water supply. It was observed that schools that had adequate piped water and rain water supply had clean classroom floors while those with boreholes had dirty classroom floors (e.g GS Gikaya in Kayonza District). It meant that water availability was a contributory factor in the cleanliness of classrooms. Dirty floors are source of dust particles which increase with overcrowding in the classroom. Such conditions put the primary learners in danger of respiratory diseases. Some schools were very old with damaged roof sheets/tiles and walls. All school classrooms visited do not have appropriate pathways for people or learners with physical disabilities. In line with the construction of school buildings, there must be provisions walk ways facilitating easy access for all including people with sensitive disability.

3.1.2 Hygiene and sanitation

Sanitation and hygiene remains a challenge in many parts of the world. About 50% of the developing world's population (2.5 billion people) lack improved sanitation facilities and over 884 million people still use unsafe drinking water sources (WHO and UNICEF, 2010). This contributes greatly to morbidity and mortality in children.

In Rwanda most of visited schools did not have improved sanitation facilities (clean latrines, water availability and toilet papers). There is a need to upgrade the sanitation to improve living condition in schools. This will foster a healthy learning environment and improve performance in public primary schools.

3.1.2.1. Latrines

The structures and conditions of latrines were observed to determine their suitability in their functioning. Lack of space to construct new latrines was a problem in some schools (GS Matimba Demonstration School). The field visits showed that most of schools had latrines for both girls and boys with hand washing facilities next to the latrines. Most of the schools were not compliant with the recommended standard ratio pit latrine/number of pupils of 1:30 for boys and 1:25 for girls. The ratio toilet/pupils was 1:58-68 per boy and girl learners was very common in many visited schools. Extremely high ratios of 1:94 for boys and 1:98 for girls were recorded in GS Gatebe in Nyagatare District. High pressure on sanitation facilities (high ratio pit latrine/pupils) and lack of water explained the poor sanitation in observed in many schools.

3.1.2.2. Hand Washing Facilities

Most of visited schools had hand washing facility which was installed outside the latrines rooms. The washing facilities had water but not soap. It happened that some learners forgot to wash their hands when the hand washing facilities located far away from the latrines. Most of schools source their water from piped water system while some sourced their water from rainy water harvesting facilities. Many visited schools were supplied with water from WASAC and had water tanks for rainwater harvesting. In many schools, water harvesting facilities cover 60% of the roof. This poor drainage causes erosion downstream.

3.1.2.3. Access to water, electricity and sanitation

Some of visited schools have been constructed with rooftop rainwater harvesting system (plastic tanks connected to the metal gutters) (Figure 3). Others had PVC gutters and pipes connected to ferro-cement water tanks constructed by a project by the "Collecte et Utilisation des Eaux de Pluie (CUEP)". However, we noted that the quality of rainwater harvested from rooftop did not meet the National and WHO guidelines for drinking water quality, particularly for bacteriological quality. Water from rooftop was contaminated by pollutants such as dust, trees leafs, birds' droppings, etc., that accumulate on the rooftop. To be potable, the system should have a system for first flush, tank cleaning and a regular programme of maintenance of the roof surface and gutters.

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Figure 3: Rainwater harvesting system in one of the Primary school in Gatsibo District

Access to water and electricity is a very important for sanitation and lighting in the school environment. The survey conducted by the Ministry of education shows that only 57 % of schools in which the project will be implemented have access to electricity. With regard to access to water, 68% of the survey school have access to water.

Majority of visited Schools lack funds to improve sanitation. For instance, toilets are not well maintained. The doors are always open because the closing handles broke down. Cleaning of toilet floor is problematic due to the lack of soap or detergents. Some school do not view the importance of using cleaning detergents and soaps in toilet cleaning. The drainage from school floor is oriented to downstream wetland where water sources are found. This can cause diseases outbreak. In the absence of potable water access from WASAC, rainwater harvesting would provide cheap drinking water supply to school children. There is a huge potential in water conservation in schools due to the large roof area provided by buildings. Rainwater harvesting could meet their water demands and reduce the costs of water in schools.

Figure 4: Poor maintained toilets in Kirambo Primary School, Burera District and Musero Primary School, Musanze District

3.2 Solid waste management

Most of Schools buildings have a waste management system. Solid wastes *are* collected using waste bins and disposed in a pit. The bins are placed outside the main entrance of the corridors.

3.2.1. Solid Waste Collection Systems

Many different types of waste are produced in schools and it is vital that the schools know what can be recycled and what cannot. Schools could have different bins for different types of rubbish, for example, a paper bin, a food waste bin, cardboard waste bins and general rubbish bins, Unfortunately, many schools visited struggle to think of imaginative ways to implement effective waste management in schools. Most visited schools put wastes in baskets, sacks, plastic bags or other suitable materials at the door side so that the collectors bring wastes to common temporary storage points (composts) or to pick up in the pit or transported to the municipal disposal sites by the authorized companies.

3.2.2. Solid Waste management

In urban areas, large amount of wastes is collected by private companies and employees from the city administration or the local administration. In urban areas, wastes are evacuated or transported by private cleaning services companies from the collecting zone to the disposal sites (landfills). However, solid waste management companies transport the collected wastes to the disposal site.

In rural area, the majority of schools are dumping solid wastes are in open dumping sites, where flies and scavengers breed on them, with high risk of contamination of land, water, land and public health. The majority of waste material included paper, pen waste, detergent, used girls

pad. Food waste are used as fertilisers in open composts whereas cooked food waste is collected by the surround community to feed pigs.

Figure 5: Open waste dumping pit in Musero Primary School, Musanze District

3.3. Land use and availability for the project activities

The land use around project is site is dominated by seasonal crops such as beans, maize and potatoes. However, permanent crops such as banana and woodlots are found. The exception is the Nyirabitside School which is located in the buffer zone of Volcanoes National Park. Information from the field work indicated that the majority of schools (84%) don not have land for construction of the new buildings or extension of the existing rooms. They will be acquiring land from the nearby land owners and make expropriation. The Districts officials (School construction Engineer, Director of Education or in Charge of Education, Director of one stop centre or Land administration/valuation officer, District Environmental Officer) and visited schools Headmaster) informed the consultant that in case the school does not have the sufficient land, it will be acquired from the nearby people who are ready to leave the land, in exchange of fair compensation of their land and properties. The issue of fair compensation was discussed with the nearby school communities. They expressed the need to follow the Law on expropriation and Real Property Valuation that insists that compensation should be based on the prevailing market prices (Gazette, no 20 of 17/05/2010). They also insisted on the need for

payment in due time, instead of waiting for several years.

3.4. Land use incompatibility with the surrounding environment

Since children spend much of their daily activities within school environment during critical developmental stages, it is crucial that the same environment is kept clean. Most schools had clean compounds with adequate systems to collect and dispose wastes. In some schools, pits were filled up, and resulted in piles of solid wastes, indicating poor solid waste management. Since children lack the experience to determine risks associated with their exposure behaviours, the presence of waste pose health risks to them. The exposure behaviours include playing with waste, placing their fingers and other objects in the mouth and not washing hands before eating and after visiting the latrine. Preventing childhood exposure to wastes may significantly prevent health risks associated with them (respiratory infections and diarrhoeal diseases).

The fence perimeter was available in few schools but most of them do not have fence. A fence in a school helps avoiding unauthorized access and keeps pupils safe from outside dangers. It prevents them from wandering away from the safety of the school environment. This notwithstanding, most schools provided an ambient physical environment for the learners. It is important to note that the school activities can also negatively the natural environment in such a way that it causes health hazards for the community at large. It is, therefore, crucial that schools have proper sanitary facilities.

Some schools are located in central residential or commercial houses. Others are found near unstable slope, ravines or even in wetlands, commonly known as high risky zone. Some schools without the perimeter fence face problems of illegal access to unauthorized animals, individuals including learners who can illegally go in and out. This minimises the school surveillance, learners' concentration and performance. Some schools are exposed to regular landslides and floods. For instance, GS NZOVE (Nyarugenge) and Buhande Primary School (Rulindo) are located in Nyabarongo and very common). During the heavy season, the worst-ever floods in the Valley of Nyabarongo could fully destroy school buildings. It is important during the project implementation to relocate schools found in incompatible environment or high risk zones.

Figure 6: Privately owned woodlot inside the school compound in GS Jean de la Manaie, Burera District

CHAPTER 4: REVIEW OF NATIONAL POLICY INSTITUTIONAL AND REGULATORY FRAMEWORK APPLICABLE TO EDUCATION AND ENVIRONMENT AND WORLD BANK REQUIREMENTS FOR ESMF RELATED TO EDUCATION AND ENVIRONMENT

4.1 Legal Framework

Rwanda is just revising and enacting new institutional, policy and legislative framework in all its sectors and sub sectors after operating with colonial framework until after 1994. Most of the government ministries have already developed the 36 respective sector policies and strategic plans most of which are based on poverty reduction strategy.

4.1.1 The constitution of the Republic of Rwanda

The constitution of the Republic of Rwanda as revised in 2015; under Article 20, Every Rwandan has the right to education. Freedom of learning and teaching is guaranteed in accordance with conditions determined by law. Primary education is compulsory and free in public schools. Conditions for free primary education in schools subsidized by the Government are determined by law. A law also determines the organization of education.

Article 21 all Rwandans have the right to good health. Article 22 specifies that everyone has the right to live in a clean and healthy environment, while Article 53 specifies that everyone has the duty to protect, safeguard and promote the environment. The constitution gives ways to many laws, policies and strategies for protecting, safeguarding and promoting the environment.

Article 34 determines the rights to private properties and stipulates that every person has right to hold a private property whether individually or collectively owned. The private property, individual or collective is inviolable. The right to private property shall not be encroached upon except in public interest and in accordance with the provisions of law.

Article 35 specifies the right to private ownership of land and other rights that are related to land are granted by the State. A law determines the modalities of concession transfer and use of land.

4.1.2 Environmental Law No48/2018 of 13/08/2018

The most relevant legislation for this study is the Environmental law. This is the law that regulates the protection of environment in Rwanda. The law sets out the general legal

framework for environment protection and management in Rwanda. It also constitutes environment as a one of the priority concerns of the Government of Rwanda. The fundamental principle on national environmental protection policy develops national strategies, plans and programs, aiming at ensuring the conservation and use of sustainable environmental resources.

The law gives right to every natural or legal person in Rwanda to live in a healthy and balanced environment. They also have the obligation to contribute individually or collectively to safeguard country's natural, historical and socio-cultural heritage. The framework of the law on the protection and management of natural resources centres on avoiding and reducing the disastrous consequences on environment. It measures result from an environmental evaluation of policies, programs and projects, aimed at preventing the consequences of such activities. The principle of sustainability of environment and equity among generation emphasizes human beings at the core of sustainable development. They therefore, have a right to a healthy and productive life in harmony with nature. They must so as to equitably meet the needs of the present and future generation. The protection and management of environment is currently registered in the environmental law that has been published in the official Rwanda Gazette in September 2018. MOE which is the ministry responsible for the environment under the article 65 puts in place Rwanda Environment Management Authority (REMA) which is the institution now charged with the responsibility of ensuring environmental protection by demanding for EIA studies to be undertaken before projects are executed. The present organic law has the following objectives.

- To protect human and natural environment.
- To establish fundamental principles of management and protection of environment against all forms of degradation so as to develop natural resources and to fight all kinds of pollutions and nuisances;
- To improve the living conditions of the population while preserving ecosystems and available resources;
- To ensure sustainable environment and resources as well as rational and sustainable use of resources, taking into account the equality between the present and future generations;
- To guarantee to all Rwandans an economically viable, ecologically rational and socially acceptable development;

- To establish the precaution principle in order to reduce the negative effects on Environment and ensure the rehabilitation of degraded areas.

In chapter 5 of Environmental law, Article 30 clearly calls for the need to subject projects to mandatory Environmental Impact Assessment. Article 3: States that every person has the duty to protect safeguard and promote environment. The State shall protect, conserve and manage the environment.

Article 33 states that the review and approval of environmental impact assessments, environmental audit, and strategic environmental assessment must be approved by the Authority or another state organ authorised in writing to do so by the Authority. If the approval is done by an authorised, such organ does so on behalf of the Authority which also responsible for its audit. With regards to the costs of conducting Environmental Assessments, Article 34 stipulates that consultancy cost for environmental audit and environmental Assessment are borne by the project initiator.

Further to this law, through the Ministerial Order N° 001/2018 of 25/04/2018, a list of all the projects that must be subjected to mandatory EIA has been put in place under article 3 and 4 of this ministerial order. According to article 3, construction projects that must undergo full EIAs include entertainment and public assembly facilities, theatre and indoor sport facilities, outdoor sport facilities and training and learning facilities that are used for more than 500 students or trainees. According to article 4, all building except those qualified for full EIA, with the capacity to host more than 100 people but not exceeding 500 people must be subjected to partial EIA.

4.1.3 Environmental Impact Assessment regulations

REMA has now developed the EIA regulations which provide a guideline and requirements for EIA in Rwanda. Projects with identified adverse impacts on environment call for a full EIA process for mitigation measures and thus the Ministerial Order No 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. The order specifies the works, activities and projects that have to undertake an environmental impact assessment. The list of works, activities and projects that must undergo a full environmental impact assessment before being granted authorisation for their implementation

is found in Annex I of the Order. The project works, activities and projects that have to undertake an environmental impact assessment are the educational buildings, fulfilling at least two of the following conditions:

- having capacity to host more than five hundred (500) people;
- having a total floor area exceeding one thousand and five hundred square meters (1500 sqm);
- built in plot size exceeding one thousand square meters (1000 sqm).

The list of works, activities and projects that must undergo a partial environmental impact assessment before being granted authorisation for their implementation is found in Annex II of the Order. The project works, activities and projects that have to undertake a partial environmental impact assessment are the educational buildings, fulfilling at least two of the following conditions:

- with a capacity to host more than two hundred (200) people but not exceeding five hundred (500) people,
- with a total floor area exceeding one thousand and five hundred square meters (1500 sqm);
- built in a plot size exceeding one thousand square meters (1000sqm).

Projects, works and activities which are not listed on the Annex I and II to the Order are not subject to the environmental impact assessment. However, when it is evident that work, activity or project not listed on the Annex I and II to this Order has a negative and irreversible impact on the environment and is similar in nature to the work, activity or project listed in Annex I and II of this Order, the Authority or authorized organ may request the developer to conduct an environmental impact assessment. In this category, there are those small classrooms with a low capacity and toilets. Depending on the location of classrooms and toilets and sensitivity and likelihoods for contamination of the surrounding, these building may require the environmental assessment.

The project activities will involve construction of new rooms/toilets, extension or rehabilitation of existing classrooms and may include replacement of roofs, windows, floors and indoor partitions, repair of basements and sewer systems. It is anticipated that the construction of new classrooms with a capacity to host more than five hundred (500) people, on a total floor area

exceeding one thousand and five hundred square meters (1500 sqm), will be subject to a full environmental impact assessment. It is also anticipated that the construction of classrooms with a capacity to host more than two hundred (200) people but not exceeding five hundred (500) people and with a total floor area exceeding one thousand and five hundred square meters (1500 sqm) will be subject to a partial environmental impact assessment.

4.1.3.1 Project Brief Submission and Registration

As a first step in the EIA process, a developer proposing to start a project shall notify Rwanda Development Board (RDB) in writing by submission of a Project Brief. The purpose of a Project Brief, which should be prepared as prescribed in this regulation, is to provide information on the proposed activity so as to enable RDB and Lead Agencies establish whether or not the activity is likely to have significant impact on the environment, and thus determine the level of EIA necessary. The project brief submitted to RDB by a developer will be registered as the formal application for an EIA.

4.1.3.2 Screening

Screening refers to the process a decision making on whether or not and at which level an EIA is required. This is based on the Ministerial Order N° 001/ 2019 of 15/04/2019 discussed in the previous section. It is through screening a project is classified as either of impact level (IL) 1, 2 or 3. Note that impact Level (IL) 1, 2 or 3 are respectively equivalent to category C, B or A**.** The responsibility for scoping shall be that of the developers (or their EIA experts) in consultation with Lead Agencies and all relevant stakeholders. Scoping is intended to establish important issues to be addressed in the environmental impact and eliminate the irrelevant ones. After scoping, RDB approves the terms of reference that would be used for carrying out the environmental impact study.

4.1.3.3 Baseline data collection and Analysis of Initial State

Baseline data describes status of existing environment at a location before intervention of the proposed project. Site-specific primary data on and around a proposed site should be collected by experts conducting the environmental impact study to form a basis for future environmental monitoring.

4.1.3.4 Impact prediction and analysis of alternatives

Impact prediction is a way of forecasting the environmental consequences of a project and its alternatives. This action is principally a responsibility of an EIA expert. For every project, possible alternatives should be identified and environmental attributes compared. Alternatives should cover both project location and process technologies. Alternatives should then be ranked for selection of the most optimum environmental and socio-economic benefits to the community. Once alternatives have been analysed, a mitigation plan should be drawn up for the selected option and is supplemented with an Environmental Management Plan (EMP) to guide the developer in environmental conservation.

4.1.3.5 EIA Report

An environmental impact study culminates into preparation of a report by the EIA experts. An EIA report should provide clear information to the decision-maker on the different environmental scenarios without the project, with the project and with project alternatives. The developer is also required to produce an environment management plan (EMP). Any modifications made by a developer to the EIA report should be presented in form of an Environmental Impact Report Addendum. All these three documents should then be submitted to REMA by the developer.

4.1.3.6 Public hearing

After completion of EIA report the Environmental Law requires that the public must be informed and consulted on a proposed development. REMA may, if it deems necessary, conduct a public hearing before EIA reports are appraised by its Technical Committee. Any stakeholders likely to be affected by the proposed project are entitled to have access to unclassified sections of the EIA report and make oral or written comments to RDB. RDB shall consider public views when deciding whether or not to approve a proposed project.

4.1.3.7 Decision-making

During the decision-making and authorization phase, EIA documents submitted to the Authority shall be reviewed by two decision-making committees: a Technical Committee and an Executive Committee constituted by RDB. If the project is approved, the developer will be issued with an EIA Certificate of Authorization, which permits implementation of the project in accordance with the mitigation measures in the EIA Report and any additional approval conditions.

4.1.3.8 Environmental Monitoring

Monitoring should be done during both construction and operation phases of a project. It is done not just to ensure that approval conditions are complied with but also to observe whether the predictions made in the EIA reports are correct or not. Where impacts exceed levels predicted in the environmental impact study, corrective action should be taken. Monitoring also enables RDB to review validity of predictions and conditions of implementation of the Environmental Management Plan (EMP). During implementation and operation of a project, monitoring is a responsibility of the developer and RDB.

4.1.4 Law Nº 43/ 2013 of 16/06/2013 governing the land in Rwanda

This law determines the terms of use and management of land in Rwanda. It also fixes the principles to be applied to the recognized rights on the whole lands located along the national territory together with anything connected to it and which is incorporated to it, either naturally or artificially. The Article 3, precise that the land is involved (included) within the common inheritance of all the Rwandan people; the ancestors, the presents and future generations. Notwithstanding the rights recognized to people, only the government (state) holds the distinguished related to the land's management along the national territory that it uses in the general interest of all in order to assure the rational economic and social development in a way defined by the law. Related to this issue, only the government has power to grant the rights of occupation and use of the land, it also has the right to order the expropriation due to a public cause of public necessity, housing conditions and development (fixing up) of the national territory in the way defined by law against a fair and previous compensation. The Article 4 mentions that any kind of discrimination, in particular the one focused on gender and to the use of land's rights shall be prohibited. The man and woman have the same rights related to the land's property.

4.1.5 Law no 32/2015 of 11/06/2015 relating to expropriation in the public interests

The Expropriation Law provides for public dissemination on the importance of the project to be established and the need for expropriation. 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.

Article 9 stipulates that it is only the Government that shall order expropriation in the public interest, and must be done with prior and fair compensation. The law also bars anybody from interfering of stopping expropriation "on pretext of self-centred interests". Accordingly, Article 3 provides for any underground or surface activity carried out with in public interest on any land but with due and fair compensation to the land owner. Article 4 requires that any project, at any level, which intends to carry out acts of expropriation in the public interest, must budget and provide funding for valuation of the property of the person to be expropriated and for fair compensation.

It is important that the expropriation of properties and lands be based on the WB Environmental and Social Standard (Land Acquisition, Restrictions on Land Use and Involuntary Resettlement), National and districts expropriation procedures. In case of mismatch between the national law and WB policy, the WB policy will supersede.

4.4.5 Ministerial order Nº2 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 in order 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. For instance article, 24 which is related to the passage for people living with disabilities specifies that every workplace including schools shall have specific passage for person with disabilities such as the passage for wheelchairs, guardrails, and other devices that may serve as support. 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 work place. 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.

4.2. Policy Framework

4.2.1. Rwanda Vision 2020

The protection and management of environment are among the pillars of Vision 2020, the development strategy for Rwanda. The environmental objective of the Government is that by 2020, it will have built a nation in which pressure on natural resources, particularly on land, water, biomass and biodiversity, has significantly been reduced and the process of environmental pollution and degradation has been reversed; a nation in which the management and protection of these resources and environment are more rational and well-regulated in order to preserve and bequeath to future generations the basic wealth necessary for sustainable development. The vision 2020 of Rwanda gives as strategic actions that institute the principle of precaution to mitigate the negative effects caused to the environment by socioeconomic and development activities.

In the area of education, vision 2020 recognises education as key strategic pillar to achieve human resources development and knowledge based economy. In this regard, Rwanda aims at achieving millennium development goals on education for all through delivery of education by introducing nine year basic education up to twelve years basic education. Rwanda recognises the need to tackle the challenges in quality education, matching the skills with the labour market needs and entrepreneurial mind-set shift. In the same path to achieve Sustainable Development Goals on Education, the Government of Rwanda has embarked on developing vision 2050 with the aims of increasing its human capital index by investing in human capital development mainly capacity building from the low base.

4.2.2. The Rwanda National Strategy for Transformation (NST1)

The Rwanda national strategy for transformation (NST1) considers environment and climate change as key strategic areas. With regard to environmental management, the focus is on

improving cross sectoral coordination to ensure smooth implementation of environmental policies and regulations. In this regard, critical sectors identified for strengthening include: agriculture, urbanization, infrastructure and land use management. Additional emphasis will be put on strengthening monitoring and evaluation. High impact areas selected include implementation of: Environmental and social Impact Assessments, biodiversity and ecosystem management, pollution and waste management. With regard to disaster management, interventions are focused on the sectors of agriculture, infrastructure, education, environment and natural resources, information and communication technology, health, the private sector and youth and social protection.

In the area of education, the NST1 recognises education as one of key strategic interventions for social transformation. In this regard, the government set a strategic objective aimed at enhancing demographic dividend through improved access to quality education by focusing on strategic investments in all levels of education (from pre-primary, basic to tertiary) and improved teachers welfare. Therefore, developing Rwandans into capable and skilled people with quality standard of living and stable and secure society will need to ensure quality of education for all aiming at building knowledge-based economy. Interventions to achieve this pillars will focus on the following strategies:

- Ensure access to pre-primary education so as to increase pre-primary net enrolment rates from 17.5% (2016) to 45% by 2024
- Upgrading and increasing school infrastructure and ensuring access to adequate equipment including modern laboratories, and appropriate teaching and modern learning materials
- Increase the number of qualified teachers and improve their welfare. This will be done through in-service education in learner-cantered trainings, provision of incentives will be undertaken to attract brilliant students to join the teaching profession and retain high performing staff.
- Increase the use of ICT in teaching and learning through scaling up SMART classrooms and ICT devices as well as use of the new competence based curriculum
- Increase effort to reduce dropout in primary, lower secondary and upper secondary from 5.6%, 6.3% and 3% in 2017 to 1.2%, 1.7% and 1% respectively by 2024.

4.2.3 The land policy

The Rwanda land policy calls for rational use and sound management of national land resources, and that land use be based on established master plans. The policy also provides development of land use plans based on suitability of the areas/lands thus distinguishing the different categories of land and their purpose. On the use and management of hillsides and marshlands, the policy stipulates that marshlands meant for agriculture should be cultivated after adequate planning and Environmental Impact Assessment.

4.2.4 The National wetland conservation programme

Though not a policy as such, the wetland convention implementation office in Rwanda has formulated a National Wetland Conservation Program for 2002-2030 jointly working with the National Commission for Development and Reform, the Ministries of Finance, Education Scientific Research and Technology, Environment, Lands, Water and Natural Resources and Agriculture. The program aims at engaging the various government ministries in wetland conservation and ensure a holistic approach to wetland management. All authorities concerned will have proper coordination of activities concerning wetland management, a factor which leads to efficiency implementation of policies. To avoid further exploitation of the resources, Rwandan Government has established rules governing wetlands in the country. This is done by subjecting any acts concerned with water and its resources like watering plants, the use of swamps to prior environmental impact assessment which is submitted for approved to REMA or any person given a written authorization by REMA. During the project site selection, the proponent will make sure that no project should be located in the wetland.

4.2.5 Water and sanitation policy

The sectoral policy on water and sanitation is based on Vision 2020, Millennium Development Goals (currently the Sustainable Development Goals) and poverty reduction strategy. The policy provides for decentralization in line with the national decentralization policy, institutional aspects, integrated watershed management, monitoring and assessment and participatory approach to water and sanitation among other sectoral reforms in Rwanda.

The policy identifies the sub sector constraints and proposes measures to achieve policy objectives of improving the living conditions of the population through optimal use of water resources and access of all to water and sanitation services.

One of the programs of this policy is on water supply and sanitation program in rural area in order to achieve the millennium goals and the 2020 Vision, the Government of Rwanda

launched 15 years water and sanitation program in rural area. This program aims to improve the population rate with access to water, presently at 44%, and increase the sanitation rate, presently at 8%, to 66% in 2010, to 80% in 2015 and 100% in 2020. In its objective 7, the policy recommends to enhance storm water management to mitigate impacts on properties, infrastructure, human health and the environment. Some schools' buildings may be the sources of storm water that can cause negative impacts on human health and environment. This project will contribute to improvement in sanitation situation and storm water management as it tends to builds news pit latrines to comply with WHO standards which stipulate a ratio of 30 students per pit latrine. In addition, roof water harvesting will improve storm water management.

4.2.6 The 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 conservation. The strategy focuses on five major areas i.e. improved conservation of protected areas and wetlands; sustainable use of biodiversity in natural ecosystems and agro-ecosystems; 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. The implementation of the project components will avoid activities that threaten sensitive biodiversity area such as protected area, or protected wetland and lakes. In case of the expansion, construction of new schools establishments and latrines threaten or are located in these areas, the alternative site will be chosen.

4.3 Institutional framework for environmental management

The responsibility for formulation and implementation of environmental matters fall with the Ministry of Environment (MOE) as the key institutions with this mandate. The other aspects of environmental management related to education projects are dealt with several other institutions, among which the most prominent are the Rwanda Environment Management Authority (REMA); Rwanda Development Board (RDB); Rwanda Land Use and Management Authority (RLMUA), Rwanda Water and Forest Authority (RWFA) Rwanda Natural) among others. In case of any technically or circumstantially perceived environmental risk or threat, the proprietor is obliged to request from REMA the opinion of the need and, if necessary, the conditions for undertaking EIA. Depending upon the assessment of potential significance of

environmental impacts, REMA can decide if there is a need to apply partial or full EIA procedure for the relevant education projects.

4.3.1 Ministry of Education (MINEDUC)

The mission of this ministry is to transform the Rwandan citizen into skilled human capital for socio-economic development of the country by ensuring equitable access to quality education focusing on combating illiteracy, promotion of science and technology, critical thinking and positive value. The main of objective of this ministry is to develop review and guide the implementation of education sector policies and strategies geared towards achieving vision 2020 through the elaboration, dissemination and coordination of the implementation of education sector policies, strategies and programs regarding basic education, post basic and higher education, literacy, special programs and information and communication technology in education. The Ministry has a unit for the project management, called the Single Project Implementation Unit (SPIU). The role of SPIU is to manage and oversee the implementation of all projects components by providing strategic leadership to ensure the achievement of projects goals and the sustainability of expected outcome. This unit shall establish mechanisms to monitor and evaluate whether construction, safety and environmental standards are respected in school construction projects.

4.3.2 The Ministry of Environment (MOE)

The MOE has the responsibility for developing land utilization policies (including surveying, land classification, land laws and land tenure); the development of environmental policies and procedures (including impact assessments), protection of natural resources (water, land, flora, and fauna), environmental legislation, biodiversity, and other environmental aspects informed by the Environment Law among others. Chapter IV of the Organic Law Article 65 clearly calls for the need to subject projects to mandatory Environmental Impact Assessment.

Article 65: Further specifies that every project shall be subjected to environmental impact assessment prior to its commencement. It shall be the same for programs, plans and policies likely to affect the environment. Specific details of projects referred to in this Article shall be spelt out by the order of the Minister in charge of environment. Article 66 states that Environmental Impact Assessment (EIA) shall include at least the following:

- A brief description of the project and its variants.

- Analysis of direct and indirect foreseeable consequences on the environment.
- Analysis of the initial state of the environment.
- Measures envisaged reducing, preventing or compensating for the Consequence
- Reasons for the choice.
- A summary of requisitions from clause1 to 5 of this article;

1. A definition of the evaluation and monitoring methods used regularly and environmental indicators before (initial state), during and after implementation of the project or, as the case may be, at the final evaluation stage of the project;
2. A financial evaluation of measures recommended preventing, reducing or compensating for the negative effects of the project on the environment and measures for regular monitoring and control of relevant environmental indicators.

4.3.3 Rwanda Environmental Management Authority

The overall responsibility of the management of the bio-physical environment lies with the Rwanda Environment Management Authority as stipulated by its establishing law of 2003, promulgated by the Government of Rwanda. The functions of REMA include:

- To advise the Government on legislative and other measures for the management of the environment or the implementation of relevant international conventions, treaties and agreements in the field of environment, as the case may deem necessary;
- To take stock and conduct comprehensive environmental audits and investigations, to prepare and publish biannual reports on the state of natural resources in Rwanda;
- To undertake research, investigations, surveys and such other relevant studies in the field of environment and disseminate the findings;
- To ensure monitoring and evaluation of development programs in order to control observance of proper safeguards in the planning and execution of all development projects, including those already in existence, that have or are likely to have significant impact on the environment;
- To participate in the setup of procedures and safeguards for the prevention of accidents and phenomena which may cause environmental degradation and propose remedial measures where accidents and those phenomena occur;
- To render advice and technical support, where possible, to entities engaged in natural resource management and environmental protection;

- To provide awards and grants aimed at facilitating research and capacity building in matters of environmental protection.

4.3.4 Rwanda Development Board (RDB)

This is a one stop institution bringing together several government bodies in Rwanda focussed on promoting investment in Rwanda. RDB has a department responsible for EIA processes including reviewing all projects EIA reports before approval of the implementation of the projects, a duty that was previously undertaken by REMA.

4.4. World Bank Environmental and Social Standards (ESF)

The preparation of this ESMF has been proposed so that the project complies with World Ban Environment and Social Standards. (ESS). Some project components will trigger World Bank Environmental and Social Standards. This ESMF will demonstrate how the project will comply with these Bank standards in case they are triggered. Those standards are:

- Environmental and Social Standard 1: Assessment and Management of Environmental and Social Risks and Impacts;
- Environmental and Social Standard 2: Labour and Working Conditions
- Environmental and Social Standard 3: Resource Efficiency and Pollution Prevention and Management
- Environmental and Social Standard 4: Community Health and Safety
- Environmental and Social Standard 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement
- Environmental and Social Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources
- Environmental and Social Standard 7: Indigenous Peoples
- Environmental and Social Standard 8: Cultural Heritage
- Environmental and Social Standard 9: Financial Intermediaries

- Environmental and Social Standard 10: Stakeholder Engagement and Information Disclosure.

4.4.1. Environmental and Social Standard 1: Assessment and Management of Environmental and Social Risks and Impacts;

The World Bank (Bank) requires environmental assessment (EA) of projects proposed for Bank support to ensure that they do not have, or mitigate environmental impacts. The EA is a process whose breadth, depth and type of analysis depend on the nature, scale and potential environmental impacts of the projects. The objectives of ESS1 is to (1) identify, evaluate and manage and social risks and impact of the project in manner which is consistent with ESSs, and adopt mitigation hierarchy approach to anticipate and avoid, minimize, mitigate, and compensate or offset risks and impacts, adopt differentiate measures so that adverse impacts do not fall to disadvantaged or vulnerable and they are not disadvantaged in sharing development benefits, to utilize national and social institutions, systems laws and regulations in the assessment, development and implementation of projects whenever appropriate, to promote environmental and social performance in a ways which recognise and enhance the borrower capacity.

The Environmental and Social Assessment will be based on current information, including accurate delineation of the project and any associated aspects, and environmental and social baseline data at appropriate level of detail sufficient to inform characterisation and identification of risks, impacts and mitigation measures. The assessment will therefore evaluate project potential social and environmental risks and impacts, examine project alternatives, identify ways of improving project selection, siting, planning, design, and implementation in order to apply mitigation hierarchy for adverse social and environmental impacts and seek to enhance positive impacts of the project.

The Bank classifies the proposed projects into three major categories, depending on the type, location, sensitivity, scale of the project, and nature and magnitude of its potential social risks and impacts. Therefore, the bank establishes three categories of risks such as 1) high, 2) substantial, and 3) medium and low risks as defined in Table 2.

Table 2: Project Classification according levels of impacts

Category	Definition

Category A (High Risks)	Projects encompassing sub-project or activities with potential significant adverse environmental or social risks/ impacts that are diverse, irreversible or unprecedented. Examples of these activities includes project affecting highly sensitive ecosystems services, project with large resettlements components, projects with serious occupational and health risks, projects with poses serious socio-economic concerns
Category B (substantial or medium risks)	Projects with activities with potential limited adverse environmental or social environments and social risks and or impacts that are few in numbers, generally site specific, largely reversible and readily addressed through mitigation measures. Examples of these projects include small scale agricultural initiative, schools and hospital construction, forest management activities, low emission energy project.
Category C (Low risks)	Projects with activities with minimal or no adverse environmental and social risks and or/ impacts. Example of these projects or activities include education and training, public broad casting, health and family planning, monitoring programmes, plans and studies and advisory services.

Although the project deals with education and training sector, the description of its components through project description shows the components of the project fall in categories B; activities with adverse substantial or moderate risks and C; activities with minimal or no adverse environmental social risks/ and impacts.

Quality Basic Education for Human Capital Development Project sub-components 1.2 will involve the construction and rehabilitation of 11,000 furnished classrooms, 14,680 latrines. This project falls in the sub-component 2.3 on strengthening the Preparation of Pre-primary and Primary Teachers in Teacher Training Colleges in which there are construction and renovation of TTCs. In this regard, the activity will be implemented through the construction of teacher's resources centres, and teaching staff room. To ensure the environmental performance of the project to this standard, an environmental and social impact assessment will be carried out on these above mentioned activities. In category C, the subject will include training of teachers, procurement and supply and school materials etc. For this category, only an environmental plan will be prepared and attached to the feasibility studies.

4.4.2. Environmental and Social Standard 2: Labour and Working Conditions

This standard covers different compliance aspects related fair treatment of workers and provision of safe and healthy working condition. The first aspect aims at improving working conditions and management of workers' relationships by providing workers with information

and documentation that is clear and understandable on terms and conditions of employment on aspects related to rights under national labour and employment law with regard to rights related to working hours, compensation, wage and benefits. The second aspects is related to protecting the workforce by avoiding the child labour by setting up the minimum age and setting conditions that they employability of people below or above minimum working age is not hazardous and interfere with children education or is not harmful to the child health, mental or physical social development. It also prohibits forced labour. The third aspects related to the creation of grievance mechanism for the employee in order to promptly address workers concerns but without impeding their access to judicial or administrative remedies that are provided by the law to address workers' grievances. The fourth aspects aim to set up and application of health and safety measures to the working place.

To comply with this standard, this ESMF will identify potential risks and accidents that may occur during schools and toilets construction and propose mitigation measure to protect the workers either direct or contractual, establish safety measures. The ESMF will set up measure to for contractor selection during the bidding exercises at the district level. These criteria will include safety and emergency plan, worker insurance against accident and risks. In addition, school operation will require protection against fire and thunder storms. The district and contractor should agree to avoid the employment of underage children or schooled children to avoid school drop-out. A registry of staff their gender and age should be established by the contractor through the compliance to the Rwanda Labour Law. Local contractual format should incorporate specifications provisions to prevent air pollution and limit noise to acceptable levels, construction vehicles speed limit specification. Traffic education for communities will be included in community mobilisation activities as it is specified in this ESMF.

4.4.3 Environmental and Social Standard 3: Resource Efficiency and Pollution Prevention and Management

This standard aims at efficient use of resources, pollution preventions and Green House Gases emission avoidance and adoption of mitigation technologies and practices which are achievable. In this regards, project support by the Bank will implement technically and financially feasible for improving efficient consumption of energy, water and as well other resources. The standard recommends the avoidance and minimization of pollutants, generation of hazardous and non-hazardous wastes. It also recommends the reuse, recycling and recovery of waste where possible. This ESMF will identify potential sources of pollution. In addition,

specification in the contract should be concise and diligent to recommend the contractor to use and recycle waste, to avoid the use hazardous materials as specified by the Environmental Law N°48/2018 of 13/08/2018, specifically articles 17, 18, 19 on management of liquid, solid and hazardous wastes.

4.4.4 Environmental and Social Standard 4: Community Health and Safety

This standard aims at addressing the health, safety, security and impacts on project-affected communities and recommends avoidance and minimization of risks and impacts focusing on people who may be vulnerable because of their particular circumstances. This requirement covers the mitigation of risks and impacts on aspects of infrastructures, equipment design and safety, safety in the provision of services to anticipate and minimize the risks and impacts that such services may have on the community. The standards also aim at mitigating by avoidance and or minimization of risks related to community exposure to health issues such as exposure to water borne disease, water based, water related and vector borne diseases, communicable and non-communicable diseases. The Bank recommends the mitigation of the impacts on ecosystems services and mitigate their effect on communities using those services. The Bank stresses the importance and having an emergency and preparedness plan included in the environmental and social assessment. The standard also ensures safeguarding of personnel and property is carried out in a manner that avoids or minimizes risks to the project-affected communities.

This ESMF will assess potential risks that the project, especially sub-components 1.2, on community health. This ESMF will identify potential project risks on communities such as spread of communication disease by project workers to communities, water ponding caused improper drainage which may the sites of mosquitoes breeding and cause of malaria. In addition, during the school operation, and sanitation and waste management plan and procedures should be development to avoid that toilets drains become sources of nuisance and disease to the school surrounding communities and to students.

4.4.5 Environmental and Social Standard 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

The objective of this standards is to avoid involuntary resettlement of when unavoidable minimize involuntary resettlement by exploring alternative project design, avoid forced eviction, and mitigate unavoidable adverse social and economic impacts from land acquisition or restriction on land use by providing timely compensation, assisting displaced persons, conceive and implement resettlement activities and ensure that resettlement activities are done with appropriate information disclosure. The essence of this standard is that involuntary settlement may cause severe long-term hardship, impoverishment, and environmental damage unless appropriate measures are carefully planned and carried out. The objective of this policy is to mitigate resettlement by avoidance and minimization through all possible viable alternative project design and where resettlement is not possible conceive and executive resettlement through fair compensation supported by public participation of affected people in manner that allow them to have opportunities in planning and implementation of resettlement programme and assist resettled communities in livelihoods improvement and standards of living which are better than those prior to the resettlement. The implication of this policy is that some project sub components will require land for school construction and expansion. Therefore, to mitigate the impacts of land acquisition and related displacement, the extension and construction of new school or school block will try to minimize the land acquisition. For instance, in urban area, the construction of school will adopt the construction of multi storeys classroom blocks (3 storeys and above). In case the insufficiency of land for land acquisition from private owners, a resettlement a Resettlement Policy Framework (RPF) has been prepared in parallel with this ESMF. This RPF established standards and procedures for identifying the project affected persons, mechanisms and processes for contested the developed list, land valuation and property thereon, communication of process and results and elaborate grievances redress mechanisms and Resettlement Action plans (RAPs), as required. The RAPs will be prepared by the project management unit (SPIU), and its implementing partners (districts).

4.4.6. Environmental and Social Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources

The aim of standard is to support the protection and conservation of biodiversity and habitats. In this regards, mitigation hierarchy and precautionary approach will be applied in the design and implementation of project that could have an impacts on biodiversity. The Bank financed project will promote sustainable management of living natural resources and support the

livelihoods of local communities including indigenous people through the integration of communities needs with conservation.

The project will comply with this requirements avoiding constructing or expanding classroom, toilets in critical habitat such as national parks or wetland of international importance. In addition, raw material for confecting school furnishing material such as student desks, teachers' tables, and shelves will not be outsourced from national parks or protected areas. For wetland and river course, the site selection will consider the environmental law and wetland management statutes that stipulate that any activities should respect 50 m buffer zone around the wetland. School located in the buffer zone of natural parks will be located to alternative sites.

4.4.7 Environmental and Social Standard 7: Indigenous Peoples/ sub-Saharaan African Historically Undeserved Traditional Community.

This standard aims to avoid or minimize impact on indigenous peoples who are defined as marginalized people with distinct characteristics such as self-identification, collective attachment to geographically distinct habitats or territory, customary , economic, social, or political institutions that are separate from those of the mainstream society or culture; or distinct language or dialect. This social standard is not applicable to this project as Rwanda does not have indigenous people.

4.4.8 Environmental and Social Standard 8: Cultural heritage

This standard seeks to protect cultural heritage from adverse impact of the project activities and support its preservation, address cultural heritage as integral aspect of sustainable development, promote meaningful consultation with stakeholders regarding cultural heritage and promote specifically the equitable sharing of benefits from the use of cultural heritage. To comply with this performance requirement, this ESMF team has tried to identify whether the school construction will have significant impacts that affect cultural heritage such as archaeological sites, unique natural features that signifies natural values like sacred rocks, sacred trees or waterfalls, and cemetery. It is also necessary to consult the affected communities and relevant government agencies in order to identify cultural heritage of importance. Mitigation measures shall be developed to protect cultural heritage from being relocated by construction activities.

4.4.9 Environmental and Social Standard 9: Financial Intermediary

This ESS applies to Financial Intermediaries (FIs) that receive financial support from the Bank FIs include public and private financial services providers, including national and regional development banks, which channel financial resources to a range of economic activities across industry sectors. Financial intermediation also includes provision of financing or guarantees by FIs to other FIs. For the purposes of this ESS, the term "FI subproject" refers to projects financed by FIs with support from the Bank Where the project involves on-lending by the FI to another FI, the term "FI subproject" will include the subprojects of each subsequent FI. The project sub-components activities will not trigger this ESS because not financial intermediary exist between the Bank and Government of Rwanda in the financing of this project.

4.4.10 Environmental and Social Standard 10: Stakeholder Engagement and information disclosure

The objective of this ESS is to engage stakeholder effectively in order to improve environmental and social sustainability of the project, enhance acceptance, and make significant contribution to successful project design and implementation. For this purpose, the project supported by the Bank must identify stakeholders and construct and build good working relationships with them in order to avoid conflicts that may arise, assess the level of stakeholder interests, support and concerns, take stakeholders views, concerns into account during project implementation. In this identification, stakeholders included Project Affected People (PAPs), these are individuals or organisation whose properties (land, houses, infrastructures, business, cultural features) and other aspects that will be affected by the project and other who may be interested in the project implementation. In addition, this ESS, will aim at promoting and providing means for stakeholders' engagement in the whole project cycle, and inform stakeholders on the project objectives, environmental and social risks in appropriate manners.

The project will comply with this ESS through the development of this ESMF. Major stakeholders such as director of one stop centres, directors of education, head teacher were consulted and provided with information on project objectives and components. During the implementation of the ESMF recommendation a stakeholder engagement plan will be established in the project sites specific environmental assessment or environmental management. During the preparation of RPF and related site specific RAPs, PAPs will be identified and consulted on different resettlement modalities as stipulated by the Law N° 32/2015 of 11/06/2015 relating to expropriation in the public interests. In addition, the ESMF

and RPF have recommended the established of grievance redress mechanisms from project site level and their composition to the district and ministerial levels.

Table 3: World Bank Environmental and Social Standard Triggered by QBEHCDP

Standard triggered by the project	**Yes**	**No**
ESS 1: Assessment and Management of Environmental and Social Risks and Impacts	X	
ESS2: Labour and Working Conditions	X	
ESS3: Resource Efficiency and Pollution Prevention and Management	X	
ESS4: Community Health and Safety	X	
ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	X	
ESS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources		X
ESS 7: Indigenous Peoples/sub-Saharian African Historically Undeserved Traditional Community.		X
ESS 8: Cultural heritage		X
ESS9: Financial Intermediary		X
ESS10: Stakeholder Engagement and information disclosure	X	

5 PROJECT ENVIRONMENTAL AND SOCIAL RISKS AND MITIGATION MEASURES

The Quality Basic Education for Human Capital Development Project (QBEHCDP) will include a number of activities with potential environmental and social impacts, and will cover selected public primary schools in 30 districts in Rwanda. This ESMF mainly addresses activities under Component 2 which relate to classroom construction in all the 5 provinces of country as identified by the Ministry of Education. A total of 11,000 classrooms and 14,680 pit latrine rooms will be constructed (about 2,704 classrooms in year 1). The number of classrooms at each selected school varies between 3 and 10, which means that separate classrooms blocks will be built. In addition, the project will include the renovation of class room block by replacing adobe bricks wall with burned bricks one and replacing Italian tile roofs (Tegura) with modern iron sheets. New schools will be constructed under this project to reduce the students travel distance, however their number will be determined by the Ministry of Education and Local Government Bodies Classrooms will be located at existing schools, this involves the acquisition of land parcels. Although sample school were visited, the location of potential sites is yet to be determined. An assessment exercise will be undertaken based on selection criteria to determine which schools will most benefit from classroom construction. The assessment will also involve preliminary environmental and social screening to gauge whether schools have land for expansion and whether they are found within environmentally fragile areas. Schools that are located in areas where the construction of classrooms will have significant environmental and/or social impacts will not be included in beneficiary lists. What is clear at this point however is that some of the schools under construction may be located in areas with high population density. This has potential implications for involuntary resettlement as more land would be required for expansion of the existing facilities. These implications will create potential environmental and social risks or impacts that will occur during different phases of the project. The environmental impacts include:

- ✓ Sanitation and waste management problems
- ✓ Increase in soil water erosion
- ✓ Increase in suspended solid and sediments delivery in surface water
- ✓ Increase in brick making and sand mining
- ✓ Impacts related to health risks and safety of workers/ students and teachers
- ✓ Generation of noise pollution

- ✓ Generation of dust emission
- ✓ Use of lead based –based products

Social Economic Impacts include

- Displacement of people
- Increase in the spread of STDs and HIV/ AIDS
- Disruption of traffic and public utilities deliveries
- Land ownership conflicts

5.1 Environmental risks and Impacts

5.1.1. Sanitation and wastes management problems

The rehabilitation of school blocks will imply the generation of debris of various forms such adobe bricks wastes, roof tiles, and old irons sheets wastes, which will need to be removed and disposed or reused. Creation of new schools and expansion will involve construction activities that will generate wastes. In addition, labour camps may a source of wastes including human ones. If not properly managed and disposed of, these types of wastes can create inconveniences; become breeding sites for water disease and their leachate pollute surface and ground water sources. The operation of toilets and combined with poor cleaning and management will cause communicable disease outbreak.

5.1.2 Increase in soil water erosion and water contamination

Gravel/soil brought for any filling purposes and soil removed during site preparation (terracing)if not properly stored and is exposed to the natural elements can be washed off to nearby streams, wetlands, rivers and low lying areas causing sedimentation. Storm water congestion on site can create inconveniences to school activities and construction work and create rills and gully on the hillsides since many schools are located on hilltops and summits of mountains. In additions soil erosion may lead to sedimentation in rivers and wetland located downstream. Improper placement and construction of latrines can cause groundwater contamination to streams and drinking water sources. Also waste water generated during construction and from labour camps can also contaminate drinking water sources if not properly treated.

5.1.3 Increased in brick making and sand mining

The construction work is likely to create a huge demand for construction materials such as sand, clay for bricks and timber which will place a burden on resources. Therefore, there will be impacts related to sand mining and extraction of gravel from burrow pits or quarries.

5.1.4 Impacts related to health risks and safety of workers/ students and teachers

During construction, safety of workers, school children and residents will be an issue. Construction related operations will generate safety risks to workers. Given work will be on school premises, construction sites that are not cordoned off or fenced can cause potential safety hazards to students and residents who are too close to the construction site. Construction site workers will be exposed to risks of accidental collisions with moving vehicles, strains from repeated movements or from lifting and heaving of heavy objects, slips and falls. Accidental cuts from tools and machines are also safety risks. Wet cement as a building material is corrosive on contact to with human skin. Construction projects vary in their scope and potential for exposing workers to lead and other hazards. During the operation, poor maintenance and hygiene in toilet may be sources of fly infestation and other pathogens that may cause water borne diseases such as diarrhoea, dysentery and typhoid.

5.1.5 Generation of noise pollution

During site clearing, preparation and construction works noise will be generated due to construction related work. During school hours this may create disturbances to classroom activities and to residents living close to the construction site.

5.1.6 Generation of dust emission

Dust generated during clearing and construction work can cause difficulties for students who have respiratory problems, and become a nuisance during school hours. Soil/ gravel kept for long periods without proper cover can generate dust and become an inconvenience during school hours and for surrounding residents. Transportation of materials to site will also generate dust. Decommissioning of existing structures can also create dust that is potentially hazardous.

5.1.7 Use of lead based–based products

During construction works lead may be present in coat, paints and sheets. Lead is commonly absorbed into the body by inhalation from use of and/or scrapping of lead based products.

When workers breathe in lead as a dust, fume, or mist, their lungs and upper respiratory tract absorb it into the body. They can also absorb lead through the digestive system if it enters the mouth and is ingested.

5.2 Social and economic impacts

5.2.1 Displacement of people

Expansion and construction of new schools will need land from private owners. Land acquisition for construction will involve the displacement of few households in proximity of schools to be extended and site to sit new schools. Some schools were found to have insufficient land for expansions. Therefore, the livelihoods and shelter of communities may be negatively affected.

5.2.2 Increase in the spread of STDs and HIV aids

The rehabilitation and construction of schools and latrines will involve the influx of people from other regions who will be housed in the school vicinity. In case workers and local population are not sensitized on STD and HIV/AIDS, this impact may occur.

5.2.3 Disruption of traffic and public utilities deliveries

The construction will involve the supply of materials and few traffic. In case the constructions site is located in the proximity of the main road, the entry and exist of material supplying trucks may disrupt the traffic. In addition, the site preparation may disrupt the supply of public utilities such as water and electricity during excavation and terracing, electrical cables and water pipe passing through the site may be unearthed, and this may disrupt the supply of these services.

5.2.4 Land related conflicts

Construction activities may require land acquisition, and people's displacement. In case no fair compensation is provided, this may be cause conflicts. Temporary or permanent restriction of access due to construction activities may be also a source of conflicts for people seeking passage.

5.2.5 Employment Opportunities

The project is expected to create employment for local artisans and manual labourers in the districts and selected schools' sites, where schools and latrines would be rehabilitated or built. The project will be expected to boost trade in construction materials such as cement, bricks, sand, concrete reinforcing steel, metal sheets, lumber etc.

5.3 Environment and Social Mitigation Measures

For each project activities classified in the sub-component A and B of the World Bank safeguard policies, an Environmental Management Plan (EMP) for site specific will be established. Therefore, mitigation measures below shall be included in EMP's developed for each construction site depending on the identified environmental impacts and shall be included in the contractor document and guidelines that are provided in this document as annexes.

5.3.1Site preparation activities by the contractor

Most construction works will be done on existing school premises and only a small fraction may be required to be located on new sites, during environmental assessments care must be taken to ensure that selection of sites abide by the following:

- Construction or rehabilitation should not be located within conservation areas, protected areas, sanctuary and forest areas as designated by the Forest and Wildlife Conservation Departments.
- Ensure that constructions/renovations/expansions are not located on steep slopes, landslide or flood prone areas such as wetlands. If projects are located in areas prone to these risks, then proper retaining walls and strengthening of slopes should be done to minimize risks,
- Ensure that no construction/ expansions is located close to wetland or on reservation of surface water bodies,
- Water supply to the construction sites should not create conflicts between water users and unacceptable connection to the water supply systems so that all water is directed to the construction site at the detriment of local community,
- All stages of site selection and construction should be done in consultation with all stakeholders including the school management committee, the district directorate of education, the sector and with approval from local authorities and government agencies where required.

5.3.2 Resources extraction

The contractor, school construction Engineer and District Environmental Officer must ensure that construction material such as sand, soil, metal and rubble shall be sourced from District and Rwanda Mining and Petroleum Board licensed sites. Timber shall be sourced from suppliers who have obtained the harvesting clearance/licence from the Sector Office. As much as possible timber used should be from renewable forest sources. In addition, bricks should also be obtained from licensed brick makers, preferably Ruliba Clay Ltd and other companies which make standardised construction materials and have environmental permits Construction contracts shall include clauses ensuring that contractors abide by this requirements and this should be stipulated in procurement procedures.

5.3.3 Sanitation and waste management problems

- Waste generated during site clearance should be disposed of in areas approved by the local authorities or school management committee.
- Construction sites shall be cleared on a daily basis of any material that can cause injury. Proper waste bins shall be located on construction sites and labour camps of possible. A waste recycling plan shall be prepared by the contractor to reduce the amount of waste disposed. Waste shall be disposed of in sites approved by the District. In urban areas the contractor must sign the contract with wastes collection cooperatives.
- Disposal of hazardous materials shall be done in a manner that does not cause harm to surrounding environment and public. Paints, thinners and other material shall be temporarily stored and disposed of district approved site. The contract shall maintain all construction sites in a cleaner, tidy and safe condition and provide and maintain appropriate facilities as temporary storage of all wastes before transportation and final disposal.

5.3.4. Soil erosion and contamination of rivers, lakes and wetlands

In order to prevent soil being washed away, the contract shall make sure that materials will be stored to minimize erosion. The contractor shall:

- Construct diversion channels and silt fences around the stockpiles where appropriate to prevent erosion and loss of top and to minimize sedimentation of nearby waterways.
- Locate Latrines downstream from drinking water source and away from wetland or other waterways
- Strip the top soil to a depth of 15 cm and store stock piles of height not exceeding 2m. Remove unwanted materials from top soil like grass, roots of trees and similar others.
- Place the stockpiles in slopes of 2:1 to reduce surface runoff and enhance percolation through the mass of stored soil and stockpiles must be covered with plastic sheeting.
- Locate topsoil stockpiles in areas outside drainage lines and protect from erosion.

5.3.5 Dust generation

The contractor shall:

- Ensure that the material stockpiles, access roads and bare soils are watered on an as required basis to minimize the potential for environmental nuisance due to dust.
- Increase the watering frequency during periods of high risk (e.g. high winds). Stored materials such as gravel and sand shall be covered and confined to avoid their being wind-drifted
- Minimize the extent and period of exposure of the bare surfaces
- Reschedule earthwork activities or vegetation clearing activities, where practical, if necessary to avoid during periods of high wind and if visible dust is blowing off-site
- Restore disturbed areas as soon as practicable by revegetation
- Store the cement in silos and minimize the emissions from silos by equipping them with filters.
- Establish adequate locations for storage, mixing and loading of construction materials, in a way that dust dispersion is prevented because of such operations

5.3.6 Health and safety

Before commencing work, the Contractor will be required to identify potential hazards. Provisions for emergency responses are to be included in the Contractor 's site safety plan which is to include nomination of a person who will be immediately contacted should an accident occur. The site safety plan will be submitted to the District and SPIU for approval one week prior to starting of the work.

- The contractor will be required to keep the site free of drugs and alcohol. The contractor 's site safety plan will include provision for a safe work environment and provide safety measures and protective equipment to all workers, including hand, head, eye and ear protection and safety footwear.
- The site safety plan will include provision or first aid facilities on-site and employ a trained first aid person, in accordance with the Law on Safety and Health at Work.
- The contractors will provide supplies of potable water, toilets and wash water to the workers.
- Contractors are obliged to perform all project activities by respecting ESMF recommendations and all Rwanda laws and sub-laws which are covering Health Safety issues. Contractor is responsible to ensure workers are properly certified to use the equipment

  Contractors are insured against accidents.

Project Management Unit and Contractor together have responsibility for reporting and investigating incidents. In order to safeguard the local communities from the increased vehicle movements, the contractors are to ensure that:

- Trucks and equipment are maintained in a safe operating condition,
- Drivers and machinery operators are trained and act responsibly,
- Prior to commencement of construction activities/site works, all of the above plans will be submitted by the Contractors to District/Project Implementation Unit for approval.

5.3.7 Social Mitigation measures

Overall, the project will not require large amount of land from the local communities. However, the expansion and construction of new schools in the areas where there is no available government

land; some plots of land will be acquired from the communities in the vicinity of the schools. In order to ensure adequate level of social rigour is in place, the following social mitigation measures have been proposed as minimum requirements to be in place as social safeguards requirements.

It is very important to stress that some schools located in high risky zone (constructed in wetlands or unstable slopes) must be relocated. In addition, following our observations that most of schools do not have walk ways facilitating easy access for all including people with sensitive disability, it is important that the project design and implementation takes into account this issue.

Table 4: Potential negative environmental and social impacts, sources, mitigation measures and cost

Project phase	Project Activities	**Negative Impacts**	**Suggested mitigation measures**	**Indicator**	**Cost (USD)**
Pre-construction	Land acquiring	Risk of destruction of properties (buildings, agriculture land) due to	➢ Expropriation of properties and lands to be based on WB Environmental and Social Standard (Land Acquisition, Restrictions on Land Use and Involuntary Resettlement), National and districts expropriation procedures; ➢ Ensure participation of owners and local administration in expropriation process; ➢ Temporary use of agricultural land should be limited to a minimum size;	Full replacement of affected properties;	Covered in Resettlement Policy Framework (RPF)
Pre-construction	Land preparation, excavation, extraction of construction materials, creation of diversions, borrowing activities, campsites	Risk of vegetation loss and habitats disruption	➢ Ensure that clearance of vegetation during construction of classrooms and toilets remains within footprint of the project development; ➢ Avoid unnecessary destruction of the surrounding vegetation, and ensure reforestation of cleared or degraded sites by indigenous species; ➢ Preserve (or stockpile) excavated topsoil for future site restoration procedures; ➢ Locate borrow pits in less vegetated areas, far from water bodies, and rehabilitate borrow pits after the project activities; ➢ Appropriately dump the earth material taking into consideration the site future use (e.g. playground or green space)	Re-vegetated land; Vegetation rate of growth; Landscaped space;	Covered in the contractor's budget
Construction	Creation of diversions, borrowing activities, camp sitting	Change in landscape aesthetics and decline of scenic quality	➢ Re-vegetate and rehabilitated quarries, borrow pits and other borrow sites; and Avoid destruction of areas of historic interest or recreational and sensitive areas;	Re-vegetated areas, borrow sites;	10,000

Project phase	Project Activities	**Negative Impacts**	**Suggested mitigation measures**	**Indicator**	**Cost (USD)**
			➢ Spoil materials generated during construction works to be placed in worked out borrow areas for their reinstatement; ➢ Provide clear and proper diversions to enable people reach their intended destinations;		
Construction	Large cuts and excavation	Increased risk of erosion and landslide	➢ Minimize the cutting on steep slope; ➢ Stabilization of slopes using engineering methods ➢ Planting trees on exposed slopes	Avoided landslide	Covered in the contractor's budget
Construction	Large cuts and excavation	Risk of land and water pollution due the piling up of earth excavations, accidental oil spilling, streams sedimentation;	➢ Compact the soil immediately after removal of the top soil ➢ Avoid concrete works close to water courses; ➢ Machinery and equipment working near water courses should be properly serviced to avoid oil spilling; ➢ Any spills on open environment should be cleaned-up within 24 hours; ➢ Waste water/runoff collected during construction should be contained, disposed of;	Cases of turbid water and soil contaminated water	10,000
Construction	Large cuts, excavation, creation of access roads and diversions	Risk of disruption of public utilities (e.g. power line, water pipelines);	➢ Prior to undertaking any works, the contractor should obtain from the utilities agencies definition and details of all utilities sites within 50 m of works; ➢ The Contractor should accurately locate all services and make plan for relocation, otherwise ensure high standards of site supervision to reduce risks of damage to public utilities; ➢ The contractor should prepare procedures for rapid notification to the Public Utilities Board and assistance with re-instatement, in the event of any disruption;	Cases of disruption of public utilities; Cases of complaints	Covered in the contractor's budget

Project phase	Project Activities	Negative Impacts	Suggested mitigation measures	Indicator	Cost (USD)
Construction	Extraction of material	Potential risk of wasting raw materials;	➢ Accurate estimates of needed material ➢ Construction materials to be sourced from sites closer to project work sections; ➢ Ensure that damage or loss of materials at construction site is kept at minimal through proper storage; ➢ Hold top soils and vegetation matter near quarries for backfilling;	Mass balance of inputs and output material; Case of wasted materials;	10,000
Construction	Extraction and transport of construction material	Degradation of air quality due to the dust emissions;	➢ Watering while soil works and construction are being executed and where dust is emitted; ➢ Enforcement speed limit regulations; ➢ Avoid excavation works in extremely dry weathers, install pollution control devices; ➢ Covering stockpiles of fines on windy days; ➢ Use stone crushers and mixing machines with wet scrubbers to arrest evolved dust; ➢ Enclose gravel screening section to reduce dust propagation; Provide Personal Protective equipment;	Dust emissions controlled; Cases of complaints about dust	30,000
Construction and operation	Extraction and transport of construction material	Risk of exhaust emissions (sulphur, Carbon, Nitrogen, chlorofluorocarbons,...) from truck movements;	➢ Enforce use of new and gas emission complying vehicles, trucks and machinery; ➢ Install emission control devices in non-complying machines, vehicles, and trucks; ➢ Minimize Vehicle idling time; ➢ Sensitize drivers to avoid unnecessary racing of vehicle engines at loading/offloading points and parking areas;	Cases of complaints about exhaust fumes; Levels of exhausts;	Covered in the contractor's budget
Construction period;	Excavation, large cuts, extraction of material,	Risk of noise and vibration pollution of machinery/hea	➢ Work during holidays ➢ Work only during day time (7:00-17:00); ➢ Use machines with minimum noise and vibration;	Cases of complaints about noise	Covered in the contractor's budget

Project phase	Project Activities	Negative Impacts	Suggested mitigation measures	Indicator	Cost (USD)
	transport of material	vy trucks to the school environment and local people	➢ Sensitize vehicle drivers, machinery operators to switch off engines not being used; ➢ Avoid gunning of vehicle engines when passing through sensitive areas (e.g. schools, hospitals); ➢ Keep in good condition machinery to reduce noise generation;	and vibration;	
Construction	Masonry and carpentry works	Risk of workers injuries resulting from manipulation of sharp objects;	➢ Ensure all staff in construction activities have protective equipment (e.g. helmets, dust masks, gloves, safety glasses, boots); ➢ Avail first aid kit on-site, train some people techniques of handling injured people; ➢ Transport means to be always present and ready to transport injured to nearest clinic; ➢ Health insurance for the personnel;	Cases of injuries; Injured person receives appropriate medical treatment	10,000
Construction period;	Masonry, carpentry and welding works	Risk of accident due to inadequate machinery/equipment safety;	➢ Ensure machinery, equipment, personal protective equipment, appliances and hand tools do comply with prescribed safety and health standards; ➢ Train, supervise inexperienced workers regarding construction machinery use;	Cases of accidents	Covered in the contractor's budget
Construction	Masonry, carpentry and welding works	Risk of fire outbreak at campsites;	➢ Provision of firefighting equipments (Fire Extinguishers, Fire hydrant and sand); ➢ Ensure availability of emergency vehicles for firefighting in nearby the project site; ➢ Ensure the availability of a health centre/hospital and transport emergency vehicles (ambulance);	Firefighting facilities	10,000
Construction	Masonry, carpentry and welding works	Risk of loss aquatic biodiversity due to degradation of	➢ Ensure construction of classroom and toilets respect the minimum distance to wetlands and water bodies; ➢ Ensure that earth waste, sediments and stockpiles are safely enough disposed to safeguard terrestrial, aquatic, biodiversity;	Cases of wetlands and water degradation	15,000

Project phase	Project Activities	Negative Impacts	Suggested mitigation measures	Indicator	Cost (USD)
		marshlands and water bodies;	➢ Stockpile topsoil at designated area, surrounding them with perimeter drains, and other pollutant traps; ➢ Concentrate the construction activities in dry season to the extent possible; ➢ Cover stockpiles during rainy season to prevent erosion and sediment runoff. ➢ Strict management and regulation construction activities, to minimize sedimentation, prevent and control fuel/chemical spills; ➢ Stockpiles and parking yards should be located far away from rivers and marshlands, at least a minimum of 100 m from these ecological zones;		
Construction	Disposal of cleared, excavated and cut material	Risk of loss aquatic biodiversity due to earth waste deposition in marshlands and water bodies;	➢ Ensure that earth waste, sediments and stockpiles are safely enough disposed to safeguard terrestrial, aquatic, biodiversity; ➢ Discuss dumping locations with government officials, local landowners, include plans for future use of spoil materials; ➢ Stockpile topsoil at designated area, surrounding them with perimeter drains, and other pollutant traps; ➢ Cover stockpiles during rainy season to prevent erosion and sediment runoff.	Cases of wetlands and water degradation	15,000
Construction	Disposal of cleared, excavated and cut material and extraction of construction material	Risk of loss of landscape scenic value and associated effects on ecosystem	➢ Hold top soils and vegetation matter near quarries, borrow pits and dumping sites ➢ Rehabilitate (green landscaping) the borrow pits, quarries and dumping sites at the end of construction activities	Cases of non-rehabilitated sites	15,000

Project phase	Project Activities	Negative Impacts	Suggested mitigation measures	Indicator	Cost (USD)
	(quarries and borrow pits)				
Construction and operation	Excavation and cuts (during construction) and day to day school operation	Risk of soil erosion to farms and homes downstream the school buildings due to runoff water coming from roofs and playing grounds; erosion from exposure of the soil after removal of the ground cover;	➢ Install drains right down to the receiving wetlands or water bodies ➢ Install erosion control measures e.g. check dams and storm water drainage channels; ➢ Sensitize people in the hillside to plant trees and protect land from erosion and land slide ➢ Site excavation works to be planned such that a section is completed, constructed or rehabilitated before another section begins. ➢ Concentrate the construction activities to dry season to the extent possible; ➢ Put in place a storm water management plan that minimizes impervious area infiltration by use of recharge areas; ➢ Re-vegetate areas where bare soil is created due to construction works;	Rainwater harvesting system; Less erosion originating from the project activities; Vegetated areas;	Covered in the contractor's budget
Construction & operation	Masonry works and day to day school operation	Risk of school building failure as a result of catastrophic events;	➢ School buildings should be designed and built to withstand vibration, strong wind, rainstorm and seismic events;	Sound buildings with structural integrity	Covered in the contractor's budget
Construction	Masonry, carpentry and	Risk of increased	➢ Ensure electrical optimal power use	Monitoring plans for	Covered in the

Project phase	Project Activities	Negative Impacts	Suggested mitigation measures	Indicator	Cost (USD)
	welding works and day to day school operation	Energy consumption	➢ Ensure equipment, appliances and lights are switched off when not being used; ➢ Install energy saving fluorescent tubes at all lighting points instead of bulbs which consume higher electric energy; ➢ Explore use of renewable energy like solar photovoltaic cells; ➢ Consider using transparent roof sheets	reduction of energy use;	contractor's budget
Construction	Masonry, carpentry and welding works and day to day school operation	Risk of overuse and completion over water use	➢ Harness rainwater for construction and domestic use to avoid conflicts over water with communities; ➢ Install water conserving taps that turn-off automatically when water is not being used; and sensitize staff to conserve water by avoiding unnecessary toilet flushing; ➢ Install a discharge meter at water outlets to determine and monitor total water usage; ➢ Promptly detect, repair water pipe, tank leak	Complaints of competition over water by the project activities and local people;	Covered in the contractor's budget
Construction and operation	Masonry, carpentry and welding works and day to day school operation	Scattered wastes	➢ Implement 3R principles (Reducing, reusing, recycling) wastes; ➢ Avail solid waste bins and sort garbage according different categories (e-wastes, chemicals, plastics, metals, glasses papers/wood and biodegradable wastes); ➢ Construction materials left over at the end of construction are used in other projects rather than being disposed of; ➢ Use of durable, long-lasting materials that will not need to be replaced as often;	Solid waste bins; Garbage on-site (rodents, flies);	7,500

Project phase	Project Activities	Negative Impacts	Suggested mitigation measures	Indicator	Cost (USD)
Construction	Masonry, carpentry and welding works and day to day school operation	Poor hygiene and sanitation due to sewage	➢ Provide means for handling sewage generated by construction workers (toilets) ➢ Install toilets away from rivers or areas with shallow groundwater ➢ Always keep clean toilets	Clean toilets;	7,500
Preparation and Construction	Land preparation, excavation and cuts	Loss of properties and utilities	➢ Ensure that the project works are restricted in the authorized area; and ensure consultation with affected peoples prior to the project construction works; ➢ Maintaining, repairing any damages caused by the project on public or private structures (e.g. water network supplies); ➢ Ensure appropriate compensation or identify suitable land (e.g. land having the same clan ownership) for resettlement;	Cases of complaints over damaged properties and utilities;	Covered in the contractor's budget
Preparation and Construction	All construction works	Degradation of cultural sites	➢ Avoid land takes from burial sites, and consider the alternative land;	Cases of disruption of cultural / historical sites integrity;	0
Construction	All construction works	Deterioration of workers' health and child right violation	➢ Avail clean water to workers ➢ Construction workers should be given breaks to go for lunch; ➢ Fair treatment of workers and provision of safe and healthy working condition (Provisions in law N° 66/2018 of 30/08/2018 regulating labour in Rwanda) ➢ Child Labour will be prohibited at all construction sites (Provisions in law N° 66/2018 of 30/08/2018 regulating labour in Rwanda)	Cases of complaints over unfair working conditions Children on work	Covered in the contractor's budget

Project phase	Project Activities	Negative Impacts	Suggested mitigation measures	Indicator	Cost (USD)
Preparation and Construction	All construction works	Risk of conflict with local people	➢ Local residents will be given the priority during workforce selection; ➢ Sitting workers camp away from existing settlements, and camp should be furnished with all necessary services; ➢ Identify construction workers by wearing uniforms and even identity tags; ➢ Ban on construction workers wood poaching and anarchic collection of timber forestry products;	Negative views against the project conflicts between workers and local people;	Covered in the contractor's budget
Preparation and Construction	All construction works	Risk of insecurity at the project site	➢ Cooperate with administration to appoint security personnel operating 24 hours where needed; ➢ Body-search the workers to avoid getting weapons on site, to ensure nothing is stolen; ➢ Ensure only authorized personnel get to site ➢ Security alarms will be installed in vehicles and other appropriate devices or areas;	Cases of insecurity within and around working site;	Covered in the contractor's budget
Construction	All construction works	Risk of contamination by HIV/AIDS and other STDs	➢ Sensitization campaign to the staff on HIV/AIDS and other STDs; ➢ Voluntary testing to determine HIV status; counselling at existing medical facilities; ➢ Sensitization on disease control;	Campaigns against HIV/AIDS and other STDs;	6,000
Preparation and Construction	All construction works	Risk of different types of hazards at working places	➢ Ensure that all plans and equipment to be used are certified by the relevant authority; ➢ Provide well stocked first aid box to be easily accessible within the premises; ➢ Firefighting equipment e.g. fire extinguishers and hydrant systems to be provided at strategic locations (e.g. stores); ➢ Regular inspection and servicing of the equipment must be undertaken by a reputable service provider;	Emergency plans; Number of occupational diseases and accidents;	4,000

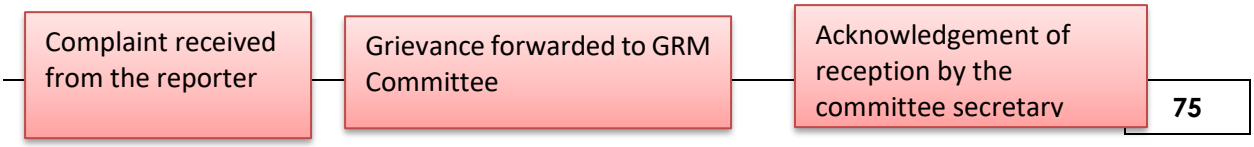
Project phase	Project Activities	**Negative Impacts**	**Suggested mitigation measures**	**Indicator**	**Cost (USD)**
			➢ Provide signage indicating works in progress, communicate to public on segments to be worked on, alternative routes; ➢ Circuits must not be overloaded; ➢ Electrical fittings near all potential sources of ignition should be flame proof; ➢ All electrical equipment must be earthed; ➢ Keep a record of all hazardous chemicals used at construction sites; ➢ No eating or drinking in areas where chemicals are stored or used; ➢ Develop suitable system for safe collection, recycling and disposal of chemical wastes. If needed, look for advises from REMA. ➢ Provide workers in areas with elevated noise and vibration levels, with suitable ear protection equipment such as ear muffs; ➢ Ensure that construction workers are provided with adequate supply of wholesome drinking water;	Availability of protective Equipment; Cases of reported work, sanitation or exposure diseases;	
Total					150,000

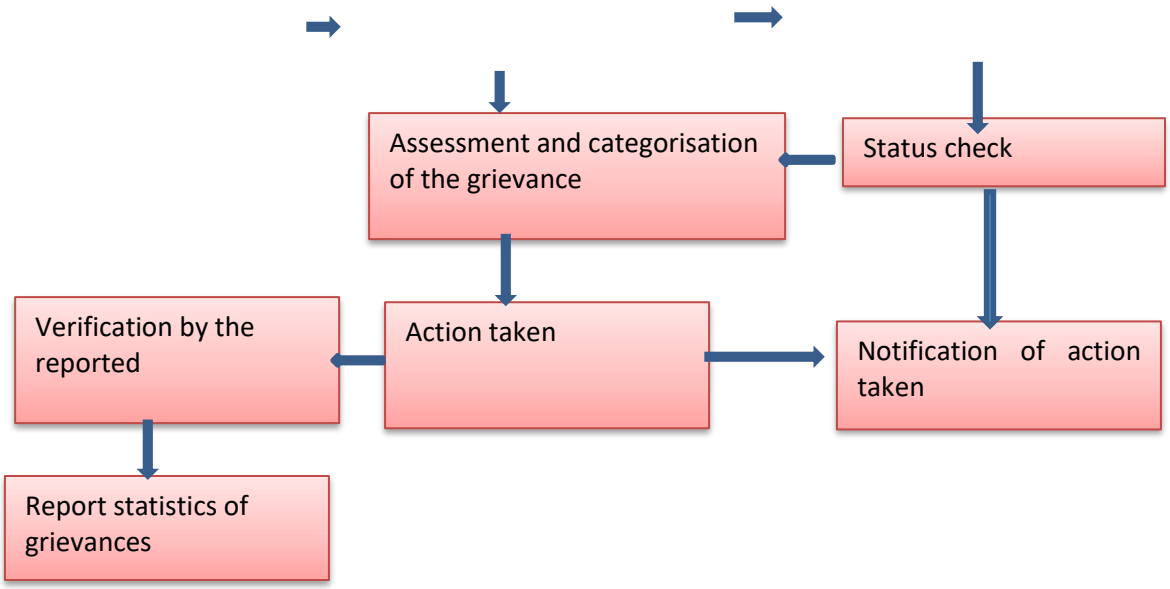
5.3.8. Grievance redress mechanisms

The MINEDUC project SPIU is expected to establish a grievance redress mechanism (GRM) to address complaints arising during the project implementation (Figure 4). Provisions in law N° 66/2018 of 30/08/2018 regulating labor in Rwanda will be applied for Grievance Redress Mechanism for workers. Ggrievances are issues that may rise by stakeholders in general and local people in particular. Grievances may include dissatisfaction in land expropriation issues and compensation arrangement, land owners whose land will be affected by different forms of erosion including rills and gullies caused by uncollected roof water, stinking emission from toilets and noises from construction sites, uncompensated injuries and accidents from the construction sites, payment arrears etc. In addition, grievances may arise from other schools that will not be selected for the project implementation.

Therefore, a system that permits the affected stakeholders to lodge complaints will be established. Stakeholders will be informed of the intention to implement the grievance redressal mechanisms, and the procedures will be communicated at the time that the site specific ESMPs and RAP are completed or finalized. A grievance redress mechanism committee (GRMC) will be established at district level. This committee will comprise the District Director of Education (DDE) as the chairman, the Environmental Officer (Vice-chairman) the School Construction Engineer (Secretary), The Director of One Stop Centre (member) and the property valuators (member), the Sector land officers and education officers, Head teachers of concerned schools, and elected community representatives from sectors where the activities will be taking place. A complaints registry will be established at each district for people to lodge complaints. After receiving complaints, the CRMC chairman will convene the committee and shall make sure that all complaints are responded. In case the response to the complaints is not satisfactory, the complainer will lodge his complaints to the higher level (Project Implementation Unit at Ministerial Level). The decision outcome of grievance redressal mechanisms by GRMC will be community and approved by the District Mayor who will report also report to the Ministry of Education to ensure accountability and transparency. The report will also be put on the district notice board.

Figure 6: Grievance redress mechanism process





5.3.9 Resettlement Action Framework

In case the Environmental and Social Standard 5 (Land Acquisition, Restrictions on Land Use and Involuntary Resettlement) has been triggered, an abbreviated Resettlement Action Plan should be prepared in parallel ESMP, which the project will follow in order to restore housing and issue economic compensation for loss of land and livelihood through a consultative and mutually agreeable process where applicable

5.4 Environmental and Social Management Plan

The implementation of this project should follow the mechanism of development and execution of environmental documents according to correlative list throughout all development stages in line with the requirements of National environmental legislation and the World Bank safeguard policies. Depending on the scope of activities for each subproject and its categorization (Category A, B, C or FI) (Table 2), an individual (site-specific) Environmental and Social Management Plan (ESMP) may be produced using Table 4 Template and other templates and checklists in Annex (Annex 1-6). The ESMP format (Table 4) provides for the identification of institutional responsibilities for installation and operation of mitigation devices and methods.

Table 5 provides the ESMP and checklist will help collect the information on impacts, mitigation, monitoring and institutional measures to be taken during the project implementation to avoid or

eliminate negative environmental impacts. In this project of construction, extension or rehabilitation of schools in the context of the quality basic education for human capital development project in Rwanda, most of pproject components are of Category B and C (Table 2). However, this does not exclude the possibility of having some project components that can fit in category A during the project implementation. In both cases (Category A and B), a full ESMP will be the effective way of summarizing the activities needed to achieve effective mitigation of negative environmental impacts. The format below provides a model for development of an ESMP. The model divides the project cycle into three phases: construction, operation and decommissioning. For each phase, it is important to identify any significant environmental and social impacts that are anticipated based on the analysis done in the context of conducting an environmental review or preparing an environmental assessment (if required). For each impact, mitigation measures should be identified and listed. Estimates are made of the cost of mitigation actions broken down by estimates for installation (investment cost) and operation (recurrent cost).

Table 5. Template for Environmental and Social Management Plan

School name…… School location ……. Description……..				
Environmental and Social Elements	Impacts	Proposed mitigation measures11	Institutional responsibility for mitigation	Cost of mitigation activities12
Construction period				
Physical Environment				
Noise				
Soil				
Water Resources				
Air Quality				
Biological Environment				
Fauna and Flora				
Social Environment				
Aesthetics and Landscape				
Human Communities13				
Historical and Cultural Sites14				

School name…… School location ……. Description…… …….. 				
Environmental and Social Elements	Impacts	Proposed mitigation measures11	Institutional responsibility for mitigation	Cost of mitigation activities12
Safety and health of staff and population				
Operation period				
Physical Environment				
Noise				
Soil				
Water Resources				
Air Quality				
Biological environment				
Fauna and Flora				
Social environment				
Aesthetics and Landscape				
Human Communities				
Historical and Cultural Sites				

School name…… School location …… Description…… ……..				
Environmental and Social Elements	Impacts	Proposed mitigation measures11	Institutional responsibility for mitigation	Cost of mitigation activities12
Safety and health of staff and population				

5.5 Environmental and Social Monitoring Plan

To keep track of the requirements, responsibilities and costs for monitoring the implementation of environmental mitigation identified in the analysis included in an environmental review or assessment for Category A and B projects, a monitoring plan should be prepared too. A format is provided below (Table 6). Like the ESMP the project cycle is broken down into two phases (design, construction, and operation). The format also includes a row for baseline information that is needed to achieve reliable and credible monitoring. The key elements of the matrix are:

- What is being monitored?
- Where is monitoring done?
- How monitoring will be carried out? /type of equipment for monitoring
- When or how frequently is monitoring necessary or most effective?
- Why is the parameter being monitored (what does it tell us about environmental impact)?

In addition to these questions, it is useful to identify the costs associated with monitoring (both investment and recurrent) and the institutional responsibilities. When a monitoring plan is developed and put in place in the context of project implementation, the SPIU should request reports from the contractors at appropriate intervals (monthly) and include the findings in its periodic reporting to the World Bank and make the findings available to Bank staff in the course of supervision missions.

Table 6: Template for Environmental Monitoring Plan

Phase	**What will be monitored ?** *Which parameter will be controlled?*	**Where is the monitoring expected to take place?** *Specify the monitoring location for each selected parameter*	**How will the monitoring be performed?** *How will measurements be done?*	**When is the monitoring expected to take place?** *At which intervals or ongoing*	**Who will perform the monitoring?** *Specify persons responsible for the monitoring for each parameter*	**Monitoring cost** *Specify expenses associated with the monitoring, unless they are included in the project budget*
Design stage						
Construction stage						
Operation stage						

5.6 Main Issues Regarding Asbestos Containing Materials

In the past, many institutional buildings in Rwanda used Asbestos Containing Materials in ceiling and roofs. Thermal insulation containing asbestos and sprayed asbestos for insulation and acoustic damping were widely used through the 1970s. Due to limited field investigations that did not reach all schools under this project, we were not able to identify which schools are having the Asbestos Containing Materials (ACM). As a precaution measures, this section discusses issues related to handling and disposal of Asbestos (ACM) Containing Materials.

Asbestos is a group of naturally occurring fibrous silicate minerals. It was once used widely in the production of many industrial and household products because of its useful properties, including fire retardation, electrical and thermal insulation, chemical and thermal stability, and high tensile strength. Today, however, asbestos is recognized as a cause of various diseases and cancers and is considered a health hazard if inhaled.

Because the health risks associated with exposure to asbestos area now widely recognized, global health and worker organizations, research institutes, and some governments have enacted bans on the commercial use of asbestos. Good practice is to minimize the health risks associated with ACM by avoiding their use in new construction and renovation, and, if installed asbestos-containing materials are encountered, by using internationally recognized standards and best practices to mitigate their impact. In all cases, the World Bank expects borrowers and other clients to use alternative materials wherever feasible. ACM must be avoided in new construction. In reconstruction, demolition, and removal of damaged infrastructure, asbestos hazards must be identified and a risk management plan adopted that includes disposal techniques and end-of-life sites. Asbestos-containing (AC) products include flat panels, corrugated panels used for roofing, water storage tanks, and water and sewer pipes.

Despite the continuous effort to avoid the use of new asbestos material and safely dispose the demolished asbestos material, it is important to avoid health risks to workers and population, who live near buildings during the demolition. During the implementation of the project, the project developer (MINEDUC) and contractor must inform the potential affected people (workers and local people) on the potential health risk associated with asbestos material. Any asbestos

contaminated waste should safely be disposed. These include Asbestos material, contaminated tools, personal protective equipment and damp rags used for cleaning. These wastes must be treated as 'Hazardous Waste'. In this regards, ACM and asbestos waste must be properly removed, stored in a separate closed area and disposed (with the consent of environmental inspectors) on a landfill on the special area for disposal of that type of waste.

The project implementation must require the contractors that the removal, repair, and disposal of ACM shall be carried out in a way that minimizes worker and community asbestos exposure. Workers must avoid destroying asbestos sheets and properly dispose them at construction sites until final disposal happens. Workers must wear protective over garment, gloves and respirators during work with asbestos sheets. Proper disposal of ACM is important not only to protect the community and environment but also to prevent scavenging and reuse of removed material. ACM must be transported in leak-tight containers to a secure landfill operated in a manner that precludes air and water contamination that could result from ruptured containers. The removal and disposal of ACM and asbestos waste as well as all other ESMP measures have to be included in both the technical specifications and bill of quantities (BoQs). Contractor shall develop site-specific ESMP where requirements to ACM and asbestos waste will be contained.

CHAPTER 6: PROJECT COORDINATION AND IMPLEMENTATION ARRANGEMENTS

6.1 Implementation of ESMP

The Organic Law requires that all projects be subjected to a review and screening process in order to determine whether or not a full scale Environmental Assessment (EA) is necessary and at which level. This is done through preparation of a project report with details on the sub-projects, to be prepared by MINEDUC. Each sub-project of construction, rehabilitation or extension will need to be reviewed independently for potential environmental and social impacts. In cases where a full scale EA is required, it will be paramount that the project feasibility studies occur concurrent with the EA study in order to ensure that the findings of the ESIA are incorporated in the feasibility study at the design stage. This will ensure that environmental sound design including proposed mitigation measures as well as alternatives are incorporated in the feasibility reports at the design stage hence avoiding design change at an advanced stage.

It is expected that the project will have the sub-projects that fit in one of the three categories (Category "A" that require full Environmental Assessment (EA), Category "B" that may partially require EA, Category "C" that does not require EA. However, field surveys showed that most of sub-project fit in Category B and C. In addition to this overall ESMF and upon the availability of all design information, MINEDUC SPIU will undertake sub-project screening for further preparation of ESMP.

6.2 Project Administration and Coordination

In Rwanda, each ministry and independent agency have a unique SPIU in charge of implementation of the project activities. This arrangement avoids the multiplication of development partners led SPIUs within one ministry implementing projects. SPIU staffs are civil servants supported by national technical assistance recruited, as needed. Following this strategy, one SPIU is located within MINEDUC and one in each implementing agency. The implementation of this project will involve four main agencies: Ministry of Education (MINEDUC), Rwanda Education Board (REB), University of Rwanda College of Education (URCE), and Rwanda Development Board (RDB). Districts are involved in construction-related activities. MINEDUC provides overall coordination of the project implementation.

This project will be implemented under the overall management responsibility of the School Construction Norms and Standard (SCNS) unit in the Basic Education Quality Assurance Department (BEQAD) of the MINEDUC. The implementation arrangement involves the following main actors:

- MINEDUC Single Project Implementation Unit (SPIU) to coordinate all the project activities;
- Environmental and Social Safeguards Field Officers to regularly monitor and report on environmental and social issues in two districts.
- The District officials (Environmentalist and School Engineer) and Individual School Head master will support the MINEDUC SPIU coordination through the provision of report on environmental issues, district based RAPs and grievance redress reports;
- The District School Engineer will support in the site selection
- The district construction engineer will assist in the supervision of the construction
- District Environmental Officer will review the site specific EIA and establish the site Environmental Management Plan
- The district valuer from one stop centre will assist , the project valuer in the identification and demarcation of the properties of project affected people]
- The District Director of Education, the Director of one stop centres will establish a coordination unit to ensure that contract implement regulation established in the contracts.
- The district social protection unit will monitor project related conflicts and gender inclusion
- The Community will provide the man power during construction and may provide paid labour
- The community will be member of grievance redress committee at sector level

Note that the field officers (15 staff country wide or two by district) will be coordinated by Environmental Safeguards Specialist and Social Safeguards Specialist who will be at the Central Level and these will be the ones to consolidate reports to be submitted to the World Bank. The Environmental and Social Safeguards Specialists and Field Officers will be provided with the Capacity Building Training for improvement of their capacity to follow up on environmental and

social safeguards matters. For the proper coordination and monitoring of the project ESMP, the MINEDUC SPIU should also get a specialist in the environmental assessment.

The project Implementation will be guided by the Project Operations Manual (POM) and the budgeted Annual Work Programs (AWPs). The POM is in draft status but remains an effectiveness condition until approved by the World Bank. The manual describes how the implementation of project activities and the relations, roles and responsibilities of each contributing department and/or implementing agencies. The MINEDUC-SPIU will update the POM on a regular basis. Budgeted AWPs will be prepared by MINEDUC-SPIU on an annual basis. AWPs are supported by implementation and procurement plans.

6.3 Project Institutional and Implementation Arrangements

The project will be implemented by MINEDUC and the Minister will be responsible for smooth and timely implementation. The overall organization of the project implementation and monitoring comprises a Steering Committee (SC); the ministerial departments and agencies, including Rwanda Education Board (REB), University of Rwanda (UR), Rwanda Development Board (RDB); and districts. The MINEDUC Single Project Implementation Unit (SPIU) is in charge of day-to-day coordination and management of the project. The three agencies (REB, UR and RDB) will be responsible for project implementation through their SPIUs, with support from the districts at the regional level (mainly for construction activities). The Department of Planning, MINEDUC, will provide all inputs related to monitoring of performance indicators of the project. The different entities will interact as follows:

- **Steering committee (SC).** This committee will oversee project implementation and review progress of activities. The SC will be chaired by the Minister or the Permanent Secretary. This committee is comprised of all the implementation agencies and heads of departments (Director Generals). The SC will meet on a monthly basis on project activities or more frequently, as needed. In addition to the MINEDUC's normal attendance, sessions will be attended by the officer overseeing World Bank's financed projects from Ministry of Finance (MINECOFIN) and a representative of Ministry of Local Government (MINALOC) overseeing districts.
- **Roles and responsibilities.** The SC will provide overall strategic guidance for effective

and timely project implementation, ensuring sectoral coordination and consistency of project activities with sector policies and strategies. In addition, it will approve Annual Work Programs (AWPs), review project progress reports and audits. The SC will also decide actions for facilitating implementation, particularly in troubleshooting cases of slow implementation, bottlenecks or conflicts. It will propose corrective actions, as needed.

- **MINEDUC-SPIU and Implementation Agency SPIUs.** For the **MINEDUC-SPIU**, the key positions will be: a coordinator, an administrative/FM/accounting specialist, a procurement specialist, a M&E specialist, an internal auditor, a safeguards specialist, an operations specialist, and a communication specialist. The SPIU will be under the administrative responsibility of the Minister. For **the SPIUs of each implementation agency,** the key functions will be: administrative/FM/accounting, procurement, and M&E. To smoothly implement, coordinate and monitor the project ESMP, the SPIU should also get a dedicated specialist in the environmental assessment to work hand in hand with the WB in environment and social safeguard issues.
- **Annual Work Programs (AWPs),** with line item budgets, will be initiated and consolidated by the MINEDUC-SPIU following inputs from all agencies and departments. A standard format discussed and approved at appraisal will be used. AWPs consolidated by MINEDUC-SPIU will be submitted annually to SC for endorsement two months (May 30th) prior to the start of the fiscal year (July 1) and approved by the World Bank prior to implementation. These approved AWPs will be monitored monthly by the agencies in charge of implementation, with support from MINEDUC-SPIU. AWPs will be used by Ministry and World Bank to monitor progress during the year.
- **Progress Reports** will be submitted as follows: using a standard format discussed at appraisal, MINEDUC SPIU will prepare semi-annual reports summarizing progress on project activities of the last 6 months, indicator values, and proposing the planning of new activities for the next 6 months. Progress reports will be sent to the SC for approval and onward transmission to the World Bank.

6.4 ESMF Implementation Activities and Budget

The total cost of this project for Reducing Overcrowding and Double-shifting at the Primary Level is estimated at approximately US$ 50 million. The estimated total costs for ESMF implementation cannot accurately be estimated because some information were not yet available at the time of ESMF study. The total budget is highly influenced by the number of schools that would require a full or partial environmental assessment in each district and actions to be undertaken before and during the project implementation. The budget for the implementation of the project environmental and social enhancement measures will be detailed while preparing the project EIAs or ESMPs.

The ESMPs are site-specific and will be prepared at each project site in consultation/supervision of the district trained officials following the template provided (Table 5). The ESIA will be prepared by the EIA expert following the EIA guidelines as discussed in 4.1.4. The Table 6 highlights the key indicative aspects that would require a cost budget at the district level. Actions to be undertaken before and during the project implement include (1) Training and capacity building for the project SPIU; (2) Training and capacity building for District Environment Officers, School Construction, contractor staff and supervisor staff, including the supporting staff; (3) Trainings and consultation forums with School officials, PAPs and local communities; (4) Preparation of EIA for new and big schools; (5) Preparation of ESMP for replacement of roofs, windows, floors and indoor partitions, repair of basements and sewer systems; (6) Implementation of Environmental and Social Management Plan (ESMP); Monitoring and evaluation of ESMPs; and Implementation of grievance redress mechanism. The cost associated with these activities is shown in Table 7.

Table 7: Indicative ESMF Budget for the ESMF implementation

No		Number (Districts)	**Unit cost (USD$)**	**Unit cost (USD$)**
1	Training and capacity building for the project SPIU	Ff	ff	15,000
2	Training and capacity building for District Environment Officers, School Construction, contractor staff and supervisor staff, including the supporting staff	30 (4 staff by district)	500	15,000
3	Tranings and consultation forums with School officials, PAPs and local communities	30	2,000	50,000
4	Preparation of EIA for new and big schools	Ff	ff	50,000

No		Number (Districts)	**Unit cost (USD$)**	**Unit cost (USD$)**
5	Preparation of ESMP for replacement of roofs, windows, floors and indoor partitions, repair of basements and sewer systems	Ff	ff	10,000[8]
6	Implementation of Environmental and Social Management Plan (ESMP)	30	5,000	150,000
7	Monitoring and evaluation of ESMPs	30	1,000	30,000
8	Implementation of grievance redress mechanism	30	1,000	30,000
	Total			350,000

[8] The ESMP will be prepared in facilitation of trained district and school officials

7. PUBLIC CONSULTATION AND DISCLOSURE

7.1 Disclosure of the ESMF

The ESMF serves as the Project's umbrella for the environmental and social management document, setting out the strategy to screening process that will ensure capturing all the project's environmental and social issues. Disclosure of ESMF should conform to the Public Communications Policy of the WB: Disclosure and Exchange of Information which requires that the ESMF document for WB projects be accessible to the interested parties and the general public. As soon as the client (MINEDUC) receives the ESMF, should initiate the process of public hearings which includes the disclosure of the ESMF document, arrangement of communication interaction with stakeholders and conduct public hearings. At the same time, the bidding commission shall include a check list for ESMPs in the bidding packages and add a provision specifying that if new information arises out of (may occur in parallel) public hearings for the ESMPs to be updated, without effect on the budget of contracted companies (it is extremely rare occasion when changes in ESMPs/ESMP checklists on the basis of public hearings require a significant budget increase which can put bidders at risk). After the successful contractor is selected, the contractor prepares site specific ESMPs/ESMP checklists with due account of the contractor's equipment, technology, status of the facility etc. This document shall be included in the first monitoring report on the sub-project.

7.2 Public hearings

Pursuant to WB Environmental and Social Standard 10: Stakeholder Engagement and Information Disclosure, the borrower should hold public hearings on the projects that must undergo environment assessment (Category A and B) to discuss the project's environmental aspects at the earliest stages; the conduct of public hearings implies access to information and broad public participation at all project consideration stages. To ensure meaningful consultations, the borrower provides relevant material in a timely manner prior to consultation. It is important for the project developer (MINEDUC) to construct and build good working relationships with different stakeholders in order to avoid conflicts that may arise, assess the level of stakeholder interests, support and concerns, take stakeholders views, concerns into account during project implementation. An ESMP shall not be limited to the period of construction works and shall also cover the operational phase under each sub-project. It means that districts and schools should commit to adhere to WB safeguards provisions including stakeholder interaction standards. This document (ESMF), ESMP checklist and ESMPs to be prepared will be disclosed to public prior to any civil works commencement. Besides ensuring participation of stakeholders, public hearings on these documents, will help identify possible impact types and environmental issues that neither were earlier reflected in the ESMPs. This will allow updating ESMPs checklists and including its final version in the bidding documents for procurements.

During the preparation of ESMP, it is important to undertake public consultations for groups that may be impacted by subproject. These groups are usually represented by those who live near construction site, as well as by representatives of local NGOs, and other stakeholders. Public consultations should take place at any subproject to inform stakeholders on planned socioeconomic safety measures and to research public opinion. During public consultations stakeholders will be given an opportunity to express their views on any environment-related issues that may arise in the course of project implementation. All PAPs will be informed and meaningfully consulted on the project using accessible communication methods and language. Any reasonable issue raised at public consultation, will be included in ESMF. Views of the stakeholders will be taken into account during subproject implementation. Public consultations usually take the form of meetings which enable the best information exchange: subproject initiators inform local communities on their activities and local communities are able to raise issues that are topical for them. Household visits will be used to inform vulnerable and marginalized categories of people (people with disabilities, landless persons, elderly).

During public consultations the project beneficiaries will be informed about the grievance redress mechanism that they can utilize during various stages of the project. There are also other acceptable methods that can be used for public opinion research such as questionnaires, round tables, etc. Minutes of public consultations shall be taken and results of public consultations should be recorded in final version of ESMP. ESMP should be developed for each subproject taking into account its specificity. ESMP, design estimates for activities and results of public consultations should be submitted to the district and RDB office in charge of environmental impact assessment. Construction activities under subproject should not be started until the approval by the RDB is obtained.

CHAPTER 8: CAPACITY BUILDING AND TRAINING OF SAFEGUARDS FRAMEWORK IMPLEMENTATION

8.1 Capacity assessment

The capacity assessment conducted at the district level in the implementation of environmental and social impacts management show that district have two departments in the environmental and social impact management These are the one stop centre and the department of environment and natural resources management. However, the department of social protection sometimes intervenes in the management of management of social risks related to construction project implementation such as conflict redress mechanisms, and gender and inclusion. In the case of QBEHCD, the department of education is involved because the school construction plays a role in assessing the status of the school infrastructures in the area of space, durability of infrastructures, the space, and status of sanitation facilities. He relies on the school head teachers to collect this information. The school construction engineer makes recommendation on expansion, renovation and demolition.

In the area of environmental and social management, the districts resort to external consultants in the area related to valuation and environmental impact assessment for instance, in the department of one stop centre, the property valuer is in charge the valuation of properties at site. The district hires an external valuer whose report is validated by the district valuer. The latter submit it to the director of one stop centre. In the environmental and natural resources management, the district environmentalist approves and validates EIA reports or environmental plans submitted by different consultants. The social protection officers from the department of social protection are in charge of handling social claims. At site level, the school Head teachers have role to identify the site and inform the district authority about the availability of land and the ownership of the land. In the former school construction model (Uburyo Budasanzwe), head teachers were involved in providing storage space for construction materials.

The availability and allocation of financial resources is a challenge. The districts do not have financial resources to address issues from inappropriate storm water drainage that may arise from the construction of buildings. They do not have enough financial resources for compensation. Compensations financed by central government constitute a challenge for district implementation because they are not planned and budgeted at district level. Therefore, OSCs encounter the bottlenecks to implement these compensations at district level and align them with performance contracts.

Officers in the district OSCs are not familiar with the World Bank ESMF procedures on Environmental Assessment and resettlement plans. They do not have the required knowledge on World Bank Environment and

Social Management Framework and its related standards. With regard to school construction engineer, this is new post that has been created in the district directorate of education. The majority of these engineers are not informed about World Bank Environmental and Social Management Framework even EIA regulation of REMA. They have also not received training in environmental and social impact assessment related to school construction.

8.2 Capacity development

Effective implementation of Environment and Social Management Framework requires technical capacity in the human resource base of implementing institutions as well as logistical facilitation. Implementers (Project SPIU and Districts) need to understand inherent social and environmental issues and values and be able to clearly identify indicators of these. Even with existence of policies and laws such as the Environment new law (2018), evidence on the ground still indicates that there is significant shortcoming in the abilities of local and district level stakeholders to correctly monitor, mitigate and manage environmental performance of development projects. It is important for MINEDUC SPIU staff, District Environmentalist and School Engineer to get the appropriate trainings that help them ensuring that the project complies with Rwandese environmental and social laws, and that the project adheres to this ESMF. Sufficient understanding of the mechanisms for implementing the ESMF will need to be provided to the various stakeholders implementing the sub-projects (each school to be rehabilitated or constructed). This will be important to support the teams appreciate their role in providing supervision, monitoring and evaluation including environmental reporting on the projects activities. The MINEDUC project SPIU should carefully analyze the project scope, their availability to the project activities and their capacity for the successful implementation of the project and its ESMF. If need be they can suggest additional supporting staff for the project and ESMF implementation.

8.3. Human Resource Capacity Requirements

Human capacity requirements for stakeholders of this ESMF are related to "low technical capacity", and "Inadequate staffing" in the area of environment. This means the implementation of this ESMF requires the right number of trained and dedicated staff for environmental management purposes at all levels (MINEDUC, Districts and Schools). It is very important to build the capacity of staff that will be assigned duties related to environmental management. The implementation of ESMF and related ESMPs requires dedicated staff with sufficient knowledge on environmental management principles, project screening, impact mitigation, monitoring and follow-up action. Therefore, we suggest the SPIU should get a staff with extensive knowledge and experience in environmental assessment. Training and awareness creation should be undertaken at different levels of ESMF implementation. These levels will entail the central Government (MINEDUC SPIU), Districts, local authorities, private sector, NGOs, and grassroots stakeholders. The exercise will be customized according to each level's

needs to ensure adequacy in implementation of the ESMF. Therefore, technical Capacity Enhancement Awareness creation, training and sensitization will be required for the following personnel:

- MINEDUC SPIU members;
- District Environment Officers;
- District School Construction Engineers;
- District Land Officer;
- School head teachers.

Training will give more focus on the following issues:

- Content of ESMF, ESMF requirements (responsibilities and actions to be taken), ESMF checklist documents;
- Content of the ESMPs/ ESMP Checklists;
- Need for ESMPs,
- National and World Bank requirements for the content and quality of ESMPs;
- Stakeholder engagement and awareness to Environment protection;
- Occupational health and safety;
- Waste minimization and management.
- Sustainable practices in construction management.

Screening procedures will be an integral part of the participatory planning processes for each type of activity. Training on awareness of environmental issues and community engagement will be part of the preparation for participatory planning activities, and their implementation will be overseen by the project proponent. Training on specific approaches to mitigate potential environmental or social impacts, will be conducted as part of the capacity for those activities.

9. CONCLUSIONS AND RECOMMENDATIONS

This Environmental and Social Management Framework (ESMF) has been prepared in order to guide project planners, implementers and other stakeholders to identify and mitigate environmental and social impacts in the Context of the Quality Basic Education for Human Capital Development Project In Rwanda. The ESMF provides project implementers with an environmental and social screening process that will enable them to identify, assess and mitigate potential environmental and social sub-projects' impacts, in accordance with the Government of Rwanda and World Bank Environmental and Social Safeguard Policies. The implementation of the project will have the environmental and social impacts that should be mitigated following the ESMF guidelines. Successful

implementation of this ESMF will depend to a large extent on the active participation of different key stakeholders (Project SPIU, Districts, Schools and local communities). To be successful it is recommended that:

- Environmental and Social awareness and education for the key stakeholders and affected communities must be an integral part of the ESMF implementation.
- MINEDUC Project SPIU, District Environmentalist, District School Engineers, School Headmasters should be adequately trained to implement the screening process, and where required to help develop and to implement appropriate Environmental and Social Management and Monitoring Plans. They should be empowered to adequately administer the ESMF and should be given the necessary support and resources to ensure effective implementation.
- This ESMF should be regularly updated to respond to changing local conditions and should go through the national approval processes, reviewed and approved. It should also incorporate lessons learned from implementing various Components of the project activities.
- The districts should be assisted to develop appropriate information management systems to support the environmental and social management process.

ANNEXES

Annex 1: General Sub-Project Information

INSTITUTIONAL AND ADMINISTRATIVE INFORMATION				
Country				
Project Title				
Sub-project area and Scope				
Institutional arrangements (Name and contacts)	World Bank (Project Team Leader)	Project Management	MINEDUC (Recipient)	
Implementation arrangements (Name and contacts)	Safeguard Supervision	Local Supervision (District School Construction Engineer or Environmentalist)	Construction Supervision	Contractor
Name of facility				
Describe the location				
Who is the land lot owner?				
Describe the geographical, physical, biological, geological, hydro-graphical and socio-economic context				
Indicative need construction materials				
LEGAL FRAMEWORK				
Identify national and regional legal framework and permits applicable to the project				
Identify when / where the public hearings took place				

Annex 2: Checklist to Identify the Scope of Environmental Assessment and Application of Safeguard Provisions

ENVIRONMENTAL / SOCIAL SCREENING FOR THE APPLICATION OF SAFEGUARDS PROVISIONS		
Will the site activity include/involve the following aspects	**Activity/issue**	**Status**
	A. General reconstruction and construction activities	[ ]Yes [ ]No
	B. Impact on surface and ground waters	[ ]Yes [ ]No
	C. Buildings belonging to historical and cultural heritage and artifacts	[ ]Yes [ ]No
	D. Land lot acquisition	[ ]Yes [ ]No
	E. Hazardous or toxic materials7 and wastes	[ ]Yes [ ]No
	F. Conservation of forests, wetlands and/or protected natural territories	[ ]Yes [ ]No
	G. Risk of unexploded ordnance	[ ]Yes [ ]No
	H. Traffic and pedestrian safety	[ ]Yes [ ]No

Annex 3: Checklist for Environmental Selection (Screening) of Sub-Projects

CRITERIA	YES	NO	Comments by SPIU Consultant for Engineering and Technical Monitoring
Will the planned economic activity be located within or near protected natural territories or vulnerable area (unstable slope, gully, ravines, wetlands, water bodies)			
Can the works under this sub-project have a potential impact on areas that are important for local or national cultural heritage (memorial sites, tombs, cultural sites, etc)			
Have residents of the rayon/oblast or public associations expressed concerns or clear opposition with regard to environmental aspects of the planned economic activity?			
Is the vegetation cover planned to be disrupted during the reconstruction and retrofitting of the facility?			
Are the soil, lands and landscapes planned to be disrupted during the reconstruction and retrofitting of the facility?			
Will the planned economic activity induce an increased level of noise, ionizing radiation and vibration which will require the arrangement of noise, vibration and radiation management as required by the laws of the Republic			
Will the level of noise make an impact on school students and staff or on facilities located close by (natural habitats, hospitals and medical institutions, social welfare centers)?			
Will measures be taken to reduce atmospheric air pollution during the performance of construction works?			
Is it planned to arrange and timely service appropriate toilets at the construction site?			
Is it planned to use hazardous materials and/or substances in accordance with the laws of the Republic of Rwanda during the performance of reconstruction and retrofitting works, which: • require special permits or licenses • require licenses or trained personnel or prohibited • are subject to handling requirements in accordance with the laws of the Republic of Rwanda • can cause soil and water pollution in case no adequate management measures are taken			

Will a system be arranged to handle construction waste and solid utility waste during the performance of construction works?			

Annex 4. Suggested Format for a Simple Environmental and Social Management Plan (ESMP)

The ESMF emphasizes that an Environmental and Social Management Plan (ESMP) should fit the needs of a subproject and be easy to use. The basic elements of an ESMP are:

a) A description of the subproject activity

b) A description of potential Environmental and social impacts;

c) A description of planned mitigation measures;

d) An indication of institutional/individual responsibility for implementing

e) mitigation measures (including enforcement and coordination);

f) A program for monitoring the Environmental and Social effects of the subproject both positive and negative (including supervision);

g) A time frame or schedule; and

h) A cost estimate and source of funds.

Table below is a matrix to be filled out for each subproject that will have a separate ESMP according its impact level.

Subproject Activity	Potential Environmental or Social Impacts	Proposed Mitigation Measures	Responsibility (including enforcement and coordination)	Monitoring Requirements (including supervision)	Time Frame or Schedule	Cost Estimate

Annex 5: Impact Mitigation Measures

ACTIVITY	PARAMETER	CHECKLIST FOR IMPACT MITIGATION MEASURES	*BUDJET*
0. General Conditions	Notification and worker safety	(a) District construction Engineer, District Environmentalist and School headmaster have been notified of upcoming activities. (b) The public has been notified of the upcoming works through appropriate notification in the media and/or at publicly accessible sites (including the site of the works). (c) All legally required permits to perform construction/repair works have been acquired. (d) The Contractor has formally consented that all works will be carried out in compliance with construction safety measures and construction rules to maximally minimize negative impacts on the health of neighboring residents and the environment. (e) Workers' personal protective equipment are available and will comply with international standards (there will always be used construction helmets and, where required, respirators and protective glasses, fall arrest mechanisms and special footwear) (f) Appropriate signposting of the sites will inform workers of key rules and regulations to follow.	
A. General Reconstruction, rehabilitation and /or extension activities	Atmospheric air Quality	(a) Dust management measures are taken during earthworks, e.g.: water spraying and topsoil watering. (b) Construction waste, excavated earth and aggregates are kept at controlled temporary storage sites with regular watering and dust control. (c) During pneumatic drilling or removal of road surface layer or base, dust should be suppressed by ongoing water spraying and/or installing on-site dust screen enclosures. (d) Pavements and roads around the site are kept free of dust and construction waste to reduce dust. (e) All machinery shall undergo timely maintenance at service stations with regard to CO emissions and smoke; construction equipment engine idling on site is not allowed.	
	Noise	(a) Construction works shall be performed exclusively during working hours specified in the permit. (b) During operations the engine covers of generators, air compressors and other powered equipment should be closed, and equipment placed as far away from residential areas as possible.	
	Water quality	a) Anti-erosion and anti-slump measures shall be taken, in particular, the construction site shall be banked; rainwater sewerage can be built, or earth stabilization can be done to prevent the slumped soil from moving beyond the construction site boundaries.	
	Waste	(a) Collection sites and facilities to use, neutralize and bury wastes shall be specified for all basic wastes expected to be generated during the	

ACTIVITY	PARAMETER	CHECKLIST FOR IMPACT MITIGATION MEASURES	*BUDJET*
	Management	works to remove fertile topsoil, dismantling works and construction works. (b) Construction wastes will be separated from municipal wastes through their collection in different containers. (c) Construction waste will be collected and appropriately disposed in authorized dumpsite (d) Waste management records will be maintained to prove appropriate waste management.	
B. Impact on surface and ground waters	Water quality	(a) No uncontrolled ground water intake and no uncontrolled discharge of cement solutions or other polluted waters into soil or nearby surface waters will be done. If necessary, the Contractor will apply and be granted permits for water use. (b) The site shall be equipped with sewerage systems and measures shall be taken to prevent pollution, blocking or other negative impact that construction works can make on natural ecosystems. (c) Measures shall be taken to prevent spillage of fuels, lubricants and other toxic or hazardous substances. (d) Construction vehicles and machinery shall only be washed at specially designated areas, and polluted waste waters shall be prevented from getting into surface waters.	
C. Buildings belonging to historical and cultural heritage and artifacts	Cultural heritage	(a) If construction works are performed near a cultural site or habitat for protected trees or animals, REMA and the Ministry in charge of Culture shall be notified, and all necessary permits shall be obtained from competent authorities, and all construction works shall be planned and performed in accordance with the national laws. (b) All necessary rules and requirements shall be met to ensure that artifacts or other possible 'chance finds' discovered during earthworks or construction works are inventoried and put on the register, the responsible persons are informed, and all works are suspended or their schedules are changed, depending on the finds' nature.	
D. Land lot acquisition	Land lot acquisition Formalities	(a) If no extension of the school territory has been planned but such necessity arises, advice shall be promptly sought from the Project Implementation Team of the Ministry of Education. (b) An approved Land Lot Selection Certificate will be implemented to locate the facility (if the design so requires).	
E. Hazardous or toxic materials and wastes	Asbestos handling	(a) If works at the site involve asbestos, it shall be clearly marked as hazardous material. (b) All asbestos-containing wastes (corrugated asbestos board etc.) shall be forwarded to waste processing operators for appropriate disposal.	
	Management of hazardous	(a) Temporary on-site storage of all hazardous or toxic substances and wastes belonging to hazard classes 1 and 2 will be arranged in separate rooms (mercury-containing wastes, intact spent	

ACTIVITY	PARAMETER	CHECKLIST FOR IMPACT MITIGATION MEASURES	*BUDJET*
	substances and wastes	lead batteries with electrolyte inside, cell batteries etc.), including restricted access and marking affixed. (b) The hazardous waste management procedures shall be specified in the waste management manual. (c) Wastes shall be transported in accordance with legal requirements applicable to the transportation of hazardous wastes. (d) Paints or solvents with toxic ingredients or lead-based paints will not be used.	
F. Conservation of forests, wetlands and/or protected natural territories	Ecosystem protection	▪ All natural ecosystems, wetlands and protected territories located in the immediate vicinity of the construction site will not be disturbed or used. (b) Large trees in the immediate vicinity of construction works shall be inspected and inventoried. Large trees shall be marked and fenced for protection, their root systems shall be protected and any damage to the trees shall be prevented. (c) Protection measures should be taken regarding nearby wetlands to avoid erosion and fallout, including, e.g. construction site banking. (d) It is prohibited to arrange borrow pits or storage sites or keep waste without authorization in adjacent areas, especially in unprotected areas. (e) It is prohibited to damage or use natural ecosystems, wetlands and protected territories located in the immediate vicinity of the construction site.	
G. Risk of unexploded Ordnance	Hazard for human health and safety	a) Prior to any earthworks, the Contractor shall make sure that the construction site has been inspected for the availability of unexploded ordinance.	
H. Safety of public transport and pedestrians	Direct or indirect hazards to public traffic and pedestrians by constructi	(a) In line with national legal requirements, the contractor guarantees that the construction site will be fenced and that the construction works will be clearly regulated at the site. □ Visible warning signs shall be posted for the public and public transport to notify of all potentially hazardous works. □ A traffic management system and personnel training shall be arranged, especially about the access to the site and heavy traffic in the vicinity. Safe passages and crossings for pedestrians will be provided in the locations of public traffic and construction machinery traffic. □ Working hours shall be corrected depending on local traffic, e.g. to avoid heavy traffic in rush hours or livestock driving hours. □ Where needed, traffic management shall be carried out at the site to ensure safe passage of people. □ Safe and uninterrupted access for the public to nearby offices, sales outlets and residential houses shall be maintained during construction works.	

Annex 6: Content of the Environmental and Social Impact Assessment

- **Executive Summary**

The executive summary should briefly discuss the ESIA/EIA Study content. It must define the study objectives and scope, need or rationale for the study, describe the project and gives the baseline information, discuss key project impacts and mitigation measures.

- **Introduction**

The introduction should talk about the developer and the consultant (EIA expert recognized and authorized by REMA to undertake the study), defines the study objectives and scope and describe the methods used to achieve the study objectives.

- **Project Description**

This chapter should provide a description of proposed project and any alternatives being considered in sufficient detail to benefit stakeholders and decision-makers. Policies, legislation, regulations directly relevant to the proposed project should be discussed in the EIA report.

- **Analysis of Relevant Policy, Legal and Institutional Framework**

This chapter should analyze policies, laws and implementation institution relevant to Environmental and Social Impact Assessment at national and international levels.

- **Baseline Information**

This chapter should provide detailed information on the project location, biophysical and chemical characteristics, and social economy of the area (landscape, hydrology, climate, land use, fauna, flora, water quality, soil and air characteristics, etc).

- **Public Involvement**

This chapter discusses the information collected from and disseminated to stakeholders and gives more attention on stakeholder's concerns, views and suggestions to the projects during the project implementation.

- **Analysis of Alternatives to The Proposed Project**

The chapter should describe the project alternatives in terms of project or no project, location, construction materials and waste management options. The analysis should be able to explain the best and recommended alternatives.

- **Project Impact and Mitigation Measures**

The chapter should identify the major socio-economic, ecological as well as public health issues of concern and indicate their relative importance to the project implementation. After a comprehensive identification and discussion of the project anticipated impacts, measures or approaches for combating or mitigating the

anticipated negative impacts of the project to the surrounding environment should be proposed. For ensuring sound environmental management, every negative impact should have a designed approach to mitigate its anticipated impacts. This may further be elaborated in an Environment Management Plan (EMP).

- **Contingency Plan**

This chapter elaborates more about Occupational Health and Safety Management, contingency measures for spills, hazardous waste and different types of pollutants, soil erosion/sedimentation control plan, training requirement, roles and responsibilities and Monitoring & Reporting.

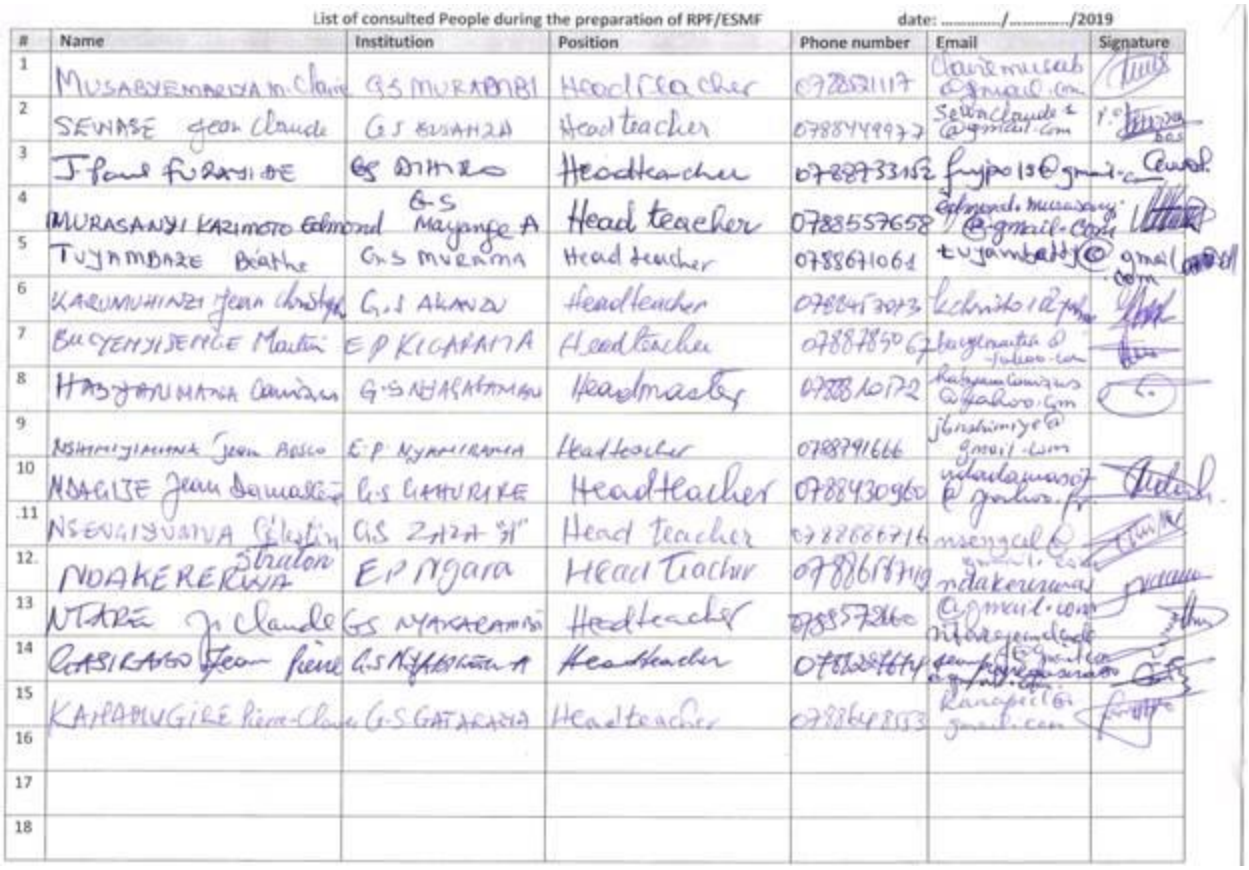
- **Environmental and Social Management Plan**

This chapter completes the information given for the environmental impacts and the mitigation measures. It proposes the institutional responsibilities for the implementation of the mitigation measures, the monitoring indicators, and the estimated cost to implement the activities.

- **Compensation Measures and Grievance Mechanisms**

This chapter discusses the procedures for compensation and grievance mechanism to ensure the process is performed according compensation rules and regulations.

Annex 7: List of Consulted People



List of consulted People during the preparation of RPF/ESMF date: ...../...../2019

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16						
17						
18						

Kayonza District 13/03/2019

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Gatsibo District

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4	MUKABEKAZI Egidie	G.S BIHINGA	Secretary	0788401653		
5	*SIBOMANA Emmanuel	G.S NYAMIRAMA	Head teacher	0788555894		
6	NTIBENDEREZA Jeannine	GS NYAMIRAMA	D.O.S	0788740182		
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13	NSHIMIYIMANA J. Claude	HT Teacher GATOKI P/S	HT Teacher	0783555137		
14	MAJYAMBERE Narcisse	KIRAMVUZA	SEO	0788940243		
15	IRIGENERA Dieudonné	NYAMATA	HT Nyarubuye	0788684824		
16	RUZIGAMANZI Martin	Rwimbogo	SEO	0788896089		
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~~GS CAMP~~ Mayenge District

List of consulted People during the preparation of RPF/ESMF date: ..15...../...03...../2019

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13	BIZIMANA Séverien	GS NZOVE	teacher	0781655843	bizzyseli@gmail.com	
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Nyagatare District

List of consulted People during the preparation of RPF/ESMF date: 11/03/2019

#	Name	Institution	Position	Phone number	Email	Signature
1	ULAYENEZA dieudonne	MINEDUC/GS NYAGATARE	Headteacher	0788741833		
2	UMUHIRE Marie Claire	G.S Nyagatare	Teacher	0788858221		
3	MIKEMPOE Ivy	G.S. Nyagatare	Teacher	0788212358		
4	GATARE Jacques	GS MATIMBA	Headteacher	0788[illegible]7844		
5	NZARAMBA Theogene	GS MATIMBA	Dupty/Headteacher	0788577831		
6	MUGWANEZA JACKLINE	G.S MATIMBA	Teacher	0782881746		
7	MWIZERWA Appolinaire	G.S MATIMBA	Teacher	0783382068		
8	BASENYA Charles	NTORA Primary	HEAD TEACHER	0788648501		
9	SAFALI Mubaraka	MATIMBA SECTOR	UMUTURAGE	0788996729		
10	HABIYAREMYE Theoneste	GS RYABEGA	Headteacher	0788641531		
11	NYIRAGUSHIMANA Antoinette	GS RYABEGA	Bursar	0783281603		
12.	NTEZIMANA J. Désiré	GS RYABEGA	Teacher	0788921437		
13	HABYARIMANA Paul	G.S RYABEGA	Teacher	0783260910		
14	UWASIMIRE Alice	Karangazi	Umuturage	0781777[illegible]		
15	BAYIZERA Edith	Nyagatare district	DDE	0788[illegible]110		
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List of consulted People during the preparation of RPF/ESMF date: 15/03/2019

#	Name	Institution	Position	Phone number	Email	Signature
1	NIYONIRINGIYE FELICIEN	RULINDO DISTRICT	Director of OSC	0788493929	niyoniringiye@gmail.com	
2	NDOLIMANA ERIC.	RULINDO DISTRICT	Land valuation officer	0785744732	ndolieric@gmail.com	
3	UWERAMAHIRWE Delphanie	G.S RUSIGA	School Accountant Secretary	0788224361		
4	HPAVIMANA François	G.S. Ngarama	Director of studies	0781446896		
5	Hema Furaha	G.S. Ngarama	Bursar/Secretary	078 2834328		
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List of consulted People during the preparation of RPF/ESMF date: 13 / 03 /2019

#	Name	Institution	Position	Phone number	Email	Signature
1	MUKESHIMANA Marie Rose	G.S RUKURA	Director of Studies	0788883457	mariejoseph@gmail.com	
2	NIRERE Jeannette	G.S RUKURA	S.Comptable	078827505	jeannetteniree@gmail.com	
3	Hitimana Jean de Dieu	Gakenke District	School construction Engineer	0788411224	habjeandedieu@yahoo.fr	
4	NDAYAMBAJE Benjamin	GAKENKE District	Nursery, Primary Education & Adult Literacy	0788593180	bndayambaje@rocketmail.com	
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List of consulted People during the preparation of RPF/ESMF

date: 14 / 03 /2019

#	Name	Institution	Position	Phone number	Email	Signature
1	NSENGIMANA J. Damascène	District	District Director of Education	0785021773	nsengadamas 2020@gmail.com	
2	MUNGWAKUZWE Jean Népo	District	School Construction Engineer	0783128637	munepo83@gmail.com	
3	TWAGIRAYEZU Edouard	District	Secondary & TVET education officer	0783556482	twagiredu@yahoo.fr	
4	MUKAGASANA Consolée	G.S. B CATHOLIQUE [illegible]	ACCountant/Secretary	0788427939	mucongo13@gmail.com	
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7	HABUMUREMYI Elie	GS MUHORO	Headteacher	0783190277	[illegible]@gmail.com	
8	SINUMVAYABO Emmanuel	GIWMBI	Director – OSC	0788304316	esinumvayabo@gmail.com	
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List of consulted People during the preparation of RPF/ESMF

date: [illegible]/03/2019

#	Name	Institution	Position	Phone number	Email	Signature
1	BIGIRIMANA Evariste	GS KAMPANGA	Deputy head teacher in charge of discipline	0788450710	evaristecaleb138@gmail.com	
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3	HARERIMANA Béata	GS KABAYA	Headteacher	0783051065	habea2003@yahoo	
4	UWITONI Clémentine	GS KABAYA	Deputy Headteacher of studies	0788475342	uwitoniclo@yahoo.fr	
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6	BAPFAKURURIMI Paul	Umuturage	Umuturage uturiye ishuri rya MUSEZERO	—		
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9	NGIRUWONSANGA Emmanuel	BURERA District	School Construction Eng.	0788430419	emmyngiru@yahoo.fr	
10	NDUWAYEZU Evariste	GS JEAN DE LA MENNAIS KIRAMBO	Head teacher	0788888362	nduwaevar@yahoo.fr	
11	MUKARUTWAZA Alphonsine	EP KIRAMBO	Head teacher	0783170690	mukarutwaza@gmail.com	
12.	DUSABIMANA K. Sylidion	BURERA district District Land Survey & GIS	District Land Survey & GIS	0788662724	d.sylidion@yahoo.fr	
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