REPUBLIC OF KENYA



MINISTRY OF EDUCATION State Department of Vocational and Technical Training

East Africa Skills for Transformation and Regional Integration Project (EASTRIP) (P163399)

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)

August 2018

Prepared By





P O Box 4880-00506 Nairobi, Kenya Covenant House, Off Ngong Road Tel 254-0724 527506

EMAIL: onsiteconsultantsltd@gmail.com, githinjime@gmail.com

Contents

	List of 7	ables	
		igures	
G		RY OF TERMS	
Α	CRONY	MS & ABBREVIATIONS	(
E	XECUT	VE SUMMARY	10
1	INTR	ODUCTION	18
	1.1	Purpose of the Environment and Social Management Framework	18
	1.2	Objectives of the ESMF	18
	1.3	Approach and Methodology for the Preparation of ESMF	18
	1.3.1	Detailed & In-depth literature review	19
	1.3.2	Consultation and Interactive Discussions	19
2	PRO	JECT BACKGROUND	20
	2.1	Project Background	20
	2.2	Project Description	20
	2.2.1	Project Components	20
	2.2.2	Key Performance indicators	2′
	2.3	Project Beneficiaries	22
3	BASI	ELINE DATA	24
	3.1	Physical and Environmental Setting	24
	3.1.1	Location and Size	24
	3.1.2	Administration	25
	3.1.3	Topography	20
	3.1.4	Climate	26
	3.1.5	Hydrology Features	28
	3.1.6	Geology and Soils	29
	3.1.7	Vegetation and Wildlife	30
	3.1.8	Marine and Coastal Areas	30
	3.1.9	Natural Resources	3
	3.2	Socio-Economic	3′
	3.2.1	Economy	3
	3.2.2	Demographics	3
	3.2.3	Education and Literacy	32
	3.3	TVET Development in Kenya	33
	3.3.1	TVET Enrollment	33
	3.3.2	Major Issues in the TVET Development Program	3
	3.4	Land Use	34
4	DES	CRIPTION OF NATIONAL AND INTERNATIONAL REGULATORY FRAMEWORK	35
	4.1	The Constitution of the Republic of Kenya 2010	35

4.2	Р	olicy Frameworkolicy Framework	. 35
4	1.2.1	Sessional Paper No. 10 of 2012 on Kenya Vision 2030	. 35
4	.2.2	Technical and Vocational Education and Training (TVET) Policy, Draft 2014	. 36
4	.2.3	Kenya National Policy on Gender and Development (NPGD), 2000	. 36
4	1.2.4	The National ICT Strategy for Education and Training (2006)	. 36
4	.2.5	The National Environment Policy 2013	. 36
4	.2.6	The National Climate Change Response Strategy (NCCRS), 2010	. 37
4.3	L	egal Frameworks	. 37
4	1.3.1	Technical and Vocational Education and Training (TVET) Act, No. 29 of 2013	. 37
4	.3.2	Science, Technology and Innovation Act 2012	. 37
4	1.3.3	Basic Education Act No. 14 of 2013	. 37
4	1.3.4	Environmental Management and Coordination Act, 1999 (EMCA) revised amendments 207 38	15
4	.3.5	The Employment Act, 2007	. 38
4	1.3.6	The Children Act, 2001, Cap 141	. 39
4	1.3.7	Occupational Safety and Health Act 2007	. 39
4	1.3.8	HIV/AIDS Prevention and control Act (Act No. 14 of 2006)	. 41
4	1.3.9	The Water Act, 2016	. 41
4	.3.10	County Government Act no 17 of 2012	. 41
4	.3.11	Traffic Act, Cap 403	. 42
4	.3.12	Public Health Act Cap 242	. 42
4	.3.13	The Environment and Land Court Act, 2011	. 42
4	.3.14	The Land Act, 2012	. 42
4	.3.15	Physical Planning Act, 1996	. 42
4.4	R	egulations	. 43
4	1.4.1	Environmental (Impact Assessment and Audit) Regulations 2003	. 43
4	1.4.2	Environmental Management and Co-ordination (Waste Management) Regulations 2006	. 43
4	1.4.3	Environmental Management and Coordination, (Water Quality) Regulations 2006	. 43
-	l.4.4 Regula	Environmental Management and Coordination, Conservation of Biological Diversity (BD) tions 2006	. 43
4	1.4.5	Environmental Management and Coordination (Controlled Substances) Regulations 2007.	. 44
	I.4.6 Shore	Environmental Management and Coordination (Wetlands, Riverbanks, Lake Shores and So Management) Regulations 2009	
	l.4.7 Contro	Environmental Management and Coordination (Noise and Excessive Vibration Pollution) Negulations, 2009.	. 44
4.5	R	elevant Environmental Institutions	. 44
4	1.5.1	Ministry of Environment, Water and Natural Resources	. 44
4	1.5.2	The National Environment Management Authority	
4	1.5.3	County Environmental Committees	. 45
4	1.5.4	National Environmental Complaints Committee	. 45

	4.5.5	National Environmental Tribunal (NET)	45
5 Tı		RIPTION OF WORLD BANK ENVIRONMENTAL & SOCIAL SAFEGUARDS POLICIES	
		/orld Bank's Safeguards Likely to be Triggered by EASTRIP	
	5.1.1	Environmental Assessment (OP4.01, BP 4.01, GP 4.01)	
		equirements for Public Disclosure	
6		TER FOUR: DETERMINATION OF POTENTIAL ENVIRONMENTAL AND SOCIAL IM	
		roposed projects	52
		ositive Impacts	
	6.2.1	Improved enrolment	52
	6.2.2	Creation of employment opportunities	52
	6.2.3	Reduction of gender gap in enrolment	
	6.2.4	Institutional Fiscal Efficiency and Transparency	53
	6.2.5	Increase in skilled workforce	53
	6.2.6	Encourage Regional integration	53
	6.2.7	Strengthening the culture of environmental and social risk mitigation	53
	6.3 P	otential Adverse Impacts	53
	6.3.1	Loss of Flora and Fauna	54
	6.3.2	Noise and Vibration Impacts	54
	6.3.3	Decreased Water Quality	54
	6.3.4	Incessant Traffic including accidents	55
	6.3.5	Public Health – increase in diseases spread and outbreaks	55
	6.3.6	Health and Safety of Construction Workers	55
	6.3.7	Soil Erosion/Run Off	55
	6.3.8	Decreased Air Quality	55
	6.3.9	Solid and Effluent Waste Hazards and Pollution	55
	6.3.10	Hazardous materials use/storage	55
	6.3.11	Waste management problem of non-biodegradable equipment	55
	6.3.12	Blasting and Rock Excavation	56
	6.3.13	Public Health - Increase in HIV/AIDs	56
	6.3.14	Increased crime and in-migration	56
	6.3.15	Potential social conflict due to labour influx	56
	6.3.16	Exploitation of workers	56
	6.3.17	Use of child labour	56
	6.3.18	Gender based violence (GBV), equity, rape and sexual harassment	57
	6.3.19	Gender inequity in employment	57
	6.3.20	Increase in Sex work	57
	6.3.21	Sexual exploitation and abuse (SEA) of under-age girls	
	6.3.22	Disruption of schooling	57

	6.3.23	Alcohol and drug abuse	57
	6.3.24	Increase in the prices of goods and services in the community	57
	6.3.25	Sharing Water sources	58
	6.3.26	Poor sanitation due to sharing of sanitation facilities	58
	6.3.27	Non user friendly buildings and facilities for People with disabilities (PWDs)	58
	6.4 E	Environmental & Social Management Process	58
	6.4.1	Mitigation considerations and options	58
	6.4.2	Recommended mitigation measures	58
7	PROJI	ECT SCREENING, REPORTING, CONSULTATION AND DISCLOSURE	66
	7.1 S	Safeguards Screening and Review Process	66
	7.2 P	Preparation of Project Reports (PRs)	66
	7.3 P	Preparation of ESIA Study Report	67
	7.3.1	ESIA Terms of Reference	67
	7.3.2	ESIA Study Report	68
	7.3.3	Public Review of the ESIA Report	68
	7.4 C	Consultation and Disclosure Requirements	70
	7.5 C	Overall Project Compliance and Reporting	70
8	PROJI	ECT INSTITUTIONAL, IMPLEMENTATION, and MONITORING ARRANGEMENTS	72
	8.1 P	Project Institutional and Implementation Arrangements	72
	8.2 N	Nonitoring Arrangements	73
	8.2.1	Safeguards Monitoring Plans and Indicators	73
	8.2.2	Monitoring Roles and Responsibilities	75
9	GRIEV	/ANCE REDRESS MECHANISM	76
	9.1	Grievance Redress Mechanism (GRM)	76
	9.2 P	Principles of a good GRM	76
	9.3	Grievance Handling Mechanism Structure	77
	9.3.1	Members of the Grievance Redress Committee (GRC) at project Level	77
	9.4 K	Cey staff coordinating Grievance Redress	77
	9.5 R	Receiving Complaints	78
	9.6 R	Registry and Monitoring	79
	9.7	Grievance Redress Mechanism Process	80
	9.8	GRM Jurisdiction	81
1	0 STA	AKEHOLDER CONSULTATION AND INFORMATION DISCLOSURE	83
	10.1 C	Objectives of Consultation	83
	10.2 S	Stakeholder Identification and Participation	83
		Summary of Issues raised by the participants	
	10.4 D	Disclosure Procedure	84
1	1 CAF	PACITY BUILDING, TRAINING AND TECHNICAL ASSISTANCE	85
	11.1 T	raining objectives	85

11.2 Identification of Capacity Needs	85
11.2.1 Capacity Building Enhancement	85
11.2.2 Training	86
12 ESMF IMPLEMENTATION BUDGET	88
REFERENCES	
ANNEX 1 – Sample Environment and Social Screening Tool	
ANNEX 2 – Chance Find Procedures	
ANNEX 3 – Sample ToR for Environmental and Social Impact Assessment (ESIA)	
ANNEX 4 – Summary of Consultation Discussion	103
ANNEX 5 – Consultations List of Attendants	108
Table 2-1: Selected Regional Tvet Centers Of Excellence from participating countries	triggered46
List of Figures Figure 3-1: Map of Kenya Figure 3-2: Map of Kenya Counties Figure 3-3: Kenya Topography map Figure 3-4: Kenya Precipitation and Climate Maps	25 26
Figure 3-4: Kerrya Frecipitation and Climate Maps	
Figure 3-6: Geological Map of Kenya	29
Figure 7-1: EIA process	
Figure 8-1 Project Implementation Arrangements	73

GLOSSARY OF TERMS

Cumulative impacts/effects: The total effects on the same aspect of the environment resulting from a number of activities or projects.

Developer/Proponent/Sponsor: the entity – person/ company/agency – proposing to develop/implement/install a new project/sub- project or expand an existing project under the project.

Direct impacts: An effect on the environment brought about directly by the projects.

Disclosure: Information availability to all stakeholders at all stages of the development of projects.

Environment: physical, biological and social components and processes that define our surroundings.

Environmental Impact Assessment (EIA): A comprehensive analysis of the project and its effects (positive and negative) on the environment and a description of the mitigative actions that will be carried out in order to avoid or minimize these effects.

Environmental Monitoring: The process of examining a project on a regular basis to ensure that it is in compliance with an Environmental Management Plan (EMP), or the Government of Kenya (GoK) Environmental Impact Assessment (EIA) certification of approval conditions and / or environmental prescriptions.

Impact: A positive or negative effect that a project has on an aspect of the environment.

Indirect impact: A positive or negative effect that a project indirectly has on an aspect of the environment.

Involuntary resettlement: The forceful loss of land resources that requires individuals, families and / or groups to move and resettle elsewhere.

Mitigation measures: The actions identified in an EIA to negate or minimize the negative environmental impact that a project may have on the environment.

Project and sub-project: a set of planned activities designed to achieve specific objectives within a given area and time frame.

Project Brief: The initial submitted document to NEMA to initiate the process that will lead to the issuance of the EIA certificate of approval.

Scoping: The initial stage in an environmental assessment that determines the likely major environmental parameters that will be affected and the aspects of the project that will bring upon these effects.

Screening: An initial step when a project is being considered for environmental assessment. The screening is the determination of the level of assessment that will be conducted. In the case of GoK, screening will place project into one of three environmental categories (I, II or III).

Significance: Importance.

Significant effect: An important impact on an aspect of the environment.

Stakeholder: Any person or group that has an interest in the project, and the environmental effects that the project may bring about.

ACRONYMS & ABBREVIATIONS

DOHS Directorate of Occupational Health and Safety

EAC East Africa Community
EAs Environmental Assessments

EASTRIP East Africa Skills for Transformation and Regional Integration

Project

EHS Environmental, Health and Safety
EIA Environmental Impact Assessment

EMCA Environmental Management and Coordination Act

EMCP Environmental Management Plan

ESMF Environmental and Social Management Framework

GOK Government of Kenya

HIV/AIDS Human Immuno Deficiency Syndrome
IBRD Bank for Reconstruction and Development
ICT Information and Communication Technologies

IFC International Finance Corporation

IUCEA Inter-University Council for East Africa

KWS Kenya Wildlife Service

MEMR Ministry of Environment and Mineral Resources

MoE Ministry of Education

MoFW Ministry of Forestry and Wildlife
MOWI Ministry of Water and Irrigation
MWI Ministry of Water and Irrigation
NPCU National Project Coordination Unit

NEAP National Environment Action Plan Committee

NEC National Environmental Council

NEMA National Environment Management Authority

NET National Environnemental Tribunal
OP World Bank Operational Policies
OSHA Occupational Safety and Health Act

PAD Project Appraisal Document
PCU Project Coordination Unit
PIU Project Implementation Unit
PPE Personal Protective Equipment
RAP Resettlement Action Plan
RFU Regional Facilitation Unit

SEA Strategic Environmental Assessment

SERC Standards and Enforcement Review Committee

TAC Technical Advisory Committee

TVET Technical and Vocation Education Training
UNEP United Nations Environment Programme
WASREB Water Services Regulatory Board

WB World Bank

WRI World Resource Institute
WRA Water Resources Authority
WSTF Water Services Trust Fund

EXECUTIVE SUMMARY

Background

The World Bank in partnership with East African countries is developing an East Africa regional skills initiative, the East Africa Skills for Transformation and Regional Integration Project (EASTRIP) to support skills development for the Northern Corridor Initiative Project (NCIP) and other mega projects in the region. The Project is expected to be approved by the World Bank board in or around October 2018 and will be implemented in the next five years or so. The Project will be financed with a combination of national and regional IDA credits and IDA grant totaling approximately US\$300 million. The EASTRIP initially covers three Eastern Africa countries including Ethiopia, Kenya, and Tanzania but can be expanded to include other countries. The Project's development objective is to increase the access and improve the quality of Technical and Vocational Education and Training (TVET) programs in selected centers to contribute to support regional economic corridors. The objectives and results will be achieved through activities grouped under three components, whereby Component I and II are at national levels and III at regional Level.

Project Description

The proposed East Africa Skills for Transformation and Regional Integration (EASTRIP) initially involves three East African countries including Ethiopia, Kenya, and Tanzania. The project's development objective is to increase the access and improve the quality of TVET programs in selected Regional TVET Centers of Excellence and to support regional integration. The project supports the development of highly specialized TVET programs at diploma and degree levels for training of technicians and TVET faculty, as well as industry recognized short-term training, targeting regional priority sectors in transport, energy, manufacturing, and ICT. The objective will be achieved through complementary interventions at three different levels—center, national, and regional.

Project description

The project has three components with a series of sub-components namely;

Component 1: Strengthening selected Regional TVET Centers of Excellence for high-quality skills development in priority sectors (US\$189 million IDA credit). This component will focus on; strengthening center governance and management, institutionalizing industry links, developing/implementing market relevant and competency-based training programs, Training of school managers and teachers, upgrading key instructional facilities and equipment, and outreaching and support for non-project national TVET.

Component 2: Capacity Building for national TVET Systems (US\$21 million IDA credit). This component will focus on; strengthening national TVET quality assurance, capacity building for TVET policy development and implementation, promoting regional integration, National project coordination, and M&E.

Component 3: Enhancing regional collaborative capacity on TVET and project coordination (US\$10 million regional IDA grant). This component will focus on; Harmonization of standards and mutual recognition of qualifications for priority occupations, Incubation of a regional TVET technical body for policy research, advocacy, strategy development, and

dissemination of good practices, Capacity building for Africa skills competition, Regional project coordination and M&E.

Key Performance indicators

The Project Development Objectives (PDO) will be measured by the following key indicative PDO level indicators: (a) PDO Indicator 1: Increase in student enrollment and completion at flagship TVET institutions in programs aimed at meeting skill needs of priority sectors (b) PDO Indicator 2: Graduates of accredited TVET programs employed in occupations in the priority sectors six months after graduation, and (c) PDO Indicator 3: Increase in number of enrolled students coming from another country in the region.

Environmental and Social Requirements

In order to reduce, minimize and mitigate adverse impacts and undue harm of its development projects to the environment, all bank-financed projects are guided by environmental and social policies and procedures commonly referred to as safeguards instruments. Implementation of the Project (especially component 1) is anticipated to have both positive and negative environmental and social impacts albeit on local scale and hence the project has triggered one of World Bank's Operational Policies – OP 4.01 – Environmental Assessment. As per the WB classification under OP 4.01, the project has been assigned 'Category B.'

Objective for the ESMF

Given the nature of the activities to be supported under the project (particularly the infrastructure projects to be financed under the project), the World Bank safeguards policy on environmental assessment (OP 4.01) has been triggered. Specific project activities (such as the types of buildings, the scope of civil works, solid waste, water and waste water management process, among others) and site locations have not been clearly identified at the project preparation stage; hence the need for an ESMF that provides a general impact identification framework to assist project implementers to screen the projects and institute measures to address adverse environmental and social impacts. The ESMF will document all key potential environmental and social issues related to project implementation as per WB requirements. Preparation of Environmental and Social Impact Assessment (ESIA) study report will be undertaken at a later stage prior to implementation of EASTRIP sub-projects.

This ESMF has been prepared in line with the relevant World Bank (WB) safeguard policies on environmental and social management. It considers the relevant World Bank Safeguards Policies and Government of Kenya regulations and describes the planning process concerning environmental and social issues, including screening, preparation, implementation, and monitoring of all project components and sub-components to ensure full compliance with the agreed guidelines. The process of preparing this ESMF entailed detailed desk-top literature review, coupled with consultation and engagement of appropriate stakeholders.

Policy, Legal and Institutional Issues

The following legal instruments among others were reviewed and they are Government of Kenya's legislations that apply to this project as well as the bank safeguards policies.

- Constitution of Kenya
- Environmental Management and Coordination Act (EMCA, 1999, amended 2015)
- Environmental Impact Assessment and Audit Regulations, 2003
- World Bank safeguards Operational policies (OP 4.01, 4.11, 4.12)
- Occupational Safety and Health Act (OSHA, 2007)
- The Children Act, 2001, Cap 141
- HIV/AIDS Prevention and control Act (Act No. 14 of 2006)

Project potential environmental and social impacts

The proposed EASTRIP is likely to have both positive and negative environmental and social impacts largely at local or project site levels and nationally.

Summary of positive and negative impacts

B 1/1 1	
Positive Impacts	Proposed Enhancement measures
Increased enrollment in TVET institutions	The project should develop infrastructure that will
	increase access to TVET programs, including offering
	relevant courses as demanded by the industries
Creation of employment opportunities for	Ensure local labour is given preference during
the local people and staff	construction and hiring staff
Reduction of gender gap in enrollment	Women (and girls) to benefit from affirmative action
and completion rates	during admission to reduce the enrollment gap and an
	enabling learning environment including provision of
	accommodation for women to be enhanced.
Better institutional management and	The project should ensure capacity building and
transparency on TVET operations	training of key staff is carried out in areas of financial
	management, procurement, monitoring and evaluation
	and, environmental and social safeguards
Increase in skilled workforce in the	The TVET institutions should develop and offer
country	courses that are demand-driven to assist in absorption
	of graduates from the TVET institutions
Regional Integration	Encourage cross border enrollment in centres of
	excellence among the countries participating in the
	project and beyond
Strengthened culture of management of	Capacity building and training of all those that will be
environmental and social risks	involved in the management of environmental and
	social safeguards of the project to enhance their skills
	for managing future projects
Increased capacity for gender friendly and	Develop, implement and monitor a gender action plan
responsive learning environments	

Negative Impacts and Proposed Mitigation measures

Impacts	Description of mitigation measures	
Soil and Land degradation	The state of the s	
Air pollution	 Regular watering of the site and access roads Cover materials during transportation Purchase sound equipment/machinery Operate well maintained vehicles, trucks and other equipment Use good quality fuel and lubricants Suppress dust generation at project sites Switch off engines when not in use 	

Impacts	Description of mitigation measures	
Noise and vibration	 Schedule of works is to be limited to daylight hours Engines of vehicles/trucks and earth-moving equipment should be switched off when not in use. Proper maintenance of construction vehicles and equipment 	
Impacts on Landscape and Visual Receptors	 Project sites should be fenced/hoarded off from public view during construction. Good house-keeping at construction sites should be ensured. 	
Impact on traffic and Public safety	 Contractor to prepare a Traffic Management Plan for his work activities Initiation of a safety program and measures by creating awareness and educational campaigns for drivers, workers and local communities, including observation of speed limits Installation of appropriate road signage, speed signs, and other warning signs at the site and access roads Employ experienced drivers The Contractor ensures proper driving discipline by its employees, and sanctions those in breach. Maintain a log detailing every violation and accident at site or associated with the project work activities 	
Water use	Develop water abstraction plan to minimize conflict with residents Manage use of piped water and other water sources mainly used by local people Obtain water abstraction permit from the relevant authorities, and other relevant agencies that manage water resources in the area. Explore other alternative sources of water like water harvesting	
Water pollution	 No garbage/refuse, oily wastes, fuels/waste oils should be discharged into drains or water bodies Fuel storage tanks/sites should be properly secured Maintenance and cleaning of vehicles, trucks and equipment should take place offsite. Provide toilet facilities for construction workers Construction activities, including camps to include measures to control runoff 	
Waste Water	 All waste water shall be treated prior to final disposal. All the sub-projects should ensure proper wastewater facilities for proper discharge of liquid waste are provided or available during design stages All liquid wastes will be stored in accordance with the containment measures to mitigate against soil contamination. Options should be explored to use treated Waste water treated for greening the compounds. 	
Solid Waste	 Establish a well-planned method of solid waste management plan for disposal of debris/ garbage at the site Provision of disposal bins at designated areas at the facilities Regular collection and disposal of garbage by the project Proponent Clean storm water drains to minimize clogging Provision of separate collection bins for biodegradable and non-biodegradable waste at the construction site and facilities during operation 	

Impacts	Description of mitigation measures
	Final disposal should be at approved sanitary landfills or dump sites approved by the local government.
Hazardous waste, including oil and fuel wastes	 The Projects should require that contractors implement a hazardous materials management plan that includes specification for proper storage and handling of fuels, oil, wastes, and other potentially hazardous materials as well as a plan for containment and clean-up of accidental spills into the aquatic environment. Final disposal should be at approved sanitary landfills or dump sites approved by the local government. No solid waste, fuels or oils should be discharged on land surface, into drains or streams Spent or waste oil from vehicles and equipment should be collected and temporarily stored in drums or containers at site. Waste oil should be disposed of by approved agents by the environmental or local authority
Production of electronic waste (e- waste) from operations	 Procure Electronic devices from credible manufactures to avoid purchasing second hand, refurbished or obsolete devices with a short shelf life or already categorised as E-Waste Recycle all E-waste by establish E-Waste Collection Centres in all TVET schools; including collection bins/receptacles; Have 3rd parties to collect and transport all E-wastes to approved Recycling Company or the recycling companies themselves Conduct awareness and sensitization targeting the users of the electronic devices to ensure that they engage in best practise for E-waste management.
Impact on fauna and habitat	 Avoid unnecessary exposure and access to sensitive habitat areas. For identified or suspected sensitive habitats (swamps/ wetlands), relevant authorities on wildlife should be engaged, and regular inspection or monitoring should be carried out in the area prior to start and during work.
Employment – Labour issues	 The contractors should as far as possible engage the local skilled and unskilled labour within the project area during construction stages Ensure that the local communities are given priority in relation to employment -all unskilled labour should be contracted or obtained from the local community if possible. Ensure that all workers have contracts with terms and conditions that are consistent with national labour laws and polices Every worker should also sign a code of conduct (CoC) as an annex to the employment contract – covering issues such as zero tolerance of unacceptable conduct in the community, GBV, sexual harassment, sexual exploitation and abuse of children, etc Facilitate workers to form a committee through which their grievances will be received attended to or channeled to management
Impacts on Human Health/ Health and sanitation	 Use road worthy vehicles/trucks and experienced drivers/operators Active construction areas to be marked with high-visibility tape Backfill and or secure open trenches and excavated areas. Provide adequate sanitary facilities Provide suitable PPEs for construction workers and employees at KIP.

Impacts	Description of mitigation measures
ппраста	Educate construction workers on site rules/regulation and hygiene and
	disease including HIV prevention.
	Strict adherence to Kenya Labour laws
	Adequate sanitary facilities will be available for workers and open range
	defecation will not be countenanced.
General health	Develop an awareness and education program on HIV prevention and
and HIV/AIDs	response
and Thy/AiDs	 Construction workers should be educated to adhere to basic rules with regard to protection of public health, including most importantly hygiene and disease prevention HIV and AIDS and STIs prevention and response campaigns should be extended beyond the construction phase and into the operational phase. Establish a partnership with local wellness centers including hospitals, VCT and ARV centers and NGOs near the project area for implementing an
Imposto on	HIV/AIDS prevention and response program
Impacts on cultural heritage / archaeological interest / existing	 The pre-construction surveys should identify cultural heritage resources and existing ecologically sensitive areas that the project should avoid and by-pass these resources. The Project should implement a chance find procedure and reporting system to be used by contractors in the event that a Cultural heritage feature or ecologically sensitive item/issue is encountered.
ecologically	
sensitive areas	
Impacts on Environmental Human Health and Occupational Safety	 The Project will require all contractors to implement an Environmental, Health and Safety (EHS) plan Construction workers will be educated and provided with adequate and right safety tools and equipment. Ensure provisions of first aid for staff, insurance, and access to ambulance service at all worksites, and arrangement to access local hospital/dispensary with qualified medical staff by workers The site shall be fenced off and provided with security at the access gates to reduce potential accidents and injuries to the public All construction and other workers will be sufficiently trained in the safe methods pertaining to their area of work to avoid injuries.
Gender Mainstreaming, gender based violence and zero tolerance for sexual harassment	 Contractor and implementing agency to prepare and implement a Gender Action plan to include at minimum, in conformance with local laws and customs, equal opportunity for employment, Contractor to prepare and enforce a No Sexual Harassment Policy in accordance with national law where applicable All workers and nearby communities and stakeholders will be educated on preventing and responding to sexual harassment and GBV ahead of any project related works. Partnerships will be established with relevant government agencies and NGOs to ensure survivors of GBV and sexual offenses access survivor centred services such as medical care, psychosocial support, legal redress, safety, etc as and when necessary Ensure that women are given adequate employment opportunities during recruitment and job postings Regular sensitization and awareness campaigns to the workers should be done to promote gender equity in employment during the construction works and during operation.

Impacts	Description of mitigation measures	
Child Protection	 Provision of gender disaggregated data, separate bathing, changing, sanitation facilities for men and women Impose zero tolerance on sexual harassment, all forms of gender based violence and discrimination at all phases of the project. Ensure no children are employed on site in accordance with national labor laws Ensure that any child sexual relations offenses among Contractors' workers are promptly reported to the police Popularize /put in place confidential mechanisms for reporting child abuse cases Enforce the child protection related clauses in the Code of conduct signed by all workers Ensure visibility of signage and information, education and communication materials on such issues in the construction sites 	
Non-user friendly buildings for PWDs	All buildings will be designed and built with ramps and other special facilities such as toilets to facilitate access and use by PWDs or	
Loss of life, injury, or damage to people and private property	 Contractor shall maintain records and make reports concerning health, safety and welfare of persons, and damage to property, at all times or as the RE may reasonably require Insuring against liability for any loss, damage, death or bodily injury which may occur to any physical property or to any person which may arise out of the Contractor's performance of the contract Insuring against liability for claims, damages, losses and expenses (including legal fees and expenses) arising from injury, sickness, disease or death of any person employed by the Contractor or any other of the Contractor's personnel. The construction site shall be fenced off to prevent access to members of the public. All people currently using college land to grow food crops and for petty business activities will be given adequate notice to harvest their food crops and not to plan new ones and relocate their business activities 	

The ESMF places great emphasis on continuous community engagement, consultation and participation to ensure the environmental and social safeguard issues are properly managed. The ESMF also recommends a functional Grievance Redress Mechanism (GRM). This will be set up for each sub-project to ensure any issues or complaints that arise as a result of the projects are managed effectively and promptly. A proposed GRM structure is provided in Chapter 9 of this ESMF.

Project implementation arrangements

IUCEA, the Regional Facilitation Unit (RFU), will be responsible for safeguards monitoring and surveillance of all the sub-project investments that will be undertaken by EASTRIP, led by a Project Coordinator for the project, with the assistance of a Safeguards officer or specialist.

The MoE will provide overall coordination of the Project and lead in the implementation of the project components, which will include overall responsibility for safeguards due diligence, and compliance monitoring. The MoE, through the National Project Coordination Unit (NPCU) will

ensure that subprojects investments are screened, their safeguard instruments prepared, cleared by the World Bank and disclosed prior to sub project implementation. Further, they will ensure that executing institutions implement the specific sub project ESMPs, and submit reports on ESMPs implementation as required to the RFU.

At the field level, the respective TVET institutions Project Implementation Unit (PIU) and the consultants will take lead to supervise and monitor the implementation of the ESIA/ESMPs and prepare progress reports to the NPCU in the MoE and RFU as per the requirements of the safeguard instruments. All sub project investments will be subject to mandatory initial environmental screening and annual environmental assessments or audit /supervision as may be deemed necessary to ensure that they comply with national requirements by Environmental Authority and other relevant laws like OSH regulations.

The World Bank safeguards team will provide second line monitoring of compliance and commitments made in the Environmental and Social Management Plans (ESMPs) through supervision. The World Bank will further undertake monitoring during its scheduled project supervision missions.

Public consultations and Disclosure

The ESMF has been prepared through a participatory process involving public consultation and validation as required by the World Bank procedures. It is mandatory that all key documents prepared to address safeguards are publicly disclosed according to the Constitution of Kenya and the World Bank disclosure policy. The ESMF report will be disclosed in the Ministry of Education website and the World Bank InfoShop.

Capacity Building and Training

The capacity building requirements will mostly be in the form of trainings, seminars/ workshops and short courses for project staff from the implementing institutions and project coordinating staff at the national and regional levels. This will be undertaken to ensure successful implementation of the environmental and social aspects of the projects EASTRIP. The proposed training modules would cover; NEMA Environmental Act and regulations, World Bank safeguards policies, Subproject Screening Checklist and procedures, preparation of ESIAs; and management of Environmental and Social safeguards including social risk management during implementation; and Clauses in requirements for the Contractors' contract and bidding documents.

Cost implication of ESMF

It is estimated that a budget provision of about USD 500,000 shall be made available for the full implementation of this ESMF over the project duration (5 years). Major cost items budgeted for include services related to preparation of ESIAs for sub-projects, Training and capacity building for EASTRIP teams, Environmental Audits, environmental monitoring and supervision and performance tracking of ESMF/ESIA.

An estimated USD 300,000 will be required for ESMF/ESIA monitoring during the project implementation by a safeguard specialist to assist the PCU office (at IUCEA) to oversee the overall implementation of safeguards for the all the countries participating in EASTRIP.

1 INTRODUCTION

1.1 Purpose of the Environment and Social Management Framework

This document presents the Environmental and Social Management Framework for the 'East Africa Skills for Transformation and Regional Integration Project (EASTRIP). Through a participatory and consultative process, the ESMF seeks to establish a process of managing environmental and social impacts that might arise out of the project implementation, which will assist the institutions in charge of the implementation of the projects to identify, assess and mitigate the potential impacts. The ESMF also determines the institutional measures to be taken during implementation of the sub-projects, including those relating to capacity building. This ESMF has been developed as one of a set of due diligence instruments required to address and manage environmental and social impacts associated with the EASTRIP.

1.2 Objectives of the ESMF

Given the nature of the activities to be supported under the project (particularly the infrastructure projects to be financed under the project), the World Bank safeguards policy on environmental assessment (OP 4.01) has been triggered. Specific project activities (such as the types of buildings, the scope of civil works, solid waste, water and waste water management process, among others) and site locations have not been clearly identified at the project preparation stage; hence the need for an ESMF that provides a general impact identification framework to assist project implementers to screen the projects and institute measures to address adverse environmental and social impacts. The ESMF will document all key potential environmental and social issues related to project implementation as per WB requirements. Preparation of Environmental and Social Impact Assessment (ESIA) study reports will be undertaken at a later stage prior to implementation of EASTRIP sub-projects.

The overall objective and purpose of the ESMF can be summarized as follows.

- Assessment of potential adverse environmental and social impacts commonly associated with the presence of displaced communities in refugee camps and the ways to avoid, minimize or mitigate them;
- To establish clear procedures and methodologies for the environmental and social assessment, review, approval and implementation of subprojects to be financed under the project,
- To specify appropriate roles and responsibilities, and outline the necessary reporting procedures, for managing and monitoring environmental and social concerns related to project:
- To determine the training, capacity building and technical assistance needed to successfully implement the provisions of the ESMF; and
- To provide practical resources for implementing the ESMF.

1.3 Approach and Methodology for the Preparation of ESMF

The ESMF has been prepared in accordance with World Bank safeguard policies on environmental assessment (OP 4.01).

Preparation of the ESMF involved the following activities:

- Literature/ Data Gathering and Review;
- Stakeholder consultations including discussions with relevant sector institutions;
- Data collation and analysis, consisting of Literature reviews; Environmental screening and scoping studies;

- Determination of potential impacts:
- Identification of impact mitigation measures;
- Preparation of an Environmental and Social Management Plan;
- Preparation of sub-project guidelines;
- Review of comments from stakeholders: and
- Preparation and Submission of reports.

1.3.1 Detailed & In-depth literature review

Review of the existing literature was undertaken to help gain a further and deeper understanding of the proposed project. This entailed a secondary review of Kenya's legal framework and World Bank policies applicable to the proposed project. The documents that were reviewed included but not limited to:

- Project Appraisal Document (PAD),
- World Bank Operation Policies,
- WB Guidelines "Managing the risks of adverse impacts on communities from temporary project induced labor influx", 2016,
- World Bank Global Gender-Based Violence Task Force: Action Plan for Implementation
- World Bank Group Environmental, Health, and Safety (EHS) Guidelines
- Environmental Management and Coordination Act (1999, Amended 2015),
- Relevant Acts and Regulations,
- Relevant sections of the Constitution of Kenya

1.3.2 Consultation and Interactive Discussions

Stakeholder engagement and consultations were conducted as part of the requirements for ESMF. The process entailed seeking the views of the stakeholders which included government representatives from various ministries and agencies, and other public and private sector players. The consultations were conducted in Nairobi on August 17th, 2018. The minutes of the proceedings are appended in **Annex 4** of this document. The stakeholder consultation was significant to the preparation of this ESMF since it formed the basis for determination of potential project impacts and viable mitigation measures. Chapter 10 of this ESMF gives more details on the process of stakeholder engagement carried out.

2 PROJECT BACKGROUND

2.1 Project Background

The World Bank in partnership with East African countries is developing an East Africa regional skills initiative, the East Africa Skills for Transformation and Regional Integration Project (EASTRIP) to support skills development for the Northern Corridor Initiative Project (NCIP) and other mega projects in the region. The Project is expected to be approved by the World Bank board in or around October 2018 and will be implemented in the next five years or so. The Project will be financed with a combination of national and regional IDA credits and IDA grant totaling approximately US\$300 million. The EASTRIP initially covers three Eastern Africa countries including Ethiopia, Kenya, and Tanzania but can be expanded to include other countries. The Project's development objective is to increase the access and improve the quality of Technical and Vocational Education and Training (TVET) programs in selected centers to contribute to support regional economic corridors. The objectives and results will be achieved through activities grouped under three components, whereby Component I and II are at national levels and III at regional Level.

The Project will target the development of specialized technical skills in priority sectors including; transportation, energy, agro-processing, light manufacturing, and information and communications technology. Sector focus may differ from country to country depending on country priorities.

The Inter-University Council for East Africa (IUCEA), which is an institution of the East African Community (EAC), responsible for coordination of higher education and research in the EAC has been selected through a competitive process to be the Regional Facilitation Unit (RFU) of EASTRIP. IUCEA) has received funding from the World Bank IDA grant in the form of a Project Preparation Advance (PPA) fund for the establishment and operation of the Regional Facilitation Unit (RFU), and preparatory activities of Component 3 for the EASTRIP initiative.

The project will cover three countries namely, Tanzania, Kenya and Ethiopia. The initial scoping of the proposed project interventions suggests that the potential environmental and social impacts will be minimal to moderate, largely reversible and site-specific due to the nature of the envisioned activities.

2.2 Project Description

The proposed East Africa Skills for Transformation and Regional Integration (EASTRIP) involves three East African countries including Ethiopia, Kenya, and Tanzania. The project's development objective is to increase the access and improve the quality of TVET programs in selected Regional TVET Centers of Excellence and to support regional integration. The project supports the development of highly specialized TVET programs at diploma and degree levels for training of technicians and TVET faculty, as well as industry recognized short-term training, targeting regional priority sectors in transport, energy, manufacturing, and ICT. The objective will be achieved through complementary interventions at three different levels—center, national, and regional.

2.2.1 Project Components

The project's objectives and results will be achieved through activities grouped under the following three components (see Figure 1).

Figure 1. Project Components and Subcomponents

COMPONENT 1:

Strengthening selected Regional TVET Centers of Excellence for high- quality skills development in priority sectors

COMPONENT 2:

Capacity building for national TVET systems

COMPONENT 3:

Enhancing regional collaborative capacity in TVET and project coordination

SUBCOMPONENTS

- Strengthening center governance and management
- 2. Institutionalizing industry links
- Developing/implementing market relevant and competency based training programs
- 4. Training of school managers and teachers
- 5. Upgrading key instructional facilities and equipment
- 6. Outreaching and support for non-project national TVET

SUBCOMPONENTS

- Strengthening national TVET quality assurance
- Capacity building for TVET policy development and implementation
- 3. Promoting regional integration
- 4. National project coordination, and M&E

SUBCOMPONENTS

- Harmonization of standards and mutual recognition of qualifications for priority occupations
- Incubation of a regional TVET technical body for policy research, advocacy, strategy development, and dissemination of good practices
- 3. Capacity building for Africa skills competition
- 4. Regional project coordination and M&E

The activities under Component 1 (where investments will be construction and upgrading of facilities under sub-component 1.5) are expected to have environmental and social impacts, thereby triggering WB OP 4.01. The ESMF will provide technical guidance for environmental and social assessment and management during preparation of the selected sub projects. This instrument (as opposed to an ESIA – environmental and social impact assessment) is chosen because the specific portfolio of projects in each county is not yet known, the locations, dimensions and designs for the larger investments and their specific locations are not yet defined, and a detailed assessment of potential environmental and social impacts is thus not feasible at this time.

2.2.2 Key Performance indicators

The Project Development Objectives (PDO) will be measured by the following key indicative PDO level indicators:

- (a) **PDO Indicator 1:** Increase in student enrollment and completion at flagship TVET institutions in programs aimed at meeting skill needs of priority sectors
 - (i) This indicator will have two sets of disaggregated indicators (enrollment in short- and long-term programs)
 - (ii) This indicator will also have a sub-indicator on increase in the share of girls enrolled in flagship TVET institutions, and this sub-indicator also have two sets of disaggregated indicators (share of girls in short- and long-term programs)
- (b) **PDO Indicator 2:** Graduates of accredited TVET programs employed in occupations in the priority sectors six months after graduation.

(c) **PDO Indicator 3:** Increase in number of enrolled students coming from another country in the region.

2.3 Project Beneficiaries

Three East Africa countries have been identified and made the commitment to participate in the first phase of the Project, which includes Ethiopia, Kenya, and Tanzania.

Overall, the Project aim to benefit the following:

- (a) students enrolled in selected flagship TVET institutes and their partner institutions (non-project TVET institutes) in the country and across the region;
- (b) employers and targeted industries who will have access to a skilled workforce matched with their needs and standards;
- (c) faculty and staff from selected flagship TVET institutes whose technical and pedagogical skills will be upgraded and who will function in an improved teaching environment with upgraded facilities;
- (d) faculty and staff in non-project TVET institutes partnering with the selected flagship TVET institutes who will receive knowledge of good TVET management and instructional practices and sector reforms; and
- (e) public and private TVET institute within the East Africa region that will have access to a network of specialized trainers, a framework of core curricular competencies, quality assurance standards, and state of the art facilities for up-to-date training of the workforce in priority sectors in the region.

Currently, 17 regional TVET Centers of Excellence have been selected from the three participating countries. (See Table below)

Table 2-1 : Selected Regional Tvet Centers Of Excellence from participating countries

Country	S.No.	Sector	Center name
Ethiopia	1	Manufacturing Technology	Technical and Vocational Education and Training Institute (TVETI)
	2	Textiles and Garments Technology	Hawassa TVET Polytechnic College
	3	Railways Technology	Meles Zenawi Memorial TVET Polytechnic College
	4	Electrical and Electronics Technology	General Wingate Polytechnic College
	5	Road Transport/Automotive Technology	Kombolcha TVET Polytechnic College
	6	Agro-Food Processing Technology	Holeta TVET Polytechnic College
	7	Railways Technology	Ethiopia Railway Academy (TBC)
	8	Leather Technology	Atse Gelawdios TVET
Kenya	9	Energy	KenGen Geothermal Institute
	10	Transport	Kenya Coast National Polytechnic
	11	Textile	Kisumu National Polytechnic
	12	Infrastructure (for Building Infrastructure)	Meru National Polytechnic
	13	Infrastructure (for Highway Infrastructure)	Kenya Institute of Building and Highway Technology
Tanzania	14	ICT	DIT Dar es Salaam Main Campus
	15	Agro-processing and manufacturing	DIT Mwanza Campus
	16	Energy	Arusha Technical College (ATC)
	17	Transport	National Institute of Transport (NIT)

3 BASELINE DATA

This section describes the overall baseline condition of Kenya in terms of bio-physical environment, as well as the socio-economic and cultural information.

3.1 Physical and Environmental Setting

3.1.1 Location and Size

Kenya is situated along the equator in the eastern part of the African continent, between the between latitudes 40 21' N and 40 28' S and between longitudes 340 and 420 E. It borders with Ethiopia and South Sudan to the north, Uganda to the west, Tanzania to the south, Somalia to the northeast, and the Indian Ocean to the southeast (see Figure below).

The Republic of Kenya has an area of approximately 582,646 sq. km. comprising of 7.8% land and 2.2% water surface. Only 20% of the land area can be classified as medium to high potential agricultural land and the rest of the land is mainly arid or semiarid. Forests, woodlands and national reserves and game parks account for ten percent (10%) of the land area, i.e. 58,264 sq. km. 18. Kenya's total land surface comprises of 13,396 km2 of water surface.

The proposed TVET projects in Kenya will be located in Nairobi city, and in Naivasha, Meru, Mombasa and Kisumu towns.

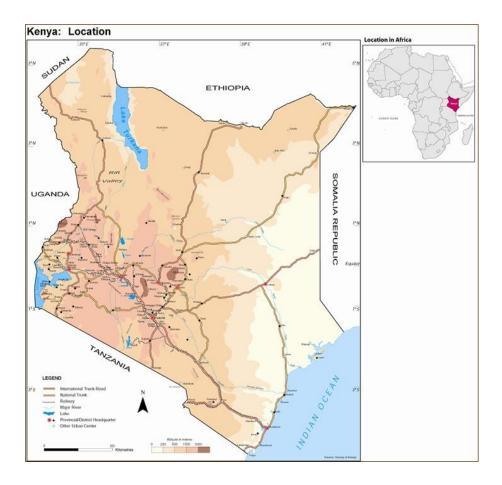


Figure 3-1: Map of Kenya

Source https://www.google.com

3.1.2 Administration

The Kenyan Constitution provides for 47 devolved county Governments which are distinct from, but interdependent with the national Government, each with a governor and a county assembly. The counties replace the previous 8 provinces and the over 250 districts they presided over. The counties are in turn subdivided into sub-counties, wards and villages. The main distinction in governance introduced by the Constitution is that while the provinces and districts had been administered by direct appointees of the President to whom they were accountable, counties elect their respective governors, which is anticipated to enhance accountability to the grassroots. Each county elects ward representatives to its county assembly whose role is to legislate locally and to monitor the performance of the governor's county executive committee. A major deviation from the old constitutional order is that the Constitution provides Parliament the powers to legislate for the mode of recalling non-performing legislators.

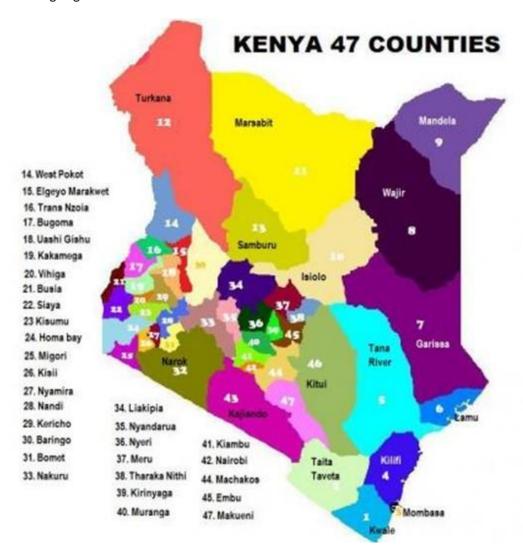


Figure 3-2: Map of Kenya Counties

Source https://www.google.com

3.1.3 Topography

Kenya's landscape is grouped into geographical zones including; the Savannah grasslands covering most of the arid and semi- arid areas, the Coastal Margin, the Rift Valley, the Highlands and the Lake Victoria Basin (Survey of Kenya, 2003). Most of the country consists of high plateau areas and mountain ranges that rise up to 3,000 m and more. The plateau area is dissected by the Eastern Rift Valley, which is 40-50 Km wide and up to 1,000 m lower than the flanking plateau. A zone of thorn bush-land dominates the narrow coastal strip along the Indian Ocean. From the coast, the altitude changes gradually through the coastal belt and plains (below 152 Metres above sea level), the dry intermediate low belt to what is known as the Kenya Highlands (over 900 Meters above sea level).

The country is split by the Great Rift Valley into the Western part, which slopes into Lake Victoria from the Mau ranges and Mount Elgon (4,300m) and the Eastern part dominated by Mt. Kenya and the Aberdare Ranges, which rise to 5,200m and 4,000m respectively.

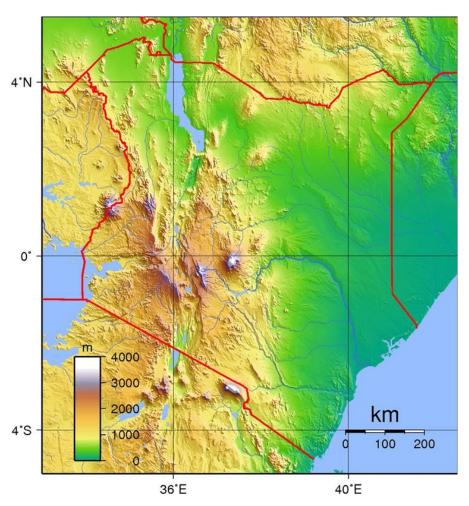


Figure 3-3: Kenya Topography map

Source http://www.vidiani.com/large-detailed-kenya-topographical-map/

3.1.4 Climate

The weather in Kenya is mainly tropical climate, determined by its tropical location, by its proximity to the Indian Ocean, its topography and the oscillating effects of the Inter-tropical Convergence Zone (ITCZ), which annually travels back and forth across equatorial Africa,

providing Kenya with a bimodal annual rainfall pattern: the long rains occur from March through to May, the short rains from October to December.

The climatic zones can be further sub-divided, with arid composed of semi-arid and arid areas, the highlands from plains to foothills, all of which has a localised effect on the climate, and therefore on the flora and fauna found there. Furthermore, some areas west of the Rift Valley experience one long rainy season.

The arid and semi-arid area, mainly in the northern, eastern and some coastal hinterlands parts of Kenya constitute 65% of Kenya, and have an annual average rainfall of between 200 and 600mm and annual temperatures range from 23°C to 34°C. Semi-arid areas are higher in altitude (900 to 1800m), experience an average annual rainfall of 500 to 1000mm, and are slightly cooler. Known collectively as the ASALs, the arid and semi-arid regions contain the majority of Kenya's wildlife areas, and are consequently vital to the country's economy.

The remaining climatic zones occupy 20% of Kenya. The coastal climatic zone, a band some 10 miles wide, extends from the Tanzanian border to Malindi, is humid all year round, experiences an average rainfall level of between 1000 and 1250mm and an average annual temperature range of 22°C to 30°C. The central and western highlands and parts of the central Rift Valley areas are Kenya's most temperate zones. Here, the altitudinal range is 900 – 4000m; annual rainfall levels average out at between 950 and 3000mm and average annual temperatures range from 14°C to 28°C. Finally, mountainous zones are restricted to Mt Kenya and Mt Elgon and their immediate environments.

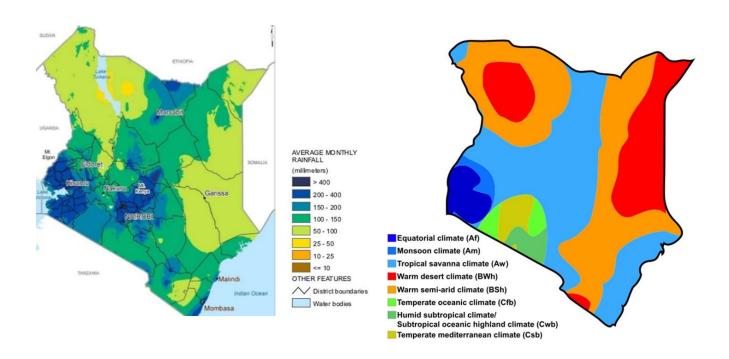


Figure 3-4: Kenya Precipitation and Climate Maps

Source: Images from World_Köppen_Classification_(with_authors).svg

3.1.5 Hydrology Features

Kenya's total land surface comprises of 13,396 sq. Km of water surface. This water surface comprises of a number of small lakes with fluctuating limits as well as part of Lake Victoria and most of Lake Turkana. Only 3,831 Km2 of Lake Victoria is in Kenya while most of Lake Turkana lies in Kenya. Kenya's coastal line extends approximately 402 Km along the Indian Ocean.

Kenya's four largest inland water bodies (Lake Victoria, Lake Turkana, Lake Naivasha, and Lake Baringo) account for about 1.9 per cent of the land area. The majority of Kenya's lakes, including both saline and freshwater, and closed and open basin systems, are located within the Great East African Rift Valley. Kenya's major permanent rivers originate in the highlands. The Nzoia, Yala, Sondu Miriu, and Migori rivers drain into Lake Victoria. The Ewaso Ngiro River is found in the northeastern part of the country and the Tana and Athi rivers flow in the southeastern part. The rivers draining into Lake Victoria (covering over 8 per cent of Kenya's land area) provide about 65 per cent of Kenya's internal renewable surface water supply. The Athi River drainage area (11 per cent of Kenya's land area) provides 7 per cent, the lowest share among Kenya's major drainage areas (Survey of Kenya 2008 and MOWI.).

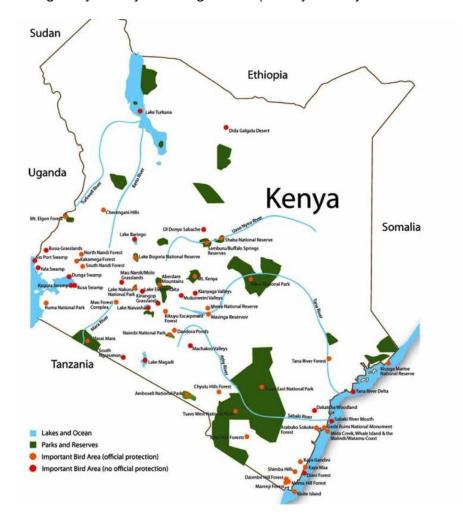


Figure 3-5: Map showing Kenya Hydrological features

Source https://kenya-adventure-tours.com/kenya-guide/

3.1.6 Geology and Soils

The geology of Kenya is characterized by Archean granite/greenstone terrain in western Kenya along Lake Victoria, the Neoproterozoic 'Pan-African' Mozambique Belt, which underlies the central part of the country and Mesozoic to Recent sediments underlying the eastern coastal areas. The Eastern Rift Valley crosses Kenya from north to south and the volcanics associated with rift formation largely obliterate the generally north-south striking Neoproterozoic Mozambique Belt (Schlueter 1997). Rift Valley volcanogenic sediments and lacustrine and alluvial sediments cover large parts of the Eastern Rift.

About 59 per cent of Kenya's soils have moderate to high fertility, meaning they are theoretically suitable for growing crops. Fertility levels, however, depend on the amount of rainfall. Given the distribution and variability of rainfall in Kenya, only about 17 per cent of the land area has medium to high potential for crops, while the remaining 83 per cent is classified as arid and semi-arid and so of low crop growing potential (Survey of Kenya 2003). Drylands, however, provide essential habitat for about half the country's livestock and 70 per cent of Kenya's wildlife (UNCCD 2002).

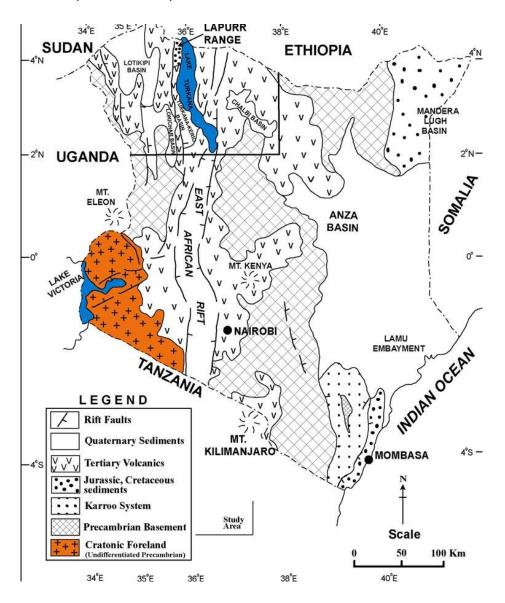


Figure 3-6: Geological Map of Kenya

Source: http://www.epgeology.com/articles/kenya-rift-basin.html

3.1.7 Vegetation and Wildlife

Kenya's five major mountainous regions (Mount Kenya, Mount Elgon, Aberdare Range, Mau Escarpment, and Cherangani Hills) are surrounded by foothills and high-elevation plateaus. Mountainous regions harbour unique types of vegetation due to the micro-climates that occur on their slopes. Different altitudes, aspects, and moisture availability create a large variety of ecosystems over relatively small areas.

Grasslands dominate Kenya's land cover and include what is known as 'savanna' vegetation. Permanent meadows and pastures occupy about 21.3 million ha. in Kenya, which represent 2.4 per cent of Africa's total meadows and pastures (FAO 2008).

Forests cover 2.9 per cent of Kenya's land area (KFMP 1995). The main forest types are moist highland forest, dry forest, tropical rain forest, coastal forest, and riverine and mangrove forests (Survey of Kenya 2003). Although they are not extensive land cover, Kenya's forests provide significant goods and services, including numerous non-timber forest products that provide local people with food, fibres, medicines, and shelter. The closed canopy forests are habitat for a disproportionately large percentage of the country's wildlife and other biodiversity. It is estimated that they harbor 40 per cent of large mammals, 30 per cent of birds and 35 per cent of the nation's butterflies. About half of Kenya's threatened mammals and birds are found in its forests (Survey of Kenya 2003).

Kenya's game parks and spectacular wildlife attract nearly two million tourists each year (UNWater2006) and generate important domestic revenues. Wildlife conservation is thus a high priority. Formed in 1946, Nairobi National Park, just outside the city, was the country's first protected area. By 2008, about 75 237.9 km2 (WCPA 2007) of the nation's land area had been set-aside as national parks and game reserves. Wildlife is also protected by bans on game hunting, killing animals even when they attack, and the trade in ivory and skins. Nevertheless, poaching is a significant threat to many species including leopards, cheetahs, lions, elephants, and rhinoceroses. Efforts are being made to restore populations of the endangered African elephant and black rhino, and an aggressive campaign is being been waged against poachers. Moreover, increased pressure on marine resources has led the Kenyan government to establish a system of protected areas managed by the Kenya Wildlife Service (KWS) to conserve and manage the most important ecosystems along the coast. In total, Kenya has five Marine Protected Areas (MPA's).

Examples of endangered species include the Sokokescops owl (*Otusireneae*); Taita blue-banded papilio (*Papiliodesmonditeita*); the highly endangered Tana River mangabey (*Cercocebusgaleritus*) and the Tana River red colobus (*Piliocolobusrufomitratus*); the green sea turtle (*Cheloniamydas*) and the critically endangered hawksbill turtle (*Eretmochelysimbricata*).

In addition to threats to species biodiversity, a number of types of ecosystems are disappearing or are in dangerous decline due to human activities. These include the slopes of Mount Kenya and coastal forests as well as the Horn of Africa Acacia Savannas, a major centre of endemism for dry land plants.

3.1.8 Marine and Coastal Areas

Kenya's marine and coastal environments include the Indian Ocean's territorial waters and the immediate areas that border the ocean. The Kenyan coast stretches 550 kilometers from the Somalian border in the north in a south-westerly direction to the border with Tanzania. The fringing coral reef (comprised of about 140 species of hard and soft corals) runs between 0.5.km and 2km off-shore with occasional gaps at the mouths of rivers and isolated areas facing creeks. Beaches, cliffs, or mangrove forests dominate the shoreline in most areas. The coral-reef system, mangrove swamps, and hinterland provide unique natural landscapes and a wide range of biodiversity resources of special conservation concern.

3.1.9 Natural Resources

Kenya is not considered mineral-rich even though recent prospects have hinted at potential significant reserves of minerals. Kenya's best known mineral export is soda ash, mined from Lake Magadi. It is used in the making of glassware, paper and industrial chemicals. Fluorspar is another significant mineral from Kenya. Precious stones are usually mined by artisanal miners, and small scale gold mines exist in the western region of the country.

However, recent geological surveys indicate that the country's mineral wealth could have been understated; commercially viable reservoirs of oil and gas were identified in Turkana and off the coast in 2012, and a particularly rich seam of coal has been found in Lower Eastern part of Kenya.

The South Coast is also emerging as a resource rich location, with findings of titanium and niobium being reported. The niobium deposits alone are estimated to be worth \$35 billion.

3.2 Socio-Economic

3.2.1 Economy

Kenya's GDP growth rate has been fluctuating over the years. Kenya's economy recorded high growth rates of real Gross Domestic Product (GDP) averaging 6.6% per annum during the immediate post-independence years (1964-1973) and towards the end of that decade. Deceleration of this growth which started in late 1970s, continued until 2002 when the economy registered a record negative growth rate of 0.2%. During the years 1997-2002 economic growth declined steadily with GDP recording an average annual growth rate of only 0.9%, against a population growth rate of 2.9% per annum.

Among the key factors contributing to the economic decline were poor infrastructure, particularly bad roads, inadequate energy supply, inadequate water supply, a weak institutional framework, weak performance of the major sectors of the economy namely; agricultural and manufacturing sectors, and poor macro-economic management.

Recent report by Kenya National Bureau of Statistics (KNBS) shows that Kenya's economy expanded by 5.7% in the third quarter of 2016 compared to 5.8% in the same period in 2015. The quarterly report says that the economic growth was well spread although most of the sectors of the economy recorded slowed growth. The tourism and hotel industry, information and communications, and public administration are among the sectors that registered improved growth during the quarter. Inflation was contained within the Central Bank's target to average at 6.3% compared to an average of 6.14% during the same quarter in 2015. The slight increase in inflation was primarily due to increases in the prices of food and beverages during the period under review.

Kenya's economic performance remains solid, with the growth rate expected to improve from 5.6% in 2015 to 5.9% in 2016, according to a new World Bank Group economic report. It is projected to rise further to 6% in 2017 (World Bank 2016).

Agriculture has performed average despite the moderate drought. Agriculture production grew by 3.5 percent in the second first half of the year as rains normalized, especially in Kenya's "bread basket", the Rift Valley, and production held up again. The drought mostly affected Kenya's livestock production in Northern and Eastern regions. It is estimated that the drought shaved off 0.2 percentage points from GDP growth, mainly because of livestock mortality. Beyond these arid regions, low rainfall and high temperatures affected tea production.

3.2.2 Demographics

The most recent census conducted in 2009 showed the country's population at 38.6 million. It is expected to rise to 55 million by 2050. In terms of demographic characteristics, the population remains relatively young with 60% being below the age of 18 years, and over 51% being female.

The population report shows the distribution of the population across the country, with Rift Valley Province being the most populous with 10.1 million people. Nairobi, the capital, has 3.1 million people, according to the report released by the Ministry of Planning and National Development. Demographic trends show that more people are moving to urban areas and the Bank estimates that half of Kenya's population will live in cities by 2050. Better macroeconomic conditions in the past decade helped improve the welfare of Kenyans, but the poor remain vulnerability to drought and other crises induced by climate change. Rural and urban poverty remain a challenge. Recent analysis of the data from the 2005 to 2006 Kenya Integrated Household Budget Survey (KIHBS) indicates that national absolute poverty declined from 52.3 percent in 1997 to 46.1 percent in 2005 to 2006.

One of implications of high population growth rate has been the large increase in the population below 25 years of age (school/ college going population) estimated at 18.8 million in 2009 and representing about 50 per cent of the total population. The population of the young people aged 10 to 24 years constituted about one third of the total population in 2009. This proportion not expected to change by 2020 due to underlying population dynamics

3.2.3 Education and Literacy

The Government of Kenya (GOK) introduced Free Primary Education (FPE) in 2003 and Free Day Secondary Education (FDSE) in 2008. The objectives of these programmes were to increase access, quality, equity and relevance in basic education and to cushion poor households by abolishing school fees. The partnership between the development partners and government led to increased enrolment rates and retention of learners in schools (UNESCO, 2015).

In Kenya, 88% of women age 15-49 are literate. Among young women age 15-24, 93% are literate. The majority of Kenyan counties, a total of 29, have literacy rates greater than 90% among young women (KNBS and IST, 2016). Less than half of young women age 15-24 are literate in Turkana (41%), Garissa (43%), Wajir (47%), and Mandera (49%).

The transition rate for both boys and girls from Primary to Secondary school increased from 66.9 (64.0 Girls and 70.2 boys) in 2009 to 76.6 (74.6 Girls and 78.6 Boys) in 2012. This can be attributed to the government initiatives such as the Free Day Secondary Education programme and promotion of girl child education through policies, legal frameworks and advocacy which has expanded access to secondary education. Previously, user fees and levies hindered many learners from transiting to secondary education due to the poverty levels. Socio-cultural practices in some communities were also contributing factor (UNESCO, 2015).

As a result of the FSDE initiative, the total enrolment in secondary schools grew from 758,967 in 2000 to 2.1 million in 2013. Between 2009 and 2013, the total enrolment for boys rose by 43.1percent compared to 42.6percent increase in girls' enrolment.

More men age 15-49 are literate compared to women in Kenya. Almost all men (97%) age 15-49 are literate. Among young men age 15-24, 95% are literate. The majority of Kenyan counties, a total of 33, have literacy rates greater than 90% among young men. Literacy among young men is lowest in Marsabit (78%) and Turkana (70%) (KNBS 2006).

The current Kenya National Adult Literacy Survey indicates that average 38.5 per cent of the Kenyan adult population is illiterate (KNBS 2006). There are also very wide regional disparities; for example, Nairobi had the highest level of literacy, 87.1 per cent, compared to North Eastern region, the lowest, at 8.0 per cent (CBS 2004). Males have higher literacy and numeracy rates of 64.2 per cent and 67.9 respectively, compared to 58.9 and 61.4 per cent for females (KNBS, 2006).

3.3 TVET Development in Kenya

Kenya is one of the leading economies in sub-Saharan Africa. Over the past decade, the country's economy has grown by an average of over 5%. Despite this economic success, growth is not enough to create sufficient employment opportunities for the growing young population. One of the major reasons for the high youth unemployment and the lack of qualified workers in Kenya is the mismatch of Technical and Vocational Education and Training (TVET) with actual labour market demand. Companies across sectors are struggling to find suitable candidates for job vacancies because the TVET courses offered at various training institutions often do not meet the requirements of the private sector. Underlying reasons for this are a general lack of practical training elements in TVET courses, the low level of involvement of enterprises in the training, outdated equipment and infrastructure at training institutions, and the lack of well-trained teachers.

The Kenyan government recognises the potential of TVET as a driving force in addressing the growing youth unemployment (20–40%). The TVET policies, launched in 2012, and the TVET Act adopted by the Kenyan Parliament in 2013, stand for a new political orientation. The TVET reforms are accompanied by the establishment of new government agencies responsible for the coordination and regulation of TVET. By introducing competency-based education and training (CBET), the reforms contribute to improving access to, quality and relevance of TVET. Furthermore, the reforms are supporting the consolidation of the highly fragmented TVET sector. An integral part of the reforms is stronger involvement of the private sector in the design and implementation of TVET¹.

3.3.1 TVET Enrollment

The Economic Survey 2018 showed that student enrollment in TVET institutions grew by increasing from 202,556 in 2016 to 275,139 in 2017, coinciding with a 50.9 per cent rise in the registration of more of TVET institutions from 1,300 in 2016 to 1,962 in 2017 (a 50.9% growth)².

During the review period, enrolment in national polytechnics and technical universities grew by 31.4 per cent from 36,915 in 2016 to 48,492 in 2017. At the same time, enrolment in Vocational Training Colleges rose by 29.1 per cent from 80,905 in 2016 to 104,441 in 2017. The total enrollment of Technical and Vocational colleges rose by 35.8 percent from 202,556 in 2016 to 275,139 in 2017. Out of that, male enrollment represented 56.2 percent (154,541 in 2017) and increased by 35.6 percent from 2016. In comparison, women enrollment represented 43.8 percent (120,558 in 2017), and increased by 36.1 percent from 2016.

The government has adopted a deliberate policy to grow Technical Vocational and Education Training (TVET) following a shortage of graduates with technical skills, targeting a gross enrolment rate of 30% by the year 2030. The new master plan by the government will see enrollment in TVET institutions peak at 3.1 million. Moreover, the new plan guarantees jobs for all TVET graduates within six months of graduating.

3.3.2 Major Issues in the TVET Development Program

According to TVET Draft Policy, 2014, while TVET in Kenya has witnessed impressive growth, there are challenges that need to be addressed³.

 The large number of young people who graduate annually from the secondary school system. According to the KNBS 2009 census there are over 8 million Kenyans (distributed equally among male and female) aged between 15 and 24 years seeking training in tertiary institutions. Of this group 10 % are planned to

¹ https://nairobi.diplo.de/blob/1677124/b28dfeab19322086a7a1ae5d2a95db93/factsheet-youth-data.pdf

² Kenya Economic Survey, 2018

³ MoE, First Final Draft TVET Policy, 2014

- join degree training programmes leaving the remaining 90% seeking for places of training in TVET
- Poverty makes it difficult for most Kenyans to pay for TVET. The result is that
 most trainees end in affordable programmes whose graduates do not necessarily
 acquire all the requisite skills for the work place.
- There is a consistent decline in the quality of training offered in training centres as a result of declining number of quality trainers and a lack of modern and efficient machine and equipment.
- Low enrollment of women due to lack of technical courses that focus on skills for women (e.g soft skills technical skills in mechanic, IT etc)
- Employers are offering few direct employment opportunities for TVET graduates due to a mismatch between training offered and the actual skills demands of industry.
- Curriculum delivery mode in majority of TVET institutions is theory-based as opposed to the desired combination of theory and practical and continuous competency development monitoring and assessment modes
- There is no deliberate link between the current TVET curriculum and Kenya's Vision 2030 needs as most programmes were developed before the conception of the Vision. This renders most programmes not relevant for the immediate national development needs.
- Co-ordination mechanisms and linkages between and among TVET institutions under the different ministries are weak as decision making in TVET is highly centralized at their respective ministry headquarters at the expense of the crucial grass-root level boards and associations of affiliated institutions where actual education and training services are delivered, monitored and evaluated.
- TVET perception among students. Most students have a bias against technical courses because they believe that they are of low value than professional courses which promise a higher paying job as well as a higher social status.

3.4 Land Use

Approximately seventy-five per cent (75%) of the country's population lives within the medium to high potential (20% of land area) and the rest in the vast Arid and Semi-Arid Lands (ASALs). One consequence of this is that size and distribution of land varies quite widely as does population density which ranges from as low as 2 persons per sq. km. in the ASALs to a high of over 2000 in high potential areas.

In the rural areas, the high to medium potential zones are dominated by small farm holdings. In some cases, insecure land-tenure systems have led to low investment in land improvement and productivity. Many smallholder areas are suffering continuous fragmentation of holdings into uneconomic sizes, and farms are getting smaller in the high rainfall areas and in the drier zones. In addition, many large state farms that used to produce seed and breeding stock have been sub-divided and transferred to private ownership (Republic of Kenya, 2012).

4 DESCRIPTION OF NATIONAL AND INTERNATIONAL REGULATORY FRAMEWORK

This chapter describes the Country's national regulatory policies, legal and administrative frameworks that are relevant to EASTRP and ESMF. The chapter also highlights relevant international conventions or agreements relevant to this ESMF and the project. The policies, legal and administrative frameworks are discussed in regard to their relevance in supporting compliance in the design and implementation of ESMF.

4.1 The Constitution of the Republic of Kenya 2010

The preamble of the Constitution makes two critical affirmations in respect of the environment, a common heritage and a determination to sustain it for the benefit of the future generations: and the people of Kenya commit to nurturing and protecting the wellbeing of individuals, families, communities and the nation. While the first commitment focuses on sound environmental management, the second commitment refers to social aspects that should be safeguarded for the advancement of individual, family, community and national aspirations. More specifically, the Constitution has provisions on the management of the environment. Under Article 42, every person has a right to a clean and healthy environment including, the right to an environment that is protected for the benefit of the present and future generations through legislative and other measures. In addition, under the Economic and social rights, Article 43, every person has a right to social security and education as well a right to safe and clean water in adequate quantities. Chapter 5 of the Constitution is devoted to Land and Environment with specific provisions of environment and natural resources appearing under Part 2: Articles 69 and 70. The articles lay emphasis on sustainable exploitation, utilization, management and conservation of the environment and natural resources as well as ensure equitable sharing of the accruing benefits. The Constitution, is therefore a critical pillar in developing and managing an ESMF in as far as sound environmental management principles and practices are concerned and the promotion of social security and education. Therefore, SEQIP must ensure that people's constitutional rights are safeguarded by ensuring that no project component threatens undermines the integrity of the environmental resources, social security is promoted and access to educational facility is enhanced.

4.2 Policy Framework

The section below highlights policies to be considered by EASTRIP.

4.2.1 Sessional Paper No. 10 of 2012 on Kenya Vision 2030

This is the country's long-term development blueprint, which aims to create a globally competitive and prosperous country providing a high quality of life for all its citizens. It aspires to transform Kenya into a newly industrializing, middle-income country by 2030 with three pillars – Economic, Social and Political.

Vision 2030 envisages a number of enablers including infrastructure development across the various sectors. Such infrastructure would take the form of educational facilities – laboratories, construction of new classrooms, sanitation and water supply facilities.

EASTRIP is seeking to address upgrading and provision of the above-mentioned facilities at TVET institutions and hence a direct contribution to the achievement of Vision 2030 goals.

4.2.2 Technical and Vocational Education and Training (TVET) Policy, Draft 2014

The policy provides for the setting up of a national Authority to facilitate linkages and coordination between the numerous actors and stakeholders in TVET. The Authority is further intended to provide accreditation and quality assurance services in training.

The activities of EASTRIP will ensure that they align the proposals under this policy, by putting specific emphasis on enhancing access to TVET institutions by increasing enrollment across all genders and population.

4.2.3 Kenya National Policy on Gender and Development (NPGD), 2000

The Policy spells out gender mainstreaming and empowerment of women as key for development and clearly states that it is the right of women, men, girls and boys to participate in and benefit equally from the country's development process. The NPGD provides a framework for mainstreaming gender in all policies, planning and programming in Kenya and puts in place institutional mechanisms to ensure effective implementation.

EASTRIP subcomponents 1 and 2 is adopting the gender mainstreaming strategy to ensure that all participating institutions address how gender enrollment among women will be increased.

4.2.4 The National ICT Strategy for Education and Training (2006)

The strategy aims to modernize Kenya's educational system using ICT and expand access to education, training and research resources and facilities, as well as to improve the quality of education and training responsive to the needs and requirements of the rapidly transforming economy and society with specific reference to the development of the information and knowledge-based economy and society. The key objective of this is to transform Kenya into an ICT or information knowledge driven nation.

The strategy was developed in 2006 and urgently needs to be revised so as to align it with the 2010 constitution and to ensure it resonates with the rapid technological advances, changing public needs and evolving global trends.

EASTRIP will among other issues support the implementation of this policy through the use of ICT across the project components

4.2.5 The National Environment Policy 2013

The Policy provides a framework for an integrated approach to sustainable management of Kenya's environment and natural resources. In particular it proposes to strengthen:

- Legal and institutional framework for good governance
- Integrate environmental management with economic growth, poverty reduction and improving livelihoods
- Research and capacity development
- Promote new environment management tools
- Promote collaboration and cooperation and partnerships in environment management,
- Promote domestication, co-ordination and maximization of benefit from Strategic Multilateral Environment Agreements

EASTRIP will integrate sound environmental management with its infrastructure development, to enhance sustainable development.

4.2.6 The National Climate Change Response Strategy (NCCRS), 2010

The strategic objective of the Strategy is to promote economic resilience in Kenya. NCCRS has the following key recommendations: adaptation and mitigation measures in key sectors; necessary policy, legislative and institutional adjustments; enhancing climate change awareness, education and communication in the country; capacity building requirements; enhancing research and development as well as technology development and transfer in areas that respond to climate change, among many others.

The strategy guides on how to tackle the climate change challenges with a view of ensuring a climate change resilient country.

The proposed EASTRIP will align to this strategy by promoting efficient materials and resource utilization technologies – e.g., solar energy, water reduction strategies etc.

4.3 Legal Frameworks

4.3.1 Technical and Vocational Education and Training (TVET) Act, No. 29 of 2013

The Act provides for;

- The establishment of a technical and vocational education and training system,
- The governance and management of institutions offering technical and vocational education and training,
- Coordinated assessment, examination and certification,
- Promotion of access and equity in training and to assure standards, quality and relevance in such institutions,

Technical and Vocational Education and Training the Curriculum Development, Assessment and Certification Council (TVETA CDACC) is corporate body established under the TVET Act, where the Council is mandated to undertake design and develop Curricula for the training institutions' examination, assessment and competence certification and advise the Government on matters related thereto.

EASTRIP will ensure that its subcomponents activities will align to the requirements of this Act.

4.3.2 Science, Technology and Innovation Act 2012

This is an Act of Parliament to facilitate the promotion, coordination and regulation of the progress of science, technology and innovation in the country. This legislation also aims to assign priority to the development of science, technology and innovation. Finally, this new law is intended to entrench technology and innovation into the national production system.

EASTRIP will ensure that its subcomponents activities will align to the requirements of this Act.

4.3.3 Basic Education Act No. 14 of 2013

This Act of Parliament gives breathe to Article 53 of the Constitution and other enabling provisions; to promote and regulate free and compulsory basic education; to provide for accreditation, registration, governance and management of institutions of basic education; to provide for the establishment of the National Education Board, the Education Standards and Quality Assurance Commission, and the County Education Board and or connected purposes.

The act provides guiding principles for the provision of basic education, which all the three components of EASTRIP aim to address, these include but are not limited to:

- Equitable access to basic education and equal access to education or institutions by the youth;
 - Promotion of quality and relevance of basic education;
 - Protection of the right of every child in a public school to equal standards of education including the medium of instructions used in schools for all children of the same educational level:
 - · Encouraging independent and critical thinking and cultivating skills,
 - Disciplines and capacities for reconstruction and development;
 - Non-discrimination, encouragement and protection of the marginalized, persons with disabilities and those with special needs;
 - Provision of appropriate human resource, funds, equipment, infrastructure and related resources that meet the needs of every child in basic education.

EASTRIP will endeavor to be compliant to the provisions of the Act. The targeted improvement in the retention and opportunity to transition to TVET institutions will be a major contribution to the spirit and intention of the Act.

4.3.4 Environmental Management and Coordination Act, 1999 (EMCA) revised amendments 2015

EMCA is implemented by the guiding principle that every person has a right to a clean and healthy environment and can seek redress through the high court if this right has been, is likely to be or is being contravened. Section 58 of the Act makes it a mandatory requirement for an integrated EIA to be carried out by proponents intending to implement projects specified in the Second Schedule of the Act and these include drilling for the purpose of utilizing ground water resources including geothermal energy. Such projects have a potential of causing significant impacts on the environment.

Similarly, section 68 of the same Act requires operators of existing projects or undertakings to carry out environmental audits in order to determine the level of conformance with statements made during the EIA. The proponent is required to submit the EIA and environmental audit reports to NEMA for review and necessary action.

The amended Schedule 2 of the EMCA, 1990 (CAP 387) provides details on projects that require Environmental Impact Assessment which include projects that may have a bearing on, changes of land-use, waters resources (construction of weirs, river diversion, drilling for the purpose of using underground water resources), and waste disposal (solid waste disposal, waste water disposal/treatment) among others. Under the second schedule of the 2015 Amended EMCA, schools and related infrastructure for learners not exceeding one hundred are categorized as low risk projects and as such can be approved after preparation of an Environmental and Social Impact Assessment Project Report whereas schools and other learning institutions exceeding one hundred learners are characterized as mediumhigh risk and have to undergo a full Environmental and Social Impact Assessment Study. However, because most of the proposed subprojects under ESATRIP involves extensions of the school infrastructure, they likely to be categorized as low-medium impact projects and will be approved at ESIA project level.

4.3.5 The Employment Act, 2007

This Act declares and defines the fundamental rights of employees; minimum terms and conditions of employment; to provide basic conditions of employment of employees; and to regulate the employment of children, among other rights. Key sections of the Act elaborate on the employment relationship; protection of wages; rights and duties in employment; termination and dismissal and protection of children, among others.

The Employment Act, Part VI provides for protection of children including protection from the worst forms of child labour. In section 58 and 59, the minimum age for employment in an industrial undertaking is 16, unless he/she is an apprentice under the Industrial Training Act (Cap. 237, Laws of Kenya). Section 60 compels a child's employer to have a register consisting age and date of birth, date of entry into and of leaving the employment and, such other particulars as may be prescribed.

This Act will guide the management of workers, including protecting against child labour especially during the construction period.

4.3.6 The Children Act, 2001, Cap 141

The law under the Children Act and the Employment Act, 2007, defines a child in Kenya as a person below the age of 18 years. Part II, Section 10 of the Children Act, provides for Protection of children from child labour and armed conflict. Every child shall be protected from economic exploitation and any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral or social development.

In the Act child labour refers to any situation where a child provides labour in exchange for payment and includes— (a) any situation where a child provides labour as an assistant to another person and his labour is deemed to be the labour of that other person for the purposes of payment; (b) any situation where a child's labour is used for gain by any individual or institution whether or not the child benefits directly or indirectly; and (c) any situation where there is in existence a contract for services where the party providing the services is a child whether the person using the services does so directly or by agent. Section 15 of the Act also protects children from sexual exploitation. A child shall be protected from sexual exploitation and use in prostitution, inducement or coercion to engage in any sexual activity, and exposure to obscene materials.

This Act will guide in protecting against child labour especially during the construction period.

4.3.7 Occupational Safety and Health Act 2007

This is an Act of Parliament which provides for the safety, health and welfare of all workers and all persons lawfully present at workplaces and it also provides for the establishment of the National Council for Occupational Safety and Health and for connected purposes. It applies to all workplaces where any person is at work, whether temporarily or permanently and therefore will apply to the project both during construction and operation phases.

The purpose of this Act is to:

- Secure the safety, health and welfare of persons at work; and
- Protect persons other than persons at work against safety and health arising out of, or in connection with the activities of persons at work.

The Occupational Safety and Health Act (OSHA) 2007 repealed the Factories and Other Places of Work Act. Anything done under the provisions of the Factories and Other Places of Work Act including subsidiary legislation issued before the commencement of the OSHA 2007 shall be deemed to have been done under the provisions of this Act.

The Factories and Other Places of Work Act had over the years passed several subsidiary rules and regulations for effective implementation of the Act. All shall, as long as it is not inconsistent with OSHA 2007 remain in force until repealed or revoked by subsidiary legislation under the provisions of OSHA 2007 and shall for all purposes be deemed to have been made under this Act.

These regulations include:

- The Factories (Cellulose Solutions) Rules 1957;
- The Factories (Wood Working Machinery) Rules 1959;
- The Factories (Dock) Rules 1962;
- The Factories (Eye Protection) Rules 1978;
- The Factories (Electric Power) (Special) Rules 1978;
- The Factories (Building Operations and Works of Engineering Construction) Rules 1984;
- The Factories and Other Places of Work (Health & Safety Committees) Rules 2004.
- The Factories and Other Places of Work (Medical Examination) Rules 2005;
- The Factories and Other Places of Work (Noise Prevention and Control) Rules 2005:
- The Factories and Other Places of Work (Fire Risk Reduction) Rules 2007;
- The Factories and Other Places of Work (Hazardous Substances) Rules 2007.

The scope of OSHA 2007 has been expanded to cover all workplaces including offices, schools, academic institutions and plantations. It establishes codes of practices to be approved and issued by the Director, Directorate of Occupational Health and Safety (DOHS) for practical guidance of the various provisions of the Act.

Other parameters within the Act relevant to the project include:

- 1) Duties of employers, owners or occupiers of workplace;
- 2) Establishment of safety and health committees;
- 3) Annual safety and health audit of workplaces;
- 4) Safety and Health obligations for persons who may come to premises for work and are not employees of that particular workplace;
- 5) Reporting of any accident, dangerous occurrence or occupational poisoning caused in the workplace to the area Occupational Health and Safety Office. These incidents should be entered in the General Register. In case of a fatal accident information to the area Safety and Health Office should be within 24 hrs and a written notice to the same within 7 days:
- 6) The duties of manufactures, designers, importers and suppliers to ensure that all articles and substances for use at workplace are safe and will not cause injury to health and the environment;
- 7) Duties of self employed persons;
- 8) Duties of employed persons;
- Prohibition of interference or misuse of any appliance, convenience or any other facility provided to secure Safety, Health and Welfare at work by any person (occupier, self employed person or employed);
- 10) The administration of the Act is the responsibility of a Director and other appointed and gazetted officials (Occupational Health and Safety Officers);
- 11) The registration of all workplaces by the Director Directorate of Occupational Health and Safety (DOHS) forming the basis of his work statistics;
- 12) Machinery safety to include:
 - Safe use of machinery, plant and equipment;
 - Prime makers and transmission machines;
 - The maintenance, construction of fencing safeguards;
 - The statutory requirements of various machines, plants and equipment (hoists and lifts, chains and ropes, cranes, steam receivers and containers, air receivers, cylinders for compressed liquefied and dissolved gases and refrigeration plants).
- 13) Chemical safety including:
 - (i) Handling, transportation and disposal of chemicals and other hazardous substances:

- (ii) Importance of Materials Safety Data Sheets (MSDS);
- (iii) Labelling and marking of chemical substances;
- (iv) Classification of hazardous chemicals and substances;
- (v) Establishment and adoption of exposure limits on hazardous substances in a workplace;
- (vi) Control of air pollution, noise and vibrations;
- (vii)Redeployment on medical advice.

4.3.8 HIV/AIDS Prevention and control Act (Act No. 14 of 2006)

The Act gives guidance to review of HIV and AIDS workplace policies, making specific reference to HIV/AIDS in relation to provision of education and information in the workplace, discrimination, privacy, confidentiality and personal rights.

Specifically, in Sections 4 and 7, the Act provides that the government – through its various ministries, departments, authorities and other agencies - shall promote public awareness about the causes, means of transmission, consequences and means of prevention and control of HIV/AIDS through a comprehensive nationwide educational and information campaign at all places of work, and ensure the provision of basic information and instructions on HIV/AIDS prevention and control to all public sector employees.

The ESIA of all sub-projects shall allocate a budget towards creating awareness and training for the workers during the project implementation as provided by law.

4.3.9 The Water Act, 2016

This Act provides for the regulation, management and development of water resources and water and sewerage services in line with the Constitution. Authorities shall, in administering or applying this Act, be guided by the principles and values set out in Articles 10,43. 60 and 232 of the Constitution. it establishes the Water Resources Authority ("Authority"), the National Water Harvesting and Storage Authority, the Water Services Regulatory Board, the Water Sector Trust Fund and the Water Tribunal. Under the Act, Management and use of water Resources is guided through the Water Resource Authority.

The projects are under EASTRIP will adhere to this Act by obtaining all the required water permits, including when abstraction of water is necessary from any water sources.

4.3.10 County Government Act no 17 of 2012

Part II of the Act empowers the county government to be in charge of planning by coordinating integrated development planning within the county; and ensuring integrated planning within the county Act provides among others for the following

- The Constitution confers powers on the County Assemblies to receive and approve plans and policies. These plans and policies affect the management and exploitation of the county's resources, and development and management of its infrastructure and institutions.
- Ensuring and coordinating the participation of communities and locations in governance at the local level and assisting communities and locations to develop the administrative capacity for the effective exercise of the functions and powers and participation in governance at the local level.
- Control of air pollution, noise pollution, other public nuisances, and outdoor advertising.

The projects are under EASTRIP will adhere to this Act by obtaining all the required planning permits and licenses during construction and operation.

4.3.11 Traffic Act, Cap 403

This Act specifies that motor vehicles use proper fuel. The Traffic Regulations promulgated under the Act specifies that every vehicle is required to be well constructed, maintained and used so as not to emit any smoke or visible vapour. The vehicles to be used during construction process should be serviced and be in good condition to prevent them from emitting any hazardous emissions.

4.3.12 Public Health Act Cap 242

The Public Health Act provides for the protection of human health through prevention and guarding against introduction of infectious diseases into Kenya from outside, to promote public health and the prevention, limitation or suppression of infectious, communicable or preventable diseases within Kenya, to advice and direct local authorities in regard to matters affecting the public health to promote or carry out researches and investigations in connection with the prevention or treatment of human diseases. This Act provides the impetus for a healthy environment and gives regulations to waste management, pollution and human health.

The Public Health Act regulates activities detrimental to human health. The owner(s) of the premises responsible for environmental nuisances such as noise and emissions, at levels that can affect human health, are liable to prosecution under this act. An environmental nuisance is defined in the act as one that causes danger, discomfort or annoyance to the local inhabitants or which is hazardous to human health.

This Act controls the activities of the project with regard to human health and ensures that the health of the surrounding community is not jeopardized by the activities of the project such as water development.

TVET institutions will have to comply to provisions within this act so as to ensure provision of safe, healthy learning facilities.

4.3.13 The Environment and Land Court Act, 2011

This Act is in place to give effect to Article 162(2) (b) of the Constitution; to establish a superior court to hear and determine disputes relating to the environment and the use and occupation of, and title to, land, and to make provision for its jurisdiction functions and powers. The Court is accorded the same status as the high court so any disputes to do with decisions made by NEMA may be handled by this court if all other avenues including the NET have been exhausted. Project disputes relating to land administration and management, public, private and community land and contracts, are also addressed by this court.

This Act will be applicable in regard to any environment or land cases that might arise from the EASTRP as part of Grievance Redress Mechanisms.

4.3.14 The Land Act, 2012

This is an ACT of Parliament to give effect to Article 68 of the Constitution, to revise, consolidate and rationalize land laws; to provide for the sustainable administration and management of land and land based resources, and for connected purposes. The Land Act of 2012 subsection (1) states that 'any land may be converted from one category to another in accordance with the provisions of this Act or any other written law.'

Although no land issues and need for acquisition is expected under this project, the provisions under this Act will be applicable if land acquisition will be necessary.

4.3.15 Physical Planning Act, 1996

This is the main Act that governs land planning and all proposed developments must be approved by the respective local authority and certificate of compliance issued accordingly. This Act provides for the preparation and implementation of physical development plans for connected purposes. It establishes the responsibility for the physical planning at various levels of Government in order to remove uncertainty regarding the responsibility for regional

planning. A key provision of the Act is the requirement for Environmental Impact Assessment (EIA).

The projects are under EASTRIP will adhere to this Act by obtaining all the required planning permits and licenses during construction and operation.

4.4 Regulations

4.4.1 Environmental (Impact Assessment and Audit) Regulations 2003

The Environmental (Impact Assessment and Audit) Regulations 2003 provides in Regulation 3 that "the Regulations should apply to all policies, plans, programmes, projects and activities specified in Part III and V of the Regulations". It basically outlines the guidelines for undertaking ESIA study from preparation of the report to submission and approval by NEMA.

4.4.2 Environmental Management and Co-ordination (Waste Management) Regulations 2006

These are described in Legal Notice No. 121 of the Kenya Gazette Supplement No. 69 of September 2006. These Regulations apply to all categories of waste including:

- Industrial wastes;
- Hazardous and toxic wastes:
- Pesticides and toxic substances:
- Biomedical wastes:
- Radio-active substances.

The proposed Project will have to abide by these regulations in dealing with waste management especially when it comes to handling of industrial, hazardous and toxic wastes which may be generated during construction or operations.

4.4.3 Environmental Management and Coordination, (Water Quality) Regulations 2006

These are described in Legal Notice No. 120 of the Kenya Gazette Supplement No. 68 of September 2006. These Regulations apply to drinking water, water used for agricultural purposes, water used for recreational purposes, water used for fisheries and wildlife and water used for any other purposes. This includes the following:

- Protection of sources of water for domestic use;
- Water for industrial use and effluent discharge and;
- Water for agricultural use.

These Regulations outline:

- a) Quality standards for sources of domestic water;
- b) Quality monitoring for sources of domestic water;
- c) Standards for effluent discharge into the environment;
- d) Monitoring guide for discharge into the environment;
- e) Standards for effluent discharge into public sewers:
- f) Monitoring for discharge of treated effluent into the environment.

In fulfilling the requirements of these regulations, the project proponent will have to undertake monitoring of both domestic water and wastewater and ensure compliance with the acceptable discharge standards.

4.4.4 Environmental Management and Coordination, Conservation of Biological Diversity (BD) Regulations 2006

These regulations are described in Legal Notice No. 160 of the Kenya Gazette Supplement No. 84 of December 2006. The Regulations apply to conservation of biodiversity which

includes Conservation of threatened species, Inventory and monitoring of BD and protection of environmentally significant areas, access to genetic resources, benefit sharing and offences and penalties.

4.4.5 Environmental Management and Coordination (Controlled Substances) Regulations 2007

These regulations are described in Legal Notice No. 73 of 2007. The Government of Kenya banned the importation of Chlorofluorocarbons (CFCs) with effect from 1 January 2009, to ensure that Kenya is compliant with the provisions of the Montreal Protocol on Substances that Deplete the Ozone Layer.

4.4.6 Environmental Management and Coordination (Wetlands, Riverbanks, Lake Shores and Sea Shore Management) Regulations 2009

The regulation applies to all wetlands in Kenya, whether occurring in private or public land. It contains provisions for the utilization of wetland resources in a sustainable manner, compatible with the continued presence of the wetlands and their hydrological, ecological, social and economic functions and services.

4.4.7 Environmental Management and Coordination (Noise and Excessive Vibration Pollution) (Control) Regulations, 2009.

These regulations prohibit making or causing any loud, unreasonable, unnecessary or unusual noise which annoys, disturbs, injures or endangers the comfort, repose, health or safety of others and the environment. It also prohibits excessive vibrations which annoy, disturb, injure or endanger the comfort, repose, health or safety of others and the environment or excessive vibrations which exceed 0.5 centimetres per second beyond any source property boundary or 30 metres from any moving source.

Under the regulation the, implementation of the project will be required to take into consideration, daily monitoring of the noise levels within the project area during construction period to ensure compliance.

4.5 Relevant Environmental Institutions

There are over 20 institutions and departments, which deal with environmental issues in Kenya. Some of the key institutions include the Ministry of Environment and Natural Resources (MENR), Kenya Forest Services (KFS), Kenya Wildlife Service (KWS), National Museums of Kenya (NMK), National Environment Management Authority (NEMA), Ministry of Water and Irrigation (MOWI), Water Resources Authority (WRA) among other organisations. There are also local and international NGOs involved in environmental issues in Kenya. In 2001, the Government established specific administrative structures to implement the EMCA. The main administrative structures are described in the following sections.

4.5.1 Ministry of Environment, Water and Natural Resources

The Ministry of Environment, Water and Natural Resources (MEWNR) is responsible for the environment at policy level. One of its key functions is the full implementation of the Environmental Management Coordination Act (EMCA) 1999 (Amended 2015). To achieve this objective, the Ministry's role is to create an enabling environment through policy, legal and regulatory reforms for environmental and natural resources management.

The mandate of the ministry is to monitor, protect, conserve and manage the environment and natural resources through sustainable exploitation for socio-economic development aimed at eradication of poverty, improving living standards and ensuring that a clean environment is sustained now and in the future. The ministry comprises of various divisions at the headquarters and the following parastatals and departments including the National Environment Management Authority.

4.5.2 The National Environment Management Authority

The responsibility of NEMA is to exercise general supervision and co-ordination over all matters relating to the environment and to be the principal instrument of Government in the implementation of all policies relating to the environment.

Any EASTRIP components that fall under the second schedule of EMCA or its regulations shall seek an Environmental Impact Assessment License from NEMA.

4.5.3 County Environmental Committees

The County Environmental Committees also contribute to decentralized environmental management and enable the participation of local communities. These environmental committees are to be constituted by the governor and are responsible for the proper management of the environment within the county for which it is appointed.

4.5.4 National Environmental Complaints Committee

The National Environmental Complaints Committee (NECC) is established under Section 31 of EMCA. The NECC is concerned with the investigation of complaints relating to environmental damage and degradation generally. The NECC has powers to investigate complaints against any person or even against NEMA or on its own motion investigate any suspected case of environmental degradation. The NECC is required by law to submit reports of its findings and recommendations to NEMA.

4.5.5 National Environmental Tribunal (NET)

The NET is established under Section 125 of EMCA for the purpose of hearing appeals from administrative decisions by organs responsible for enforcement of environmental standards. An appeal may be lodged by a project proponent upon denial of an EIA licence or by a local community upon the grant of an EIA licence to a project proponent. NEMA may also refer any matter that involves a point of law or is of unusual importance or complexity to NET for direction. The proceedings of NET are not as stringent as those in a court of law and NET shall not be bound by the rules of evidence as set out in the Evidence Act. Upon the making of an award, NET's mandate ends there as it does not have the power to enforce its awards. EMCA provides that any person aggrieved by a decision or award of NET may within 30 days appeal to the High Court.

5 DESCRIPTION OF WORLD BANK ENVIRONMENTAL & SOCIAL SAFEGUARDS POLICIES AND TRIGGERS

The World Bank Safeguard Policies are outlined below and summarized in **Error! Reference source not found.** below and thereafter a determination has been made on the safeguards that will be triggered as a result of the EASTRIP.

Table 5-1: Summary of World Bank's Safeguards Policies objectives including when they are triggered

Policy	Objective	Trigger for the Policy	
OP/BP 4.01 Environmental Assessment	The objective of this policy is to ensure that Bank-financed projects are environmentally sound and sustainable, and that decision-making is improved through appropriate analysis of actions and of their likely environmental impacts. This policy is triggered if a project is likely to have potential (adverse) environmental risks and impacts on its area of influence. OP 4.01 covers impacts on the natural environment (air, water and land); human health and safety; physical cultural resources; and transboundary and global environment concerns.	plan (EMP). When a project is	
OP/BP 4.04 Natural Habitats	This policy recognizes that the conservation of natural habitats is essential to safeguard their unique biodiversity and to maintain environmental services and products for human society and for long-term sustainable development. The Bank therefore supports the protection, management, and restoration of natural habitats in its project financing, as well as policy dialogue and economic and sector work. The Bank supports, and expects borrowers to apply, a precautionary approach to natural resource management to ensure opportunities for environmentally sustainable development. Natural habitats are land and water areas where most of the original native plant and animal species are still present. Natural habitats comprise many types of terrestrial, freshwater, coastal, and marine ecosystems. They include areas lightly modified by human activities, but retaining their ecological functions and most native species.	This policy is triggered by any project (including any subproject under a sector investment or financial intermediary) with the potential to cause significant conversion (loss) or degradation of natural habitats, whether directly (through construction) or indirectly (through human activities induced by the project).	
OP/BP 4.36 Forests	The objective of this policy is to assist borrowers to harness the potential of forests to reduce poverty in a sustainable manner, integrate forests effectively into sustainable economic development and protect the vital local and global environmental services and	This policy is triggered whenever any Bank-financed investment project (i) has the potential to have impacts on the health and quality of forests or the rights and	

Policy	Objective	Trigger for the Policy	
	values of forests. Where forest restoration and plantation development are necessary to meet these objectives, the Bank assists borrowers with forest restoration activities that maintain or enhance biodiversity and ecosystem functionality. The Bank assists borrowers with the establishment of environmentally appropriate, socially beneficial and economically viable forest plantations to help meet growing demands for forest goods and services.	welfare of people and their level of dependence upon or interaction with forests; or (ii) aims to bring about changes in the management, protection or utilization of natural forests or plantations.	
OP 4.09 Pest Management	The objective of this policy is to (i) promote the use of biological or environmental control and reduce reliance on synthetic chemical pesticides; and (ii) strengthen the capacity of the country's regulatory framework and institutions to promote and support safe, effective and environmentally sound pest management. More specifically, the policy aims to (a) Ascertain that pest management activities in Bank-financed operations are based on integrated approaches and seek to reduce reliance on synthetic chemical pesticides (Integrated Pest Management (IPM) in agricultural projects and Integrated Vector Management (IVM) in public health projects. (b) Ensure that health and environmental hazards associated with pest management, especially the use of pesticides are minimized and can be properly managed by the user. (c) As necessary, support policy reform and institutional capacity development to (i) enhance implementation of IPM-based pest management and (ii) regulate and monitor the distribution and use of pesticides.	The policy is triggered if: (i) procurement of pesticides or pesticide application equipment is envisaged (either directly through the project, or indirectly through on-lending, co-financing, or government counterpart funding); (ii) the project may affect pest management in a way that harm could be done, even though the project is not envisaged to procure pesticides. This includes projects that may (i) lead to substantially increased pesticide use and subsequent increase in health and environmental risk; (ii) maintain or expand present pest management practices that are unsustainable, not based on an IPM approach, and/or pose significant health or environmental risks.	
OP/BP 4.11 Physical Cultural Resources	The objective of this policy is to assist countries to avoid or mitigate adverse impacts of development projects on physical cultural resources. For purposes of this policy, "physical cultural resources" are defined as movable or immovable objects, sites, structures, groups of structures, natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance. Physical cultural resources may be located in urban or rural settings, and may be above ground, underground, or underwater. The cultural interest may be at the local, provincial or national level, or within the international community.	This policy applies to all projects requiring a Category A or B Environmental Assessment under OP 4.01, project located in, or in the vicinity of, recognized cultural heritage sites, and projects designed to support the management or conservation of physical cultural resources.	

Policy	Objective	Trigger for the Policy
OP/BP 4.10 Indigenous Peoples	The objective of this policy is to (i) ensure that the development process fosters full respect for the dignity, human rights, and cultural uniqueness of indigenous peoples; (ii) ensure that adverse effects during the development process are avoided, or if not feasible, ensure that these are minimized, mitigated or compensated; and (iii) ensure that indigenous peoples receive culturally appropriate and gender and inter-generationally inclusive social and economic benefits.	The policy is triggered when the project affects the indigenous peoples (with characteristics described in OP 4.10 para 4) in the project area.
OP/BP 4.12 Involuntary Resettlement	The objective of this policy is to (i) avoid or minimize involuntary resettlement where feasible, exploring all viable alternative project designs; (ii) assist displaced persons in improving their former living standards, income earning capacity, and production levels, or at least in restoring them; (iii) encourage community participation in planning and implementing resettlement; and (iv) provide assistance to affected people regardless of the legality of land tenure.	This policy covers not only physical relocation, but any loss of land or other assets resulting in: (i) relocation or loss of shelter; (ii) loss of assets or access to assets; (iii) loss of income sources or means of livelihood, whether or not the affected people must move to another location. This policy also applies to the involuntary restriction of access to legally designated parks and protected areas resulting in adverse impacts on the livelihoods of the displaced persons.
OP/BP 4.37 Safety of Dams	The objectives of this policy are as follows: For new dams, to ensure that experienced and competent professionals design and supervise construction; the borrower adopts and implements dam safety measures for the dam and associated works. For existing dams, to ensure that any dam that can influence the performance of the project is identified, a dam safety assessment is carried out, and necessary additional dam safety measures and remedial work are implemented.	This policy is triggered when the Bank finances: (i) a project involving construction of a large dam (15 m or higher) or a high hazard dam; and (ii) a project which is dependent on an existing dam. For small dams, generic dam safety measures designed by qualified engineers are usually adequate.
OP 7.50 Projects in International Waters	The objective of this policy is to ensure that Bank-financed projects affecting international waterways would not affect: (i) relations between the Bank and its borrowers and between states (whether members of the Bank or not); and (ii) the efficient utilization and protection of international waterways. The policy applies to the following types of projects: (a) Hydroelectric, irrigation, flood control, navigation, drainage, water and sewerage, industrial and similar projects that involve the use or potential pollution of international waterways; and (b) Detailed design and engineering studies of projects	This policy is triggered if (a) any river, canal, lake or similar body of water that forms a boundary between, or any river or body of surface water that flows through two or more states, whether Bank members or not; (b) any tributary or other body of surface water that is a component of any waterway described under (a); and (c) any bay, gulf strait, or channel bounded by two or more states, or if within one state

Policy	Objective	Trigger for the Policy
	under (a) above, include those carried out by the Bank as executing agency or in any other capacity.	recognized as a necessary channel of communication between the open sea and other states, and any river flowing into such waters.
OP 7.60 Projects in Disputed Areas	The objective of this policy is to ensure that projects in disputed areas are dealt with at the earliest possible stage: (a) so as not to affect relations between the Bank and its member countries; (b) so as not to affect relations between the borrower and neighboring countries; and (c) so as not to prejudice the position of either the Bank or the countries concerned.	This policy is triggered if the proposed project will be in a "disputed area". Questions to be answered include: Is the borrower involved in any disputes over an area with any of its neighbors. Is the project situated in a disputed area? Could any component financed or likely to be financed as part of the project be situated in a disputed area?

5.1 World Bank's Safeguards Likely to be Triggered by EASTRIP

The likely locations for subprojects under EASTRIP are not yet known but will most be within the existing participating institutions. Further preparatory work needs to be concluded as to the specific site locations at the institutions for the proposed projects (e.g. site selection, type of infrastructures to be undertaken, and other associated infrastructure that goes with the proposed investments). Further details on the actual proposed investments, social/physical environment of the project activities will be provided after the pre-appraisal mission and this will be contained in the appraisal stage ISDS.

Due to the location of the institutions proposed under EASTRIP, the activities under EASTRIP (all expected to be within the institutions compounds) are for the moment expected to trigger only OP 4.01 (Environmental Assessment). However, further details pertaining to the exact locations of the proposed activities for EASTRIP at different institutions may trigger other OPs, such as 4.12 (Involuntary Resettlement), 4.04 (Natural Habitats), 4.11 (Physical Cultural Resources), and 4.36 (Forests). The safeguards instruments prepared for any subprojects will address the requirements of any applicable policies.

Table 5-2: Safeguard polices likely to be triggered by the proposed sub-projects

Safeguard Policies Triggered by the Project (For the Moment)	Yes	No
Environmental Assessment (OP/BP 4.01)	X	
Natural Habitats (OP/BP 4.04)		X
Pest Management (OP 4.09)		X
Physical Cultural Resources (OP/BP 4.11)		X
Involuntary Resettlement (OP/BP 4.12)		X
Indigenous Peoples (OP/BP 4.10)		X
Forests (OP/BP 4.36)		X
Safety of Dams (OP/BP 4.37)		X
Projects in Disputed Areas (OP/BP 7.60)*		Х
Projects on International Waterways (OP/BP 7.50)		X

^{*} By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas

5.1.1 Environmental Assessment (OP4.01, BP 4.01, GP 4.01)

This policy requires Environmental Assessment (EA) of projects proposed for Bank financing to help ensure that they are environmentally sound and sustainable, and thus to improve decision making. The EA is a process whose breadth, depth, and type of analysis will depend on the nature, scale, and potential environmental impact of the proposed investments under EASTRIP. The EA process considers the natural environment (air, water, and land); human health and safety; social aspects (involuntary resettlement, indigenous peoples, and cultural property) and transboundary and global environmental aspects.

The environmental and social impacts under EASTRIP will come from the proposed subprojects investment activities. However, since the exact location of these investments will not be identified before bank appraisal of the project, the EA process calls for the borrower to prepare an Environmental and Social Management Framework (ESMF).

OP4.01 is triggered in case of EASTRP, as the bank will finance civil works projects including the rehabilitation and refurbishment of existing infrastructure, as well as the construction of new infrastructure. The exact locations and impacts of the sub-projects have not yet been identified, though the proposed sub-projects have been identified at early stages of the project.

This ESMF report establishes a mechanism to determine and assess future potential environmental and social impacts during implementation of EASTRIP activities, and sets out mitigation, monitoring and institutional measures to be taken during operations of these activities, to eliminate adverse environmental and social impacts, offset them, or reduce them to acceptable levels.

Operational Policy 4.01 further requires that the ESMF report must be disclosed as a separate and stand-alone document by the borrower and the World Bank as a condition for bank appraisal. The disclosure should be both in a manner that accessed by the general public and local communities and at the InfoShop of the World Bank and the date for disclosure must precede the date for appraisal of the program.

The extent and type of environmental and social assessment required by the World Bank is a function of the project's environmental impact and hence, its environmental screening category. The World Bank undertakes environmental and social screening of each proposed subproject to determine the appropriate extent and type of environmental and social assessment. The World Bank classifies projects into one of three categories (A, B and C), depending on the type, location, sensitivity, and scale of the project and the nature and magnitude of its potential environmental impacts.

The three project categories are described below:

Category	Description
Category "A" Projects	An EIA is always required for projects that are in this category. Impacts are expected to be 'adverse, sensitive, irreversible and diverse with attributes such as pollutant discharges large enough to cause degradation of air, water, or soil; large-scale physical disturbance of the site or surroundings; extraction, consumption or conversion of substantial amounts of forests and other natural resources; measurable modification of hydrological cycles; use of hazardous materials in more than incidental quantities; and involuntary displacement of people and other significant social disturbances.

Category	Description
Category "B" Projects	When the subproject's adverse environmental impacts on human populations or environmentally important areas (including wetlands, forests, grasslands, and other natural habitats) are less adverse than those of Category A subprojects. Impacts are site – specific; few, if any, of the impacts are irreversible; and in most cases, mitigation measures can be designed more readily than for Category A subprojects. The scope of environmental assessment for a Category B subproject may vary from sub-project to subproject, but it is narrower than that of a Category A sub-project. It examines the subproject's potential negative and positive environmental impacts and recommends any measures needed to prevent, minimize, mitigate, or compensate for adverse impacts and improve environmental performance.
Category "C" Projects	If the subproject is likely to have minimal or no adverse environmental impacts. Beyond screening, no further environmental assessment action is required for a Category C subproject.
	project.

Most projects under EASTRIP falls under Category "B" as described above.

Therefore, this ESMF sets out to establish the EA process to be undertaken for implementation of proposed sub-project activities under EASTRIP when they are being identified and implemented. This process requires that EASTRIP and its implementing partners screen their activities to identify their potential adverse impacts and thereby determine the corresponding mitigation measures to incorporate into their planned activities.

If during screening the sub-projects it is found out that other safeguard policies are triggered, applicable safeguards instruments relating to the triggered policy will be prepared for the subprojects.

5.2 Requirements for Public Disclosure

As part of the preparation of this ESMF, a series of consultations were held with different stakeholders relevant to the project. The results of the consultations were incorporated in the final ESMF document. The list of those consulted and the minutes are included as an annex in this document.

Any subsequent Environmental and Social Impact Assessments and Environmental and Social Management Plans will be developed once specific investments are designed. The ESIAs and ESMPs will be consulted upon and publicly disclosed in Kenya. The ESMPs should be included into works contracts to support environmental and social compliance of each subproject.

This ESMF will be disclosed in line with the World Bank requirements within the country through posting on the websites of Ministry of Education, as well as in the Bank's infoshop.

6 CHAPTER FOUR: DETERMINATION OF POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS

According to the World Bank Project Appraisal Document (PAD), this project is assigned environmental category B, and the risk is rated as "Moderate" Partial Assessment- assigned to projects that are likely to have limited, minimal, and reversible environmental impacts, that can be readily be mitigated. The assessment of environmental and social risks were analyzed based on the type of the proposed investments to be carried out in various sub-projects under EASTRIP components.

There are no significant and /or irreversible adverse environmental issues anticipated from the proposed sub-projects, as the nature of civil works is limited to construction of laboratories, classrooms, accommodation facilities, and rehabilitation of existing school's infrastructure (all in Component 1). This ESMF was prepared to identify, assess and provide possible mitigation measures for potential negative environmental and social impacts of the project, and to provide guidance on environmental and social management to all the proposed sub-project investments.

Based on the ESMF, supplementary safeguards instruments will be prepared that include the Environmental and Social Impact Assessment (ESIA) and/or Environmental and Social Management Plan (ESMP) for specific sub projects during project implementation.

This section provides the details on the positive and negative environmental and social impacts, in terms of both scale and depth.

6.1 Proposed projects

Although not finally confirmed by the respective institutions, including the exact site locations, the proposed projects under EASTRIP includes but limited to the following:

- (i) Construction of new additional classrooms, laboratories, hangars, multi-purpose rooms/libraries, accommodation facilities /dormitories, sanitation facilities;
- (ii) Construction of access roads;
- (iii) Construction of modern training centers with boarding facilities.

The implementation of these activities will be limited to existing TVET Institutions, and thus no land acquisition will be carried out under this project. However, these proposed activities will be subjected to environmental and social assessments.

The potential negative environmental impacts and possible mitigation measures identified by this ESMF and during stakeholder consultations are described in the following sections.

6.2 Positive Impacts

6.2.1 Improved enrolment

Poor and adequate infrastructure has been identified as one of the primary causes of low enrollment in TVET institutions. The project is expected to increase enrollment levels at the participating institutions, including of women and girls overall, as well as in non-female traditional courses.

6.2.2 Creation of employment opportunities

Increased employment opportunities will be created as more students enroll when facilities are improved and increased at the respective institutions. In addition, increased enrollment means more teachers will need to be employed. Employment will also be created during the

construction periods for the local people, including those supplying construction materials. More population at the institutions will also translate to more opportunities for the local economy as demand for goods and services trickle down to the local businesses. The program will translate to overall measurable economic and employment growth for the country.

6.2.3 Reduction of gender gap in enrolment

A special focus of EASTRIP is to promote and increase enrollment of girls with at the participating TVET institutions. An overall of at least 25% of female enrollment (from a baseline of 22%) is targeted under the project. Gender breakdown in enrollment will be monitored throughout the project including providing for an enabling environment for safety of women from sexual harassment and provision of gender friendly facilities to enhance retention and completion for women and girls.

6.2.4 Increased capacity for gender friendly and responsive learning environments

The project will develop infrastructure with increased capacity to enroll women and facilities that will attract them to enroll, such as separate dormitory facilities.

6.2.5 Institutional Fiscal Efficiency and Transparency

Improved fiscal impact on the institutions from better project preparation, better risk allocation, increased transparency, wider quality control, and greater efficiency are other positive impacts expected as a result of implementing the EASTRIP.

6.2.6 Increase in skilled workforce

The project will help increase the likelihood of students' employment after graduation by providing good quality and relevant training programs to students, training, and exchange opportunities for trainers and management staff in academic, industry, and pedagogy skills areas.

6.2.7 Encourage Regional integration

A regional approach to developing the specialized TVET centers can have a number of benefits, including exploiting economies of scale to lower costs of training for individual countries on specialized and industry certified training programs, facilitating mobility of people and skilled labor, promoting peer learning among countries and institutions and sharing good policies and practices, and targeting employment toward regional economic corridors such as the Northern and Central Corridor Initiatives and other mega infrastructure projects in the region.

6.2.8 Strengthening the culture of environmental and social risk mitigation

The environmental and social risk mitigation measures put in place under the project will contribute to strengthening the culture of environmental and social risk mitigation in the colleges and the community beyond the TVET colleges, especially for future projects.

6.3 Potential Adverse Impacts

The actual impact significance rating depends on a lot of factors, including:

- Type of project;
- The magnitude of the impact:
- The sensitivity and value of the resource or receptor affected;
- Compliance with relevant laws, regulations and standards;
- Views and concerns of stakeholders;
- Overall worker/public comfort; and
- Likelihood of occurrence.

A 'negligible or no impact' or an impact of negligible significance is observed when a resource or receptor will not be affected in any way by a particular activity, or the predicted effect is deemed to be imperceptible or is indistinguishable from natural background levels.

A 'minor impact' or an impact of minor significance is one where an effect will be experienced, but the impact magnitude is sufficiently small and well within accepted standards, and/or the receptor is of low sensitivity/value. In such instances, standard construction/ operational practices can address such impacts.

A 'moderate impact' or an impact of moderate significance is where an effect will be within accepted limits and standards. Moderate impacts may cover a broad range, from a threshold below which the impact is minor, up to a level that might be just short of breaching an established (legal) limit. In such cases, standard construction practices can take care of these impacts but mitigation measures may also be required.

A 'major impact' or an impact of major significance is one where an accepted limit or standard may be exceeded, or large magnitude impacts occur to highly valued/sensitive resource/receptors. In such cases, alternatives are required to address such impacts otherwise mitigation measures should be adopted with strict monitoring protocols.

These classifications as used in the tables are largely subjective and may be overruled by site-specific issues or information and detailed project activities not captured in this framework, especially when the actual sites are identified. Scale and significance of the risks associated with the potential projects will also depends on specific sub-projects design.

The section below highlights the potential adverse impacts that could occur when the EASTRIP sub projects are implemented. A sample EMP has been prepared and details the potential adverse impacts (Bio-physical and socio-cultural) for each of the proposed activities.

6.3.1 Loss of Flora and Fauna

There might be a significant vegetation loss both during the construction phase either to pave way for access roads, actual project construction among others. The vegetation will be cleared so that the area where the construction work is to take place is clear for the construction work to be performed. These activities will expose the land to elements of erosion such as wind and water and thus will trigger the process of land degradation. The increase in noise during construction may scare away wild animals. There could also be some rare or endangered species near the project area, and therefore the impact on rare and endangered species of flora and fauna cannot be ruled out.

6.3.2 Noise and Vibration Impacts

Construction activities could result in significant noise impacts so as to impact on general well-being, health and functioning. The proposed projects might involve the use of heavy equipment (graders, drilling equipment, trucks, blasting equipment, tractors, and excavators) for among others rock blasting, excavation, asphalt mixing plant operations and vehicular movement that emit incessant noise usually harmful to the environment.

During operation phases, use and operation of laboratory equipment might generate some noise that can impair the hearing of the students and other people working or living near the proposed facilities.

6.3.3 Decreased Water Quality

Increase in suspended particles due to construction works; risk of human contamination from construction camps could affect the water quality near the project areas. This can also happen from mismanagement of contaminants like oils from construction equipment that might find their ways to natural surface water drains.

6.3.4 Incessant Traffic including accidents

There is potential for traffic congestion from construction and operation phases of the sub projects which could potentially cause disruption, health and safety impacts, as well as economic impacts. The use of heavy moving construction vehicles and machineries in project sites is generally known to cause traffic reducing movement and flow of vehicles.

6.3.5 Public Health – increase in diseases spread and outbreaks

There is potential for diseases resulting from unsound management of solid waste and effluent from construction camps, poor sanitation at construction sites, food vendors selling food to construction workers, malaria due to stagnant water associated with construction works etc.

6.3.6 Health and Safety of Construction Workers

Occupation health and safety of the workers during the construction phase (and in certain cases operation phase) is likely to be a concern due to the accidents that normally occur in construction sites that could cause loss of life, limbs among others.

6.3.7 Soil Erosion/Run Off

This will be as a result of the intensive activities that will be going on in the construction areas especially land clearing. The heavy equipment and machines that shall be used in the construction process will interfere with the soil structure making it loose hence liable to erosion.

6.3.8 Decreased Air Quality

Airborne dust will be caused by excavation, vehicle movement hence engine combustion and materials handling, particularly downwind from the construction sites during the construction phase of the identified sub project activities. Uncovered stock piles and asphalt mixing plant operations are another source of dust. Air pollution will be further caused by emissions from vehicles and construction machinery. There will be decreased air quality due to dust, suspended particles, hydrocarbon vapours, oxides of nitrogen and sulphur (NOx and SOx) and Volatile Organic Compounds (VOC) among other emissions.

At the operation phases of certain equipment, there is potential for air quality degradation through emissions of fumes that can affect the health of the students and laboratory workers with the risk of chronic respiratory infections.

The improper disposal of E-waste through incineration is likely to lead to atmospheric pollution through the release of toxic and noxious gases in the atmosphere. Combustion from burning e-waste creates fine particulate matter, which is linked to pulmonary and cardiovascular disease.

6.3.9 Solid and Effluent Waste Hazards and Pollution

Solid waste issue is a potential adverse impact that will be as a result of abandonment of litter/construction materials on site. Effluent waste issue will arise from waste water during storm water runoff, sanitary systems, and improper maintenance of sewer systems, which could end up into the clean domestic water systems.

6.3.10 Hazardous materials use/storage

There may be the need to use hazardous materials during construction. They may include paint; reacting chemicals among others. These materials can lead to minor or major destructions to life, soils and water.

6.3.11 Waste management problem of non-biodegradable equipment

Electrical and electronic equipment contain different hazardous materials, which are harmful to human health and the environment if not disposed of carefully. While some natural occurring substances are harmless in nature, their use in the manufacture of electronic equipment often results in compounds, which are hazardous (e.g. chromium becomes chromium VI).

Improper and indiscriminate disposal of E-waste by the schools is likely to lead to the mushrooming of informal waste disposal centers in neighbourhoods which further exacerbates the problem of E-waste where informal E-waste handlers, refurbishers or recyclers are exposed to the adverse health impacts of E-wastes as a result of lack of personal protective equipment and skills to dismantle the wastes.

Most of the components of electronic devices are not biodegradable and hence provides a challenge in terms of disposal. Non-biodegradable equipment often remains in the environment for years and end up becoming a menace, eye sore as well as a landscape and visual intrusion problem.

6.3.12 Blasting and Rock Excavation

Blasting is used to loosen or break up rocks for removal. It is used during excavation of bedrock. Potential environmental impacts include dust (air quality), contaminant spills, sedimentation, safety (workers, storage), fly rock and debris, noise and explosive detonation effects on people and structures.

6.3.13 Public Health - Increase in HIV/AIDs

There is a potential risk that the construction and operation of the industrial park could increase HIV/AIDS prevalence in the project area especially through interactions of the locals with the migrant labor. Increase in risk of sexually transmitted diseases, such as HIV/AIDS etc. due to labor influx induced sex work and potential sexual relations between migrant workers and women and girls in the community.

6.3.14 Increased crime and in-migration

The influx of labour a specific project area or site especially during construction, and the settlement changes due to economic development of the area after project completion has the potential to lead to a number of negative socio-economic impacts, including increased insecurity and community conflicts, increased incidences of diseases (as mentioned above); increased risk of accidents and occupational hazards. Migration and settlement by new students could lead to increase of negative vices in the project area during operational stages of the institution.

6.3.15 Potential social conflict due to labour influx

Local residents, especially the youth usually benefit from expanded opportunities for seasonal employment during the construction period of projects in their areas. However, sometimes local labour force is not available, due to experience required and/or lack of people to be employed from the area. The contractor therefore usually brings labour force from outside, who are skilled and sometimes fulltime employees, which could result in potential social conflict between the contractor and the local residents if local skilled and unskilled labour is not utilized during the construction period. This could lead to demonstrations, damage to property, stoppage of the works, and sometimes lead to violence towards the contractor and his employees.

6.3.16 Exploitation of workers

Project workers such as construction workers face the risk of exploitation, discrimination and other forms of unfair treatment by employers/contractors, eg. being overworked with no compensation, low wages, improper provision of proper PPEs and equipment for the works assigned, among others.

6.3.17 Use of child labour

There is potential of the contractor employing children who have not reached the employment age, therefore violating the child labour laws of the borrower. The laws of Kenya prohibit contractors from "employing children in a manner that is economically exploitative, hazardous,

detrimental to the child's education, harmful to the child's health or physical, mental, spiritual, moral, or social development.

6.3.18 Gender based violence (GBV), equity, rape and sexual harassment

Due to labour influx for some project activities such as construction works, the project could exacerbate GBV, sexual harassment and other sexual offenses such as rape. Construction workers may engage in sexual fraternization with wives of other people. In addition to this being a driver of HIV infection, it will lead to domestic conflicts, GBV and domestic violence at household level. Women who seek employment may also face demands for sexual favors before being employed which amounts to sexual harassment. Even when employed, women may face continuous and unwanted demands for sex and risk losing their jobs if they do not give in. Women in the community and places of work may also face the risk being subjected to verbal harassment in the form of insults and demeaning comments in addition to unwanted gestures and touches by construction workers. Sexual harassment of women and girls might also happen as a result of mixing of women and men at worksites and campsites. Outright rape is also a risk some female employees may face when employed at construction sites. As a result, domestic violence and gender-based violence in homes, where it might have an impact to children who are likely suffer physically and emotionally.

6.3.19 Gender inequity in employment

There is a potential risk that gender inequality might be perpetuated during project construction through unequal distribution of work, discrimination against women, and unequal pay for women, among others.

6.3.20 Increase in Sex work

Construction workers could increase or create the demand for casual sex leading to the emergence or increase in sex work near the construction sites. Sex workers are a key bridging population for HIV transmission because their customers in many cases have spouses. The HIV prevalence among sex workers is usually about 2-3 times that of the general population.

6.3.21 Sexual exploitation and abuse (SEA) of under-age girls

There is a potential risk of project workers engaging in illegal sexual relations with minor girls, leading to HIV infection, teenage pregnancy, early child marriage, illegal and risky abortions, school dropout, etc.

6.3.22 Disruption of schooling

School children who live near construction sites are likely to be absent from school many times or will perpetually report late to school because of engaging in petty business activities of vending eats and other items to construction workers.

6.3.23 Alcohol and drug abuse

The presence of migrant construction and other project workers in the community may lead to the emergence of small business hubs with kiosks for selling foodstuffs, cigarettes, alcohol, etc to serve the workers and other members of the community. These business hubs may also engage in selling illegal drugs to project workers and other members of the community. The overall effect may be an increase in consumption of alcohol and illegal drugs in the community.

6.3.24 Increase in the prices of goods and services in the community

Increased demand by migrant labor may affect the local economy positively for producers and providers of some goods and services. This may lead to prices of rent, food and other commodities to rise. This may negatively affect other households who have a fixed income or those who are already barely managing to survive.

6.3.25 Sharing Water sources

The college and the wider community are likely to be inconvenienced if construction activities share limited water sources with them. Queuing at water sources could lead to delays in executing planned tasks by college students and other members of the college community and members of the wider community.

6.3.26 Poor sanitation due to sharing of sanitation facilities

Construction workers sharing sanitation facilities such as toilets with colleges students and other members of the college community could lead to hygiene challenges and a risk of hygiene related diseases.

6.3.27 Non user friendly buildings and facilities for People with disabilities (PWDs)

There is a risk that buildings to be constructed will not be easily accessible by or user friendly for PWDs if ramps and other facilities are not catered for.

6.4 Environmental & Social Management Process

Impacts expected as a result of the implementation of the sub projects under the EASTRIP will be managed through an Environmental Management Plan (EMP). Table 6-1 below specifically outline the proposed measures that will be undertaken at different stages of the project (planning, design, procurement, construction and post-construction) in order to eliminate adverse environmental and social impacts, offset them, or reduce them to acceptable levels.

6.4.1 Mitigation considerations and options

All moderate to major adverse impacts are considered for mitigation. Specific measures have been suggested in this regard where practicable. With regard to negligible and minor impacts where the project activity is not expected to cause any significant impact in such cases, best practice measures and mitigation have also been recommended where appropriate to improve the environmental and social performance of the Project. In cases where the effectiveness of the mitigation is uncertain, monitoring programs are introduced.

6.4.2 Recommended mitigation measures

The mitigation measures or guidelines have been designed in order to avoid, minimize and reduce negative environmental and social impacts at the project level.

For each impact, a rating has been given due to extent of the impact to the environment. The description of each rating is given below;

Negligible – the impact on the environment is not detectable.

Minor – the impact affects the environment in such a way that natural functions and processes are not negatively affected, or these natural functions are enhanced to a small degree.

Moderate – where the affected environment is altered but natural functions and processes continue, albeit in a modified way, or are considerably improved.

Major – where natural functions or processes are altered to the extent that it will temporarily or permanently cease; or in the case of a positive impact, will be restored to close to its natural state in terms of functions and processes.

NB: The final rating will be determined when the specific ESIA study is done for the subprojects, once the specific types of investments are identified for each institution.

The proposed mitigation measures are presented in the following table in a descriptive format.

Table 6-1: Proposed mitigation measures

Impacts	Potential	Description of mitigation measures
	Rating /	
Physical Enviro	Significance	
Soil and Land degradation	Moderate	 Minimize land clearing areas as much as possible to avoid unnecessary exposure of bare ground to the elements of the weather. Re-vegetate cleared areas using native plant species or recommended landscaping plants Avoid construction work during heavy rains
Air pollution	Major	 Regular watering of the site and access roads Cover materials during transportation Provide PPEs such as nose masks to the workers on the construction site; Proper site management through regular cleaning including wet sweeping of the surfaces that produces a lot of dust particles; Workers should be encouraged to go for regular health check-ups to ascertain their health standards; Regular air quality tests to enhance air quality monitoring; Hoarding the site with netting/sheet fabric cloth to prevent excess dust blowing from the construction site area. Proper maintenance of construction equipments, vehicles, trucks and equipment. The project should ensure the use of good quality fuel and lubricants only. Construction traffic speed control measures should be enforced on unpaved roads (speed limits through communities should be ≤50km/hr on unpaved roads and near or at project site should be ≤30 km/hr). Engines of vehicles/trucks and earth-moving equipment should be switched off when not in use.
Noise and vibration	Major	 The Projects should require contractors to use equipment and vehicles that are in good working order, well maintained, and that have some noise suppression equipment (e.g. mufflers, noise baffles) intact and in working order. Contractors will be required to implement best driving practices when approaching and leaving the site (speed limit of ≤30 km/hr) to minimize noise generation created through activities such as unnecessary acceleration and breaking squeal. Construction activities should be carried out only during the day to avoid noise to the residents Engines of vehicles/trucks and earth-moving equipment should be switched off when not in use.
	Moderate	Project sites should be fenced/hoarded off from public view during construction.

Impacts	Potential Rating /	Description of mitigation measures
	Significance	
Impacts on Landscape and Visual Receptors		Good house-keeping at construction sites should be ensured.
Impact on traffic and Public safety	Moderate	 Contractor to prepare a Traffic Management Plan for approval to address the following issues; Initiation of a safety program and measures by creating awareness and educational campaigns for drivers, workers and local communities, including observation of speed limits Installation of appropriate road signage, speed signs, and other warning signs at the site and access roads Copies of drivers' licenses and insurance policies for the Contractor's drivers and vehicles respectively should be provided to the Supervision Consultant. The Contractor's vehicles and equipment must be in proper working condition(roadworthy vehicles) and have registration plates, and numbering. The Contractor ensures proper driving discipline by its employees, and sanctions those in breach. Maintain a log detailing every violation and accident at site or associated with the project work activities, including the nature and circumstances, location, date, time, precise vehicles and persons involved, and follow-up actions with the police, insurance, families, community leaders, etc. (including during operation stages)
Water use	Moderate	 Develop water abstraction plan to minimize conflict with residents Manage use of piped water and other water sources mainly used by local people Obtain water abstraction permit from the relevant authorities, and other relevant agencies that manage water resources in the area. Explore other alternative sources of water like water harvesting
Water pollution	Moderate	 No garbage/refuse, oily wastes, fuels/waste oils should be discharged into drains or onto site grounds. Incorporate erosion control measures during construction at the site Fuel storage tanks/sites should be properly secured to contain any spillage. Maintenance, re-fueling and cleaning of equipment should NOT be done at construction site by the Contractor – but in a licensed garage outside the site area The design will incorporate oil sumps at the parking areas to isolate oil spills from parked vehicles that might spill to the storm drains

Impacts	Potential	Description of mitigation measures
	Rating / Significance	
		 Not any form of solid and liquid waste, fuels or oils shall be discharged on land surface, into the storm water drains Toilet facilities should be provided for construction workers to avoid indiscriminate defecation in nearby bush or local water bodies.
Waste Water	Moderate	 All waste water shall be treated prior to final disposal. All the sub-projects should ensure proper wastewater facilities for proper discharge of liquid waste are provided or available during design stages All liquid wastes will be stored in accordance with the containment measures to mitigate against soil contamination. Options should be explored to use treated Waste water treated for greening the compounds.
Solid Waste	Major	 Establish a well-planned method of solid waste management plan for disposal of debris/ garbage at the site Provision of disposal bins at designated areas at the facilities Regular collection and disposal of garbage by the project Proponent Clean storm water drains to minimize clogging Provision of separate collection bins for biodegradable and non-biodegradable waste at the construction site and facilities during operation Encourage separate treatment for solid waste at the facilities Conduct awareness on need of appropriate waste management practices including reduction, reuse, recycle, segregation, treatment among others Final disposal should be at approved sanitary landfills or dump sites approved by the local government.
Hazardous waste, including oil and fuel wastes	Minor	 The Projects should require that contractors implement a hazardous materials management plan that includes specification for proper storage and handling of fuels, oil, wastes, and other potentially hazardous materials as well as a plan for containment and clean-up of accidental spills into the aquatic environment. Final disposal should be at approved sanitary landfills or dump sites approved by the local government. No solid waste, fuels or oils should be discharged on land surface, into drains or streams Spent or waste oil from vehicles and equipment should be collected and temporarily stored in drums or containers at site. Waste oil should be disposed of by approved agents by the environmental or local authority

Impacts	Potential	Description of mitigation measures
	Rating / Significance	
Production of electronic waste (e-waste) from operations	Major	 Procure Electronic devices from credible manufactures to avoid purchasing second hand, refurbished or obsolete devices with a short shelf life or already categorised as E-Waste Recycle all E-waste by establish E-Waste Collection Centres in all TVET schools; including collection bins/receptacles; Have 3rd parties to collect and transport all E-wastes to approved Recycling Company or the recycling companies themselves Conduct awareness and sensitization targeting the users of the electronic devices to ensure that they engage in best practise for E-waste management.
Impact on fauna and habitat	Minor	 Avoid unnecessary exposure and access to sensitive habitat areas. For identified or suspected sensitive habitats (swamps/wetlands), relevant authorities on wildlife should be engaged, and regular inspection or monitoring should be carried out in the area prior to start and during work.
Social Enviro	onment	
Employment – Labour issues	Moderate	 The contractors should as far as possible engage the local skilled and unskilled labour within the project area during construction stages Ensure that the local communities are given priority in relation to employment -all unskilled labour should be contracted or obtained from the local community if possible. Ensure that all workers have contracts with terms and conditions that are consistent with national labour laws and polices Every worker should also sign a code of conduct (CoC) as an annex to the employment contract – covering issues such as zero tolerance of unacceptable conduct in the community, GBV, sexual harassment, sexual exploitation and abuse of children, etc Facilitate workers to form a committee through which their grievances will be received attended to or channeled to management
Impacts on Human Health/ Health and sanitation	Moderate	 Appropriate notices and warning signs will be erected along the roads, around working areas and public areas to warn prospective pedestrians, motorists, and other road users of any danger or risk. Trucks carrying construction materials such as sand, quarry dust, laterite etc will have the buckets covered with tarpaulin or appropriate polythene material from or to project site. Except for areas secured by fencing, all active construction areas will be marked with high-visibility tape to reduce the risk accidents involving pedestrians and vehicles.

Impacts	Potential	Description of mitigation measures
	Rating / Significance	
	Significance	 All open trenches and excavated areas will be backfilled as soon as possible after construction has been completed. Access to open trenches and excavated areas will be secured to prevent pedestrians or vehicles from falling in. Reclamation of borrow pits and quarries to reduce incidences of accidents, water bone diseases and minimize landscape disfigurement. Adequate sanitary facilities will be available for workers and open range defecation will not be countenanced.
General health and HIV/AIDs	Major	 A program on HIV prevention and response targeting workers and the community designed following the principle of Know Your Epidemic and Know Your Response (KYE/KYR) will be put in place at every construction site Construction workers should be educated to adhere to basic rules with regard to protection of public health, including most importantly hygiene and disease prevention HIV and AIDS and STIs prevention and response campaigns should be extended beyond the construction phase and into the operational phase. Establish a partnership with local wellness centers including hospitals, VCT and ARV centers and NGOs near the project area for implementing an HIV/AIDS prevention and response program
Impacts on cultural heritage / archaeological interest / existing ecologically sensitive areas	Minor	 The pre-construction surveys should identify cultural heritage resources and existing ecologically sensitive areas that the project should avoid and by-pass these resources. The Project should implement a chance find procedure and reporting system to be used by contractors in the event that a Cultural heritage feature or ecologically sensitive item/issue is encountered. See sample Chance Finds Procedure in Annex 2 in the event that cultural heritage is discovered
Impacts on Human Health and Public Safety	Moderate	 The Project will require all contractors to implement an Environmental, Health and Safety (EHS) plan which will outline procedures for avoiding health and safety incidents and for emergency medical treatment. This will be achieved by making it a component of contractual agreement. Construction workers will be provided with adequate and right safety tools and equipment. They shall also be educated to wear suitable Personal Protective Equipment (PPE) including hard hats, overalls, high-visibility vests, safety boots, earplugs, gloves etc. Ensure provisions of first aid for staff, insurance, and access to ambulance service at all worksites, and arrangement to access local hospital/dispensary with qualified medical staff by workers The site shall be fenced off and provided with security at the access gates to reduce potential accidents and injuries to the public

Impacts	Potential	Description of mitigation measures	
	Rating / Significance		
	olg.micarios	All construction and other workers will be sufficiently trained in the safe methods pertaining to their area of work to avoid injuries.	
Gender Mainstreaming, gender based violence and zero tolerance for sexual harassment	Moderate	 Contractor and implementing agency to prepare and implement a Gender Action plan to include at minimum, in conformance with local laws and customs, equal opportunity for employment, Contractor to prepare and enforce a No Sexual Harassment Policy in accordance with national law where applicable All workers and nearby communities and stakeholders will be educated on preventing and responding to sexual harassment and GBV ahead of any project related works. The community within the vicinity of the college where construction will take place will also be educated on gender-based violence and sexual offenses such as sexual harassment, rape and defilement in the context of labor influx and the prevention and response measures. Strategies such as male involvement will be employed in preventing and responding to GBV and sexual harassment Partnerships will be established with relevant government agencies and NGOs to ensure survivors of GBV and sexual offenses access survivor centred services such as medical care, psychosocial support, legal redress, safety, etc as and when necessary Ensure that women are given adequate employment opportunities during recruitment and job postings Regular sensitization and awareness campaigns to the workers should be done to promote gender equity in employment during the construction works and during operation. Provision of gender disaggregated data, separate bathing, changing, sanitation facilities for men and women Impose zero tolerance on sexual harassment, all forms of gender-based violence and discrimination at all phases of the project 	
Child Protection	Moderate	 Workers will be educated by relevant agencies such as police and probation officers on the relevant laws and polices protecting children Reach out to children in and out of school in the vicinity 	
		of the construction sites with a life skills program focusing on HIV/AIDS and sexual abuse prevention among others areas Strengthen school based and school led life skills programs targeting any schools near construction sites Mobilise and strengthen child protection institutions and structures near construction sites Reach out to school authorities and parents near construction sites on paying special attention to child protection in light of labour influx	

Impacts	Potential	Description of mitigation measures		
impuoto	Rating /	Description of magation measures		
	Significance			
		 Partnerships will be established with relevant government agencies and NGOs to ensure children access survivor centred services such as medical care, psychosocial support, legal redress, safety, etc as and when necessary Ensure no children are employed on site in accordance with national labor laws Ensure that any sexual exploitation and abuse (SEA) of children by the contractors' workers are promptly reported to the police Popularize /put in place confidential mechanisms for reporting child abuse cases Enforce the child protection related clauses in the Code of conduct signed by all workers Ensure visibility of signage and information, education and communication materials on such issues in the construction sites 		
Non-user friendly buildings for PWDs		All buildings will be designed and built with ramps and other special facilities such as toilets to facilitate access and use by PWDs		
Loss of life, injury, or damage to people and private property	Moderate	 Contractor shall maintain records and make reports concerning health, safety and welfare of persons, and damage to property, at all times or as the RE may reasonably require Insuring against liability for any loss, damage, death or bodily injury which may occur to any physical property or to any person which may arise out of the Contractor's performance of the contract Insuring against liability for claims, damages, losses and expenses (including legal fees and expenses) arising from injury, sickness, disease or death of any person employed by the Contractor or any other of the Contractor's personnel. The construction site shall be fenced off to prevent access to members of the public. All people currently using college land to grow food crops and for petty business activities will be given adequate notice to harvest their food crops and not to plan new ones and relocate their business activities 		

7 PROJECT SCREENING, REPORTING, CONSULTATION AND DISCLOSURE

EMCA, 1999 require that all projects be subjected to a review and screening process in order to determine whether a full scale EIA is necessary or otherwise. Sub projects and activities will each need to be reviewed independently for potential environmental and social impacts when undertaking the ESIA study for EASTRIP. Once the screening is done, the findings will be incorporated in the design of the subprojects to enhance the positive impacts and to mitigate the negative impacts. This will ensure that a sound environmental design with proposed mitigation measures is incorporated during the early designs, hence avoiding unnecessary changes at advanced design stages.

The World Bank will not provide individual sub-project support until (i) the World Bank has reviewed and cleared the environmental documentation and issued its formal no objection, and (ii) the applicant has presented the WB with an approved license (or applicable document) that indicates approval for the sub-project to proceed by the relevant national authority.

7.1 Safeguards Screening and Review Process

Prior to commencement of sub-projects, the proponents will fill out the screening form attached to this report (See Annex 1). The screening form shall be completed by the participating Institutions" safeguard specialists who will be trained in the use of the screening form and fundamentals of what could constitute environmental and social risks.

The screening form will be used for all infrastructure subprojects that will involve construction and renovation works.

Should the screening process reveal no major negative impacts, then the project would be given a go-ahead to continue.

If the screening process reveals that there will likely be moderate or significant adverse impacts during and after implementation, then the proponent would be required to prepare a Project Reports (PR) project and submit it to NEMA county offices and World Bank for review. NEMA may approve the project to commence at this stage or require the proponent to prepare Terms of Reference (ToR) and proceed to ESIA study. Preparation of Project Reports (PR) and ESIA study reports would be undertaken by consultants registered by NEMA.

7.2 Preparation of Project Reports (PRs)

Project Reports (PRs) are prepared as a means of informing NEMA of the activities, geographical area and potential impacts of the proposed development. A PR would give a description of the project, baseline information of project area, potential impacts and mitigation measures associated with the project. Preparation of a PR will be the responsibility of the project proponent who would hire a NEMA registered expert for this purpose. After receipt of the project report, NEMA shall send copies of the report to Lead Agencies with interest in the proposed project and give them 21 days to comment on the report. Upon expiry of this period NEMA compliance officers shall visit the proposed project site, interview the proponents and stakeholders, and assess the project's impacts in view of their observations at the site and the concerns raised by stakeholders. After review of the report NEMA can approve the proposed project and issue an ESIA/EIA license or

advise for an ESIA study to be undertaken within 30 days from the time of submission of the report.

If NEMA decides that a sub project cannot be approved through the Project Report submitted, the implementing institution will be required to prepare a full EIA report through independent NEMA registered experts. Project Reports are normally prepared as a means of informing NEMA of the proposed development such that after review of the report, NEMA advises on the need or otherwise for a full EIA. The EIA regulations allow for approval of proposed projects at the Project Report Stage and have been effectively used by NEMA to grant Environmental Licenses to small projects without requiring a full EIA.

Steps	Action	Actor	Time requirement
1	Submission of PR to NEMA. NEMA receives PR, issues a receipt and acknowledgement.	TVET Institution	To be undertaken by the TVET Institution
2	NEMA mails PR to Lead Agencies	NEMA	7 days assuming all requirements are fulfilled
3	Lead agencies review PR and issue comments	Lead Agencies	15 days (minimum) after receipt of PR from NEMA.
4	Review of PR by NEMA	NEMA	20 days after receipt of PR.
5	Communication of findings from NEMA review	NEMA	30 days after receipt of PR.

The typical outcomes of review of Project Reports from NEMA are as follows.

Project is approved. Where NEMA and Lead Agencies ascertain that a project report has disclosed adequate mitigation for identified impacts, the project is approved by NEMA upon which, an Environmental License is issued with certain conditions. Among these requirements are that; the scheme design should not be altered without approval by NEMA, project must commence, usually within 24 months period after issuance of license, the proponent should undertake an annual Environmental Audit and submit an EA report to NEMA during the first year of completion, among others.

Full ESIA required. If the PR reveals significant irreversible environmental and social impacts, or that the proponent does not provide adequate mitigation measures, the proponent will be required to undertake a full ESIA study. NEMA will write to the proponent to undertake scoping, prepare Terms of Reference (ToR) for ESIA study and submit these for approval prior to commencement of the study.

7.3 Preparation of ESIA Study Report

7.3.1 ESIA Terms of Reference

The ToR provides a mechanism for consulting with NEMA and Lead Agencies and agreeing on the content and methodology of EIA at an early stage in the process. The key objectives of preparing a scoping report are to:

- Give a project description and its location;
- Project activities;
- Identify the key issues to be addressed in the ESIA;
- Define the approach and methodologies for conducting baseline studies;

- Define the approach to and methodologies for predicting environmental impacts and for evaluating the significance and severity of environmental effects;
- Identify the methods to be adopted for incorporation of mitigation measures and other environmentally driven modifications into the project;
- Define the consultation strategy to be applied during the ESIA process;
- Seek comments from key stakeholders on the scope of the ESIA, the approach and work plan.

The ToR will also give details of the composition of the EIA team (including their experience and field of expertise) and timelines.

7.3.2 ESIA Study Report

Upon review and approval of the Scoping Report, NEMA will advise that an ESIA Study be undertaken. The ESIA Study will entail a systematic investigation of all impact areas as identified in the scoping report, taking care to document the current baseline environment, resource exploitation patterns and ecological pressure points. It will include but not limited to;

- Project Description: A description of key components of the proposed project, the implementing agents, a brief history of the project and its justification; Baseline Information:
- Baseline environmental information comprising physical, biological and socioeconomic conditions of the site to be assembled and evaluated;
- A description of the pertinent legislation, regulations and standards, as well as environmental policies applicable to the proposed project and the appropriate authority jurisdictions;
- Identification of impacts related to project elements and an analysis of severity and duration of impacts;
- Prescription of mitigation measures and development of an environmental management plan to neutralize the effects of negative impacts;
- Development of a monitoring plan to ensure that the proposed mitigation measures are implemented and the desired remediation effects achieved;
- Public consultation and documentation of stakeholder views.

A template showing a ToR and contents of an ESIA has been provided in the **Annex 3** of this ESMF report.

It is mandatory for the ESIA study to undertake public consultation with all stakeholders in the project's area of influence. The ESIA Team should note and understand all stakeholder interests so as to cater for them in the ESMP. All accruing information will be included in the ESIA Report submitted to NEMA for review. Upon review of this report, it will be subjected to public review. The review process will entail advertising of the project in the local media and may include a public hearing meeting.

7.3.3 Public Review of the ESIA Report

This will entail exposure of all the EIA documents at strategic points within the project's area of influence so as to allow all stakeholders to read and understand how they stand to be affected by the project. The public review has to be advertised twice in local dailies that are widely read in Kenya, and are often supplemented by public hearings organized by NEMA where the project is explained to local stakeholders.

Upon public/ stakeholder review of the ESIA/EIA report, NEMA will prepare a summary of the report and advertise it in the press for public review. The purpose of this is to allow all stakeholders to read and understand how they would be affected by the project.

Upon expiry of the public review period, the ESIA team will organize the written comments either into an additional chapter or a volume to the ESIA report. This chapter will clearly explain how each of the comments and concerns have been addressed and resolved.

Once NEMA is satisfied that the revised ESIA Study report addresses all the issues raised by stakeholders it would issue an ESIA license. World Bank safeguard policies require that environmental reports for projects are made available to project affected groups and stakeholders, including local NGOs, and the public at large. Public disclosure of ESIA reports is also a requirement of the national ESIA procedures in line with the provisions of EMCA, (Amendment) 2015 as elaborated in the Environmental Impact Assessment and Audit Regulations, 2003.

Disclosure of EIA study reports prepared in line with EMCA provisions should follow the same procedure. EMCA does not require disclosure of final environmental project reports. However, in order to meet WB disclosure requirements, ESIA should be disclosed to the project beneficiaries, stakeholders and the local community. The approved version of the report should be posted at NEMA, MoE websites as well as WB Info Shop to ensure all interested parties can access it.

The figure below outlines the EIA process and review to be followed in an event that a determination for a full scale ESIA is arrived at by NEMA.

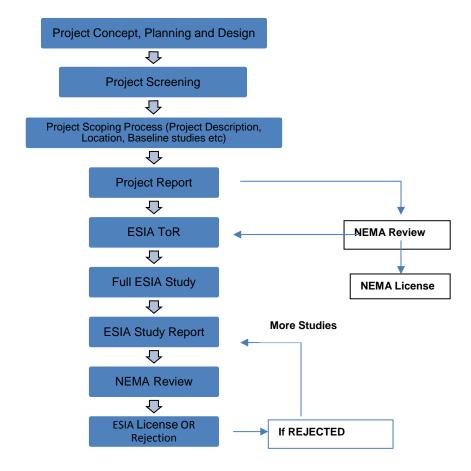


Figure 7-1: EIA process

7.4 Consultation and Disclosure Requirements

In addition to the environmental documentation requirements described above, World Bank Operational Policy 4.01 (paragraphs 15 and 16), and the WB Policy on Access to Information stipulates that the following consultation and disclosure requirements be utilized for all sub projects:

During the EIA process, the applicant shall consult groups and other stakeholders (including local NGOs) affected by the subproject on the subproject's environmental and social aspects and take their views into account. The applicant shall initiate such consultations as early as possible. Consultations with stakeholders should take place only once after a draft EA report is prepared. In addition, the applicant shall consult with such groups throughout project implementation as necessary to address EA-related issues that affect them.

For meaningful consultations, the applicant shall apply the following disclosure requirements:

- The applicant shall provide relevant material in English and/or the local language (as appropriate) in a timely manner prior to consultation;
- The applicant shall make the draft ESIA/EIA report including a detailed summary
 of the ESIA/EIA conclusions available at a public place accessible to groups and
 other stakeholders affected by the subproject.

7.5 Overall Project Compliance and Reporting

Owing to the significant nature of some of the project activities, a strict system of compliance monitoring and reporting will be adopted. The ESMF will be implemented by the project proponent, with the assistance of the safeguard specialist at the RFU. The project proponent will collaborate with the Safeguard specialists at RFU, NEMA and the financing institution to ensure effective execution.

The table below provides a summary of the stages and institutional responsibilities for the screening, preparation, assessment, approval and implementation of the EASTRIP subproject activities.

Table 7-2: Screening Responsibilities

No.	Stage	Institutional responsibility	Implementation responsibility
1.	Screening of Environmental and Social impacts to assist in project formulation using checklist	TVET Institutions	Safeguard specialists (TVET Institution) / Safeguard specialist (RFU)
2.	Determination of appropriate environmental assessment level/ category	NEMA / RFU	Safeguards Specialist (TVET Institution) / Safeguard specialist (RFU)
2.1	Selection validation	WB	
3.	Implementation of environmental assessment	TVET Institutions	Safeguards Specialist (TVET Institution) / Safeguard specialist (RFU)
	If ESIA is necessary		
3.1	Preparation of Terms of Reference	TVET Institutions	Safeguards Specialist (Investor)
3.2	Validation of ESIA/ESMP TOR	NEMA	Safeguard Specialist
3.3	Selection of Consultant	TVET Institutions	
3.4	Realization of the EIA, Public Consultation Integration of environmental and social management plan issues in the tendering and project implementation	TVET Institutions /Consultancy firm / RFU	Safeguards Consultant/ Safeguards Specialist (TVET Institutions)/ Safeguard specialist (RFU)
4.	Review and Approval		
4.1	EIA Approval (Significant Impacts)	NEMA	
4.2	Simple EA/ESMP Approval (Minimal Impacts)	TVET Institutions / WB	Safeguards Specialist (TVET Institutions)/ RFU Safeguard specialist
5.	Public Consultation and disclosure	TVET Institutions / NEMA / WB	Safeguards Specialist (Investor)/Consultant/ WB
6.	Development of monitoring indicators	TVET Institutions/RFU	Safeguards Specialist (TVET Institutions)/ Safeguard specialist (RFU)
7.	Surveillance and monitoring	TVET Institutions /NEMA/ RFUWB	Safeguard specialist (TVET Institutions) / Safeguard specialist (RFU)

8 PROJECT INSTITUTIONAL, IMPLEMENTATION, and MONITORING ARRANGEMENTS

8.1 Project Institutional and Implementation Arrangements

EASTRIP is designed to have three levels of intervention, at the TVET center, national (country), and at regional levels. Correspondingly, a three-layered project implementation approach will be followed. The proposed implementation arrangement follows the successful model for the ACEI and ACE II projects and their lessons learned. The following are the three tiers of the governance and implementation arrangement proposed for the project.

- (a) The regional TVET Centers of Excellence will be responsible for center-level project implementation. The centers will establish a project implementation unit (PIU) for strategic planning and implementation of the approved plans, based on core functions including management, technical, industry liaison officer, fiduciary, safeguards including a gender focal point, monitoring and evaluation, and other requirements as assessed and recommended by the World Bank and agreed with the counterparts. The center level PIUs will work closely with the management of the host TVET institutions. In addition, an Industrial Advisory Board (IAB) will be established to provide guidance on industry collaboration.
- (b) A National Project Coordination Unit (NPCU) will be established in the country's ministry of education with key project functions. The NPCU will work closely with national TVET quality assurance agencies to execute the national component of the project and further provide national-level coordination, M&E, and dissemination of good practices from the centers.
- (c) The IUCEA, as the RFU will support the centers and national agencies in their implementation of the project. Further, the RFU will facilitate the implement of a number of regional initiatives. It will provide knowledge sharing and coordination of sector activities. The RFU will be led by a project coordinator, who will be responsible for overall project coordination and facilitation, and an adequate number of professional staff in key function areas, including a finance officer, a procurement officer, an M&E officer, and communications officer.

In addition, Project Steering Committees will be established at national and regional levels with representation from relevant government agencies and industries to ensure political commitment and direction for the project. A National Steering Committee will comprise of representatives from relevant sector ministries as well as industries. A Regional Steering Committee will comprise of representatives of ministries of education and major regional industries from transport, energy, manufacturing and ICT sectors. Finally, a regional TVET expert team will be established to advise on technical matters.

National steering committee at country level will be streamlined with existing project steering structure of other relevant World Bank-supported projects in higher education and skills, to promote synergies and efficiency. For example, the EASTRIP Tanzania National Steering Committee may be the same core steering committee as for the Eastern and Southern Africa Higher Education Centers of Excellence (ACE), Education and Skills for Productive Jobs (ESPJ) and the new higher education project. Figure 7-1 below depicts the project implementation arrangements.

Regional level Regional Facilitation Unit Regional Steering Committee (IUCEA) **TVET Center level** Project Implementation Unit (PIU) Industry Advisory Center Director Board Deputy Director (TVET Specialist) Financial Management Specialist **Procurement Specialist** TVET Host Monitoring & Evaluation Specialist Institute Safeguards Specialist (gender focal point) Management Industry Liaison Officer **National level Project Coordination Unit** Ministry of Education (Ethiopia) **National Steering Committee** Ministry of Education, Science & Technology (Kenya & Tanzania) National TVET bodies*

Figure 8-1 Project Implementation Arrangements

Source: EASTRIP PAD *National TVET bodies

Ethiopia: Ministry of Education (Federal TVET Agency)

Kenya: Ministry of Education, Science & Technology (TVET Authority: TVETA; Curriculum Development

Assessment and Certification Council: TVET CDACC)

Tanzania: Ministry of Education, Science & Technology: MoEST (National Council for Technical Education: NACTE; Vocational Education & Training Authority: VETA; Tanzania Commission for Universities: TCU)

8.2 Monitoring Arrangements

8.2.1 Safeguards Monitoring Plans and Indicators

The purpose of a monitoring plan is to initiate a mechanism for implementing mitigation measures for the potential negative environmental impacts and monitor the efficiency of these mitigation measures based on relevant environmental and social indicators. The plan assigns responsibilities of actions to various actors and provides a timeframe within which mitigation measures can be implemented, supervised and monitored. The plan also determines whether further interventions are needed or monitoring is to be extended in some areas. Further, it provides a checklist for project monitoring and evaluation. Monitoring indicators will be very much dependent on specific project contexts.

a) Overall Project Level

IUCEA, the Regional Facilitation Unit (RFU), will be responsible for safeguards monitoring and surveillance of all the sub-project investments that will be undertaken by EASTRIP, led by a Project Coordinator for the project. RFU will report results of this monitoring to the

World Bank. In appreciation of the fact that it would be impossible to visit or monitor all sub project investments to be financed under the project, "spot checks" may be undertaken by the PMU, but no investment will be ignored in this high level monitoring.

b) National Project Level

The Ministry of Education, through the State Department of TVET will be responsible for monitoring and reporting on compliance with the ESMF under the established National Project Coordination Unit (NPCU). They will ensure that subprojects investments are screened, their safeguard instruments prepared, cleared and disclosed prior to sub project implementation. Further, they will ensure that executing institutions implement the specific sub project ESMPs, and submit reports on ESMPs implementation as required to the RFU.

c) Sub Project Level Monitoring

At the field level, the respective TVET institutions and the consultants will take lead to supervise and monitor the implementation of the ESIA/ESMPs and prepare progress reports to the NPCU in the MoE and RFU as per the requirements of the safeguard instruments. Each TVET institution will set up a Project Implementation Unit (PIU) solely responsible for executing the sub project investment which will include responsibility for monitoring and reporting all the elements in the ESMP on day to day or periodically as specified in the monitoring plan. The sub project level monitoring reports will be submitted to the safeguards specialist at the RFU for review and analysis, for further submission to the World Bank. All sub project investments will be subject to mandatory initial environmental audits and annual environmental audit /supervision to ensure that they comply with national requirements by Environmental Authority and other relevant laws like OSHA regulations.

d) World Bank's Monitoring Support

The World Bank safeguards team will provide second line of monitoring compliance and commitments made in the Environmental and Social Management Plans (ESMPs) through supervision. The bank will further undertake monitoring during its scheduled project supervision missions.

Specifically, for each year that the agreement is in effect, sub project executing institutions will be required to submit to the RFU all the monitoring reports. The RFU will consolidate and summarize country reports and submit as part of its reporting process to the Bank. The Bank supervision team will review these reports and provide feedback.

Monitoring Level	Monitoring item	Verifiable indicators	Responsibility
ESMF Level	 Adequate dissemination of ESMF to stakeholders Capacity building and training programs 	 Record of consultations and meetings, No of training Sessions Done Workshop reports. 	MoE (NPCU) RFU
Project Level Investment	 Preparation of ESIA/ESMPs Environmental permits Safeguards Monitoring and Evaluation 	 ESIA Reports ESMPs Environmental Licenses for sub-projects Contractor's Environmental and Social Management Plans (CESMPs) Audit Reports 	MoE (NPCU) PIU environment safeguards focal person) Consultants NEMA

8.2.2 Monitoring Roles and Responsibilities

a) National Environment Management Authority (NEMA)

NEMA is charged with the overall role of providing oversight in regard to monitoring for all project activities that have potential impacts on the environment in Kenya. NEMA will undertake periodic monitoring of the sub projects by making regular site inspection visits to determine compliance with the sub project EIA/EMPs approved and will further rely on the submitted annual audit reports submitted for each sub project annually as required by EMCA as a way of monitoring.

NEMA will provide approvals and ESIA licenses to all the investments based on the ESIA reports submitted, since without NEMA's approval implementation of the investment project will not move forward. All monitoring reports as well as annual environmental audit report will be submitted to NEMA as specified by the environmental assessment and audit regulations, 2003.

b) EASTRIP Secretariat-Safeguards Specialist

The EASTRIP Secretariat will recruit a safeguard specialist to provide oversight, facilitation, coordination, monitoring and evaluation of all the sub projects within the different countries all through the implementation period. In principle, the specialist will work with the implementing institutions to ensure that monitoring of project activities is undertaken and findings are reported to them periodically so that any technical assistance required to ensure compliance is provided.

The safeguard specialist based at the EASTRIP secretariat will submit quarterly monitoring reports of all active sub projects under implementation to the EASTRIP Project Implementation Unit (PIU) head who will then submit these reports to the World Bank.

9 GRIEVANCE REDRESS MECHANISM

9.1 Grievance Redress Mechanism (GRM)

Grievance redress mechanisms (GRM) provide a formal avenue for affected groups or stakeholders to engage with the project implementers or owners on issues of concern or unaddressed impacts. Grievances are any complaints or suggestions about the way a project is being implemented. They may take the form of specific complaints for damages/injury, concerns about routine project activities, or perceived incidents or impacts. Identifying and responding to grievances supports the development of positive relationships between projects and affected groups/communities, and other stakeholders.

Grievance mechanisms should receive and facilitate resolution of the affected institutional or communities' concerns and grievances. World Bank standards states the concerns should be addressed promptly using an understandable and transparent process that is culturally appropriate and readily acceptable to all segments of affected communities, at no cost and without retribution. Mechanisms should be appropriate to the scale of impacts and risks presented by a project.

Grievances can be an indication of growing stakeholder concerns (real and perceived) and can escalate if not identified and resolved. The management of grievances is therefore a vital component of stakeholder management and an important aspect of risk management for a project. Projects may have a range of potential adverse impacts to people and the environment in general, and identifying grievances and ensuring timely resolution is therefore very necessary.

The following sections describe the proposed procedures that will be followed to address complaints or concerns submitted by people who may benefit from or impacted by EASTRIP subprojects. It intends to provide clarity and predictability on how complaints will be received, assessed, sorted, resolved and monitored.

9.2 Principles of a good GRM

Effective GRMs usually embody six core principles⁴;

- *Fairness.* Grievances are treated confidentially, assessed impartially, and handled transparently.
- **Objectiveness and independence**. The GRM operates independently of all interested parties in order to guarantee fair, objective, and impartial treatment to each case. GRM officials have adequate means and powers to investigate grievances (e.g., interview witnesses, access records).
- Simplicity and accessibility. Procedures to file grievances and seek action are simple enough that project beneficiaries can easily understand them. Project beneficiaries have a range of contact options including, at a minimum, a telephone number (preferably toll-free), an e-mail address, and a postal address. The GRM is accessible to all stakeholders, irrespective of the remoteness of the area they live in, the language they speak, and their level of education or income. The GRM does not use complex processes that create confusion or anxiety (such as only accepting grievances on official-looking standard forms or through grievance boxes in government offices).

⁴ World bank Group; HOW-TO-NOTES, The theory of Grievance Redress, http://siteresources.worldbank.org/EXTSOCIALDEVELOPMENT/Resources/244362-1193949504055/4348035-1298566783395/7755386-1301510956007/GRM-P1-Final.pdf

- Responsiveness and efficiency. The GRM is designed to be responsive to the needs
 of all complainants. Accordingly, officials handling grievances shall be trained to take
 effective action upon, and respond quickly to, grievances and suggestions.
- **Speed and proportionality.** All grievances, simple or complex, shall be addressed and resolved as quickly as possible. The action taken on the grievance or suggestion is swift, decisive, and constructive.
- Participatory and social inclusion. A wide range of project-affected people—community members, members of vulnerable groups, project implementers, civil society, and the media shall be encouraged to bring grievances and comments to the attention of project authorities. Special attention is given to ensure that poor people and marginalized groups, including those with special needs, are able to access the GRM.

9.3 Grievance Handling Mechanism Structure

9.3.1 Members of the Grievance Redress Committee (GRC) at project Level

The proposed members of the grievance committee are as follows;

Name / organization	Representing
Local Administration (eg Sub County	Government - Chairman
Commissioner)	
Area Administration (eg Chief)	Government - Observer
Community	Community - member
PMU	Project Management Unit - Member
Resident Engineer (RE) Safeguard	RE – Member
specialist	
Institution Safeguard Specialist	PIU – Member
NEMA representative	NEMA – Member
Contractor representative	Contractor - Member
NGOs	NGOs – representative of various NGOs
Institution stakeholders (eg student rep)	Users – Member
Other Stakeholders	As may be determined during the implementation
	of the project

NB: Other members can be added or removed as required depending on the evaluation of impacts observed during the ESIA stage.

The main role of the committee will be arbitration through mediation and negotiation when complaints arise to ensure that cases are resolved quickly and fairly. The above committee shall normally meet once per month and may form special sub-committees or ad-hoc committee that shall meet on a weekly basis or more frequently as the nature of some grievances may demand. Such sub-committees or special ad-hoc committee will report their findings and recommendations to the main committee for ratification or approval.

9.4 Key staff coordinating Grievance Redress

The PIU Environmental and Social Safeguards specialist will be designated as the person in charge of Grievance Redress.

In regard to GRM, the following will be their responsibilities;

- Coordinate formation of Grievance Redress Committees (GRCs) before the commencement of construction to resolve issues.
- Act as the Focal Point at PIU on Grievance Redress issues and facilitate the grievance mechanisms.
- Create awareness of the Grievance Redress Mechanism (GRM) amongst all the stakeholders through public awareness campaigns.
- Assist in Redress of all Grievances by coordinating with the concerned parties.
- · Maintain information of grievances and Redress.
- Monitor the activities on Redress of Grievances.
- Prepare the progress for monthly/quarterly reports.
- Provision of resources to cover the operational costs of the GRM.

9.5 Receiving Complaints

Points of receipt of complaints

The various points of receiving complaints would be as follows:

- (i) Regional Government administration:
- (ii) Local chief's office;
- (iii) PIU office (at TVET centers)
- (iv) Contractor or RE office
- (v) Ministry of Education
- (vi) Representative at the community level

Mode of receipt and recording of Complaints

The complaints can be made in writing, verbally, over the phone, by fax, emails or any other media. As soon as the officer receives a complaint he /she would issue an acknowledgement of the complaint, including the details of the person bringing the grievance. The officer receiving the complaints should try to obtain relevant basic information regarding the grievance and the complainant and will immediately inform the safeguard specialist the receipt of the complaint.

The PIU will maintain a Complaint / Grievance and Redress register or log book and the responsibility of keeping records collected from relevant bodies will be the responsibility of the PIU safeguard specialist.

After registering the complaint in the Grievance Redress Registration and Monitoring Sheet, the safeguard specialist would study the complaint made in detail and forward the complaint to the concerned officer with specific dates for replying and redressing the same. He/she would hold meetings with the affected persons / complainant and then attempt to find a solution to the complaint received. If necessary, meetings have to be held with the concerned affected persons / complainant and the concerned parties to find a solution to the problem and fix up plans to redress the grievance. The deliberations of the meetings and decisions taken are recorded and minutes of the meetings filed.

Table 9-1: Grievance Redress Process

Process	Description	Time frame	Other information
		Trame	
Identification of grievance	Face to face; phone; letter, e-mail; recorded during public/community interaction; others	1 Day	Email address; hotline number
Grievance assessed and logged	Significance assessed and grievance recorded or logged (i.e. in a log book)	4-7 Days	Significance criteria: Level 1 –one off event; Level 2 – complaint is widespread or repeated; Level 3- any complaint (one off or repeated) that indicates breach of law or policy or provisions in other project documents
Grievance is acknowledged	Acknowledgement of grievance through appropriate medium	7-14 Days	
Development of response	Grievance solved at Tier 1 (Resolved at EASTRIP level) Response development with input from management/ complainant/relevant stakeholders	4-14 Days	
Response signed off	Grievance closed Redress action approved at appropriate levels	Within above timelines	Project staff at KenGen and complainant to sign off
Grievance not solved, passed to GRC	Grievance passed to appropriate party for resolution (GRC) – Tier 2 Redress action approved at appropriate levels	7-14 Days	GRC and complainant to sign off
Implementation and communication of response	Redress action implemented and update of progress on resolution communicated to complainant	Within 7 days	
Complaints Response	Redress action recorded in grievance log book	4-7 Days	
	Confirm with complainant that grievance can be closed or determine what follow up is necessary		
Grievance not solved, passed to MRC	Grievance passed to appropriate party for resolution (MRC) – Tier 3 Final decision communicated to complainant	7 -14 days	MRC to sign off Complainant to sign off
Close grievance	Record final sign off of grievance If grievance cannot be closed, return to step 2 or refer to sector minister or recommend third-party arbitration or resort to court of law.	4-7 Days	Final sign off on by EASTRIP Secretariat, MoE

9.6 Registry and Monitoring

All complaints received will be entered into a publicly accessible system that will allow complaints to be tracked and monitored. The system will also present a database showing:

- No of complaints received.
- No and % of complaints that have reached agreement.
- No and % of complaints that have been resolved.
- No and % of complaints that have gone to mediation
- No and % of complaints that have not reached agreement.

The database should also show the issues and geographic areas most complaints circle around. The information provided by the database is expected to help EASTRIP to improve

the Grievance Redress Mechanism and better understand and address the environmental and social impacts of the project.

9.7 Grievance Redress Mechanism Process

The stakeholders are informed of various points of making complaints (if any) and the PIU collect the complaints from these points on a regular basis and record them. This is followed by coordinating with the concerned people to address the grievances. The PIU will manage the grievance activities at the respective stakeholder's level to address the Grievances and would act as the focal point in this regard.

A three tier Redress structure is proposed to address all complaints in the sub-projects under EASTRIP.

a) First tier of Redress

The complaints are received at various points as described above.

The resolution at the first tier will be normally be done within 14 working days and notified to the concerned through a disclosure form. Should the Grievance be not solved within this period, this would be referred to the next level of Grievance Redress. However, if the PIU feels that adequate solutions are worked out but it would require a few more days for actions to be taken, he/she can decide on retaining the issue at the first level by informing the complainant accordingly. However, if the complainant requests for an immediate transfer of the issue to the next level, it would be accepted and the issue would be taken to the next tier, especially if the issue is not addressed within 21 days.

b) Second tier of Redress

The Grievance Redress Committee (GRC) would be the one which would address the grievance in the next level in case the problem is not solved at the first tier. The PIU will coordinate with the respective chairman of the GRC in getting this Committee constituted and get the necessary circulars issued in this regard so that they can be convened whenever required.

The safeguard specialist will coordinate the convening of the meetings of the GRC. He / She is also responsible for briefing the GRC on the grievances and deliberations of the first level of Redress, outcomes and on the views of both the parties (project proponent and complainant).

The GRC will hold the necessary meetings with the affected party / complainant and attempt to find a solution acceptable at all levels. The GRC would record the minutes of the meeting and filed by the PIU. The decisions of the GRC will be communicated to the complainant formally and if he/she accepts the resolutions, the complainant's acceptance is obtained in writing and signing off is done between the complainant and the GRC.

If the complainant does not accept the solution offered by the GRC, then the complaint is passed on to the next level / or the complainant can reach the next level for redress. The Chairman of the GRC would be required to forward the issue to the Third Tier to facilitate in exploring a solution to the grievance. In any case, the grievance should be forwarded to the next level if no solution is reached within 14 days of the case reaching the second level. However, in cases nearing offering an amicable solution, it can be retained to an extent of 21 days.

c) Third tier of Redress

If the affected party / complainant does not agree with the resolution at the 2nd level, or there is a time delay of more than a month in solving the issue, the complainant can opt to consider taking it to the third level.

Where an agreement has not been reached, the complainant will be offered the option of an independent mediation process at an alternative arbitration body such as local arbitration arrangements, local administration, or other avenues as might be prescribed in the country constitution before legal redress. The PIU will collect all the details of the Grievance including the deliberations of first tier efforts and of the GRC and present it to the 3rd level tier. The 3rd tier structure will deliberate upon the issue and give suitable recommendations. The minutes of the meetings will be recorded and kept at the PIU office.

The decisions of the 3rd tier structure would be final from the project side and will be communicated to the complainant formally and if he/she accepts the resolutions, the complainant's acceptance is obtained and signed off by the complainant and the 3rd tier structure, including the project GRC.

The Complainant may decide to take a legal or any other recourse if he /she is not satisfied with the resolutions of the deliberations of the three tiers of GRM.

It should be encouraged that the 3 levels of handling the grievances should be exhausted extensively before one goes to courts as last resort.

9.8 GRM Jurisdiction

The proposed GRM is project specific and scaled to the risks and impacts of the Project. It is meant to solve the project's concerns by the stakeholders or any complainant. The proposed GRM is however not intended to bypass any Governments' own existing redress process; rather is intended to address affected people's concerns and complaints promptly, making it readily accessible to all segments of the affected people. Any established Government Redress mechanisms takes priority over the proposed GRM.

The figure on the next page shows a proposed Grievance Redress Mechanism flow process for the EASTRIP. This will be reviewed and customized to address any missing gaps before establishment.

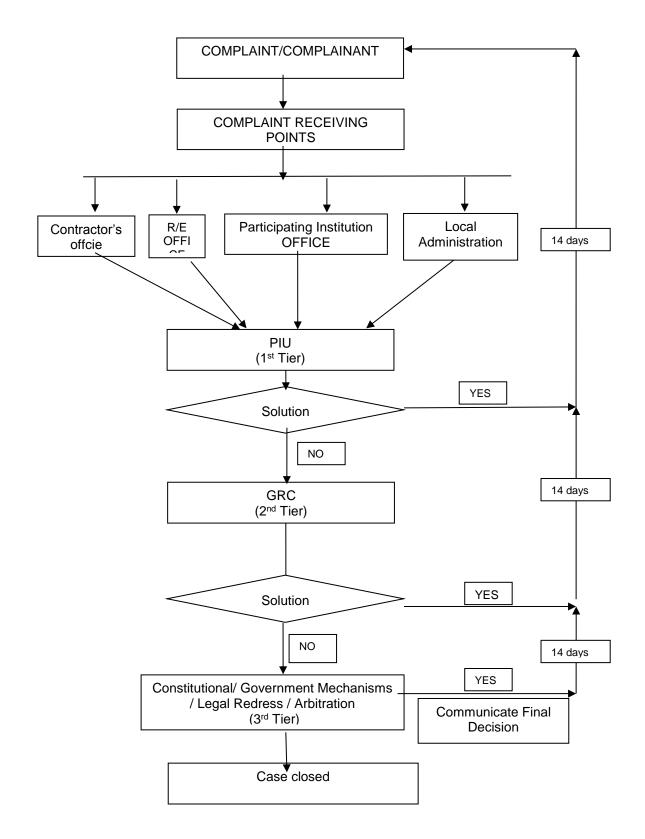


Table 9-2 Grievance Redress Flow Process

10STAKEHOLDER CONSULTATION AND INFORMATION DISCLOSURE

The purpose of Stakeholder Consultation and Information Disclosure Mechanism is to:

- Inform: Promote stakeholder understanding of issues, problems, alternatives, opportunities and solutions through balanced and objective information sharing;
- Consult: To obtain feedback and acknowledge concerns and aspirations of stakeholders on analysis, alternatives, and decisions with regard to EASTRIP;
- Engage: Work directly with stakeholders to ensure that their concerns and aspirations are understood and considered and to assure them that their concerns / aspirations would be directly reflected in the developed alternatives; and that feedback will be provided on how their input influenced the final decision.
- Empower: Make stakeholders partners in each aspect of the decision, including development of alternatives and identification of preferred solution so as to ensure ownership of subprojects at grassroots level.

10.1 Objectives of Consultation

Objectives of the stakeholder consultation workshops were:-

- i. To share the proposed project components, coverage and activities,
- ii. In a participatory manner, develop detailed environmental and social implications of the proposed project,
- iii. Develop recommendations/mitigation measures on how best to address the anticipated environmental and social implications,
- iv. Develop a provisional list of institutional responsibilities, and
- v. Identify capacity needs

10.2 Stakeholder Identification and Participation

Selection and consultation of stakeholders was based on three criteria as follows:

- Participating institutions and EASTRIP National Project Unit (MoE);
- Potential to be impacted by proposed sub-projects;
- Special interests in the programme either as government sector, NGO or CBO, etc.
- County governments where the institutions will be located,
- Institutions responsible for Environmental and Social issues (in this case NEMA)

A stakeholder workshop was held on August 17th, 2018, in Nairobi (at MoE headquarters, Jogoo House) where a presentation on expected positive and negative impacts and their mitigation measures were presented to the key stakeholders. The stakeholders were then invited to detail their concerns, perceptions, reactions and experiences in relation to the proposed sub-projects and the impacts presented, and how these experiences may be of relevance to the EASTRIP. A total of 36 stakeholders participated in the consultation process.

10.3 Summary of Issues raised by the participants

Most of the participants highlighted the importance of proper management of environmental and social issues as presented during the consultation process. Key areas that the participants noted will require proper attention included air and noise water pollution, and solid waste management. The participants also noted that social issues such

as labour and wage issues will need to be managed properly during the construction period.

One of the key outcomes from the consultation was the lack of capacity by most of the institutions to carry out proper supervision of safeguards during the implementation period of EASTRIP. The participants indicated the need for the project to consider capacity building and training to the safeguard focal points, and the entire PIUs (at institutional and National levels) to ensure that the environmental and social issues are managed properly. In relation to this request, this ESMF has provided a provision of 2-day safeguards training and capacity building for the project team.

A summary of issues and response raised during the stakeholder consultation has been attached in this report in **annex 4**. The issues raised by stakeholders will also be a key guidance during the ESIA process, especially consulting the key stakeholders on critical issues.

10.4 Disclosure Procedure

The Ministry of Education (MoE) will organize a Stakeholders Disclosure Workshop at later date to share the draft final ESMF report to the stakeholders. The focus of the consultation process will be to explain the project objectives, the proposed implementation modalities, likely environmental and social impacts and corresponding mitigation strategies and arrangement.

The final ESMF will also be shared in hard copies and soft copies to be uploaded at MoE website, as well as the World Bank InfoShop.

11 CAPACITY BUILDING, TRAINING AND TECHNICAL ASSISTANCE

This ESMF noted the limited and weak capacity of the MoE and implementing institutions that will be in charge of safeguards to prepare and implement environmental and social management plans for the sub-projects.

Effective implementation of the Environmental and Social Management Framework will therefore require capacity development for project NPCU, as well as those responsible for implementing sub-projects at the implementing institutions levels. The PIU team, who will be the key implementers of the projects will need to understand inherent social and environmental issues and values, and be able to clearly identify indicators of the same.

11.1 Training objectives

The overall objective of the training is to mainstream environmental and social consideration into participatory processes of sub-project identification, planning, implementation and mitigation, as well as monitoring of the mitigation activities in the sub-projects and main projects activities. The specific objectives of the training include:

- To ensure that key stakeholders understand the ESMF, how to apply it to sub-projects and other activities of the project;
- To actively involve key stakeholders in the screening of environmental and social aspects of sub-projects from design, planning, monitoring and implementation;
- Domesticating the ESMF to fast track the implementation of the associated subprojects.
- Manage environmental and social risk during project implementation.

11.2 Identification of Capacity Needs

Review of the existing functional system of the MoE and TVET Institutions that will implement EASTRIP projects on the capacity to manage environment and social issues showed that these institutions have no environmental experts well trained on safeguards. Therefore, the ESMF recommends a capacity building and training program for all the environmental and social safeguards focal points at the MoE and TVET institutions levels, and other stakeholders that will be involved directly in the implementation of this project. The capacity building requirements will mostly be in the form of training workshops.

The ESMF proposes capacity building by way of awareness creation, sensitization, actual training through a formal training as described below for different players that will be involved in the EASTRIP project.

The following capacity building and training programmes are proposed:

11.2.1 Capacity Building Enhancement

Awareness creation, training and sensitization will be required for personnel of the following institutions.

- Ministry of Education Implementation team (NPCU level)
- Environmental and Social officers from implementing institutions (PIU level)
- Sub-county Environment Officers / local Environmental Officers (at local sub-county level)

- Any other relevant agencies that will be supporting the project
- Contractors and their staff prior to commencement of construction works

11.2.2 Training

A comprehensive training plan will be designed aiming at enhancing capacity of relevant stakeholder agencies and with the following objectives.

- Identify, prepare, implement & manage environmental aspects of sub-projects;
- Ensure that the institutions have the capacity to assist in preparing sub-project screening, reports, and monitor implementation of mitigation plans; and
- Ensure that the implementing agencies have the capacity to appraise, approve and supervise the implementation of subprojects

The training will focus on;

- Background of the EASTRIP its objectives, target groups and footprints;
- Role of ESMF in implementation of EASTRIP sub-projects;
- Relevant environmental and social regulations;
- Thorough review of Country EIA procedures, Environmental and Social Management policies & guidelines
- World Bank safeguards policies, as well as their implementation and enforcement.
- Environmental Impact Assessment (EIA) and Environmental Audit (EA) procedures;
- Project activities and their potential environmental and social impacts
- Stakeholder engagement, consultation and partnerships;
- Development of mitigation measures and Environmental and Social Management Plans
- Project screening methods, including application of ESMF tools (Screening checklists, EA), their review, implementation and enforcement.
- ESMP reporting, monitoring and follow-up of ESMF (including responsibilities of each party)
- Grievance Handling and Redress mechanisms and its relevant tools
- Prevention and response to gender based violence including sexual exploitation and abuse of girls
- HIV Prevention in the work place
- Prevention and response to sexual harassment
- Labor influx management practices including preparation and enforcement of workers contracts and codes and conduct.
- Grievance redress mechanism for workers

These training activities and capacity building program will be developed and implemented by the RFU with input of the WB safeguard specialist involved in the project. The resources for implementing the training will be allocated from the respective component of EASTRIP, and will be co-ordinated by the Safeguard specialist at the RFU.

The training program/agenda below provides a sample training outline and course content.

Table 11-1: Proposed Training program on ESMF

Day 1

- 1. Introduction to Environmental and Social Management Plans This section will introduce participants to the theory and application of ESMF as a decision-making tool. It will outline the principles of ESMF and provide clear definitions on EMP practice terminology (e.g. screening and scoping, impacts [negative, positive, cumulative, strategic] natural resource base (water, soil, land, biodiversity, air, etc., mitigation and monitoring) and social baseline (employment, social, health, literacy etc)).
- 2. Country Environmental Laws and Legislation & International Financial Institutions
 Safeguard Policies and This section will discuss the relevant environmental and social laws and
 policies which apply to activities under the program under the respective constitution. The section
 will also discuss WB safeguard policies and their application to the project.
- 3. **Screening of investment projects**. A list of potential activities to be financed under the projects will be discussed. Application of the screening checklist will be explained using case studies.
- 4. **Impact Identification**. Potential impacts related to various types of activities will be discussed, in terms of their significance (adverse or minimal, positive or negative), magnitude (long term versus short term), and impact category (localized or cumulative).
- 5. **Occupational health and safety** (OHS) management protects the safety, health, and welfare of people at the workplace will be discussed
- 6. Labour Influx, Gender, Child Protection, HIV Prevention strategies
- 7. **Stakeholder consultation and engagement** approaches with emphasis on how to build a common vision, enhance conflict management and resolution, and responsibility sharing among others

Day 2

- 8. Development of a practical **environmental and social management plan (ESMP)** based on the detailed analysis, the project implementers at the site level may be required to development a comprehensive management plan on how to address each of the identified impacts
- 9. **Mitigation and Monitoring Mitigation measures** as they apply to various types of investment activities will be discussed, in terms of their application, cost and feasibility. Monitoring measures will also be recommended to measure the effectiveness of mitigation plans and to monitor performance.
- 10. Responsibilities for Planning and Reporting For each target audience, responsibilities for environmental and social management will be discussed as they relate to the Project implementation. This will include responsibilities for planning, management of impact identification and mitigation/monitoring, partnerships with local NGOs and technical service providers, community members, and reporting.
- 11. **Grievance Handling Redress Mechanisms** collection, reporting and resolving grievances will be discussed for the projects

12ESMF IMPLEMENTATION BUDGET

The ESMF implementation costs outlined here are for activities aimed at ensuring that project activities align with procedures recommended in this ESMF, and to support a capacity-building program for key actors. These costs are to be included in the sub project budget funds.

The estimated total cost for ESMF implementation is indicated in the table below.

Table 12-1: Overall costs for implementation of ESMF in EASTRIP

Activity	Description	Unit cost, US\$	No	Total Cost, US\$			
CAPACITY BUILDING	CAPACITY BUILDING ON ESMF/ESIA						
Training on ESMF and ESIA	Training workshop/seminars for stakeholders on ESMF/ESIA implementation - MoE, NCPU, PIU staff	25,000	2 days	50,000			
ESIAs for sub-project							
Preparation of ESIA for subprojects	Undertaking EIAs and submitting reports to NEMA for approval through short term consultancies or consultants	20,000	5	100,000			
MONITORING SAFEG	UARD CONSULTANTS			1			
Monitoring, Evaluation and reporting at the NCPU level (MoE)	Monitoring and evaluation exercises for every quarter	100,000	LS	100,000			
Establishment of GRMs, Gender	Establishment of GRMs, zero tolerance program for sexual harassment, gender and inclusion strategy and action plan, stakeholder engagement plan, communication strategy including I formation Education and Communication (IEC) materials, development of prototypes of generic workers codes of conduct etc	200,000	LS	200,000			
OTHER ACTIVITIES			1				
Annual environmental and Social Audit	Hire a consultant to do Annual Environmental and Social Audits	50,000	LS	50,000			
TOTAL EST BUDGET				\$500,000			

NB: Budget for ESMF at PCU level not added on this budget. An estimated USD 300,000 will be required for ESMF/ESIA monitoring during the project implementation by a safeguard specialist to assist the PCU office (at IUCEA) to oversee the overall implementation safeguards for the ALL the countries participating in EASTRIP.

REFERENCES

- 1. Government of Kenya Vision 2030
- 2. Government of Kenya Water Act 2002
- 3. Government of Kenya Wildlife Conservation and Management Act
- 4. Minutes of public and stakeholders consultations
- 5. World Bank Group Operational Policies
- 6. IFC Safeguards Performance standards
- 7. World Bank GPE Project Appraisal Document (PAD),
- 8. Kenya Economic Survey 2018
- 9. Kenya National Bureau of statistics, 2009

ANNEX 1 – Sample Environment and Social Screening Tool

The Environmental and Social Screening Form (ESSF) has been designed to assists in the evaluation of sub projects for the East Africa Skills for Transformation and Regional Integration Project (EASTRIP). The form is designed for assessment of environmental and social impacts and their mitigation measures, if any, so that requirements for further environmental analysis can be determined. This form must be completed by the Project Implementation Unit (PIU) safeguard specialist (or any other appointed person) appropriately trained to do so and in consultation with the key stakeholders of the sub-project. The form will form part of the approval requirements for implementation of the sub-project activities.

PART 1.	A: GENERAL INFORMATION Name of sub-project:
2.	
3.	Name of the Institution:
4.	Name of Town:
5.	Name of County
6.	Name of Executing Agent
7.	Name of the Approving Authority
Detail 8.	Job title:
10). Telephone Number:
11	. Fax Number:
12	2. E-mail Address:
13	B. Date:
14	Signature:

PART B: BRIEF DESCRIPTION OF THE SUB-PROJECT

Please provide information on the type and scale of the sub-project (area, required land and approximate size of total building floor area).

Estimated area of land where project will be located
Is the land owned by the institution?
Approximate sizes of buildings
Approximate costs of construction works
Provide below information about the nature of project activities during the construction of the

facilities including support/ancillary structures and activities required to build it, e.g. need to quarry or excavate borrow materials, laying pipes/lines to connect to energy or water source, access road etc.

PART C: BRIEF DESCRIPTION OF THE ENVIRONMENTAL and PHYSICAL OF PROJECT LOCATION SITUATION

Describe the sub-project location, sitting, surroundings (include a map or even a sketch map) Describe the land formation, topography, vegetation in and adjacent to the project area. Estimate and indicate where vegetation may have to be cleared

PART D: NATURAL HABITAT IMPACTS

Will the project?

No	Description	Yes	No	Not Known
1	Be located within or near environmentally sensitive areas (e.g. intact natural forests, mangroves, wetlands) or threatened species? NB: If the answer is yes, the sub-project should not proceed.			
2	Adversely affect environmentally sensitive areas or critical habitats — wetlands, woodlots, natural forests, rivers, protected areas including national parks, reserves or local sanctuaries, etc.)? NB: If the answer is yes, the sub-project should not proceed.			
3	Affect the indigenous and endangered/threatened biodiversity (flora and fauna)? NB: If the answer is yes, the sub-project should not proceed.			
4	Cause any loss or degradation of any natural habitats, either directly (through project works) or indirectly? NB: If the answer is yes, the sub-project should not proceed.			
5	Increase human-wildlife conflicts? NB: If the answer is 'yes', please include in the ESMP a mitigation with sub-project application.			

PART E: ENVIRONMENTAL ISSUES

Will the project?

No	Description	Yes	No	Not Known
1	Create a risk of increased soil erosion?			
2	Create a risk of increased deforestation?			
3	Create a risk of increasing any other soil degradation			
4	Affect soil salinity and alkalinity?			
5	Divert the water resource from its natural course/location?			
6	Cause pollution of aquatic ecosystems by sedimentation and agro-chemicals, oil spillage, effluents, etc.?			
7	Introduce exotic plants or animals?			
8	Involve drainage of wetlands or other permanently flooded areas?			
9	Cause poor water drainage and increase the risk of water-related diseases such as Malaria			
10	Reduce the quantity of water for the downstream users?			
11	Result in the lowering of groundwater level or depletion of groundwater?			
12	Create waste that could adversely affect local soils, vegetation, rivers and streams or groundwater?			
13	Reduce various types of livestock production?			
14	Affect any watershed?			

No	Description	Yes	No	Not Known
15	Focus on biomass/bio-fuel energy generation?			
16	Project will pollute air directly (construction cement /dust)			
17	Project will lead to practices that worsen air quality			
18	Project will lead to a change in engine or fuel use that could cause serous air problems			
19	The project will generate noise from construction activities			
20	Project operation will result in increase in noise generation			
21	Project could make people to move to high noise level area			
22	Project could result in noisy working environments for staff			
23	The project will increase demand for conventional energy sources			
24	The project will create demand for demand for other energy sources (wood and charcoal)			

PART F: SOCIAL ISSUES

Will the project?

No	Description	Yes	No	Not Known
1	Be project located in a rural or remote area?			
2	Displace people from their current settlement?			
3	Interfere with the normal health and safety of the worker/employee?			
4	Reduce the employment opportunities for the surrounding communities?			
5	Reduce settlement (no further area allocated to settlements)?			
6	Will the project potentially involve an influx of workers to the project location?,			
7	Will the influx be considered significant for the local community?			
8	What is the expected frequency and extent of contact between the local community and outsiders?			
9	Reduce income for the local communities?			
10	Increase insecurity due to introduction of the project?			
11	Increase exposure of the community to communicable diseases such as HIV/AIDs			
12	Induce conflict?			
13	Introduce new practices and habits?			
14	Lead to child delinquency (school drop-outs, child abuse, child labour, etc.?			
15	Lead to gender disparity?			
16	Is the project area known to have history of Gender based violence?			
17	Is there a potential for the project to increase gender based violence			

No	Description	Yes	No	Not Known
18	Lead to social evils (any form of gender based violence, drug abuse, excessive alcohol			
10	consumption, crime, sex workers etc.)?			
19	Based on the socio-economic, cultural, religious and demographic qualities of the local community and the incoming workers, is there a possibility that their presence or interaction with the local community			
	could create adverse impacts?			

PART G: LAND ACQUISITION AND ACCESS TO RESOURCES

Will the project?

No	Description	Yes	No	Not Known
1	Require that land (public or private) be acquired (temporarily or permanently) for its development			
2	Use land that is currently occupied or regularly used for productive purposes (e.g. gardening, farming, pasture, fishing locations, forests)			
3	Displace individuals, families or businesses?			
4	Result in temporary or permanent loss of crops, fruit trees and pasture land?			
5	Adversely affect small communal cultural property such as funeral and burial sites, or sacred groves?			
6	Result in involuntary restriction of access by people to legally designated parks and protected areas?			

NOTES

Any activities assigned the environmental category A cannot be funded because the parent project has been assigned the environmental category B; and The screener should determine whether any of the safeguard policies described in the ESMF are triggered by the proposed activity, and if so, appropriate mitigation measures as per the triggered OP should be presented in this section.

GUIDE ON POSSIBLE ACTION TO BE TAKEN

If all the above answers are "No", there is no need for further action and the Environmental category will be "C".

If there is at least one "Yes", an ESIA/ESMP will be required for the sub-project. Approval by relevant authority will be required depending on the impacts.

(ii) YES – Less/minimal adverse and ESIA)	
THIS FORM HAS BEEN COMPLETI	ED BY:
Name:	Title:
Date:	Signature:
Approved by	-
Name:	Title:
Date:	Signature:

ANNEX 2 – Chance Find Procedures

Chance find procedures are an integral part of the project EMMP and civil works contracts. The following is proposed in this regard:

If the Contractor discovers archeological sites, historical sites, remains and objects, including graveyards and/or individual graves during excavation or construction, the Contractor shall:

- Stop the construction activities in the area of the chance find;
- Delineate the discovered site or area;
- 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 arranged until the responsible local authorities or the Ministry of State for National Heritage and Culture take over;
- Notify the supervisor, Project Environmental Officer and Project Engineer who in turn will notify the responsible local authorities and the Ministry of State for National Heritage and Culture immediately (within 24 hours or less);

Responsible local authorities and the Ministry of State for National Heritage and Culture would then 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 archaeologists of the National Museums of Kenya. The significance and importance of the findings should be assessed according to the various criteria relevant to cultural heritage, namely the aesthetic, historic, scientific or research, social and economic values.

Decisions on how to handle the find shall be taken by the responsible authorities and the Ministry of State for National Heritage and Culture. This could include changes in the layout (such as when finding irremovable remains of cultural or archeological importance) conservation, preservation, restoration and salvage.

Implementation for the authority decision concerning the management of the finding shall be communicated in writing by relevant local authorities.

Construction work may resume only after permission is given from the responsible local authorities or the Ministry of State for National Heritage and Culture concerning safeguard of the heritage.

ANNEX 3 – Sample ToR for Environmental and Social Impact Assessment (ESIA)

TERMS OF REFERENCE FOR CONDUCTING ENVIRONMENT AND SOCIAL IMPACT ASSESSMENT STUDY FOR PROJECTS UNDER EASTRIP.

Project Background

The World Bank in partnership with East African countries is developing an East Africa regional skills initiative, the East Africa Skills for Transformation and Regional Integration Project (EASTRIP) to support skills development for the Northern Corridor Initiative Project (NCIP) and other mega projects in the region. The Project is expected to be approved by the World Bank board in or around October 2018 and will be implemented in the next five years or so. The Project will be financed with a combination of national and regional IDA credits and IDA grant totaling approximately US\$300 million. The EASTRIP initially covers three Eastern Africa countries including Ethiopia, Kenya, and Tanzania but can be expanded to include other countries. The Project's development objective is to increase the access and improve the quality of Technical and Vocational Education and Training (TVET) programs in selected centers to contribute to support regional economic corridors. The objectives and results will be achieved through activities grouped under three components, whereby Component I and II are at national levels and III at regional Level.

The Project will target the development of specialized technical skills in priority sectors including; transportation, energy, agro-processing, light manufacturing, and information and communications technology. Sector focus may differ from country to country depending on country priorities. The Inter-University Council for East Africa (IUCEA), which is an institution of the East African Community (EAC), responsible for coordination of higher education and research in the EAC has been selected through a competitive process to be the Regional Facilitation Unit (RFU) of EASTRIP. IUCEA) has received funding from the World Bank IDA grant in the form of a Project Preparation Advance (PPA) fund for the establishment and operation of the Regional Facilitation Unit (RFU), and preparatory activities of Component 3 for the EASTRIP initiative.

The project will cover three countries namely, Tanzania, Kenya and Ethiopia. The initial scoping of the proposed project interventions suggests that the potential environmental and social impacts will be minimal to moderate, largely reversible and site-specific due to the nature of the envisioned activities.

Project Description

The proposed East Africa Skills for Transformation and Regional Integration (EASTRIP) involves three East African countries including Ethiopia, Kenya, and Tanzania. The project's development objective is to increase the access and improve the quality of TVET programs in selected Regional TVET Centers of Excellence and to support regional integration. The project supports the development of highly specialized TVET programs at diploma and degree levels for training of technicians and TVET faculty, as well as industry recognized short-term training, targeting regional priority sectors in transport, energy, manufacturing, and ICT. The objective will be achieved through complementary interventions at three different levels—center, national, and regional.

This Project has been assigned the Environmental Category "B", predicated on the premise that implementation of activities under the Project could trigger the Bank's Policies and Operational Policies on Environmental Assessment (BP/OP 4.01). In view of this categorization, the Recipient through its implementing agency is required to prepare site-specific Environmental and Social Impact Assessment (ESIA) that needs to be cleared by the Kenya's National Environmental Management Authority (NEMA) and disclosed in-country and in the Bank's InfoShop.

The project has three components with a series of sub-components namely;

Component 1: Strengthening selected Regional TVET Centers of Excellence for high-quality skills development in priority sectors (US\$189 million IDA credit). This component will focus on; strengthening center governance and management, institutionalizing industry links, developing/implementing market relevant and competency-based training programs, Training of school managers and teachers, upgrading key instructional facilities and equipment, and outreaching and support for non-project national TVET.

Component 2: Capacity Building for national TVET Systems (US\$21 million IDA credit). This component will focus on; strengthening national TVET quality assurance, capacity building for TVET policy development and implementation, promoting regional integration, National project coordination, and M&E.

Component 3: Enhancing regional collaborative capacity on TVET and project coordination (US\$10 million regional IDA grant). This component will focus on; Harmonization of standards and mutual recognition of qualifications for priority occupations, Incubation of a regional TVET technical body for policy research, advocacy, strategy development, and dissemination of good practices, Capacity building for Africa skills competition, Regional project coordination and M&E.

Key Performance indicators

The Project Development Objectives (PDO) will be measured by the following key indicative PDO level indicators:

- a) PDO Indicator 1: Increase in student enrollment and completion at flagship TVET institutions in programs aimed at meeting skill needs of priority sectors
- b) PDO Indicator 2: Graduates of accredited TVET programs employed in occupations in the priority sectors six months after graduation, and
- c) PDO Indicator 3: Increase in number of enrolled students coming from another country in the region.

Objectives of the Assignment

The primary objective of the consultancy is to undertake an Environment and Social Impact Assessment (ESIA) of the projects under EASTRIP in order to ensure compliance with;

- (i) The National Environmental Management Authority (NEMA) Act and EIA and Audit Regulations
- (ii) World Bank's Environmental and Social Safeguards requirements

The ESIA will identify significant environmental and social impacts associated with the proposed projects and recommend appropriate mitigation measures for integration in all phases of the projects cycle. The ESIA will also generate an Environmental and Social Management Plan that describes in detail the mitigation measures to be carried out, the costing, scheduling and responsibility of such measures, and a detailed monitoring process and its schedule.

The Project Management

The overall responsibility for project execution/implementation will be a Project Implementation unit (PIU) at the TVET institution level. At the national level, the Ministry of Education will provide leadership and ensuring effective coordination through the National Project Coordinating Unit (NPCU). A Regional Facilitation Unit (RFU) at IUCEA will provide oversight for project implementation at the regional level.

The method of selection

A Firm/Consortium will be selected on the basis of **Quality and Cost Based Selection** procedures in accordance with the policies of the International Development Association (IDA) detailed Guidelines: Selection and Employment of Consultants by World Bank Borrowers, published in May 2004, and revised in October 2006 and May 2010. A copy of the guidelines can be obtained at the following website: www.worldbank.org/procure.

Scope of the services required for Environment and Social Impact Assessment (ESIA) Consultant

The project scope will include Literature review; detailed and updated description of the project design and proposed implementation schedule, costs, as well as suitable alternative options; an in-depth analysis of the environmental and social baseline conditions; an outline of policy, legal and institutional framework governing the education sector with specific focus on TVET sector; an exhaustive stakeholder (public) consultation; establish details of significant environmental and social impacts associated with the construction, operation, decommissioning and post-decommissioning of the project; recommend appropriate mitigation measures for all adverse environmental and social impacts and develop an environmental and social management plan (ESMP) for all project phases giving actions, responsibilities, cost estimates, timeframes and monitorable parameters.

The consultant shall carry out an Environmental and Social Impact Assessment and prepare Environmental and Social Impact Assessment (ESIA) report in accordance with the National Environmental Act 2004, EIA and Audit Regulations of 2005, and World Bank's Environmental and Social Safeguards requirements (OP 4.01).

Specific Tasks of the ESIA consultancy services

The scope of services will include but not be limited to the following:

- i. Task 1. Scoping of Environmental and Social Issues; As part of the Inception Phase, the Consultant shall undertake scoping of key environmental and social issues with a view to determine the key issues and questions the main environmental study should assess and key issues that might affect the design of the different options. This will include a preliminary analysis of potential key direct and indirect impacts of the Project, environmental and social conditions in the potentially affected areas. The Consultant shall use this as a starting point for further refining the scope of the environmental and social studies through a consultative process.
- ii. **Task 2. Literature Review:** The Consultant will be required to undertake desktop study analysis on the available literature on the proposed project and its potential impacts. Literature available to the client shall be provided to the consultant which will serve as a starting point for the consultant to gather Environmental and Social information pertaining the project.
- iii. **Task 3. Legislative and Regulatory Framework:** The Consultant shall identify and describe all pertinent regulations and standards (both local and international) governing the environmental quality, solid and liquid waste management, health and safety, protection of sensitive areas, land use control, ecological, and socio-economic issues at the local, national and international levels. Compliance issues should also be stated.
- iv. **Task 4. Description of the Baseline Environment:** The Consultant is required to collect, collate and present baseline information on the environmental characteristics of the existing situation. This description will involve:
 - a) *Physical environment* (topography, landforms, geology, soils climate and meteorology, air quality, hydrology, etc.).
 - b) *Biological environment* (i.e., flora and fauna types and diversity, endangered species, sensitive habitats, etc.).

c) Social and cultural environment, (i.e., population, land use, planned development activities, community structure, employment and labour market, sources and distribution of income, cultural properties, etc).

The Consultant is to concisely describe the proposed project; its geographic location; general layout of facilities including maps at appropriate scale where necessary; raw materials; products and by-products; wastes to be generated; project alternatives.

- v. Task 5. Carry out public participation and consultations on the positive and negative impacts of the proposed project: The Consultant shall carry out a detailed public consultation exercise to collect the views and opinions of stakeholders which will be incorporated in the final report. The Consultant shall organize forums for public participation to enable interested & affected parties to present their concerns and opinions regarding the proposed project. The views of the public will be solicited and incorporated in the main ESIA report. Stakeholders to be consulted will have been identified at the scoping stage. Among others, the following should be consulted: NEMA, county Environmental Officers, respective county leadership (both technical and political), the local communities, and other stakeholders identified during the ESIA process.
- vi. Task 6: Analysis of alternatives of the proposed project; The consultant will analyze the proposed project together with public participation and consultations observations and report the project alternatives in accordance with project location, choice of materials and equipment, construction and operation methods and routine maintenance of the proposed project. The consultant will check different options for the proposed project that would maximize the project benefits for the client and advise accordingly.
- vii. Task 7. Identify potential environmental and impacts that could result from the proposed project: The Consultant shall analyse and describe all significant changes expected due to the proposed project. These would encompass environmental, ecological and social impacts, both positive and negative, as a result of interaction between the proposed project and the environment that are likely to bring about changes in the baseline environmental and social conditions discussed in Task 4. The Consultant shall differentiate between short, medium and long-term impacts. During the analysis, the consultant shall consider both biophysical and socio-economic factors that will include but not limited to the impacts of: Population resettlement/relocation; Socio-economic characteristics of the difference target groups near the project; Physical and social infrastructure change; Change in economic activities; Development resources; Removal of structure /sites; Vegetation clearance and disturbance; Effects on flora and fauna; Air quality; Water quality, Improved access; Accident rates; and Visual/aesthetic change.
- viii. **Task 8. Identify potential social risks that could result as a result of labour influx:** The Consultant shall analyse and describe all significant potential risks that could result from the influx of labour due to the project. This will include but not limited to labour conflict, gender-based violence, child exploitation, spread of communicable diseases such as HIV/AIDs, illicit behaviour and crime, impacts on community dynamics, etc.
- ix. **Task 9. Occupational Safety & Health concerns:** The Consultant shall analyse and describe all occupational health and safety concerns likely to arise as a result of construction and operations of the proposed facility. The Consultant shall make recommendations on corrective and remedial measures to be implemented under the environmental management plan. The Consultant will include emergency/disaster preparedness plans for proposed project.
- x. Task 10. Propose Mitigation Measures to the identified environmental and social impacts. The consultant shall come up with the feasible mitigation measures for the negative impacts that could result from the proposed project.
- xi. Task 11. Development of Environmental and Social Management Plan to mitigate

negative impacts: The Consultant shall develop a comprehensive Environmental and Social Management Plan (ESMP). The plan should recommend a set of mitigation, monitoring and institutional measures to eliminate, minimize or reduce to acceptable levels of adverse environmental and social impacts and/or maximize socio-economic benefits. The Consultant shall provide cost outlays for the proposed measures as well as their institutional and financial support.

- xii. **Task 12. Development of Environmental and Social Monitoring Plan:** The Consultant will be required to give specific descriptions, and technical details of monitoring measures, including the parameters to be measured, methods to be used, sampling locations, frequency of measurements, and definition of thresholds that will signal the need for corrective actions as well as deliver monitoring and reporting procedures. The Consultant will provide time frames and implementation mechanisms, staffing requirements and cost outlays.
- xiii.Task 13: Environmental & Social Impact Assessment Report: The main output shall be an Environmental & Social Impact Assessment Report. The report shall be in the English Language and has to be clear and concise. The report will be in a format acceptable to National Environmental Management Authority (NEMA) and the client.

Expected Outputs of ESIA

The main output of the ESIA assignment will be an ESIA report for the respective Project. More specifically, the ESIA Report will be expected to include (but not limited to) the following:

- Executive Summary
- Description of the Proposed Project
- Policy, Legal and Administrative Framework
- Baseline Data
- Consultation and Public Participation
- Analysis of Alternatives
- Potential Positive and Negative Environmental Impacts
- Occupational, Health and Safety concerns
- Social issues related to Labour influx, gender based violence, child labour, impacts on local communities where the project will be located
- Proposed Mitigation Measures
- Environmental and Social Management Plan
- Environmental and Social Monitoring Plan
- Gender Management Plan
- Appendices: List of people consulted, Minutes of consultations, other relevant documents related to the study.)

Expected Output

The main outputs of this assignment will be individual ESIAs reports for each of the subproject, prepared in accordance with the World Bank Safeguard Policies (especially OP. 4.01 and other relevant policies) and the NEMA EIA and Audit Regulations.

Deliverables, Duration and Timing for Study

The assignment shall be carried out and completed within twelve (12) weeks, from the date of the Contract signing.

a) Inception Report; The consultant will prepare a report based on the understanding of the terms of reference for the study and the expected deliverables of the assignment. The consultant will prepare a Report after Two (2) weeks of commencing the assignment. The inception report will summarize consultant's initial observations, including the revised understanding of the terms of reference and the description of the methodology to be used,

- planned deliverables, including an appreciation of any limitations or constraints and how these will be overcome. The Client shall review the Inception Report and give feedback to the Consultant within one (01) week.
- b) **Draft Environmental and Social Impact Assessment (ESIA) Report;** The consultant will prepare and present a draft ESIA report to the client for comments within Eight (8) weeks of commencement of the assignment, summarizing the work accomplished, in accordance with the objectives and scope of work as agreed with the client. The Client shall review and comment on the submitted reports within two (02) weeks from the date of report receipt.
- c) *Final ESIA Report;* The consultant will prepare and submit the Final ESIA Report incorporating all revisions deemed appropriate two (2) weeks after the receipt of the Client's comments on the Draft ESIA report.

The consultant shall submit to the Client four (4) hard copies as well as two (2) CDs containing soft/ electronic copies (in word document and 'pdf' format) of the Final ESIA Report.

The timeframe of implementation of the assignment:

No.	Item	Outputs Vs Payment	Duration	
1.	Preparations of inception report	Inception Report (20%)	Two (02)	
			weeks	
2.	Review of the Inception Report by the	Review comments on the	One (01)	
	Client	Inception Report	week	
3.	ESIA Study	Draft ESIA report (40%	Five (05)	
		payment)	weeks	
	Preparation of the draft Environmental &			
	Social Assessment report			
4	Review and Quality Assurance by the	Review comments on draft ESIA	Two (02)	
	Client	report	weeks	
5	Incorporation of review comments &	Final ESIA report (40%	Two (02)	
	finalisation of the ESIA report	payment)	weeks	

Note:

The last 40% payment for the Final Environmental and Social Assessment report shall be paid after submission and *approval* of acceptable Environmental and Social Assessment report by NEMA.

Qualification of the Consultant

A suitably qualified and experienced individual consultant with Graduate (Master's level) Degree in Environment, Natural Resources Management or related field and with at least four (04) years of relevant experience or a holder of a Bachelor's Degree in Environment, Natural Resources Management or related field and at-least five (05) years' working experience in environmental and social assessment for development projects, and familiarity with the Kenya Government and World Bank's safeguard policies and procedures. The consultant must be a Registered (Lead Expert) with NEMA.

Any Facilities, Services or Resources to be provided by the client

The client will provide the following:

- Relevant materials which will include the relevant safeguards documents such as the ESMF, Aide Memoires, project's progress reports, including the environmental implementation review sections, assessments reports, and the Project Appraisal Documents
- Relevant background documentation and studies;

- Make all necessary arrangements for facilitating the work of the Consultant and to provide access to Project sites, relevant government authorities, and other Project stakeholders.
- Any other information to facilitate the consultant to carry out the assignment.

Communication and Reporting Requirement

All official communications regarding the project work shall be addressed to the Project Manager at the TVET institution. However, the Environmental and Social Safeguards Specialist at PIU shall coordinate the Consultancy and will be the contact persons for day to day running of the assignment.

ANNEX 4 – Summary of Consultation Discussion

ENVIRONMENTAL & SOCIAL MANAGEMENT FRAMEWORK (ESMF) FOR EAST AFRICA SKILLLS FOR TRANSFORMATION AND REGIONAL INTERGRATION PROJECT (EASTRIP) - KENYA

MINUTES OF KEY STAKEHOLDERS CONSULTATIVE WORKSHOP HELD ON 17TH AUGUST 2018 2016 AT JOGOO HOUSE, NAIROBI.

Agenda

- 1. Introduction to EASTRIP
- 2. Presentation of Environmental and Social Management Framework of EASTRIP KFNYA
- 3. Feedback from participants
- 4. Way forward

Present

36 participants as per the attached attendance sheet.

Min 1/08/2018: Preliminaries

The Project National Coordinator, Mr Nelson Gitau from the Ministry of Education called the meeting to order at 900 hrs. Peretsa Mangu led the opening prayer.

Min 2/08/2018: Introductory Remarks from Ministry of Education

The Country Project Coordinator, Mr Nelson Gitau, on behalf of the Ministry of Education, welcomed the participants to the meeting and thanked them for honoring the invitation. He indicated the participation of all the stakeholders would contribute greatly towards enhancing the safeguards management when the projects commence.

The Project coordinator made a presentation on the overall project overview and the flagship Centre Leaders made presentations on the Strategic Investment Plans (SIPs), the tool that will guide project implementation within the Centres.

Min 3/08/2018: Presentation by Environmental Consultant

Julius Byenkya on behalf of Onsite Consultants Ltd made a power point presentation on the Environmental and Social Management Framework (ESMF) for EASTRIP. He presented the objectives of the ESMF which is to provide a framework for effective management of environmental and social issues in the proposed EASTRIP Project. It also seeks to both enhance environmental and social development benefits of the project and mitigate any adverse impacts, in line with Government of Kenya and World Bank policies, and give guidelines on management of Environmental and Social Development Projects.

He informed the participants that since the precise locations, technical designs and potential impacts of future sub-projects are not known, the ESMF provides the basis for the preparation of necessary environmental and social tools, as needed for the sub-project investments supported through the Project.

He also informed the participants that the ESMF will enable project proponents (the Ministry of Education) and beneficiaries (Flagship TVET Institutions) integrate and incorporate environmental and social concerns in the entire cycle of Project Implementation. The ESMF also proposes guidelines on how environmental and social impacts will be screened when the sub-projects are identified and implemented.

He also presented the potential impacts identified by the proposed subprojects under EASTRIP.

Potential Positive Impacts of subprojects

- Increased enrollment in TVET institutions
- Creation of employment opportunities for the local people and staff during and after project completion which will improved livelihoods via employment
- Reduction of gender gap in enrollment at TVET institutions

- Better institutional management and transparency on TVET operations
- Enhancement of Regional Integration between participating countries
- Strengthened culture of management of environmental and social risks at the TVETs during and after project completion

Potential Negative Impacts

- Loss of habitat
- Soil erosion
- Dust emission
- Noise pollution
- Traffic disruption
- Air pollution
- Social issues
- Gender mainstreaming
- Labour influx and its associated negative impacts
- Solid waste disposal
- Water depletion
- Mushrooming of informal settlements
- Spread of HIV/AIDS
- Potential gender-based violence

He discussed proposed mitigation measures for each of the above negative impacts. In addition, he presented the proposed Grievance Redress Mechanisms proposed by the ESMF.

Next Steps

After presentation, the participants were informed that the ESMF document will be completed and as per the requirements of the country laws and World Bank guidelines, the document will be disclosed on the Ministry of Education website and World Bank infoshop.

Min 4/08/2018: Plenary

Comment/Question/Clarifications	Response
Closing the gender gap and ensuring social inclusion What strategies are proposed by the CE for closing the gender gap and ensuring social inclusion in vocational and technical education in Kenya?	 The project will do the following to close the gender gap Constructing hostels for girls under the project Scholarships targeting girls Career guidance talks in schools to encourage girls to take up science and other subjects that that lead to vocational education Allocating admission slots to students from areas of the country that have historically experienced low enrolment at all levels in the education system Scholarships for people with disabilities (PWDs) Ramps to be included in the design of buildings to make them user friendly for PWDs
	On a wider scope, other examples of interventions proposed related to gender mainstreaming include training of civil engineering students in some of the TVETS on some aspects such as incorporating breastfeeding sheds as part of training on road design. This has already been implemented as part of the training by KIHBT.

Comment/Question/Clarifications	Response
Green buildings/green technology Can the World Bank support the construction of green buildings? Only one institution, Kengen has plans for green technology. What about other colleges?	 The World Bank supports the construction of green buildings within budget as long as this ensures the best value for money. Other Colleges agreed to the extent possible, to include green technology in their final SIPs. Wind power as an alternative source of energy for some colleges (near Ngong Hills) would be explored through other funding opportunities if not eligible under this project or if it cannot fit in the project budget. All buildings to be constructed under the project were advised to have solar water heating as per government regulations
Preparation of ESIAs Will buildings to be constructed in Centre of Excellences require ESIAs? Preparation of ESIAs Representation of ESIAs Preparation of ESIAs Preparatio	• As per NEMA regulations, ESIAs will be required. In one of the College-Kisumu National Polytechnic, the construction will take place in what is considered a wet land. Environmental and social impact mitigation measures will have to be planned as part of ESMP. Because of the sensitivity of the wetland, the representative of the college was advised to do proper screening early in advance and have NEMA and WB approve the project concept if it will be affecting the wetland before even the designs commences. If the project is deemed to have adverse and irreversible impacts at the proposed site, then the college might have to find another site location for the project
The participants were asked whether they know the current status of several social risks such as HIV/AIDS, sexual abuse of minor girls, teenage pregnancy, gender-based violence including sexual harassment in the project areas	Stakeholders acknowledged that the prevalence in many parts of the country of several social risks including those mentioned in the report is high. One college in close to Naivasha – where is known to be a hot spot for HIV/AIDS and other social vices. The representative acknowledged that they are likely to be exacerbated by the project, particularly by labour influx for construction works
Mitigating social risks How can the identified social risks be mitigated?	The consultant advised the participants to ensure due diligence during the ESIA process to ensure practical mitigation measures are put in place during and after the project. Such measures include • Sourcing labour to the extent possible from the community as a social risk mitigation measure and economic empowerment of the local community • Carrying out community education on the prevention and mitigation of the above social risks • Working with other structures and offices with capacity and mandate on some issues such as probation officers on child protection issues. • Proper monitoring of new workers to minimize social interaction with the local communities

Comment/Question/Clarifications Response Role of political leaders in environmental The participants were informed the importance of the and social risk mitigation local leaders in mitigating some of the negative impacts. What the role of political leaders in the mitigation of the potential risks? They were informed the risks cut across many sectors and require massive community mobilisation, which will require political will. This necessitates mobilisation and engagement of all technical and political leaders from the County Governments where each college is located to play their roles in risk mitigation in accordance with their mandate. It was proposed and agreed that a meeting would be held for each county government concerned to obtain the buy in of all technical and political leaders, including devising ways to ensure the environmental and social risks and mitigation measures are managed properly. **Role of NGOS** The participants were informed that the NGOs have a key role to play in environmental and social risk What is the role of NGOs in Social Risk mitigation. This role includes supplementing environmental and government efforts in delivering some services such mitigation? as those needed by survivors of GBV and sexual exploitation and abuse and HIV prevention, etc. NGOs also play a role in monitoring delivery of environmental and social risk mitigation services, capacity building, advocacy and being a voice for the voiceless. Stakeholders concerns and complaints Principles/pillars of a good GRM were presented How would project related issues and to the stakeholders. concerns of stakeholders be As required under all World Bank funded addressed?. projects, a grievances redress mechanism (GRM) would be put in place for the project. Stakeholders were requested to give ideas on how this GRM should be set up. They indicated the most important thing is to make the project transparent and ensure all complaints are handled well and promptly Sustainability of environmental and social The participants suggested that for Sustainability management after project completion to be achieved, the County technical and political Some participants wanted to know how leaders and structures, the colleges and NGOs sustainability of environmental and social risk have to work in partnership. Each partner is mitigation measures to be put in place would expected to execute environmental and social be achieved after projects are completed, e.g. risk mitigation tasks in accordance with their ensuring proper waste management continues mandate and capacity. after projects are completed Training all key actors including the students in the colleges on environmental and social risk mitigation will also be important to contribute to sustainability The participants raised some issues as It was agreed that only waste management follows: companies registered and regulated by NEMA There was concern that some should be engaged for waste management. organisations and individuals hired for Oil spills and oil waste issues and the mitigation waste management engage in un ethical measures will be included in the final ESMF and

SIPs of the colleges

conduct such depositing the waste in un

Comment/Question/Clarifications

- authorised places and transporting it not covered.
- There was also concern that oil spills and oil waste had not been identified as an issue and therefore no mitigation measures have been proposed
- E-waste management has not been included or discussed by the current proposals in the ESMF and the colleges as an environmental mitigation measure. This would include having a collection centre for recycling waste since waste management is expensive hence requiring a partnership.

Response

- The final ESMF and the final college SIPs will consider e-waste management including a collection centre for managing waste. This option will however be examined more closely at the time of preparing ESIAs.
- There are other arms of government that may be interested in management of for example, radioactive waste.
- Information was provided that NEMA at one time establish a collection centre for waste but did not go far with the idea. There is need to learn from their experience.
- There is however, an NGO that has established a collection centre for waste management that needs to be consulted.

Capacity building and training

The participants acknowledged that most of the participating institutions lacked trained environmental and social specialists who have the experience of managing safeguards, most of them not having undertaken World Bank financed projects The participants were informed that as part of the ESMF management and monitoring, capacity building and training will be carried out for the project implementation unit (PIU) and National project coordinating team (NPCU) staff on safeguards management. The project will also conduct training for contractors who will be undertaking the projects during construction.

It was also highlighted that the ESIA and ESMP implementation will be part of the contract within the main contract documents with the contractors.

Min 5/08/2018: Response from consultant

The consultant assured the participants that the issues discussed will be taken into consideration in the ESMF and in the overall project design to ensure proper environmental and social safeguard considerations are put in place especially during project construction period. He reminded them to ensure the ESMF is used as a tool during preparation of the ESIAs for each subproject.

Min 6/08/2018: Closing Remarks & Way Forward by Ministry of Education

The Project Coordinator thanked participants for turning up. He indicated the ministry will be working together throughout the project period to ensure the projects are implemented well, with no issues of safeguards. He asked all the TVET centres to ensure they incorporate all the safeguard issues in the SIPs and also during the project designs.

Min 7/08/2018: Adjournment There being no any other business, the meeting adjourned at 12.45pm.				
Prepared by: Julius Byenkya, Onsite Consultants Ltd	Date:			
Approved for Circulation by: Chairperson – National Project Coordinate				

ANNEX 5 – Consultations List of Attendants



REPUBLIC OF KENYA MINISTRY OF EDUCATION

State Department of Vocational & Technical Training

NATIONAL FORUM FOR ENVIRONMENTAL & SOCIAL SAFEGUARDS FOR EAST AFRICA SKILLS FOR TRANFORMATION AND REGIONAL INTEGRATION PROJECT (EASTRIP)

VENUE: JOGOO HSE, 10[™] FLOOR BOARDROOM

DATE: 17TH AUGUST 2018

S/N	Name	Position	Attendance List Department- Institution	Telephone	EMail Address	Signature
L.	EPHRAIM MULLENG	PTEO	KHRA	0771058129	munerer ogmail	- Alle
2.	SUSAN NIAMBERA	ENV OFFICER	ENT WATER, RNERGY &	0726005/142	svemenso@gment con	4
3.	PAUL N. MBUTHI	SHA ANT PIRECT		0722894155	pmbiethi@gmail.com	AR :
١.	RITA K. MURUNGI	ENV. OFFICER	ENV WILDLIFE & MAILED	0732556168	1.	
	JOSEPHINE ONDIEK	PLIGHT	NOE	0722683065	i exteriegralicon	C130.
	TERESTIAN OSLUTO	BI AGGICAR	S CGRC	0738556236	jeremiekokubacogm	100 m
7.	Nelly Okazo	LEADER LEP	KNUMU National	0733348584	oxogonely @ 9 mail.	nA.
3.	Anna Tohina	E. Shoan		0721703857	Kaburimunitus Ognic	· page
)	Dan Ongold	River Maria	& of Hilliam	0717106341	demongoroyatora	There
10.	WOHOO G. KEYAH	Exc. Director	Constitution Institution	n= 7223064	genter role coment	In Form
11	Francia Maluki	150	WASLES	072161081	0011	go Ke Se



REPUBLIC OF KENYA MINISTRY OF EDUCATION

State Department of Vocational & Technical Training

NATIONAL FORUM FOR ENVIRONMENTAL & SOCIAL SAFEGUARDS FOR EAST AFRICA SKILLS FOR TRANFORMATION AND REGIONAL INTEGRATION PROJECT (EASTRIP)

VENUE: JOGOO HSE, 10[™] FLOOR BOARDROOM

DATE: 17TH AUGUST 2018

S/N	Name	Position	Department- Institution	Telephone	EMail Address	Signature
1.	SIDI KADILTU	Seaenady	MSA COCOTY Dept - Etwant	0700967405	Visidi@mambese . so to	Didie
2.	RISPAH F M. MORURI	Director:	social protection	0721475306		7/
3.	PEKETSA MARGI	CENTRE 1 C	Training institute	0705116096	principality allenger will	Male
4.	Elving M. Maurqu	Wei other	MSG COUNTY	0726445899	elinaling loub gover 10	1-1
5.	Mark Angwenzi	County Director	NEMA - MERU	0722 580475	mangwenyi e nemo go Ke	
6.	Karani Mbogori.	DIRECTOR		0706365086	Milkingskilled exhibite	
7.	Lucy Kinany	NINP		Committee and the committee of the	- U	
8.	Peter Kavanu Mbaka	CENTR (ender	Building	0722977299		
9.	Byenkya Juliuca	En and Herk Course Hant	Co-Sulter		hyenryaja azmanla	a referen
10.	Gitau Nelson	ANTVET	ALCO V		gitaunc64 ogmeir.	600



REPUBLIC OF KENYA MINISTRY OF EDUCATION

State Department of Vocational & Technical Training

NATIONAL FORUM FOR ENVIRONMENTAL & SOCIAL SAFEGUARDS FOR EAST AFRICA SKILLS FOR TRANFORMATION AND REGIONAL INTEGRATION PROJECT (EASTRIP)

VENUE: JOGOO HSE, 10TH FLOOR BOARDROOM

DATE: 17TH AUGUST 2018

	Attendance List								
S/N	Name	Position	Department- Institution	Telephone	EMail Address	Signature			
1.	KEVIN OCHENGE	Centre Leader	Ronge coast National	0721814923	Kevin schring@Kenge werf	dem			
2.	PAUL OMOLO	ESMF	Keynya Cort Notice	0724706632	oching parts & grand.	A DE			
3.	Elvina M. M2 vigu	Will more	Mongray Acarban	C120 442 417	elundandonbugatil.	w. Alle			
4.	PEKETSA MANG	Centre UC	Ministry Gaptermal Training	0403116076	binean & Winda-10- Ke	Matile			
5.	RISPAH F-M-PRORUEI	L'ASTA DO		0721475306	rispinonii Byeaus con	Blasso			
6.	SIDI KABUTU	Policy & Resease	M. M. Courts	50146 asta	L. Sidi @momonso goca	Disiez.			
7.	Angelypo Kochacc	Accountant	SDUTT	072550/140	angelque kabasaogmete	who			
8.	PKID Emose	Winsment Co	Kentien-Gott	1294420061	Phonen akenpara K	The same of the sa			
9.	Kose K. Kubal	Olding Outin	G7C "	433511016	stupas @bengon. Oo. te	\$ 55E			
10.	RUPER KANDIE	Couty leader Hole	Gic Kencer Lite	0776804709	Mandie @ Rugen-1016	Pado"			