# REPUBLIC OF RWANDA



# KARONGI DISTRICT

# ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP)

# FOR CONSTRUCTION OF 54 CLASSROOMS AND 60 LATRINES UNDER QUALITY BASIC EDUCATION FOR HUMAN CAPITAL DEVELOPMENT (QBEHCD) PROJECT IN KARONGI 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 Karongi District	2
1.3 Description of sub-projects activities	4
1.4 Purpose of the ESMP	6
CHAPTER II: POLICY, LEGISLATIVE AND INSTITUTIONAL FRAMEWORK	6
2.1 Institutional Framework	7
2.2 National Policy Framework	7
2.3 National Legislative Framework	7
2.4 International legislative framework	8
2.5 World Bank Environmental and Social Standards applied	8
CHAPTER III: POTENTIAL IMPACTS AND MITIGATION MEASURES	
3.1 Potential positive impacts	9
2.2 Potential negative impacts	9
CHAPTER IV: ENVIRONMENTAL AND SOCIAL MANAGEMENT/MONITORING PLAN	13
4.1 Environmental and Social Management Plan	13
4.2 Environmental and Social Monitoring Plan	25
4.2.1 Monitoring roles	38
CHAPTER V. REPORTING AND DOCUMENTATION	39
CHAPTER VI.CONCLUSIONS AND RECOMMENDATIONS	39
9.1 Conclusion	39
ANNEXES:	41
Annex 1: Occupational Health and Safety Plan	41
Annex 2: Chance Finds Procedure	43
Annex 3: Grievance Redress Mechanism Log Frame Template	44
Annex 4: Reporting format of the ESMP implementation progress	45
Annex 5; Emergency preparedness and response plan	46
Anney 6: Employee's Emergency contact information form	55

#### LIST OF ABBREVIATIONS AND ACRONYMS

**AIDS:** Acquired Immune Deficiency Syndrome

**EDPRS:** Economic Development and Poverty Reduction Strategy

**EIA:** Environmental Impact Assessment

**EMP:** Environmental Management Plan

**ESIA:** Environmental and Social Impact Assessment

**ESMP:** Environmental and Social Management Plan

**GOR:** Government of Rwanda

**HIV:** Human Immunodeficiency Virus Infection

MININFRA: Ministry of Infrastructure

**NST1:** National Strategy for Transformation

**RAPs:** Resettlement Action Plans

**RDB:** Rwanda Development Board

**REMA:** Rwanda Environmental Management Authority

**RHA:** Rwanda Housing Authority

**RLMUA:** 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	. 10
Table 3.4: Environmental and Social Management Plan for generic impacts for construction classrooms and latrines in Karongi District	. 15
Table 4.4: Environmental and Social Monitoring Plan for construction of classrooms and latrines i Karongi District	
Table 5.5: Monitoring roles and responsibility	. 38
Table 6: Occupational Health, Safety and Security Management Plan	41

## LIST OF FIGURES

C:	. 1 1. 1 1	C IZ	district
⊢1011re	i i i Administrative ma	an of Karongi	district
LISUIV	<i>,</i> 1.1. <i>1</i> tanining a at <i>i</i> c in	ap or ixurongi	C15t11ct

#### **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 learns' home. As the project will be implemented across Rwanda, part of sub-projects will be constructed in Karongi District of Western Province, those include 54 classrooms and 60 latrines among others.

Karongi 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.

#### 1.2 Overview of Karongi District

Karongi District is one of the seven Districts in the Western Province. It is bordered by Rutsiro to the north, Ngororero and Muhanga districts to the north-east, Nyamasheke and Nyamagabe districts to the south, Ruhango district to east and it borders with the Democratic Republic of Congo and Lake Kivu to the west. Karongi District stretches over an area of 993 km² with a population of 331, 808 distributed into 77000 households. Karongi District is divided into 13 administrative sectors (Imirenge), It is subdivided into 88 cells (Akagari) and 538villages (Imidugudu).

# KARONGI DISTRICT ADMINISTRATIVE MAP RUTSIRO NGORORERO Rubengera Bwishyura Rugabano Murundi Gitesi Gishyita Rwankuba RUHANGO Ruganda Mutuntu NYAMASHEKE NYAMAGABE Sector\_Boundaries\_Karongi District\_boundaries MINEDUC November, 2019 Kilometers

Figure 1.1: Administrative map of Karongi district

Karongi District stretches over an area of 993 km² with a population of 331,571, composed of 175,684 females and 155,887 males, which represent a Sex Ratio of 89 and distributed into 77000 households. It is among the districts of Rwanda which has a high density of 334 persons per square kilometer and faces to the demographic growth with average annual growth rate of 1.7 %. The majority of the population of Karongi District is young, with 80% of the population aged less than 40 years old. About 54% of the population is aged 19 years or younger. People aged 65 years and above make up 5% of the population.

Karongi District experiences tropical climate of high altitude. It is one of Rwanda regions which have high rainfall. The amount of rainfall in the district benefits the area and It is characterized by two dry seasons covering the period from December to January and from June to mid-September, and It is also characterized by two rainy seasons the long rains start in mid-September and end in December and from February to June with an annual average of temperature varying from 16°C to 21° 5C Annual rain falls ranging from 1100 to 1500 mm, thus these features are favorable to agriculture and livestock development.

In Karongi, agriculture and livestock farming remain the key economic activities. First, agriculture encounters many people who are independent farmers, at least 73.7 of households depend mainly on the revenues from agricultural activities- this implies that 85.2% of the households are involved in agriculture. Among the export crops, coffee, tea and macadamia are the main commercial crops found in the area while food crops produced in the area comprise of maize, sorghum, beans, soya beans, peas, irish potatoes, bananas, cassava, wheat, vegetables and fruit trees. The main crops that are cultivated on large land by most of farmers include beans, sorghum, soya beans, legumes, bananas, maize, potatoes, peas, and wheat and fruit trees. In rural areas, farmers rear some animals such as cows, sheep, goats, pigs, and poultry.

Karongi district is characterized by the high lands area with steep features and has an altitude varying between 1470 to 2200 metres. On one hand, the topographical characteristics allow the district to be faced with soil erosion. The various land uses decrease forest area accentuate the erosion phenomena, bring heavy siltation downstream, and in some cases, the floods may occur.

In Karongi, 30.3% of pupils have access to primary school infrastructures, by spending more time that varies between 30 and 59 minutes and 10 % use one hour and above. In many cases, this distance from school infrastructures to their houses would increase the drop out of pupils who do not continue in the secondary schools. In addition to that, the household poverty is an issue because most of pupils do not have means to access to secondary schools in which payment requires great school fees. These secondary schools are very expensive and poor people are not able to afford these expenses

#### 1.3 Description of sub-projects activities

The project will finance works of 14 subprojects which consist of construction of 54 classrooms and 60 latrines in 9 sectors namely Gishyita, Gitesi, Murundi, Rwankuba, Rubengera, Gashali, Bwishyura, Ruganda, Murambisectors. Currently, the issues of overcrowding to schools have been noticed as major factors that inhibit learning in Karongi 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 learns' homes and schools in Karongi 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 EP GISIZA	EP GISIZA	GISHYITA	CYANYA	GISIZA
2	Construction of 5 classrooms and 6 latrines at EP GITEGA	EP GITEGA	GITEGA	BUGOBERI	NYABIKENKE
3	Construction of 2 classrooms and 12 latrines at EP MUJYOJYO	EP MUJYOJYO	MURUNDI	KABAYA	MUJYOJYO
4	Construction of 4 classrooms and 12 latrines at GS BIGUGU	GS BIGUGU	RWANKUBA	BIGUGU	RUHUHA
5	Construction of 5 classrooms and 6 latrines at GS BISESERO	GS BISESERO	RWANKUBA	BISESERO	JURWE
6	Construction of 3 classrooms at EP GITESI	EP GITESI	GITESI	MUNANIRA	GISIZA
7	Construction of 4 classrooms and 12 latrines at GS KIBIRIZI	GS KIBIRIZI	RUBENGERA	KIBIRIZI	KAMUSANGA NYA
8	Construction of 5 classrooms and 6 latrines at GS MWENDO	GS MWENDO	GASHALI	MWENDO	KABAGENI

No	Sub Project names	School Name	Location				
			Sector	Cell	Village		
9	Construction of 2	GS	BWISHURA	BURINGA	NYABIKENKE		
	classrooms at GS	NYABIKENK					
	NYABIKENKE	Е					
10	Construction of 4	GS	RUGANDA	NYABIKERI	NYABIKERI		
	Classrooms at GS	NYABIKERI					
	NYABIKERI						
11	Construction of 2	GS	BWISHYURA	KINIHA	NYEGABO		
	classrooms at GS	NYEGABO					
	NYEGABO						
12	Construction of 3	GS RUBAZO	RWANKUBA	RUBAZO	NYARUYAGA		
	classrooms and 6 latrines						
	at GS RUBAZO						
13	Construction of 7	GS	BWISHURA	RUYENZI	GITEGA		
	classrooms at GS	RURAGWE					
	RURAGWE						
14	Construction of 4	GS	MURUNDI	NZARATSI	GATWARO		
	classrooms at GS	WITONGO					
	WITONGO						

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  $N^{\circ}290/03$  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 subprojects to be implemented in Karongi 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

Potential Impacts/issues	M	anagement/Mitigation Measures
Acquisition of non-governmental land	•	Sign consent form by religious organizations as per
for construction/extension of schools		Prime Minister's order n°290/03 of 13/11/2015
that belong to religious organizations.		
Loss of vegetation cover	•	Clear only the area designed for classrooms and
		latrines construction
	•	Preserve (or stockpile) excavated topsoil for future
		site restoration procedures;
	•	Greening by grasses
Potential risks of wasting raw materials	•	Accurate estimate of needed materials
	•	Get supply of raw-materials (such as sand, stones,
		bricks, etc.) from authorized suppliers and sites
Access roads	•	Locate access roads in consultation with local
		community and officials
Risk of loss of landscape scenic value	•	Hold top soils and vegetation matter near quarries,
and associated effects on ecosystem		borrow pits and dumping sites
	•	Rehabilitate (green landscaping) the borrow pits,
		quarries and dumping sites at the end of construction
		activities
1	•	
Accidental injuries	•	
		_
	•	
		· ·
		•
		•
Deterioration of workers' health and	•	
	•	_
		lunch;
	•	Child labor should be avoided at all stages of
Valuable artefacts or culturally valuable materials  Accidental injuries  Deterioration of workers' health and child right violation		·

	' / 1'11 1 10 11
	construction (child under 18years old)
	• Fair treatment of workers and provision of safe and
	health working condition
	Respect of working hours
Risk of conflict	• Local residents will be given the priority during
	workforce selection;
	Wearing uniform (jacket)
	Grievance redress mechanism
Risk of insecurity at the sub project site	Ensure only authorized personnel get to site
	Ensure security persons are available on the site
Risk of contamination by HIV/AIDS	Sensitize site workers on HIV/AIDS, Sexual
and other STDs, Sexual harassment and	harassment and abuse, GBV (gender based violation)
abuse, GBV (gender based violation)	to avoid negative effects from social& multicultural
_	inclusion at the area.
	• Voluntary testing to determine HIV status;
	counselling at existing medical facilities;
	Enforce and sensitize code of conducts
Poor hygiene and sanitation	Provide means for handling waste generated by
	construction workers
	Avail handwashing facilities
	Always keep clean toilets
	• Install toilets away from rivers or areas with shallow
	groundwater
	Sensitize workers about handwashing culture
Risk of exhaust emissions (e.g. Sulphur,	Before hiring a supplier, make sure that his/her
Carbon, Nitrogen,	vehicle has a valid vehicle technical control
chlorofluorocarbons,) from truck	certificate
movements	Sensitize drivers to avoid unnecessary racing of
movements	vehicle engines at loading/offloading points and
	parking areas;
Risk of noise and/or vibration pollution	<ul> <li>Notify and coordinate with local people adjacent to</li> </ul>
of civil works/heavy trucks to the school	sub-project sites and school administration to inform
_	them of the possibility of temporary noise disruption
environment and local people	
	& related issues, and how to report complaints if any;
	• Limit civil work activities to daytime hours to the
	extent feasible;
	Sensitize vehicle drivers to switch off engines when  the relation parked.
	the vehicle is parked;
	Perform welding and other noise producing activities

	during weekend in order to minimize noise pollution during school days
Degradation of air quality due to the dust emissions;	<ul> <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> <li>Reduce vehicle speed in working area</li> </ul>
Soil erosion due to the runoff	<ul> <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> <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> <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> <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	Proper construction of foundation and walls for pit by cementing

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 emergency preparedness and response plan, 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 four sites (GS Bisesero, GS Kibirizi, GS Mwendo and GS Nyegabo). For the rest subprojects sites which are mostly owned by different religious organizations (EP Gisiza, EP Gitega, EP Mujyojyo, GS Bigugu, EP Gitesi, GS Nyabikenke, GS Nyabikeri, GS Rubazo, GS Ruragwe, GS Witongo) there is no government land but religious institution Land. But in collaboration with the Religious institution 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 Karongi District

Sub-Project Phase	Sub-Project Activity	Potential Impacts/issues	Management/Mitigation Measures	Implementation responsibility	Time Frame	Estimated Grant (France)
Pre-construction phase	Avail land for 12 sub-project sites from religious organizations at (EP Gisiza, EP Gitega, EP Mujyojyo, GS Bigugu, EP Gitesi, GS Nyabikenke, GS Nyabikeri, GS Rubazo, GS Ruragwe, GS Witongo) Site clearing	Religious Land use for 12 subprojects for classrooms and latrines construction		Religious Legal Representative, Government of Rwanda	Before commencing civil works	Cost (Frw) No cost  1 502 000(of
	Site clearing	vegetation cover	designed for classrooms and latrines construction  • Preserve (or stockpile) excavated topsoil for future site restoration procedures;	Head Teacher	clearance	which 28,000 per one Classroom)

			•	Greening by grasses			
Construction phase	Extraction and transportation of materials	Potential risks of wasting raw materials	•	Accurate estimate of needed materials  Get supply of rawmaterials (such as sand, stones, bricks, etc.) from authorized suppliers and sites	Foreman,  School construction officer	During construction period	No cost
		Access roads	•	Locate access roads in consultation with local community and officials	Foreman, School construction officer, Suppliers with local community	During construction period	No cost
		Risk of loss of landscape scenic value and associated	•	Hold top soils and vegetation matter near quarries, borrow pits and dumping sites	Suppliers	During implementati on of the sub project activities	No cost

	effects on ecosystem	<ul> <li>Rehabilitate (green landscaping) the borrow pits, quarries and dumping sites at the end of construction activities</li> </ul> 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	• Use and follow chance find procedures as per the ESCP  Foreman, School construction officer  Prior to & during excavation	2,800, 000 (of which 200,000 per site)
	Accidental injuries	Checking daily if the materials are in good conditions before starting the activities,      Checking daily if the Foreman, School Head Teacher  Head Teacher	No cost
		• Equip all site workers with Individual protective equipment (such as boots, helmets, and high visibility jackets)  During the timeframe of the implementati on of the project	Workers will be provided Personal Protective Equipment
		<ul> <li>Avail first aid kit on-site,</li> <li>Ensure that all workers have medical insurance</li> </ul>	6,451,200 (460,800 per

			such as "Mutuelle de santé", RAMA or any				sites)
			other recognized medical insurance				
		•	Ensure provision of regular briefing on occupational health and safety to workers				No cost
		•	Having distance between workers				No cost
	Deterioration of workers' health and child right violation		The site will be provided with clean drinking water  Construction workers should be given break to go for lunch;  Child labor should be avoided at all stages of construction (child under 18 years old)	School Teacher, Foreman, Safeguards T	Head eam	During sub- project implementati on	252, 000 Frw (of which 18,000 per site)
		•	Fair treatment of workers and provision of safe and health working condition				

Risk of conflict	•	Respect of working hours  Local residents will be	Foreman, School		
	•	given the priority during workforce selection; Wearing uniform (jacket) Grievance redress mechanism	Head Teacher and Social Safeguard Team	During the timeframe of the implementati on of the project	No cost  No cost
Risk of insecurity at the sub project site	•	Ensure only authorized personnel get to site  Ensure security persons are available on the site	Foreman ,Local Authorities	During the timeframe of the implementati on of the project	A,200,000(of which 300,000 per site)
Risk of contamination by HIV/AIDS and other STDs, Sexual harassment and abuse, GBV (gender based violation)	•	Sensitize site workers on HIV/AIDS, Sexual harassment and abuse, GBV (gender based violation) to avoid negative effects from social& multicultural inclusion at the area.  Voluntary testing to determine HIV status;	Teacher, Foreman ,Health Centers,	During the timeframe of the implementati on of the project	No cost

	counselling at existing medical facilities;  • Enforce and sensitize code of conducts	
Poor hygiene and sanitation	<ul> <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> <li>Social affairs at buring the timeframe of the teacher, Foreman implementati on of the sub-project</li> </ul>	1 260,000 (of which 90,000 per site)
Risk of exhaust emissions (e.g. Sulphur , Carbon, Nitrogen, chlorofluorocar bons,) from truck movements	<ul> <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> <li>Foreman, National police, District on of the activities</li> <li>Environmental and Social Safeguards</li> <li>Officer</li> </ul>	No cost

Risk of noise and/or vibration pollution of civil works/heavy trucks to the school environment and local people	with local people adjacent to sub-project sites and school administration to inform them of the possibility of temporary noise disruption & related issues, and how to report complaints if any;  • Limit civil work activities to daytime hours to the extent feasible;  • Sensitize vehicle drivers to switch off engines when the vehicle is parked;  • Perform welding and other noise producing activities during weekend in order to minimize	No cost

		Degradation of air quality due to the dust emissions;	•	Manual compaction of unstable soil  Watering while soil works and construction are being executed and where dust is emitted;  Reduce vehicle speed in working area	Foreman, drivers, Traffic Police, safeguards team	During implementati on of the sub project activities	No cost  336 000 (24,000 per site)
		Soil erosion due to the runoff	•	Installation of rain water harvesting system (Water tanks and waterways)  Plantation of ornamental trees and grasses on exposed slopes	MINEDUC in collaboration with, FONERWA, MINEMA, Ministry of Environment, Districts, School head teacher, Foreman	During the timeframe of the implementati on of the sub-project	21,600,000 (one tank cost 1,200,000) 278,250(of which 19,875 per site)
Construction	Elevation of walls, roof trusses, roof covering, Fixing windows and doors, internal and external	Generation of solid waste in the form of construction spoils	•	Implement 3R principles (Reducing, reusing, recycling) wastes;  Avail solid waste bins and sort garbage according different categories (e-wastes,	District Environmental Officer, School head teacher, Foreman	During the timeframe of the implementati on of the project	No cost

finishing and pavement.		chemicals, plastics, metals, glasses papers/wood and biodegradable wastes);  • Dispose of solid waste to	
	Fire outbreak due to welding activities	<ul> <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</li> </ul>	No cost
Painting	Soil pollution due to toxic or hazardous chemical from paints or solvents	<ul> <li>Hazardous/toxic materials shall be stored in appropriate containers/stores with clearly visible labels; &amp; regularly inspect for signs of leaks.</li> <li>District Environmental timeframe of the sub-projects</li> <li>Disposal of waste from paint in existing toxic liquid waste pit</li> </ul>	No cost

			<ul> <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 PPEs</li> </ul>		1 400,000 ( of which 100,000 per site)
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	During pit cementing and foundation works	6 399 960(of which 106,666 per Latrine)
Total estimated budget					46 489 410 (of which 3,320,672 for each site).

### 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 Karongi 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 Karongi District

Sub-	Potential impacts		Monitoring	Frequency/	Responsible	Estimated
project		Management/	indicator	Time frame		cost (Frw)
phase		Mitigation Measures				
Pre-	Religious land use 12	Sign consent form by	Number of	Before the	Monitoring and	No cost
constructio	sub-project sites	religious organizations	signed	commenceme	Evaluation Specialist	
n phase	(EP Gisiza,	as per Prime Minister's	consent form	nt of civil	and Social safeguards	
	EP Gitega,	order n°290/03 of		works	Specialist/MINEDUC	
	EP Mujyojyo,	13/11/2015				
	GS Bigugu,					
	EP Gitesi,					
	GS Nyabikenke,					
	GS Nyabikeri,					
	GS Rubazo,					
	GS Ruragwe,					
	GS Witongo) for					
	classrooms and					
	latrines construction					

	Loss of vegetation cover	•	Clear only the area designed for classrooms and latrines construction  Preserve (or stockpile) excavated topsoil for future site restoration procedures;  Greening by grasses	Area cleared in square meter  Quantity of excavated soil in cubic meter  Area greened in square meter	Once Once Once(after construction works)	Local authorities, Foreman and MINEDUC Safeguards Team	1 134 000 (of which 81000 per site)
Constructio n phase	Potential risks of wasting raw materials  Access roads	•	Accurate estimate of needed materials  Get supply of rawmaterials (such as sand, stones, bricks, etc.) from authorized suppliers and sites  Locate access roads in consultation with local community	Quantity of remaining materials  Number of complaints	Monthly	Foreman	No cost

		and officials				
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;	All accumulated top soils and vegetation matter used for rehabilitation	Once after construction works	Local authorities, Foreman, Suppliers and MINEDUC Safeguards Team	1 400,000 (of which 100,000 per site
	•	Rehabilitate (green landscaping) the borrow pits, quarries and dumping sites at the end of construction activities	of sites; Rehabilitated area in square meter			
Valuable artefacts or culturally valuable materials	•	Use and follow chance find procedures as per the ESCP	Number of complains	During construction period	Local authority , MINEDUC safeguards Team	No cost
Accidental injuries	•	Checking daily if the materials are in good conditions before starting the activities,  Equip all site	Number of Materials in good condition	Daily	Local authorities, Foreman, schools' construction Engineers, and MINEDUC Safeguards Team	no cost

	T	1	
workers with		Daily	
Individual	workers with		
protective	personnel		
equipment (such as	protective		
boots, helmets and	equipment		
high visibility			
jackets);		Daily	
	Number of	Daily	
• Avail first aid kit	first aid kit		
on-site,	on site		
. Engage 41-4 11		Daily	
• Ensure that all	Number of		
workers have	workers with		
medical insurance	medical		
such as "Mutuelle	Insurance		
de santé", RAMA			
or any other			
recognized medical			
insurance		Daily	
	Number of		
• Ensure provision of	briefings on		
regular briefing on	safety to		
occupational health	workers		
and safety to	provided		
workers		Daily	
		Daily	
	Distance in		

Deterioration of workers' health and child right violation		Having distance between workers The site will be provided with clean drinking water	meter  Quantity of drinking water in jericans	Daily	Local authorities, Foreman and MINEDUC	310,625(of which 22,187.5 per site)
child right violation	•	Construction workers should be given break to go for lunch;	Number of hours for break	Daily	Safeguards Team	
	•	Child labor should be avoided at all stages of construction (child under 18 years old)	Number of checking made on site	Daily		
	•	Fair treatment of workers and provision of safe and health working condition	Number of complains resolved	Daily  Daily		
	•	Respect of working hours	Number of working hours/day			

Risk of conflict	•	Local residents will	Number of	Once, during	Local authorities, Site	No cost
		be given the	local	recruitment	supervisor and	
		priority during	residents on		MINEDUC	
		workforce	work		Safeguards Team	
		selection;				
				5		
	•	Wearing uniform	Number of	Daily		
		(jacket)	workers with			
			jackets			
			Number of	Daily		
	•	Grievance Redress	grievances			
		Mechanism	resolved			
			10001100			
Risk of insecurity at	•	Ensure only	Entry	Daily	Local authorities,	4,200
the sub project site		authorized	Register		foreman and	000(of
		personnel get to	book		MINEDUC	which
		site,			Safeguards Team	300,000
			Contract of			per site)
	•	Ensure security	security			
		persons are	personnel			
		available on the site	employed			
Risk of contamination	•	Sensitize site	Minutes and	Monthly	Local authorities,	2 100
by HIV/AIDS and		workers on	attendance		Health Centers,	000(of
other STDs, Sexual		HIV/AIDS, Sexual	lists		Foreman and	which
harassment and abuse,		harassment and			MINEDUC	150,000
GBV (gender based		abuse, GBV			Safeguards Team	per site)
		(gender based				

violation)	violation) to avoid negative effects from social& multicultural inclusion at the area;  • Voluntary testing to determine HIV status; counselling at existing medical facilities;	Number of voluntary tested personnel  Number of Site	Monthly		
	• Enforce and sensitize code of conducts	supervision			
Poor hygiene and sanitation	<ul> <li>Avail handwashing facilities;</li> <li>Always keep clean toilets;</li> </ul>	Number of handwashing facilities on site  Cleanliness	Daily Daily	Local authorities, Foreman, head teachers and MINEDUC Safeguards Team	420 000 ( of which 30,000 per site)
	Install toilets away from rivers or areas with shallow groundwater;	Field visit report	Once during project startup		

	•	Sensitize workers about handwashing culture	Minute and attendance list	Monthly		
Risk of exhaust emissions (e.g. Sulphur, Carbon, Nitrogen, chlorofluorocarbons,)	•	Before hiring a supplier, make sure that his/her vehicle has a valid vehicle technical control certificate;  Sensitize drivers to avoid unnecessary racing of vehicle engines at loading/offloading points and parking areas;	Inspection report  Minute and attendance lists	Daily	Local authorities, traffic police, foreman and MINEDUC Safeguards Team District Environmental officer	4 200 000( of which 300,000 per site)
Risk of noise and vibration pollution of heavy trucks to the school environment and local people		Notify and coordinate with local people adjacent to subproject sites and school administration to inform them of the possibility of	Number of complaints raised and resolved about noise and vibration	Daily	Local authorities, Foreman and MINEDUC Safeguards Team	105 000 (of which 7500 per site)

		•	temporary noise disruption & related issues, and how to report complaints if any;  Limit civil work activities to daytime hours to						
		•	the extent feasible;  Sensitize vehicle drivers, operators to switch off engines when the vehicle is parked;						
		•	Perform welding and other noise producing activities during weekend in order to minimize noise pollution during school days						
qua	egradation of air ality due to the dust issions;	•	Manual compaction of unstable soil;	Area of compacted soil in square	Daily	Local Fore MINEDU	authorities, man and JC	1 000(of which	050

	•	Watering while soil works and construction are being executed and where dust is emitted;  Reduce vehicle speed in working area			Safeguards Team	75,000 per site)
Soil erosion due trunoff	•	Installation of rain water harvesting system (Water tanks and waterways).  Plantation of ornamental trees and grasses on exposed slopes	Number of installed water tanks  Number of planted ornamental trees	Monthly	Local authorities, Foreman and MINEDUC Safeguards Team	45 000 of which (7,500 per site)
Generation of waste in the for		Implement 3R principles	Awareness provided for	Twice a week	District Environmental	75 000 (of which

construction spoils		(Reducing, reusing,	workers on		Officer, L	ocal	12,500	per
-		recycling) wastes;	3R principles		authorities,	Site	site)	
	•	Avail solid waste bins and sort garbage according different categories (e-wastes, chemicals, plastics, metals, glasses papers/wood and biodegradable wastes);	Number of solid waste bins and garbage on site	Daily	Foreman MINEDUC Safeguards Team	and		
	•	Dispose of solid waste to existing dumpsite	Amount of solid waste disposed at existing dumpsite	Weekly				
Fire outbreak due to welding activities	•	Avail sand and water on site for fire fighting  Employ of skilled people in welding activities'	Quantity of sand and water in cubic meter	Daily	Local authorities, supervisor MINEDUC Safeguards Team	Site and	98 000 which 7,000 site)	o(of

	•	Ensure a quick contact to concerned security institution in case of strong fire outbreak				
Soil pollution due to toxic or hazardous chemical from paints or solvents	•	Hazardous/toxic materials shall be stored in appropriate containers/stores with clearly visible labels; & regularly inspect for signs of leaks. Disposal of waste from paint in existing toxic liquid waste pit;  Company certified in collected waste will be hired in collecting the produced waste wherever possible;	Quantity of waste disposed in existing toxic liquid waste pit.	Monthly	Local authorities, foreman and MINEDUC Safeguards Team	196,000 (of which 14,000 per site)

		•	Work closely with the district hospital in handling hazardous waste  Provide training on management of all hazardous chemicals/materials and wastes for workers including use of Personal	Number of personnel protective equipment	Monthly			
			Protective Equipment.					
Operation	Soil and groundwater pollution due to infiltration of microbes from toilets	•	Cementing the walls of pit	Inspection report	Once after completion	Local foreman MINEDU Safeguard	98,000 ( which 7,000 p site)	0f per
Total estimated budget							15 311 6 (of whith 1 093 6 for easite)	ch 88

# **4.2.1** Monitoring roles

Table 5.5: Monitoring roles and responsibility

Institution	Roles	Responsible
		department/person
WORLD	• Responsible for issuing no objection before the project	WB Safeguards
BANK	implementation	Team
	<ul> <li>Monitoring of the implementation of ESMP</li> </ul>	
	• Capacity building of MINEDUC safeguards Team and	
	social protection unit Staff on ESMP	
RDB	• Issuance of the clearance certificate for the projects	EIA Department
MININFRA	• Technical support to classrooms and latrines	Staff in charge of
	construction activities	construction
MINEDUC	• Review the ESMP from District and submit it to WB	• MINEDUC
	for no objection	Safeguard Team
	• Address the comments from WB and submit it to RDB	
	for clearance	
	<ul> <li>Monitoring of ESMP implementation</li> </ul>	
	<ul> <li>Training of District staff on ESMP</li> </ul>	
	• Report the implementation of ESMP to WB	
Districts	• Preparation of ESMP and submit it to MINEDUC to be	Environmental
	reviewed and submitted to WB and RDB	officer
	• Training of stakeholders at Sector level and technicians	• Schools
	on ESMP	Construction
	• Monitoring of ESMP implementation and report to	Engineer
	MINEDUC	• Director of
	• Supervise the implementation of Mitigation Plan	Education unit
	• Supervision of putting in place and operationalization	
	of grievance committees	
Sector and	• Training of stakeholders at Sector level and technicians	
Cells	on ESMP	officer
	Monitoring of ESMP implementation and report to	• Sector Social
	District	Protection Officer
	Supervise the implementation of Mitigation Plan	• Executive
	• Supervision of putting in place and operationalization	secretary of
	of grievance committees	concerned Cells
		• Sector

		agronomist								
	• Execute ESMP guidelines and report any	Community and								
Community	Environmental and Social issue occurred on the site to	Environmental and Social issue occurred on the site to Workers								
	local authorities									
	Election of grievance committee's members									

#### 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 54 classrooms and 60 latrines sub-projects under Quality Basic Education for Human Capital Development (QBE-HCD) Project in Karongi 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 Karongi 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

Potential Risk	Mitigation Measures	Responsible
The influx of new workers	➤ Health services of the new workers	District in
from outside areas to the	shall be provided especially the	collaboration with
project area will increase	medical insurance "Mutuelle de	RSSB
demand on existing health	santé"	
services		
The influx of new workers to	> Awareness campaigns on hygiene	Sectors
the area could bring with it an	and sanitation and how these	Districts
increase of communicable	diseases spread.	
diseases.		
Dust from transport and	Control speed limits;	Site environmental
vehicles and machineries on	> Haul truck transporting volatile	and social officers
roads	construction materials	
	> Ensure haul trucks are not	Site construction
	overloaded and are covered where	engineers
	necessary;	
		District
		environmental
		officer
Road accidents	➤ Restrict speed limits 20km/hour;	Traffic policy
	Erect speed control signs post;	
	> Community awareness on proper	
	use of roads.	

Potential Risk	Mitigation Measures	Responsible
Diffuse run-off from roads,	> Ditches will channel surface water	Site construction
construction areas and other	runoff to the designated areas;	engineers
disturbed areas may contain	Maximum reuse or recycle of	
elevated concentrations of	process waste water;	
suspended solids or pollutants	➤ Water monitoring will be conducted.	
Noise will be significant	Monitoring will be conducted;	Environmental and
during construction.	Operating hours of the open pit activities only during the daily	social officer
	hours;	District
	> Speed restrictions on site traffic;	environmental
		officer
Gas emissions from project vehicles, trucks and construction machineries	<ul><li>Constant preventative emission control;</li><li>Ensure all project vehicles and</li></ul>	Environmental and social
	trucks have valid vehicle inspection	District
	certificates,	environmental
	,	officer
Dust from construction	> Sprays water to avoid lift of dust;	Environmental and
activities including quarries and borrow pits	Workers provided with appropriate PPE.	social officer
-		District
		environmental
		officer
Interaction between learns and project workers	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;	
	> Learners plays and interactions	
	between themselves must be from construction sites	
	> Increase security awareness among	
	learners and restrict them from	
	crossing danger/warning tape.	
Site intrusion, theft, and other	> Put in place warning tape across	

Potential Risk	Mitigation Measures	Responsible
insecurity at construction site	construction perimeter	
	➤ Ensure security of construction site	
	by appointing security staffs 24/7	
	till completion of construction	

#### **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

Griev	Nam	Date	Means of	Loc	Type of	Sum	Action	Dat	Statu	Status	Statu
ance	es	for	grievance	atio	issue	mari	undert	e of	s+30	+60	s+90
Refer	and	griev	reception	n of	raised	zed	aken	acti	days	days	days
ence	ID	ance	(SMS,	grie	(Grieva	desc		on			
Num	of	rece	Phone	van	nce,	ripti					
ber	com	ption	call,l etter,	ce	Concer	on of					
	plai		email,	rece	n,	the					
	nant		verbal,)	ptio	request,	com					
				n	)	plain					
						t					

### TEMPLATE FOR CONSOLIDATED REPORT OF GRCs ACTIVITIES

N	Names,	Date	Means	Type of	Summari	Action	Date	Level	Status
О	Area of	for	of	issue	zed	undertak	of	of	of
	residence	grievan	grievan	raised	descriptio	en	actio	GRC	grievan
	and ID of	ce	ce	(Grievan	n of the		n	that	ce
	complain	recepti	recepti	ce,	complaint			took	during
	ant	on	on	Concern,				action	the
			(SMS,	request,				on	reporti
			Phone	)				grievan	ng time
			call,					ce	
			letter,						
			email,						
			)						

### **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

Impact	Proposed	Indicator	Color	Sub-	Findings/Remarks	
predicted	mitigation	(Parameter	coding	project	(Describe status of	
	measures	to be			completion, Does this	
		measured)			measure seem effective?	
					suggest solutions where	
					problems are encountered)	
<b>District ESSO</b>				Date/Name of reviewer:		
TOBE COMPI	LETED BY M	INEDUC		Status of ESMP		
Progress monit	oring - main	findings:				
	S	☐ Onschedule/completed/ahead				
		of time				
		☐ slightly delayed				
		☐ slightly 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

Annex 5; Emergency preparedness and response plan

Item	Scenario requiring emergency preparedness	Emergency actions/response	Responsible person	Resources Required (Equipment, materials, Personnel, etc.)
Hazard and risks	Potential hazards and risks at site/workplace	<ul> <li>Identifying existing or potential hazards and ensuring that these risks are removed;</li> <li>Conducts regular audits of the workplace;</li> <li>Employees may bring forward health and safety concerns to the site supervisor/Forman or to Employee meetings through the Employees' supervisor/Forman</li> </ul>	Environmental and Social Safeguard Officers (ESSO), School Construction Field Office (SCFO), District School Construction Engineer (DSCE), District Environment Officer (DEO), District Disaster Management Officer (DDMO) and Foreman	<ul> <li>Risk     assessment     Checklist,</li> <li>Audit     Checklist,</li> </ul>
Employees training	Unprofessional behavior at work place and lack of basic ergonomics	<ul> <li>Employee/Workers, volunteers, and visitors will be oriented to the Emergency Response Plan and notified of any updates;</li> <li>Employee will undertake regular drills in order to be prepared in the event of a real emergency;</li> <li>Employees meetings will regularly address potential emergency concerns and responses.</li> </ul>	ESSO, SCFO, DSCE, DDMO and Foreman	• Banners, Pull-up, Sample PPE

Emergency Contact List	Lack of emergency contact list	•	All Employees will be asked to complete a confidential emergency contact information form. The form will be kept secure and confidential by the site Foreman and used only in the event of an emergency.  The emergency telephone number of police and ambulance, will be displayed and clearly seen	Foreman	Register, logbooks
Warning		•	by everyone on sign post at work area/site  The foreman will blow a whistle to alert The	Foreman,	<ul><li>Sign post</li><li>Whistle</li></ul>
systems			construction site workers in case of emergency that requires attention, evacuation, etc.	Toreman,	Whistie
	Lack of facility to cease fire	•	Avail enough sands and water to be used in case of fire accidents;  Proper collaboration with Police department of fire brigade in case of emergency response that is beyond site capacity to cease fire	Foreman	Sand and     Water
		•	First aid kits to be kept onsite all the time and checked on regular basis. The kits shall be equipped with all recommended content (cotton, ointment, scissors, bandage, alcohol, antibiotics, disposable gloves, disposable mask, painkiller, Band-Aid/sticking plaster)	Foreman, SCFO,	• Fully equipped First Aid Kit
Response Equipment/ materials	Lack of First-Aid facilities	•	The school construction field officer, environmental and social safeguard officer and foreman will assign two people among employees/workers for each site to take the		

		responsibility to use the first aid kit. The team will ensure the kit users are equipped with basic knowledge to use the kit through collaboration with a nearby health center.		Two selected people from employees
Essential project Documents	Damage of essential project documents	All essential project documents will be stored and kept in safe place. These documents would be considered essential to the project operations and would cause considerable inconvenience if lost or damaged. These include: drawing designs, safeguard documents, construction manuals, code of conduct, contracts of workers, log books/registers, card stock, etc.	• Foreman	Metallic box
	Non-life threatening situations (power failure, technical failures)	<ul> <li>Discuss response plan with the construction engineer, environmental officer and Foreman;</li> <li>Ensure that all project Employees/workers are informed about the response plan;</li> <li>If need be, contact employees through emergency contact information provided by each Employee</li> </ul>	SCFO, DSCE, ESSO, District Environmental Officer (DEO), District Disaster Management Officer (DDMO) and Foreman	<ul> <li>Employee emergency contact,</li> <li>Emergency preparedness plan</li> </ul>
<b>Emergency</b> situations	Advanced warning including severe and potentially hazardous weather conditions (e.g. storms, fire), Infectious disease	<ul> <li>Discuss response plan with the construction engineer, environmental officer and Foreman or refer to previously assigned response plan;</li> <li>Ensure that all project Employees/workers are informed about the response, anticipated timeline for return to work, offsite meeting space, etc.</li> </ul>	ESSO,DEO, DDMO SCFO, Foreman	• Employee emergency contact,

		1	
outbreak	• Contact Employees through emergency contact information provided by each Employee		
Personal medical emergency; examples for this situation include heart attack, stroke, anaphylactic shock, personal injury at the work place	<ul> <li>Immediately ensure contact to emergency medical services (EMS) and that onsite first aid is administered until EMS Personnel/staff arrive;</li> <li>Ensure that the individual's emergency contacts are informed unless otherwise requested by the individual;</li> <li>Complete an accident report and send it to MINEDUC</li> </ul>	Foreman, ESSOs and SCFO	<ul><li>Cell phone</li><li>First aid kit</li></ul>
Spontaneous dangerous events; this include  On site fire, bom threat, explosions intruder threat workplace violence, hazardous materials, suspicious packages etc.; Off site terrorist attack hazardous materials withi		Foreman, RNP, RDF, Local Authority, DDMO and ESSOs	• Cell phone

vicinity etc.		
Evacuation	When the Foreman as Emergency Coordinator (EC) alerts Employees and visitors to evacuate the project site; everyone:	Foreman, Local Authority, SCFO, DEO, DDMO and ESSOs
Procedures	<ul> <li>Stop working immediately and listen to the EC's instructions;</li> <li>Leave your workstation or office immediately – do not stay behind to finish work;</li> <li>If possible secure confidential information, valuables and appropriate clothing when evacuating but do not hesitate;</li> <li>Close office door as you leave;</li> <li>Congregate at the assembly area (to be determined);</li> <li>If you are not in your regular work area, do not attempt to return to it;</li> <li>Emergency Coordinator or Foreman will make of a head count (including visitors, consultants) is done at that time at site;</li> <li>Assist visitors and others who require assistance (physical, language, etc.);</li> <li>After evacuation the Emergency Coordinator or foreman will</li> </ul>	

Fire	<ul> <li>Conduct an immediate risk assessment and send report to MINEDUC;</li> <li>Vocally alert Employees of the emergency response (i.e. evacuation procedures);</li> <li>Take basic Emergency Kit;</li> <li>Delegate searchers to site and to take head counts and ensure all have vacated the site or office;</li> <li>Delegate support for visitors or individuals requiring assistance</li> </ul>	Foraman SCEO	a Sand and
Fire	<ul> <li>If local fire is detected in the workplace the Foreman shall alert and evacuate Employees/workers immediately;</li> <li>Evacuate the building if you hear continuous whistle sounds;</li> <li>Remain calm, if possible secure confidential information, valuables when evacuating but do not hesitate;</li> <li>Congregate at the assembly area;</li> <li>If you are not in your work area/site, do not attempt to return to it</li> </ul>	Foreman, SCFO, ESSOs, DEO and DDMO	<ul> <li>Sand and water</li> <li>First aid kit, whistle</li> </ul>
Suspicious Package	<ul> <li>If you see a suspicious package, do not touch the package;</li> <li>Clear the immediate area where the package was found;</li> <li>Employee/workers move away from package and notify Foreman and tell them where the</li> </ul>	Foreman, RDF, RNP, ESSOs, Local Authority	<ul><li>PPEs</li><li>Cell phone,</li></ul>

		suspicious package was discovered, what the suspicious package looks like, employee/worker's name and telephone number;  • If ordered to evacuate follow evacuation instructions		
	rsons with ability	<ul> <li>Individuals who are unable to reasonably exit the site on their own during an emergency are asked to fill out a form notifying Foreman, Environmental and Social Safeguard Officer, and construction officer;</li> </ul>	, •	Employee emergency information form
Bef	fore a storm	• Seek information on the risk of storms in the area where you are staying and on the established protective and rescue measures;    Foreman, ESSOs	·	National Risk Atlas of Rwanda
	nen the storm is minent	<ul> <li>Move inside all furniture and other objects likely to be swept away by the wind or water;</li> <li>Keep calm and avoid panic;</li> <li>Assemble everyone in the emergency shelter specially equipped for this situation;</li> <li>Follow the instructions given by the authorities and by the intervening bodies, especially as regards the evacuation of people. If it is necessary to evacuate, cut off water and electricity supplies;</li> <li>If caught by the storm whilst outside or in a vehicle, leave the vehicle and seek refuge in the nearest building;</li> </ul>	,	PPEs, Cell phone

C4arres			D : 41 1 4 4 10 0			
Storm		•	During a thunderstorm protect yourself from lightning by keeping away from metal objects, switching off the electricity supply, and telephone;  Avoid standing up in an elevated area or sheltering under a tree.			
	After a storm	•	Keep calm and do not panic; Stay inside the building in which you have sheltered. Do not use vehicles because of traffic problems and danger from damaged buildings and roads; Follow the radio, television, website, and authorities' instructions; Only use the telephone in an emergency; Check to see if there are people nearby which are wounded or in difficulty and assist them; Do not go near, touch or use damaged electrical installations, cables and wires and alert the relevant authorities of the damage. The same	Foreman, ESSOs, DEO, DDMO, SCFOs, and Local Authority	•	Cell phone, PPEs
	During a Thunderstorm	•	applies to ruptured water or sewers;  Do not be or stand next to - tallest object in the area;  Do not stand near wire fences or other metal objects that could conduct electricity;  Do not stand in or near water;  Do not seek shelter in open areas;  Avoid touching any metal;	Foreman, ESSOs, DEO, DDMO SCFOs an Local Authority	•	Sign posts with printed instructions PPEs

Avoid using the telephone or any electrical	
appliances;	

## **Annex 6: Employee's Emergency contact information form**

Employee information		
First name:	last name:	
Title (mason, aid, store keeper, etc.):		
Identification number:		
Home address: Cell:	. Sector:	District:
Any disability or chronic disease (specify	):	
Insurance information : Mutuelle de san	té $\square$ Other (specify)	
Emergency contact name		
Primary contact name		
Relationship to employee	Telephone:	
Home address: Cell:	. Sector:	District:
$\square$ Same address/phone as employee		
Emergency contact name		
Primary contact name		
Relationship to employee	Telephone:	
Home address: Cell:	. Sector:	District:
$\square$ Same address/phone as employee		
Comment		
Fundamenta nama	Cianationa	D-t-
Employee's name	Signature	Date