REPUBLIC OF RWANDA

NYARUGURU DISTRICT

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP)

FOR CONSTRUCTION OF 71 CLASSROOMS AND 96 LATRINES UNDER QUALITY BASIC EDUCATION FOR HUMAN CAPITAL DEVELOPMENT (QBE-HCD) PROJECT IN NYARUGURU DISTRICT

Final Report

December, 2019

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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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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 Nyaruguru District of Southern Province, those include 71 classrooms and 96 latrines among others.

Nyaruguru 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 Nyaruguru District

Nyaruguru district is one of the eight districts comprising southern province. It is mountainous, containing part of the montane forest of Nyungwe, one of Rwanda's most popular tourist destinations. In the East, Nyaruguru District borders with the District of Huye and Gisagara District, in the North the District borders with Nyamagabe. In the West, it shares its borders with the Western Province and the Republic of Burundi in the South. The district of Nyaruguru has a surface area of 1,010 km² and it is composed of 14 sectors (Busanze, Cyahinda, Kibeho, Kivu, Mata, Muganza, Munini, Ngera, Ngoma, Nyabimata, Nyagisozi, Ruheru, Ruramba and Rusenge) which are made of 72 cells and 332 villages.

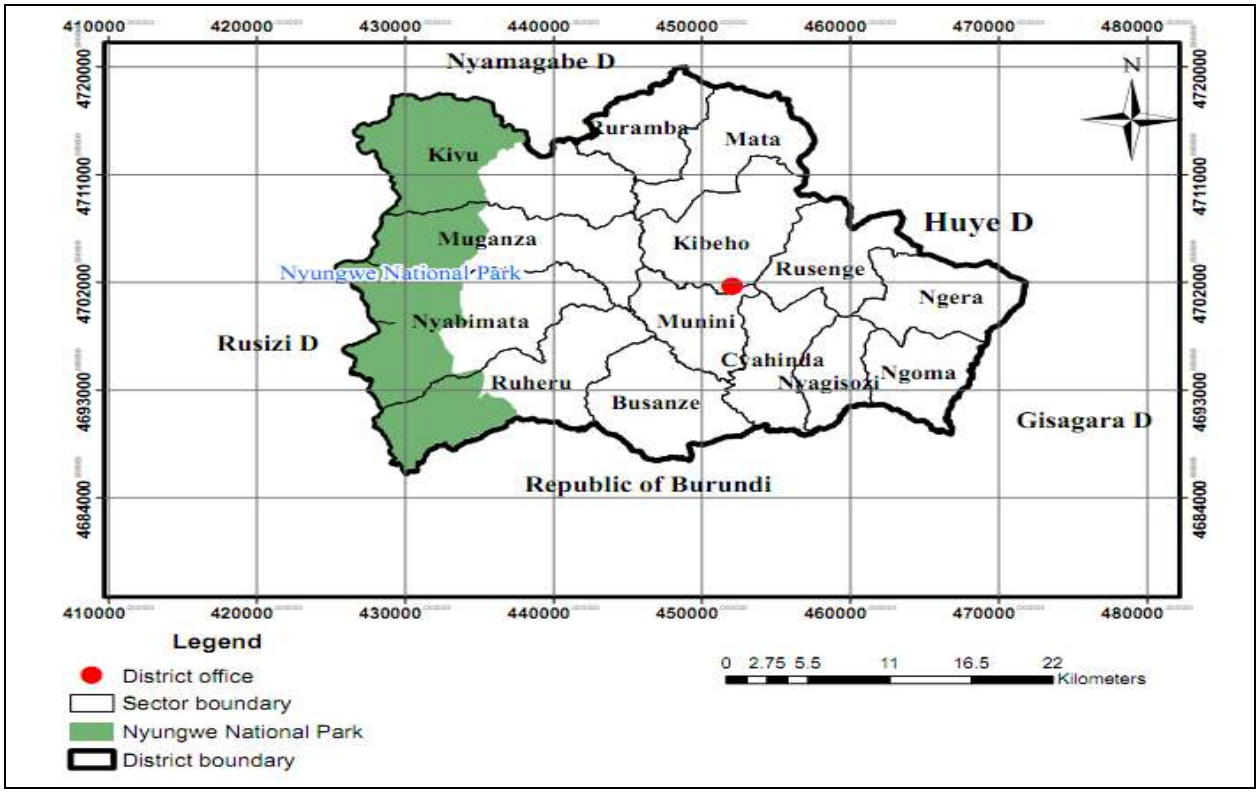

Figure 1.1: Administrative Map of Nyaruguru district

As per the 4th Population and Housing Census report in 2012, the population of Nyaruguru district was 294,334 of whom 52.7% are females while males make 47.3%. Considering the population age structure, majority of the population are young where 55.5% of this population is below 20 years old and for extension, about 83% still under 40 years of age. The population density is 291 inhabitants per square kilometer and considering the family size, Nyaruguru district has 5 people as the average family size which is above 4.8 people at the national level.

The average annual temperature varies between 17-22 ^{0}C in Central Plateau and 15^{0}C on the eastern escarpment of Congo Nile Divide. Rainfall patterns combined with moderate temperate favor two-season rain-fed agriculture on hill slopes. However, combined with the steep topography and poor agricultural practices, this rainfall causes soil degradation through erosion and nutrients leaching. The average annual precipitation varies from 1300 mm in the eastern part of the district and 1500 mm/yr in sectors bordering the Nyungwe National Park.

Farmers land distribution and utilization is critical, 10% of households have 0-0.1 Ha; 24.3% have 0.1-0.19 Ha, and 26.4% have 0.20-0.49 Ha. From these figures, it is clear that the largest number of households in Nyaruguru district (61%) has less than 0.5 Ha and 80.5% of cultivating households cultivate less than 0.9 Ha of land whereas the agricultural sector covers on itself 82.5% of the total population. While livestock is an important source of income, Nyaruguru is ranked first in Rwanda (99.6% against 84.6% at national level) where at least a household has a livestock (EICV3

According to EICV3 (NISR) Nyaruguru district was ranked second least (before its neighbor Nyamagabe) with 79% of individuals aged six and above having at some time attended school. Nyaruguru district is also ranked third last with a literacy rate of 63% among the population aged 15 and above. Net attendance rate in primary school in Nyaruguru district was 87%, which was below the national average of 91.7% while in secondary school was 17% is also below the national average of about 21%, and below the rural area (18.2%).

1.3 Description of sub-projects activities

The project will finance 14 sub-projects consist of construction of 71 classrooms and 96 latrines in 9 sectors namely Ngera, Cyahinda, Kivu, Kibeho, Mata, Ruheru, Nyabimata, Muganza, Ngoma sectors in which overcrowding and long distances to schools have been noticed as major factors that inhibit learning in Nyaruguru 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 Nyaruguru 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 6 classrooms and 6 latrines at EP MUHORA	EP MUHORA	KIBEHO	GAKOMA	VIRO
2	Construction of 5 classrooms and 12 latrines at GS MURAMA	GS MURAMA	NGERA	MURAHO	NYARUGANO
3	Construction of 7 classrooms GS KIYONZA	GS KIYONZA	NGOMA	KIYONZA	AKAGANO
4	Construction of 4 classrooms at GS KIBANGU	GS KIBANGU	NGOMA	KIBANGU	KIREHE
5	Construction of 4 classrooms at GS MUGANZA	GS MUSHUBI	MUGANZA	MUGANZA	NYABIRONDO
6	Construction of 8 classrooms and 12 latrines at EP KABERE	EP KABERE	NYABIMATA	KABERE	UWURUSUGI
7	Construction of 5 classrooms and 12 latrines at EP YANZA	EP YANZA	RUHERU	UWUMUSEBEYA	YANZA
8	Construction of 4 classrooms and 12 latrines at EP RWAMIKO	EP RWAMIKO	MATA	RWAMIKO	RWAMIKO
9	Construction of 6 Classrooms and 12 latrines at EP YARAMBA	EP YARAMBA	NGERA	YARAMBA	YARAMBA
10	Construction of 5 classrooms and 12 latrines at EP MUKUGE	EP MUKUGE	MUNINI	MUKUGE	NYAMUGARI
11	Construction of 4 Classrooms and 12 latrines at EP MBASA	EP MBASA	KIBEHO	MBASA	RWIMBOGO
12	Construction of 3 Classrooms and 6 latrines at EP RUGANZA	GS RUGANZA	MATA	RUGANZA	RUGANZA
13	Construction of 4 classrooms at EP RUTOBWE	EP RUTOBWE	CYAHINDA	RUTOBWE	RUTOBWE
14	Construction of 4 classrooms at GS	GS BITARE	NGERA	BITARE	SHEKE

	BITARE				

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 Nyaruguru 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	Management/Mitigation Measures
Acquisition of non-governmental land for construction/extension of schools that belong to religious organizations.	• Sign consent form by religious organizations as per Prime Minister's order n°290/03 of 13/11/2015
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 and associated effects on ecosystem	• Hold top soils and vegetation matter near quarries, borrow pits and dumping sites
	• Rehabilitate (green landscaping) the borrow pits, quarries and dumping sites at the end of construction activities

Valuable artefacts or culturally valuable materials	• Use and follow chance find procedures as per the 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 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 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 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; 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, Carbon, Nitrogen, chlorofluorocarbons,...) from truck movements	• 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;
Risk of noise and/or vibration pollution of civil works/heavy trucks to the school environment and local people	• Notify and coordinate 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 noise pollution during school days
Degradation of air quality due to the dust emissions;	• Manual compaction of unstable soil and wearing dust mask • Watering while soil works and construction are being executed and where dust is emitted; • Reduce vehicle speed in working area
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
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

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 collecting 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 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 are 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 2 sites (EP Yaramba and GS Bitare).

For the rest sub-projects sites which are mostly owned by religious organizations organizations (EP Muhora, GS Murama, GS Kiyonza, GS Kibangu, GS Muganza, EP Kabere, EP Yanza, GS Rwamiko, EP Mukunge, EP Mbasa, EP Mbasa, EP Ruganza, EP Rutobwe), 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 Nyaruguru District

Sub-Project Phase	Sub-Project Activity	Potential Impacts/issues	Management/Mitigation Measures	Implementation responsibility	Time Frame	Estimated Cost (Frw)
Pre-construction phase	Avail land for 12 sub-project sites from religious organizations (EP Muhora, GS Murama, GS Kiyonza, GS Kibangu, GS Muganza, EP Kabere, EP Yanza, GS Rwamiko, EP Mukunge, EP Mbasa, EP Mbasa, EP Ruganza, EP Rutobwe)	Religious Land use for 12 sub-projects for classrooms and latrines construction	Sign consent form by religious organizations as per Prime Minister's order n°290/03 of 13/11/2015	Religious Legal Representative, Government of Rwanda	Before commencing civil works	No cost
	Site clearing	Loss of vegetation cover	• Clear only the area designed for classrooms and latrines construction • Preserve (or stockpile) excavated topsoil for	Foreman, School Head Teacher	During site clearance	1,988,000 (of which 28,000 per one Classroom)

			future site restoration procedures; • Greening by grasses			
Construction phase	Extraction and transportation of materials	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	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 implementation 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	2,800,000 (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 protective equipment (such as boots, helmets, and high visibility jackets) • Avail first aid kit on-site, • Ensure that all workers have medical insurance	Foreman, School Head Teacher	During the timeframe of the implementation of the project	No cost Workers will be provided Personal Protective Equipment 6,400,000(460,800 per sites)

			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			No cost 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 18years old) • Fair treatment of workers and provision of safe and health working condition • Respect of working hours	School Head Teacher, Foreman, Safeguards Team	During sub-project implementation	225, 000 Frw (of which 18,000 per site)

		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 implementation 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 implementation of the project	No cost 4,200,000(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; counselling at existing	School Head Teacher, Foreman ,Health Centers, Local Authorities	During the timeframe of the implementation of the project	No cost

			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	Social affairs at sector level, School head teacher, Foreman	During the timeframe of the implementation of the sub-project	1,260,000 (of which 90,000 per site)
		Risk of exhaust emissions (e.g. Sulphur , Carbon, Nitrogen, chlorofluorocarbons,...) from truck movements	• 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	Foreman, National police District Environmental officer Environmental and Social Safeguards	During implementation of the activities	No cost

			and parking areas;	Officer		
		Risk of noise and/or vibration pollution of civil works/heavy trucks to the school environment and local people	• Notify and coordinate 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 noise pollution during school days	Foreman	During implementation of the activities	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 implementation 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 implementation of the sub-project	28,400,000 (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	District Environmental Officer, School head teacher, Foreman	During the timeframe of the implementation of the project	No cost

	finishing and pavement.		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	School head teacher, foreman and police fire brigade	During welding activities	No cost
	Painting	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	District Environmental officer, School head teacher, Foreman	During the timeframe of the implementation of the sub-projects	No cost

			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 PPEs			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	School construction officer and specialist	During pit cementing and foundation works	10,239,936(of which 106,666 per Latrine)
Total estimated budget						57,527,186(of which 4,101,084 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 Nyaruguru 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 Nyaruguru District

Sub-project phase	Potential impacts	Management/ Mitigation Measures	Monitoring indicator	Frequency/ Time frame	Responsible	Estimated cost (Frw)
Pre-construction phase	Avail land for 12 sub-project sites from religious organizations (EP Muhora, GS Murama, GS Kiyonza, GS Kibangu, GS Muganza, EP Kabere, EP Yanza, GS Rwamiko, EP Mukunge, EP Mbasa, EP Mbasa, EP Ruganza, EP Rutobwe)	Sign consent form by religious organizations as per Prime Minister's order n°290/03 of 13/11/2015	Number of signed consent form	Before the commencement of civil works	Monitoring and Evaluation Specialist and Social safeguards Specialist/MINEDUC	No cost

	Loss of vegetation cover	• 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	1 296 000 (of which 81000 per site)
Construction phase	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	Quantity of remaining materials	Monthly	Foreman	No cost
	Access roads	• Locate access roads in consultation with	Number of			

		local community and officials	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, quarries and dumping sites at the end of construction activities	All accumulated top soils and vegetation matter used for rehabilitation of sites; Rehabilitated area in square meter	Once after construction works	Local authorities, Foreman, Suppliers and MINEDUC Safeguards Team	1,600,000 (of which 100,000 per site
	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,	Number of Materials in good condition	Daily	Local authorities, Foreman, schools' construction Engineers, and MINEDUC	no cost

		• 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	Number of workers with personnel protective equipment Number of first aid kit on site Number of workers with medical Insurance Number of briefings on safety to workers provided	Daily Daily Daily Daily Daily	Safeguards Team	

		• Having distance between workers	Distance in meter			
	Deterioration of workers' health and child right violation	• The site will be provided with clean drinking water	Quantity of drinking water in jericans	Daily	Local authorities, Foreman and MINEDUC	355,000 (of which 22,187.5 per site)
	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	Number of hours for break Number of checking made on site Number of complains resolved Number of working	Daily Daily Daily Daily	Safeguards Team	

			hours/day			
	Risk of conflict	• Local residents will be given the priority during workforce selection; • Wearing uniform (jacket) • Grievance Redress Mechanism	Number of local residents on work Number of workers with jackets Number of grievances resolved	Once, during recruitment Daily Daily	Local authorities, Site supervisor and MINEDUC Safeguards Team	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	Entry Register book Contract of security personnel employed	Daily	Local authorities, foreman and MINEDUC Safeguards Team	4,800 000(of which 300,000 per site)
	Risk of contamination by HIV/AIDS and other STDs, Sexual harassment and abuse,	• Sensitize site workers on HIV/AIDS, Sexual harassment and	Minutes and attendance lists	Monthly	Local authorities, Health Centers, Foreman and MINEDUC	2 400 000(of which 150,000

	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	Number of voluntary tested personnel Number of Site supervision	Monthly	Safeguards Team	per site)
	Poor hygiene and sanitation	• Avail handwashing facilities; • Always keep clean toilets; • Install toilets away from rivers or areas	Number of handwashing facilities on site Cleanliness Field visit	Daily Daily Once during	Local authorities, Foreman, head teachers and MINEDUC Safeguards Team	480 000 (of which 30,000 per site)

		with shallow groundwater; • Sensitize workers about handwashing culture	report Minute and attendance list	project startup 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	4 800 000(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 sub-project sites and	Number of complaints raised and resolved about noise	Daily	Local authorities, Foreman and MINEDUC Safeguards Team	1 200 000 (of which 7500 per site)

		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, 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	and vibration			

		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	Area of compacted soil in square meter	Daily	Local authorities, Fore man and MINEDUC Safeguards Team	1 200 000(of which 75,000 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	Number of installed water tanks Number of planted ornamental	Monthly	Local authorities, Foreman and MINEDUC Safeguards Team	120 000 (7,500 per site)

			trees			
	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	Awareness provided for workers on 3R principles Number of solid waste bins and garbage on site Amount of solid waste disposed at existing dumpsite	Twice a week Daily Weekly	District Environmental Officer, Local authorities, Site Foreman and MINEDUC Safeguards Team	200,000 (of which 12,500 per site)
	Fire outbreak due to welding activities	• Avail sand and water on site for fire fighting	Quantity of sand and water in	Daily	Local authorities, Site supervisor and MINEDUC	112 000(of which 7,000 per

		• Employ of skilled people in welding activities' • Ensure a quick contact to concerned security institution in case of strong fire outbreak	cubic meter		Safeguards Team	site)
	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 collecting wastes will be hired	Quantity of waste disposed in existing toxic liquid waste pit.	Monthly	Local authorities, foreman and MINEDUC Safeguards Team	224,000 (of which 14,000 per site)

		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.	Number of personnel protective equipment	Monthly		
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	112,000 (0f which 7,000 per site)
Total estimated budget						18,899,000 (of which 134,992 each site)

4.2.1 Monitoring roles

Table 5.5: Monitoring roles and responsibility

Institution	Roles	Responsible department/person
WORLD BANK	• Responsible for issuing no objection before the project implementation • Monitoring of the implementation of ESMP • Capacity building of MINEDUC safeguards Team and social protection unit Staff on ESMP	WB Safeguards Team
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 WB for no objection • 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	• MINEDUC Safeguard Team
Districts	• Preparation of ESMP and submit it to MINEDUC to be reviewed and submitted to WB and RDB • Training of stakeholders at Sector level and technicians on ESMP • Monitoring of ESMP implementation and report to MINEDUC • Supervise the implementation of Mitigation Plan • Supervision of putting in place and operationalization of grievance committees	• Environmental officer • Schools Construction Engineer • Director of Education unit
Sector and Cells	• Training of stakeholders at Sector level and technicians on ESMP • Monitoring of ESMP implementation and report to District • Supervise the implementation of Mitigation Plan • Supervision of putting in place and operationalization of grievance committees	• Sector land officer • Sector Social Protection Officer • Executive secretary of concerned Cells • Sector

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

CHAPTER V. REPORTING AND DOCUMENTATION

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

CHAPTER VI.CONCLUSIONS AND RECOMMENDATIONS

9.1 Conclusion

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

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

Given the nature and location of the project development activities, the conclusion is that the potential impacts associated with the proposed development are of a nature and extent that can be avoided, reduced, and eliminated by the application of the proposed appropriate mitigation

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

Potential Risk	Mitigation Measures	Responsible
suspended solids or pollutants	➢ 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 far 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

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

TEMPLATE FOR CONSOLIDATED REPORT OF GRCs ACTIVITIES

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

Annex 4: Reporting format of the ESMP implementation progress

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

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)
Loss of vegetation cover					
Potential risks of wasting raw materials					
Access roads					
Risk of loss of landscape scenic value and associated effects on ecosystem					
Risk of contamination by HIV/AIDS and other STDs, Sexual harassment and abuse,					

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

welding activities					
				Date/Name of reviewer:	
				Status of ESMP ☐ on schedule/completed/ahead of time ☐ slightly delayed ☐ slightly delayed	
Soil pollution due to toxic or hazardous chemical from paints or solvents					

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*