

**REPUBLIC OF RWANDA**



**NYAMAGABE DISTRICT**

**ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP)**

**FOR CONSTRUCTION OF 59 CLASSROOMS AND 84 LATRINES UNDER  
QUALITY BASIC EDUCATION FOR HUMAN CAPITAL DEVELOPMENT  
(QBE-HCD) PROJECT IN NYAMAGABE DISTRICT**

**Final Report**

**December, 2019**

## TABLE OF CONTENTS

LIST OF ABBREVIATIONS AND ACRONYMS .....	iii
LIST OF TABLES .....	iv
LIST OF FIGURES .....	v
CHAPTER I. INTRODUCTION .....	1
1.1 Project background .....	1
1.2 Overview of Nyamagabe District .....	2
1.3 Description of sub-projects activities .....	3
1.4 Purpose of the ESMP.....	5
CHAPTER II: POLICY, LEGISLATIVE AND INSTITUTIONAL FRAMEWORK .....	6
2.1 Institutional Framework .....	6
2.2 National Policy Framework.....	6
2.3 National Legislative Framework .....	6
2.4 International legislative framework.....	7
2.5 World Bank Environmental and Social Standards applied.....	8
CHAPTER III: POTENTIAL IMPACTS AND MITIGATION MEASURES .....	8
3.1 Potential positive impacts .....	8
3.2 Potential negative impacts .....	8
CHAPTER IV: ENVIRONMENTAL AND SOCIAL MANAGEMENT/MONITORING PLAN .....	12
4.1 Environmental and Social Management Plan.....	12
4.2 Environmental and Social Monitoring Plan .....	23
4.2.1 Monitoring roles .....	35
CHAPTER V. REPORTING AND DOCUMENTATION .....	36
CHAPTER VI. CONCLUSIONS AND RECOMMENDATIONS.....	36
9.1 Conclusion .....	36
ANNEXES: .....	37
Annex 1: Occupational Health and Safety Plan .....	37
Annex 2: Chance Finds Procedure .....	39
Annex 3: Grievance Redress Mechanism Log Frame Template .....	40
Annex 4: Reporting format of the ESMP implementation progress.....	41

## **LIST OF ABBREVIATIONS AND ACRONYMS**

<b>AIDS:</b>	Acquired Immune Deficiency Syndrome
<b>EDPRS:</b>	Economic Development and Poverty Reduction Strategy
<b>EIA :</b>	Environmental Impact Assessment
<b>EMP :</b>	Environmental Management Plan
<b>ESIA:</b>	Environmental and Social Impact Assessment
<b>ESMP :</b>	Environmental and Social Management Plan
<b>GOR:</b>	Government of Rwanda
<b>HIV:</b>	Human Immunodeficiency Virus Infection
<b>MININFRA:</b>	Ministry of Infrastructure
<b>NST1:</b>	National Strategy for Transformation
<b>RAPs:</b>	Resettlement Action Plans
<b>RDB:</b>	Rwanda Development Board
<b>REMA:</b>	Rwanda Environmental Management Authority
<b>RHA:</b>	Rwanda Housing Authority
<b>RLMUA:</b>	Rwanda Land Management and Use Authority

## **LIST OF TABLES**

Table 1.1: Sub-projects proposed to be implemented under QBE – HCD Project.....	4
Table 2.3: Identified potential impacts and mitigation measures .....	9
Table 3.4: Environmental and Social Management Plan for generic impacts for construction classrooms and latrines in Nyamagabe District .....	13
Table 4.4: Environmental and Social Monitoring Plan for construction of classrooms and latrines in Nyamagabe District .....	23
Table 5.5: Monitoring roles and responsibility.....	35
Table 6: Occupational Health, Safety and Security Management Plan.....	37

**LIST OF FIGURES**

Figure 1.1: Administrative Map of Nyamagabe district..... 2

## **CHAPTER I. INTRODUCTION**

### **1.1 Project background**

The Government of Rwanda (GoR) is increasingly emphasizing human capital development to support the socioeconomic transformation of the country thus is among twenty-eight early adopter countries of the Human Capital Projects of the World Bank. With support from the Bank, the GoR is implementing the Quality Basic Education for Human Capital Development (QBE-HCD) project with intention to improve teacher competency and student retention and learning in basic education. The project governance is led by Ministry of Education (MINEDUC) that coordinates and implement the project's activities at National level. At local level, the QBE-HCD project is implemented by all thirty district governments.

The project seeks to supports the ongoing government's program to phase out double-shifting, and reduce class overcrowding, which is currently the highest national priority as set out in the National Strategy for Transformation (NST1, 2017-2024). In addition, it will replace existing overage substandard primary classrooms, kitchens and sanitation facilities and expand access to pre-primary education (pre-school classrooms) to improve pupil's school readiness. The QBE-HCD project is implemented countrywide through the Rwanda's Home-Grown School Construction Approach (HGSCA), and is denoted construction program B, to make the distinction from the parallel government-funded school construction program A, which is the continuation of past program. The project has the following three main components: (i) Enhancing teacher effectiveness for improved student learning, (ii) improving the school environment to support student learning and (iii) Developing institutional capacity to strengthen teaching and learning

Under component 2, the project will finance the construction of 11,000 furnished classrooms and approximately 14,680 latrines, amongst other investments, so as to reduce overcrowding in classrooms and distance to schools from learners' home. As the project will be implemented across Rwanda, part of sub-projects will be constructed in Nyamagabe District of Southern Province; those include 56 classrooms and 84 latrines among others.

Nyamagabe District acknowledges its corporate responsibility towards the protection of environment, social set up, health and safety of its workers and surrounding communities and accordingly, is committed to the elimination, reduction and control of potential negative environmental and social impacts associated with project activities through implementation of measures contained in this ESMP.



According to the distribution of the population in Nyamagabe District by age groups and sex composition, the majority are aged 19 years or younger with 54%, people aged 65 years and above make up a small part (4%). More than a half (53%) of the population is constituted of female individuals and the population is predominantly young, with about 80%.

The climate of Nyamagabe District is humid tropical and moderated by the effect of high altitude. Nyamagabe District is among the regions in the country with the highest rainfall. The annual rainfall varies from 1300 to 1450 mm with average temperature of 18°C. The climate comprises, essentially, four seasons spread throughout the year as follows: two dry seasons stretching from January to February and from July to mid-September and two rainy seasons from mid-September to December and from March to June.

Nyamagabe District has an average altitude varying from 1800 to 2700 meters. It has uneven altitude with some summits at times going beyond 3000 meters high. The altitude and rains increase as and when one approaches Congo-Nil Crater. Nyamagabe District relief is characterized by jagged and irregular slopes ranging from 60° to 120° making soils susceptible to soil erosion and degradation. Nyamagabe District soils are generally acidic in nature with a pH ranging from 3.6 - 5. This generally implies very poor soil which is saturated with aluminum cations implying its low agricultural productivity unless organic and mineral fertilizers are added.

According to EICV3 (NISR) published in 2013 the District counts 55 nursery schools, 103 Primary schools, 46 Secondary schools with 1194 classrooms and 5 VTCs. Literacy rate among population aged 15 and above is 63.2%, secondary school attained count 28.8% and 14% net secondary school enrolment.

### **1.3 Description of sub-projects activities**

The project will finance 12 sub-projects which consist of construction of 59 classrooms and 56 latrines in 8 sectors namely Uwikingi, Gatare, Mbazi, Buruhukiro, Mushubi, Tare, Gatare, Cyanika sectors in which overcrowding and long distances to schools have been noticed as major factors that inhibit learning in Nyamagabe District. This was decided following public consultations conducted by District authority with all concerned and interested parties, whereby a quite number of sub-projects were identified as priorities during 2019/2020 fiscal year under this program to address overcrowding in classrooms and long distance between learners' homes and schools in Nyamagabe District.

During construction of classrooms and latrines the following activities will be carried out: Site clearing, land preparation for classrooms and latrines, extraction of construction materials, excavation works, foundation works, concrete works, elevation of walls, roof trusses, roof covering, fixing windows and doors, internal and external finishing, painting, pavement.

**Table 1.1: Sub-projects proposed to be implemented under QBE – HCD Project**

No	Sub Project names	School Name	Location		
			Sector	Cell	Village
1	Construction of 4 classrooms at GS Kizimyamuriro	GS Kizimyamuriro	BURUHUK IRO	KIZIMYAMU RIRO	GIKUNGU
2	Construction of 5 classrooms and 6 latrines at GS Nyarwungo	GS Nyarwungo	GATARE	SHYERU	RUSHYARA RA
3	Construction of 8 classrooms and 11 latrines at GS Rugogwe	GS RUGOGWE	CYANIKA	GITEGA	GASHARU
4	Construction of 4 classrooms and 6 latrines at GS Ngororero	G S NGORORERO	TARE	NYAMIGINA	NGORORERO
5	Construction of 4 classrooms and 6 latrines at GS Mushubi	GS MUSHUBI	MUSHUBI	GASHWATI	MUSHUBI
6	Construction of 3 classrooms and 6 latrines at EP Sebukiniro	EP SUBUKINIRO	UWINKINGI	RUGOGWE	SUBUKINIRO
7	Construction of 4 classrooms and 6 latrines at GS Kibyagira	GS KIBYAGIRA	UWINKINGI	KIBYAGIRA	SEKERA
8	Construction of 7 classrooms and 8 latrines at EP Muhingo	EP MUHINGO /SAT	GATARE	BAKOPFU	MUHINGO
9	Construction of 4 Classrooms and 4 latrines at EP Manwari	EP MANWARI	MBAZI	MANWARI	KIRAMBI
10	Construction of 4 classrooms and 8 latrines at EP Munini	EP MUNINI	UWINKINGI	RUGOGWE	NYAMUGARI
11	Construction of 10 Classrooms and 14 latrines at EP Munini (New school)	EP MUNINI	BURUHUK IRO	MUNINI	GITOVU
12	Construction of 6 Classrooms and 8 latrines at GS Kibyagira	GS KIBYAGIRA	BURUHUK IRO	GIFURWE	NGANZO

During the implementation of these sub-projects, the possession of health insurance and Personal Protective Equipment (PPEs) will be a must for all workers at all sites during their daily activities. However, for an individual who do not have a personal medical insurance, an agreement should be reached at the recruitment that the individual's first payment will be used to pay for the individual medical insurance. The local people will be the first to be employed in order to reduce risk that may be resulted from the labor influx.

The classrooms and latrines construction activities in year 1 will not disturb the local people because during the sites selection, the priority has been accorded to sites that will not involve land acquisition, restriction on the use of the land/assets and involuntary resettlement. Impact from the noise caused by construction activities at the sub-project sites will be minor as the sub-project activities will not involve machines and will be mitigated by not working during the night.

The QBE – HCD Project is of Impact Level two (IL-2) according to the national project environmental impact classification and as Substantial Risk projects following World Bank environmental and social risk classification, hence QBE – HCD sub-project will be implemented in accordance with National Law and any requirement of the Environmental and Social Standards that the Bank deems relevant to such sub-project.

#### **1.4 Purpose of the ESMP**

The purpose of this Environmental and Social Management Plan (ESMP) is to provide a consolidated summary of all the Environmental and Social (E&S) commitments relevant for the Construction of classrooms and latrines sub-projects planning and implementation. The measure focuses on environmental (such as sanitation and waste management problems, dust emission, noise pollution, soil erosion, natural resources extraction such as sand gravels, etc., chemical wastes related to paints, biodiversity and environmental contamination, including surface water and groundwater) and social aspects (such as protection of human rights, communication with local stakeholders, labor influx, spread of sexually transmitted diseases and HIV/AIDS, safety of workers and communities).

For Year 1, the implementation of Rwanda QBE - HCD Project will not involve land acquisition because the targeted land is the property of the Government and Religious organizations who will avail their land voluntarily as they will sign consent Form in the regards of the existing `Prime Minister's order N°290/03 of 13/11/2015 determining special regulations governing government subsidized schools.

This ESMP also gives an overview about the Environmental Management that must be implemented to ensure systematic and effective execution of these commitments, including roles and responsibilities between the District, sector and community.

Prior to the commencement of any sub-project or individual activity, it is required to understand the nature of the tasks involved and any hazards that may be associated with it in order to ensure that all potential hazards are identified and suitably controlled or mitigated. As part of this, the ESMP is being prepared in parallel with the sub-projects' design works with intention to include environmental and social considerations in the design works at the earliest appropriate stage and tiers of decision making or prior to their final approval. Also, an

update of ESMP by the sub-project management shall complete a review of the ESMP periodically to assess its on-going effectiveness, adequacy and suitability.

## **CHAPTER II: POLICY, LEGISLATIVE AND INSTITUTIONAL FRAMEWORK**

This ESMP has been prepared to fully comply with environmental legislations and procedures in Rwanda and the World Bank environmental and social framework. The Project implementation will comply with national laws, international regulations and different conventions ratified by GoR as well as world bank environmental and social standards.

### **2.1 Institutional Framework**

The institution to which this project will have to consult and relate to include:

- i. Ministry of Education;
- ii. Ministry of Finance (MINECOFIN);
- iii. Rwanda Education Board (REB);
- iv. Ministry of Local Government (MINALOC);
- v. Ministry of Infrastructure (MININFRA);
- vi. Rwanda Information Security Authority (RISA);
- vii. Rwanda Housing Authority (RHA);
- viii. University of Rwanda (UR);
- ix. National Early Childhood Development Program (NECP);
- x. Rwanda Development Board (RDB);
- xi. Rwanda Environmental Management Authority (REMA);
- xii. Rwanda development Board (RDB)
- xiii. Rwanda Social Security Board (RSSB)

### **2.2 National Policy Framework**

The Policy frameworks that will guide the project include

- i. Environmental Policy, 2004
- ii. National Land policy, 2004
- iii. Water and Sanitation Policy, 2010
- iv. Vision, 2020
- v. National Strategy for transformation (NST1)

### **2.3 National Legislative Framework**

Amongst the laws that will have a bearing to the project this site includes:

- i. The Constitution of the Republic of Rwanda, 2003 as revised in 2015
- ii. Law on Environment, 2018

- iii. National Land Law, 2013
- iv. Law on Mining and Quarry Operations, 2014
- v. Law Regulating Labor in Rwanda, 2009
- vi. Law governing the preservation of air quality and prevention of air pollution in Rwanda, 2016
- vii. Ministerial order relating to the requirements and procedure for environmental impact Assessment (EIA), 2018
- viii. Ministerial Order establishing the list of projects that must undergo environmental impact assessment, instructions, requirements and procedures to conduct environmental impact assessment, 2019
- ix. Ministerial Order determining modalities of establishing and functioning of occupational health and safety committees, 2012
- x. Ministerial Order determining conditions for occupational health and safety, 2012
- xi. Rwanda building control regulation, 2012
- xii. Sector guidelines for EIA for Roads development projects in Rwanda, 2009

#### **2.4 International legislative framework**

Rwanda is a signatory to a number of conventions on sustainable development and is member of various bilateral and multilateral organizations amongst those that have an impact to this project include:

- i. The international Convention on Biological Diversity (CBD) and its habitat signed in Rio de Janeiro in Brazil on 5 June 1992, as approved by Presidential Order no 017/01 of 18 March 1995;
- ii. The United Nations Framework Convention on Climate Change, signed in Rio de Janeiro in Brazil on 5 June 1992, as approved by Presidential Order no 021/01 of 30 May 1995
- iii. The Kyoto Protocol to the framework on climate change adopted at Kyoto on March 6, 1998 as authorized to be ratified by Law no 36/2003 of December 2003;
- iv. The Ramsar International Convention of February 2, 1971 on Wetlands of International importance, especially as water flows habitats as authorized to be ratified by Law No 37/2003 of 29 December 2003;
- v. Paris Agreement/Paris Climate Agreement or COP21 of December 2015 on reduction of the emission of gases that contribute to global warming. This agreement was signed by Rwanda on 22/04/2016 and ratified on 06/10/2016;

## **2.5 World Bank Environmental and Social Standards applied**

The Rwanda QBE – HCD Project is financed by the World Bank that has in place environmental and social framework with ten (10) environmental and social standards (ESS) that are designed to avoid, minimize, and/or mitigate adverse environmental and social impacts of projects supported by the Bank. The World Bank Environmental and Social Standards applied to the sub-projects to be implemented in Nyamagabe District are following:

- i. ESS1: Assessment and Management of Environmental and Social Risks and Impacts
- ii. ESS2: Labor and Working Conditions
- iii. ESS3: Resource Efficiency and Pollution Prevention and Management
- iv. ESS4: Community Health and Safety
- v. ESS8: Cultural Heritage
- vi. ESS10: Stakeholder Engagement and Information Disclosure

## **CHAPTER III: POTENTIAL IMPACTS AND MITIGATION MEASURES**

The construction of classrooms and latrines at all stages of sub-projects will involve a number of activities associated with potential risks and impacts on biophysical environment (air, water, aquatic and terrestrial ecology, soil), and socioeconomic environment (land use, finance, employment, hazard and health, security, safety of graveyards, etc.). An impact is any change to the existing condition of the environment caused by human activity or an external influence. Impacts therefore may be positive/beneficial or negative/adverse.

### **3.1 Potential positive impacts**

The positive impacts are beneficial and will thus not require any mitigation. The following are considered as major positive impacts:

- i. Overcrowding in schools will be reduced after completion of construction activities,
- ii. The distance covered by learners from their homes to schools will be reduced,
- iii. Creation of employment to local people during construction,
- iv. There will be income generation to local entrepreneurs through procurement or supply of construction materials,
- v. Improve quality and aesthetics of schools' infrastructure,
- vi. Generation of revenue to Government and the District,
- vii. Increased value and efficient use of government land,
- viii. Improved resilience to climate shocks (destruction of schools, heat, flooding, etc.)

### **2.2 Potential negative impacts**

In terms of environmental degradation, the project is likely to lead to very minimal negative impacts, which shall be easily taken care of in the proactive design and the proposed mitigation measures suggested in this

project brief. The negative impacts can be divided into those that will directly come from the constructional and operational activities and those that will be due to socio-economic issues. This can be summarised as follows:

**Table 2.3: Identified potential impacts and mitigation measures**

<b>Potential Impacts/issues</b>	<b>Management/Mitigation Measures</b>
Acquisition of non-governmental land for construction/extension of schools that belong to religious organizations.	<ul style="list-style-type: none"> <li>• Sign consent form by religious organizations as per Prime Minister’s order n°290/03 of 13/11/2015</li> </ul>
Loss of vegetation cover	<ul style="list-style-type: none"> <li>• Clear only the area designed for classrooms and latrines construction</li> <li>• Preserve (or stockpile) excavated topsoil for future site restoration procedures;</li> <li>• Greening by grasses</li> </ul>
Potential risks of wasting raw materials	<ul style="list-style-type: none"> <li>• Accurate estimate of needed materials</li> <li>• Get supply of raw-materials (such as sand, stones, bricks, etc.) from authorized suppliers and sites</li> </ul>
Access roads	<ul style="list-style-type: none"> <li>• Locate access roads in consultation with local community and officials</li> </ul>
Risk of loss of landscape scenic value and associated effects on ecosystem	<ul style="list-style-type: none"> <li>• Hold top soils and vegetation matter near quarries, borrow pits and dumping sites</li> </ul>
	<ul style="list-style-type: none"> <li>• Rehabilitate (green landscaping) the borrow pits, quarries and dumping sites at the end of construction activities</li> </ul>
Valuable artefacts or culturally valuable materials	<ul style="list-style-type: none"> <li>• Use and follow chance find procedures as per the ESCP</li> </ul>
Accidental injuries	<ul style="list-style-type: none"> <li>• Checking daily if the materials are in good conditions before starting the activities,</li> <li>• Equip all site workers with Individual protective equipment (such as boots, helmets, and high visibility jackets)</li> <li>• Avail first aid kit on-site,</li> <li>• Ensure that all workers have medical insurance such as “Mutuelle de santé”, RAMA or any other recognized medical insurance</li> <li>• Ensure provision of regular briefing on occupational health and safety to workers</li> <li>• Having distance between workers</li> </ul>
Deterioration of workers' health and child right violation	<ul style="list-style-type: none"> <li>• The site will be provided with clean drinking water</li> <li>• Construction workers should be given break to go for lunch;</li> <li>• Child labor should be avoided at all stages of</li> </ul>

	<p>construction (child under 18years old)</p> <ul style="list-style-type: none"> <li>• Fair treatment of workers and provision of safe and health working condition</li> <li>• Respect of working hours</li> </ul>
Risk of conflict	<ul style="list-style-type: none"> <li>• Local residents will be given the priority during workforce selection;</li> <li>• Wearing uniform (jacket)</li> <li>• Grievance redress mechanism</li> </ul>
Risk of insecurity at the sub project site	<ul style="list-style-type: none"> <li>• Ensure only authorized personnel get to site</li> <li>• Ensure security persons are available on the site</li> </ul>
Risk of contamination by HIV/AIDS and other STDs, Sexual harassment and abuse, GBV (gender based violation)	<ul style="list-style-type: none"> <li>• Sensitize site workers on HIV/AIDS, Sexual harassment and abuse, GBV (gender based violation) to avoid negative effects from social&amp; multicultural inclusion at the area.</li> <li>• Voluntary testing to determine HIV status; counselling at existing medical facilities;</li> <li>• Enforce and sensitize code of conducts</li> </ul>
Poor hygiene and sanitation	<ul style="list-style-type: none"> <li>• Provide means for handling waste generated by construction workers</li> <li>• Avail handwashing facilities</li> <li>• Always keep clean toilets</li> <li>• Install toilets away from rivers or areas with shallow groundwater</li> <li>• Sensitize workers about handwashing culture</li> </ul>
Risk of exhaust emissions (e.g. Sulphur, Carbon, Nitrogen, chlorofluorocarbons,...) from truck movements	<ul style="list-style-type: none"> <li>• Before hiring a supplier, make sure that his/her vehicle has a valid vehicle technical control certificate</li> <li>• Sensitize drivers to avoid unnecessary racing of vehicle engines at loading/offloading points and parking areas;</li> </ul>
Risk of noise and/or vibration pollution of civil works/heavy trucks to the school environment and local people	<ul style="list-style-type: none"> <li>• Notify and coordinate with local people adjacent to sub-project sites and school administration to inform them of the possibility of temporary noise disruption &amp; related issues, and how to report complaints if any;</li> <li>• Limit civil work activities to daytime hours to the extent feasible;</li> <li>• Sensitize vehicle drivers to switch off engines when the vehicle is parked;</li> <li>• Perform welding and other noise producing activities during weekend in order to minimize noise pollution during school days</li> </ul>
Degradation of air quality due to the dust emissions;	<ul style="list-style-type: none"> <li>• Manual compaction of unstable soil and wearing dust mask</li> <li>• Watering while soil works and construction are being executed and where dust is emitted;</li> </ul>

	<ul style="list-style-type: none"> <li>• Reduce vehicle speed in working area</li> </ul>
Soil erosion due to the runoff	<ul style="list-style-type: none"> <li>• Installation of rain water harvesting system (Water tanks and waterways)</li> <li>• Plantation of ornamental trees and grasses on exposed slopes</li> </ul>
Generation of solid waste in the form of construction spoils	<ul style="list-style-type: none"> <li>• Implement 3R principles (Reducing, reusing, recycling) wastes;</li> <li>• Avail solid waste bins and sort garbage according different categories (e-wastes, chemicals, plastics, metals, glasses papers/wood and biodegradable wastes);</li> <li>• Dispose of solid waste to existing dumpsite</li> </ul>
Fire outbreak due to welding activities	<ul style="list-style-type: none"> <li>• Avail sand and water on site for fire fighting</li> <li>• Employ skilled people in welding activities</li> <li>• Ensure a quick contact to concerned security institution in case of strong fire outbreak</li> </ul>
Soil pollution due to toxic or hazardous chemical from paints or solvents	<ul style="list-style-type: none"> <li>• Hazardous/toxic materials shall be stored in appropriate containers/stores with clearly visible labels; &amp; regularly inspect for signs of leaks.</li> <li>• Disposal of waste from paint in existing toxic liquid waste pit</li> <li>• Company certified in collected waste will be hired in collecting the produced waste wherever possible</li> <li>• Work closely with the district hospital in handling hazardous waste</li> <li>• Provide training on management of all hazardous chemicals/materials and wastes for workers including use of Personal Protective Equipment</li> </ul>
Soil pollution due to infiltration of microbes from faeces Ground water pollution due to infiltration of faeces	<ul style="list-style-type: none"> <li>• Proper construction of foundation and walls for pit by cementing</li> </ul>

In order to put these measures into practice, an Environmental and Social Management Plan (ESMP) needs to be developed and elaborated. The EMP is developed to guide all activities of the project concerning the protection of the environment. This plan specifies the nature of the negative impacts, the proposed mitigation measures for these impacts, the indicators in the execution of these mitigation measures, the time period, the responsibilities and the follow-up needed from concerned authorities. Other plans and procedures are developed as part of this ESMP, those include Occupational Health and Safety Plan to deals with occupational health and traffic, Chance Find Procedure to provide appropriate protocol in case a valuable artefacts or culturally valuable materials is found during civil works.

## **CHAPTER IV: ENVIRONMENTAL AND SOCIAL MANAGEMENT/MONITORING PLAN**

### **4.1 Environmental and Social Management Plan**

Referring to data collected during Environmental and Social screening, all the sites have almost similar environmental and social impacts; hence only one table combining all the possible impacts was developed. However, the government owns land at only 4 sites (EP Muhingo, EP Munini, GS Rugogwe, GS Kizimiyamuriro). For the rest sub-projects sites which are mostly owned by religious organizations (EP Sebukiniro Satellite, EP Manwari, EP Munini Uwinkingi, GS Kibiyagira Buruhukiro, GS Kibiyagira Uwinkingi, GS Mushubi, GS Ngororero, GS Nyarwungu) a Consent form will be signed in the regards of the existing Prime Minister's order n°290/03 of 13/11/2015 determining special regulations governing government subsidized schools.

It is important to note that during the course of the project new environmental aspects and impacts may be identified, this ESMP will be revised every time once new impact is identified. Environmental and social safeguard officers will have the responsibility to report on the progress of implementation of this ESMP. The budget of ESMP will be managed by MINEDUC and Districts, the rainwater harvesting tanks will be acquired by MINEDUC.

During the implementation of Environmental and social management plan, there is a well-planned way of managing the cost of ESMP according to the project phase and project activity. There are some mitigation measures to be implemented at the national level, district level and others at site level according to the respective implementing responsibility.

The purchase and supply of rainwater harvesting tanks will be conducted at National procurement level as well as the supply of Personnel protective equipment. Other mitigation measures will be conducted in respect to the implementing responsibility.

**Table 3.4: Environmental and Social Management Plan for generic impacts for construction classrooms and latrines in Nyamagabe District**

<b>Sub-Project Phase</b>	<b>Sub-Project Activity</b>	<b>Potential Impacts/issues</b>	<b>Management/Mitigation Measures</b>	<b>Implementation responsibility</b>	<b>Time Frame</b>	<b>Estimated Cost (Frw)</b>
Pre-construction phase	Avail land for 8 sub-project sites from religious organizations organizations (EP Sebukiniro Satellite, EP Manwari, EP Munini Uwinkingi, GS Kibyangira Buruhukiro, GS Kibyangira Uwinkingi, GS Mushubi, GS Ngororero, GS Nyarwungo)	Religious Land use for 8 sub-projects for classrooms and latrines construction	Sign consent form by religious organizations as per Prime Minister's order n°290/03 of 13/11/2015	Religious Legal Representative, Government of Rwanda	Before commencing civil works	No cost
	Site clearing	Loss of vegetation cover	<ul style="list-style-type: none"> <li>• Clear only the area designed for classrooms and latrines construction</li> <li>• Preserve (or stockpile) excavated topsoil for future site restoration procedures;</li> </ul>	Foreman, School Head Teacher	During site clearance	1,652,000(of which 28,000 per one Classroom)

			<ul style="list-style-type: none"> <li>Greening by grasses</li> </ul>			
Construction phase	Extraction and transportation of materials	Potential risks of wasting raw materials	<ul style="list-style-type: none"> <li>Accurate estimate of needed materials</li> <li>Get supply of raw-materials (such as sand, stones, bricks, etc.) from authorized suppliers and sites</li> </ul>	Foreman,  School construction officer	During construction period	No cost
		Access roads	<ul style="list-style-type: none"> <li>Locate access roads in consultation with local community and officials</li> </ul>	Foreman, School construction officer, Suppliers with local community	During construction period	No cost
		Risk of loss of landscape scenic value and associated effects on ecosystem	<ul style="list-style-type: none"> <li>Hold top soils and vegetation matter near quarries, borrow pits and dumping sites</li> </ul>	Suppliers	During implementation of the sub project activities	No cost
			<ul style="list-style-type: none"> <li>Rehabilitate (green landscaping) the borrow pits, quarries and dumping sites at the end of construction activities</li> </ul>	Suppliers	At the end of construction activities	No cost

	All activities: Excavation and foundation, elevation of walls, ceilings, roof works.	Valuable artefacts or culturally valuable materials	<ul style="list-style-type: none"> <li>Use and follow chance find procedures as per the ESCP</li> </ul>	Foreman, School construction officer	Prior to & during excavation	2,400, 000 (of which 200,000 per site)
		Accidental injuries	<ul style="list-style-type: none"> <li>Checking daily if the materials are in good conditions before starting the activities,</li> <li>Equip all site workers with Individual protective equipment (such as boots, helmets, and high visibility jackets)</li> <li>Avail first aid kit on-site,</li> <li>Ensure that all workers have medical insurance such as “Mutuelle de santé”, RAMA or any other recognized medical insurance</li> <li>Ensure provision of regular briefing on occupational health and safety to workers</li> <li>Having distance between</li> </ul>	Foreman, School Head Teacher	During the timeframe of the implementation of the project	<p>No cost</p> <p>5,529,600 of which 460,800 per site</p> <p>4,579,200 (381,600 per sites)</p> <p>No cost</p>

			workers			No cost
		Deterioration of workers' health and child right violation	<ul style="list-style-type: none"> <li>• The site will be provided with clean drinking water</li> <li>• Construction workers should be given break to go for lunch;</li> <li>• Child labor should be avoided at all stages of construction (child under 18years old)</li> <li>• Fair treatment of workers and provision of safe and health working condition</li> <li>• Respect of working hours</li> </ul>	School Head Teacher, Foreman, Safeguards Team	During sub-project implementation	216, 000 Frw (of which 18,000 per site)
		Risk of conflict	<ul style="list-style-type: none"> <li>• Local residents will be given the priority during workforce selection;</li> <li>• Wearing uniform (jacket)</li> <li>• Grievance redress mechanism</li> </ul>	Foreman, School Head Teacher and Social Safeguard Team	During the timeframe of the implementation of the project	No cost  No cost

		Risk of insecurity at the sub project site	<ul style="list-style-type: none"> <li>• Ensure only authorized personnel get to site</li> <li>• Ensure security persons are available on the site</li> </ul>	Foreman ,Local Authorities	During the timeframe of the implementation of the project	No cost  3,600,000(of which 300,000 per site)
		Risk of contamination by HIV/AIDS and other STDs, Sexual harassment and abuse, GBV (gender based violation)	<ul style="list-style-type: none"> <li>• Sensitize site workers on HIV/AIDS, Sexual harassment and abuse, GBV (gender based violation) to avoid negative effects from social&amp; multicultural inclusion at the area.</li> <li>• Voluntary testing to determine HIV status; counselling at existing medical facilities;</li> <li>• Enforce and sensitize code of conducts</li> </ul>	School Head Teacher, Foreman ,Health Centers, Local Authorities	During the timeframe of the implementation of the project	No cost
		Poor hygiene and sanitation	<ul style="list-style-type: none"> <li>• Provide means for handling waste generated by construction workers</li> <li>• Avail handwashing facilities</li> </ul>	Social affairs at sector level, School head teacher, Foreman	During the timeframe of the implementation of the sub-project	1,080,000 (of which 90,000 per site)

			<ul style="list-style-type: none"> <li>• Always keep clean toilets</li> <li>• Install toilets away from rivers or areas with shallow groundwater</li> <li>• Sensitize workers about handwashing culture</li> </ul>			
		Risk of exhaust emissions (e.g. Sulphur , Carbon, Nitrogen, chlorofluorocarbons,...) from truck movements	<ul style="list-style-type: none"> <li>• Before hiring a supplier, make sure that his/her vehicle has a valid vehicle technical control certificate</li> <li>• Sensitize drivers to avoid unnecessary racing of vehicle engines at loading/offloading points and parking areas;</li> </ul>	Foreman, National police  District Environmental officer  Environmental and Social Safeguards Officer	During implementation of the activities	No cost
		Risk of noise and/or vibration pollution of civil works/heavy trucks to the school environment and local people	<ul style="list-style-type: none"> <li>• Notify and coordinate with local people adjacent to sub-project sites and school administration to inform them of the possibility of temporary noise disruption &amp; related issues, and how to report complaints if any;</li> <li>• Limit civil work activities to daytime hours to the</li> </ul>	Foreman	During implementation of the activities	No cost

			<p>extent feasible;</p> <ul style="list-style-type: none"> <li>• Sensitize vehicle drivers to switch off engines when the vehicle is parked;</li> <li>• Perform welding and other noise producing activities during weekend in order to minimize noise pollution during school days</li> </ul>			
		Degradation of air quality due to the dust emissions;	<ul style="list-style-type: none"> <li>• Manual compaction of unstable soil</li> <li>• Watering while soil works and construction are being executed and where dust is emitted;</li> <li>• Reduce vehicle speed in working area</li> </ul>	Foreman, drivers, Traffic Police, safeguards team	During implementation of the sub project activities	<p>No cost</p> <p>288,000(24,000 per site)</p>

		Soil erosion due to the runoff	<ul style="list-style-type: none"> <li>• Installation of rain water harvesting system (Water tanks and waterways)</li> <li>• Plantation of ornamental trees and grasses on exposed slopes</li> </ul>	<p>MINEDUC in collaboration with, FONERWA, MINEMA, Ministry of Environment,</p> <p>Districts, School head teacher, Foreman</p>	During the timeframe of the implementation of the sub-project	<p>23,600,000 (one tank cost 1,200,000) 3 tanks</p> <p>238,500(of which 19,875 per site)</p>
Construction	Elevation of walls, roof trusses, roof covering, Fixing windows and doors, internal and external finishing and pavement.	Generation of solid waste in the form of construction spoils	<ul style="list-style-type: none"> <li>• Implement 3R principles (Reducing, reusing, recycling) wastes;</li> <li>• Avail solid waste bins and sort garbage according different categories (e-wastes, chemicals, plastics, metals, glasses papers/wood and biodegradable wastes);</li> <li>• Dispose of solid waste to existing dumpsite</li> </ul>	District Environmental Officer, School head teacher, Foreman	During the timeframe of the implementation of the project	No cost

		Fire outbreak due to welding activities	<ul style="list-style-type: none"> <li>• Avail sand and water on site for fire fighting</li> <li>• Employ skilled people in welding activities</li> </ul>	School head teacher, foreman and police fire brigade	During welding activities	No cost
			<ul style="list-style-type: none"> <li>• Ensure a quick contact to concerned security institution in case of strong fire outbreak</li> </ul>			
	Painting	Soil pollution due to toxic or hazardous chemical from paints or solvents	<ul style="list-style-type: none"> <li>• Hazardous/toxic materials shall be stored in appropriate containers/stores with clearly visible labels; &amp; regularly inspect for signs of leaks.</li> <li>• Disposal of waste from paint in existing toxic liquid waste pit</li> <li>• Company certified in collected waste will be hired in collecting the produced waste wherever possible</li> <li>• Work closely with the district hospital in handling</li> </ul>	District Environmental officer, School head teacher, Foreman	During the timeframe of the implementation of the sub-projects	No cost  1,200,000 ( of which 100,000 per site)

			<p>hazardous waste</p> <ul style="list-style-type: none"> <li>• Provide training on management of all hazardous chemicals/materials and wastes for workers including use of PPEs</li> </ul>			
Operation	Use of toilet	Soil and groundwater pollution due to infiltration of microbes from faeces	Proper construction of foundation and walls for pit by cementing	School construction officer and specialist	During pit cementing and foundation works	8,959,944(of which 106,666 per Latrine)
<b>Total estimated budget</b>						<b>51,495,944(4,291,329 for each site).</b>

## 4.2 Environmental and Social Monitoring Plan

The below monitoring plan is applicable to all impact summarized in the above table and it is common to all sites within Nyamagabe District. As stated above, for sub-projects owned by religious institutions; they shall sign consent forms with the government prior the construction works.

**Table 4.4: Environmental and Social Monitoring Plan for construction of classrooms and latrines in Nyamagabe District**

<b>Sub-project phase</b>	<b>Potential impacts</b>	<b>Management/ Mitigation Measures</b>	<b>Monitoring indicator</b>	<b>Frequency/ Time frame</b>	<b>Responsible</b>	<b>Estimated cost (Frw)</b>
Pre-construction phase	Religious land use 8 sub-project sites (EP Sebukiniro Satellite, EP Manwari, EP Munini Uwinkingi, GS Kibyangira Buruhukiro, GS Kibyangira Uwinkingi, GS Mushubi, GS Ngororero, GS Nyarwungo ) for classrooms and latrines construction	Sign consent form by religious organizations as per Prime Minister's order n°290/03 of 13/11/2015	Number of signed consent form	Before the commencement of civil works	Monitoring and Evaluation Specialist and Social safeguards Specialist/MINEDUC	No cost

	Loss of vegetation cover	<ul style="list-style-type: none"> <li>• Clear only the area designed for classrooms and latrines construction</li> <li>• Preserve (or stockpile) excavated topsoil for future site restoration procedures;</li> <li>• Greening by grasses</li> </ul>	<p>Area cleared in square meter</p> <p>Quantity of excavated soil in cubic meter</p> <p>Area greened in square meter</p>	<p>Once</p> <p>Once</p> <p>Once(after construction works)</p>	Local authorities, Foreman and MINEDUC Safeguards Team	1 296 000 (of which 81000 per site)
Construction phase	Potential risks of wasting raw materials	<ul style="list-style-type: none"> <li>• Accurate estimate of needed materials</li> <li>• Get supply of raw-materials (such as sand, stones, bricks, etc.) from authorized suppliers and sites</li> </ul>	Quantity of remaining materials	Monthly	Foreman	No cost
	Access roads	<ul style="list-style-type: none"> <li>• Locate access roads in consultation with local community and officials</li> </ul>	Number of complaints			
	Risk of loss of landscape scenic value and associated effects	<ul style="list-style-type: none"> <li>• Hold top soils and vegetation matter near quarries, borrow</li> </ul>	All accumulated top soils and	Once after construction	Local authorities, Foreman, Suppliers and MINEDUC Safeguards	1,600,000 (of which 100,000 per

	on ecosystem	<p>pits and dumping sites;</p> <ul style="list-style-type: none"> <li>Rehabilitate (green landscaping) the borrow pits, quarries and dumping sites at the end of construction activities</li> </ul>	<p>vegetation matter used for rehabilitation of sites;</p> <p>Rehabilitated area in square meter</p>	works	Team	site
	Valuable artefacts or culturally valuable materials	<ul style="list-style-type: none"> <li>Use and follow chance find procedures as per the ESCP</li> </ul>	Number of complains	During construction period	Local authority , MINEDUC safeguards Team	No cost
	Accidental injuries	<ul style="list-style-type: none"> <li>Checking daily if the materials are in good conditions before starting the activities,</li> <li>Equip all site workers with Individual protective equipment (such as boots, helmets and high visibility jackets);</li> <li>Avail first aid kit on-site,</li> </ul>	<p>Number of Materials in good condition</p> <p>Number of workers with personnel protective equipment</p>	<p>Daily</p> <p>Daily</p>	Local authorities, Foreman, schools' construction Engineers, and MINEDUC Safeguards Team	no cost

		<ul style="list-style-type: none"> <li>• Ensure that all workers have medical insurance such as “Mutuelle de santé”, RAMA or any other recognized medical insurance</li> <li>• Ensure provision of regular briefing on occupational health and safety to workers</li> <li>• Having distance between workers</li> </ul>	<p>Number of first aid kit on site</p> <p>Number of workers with medical Insurance</p> <p>Number of briefings on safety to workers provided</p> <p>Distance in meter</p>	<p>Daily</p> <p>Daily</p> <p>Daily</p> <p>Daily</p>		
	Deterioration of workers' health and child right violation	<ul style="list-style-type: none"> <li>• The site will be provided with clean drinking water</li> </ul>	Quantity of drinking water in jericans	Daily	Local authorities, Foreman and MINEDUC	355,000 (of which 22,187.5 per site)
	child right violation	<ul style="list-style-type: none"> <li>• Construction workers should be given break to go for lunch;</li> </ul>	Number of hours for break	Daily	Safeguards Team	

		<ul style="list-style-type: none"> <li>• Child labor should be avoided at all stages of construction (child under 18years old)</li> <li>• Fair treatment of workers and provision of safe and health working condition</li> <li>• Respect of working hours</li> </ul>	<p>Number of checking made on site</p> <p>Number of complains resolved</p> <p>Number of working hours/day</p>	<p>Daily</p> <p>Daily</p> <p>Daily</p>		
	Risk of conflict	<ul style="list-style-type: none"> <li>• Local residents will be given the priority during workforce selection;</li> <li>• Wearing uniform (jacket)</li> <li>• Grievance Redress Mechanism</li> </ul>	<p>Number of local residents on work</p> <p>Number of workers with jackets</p> <p>Number of grievances resolved</p>	<p>Once, during recruitment</p> <p>Daily</p> <p>Daily</p>	Local authorities, Site supervisor and MINEDUC Safeguards Team	No cost

	Risk of insecurity at the sub project site	<ul style="list-style-type: none"> <li>• Ensure only authorized personnel get to site,</li> <li>• Ensure security persons are available on the site</li> </ul>	<p>Entry Register book</p> <p>Contract of security personnel employed</p>	Daily	Local authorities, foreman and MINEDUC Safeguards Team	4,800 000(of which 300,000 per site)
	Risk of contamination by HIV/AIDS and other STDs, Sexual harassment and abuse, GBV (gender based violation)	<ul style="list-style-type: none"> <li>• Sensitize site workers on HIV/AIDS, Sexual harassment and abuse, GBV (gender based violation) to avoid negative effects from social&amp; multicultural inclusion at the area;</li> <li>• Voluntary testing to determine HIV status; counselling at existing medical facilities;</li> <li>• Enforce and sensitize code of conducts</li> </ul>	<p>Minutes and attendance lists</p> <p>Number of voluntary tested personnel</p> <p>Number of Site supervision</p>	<p>Monthly</p> <p>Monthly</p>	Local authorities, Health Centers, Foreman and MINEDUC Safeguards Team	2 400 000(of which 150,000 per site)

	<p>Poor hygiene and sanitation</p>	<ul style="list-style-type: none"> <li>• Avail handwashing facilities;</li> <li>• Always keep clean toilets;</li> <li>• Install toilets away from rivers or areas with shallow groundwater;</li> <li>• Sensitize workers about handwashing culture</li> </ul>	<p>Number of handwashing facilities on site</p> <p>Cleanliness</p> <p>Field visit report</p> <p>Minute and attendance list</p>	<p>Daily</p> <p>Daily</p> <p>Once during project startup</p> <p>Monthly</p>	<p>Local authorities, Foreman, head teachers and MINEDUC Safeguards Team</p>	<p>480 000 ( of which 30,000 per site)</p>
	<p>Risk of exhaust emissions (e.g. Sulphur, Carbon, Nitrogen, chlorofluorocarbons,...)</p>	<ul style="list-style-type: none"> <li>• Before hiring a supplier, make sure that his/her vehicle has a valid vehicle technical control certificate;</li> <li>• Sensitize drivers to avoid unnecessary racing of vehicle engines at loading/offloading points and parking areas;</li> </ul>	<p>Inspection report</p> <p>Minute and attendance lists</p>	<p>Daily</p>	<p>Local authorities, traffic police, foreman and MINEDUC Safeguards Team District Environmental officer</p>	<p>4 800 000( of which 300,000 per site)</p>

	<p>Risk of noise and vibration pollution of heavy trucks to the school environment and local people</p>	<ul style="list-style-type: none"> <li>• Notify and coordinate with local people adjacent to sub-project sites and school administration to inform them of the possibility of temporary noise disruption &amp; related issues, and how to report complaints if any;</li> <li>• Limit civil work activities to daytime hours to the extent feasible;</li> <li>• Sensitize vehicle drivers, operators to switch off engines when the vehicle is parked;</li> <li>• Perform welding and other noise producing activities during weekend in order to minimize noise pollution during school days</li> </ul>	<p>Number of complaints raised and resolved about noise and vibration</p>	<p>Daily</p>	<p>Local authorities, Foreman and MINEDUC Safeguards Team</p>	<p>1 200 000 (of which 7500 per site)</p>
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	Degradation of air quality due to the dust emissions;	<ul style="list-style-type: none"> <li>Manual compaction of unstable soil ;</li> <li>Watering while soil works and construction are being executed and where dust is emitted;</li> <li>Reduce vehicle speed in working area</li> </ul>	Area of compacted soil in square meter	Daily	Local authorities, Foreman and MINEDUC Safeguards Team	1 200 000(of which 75,000 per site)
	Soil erosion due to the runoff	<ul style="list-style-type: none"> <li>Installation of rain water harvesting system (Water tanks and waterways).</li> <li>Plantation of ornamental trees and grasses on exposed slopes</li> </ul>	Number of installed water tanks  Number of planted ornamental trees	Monthly	Local authorities, Foreman and MINEDUC Safeguards Team	120 000 (7,500 per site)
	Generation of solid waste in the form of construction spoils	<ul style="list-style-type: none"> <li>Implement 3R principles (Reducing, reusing, recycling)</li> </ul>	Awareness provided for workers on 3R	Twice a week	District Environmental Officer, Local authorities, Site	200,000 (of which

		<p>wastes;</p> <ul style="list-style-type: none"> <li>• Avail solid waste bins and sort garbage according different categories (e-wastes, chemicals, plastics, metals, glasses papers/wood and biodegradable wastes);</li> <li>• Dispose of solid waste to existing dumpsite</li> </ul>	<p>principles</p> <p>Number of solid waste bins and garbage on site</p> <p>Amount of solid waste disposed at existing dumpsite</p>	<p>Daily</p> <p>Weekly</p>	<p>Foreman and MINEDUC Safeguards Team</p>	<p>12,500 per site)</p>
	<p>Fire outbreak due to welding activities</p>	<ul style="list-style-type: none"> <li>• Avail sand and water on site for fire fighting</li> <li>• Employ of skilled people in welding activities'</li> <li>• Ensure a quick contact to concerned security institution in case of strong fire outbreak</li> </ul>	<p>Quantity of sand and water in cubic meter</p>	<p>Daily</p>	<p>Local authorities, Site supervisor and MINEDUC Safeguards Team</p>	<p>112 000(of which 7,000 per site)</p>

	Soil pollution due to toxic or hazardous chemical from paints or solvents	<ul style="list-style-type: none"> <li>• Hazardous/toxic materials shall be stored in appropriate containers/stores with clearly visible labels; &amp; regularly inspect for signs of leaks.</li> <li>• Disposal of waste from paint in existing toxic liquid waste pit;</li> <li>• Company certified in collected waste will be hired in collecting the produced waste wherever possible;</li> <li>• Work closely with the district hospital in handling hazardous waste</li> <li>• Provide training on management of all hazardous chemicals/materials and wastes for workers including use</li> </ul>	Quantity of waste disposed in existing toxic liquid waste pit.	Monthly	Local authorities, foreman and MINEDUC Safeguards Team	224,000 (of which 14,000 per site)
				Monthly		

		of Personal Protective Equipment.	Number of personnel protective equipment			
Operation	Soil and groundwater pollution due to infiltration of microbes from toilets	<ul style="list-style-type: none"> <li>Cementing the walls of pit</li> </ul>	Inspection report	Once after completion	Local authorities, foreman and MINEDUC Safeguards Team	112,000 ( Of which 7,000 per site)
Total estimated budget						18,899,000 (of which 1,181,187.5 for each site)

#### 4.2.1 Monitoring roles

**Table 5.5: Monitoring roles and responsibility**

<b>Institution</b>	<b>Roles</b>	<b>Responsible department/person</b>
<b>WORLD BANK</b>	<ul style="list-style-type: none"> <li>Responsible for issuing no objection before the project implementation</li> <li>Monitoring of the implementation of ESMP</li> <li>Capacity building of MINEDUC safeguards Team and social protection unit Staff on ESMP</li> </ul>	WB Safeguards Team
<b>RDB</b>	<ul style="list-style-type: none"> <li>Issuance of the clearance certificate for the projects</li> </ul>	EIA Department
<b>MININFRA</b>	<ul style="list-style-type: none"> <li>Technical support to classrooms and latrines construction activities</li> </ul>	Staff in charge of construction
<b>MINEDUC</b>	<ul style="list-style-type: none"> <li>Review the ESMP from District and submit it to WB for no objection</li> <li>Address the comments from WB and submit it to RDB for clearance</li> <li>Monitoring of ESMP implementation</li> <li>Training of District staff on ESMP</li> <li>Report the implementation of ESMP to WB</li> </ul>	<ul style="list-style-type: none"> <li>MINEDUC Safeguard Team</li> </ul>
<b>Districts</b>	<ul style="list-style-type: none"> <li>Preparation of ESMP and submit it to MINEDUC to be reviewed and submitted to WB and RDB</li> <li>Training of stakeholders at Sector level and technicians on ESMP</li> <li>Monitoring of ESMP implementation and report to MINEDUC</li> <li>Supervise the implementation of Mitigation Plan</li> <li>Supervision of putting in place and operationalization of grievance committees</li> </ul>	<ul style="list-style-type: none"> <li>Environmental officer</li> <li>Schools Construction Engineer</li> <li>Director of Education unit</li> </ul>
<b>Sector and Cells</b>	<ul style="list-style-type: none"> <li>Training of stakeholders at Sector level and technicians on ESMP</li> <li>Monitoring of ESMP implementation and report to District</li> <li>Supervise the implementation of Mitigation Plan</li> <li>Supervision of putting in place and operationalization of grievance committees</li> </ul>	<ul style="list-style-type: none"> <li>Sector land officer</li> <li>Sector Social Protection Officer</li> <li>Executive secretary of concerned Cells</li> <li>Sector agronomist</li> </ul>
<b>Community</b>	<ul style="list-style-type: none"> <li>Execute ESMP guidelines and report any Environmental and Social issue occurred on the site to local authorities</li> <li>Election of grievance committee's members</li> </ul>	Community and Workers

## **CHAPTER V. REPORTING AND DOCUMENTATION**

The Environmental and Social Safeguards Officers (ESSO) at District level; in close collaboration with District Environmental Officer; will ensure if monthly and quarterly reports of the implementation and monitoring of the ESMP are provided timely to the Ministry which shall consolidate and submit all the reports to the World Bank as agreed in the commitment plan. The ESSO shall ensure the documentation of all designed mitigation measures in this plan. He/ She shall notify within 24 hours any incident or accident related to the project implementation or that has impact on it, and that has or could have a significant adverse effect on the environment, the affected communities, the public, or the workers included, for example, occupational accidents and electrocution.

## **CHAPTER VI. CONCLUSIONS AND RECOMMENDATIONS**

### **9.1 Conclusion**

Prior to the commencement of any sub-project or individual activity, it is required to understand the nature of the tasks involved and any hazards that may be associated with it. To ensure that all potential hazards are identified and suitably controlled or mitigated, there are 5 key process elements to be continually implemented as follows: identify the hazards; assess who may be harmed and how; evaluate the risks and decide on appropriate control measures; record the findings and implement the controls; periodically review the assessments and update as required.

Plans and procedures that describe the actions to be taken and control measures to be applied, in order to reduce risk to health and welfare of sub-project personnel and other stakeholders, resulting from construction activities to all levels, are developed and reviewed as necessary, to meet both legal and employer contract specific ESMP requirements.

Given the nature and location of the project development activities, the conclusion is that the potential impacts associated with the proposed development are of a nature and extent that can be avoided, reduced, and eliminated by the application of the proposed appropriate mitigation measures suggested; hence the construction of 59 classrooms and 84 latrines sub-projects under Quality Basic Education for Human Capital Development (QBE-HCD) Project in Nyamagabe District shall be successfully implemented.

**ANNEXES:**

**Annex 1: Occupational Health and Safety Plan**

This plan provides remedies for potential community health, safety and a security risk associated with the implementation of Rwanda QBE – HCD sub-projects and helps to provide guidance that respond and mitigate the identified risks. Under this plan all applicable laws and standards stated in legal and institutional framework shall apply. The table below shows the potential risks of sub-projects activities under QBE – HCD Project in Nyamagabe District, the proposed mitigation measures and the responsibilities. The following table summarizes the Community Health, Safety and Security Management Plan.

**Table 6: Occupational Health, Safety and Security Management Plan**

<b>Potential Risk</b>	<b>Mitigation Measures</b>	<b>Responsible</b>
The influx of new workers from outside areas to the project area will increase demand on existing health services	➤ Health services of the new workers shall be provided especially the medical insurance “Mutuelle de santé”	District in collaboration with RSSB
The influx of new workers to the area could bring with it an increase of communicable diseases.	➤ Awareness campaigns on hygiene and sanitation and how these diseases spread.	Sectors Districts
Dust from transport and vehicles and machineries on roads	➤ Control speed limits; ➤ Haul truck transporting volatile construction materials ➤ Ensure haul trucks are not overloaded and are covered where necessary;	Site environmental and social officers  Site construction engineers  District environmental officer
Road accidents	➤ Restrict speed limits 20km/hour; ➤ Erect speed control signs post; ➤ Community awareness on proper use of roads.	Traffic policy
Diffuse run-off from roads, construction areas and other disturbed areas may contain elevated concentrations of suspended solids or pollutants	➤ Ditches will channel surface water runoff to the designated areas; ➤ Maximum reuse or recycle of process waste water; ➤ Water monitoring will be conducted.	Site construction engineers
Noise will be significant during construction.	➤ Monitoring will be conducted; ➤ Operating hours of the open pit activities only during the daily hours; ➤ Speed restrictions on site traffic;	Environmental and social officer  District environmental officer
Gas emissions from project vehicles, trucks and construction	➤ Constant preventative emission control;	Environmental and social

<b>Potential Risk</b>	<b>Mitigation Measures</b>	<b>Responsible</b>
machineries	<ul style="list-style-type: none"> <li>➤ Ensure all project vehicles and trucks have valid vehicle inspection certificates,</li> </ul>	District environmental officer
Dust from construction activities including quarries and borrow pits	<ul style="list-style-type: none"> <li>➤ Sprays water to avoid lift of dust;</li> <li>➤ Workers provided with appropriate PPE.</li> </ul>	Environmental and social officer  District environmental officer
Interaction between learners and project workers	<ul style="list-style-type: none"> <li>➤ Head teacher, foreman, environmental and social officer to prevent any interactions between learners and project workers by keeping learners far from construction sites and enforcing strict security measures;</li> <li>➤ Learners plays and interactions between themselves must be from construction sites</li> <li>➤ Increase security awareness among learners and restrict them from crossing danger/warning tape.</li> </ul>	
Site intrusion, theft, and other insecurity at construction site	<ul style="list-style-type: none"> <li>➤ Put in place warning tape across construction perimeter</li> <li>➤ Ensure security of construction site by appointing security staffs 24/7 till completion of construction</li> </ul>	

## **Annex 2: Chance Finds Procedure**

Institute of National Museums of Rwanda (INMR) is responsible for recovering these items. Chance find procedures will be used as follows:

- i. Stop the construction activities in the area of the chance find;
- ii. Delineate the discovered site or area;
- iii. Secure the site to prevent any damage or loss of removable objects. In cases of removable Antiquities or sensitive remains, a night guard shall be present until the responsible local Authorities and the equivalent take over;
- iv. Notify the supervisory Engineer who in turn will notify the responsible local authorities and the General Authority of Antiquities immediately (within 24 hours or less);
- v. Responsible local authorities and the General Authority of Antiquities would be in charge of protecting and preserving the site before deciding on subsequent appropriate procedures. This would require a preliminary evaluation of the findings to be performed by the archeologists of the General Authority of Antiquities (within 72 hours). The significance and importance of the findings should be assessed according to the various criteria relevant to cultural heritage; those include the aesthetic, historic, scientific or research, social and economic values;
- vi. Decisions on how to handle the finding shall be taken by the responsible authorities and the General Authority of Antiquities. This could include changes in the layout (such as when finding an irremovable remain of cultural or archeological importance) conservation, preservation, restoration and salvage;
- vii. Implementation for the authority decision concerning the management of the finding shall be communicated in writing by the General Authority of Antiquities; and
- viii. Construction work could resume only after permission is given from the responsible local authorities and the General Authority of Antiquities concerning safeguard of the heritage.

These procedures must be referred to as standard provisions in construction contracts, when applicable, during project supervision, the Site Engineer shall monitor the above regulations relating to the treatment of any chance find encountered are observed.

**Annex 3: Grievance Redress Mechanism Log Frame Template**

**The log form to be filled by grievance redress committees**

Grievance Reference Number	Names and ID of complainant	Date for grievance reception	Means of grievance reception (SMS, Phone call, letter, email, verbal,...)	Location of grievance reception	Type of issue raised (Grievance, Concern, request, ...)	Summarized description of the complaint	Action undertaken	Date of action	Status+30 days	Status +60 days	Status+90 days

**TEMPLATE FOR CONSOLIDATED REPORT OF GRCs ACTIVITIES**

No	Names, Area of residence and ID of complainant	Date for grievance reception	Means of grievance reception (SMS, Phone call, letter, email, ...)	Type of issue raised (Grievance, Concern, request, ...)	Summarized description of the complaint	Action undertaken	Date of action	Level of GRC that took action on grievance	Status of grievance during the reporting time

**Annex 4: Reporting format of the ESMP implementation progress**

1. Sub/projects background (locations' description etc.,)
2. Actual impacts including unforeseen effects of the project
3. Level of staff awareness on operational issues relating to environmental performance
4. Overall status of environmental performance
  - List all challenges encountered so far during project implementation & lessons & learnt
  - Provide photos and pictures that illustrate the changes onsite before intervention and after intervention)
5. Recommendation for continual improvement

<b>Impact predicted</b>	<b>Proposed mitigation measures</b>	<b>Indicator</b> (Parameter to be measured)	<b>Color coding</b>	<b>Sub-project</b>	<b>Findings/Remarks</b> (Describe status of completion, Does this measure seem effective? suggest solutions where problems are encountered)
Loss of vegetation cover					
Potential risks of wasting raw materials					
Access roads					
Risk of loss of landscape scenic value and associated effects on ecosystem					
Risk of contamination by HIV/AIDS and other STDs, Sexual harassment and abuse, GBV (gender based violation)					

Valuable artefacts or culturally valuable materials					
Accidental injuries					
Deterioration of workers' health and child right violation					
Soil and groundwater pollution due to infiltration of microbes from faeces					
Risk of conflict					
Risk of insecurity at the sub project site					
Risk of exhaust emissions (e.g. Sulphur , Carbon, Nitrogen, chlorofluorocarbons,...) from truck movements					
Risk of noise and/or vibration pollution of civil works/heavy trucks to the school environment and local people					
Degradation of air quality due to the dust emissions;					
Soil erosion due to the runoff					
Generation of solid waste in the form of construction spoils					
Fire outbreak due to					

welding activities					
Soil pollution due to toxic or hazardous chemical from paints or solvents					
<b>District ESSO</b>				<b>Date/Name of reviewer:</b>	
<b>TOBE COMPLETED BY MINEDUC</b>				<b>Status of ESMP</b>	
<b>Progress monitoring-main findings</b>				<input type="checkbox"/> on schedule/completed/ahead of time <input type="checkbox"/> Slightly delayed <input type="checkbox"/> Delayed	

*Note: The progress of implementing mitigation measures should be color-coded in column 4: **Green** = On Schedule/ Ahead of Schedule/ Completed, **yellow** = Slightly Delayed, **Red** = Delayed*