

Republic of Malawi Ministry of Finance and Economic Affairs

Regional Climate Resilience Program for Eastern and Southern Africa Series of Projects 2 (P181308) Malawi

<u>Draft</u>

Environmental and Social Management Framework (ESMF)

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Table of Contents

TABLE OF CONTENTS 2
LIST OF TABLES
LIST OF FIGURES
ABBREVIATIONS AND ACRONYMS7
EXECUTIVE SUMMARY
1. INTRODUCTION
1.1 Project Components
1.2. Project Beneficiaries and Geographical Locations15
1.3 Objective of the ESMF
1.4. Approach and Methodology16
2. POLICY AND LEGAL FRAMEWORK
2.1 National Regulatory and Policy Framework18
2.2 International Conventions Signed and Ratified28
2.3 World Bank Environmental and Social Management Framework and Relevant Standards (ESS)
2.4. WB Environmental, Health and Safety (EHS) Guidelines and Technical Notes
2.5. Gap Analysis between National Legislation and WB Standards35
3. ENVIRONMENTAL AND SOCIO-ECONOMIC BASELINE
3.1 Environmental Baseline
3.2 Socioeconomic Baseline
4. ENVIRONMENTAL AND SOCIAL RISK CLASSIFICATION
4.1 Risk and Impacts Assessment Methodology55
4.2 Identification and Assessment of Risks and Impacts55

4.3 lo	lentification of Risks and Impacts	57
5.	PROJECT MITIGATION MEASURES AND MANAGEMENT OF RISKS AND IMPACTS	52
5.1 E	nvironmental and Social Management Plan (ESMP)	53
6.	INSTITUTIONAL AND IMPLEMENTATION ARRANGEMENTS	36
7.	ENVIRONMENTAL AND SOCIAL MANAGEMENT PROCESS	39
7.1 S	creening Process	39
7.2 E	&S Documentation, Approval and Disclosure) 0
7.3 Li	st of Exclusions)1
8.	MONITORING PLAN AND REPORTING)3
8.1 R	egular Monitoring and Inspection for Compliance) 3
8.2.	Reporting) 3
8.3 Ir	ncident and Accident Reporting) 4
9.	STAKEHOLDER ENGAGEMENT	96
10.	GRIEVANCE REDRESS MECHANISMS	98
11.	CAPACITY DEVELOPMENT AND TRAINING SCHEDULE)2
12.	RESOURCES AND BUDGET)4
ANN	EX 1: ENVIRONMENTAL AND SOCIAL SCREENING REPORT 10)5
ANN	EX 2: CULTURAL AND CHANCE FIND PROCEDURES 11	1
ANN	IEX 3: PROCEDURES FOR MANAGING CONTRACTORS 11	2
ANN	EX 4: STAKEHOLDER CONSULTATIONS 11	16
ANN	EX 5: INCIDENT REPORT FORM 11	8
ANN	EX 6: INDICATIVE OUTLINES FOR ESIAS / ESMPS 12	23

ANNEX 7: QUARTERLY E&S REPORTING TEMPLATE 126	,
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List of Tables

Table 1 Indicative list of subprojects	14
Table 2 Gap Analysis WB ESS and national legal framework	35
Table 3 Malawi Soil Map	44
Table 4 Proportion of households obtaining income from the various sources, 2004, 20	010, and
2013 (%)	52
Table 5 Risk assessment methodology	55
Table 6 Potential E&S Risks and Impacts	57
Table 7 Project ESMP and Monitoring Table	63
Table 8 Risk Categories	89
Table 9 Capacity development and training plan	102
Table 10 Estimated Costs of ESMF implementation	104
Table 11 E&S Screening Table	106
Table 12 Incident report form	118
Table 13 Incident form to be completed after investigation	119
Table 14 Incident Report Form for SEA/SH cases	120
Table 15 SEA/SH incident report form after investigations	121
Table 16 Indicative Outline/Content for ESMP	
Table 17 Indicative table of contents for ESIA	124

List of Figures

Figure 1 Key Biodiversity Areas in the Central and Southern Region	47
Figure 2 Projected change in asset losses from inland flooding in different policy scenarios	49
Figure 3 Project Implementation Arrangements	87

Abbreviations and Acronyms

AIDS	Acquired Immune Deficiency Syndrome
AUC	African Union Commission
BoQ	Bill of Quantity
CAP	Corrective Action Plan
CCDR	Climate Change and Development Reports
CEDAW	Convention on the Elimination of all Forms of Discrimination Against
	Women
CERC	Contingency Emergency Response Component
C-ESMP	Contractor's Environmental and Social Management Plan
CLC	Customary Land Committee
CoC	Code of Conduct
CSO	Civil Society Organization
CRW	Crisis Response Window
DDF	District Development Fund
DoCCMS	Department of Climate Change and Meteorological Services
DoDMA	Department of Disaster Management Affairs
E&S	Environmental & Social
EHS	Environment, Health and Safety
EHSG	Environmental Health and Safety Guidelines
EIA	Environmental Impact Assessment
ENTRO	Eastern Nile Technical Regional Office
ESCOM	Electricity Supply Corporation of Malawi
ESCP	Environmental and Social Commitment Plan
ESF	Environmental and Social Framework
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESIA	Environment and Social Impact Assessment
ESS	Environmental and Social Standards
FM	Financial Management
GDP	Gross Domestic Product
GBV	Gender-Based Violence
GESD	Governance to Enable Service Delivery
GHG	Greenhouse Gas
GIIP	General International Industrial Practice
GRC	Grievance Redress Committee
GRM	Grievance Redress Mechanism
GRS	Grievance Redress Service
HIV/AIDS	Human Immunodeficiency Virus / Acquired Immune Deficiency Syndrome
HSSE	Health, Safety, Social & Environmental
IASC	Inter-Agency Standing Committee
ICR	Implementation Completion Report
IDP	Internally Displaced Person
IFC	International Financial Cooperation
ILO	International Labor Organization

IPV	Intimate Partner Violence
IUCN	International Union for Conservation of Nature
LAPA	Local Authority Performance Assessment
LMP	Labor Management Plan
M&E	Monitoring and Evaluation
masl	Elevation above sea-level
MDoA	Malawi Department of Antiquities
MEPA	Malawi Environment Protection Authority
MIS	Management Information System
MoA	Ministry of Agriculture
Mofea	Ministry of Finance and Economic Affairs
MoNRCC	Ministry of Natural Resources and Climate Change
MoWS	Ministry of Water and Sanitation
MRV	Monitoring, Reporting, and Verification
NEP	National Environmental Policy
NGO	Non-Governmental Organization
NLGFC	National Local Government Finance Committee
OHS	Occupational Health and Safety
0&M	Operations & Maintenance
PAD	Project Appraisal Document
PDO	Project Development Objective
POM	Project Operations Manual
PPE	Personal Protective Equipment
PSEA	Prevention of Sexual Exploitation and Abuse
PCN	Project Concept Note
RAP	Resettlement Action Plan
RCA	Root Cause Analysis
RCRP	Regional Climate Resilience Program
RPF	Resettlement Policy Framework
RSC	Regional Steering Committee
SADC	Southern African Development Community
SEA	Sexual Exploitation and Abuse
SEP	Stakeholder Engagement Plan
SH	Sexual Harassment
SOP	Series of Projects
STI	Sexually Transmitted Infection
TA	Technical Assistance
TLMA	Traditional Land Management Areas
TOR	Terms of Reference
TP	Third Party
TSMP	Traffic Safety Management Plan
UNDP	United Nations Development Programme
USD	United States Dollar
WB	World Bank
ZAMCOM	Zambezi River Basin Commission

Executive Summary

Within the Southern Africa region, Malawi is highly vulnerable to climate change and variability – affecting the poorest groups in particular. Malawi experienced more than 19 major flooding events in the last five decades, and eight catastrophic droughts, which hampered development efforts. In the last few years, the impact of these water-related climate shocks in Malawi has intensified costing an estimated 1.7 percent of the GDP annually. Weather shocks have caused four Malawians to fall back into poverty for every three who moved out of it between 2010 and 2019.¹

Proposed is a second operation of the Regional Climate Resilience Program for Eastern and Southern Africa (RCRP) Series of Projects (SOP) to help countries better prepare for and manage the increasing frequency, intensity, and impact of climate shocks on people, livelihoods, infrastructure, and ecosystems. The second operation under the SOP (SOP-2, or RCRP-2, or the 'Project') includes Malawi and scales up RCRP-1 with complementary investments. In Malawi, the Project will both rehabilitate critical infrastructure impacted by Tropical Cyclone Freddy using Crisis Response Window (CRW) resources and address the more chronic vulnerabilities in the Shire River Basin by investing in critical infrastructure at national and district level; strengthening institutional frameworks and accountability; incorporating climate considerations into the planning, implementation, and operation and maintenance of new infrastructure; and strengthening community resilience and social protection system consistent with SOP 1. The Project will be implemented by the Ministry of Finance.

The Project Development Objective (PDO) is to improve the resilience to water-related climate shocks in Malawi and in the Eastern and Southern Africa region. Project Components include: Component 1: Risk Management and Climate Financing; Component 2. Infrastructure Investments and Sustainable Asset Management for Climate Resilience; Component 3. Adaptive Climate Services for Resilient Communities; Component 4. Project Management; and Component 5. Contingent Emergency Response Component.

The environmental and social risk classification for the project is *High*. The environmental risk is *High* due to the cumulative context of low borrower capacity to adequately assess risks and impacts and commitment to implement appropriate management measures, and the site, system, and cumulative impact of the multiple civil works at various locations and on already degraded and sensitive ecosystems. The proposed hydraulic infrastructure includes potential impacts from civil works: loss of riverine, woodland and remnant rainforest resulting in more loss of dwindling habitat for endemic and migratory species and contribution to climate change; spillage and increased sediment load into water courses during construction activities and loss of riparian buffers; wash bays for cleaning construction equipment discharging into watercourses; inadvertently promoting illegal river sand mining which further undermines existing and new structures; creation of borrow pits as a result of excavation construction materials such as gravel; occupational and community health and safety risks working next to water especially in the wet season, and traffic safety for pedestrians and other road users during construction; impacts associated with informal vending around construction sites such as poor sanitation, poor waste management, and Sexually-transmitted diseases (STIs); poor waste management and illegal disposal; increased deforestation for fuelwood/charcoal for cooking for laborers and informal vendors; and others. The social risk is *High* due to the scope of the proposed activities, including Technical Assistance (TA)

¹ World Bank. 2022. "Malawi Poverty Assessment: Poverty Persistence in Malawi - Climate Shocks, Low Agricultural Productivity, and Slow Structural Transformation"

activities and proposed civil works across multiple sites and due to the limited capacity to manage social risks in Malawi. Social risks related to land acquisition include loss of land or other assets, social and gender exclusion, inadequate consultations and engagement, lack of compensation at replacement cost, lack of access to grievance mechanisms, and failure to restore livelihoods. The activities may also create or exacerbate the existing tension and conflicts, between communities and households over access to resources and project benefits.

To assist in the mitigation of key risks and impacts and to comply with the World Bank's Environmental and Social Framework (ESF) and Malawi legislation, the recipient has prepared an Environmental and Social Commitment Plan (ESCP); and this Draft Environmental and Social Management Framework (ESMF), and will prepare a Stakeholder Engagement Plan (SEP), Labor Management Procedures (LMP), a Resettlement Policy Framework (RPF), and a Sexual Exploitation and Abuse / Sexual Harassment Action Plan. An Environmental and Social Management Framework (ESMF) is used when concrete subprojects and sites are not known yet.

The risks and impacts will be managed through the mitigation hierarchy approaches (avoid, minimize, mitigate and compensate) included in this ESMF and subsequently in all site-specific Environmental and Social Management Plans (ESMPs), during the implementation stage once the detailed characteristics of sub-project sites are confirmed.

This ESMF sets forth the basic principles and prerogatives that the Project will comply with during implementation once the physical footprints are known, including site-specific environmental and social (E&S) screening, the preparation of site-specific instruments. All E&S instruments will be the subject of consultation with the beneficiaries and institutional stakeholders, to the satisfaction of the World Bank. All E&S instruments will be publicly disclosed both in-country and on the project and World Bank website prior to the physical start of project or activity implementation.

The Ministry of Finance and Economic Affairs will take on the overall lead and coordination role of the Project. It will set up a Project Implementation Unit (PIU) that will be responsible for coordination, monitoring and reporting for the project. The PIU will work closely with other Ministerial teams to coordinate implementation, build capacity of Ministry teams and District teams for implementation, facilitate support for compliance with environment and social requirements for the project, collect and compile data from the project results framework and manage communications for the Project.

The Project will provide a Grievance Redress Mechanism (GRM) to all stakeholders. The GRM will be a distinct mechanism that will allow stakeholders at the community level to provide feedback on project activities, its impacts and social and environmental mitigation measures. The GRM will be operated for affected individuals and parties, while a separate workers' grievance mechanism will be set up to allow all Project workers to raise workplace concerns, as provided under ESS2. The project GRM will provide for multiple channels through which complaints can be registered in a safe and confidential manner. A complaint should be related to the project components and/or to its implementation and management. Any complaint not directly related to the project will be referred by the mechanism to the appropriate responsible government body.

The estimated costs for the implementation of the ESMF will be USD 2,650,000.

1. Introduction

Climate change threatens the Eastern and Southern Africa region's long-term development objectives, particularly poverty reduction, and it is thus urgent to boost climate resilience and adaptation. As the recent Climate Change and Development Reports (CCDRs) show, boosting climate resilience and adaptation is an urgent and integral part of development and poverty reduction, especially in low-income countries. More resilience can be achieved through a three-pronged approach, involving rapid and inclusive development, especially poverty reduction and universal access to infrastructure and social services; a whole-of-society approach to resilience and adaptation, to ensure climate risks are considered in all decisions and investments; and a set of targeted sectoral interventions covering human capital, infrastructure, and various economic sectors.

Within the region, Malawi is highly vulnerable to climate change and variability – affecting the poorest groups in particular. Malawi experienced a series of major flooding events in the last five decades, and eight catastrophic droughts, which hampered development efforts. In the last few years, the impact of these water-related climate shocks in Malawi has intensified costing an estimated 1.7 percent of its GDP annually. Weather shocks have caused four Malawians to fall back into poverty for every three who moved out of it between 2010 and 2019.² Malawi is ranked 5th out of 189 nations for the proportion of poor people exposed to floods, with 12 percent of those living on less than US\$ 1.90 per day.³

Uncontrolled development, excessive deforestation, and weak institutions have led to a reduction of the natural buffers that used to limit the impact of these water-related shocks. Overreliance on natural resources has led to severe catchment degradation. Without action, climate modeling shows that damage from inland flooding could increase by up to 25 percent by 2050 due to increased land degradation (under a Business-as-Usual scenario)⁴. Moreover, weak institutions with lack of accountability and unclear responsibilities often struggle to allocate operation and maintenance (O&M) funds to manage already depleted protective and water storage infrastructure, and inadequate quality control in construction activities results in sub-standard buildings prone to damage and collapse. The integration of resilience considerations into the planning, design, and operation of critical infrastructure is limited. This leads to structures that are vulnerable to damage by climate shocks, as the devastating impacts of the recent Tropical Cyclone Freddy shows. Urgently needed is the restoration of degraded landscapes through improved planning and strengthening institutions responsible for managing water and land resources and related infrastructure.

Climate models suggest that Malawi will see increasing climatic variability, higher temperatures, longer dry periods, and more erratic and intense rainfall events – all this risks further multiplying these already significant losses unless remedial action is taken.⁵ The recent CCDR for Malawi showed that without strategic investments in development and resilience, climate change could reduce GDP by 3 to 9 percent by 2030, 6 to 20 percent by 2040, and 8 to 16 percent by 2050.⁶ The impacts of extreme climate-related events – more frequent and intense floods and droughts - may cause 23 million additional people to be

² World Bank. 2022. "Malawi Poverty Assessment: Poverty Persistence in Malawi - Climate Shocks, Low Agricultural Productivity, and Slow Structural Transformation"

³ Rentschler, J. and M. Salhab. 2020. "People in Harm's Way: Flood Exposure and Poverty in 189 Countries." Policy Research Working Paper No. 9447. Washington, DC: World Bank. doi:10.1596/1813-9450-9447.

⁴ World Bank Group, 2022, Malawi Country Climate and Development Report (CCDR).

⁵ Government of Malawi (2017). Strategic Program for Climate Resilience: Pilot Program on Climate Resilience (PPCR).

⁶ World Bank Group. 2022. "Malawi Country Climate and Development Report (CCDR)",

https://openknowledge.worldbank.org/handle/10986/38217

pushed below the poverty line by 2030 and approximately 90 million people regionally may be forced to migrate by 2050, potentially intensifying regional fragility, conflict, and violence.

Proposed is a second operation of the Regional Climate Resilience Program for Eastern and Southern Africa (RCRP) Series of Projects (SOP) to help countries better prepare for and manage the increasing frequency, intensity, and impact of climate shocks on people, livelihoods, infrastructure, and ecosystems. The RCRP SOP is structured as a 10-year Series of Projects (SOP) that tackles common challenges amongst countries in the region while benefiting from a programmatic framework that will allow scalability and economies of scale. The first operation under the series was approved in May 2023 (P180171) and details the overall approach (referred to as the 'Program'). RCRP-1 includes four countries (Mozambique, South Sudan, Madagascar, and Comoros), two regional organisations (the Eastern Nile Technical Regional Committee (ENTRO), and the Southern Africa Development Community (SADC). The proposed second operation under the SOP (SOP-2, or RCRP-2, or the 'Project') includes Malawi and the Africa Union Commission (AUC) and scales up RCRP-1 with complementary investments.

The overarching Development Objective of the Series of Projects (SOP) is to strengthen the resilience to water-related climate shocks in Eastern and Southern African countries. The overarching Development Objective of the SOP will be achieved by: (i) strengthening participating countries and regional organizations' capacity to manage disasters risk, including via improved national and regional early warning systems (EWS); (ii) improving access to climate financing to finance climate adaptation investment; (iii) mainstream climate resilience in water infrastructure planning, and generally in water institutions; (iv) increase infrastructure resilience, including by improving O&M systems, with focus on large storage and flood risk management infrastructure; and (v) improve community-level awareness and response capacity, including by establishing/strengthening adaptive social protection systems.

In Malawi, the proposed project will both rehabilitate critical infrastructure impacted by Tropical Cyclone Freddy using Crisis Response Window (CRW) resources and address the more chronic vulnerabilities in the Shire River Basin by investing in critical infrastructure at national and district level; strengthening institutional frameworks and accountability; incorporating climate considerations into the planning, implementation, and operation and maintenance of new infrastructure; and strengthening community resilience and social protection system consistent with SOP 1. This will build a situation whereby people can live sustainably with the flood/drought risk, through a properly overseen and managed basin in terms of its competing uses. The emergency works will include the reconstruction of needed connectivity (roads, bridges, culverts), hydraulic and other critical infrastructure.

1.1 Project Components

The Project Development Objective (PDO) is to improve the resilience to water-related climate shocks in Malawi and in the Eastern and Southern Africa region. Resilience is defined as the capacity of vulnerable households, communities, and systems to withstand shocks effectively, and to recover and adapt sustainably. The RCRP-2 focuses on building resilience by going beyond emergency response, via reducing risk. Water-related climate-related shocks and associated impacts include tropical cyclones, floods, droughts, rainfall variability, and other climate events exacerbated by climate change.

Component 1. Risk Management and Climate Financing. The objective of this component is to build national institutional capacity and to strengthen cooperation on climate and disasters risk management and climate financing. This component will (i) promote a reorientation of development in the Shire River Basin under an integrated management strategy, including a vision on how to live sustainably with floods; (ii) Improve national early warning systems and their connection with regional ones, and hydromet data sharing with neighboring countries and regional counterparts on hydromet; (iii) support the development of a national drought policy and drought monitor (iv) support the foundations for the establishment of a Monitoring, Reporting, and Verification (MRV) system for tracking land-use change, forest degradation, and carbon emissions, and strengthening national institutional environmental and social risk management capacity.

Component 2. Infrastructure Investments and Sustainable Asset Management for Climate Resilience. This Component aims to address the regional gap in critical water infrastructure for climate resilience, and to establish a strong institutional framework that incorporates climate considerations into the planning, implementation, and operation and maintenance of new infrastructure including landscape restoration. This component will concentrate on the transboundary Shire River Basin by adopting a 'two-speed' approach and implementing the design and construction of climate-resilient infrastructure through both the basin and district levels. At both scales, this component will finance additional activities to strengthen the construction of regulatory systems to ensure construction works are of better quality and standards to withstand recurring weather events:

Sub-component 2.1. Basin-Level Infrastructure Development: This sub-component focuses on both the (i) rapid reconstruction and rehabilitation of critical connectivity (roads/bridges) and critical hydraulic infrastructure in affected regions, including Blantyre City as well as (ii) construction of longer-term flood resilient hydraulic infrastructure (i.e., river training, riverbank protection, drainage, dykes etc.) that will be informed by the integrated flood risk management plan for the Shire River Basin and Blantyre City, that are currently underway. Within this component, design services will also include activities beyond the RCRP-2 project financing, to build an investment pipeline for future programs in climate resilience. The rapid reconstruction will be financed with CRW resources.

Sub-component 2.2. District-Led Infrastructure Development: This sub-component aims to build off the Governance to Enable Service Delivery (GESD)⁷ architecture at the district-level, to funnel further performance-based funds in addition to the District Development Fund (DDF) to enhance capacity in the design, implementation and management of resilient infrastructure. The sub-component and performance-based elements will focus on establishing minimum eligibility criteria for inclusion and will be complemented by a robust Technical Assistance (TA) engagement during the period of implementation. Infrastructure implemented will be guided by district territorial planning, robust works standards and designs, improved quality of construction methods and engineering oversight, and O&M plans and principles for sustainable asset management to embed climate resilient considerations towards cyclones, droughts and floods into the siting, design, construction and supervision of planned activities. Other activities will include removing infrastructure flood debris from catchments at relevant locations, as these continue to cause impacts within the watercourses in future events.

⁷ The objective of the US\$100 million Governance to Enable Service Delivery Project (GESD – P164961) is to strengthen Local Authorities' (ie. District councils) institutional performance, responsiveness to citizens and management of resources for service delivery. 70% of funds are dedicated to the introduction of a Performance Based Grant (PBG) for the 28 rural District Councils, to increase funding for development projects identified in the District Development Plans. The access to and the size of the PBG is determined by the score on the Local Authority Performance Assessment (LAPA).

Component 3. Adaptive Climate Services for Resilient Communities. This Component aims to enhance "last mile" community preparedness, engagement and mainstreaming the climate dimension in social protection policy design, operational and budgetary planning. The activities will focus on expanding the social protection registry in the Central and Southern Regions (including in the transboundary Shire River Basin), to include in social protection programs also people vulnerable to floods and droughts. This component will also finance community awareness on climate resilience risks, so they can more effectively contribute to community climate risk management plans. Moreover, it may finance Tropical Cyclone Freddy's social recovery packages, including providing basic health services, psychological support, basic package of clothing and household requirements.

Component 4. Project Management. This component will finance all project management activities, including equipment and materials, TA and compliance with fiduciary, procurement, and environmental and social (E&S) risk management requirements, security planning and management, remote supervision, monitoring and evaluation (M&E), impact assessment, and knowledge management and communication, and support to technical activities and supervision through a Third Party firm(s) (TP). Finally, this component will also finance the participation of Malawi in the RCRP Regional Steering Committee (RSC) that has been established under RCRP-1 to increase coordination across the region, primarily on the learning and knowledge program; and in other learning events.

Component 5. Contingent Emergency Response Component. This component will be included in the financing agreement. It will allow for rapid reallocation of uncommitted funds under corresponding credits and grants in the event of an eligible crisis or emergency. For the Contingent Emergency Response Component (CERC) to be activated and financing to be provided the Recipient will need to: (a) submit a request letter for CERC activation and the evidence required to determine eligibility of the emergency, as defined in the CERC annex; (b) submit an Emergency Action Plan, including the emergency expenditures to be financed; (c) meet the environmental and social (E&S) requirements as agreed in the Emergency Action Plan and Environmental and Social Commitment Plan (ESCP); and (d) adopt a CERC Manual.

The table below presents an indicative list of the types of Project activities and their technical complexity.

Component / Subcomponent	Type of Activity	Technical Complexity		
Component 1. Risk Management and Climate Financing				
	TA to support integrated management strategy	Low		
	TA to improve early warning system and collection of hydromet data	Low		
	TA to support development of national drought policy	Low		
	TA to support foundations for MRV system	Low		
	TA to support strengthening national institutional environmental and social safeguards capacity	Low		

Table 1 Indicative list of subprojects

Component 2. Infrastructure Investments and Sustainable Asset Management for Climate Resilience

Basin-Level	Reconstruction and rehabilitation of critical connectivity (roads/bridges, culverts) and critical hydraulic infrastructure	High		
Infrastructure Development:	Construction of longer-term flood resilient hydraulic infrastructure (river training, riverbank protection, drainage, dykes etc.)	High		
	TA to enhance capacity in the design, implementation and management of resilient infrastructure	Low		
District-Led Infrastructure	Small-scale investments, removal of infrastructure flood debris from catchments at relevant locations	High		
Development	Landscape Restoration activities in priority catchments	Medium		
	Activities implemented through public works/ community works	Medium		
Component 3. Adaptive Climate Services for Resilient Communities				
	Expanding the social protection registry in the Central and Southern Regions	Low		
	Community awareness on climate resilience risks	Low		
	Social recovery packages (basic health services, psychological support, basic package of clothing and household requirements).	Medium		
Component 4. Project Management				
	Equipment and materials, TA, financial management, E&S risk management, security planning and management, M&E, etc	Low		

1.2. Project Beneficiaries and Geographical Locations

The Project is expected to generate an important set of quantifiable and non-quantifiable benefits through its interventions. In particular, the project's investments are expected to generate several benefit streams for the targeted beneficiaries, including socio-economic benefits from improved adaptative social services, stronger transboundary cooperation and coordination, and overall prosperity and economic growth for all participating countries. At present no selection of particular locations has been undertaken. Component 1 and 5 will be covering the national level; Component 2 will focus on the transboundary Shire River Basin; and Component 3 will focus on the central and southern regions of the country, including the transboundary Shire River Basin.

1.3 Objective of the ESMF

This Draft ESMF has been developed as the E&S instrument for assessing, managing and monitoring E&S risks and impacts of the project. An ESMF has been selected given that the full nature, scope and geographical locations were not exactly known at the time of preparing the ESMF. The ESMF establishes the screening processes and tools as well as exclusion criteria for specific sub-projects - to be directly implemented by the Project Implementation Unit (PIU) and relevant ministry project technical teams in assessing the risks and impacts of the sub-projects or activity. This will facilitate the recommendation of appropriate mitigation and monitoring measures for each sub-project.

The ESMF describes the policy and legal framework in which the E&S Standards are embedded, including national legislation and policies, international commitments of Malawi, the World Bank Environmental and Social Framework (ESF) and supporting instruments. It further lays out an environmental and socioeconomic baseline; classifies the E&S risks and tables E&S risks and mitigation measures in the format of a generic Environmental and Social Management Plan (ESMP). The document then explains the institutional and implementation arrangements for the project and for the ESMF and lays out the Monitoring Plan for the ESMF. It also lists the Project Grievance Redress Mechanisms (GRM) and explains anticipated trainings and capacity development initiatives for E&S compliance. The ESMF further lays out how Environment, Social, Health, and Safety clauses and requirements will be incorporated in the contract bidding documents. Specific E&S instruments, designed for the risk mitigation of the Project will be annexed to this ESMF. These include a Sexual Exploitation and Abuse (SEA) and Sexual Harassment (SH) risk assessment and Action Plan, and Labor Management Procedures (LMP). A Stakeholder Engagement Plan (SEP) and a Resettlement Policy Framework (RPF) have been prepared as a separate document.

1.4. Approach and Methodology

The methodology applied to develop this ESMF was based on a literature review and stakeholder consultations.

The literature review aimed to review relevant documentation and understand the context in which the ESMF is applied. The literature review included the review and consultation of the following:

- ESMF of similar projects in the region financed by the WB, in particular under the RCRP I, and previous projects within Malawi;
- Malawi's policies, laws, procedures, regulatory and administrative frameworks to determine the relevant legal requirements for the project;
- ESS of the WB in order to determine their applicability to the Project;
- Existing documents related to the Project, such as the RCRP Project Appraisal Document (PAD) and the Project Concept Note (PCN) for the RCRP II
- Draft Environmental and Social Commitment Plan ESCP, Stakeholder Engagement Plan SEP, and the C-ESRS
- Documents and literature on environmental and social aspects of the Project areas;
- Information on sensitive habitats and species.
- The following Good Practice Notes: Addressing sexual exploitation and abuse and sexual harassment (SEA/SH) in investment projects financing involving in major civil works, 2020; Addressing Gender based violence in Investment Project Financing involving major civil works, 2018; Gender, 2019; Road

safety, 2019; Assessing and managing the risks and impacts of the use of security personnel, 2018; Managing the risks of adverse impacts on communities from temporary project induced labor influx, 2016.

2. Policy and Legal Framework

This section provides a discussion of the policy and legal framework for environmental and social management and conservation in Malawi under the Project.

2.1 National Regulatory and Policy Framework

The Constitution of the Republic of Malawi (1995): The Constitution is the supreme law of the land. All other pieces of legislation or Acts of government are valid to the extent of their consistency with the Constitution. Several judgments of the High Court and even the Supreme Court confirm this position. Under Section 13 of the Constitution as part of the state responsibility of promoting welfare and development of the people of Malawi, the State has the responsibility to ensure gender equality, responsible environmental management, enhance the quality of life in rural communities, among others. The Constitution uniquely provides for the right to development in Section 30, which not only confers the right but also places responsibility on the State to take all necessary measures for the realization of the right to development.

The Constitution further provides for the principle on which land acquisition can occur in Malawi. Section 28 (2) states that "No person shall be arbitrarily deprived of property" and section 44 (4) states that "Expropriation of property shall be permissible only when done for public utility and only when there has been adequate notification and appropriate compensation, provided that there shall always be a right to appeal to a court of law for redress.

Environment Management Act (2017): the Act is the overarching legal framework on environmental management in Malawi and emanated from the Malawi National Environmental Policy (NEP, 2005). Both the EMA and the NEP provide for the protection and sound management of the environment, and conservation and sustainable utilization of natural resources. Chapter 27 of EMA provides the legal mandate to the Director-General of the Malawi Environment Protection Authority (MEPA) to carry periodic monitoring of the environmental management systems of any project to enforce Environmental Management Act. The Act further requires that project proponents must take all reasonable measures to mitigate undesirable effects arising from implementation of a project which could not reasonably be foreseen at the construction phase. The Act also makes provisions for use of the Guidelines for Environmental and Social Impact Assessment (ESIA), which outline the process for conducting ESIAs and facilitating compliance with the ESIA process as provided for in the Environment Management Act, 2017. The guidelines provide a list of prescribed projects for which ESIA is mandatory. They act as a tool for integrating environmental concerns into development plans at all levels. It is a requirement under the EMA that project proponents submit ESIA/ESMPs Reports to MEPA for review and approval. The documents to be submitted to MEPA for review and approval are as follows: Project components screening forms and briefs and the ESMPs for the project sub-components including the project screening forms for each component will be submitted to MEPA for review and approval. Several regulations have been gazetted in support of the EMA that are relevant to the Project.

<u>The Land Act (2016 and Amendment Act 2022): The Act</u> makes provision for land in Malawi and for all matters incidental or connected thereto. The Act deals with land access, rules for good land husbandry, use and disposal issues. The law categorizes land into public, private and customary land with public land including government and unallocated customary land used for benefits of a whole community. Private

land is composed of freehold land, leasehold and customary estates. Customary land is used, occupied and held by chiefs. The Act also outlines the procedures for acquisition of customary land for public utilities and the conversion of customary land to registered land. It recognizes that every person has a natural dependence on land and that it is therefore important. The Act also sets out rules for good land husbandry providing due regard for the character and situation of the land in question.

Section 41(2) Without derogation from the generality of subsection (1), any such Order, regulation, direction or instruction, may make provision regulating and controlling the use to which land may be put, the method of cultivation and growing of crops and keeping livestock, the maintenance of proper drainage of such land and the fencing, hedging and modes of access to such land, the preservation and protection of the source, course and banks of streams and generally for the good management and conservation of the soil, water, woodland, pasture and other natural resources thereof. Different Orders, regulations, directions or instructions may be made or given by the Minister in respect of different areas of land.

<u>The Lands Acquisition (Amendment) and Compensation Act (2017): The Act</u> provides powers to the Minister or local government authority to acquire land for public utility either compulsorily or by agreement and pay appropriate compensation thereof. This is the main Act that provides for land acquisition and compensation, to be administered by the Commissioner for Lands. Per Section 3 of this Act, the Minister responsible for land matters is given powers to acquire land either compulsorily or by agreement, where he is of the opinion that the land is required for public interest. Fair compensation is assured under Section 9, where the Act provides for payment of fair compensation for any land acquired by the minister with the provision for payment of compensation either as a lump sum or in instalments. Section 10 says that assessment for fair compensation would take into account the following:

- a) Amount of money the person paid when acquiring the land;
- b) The value of improvements to the land; and
- c) Appreciation in the value of the land since the date of acquisition.

The Act says the assessment of compensation made by the Minister shall be final and not be subject to any appeal to, or to any review by any court.

Customary Land Act (2016): The new Customary Land Act (CLA) proposes the creation and registration of customary estates based on current, legitimate, customary land occupation within Traditional Land Management Areas (TLMAs) and transforms these holdings into private land, capable of being transacted (with certain limitations) and encumbered. It envisages identification and formalization processes that incorporate international best practice principles and lays the legal foundation for transparent and decentralized administration of these estates. Arrangements for local governance of land rights envisage formal approval and dispute resolution roles for the Traditional Authorities, and for new institutions to be established at Group Village Level. These comprise of Customary Land Committees (CLCs), established in terms of section 5 of the CLA, which will have powers to make grants of customary estates. In addition, the current regional land registry will be decentralized to district level. Each TLMA will also have a Customary Land Tribunal (CLT) with responsibilities for hearing appeals and resolving disputes as a forum of first instance, and to be chaired by the Traditional Authority. The establishment of these Group Village CLCs and TLMA CLTs is a conscious attempt to institute greater legitimacy in decisions regarding the application of customary norms to land management. Whilst formalizing the roles of the Traditional Authorities in this regard, the CLA introduces a level of democratization; the CLCs will be chaired by the Group Village Headperson, ex oficio, but an additional six members shall be elected by people in the TLMA, three of whom must be women.

<u>Water Resources Act (2013</u>): The Act governs water rights, water abstraction, pollution control, building of dams and water resource planning and development. The Act further prohibits any person to divert, dam, store, abstract or use public water for any other purpose except in accordance with the provisions of this Act. Part VIII, Section 89 (1) of the Act makes it an offence for any person to interfere with, alter the flow of, or pollute or foul, any public water. The Act defines pollution or fouling of public water to mean the discharge into or near public water or in a place where public water is likely to flow, of any matter or substance likely to cause injury whether directly to public health, livestock, animal life, fish, crops orchards or gardens which such water is used or which occasions, or which is likely to occasion, a nuisance.

Section 10. Powers and functions of the Authority

- (1) The Authority shall have the following powers and functions—
- (a) to develop principles, guidelines and procedures for the allocation of water resources;
- (e) to regulate and protect water resources quality from adverse impacts;
- (f) to manage and protect water catchments;
- (i) to liaise with the relevant stakeholders for the better regulation and management of water resources;
- (j) to advise the Minister concerning any matter in connexion (*sp*) with water resources;

Section 25. Catchment areas

- (1) In accordance with the National Water Policy, the Authority may, by notice published in the *Gazette*, designate a defined area from which rainwater flows or drains into a watercourse, to be a catchment area for the purposes of this Act.
- (2) A catchment area designated under this section may include two or more sub-catchment areas.

Section 26. Establishment of catchment management committees

• (1) A catchment management committee may be established for a specific catchment area, after public consultation, on the proposal of the community and stakeholders concerned, or the Authority may establish a catchment management committee on its own initiative.

Section 28. Composition of a catchment management committee

- (1) The members of a catchment management committee shall be chosen from among—
 - (a) representatives of ministries, departments or other public bodies responsible for matters relating to water resources in the catchment area;
 - (b) representatives of any regional development authorities and local authorities whose areas of jurisdiction or any part thereof fall within the catchment area concerned;
 - (c) representatives of farmers within the catchment area concerned;
 - (d) representatives of the business community operating within the catchment area concerned;
 - (e) representatives of the non-governmental organizations engaged in water resources management programmes within the catchment area concerned; and
 - (f) other persons who have demonstrated competence in matters relating to the management of water resources.

Section 29. Functions of catchment management committees

- (1) Without prejudice to the provisions of section 25, a catchment management committee shall, in relation to the catchment area for which it is appointed, advise officers of the Authority at the appropriate regional office concerning—
 - (a) water resources conservation, use and allocation;

- (b) the grant, adjustment, cancellation or variation of any licence and permit under this Act; and
- (c) any other matters pertinent to the proper management of water resources.
- (2) Subject to the relevant Catchment Management Strategy, a catchment management committee may also undertake, on its own initiative and with funding received pursuant to section 31, water resources conservation activities and works..

"catchment", in relation to a watercourse or any part thereof, means the area from which any rainfall will drain into, the watercourse or part of the watercourse through surface flow to a common point;

"water resource" means any lake, pond, swamp, marsh, stream, watercourse, estuary, aquifer, artesian basin or other body of flowing or standing water, whether above or below ground;

<u>Forestry Act (2016)</u>: The Forestry Act provides for participatory forestry, forest management, forestry research, forestry education, forest industries, protection and rehabilitation of environmentally fragile areas. The act among other things seeks to: augment, protect and manage trees and forests on customary land in order to meet basic fuelwood and forest produce needs of local communities and for the conservation of soil and water; promote community involvement in the conservation of trees and forests in forest reserves and protected forest areas; prevent resources degradation and to increase socio-economic benefits; promote community involvement in conservation of trees and forests; promote optimal land use practices through agroforestry in small holders farming systems; protect fragile areas such as steep slopes, river banks, water catchment and to conserve and enhance biodiversity.

Section 26. Declaration of protected forest areas

- (1)Where the Minister finds that the protection of soil and water resources, outstanding flora and fauna requires that any area of land be maintained or established as a forest, the Minister may, by order published in the *Gazette*, after consultations with the Minister responsible for land matters, the Minister responsible for physical planning, the Minister responsible for agriculture, the Minister responsible for Irrigation and Water Development, the owner or occupier and, in case of customary land, the traditional authority, declare such land to be a protected forest area.
- (2)Where the Minister considers that land which requires protection as a forest reserve or protected forest area, is liable to serious degradation if not immediately protected, the Minister may declare such land to be a protected forest area for such period not exceeding one year as may be necessary to complete the consultations required by section 22 or subsection (1).

Section 31. Forest management agreement

- (1)For the proper management of village forest areas, the Director of Forestry may enter into a forest management agreement with a management authority providing for— (a)the specifications of the nature of the forestry and other practices to be followed;
- (b)the assistance to be provided by the Department of Forestry and provision for use and disposition of the produce and revenue therefrom.
- (c)allocation of land to individuals or families for afforestation and revocation of such allocation if applicable provisions of the agreement are not adhered to by the occupier of the land so allocated;
- (d)formation of village natural resources management committees for the purposes of managing and utilizing village forest areas.

Section 32. Minister may make rules

 (1)The Minister may make rules which shall apply to all customary land outside forest reserves and protected forest areas.(2)In particular and without prejudice to the generality of the foregoing power, such rules may(a)provide for the protection of <u>water catchment</u> and fragile areas, rehabilitation of degraded areas and any other activity which would be conducive to good land husbandry;

- (b)facilitate the establishment and management of forest by village natural resources management committees for the benefit of local communities;
- (c)encourage local government authorities, non-governmental organizations and the private sector to contribute towards the provision of forestry extension services, as well as the establishment and management of plantations in accordance with guidelines provided by the Department of Forestry;
- (d)provide for the establishment and maintenance of nurseries to provide seedlings for tree planting programmes;
- (e)authorize the payment, of grants or bonuses out of public funds for the encouragement of forestry;
- (f)provide for the declaration of endangered or essential tree species and their management;
- (g)prescribe a mechanism for sharing costs and benefits between the Department of Forestry and village natural resources management committees in regard to forest produce confiscated from customary land forests.

<u>Irrigation Act (2001)</u>: The Act provides for the sustainable development and management of irrigation, protection of the environment from irrigation related degradation, establishment of the National Irrigation Board, the Irrigation Fund and other matters related to irrigation development in Malawi. It mandates farmers to maintain irrigation canals, drains and other associated infrastructure in their holdings and prohibits people from engaging in practices which are destructive or potentially destructive to the catchment area of a river that provides water for irrigation. It goes further and prohibits livestock grazing, setting or causing to set fire on irrigation schemes or farms. Recognizing the destructive effects of fires, puts the responsibility for averting, fighting or extinguishing fire on irrigation schemes or farms in the hands of everybody. Although the Act is silent on the maintenance of buffer zones along riverbanks, it prohibits any actions that are destructive to the catchment.

<u>Occupational Safety, Health and Welfare Act (1997)</u>: Section 66 of the Occupational Safety, Health and Welfare Act (1997) defines the procedure to be followed in case of the occurrence of an accident which either causes loss of life or disables a person from carrying out the normal duties at which he is employed. Furthermore, it stipulates measures that relate to work in confined spaces (section 55), measures taken to prevent and deal with fire (section 56), matters relating to bulk storage of dangerous materials, matters dealing with noise (section 63) and general matters relating to health and safety.

<u>National Construction Industry Act (1996) (NCIC</u>) for the promotion and development of the construction industry in Malawi, for the registration of persons engaged in the construction industry, for the coordination of training of persons engaged in the construction industry and generally for matters incidental thereto.

<u>Physical Planning Act (2016)</u>: The Act provides for physical planning and the orderly and progressive development of land in both rural and urban areas and for issues relating to the grant of permission to develop land and for other powers of control over the use of land. The Act is administered by the Commissioner for Physical Planning and also provides for the establishment of the Physical Planning Council. The Act provides for development permission including application forms, processing and revocation. Section 54 provides that a person shall not commence the development of any subdivision of any land unless he first obtains a grant of development permission. In addition, a person applying for the

registration of any land under the Registered Land Act must attach a copy of the grant of development permission in order for his documents to be considered.

Part VII of the Act deals with acquisition of land and compensation. The section provides that the Minister may acquire any land, either compulsorily or by agreement if it is considered desirable or expedient in the interests of the implementation of any plan of the proper control and furtherance of development of any land under the Act. Compensation will be paid in accordance with the Lands Acquisition Act as amended. Section 68 of the Act provides for occasions when compensation is payable for planning actions, section 69 deals with how compensation can be assessed and section 70 provides for how a claim for compensation can be made. The Second Schedule of the Act is on the calculation of compensation under section 68. The Act provides for circumstances when an appeal can be made and the fact that an appeal can be made to the Council. A person aggrieved by a decision of the Council may apply to the High Court for judicial review.

<u>National Parks and Wildlife Act (2017</u>): The Act was amended in 2017 to replace the National Parks and Wildlife Act of 1992 with an aim to curb the rising number of illegalities in the protected areas. All protected species are now referred to as endangered or listed in line with IUCN classification. Part IV of the Act, provides for the conduct of environmental and social impact assessment (ESIA) for activities that may occur in protected areas. This may be initiated by any person with sufficient grounds that such actions may have an adverse effect on any wildlife species or community.

<u>Pesticides Act (2000).</u> This Act provides for the control and management of the import, export, manufacture, distribution, storage, disposal and use of pesticides. The Act also establishes the Pesticides Control Board that enforces the provisions of the Act relating to pesticides and other incidental matters. It therefore protects the importation and use of expired products that can be hazardous to the environment and human health.

Malawi Cultural Policy of (2015): The Policy formally establishes the mechanism that the Malawi Government must follow to adequately fulfil its program to deliver Cultural Services to all Malawians in line with the need to strengthen our cultural identity in the face of foreign influences. It takes into account the need to support poverty reduction initiatives. The Policy also takes into account the need to preserve the natural environment and protect it from further degradation. The objectives of the policy include: a) To develop a system that would capably and adequately research, develop, preserve, protect, maintain and promote Malawi's cultural heritage; b) To provide adequate facilities for the efficient dissemination of information on culture; c) To provide suitable education and training to young people for the proper observance of moral values, positive traditional beliefs, self-reliance, patriotism and service to the community d) To promote environmental and biodiversity conservation and preservation methods that are in harmony with cultural beliefs e) To promote nation-wide participation in cultural programs for national unity and socio-cultural awareness f) To develop a mechanism for the development and promotion of literature, folklore, storytelling, and fine and performing arts g) To take into account cultural factors in development projects, policies and programmes for the nation.

<u>Public Health Act (1948)</u>: The Act provides the legal framework for planning and management of a wide range of health-related issues including environmental health, occupational health, and solid waste management.

Section 88 stipulates the requirements for separate toilets for both female and male persons in public buildings or buildings which would be used by both male and female employees.

<u>Workers Compensation Act (2000</u>). The Workers' Compensation Act provides for compensation for injuries suffered or diseases contracted by workers in the course of their employment or for death resulting from such injuries or diseases; it provides for the establishment and administration of a Workers' Compensation Fund; and it provides for matters connected therewith or incidental thereto, key of which are the following: Eligibility for Compensation in Case of Injury other than the Contraction of a Scheduled Disease; Compensation for Injury Caused otherwise than by the Contraction of a Scheduled Disease; Calculation and Distribution of Compensation; Medical Aid; Compensation for Injury due to the Contraction of a Scheduled Disease; Procedure for Obtaining Compensation; and Administration 8. Workers' Compensation Fund.

<u>The Employment Act (2000)</u>: The Employment Act establishes, reinforces, and regulates minimum standards of employment with the purpose of ensuring equity necessary for enhancing industrial peace, accelerate economic growth and social Justice and for matters connected therewith and incidental thereto. The Act covers: Administration; Employment of Young People; Contracts; Hours of Work, Weekly Rest and Leave Wages; and Discipline and Dismissal.

<u>The Labor Relations Act (2000</u>): The Act promotes sound labor relations through the protection and promotion of freedom of association, the encouragement of effective collective bargaining and the promotion of orderly and expeditious dispute settlement, conducive to social justice and economic development. The act covers the following: Freedom of Association; Trade Unions and Employers' Organizations; Collective bargaining and Organizational Rights; Dispute Settlement; Tripartite Labour Advisory Council; and Establishment of Industrial Relations Court.

<u>Gender Equality Act (2012)</u>: The Act promotes gender equality, equal integration, influence empowerment, dignity and opportunities, for men and women in all functions of society, to prohibit and provide redress for sex discrimination, harmful practices and sexual harassment, to provide for public awareness on promotion of gender equality and to provide for connected matters. Section 6(1) of the Act states that a person who commits an act of harassment if he or she engages in in any form of unwanted verbal, non-verbal or physical conduct of a sexual nature in circumstances, would have anticipated that the other person would be offended, humiliated or intimidated, and (2) a person who sexually harasses another in terms of the foregoing subsection is liable to a fines and imprisonment specified under subsection (2).

Section (7) of the Act makes provision for Government to take active measures to ensure that employees have developed and are implementing appropriate policy and procedures aimed at eliminating sexual harassment in the workplace.

<u>Administrative Framework:</u> The Environment Management Act and the EIA Guidelines provide for the administrative framework of the ESIA process. The ESIA process is managed by the Malawi Environment Protection Authority (MEPA). The Authority works with other line Ministries/agencies and stakeholders. Under section 31 (2)_of the Environment Management Act, no one shall undertake any project for which an Environmental and_Social Impact Assessment is required without the written approval of the Authority, and except in accordance with any conditions imposed in that approval. Section 31 (3) also states that any other licensing_authority shall not grant a permit or license for the execution of a prescribed project unless an approval for the project is granted by the Authority, or the grant of the permit or license is made conditional upon the approval of the Authority being granted.

The Director-General is empowered under the Act to require changes to a project in order to reduce environmental impact and to reject a project, if, in his view, the project will cause significant and irreparable injury to the environment. A person not satisfied with the decision of the Director may appeal to the Environmental Appeals Tribunal. The EMA in section 25 stipulates that the Authority may establish an advisory committee as may be deemed necessary and appropriate for the conduct of its regulatory responsibilities. In reference to this, the Authority has in place the Advisory Committee on Environmental and Social Assessment that provides technical advice on ESIA reports submitted for its approval. Through this committee, member agencies are informed about projects being appraised; develop project approval terms and conditions; and recommends courses of action to the Authority. The Authority is not bound by the advice of the Committee to arrive at any action that may be considered necessary.

<u>National Environmental Policy (2004): The Policy</u> aims at narrowing the gap between the degradation of the environment and depletion of the natural resources on one hand and development on the other. The Policy promotes sustainable social and economic development through sound management of the environment and natural resources. The policy has the following guiding principles with regards to water:

- a) All people should have access to clean potable water in order to reduce the incidence of water borne diseases and reduce the time devoted by individuals to water collection,
- b) In planning and providing water supply services, consideration should be given to safe disposal of the resultant wastewater,
- c) The precautionary approach to water quality management shall be pursued with a focus on pollution minimization and prevention,
- d) To improve human welfare and sustainable environment and natural resources management.

<u>National Water Policy (2005)</u>: The policy goal is sustainable management and utilization of water resources, to provide water of acceptable quality in sufficient quantities. It aims at ensuring efficient and effective provision of potable water and sanitation that meets the basic needs of every Malawian. The overall policy objective supports the right to life where it states to ensure that all persons have convenient access to sufficient quantities of water of acceptable quality and the associated water-related public health and sanitation services at any time and within convenient distance.

<u>National Irrigation Policy (2016)</u>: The National Irrigation Policy goal is to contribute to sustainable national economic growth and development through enhanced irrigated agriculture production and productivity. The policy is supplemented by the Environmental Impact Assessment (EIA) Guidelines for Irrigation and Drainage Projects (2002) that guides development of ESIA in the irrigation sector. The policy aspires to attain the following outcomes: Increased irrigated agriculture production and productivity for local and export use using irrigation technologies that consider climate change; Improved national and household incomes, food and nutritional security; Improved irrigation service delivery; Increased employment opportunities; and Enhanced land and water productivity through sustainable land tenure arrangements, catchment management and water harvesting.

<u>National Forest Policy (2016) and Forest Landscape Restoration Strategy (2017)</u>: Forestry resources play a major part in supporting livelihoods, infrastructure development and energy besides providing habitat for animals and providing protection for soil and water resources for agriculture and domestic use. The ecological services provided by forests in providing protection of watersheds that supply water to irrigation schemes are very important for sustainable irrigation development in Malawi. The 2016 National Forestry Policy calls for conservation, establishment, protection and management of trees and forests for the sustainable development of Malawi. The 2017 Forest Strategy seeks to reinforce landscape governance by strengthening local bylaws for the use and management of trees and other natural resources; expand communication and outreach to share information broadly about restoration techniques and benefits, and to mobilize a restoration movement; ensure increased socioeconomic benefits accrue to communities and individual households investing in implementing restoration; and mainstream integrated landscape management approaches and increased support for implementing restoration in development programs at all levels.

National Disaster Risk Management Policy (2015): The overall goal of the Policy is to sustainably reduce disaster losses in lives and in the social, economic and environmental assets of communities and of the nation. The policy aims at creating and providing enabling framework for the establishment of a comprehensive disaster risk management system in Malawi. The priority areas of the policy focus on including mainstreaming of disaster risk management into sustainable development, establishment of comprehensive system for disaster risk identification, assessment and monitoring, development and strengthening of a people centered early warning system, promotion of a culture of safety, adoption of resilience enhancing interventions and the reduction of underlying risks. The strategies to implement the policy cut across several sectors including infrastructure development, agricultural diversification, microfinance initiatives, disaster risk insurance, social support schemes, reforestation and river training.

<u>National Wildlife Policy (2000)</u> The Policy aims at ensuring proper conservation and management of the wildlife resources in order to provide for sustainable utilization and equitable access to the resources and fair sharing of the benefits from the resources for both present and future generations. It recognizes that wildlife forms the basis for the tourism industry in Malawi which is overwhelmingly nature-based and has potential for increased contribution to GDP. The Policy seeks to meet a number of objectives including ensuring adequate protection of representative ecosystems and their biological diversity through promotion and adoption of appropriate land and water management practices that adhere to the principles of sustainable use and enhancing public awareness and understanding of the importance of wildlife conservation and management and its close relationships with other forms of land use.

<u>National Gender Policy (2008</u>): The Policy appreciates that gender inequality is a significant constraint to socio-economic growth and poverty reduction. The policy specifies that Government has a responsibility to integrate gender into the development, design, implementation, and monitoring of different development programs. According to this Policy, Government of Malawi is expected to implement a constitutional obligation of building a society where men, women, boys and girls equally and effectively participate in and benefit from different development processes.

<u>National Land Policy (2002)</u>: The Policy guides land management and administration in Malawi. It introduces major reforms intended for land planning, use, management and tenure and provides clear definition of land ownership categories addressing issues of compensation payment for land. The policy has provisions for environmental management, urban management of solid and liquid waste, protection of sensitive areas, agricultural resource conservation and land use, community forests and woodland management.

The National Land Policy refers to matters relating to land acquisition. It alludes to necessity of having provisions in the land law that would give the Government the opportunity to acquire any piece of land required for public services following guidelines such as:

a) Clearly spelling out or specifying the purposes for which Government may require the land in order to prevent possible abuse of the power of eminent domain;

- Payment of compensation in the event of the repossession of a leasehold interest on Government land, to be limited to the negotiated value of improvements made by the leaseholder; and
- c) No compensation to be paid for the land, when the private user rights granted as a result of the lease are terminated. Government ownership of the land remains throughout the term of the lease.

The Land Policy recognizes Government's duty to protect the free enjoyment of legally acquired property rights on land and a landholder's entitlement to fair and adequate compensation where the Government acquires property for public use. It further stipulates that compensation valuation for customary land, at the time of acquisition by the Government, be based on the open market value of the land and all improvements carried out on the land. The Policy notes that the inadequacy of compensation is always a direct result of excluding certain items or qualities from the factors considered when determining the value; and delays in payment of compensation.

Land Resources Management Policy and Strategy (2000): The overall goal of this policy is to promote the efficient, diversified and sustainable use of land based resources both for agriculture and other uses in order to avoid sectoral land use conflicts and ensure sustainable socio-economic development. Some of the selected policy objectives are to promote integrated land conservation measures in all forms of agricultural practices, and to protect and preserve environmentally fragile areas such as steep slopes, stream banks, water sheds and dambos. The policy is not explicit on the issue of riverbank cultivation as it provides no guidance on the size of buffer zones along rivers and the recommended management practices of such zones.

<u>Fisheries and Aquaculture Policy (2016</u>): The goal of the Policy is to promote sustainable fisheries resource utilization and aquaculture development in order to contribute to food and nutrition security and economic growth of the country. The policy objectives hinge on increasing annual fish production from capture fisheries; increasing aquaculture production; strengthening participatory fisheries management regimes; reducing fish post-harvest losses; increase annual fish exports; increasing per capita fish consumption; improving decent employment in fishing communities for youth, women and men and to reduce the number of child laborers; promotion of applied research in fisheries and aquaculture and monitor the impact of pollution and environmental changes including climate change; and developing capacity of the Government and local management institutions to serve the industry.

<u>Climate Change Policy (2015</u>): Malawi's policy commitments to address climate change and build resilience, as set-out in Malawi's Nationally Determined Contribution (NDC) document submitted to the United Nations Framework Convention on Climate Change in 2015 sets the country's top adaptation priorities that include addressing land and watershed degradation and specifically the loss and degradation of forests, improving the resilience of the agriculture sector to climate change through development of irrigation and climate smart agriculture and improved management of fisheries and natural ecosystems.

<u>Biodiversity Strategy and Action Plan (2015-2026)</u>: The goal of the Plan is to enhance the management of biodiversity for economic growth and wellbeing of the present and future generations. To realize the goal, the Plan will pursue the following strategic objectives: Improved capacity and knowledge on biodiversity issues; Increased mainstreaming of biodiversity management into sectoral and local development planning; Reduced direct pressures on biodiversity; Improved status of biodiversity by safeguarding

ecosystems, species and genetic diversity; and Enhanced access and benefit sharing from biodiversity and ecosystem services.

<u>National HIV and AIDS Policy (2016</u>): The Malawi National HIV and AIDS policy was adopted by the Government in 2003 to prevent HIV infections, reduce vulnerability to HIV, improve the provision of treatment, care and support for people living with HIV and AIDS and mitigate the socioeconomic impact of HIV and AIDS on individuals, families, communities and the nation. Chapter 7 of the Policy observes that in workplaces unfair discrimination against people living with HIV and AIDS has been perpetuated through practices such as pre-employment HIV and AIDS testing, dismissal for being HIV and AIDS positive and the denial of employee benefits if known to be infected. HIV and AIDS affects every workplace. Absenteeism and death impact on productivity, employee benefits, production costs and workplace morale.

2.2 International Conventions Signed and Ratified

The 1992 United Nations Framework Convention on Climate Change. The primary purpose of the Convention is to establish methods to minimize global warming and in particular the emission of greenhouse gases. The Convention was adopted in 1992 and came into force in 1994. Malawi signed the Framework in 1992.

The 1992 United Nations Convention on Biological Diversity. The Convention has three main goals which are: The conservation of biological diversity or biodiversity, the sustainable use of its components and the fair and equitable sharing of benefits arising from genetic resources. Malawi ratified the Convention in 1994.

The Ramsar Convention for the Conservation and Sustainable Utilization of Wetlands: The Convention is an international treaty for the conservation and sustainable utilization of wetlands, recognizing the fundamental ecological functions of wetlands and their economic, cultural, scientific and recreational value. Malawi ratified the Convention in 1997.

The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal was adopted on 22 March 1989. The overarching objective of the Basel Convention is to protect human health and the environment against the adverse effects of hazardous wastes. Its scope of application covers a wide range of wastes defined as "hazardous wastes" based on their origin and/or composition and their characteristics, as well as two types of wastes defined as "other wastes" - household waste and incinerator ash. The provisions of the Convention center around the following principal aims:

- the reduction of hazardous waste generation and the promotion of environmentally sound management of hazardous wastes, wherever the place of disposal;
- the restriction of transboundary movements of hazardous wastes except where it is perceived to be in accordance with the principles of environmentally sound management; and
- a regulatory system applying to cases where transboundary movements are permissible.

Convention on the Rights of the Child: The Convention on the Rights of the Child from 1989 is the most comprehensive compilation of international legal standards for the protection of the human rights of children. It acknowledges children as individuals with rights and responsibilities according to their age and

development, as well as members of a family or community. This includes non-discrimination, the best interest of the child, the right to life, survival and development and the right to participation. Malawi signed the Convention in 1991.

ILO 182 Worst Forms of Child Labor Convention (1999). The convention calls for immediate action to prohibit and eliminate the worst forms of child labor. The predefined forms of child labor include all forms of slavery, trafficking of children, debt bondage or any other form of bonded labor, forced or compulsory labor, commercial sexual exploitation of children, prostitution and the production of pornography, as well as work that is likely to harm the health, safety or morals of children. Malawi ratified the convention in 1999.

ILO Convention 138, Minimum Age. The convention provides for the possibility of initially setting the general minimum age at 14 (12 for light work) where the economy and educational facilities are insufficiently developed. Malawi signed the Convention in 1999.

Constitution of the International Labor Organization: The constitutional principle is that universal and lasting peace can be established if it is based on social justice. The ILO has generated such hallmarks of industrial society as the eight-hour work day, maternity protection, child labor laws, and a range of other principles. Malawi has been a member of the ILO since 1965.

ILO Convention 029 on Forced Labor. The Objective of the convention is to suppress forced labor in all its forms. Malawi ratified the Convention in 1999.

ILO Convention 100 on Equal Remuneration. The convention aims at equal remuneration for work of equal remuneration between men and women. Malawi signed the convention in 1965.

ILO Convention 111 on Discrimination. The convention calls upon states to enable legislation prohibiting all forms of discrimination and exclusion on any basis, including race, sex, religion, etc. Malawi ratified the convention in 1965.

Convention on the Elimination of all forms of Discrimination against Women. CEDAW places explicit obligations on states to protect women and girls from sexual exploitation and abuse. Malawi signed the Convention in 1987.

Convention on the Elimination of all forms of Discrimination against Women. CEDAW places explicit obligations on states to protect women and girls from sexual exploitation and abuse, among other issues. Malawi ratified the CEDAW in 1987. The accession to CEDAW enabled the country to address issues of customary law involving women's right to inherit and own productive assets, as well as their lack of voice and decision making in family and community matters and the denial of their right of choice to found a family especially in rural settings.

The Beijing Declaration and Platform for Action (1995) is an agenda for women's empowerment, which consists of 12 areas of concerns, including women and the environment, women in power and decision-making, the girl child, women and the economy, women and poverty, violence against women, human rights and women etc... Malawi committed to the implementation of the Declaration.

The Protocol to the African charter on Human and Peoples' Rights on the Rights of Women in Africa (Maputo Protocol) is an international human rights instrument established by the African Union, which came into effect in 2005. Malawi ratified the Charter in 2005.

2.3 World Bank Environmental and Social Management Framework and Relevant Standards (ESS)

The Environmental and Social Framework (ESF) sets out the World Bank's commitment to sustainable development through a Bank Policy and a set of Environmental and Social Standards (ESSs) that are designed to support borrowers' projects with the aim of ending extreme poverty and promoting shared prosperity. The short summary of several relevant ESSs from the Bank's ESF are presented below.

The ESSs set out the requirements for borrowers relating to the identification and assessment of environmental and social risks and impacts associated with projects and sub-activities supported by the Bank through Investment Project Financing. The Bank believes that the application of these standards, focusing on the identification and management of environmental and social risks, will support borrowers in their goal to reduce poverty and increase prosperity in a sustainable manner for the benefit of the environment and their citizens.

The standards will:

(a) support borrowers to achieve good international practice relating to environmental and social sustainability;

(b) assist borrowers to fulfil their national and international environmental and social obligations;

(c) enhance nondiscrimination, transparency, participation, accountability and governance;

(d) enhance the sustainable development outcomes of projects through ongoing stakeholder engagement.

The relevant ESS that the borrower and the project will meet through the project life cycle, are as follows:

ESS 1: Assessment and Management of Environmental and Social Risks and Impacts. ESS1 sets out the borrower's responsibilities for assessing, managing and monitoring environmental and social risks and impacts associated with each stage of a project supported by the Bank through Investment Project Financing, in order to achieve environmental and social outcomes consistent with ESSs.

The E&S assessment will be based on current information, including a description and delineation of the project and any associated aspects and environmental and social baseline data at an appropriate level of detail sufficient to inform characterization and identification of risks and impacts and mitigation measures. The assessment will evaluate the project's potential environmental and social risks and impacts, including cumulative impacts where applicable, with a particular attention to those that may fall disproportionally on disadvantaged and/or vulnerable social groups; examine project alternatives; identify ways of improving project selection, siting, planning, design and implementation in order to apply the mitigation hierarchy for adverse environmental and social impacts and seek opportunities to enhance the positive impacts of the project. The environmental and social assessment will include stakeholder engagement as an integral part of the assessment, in accordance with ESS10.

According to ESS1 the borrower will manage E&S risks and impacts of the project throughout the project life cycle in a systematic manner, proportionate to the nature and scale of the project and the potential risks and impacts. The borrower is thereby responsible for cascading compliance with standards along the chain of implementing partners, contractors and subcontractors. The Project is subject to ESS1 and will follow it through during preparation, design and implementation.

ESS 2 – Labor and Working Conditions. ESS2 recognizes the importance of employment creation and income generation in the pursuit of poverty reduction and inclusive economic growth. Borrowers can promote sound worker-management relationships and enhance the development benefits of a project by treating workers in the project fairly and providing safe and healthy working conditions. ESS2 applies to project workers including fulltime, part-time, temporary, seasonal and migrant workers.

The Borrower will develop and implement written labor management procedures (LMP) applicable to the project. These procedures will set out the way in which project workers will be managed, in accordance with the requirements of national law and this ESS as well as requirements in the World Bank Environmental, Health and Safety (EHS) guidelines for managing occupational health and safety. The procedures address the way in which this ESS applies to different categories of project workers including direct workers, contracted workers and community workers, and the way in which the Borrower will require third parties to manage their workers in accordance with ESS 2. The LMP will further include an Occupation Health and Safety (OHS) Framework, and a grievance redress system which allows workers to raise their grievances.

ESS 3 – Resource Efficiency and Pollution Prevention and Management. ESS 3 recognizes that economic activity and urbanization often generate pollution to air, water and land, and consume finite resources that may threaten people, ecosystem services and the environment at the local, regional and global levels. The current and projected atmospheric concentration of greenhouse gases (GHG) threatens the welfare of current and future generations. At the same time, more efficient and effective resource use, pollution prevention and GHG emission avoidance, and mitigation technologies and practices have become more accessible and achievable. This ESS sets out the requirements to address resource efficiency and pollution prevention and management throughout the project life cycle consistent with GIIP.

This ESMF includes sections on resource efficiency and pollution prevention and management. Assessment of risks and impacts and proposed mitigation measures related to relevant requirements of ESS3, including raw materials, water use, air pollution, hazardous materials and hazardous waste are included within scope of the ESMF, and ESIAs/ESMPs as relevant.

ESS 4 – Community Health and Safety. ESS4 recognizes that project activities, equipment and infrastructure can increase community exposure to risks and impacts. In addition, communities that are already subjected to impacts from climate change may also experience an acceleration or intensification of impacts due to project activities including disaster risk and emergency preparedness.

ESS 4 addresses the health, safety, and security risks and impacts on project-affected communities and the corresponding responsibility of borrowers to avoid or minimize such risks and impacts, with particular attention to people who, because of their particular circumstances, may be vulnerable. While not explicitly mentioned, prevention and mitigation of different forms of gender-based violence, specifically SEA/SH, is covered by ESS4. This ESMF includes mitigation measures for anticipated risks in relation to ESS4. A SEA/SH Action Plan will be prepared to mitigate SEA/SH risks.

ESS 5 – Land Acquisition, Restrictions on Land Use, and Involuntary Resettlement. ESS5 recognizes that project-related land acquisition and restrictions on land use can have adverse impacts on communities and persons. Project-related land acquisition or restrictions on land use may cause physical displacement (relocation, loss of residential land or loss of shelter), economic displacement (loss of land, assets or access to assets, leading to loss of income sources or other means of livelihood), or both. The term "involuntary resettlement" refers to these impacts. Resettlement is considered involuntary when affected persons or communities do not have the right to refuse land acquisition or restrictions on land use that result in displacement.

Experience and research indicate that physical and economic displacement, if unmitigated, may give rise to severe economic, social and environmental risks: production systems may be dismantled; people face impoverishment if their productive resources or other income sources are lost; people may be relocated to environments where their productive skills are less applicable and the competition for resources greater; community institutions and social networks may be weakened; kin groups may be dispersed; and cultural identity, traditional authority, and the potential for mutual help maybe diminished or lost. For these reasons, involuntary resettlement should be avoided. Where involuntary resettlement is unavoidable, it will be minimized and appropriate measures to mitigate adverse impacts on displaced persons (and on host communities receiving displaced persons) will be carefully planned and implemented.

ESS 6 – **Biodiversity Conservation and Sustainable Management of Living Natural Resources**. ESS6 recognizes that protecting and conserving biodiversity and sustainably managing living natural resources are fundamental to sustainable development. Biodiversity is defined as the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species, between species and of ecosystems. Biodiversity often underpins ecosystem services valued by humans. Impacts on biodiversity can therefore often adversely affect the delivery of ecosystem services.

ESS 6 recognizes the importance of maintaining core ecological functions of habitats, including forests, and the biodiversity they support. Habitat is defined as a terrestrial, freshwater or marine geographical units or airways that supports assemblages of living organisms and their interactions with the non-living environment. All habitats support complexities of living organisms and vary in terms of species diversity, abundance and importance. This ESS also addresses sustainable management of primary production and harvesting of living natural resources.

ESS 6 recognizes the need to consider the livelihood of project-affected parties whose access to, or use of, biodiversity or living natural resources may be affected by a project. The potential, positive role of project affected parties in biodiversity conservation and sustainable management of living natural resources is also considered including rehabilitation of project sites to restore biodiversity and ecosystem services.

ESS 8 – Cultural Heritage. ESS8 recognizes that cultural heritage provides continuity in tangible and intangible forms between the past, present and future. People identify with cultural heritage as a reflection and expression of their constantly evolving values, beliefs, knowledge and traditions. Cultural heritage, in its many manifestations, is important as a source of valuable scientific and historical information, as an economic and social asset for development, and as an integral part of people's cultural identity and practice. ESS8 sets out measures designed to protect cultural heritage throughout the project

life cycle. Given the planned construction under the Project, this ESS is applicable. A Chance Find Procedure is included in this ESMF (See Annex 2).

ESS 10 – Stakeholder Engagement and Information Disclosure. This ESS recognizes the importance of open and transparent engagement between the Borrower and project stakeholders as an essential element of good international practice. Effective stakeholder engagement can improve the environmental and social sustainability of projects, enhance project acceptance and make a significant contribution to successful project design and implementation.

The borrower will engage with stakeholders throughout the project life cycle, commencing such engagement as early as possible in the project development process and in a timeframe that enables meaningful consultations with stakeholders on project design. The nature, scope and frequency of stakeholder engagement will be proportionate to the nature and scale of the project and its potential risks and impacts.

Stakeholder engagement is an inclusive process conducted throughout the project life cycle. Where properly designed and implemented, it supports the development of strong, constructive and responsive relationships that are important for successful management of a project's environmental and social risks. Stakeholder engagement is most effective when initiated at an early stage of the project development process and is an integral part of early project decisions and the assessment, management and monitoring of the project's environmental and social risks and impacts.

In consultation with the Bank, the borrower has prepared a Stakeholder Engagement Plan (SEP) proportionate to the nature and scale of the project and its potential risks and impacts. Disclosure of information shall be undertaken through the implementation of the SEP. The SEP also outlines the establishment of a functioning GRM.

Project on International Waterways (OP7.50). Where a project affects an International waterway, the World Bank requires appropriate notification to be provided to the riparian users. Owing to the Shire River being an integral part of the Zambezi River Basin, the Government of Malawi will consult the riparian states of the basin through Zambezi River Basin Commission (ZAMCOM) of its intention to implement the Project.

2.4. WB Environmental, Health and Safety (EHS) Guidelines and Technical Notes

The project will further apply the WB General EHS Guidelines from 2007, which are guidelines that contain the performance levels and measures that are acceptable to the WB and reflect good international industry practice. Where the national regulations differ from the levels and measures presented in these guidelines, the project will aim for whichever is more stringent.

The following Good Practice Notes were also consulted to ensure that mitigation measures developed are aligned with best industry practices: Addressing sexual exploitation and abuse and sexual harassment (SEA/SH) in investment; Projects financing involving in major civil works, 2020; Addressing Gender based violence in Investment Project Financing involving major civil works, 2018; Gender, 2019; Road Safety, 2019; and Managing the risks of adverse impacts on communities from temporary project induced labor

influx, 2016, and assessing and managing the risks of the use of security personnel, 2018; ESF Advisory Note for Technical Assistance.

2.5. Gap Analysis between National Legislation and WB Standards

The following Table presents a gap analysis between national legislation and WB ESS and proposes measures where gaps have been identified.

Table 2 Gap Analysis WB ESS and national legal framework

GAP Analysis World Bank ESS and National Legal Framework						
ESF Objectives	National Laws and Requirements	Gaps	Recommended Actions			
ESS 1: Assessment and Management of Environmental and Social Risks and Impacts						
Objectives of ESS 1 are: To identify, evaluate and manage the environmental and social risks and impacts of the project in a manner consistent with the ESSs. To adopt a mitigation hierarchy approach to: (a) Anticipate and avoid risks and impacts	The overarching Act related to this standard is the Environment Management Act (2017)	There is no provision for environmental and social screening of projects in which activities and locations are not known. ESIA study screening and scoping do not guarantee coverage of all ESS standards in the assessment.	To resolve this gap the project has prepared the ESMF to provide guidance in situations where these gaps exist to the satisfaction of the Bank.			
 (b) Where avoidance is not possible, minimize or reduce risks and impacts to acceptable levels (c) Once risks and impacts have been minimized or reduced, mitigated; and (d) Where significant residual impacts remain, compensate for or offset them, where technically and financially feasible 		The stakeholder engagement during the conduct of the ESIA is limited and the ESIA report is not disclosed.				
To adopt differentiated measures so that adverse impacts do not fall disproportionately on the disadvantaged or vulnerable and they are not disadvantaged in sharing development benefits and opportunities resulting from the project.						
To utilize national environmental and social institutions, systems, laws, regulations and procedures in the assessment, development and implementation of projects, whenever appropriate.						

ESS 2: Labor and Working Conditions					
The Objectives of ESS 2 are:	Occupational Safety, Health and Welfare Act (1997): Section 66 of the		The project will prepare an LMP that will guide		
To promote safety and health at work.	Occupational Safety, Health and Welfare Act (1997) defines the		compliance with ESS2 to the satisfaction of the		
To promote the fair treatment, non-discrimination and equal opportunity of project workers.	procedure to be followed in case of the occurrence of an accident which either causes loss of life or disables a	including OHS requirements before approval.	Bank.		
To protect project workers, including vulnerable	person from carrying out the normal	The Act does not require			
workers such as women, people with disabilities,	duties at which he is employed.	development projects to prepare			
children (of working age, in accordance with this ESS) migrant workers, contracted workers, community workers and primary supply workers, as appropriate.		LMP or Occupational Health and Safety (OHS) Plans.			
To prevent the use of all forms of forced labor and child labor.					
To support the principles of freedom of association and collective bargaining of project workers in a manner consistent with national law.					
To provide project workers with accessible means to raise workplace concerns.					
ESS 3: Resource Efficiency and Pollution Prevention and Management					

 The Objectives of ESS 3 are: To promote the sustainable use of resources, including energy, water and raw materials. To avoid or minimize adverse impacts on human health and the environment by avoiding or minimizing pollution from project activities. To avoid or minimize project-related emissions of short and long-lived climate pollutants. To avoid or minimize generation of hazardous and non-hazardous waste. 	National Environmental Policy (2004) aims at narrowing the gap between the degradation of the environment and depletion of the natural resources on one hand and development on the other. Environment Management Act (2017) Environmental Management (Waste Management and Sanitation) Regulations, (2008)	Existing energy and water conservation policies, laws and regulations do not require development projects to assess resource efficiency issues and incorporate resource efficiency measures in their E&S risk management plans. The national legislation mostly focuses on pollution prevention and less on aspects of resource efficiency	The project will promote the sustainable use of resources and avoid or minimize adverse impacts on human health to the satisfaction of the Bank
 ESS 4: Community Health and Safety The Objectives of ESS 4 are: To anticipate and avoid adverse impacts on the health and safety of project-affected communities during the project life-cycle from both routine and non-routine circumstances. To avoid or minimize community exposure to project-related traffic and road safety risks, diseases and hazardous materials. To have in place effective measures to address emergency events. To ensure that the safeguarding of personnel and property is carried out in a manner that avoids or minimizes risks to the project-affected communities. To promote quality and safety, and considerations relating to climate change, in the design and construction of infrastructure, including dams 	The provisions related to ESS4 are taken care of under the Environment Management Act (2017) Public Health Act (1948): provides the legal framework for planning and management of a wide range of health-related issues including environmental health, occupational health, and solid waste management. National Gender Policy (2008): appreciates that gender inequality is a significant constraint to socio- economic growth and poverty reduction. The Occupational Safety, Health and Welfare Act, (1997) Malawi National HIV and AIDS Policy (2016): The Malawi National HIV and	The Occupational Safety, Health and Welfare Act, (1997) does not focus much on community health and safety, emphasis is on workers. The policies do not indicate the need to develop the GBV Prevention and Management Plan	The project will ensure that ESS4 requirements are included in the E&S instruments to the satisfaction of the Bank, including a SEA/SH Action Plan

ESS 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement The Objectives of ESS 5 are: The Land Act (2016) makes provision for land in Malawi and for all matters incidental or connected thereto. The national legislation does not require the preparation of a RAP; The Project will prepare a Resettlement of policy framework (RPF) that will guide procedures in addressing the identified to connected thereto. To avoid forced eviction. The Lands Acquisition and Compensation (Amendment) Act (2016) provides powers to the Minister or local government authority to acquire land for public utility either compulsorily or by greement and pay appropriate compensation for loss of assets at replacement The Inal Act (2016) Provide Compensation of INAL ACT (2002); The policy guides land management and administration in Malawi Does not provide compensation of loss asset is not based on "replacement cost' standard National Land Scuusition and Custainable Management of Living Natural Resources Statual Act (2016) Naluation of loss asset is not based on "replacement cost' standard"		AIDS policy was adopted by the Government in 2003 to prevent HIV infections, reduce vulnerability to HIV, improve the provision of treatment, care and support for people living with HIV and AIDS and mitigate the socioeconomic impact of HIV and AIDS on individuals, families, communities and the nation.		
The Objectives of ESS 5 are: To avoid involuntary resettlement or, when unavoidable, minimize involuntary resettlement by exploring project design alternatives.The Land Act (2016) makes provision for land in Malawi and for all matters incidental or connected thereto.The national legislation does not require the preparation of a RAP; Does not provide compensation of have formal legal claim to the and; (2016) provides powers to the intigete unavoidable adverse social and ecompensation for loss of assets at replacementThe Lands Acquisition and authority to acquire land for public utility either compulsorily or by agreement and pay appropriate compensation thereof.The national legislation does not nework (RPF) that will guide procedures in addressing the identified gaps to the satisfaction of the Bank.National Land Policy (2002): The policy guides land management and administration in MalawiNo provision to give special attention to the vulnerable groupsThe Project will prepare a Resettlement Policy 	ESS 5: Land Acquisition, Restrictions on Land Use a	nd Involuntary Resettlement		
	 The Objectives of ESS 5 are: To avoid involuntary resettlement or, when unavoidable, minimize involuntary resettlement by exploring project design alternatives. To avoid forced eviction. To mitigate unavoidable adverse social and economic impacts from land acquisition or restrictions on land use by providing timely 	The Land Act (2016) for land in Malawi and for all matters incidental or connected thereto.TheLandsAcquisitionand Compensation (Amendment)Act (2016)provides powers to the Minister or local government authority to acquire land for public utility either compulsorily or by agreement and pay appropriate compensation thereof.National Land Policy (2002): The policy guides land management and administration in MalawiLands Acquisition and Compensation Act (2016)Customary Land Act (2016)Physical Planning Act (2016)	require the preparation of a RAP; Does not provide compensation or assistance to those who do not have formal legal claim to the land; Does not provide transitional allowances for restoration of livelihoods for informal settlers; Relies on cash compensation, no developmental objectives; No provision to give special attention to the vulnerable groups Valuation of lost asset is not based	a Resettlement Policy Framework (RPF) that will guide procedures in addressing the identified gaps to the satisfaction
END D. DIODIVERSITY L'ODSERVATION AND NISTAINANIE IVIANAVEMENT OF LIVINV NATURAL RESOURCES	FSS 6: Biodiversity Conservation and Sustainable M			

 The Objectives of ESS 6 are: To protect and conserve biodiversity and habitats. To apply the mitigation hierarchy and the precautionary approach in the design and implementation of projects that could have an impact on biodiversity. To promote the sustainable management of living natural resources. To support livelihoods of local communities, including Indigenous Peoples, and inclusive economic development, through the adoption of practices that integrate conservation needs and development priorities. 	Water Resources Act (2013): governs water rights, water abstraction, pollution control, building of dams and water resource planning and development.National Water Policy (2005) The overall policy goal is sustainable management and utilization of water resources, to provide water of acceptable quality in sufficient quantitiesEnvironment Management Act (1996) Parks and Wildlife Act (1997)National Biodiversity Strategic Action Plan	Laws and policies have no equivalent requirements on: The application of hierarchy of measures. The preparation of Biodiversity Management Plans. Differentiated measures on types of habitats. Conduct of due diligence on primary suppliers.	The Project will avoid any encroachment into any sensitive habitat and/or protected areas. The project will ensure that ESIA and ESMP documents are developed in line with ESS6 to the satisfaction of the Bank.
ESS 8: Cultural Heritage			
 The Objectives of ESS 8 are: To protect tangible and intangible cultural heritage from the adverse impacts of project activities and support its preservation. To address cultural heritage as an integral aspect of sustainable development. To promote meaningful consultation with stakeholders regarding cultural heritage. To promote the equitable sharing of benefits from the use of cultural heritage. 	Monuments and Relics Arrangement of Sections (1992) Arts and Crafts Act (1991)	Laws and policies have no requirements on: The application of hierarchy of measures. The development of Cultural Heritage Management Plan. The development and adoption of project-specific Change Find Procedures. The engagement of cultural heritage experts.	The Project will implement chance find procedures, to the satisfaction of the Bank, to protect cultural or archeological findings during project activities, as per the Chance Find Procedure in Annex 2 The Project will further conduct community consultations (as per SEP) prior to project activities to ensure protection of other

			tangible cultural heritage.
ESS 10: Stakeholder Engagement and Information	Disclosure		
The Objectives of ESS 10 are: To establish a systematic approach to stakeholder engagement that will help borrowers to identify stakeholders and build and maintain a constructive relationship with them, project-affected parties. To assess the level of stakeholder interest and support for the project and to enable stakeholders' views to be considered in project design and environmental and social performance. To promote and provide means for effective and inclusive engagement with project-affected parties throughout the project life cycle on issues that could potentially affect them. To ensure that appropriate project information on environmental and social risks and impacts is disclosed to stakeholders in a timely, understandable, accessible and appropriate manner and format. To provide project-affected parties with accessible and inclusive means to raise issues and grievances and allow borrowers to respond to and manage such grievances.	The ESIA guidelines recommend public consultations during scoping and the preparation of the ESIA report. Environmental Management Act (2017) Local Government Act (1998) National Decentralization Policy (2000)	There is no further provision for any stakeholder engagements during project implementation. No provision for development of the GRM	The Project will implement stakeholder consultations throughout the lifetime of the project to the satisfaction of the Bank, as per the SEP. The Project will implement a Project GRM (as described in the SEP) to allow project- affected parties to raise issues and grievances that can be managed by the PIU.

3. Environmental and Socio-Economic Baseline

3.1 Environmental Baseline

The following section describes key environmental features of the country as the project activities shall be carried out in various areas of the country. Detailed baseline will be undertaken for the preparation of site-specific ESIAs or ESMPs.

Geography: Malawi covers 118.484 km², of which approximately 20 percent consists of the inland water of Lake Malawi. The shape of the country follows roughly the Rift Valley. It is elongated in North-South direction and measures about 900 km in length with a width varying between 80 and 160 km from east to west. The Shire River forms the outlet of Lake Malawi and flows about 400 km to connect the Southern end of Lake Malawi (457 m above sea level) to the Zambezi River in Mozambique. The Shire River leaves the country at the lowest point at 37 masl, while only 100 km north, Malawi's highest peak rises to 3000 masl in the Mulanje Mountains. The country is characterized by a north-south Valley system with the Lake and Shire River located in valley bottom and bordered east-west by an escarpment on either side rising up to 1000masl. Most of the land is slightly rolling and plateau land with elevations between 900 m and 1250 m, alternated with hilly and mountainous land rising up to 2500 m. The country is divided into three regions (northern, central and southern) and has 28 districts.

Climate: Malawi has a Tropical Continental Climate with two main seasons during the year: the dry and the wet season. The wet season lasts from November to May and the remainder of the year is dry, with temperatures increasing until the onset of the next rains. Temperatures in the Shire Valley can reach well into +40°C during summer months coupled with high humidity. The Shire Highlands ridge, by virtue of its height, is relatively cool for much of the year and, in the higher parts of the Thyolo and Mulanje districts, rainfall, during the dry season, is sufficient to support the cultivation of tea. The Phalombe and the Chileka Plains are located east and west of the Shire Highlands and have higher temperatures and lower rainfall than the highlands themselves.

Climate Change: The World Bank Country Environmental Assessment⁸ reports that future climate change scenarios suggest that Malawi will see increasing climatic variability, higher temperatures, longer dry periods, and more erratic and intense rainfall events.⁹ Data from Malawi's Department of Climate Change and Meteorological Services (DCCMS) show a noticeable increase in maximum and minimum temperatures over the last 20 years. Mean temperatures have risen by an average rate of 0.21 Celsius per decade, with comparative increases in evapotranspiration.¹⁰ The largest shifts in maximum temperature are in November and December, with slightly lower increases in the late summer months of January and February. Changes in rainfall patterns are more variable. Northern and Southern Malawi have experienced a drying trend since the early 2000s, while the center of Malawi has seen slightly increased rains. Reports of extreme weather events (droughts, heavy rains, and floods) increased from just one during the 1970s to 19 between 2000 and 2016⁻¹¹

 ⁹ Government of Malawi, 2017. Strategic Program for Climate Resilience: Malawi, Pilot Program on Climate Resilience (PPCR).
 ¹⁰ Vincent et al. 2014. Analysis of Existing Weather and Climate Information for Malawi.

¹¹ World Bank, Malawi Country Environmental Analysis, January 2019.; ActionAid. 2006. Climate Change and Smallholder Farmers in Malawi: Understanding Poor People's Experiences in Climate Change Adaptation.

More intense flood events may cause greater soil erosion and land degradation including landslides; hotter and drier periods will contribute to forest and grass fire risks; and prolonged droughts will negatively affect food production. Food production is further adversely affected by the floods as crops are washed away or heavy rains damage the plants. About 90 percent of Malawi's food production comes from one rainfed crop, which means that droughts can rapidly have an adverse impact on food security. Increased poverty then results in greater demands for more land and natural resources. Climate shocks affect all economic sectors and geographical areas. For example, losses for agricultural GDP due to droughts are estimated to range from 1.1 percent to 21.5 percent for return periods of 5 and 25 years, respectively¹². The sector is the most at risk from direct climate change stressors because it is highly sensitive to changes in temperature and precipitation.

These weather events occur in increased frequency and therefore increase these types of impacts. Between 2015 and 2017, floods in Malawi's southern districts were followed by countrywide drought conditions, with the resulting loss and damage estimated at USD 335 million.

Disaster Vulnerability: Malawi is ranked among the countries most at risk of natural disasters in the world. After the floods of 2015, Malawi was categorized by the Climate Change Index as the third-most vulnerable country to climate change,¹³ and the country is ranked as the 16th most vulnerable country globally for humanitarian crisis and disasters in the INFORM's Global Risk Index 2017.¹⁴ Between 1980 to 2017, Malawi has experienced eight major droughts and 33 floods. The floods of 2015 were the worst in 50 years and this was followed by a drought in 2016–17. This drought affected 6.5 million people, which is over a third of the total population, many of which live in the densely populated southern region (placing themselves at risk by living in floodplains and other sensitive areas).

Natural disasters, such as extreme weather and recurring floods and droughts, put economic growth and people's livelihoods at risk, and add strain to environmental resources and ecosystem services. Other natural disasters, such as hailstorms, lightning, earthquakes, pest infections, and wildfires increase these risks. These disasters are also hard to predict, manage, and recover from. In addition, Malawi's women and children are particularly vulnerable to natural disasters such as droughts due to disproportionate gendered responsibilities for food production and livestock.¹⁵

Mineral Resources: Malawi's mining sector accounts for 1 percent of GDP. The government projects that mining will grow by five percent in the near future. Malawi has several minerals with economic potential, such as: uranium, phosphates (apatite), bauxite, kaolinitic, coal, kyanite, limestones, rare earths (including strontianite and monazite), graphite, sulphides (pyrite and pyrrhotite), titanium minerals, and vermiculite. Most of these minerals were evaluated in the past by either Ministry of Mining (through Geological Survey Department) or private companies. Only phosphate, coal, limestone, uranium, iron ore, rock aggregate, and precious stones have been exploited. Several rare earth and niobium projects are planned, with anticipated start dates in the next 2 years. Artisanal and small-scale mining in Malawi is carried out through labor-intensive mining methods for lime production, clay for pottery, and gemstones.

 ¹² Pauw et al. 2011. The Economic Costs of Extreme Weather Events: A Hydro-Meteorological CGE Analysis for Malawi.
 ¹³ Kreft et al. 2017. GLOBAL CLIMATE RISK INDEX 2017—Who Suffers Most from Extreme Weather Events? Weather-related Loss Events in 2015 and 1996

to 2015.

¹⁴ INFORM. 2017. Malawi.

¹⁵ GoM. 2015(a). Malawi 2015 Floods Post Disaster Needs Assessment Report.

Soils: According to the Soil and Terrain database of the Republic of Malawi, Lixisols is rather well distributed from north to south over the country and is not particularly concentrated in a certain region. The second largest RSG, Luvisols, occurs more frequently in the central region, while Cambisols are found frequently in the northern and southern regions (see Figure below). Strongly weathered and leached soils, such as the Ferralsols and Acrisols are found on stable, old and often strongly undulating lands, such as the Nyika and Viphya plateaus in the northern region. These soils also occur on the south slopes of the Mulanje Mountain massive in the southern region.

A relatively high percentage of Fluvisols, Gleysols, Vertisols, Planosols and Solonetz are found in the southern region. Their occurrence is related to present and former levels of Rift Valley lakes, such as Lake Malawi and Lake Chilwa, and to the sediments of the Shire River before joining the Zambezi River in Mozambique.¹⁶

¹⁶ ISRIC, World Soil Information, Soil and Terrain Database of the Republic of Malawi, Wageningen 2016, accessed at: https://www.isric.org/sites/default/files/isric_report_2016_01.pdf

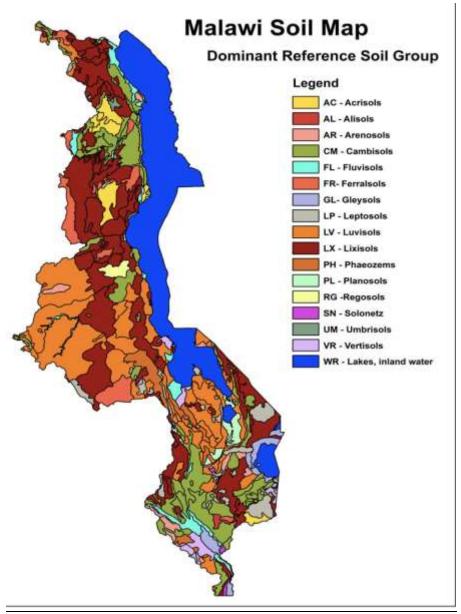


Table 3 Malawi Soil Map

Fauna and Flora / Biodiversity: The dominant vegetation is Miombo woodland characterized by broadleaved Brachystegia species. It is relatively moist woodland that intergrades into savannah. In southern Malawi the relatively dry, broadleaved mopane woodland is more common, often intergrading into savannah vegetation.

One century ago, the Shire Highlands was mostly covered with closed evergreen forest, fringing the many perennial streams and capping hills and mountains above 1370 m. Due to considerable clearing and cultivation during the intervening years, only scattered fragments of the original Rainforest and Brachystegia woodland remain, mostly on private estates and the lower slopes of rocky hills. As much a feature of the landscape today are the many plantation of the exotic trees and particularly the ubiquitous Blue Gum (*Eucalyptus saligna x E. grandis*) and Mexican Pine (*Pinus patula*).

Widdringtonia whytei, the Mulanje cedar or Mulanje cypress, is a species of conifer native to Malawi¹⁷, where it is endemic to the Mulanje Massif at altitudes of 1,830–2,550 m. It has become endangered as a result of over-harvesting for its wood, and an increase in the frequency of wildfires due to human activity. The tree is now Critically Endangered and at risk of becoming extinct in its natural habitat.¹⁸

Riverine forest still occurs, but where heavy felling has taken place or where cultivation has been taken right up to the bank, the forest has degenerated completely and all that is left consists of isolated tall trees standing on an eroding gulley. The value for the riverine forest, in holding the banks of the streams and in preventing scouring and erosion during floods, is important, as well as providing habitat to endemic bird species, amongst others. Typical species of the riverine forest are: *Khaya nyasica (mbawa), Parkia filicoidea* (mkundi), *Albizzia glabresscens, Ficus vallischoudae*, and the palms *Raphina vinifera (ciwele), Adina microcephala (mweya)*, and *Phoenix reclinata (kanjedza)*.

According to the World Bank's Country Environmental Analysis, much of Malawi's biodiversity key taxa are in decline. Most species of national and international conservation significance are increasingly restricted to protected areas. Malawi has one of the highest numbers of threatened species in the region, and the expanding population and increased demand for agricultural land and sources of protein are causing a steady decline in Malawi's biodiversity assets. However, the GoM has also made substantial recent progress in tackling wildlife crime.

Terrestrial biodiversity: According to the IUCN Red List of Threatened Species¹⁹, Malawi has 150 critically endangered, endangered, or vulnerable animal species. Over 50 percent of Malawi's elephant population has been lost in the last 25 years, including the African elephant (*Loxodonta Africana*) and other important species. Current estimates put the national elephant population close to 2,000 individuals.²⁰ Other species of international conservation concern have also declined or are now extinct in Malawi. For example, African Wild Dogs (*Lycaon pictus*) are known to still exist in Kasungu National Park and Nyika National Park, but they are subject to high levels of human encroachment and poaching. The cheetah (*Acinonyx jubatus*) was reported as almost extinct in Malawi in 1996 and, with the exception of small numbers that have recently been reintroduced into Majete Wildlife Reserve and Liwonde National Park. Malawi Hills in the Southern region is home to the rare and endemic Chapman's chameleon.

Avifaunal biodiversity: Key Biodiversity Areas located across the southern region provide habitat to both endemic and migratory species, including the rare and endemic Chapman's chameleon; several endemic bird species found in mid-altitude and montane forests including White-winged Apalis, the Yellow-throated Apalis, Thyolo Alethe; and the Green-headed Oriole and White-backed Night heron, which are found in remnant forests in the tea estates of Thyolo. Also migratory bird and bat species including IUCN Vulnerable listed Red-Footed Falcon, which migrates from Eastern Europe can be found. The destruction of the montane and riverine forests damaged through floods e.g. bank erosion and flood debris also contributes to further decline in habitat.

¹⁷ Source: Wikipedia. <u>https://en.wikipedia.org/wiki/Widdringtonia_whytei</u>

¹⁸ Source: <u>https://www.bgci.org/wp/wp-content/uploads/2023/02/Mulanje-Cedar-Global-Trees-PDF-version.pdf</u>

¹⁹ IUCN. 2017. The IUCN Red List of Threatened Species.

²⁰ GoM. 2015(d). National Elephant Action Plan for Malawi 2015–2025.

Aquatic ecosystems: Aquatic ecosystems cover about 20 percent of the total surface area of Malawi and are habitats to an astonishing diversity of fish and other aquatic fauna and flora. It is the ninth-largest lake in the world and the third-largest in Africa. It is over 2 million years old and a center of endemism for Cichlid fish. There are at least 800 species of Cichlids in Lake Malawi, of which 117 are classified as threatened by the IUCN. The lake contains the largest number of freshwater fish species in the world, 30 percent of all known cichlid species,²¹ and 4 percent of the world's fish species. Of particular significance, however, is the decline of the endemic Chambo, of which there are three species: (i) *Oreochromis lidole*, (ii) *Oreochromis karongae*; and (iii) *Oreochromis squamipinnis*. The former is endemic to Lake Malawi, Lake Malombe, and the Shire River and is harvested extensively in Lake Malawi for food, sale, and trade. It is now listed in the IUCN Red List as an endangered species on account of its precipitous decline.

Wetlands: Elephant Marsh was designated a Ramsar wetland of conservation value in 2017. Eight of the waterbird species that have been recorded at Elephant Marsh or at least in the lower Shire River area are globally threatened species. These are: Madagascar Squacco Heron, Lesser Flamingo, Wattled Crane, Southern Crowned Crane, Great Snipe, Bar-Tailed Godwit, Curlew Sandpiper and African Skimmer. However for only one of these species, African Skimmer, does the Elephant Marsh appear to be a significant locality. Otherwise, the value of Elephant Marsh lies in its supporting a wide diversity of waterbirds and, more especially, particularly high numbers of aquatic birds.²² Originally home to more than 800 Elephants, hence the name, now none remain.

Wetlands, such as Lake Chilwa and the Elephant Marsh, are important for livelihoods and climate resilience. They support important fisheries, livestock grazing, and agriculture, especially during dry periods where water elsewhere in the landscape is scarce.²³ Malawi's wetlands support populations of internationally significant water bird populations, including both resident and migratory populations. It also supports populations of hippopotamus, and several species of fish and aquatic invertebrates, including the newly identified sub-species of the butterfly Colotis amata that breeds exclusively on the lake edge surrounded by the evergreen shrub Salvadora persica. The Elephant Marsh also plays an important role in flood storage and attenuation and for purifying sediment-rich water flowing through the Shire system.

Ecology, Biodiversity and Protected Areas: Multiple Key Biodiversity Areas aim to prevent the rapid loss of biodiversity by supporting nationally led efforts to identify places that are critical for the survival of unique plants and animals, and the ecological communities they comprise. Malawi has 96 protected areas, comprising forest reserves, national parks, and wildlife reserves. These cover a total of 10,585 km²—or 11.2 percent of Malawi's total land area.²⁴ National parks include the Kasungu Nationa Park, Lake Malawi National Park, Lengwe National Park, Liwonde National Park, and Nyika National Park. Game and wildlife reserves include the Majete Wildlife Reserve, Mwabvi Wildlife Reserve, Nkhotakota Wildlife Reserve and Vwaza Marsh game Reserve. All, northern, central and southern region comprise a number of Forest Reserves each. Forest reserves are managed by the DoF and national parks and wildlife reserves by the DNPW. Many of these protected areas are also categorized as important bird areas. These areas face considerable challenges with illegal logging and encroachment, poaching for ivory, traditional-muti, and

²¹ UNESCO. 2018. Lake Malawi National Park.

²² Anchor Environmental, Climate Resilient Livelihoods and Sustainable Natural Resource Management in The Elephant Marsh. Sub-Study 4, Biodiversity of the Elephant Marsh, 2016, page 140.

²³ Arthur and Hara. 2017. Climate Resilient Livelihoods and Sustainable Natural Resources Management in the Elephant Marshes—Livelihoods Report.

²⁴ GRID-Arendal. 2013. Zambezi River Basin—Atlas of the Changing Environment.

hunting for bush meat. This contributes to significant declines of native species of tree, especially the Mulanje Cedar, the national tree of Malawi.



Figure 1 Key Biodiversity Areas in the Central and Southern Region²⁵

Hydrology: Malawi has abundant surface water resources, both Lake Malawi and many large perennial rivers flowing from the highland areas. Despite abundance becoming a water scarce country.

Surface Water: Lake Malawi is the largest water body in Malawi, and is the dominant control on the surface water drainage network in the country. The only river flowing out of Lake Malawi is the Shire River,

²⁵ Source: keybiodiversityareas.org

which flows south into Mozambique, where it flows into the Zambezi River. The main rivers flowing into Lake Malawi are the Songwe, South Rukuru, North Rukuru, Dwangwa, Linthipe and Bua. The Songwe river marks Malawi's northern boundary with Tanzania, and flows into Lake Malawi at its northern end. The South Rukuru river is the main river in the Northern region of Malawi, flowing though the Nyika Plateau to the lake. The Bua and Dwangwa rivers flow through central Malawi into the lake. Rua River forms south eastern border of the country with Mozambique, flows into the Shire River in the Elephant Marsh. River suffers significant flooding during tropical storms and cyclones and channel-relocation affecting the international boundary.

These major rivers typically drain wide 'dambos' in the plateau areas, which have steep valley sides that become less steep as they reach the rift valley. The upper Shire Valley has a wide alluvial plain, changing to a narrower valley with gorges and rapids in the lower part.

The next largest lake in Malawi is Lake Chilwa, which forms an internal drainage basin and mainly drains the northern uplands. Rivers flowing into the Chilwa basin tend to be ephemeral in their lower courses, losing water to permeable valley alluvial deposits. Recent years, Lake Chilwa has dried out during dry season.

Groundwater: The natural quality of groundwater across much Malawi is thought to be generally suitable for drinking. However, groundwater chemistry is highly dependent on aquifer lithology (rock type and mineralogy), and so it is highly variable spatially. Groundwater in alluvial aquifers is generally more mineralized than that in basement aquifers, and a number of boreholes in alluvial aquifers have been abandoned due to high salinity. The revised National Water Master Plan (Republic of Malawi 2014) states that the priority for consumptive water use is for domestic water, irrigation and livestock. There is little information or knowledge about environmental water flows or how groundwater supports environmental flows, or any guidelines for estimating them.

Deforestation: Malawi's natural capital is degrading, with implications for agricultural productivity and economic growth. With 97–98 percent of households relying on solid biomass—mainly firewood and charcoal— for cooking, typically on inefficient traditional stoves, fuelwood harvesting has been identified as a major driver of deforestation and forest degradation in Malawi. Unsustainable farming and grazing practices have also contributed significantly to land degradation, resulting in reduced vegetation cover and growing areas of bare land. A 2017 study found 7.7 million hectares—more than 80 percent of Malawi's land area—could benefit from land restoration interventions. An economic analysis found that, because topsoil loss harms crop productivity, just a 10 percent increase in topsoil loss could affect maize yields enough to reduce Malawi's GDP by 1 percent. Watershed degradation has also affected the availability and quality of water resources.²⁶

Restoring degraded landscapes is crucial to preserving Malawi's natural capital, boosting crop productivity, and building climate resilience—and reduce GHG emissions. Malawi has lost large shares of its forests to clearing for cropland and through fuelwood harvesting, and unsustainable farming and grazing practices have further degraded the land. Land degradation is reducing land fertility and vital ecosystem services, such as water regulation, flood mitigation, erosion control, pollination, biodiversity, and carbon storage. Efforts to address land degradation have been anchored in the 2016 Malawi National Forest Landscape Restoration Strategy. The World Bank-financed Malawi Watershed Services Improvement Project, launched in 2020, is already supporting the promotion of sustainable landscape management practices in targeted watersheds. Malawi's pledge to restore 4.5 million hectares under the

²⁶ World Bank Group, Country Climate and Development Report: Malawi, October 2022, Page 19.

Bonn Challenge and the African Forest Landscape Restoration Initiative will further increase areas under improved management. Energy sector interventions are also expected to significantly reduce pressure on forests.²⁷

Another key benefit of improved land management is a reduction in flood risks. When torrential rains come, healthy forests and other natural landscapes can significantly mitigate flood risks, as they can hold large amounts of water. The vegetation cover also protects the soil from being carried away. Figure 5 shows the projected loss of capital from a once-in-10-years flood in two climate scenarios relative to current conditions, reflecting the benefits of both development measures (the improved land management practices included in the ASP scenario), and of complementary adaptation measures. In the high-emissions scenario (RCP8.5), in 2050, increased land degradation and climate change impacts combined increase losses by almost 25 percent. Improved land conditions in the ASP and RES scenarios significantly reduce flood-related losses.²⁸

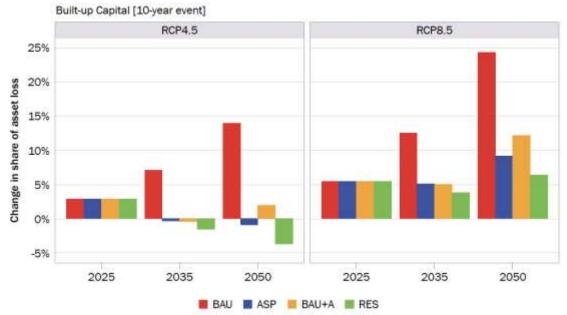


Figure 2 Projected change in asset losses from inland flooding in different policy scenarios²⁹

3.2 Socioeconomic Baseline

Economic Outlook and Macroeconomic Performance: Malawi is one of the poorest countries in the world, ranked 170 of 188 countries on the Human Development Index, by UNDP. More than 70 percent of the population lives below the international poverty line of USD 1.90 per capita per day and GDP per capita is just USD 372 (2015). Both inequality and poverty rates are high. About 20.7 percent of people are so poor that they cannot afford to eat a minimum daily recommended food intake, and at least 37 percent of children under five are chronically undernourished and stunted (low weight for age). Poverty

²⁷ World Bank Group, Country Climate and Development Report: Malawi, October 2022, Page 15.

²⁸ Ditto, Page 40.

²⁹ Ditto, p. 40

is also unequally distributed. The intra-regional variation is more pronounced in the south, where some districts have poverty rates over 80 percent and others under 20 percent.³⁰

According to the World Bank's Malawi Economic Monitor, the economy has had a difficult start in 2023. Economic growth is only expected to increase slightly to 1.4 percent in 2023. The trajectory is driven by long-standing macroeconomic imbalances, an ongoing debt and balance-of-payments crisis and the impacts of Tropical Cyclone Freddy. The latter is estimated to have caused production losses equivalent to USD \$ 36.4 million.³¹

Population: According to the World Bank's Environmental Country Analysis, over the past 20 years, Malawi has faced rapid population growth and steadily increasing population density.³² The population is growing quickly. It has increased from just under 3 million in 1950 to over 18 million in 2017. It is anticipated that by 2050 the population will be over 40 million.³³ Population density has also grown. Apart from Rwanda and Burundi, Malawi has the highest population density in the region, currently over 180 people per square kilometer. The population is also very young with a median age of 16.5.³⁴ With the increase in child survival seen in recent decades and persistently high fertility, Malawi's age structure is young.³⁵ However, adult survival in Malawi continues to improve, and current estimates suggest that 74 percent of 15-year-olds will survive until age 60.³⁶

Malawi is urbanizing at a slower rate than other countries in the region. According to the 2020 Malawi Integrated Household Survey, the majority of the population (84.4%) are still rural based while only 15.6% are in urban areas. It is anticipated that only 20 percent of Malawi's population will live in an urban environment by 2040.³⁷ 83 percent of Malawi's poor live in rural parts of the country and these numbers are rising. Some regions face greater poverty issues than others and nearly half of Malawi's poor population live in the southern part of the country.

Governance: Despite a weak fiscal position, Malawi has a multiparty, democratic political system. The present government is implementing a series of institutional and fiscal reforms to improve service delivery. Malawi has significant governance and institutional challenges that limit delivery of basic services needed to develop human capital, including health and education services. With the process of devolution partially underway, responsibility for basic service delivery increasingly resides with 35 local authorities, which do not have full administrative and financial powers.³⁸

Education: Literacy is defined as the ability to read and write. Specifically, this analysis classifies all those who can read and write in Chichewa or English or any other language as being literate. Among males,

³⁰ World Bank 2019.

³¹ World Bank Malawi Economic Monitor, 2023 accessed at: https://www.worldbank.org/en/news/press-

release/2023/07/19/new-afe-malawi-economic-update-calls-for-urgent-action-to-address-macroeconomic-imbalances-and-increase-energy-access

³² World Bank, Malawi: Environmental Country Analysis, January 2019.

³³ United Nations. 2017. World Population Prospects 2017.

³⁴ World Population Review. 2018. Malawi Population 2018.

³⁵ World Bank. Policy Brief: Demographic Challenges and Oportunities in Malawi, 2018.

³⁶ World Bank Group, Overcoming Challenges to Transforming Human Capital in Malawi. Human Capital Review Report, September 2022, p.47.

³⁷ World Bank. 2017(a). Malawi Economic Monitor: Harnessing the Urban Economy.

³⁸ World Bank Group, Overcoming Challenges to Transforming Human Capital in Malawi. Human Capital Review Report, September 2022, p.25.

almost 76 percent are literate while half of females are literate. Education services are provided by the government. Free education has led to 88 percent net enrollment in primary schools. However, the completion rate of Primary School is just 33 percent. According to a UNICEF report, girls, children in urban areas and the wealthiest households have a better chance of completing primary school than boys, children in rural areas and children in poor households. Of children of lower secondary school age, only 12 percent attend the lower secondary school or a higher level.³⁹ Access to tertiary education has been increasing in the country, yet enrollment rates are among the lowest in the world. Between 2017 and 2018, enrollment in public higher education increased from 25,000 to 30,975.⁴⁰

Health: The health situation in Malawi is characterized by a high prevalence of communicable diseases like HIV/AIDS, malaria, tuberculosis, cholera high incidence of maternal and child health problems. An increasing burden of non-communicable diseases including protein energy malnutrition, road traffic accidents, and hypertensive heart disease.⁴¹ and resurgence of tropical diseases is also noted. Access to essential health care and essential medicines is also limited.

The maternal mortality ratio is 347 deaths per 100,000 live births, which is lower than the sub-Saharan average (534 deaths per 100,000 live births), but it is higher than in the neighboring countries Mozambique and Zambia. A mix of supply-side (health systems) and demand-side factors increase the risk of obstetric complications leading to maternal mortality. Maternal and neonatal health services are provided in all 28 districts, but limited coverage and access to health services, essential equipment and medications, and socioeconomic factors contribute to maternal mortality. The direct cause of maternal mortality in Malawi is often obstetric complications compounded by limited access to health services.⁴²

Livelihoods and Poverty: More than 20 percent of the population of Malawi is 'ultra-poor' and over 50 percent is considered moderately poor. The impacts of poverty are exacerbated by limited access to education, employment, and markets, as well as high prevalence of diseases such as malaria and HIV /AIDS. Natural resources are the main source of livelihood for most families. The majority of rural families depends heavily on natural resources for their livelihoods, in particular woodlands and forests, for the provision of wood fuel, enhancing soil fertility, generating cash income and supplying protein. Most Malawian households, including most of the poorest ones, are involved in agriculture, 85 percent of the population depend on farming.

The economy depends heavily on agriculture, which employs nearly 80 percent of the population, and 82.5 percent of the population resides in rural areas.⁴³ Its gross domestic product has historically been correlated with climate shocks.⁴⁴

Malawi's fisheries sector provides an important livelihood for many Malawians, and protein consumed through fish is particularly important for a lot of poor households. Figures for total landed catches are increasing and now stand at around 199,454 tons per year (2017), with a rapid increase since 2014. The

³⁹ UNICEF, School-Age Children, Quality Learning and Protection, 2022, accessed at: https://www.unicef.org/malawi/school-age-children

⁴⁰ World Bank Group, Overcoming Challenges to Transforming Human Capital in Malawi. Human Capital Review Report, September 2022, p.46.

⁴¹ WHO, WHO Country Cooperation Strategy 2017-2022, Malawi.

⁴² World Bank Group, Overcoming Challenges to Transforming Human Capital in Malawi. Human Capital Review Report, September 2022, p.31.

⁴³ World Bank, Malawi Economic Monitor, December 2021.

⁴⁴ World Bank, Malawi and Southern Africa: Climate Variability and Economic Performance, 2003.

reasons for this apparent increase are complex, reflecting changes in species composition of harvests, increasing fishing effort, and changes in the way in which fish stocks have been monitored.

The Table below shows that among rural populations 89 percent of income derive from crops, 20 percent from livestock, and 47 percent from agricultural wages. Despite the large numbers of people engaged in farming, agriculture contributes just 30 percent of gross domestic product (GDP). Urban households' income sources are more diverse, with most income coming from wage labor and self-employment. The overall picture confirms the importance of agriculture to rural and urban household incomes. It is a major driver of the continued pressure on land and other natural resources across the country, and this pattern does not appear to be changing at present.

	Malawi			Urban Areas			Rural Areas		
	2004	2010	2013	2004	2010	2013	2004	2010	2013
Agricultural				10 01			·		
Crop	77.2	85.9	83.8	35.7	43.1	52.2	83.4	93.2	89.3
Livestock	58.4	18.1	20.6	12.7	6.5	7.9	65.2	20.02	22.8
Agricultural wage	50.8	44.6	47.0	26.8	30.1	39.4	54.4	47.04	48.3
Nonagricultural									
Nonfarm wage	21.1	21.4	19.3	53.8	58	48.6	16,2	15.2	14.2
Self-employment	30.6	22.2	30.8	35.9	38.2	49.7	29.8	19.5	27.5
Transfers	85.9	28.4	36.5	64.4	34.1	52.2	89.1	27.5	33.8
Other	9.5	6.2	7.6	24.7	19.6	22.2	7.3	3.9	5.0

Table 4 Proportion of households obtaining income from the various sources, 2004, 2010, and 2013 (%)

Source: World Bank. 2017(a). Malawi Poverty Assessment team calculations based on IHS2 and IHS3.

Poverty is persistent and widespread in the Shire River Basin, with poverty rates exceeding 60 percent in several districts.⁴⁵ High population density and high poverty levels in the Basin lead to significant human pressure on its natural resource base. Unsustainable management of its natural resources has led to severe landscape degradation, which in turn increases flood incidences. Today, more than half a million people currently reside in areas adjacent to the river in the lower Shire, making them vulnerable to both droughts and floods.

The skilled workforce in the country is inadequate, mostly because of limited skills development and learning opportunities that are critical to increasing productivity, income, and employment, especially for youth and women. The labor force participation rate is high, but there are gender gaps in economic opportunities. The total labor force participation rate in Malawi is 76 percent, compared to 60.9 percent globally and 67.9 percent in Sub-Saharan Africa. Female labor participation is 72.5 percent, compared with 80.4 percent for men, and female wage workers earn about 64 cents for every dollar that men earn. Female entrepreneurs have less access to capital and hire fewer workers, which limits their earnings; there are also more salaried men than women in Malawi.⁴⁶

⁴⁵ Caruso, G. and L. Cardona Sosa. 2022. "Poverty Persistence in Malawi: climate shocks, low agricultural productivity and slow structural transformation" Malawi Poverty Assessment. Washington, DC: World Bank Group.

https://documents1.worldbank.org/curated/en/099920006302215250/pdf/P174948072f3880690afb70c20973fe214d.pdf. ⁴⁶ World Bank Group, Overcoming Challenges to Transforming Human Capital in Malawi. Human Capital Review Report, September 2022, p.45.

Gender Equality Dynamics: Malawi has achieved gender parity with respect to primary school enrolments, which indicates an improvement in attitudes towards girls' education. However, according to the World Bank's Country Environmental Analysis, the majority of women in Malawi are informally employed in the natural resource sector, and their livelihood and food security are more likely to be adversely affected by deforestation, land degradation, and resource depletion. 90 percent of women above the age of 15 state they are reliant on natural resources for domestic activities (for example, collecting firewood, fetching water, and wild fruits for home consumption) in comparison to 24 percent of men. 24 percent of households in Malawi are female-headed. When resources are scarce, these households are disproportionately affected and more likely to fall into the poverty trap. Malawi ranks 145 of 188 countries on the United Nations Gender inequality Index and 116 of 153 on the Global Gender Gap Index.⁴⁷

It is estimated that gender inequality in the agriculture sector alone is costing the country USD 100 million and 7.3 percent in crop production annually. Closing this gap has the potential to alleviate poverty for as many as 238,000 people.⁴⁸ The World Bank Gender Assessment in Malawi indicated that the total conditional gender gap in agricultural productivity is 31 percent. Drivers of the gender gap include: that women are less likely to farm cash crops; women farmers have less access to male labor; and women have less access to agricultural technology and mechanization – which is especially detrimental given women's greater childcare and domestic responsibilities, which leave them in more need of labor-saving options. Women entrepreneurs' sales are 46 percent less than those of male entrepreneurs because men are more likely to use their own agricultural savings as startup capital, reflecting their greater agricultural productivity which allows them to save, and to have workers and to pay them more. Women wage workers receive lower wages and are more likely than men to not be paid for their work, because women are more likely to have time constraints due to performing unpaid domestic and care work, and they are more likely to work in the informal sector due to lower educational attainment and skill levels.⁴⁹

Furthermore, high levels of adolescent marriage and childbearing limit girls' ability to obtain an education and gain skills needed to compete in the global market, which limits their economic opportunities and income.⁵⁰

Women and girls are subject to high levels of -Based Violence: 42 percent of girls in Malawi experience physical violence before the age of 18. 42 percent f women are married before the age of 18, and 9 percent are married before the age of 15. 38 percent of ever-partnered women aged 15-49 years experienced intimate partner violence at least once in their lifetime, and 24 percent in the last 12 months. This makes Malawi features among the 20 countries in the world with the highest incidence of IPV. 1 in 5 women have experienced sexual violence, and 14 percent have experienced sexual violence in the past year. 49 percent of women who experienced physical or sexual violence have never sought help nor told anyone about it.⁵¹

⁴⁷ UNDP 2019. Human Development Report 2019: Inequalities in Human Development in the 21st Century; WEF. 2020. Global Gender Gap Report 2020. See also: https://evaw-global-database.unwomen.org/en/countries/africa/malawi.

⁴⁸ World Bank. 2015. The Cost of the Gender Gap in Agricultural Productivity in Malawi, Tanzania, and Uganda.

⁴⁹ World Bank Group, Malawi Gender Assessment, Eastern and Southern Africa Gender platforms, 2022, p.10.

⁵⁰ World Bank Group, Overcoming Challenges to Transforming Human Capital in Malawi. Human Capital Review Report, September 2022, p.19.

⁵¹ Malawi National Statistical Office (NSO). Malawi Demographic and Health Survey 2015-2016.

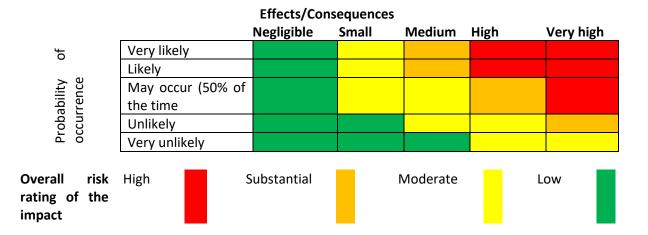
Energy and Electricity: Malawi's power sector is one of the most severely constrained in sub-Saharan Africa. Access to electricity remains at just 13.4 percent of the population of 18 million. For the 80 percent of the people living in rural areas, access to electricity is barely existing, rather relying on biomass as fuel wood or charcoal as energy sources for cooking and heating. The total installed capacity for power generation in the interconnected grid of Malawi operated by the Electricity Supply Corporation of Malawi (ESCOM) is approximately 362 megawatts (MW), of which 351 MW is hydropower and 11 MW is reciprocal engines (diesel sets). Some off-grid photovoltaic installations exist but they are very few. With the majority of Malawi's hydropower generation derived from the Shire River located south of Lake Malawi, the hydrology of the river determines, to a great extent, the available output of electricity at any time. Estimates indicate that shortage of capacity frequently exceeds 60 MW, or over 17 percent of peak demand in Malawi. With no reserve margin and a stressed system, the reliability and quality of electricity supply is poor. Malawi depends on domestic generation, as there are currently no significant interconnections to neighboring countries.

4. Environmental and Social Risk Classification

4.1 Risk and Impacts Assessment Methodology

The assessment of impacts is an iterative process underpinned by four key questions: **Prediction**: what change to the physical, chemical or social environment will occur if the project is implemented?; **Evaluation**: what are the consequences of this change? How significant will its impact be on human and biological receptors; **Mitigation**: if it is significant can anything be done about it?; **Residual Impact**: is it still significant after mitigation? Where significant residual impacts remain, further options for mitigation will be considered and where necessary impacts are re-assessed until they are reduced. The figure below shows the methodology that will be used to assess impacts.

Table 5 Risk assessment methodology



4.2 Identification and Assessment of Risks and Impacts

The environmental and social risk classification for the project is *High*.

Environmental Risks and Impacts: The environmental risk is *High* due to the cumulative context of low borrower capacity to adequately assess risks and impacts and commitment to implement appropriate management measures, and the site, system, and cumulative impact of the multiple civil works at various locations and on already degraded and sensitive ecosystems. The proposed hydraulic infrastructure includes potential impacts from civil works: (i) loss of riverine, woodland and remnant rainforest resulting in more loss of dwindling habitat for endemic and migratory species and contribution to climate change; (ii) spillage and increased sediment load into water courses during construction activities and loss of riparian buffers; (iii) wash bays for cleaning construction equipment discharging into watercourses; (iv) inadvertently promoting illegal river sand mining which further undermines existing and new structures; (v) occupational and community health and safety risks working next to water especially in the wet season, and traffic safety for pedestrians and other road users during construction; (vi) impact of informal vendors around construction sites including sanitation, waste, and STIs; (vii) poor waste management and illegal disposal; (viii) increased deforestation for fuelwood/charcoal for cooking for laborers and informal

vendors; (ix) exacerbation of existing erosion problems especially along water courses; (x) cumulative impacts of floods and construction debris downstream into Elephant Marsh and other key biodiversity areas; (xi) poor or inefficient design and poor construction resulting in future structure failure; (xii) impacts/damage to other infrastructure such as water supply pipes, sanitation pipes, irrigation infrastructure, and footpath/access routes; (xiii) ineffective community sensitization resulting in damage to structures to re-instate access routes for farming, livestock watering, access for washing or construction of dwellings; (xiv) continued poor/lack of runoff management within catchments; (xv) creation of borrow pits. There are operational concerns associated with inadequate risk and impact identification, assessment, mitigation and monitoring/ supervision including ESMP and C-ESMP implementation and construction processes across multiple sites, and weak regulatory and technical oversight capacity at national and district level. Without adequately addressing the challenges of runoff across the landscape and land uses, implementing runoff reduction measures, infrastructure will continue to be damaged, and communities will continue to be flooded resulting in loss of crops and infrastructure.

Social Risks and Impacts: The social risk is *High* due to the scope of the proposed activities, including TA activities and proposed civil works across multiple sites and due to the limited capacity to manage social risks in Malawi. Social risks related to land acquisition include loss of land or other assets, social and gender exclusion, inadequate consultations and engagement, lack of compensation at replacement cost, lack of access to grievance mechanisms, and failure to restore livelihoods. The activities may also create or exacerbate the existing tension and conflicts, between communities and households over access to resources and project benefits. Potential social risks relate to: (i) insufficient community and other stakeholder engagement; (ii) social tensions/conflicts induced by competition over project benefits including employment opportunities; (iii) labor influx and associated risks including risks on community health and safety, SEA/SH and other forms of GBV; (iv) operational concerns associated with monitoring and supervising social risks including grievance management; and (v) weak implementation capacity at the national and district level. Other social risks include the failure to comply with labor standards notably working hours and timely payment of compensation. These risks also need to be considered in the context of the preparation and implementation of a number of other donor funded projects. TA activities are mainly to build resilience through capacity building, and institutional strengthening activities that will help enhance ability of selected entities and communities to prepare for and respond to climate risks. This will bring benefits to these communities but there is also the potential for elite capture and the exclusion of vulnerable groups including women especially in relation to component 3 activities.

<u>SEA/SH Risks</u>: The SEA/SH risk rating is considered to be *Substantial*. Malawi has high rates of GBV, including intimate partner violence (IPV) and sexual violence⁵². Key drivers for GBV and Intimate Partner Violence (IPV) include high rates of early marriage and childbirth, low levels of economic independence and low levels of education. While legislation exists to prevent and respond to GBV, there is weak enforcement and critical national action plans on GBV require updating. Resources to address GBV are also limited and fragmented in the Southern Region. Labor influx is anticipated during construction with works located close to rural villages. This includes risks of workers subjecting community members including minors to SEA/SH. This may take the form of rape as well as transactional sexual relations. SEA/SH may also occur on worksites, in workers' camps or in exchange for employment opportunities on the Project. The Project will be implemented over a dispersed geographical footprint with multiple sites where male and female workers may be in close proximity or where male workers will be close to communities with limited supervision.

⁵² Malawi Gender Based Violence Assessment, World Bank March 2022

4.3 Identification of Risks and Impacts

The below Table presents the potential risks and impacts as per Component and assessment of the risk.

Table 6 Potential E&S Risks and Impacts

Component and Subcomponent	Activities	Potential Risks and Impacts	Risk Assessment 53
Component 1. Risk Management and Climate Financing	TA to support integrated management strategy TA to improve early warning system and collection of hydromet data TA to support development of national drought policy	Environmental Risks:TA may pose downstream environmental risks, such as lack of environmental protection and waste management, etc (ESS3)Social Risks:Lack of adequate understanding of risks and impacts of sub-projects (ESS1) Lack of adequate access to grievance redress mechanisms (ESS10)Inadequate stakeholder engagement (ESS10) Downstream social risks emanating from TA (ESS1)	
	TA to support foundations for MRV system E&S capacity building activities.		
Component 2. Infrastructure Inves tments	Reconstruction and rehabilitation of critical	Environmental Risks: Lack of capacity to adequately assess risks and impacts (ESS1)	

⁵³ (red = high; orange = substantial; yellow = moderate; green = low)

and Sustainable	connectivity	Inadequate risk and impact identification, assessment, mitigation and	
Asset Management	(roads/bridges) and critical	monitoring/ supervision including ESMP and C-ESMP implementation and	
for Climate	hydraulic infrastructure	construction processes across multiple sites (ESS1)	
Resilience	nyuraule illitästructure		
Basin-Level	Construction of longer-term flood resilient hydraulic	Weak regulatory and technical oversight capacity at national and district level (ESS1 and ESS3)	
Development:	infrastructure (river training, riverbank	Noise pollution and vibration linked to machinery (ESS4 and ESS2)	
	protection, drainage, dykes	Occupational Health and Safety risks from handling equipment (ESS2)	
District-Led Infrastructure	etc.)	Inadequate PPE (ESS 2)	
Development	TA to enhance capacity in the design, implementation	Inadequate understanding of EHS risks and impacts and of mitigation measures leads to accidents and health impacts (ESS2)	
and management of		Risks from natural hazards (flooding) during construction (ESS2)	
	resilient infrastructure	Occupational and community health and safety risks working next to water especially in the wet season (ESS2 and ESS4)	
	Removal of infrastructure flood debris from	Poor waste management and illegal disposal (ESS3)	
	catchments at relevant	Hazardous waste (ESS3)	
	locations	Air pollution through dust and emissions from machinery and vehicles (ESS3)	
	Landscape Restoration activities in priority	Soil and water contamination and degradation of water bodies caused by discharge of waste (ESS3)	
	catchments	Pollution of local surface water sources (ESS3)	
	Activities implemented	Soil erosion (ESS3)	
	through public works/ community works	Spillage and increased sediment load into water courses during construction activities and loss of riparian buffers (ESS3)	
	,	Wash bays for cleaning construction equipment discharging into watercourses (ESS3)	
		Promotion of illegal river sand mining which further undermines existing and new structures (ESS3)	
		Risks from natural hazards (flooding) during operation (ESS4)	

Vehicular traffic during facility construction and operation may potentially cause	
congestion on the local routes, generate noise, and pose safety hazards for the	
local population, particularly for children and elderly people (ESS4)	
Construction/rehabilitation and structural safety risks (ESS4)	
Impact of informal vendors around construction sites including sanitation, waste,	
and STIs (ESS4)	
Poor or inefficient design and poor construction resulting in future structure	
failure (ESS4)	
Impacts/damage to other infrastructure such as water supply pipes, sanitation	
pipes, irrigation infrastructure, ESCOM structures, and footpath/access routes (ESS4)	
Ineffective community sensitization resulting in damage to structures to re-	
instate access routes for farming, livestock watering, access for washing or	
construction of dwellings (ESS4)	
Ineffective implementing runoff reduction measures, infrastructure will continue	
to be damaged, and communities will continue to be flooded resulting in loss of	
crops and infrastructure (ESS4)	
Continued poor/lack of runoff management within catchments (ESS4/ESS6)	
Cumulative impact of the multiple civil works at various locations and on already	
degraded and sensitive ecosystems (ESS6)	
Loss of riverine, woodland and remnant rainforest resulting in more loss of	
dwindling habitat for endemic and migratory species and contribution to climate	
change (ESS6)	
Increased deforestation for fuelwood/charcoal for cooking for laborers and	
informal vendors (ESS6)	
Exacerbation of existing erosion problems especially along water courses (ESS6)	
Cumulative impacts of floods and construction debris downstream into Elephant	
Marsh and other key biodiversity areas (ESS6)	
Human Wildlife Conflict (ESS6)	
Social Risks:	
Lack of capacity to adequately assess risks and impacts (ESS1)	

	Inadequate risk and impact identification, assessment, mitigation and	
	monitoring/ supervision including ESMP and C-ESMP implementation and	
	construction processes across multiple sites (ESS1)	
	Weak regulatory and technical oversight capacity at national and district level	
	(ESS1)	
	Downstream social risks emanating from TA (ESS1)	
	Violations of labor and working conditions (ESS2)	
	Risk of Child labor (ESS2)	
	Risk of Forced Labor (ESS2)	
	Failure to comply with labor standards notably working hours and timely payment of compensation (ESS2)	
	SEA/SH for project workers and community members (ESS2 and ESS4)	
	Discriminatory practices in accessing project services, and benefits (ESS4)	
	Lack of adequate budgets for O&M (ESS4)	
	Labor influx and associated risks including risks on community health and safety,	
	SEA/SH and other forms of GBV (ESS4)	
	Social tensions/conflicts induced by competition over project benefits including	
	employment opportunities (ESS4)	
	Operational concerns associated with monitoring and supervising social risks	
	including grievance management (ESS4)	
	Physical displacement	
	Loss of or loss of access to land or other assets used to support livelihoods	
	Social and gender exclusion, inadequate consultations and engagement in	
	relation to land loss (ESS4 and ESS5)	
	Lack of compensation at replacement cost (ESS5)	
	Failure to restore livelihoods (ESS5)	
	Lack of access to grievance redress mechanisms (ESS10)	
	Exclusion of vulnerable groups from Project activities and consultations (ESS10)	

		Inadequate stakeholder engagement (ESS10)	
		Environmental Risks:	
Component 3.	Expanding the social		
Adaptive Climate	protection registry in the	Social Risks:	
Services for Resilient			
	Regions	Inadequate understanding of risks and impacts of sub-projects (ESS1)	
		Violations of labor and working conditions (ESS2)	
	Community awareness on	Lack of understanding of EHS risks and impacts and of mitigation measures leads	
	climate resilience risks	to accidents and health impacts (ESS2)	
Social recovery packages (basic health services		Risk of Child labor (ESS2)	
	(basic health services,	Risk of Forced Labor (ESS2)	
	psychological support, basic	Risks of labor influx (ESS2 and ESS4)	
	package of clothing and household requirements).	SEA/SH for project workers and project-affected persons (ESS2 and ESS4)	
		Bias and corruption in the selection of institutions and trainees/beneficiaries (ESS4)	
		Lack of access to grievance redress mechanisms (ESS10)	
		Exclusion of vulnerable groups in project activities and consultations (ESS10)	
		Social tensions/conflicts induced by competition over project benefits including employment opportunities (ESS4)	
		Inadequate stakeholder engagement (ESS10)	
		Downstream social risks emanating from TA (ESS1)	
		Elite capture and the exclusion of vulnerable groups including women (ESS4 and ESS10)	

5. Project Mitigation Measures and Management of Risks and Impacts

In line with ESS1, for the elaboration and implementation of the environmental and social mitigation measures, the project is adopting the following mitigation hierarchy approach:

- 1. Anticipate and avoid risks and impacts;
- 2. Where avoidance is not possible, minimize or reduce risks and impacts to acceptable levels;
- 3. Once risks and impacts have been minimized or reduced, mitigate;
- **4.** Where significant residual impacts remain, compensate for or offset them, where technically and financially feasible.

The below generic Environmental and Social Management Plan (ESMP) lists the prevention, minimization, mitigation and compensation activities for each activity's risks and impacts. It disaggregates them by ESS. The generic ESMP presents standardized management and mitigation procedures for handling environmental and social risks resulting from the project in the local context. The generic ESMP should therefore serve as a reference on risks and impacts during construction and operational phases and in regards to the associated international industry best practices and mitigation measures that can be planned and implemented throughout the project life cycle. The items in the generic ESMP can serve as a template for site-specific mitigation and monitoring measures to be included in subproject-specific ESIAs/ESMPs.

5.1 Environmental and Social Management Plan (ESMP)

Table 7 Project ESMP and Monitoring Table

			Phase			Freque	ncy of Mor	itoring		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for implementation and monitoring	Estimated Cost (in USD) ⁵⁴
ESS 1: Environmental and Social Asse	ssment									
Inadequate capacity to adequately assess risks and impacts	Screen each subproject prior to implementation Prepare all relevant E&S instruments to mitigate risks and impacts Raise awareness of E&S risks among all implementers Recruitment of qualified personnel on E&SS	X			% of subprojects that have been screened # of additional E&S instruments prepared	x			Implementati on: PIU Monitoring: PIU	Monitoring costs: Included in staff time
Inadequate risk and impact identification, assessment, mitigation and monitoring/ supervision including ESMP and C- ESMP implementation and construction processes across multiple sites	Screen each subproject prior to implementation Ensure rigorous monitoring of rehabilitation and construction through field visits and spot checks		x		% of subprojects that have been screened % of sub-project visited per month	x			Implementati on: PIU Monitoring: PIU	Included in staff time Travel budget

⁵⁴ The costs cannot be fully determined at this stage. They will be calculated for each activity in the activity-specific ESMPs.

			Phase			Frequ	ency of Mor	nitoring		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for implementation and monitoring	Estimated Cost (in USD) ⁵⁴
Weak regulatory and technical oversight capacity at national and district level	Create regulatory and technical awareness among respective institutions at national and district level through provision of awareness sessions Provide E&S capacity building sessions at all levels		x		 # of awareness sessions at national and district levels # of capacity building exercises at all levels 			x	Implementati on: PIU Monitoring: PIU	Included in staff time Travel budget
Downstream E&S risks emanating from TA	Include all relevant E&S provisions into every Request for Proposals or TOR, and in every contract	x			% of RFPs or TOR contain all relevant provisions on E&S	Х			Implementati on: PIU Monitoring: PIU	Monitoring costs: Included in staff time
ESS 2: Labor and Working Conditions										
Occupational Health and Safety risks from handling equipment	Train workers appropriately on OHS risks, hazards and safe handling of equipment and procedures, based on EHS Guidelines on OHS ⁵⁵ Provide appropriate PPE, continuous reminders to use PPE, use of signage and continuous	x	X		 # of safety incidents # of workers' grievances filed % of workers with adequate PPE 		x		Implementati on: Contractor Monitoring: PIU	Monitoring costs: Included in staff time Travel costs for monitoring activities

⁵⁵ IFC, Environmental, Health and Safety Guidelines, accessed at: <u>https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at</u> ifc/policiesstandards/ehs-guidelines

			Phase			Freque	ncy of Mon	itoring		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for implementation and monitoring	Estimated Cost (in USD) ⁵⁴
	supervision, based on EHS Guidelines on OHS Recruit qualified and licensed drivers and machine or plant operators Communicate and implement workers' GRM Develop and implement C-ESMP including OHS Implement Labor Management Procedures (LMP) Contractor bid and contract to include various OHS requirements Report significant OHS incidents				% of bids with adequate OHS provisions listed % of drivers with appropriate qualifications and licenses # of OHS incidents timely reported, Root Cause Analysis (RCA) developed, Corrective Action Plan (CAP) identified and implemented # of registered cases of incidents are closed.					
Inadequate PPE for workers	Provide appropriate PPE Continuous reminders to use PPE, use of signage and continuous supervision of availability and use of PPE, based on EHS Guidelines on OHS		x		 # of safety incidents # of workers grievances filed % of workers with appropriate PPE 		x		Implementati on: Contractor Monitoring: PIU	Monitoring costs: Included in staff time Travel costs for

			Phase			Freque	ency of Mor	nitoring	Responsibility for implementation and monitoring	Estimated Cost (in USD) ⁵⁴
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly		
	Communicate and implement workers' GRM									monitoring activities
Lack of understanding of EHS risks and impacts and of mitigation measures leads to accidents and health impacts	Assess capacity of construction company on EHS/OHS Train workers on EHS/OHS through toolbox talks		X		% of construction companies whose capacity has been assessed. # of toolbox talks conducted # of trainings provided		x		Implementati on: Contractor/PI U Monitoring: PIU	Monitoring costs: Included in staff time Travel costs for monitoring activities
Failure to comply with labor standards, including working hours and timely payment of compensation	Establish and operationalize workers GRM Introduce transparent procedures for hiring and advertise job opportunities widely		x		# of workers grievances filed # of available GRM for workers		×		Implementer: Contractor/PI U Monitoring: PIU	Monitoring costs: Included in staff time
Risk of child labor and forced labor	Comply with minimum age set for all types of work (in compliance with national laws and ESS2) and document age of workers upon hiring (see LMP) Verify age of workers with communities where required		x		 # of workers violations (child, forced labor) # of existence/maintena nce of a labor registry 		x		Implementer: Contractor/PI U Monitoring: PIU	Monitoring costs: Included in staff time

			Phase			Freque	ncy of Mor	nitoring		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for implementation and monitoring	
	Conduct a track record search of the contractors at the bidding process (documents related to workers' rights violations, etc.) Raise awareness of communities to not engage in child labor				% of workers with age verification # of awareness campaigns at community level					
Risks of labor influx	Set up local workforce minimum content for the contractors Disclose to communities local workforce content requirement Investigate possibility of providing training to local communities on general jobs during the planning phase Maximize the use of local suppliers (for food, water, services etc.)		X		% of local workforce hired # Number of sensitization/aware ness events within communities # of local suppliers used		x		Implementer: Contractor Monitoring: PIU	Monitoring costs: Included in staff time
SEA/SH violations of project workers	Provide awareness session for workers Every worker to sign Code of Conduct (CoC) Provide training on CoC for workers		x		% of workers that signed CoCs # of trainings on CoC for workers		x		Implementer: Contractor Monitoring: PIU	Monitoring costs: Included in staff time

			Phase			Freque	ency of Mon	itoring		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for implementation and monitoring	Estimated Cost (in USD) ⁵⁴
Risks from natural hazards (flooding and lack of water due to droughts) during construction for workers and community members Occupational and community health and safety risks working next to water especially in the wet season	Prepare community health and safety programDevelop and implement a program of flood awareness for adjacent community membersTruck water during times of droughtEnsure that relevant work sites are protected from flooding during constructionPrepare and adopt Disaster risk Assessment and Emergency Preparedness Plan and Response Procedures (Risk Assessment to include consideration of climate change effects on future rainfall, quantitative analysis of flooding scenarios and other relevant GIIP.Findings and recommendations to be included into the site management and implementation procedures, design considerations, community early warning, and other ESF instruments)		x		 # of community health and safety programs prepared # of Programs of floods awareness for community members prepared and implemented % of facilities have sufficient water available during times of drought % of facilities have a response plan for flooding # of Emergency Preparedness Plans prepared 			x	Implementer: Contractor Monitoring: PIU	Staff costs Costs of trucking of water

			Phase			Freque	ency of Mor	nitoring		Estimated Cost (in USD) ⁵⁴
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for implementation and monitoring	
ESS 3: Resource Efficiency and Polluti	on Prevention and Management									
TA may pose downstream environmental risks, such as lack of environmental protection and waste management, etc	Ensure TOR for TA include provisions on E&S requirements	x			% of TOR for TA that contain provisions on E&S requirements	x			Implementer: PIU Monitoring: PIU	Included in staff time
Poor waste management and illegal disposal	Implement Waste Management Plan as part of C-ESMP		x		# of contractors that have prepared a C-ESMP		x		Implementer: Contractor Monitoring: PIU	Monitoring costs: Included in staff time
Hazardous waste	Prepare and implement Hazardous Waste Management Plan as part of ESMPs	x	x		# of Hazardous Waste Management Plans prepared		x		Implementer: PIU Monitoring: PIU	Monitoring costs: Included in staff time
Spillage and increased sediment load into water courses during construction activities and loss of riparian buffers	Avoid spillage and increased sediment load into water courses through trapping of sediment Remove sediment where already trapped Plant plants and trees along water margins and banks. Prepare a Rehabilitation Plan		x		 # of incidents recorded # of sites with plants and trees planted # of Rehabilitation Plans adopted as part of ESMPs 		x		Implementer: Contractor Monitoring: PIU	Monitoring costs: Included in staff time

			Phase			Freque	ncy of Mor	itoring		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous Monthly Quarterly	Quarterly	Responsibility for implementation and monitoring	Estimated Cost (in USD) ⁵⁴	
	taking into consideration vegetation and habitat rehabilitation, planting timing, density objectives, species selection, and ongoing management – to be adopted as part of the ESMP.									
Wash bays for cleaning construction equipment discharging into watercourses	No wash-water containing any cleaning agents should be discharged into water courses Only discharge water into sewers Only wash construction equipment at designated wash bays		x		 # of incidents recorded or grievances filed # of designated wash bays available at construction site 		x		Implementer: Contractor Monitoring: PIU	Monitoring costs: Included in staff time
Promotion of illegal river sand mining further undermines existing and new structures	Prevent or stop any illegal river sand mining takes place Only obtain sand from designated place as laid out in the C-ESMP		x		# of grievances filed # of C-ESMPs containing provisions on where to mine sand		x		Implementer: contractor Monitoring: PIU	Monitoring costs: Included in staff time Travel costs for monitoring activities
Air pollution through dust and emissions from machinery and vehicles	High level maintenance of the vehicles to reduce the vibrations		x		% of vehicles that have been recently maintained		x		Implementer: contractor	Monitoring costs:

			Phase			Freque	ncy of Mon	itoring		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for implementation and monitoring	Estimated Cost (in USD) ⁵⁴
	Selecting equipment with lower sound power levels Installing suitable mufflers on engine exhausts and compressor components Equipment casing Planning activities in consultation with local communities so that activities with the greatest potential to generate noise are planned during periods of the day that will result in least disturbance. Suitable wet suppression techniques need to be utilized in all exposed areas All unnecessary traffic must be strictly limited on site speed controls are to be enforced Monitor exhaust emissions to ambient air, waste pollutant releases to land and water.				% of vehicles with mufflers installed # of community consultations around planning				Monitoring: PIU	Included in staff time Travel costs for monitoring activities

		Phase			Freque	ncy of Mon	itoring			
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for implementation and monitoring	Estimated Cost (in USD) ⁵⁴
Soil and water contamination and degradation of water bodies caused by discharge of waste	Untreated waste effluents from the construction sites shall not be released into drinking water sources, cultivation fields, irrigation channels or critical habitats. Adopt and implement GRM		x		# of GRM cases filed # of incidents of water contamination based on regular testing		x		Implementer: contractor Monitoring: PIU	Monitoring costs: Included in staff time Travel costs for monitoring activities
Soil erosion	Ensure that design of the facility and appropriate construction planning and construction activities do not cause any soil erosion or degradation. Spoils and excess soil if generated will be disposed of appropriately. Borrow areas will be dressed to minimize safety hazards and soil erosion Avoid working on wet soil Cover soils with vegetation or mulch		x		% of appropriate designs prepared % of soil covered with vegetation		x		Implementer: contractor Monitoring: PIU	Monitoring costs: Included in staff time

ESS 4: Community Health and Safety

			Phase			Freque	ncy of Mor	itoring		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for implementation and monitoring	Estimated Cost (in USD) ⁵⁴
Air pollution through dust and emissions from machinery and vehicles Dust Emission (air quality)	Suitable wet suppression techniques need to be utilized in all exposed areas All unnecessary traffic must be strictly limited on site speed controls are to be enforced Monitor exhaust emissions to ambient air, waste pollutant releases to land and water. Suppress dust during		x		% of vehicles that have been recently maintained % of vehicles with mufflers installed # of community consultations around planning # of complaints on		X		Implementer: Contractor Monitoring: PIU Implementer:	Monitoring costs: Included in staff time Travel costs for monitoring activities Monitoring
	construction by water spraying and dampening where necessary Practice good general housekeeping at the work site sweep off the drilled-out materials Provide fit to work PPEs (dust masks) for all workers involved in the construction/rehabilitation Implement speed limit for the heavy machinery				 # of complaints off dust emissions % of workers that use dust masks # of trucks covered with a tarpaulin 				Monitoring: PIU	costs: Included in staff time Travel costs for monitoring activities

			Phase			Freque	ncy of Mor	itoring		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for implementation and monitoring	Estimated Cost (in USD) ⁵⁴
	Cover trucks carrying soil, sand and stone with tarpaulin sheets to dust spreading									
Noise and vibration linked to machinery	High level maintenance of the vehicles to reduce the vibrationsSelecting equipment with lower sound power levelsInstallingsuitable silencers/mufflersInstallingsuitable silencers/mufflersexhaustsand compressor componentsEquipment casingPlanning activities in consultation with local communities so that activities with the greatest potential to generate noise are planned during periods of the day that will result in least disturbance.		x		 # of vehicles with recent maintenance record # of equipment with lower sound power levels # of equipment cased # of community planning sessions conducted 		X		Implementer: Contractor Monitoring: PIU	Monitoring costs: Included in staff time Travel costs for monitoring activities
Construction/rehabilitation and structural safety risks	Ensure infrastructure rehabilitated is designed and modelled on Safe Standard			x	# of institutions modelled on Safe Standards			x	Implementati on and Monitoring: PIU	Monitoring costs: Included in staff time

			Phase			Freque	ncy of Mon	itoring		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for implementation and monitoring	Estimated Cost (in USD) ⁵⁴
										Travel costs for monitoring activities
Bias and corruption in the selection of institutions and beneficiaries	Transparency and communication/public disclosure of beneficiary selection criteria (SEP) Communicate and implement GRM	x	x		# of communication events as per SEP implemented as compared to planned events # of GRM cases filed		x		Implementer/ Monitoring: PIU	Monitoring costs: Included in staff time
Discriminatory practices in accessing project services, and benefits	Transparency and communication/public disclosure of beneficiary selection criteria (SEP) Communicate and implement GRM	x			# of communication events as per SEP implemented as compared to planned events # of GRM cases filed		x		Implementer/ Monitoring: PIU	Monitoring costs: Included in staff time
Community conflicts over beneficiary selection	Transparency and communication/public disclosure of beneficiary selection criteria (SEP) Communicate and implement GRM		x	x	# of communication events as per SEP implemented as compared to planned events # of GRM cases filed			x	Implementer/ Monitoring: PIU	Monitoring costs: Included in staff time

			Phase			Freque	ncy of Mon	itoring		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for implementation and monitoring	Estimated Cost (in USD) ⁵⁴
Vehicular traffic during facility construction and operation may potentially cause congestion on the local routes, generate noise, and pose safety hazards for the local population, particularly for children and elderly people	Prepare traffic safety management plan (TSMP), based on EHS Guidelines on Traffic Safety (set out management and mitigation measures for traffic and road safety to be implemented across all sub- projects, contractors and service providers on the project, including inter alia consideration of the road worthiness of vehicles, and competence of vehicle operators, signage, pedestrian movement around construction sites and access roads to sites, line with the ESSs, the WB Environmental, Health and Safety Guidelines (EHSGs), and other relevant Good International Industry Practice (GIIP), etc.) Hold community consultations before the construction Safety signage will be erected at appropriate places Safe driving practices will be promoted among the drivers,		x		 # of traffic safety incidents # of grievances filed # of community consultations held # of safety signage erected 		x		Implementer: Contractor Monitoring: PIU	Monitoring costs: Included in staff time Travel costs

			Phase			Freque	ency of Mor	nitoring		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for implementation and monitoring	Estimated Cost (in USD) ⁵⁴
	including training to drivers, limiting of max. speed Adopt and implement GRM									
Sanitation challenges, additional waste, and STIs through informal vendors gathering at the site	Fencing off of construction site Hold community awareness sessions		x		# of fences orbarriers erected# of communityawareness sessionsheld		x		Implementer: Contractor Monitoring: PIU	Monitoring costs: Included in staff time Travel costs
Poor or inefficient design and poor construction resulting in future structure failure	Ensure appropriate designs for structure Ensure design details are included in bidding documents and budgeted correctly	x			 # of designs that are technically sound # of bidding documents containing appropriate designs and budgets 	x			Implementati on / Monitoring: PIU	Monitoring costs: Included in staff time
Impacts/damage to other infrastructure such as water supply pipes, sanitation pipes, irrigation infrastructure, and footpath/access routes	Adopt and implement C-ESMP Where damage has been done, ensure that it is fixed Adopt and implement GRM		x		 # of contractors with C-ESMP in place # of grievances filed in relation to damages 			x	Implementati on: Contractor Monitoring: PIU	Monitoring costs: Included in staff time

			Phase			Freque	ncy of Mor	itoring		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for implementation and monitoring	Estimated Cost (in USD) ⁵⁴
					# of grievances solved in a satisfactory manner					
Ineffective community sensitization resulting in damage to structures to re-instate access routes for farming, livestock watering, access for washing or construction of dwellings	Ensure appropriate community awareness and communication Adopt and implement GRM		x		 # of awareness sessions held # of grievances filed and solved. 		x		Implementati on: Contractor Monitoring: PIU	Monitoring costs: Included in staff time
Implementing runoff reduction measures, infrastructure will continue to be damaged, and communities will continue to be flooded resulting in loss of crops and infrastructure Continued poor/lack of runoff management within catchments	Ensure appropriate initial design of infrastructure Ensure design details are included in bidding documents and costed appropriately Adopt and implement GRM	x	x		 # of sub-projects with appropriate design # of bidding documents with appropriate design that is costed correctly # of grievances filed 		x		Implementati on / Monitoring: PIU	Monitoring costs: Included in staff time
Discriminatory practices in accessing project services, and benefits (ESS4)	Ensure stakeholder communication through implementation of SEP Adopt and implement GRM		x		# of grievances filed # of community consultations implemented # of grievances filed		×		Implementati on: Contractor / PIU Monitoring: PIU	Monitoring costs: Included in staff time
Lack of adequate budgets for O&M	Prior to bidding process, ensure availability of appropriate O&M budget	x			# of sites with appropriate O&M budget		x		Implementati on: PIU	Monitoring costs:

			Phase			Frequ	ency of Mor	nitoring		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for implementation and monitoring	Estimated Cost (in USD) ⁵⁴
					# of sites with O&M budget identified prior to construction / rehabilitation				Monitoring: PIU	Included in staff time
Labor influx and associated risks including risks on community health and safety, SEA/SH and other forms of GBV	Implementation of LMP including signing of CoC by all workers at point of hiring Implementation of GBV Action Plan		x		% of workers that signed CoCs % of workers that completed GBV/SEA training			x	Implementer: Contractor Monitoring: PIU	Monitoring costs: Included in staff time
Social tensions/conflicts induced by competition over project benefits including employment opportunities	Ensure stakeholder communication through implementation of SEP Adopt and implement GRM		x		# of community consultations implemented # of grievances filed			x	Implementer: Contractor Monitoring: PIU	Monitoring costs: Included in staff time
ESS5: Involuntary Resettlement	I	<u> </u>			I	<u> </u>	_	<u> </u>		
Lack of compensation at replacement cost	Conduct initial E&S screening of sub-project site Prepare additional E&S instruments (e.g. Resettlement Action Plans – RAPs) according to Resettlement Policy Framework (RPF) where required	x	X		 # of sub-projects that have been screened # of sub-project sites with appropriate 			X	Implementer: Contractor / PIU / local authorities Monitoring: PIU	Monitoring costs: Included in staff time Travel costs for

			Phase			Freque	ncy of Mor	nitoring		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for implementation and monitoring	Estimated Cost (in USD) ⁵⁴
	Ensure proper implementation of additional E&S instruments Adopt and implement GRM				additional E&S instruments # of grievances filed					monitoring activities
Failure to restore livelihoods	Adopt and implement GRMImplement stakeholderconsultations during planningphasePrepare additional E&Sinstruments (e.g. LivelihoodRestoration Plans – LRPs)according to RPF where requiredEnsure proper implementation ofadditional E&S instrumentsAdopt and implement GRM	x	x		 # of stakeholder consultations held at sub-project site # of LRPs prepared where appropriate # of grievances resolved 		x		Implementati on: Contractor / PIU / Local Authorities Monitoring: PIU	Monitoring costs: Included in staff time Travel costs for monitoring activities
ESS 6: Biodiversity Conservation and		esources		T			T			
Cumulative impact of the multiple civil works at various locations and on already degraded and sensitive ecosystems	Assess potential risks during E&S screening Prepare site-specific ESMPs designed to avoid impacts Ensure re-vegetation after completion of construction		x		 # of sub-project sites screened # of sub-project sites with appropriate E&S instruments developed for them 			X	Implementer: Contractor Monitoring: PIUs	Monitoring costs: Included in staff time Travel costs for

			Phase			Freque	ncy of Mon	itoring		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for implementation and monitoring	Estimated Cost (in USD) ⁵⁴
					# of subproject sites that have been re- vegetated after construction					monitoring activities
Loss of riverine, woodland and remnant rainforest resulting in more loss of dwindling habitat for endemic and migratory species and contribution to climate change	Conserve riverine, woodland and remnant rainforest where possible at sub-projects (including re-vegetation) Screen out sub-projects with impacts on riverine, woodland and remnant rainforest Prepare Biodiversity Assessments and Management Plans (BMPs) where appropriate (describe baseline assessment, design of the infrastructure, access routes, and sourcing materials that minimized impacts to critical habitat and avoids fragmentation; measures to avoid temporary impacts from traffic, spoil deposition, direct land take and indirect impacts of noise, and visual intrusion, pollution or other forms of damage; monitoring of the site and implementation activities,	x			 # of sites with revegetation conducted # of sub-projects likely to impact riverine, woodland and remnant rainforest # of BMPs developed and implemented 			x	Implementati on: Contractor / PIU / local authorities Monitoring: PIU	Monitoring costs: Included in staff time Travel costs for monitoring activities

			Phase			Freque	ncy of Mor	nitoring		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for implementation and monitoring	Estimated Cost (in USD) ⁵⁴
	including adaptive management as necessary)									
Increased deforestation for fuelwood/charcoal for cooking for laborers and informal vendors	Avoid collection of local firewood Apply zero tolerance for charcoal and/or firewood stoves for cooking at construction camps and by vendors at construction sites Proactive promotion of sustainable cookstoves Conduct awareness sessions among workers Adopt and implement GRM		x		# of grievances filed # of awareness sessions conducted		X		Implementati on: Contractor / PIU / local authorities Monitoring: PIU	Monitoring costs: Included in staff time
Exacerbation of existing erosion problems especially along water courses	Avid exacerbation of existing erosion problems through appropriate design of infrastructure Vegetate area where feasible	x			 # of designs that avoid exacerbation of existing erosion # of vegetation exercises conducted 		x		Implementati on: Contractor / PIU / local authorities Monitoring: PIU	Monitoring costs: Included in staff time
Cumulative impacts of floods and construction debris downstream into Elephant Marsh and other key biodiversity areas	Screen sub-projects prior to construction for potential creation of debris		x		# of sub-projectplans screened# of C-ESMPs thatinclude waste		x		Implementer: Constructor Monitoring: PIU	Monitoring costs: Included in staff time

			Phase			Freque	ency of Mo	nitoring		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for implementation and monitoring	Estimated Cost (in USD) ⁵⁴
	Conduct appropriate waste management procedures, included in C-ESMP				management procedures					
Human wildlife conflict	Prepare, adopt, and implement Human Wildlife Conflict Management Procedures (including crocodiles and snakes) and adopt as part of ESMPs Proactive prevention of bushmeat poaching.	x			# of Human Wildlife Conflict Management Procedures included in ESMPs		X		Implementer: Constructor / PIU Monitoring: PIU	Monitoring costs: Included in staff time
ESS 8: Cultural Heritage										
Chance Finds	Implement chance find procedures (see Annex 2)		x		# of Chance find procedures implemented		x		Implementer: Contractor Monitoring: PIU	Monitoring costs: Included in staff time
ESS 10: Stakeholder Engagement and I	nformation Disclosure	<u>.</u>				·				
Exclusion of vulnerable groups in project activities and consultations	Implement SEP Identify minority, marginalized and disadvantaged communities in project sphere of influence.		x		 # of marginalized communities assessed # Local languages used in communication 			×	Implementer / Monitoring: PIU	Monitoring costs: Included in staff time

			Phase			Freque	ncy of Mor	itoring		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for implementation and monitoring	Estimated Cost (in USD) ⁵⁴
	Establish and maintain continuous liaison with the communities including marginalised groups to sensitize them on the project objectives and design. Use innovative communication means to reach the communities with information on the project. Establish GRM structures in the communities and sensitize the communities on the project GRM. Apply local languages in communication									
Lack of access to GRM	stablish GRM structures in the communities and sensitize the communities on the project GRM. Adopt and Implement GRM	x	x	x	# of GRM awareness sessions held in community # of GRM cases filed and addressed	x			Implementer/ Monitoring: PIU	Monitoring costs: Included in staff time
Inadequate stakeholder engagement	Adopt and Implement SEP Include information	x	x		# of community consultations held # of vulnerable groups consulted	x			Implementer/ Monitoring: PIU	Monitoring costs: Included in staff time

			Phase			Freque	ncy of Mon	itoring		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly		Responsibility for implementation and monitoring	Estimated Cost (in USD) ⁵⁴
	Information dissemination and consultations of vulnerable groups									
Elite capture and the exclusion of vulnerable groups including women	Adopt and Implement SEP Include information	x	x		# of community consultations held	x			Implementer/ Monitoring: PIU	Monitoring costs:
	Information dissemination and				# of women					Included in
	consultations of vulnerable				consulted					staff time
	groups with a specific focus on women									

6. Institutional and Implementation Arrangements

<u>Regional Steering Committee (RSC).</u> A Regional Steering Committee has been established for the RCRP I. Malawi will join the RSC in order to strengthen coordination between countries and the regional organizations. The RSC meets on a bi-annual basis. The RSC has been established to increase overall regional coordination at the Program level and maximize the impact of the RCRP's framework approach. The RSC reinforces the role of the RCRP as a coordination platform expected to consolidate regional cooperation in climate governance in the Africa region by actively engaging stakeholders at multiple levels and encouraging communication and exchange. It includes heads of PIUs/PCU in the different participating countries, focal points from each participating Ministry/Implementation Agency, and convenes at least once a year to discuss implementation progress, and at least another time to discuss technical themes addressed by all countries of the Program.

<u>Project Implementation Unit (PIU)</u>: the Project in Malawi will be implemented by a PIU sitting in the Department of Economic Planning and Development, within the Ministry of Finance. The PIU will be comprised of Project management, fiduciary and engineering expertise. The PIU will additionally draw on a technical team of staff assigned from involved line ministries (Ministry of Water and Sanitation; Ministry of Transport/Roads Authority, Department of Disaster Management Affairs (DoDMA), the Department of Climate Change and Meteorological Services (DCCMS), Department of Land Resource Conservation, Ministry of Lands, Environmental Affairs Department) and Ministry of Agriculture (Department of Land Resources Conservation). The PIU will also manage the contracting and supervision of all third-party firms hired under the Project.

For the district level activities under Component 2, the Project will be implemented by the National Local Government Finance Committee (NLGFC) under the Ministry of Local Government. The NLGFC is a constitutional body mandated to facilitate fiscal decentralization, Financial Management and local development in local councils, with dual reporting lines to the Ministry of Local Government and the Ministry of Finance.

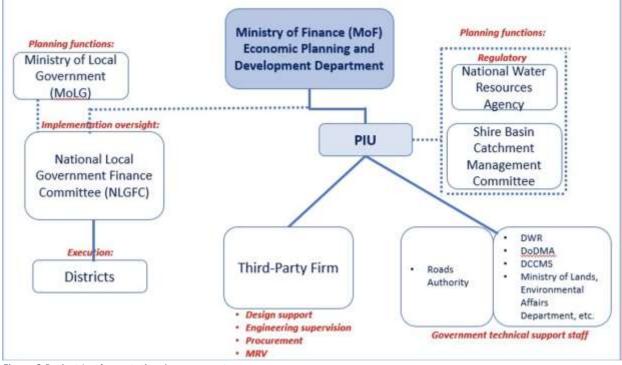


Figure 3 Project Implementation Arrangements

The PIU will include qualified staff and resources to support the management of all E&S risks and impacts of the Project. For this purpose, the PIU will recruit one Environmental Management Safeguards Specialist, one Social Development Safeguards Specialist, one OHS Safeguards Specialist, and one SEA/SH Specialist (collectively the Environmental and Social Specialists). All of them will be full time project staff. The Environmental and the Social Specialists will be responsible for the monitoring of the compliance with this ESMF, the SEP, and the LMP. Where necessary, they will discuss corrective measures with Project management and implementers where appropriate. They will further prepare additional E&S instruments, such as ESIAs, ESMPs or RAPs for sub-projects. The team will prepare these instruments and submit them to the World Bank for clearance.

The Environmental and Social Specialists at the PIU will be responsible for the monitoring and supervision of the subproject-specific E&S instruments. They will assist in the preparation of bidding documents and ensure that all subproject-specific requirements are included in the bidding documents and that the construction companies have the respective capacity to implement the requirements. They will undertake field monitoring missions and review documentation in order to monitor the implementation of the E&S requirements, and they will train ministerial staff at all relevant levels in the monitoring efforts, especially the staff of the NLGFC and district-level staff implementing Component 2. The Social Development Safeguards Specialist, in addition, will ensure the implementation of all stakeholder engagement requirements, and the implementation of the GRM. The SEA/SH Specialist will ensure the implementation of all SEA/SH complaints made through the GRM. The OHS Specialist will review and monitor OHS procedures and implementation at project sites and sub-projects, ensure correct training in OHS risk assessments and development and implementation of Standard Operating Procedures, Job Hazards assessments, etc. and provide technical oversight and support to project teams and sub-project activities.

The E&S Specialists will receive monthly reports from construction companies and the NLGFC and will prepare the E&S inputs for the Project Quarterly Progress Report to the World Bank. While the OHS Specialist will in particular focus on any environmental, health and safety tasks, the Social Development Safeguards Specialist will be responsible for any aspects regarding social issues, labor risk management, as well as stakeholder consultations and the GRM.

The PIU staff will flag any performance concerns or non-compliance with the PIU leadership.

<u>At the local level</u>, the PIU staff will play a critical role in ensuring local governments are fully aware of the project and its activities. The staff at the local level will work closely with the PIU Environmental and Social Specialists and will be trained in the monitoring of relevant E&S risk mitigation measures.

<u>Contractors</u>: Contractors will be implementing E&S mitigation measures as laid out in this ESMF and subsequent ESMPs. Mitigation measures required will be included in all procurement and bidding documentation, including in Bills of Quantities (BoQs), and will be costed in agreements with the contractors. The contractors will be obliged to ensure that staff with EHS experience and capacity is involved in construction works and can fulfill the reporting requirements on E&S, and can guide and supervise all workers, including community workers.

The PIU will develop and implement procedures for managing contractors and subcontractors recruited to carry out civil works including: ensuring compliance with the national laws, e.g., licenses to operate and excavate any sites for project purposes; relevant E&S requirements to be included in the procurement and contracting process including bidding documents, contracts and subcontracts consistent with the requirements of ESSs; contractors to adopt the relevant aspects of the ESMF and implement the E&S requirements specified in the bid document and must show that they have sufficient staff and capacity to carry it out; Codes of conduct (CoCs) to be required for contractors, subcontractors, and their workers covering conditions of service, OHS, and SEA/SH requirements; preparation of a detailed contractor-ESMP (C-ESMP) that is costed, with sufficient budget to mitigate E&S risks; monitoring contractor commitment and compliance with as per the Project specific E&S instruments and requirements; provision of GRM for contractor and subcontractor, primary suppliers, communities and other stakeholders as well as employees; ensuring contractors and primary suppliers provide details on their oversight on environmental, social, health and safety (ESHS) performance and adequate mechanisms for serious incident reporting should it be required; and monitoring of the performance of the contractors and primary suppliers to ensure that they comply with the WB Environmental, Health and Safety Guidelines (EHSGs) of their respective contracts in accordance with the ESMF, LMP, and SEA/SH Action Plan.

7. Environmental and Social Management Process

7.1 Screening Process

The PIU will be responsible for the screening of all respective activities. The E&S screening will be based on the Environmental and Social Screening Form (see Annex 1). The Environmental and Social Specialists in the PIU will be responsible for all E&S screening of activities, in close coordination with the engineers working on sub-project planning and design.

All proposed sub-projects will be subjected to a screening process to determine and assign an environmental and social risk rating to each activity / sub-project. The screening will also assist in further identifying potentially sensitive environmental and social receptors likely to be negatively impacted. The outcome of the screening will determine a) whether the sub-project contains activities included in the list of exclusions and therefore has to be screened out (see Section 7.3 for a list of exclusions), b) whether an Environmental and Social Impact Assessment (ESIA) (for *high or substantial* sub-projects) or an Environmental and Social Management Plan (ESMP) is required (for *moderate* subprojects), or c) whether the subproject does not require any additional E&S instrument rather an E&S consideration with the relevant mitigation measures listed in this ESMF (for *low* risk subprojects). The types of ESIAs/ESMPs to be prepared will depend on the complexity of the sub-project, it can either be a simplified ESMP, a detailed ESMP done internally, an ESMP that is prepared by a consultant, or a full ESIA prepared by a consultant. It is expected that all construction sub-projects will require at least an ESMP. ESMPs may include other sub-project relevant instruments, such as hazardous substances Management Plans, Waste Management Plans, Cumulative Impact Assessments, etc... including for quarries, borrow pits or camp sites.

The screening report will further help to determine which ESF standards are applicable and which steps need to be taken and which provisions or procedures apply, as laid out in this ESMF. This will include the process of identifying if the sub-project needs to develop Resettlement Action Plans (RAPs) in line with the RPF.

The E&S screening process involves: a) reconnaissance of the subproject areas/routes and their surroundings, b) identification of the major subproject activities and c) preliminary assessment of the impacts of these activities on the ecological, physicochemical and socio-economic environment of the sub-project surrounding areas.

The screening form may need to be reviewed and updated during the process to accommodate other variables.

Where site-specific ESIAs/ESMPs (along with any other safeguards instruments) are required, the costs to prepare and implement these plans are budgeted for in the budgets of the respective activity.

Following the screening process, the PIU will assign all the proposed sub-projects into one of the E&S risk levels (*High, Substantial, Moderate, Low*), aligned with the ESF risk classification. In terms of social risks, some mitigation measures will be implemented independent from the size and environmental category of the physical infrastructure; this includes stakeholder engagement activities, and SEA/SH related requirements.

Table 8 Risk Categories

Risk Category	Nature of Risk and Impact	Examples
Low Risk	Activities that do not have a physical footprint and/or no civil works (including refurbishment and/or renovations). These may not require E&S instruments preparation, however, E&S clauses in the contract are recommended (to be prepared by the PIU prior to bidding process)	Purchase of furniture; communication and translations; Small training and workshops; TA activities
Moderate Risk	Activities that have low to moderate E&S risks and impacts, including those that are site- specific, temporal and reversible in nature. In addition to the E&S clauses in the contract, these activities may require a simplified or detailed ESMP. Contractors will also be required to prepare C-ESMPs. Furthermore, activities may require risk mitigation measures in regards to SEA/SH, LMP, etc	Activities that may spark intra-communal conflict over allocation of resources
Substantial Risk	Activities that have substantial E&S risks and impacts, including those that are not as complex as high risk projects, and more predictable and potentially reversible. This category includes risks of social conflict, and impacts on human security; impacts that are medium in magnitude, medium to low probability of serious adverse effects to human health and/or environment. These activities will require an ESIA or detailed ESMP.	Rehabilitation or construction of infrastructure; Activities that include potential conflict risks; activities that could lead to SEA/SH (e.g. significant labor influx); activities leading to involuntary resettlement, land acquisition and restrictions to land use
High Risk	Subprojects that contain significant environmental and social risks impacts. These activities will require an ESIA compiled by an international consultant.	Rehabilitation or construction of infrastructure in sensitive areas; activities in critical habitat and protected areas; activities involving significant quantities of hazardous substances

Note: In all these classification categories, EIA guidelines will also be applied accordingly in tandem with this ESMF.

7.2 E&S Documentation, Approval and Disclosure

The main responsibility for the preparation of subproject-specific E&S instruments (ESIAs/ESMPs/RAPs) will rest with the PIU. Following the E&S screening process, where applicable, the PIU will prepare the respective E&S instruments either through their Environmental and Social Specialists with policy and technical guidance from EAD staff or through consultants. ESIAs/ESMPs will be based on the table presented in Annex 6. E&S instruments will be submitted to the World Bank for clearance. No works can commence prior to clearance.

The World Bank disclosure standards require that the ESMF for the Project is made available to projectaffected groups, local NGOs, and the public at large. A summary version will be translated into the main local languages. Public disclosure of ESIAs/ESMPs/RAPs is also a requirement. The PIU will disseminate ESIAs/ESMPs/RAPs at strategic locations and offices of the ministries and according to the SEP. A GRM will be in place for complaints on non-compliance with the disseminated documentation.

ESIAs/ESMPs will be prepared in line with para 13 and 14 of ESS1 of the World Bank's ESF ('indicative outline of ESMP') and the project-specific requirements outlined in the Environmental and Social Commitment Plan (ESCP). Annex 6 provides an indicative outlines for ESIAs/ESMPs. RAPs will be prepared as will be outlined in the RPF and in line with the requirements of ESS5. Stakeholder consultations will be conducted as part of the E&S screening and the preparation of the ESIAs/ESMPs/RAPs – as will be laid out in the SEP – and shall identify any E&S related concerns from project-affected parties.

The ESIAs/ESMPs shall be included in the procurement and contracting of contractors - including bidding documents for potential civil works, as well as other WB standard EHS terms and conditions for procurement and any subproject-specific requirements. Codes of conduct (CoC) shall be required to be signed by all workers of contractors, subcontractors, primary suppliers, and their workers.

7.3 List of Exclusions

Subprojects to be excluded from financing include the following:

- Activities that may cause long term, permanent and/or irreversible (e.g. loss of major natural habitat) impacts.
- Activities that have high probability of causing serious health and safety adverse effects to human health and/or the environment.
- Activities that may have significant adverse social impacts and may give rise to significant social conflict.
- Activities that would result in significant levels of involuntary resettlement (physical and/ or economic).
- Dams and irrigation schemes
- > Activities with significant impact on natural habitats.
- > Activities that may have risk/impact on cultural heritage.
- > Activities that may require use/deployment of Military.
- > Activities in contravention of international conventions and treaties to which Malawi is a Party.

8. Monitoring Plan and Reporting

8.1 Regular Monitoring and Inspection for Compliance

The goal of monitoring activities is to measure the success of the activities, determine whether interventions have prevented or mitigated negative risks and impacts and to determine whether further interventions are required to mitigate adverse impacts or monitoring is to be extended in some areas. The goal of regular inspection is to ensure that sub-component activities comply with the plans and procedures laid out in this ESMF and in potential ESIAs/ESMPs prepared for sub-projects.

The main monitoring responsibilities and inspection activities will sit with the PIU, which will administer the overall project-related E&S monitoring and implementation as laid out in this ESMF. The PIU will have overall responsibility for the implementation of the E&S mitigation measures, as well as for monitoring for compliance. The Safeguards Specialists in the PIU will handle all monitoring, inspection and reporting aspects on a day-to-day basis. E&S-related monitoring will focus on compliance by its contractors, sub-contractors and suppliers, as well as capturing baseline information including spatial data of project sites.

The PIU will make use of the Kobo-tool Geo-Enabled Monitoring System (GEMS) to enhance Monitoring and Evaluation (M&E). This is achieved by building capacity among partners on the ground, to leverage field-appropriate technology for digital data collection and analysis. Using these tools and methods allows operations to enhance the transparency and accuracy of M&E and increase the accountability of third-party monitoring (TPM). At the same time, GEMS provides platforms for remote supervision and portfolio mapping for coordination across projects and partners.

The PIU Environmental and Social Specialists will assess progress of activities against the ESCP, ESMF, LMP, SEA/SH Action Plan and the SEP, and subsequent ESIAs/ESMPs/RAPs, and will report any non-compliance to the respective Project Manager. Indicators for mitigation measures are identified in the above generic ESMP, they will be used as a baseline for assessing progress on the ESMF implementation. Monitoring indicators will further depend on specific activity contexts and will be developed as part of the sub-project specific E&S instruments. Additional indicators will be included as needed in the site-specific instruments.

The PIU will be responsible for the E&S screening of each sub-project/activity (level of screening to be identified on the basis of types of intervention), the preparation of site/activity-specific E&S instruments, collection of baseline information, monitoring of implementation of mitigation measures, and administration of mitigation measures. The PIU will supervise the preparation of C-ESMPs by contractors and will be responsible for the monitoring and supervision of contractors and sub-contractors and suppliers. If monitoring and supervision results in findings of non-compliance by contractors, the PIU will discuss and oversee the implementation of corrective actions of the contractor.

In addition, the Ministry of Labor, Department of Health and Safety, the Ministry of Water and Sanitation, and the Ministry of Natural Resources and Climate Change, National Construction Industry Council (NCIC) have regulatory duties to undertake site visits of construction areas. The PIU will collaborate closely with these entities and provide support in order for them to fulfill their duties.

8.2. Reporting

The PIU will provide quarterly reports covering environmental, social, health and safety performance of the project no later than 14 days after the end of the quarter (see Annex 7). The reports will include the status or preparation and implementation of E&S instruments, stakeholder consultations, and results of the grievance redress mechanism (GRM) and other items listed in the ESCP.

The PIU will receive monthly reports from contractors in regard to their implementation of E&S mitigation measures. These report contents will feed into the quarterly progress report on E&S.

The GRM will further help track complaints and effectiveness of interventions, including those with E&S impacts and the quarterly monitoring reports will provide summaries and statistics on the GRM.

Six months prior to completion of the project, the PIU will submit an assessment of the success of the ESMF and include relevant information in the Implementation Completion Report (ICR). If any key objectives of the ESMF were not achieved then follow-up measures will be developed to remedy the situation prior to the closure of the project. This is also applicable for site-specific ESIAs/ESMPs.

8.3 Incident and Accident Reporting

Incidents that will be reported to the WB include the following types: Fatality, Lost Time Injury, Acts of Violence/Protest, Disease Outbreaks, Displacement without Due Process, Child Labor, Forced Labor, Unexpected impacts on heritage resources, unexpected impacts on biodiversity resources, environmental pollution incident, dam failure, violence on the basis of Sexual Orientation and Gender Identity (SOGI), Discrimination on the basis of SOGI, Sexual exploitation, Sexual Abuse, Sexual Harassment.

The World Bank needs to be notified promptly (within 48 hours) of any incident or accident related to the Project which has, or is likely to have, a significant adverse effect on the environment, communities, the public or workers, including, inter alia, cases of SEA/SH and accidents that result in death, serious or multiple injuries (by the PIU). The PIU will need to provide sufficient detail regarding the scope, severity, and possible causes of the incident or accident, indicating immediate measures taken or that are planned to be taken to address it. The report should also include any information provided by any contractor or supervising entity. A record of indicative incidents is still required to identify any potential trends to be mitigated, e.g. repetitive similar incident, or repeat offender contractor, etc.

Key information in the incident report should respond to the following questions (the information given regarding the accident should be enough to conduct the Bank's ESIRT internal procedures):

- What was the incident? What happened? To what or to whom?
- Where and when did the incident occur?
- What is the information source? How did you find out about the incident?
- Are the basic facts of the incident clear and uncontested, or are there conflicting versions?
- What were the conditions or circumstances under which the incident occurred?
- Is the incident still ongoing or is it contained?
- Is loss of life or severe harm involved?
- How serious was the incident? How is it being addressed? How is the response?
- What, if any, additional follow up action is required, and what are the associated timelines?

With respect to SEA/SH, the Project Manager will confirm if an investigation of SEA/SH misconduct will be carried out, after considering whether it will be safe to investigate and whether the employer's misconduct (accountability and response framework) investigation process is appropriate for undertaking the investigation in a survivor-centric manner. The Bank will not request or be given an investigation report from the employer but will use the records available from the Project Manager for the ESIRT process.

For all other incidents, the PIU will provide the information to the task team as quickly as possible and ideally within 10 days. The task team will review the investigation report and updated incident form, and if necessary, will request further clarification or information with respect to the causes of the incident

9. Stakeholder Engagement

A consultation mission was undertaken from 5 to 9 June 2023 to define the concept of the program, including its development objective, components and activities, as well as implementation arrangements, timeline and roadmap for preparations, and necessary analytical work in support of integrated approaches to floods, catchment and basin climate resilience. Consulted stakeholders included officials from the Ministry of Finance and Economic Affairs (MoFEA), the Ministry of Water and Sanitation (MoWS), Department of Disaster Management Affairs (DODMA), Ministry of Natural Resources and Climate Change (MoNRCC), Ministry of Agriculture (MoA), and from the Ministry of Transport and Public Works and Roads Authority (see Annex 4). Considering that stakeholders engagement is a continuous process, consultations will continue to be done throughout the project cycle.

Consultations clarified the required rationale of the Project. Stakeholders pointed out that Malawi is exposed to several hydro-meteorological hazards including floods, droughts, hailstorms, strong winds and landslides, and geo-hazards, notably earthquakes. Between 1980 to 2017, Malawi experienced eight major droughts and 33 floods. The drought in 2016 affected 6.5 million people, which is over a third of the total population. Since the devastating 2015 cyclone Chedza, the country has experienced Cyclones Idai (2019), Ana, Gombe (2022) and most recently, Tropical Storm Freddy (2023), all of which have led to significant loss of life, loss of livelihoods, and damage to infrastructure. Given these trends there is an urgent need to develop a program, breaking the cycle of recurrent reconstruction projects, blending needed critical infrastructure and cyclone recovery with a longer-term resilience and institutional strengthening agenda.

It was further decided that the proposed operations will build on foundation laid by the Shire River Basin Management Program (SRBMP – P117617 - closed) and Malawi Flood Emergency and Recovery Project (MFERP - 154803) on basin planning, hydromet services improvement and flood Management. The Project will further coordinate with Malawi Watershed Improvement Project (MWASIP - 167860) and Malawi Resilient and Disaster Risk Management Project (MRDRMP - 161392). Flow of resources to District Council will follow Governance to Enable Service Delivery (GESD – P164961) approach.

Key principles of engagement discussed for the Project included that with increased climate volatility, as well as mounting land use pressures, limited progress in reducing vulnerability, the frequency and intensity of water-related disasters, and associated recovery and reconstruction needs have increased over the years, so much so that a "new normal" has been created. The aim for this Project is to respond to the current cyclonic event, while also zooming out and providing a reset in the way disasters are anticipated, managed, and averted. Based on experience of the last decade, the planned interventions, as well as the implementation arrangements, are designed to: a) Advance a vision of "Living with floods": Bring back a coherent vision for natural resources management/water resources management and flood risk management for the Shire Basin and indeed the country as a whole. This vision should integrate spatially different functions, needs and risks of natural resource use and flood risk management; b) Design a "GESD for climate resilience": Decentralize implementation and accountability to communities at risk and embed climate resilience capacity within districts, building on other project experience; c) Integrate "Performance-based lending": Reward performance and pay for results (within the World Bank IPF) and build capacity for increased performance-based lending; d) Establish "Rules of the game": Focus on enforcement of rules (e.g., flood zoning), and sustainable O&M; and d) Secure "High level commitment": A series of investments without accompanying policy and commitment to enforcement will not bring desired results. Prior to appraisal, high level endorsement of policy and performance criteria will be sought.

The Project team is further preparing a Project-level Stakeholder Engagement Plan (SEP), which will lay out all further stakeholder engagements throughout project preparation and implementation. The SEP will map applicable stakeholders, including vulnerable groups in the Project region. It will further lay out modalities through which these stakeholders can be reach in order to disseminate project-relevant information and to ensure continuous consultations on Project details as well as E&S measures.

For the preparation of this ESMF further stakeholder engagements will be conducted prior to appraisal. The outcomes will be presented in an updated version of this document.

10. Grievance Redress Mechanisms

During design and implementation of the Project activities, stakeholders may be adversely impacted directly or indirectly. The grievances that may arise might relate to social issues such as loss of land or restricted land use, involuntary resettlement, loss of crops, temporary or permanent loss of livelihoods, disruption of services and pathways, gender-based violence, and other social and cultural issues. Grievances may also be related to environmental issues such as excessive dust or noise generation, damages to infrastructure due to construction related vibrations or transportation of raw material, noise and traffic congestion among others. Should such a situation arise, there must be a mechanism through which concerns from affected parties are handled in an efficient, unbiased, transparent, timely and cost-effective manner. The project will therefore institutionalize a Grievance Redress Mechanism to address concerns and grievances that arise in connection with the project activities. Under the World Bank ESSs, Banksupported projects are required to facilitate mechanisms that address concerns and grievances that arise in connection with a project.⁵⁶ One of the key objectives of ESS10 (Stakeholder Engagement and Information Disclosure) is 'to provide project-affected parties with accessible and inclusive means to raise issues and grievances and allow borrowers to respond and manage such grievances'.⁵⁷ This Project GRM should facilitate the project to provide a timely response to concerns and grievances of the project-affected parties related to the environmental and social performance of the project. The Project will provide mechanisms to receive and facilitate resolutions to such concerns. This section lays out the GRM for the Project.

The goal of the GRM is to strengthen accountability to beneficiaries and to provide channels for project stakeholders to provide feedback and/or express grievances related to project supported activities. By increasing transparency and accountability, the GRM aims to reduce the risk of the project inadvertently affecting citizens/beneficiaries and serves as an important feedback and learning mechanism that can help improve the project impacts.

The GRM will be operated in addition to a specific workers' GRM, which will be laid out in the Labor Management Procedures (LMP).

The GRM is designed to ensure that project related grievances and perceived injustices are timely and effectively handled by the Project., The Project will ensure that the GRM is efficient and accessible to project affected parties. The GRM shall have a well defined instutional framework, instruments and methodological approach that will guide the grievance resolution process. The GRM therefore provides an effective avenue for expressing concerns, providing redress, and allowing for general feedback from community members.

The GRM aims to address project-related concerns in a timely and transparent manner and effectively. Information on the GRM will be readily available to all project-affected parties. The GRM is designed in a culturally appropriate and socially inclusive way and is able to respond to all needs and concerns of project-affected parties. The availability of the GRM does not prevent recourse to judicial and administrative resolution mechanisms.

The Social Development Safeguards Specialist recruited as part of the PIU will be responsible for ensuring that grievances are resolved. The Project GRM provides for multiple channels through which complaints can be registered in a safe and confidential manner can be enabled. The complaint should

⁵⁶ Under ESS 2 (Labour and Working Conditions), a grievance mechanism for all direct or contracted workers is prescribed, which is laid out in the Labour Management Plan (LMP). The World Bank's Good Practice Note on 'Addressing Gender Based Violence in Investment Project Financing involving Major Civil Works'⁵⁶ spells out requirements for a GBV grievance redress mechanism, which is laid out in a separate GBV/SEA and Child Protection Risks Action Plan.

⁵⁷ World Bank, 2018, p. 131.

be related to the project activities and/or to its implementation and management. Any complaint not directly related to the Project will be referred to the relevant Traditional or Government Authority. The Project GRM will involve the following main steps:

- <u>Receipt of grievance</u>: any stakeholder including people from the affected communities can submit a grievance (written, verbal, text message, telephone, etc. as appropriate for the complainant).
- Registering the complaint: the complaint will be registered in the GRM logbook.
- Referral and examination of complaints: a GRM Committee shall be established (comprising of members from representatives of implementing agencies, elders, community facilitators, etc.) who will examine the complaint, resolve, or escalate the grievance as needed.
- Notifying the complainant: the decision/solution/action by the grievance committee shall be communicated to the complainant as per the stipulated timeline for feedback.
- Closing the complaint: where the decision/solution of the complaint is accepted by the complainant, or complaint that is not related to the project or any of its components, or a complaint that is being heard by the judiciary will be closed following the appropriate procedure based on the acknowledge and signed of complainant.

The GRM will be promoted as much as possible as part of a communication campaign and trainings to community members so that beneficiaries of the Project are aware of channels through which they can voice their grievances and complaints. The Project will use various mechanisms to promote the availablity of the GRM. It will use radio, community meetings and other social gatherings as appropriate. The Project will also adequately communicate to the community about Project activities and the environmental and social risks as well as mitigation measures including the SEA/SH referral pathways. This will help aggrieved parties to decide whether they have a case to report or whether the available information clarifies their concern. This will allow the aggrieved party to decide on the appropriate next step in order to report a grievance, comment or provide feedback to the Project.

The PIU will have the responsibility of overseeing the resolution of all issues related to the project activities in accordance with the laws of Malawi and in line with the World Bank ESS through a clearly defined GRM that outlines its process and is available and accessible to all stakeholders. The community will be sensitized to put-forward their grievances or concerns about anyone or anything related to the project through appropriate channels of their choice which will include:

- Face- to-face meetings with GRM committee members, local government staff, and national staff during visits to the project site;
- Grievance boxes and desks;
- Written letters, E-mail or SMS and hotline services (when available)

Intake, Acknowledge and Follow-Up: Regardlesss of the entry point all grievances will be acknowledged, logged, and followed up. The complainant has the right to remain anonymous, thus the name and contacts will not be logged and whistleblower protection for complaints raised in good faith will be ensured. The Social Specialist will carry out training of all staff involved with the Project, and contractors on receiving complaints and referral and complaints handling and reporting and will oversee awareness raising on the GRM.

A grievance redress committee (GRC) will be established under the respective local governments and the PIU, and relevant staff will be included as necessary depending on the complaint (procurement, finance, M&E, SEA/SH Specialist and communications). The GRC will meet regularly to review minor complaints, progress on complaints resolution, review the development and effectiveness of the grievance mechanism, and ensure that all staff and communities are aware of the system and the project. Immediate meetings will be held in case of significant complaints to be addressed.

Verify, Investigate and Act: An acknowledgement of receipt will be sent to the complainant within 7 days of receipt of the complaint. At all times, the PIU will provide feedback promptly to the aggrieved party, for example through the phone or through the community structures established for addressing GRM. Feedback will also be communicated through stakeholder meetings and beneficiary meetings during Project activities. For sensitive issues, feedback will be given to the concerned persons bilaterally.

Where a negotiated grievance solution is required, the aggrieved party (or a representative) will be invited to decide on a solution, which is acceptable to both parties and allows for the case to be closed, if both parties agree. After deciding a case, an appeal mechanism is to be provided to the aggrieved party, which is constituted through the PIU. This is important in cases in which the aggrieved party is dissatisfied with the solution provided. In these instances, the PIU will step in and provide an appeals mechanism.

Monitor, Evaluate and Feedback: Records of all feedback and grievances reported will be established by the PIU. All feedback will be documented and categorized for reporting and/or follow-up if necessary. For all mechanisms, data will be captured in an excel spreadsheet. The information collected, where possible and for only for non-SEA/SH complaints, will include the name of the person reporting, district, contractor where applicable, project activity, and the nature of the complaint or grievance.

The PIU, specifically the Social Specialist, will be responsible for monitoring the access to and implementation of the GRM. The Specialist will include the GRM in his/her supervision and monitoring missions to the field and conduct spot checks on its implementation, or, where access is difficult recruit local teams to do so.

The Social Specialist will provide analytical synthesis reports on a quarterly basis to the PIU Project Manager, which will include the number, nature and status of grievances. These reports will form the basis of all regular reports from the PIU to the World Bank.

Appeals and Escalation Mechanism: Where no agreement on grievance resolution has been reached, the project team will offer the complainant with appeal options and processes available in the country.

Arbitration: If the GRC fails to address the issue an arbitrator who is external to the committee will be asked to help resolve the issue. The person chosen as an arbitrator will be well trained in peace and conflict management and resolution.

Court Option: Where the case was not closed, the affected parties shall be advised to seek justice from the Court of Law and the decision made by the Court of Law shall be final.

Criminal and Other Special Cases. All cases recorded by the GRM that are found to be criminal in nature shall immediately be reported to the police. Communities will also be sensitized to report criminal cases directly to the police.

The PIU will further provide an excel sheet summary of the feedback and grievances reported, which will be linked to the M&E Results Framework. It will further maintain a documented record of stakeholder engagements, including a description of the stakeholders consulted, a summary of the feedback/grievances received during community consultations. The PIU will extract lessons from the GRM and conduct an analysis on the overall grievances, and share the results with all PIU staff.

SEA/SH: SEA/SH cases are substantively different from other complaints that are typically handled through the grievance redress mechanisms, their information will be handled in a special way within the GRM to ensure that the information is confidential. The detail reporting procedures will be provided in the SEA/SH Action Plan.

Cases of SEA/SH can be reported through the general Project GRM. However, additional channels for reporting SEA/SH complaints will be identified and integrated into the GRM. The survivor has the freedom and right to report an incident to anyone: community member; project staff; GBV case manager; or service provider. Given to the sensitive nature of GBV complaints, the GRM will provide different ways to submit grievances such as phone, text message and email. All relevant staff of the PIU will receive training on handling SEA/SH complaints and referral systems, ideally during the project initiation phase and as part of the staff welcome package. GRM-relevant staff will be trained on key protocols including referral, reporting and informed consent protocols to receive those cases in an appropriate manner and immediately forward them to the SEA/SH referral system. The GRM staff will ensure appropriate response by: (i) providing a safe caring environment and respect the confidentiality and wishes of the survivor; (ii) if survivor agrees, obtain informed consent and make referrals; and (iii) provide reliable and comprehensive information on the available services and support to GBV survivors.

The GRM proposes the following key features on preventing SEA/SH: (i) identify a female focal person in in the community level grievance management; (ii) provide multiple channels to receive complaints (channels to be determined after community consultation); (iii) resolve complaints at the point of service delivery to reduce information and transaction costs and gender sensitive independent channels for redress; and (iv) communicate GRM services at the community level to create SEA/SH awareness and enable project-affected persons to file complaints.

Beneficiaries and communities will generally be encouraged to report all SEA/SH cases through the dedicated SEA/SH referral system and complaints resolution mechanism. This will be made explicit in all community awareness sessions, as well as be part of the publicly disclosed information. The SEA/SH referral system will guarantee that survivors have access to necessary services they may need, including medical, legal, counselling, and that cases are reported to the police should the survivor choose to do so or if the case requires mandatory reporting.

If a SEA/SH case is reported through the Project GRM, the Social Specialist will report the case within 24 hours to the PIU, and the PIU is obliged to report this case to the WB within 24 hours. Furthermore, cases of SH will be reported through the workers' GRM, if it concerns a direct worker or a worker from a contractor, following a survivor-centered approach. The PIU will be in charge of holding sensitization sessions for contractors regarding the CoC obligations and awareness raising activities in communities. All reporting on SEA/SH will limit information in accordance with the survivor's wishes regarding confidentiality and in case the survivor agrees on further reporting, information will be shared only on a need-to-know-basis, avoiding all information which may lead to the identification of the survivor and any potential risk of retribution.

11. Capacity Development and Training Schedule

Capacity building and training will be provided to the PIU and the E&S staff, contractors, beneficiary communities and key stakeholders to ensure the project is implemented in compliance with the ESCP and this ESMF.

Training will be based on the results of a capacity assessment that will be undertaken in advance. The PIU will administer the capacity assessment of its contractors.

Objectives	Issues for engageme nt	Method of engageme nt	Stakeholders/target population and area	Respon sible entity	Time frame	Budget in USD
WB ESF	ESF	Training	PIU staff	WB	At commence ment of activities	WB staff time Staff Travel costs
Stakeholder mapping and engagement	SEP	Meeting	PIU staff Contractors Consultants	PIU	Prior to commence ment of sub- projects	E&S Specialist staff time Meeting costs
The ESMF and specific aspects of E&S assessment including preparation of E&S instruments such as ESIAs/ESMPs, RAPs etc	ESMF and E&S processes	Training	PIU staff Contractors District Staff	PIU	Prior to commence ment of sub- projects	E&S Specialists staff time Meeting costs
OHS issues (such as OHS measures in school rehabilitation, construction and maintenance) and Job Hazard Assessments Emergency Preparedness and Response Community Health & Safety	OHS risk manageme nt	Meeting at sub-project site	PIU staff especially E&S staff, contractors/sub- contractors, beneficiaries, communities that will be part of the operational phase District staff	PIU	prior to construction works	E&S Specialists staff time Meeting costs Staff travel costs
GRM	GRM	Meeting: Plenary discussion with questions and answers, informatio n materials, website	Contractors, sub- contractors, Beneficiary communities District staff	PIU	Continuous	E&S Specialists staff time Meeting costs Staff travel costs

Table 9 Capacity development and training plan

Climate change adaptation and mitigation	Climate Change	Training	PIU staff	Consult ant	Prior to planning and design of subprojects	Consultant costs
SEA/SH prevention and response	GBV risks	Meetings at site	Contractors, sub- contractors, Beneficiary communities District staff	PIU	Prior to commence ment of sub- projects	GBV Specialists staff time Meeting costs Staff travel
Resettlement Planning and implementation	Involuntary Resettleme nt	meetings	Contractors, Community members, Local government / district staff	PIUs	Prior to commence ment of sub- projects	E&S Specialists Meeting costs Staff travel
Emergency Preparedness and Response Sustainable use and maintenance of flood protection structures Community health & safety	Communit y level risks	Meetings	Community members Beneficiaries District staff	PIU	Prior to commence ment of sub- projects	E&S Specialists Meeting costs Staff travel

12. Resources and Budget

The below table presents the estimated costs for the implementation of the ESMF. It includes costs for the implementation of the SEP.

Table 10 Estimated Costs of ESMF implementation

	Required Resources	USD
	Risk Management Unit / PIU – Monito	ring of E&S
1.	Human Resources:	
	1 Social Development Safeguards Specialist	Incl. in PIU staff costs
	1 Environmental Safeguards Specialist	Incl. in PIU staff costs
	1 OHS Specialist	Incl. in PIU staff costs
	1 GBV Specialist	Incl. in PIU staff costs
2.	Logistics / Travel for monitoring and supervision	200,000
	Grievance Redress Mechanis	m
3.	Outreach material	50,000
	Travel costs	50,000
	Meeting costs	50,000
	Implementation of Risk Mitigation N	N easures
4.	Preparation of ESMPs and ESIAs	500,000
5.	Contractor E&S staff	Incl. in contractor budget
6.	Risk Mitigation Measures (estimates based on other	500,000
	project implementation)	
7.	SEP implementation	500,000
8.	Trainings and Capacity Building	300,000
	SEA/SH Action Plan	500,000
	TOTAL	2,650,000

ANNEX 1: Environmental and Social Screening Report

The objective of this E&S screening is to assist in the evaluation of planned rehabilitation and construction of infrastructure. The form is designed to place information in the hands of implementers and reviewers so that impacts and their mitigation measures, if any, can be identified and/or that requirements for further environmental impact assessment be determined.

The form contains information that will allow reviewers to determine the characterization of the prevailing local bio-physical and social environment with the aim to assess the potential impacts of the activities on this environment.

The form is completed by the PIU in coordination with engineers and E&S staff, after field visit and consultations with local authorities in the respective sub-project sites.

IDENTIFICATION OF THE SUB-PROJECT

Name of sub-project

Name of the region/community in which the subproject takes place

Executing agency _____

Name, job title, and contact details of the person responsible for filling out this form:

Name:	

Job title: ______ Telephone numbers:

E-mail address:

Date: _____

Signature: _____

PART A: BRIEF OVERVIEW OF THE PROPOSED ACTIVITIES

Please provide information on the type and scale of the activity

Provide information about actions needed during the activity, e.g. need to quarry or excavate borrow materials, laying pipes/lines to connect to energy or water source, etc...

Describe how the rehabilitation activities will be carried out, including support/activities and resources required to operate it e.g. roads, disposal site, water supply, energy requirement, human resource etc.

Table 11 E&S Screening Table

PART B: QUESTIONNAIRE

	Yes	No	Additional comments (if yes, also indicate which WB ESS is applicable)
ESS2: Occupational health hazards			· · · ·
Will the works require large number (e.g.,			
more than 100) of staff and laborers from			
outside the local area?			
Will the infrastructure works require a			
worker's camp?			
If "Yes", how many workers are expected to			
occupy the camp?			
Are the works activities prone to hazards, risks			
and could result in accidents and injuries to			
workers during construction or operation?			
Will there be OHS risks from handling of			
equipment?			
Is there a risk of flooding during			
construction/rehabilitation? (wet season or by			
project activities)			
ESS3: Noise and Dust Pollution during Construc	tion and	d Operat	ions
Will the operating noise level of the			
new/rehabilitated infrastructure exceed the			
allowable noise limits?			
Will the operation result in emission of			
significant amounts of dust?			
ESS3: Contamination and Pollution Hazards			
Is there a possibility that the works will lead to			
any contamination and pollution?			
ESS3: Degradation and/or depletion of resource	es <mark>duri</mark> n	ig constr	uction and operation
Will the operation involve use of considerable			
amounts of natural resources (construction			
materials, trees) or may lead to their			
depletion or degradation at points of source?			
Is there a likelihood of informal traders			
establishing business at the subproject site?			
(waste generation and resource depletion,			
increased safety risk)			
ESS3: Solid and/or Liquid Wastes and/or Hazard	dous W	astes	
Will the works generate solid or liquid wastes?			
(including human excreta/sewage, asbestos)			
If "Yes", does the sub-project include a plan			
for their adequate collection and disposal,			
particularly for asbestos?			
Will there be any soil or water contamination			
and degradation of water bodies?			
Is there a likelihoods of spillage and increased			
sediment load into water courses during		1	

construction activities and loss of riparian buffers?	
Will there be a wash bay?	
ESS 4: Community Health and Safety	
Will community members be at risk of harm	
or injury during subproject implementation?	
Will activities of the subproject generate	
traffic safety issues? Both on site and for the	
adjacent community?	
Is subproject site located near to schools or	
other areas of sensitive or vulnerable	
persons?	
Is the subproject likely to encounter human- wildlife interactions and/or conflicts?	
ESS4: Beneficiary Selection and Social Dynamic	S
Could the subproject lead to discrimination of	
certain societal groups?	
Could the beneficiary selection be contested?	
Based upon visual inspection or available	
literature, are there areas of possible geologic	
or soil instability (prone to: soil erosion,	
landslide, subsidence, earthquake etc.)?	
Based upon visual inspection or available	
literature, are there areas prone to floods,	
poorly drained, low-lying, or in a depression or	
block run-off water.	
Could natural hazards (droughts and floods)	
exacerbate risk during project contraction of	
operation	
ESS5: Resettlement and/or land Acquisition	
Will the subproject require new borrow pits,	
quarries, temporary use of land? E.g.	
stockpiling, parking, construction camps, etc.	
Will involuntary resettlement, land	
acquisition, relocation of property, or loss,	
denial or restriction of access to land and	
other economic resources be a result of the	
rehabilitation of the infrastructures works or	
any other project activities?	
Will the construction/ rehabilitation of the	
infrastructures works or any other project	
activities result in the permanent or	
temporary loss of crops, fruit trees, infra-	
structure (such as granaries, outside toilets and kitchens, livestock shed etc.), and/or	
and Kitchens, investock shed etc.), and/of	

· · ·	1		
business infrastructure (such as permanent			
stalls).			
Was the land area required for the sub-project			
subject to a voluntary land donation? If so,			
was all ESS 5 principles on this matter were			
respected?			
ESS6: Natural habitats, Environmentally sensiti	ive areas	or thre	atened species
Are there any natural habitats,			
environmentally sensitive areas or threatened			
species that could be significantly			
converted/adversely affected due to the			
rehabilitation of infrastructures works?			
Is the subproject area (or components of it)			
located within/adjacent to any protected			
areas designated by government (national			
park, national reserve, world heritage site			
etc.) or Key Biodiversity Area, or Community			
protect area e.g. Community Forest?			
Is the site considered to be habitats of			
endangered/threatened, endemic, or			
migratory species for which protection is			
required?			
Is there a possibility that, due to construction			
and rehabilitation works, any river or lake			
ecology will be adversely affected? (including			
natural springs)			
Could the works affect the rights and welfare			
of people and their level of dependence upon			
or interaction with natural resources? E.g.			
access to river			
ESS8: Historical, archaeological or cultural herit	tage site		
Based on available sources, consultation with			
local authorities, local knowledge and/or			
observations, could the works alter any			
historical, archaeological, cultural heritage			
traditional (sacred, ritual area) site or require			
excavation near same?			
ESS10: Stakeholder engagement			
Has input from community members and			
those who may be affected by the works or			
any other project activities been sought?			
Has the subproject received overall			
stakeholder support including from vulnerable			
individuals and marginalized groups?			
Has the stakeholder engagement process			
considered vulnerable individuals and			
marginalized groups?			
5 5 1111	1 1		l

PART D : MITIGATION MEASURES, DETERMINATION OF E&S INSTRUMENT

For all "Yes" responses, describe briefly the measures taken to this effect. Once the E&S Screening Form is completed it is analyzed by the Environmental and the Social Specialist at the PIU.

Based on the answers provided, the risk rating of the sub-project (High, Substantial, Moderate or Low) will be assessed - according to the WB Environmental and Social Policy for Investment Project Financing, dispositions for *projects involving multiple small subprojects*.

The Bank will require the Borrower to carry out appropriate environmental and social assessments of subprojects.

PART E: MALAWI EIA GUIDELINES

The Environmental Management Act No. 23 of 1996 outlines the Environmental Impact Assessment (EIA) Process. The General EIA Guidelines provide a list of projects that require an EIA (List A) and a list of projects that may require an EIA (List B). This Project will comply with the Malawi EIA guidelines as well as with the process stipulated in the WB ESF and this ESMF, to the satisfaction of the Bank.

Under the Malawi EIA Guidelines, If the initial screening indicates large negative impacts or unsustainability, it is likely the EIA process needs to be followed. Screening is the process of determining what projects should be subject to EIA requirements. A project brief is to be provided to the Environmental Affairs Department (EAD) to inform the Director that a project is considered and to allow the Director to make an informed decision on whether a full EIA is required. The Director of the EAD refers the project brief to the Technical Committee for the Environment (TCE), which assesses the project brief and recommends a course of action to the Director. The Director will then make a decision on whether or not a scoping study and full EIA is required. If an EIA is not required, the Project is exempted from further compliance with EIA requirements. In such instances, the Director will issue the proponent with a certificate and advise the developer and relevant licensing authorities of the exemption with, if appropriate, recommendations for environmental management of the Project. If the Director determines that an EIA is required, the proponent will be informed as well as all relevant government departments.

The EIA process is initiated through a Scoping Phase that results in the formulation of the Terms of Reference for the full EIA. The Scoping Phase must include consultation with all the relevant government departments. The EAD may also require a degree of public consultation / participation. This phase determines the issues and impacts that are relevant to the Project and therefore to be included in the EIA. The scoping report is prepared by the developer, which may or may not be available for public and authority review. Once this has been determined and the Terms of Reference have been approved, the EIA phase of the project can begin.

The full EIA stage can be divided into six major phases:

- * The identification of impacts.
- * The prediction of the changes brought about due to the impacts.
- * The evaluation and interpretation of the potential impacts.
- * The determination of possible mitigatory measures to reduce the severity of impacts.
- * The compiling of the Environmental Impact Assessment Report.
- * The establishment of a monitoring and management strategy, including the compiling of an Environmental Management Plan.

To complete the above phases the EIA will involve comprehensive baseline studies to determine the current state of the environment. This will enable a more informed determination of the severity of potential impacts to be made and the means to mitigate these impacts to be identified.

Once completed, the EIA is reviewed by EAD and the TCE to determine whether the Project should be allowed to proceed, and if so, what terms and conditions must be enforced for the project to proceed. Depending on the complexity of the Project, individual outside experts or an independent review panel may be retained to advise the EAD and TCE. When the reviews are complete and consolidated, the Director will meet with the developer and / or licensing authority to discuss the draft EIA and, if considered necessary by the TCE, require that corrections and / or additions be made before it is finalized. Based on the review and advice of the TCE, the Director may determine one of the following:

1. That the project must be redesigned to eliminate or reduce adverse impacts, and/or to enhance environmental benefits, in which case the EIA report may have to be redone and resubmitted for the revised project; or

2. That there is reasonable cause to believe that, even if it is redesigned or more detailed EIA studies are undertaken, the project will cause significant and irreparable injury to the environment, and that the project is rejected; or

3. That the project will not result in significant injury to the environment and is approved.

Public participation / consultation is mandatory throughout the EIA process. Developers are required to conduct public consultation throughout the scoping and EIA phase. Formal EIA documents must be made available for public review and comment by the proponent. These documents include the Project Brief (EAD), the Scoping & Terms of Reference report (may need to be released for review and comment), the draft and final EIA reports and the decision of the Director of the EAD.

Annex 2: Cultural and Chance Find Procedures

This procedure was developed to protect and preserving both tangible and intangible cultural heritage records of Malawi and the requirements of the World Bank's ESS8 (To protect cultural heritage from the impacts of project activities and support its preservation, to address cultural heritage as an integral aspect of sustainable development, to promote meaningful consultation with stakeholders regarding cultural heritage and to promote the equitable sharing of benefits from the cultural heritage).

This procedure is included as a standard provision in the implementation of Works contracts to ensure the protection of cultural heritage (Archaeological and Historical Sites). The PIU, as well as contractors will be required to observe this procedure as documented hereafter.

Subprojects that require excavation or construction in sites of known archaeological will not be allowed, due to impacts on cultural heritage. Where historical remains, antiquity or any other object of cultural or archaeological importance are unexpectedly discovered during construction in an area not previously known for its archaeological interest, the following procedures should be applied:

- ➤ Stop construction activities;
- Delineate the discovered site area;
- Secure the site to prevent any damage or loss of removable objects. In case of removable antiquities or sensitive remains, a full-time guard should be present until the responsible authority takes over;
- Notify the responsible foreman/archaeologist, who in turn should notify the responsible authorities, the concerned officers from the Department and local authorities (within less than 24 hours);
- Responsible authorities are in charge of protecting and preserving the site before deciding on the proper procedures to be carried out;
- An evaluation of the finding will be performed by the concerned officers. The significance and importance of the findings will be assessed according to various criteria relevant to cultural heritage including aesthetic, historic, scientific or research, social and economic values;
- Decision on how to handle the finding will be reached based on the above assessment and could include changes in the project layout (in case of finding an irrevocable remain of cultural or archaeological importance), conservation, preservation, restoration or salvage;
- > Implementation of the authority decision concerning the management of the finding;
- Construction work can resume only when permission is given from the concerned officers after the decision concerning the safeguard of the heritage is fully executed;
- In case of delay incurred in direct relation to archaeological findings not stipulated in the contract (and affecting the overall schedule of works), the contractor may apply for an extension of time. However, the contractor will not be entitled for any kind of compensation or claim other than what is directly related to the execution of the archaeological findings works and protections.

Annex 3: Procedures for Managing Contractors

This procedure was developed consistent with the World Bank ESHS Guideline which incorporates the IFC ESHS Guidelines, under the "Good Practice Note: Managing Contractors' Environmental and Social Performance". This is to remind the borrower's responsibility to comply with the ESHS Guidelines, loan agreement commitments, local laws and regulations, and permits and standards, ensuring that any contractor providing services of any kind to the implementing entity duly follows these requirements throughout the duration of the contract, including any activity or services performed by subcontractors or third parties undertaking a contract from the contractor.

The PIU must use its direct control over contractors to ensure that E&S requirements are met by contractors. To achieve this commitment, the PIU needs to include in subcontracts the requirement to comply with all the E&S requirements that are appropriate for the works being subcontracted and consistent with the implementing entity's and the contractor's E&S management programs.

<u>Understanding Implementation Responsibilities</u>: The role of the PIU and contractors in meeting E&S requirements are intertwined and must be worked out at the subproject level. In some cases, such as stakeholder engagement, the PIU and contractors will have certain obligations and limits and will need to coordinate their efforts. In others, such as monitoring, each party will monitor E&S performance, but at different frequencies and levels of detail. In all cases, the PIU remains ultimately responsible to the World Bank for ensuring E&S requirements are met, with the responsibilities of the contractor defined in the contract. The design standards and requirements of subprojects (and operation standards) will also be set out in the terms of reference of the contract.

<u>Contractor Oversight</u>: The PIU will monitor contractors and their E&S performance and ensure the contractor monitors its own and all subcontractors' E&S performance throughout rehabilitation, including mobilization, the main rehabilitation phase, and demobilization. Clear responsibilities and reporting lines are essential to avoid duplication of effort or, conversely, gaps in monitoring. If operations are carried out under contract, or some work is performed by contractors, the PIU and the contractors will monitor E&S performance during operations as well. All contractors engaged on the project operate in a manner consistent with the requirements of the ESSs, including the specific requirements set out in the ESCP.

The PIU should require contractors to report on a monthly basis their E&S performance and metrics (which shall include relevant information and data from subcontractors, as applicable). Timely reporting of E&S performance and results enables the client to identify opportunities for improvement, prevent poor performance issues, and assist contractors if remedial action is to be taken.

<u>E&S Performance Meetings</u>: Regular meetings are essential to ensure contractor performance is satisfactory and that project specifications are being met. The PIU may share performance monitoring results at weekly meetings with all contractors to effectively drive improved performance by introducing a competitive element, sometimes with small incentives. The authority of monitoring staff who control contractor performance also needs to be clarified and understood by contractors (for example, who gives instructions to stop work or proceed but with modifying the approach, scope, equipment, and so forth).

The PIU should ensure that contractors employ qualified E&S personnel to oversee E&S performance, and that contractor staffing and resources are commensurate with the magnitude and timing of work and

potential E&S risks. The PIU should also approve documentation, including for training programs, to ensure all staff are aware of E&S commitments and their part in meeting them.

<u>Review and Approval of Contractor Site-Specific E&S Plans</u>: The PIU is responsible for its contractors, meeting all of the project's E&S requirements, it is essential for the PIU to review and approve project E&S management plans and procedures. These might include such plans as working within boundaries (footprint management), protection of biodiversity, traffic management, labor sources and methods of recruitment of workers, worker accommodation, noise and dust control, and possibly others. Where an ESIA/ESMP has not been approved, no works will commence in the area.

<u>Kickoff Meeting</u>: Prior to early work activities, the PIU should hold a kickoff meeting with each of the contractors prior to arriving at the site. Timing of mobilization based on logistical issues, resources, customs delays, and so forth should be considered in the planning. The PIU and the contractor project managers and subcontractors should participate in these meetings. The purpose is to review planned activities and schedules, review E&S requirements (among others), review the roles of the various parties in implementing and monitoring mitigation measures, and agree on project-specific induction and training content. Both client and contractor E&S representatives should be present to reiterate all E&S commitments and establish initial compliance points and coordination requirements during site establishment.

<u>E&S Induction and Training</u>: A general E&S site induction and OHS training should be mandatory for all workers, with specialized technical E&S training delivered to staff. The degree of training should be based on the project's E&S risks, on the tasks that will be performed, the CoC, including the SEP, and on the general E&S provisions that are applicable for all personnel, including contractors and subcontractors. All workers should be made aware of the worker GRM and Project GRM and how to access them. The PIU SEA/SH Specialists should provide SEA/SH awareness training for staff at all levels, from contract management to day laborers. Additional training may be needed for staff that will be responsible for implementing, monitoring, and reporting E&S performance. Once the general E&S induction is defined, a series of specific trainings may be required in order to ensure that the requirements, controls, and mitigation measures are well communicated and understood.

<u>PIU Monitoring of Activities</u>: The monitoring of contractor E&S performance by the PIU must be practiced throughout rehabilitation, from mobilization through demobilization. This should involve both visits to work locations and reviews of records kept by the contractor and of reports submitted by the contractor. The frequency of site visits should be commensurate with the magnitude of the E&S risks of the activities being carried out and permanence of potential impacts that could result from ongoing activities. Monitoring may be conducted by PIU E&S staff.

PIU Safeguard Specialists should review one or more recent inspection reports and the contractor's previous month's E&S progress report prior to visiting the site to monitor the contactor's E&S performance. They should do the same before participating in meetings where the contractor's E&S performance is to be discussed. The PIU will review contractor reports and follow up as needed to ensure timely resolution of issues of noncompliance with E&S requirements. This may include additional visits to the contractor's site or offices, further communications with contractor E&S personnel, issuance of notices of deficiency or warnings to the contractor, and other actions as needed.

At any stage of construction or other work, if the contractor has not taken appropriate action to achieve compliance with E&S requirements after repeated notices of violation and warnings of noncompliance,

and significant E&S impacts are occurring or imminent, the PIUs should order the contractor to stop work until E&S performance is brought under control and up to acceptable standards.

<u>Contractor Monitoring and Reporting</u>: The PIU should require contractors to monitor and keep records on E&S performance in accordance with the E&S management plans. This may include monitoring of E&S matters, scheduled and unscheduled inspections to work locations, observations made during routine activities, desk reviews, drills, and any other monitoring protocols implemented by the contractor to ensure E&S compliance.

Responsibilities for monitoring need to be clear between the client and contractor, and results (if client and contractor are both collecting data) must be comparable, for example, collected using the same methodologies, analyzed at the same labs, and using similar equipment, and so forth.

The PIU should require contractors to report on E&S performance on at least a monthly basis throughout the construction phase, including mobilization, construction, and demobilization. This could be more frequent for more sensitive E&S projects. It can be part of the overall engineering progress report or a stand-alone E&S report. The table below shows the E&S parameters considered in the reporting of E&S performance.

Item	Parameter	Description
1	Safety:	Hours worked, Toolbox talks and topics, incidents and corresponding Root Cause Analysis (lost time incidents, medical treatment cases), first aid cases, inventory needs to resupply First Aid kit, high potential near misses, and remedial and preventive activities required (for example, revised job safety analysis, new or different equipment, skills training, and so forth).
2	Environmental incidents and near misses:	Environmental incidents and high potential near misses and how they have been addressed, what is outstanding, and lessons learned.
3	Major works:	Those undertaken and completed, progress against project schedule, and key work fronts (work areas).
4	E&S staffing:	New hires and departures, and listing of current staff and titles.
5	E&S requirements:	Noncompliance incidents with permits and national law (legal noncompliance), project commitments, or other E&S requirements, grievances.
6	E&S inspections and audits:	By contractor, engineer, or others, including authorities—to include date, inspector or auditor name, sites visited and records reviewed, major findings, and actions taken.
7	Workers:	Number of workers, indication of origin (expatriate, local, nonlocal nationals), gender, and skill level

Parameters to consider for E&S reporting by the contractor at least on a monthly basis.

(unskilled, skilled, supervisory, professional, mana	anagement).
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8	Training on E&S issues:	Including dates, number of trainees, and topics
9	External stakeholder engagement:	Highlights, including formal and informal meetings, and information disclosure and dissemination—to include a breakdown of women and men consulted and themes coming from various stakeholder groups, including vulnerable groups (e.g., disabled, elderly, children, etc.).
10	Details of any security risks:	Details of risks the contractor may be exposed to while performing its work—the threats may come from third parties external to the project or from inappropriate conduct from security forces employed either by the client or public security forces.
11	Worker grievances:	Details including occurrence date, grievance, and date submitted; actions taken and dates; resolution (if any) and date; and follow-up yet to be taken—grievances listed should include those received since the preceding report and those that were unresolved at the time of that report.
12	External stakeholder grievances:	Grievance and date submitted, action(s) taken and date(s), resolution (if any) and date, and follow-up yet to be taken— grievances listed should include those received since the preceding report and those that were unresolved at the time of that report. Grievance data should be gender-disaggregated. Particular sensitivity may be needed around SEA/SH issues raised.
13	Deficiency and performance management:	Actions taken in response to previous notices of deficiency or observations regarding E&S performance and/or plans for actions to be taken—these should continue to be reported until the client determines the issue is resolved satisfactorily.

ANNEX 4: Stakeholder Consultations

No.	Name	Position
	Ministry of Finan	ce and Economic Affairs
1	MacDonald Mwale	Secretary to the Treasury
2	Nations Msowoya	Acting Director of Debt and Aid
3	Issa Elias	Finance Officer Debt and Aid
	Ministry of V	Vater and Sanitation
4	Elias Chimulambe	PS
5	James Chitete	Director of Water Resources
6	Modesta Kanjaye	Director of Sanitation
	Dwight Kambuku	Chief Executive Officer - NWRA
7	Phideria Moyo	Deputy Director of Water Supply Services
8	Sydney Kamtukule	Deputy Director of Water Resources
9	John Chingawale	Principal Civil Engineer
10	Mercy Sowoya	Chief Economist
11	Gertrude Botomani	Principal Water Engineer
12	Aaron Mapsere	Civil Engineer
13	Hastings Mbale	Principal Hydrologist
14	Rodrick Kumkwezu	Senior Water Resources Development Office
15	Engineer Emmanuel Chiundira	Principal Water Resources Development Office
16	Frank Chisambilo	Director of Corporate Services - NWRA
17	Toney Nyasulu	Director of Water Resources - NWRA
17		aster Management Affairs
18	Charles Kalemba	Secretary and Commissioner
19	Peter Chimangeni	Director of Resilience and Recovery
20	Boyd Hamela	Chief Planning Officer
21	Samuel Gama	Chief Resilience and Recovery Officer
22	Annie Mapulanga	Planning Officer
23	Hastings Mwanjoka	Deputy Director
		esources and Climate Change
24	Yusuf Mkungula	PS
25		Director of Climate Change and Meteorological
25	Lucy Mtilatila	Services
26	Taonga Mbale	Director of Environment Affairs
27	Charles Vanya	Deputy Director of Climate Change and Meteorological Services
28	Evance Njewa	Deputy Director - EAD
29	Chimwemwe Yonasi	Environmental Officer
30	Titus Zulu	Deputy Director - DoF
_ •	l l	y of Agriculture

Annex 1 – List of People Consulted

31	Dickxie Kampani	PS – Agriculture
32	Geoffrey Mamba	PS – Irrigation
33	Anderson Mbozi	Deputy Director – Irrigation Services
34	Joseph Kanyangalazi	Deputy Director - LMT
35	Enock Whayo	Chief Land Resources Conservation Officer
	Ministry of I	Local Government
36	Douglas Mkweta	Director Local Government Services
		Director of Planning and Development –
37	Melayi Mhone	Blantyre District Council
		Director of Planning and Development –
38	Thokozile Munthali	Chikwawa District Council
		Director of Planning and Development – Nsanje
39	Smith Mnenula	Distirct Council
		Director of Planning and Development – Zomba
40	Precious Kamtsitsi	District Council
	Ministry of Trans	sport and Public Works
41	Ganizani Liwewe	Chief Economist
	Road	ls Authority
42	Sam Kadangwe	Director of Major Projects
43	Florence Ndenguma	Director of Maintenance
44	Flora Hauya	Senior Engineer
	MRL	DRMP PIU
45	Peter Kadewere	Project Coordinator
	Blantyre	e City Council
46	Denis Chimseu	Chief Executive Officer
		Director of Town Planning and Estates
47	Costly Chanza	Management
48	Eng. Chimwemwe Mndelemani	Director of Engineering Services
49	William Chimzinga	Deputy Director of Environment

Annex 5: Incident Report Form

The following report form is to be completed by the PIU within 24 hours in the case of an incident:

Table 12 Incident report form

81: Incident Details			105		
Date of Incident:	Tim	e:	Date Re	ported to PIU:	Date Reported to WB:
Reported to PIU by:		Reported to WB	by:	Notification Ty notice/other	pe: Email/'phone call/media
Full Name of Main Contr	actor:		Full Nar	ne of Subcontractor:	

B2: Type of incident (please check all that apply)¹

 Fatality
 Lost Time Injury
 Displacement Without Due Process
 Child Labor
 Acts of Violence/Protest
 Disease

 Outbreaks
 Forced Labor
 Unexpected impacts on heritage resources
 Unexpected impacts on biodiversity resources

 Environmental pollution incident
 Dam failure
 Other

See Annex for definitions

B3: Description/Narrative of Incident

For example:

- I. What is the incident?
- II. What were the conditions or circumstances under which the incident occurred (if known)?
- III. Are the basic facts of the incident clear and uncontested, or are there conflicting versions? What are those versions?
- IV. Is the incident still ongoing or is it contained?
- V. Have any relevant authorities been informed?

Short Description of Action	Responsible Party	Expected Date	Status
For incidents involving a contractor:			
Have the works been suspended under Contract G Name of Contractor:	5CC8.97 Yes □; No □;		

The following report form will be completed by the PIU following investigations into an incident:

Table 13 Incident form to be completed after investigation

C3a: Fatality/Lost time Injury information

Cause of fatality/injury for worker or member of the public (please check all that apply):

 1. Caught in or between objects
 2. Struck by falling objects
 3. Stepping on, striking against, or struck by objects

 4. Drowning
 5. Chemical, biochemical, material exposure
 6. Falls, trips, slips
 7. Fire & explosion

 8. Electrocution
 9. Homicide
 10. Medical Issue
 11. Suicide
 12. Others

Vehicle Traffic: 13. Project Vehicle Work Travel 🗌 14. Non-project Vehicle Work Travel 🗌 15. Project Vehicle Commuting 🗌 16. Non-project Vehicle Commuting 🔲 17. Vehicle Traffic Accident (Members of Public Only) 🗌

Name	Age/DOB	Date of Death/Injury	Gender	Nationality	Cause of Fatality/Injury	Worker (Employer)/Public

C3b: Financial Support/Compensation Types (To be fully described in Corrective Action Plan template)

1. Contractor Direct
2. Contractor Insurance
3. Workman's Compensation/National Insurance
4. Court Determined Judicial Process
5. Other
6. No Compensation Required

Name	Compensation Type	Amount (US\$)	Responsible Party

	e/households were affected d actions influenced the incident lures and were they followed	
ho was involved, and how many people hat happened and what conditions and hat were the expected working procedu d the organization or arrangement of t ere there adequate training/competent	e/households were affected d actions influenced the incident lures and were they followed the work influence the incident t persons for the job, and was necessary and suitable o	
hat happened and what conditions and hat were the expected working procedu d the organization or arrangement of t ere there adequate training/competent	d actions influenced the incident lures and were they followed the work influence the incident t persons for the job, and was necessary and suitable o	
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d the organization or arrangement of t ere there adequate training/competent	the work influence the incident it persons for the job, and was necessary and suitable (
ere there adequate training/competen	t persons for the job, and was necessary and suitable o	
hat were the underlying causes; where	there any absent risk control measures or any system	failures
ius Astions from the investigation to i	he implemented (To be fully described in Correction	Action Diam)
11.531124129	All All Market Ma	215 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Action	Responsible Party	Expected Date
1	tive Actions from the investigation to Action	tive Actions from the investigation to be implemented (To be fully described in Corrective Action Responsible Party

The following incident form will be completed by the PIU in the case of SEA/SH cases, within 24 hours:

Table 14 Incident Report Form for SEA/SH cases

B1: Incident Details			
Date of incident intake by the project/GM:	Date Reported to PIU:	Date Reported to WBG:	
Reported to project/GM by: Survivor Third party Other: Is a record of this incident in GM? Yes No	Reported to PIU by: GM operator Directly, by Survivor Directly, by third party Other:	Reported to WBG by: PIU Directly, by Survivor Directly, by third party Other:	

B2: Incident type (please check all that apply) See Appendix 1 for definitions

Sexual exploitation 🗆 Sexual abuse 🗆 Sexual harassment 🗆

Age of survivor (if recorded in GM):	Have the national legislation or mandatory reporting requirements been followed? Yes D No D
Sex of survivor (if recorded in GM): Male 🗆 Female 🗖 Other 🗖	Was the survivor referred to service provision? ²⁹ Yes No
Is the survivor employed by the project (as indicated by the survivor or complainant and reported in the GM)? Yes No	Is the alleged perpetrator employed by the project (as indicated by the survivor or complainant and reported in the GM)? Yes □ No □

B4: Basis for further action	
a. Has the complainant provided informed consent to lodge a formal complaint? Yes 🗌 No 🗌	c. Has the survivor provided informed consent to be part of an investigation into misconduct? Yes \Box No \Box
 b. Does the employer have a suitable administrative process and capacity in place to investigate misconduct relating to SEA/SH in a survivor-centered way? Yes No 	d. Has the complaint been filed anonymously or through a third party? Yes 🗌 No 🗆
If the answer to any of these questions is no, has the GM investigation into the alleged misconduct, taking into acc	
Will an investigation into misconduct be undertaken in ac processes or procedures? Yes 🔲 No 🗔	ldition to an investigation into adequacy of project systems,

The following form will be completed by the PIU in case of SEA/SH cases – following investigations:

Table 15 SEA/SH incident report form after investigations

Has an investigation into adequacy of p procedures been undertaken? Yes 🗆	Construction of the second						
C2: Corrective actions to be implemented (To be fully described in Corrective Action Plan)							
Responsible Party	Timeline for completion/Status						
	procedures been undertaken? Yes described in Corrective Action Plan)						

Annex 6: Indicative Outlines for ESIAs / ESMPs

Below are indicative outlines and content suggestions for ESMPs and ESIAs, based on the WB ESF, that should be followed in the preparation of these instruments.

ESMPs should be prepared alongside the design of the subproject works. A draft ESMP should be finalized a couple of weeks after designs are finalized. Stakeholder consultations should be conducted during the design preparations. The ESMPs should therefore be ready for submission to the WB for clearance two weeks after the finalization of the designs. The ESMPs should be cleared by the WB prior to inclusion of ESMP details into the bidding process. The PIUs will commit to respond to comments received within a week– to prevent procurement processes from being delayed through the clearance of E&S instruments.

Section	Content of Section			
Executive summary	Concisely discusses significant findings and recommended actions, in English and in the respective local language. 2-3 pages.			
Project description Concisely describe the proposed subproject and its geographic, ecologica temporal context. Clearly define and designate the project area of influence indirect e.g. borrow pits, access roads, camp sites, etc.) that is covered by the a map and google earth /aerial image showing the project site and the project influence, and any relevant photos from field visits providing context of the site site and the project site and the pro				
Impact assessment	Identifies and summarize all anticipated adverse environmental and social impacts (including those involving involuntary Resettlement, and associated works e.g. borrow pits, access roads, camp sites, etc.), including cumulative impacts Indicate who is likely to be impacted, consequences of impacts, scale and likelihood.			
Mitigation	 Identify measures and actions in accordance with the mitigation hierarchy that reduce potentially adverse environmental and social impacts to acceptable levels. Include compensatory measures, if applicable. Specifically, the ESMP: (i) describes—with technical details—each mitigation measure, including the type of impact to which it relates and the conditions under which it is required (e.g., continuously or in the event of contingencies), together with designs, equipment descriptions, and operating procedures, as appropriate; estimates any potential environmental and social impacts of these measures; and 			
	 (ii) takes into account, and is consistent with, other mitigation plans required for the project (e.g., for involuntary resettlement) (iii) Is there any residual impacts, that require further mitigation if not acceptable. 			
Monitoring	Identify monitoring objectives and specify the type of monitoring, with linkages to the impacts assessed in the environmental and social assessment and the mitigation measures described in the ESMP.			
	Provide (a) a specific description, and technical details, of monitoring measures, including the parameters to be measured, methods to be used, sampling locations, frequency of measurements, detection limits (where appropriate), and definition of thresholds that will			

Table 16 Indicative Outline/Content for ESMP

	signal the need for corrective actions; and (b) monitoring and reporting procedures to (i) ensure early detection of conditions that necessitate particular mitigation measures, and (ii) furnish information on the progress and results of mitigation.
Capacity Development and Training	Draw on the environmental and social assessment of the existence, role, and capability of responsible parties on site or at the agency and ministry level.
	Provide a specific description of institutional arrangements, identifying which party is responsible for carrying out the mitigation and monitoring measures (e.g., for operation, supervision, enforcement, monitoring of implementation, remedial action, financing, reporting, and staff training).
	Strengthen environmental and social management capability in the agencies responsible for implementation, the ESMP recommends the establishment or expansion of the parties responsible, the training of staff and any additional measures that may be necessary to support implementation of mitigation measures and any other recommendations of the environmental and social assessment.

Table 17 Indicative table of contents for ESIA

Section	Content of Section
Executive summary	Concisely discusses significant findings and recommended actions, in English and in the native language.
Project description	Concisely describes the proposed project and its geographic, ecological, social, and temporal context, including any offsite investments that may be required (e.g., access roads, power plants, water supply, housing, and raw material and product storage facilities, disposal sites for wastes, etc.). It should also clearly define and designate the project area of influence (direct and indirect) that is covered by the ESIA. Indicates the need for any resettlement plan. Normally includes a map and photographs showing the project site and the project's area of influence.
Policy, legal, and administrative framework	Discusses the policy, legal, and administrative framework within which the environmental assessment (EA) is carried out. Explains the environmental and social requirements of the World Bank Group (ESS and relevant guidelines). Identifies relevant international environmental agreements to which the country is a party.
Baseline data	Assesses the dimensions of the study area and describes relevant physical, biological, and socioeconomic conditions, including any changes anticipated before the project commences. The baseline data must include the results of the Social Assessment. Also considers current and proposed development activities within the project area but not directly connected to the project. Data should be relevant to decisions about project location, design, operation, or mitigation measures. The section indicates the accuracy, reliability, and sources of the data.
Environmental and social impacts	Predicts and assesses the project's likely positive and negative impacts, in quantitative terms to the extent possible. It should include impacts at various phases of the project, including cumulative impacts. Identifies mitigation measures and any residual negative impacts that cannot be mitigated. Explores opportunities for environmental enhancement. Identifies and estimates the extent and quality of available data, key data gaps, and

	uncertainties associated with predictions, and specifies topics that do not require further attention.
Analysis of alternatives	Systematically compares feasible alternatives to the proposed project site, technology, design, and operation-including the "without project" situation-in terms of their potential environmental impacts; the feasibility of mitigating these impacts; their capital and recurrent costs; their suitability under local conditions; and their institutional, training, and monitoring requirements. For each of the alternatives, quantifies the environmental impacts to the extent possible, and attaches economic values where feasible. States the basis for selecting the particular project design proposed and justifies recommended emission levels and approaches to pollution prevention and abatement.
Environmental and social management plan (ESMP	Covers hierarchy of measures (avoidance, prevention, mitigation, compensation/offset) and include both generic construction measures and site-specific measures to address impacts on sensitive receptors. The mitigation measures identified in the Social Assessment (if distinct than those presented in the Project ESMP) will be incorporated in the ESMP. It should also include all other sub-plans that are sub-sets of the ESMP
Environmental monitoring and reporting plan	
Institutional arrangements, capacity assessment and capacity building program	Please elaborate on the scope

Annex 7: Quarterly E&S Reporting Template

Template for the Periodic Report on the Environment and Social Aspects of the Project

The objectives of the periodic report are:

- To record environmental and social impacts and risks resulting from the project activities and to ensure implementation of the mitigation, monitoring and institutional measures identified in the Environment and Social Commitment Plan (ESCP) and subsequently the ESMP(s), Resettlement Action Plans (RAPs), functionality of the project grievance redress system, accidents, and any other environmental and social instruments e.g. labor management procedures, SEA/SH Action Plans prepared for the project in order to reduce adverse impacts and risks and enhance positive impacts from specific project activities;
- Identify and address any unexpected or unforeseen environmental and social impacts or risks, that may arise during the period of the reporting this could include reporting on the progress during the construction/operation of the components/subcomponents of the Project as appropriate;
- Address any unexpected issues that may impact on the implementation of the project or compliance with the Safeguard requirements (e.g. contractor abandoned the site, site is flooded, community or worker protests, emergency works are required, etc.);
- To ensure that the implementation of the project is in line with the World Bank's (WB) environmental and social standards (ESS) in the Environment and Social Framework (ESF) for projects approved after October 2018 or the ten safeguard operational policies for projects approved before October 2018;
- To ensure development and implementation of necessary occupational health and safety management plans to identify hazards and mitigate risks, to ensure safe working sites and procedures;
- To report any changes in the project activities requiring a material change in the ESCP and/or other project instruments (e.g. ESMP(s), RAP(s), LMP etc) during the monitoring period; and
- To propose mitigations and corrective measures or actions for unforeseen adverse environmental and social risks and impacts identified during the monitoring period of the Project.

Please fill in ALL of the following information in the following template. If there is not an applicable heading for particular information, please include a section called Other or another appropriate heading and include the information. In addition, text can be included under any table, or as an additional Annexure, to further justify, provide additional details on a topic as needed.

If there is more information that you would like to report, please do so. If you require additional columns or rows to complete the tables, please add as necessary. However please DO NOT delete columns from tables, or sections from the template. Rather indicate as not relevant, or not applicable to this reporting period.

Please delete this Guidance note section when compiling the report.

I. Proposed Template

Project Name	
Project Code	
Project Amount (or Component Amount if	
relevant)	
Board Approval Date	
Implementing Agency	
Applicable ESS standards/ Safeguard	
Operational Policies	
Monitoring Period	

1. If this is not the first report, please indicate any changes as compared to the previous reporting period.

2. Planned/Undertaken Project Activities

Please provide in Table 1, a synopsis of the main Project activities planned/undertaken during the reporting period. Project activities and monitoring indicators can be taken from the PAD.

Description of Project work/activities	Monitoring Indicators during reporting Period	Frequency (monthly, quarterly)	

Table 1: Synopsis of the Project Activities Implemented During the Reporting Period

3. Pending/Delayed Actions (If any)

Please use Table 2 to highlight any pending or delayed actions of the precedent report (if any), as well as activities planned but not undertaken in the current reporting period, indicating reasons and/or challenges and actions to address the delay. If there are no pending or delayed actions please mark the Table 2 as not applicable.

No.	Activities (components, subcomponents) planned but not implemented	Safeguards requirements associated with the activities	Reason for delay	Actions to be taken	Timeline

Table 2: Table for Delayed Actions of the Project

Table 3: Status of the Implementation of the ESCP.

^{4.} Status of Implementation of the Environmental and Social Commitment Plan (ESCP). *Please use the ESCP in the loan agreement with the following columns in sequence in Table 3. (The Table can be made landscape to accommodate text or included as an annex.)*

ESS#	ESCP obligations	Timeframe of ESCP obligations	Status of implementation	Justification of delays/shortcomings	Actions to be taken and timeline

5. Status of the Implementation of the ESMP including all ancillary sites e.g. borrow pits, quarries, access roads, etc.

This section will inform/update on the status of the mitigation and monitoring measures of significant project risks, using a matrix approach including the relevant community health and safety measures. Please use the ESMP matrix with the following columns in sequence as shown in table 4 below. Where there are multiple ESMPs or ES instruments, including but not limited to ESIA, ESMF, ES Audit, LMP, GBV Action Plan, etc. within a project, please complete Annexure A to reflect status of each instrument. Please make a note here that Annexure A has been completed.

R	eference	E&S	Monitoring	Linked to	Status of	Justification	Actions to be
		Mitigation	Indicators	Investment	Implementation	of	taken and
		Measures		Activity or		delays/short	timeline
				the ESS's		comings	

Table 4: Status of Implementation of the ESMP

6. Status of Development and / or Implementation of the Resettlement Action Plan (RAP) (if applicable)

For RAPs in Development: Please outline the current status of RAP(s) in development including but not limited to: (i) status of contract award to RAP consultant (ii) the number of PAPs affected by economic displacement, physical displacement and physical and economic displacement; (iii) estimated cost of compensation; (iv) status of stakeholder engagement; (v) grievances submitted during monitoring period; and (vi) expected timelines for RAP completion etc.

For RAPs in Implementation: This section will summarize the number and type of PAPs and status of the provision of relevant entitlements to compensate for the loss of assets belonging to the project affected people during the reporting period as well as the provision of livelihood restoration measures (as applicable) and justification for any delays. Where more than one RAP required for the project, please complete Annexure B in addition to the table below.

Table 5: Status of RAP Implementation	n		
Category	# of HH	# of Persons	Justification for any change
			since previous reporting
			period
1. ONLY physically displaced from dwe	llings		
Displacement as anticipated in			
resettlement plans			

Table 5: Status of RAP Implementation

Completed resettlement/economic			
rehabilitation/compensation			
Pending resettlement/economic			
rehabilitation/compensation	<u> </u>		
2. BOTH physically displaced from dwe	ellings and e	conomically disj	placed
Displacement as anticipated in			
resettlement plans			
Completed resettlement/economic			
rehabilitation/compensation			
Pending resettlement/economic			
rehabilitation/compensation			
3. ONLY economically displaced			
Displacement as anticipated in			
resettlement plans			
Completed resettlement/economic			
rehabilitation/compensation			
Pending resettlement/economic			
rehabilitation/compensation			
4. Voluntary Land Donations / Negotia	ted Agreem	ents (where app	olicable)
Displacement as anticipated in			
resettlement plans			
Completed Agreements			
Pending Agreements			
5. Livelihood Restoration			
Eligible for livelihood restoration plans			
Receiving livelihood restoration plans			
Pending inclusion in livelihood restoration			
plans			
6. Community Assets (report per site)			
Displacement as anticipated in			
resettlement plans			
Completed resettlement/economic			
rehabilitation/compensation			
Pending resettlement/economic			
rehabilitation/compensation			
	I		

Table 5A: RAP Implementation Delays (if relevant)

Justification for any delay in payment of compensation	
and timelines for resolution	
Justification for any delay in provision of other	
entitlements (eg replacement structures, agricultural	
inputs etc) and timelines for resolution	
Justification for delay in provision of livelihood restoration	
and timelines for resolution	

7. Status of the Implementation of the Project's Grievance Mechanism

This section will inform/update on the status of grievances filed and how the Borrower is responding to the concerns and grievances (including labour, social, environment grievances) of project-affected parties related to the environmental and social performance of the project. Please summarise in Table 6:

- State total number of grievances recorded during the reporting period;
- How many were resolved?
- How many were referred elsewhere? Is the GRC/ GRM following up?
- How many issues are unresolved and why?
- What is the plan for the unresolved issues?

In Annex D, please attach copies of the GRMs for this reporting period.

#	Stakeholder	Nature of Grievance (s)	Total Grievances	Status	Remarks/ Comment(s)
	(e.g. institution, community members, local leaders, etc)			Resolved/ unresolved	

Table 6: Overview of Grievances During the Reporting Period

8. Stakeholder Engagement

This section will inform/update on the status of stakeholder engagement and how the Borrower is ensuring that stakeholders are being met with in line with the requirements of the Project and / or SEP as relevant. The section should outline:

- a) The number of engagement activities undertaken during the reporting period and types of stakeholders met with (e.g., communities, districts, neighbouring facilities, etc)
- b) Key issues raised or discussed during the meetings
- c) To what extent are the stakeholders being engaged during the implementation of E&S risks and impacts management measures?
- d) Do they participate in monitoring the implementation of E&S risk and impact management measures?
- e) Is the engagement/consultations organized according to the SEP?
- f) Were the participants informed before the meeting and minutes were shared with the participants?

9. Health and Safety Accidents

This section summarizes in table 7 the Environmental, Health and Safety accidents and incidences that occurred during the reporting period. Importantly, the section includes detailed descriptions of the procedures to mitigate recurrence and avoid further injury. The section includes reports on near-misses and treats these as incidents in line with comparative accidents. The section includes a table for follow-up of earlier accidents, incidents, and near-misses. Details of OHS status must be completed in Annexure C.

Table 7: Accident and Incident Reporting

Data and time of	Nama of	Description	Courseitur		A ations to be	Ctature of
Date and time of	Name of	Description	Severity	Mitigating measures	Actions to be	Status of
accident/Incident	Victim	of the	of	taken by the	taken to	the
		accident	Accident	contractor/proponent	prevent the	accidented
			(Minor		occurrence of	(open
			/Major		the accident	/closed ⁵⁸)
			injury/			
			death)			

10. Environmental and Social Management Capacity

This section details the E&S supervision arrangements for the project and individual sites. The section includes a diagram of the reporting arrangements as well as roles and responsibilities, any vacant positions and timelines to fill them if relevant. The description may require several diagrams for various project sites.

Administration:

State any changes or updates on administrative requirements e.g. E&S personnel, location, etc.; Any changes in terms of applicable national and international requirements.

Capacity Building:

Provide an update on any E&S safeguards related CB activities undertaken at any level – PIU, district, community etc.

Indicate outstanding CB activities and timelines for undertaking them.

11. Environmental and Social Audits, Reviews, and 3rd Party Monitoring

This section details the planned and conducted environmental and / or social audits (independent, external/regulator, and internal) during the project lifetime, this also includes status/progress or findings or recommendations from 3rd Party Monitors (where applicable).

12. Other Project specific issues to flag, raise, report on:

13. Other Specific Issues

Please answer the following questions:

- g) Is the PIU adequately staffed with skilled and permanent E&S specialists? Do they have resources (finance and equipment) to carry out field visits and supervisions?
- h) Are the Contractor(s) and Owner/Supervising Engineer adequately staffed with skilled and permanent E&S staff. Are they preparing their periodic E&S reports to the Owner?
- i) Is the project GRM still robust enough to respond to complaints? How many complaints have been received and resolved (provide current and cumulative data?

⁵⁸ Closed incident referring to those that have all the actions completed

- j) What is the level of expenditure of the amounts detailed in the ESMP including those incurred by the Contractor(s). Is there sufficient budget allocation for implementing the ES instruments?
- k) What are the constraints to the achievement of the ESCP and ESMP(s)⁵⁹?

II. Conclusions and Recommendations

Please summarize the major conclusions during this periodic report and recommendations for actions to be implemented in the next monitoring period. Include a summary (in a table) of measures or activities that were planned vs achieved; And state reasons why some activities are still outstanding. Include a table of planned activities for the next quarter/ reporting period.

⁵⁹ Or other ES instruments including but not limited to ESMF, ES Audit, etc.

Annexure A: Status of ESMPs (Or other instruments where there are multiple)

Indicate the status of each ESMP, or instrument, within the project. Copies of monitoring checks or reports of ESMPs should be attached to the report.

Sub-project activity name	E&S Instrument (e.g., ESMF, ESIA, ESMP, ES Audit)	Status/progress of Implementation (Implemented/not implemented/delayed)	Justification of delays/shortcomings	Actions to be taken and timeline

Annexure B: Status of RAPs

Indicate status of implementation of each RAP within the project:

Name	Status of	Total	Number of	Amount	Other	Status of	Justification	Action
of	RAP	PAPs	PAPs & HH	of	Entitlements	Provision of	of non-	to be
RAP	(developme	&	a) physically	compens	to be	Compensati	payment or	taken
	nt,	НН	displaced	ation	provided	on and / or	delay	and
	implementa		only, b)			entitlement		timeline
	tion, closed		economically			s: Paid/Part		
	out)		displaced			Paid/		
			only and c)			Delayed/Un		
			physically			paid		
			and					
			economically					
			displaced*.					

*the number of PAPS and Households in this column should equal the total number of PAPs and HH reported in the previously column i.e. each PAP or HH should only appear in one classification.

Annexure C: Occupational Health and Safety

(If there are multiple contractors and/or multiple OHS plans, then submit a separate OHS Progress Report, reference it here, e.g. Project taking place in 10 Districts and 10 different contractors each with own OHS plan, etc.).

Summarise the status of:

- Site Risk Management (Outline who is the principal contractor, list subcontractors, how is OHS monitored and enforced on site, etc.)
- Site Risk Assessments (including members of risk assessment team, notes of assessments, minutes of meetings),
- Safety Plans,
- Establishment of Safety committee (including members, minutes of meetings, constitution, meeting agendas, etc.),
- Development of safety procedures,
- Induction training and attendance,

- Employee training records,
- Toolbox talk attendance,
- Labour GRM establishment and complaints,
- Compliance with OHS plan,
- Accident and incident reports (captured information into GEMS/KOBO?),
- Project construction site photos,
- Reports on environmental and ecological monitoring, including water quality, air quality, fauna, flora, avifauna, etc.

Annexure D: Project's Grievance Mechanism

Please attach copies of the Project GRMs for this reporting period.