REPUBLIC OF RWANDA



NGOMA DISTRICT

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP)

FOR CONSTRUCTION OF 120 CLASSROOMS AND 150 LATRINES UNDER QUALITY BASIC EDUCATION FOR HUMAN CAPITAL DEVELOPMENT (QBEHCD) PROJECT IN NGOMA DISTRICT

Final Report

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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

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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 Ngoma District of Eastern Province, those include 120 classrooms and 150 latrines among others.

Ngoma 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 Ngoma District

The District of Ngoma is one of the beneficiaries of QBEHCD project. It is one of seven districts that make up the Eastern Province. It is subdivided into fourteen (14) sectors, sixty-four (64) cells and four hundred and seventy-three (473) villages (Imidugudu). The district covers an area of eight hundred

sixty-seven point seventy-four square kilometers (867.74 Km²). It is limited by Rwamagana District in the North-West, by Kayonza District in the North-East, by the District of Bugesera in the West, by the District of Kirehe in the East and by the Republic of Burundi in the South. The total population of Ngoma District is 338,562 inhabitants among which 162,388 are males and 176,174 are females (NISR, 2012).

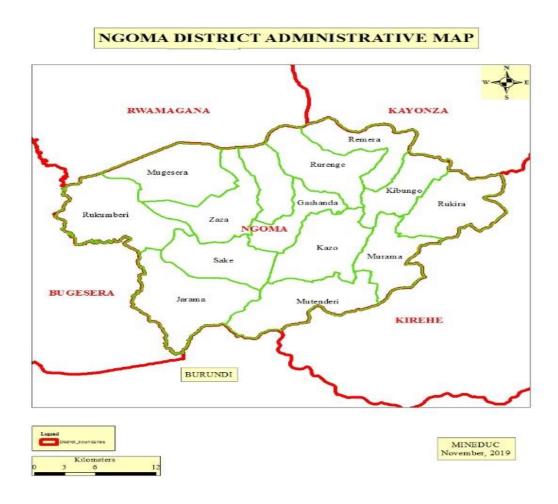


Figure 1: Ngoma District Administrative Map

The District of Ngoma is part of lowlands of the East, a region essentially dominated by hills with low slopes, with an average altitude between 1400m and 1700 m above sea level. The original relief is a plateau strongly dissected by tectonic movements of the quaternary that were progressively gullied by the erosion creating valleys and swamps.

The climate is temperate especially in low altitudes. The annual average temperature is around 20C. Ngoma like other regions of the country enjoys four seasons of which two are rainy and other two are dry: a short rainy season which extends from October to December, a short dry season which runs from

January to February, and a long rainy season from mid-February to mid-May and a long dry season from mid-May to Early October. Generally, the dry season begins earlier and ends later compared to other regions of the country. The resulting pluviometric deficit impacts adversely agricultural and pastoral production. The volume of annual precipitations on the whole of the district lies between 900 and 1400 mm oaf rains.

As regard to soil and hydrography, Ngoma soil is favorable for agricultural activities due to the presence of little sandy—clay soil mixture. The District of Ngoma has three lakes namly Bilira, Mugesera and Sake which provides the region with a beautiful landscape that may attract tourists if developed and advocated for.

In terms of flora and fauna, the natural vegetation of the district of Ngoma is dominated by savanna landscapes. It is a typical vegetation of the east African basin, with vast lands of grass with scattered shrubs of the natural vegetation dominated by savanna landscapes. The western part of the district is made up of vast wetlands constituted by depressions of fluvio-lakes of the Akagera that offers a typical landscape of lakes and swamps.

Like any elsewhere in Rwanda, Ngoma's economy and the livelihoods of its people are dependent on natural resources such as water, land, air, plants and animals. These natural resources are increasingly under pressure from unsustainable use resulting in environmental degradation. The challenge is to utilize natural resources to develop the economy while at the same time conserving the environment to avoid the adverse impacts of pollution, soil erosion, deforestation and general degradation.

In 2013, the net primary school enrolment rate in Ngoma District was 86.7%, gross secondary school enrolment is 37.9% and literacy rate for persons aged 15-24 years is 84.5%. This is somehow different from the national achievements which are at: 91.7% for net primary school enrolment rate, 40.9% for gross secondary school enrolment and 83.7% for literacy rate for persons aged 15-24 years. The adult literacy rate is at 70.5% in Ngoma District against 69.7% of the total Rwandan population. Among the youth, 56.7% did not complete their primary school and (79.9%) among young males and (86.5%) among females are literate. Among other educational issues are insufficient qualified and motivated teachers as the teacher-pupil ratio is 66 while the national target is 45. The dropout rate is still high (14%) and requires a lot of energy to fully eradicate it.

1.3 Description of sub-projects activities

The project will finance 32 sub-projects which consists of 120 classrooms and 150 latrines located in thirteen (13) sectors of Ngoma District namely: Gashanda, Jarama, Karembo, Kazo, Kibungo, Mugesera, Murama, Mutenderi, Remera, Rukira, Rukumberi, Rurenge, and Zaza sectors in which overcrowding and long distances to schools have been noticed as major factors that inhibit learning in Ngoma 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 Ngoma 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: Sub-projects proposed to be implemented under QBE – HCD Project

No	Sub Project names	School Name	Location			
			Sector	Cell	Village	
1	Construction of 3	EP BITARE	GASHANDA	CYERWA	MIZIBIRI	
	Classrooms					
2	Construction of 2	EP MUNEGE	GASHANDA	MUNEGE	KANEGE	
	Classrooms					
3	Construction of 2	GS JARAMA	JARAMA	JARAMA	UBUMWE	
	Classrooms					
4	Construction of 3	E.P. NGARA	KAREMBO	AKAZIBA	NGARA	
	classrooms and 10					
	latrines					
5	Construction of 7	E.P KABIRIZI B	KAREMBO	KARABA	RUSUMBAN	
	Classrooms and 4				TWALI	
	latrines					
6	Construction of 4	G.S. KABIRIZI A	KAREMBO	NYAMIRAM	KARIBU	
	classrooms and 10			ВО		
	latrines					
7	Construction of 5	G.S. KAZO	KAZO	UMUKAMBA	KAZO	
	Classrooms and 12					
	latrines					
8	Construction of 7	GS GAHURIRE	KAZO	KARAMA	MPANDU	
	Classrooms and 20					
	latrines					
9	Construction of 3	EP TUNDUTI	KAZO	KINYONZO	RUGARAMA	
	Classrooms and 6					
	latrines					

10	Construction of 4	G.S.GAHIMA	KIBUNGO	GAHIMA	NYAMIGIN
	Classrooms				A
11	Construction of 4	G.S. GATARE	MUGESERA	AKABUNGO	RUGARAMA
	Classrooms				
12	Construction of 5	E.P. KAGASI	MUGESERA	MUGATARE	KAMPARA
	Classrooms and 18				
	latrines				
13	Construction of 5	G.S. NYANGE	MUGESERA	NYANGE	RUSAVE
	Classrooms and 8				
	latrines				
14	Construction of 4	E.P.KIBALE I	MUGESERA	NYAMUGALI	NYAMABU
	Classrooms and 6				YE
	latrines				
15	Construction of 4	E.P.RUKIRA	MURAMA	KIGABIRO	KIGABIRO
	Classrooms	E B BUBELLOS	1000	DIRECTOR	TT A CITY :
1.5	Construction of 2	E.P.RURENGE	MURAMA	RURENGE	KAZIBA
16	Classrooms	Catholique	MIMENTER	MIMENTER	AIZADDADIA
17	Construction of 5	G.S.BARE	MUTENDER	MUTENDERI	AKARIMBU
10	Classrooms	ED KIDAREH	I	MID A DE	MILIZITO
18	Construction of 4	E.P. KIBARE II	MUTENDER	KIBARE	MUKURA
	Classrooms and 6 latrines		I		
19	Construction of 4	G.S. NDEKWE	REMERA	NDEKWE	RWAMUTA
19	Classrooms	U.S. NDERWE	REWIEKA	NDERWE	BAZI
20	Construction of 4	G.S.	REMERA	NYAMUGALI	NYAKABIN
20	Classrooms	NYAMUGALI	KEWIEKA	NTAMOGALI	GO
21	Construction of 3	EP KABARE I	REMERA	NYAMAGAN	KABUYE
	classrooms and 10			A	
	latrines				
22	Construction of 3	G.S. KIBAYA	RUKIRA	NYARUVUM	GATARE
	Classrooms			U	
23	Construction of 4	G.S. GITUKU	RUKIRA	KIBATSI	RUTUKU
	Classrooms and 12				
	latrines				
24	Construction of 3	E.P. BULIBA	RUKIRA	BULIBA	KANZENZE
	Classrooms and 6				
	latrines				
25	Construction of 5	E.P	RUKIRA	NYINYA	KIBIMBA
	Classrooms	RUGARAGARA			

26	Construction of 3	E.P RUBAGO	RUKUMBER	RUBONA	RUGENDA
	Classrooms		I		
27	Construction of 3	E.P.NTOVI	RUKUMBER	NTOVI	IYANTENDE
	Classrooms		I		
28	Construction of 3	E.P KIGARAMA	RURENGE	RWIKUBO	RUHUHA
	Classrooms				
29	Construction of 2	G.S.MUSYA	RURENGE	MUSYA	AKABIMBA
	Classrooms				
30	Construction of 5	E.P.ZAZA B	ZAZA	RUHEMBE	KABEZA
	Classrooms and 12				
	latrines				
31	Construction of 2	G.S. ZAZA	ZAZA	RUHEMBE	KABEZA
	Classrooms and 6				
	latrines				
32	Construction of 2	E.P. SHWA	ZAZA	NYAGASOZI	KIYOVU
	Classrooms and 6				
	latrines				

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 Ngoma 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.)

3.2 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: Identified potential impacts and mitigation measures

Potential Impacts/issues		Management/Mitigation Measures
Acquisition of non-governmental land	•	Sign consent form by religious organizations as per
for construction/extension of schools that		Prime Minister's order n°290/03 of 13/11/2015
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
3 3 3	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
Valuable artefacts or culturally valuable	Use and follow chance find procedures as per the
materials	ESCP
Accidental injuries	Checking daily if the materials are in good
	conditions before starting the activities,
	Equip all site workers with Individual protective
	equipment (such as boots, helmets, and high
	visibility jackets)
	Avail first aid kit on-site,
	Ensure that all workers have medical insurance
	such as "Mutuelle de santé", RAMA or any other
	recognized medical insurance
	Ensure provision of regular briefing on
	occupational health and safety to workers
	Having distance between workers
Deterioration of workers' health and	The site will be provided with clean drinking water
child right violation	Construction workers should be given break to go
	for lunch;
	Child labor should be avoided at all stages of
	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
Risk of hisecurity at the sub-project site	
D' 1 C HBY/ADG	• 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
abuse, GBV (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;
	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
	vehicle engines at loading/offloading points and
	parking areas;
Risk of noise and/or vibration pollution	Notify and coordinate with local people adjacent to
of civil works/heavy trucks to the school	sub-project sites and school administration to
environment and local people	inform them of the possibility of temporary noise
on the similar wind recent people	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
	noise pollution during school days
Degradation of air quality due to the	 Manual compaction of unstable soil and wearing
dust emissions;	dust mask
dust eliiissiolis,	
	Watering while soil works and construction are heirs are systed and rule are dust is arrived.
	being executed and where dust is emitted;
	Reduce vehicle speed in working area

Soil erosion due to the runoff Generation of solid waste in the form of	 Installation of rain water harvesting system (Water tanks and waterways) Plantation of ornamental trees and grasses on exposed slopes
construction spoils	 Implement 3R principles (Reducing, reusing, recycling) wastes; Avail solid waste bins and sort garbage according different categories (e-wastes, chemicals, plastics, metals, glasses papers/wood and biodegradable wastes); Dispose of solid waste to existing dumpsite
Fire outbreak due to welding activities	 Avail sand and water on site for fire fighting Employ skilled people in welding activities 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 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 Protective Equipment
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 ten (10) sites (E.P BITARE, G.S GATARE, G.S GAHURIRE, E.P MUNEGE, E.P NGARA, G.S KABIRIZI B, G.S GAHIMA, E.P KAGASHI, E.P RUKIRA, and E.P NTOVI). For the rest subprojects sites which are mostly owned by religious institutions mainly the Catholic Church (G.S ZAZA A, G.S KIBAYA, E.P KIBARE I, G.S NYANGE, G.S KAZO, G.S JARAMA, E.P RURENGE, E.P KIBARE II, G.S BARE, E.P KIBARE I, G.S NDEKWE, G.S GITUKU, E.P BULIBA, E.P RUBAGO, G.S MUSYA, G.S KIGARAMA, E.P SHYWA, E.P ZAZA B, EP TUNDUTI), EAR (G.S KABIRIZI A), EPR (EP RUGARAGARA), and ADEPR (GS NYAMUGARI), 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: Environmental and Social Management Plan for generic impacts for construction classrooms and latrines in Ngoma District

Sub-Project Phase	Sub-Project Activity	Potential Impacts/issues	Management/Mitigation Measures	Implementation responsibility	Time Frame	Estimated
Thase	Activity	Impacts/issues	Wiedsufes	responsibility		Cost (Frw)
Pre-	Avail land for 22	Religious Land	Sign consent form by	Religious Legal	Before	No cost
construction	sub-project sites	use for 22 sub-	religious organizations as per	Representative,	commencing	
phase	from religious	projects for	Prime Minister's order	Government of	civil works	
	organizations	classrooms and	n°290/03 of 13/11/2015	Rwanda		
	(G.S ZAZA A,	latrines				
	G.S KIBAYA,	construction				
	E.P KIBARE I,					
	G.S NYANGE,					
	G.S KAZO, G.S					
	JARAMA, E.P					
	RURENGE, E.P					
	KIBARE II, G.S					
	BARE, E.P					
	KIBARE I, G.S					
	NDEKWE, G.S					
	GITUKU, E.P					
	BULIBA, E.P					
	RUBAGO, G.S					
	MUSYA, G.S					
	KIGARAMA,					
	E.P SHYWA,					
	E.P ZAZA B, EP					
	TUNDUTI, G.S					
	KABIRIZI A,					

	EP RUGARAGAR A) for classrooms and latrines construction Site clearing	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 	Foreman, School Head Teacher	During site clearance	3,360,000 (of which 28,000 per one Classroom)
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,	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 with local community Suppliers	During implementati on of the sub project activities	No cost
	effects on ecosystem	Rehabilitate (green landscaping) the borrow pits, quarries and dumping sites at the end of construction activities	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	Use and follow chance find procedures as per the ESCP	Foreman, School construction officer	Prior to & during excavation	6,400, 000 (of which 200,000 per site)
	Accidental injuries	 Checking daily if the materials are in good conditions before starting the activities, Equip all site workers with Individual 	Foreman, School Head Teacher	During the timeframe of the implementati on of the project	No cost

	protective equipment (such as boots, helmets,			14,745,600 (460,800 per
	 and high visibility jackets) Avail first aid kit on-site, Ensure that all workers have medical insurance 			site) 768,000 (24,000 per 1kit per site)
	such as "Mutuelle de santé", RAMA or any other recognized medical insurance			No cost
	Ensure provision of regular briefing on occupational health and safety to workers			No cost
	Having distance between workers			No cost
Deteriors of worke health ar child rig violation	with clean drinking water	School Head Teacher, Foreman, Safeguards Team	During sub- project implementati on	576, 000 (of which 18,000 per site) No cost
	Child labor should be avoided at all stages of			No cost

	construction (child under 18years old) • Fair treatment of workers and provision of safe and health working condition • Respect of working hours			No cost
Risk of conflict	 Local residents will be given the priority during workforce selection; Wearing uniform (jacket) Grievance redress mechanism 	Foreman, School Head Teacher and Social Safeguard Team	During the timeframe of the implementati on of the project	No cost Provided 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	9,600,000 (of which 300,000 per site)
Risk of contamination by HIV/AIDS and other STDs, Sexual	Sensitize site workers on HIV/AIDS, Sexual harassment and abuse, GBV (gender based violation) to avoid	School Head Teacher, Foreman ,Health Centers, Local Authorities	During the timeframe of the implementati	No cost

harassment and abuse, GBV (gender based violation)	counselling at existing medical facilities;	No cost
Poor hygiene and sanitation	Always keep clean toilets	2,880,000 (of which 90,000 per site)
Risk of exhaust emissions (e.g. Sulphur , Carbon,	• Before hiring a supplier, make sure that his/her vehicle has a valid Foreman, National police During implementati	No cost

Nitroger chlorofl bons,) truck moveme	from • Sensitize drivers to avoid unnecessary racing of	District Environmental officer Environmental and Social Safeguards Officer	on of the activities	
Risk of and/or vibratio pollutio civil works/h trucks to school environ and loca people	with local people adjacent to sub-project adjacent to sub-project sites and school administration to inform them of the possibility of the temporary noise disruption & related issues, and how to report	Foreman	During implementati on of the activities	No cost

	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;	 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 on of the sub project activities 	No cost 768,000 (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, the implementati on of the sub-project Environment, During the timeframe of the implementati on of the sub-project Environment, Districts, School head teacher, Foreman 	48,000,000 (one tank per 3 classrooms cost 1,200,000) 3,360,000 (of which 28,000 per 1classroom)

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	 Implement 3R principles (Reducing, reusing, recycling) wastes; Avail solid waste bins and sort garbage according different categories (e-wastes, chemicals, plastics, metals, glasses papers/wood and biodegradable wastes); Dispose of solid waste to existing dumpsite Dispose of solid waste in plementati timeframe of the timeframe of the implementati on of the project 	No cost 160,000 (of which 5,000 per site) No cost
		Fire outbreak due to welding activities	 Avail sand and water on site for fire fighting Employ skilled people in welding activities Ensure a quick contact to concerned security institution in case of strong fire outbreak School head teacher, foreman and police fire brigade 	No cost No cost No cost
	Painting	Soil pollution due to toxic or hazardous chemical from	• Hazardous/toxic District During the materials shall be stored in appropriate containers/stores with During the timeframe of the implementati	No cost

		paints or	clearly visible labels; &	head teacher,	on of the	
		solvents	regularly inspect for signs of leaks.	Foreman	sub-projects	
			Disposal of waste from paint in existing toxic liquid waste pit			No cost
			Company certified in collected waste will be hired in collecting the produced waste wherever possible			No cost
			Work closely with the district hospital in handling hazardous waste			No cost
			Provide training on management of all hazardous chemicals/materials and wastes for workers including use of PPEs			3,200,000 (of which 100,000 per site)
Operation	Use of toilet	Soil and groundwater pollution due to infiltration	Proper construction of foundation and walls for pit by cementing	School construction officer and specialist	During pit cementing and foundation works	16,000,000 (of which 106,665 per Latrine)

	of microbes from faeces		
Total estimated budget			109,817,600

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 Ngoma 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: Environmental and Social Monitoring Plan for construction of classrooms and latrines in Ngoma District

Sub-	Potential impacts		Monitoring	Frequency/	Responsible	Estimated
project		Management/	indicator	Time frame		cost (Frw)
phase		Mitigation Measures				
Pre-	Religious land use 22	Sign consent form by	Number of	Before the	Monitoring and	No cost
constructio	sub-project sites	religious organizations	signed	commenceme	Evaluation Specialist	
n phase	(Avail land for 22	as per Prime Minister's	consent form	nt of civil	and Social safeguards	
	sub-project sites from	order n°290/03 of		works	Specialist/MINEDUC	
	religious	13/11/2015				
	organizations (G.S					
	ZAZA A, G.S					
	KIBAYA, E.P					
	KIBARE I, G.S					
	NYANGE, G.S					
	KAZO, G.S					

JARAMA, E.P RURENGE, E.P KIBARE II, G.S BARE, E.P KABARE I, G.S NDEKWE, G.S GITUKU, E.P BULIBA, E.P RUBAGO, G.S MUSYA, G.S KIGARAMA, E.P SHYWA, E.P ZAZA B, EP TUNDUTI, G.S KABIRIZI A, EP RUGARAGARA) 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; 	Area cleared in square meter Quantity of excavated soil in cubic meter	Once	Local authorities, Foreman and MINEDUC Safeguards Team	2,592,000 (of which 81000 per site)

		•	Greening by grasses	Area greened in square meter	Once(after construction works)		
Constructio n phase	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	Quantity of remaining materials	Monthly	Foreman	No cost
	Access roads	•	Locate access roads in consultation with local community and officials	Number of complaints			
	Risk of loss of landscape scenic value and associated effects on ecosystem	•	Hold top soils and vegetation matter near quarries, borrow pits and dumping sites; Rehabilitate (green landscaping) the borrow pits,	All accumulated top soils and vegetation matter used for rehabilitation of sites;	Once after construction works	Local authorities, Foreman, Suppliers and MINEDUC Safeguards Team	220,000

Valuable artefacts or culturally valuable materials	quarries and dumping sites at the end of construction activities • Use and follow chance find procedures as per the ESCP	Rehabilitated area in square meter 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 workers with Individual protective equipment (such as boots, helmets and high visibility jackets); 	Number of Materials in good condition Number of workers with personnel protective equipment	Daily	Local authorities, Foreman, schools' construction Engineers, and MINEDUC Safeguards Team	No cost No cost
	Avail first aid kit on-site,	Number of first aid kit on site	Daily		No cost
	• Ensure that all workers have	Number of workers with	Daily		No cost

		medical insurance	medical			
		such as "Mutuelle	Insurance			
		de santé", RAMA				
		or any other				
		recognized medical				
		insurance				
				D-"-		
	•	Ensure provision of	Number of	Daily		
		regular briefing on	briefings on			No cost
		occupational health	safety to			
		and safety to	workers			
		workers	provided			
			provided			
	•	Having distance	Distance in	Daily		No cost
		between workers	meter			
Deterioration of	•	The site will be	Quantity of	Daily	Local authorities,	No cost
workers' health and		provided with clean	drinking	Duily	Foreman and	110 6051
child right violation		drinking water	water in		MINEDUC	
		www.	jericans			
			3			
child right violation	•	Construction	Number of	Daily	Safeguards Team	No cost
Jima right violation		workers should be	hours for	Zuily	Saroguaras roum	110 0050
		given break to go	break			
		for lunch;				
	•	Child labor should		Daily		No cost
		be avoided at all				

		stages of construction (child under 18years old)	Number of checking made on site			
	•	Fair treatment of workers and provision of safe and health working condition	Number of complains resolved	Daily		No cost
	•	Respect of working hours	Number of working hours/day	Daily		No cost
Risk of conflict	•	Local residents will be given the priority during workforce selection;	Number of local residents on work	Once, during recruitment	Local authorities, Site supervisor and MINEDUC Safeguards Team	55,000
	•	Wearing uniform (jacket)	Number of workers with jackets	Daily		No cost
	•	Grievance Redress Mechanism	Number of grievances resolved	Monthly		55,000

Risk of insecurity a the sub project site	•	Ensure only authorized personnel get to site, Ensure security persons are available on the site	Entry Register book Contract of security personnel employed	Daily	Local authorities, foreman and MINEDUC Safeguards Team	No cost 55,000
Risk of contamination by HIV/AIDS and other STDs, Sexual harassment and abute GBV (gender based violation)	se,	Sensitize site workers on HIV/AIDS, Sexual harassment and abuse, GBV (gender based violation) to avoid negative effects from social& multicultural inclusion at the	Minutes and attendance lists	Monthly	Local authorities, Health Centers, Foreman and MINEDUC Safeguards Team	55,000
	•	area; Voluntary testing to determine HIV status; counselling at existing medical facilities;	voluntary tested personnel Number of Site supervision	Quarterly Weekly		55,000 No cost

	Enforce and sensitize code of conducts				
Poor hygiene and sanitation	Avail handwashing facilities;	Number of handwashing facilities on site	Daily	Local authorities, Foreman, head teachers and MINEDUC Safeguards Team	No cost
	Always keep clean toilets;	Cleanliness	Daily		No cost
	Install toilets away from rivers or areas with shallow groundwater;	Field visit report	Once during project startup		No cost
	Sensitize workers about handwashing culture	Minute and attendance list	Monthly		220,000
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;	Inspection report	Once at every contracting	Local authorities, traffic police, foreman and MINEDUC Safeguards Team District Environmental officer	55,000
					55,000

	•	Sensitize drivers to	Minute and attendance			
		avoid unnecessary	lists			
		racing of vehicle	lists			
		engines at				
		loading/offloading				
		points and parking				
		areas;				77.000
Risk of noise		riotily and	Number of	Daily	Local authorities,	55,000
vibration poll		coordinate with	complaints		Foreman and	
heavy trucks		local people	raised and		MINEDUC	
school enviro		adjacent to sub-	resolved		Safeguards Team	
and local peo	ple	project sites and	about noise			
		school	and vibration			
		administration to				
		inform them of the				
		possibility of				
		temporary noise				
		disruption & related				
		issues, and how to				
		report complaints if				
		any;				
	•	Limit civil work		Daily		No cost
		activities to				
		daytime hours to				
		the extent feasible;				
	•	Sensitize vehicle		Weekly		No cost
		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		During work implementation plan		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; 	Area of compacted soil in square meter	During excavation and foundation works	Local authorities, Fore man and MINEDUC Safeguards Team	55,000
	Reduce vehicle speed in working area		Daily		No cost
Soil erosion due to the runoff	Installation of rain water harvesting system (Water	Number of installed water tanks	Monthly	Local authorities, Foreman and	55,000

	•	tanks and waterways). Plantation of ornamental trees and grasses on exposed slopes	Number of planted ornamental trees		MINEDUC Safeguards Team	
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, chemicals, plastics, metals, glasses	Awareness provided for workers on 3R principles Number of solid waste bins and garbage on site	Twice a week Daily	District Environmental Officer, Local authorities, Site Foreman and MINEDUC Safeguards Team	55,000 No cost
	•	papers/wood and biodegradable wastes); Dispose of solid waste to existing dumpsite	Amount of solid waste disposed at existing dumpsite	Weekly		55,000

		•	Avail sand and water on site for fire fighting	Quantity of sand and water in cubic meter	Daily	Local authorities, Site supervisor and MINEDUC Safeguards Team	No cost
	Fire outbreak due to welding activities	•	Employ of skilled people in welding activities'		Once at contracting		55,000
	weiding activities	•	Ensure a quick contact to concerned security institution in case of strong fire outbreak		Instantly		No cost
to	Soil pollution due to oxic or hazardous chemical from paints or solvents	•	Hazardous/toxic materials shall be stored in appropriate containers/stores with clearly visible		Monthly	Local authorities, foreman and MINEDUC Safeguards Team	55,000
		•	labels; & regularly inspect for signs of leaks. Disposal of waste from paint in existing toxic liquid waste pit;	Quantity of waste disposed in existing toxic	Once during and after painting works		55,000

		•	Company certified in collected waste will be hired in collecting the produced waste wherever possible;	liquid waste pit.			No cost
		•	Work closely with the district hospital in handling hazardous waste		Monthly		
		•	Provide training on management of all hazardous chemicals/materials and wastes for workers including use of Personal Protective Equipment.	Number of personnel protective equipment			55,000
Operation	Soil and groundwater pollution due to infiltration of microbes from toilets	•	Cementing the walls of pit	Inspection report	Once after completion	Local authorities, foreman and MINEDUC Safeguards Team	55,000

Total			
estimated			3,912,000
budget			

4.2.1 Monitoring roles

Table 5: Monitoring roles and responsibility

Institution	Roles	Responsible
		department/person
WORLD	• Responsible for issuing no objection before the	WB Safeguards
BANK	project implementation	Team
	Monitoring of the implementation of ESMP	
	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 construction activities	Staff in charge of construction
MINEDUC	• Review the ESMP from District and submit it to	MINEDUC
	WB for no objection	Safeguard Team
	Address the comments from WB and submit it to	
	RDB for clearance	
	Monitoring of ESMP implementation	
	Training of District staff on ESMP	
	Report the implementation of ESMP to WB	
Districts	Preparation of ESMP and submit it to MINEDUC	Environmental
	to be reviewed and submitted to WB and RDB	officer
	• Training of stakeholders at Sector level and	• Schools
	technicians 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	
Coston and	operationalization of grievance committees	- Caston land
Sector and Cells	• Training of stakeholders at Sector level and technicians on ESMP	• Sector land officer
Cons	Monitoring of ESMP implementation and report to	• Sector Social
	District	Protection Social
	 Supervise the implementation of Mitigation Plan 	Officer
	• Supervision of putting in place and	Executive
	operationalization of grievance committees	secretary of
	operation of greening committees	concerned Cells
		• Sector
		agronomist

Community	Execute ESMP guidelines and report any Comm Environmental and Social issue occurred on the site Worker	=
Community	to 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

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 106 classrooms and 120 latrines sub-projects under Quality Basic Education for Human Capital Development (QBE-HCD) Project in Ngoma 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 Ngoma 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	District in
from outside areas to the	workers shall be provided	collaboration with
project area will increase	especially the medical insurance	RSSB
demand on existing health	"Mutuelle de santé"	
services		
The influx of new workers to	➤ Awareness campaigns on hygiene	Sectors
the area could bring with it	and sanitation and how these	Districts
an increase of communicable	diseases spread.	
diseases.		
Dust from transport and	> Control speed limits;	Site
vehicles and machineries on	➤ Haul truck transporting volatile	environmental
roads	construction materials	and social officers
	Ensure haul trucks are not	
	overloaded and are covered where	Site construction
	necessary;	engineers
		District
		environmental
		officer
Road accidents	Restrict speed limits 20km/hour;	Traffic policy
	Erect speed control signs post;	
	Community awareness on proper	
	use of roads.	
Diffuse run-off from roads,	Ditches will channel surface	Site construction
construction areas and other	water runoff to the designated	engineers
disturbed areas may contain	areas;	
elevated concentrations of	> Maximum reuse or recycle of	
suspended solids or	process waste water;	
pollutants		

Potential Risk	Mitigation Measures	Responsible
	Water monitoring will be conducted.	
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 machineries	 Constant preventative emission control; Ensure all project vehicles and trucks have valid vehicle inspection certificates, 	Environmental and social District environmental officer
Dust from construction activities including quarries and borrow pits	 Sprays water to avoid lift of dust; Workers provided with appropriate PPE. 	Environmental and 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 insecurity at construction site	 Put in place warning tape across 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, letter,	ce	Concer	on of					
	plai		email,	rece	n,	the					
	nant		verbal,)	ptio	request,	com					
				n)	plain					
						t					
						t					

TEMPLATE FOR CONSOLIDATED REPORT OF GRCs ACTIVITIES

	3.7	ъ.	3.5	TD 6	I a .		ъ.	T 1	a
N	Names,	Date	Means	Type of	Summari	Action	Dat	Level	Status
О	Area of	for	of	issue	zed	underta	e of	of	of
	residenc	grieva	grieva	raised	descripti	ken	acti	GRC	grieva
	e and ID	nce	nce	(Grieva	on of the		on	that	nce
	of	recepti	recepti	nce,	complain			took	during
	complai	on	on	Concern	t			action	the
	nant		(SMS,	,				on	reporti
			Phone	request,				grieva	ng
			call,)				nce	time
			letter,						
			email,						
)						

Annex 5: 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 predicted	Proposed mitigation measures	Indicator (Parameter to be measured)	Color coding	Sub- project	Findings/Remarks (Describe status of completion, Does this measure seem effective? suggest solutions where problems are encountered)
District ESSO			Date/Name of reviewer: Status of ESMP		
TOBE COMPLETED BY MINEDUC Progress monitoring - main findings:			□ on sche of tin □ sligh	dule/completed/ahead	

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 actions/response	Responsible person	Resources Required
	emergency			(Equipment,
	preparedness			materials,
				Personnel, etc.)
Hazard and risks	Potential hazards and risks at site/workplace	 Identifying existing or potential hazards and ensuring that these risks are removed; Conducts regular audits of the workplace; Employees may bring forward health and safety concerns to the site supervisor/Forman or to Employee meetings through the Employees' supervisor/Forman 	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	Checklist,Audit Checklist,
Employees training	Unprofessional behavior at work place and lack of basic ergonomics	 Employee/Workers, volunteers, and visitors will be oriented to the Emergency Response Plan and notified of any updates; Employee will undertake regular drills in order to be prepared in the event of a real emergency; Employees meetings will regularly address potential emergency concerns and responses. 	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 by everyone on sign post at work area/site 	Foreman	Folder Printed announcement with emergency contact numbers

Warning		• The foreman will blow a whistle to alert The	Foreman,	Whistle
systems		construction site workers in case of emergency that requires attention, evacuation, etc.		
	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	Water Sand Printed announcement with emergency contact numbers
Response Equipment/ materials		• 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,	First Aid Kit
	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.		
Essential	Damage of essential	Hard Files	Foreman	Hard file, logbook
project Documents	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		

	Non-life threatening situations (power failure, technical failures)	 of conduct, contracts of workers, log books/registers, card stock, etc. Discuss response plan with the construction engineer, environmental officer and Foreman; Ensure that all project Employees/workers are informed about the response plan; If need be, contact employees through emergency contact information provided by each Employee 	SCFO, DSCE, ESSO, DEO, DDMO and Foreman	Employee emergency contact, Emergency preparedness plan
Emergency situations	Advanced warning including severe and potentially hazardous weather conditions (e.g. storms, fire), Infectious disease outbreak	 Discuss response plan with the construction engineer, environmental officer and Foreman or refer to previously assigned response plan; Ensure that all project Employees/workers are informed about the response, anticipated timeline for return to work, offsite meeting space, etc. Contact Employees through emergency contact information provided by each Employee 	ESSO,DEO, DDMO SCFO, Foreman	Employee emergency contact,
	Personal medical emergency; examples for this situation include heart attack, stroke, anaphylactic shock, personal injury at the work place	 Immediately ensure contact to emergency medical services (EMS) and that onsite first aid is administered until EMS Personnel/staff arrive; Ensure that the individual's emergency contacts are informed unless otherwise requested by the individual; Complete an accident report and send it to MINEDUC 	Foreman, ESSOs and SCFO	Telephone First aid kit
	Spontaneous dangerous events; this include On site fire, bomb threat, explosions, intruder threat, workplace violence,	 Immediately initiate appropriate response action (see Response Actions) See specific procedures 	Foreman, RNP, RDF, Local Authority, DDMO and ESSOs	Telephone

	hazardous materials,			1
	suspicious packages			
	etc.; Off-site terrorist			
	attack, hazardous			
	materials within			
	vicinity etc.			
	Evacuation Evacuation	When the Foreman as Emergency Coordinator (EC)	Foreman, Local Authority,	First aid kit, whistle
	Lvacuation	alerts Employees and visitors to evacuate the project	_	That aid kit, whistic
		site; everyone:	ESSOs	
		sic, everyone.	LSSOs	
		• Stop working immediately and listen to the EC's		
		instructions;		
		 Leave your workstation or office immediately – do 		
		not stay behind to finish work;		
		• If possible secure confidential information,		
		valuables and appropriate clothing when		
		evacuating but do not hesitate;		
		Close office door as you leave;		
		• Congregate at the assembly area (to be determined);		
Procedures		• If you are not in your regular work area, do not		
		attempt to return to it;		
		• Emergency Coordinator or Foreman will make of a head count (including visitors, consultants) is done		
		at that time at site;		
		 Assist visitors and others who require assistance 		
		(physical, language, etc.);		
		After evacuation the Emergency Coordinator or		
		foreman will		

	 Conduct an immediate risk assessment and send report to MINEDUC; Vocally alert Employees of the emergency response (i.e. evacuation procedures); Take basic Emergency Kit; Delegate searchers to site and to take head counts and ensure all have vacated the site or office; Delegate support for visitors or individuals requiring assistance 		
Fire	 If local fire is detected in the workplace the Foreman shall alert and evacuate Employees/workers immediately; Evacuate the building if you hear continuous whistle sounds; Remain calm, if possible secure confidential information, valuables when evacuating but do not hesitate; Congregate at the assembly area; If you are not in your work area/site, do not attempt to return to it 	Foreman, SCFO, ESSOs, DEO and DDMO	First aid kit, whistle
Suspicious Package	 If you see a suspicious package, do not touch the package; Clear the immediate area where the package was found; Employee/workers move away from package and notify Foreman and tell them where the suspicious package was discovered, what the suspicious package looks like, employee/worker's name and telephone number; If ordered to evacuate follow evacuation instructions 	Foreman, RDF, RNP, ESSOs, Local Authority	PPEs, Telephone,
Persons with disability	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	Foreman, ESSOs, DDMO and SCFOs	Register form

		and Social Safeguard Officer, and construction officer;
	Before 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, DEO, National Risk Atla of Rwanda
Storm	When the storm is imminent	 Move inside all furniture and other objects likely to be swept away by the wind or water; Keep calm and avoid panic; Assemble everyone in the emergency shelter specially equipped for this situation; 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; If caught by the storm whilst outside or in a vehicle, leave the vehicle and seek refuge in the nearest building; 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 applies to		
	ruptured water or sewers;		
During a	• Do not be or stand next to - tallest object in the area;	Foreman, ESSOs, DEO,	Announcement with
Thunderstorm	• Do not stand near wire fences or other metal objects that could conduct electricity;	DDMO SCFOs an Local Authority	instructions,
	Do not stand in or near water;Do not seek shelter in open areas;		PPEs
	 Avoid touching any metal; Avoid using the telephone or any electrical appliances; 		

Annex 6: Employee's Emergency contact information form

Employee's information First name:last name: Title (mason, aid, store keeper, etc.): Identification number: Any disability or chronic disease (specify): Insurance information: Mutuelle de santé Other (specify)...... **Emergency contact name** Primary contact name..... Relationship to employee......Telephone:Telephone: ☐ Same address/phone as employee **Emergency contact name** Primary contact name..... Relationship to employee......Telephone:Telephone: ☐ Same address/phone as employee Comment Employee's name Signature **Date**