Republic of South Sudan
Ministry of Livestock and Fisheries

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)
for
South Sudan Resilient Livestock Sector Project (P500553)

(Cleared by RSA)

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Abbreviations and Acronyms

CAHW	Community Agricultural Health Workers
CoC	Code of Conduct
CERC	Contingency Emergency Response Components
DRC	Democratic Republic of Congo
EHS	Environment, Health and Safety
ESCP	Environmental and Social Commitment Plan
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Impact Assessment
C-ESMP	Contractor Environmental and Social Management Plan
ESF	Environmental and Social Framework
ESS	Environmental and Social Standards GHG
FCV	Fragility, Conflict and Violence
GAHP	Good Animal Husbandry Practices
GBV	Gender Based Violence
GRM	Grievance Redress Mechanism
HWMP	Hazardous Waste Management Plan
IDP	Internally Displaced Persons
MLF	Ministry of Livestock and Fisheries
OHS	Occupational Health and Safety
PAP	Project Affected Persons
PIU	Project Implementation Unit
LMP	Labor Management Procedures
R&D	Research and Development
RF	Resettlement Framework
SA	Social Assessment
SEA	Sexual Embarrassment and Abuse
SEP	Stakeholder Engagement Plan
SH	Sexual Harassment
SRA	Security Risk Assessment
TA	Technical Assistance
TBD	Tick Borne Disease
TPMA	Third Party Monitoring Agent
VHC	Veterinary Health Centers
VLD	Voluntary Land Donation
VMP	Veterinary Medicinal Products
VFU	Veterinary Field Units

Executive Summary

I. Introduction

The South Sudan Resilient Livestock Sector Project will support to improve the animal health and strengthen resilience of livestock production systems for targeted beneficiaries in project areas. The project will adopt a risk-based approach with focus on transboundary diseases especially in locations with significant cross-border trade in livestock, clusters with high livestock population, and geographical locations which are stable and accessible.

The objective of the ESMF is to assess and mitigate potential negative environmental and social risks and impacts of the project consistent with the Environmental and Social Standards (ESSs) of the World Bank ESF and national requirements of South Sudan.

II. Project Description

The proposed project will have four interlinked components, which are summarized below.

Component 1: Strengthening animal health and welfare to restore South Sudan's herd productivity.

Sub-component 1.1: Implementation of the livestock vaccination and deworming campaigns and dipping tanks for tick and tick-borne disease (TBD) control. The sub-component will support vaccination and internal parasite control (deworming) campaigns for priority diseases and parasites, as well as the construction of dipping tanks to improve the health of the herd.

Sub-component 1.2: Strengthening the delivery of animal health services. The sub-component will support the training of Community Agricultural Health Workers (CAHWs, implementation of small veterinary health centers (VHC) and adequate community slaughterhouses on a pilot basis at the sub-district level, and supply Veterinary Medicinal Products (VMP) for basic animal health services, as well as a pilot privatization model for access to animal health services through the establishment of Veterinary Field Units (VFU) for the delivery of demand-driven animal health services.

Component 2: Sustainable management of natural resources for livestock systems, with focus on rangeland and water management.

*Sub-component 2.1: Support for natural resources infrastructure and capacity critical for livestock systems***.** The sub-component will deliver water (boreholes/hefir) and fodder conservation infrastructure to ensure the availability of critical resources and, in the case of fodder, to promote the commercialization of surplus fodder as a source of alternative livelihood.

*Sub-component 2.2: Sustainable rangeland management***.** The sub-component will support the establishment of an effective and sustainable rangeland management system at community level that supports fodder production for livestock and establishes rangelands as a carbon sink to promote GHG intensity reduction.

Component 3: Strengthening institutional alignment and regulatory coherence.

Sub-component 3.1: Strengthening coordination and Support to Policy Formulation, Planning, and Capacity. It will support the MLF to improve coordination of service delivery model between

the central and state veterinary services, the current process to develop the regulatory framework for livestock systems and value chains, the formulation and implementation of policies on animal health and welfare, as well as the establishment of livestock markets geared towards increasing livestock offtake in target locations.

Sub-component 3.2: Research and Development and Capacity building. This will support R&D and capacity building to produce knowledge required to guide the strategic and sustainable development of the sector and knowledge transfer and service delivery to farmers. Capacity in early warning, early response and resilience measurement will also be covered.

Component 4: Project Coordination and Technical Assistance.

Sub-component 4.1: Project Management and Coordination
Sub-component 4.2: Technical Assistance (TA) and Capacity Building Support to MLF: The sub-component will support TA and capacity strengthening of MLF and select associated departments in priority policy making including data and knowledge generation.

III. Environmental and Social Policies, Regulations, and Laws

Since attaining independence in July 2011, the Government of the Republic of South Sudan has adopted a new constitution, as well as policies and legislation related to environmental and social management. Some legislation from the previous 'Southern Sudan' remains in place. At the same time, other laws and regulations are still being drafted, with the aim of enhancing sustainable socio-economic development. These includes; the Transitional Constitution of the Republic of South Sudan of (2011), National Environment Policy 2015 to 2025, National Agriculture and Livestock Extension Policy (2011), Ministry of Animal Resources and Fisheries (MARF) Policy Framework and Strategic plan (2012 -2016), The Water Policy, Gender Policy, South Sudan National Women's Strategy 2016, Draft Environmental Protection Bill (2013), The Labor Act (Act No. 64 of 2017), The Public Health (Water and Sanitation) Act (2008), The Child Act (Act No. 10 of 2008), and The Land Act of 2009 (State of Southern Sudan).

IV. National Environmental and Social Assessment and Licensing Procedures

The Ministry of Environment and Forestry (MoEF) is responsible for managing environmental assessments in South Sudan. The Directorate responsible for ESIA process and administration including review and approval is the Environment and Sustainable Development Directorate. Currently, the Directorate lacks a binding legal instrument to require and enforce EIA procedures on development projects due to the fact that the Environmental Protection Bill is still not enacted. Therefore, the MoEF only issues a "Letter of no objection" for subproject ESIAs when satisfied that it is complete upon review. In the absence of a fully-fledged national environmental and social screening, review and approval process for subprojects, the World Bank's ESF and its procedures will be adopted for managing environmental and social risks and impacts in this project.

V. Potential Environmental and Social Risk Impacts and Standard Mitigation Measures

Based on a review of project documents, including the project's concept note and after consultations with stakeholders, the project's overall risk rating is adjudged as '***High***.' The environmental and social risk of the project is categorized as ***Substantial***. Nine of the ten World Bank's ESSs are found applicable to project activities.

The potential adverse E&S risks of the SSRLSP likely to occur under component 1, 2 and 3 can be classified into two groups: (a) those that may emerge due to civil works and (b) those potential risks and impacts due to routine subproject implementation and operational activities.

Activities under component 1 and 2 that involve the undertaking of civil construction works, includes construction of dipping tanks, implementation of community slaughterhouses, establishment of Veterinary Field Units (VFU), delivering boreholes/hefir water, delivering fodder conservation infrastructures, and the establishment of livestock markets under component 3. The adverse E & S risks of these subproject activities are related to construction (civil work) activities.

Activities that would cause adverse E&S risks as a result of subproject implementation and operational activities includes vaccination and internal parasite control (deworming) campaigns, operation of dipping tanks, supply of Veterinary Medical Products at sub district levels, supporting the implementation of small veterinary health centers (VHC), operation of community slaughter houses, operation of Veterinary Field Units (VFU), operation of feedlot for livestock fattening for commercial purpose, operation of livestock markets, as well as establishment of an effective and sustainable rangeland management system at community level that supports fodder production for livestock. Except for the range land management system subproject, the adverse E & S risks associated with many of these subprojects are anticipated to be caused due to release of both hazardous and non-hazardous wastes during operational activities. The handling, transport, storage and use of veterinary medicines including pesticides and release of hazardous wastes to the environment would likely cause adverse impacts to the environment.

The adverse environmental and social risks and impacts associated with the SSRLS project subcomponent activities are broadly summarized in Table 3 found in the main body of the report (Table 3 is more than ten pages and will stretch the executive summary beyond limits).

Much of the E&S impacts that may arise from the operational activities of SSRLSP subproject such as community slaughterhouses, feedlots for livestock fattening and livestock markets could be minimized by carefully selecting appropriate sites and facility designs during the planning phase. Selection of sites that is away from residential areas and having proper distance from neighbors to avoid foul odor nuisance will avoid/minimize negative impacts affecting the neighborhood. The planning and design considerations of the sustainable range land management system would also need to take into account the presence of critical habitats including known habitat of critically endangered or endangered species, or important wildlife breeding, feeding, and staging areas and avoid or minimize impacts by selecting alternative sites and methodologies.

VI. Procedures and Implementation Arrangements

The environmental and social risk management procedures will be implemented through the Project's subproject selection process. In summary, the procedures aim to do the following:

Project Stage	E&S Stage	E&S Management Procedures
a. Assessment and Analysis:	Screening	- During subproject identification, ensure subproject eligibility by referring to the Exclusion List in Table 5 below.

Subproject identification		- For all subprojects, use the Screening Form in Annex 1 to identify and assess potential environmental and social risks and impacts, and identify the appropriate mitigation measures for the subproject. - Check and update regularly if there are progresses made in promulgating the Draft Environment Bill by the National Parliament and identify the documentation, permits, and clearances required under the enforced Environmental Bill.
b. Formulation and Planning: Planning for subproject activities, including human and budgetary resources and monitoring measures	Planning	- Based on ***Screening Form*** and in consultation with the World Bank country office safeguard team, prepare relevant environmental and social procedures and plans. - For activities requiring Environmental and Social Management Plans (ESMPs), submit the first 5 ESMPs [or another number agreed with the World Bank Country office safeguard team] for prior review and no objection by the World Bank prior to initiating bidding processes and/or launching activities. - Ensure that the contents of the ESMPs are shared with relevant stakeholders including the Ministry of Environment and Forest (MoEF) in an accessible manner and consultations are held with the affected communities in accordance with the SEP. - Complete obtaining the "***Letter of no Objection***" clearances from the MoEF and final "**No objection**" from the World Bank Safeguards team - Train staff responsible for implementation and monitoring plans. - Incorporate relevant environmental and social procedures and plans into contractor bidding documents; train contractors on relevant procedures and plans.
c. Implementation and Monitoring: Implementation support and continuous monitoring for projects.	Implementation	- Ensure implementation of plans through site visits, regular reporting from the field, and other planned monitoring. - Track grievances/beneficiary feedback. - Continue awareness raising and/or training for relevant staff, contractors and communities.
d. Review and Evaluation:	Completion	- Assess whether plans have been effectively implemented by conducting **Annual Performance Reviews**. - Ensure that physical sites are properly restored.

The Technical Assistance activities of the SSRLP project are categorized as Type 2 and Type 3 TAs. Hence the MLF PIU will ensure that the Type 2 TA activities designed to support formulaion of policies and regulatory frameworks are carried out in accordance with ToRs that are consistent

with the ESSs. Similarly the MLF PIU should have to review the tasks of the Type 3 TA activities for capacity building and training of CAHWs to check if it has issues covered by the ESF, and ensure that the ToR are designed in a way to address them.

VII. Implementation Arrangements

At National level, the project activities will be implemented and coordinated by the Ministry of Livestock and Fisheries (MLF). A Steering Committee representing the major stakeholders in the livestock sector (livestock, agriculture, finance, and participating states) will provide overall guidelines to the project. A Project Implementing Unit (PIU), which will be staffed with environment and social specialists, will coordinate day-to-day implementation, supervision, and overall management of project activities. At states level, the project will be implemented by the beneficiary state ministries in collaboration with MLF. The beneficiary state ministries will assign focal persons for environment and social management, who will be responsible for regular implementation, monitoring and supervision of the ESMF and associated ESMPs for subproject activities in their respective states. In view of the weak capacity and government systems in South Sudan, outsourcing implementation of some of the activities to United Nations (UN) implementing partners will be applied.

The table below summarizes the roles and responsibilities regarding the implementation arrangements for environmental and social management.

Level/ Responsible Party	Roles and Responsibilities
MLF PIU	- For subprojects managed centrally, ensure project activities do not fall under the Exclusion List. Fill out Screening Forms for relevant subproject activities. - Oversee overall implementation and monitoring of environmental and social mitigation and management activities, compile progress reports from state levels for subprojects, and report to the World Bank on a quarterly [or biannual] basis. - Provide support, oversight and quality control to field staff working on environmental and social risk management. - Collect, review, and provide quality assurance and approval to Screening Forms and ESMPs as relevant. Keep documentation of all progress. - Train central and field staff and contractors who will be responsible for implementing the ESMF. - If contracting is managed centrally, ensure that all bidding and contract documents include all relevant E&S management provisions per screening forms, ESMPs, and ESCOPs.
State level E&S focal persons	- Ensure project activities do not fall under the Exclusion List. Fill out Screening Forms for relevant subproject activities and submit forms to the national level. - If relevant, complete site-specific ESMPs for subproject activities and submit forms to the national level. - Oversee daily implementation and monitoring of environmental and social mitigation measures, and report progress and performance to the national level on a monthly basis. - Provide training to local contractors and communities on relevant environmental and social mitigation measures, roles, and responsibilities.

	- If contracting is managed at state level, ensure that all bidding and contract documents include all relevant E&S management provisions per screening forms, ESMPs, and ESCOPs.
Local contractors	- Comply with the Project's environmental and social mitigation and management measures as specified in ESMPs, ESCOPs, and contract documents, as well as national and state legislation. - Take all necessary measures to protect the health and safety of workers and community members, and avoid, minimize, or mitigate any environmental harm resulting from project activities.]

VIII. Capacity Building and Budget

The virtual consultation discussions held with the stakeholder institutions have shown that there are capacity gaps in the E&S management which need to be filled through deploying adequate human resources and training. As a result, it is recommended that the capacity gap in E&S risk management should be filled in as follows.

- The MLF should deploy one environmental and one social specialist on a fulltime basis to work in the SSRLP PIU at national level
- The State Ministries in the project beneficiary states should deploy one environmental and one social specialist on a fulltime basis to work in the SSRLP PIU at state level
- Each project SSRL project beneficiary Counties should assign qualified focal persons for environment and social experts.

There will be a need to carry out E&S awareness workshops and technical training on environmental and social management covering a range of topics for staff and officials of project implementing and stakeholder institutions. The total estimated costs for mainstreaming environment into the SSRLSP subcomponents for the entire five years of project implementation period is USD 928 500. The above costs will be funded by the SSRLSP project. The SSRLSP PIU Environmental and Social Specialists will report on SSRLSP ESMF expenditure.

1. Introduction

This Environmental and Social Management Framework (ESMF) is developed to support the environmental and social due diligence provisions for activities financed by the World Bank under the aegis of the proposed South Sudan Resilient Livestock Sector Project. The project will support to improve the animal health and strengthen resilience of livestock production systems for targeted beneficiaries in project areas. It will have four interlinked components aimed at achieving a healthy and productive national livestock herd, sustainable management of natural resources for livestock systems, institutional alignment and regulatory coherence. The project will adopt a risk-based approach with focus on transboundary diseases especially in locations with significant cross-border trade in livestock, clusters with high livestock population, and geographical locations which are stable and accessible. It will also intervene in areas where important tick-borne diseases (especially East Coast Fever) are endemic and a significant hindrance to animal production, trade, and off-take. The project will be implemented and coordinated at the central level by the Ministry of Livestock and Fisheries (MLF) in collaboration with the participating counties at the state level.

This ESMF follows the World Bank Environmental and Social Framework (ESF)[1] as well as the national laws and regulations of the South Sudan. The objective of the ESMF is to assess and mitigate potential negative environmental and social risks and impacts of the project consistent with the Environmental and Social Standards (ESSs) of the World Bank ESF and national requirements. In this project, the nine relevant ESSs set out the requirements for the Republic of South Sudan relating to the identification and assessment of environmental and social risks and impacts associated with this project, which is supported by the Bank through Investment Project Financing framework.

More specifically, the ESMF aims to (a) assess the potential environmental and social risks and impacts of the proposed Project and propose mitigation measures; (b) establish procedures for the environmental and social screening, review, approval, and implementation of activities; (c) specify appropriate roles and responsibilities, and outline the necessary reporting procedures, for managing and monitoring environmental and social issues related to the activities; (d) identify the staffing requirements, as well as the training and capacity building needed to successfully implement the provisions of the ESMF; (e) address mechanisms for public consultation and

[1] The ESF supports green, resilient, and inclusive development by strengthening protections for people and the environment and making important advances in areas such as labor, inclusion and non-discrimination, gender, climate change, biodiversity, community health and safety, and stakeholder engagement. It uses a risk-based and proportionate approach that applies increased oversight and resources to complex projects and allows for greater responsiveness to changes in project circumstances through adaptive risk management and stakeholder engagement. It promotes integrated environmental and social risk management. The ESF places an emphasis on strengthening national environmental and social management systems and institutions and supporting Borrower capacity building. It promotes enhanced transparency and stakeholder engagement through timely information disclosure, meaningful and ongoing consultations throughout the project life cycle, and responsive grievance mechanisms to facilitate resolution of concerns and grievances of project-affected parties.

disclosure of project documents as well as redress of possible grievances; and (f) establish the budget requirements for implementation of the ESMF.

This ESMF should be read together with other plans prepared for the project, including the Stakeholder Engagement Plan (SEP), the Environmental and Social Commitment Plan (ESCP), GBV/SEA Plan, Labour Management Procedures (LMP), Resettlement Framework (RF), Security Risk Assessment and Management Plan (SRAMP), Social Assessment (SA) including provisions for vulnerable group and Voluntary Land Donation Framework and the timelines specified in those E&S documents

2. Project Description

The proposed project will have four interlinked components, which are summarized below.

Component 1: Strengthening animal health and welfare to restore South Sudan's herd productivity.
Using a One Health approach, this component will support the delivery and implementation of animal health services (vaccination, internal parasite control, and tick control) in target areas in South Sudan. Component 1 will have the following two subcomponents.

- **Sub-component 1.1: Implementation of the livestock vaccination and deworming campaigns and dipping tanks for tick and tick-borne disease (TBD) control.** The sub-component will support vaccination and internal parasite control (deworming) campaigns for priority diseases and parasites, as well as the construction of dipping tanks to improve the health of the herd. Vaccination and deworming will be risk-based, adapted to region, type of livestock, target disease and seasonality. Based on a mapping exercise to be conducted during project preparation of existing dipping tanks overlaid with pastoralist routes and existing (staffed) community centers, the Project will define investment areas for the construction of dipping tanks for improved control of TBDs. The dipping tanks will also be constructed near centers where other veterinary services are provided such as vaccination centers or between major cattle camps. A total of 3 to 5 new dipping tanks per county of intervention will be constructed based on pre-identified priority needs.

- **Sub-component 1.2: Strengthening the delivery of animal health services.** The sub-component will support the training of Community Agricultural Health Workers (CAHWs). Training will cover Good Animal Husbandry Practices (GAHP) and basic animal health (with a One Health approach) and welfare care. The Project will also support the implementation of small veterinary health centers (VHC) and adequate community slaughterhouses on a pilot basis at the sub-district level to supply Veterinary Medicinal Products (VMP), basic animal health services, and training for CAHWs. It will also support a pilot privatization model for access to animal health services through the establishment of Veterinary Field Units (VFU) for the delivery of demand-driven animal health services. The sub-component will train 1,000 new CAHWs (with special emphasis on female-owned herds).

Component 2: Sustainable management of natural resources for livestock systems, with focus on rangeland and water management. The proposed Project will introduce and foster the adoption of rangeland management practices using geo-referenced mapping of natural resources critical to livestock systems overlayed with rangeland carrying capacity and pastoralist routes conducted during project preparation to identify investment areas. Given the importance of fodder and water in the life and productivity of livestock, and to offset the seasonality of availability of

these resources, the proposed Project will support the production and continuous availability of these two critical inputs. Component 2 will have the following two subcomponents;

- **Sub-component 2.1: Support for natural resources infrastructure and capacity critical for livestock systems.** The sub-component will deliver water (boreholes/hefir) and fodder conservation infrastructure to ensure the availability of critical resources and, in the case of fodder, to promote the commercialization of surplus fodder as a source of alternative livelihood. Investment areas for water infrastructure (boreholes) will be defined based on needs assessment cross-referenced with pastoralist routes. Investment areas for fodder conservation infrastructure and capacity building will be defined based on needs assessment, rangeland carrying capacity, and livestock density studies conducted during project preparation. A total of 3-5 new water points and 3 fodder conservation infrastructures will be constructed in targeted project areas. Feedlot will be introduced in potential areas for livestock fattening for commercial purposes.

- **Sub-component 2.2: Sustainable rangeland management.** The sub-component will support the establishment of an effective and sustainable rangeland management system at community level that supports fodder production for livestock and establishes rangelands as a carbon sink to promote GHG intensity reduction. Sustainable soil management can offset GHG emissions. Managing the invasive species that are taking up large areas of rangeland will help in restoration and rehabilitation of grazing pasture and restoration and enhancement of rangelands will enable improved stocking distribution of the livestock herd in South Sudan, thus reducing rangeland degradation and conflict resulting from competition over fodder. It will facilitate the relocation of cattle from overstocked areas that have resulted in severe soil degradation to areas with potential for livestock production that currently need natural resources restoration or improvement. Sustainable rangeland management will also reduce the strong seasonality in the availability of graze, thus reducing conflict over scarce resources, improving resilience of livestock producers, and promoting mitigation measures.

Component 3: Strengthening institutional alignment and regulatory coherence. The component will support institutional alignment and regulatory coherence of the MLF services. Component 3 have the following two subcomponents.

- **Sub-component 3.1: Strengthening coordination and Support to Policy Formulation, Planning, and Capacity.** The sub-component will support the MLF to improve coordination of the service delivery model between the central and state veterinary services. It will also support the current process undertaken by the MLF to develop the regulatory framework for livestock systems and value chains. The Project will support the formulation and implementation of policies on animal health and welfare, food safety, antimicrobial resistance (AMR) surveillance, commercialization of animal-derived

products, meat control and slaughtering facilities, and Veterinary Medicinal Products (VMPs) and other priority policies and strategies of the ministry. The Project will support the establishment of livestock markets geared towards increasing livestock offtake in target locations that are also working with livestock traders and butchers' associations.

- **Sub-component 3.2: Research and Development and Capacity building.** The Sub-component will support Research and Development (R&D) and capacity building to produce knowledge required to guide the strategic and sustainable development of the sector and knowledge transfer and service delivery to farmers. The component will focus on the matters that are relevant to the Project. Livestock extension and advisory services will be strengthened to link research and technology transfer to livestock production and range management. Capacity in early warning, early response and resilience measurement will also be covered.

Component 4: Project Coordination and Technical Assistance. The component will support the MLF to implement the Project, provide technical assistance and capacity building to strengthen its policy, planning, managerial and technical roles, and functions. Component 4 have the following two subcomponents;

- **Sub-component 4.1: Project Management and Coordination:** The sub-component will fund the project management implementation unit (PIU) which will be recruited to run the Project under the MLF. In addition to the other staff, the PIU will be staffed with an environmental specialist, a social specialist and a GBV Specialist to manage: (a) effective implementation of the project activities in compliance with the requirement of the environmental and social framework (ESF); (b) environmental and social (E&S) risk management, regular E&S implementation progress reports; and (c) oversight from Third Party Monitoring Agent (TPMA). This sub-component will also finance the establishment and maintenance of a Grievance Redress Mechanism (GRM).

- **Sub-component 4.2**: **Technical Assistance (TA) and Capacity Building Support to MLF:** The sub-component will support TA and capacity strengthening of MLF and select associated departments in priority policy making including data and knowledge generation, promotion of sustainable and climate-smart livestock management, national policies and planning processes and other technical areas. The Project will commission a capacity needs assessment exercise, identify priority training areas, and arrange training for the officials and technical staff.

The project activities will be implemented and coordinated at the central level by the MLF in collaboration of the participating counties at the state level. At the pinnacle of the project, there will be a Steering Committee representing the major stakeholders in the livestock sector (livestock, agriculture, finance, and participating states) to provide overall guidelines. A PIU that coordinate

day-to-day implementation, supervision, and overall management of project activities will be created. In view of the weak capacity and government systems in South Sudan, outsourcing implementation of some of the activities to United Nations (UN) implementing partners, where local skills and experience will be lacking, will be applied.

3. Environmental and Social Policies, Regulations, and Laws

3.1 South Sudan: Background and Legal Framework

South Sudan is a landlocked country that lies between latitudes 3°N and 13° N and longitudes 24°E and 36°E. The country's territory covers 644,329 km^2 and has many plains and plateaus that are drained by the Nile and its numerous tributaries. South Sudan has a tropical climate, characterized by a rainy season of high humidity and large amounts of rainfall followed by a drier season. The temperature on average is always high with July being the coolest month with average temperatures falling between 20 and 30°C (68 and 86 °F). South Sudan's protected area of Bandingilo National Park hosts the second-largest wildlife migration in the world. Habitats in the country include grasslands, high-altitude plateaus and escarpments, wooded and grassy savannas, floodplains, and wetlands. Associated wildlife species include the endemic White-Eared Kob.

The Republic of South Sudan became the world's youngest nation and Africa's 54th country on July 9, 2011. However, outbreaks of civil war in 2013 and 2016 have undermined the post-independence development gains it made, as well as making its humanitarian situation worse. More than a decade after independence, South Sudan remains impacted by fragility, economic stagnation, and instability. Poverty is ubiquitous, exacerbated by conflict, displacement, and external shocks. The signing of the Revitalized Agreement on the Resolution of the Conflict in the Republic of South Sudan (R-ARCSS) in September 2018 and the formation of a Transitional Government of National Unity in February 2020 have contributed to recovery and peacebuilding.

Since attaining independence in July 2011, the Government of the Republic of South Sudan has adopted a new constitution, as well as policies and legislation related to environmental and social management. Some legislation from the previous 'Southern Sudan' remains in place. At the same time, other laws and regulations are still being drafted, with the ultimate aim of enhancing sustainable socio-economic development. Table-1 below provides a summary of the policy and legal framework for environmental and social management and conservation in South Sudan under the auspices of this project.

Table 1: Summary of National Legal Frameworks Relevant to the SSRLSP

Law	Description and Relevance to Project Activities
Transitional Constitution of the Republic of South Sudan of 2011.	Article 41 (1) (2) (3) and Article 166 (6) of the Constitution outlines the environmental rights and duties. The environmental rights include a right to clean and healthy environment and the right to inherit an environment protected for the benefit of present and future generations. Environmental duties enshrined in the Constitution also include an obligation to every person to protect the environment, and for local governments to involve communities in decision-making in the promotion of a safe and healthy environment.

South Sudan National Environment Policy 2015 to 2025	The policy is a response to the challenges posed by existing environmental problems, such as pollution and depletion of natural resources. Statement 15 of the Policy states that "The Government will ensure incorporation of environmental assessment into procedures for designing and implementing development programs, plans, policies and projects". This will be achieved through promoting application of Environmental Assessment Tools (Environmental Impact Assessment - EIA, Strategic Environmental Assessment – SEA, etc.) to all investment and development projects before their establishment.
National Agriculture and Livestock Extension Policy (2011)	The aim of the policy on agriculture and livestock (2011) is "to transform agriculture and livestock from traditional/subsistence systems to achieve food security, wealth creation and national economic growth through science based, market oriented, competitive and profitable agricultural systems."
Ministry of Animal Resources and Fisheries (MARF) Policy Framework and Strategic plan (2012 - 2016)	The MARF Strategic Plans for the Directorate of Animal Production and Range Management (DAPRM) sets out the following three objectives and detailed strategies that are linked with the core components of the present project : ***Strategic Objective (1)*:** Improve utilization and conservation of rangelands and water resources - Mapping of livestock migratory routes and grazing areas - Establishment of water catchments - Pasture/rangeland conservation/improvement ***Strategic Objective (*2):** Characterize, document, conserve and improve (in collaboration with the Directorate of Animal and Fisheries Research and Development) the available animal genetic resources. - Documentation of existing situation with production and breed improvement research studies ***Strategic Objective (3)***: Develop livestock feed standards and quality feed formulations for all classes of livestock, in collaboration with the Directorate of Animal and Fisheries Research and Development and promotes with livestock producers. - Documentation and dissemination of feed standards and feed formulation research to develop and support the production of quality locally-formulated livestock feeds
The Water Policy	The overall goal of the GoSS Water Policy is to support social development and economic growth by promoting efficient, equitable and sustainable development and use of available water resources, and effective delivery of water and sanitation services in Southern Sudan. The specific objectives of the policy includes; -To establish clear guidelines governing equity of access to water resources to maximize social and economic benefits for all people of Southern Sudan.

	-To conserve available water resources, to promote efficient and responsible development and use of water resources, to manage water quality and to prevent pollution of ground and surface waters.
Gender Policy	The Government of South Sudan has committed to gender equality for women and men, girls and boys and to protect women and girls from harmful social norms. The Government has endorsed pledges to end child marriage and prevent and respond to gender-based violence (GBV).
South Sudan National Women's Strategy 2016	The National Women Strategy is a tool to mainstream gender and provide for gender equality in different sectors of the society. The objective of this strategy document is to ensure that women participation and contribution in decision making at national level is seen beyond the limitation of the 25% thresh hold of gender quota which is enshrined in the Constitution of Republic of South Sudan (2011) amended 2015\
Draft Environmental Protection Bill (2013)	Even though the draft bill is not legally established yet, it has set out the regulations in detail which defines the national EIA requirements, process and procedures. Article 22 (1) of the draft Bill introduces the EIA requirement by prohibiting any developer or proponent to implement a project for which an environmental impact assessment is required under the Bill or any other written law unless an environmental impact assessment has been concluded and approved in accordance with the Schedule I of the draft Bill. Article 23 (1&2) requires that a project developer or proponent shall be required to register an application for an EIA certificate by preparing and submitting a project brief.
The Labor Act (Act No. 64 of 2017)	The Labor Act establishes a legal framework for the minimum conditions of employment, labor relations, labor institutions, dispute resolution and provisions for health and safety in the workplace. The provisions pertaining to health and safety issues at work place are addressed in Articles 110 -112 of the Labor Act No.64 (2017). Article 110 (1) state that an employer shall ensure safety, health and welfare at workplace for all employees. Article 12(6) of the Labor Act prohibits the engagement of a child under the age of eighteen years to perform hazardous work. In addition, section 10 of the act spells out that forced labor is prohibited. Article 7(1) of the Labor Act restricts sexual harassment at workplace by stating that "no person shall sexually harass an employee or an employer".
The Public Health (Water and Sanitation) Act (2008)	Emphasizes the prevention of pollution of air and water and also encourages improvement in sanitation. Key provisions include the protection of the sanitation of the environment and it encompasses the measure to address the pollution of water and air. Actions stated in the Public Health Act include measures to prevent pollution of water for consumption, management and disposal of hazardous wastes; and storage of wastes on the premises of waste generators.
The Land Act of 2009 (State	The Land Act provides for fair and prompt compensation to any person whose right of occupancy, ownership or recognized long-standing occupancy or customary use of land is revoked or otherwise interfered with by the

of Southern Sudan)	Government. The Act requires the Government to consult local communities and consider their views in decisions about community land. The Act also gives pastoralists special protection: 'No person shall without permission to carry out any activity on the communal grazing land which may prevent or restrict the residents of the traditional communities concerned from exercising their grazing rights'.
The Child Act (Act No. 10 of 2008)	The Child Act regulates the prohibition on child labor, the protection of children and young persons and hazardous child labor.

3.2 National Environmental and Social Assessment and Licensing Procedures

The Ministry of Environment and Forestry (MoEF) is responsible for managing environmental assessments in South Sudan. The Directorate responsible for ESIA process and administration including review and approval is the Environment and Sustainable Development Directorate. Currently, the Directorate lacks a binding legal instrument to require and enforce EIA procedures on development projects due to the fact that the Environmental Protection Bill is still not enacted by the legislature to become law. The Environmental Protection Bill was drafted in 2010 and updated in 2013.

Even though the draft bill is not legally established yet, it has set out the regulations in detail which defines the national EIA requirements, process and procedures. Chapter V of the draft Environment Bill is dedicated for EIA regulations and it outlines the requirements, processes as well as review and approval procedures. Article 22 (1) of the draft Bill introduces the EIA requirement by prohibiting any developer or proponent to implement a project for which an environmental impact assessment is required under the Bill or any other written law unless an environmental impact assessment has been concluded and approved in accordance with the Schedule I of the draft Bill. Schedule I of the draft Bill provides the list of projects requiring an EIA and those not requiring EIA by categorizing it as Type A and Type B projects respectively. Accordingly, whereas Type A projects are likely to have significant adverse environmental impacts and that a comprehensive mandatory EIA study is required, Type B projects are likely to have some adverse environmental impacts with magnitude of impacts not well-known and thus a preliminary environmental assessment is required.

The draft Bill (Article 23 (and clauses 1&2)) requires that a project developer or proponent shall be required to register an application for an EIA certificate by preparing and submitting a project brief. The project brief is required to contain basic information about the project such as the nature, location, design and its activities and is expected to be prepared by registered environmental expert. The Authority shall screen the project brief guided by screening criteria. The screening process shall be undertaken with the objective of determining whether an environmental impact assessment be undertaken. Where the Authority is satisfied that the project shall not have significant negative impact on the environment, or that the project brief discloses sufficient

mitigation measures, the Authority may proceed to recommend to the Minister to approve the project. Where the Authority finds that the project shall have a significant impact on the environment and the project report discloses no sufficient mitigation measures it shall require the developer or proponent to:

- Undertake an environmental impact assessment in accordance with the Regulation; or
- Undertake a preliminary assessment, where more information is required to determine a screening decision.

Where the Authority finds that the project shall have no significant negative impact on the environment and the project report discloses sufficient mitigation measure, it shall not require the developer or proponent to undertake an environmental impact assessment, and may proceed to recommend to the Minister for approval of the project.

Despite these E&S procedures of the draft Environmental Bill, however, it is not yet in a position to be implemented by the MoEF as it is not promulgated by the National Parliament. Therefore, the MoEF only issues a "Letter of no objection" for subproject ESIAs when satisfied that it is complete upon review. In the absence of a fully-fledged national environmental and social screening, review and approval process for subprojects, the World Bank's ESF and its procedures will be adopted for managing environmental and social risks and impacts in this project.

3.3 World Bank Standards and Key Gaps with the National Framework

The project will follow the requirements of the World Bank's ESS that are relevant to the project, as well as the World Bank Group's Environmental, Health and Safety Guidelines.[2] The Guidelines provide the necessary technical reference with general and industry-specific examples of Good International Industry Practice (GIIP).

Based on a review of project documents, including the project's concept note and after consultations with stakeholders, the project's overall risk rating is adjudged as 'High.' The environmental and social risk of the project is categorized as Substantial. The environmental risks are attributable to agro-pastoral activities, basic small-scale infrastructure, small-scale water infrastructure, soil restoration activities, etc. Animal agriculture, in particular meat production, can cause pollution, greenhouse gas emissions, biodiversity loss, disease, and significant consumption of land, food, and water. Potential impacts are related to: (i) water quality, (ii) disposal of wastes and management of agrochemicals and veterinary medicine; (iii) occupational health and safety of workers; and (iv) nuisances related to air and noise emissions.

[2] See https://documents1.worldbank.org/curated/en/157871484635724258/pdf/112110-WP-Final-General-EHS-Guidelines.pdf. A complete list of industry-sector guidelines can be found at: www.ifc.org/ifcext/enviro.nsf/Content/EnvironmentalGuidelines

The Social risk rating is 'High.' Key social risks identified in the project include possible physical and economic displacement impacts from project activities, gender-based violence and sexual exploitation and abuse and sexual harassment (SEA/SH); exclusion of women and girls, IDPs, young people, ethnic minorities, elderly, communities living far from decision-making centers and other vulnerable groups such as persons with disabilities. Inter-communal conflicts and cattle raiding activities in the country particularly among communities with livestock can also be a source of conflict. Development of water points, rangelands, animal health posts and animal health services including vaccination programs could potentially create risks to the environment and be discriminatory including to women.

The nine World Bank's ESSs applicable to project activities are summarized below. In addition, as activities touching on the restoration and upgrading of physical infrastructures, such as boreholes/hefir dams and fodder conservation infrastructure, have been identified, both skilled and unskilled laborers may be brought in to support the civil works. This may heighten certain labor related risks involving health and safety of workers. There are other social risks, including concerns on fair wages and working conditions and the protection of female workers, security and health risks, conflicts over provision of employment or contracts, and possible conflicts arising from attraction of returnee/IDP populations to communities that have improved production systems and social infrastructure.

Table 2: Relevant World Bank ESS and Alignment with South Sudan National Framework – Gap Analysis

E&S Standard	Relevance
1. Assessment and Management of Environmental and Social Risks and Impacts	ESS1 is relevant for the project because project activities are expected to pose substantial environmental and social risks such as. (i) water quality, (ii) disposal of wastes and management of agrochemicals and veterinary medicine; (iii) occupational health and safety of workers, (iv) nuisances related to air and noise emissions, (iv) possible physical and economic displacement impacts, (v) gender-based violence and sexual exploitation and abuse and sexual harassment (SEA/SH), (vi) exclusion of women and girls, IDPs, and other vulnerable groups such as well as persons with disabilities.
2. Labor and Working Conditions	ESS2 is relevant for the project because there are a number of risks including the risks of child labor. The project will engage direct workers, contract workers, community workers and primary supply workers. Labor-related risks include (i) security risks to project workers, (ii) inadequate terms and conditions of employment including risks of involuntary/unpaid community labor, (iii) occupational health and safety risks, (iv) traffic and road safety issues, and (v) child labor.
3. Resource Efficiency and Pollution	ESS 3 is relevant for the project because project activities are expected to pose risks associated with disposal of

Prevention and Management	building/construction wastes, disposal and management of veterinary medicine, animal health care waste, chemical and hazardous wastes, as well as during transportation of samples. South Sudan, like other developing countries, has a problem collecting solid waste. Preliminary screening shows that between one-third to two-thirds of the solid waste generated is not collected..
4. **Community Health and Safety**	ESS 4 is relevant for the project because project activities are expected to pose risks associated with Gender-based violence. Gender-based violence (GBV) is one of the most critical threats to the protection and wellbeing of women and children in South Sudan. Other risks and impacts to community health and safety may result from civil works and are related to a range of factors including worker-community interactions and movement of chemicals and veterinary medicine.
5. Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	This standard is relevant. However, given the project's current design, land needs are likely to be minor. An illustrative list of the types of infrastructure envisioned includes fodder conservation infrastructure, livestock handling facilities, markets, small veterinary health centers (VHC) and community slaughterhouses. A Resettlement Policy Framework (RPF) will be prepared and implemented along side this ESMF.
6. Biodiversity Conservation and Sustainable Management of Living Natural Resources	This standard is relevant. South Sudan has set aside six national parks and ten game reserves, where much of its spectacular wildlife can be seen – from giraffe and bongo to lion and African wild dog. Southern National Park is an expansive habitat with huge potential for species recovery, not least for wild dogs, hyena, lion, leopard, elephants, giant eland and Temminck's pangolin. However, preliminary screening shows that the project will be implemented in areas that are already have been, while the specific locations of project activities modified anthropogenically, meaning biodiversity hotspots are unlikely to be affected. Nevertheless, as the country is home to expansive and intact habitats the ESMF shall screen out civil works that may have unintended negative consequences on the ecological functions of habitats and the biodiversity they support.
7. Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	This standard is relevant. South Sudan is characterized by a large number of distinct ethnic groups, the majority of which are considered vulnerable and marginalized (see UNOPS June 2020), although there is no accurate demographic data in South Sudan. The overwhelming majority of people in South Sudan meet the requirements of ESS7 for historically underserved traditional local communities. The potential risk that these groups of people may face during implementation of the project is exclusion. These risks will be mitigated through clear and adequate communication of beneficiary selection and other project approaches and strategies, in locally appropriate ways; as well as through clear communication and implementation of the GRM.

8. Cultural Heritage	South Sudan is home to a rich heritage of past civilization. South Sudan's various ethnic groups, for example, have a history of producing various handicrafts. The Zande, for example, were prominent as craftsmen and artists. This standard is relevant because excavation is likely during civil works of project financed small infrastructures development activities. During construction, it is possible that both known and unknown physical and cultural resources may be uncovered. Any sites identified to have cultural heritage will be avoided and if avoidance is not possible, the ESMP will identify measures required to address these impacts in accordance with the mitigation hierarchy.
10. Stakeholder Engagement and Information Disclosure	ESS10 is relevant for this project given the need to engage with beneficiaries and stakeholders on development activities that affect their lives and landscapes.

4. Environmental and Socio-economic Baseline

4.1 Physical Environment

4.1.1 Geographical location of South Sudan

South Sudan is a landlocked country that lies between latitudes 3°N and 13° N and longitudes 24°E and 36°E [18]. It has an area of about 644 330 km^2, representing around 30 percent of pre-2011 Sudan. It is bordered by Sudan in the north, Ethiopia and Kenya in the east, Uganda and the Democratic Republic of Congo (DRC) in the south, and the Central African Republic in the west. South Sudan is constituted by 10 States, corresponding to three regions of pre-2011 Sudan: Bahr el Ghazal, Equatoria and Greater Upper Nile. Each State is further divided into counties, payams and bomas .

Figure 1: Location of South Sudan (Source: United Nations, Map No. 4450 Rev 1, October 2011)

4.1.2 Climate

The climate of South Sudan is characteristically hot and dry, with seasonal rains brought on by the annual migration of the Inter-Tropical Convergence Zone. Temperatures range from 25 to 40°C. The growing season is generally between 100 to 250 days, depending on the agro-ecological zone . Although South Sudan contributes very little to global greenhouse gas emissions and its

development trajectory promises to focus on clean energy, it is highly vulnerable to the impacts of rising temperatures and increased rainfall variability due to climate change. Between the 1970s and the 2000s, the country's central and southern regions experienced one of the world's highest increases in temperatures (as much as 0.4°C per decade). By 2060, South Sudan overall will get warmer by about 1°C over and above 2020 values.

These changes make South Sudan one of the five countries in the world most vulnerable to the impacts of climate change, which are likely to be devastating. Almost 80 per cent of households depend on crop farming or animal husbandry as their primary source of income, and these farmers and pastoralists rely heavily on seasonal rains, but if the current climate change trend continues, rain-fed agriculture may become unsustainable. In turn, loss of livelihoods will increase conflict over rights and access to water and natural resources. South Sudan needs to achieve political stability and legalize and implement its draft policies and plans so that it can act on its climate change adaptation and mitigation priorities. The meteorological data shows that temperatures in South Sudan are rising, and the weather is becoming drier, and it is likely that these changes are related to global climate change. Since the mid-1970s, average temperatures have increased by 1°C, while some regions have experienced temperature rises of up to 0.4°C per decade. Warming trends lead to decreased evapotranspiration and declining precipitation.

Since the mid-1970s, South Sudan has experienced a decline of between 10 to 20 per cent in average precipitation as well as increased variability in the amount and timing of rainfall from year to year . There is also some evidence that the onset of rain now occurs one month later month later .

[1, p. 16]

4.1.3 Topography

South Sudan's has many plains and plateaus that are drained by the Nile and its numerous tributaries. The Nile River system runs from south to north across the entire length of the eastcentral part of South Sudan. The central part of the country has a clay plain where the Sudd Wetland covers around 100,000 km^2, comprising lakes, marshes and extensive floodplains. The Ironstone Plateau lies between the Nile Congo Watershed and the clay plain and has numerous inselbergs, which are isolated hills that rise abruptly from the plains. In the southern part of South Sudan are the Imatong Mountains, with peaks of more than 3,000 metres [18].

4.1.4 Soils

The country's soils can be divided geographically into two categories. These are the clay soils of the central and Northern regions, and the laterite soils of the south. Less extensive and widely separated, but of major economic importance, the third group consists of alluvial soils found along the lower reaches of the White Nile and Blue Nile rivers. Agriculturally, the most important soils are the clays in central South known as cracking soils because of the practice of allowing them to dry out and crack during the dry months to restore their permeability; they are used for irrigated cultivation.

4.1.5 Hydrology; water resources and wetlands

Southern Sudan covers an area of about 640,000 square kilometres with the whole area distributed in the southern plains of the White Nile and its tributaries. It has substantial water resources, but these are unevenly distributed across the territory and vary substantially between years with periodic major flood and drought events. Annual rainfall ranges from 400mm in the northern parts to 1600mm in the southern parts distributed across three major River Basins, namely: Bahr el-Ghazal, Bahr el-Jebel and the river Sobat. Within the region there are various surface water sources comprising perennial rivers, lakes and wetland areas; seasonal pools/ponds, rivers, torrents, streams and extensive floodplains (known locally as Toich); and cataracts/falls/rapids upstream of the rivers. The impact of human activities on the availability and quality of water resources is already evident in the form of increased pollution, reduced river flows, lowering of water table in urban areas and contamination of both surface and ground waters, and is a growing concern [23].

The major groundwater formation is the Sudd basin, also called the Umm Rwaba basin, the extent of which is currently unknown as well as its relationship with the overlaying surface water, in particular the swamps. In 2013, the Sudd is the only Ramsar listed wetland of the country. It is an inland delta of the White Nile and is made up of lakes, swamps, marshes and flood plains. Its extent fluctuates from 10 000 km2 to more than 35 000 km^2 depending on rainfall and evaporation, which is exceptionally high. An estimated 50 percent of the inflow to the Sudd, mainly through the White Nile system, is lost to evaporation. It is one of Africa's largest swamps. The Jonglei Canal, between Bahr el Jebel and the White Nile, was planned to divert water from upstream of the Sudd to a point farther down the White Nile, thus bypassing the swamps with the purpose to make more water available for irrigation and hydropower downstream .

4.1.6 Disaster Vulnerability

South Sudan is susceptible to natural hazards, especially drought and floods but climate change is exacerbating their intensity, frequency and duration. In addition, multiple socioeconomic stressors, including the ongoing conflict, poverty, famine and economic and political instability, create a state of extreme fragility and vulnerability to the impacts of these natural hazards. Given the population's dependence on seasonal rains to support their livelihoods, the severe disruption of rainfall patterns combined with increased vulnerability will jeopardize the capacity of huge numbers of people to sustain themselves, a situation that is already occurring in several parts of the country.
Floods and droughts have always been a part of life in South Sudan and people have developed strategies to cope with them. However, anthropogenic global warming is contributing to increased climate changes at present. The changes will bring forth frequent extreme rainfall and flooding, and long-term stressors, including the gradual increases in temperature and changes to seasonal precipitation patterns. These stresses have already had increased impacts on the socio-economic health of South Sudan, including through loss of pasture and livestock, reduction of critical habitats, and reduction in river flows .

4.2 Biological Environment

South Sudan has a variety of species and ecosystems that constitute the country's biological environment. A description of some of the key aspects of the country's biological environment is highlighted in the sections below. Additionally, Figure 2 provides an indication of the location of some of the country's sensitive ecosystems.

4.2.1 Forests

The total area of forest cover in South Sudan is thought to be almost 20,000,000 ha, which represents about 30 percent of the country's total land area. Of this total, gazetted forest reserves account for 3.1 percent and plantation forests represent 0.1 per cent. Plantations consist mostly of teak forests thought to be the oldest forests in Africa and the largest plantations of its kind in the world. Acacia plantations for Gum Arabic are also important.
South Sudan's forests are in danger of disappearing; the annual deforestation rate is likely between 1.5 and 2 percent. The main drivers and pressures are population growth and the increased demand for fuelwood and charcoal, the conversion of forests to urban areas and uncontrolled fires and timber harvesting. This has led to the degradation or deforestation of parts of the country's natural forest areas and woodlands, localised soil erosion, biodiversity loss and altered hydrological and nutrient cycles. Generally, land degradation in South Sudan shows that 4.32 percent out of the country's land was degraded [25].

4.2.2 Fauna

South Sudan harbours an immense diversity of fauna species within and outside her protected areas. Some of the endemic fauna species in the country include: the Nile lechwe, Hoogstral's Striped Grass Mouse, Nile Sitatunga and a recently discovered African climbing mouse (*Dendromus ruppi).* Other notable species in the country include: white-eared Kob, Elephants, Giraffes, common Eland, giant Eland, Oryx, Lions, wild Dogs, Buffalo, and Topi (locally called Tiang), Nile crocodile among others. Most of these species are threatened by hunting pressure and habitat loss.

4.2.3 Ecology, Biodiversity, National Parks and Protected Areas

South Sudan is divided into several ecological zones; the rainforest, savannah woodland, flood plains, swamp and semi-desert. The Country's remarkable biodiversity is of global significance – the Sudd swamp is one of the world's largest tropical wetlands and the country is home to one of the planet's greatest circular wildlife migrations. South Sudan's wide range of habitats supports a very rich diversity of both animal and plant species. However, the variety and number of different species is unknown. A glimpse of the richness of species is provided in a 2015 study by biologists who took 105,000 motion-controlled photos in an area of about 7,770 km^2 of dense forest in former Western Equatoria State. They found a total of 37 species, including four species never documented before in South Sudan: the African golden cat (Caracal aurata), water chevrotain (Hyemoschus aquaticus), red river hogs (Potamochoerus porcus), and giant pangolin (Manis gigantea). It also captured chimpanzees, bongos, leopard, forest buffalo, honey badger and the rare forest elephant [9]. Forest elephants (Loxodonta cyclotis) are smaller than savannah elephants and

tend to inhabit densely wooded rain forests. They play a crucial role in the ecosystem because they are voracious fruit eaters whose dung spreads tropical fruit tree seeds extensively [9].

The IUCN Red List of Threatened Species for South Sudan lists 4 critically endangered species and 11 endangered species. The hooded vulture (Necrosyrtes monachus), Rüppell's griffon (Gyps rueppellii), white-backed vulture (Gyps africanus) and white-headed vulture (Trigonoceps occipitalis) are all critically endangered. Endangered species include three mammals: The Cape hunting dog (Lycaonpictus), common chimpanzee (Pan troglodytes) and the Nile lechwe (Kobus megaceros); six birds: Basra reed warbler (Acrocephalus griseldis), Egyptian eagle (Neophronpercnopterus), lappet-faced vulture (Torgostracheliotos), Natal thrush (Geokichla guttata), Saker falcon (Falco cherrug) and Steppe eagle (Aquila nipalensis). Two plants, Aloe erensii and Aloe macleayi, while currently not threatened, are restricted to South Sudan [10].

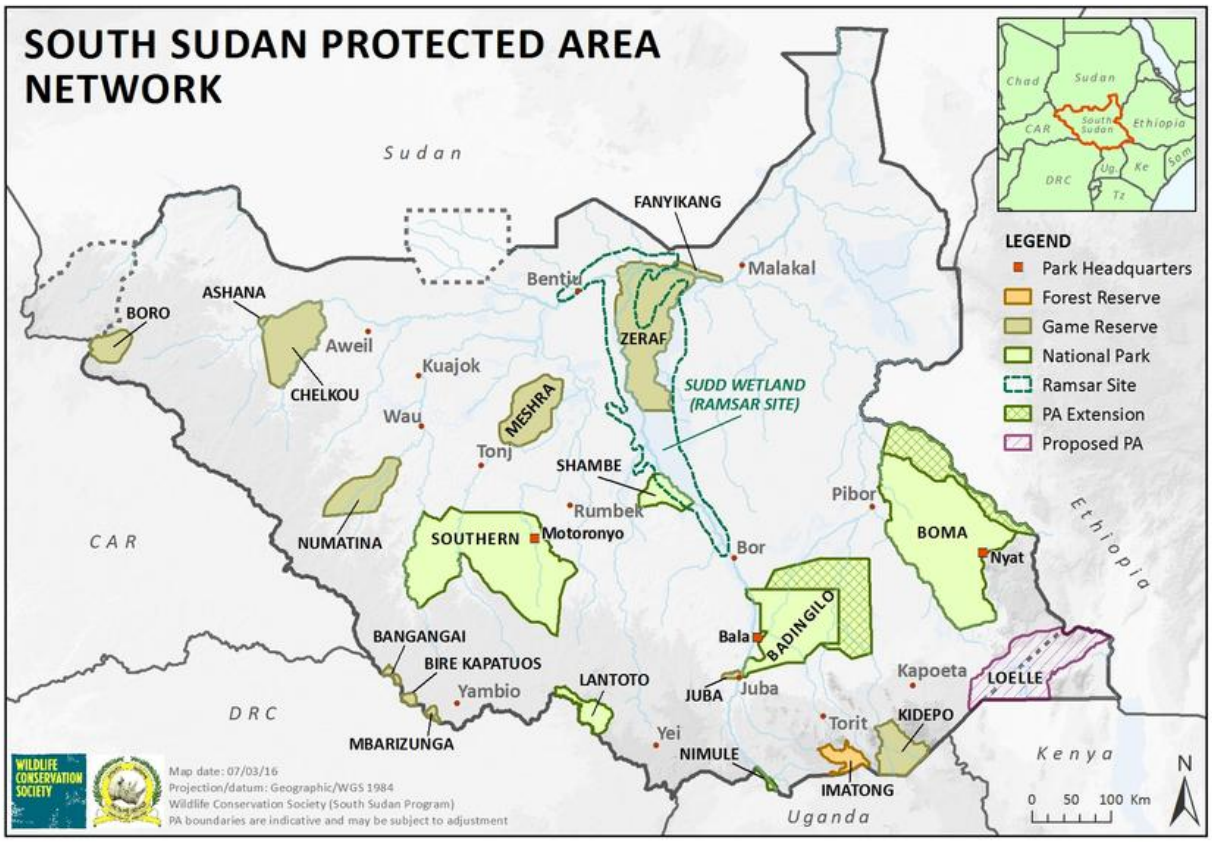


Figure: 2 ***Protected Areas in South Sudan (source: Ministry of Environment, 2015)*** [11]

4.3 Socioeconomic Baseline

4.3 Social and Economic Baseline

South Sudan presents a complex demographic and socio-economic landscape, shaped by decades of conflict, chronic underdevelopment, weak governance systems, and recurring humanitarian crises. The country's population, as recorded during the 2008 Sudan Census, stood at approximately 8.26 million people, comprising 3.97 million males and 4.29 million females. By 2020, this number had grown to an estimated 11.19 million, with near gender parity. The demographic structure of the population is notably young, with roughly 73 percent of the population under the age of 30 and almost half below the age of 18. While this youthful population presents a potential demographic dividend, it simultaneously places enormous strain on South Sudan's already limited capacity to deliver basic services such as education, employment, and health.

Ethnic and linguistic diversity is another defining feature of South Sudan's social fabric. The majority of the population belongs to the Nilo-Saharan language family, encompassing major groups such as the Dinka, Nuer, Shilluk, Anuak, Bari, Lotuho, and Teso. Communities such as the Zande in Western Equatoria belong to the Niger-Congo family. Over 50 indigenous languages are spoken across the country, reflecting significant cultural and social diversity. This diversity enriches South Sudanese identity but also contributes to complex political, land, and resource governance challenges.

Social structures in South Sudan are deeply rooted in clan, lineage, and kinship systems. Among pastoralist communities such as the Dinka, Nuer, and Atuot, social organization is largely based on seasonal transhumance, where households move with livestock in search of pasture and water. These communities tend to operate under decentralized and acephalous systems of governance, characterized by authority dispersed among elders and customary leaders. Kinship and cattle-based economies are central to social organization, with cattle serving as both economic and cultural assets—used in marriage, dispute resolution, and rituals.

Agrarian societies, by contrast, tend to be more settled and operate under centralized traditional institutions such as kingships and chieftaincies. Groups such as the Zande historically lived under hierarchical systems that included mechanisms for taxation, tribute, and justice enforcement. Among the Shilluk and Anuak communities, sacral kingship played a central governance role. The colonial and post-colonial state incorporated or restructured many of these traditional authorities to serve administrative purposes. However, local legitimacy remains rooted in longstanding cultural and spiritual traditions.

South Sudan's economic landscape has recently undergone profound upheaval. The rupture of the Dar Blend oil pipeline in early 2024, due to the conflict in Sudan, halted the country's primary export channel and caused a loss of approximately USD 7 million in daily revenues. By March 2025, the pipeline remained closed, and nearly all export revenues had ceased. This fiscal collapse triggered a projected 30 percent contraction of GDP for the 2024/25 fiscal year and a steep decline in GDP per capita, which is now half of its 2020 level. Inflation soared to 105

percent in 2024, compounding a severe cost-of-living crisis. Public sector salaries remain unpaid, social service delivery is collapsing, and over 92 percent of the population is now estimated to be living below the poverty line.

Despite its natural endowments, South Sudan's agriculture sector remains underdeveloped and rain-fed. Approximately 83 percent of the population resides in rural areas, with most households relying on small-scale farming, livestock rearing, and fishing. Of the country's total landmass, around 75 percent is considered arable, with half rated as prime agricultural land. However, limited mechanization, poor infrastructure, and insecurity have kept agricultural productivity low. An estimated 81 percent of households cultivate land, 74 percent own livestock, and 22 percent engage in fishing or fish trade. Households typically rely on a mix of livelihood strategies depending on the season, labor availability, and access to natural resources.

Livestock production, in particular, is a cornerstone of rural livelihoods and is deeply embedded in cultural identity and resilience strategies. South Sudan is home to an estimated 38–42 million head of livestock, comprising approximately 12 million cattle, 12–14 million goats, and 11–13 million sheep. Livestock holdings vary by ecology, ethnicity, and production system. While nearly 85 percent of households own livestock, commercialization remains low due to limited access to veterinary services, poor infrastructure, and weak value chains. Livestock are often kept for cultural purposes, including prestige, dowries, and risk management, rather than for market purposes, resulting in low GDP contribution from the sector.

The education system in South Sudan faces critical structural deficits. On average, students complete only 4.8 years of schooling. As of 2021, more than 2.8 million school-age children—over 70 percent—were out of school, a significant rise from 2.2 million in 2018. Education disparities are evident across gender lines, with girls accounting for just 42 percent of school enrolments. Education infrastructure remains weak, especially in conflict-affected areas where schools are often closed, destroyed, or occupied by displaced populations. Furthermore, more than 70 percent of teachers lack formal qualifications, contributing to extremely low learning outcomes and limited opportunities for human capital development.

The health system is similarly fragile and under-resourced. South Sudan ranks near the bottom of the Human Development Index, at 185 out of 189 countries, with a score of 0.433. Life expectancy is estimated at 58 years for men and 60 years for women. The maternal mortality rate remains one of the highest in the world, at 1,150 deaths per 100,000 live births. Health services are decentralized and free in principle, but chronic underfunding, insecurity, and personnel shortages severely undermine access. With only 189 doctors serving the entire country, the doctor-to-patient ratio is approximately one to every 39,000 people.

Food insecurity has reached catastrophic levels. Between April and July 2025, approximately 7.7 million people—57 percent of the population—were projected to face acute food insecurity (IPC Phase 3 or above), including 83,000 in IPC Phase 5 (Catastrophe). The drivers of food insecurity include conflict-related displacement, economic collapse, repeated flooding, and a fragile market system. Acute malnutrition, especially among children, is widespread, exacerbated by poor sanitation, limited access to health care, and inadequate food intake.

While the 2018 peace agreement and the formation of a unity government in 2020 have reduced high-level political violence, localized conflicts persist. These include intercommunal violence, cattle raiding, land disputes, and clashes over grazing routes and water points. The spread of small arms, growing militarization of youth, and the weakening of customary authorities have made local conflict resolution more difficult. Currently, South Sudan hosts over two million internally displaced persons (IDPs), and a further 2.3 million refugees are located in neighboring countries.

Taken together, these conditions reflect a highly fragile socio-economic environment marked by deep poverty, vulnerability, and structural barriers to development. They will require careful and sustained engagement under the project to avoid exacerbating existing tensions and to maximize inclusive benefits.

5. Potential Environmental and Social Risk Impacts and Standard Mitigation Measures

This chapter describes the potential environmental and social risks of the activities of the proposed South Sudan Resilient Livestock Sector Project (SSRLSP). The main activities that are anticipated to cause adverse risks during project implementation are found under Components 1 and 2; and to some extent under Component 3. The adverse environmental and social risks of subprojects under these components can be classified into two groups: (a) those that may emerge due to civil works and (b) those potential risks and impacts due to routine subproject implementation and operational activities.

There are subproject activities under component 1 and 2 of the SSRLS project that involve the undertaking of civil construction works. These includes construction of dipping tanks (subcomponent 1.1), implementation of community slaughterhouses (subcomponent 1.1), establishment of Veterinary Field Units (VFU) (subcomponent 1.2), delivering boreholes/hefir water (subcomponent 2.1), delivering fodder conservation infrastructures (subcomponent 2.1), and the establishment of livestock markets under component 3. The adverse E & S risks of these subproject activities are related to construction (civil work) activities.

On the other hand the SSRLSP also consists of subproject activities that would cause adverse E & S risks as a result of subproject implementation and operational activities. Such subproject activities includes vaccination and internal parasite control (deworming) campaigns (subcomponent 1.1), operation of dipping tanks (subcomponent 1.1), supply of Veterinary Medical Products at sub district levels (subcomponent 1.2), supporting the implementation of small veterinary health centers (VHC) (subcomponent 1.2), operation of community slaughter houses (subcomponent 1.1), operation of Veterinary Field Units (VFU) (subcomponent 1.1), operation of feedlot for livestock fattening for commercial purpose (subcomponent 2.1), operation of livestock markets (subcomponent 3.1), as well as establishment of an effective and sustainable rangeland management system at community level that supports fodder production for livestock. Except for the range land management system subproject, the adverse E & S risks associated with many of these subprojects are anticipated to be caused due to release of both hazardous and non-hazardous wastes during operational activities. The handling, transport, storage and use of veterinary medicines including pesticides and release of hazardous wastes to the environment would likely cause adverse impacts to the environment.

The SSRLSP also consist of Technical Assistance (TAs) and training related activities under its Components. The TA's are related to capacity strengthening of MLF and select associated departments (subcomponent 4.2), training of Community Agricultural Health Workers (subcomponent 1.2), supporting formulation and implementation of policies as well as development of regulatory framework (subcomponent 3.1). As a result, based on the OESRC Advisory note, most of these subproject TA activities will fall under Type 3 TAs with only one

TA activity on formulation of policies and developing a legal framework falling under Type 2 TA. The SSRLSP project will not have Type 1 TA activities.

While the SSRLS project does not involve activities with a high potential to harm communities or that would potentially exacerbate social risks, it will be carried out in FCV contexts where there is growing tension within the communities about natural resources management. Moreover, given the project's current design, land acquisition needs for the various subproject implementations are likely to be minor. Accordingly, the environmental and social risk assessment carried as part of the present ESMF has concluded that the overall risk rating for both environmental and social is "Substantial". This is in consideration of the aforementioned group of activities which are risk drivers and the FCV contexts in the project areas under consideration.

The aim of this section is to describe the benefits, risks, impacts, and mitigation measures at a broad level. The adverse environmental and social risks and impacts associated with the SSRLS project subcomponent activities are broadly summarized in Table 3 below. Relevant EHS guidelines including Mammalian Livestock Production, Meat Processing, and General EHS Guideline: Hazardous Materials Management was consulted while proposing mitigation measures. For subprojects, the contractors will need to assess risks and impacts at a site-specific level and propose appropriate mitigation measures.

5.1 Environmental and Social Benefits of the SSRLP

The SSRLSP will have an overall significant positive environmental and social impact on the country's population. These positive environmental and social impacts are summarized as follows.

- Generate job opportunities and income primarily for women and youth through creating small investor producers and cooperatives.
- Livestock provides significantly increased economic stability to rural households in the form of cash buffers, as capital reserves and creates a hedge against inflation.
- Sustainable livestock development would positively contribute to poverty alleviation
- Clear and measurable benefits in terms of productivity, household income, production diversification, and increasing the availability of varied household diets can be achieved through implementation of Good Animal Husbandry Practices/GAHP at various beneficiary levels of SSRLSP.
- GAHP interventions (improved livestock health, breeds and feed quality) on primary beneficiaries (poor livestock keepers/herders) would significantly minimize the amount of greenhouse gas that could have been produced otherwise
- Minimize livestock diseases and deaths through supporting national priority animal disease prevention and control strategic program

- Expand market opportunities of livestock commodities through demand creation and construction of critical market and commercialization infrastructures.
- Sustainable Rangeland management Increase the social value of water resources and in turn create environmentally responsible society who exercise better water resource protection (ex: from pollution) and overall management.
- Public private partnership will enhance the quality and competitiveness of the services delivered by the private sector to bridge accessibility gaps of public service delivery.
- Creation of opportunities for traditionally excluded groups (especially women and girls) in the agric value chain space;
- Provision of extension service provision to farmers in most of the program implementation areas will be improved because of various capacity building activities implemented by the program thereby increased the production and productivity of livestock keepers;

Table 3: Environmental and Social Risk and Mitigation Measures

Subcomponent Activity	Benefits/Risks and Impacts	Mitigation Measures
Adverse Environmental Impacts (Construction Phase)		
Subcomponent Activity	**Risks and Impacts**	**Mitigation Measures**
- Construction of (boreholes/hefir) water - Construction of fodder conservation infrastructure - Construction of dipping tanks - Establishment of community slaughterhouses - Establishment of livestock markets - Establishment of Veterinary Field Units (VFU).	Construction activities may result in mixing and compaction of soil layers, creating hardpan, disturbing natural soil structure and reducing ecological functions of the soil.	-Demarcate the area to be stripped clearly, so that the contractor does not strip beyond the demarcated boundary. -Top soil stripped should be stockpiled for rehabilitation of the area later - Restore the nutrient rich top soil to its original level upon completion of construction works - The topsoil should be uniformly spread onto areas to be rehabilitated. - As much as possible, use existing access roads -Pre-defined, essential road routes should be clearly demarcated and adhered-to in order to restrict soil compaction to certain areas.
	Land degradation and erosion risks: Quarrying to extract construction materials will cause land degradation and erosion.	- Where appropriate, construction material extraction sites should be selected in consultation with relevant local authorities - Sourcing of natural construction material like water, sand, murram, etc. from authorized sites or licensed operators, - control of erosion and storm water runoff - Smaller, short-lived extraction sites should be reclaimed immediately -Affected land should be rehabilitated to acceptable uses consistent with local land use plans. Land that is not restored for a specific community use should be seeded and revegetated with native species.
	Impact on water resources: Construction activities taking place in close proximities to surface water bodies can cause	-Provide segregated waste receptacles within the construction site to encourage reuse and recycling. -Provide dedicated bins for hazardous waste, located on hard standing within the construction site.

	adverse effects by releasing solid and liquid wastes	-All staff must be responsible to keeping all food and packaging waste on them to be disposed of at the waste bins. -Placement of drip trays under vehicles and relevant equipment when stationary; -Fuel, lubricant and waste oil storage, dispensing and operating facilities must be designed and operated in a way to prevent contamination of water. -Empty sewage wastewater regularly with vacuum trucks and disposed of in approved disposal facilities/sites by the local municipal authorities. -Proper storage and handling of oils and any hazardous chemical used on site, -Consider disposing collected used oils and lubricants through recyclers or reuses as furnace oil. -Prepare a C-Waste Management Plan for the subproject site and ensure compliance with it.
	Impact of construction wastes: Uncontrolled disposal of site clearance and excavation waste, general construction waste, as well as domestic solid waste adversely affect the environment	-The contractor shall work to facilitate proper waste handling and disposal from the site. All solid wastes must be taken to the approved disposal site or landfill. -Construction wastes should be recycled or reused as much as possible. -Dispose the construction waste materials ("spoil") only at designated sites approved by the responsible local authority. -Consider reusing the soil spoil for land restoration purpose. -Vehicles hauling dirt or other construction debris from the site shall cover any open load with a tarpaulin or other secure covering to minimize dust emissions and dropping of debris.
	Noise and Vibration Impacts: Noise and vibration impacts could adversely affect communities nearby the construction sites.	-Avoid use of old or damaged machinery with high level of noise emissions -Installation of proper sound barriers and / or noise containments, with enclosures and curtains at or near the source equipment (e.g. grinders)

		-Installation of natural barriers at facility boundaries, such as vegetation curtains -locate noise generating sources away from residential or other noise-sensitive receptors (e.g.: patient treatment areas, wards, etc.) -Avoid using heavy construction machinery during night-time -Carry out regular maintenance on the construction machineries -Select transport routes to minimize noise pollution in sensitive areas -Install noise silencer on the construction machineries
	Impact on terrestrial flora: loss of vegetation cover and flora species of biodiversity importance	- Adopt the exclusion criteria during site identification and identify alternatives -Avoid locating construction sites around nature reserves or species conservation areas during planning -Conduct careful and suitable site selection/survey through a participatory process for component 1 & 2 infrastructures --screen out civil works that may have unintended negative consequences on the ecological functions of habitats and the biodiversity they support. -Prioritize and minimize impacts or avoid damage to indigenous trees of significant importance, avoid or minimize cutting of big trees, particularly indigenous species - Construction of subprojects on a known areas of biodiversity significance such as parks and natural reserve areas should be avoided or minimized. - Plant indigenous trees in open spaces, along river banks, and/or other disturbed areas. -When significant risk and adverse impacts on biodiversity have been identified, a Biodiversity Management Plan will be developed based on the indicative outline of BMP template included under Annex10 - Monitor for any unusual or invasive aquatic species and remove such species when seen.

	Impact on terrestrial fauna: construction of the subprojects will disturb wildlife habitat, force them to migrate from its natural habitats and also hinder their free movements.	- consult state/county biodiversity or ministry of environment and forest office to identify important biodiversity and genetic resource in the sub-project influence area. - Identify wildlife habitats and avoid construction of subprojects in or near the identified habitats - For mandatory civil works near protected areas and potential critical habitats, require detailed mapping and, where appropriate, identification of species and habitats to exclude any activity that may lead to unsustainable use of natural resources thus impacting on the livelihood of local communities. - provide alternate passage for important wildlife habitats to ensure free movement of wildlife - design and construct wildlife access to avoid or minimize habitat fragmentation.
	Impacts on environmental sensitive areas, wetlands	- Consider and compare the adverse and beneficial impacts of wetlands and its ecosystem services to propose balanced and proper mitigation measures during subproject ESIA studies. - Where possible, avoid building subproject structures at the middle of wetland areas - Where possible, minimize the wetland area to be utilized for construction purposes and rehabilitate the construction site at the end of the construction - Consider the cumulative impacts of upstream and downstream sub-projects on the wetland systems during site selection.
	Impact on Air Quality due to dust resuspension and diesel fuel combustion:	-Vehicles and machinery must be kept in good condition to prevent excessive smoke from exhausts. -A routine maintenance program for all equipment, vehicles, trucks and power generating engines should be in place. -Regularly spray water to suppress the resuspension of dust during construction, particularly during use of gravel roads and dirt tracks. -Wetting exposed soil and site areas with water to control dust emissions.

		-Minimize unnecessary idling of running diesel engines of machineries, vehicles and equipment. -Limit the speed of vehicle movements to minimize dust.
	Impact of construction wastes: Uncontrolled disposal of site clearance and excavation waste, general construction waste, as well as domestic solid and liquid waste adversely affect the environment	-The contractor shall work to facilitate proper waste handling and disposal from the site. All solid wastes must be taken to the approved disposal site or landfill. -Construction wastes should be recycled or reused as much as possible. -Consider reusing the soil spoil for land restoration purpose. -Dispose the construction waste materials ("spoil") only at designated sites approved by the responsible local authority. -Vehicles hauling dirt or other construction debris from the site shall cover any open load with a tarpaulin or other secure covering to minimize dust emissions and dropping of debris.
	Occupational Health Hazards during Construction phase: Construction workers would be actively involved in potentially hazardous activities that exposing them to physical, electrical and fire hazards.	*Recommended mitigation measures to reduce/avoid physical hazards:* -All construction workers must be oriented on safe work practices and guidelines and ensure that they adhere to safe work practices. -New workers must be provided with introduction training/awareness on health and safety features and procedures as well as general safety briefing on the use of equipments at site. -Use signage to warn staff and/or visitors in the construction activities of dangerous places and activities. -Strict instructions on safety must be given for drivers of heavy equipment. -Supervision of works must be done regularly (daily) to ensure that safety conditions are met. - Develop evacuation procedures to handle emergency situations. - Provide adequate OHS protective gear to construction workers and include terms in the CoC signing to appropriately wear and use safety gears while at work site. - Where appropriate, the contractor should consider implementing safe systems of work and permit to work at heights.

Adverse Social Impacts (Construction Phase)		
Subcomponent Activity	**Risks and Impacts**	**Mitigation Measures**
Component 1 and 2	-Occupational health and safety (OHS) risks for workers during construction. (ESS 2) - Blasting without proper arrangements and safeguards can lead to injuries and loss of life (ESS 2) - Occupational Health and Safety risks from handling equipment (ESS 2) -Inadequate PPE for health care workers (ESS 2) - Safety risks for workers and community (notably children) during construction, in the vicinity of project works (such as ponds) - Risk of Child labor (ESS 2) - Risk of Forced Labor (ESS 2) - Risks of labor influx (ES 2) - Discriminatory hiring practices (ESS 2)	-The facility workers will be appropriately trained on OHS risks, hazards and safe working procedures, based on EHS Guidelines on OHS. -Provide appropriate PPE, continuous reminders to use PPE, use of signage and continuous supervision, based on EHS Guidelines on OHS -The facility workers will be appropriately trained on OHS risks, hazards and safe working procedures, based on EHS Guidelines on OHS -Communicate and implement GRM/workers' GRM -Develop and implement C-ESMP including OHS -Implement LMP / especially in regard to OHS -Include OHS requirements into bids and contracts -Report and assess significant OHS accidents -Contractor bid and contract to include various OHS requirements -Report significant OHS incidents -Comply with the labor management procedures of the project namely : * Set a minimum age for all types of work (in compliance with national laws and ESS2) and confirm and formally document age of workers upon hiring by way of a registry for all workers * Conduct a track record search of the contractors at the bidding process (record of health and safety violations, fines, consult public documents related to workers' rights violations etc.) o Raise awareness of communities/suppliers to not engage in child labor -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.) - Discriminatory hiring practices: * Ensure Project GRM are accessible * Provide workers' GRM
	- Conflicts over provision of employment or contracts - the selection of project partners, local project staff, contractors or other local implementers can lead to grievances, including through perceptions of being left out due to clan, ethnic, gender, or other affiliations. (ESS 2 and 4) - Labor influx heightens risks of GBV/SEA. (ESS 4) - Risks associated with hiring security personnel (ESS 4) - Community safety risks during construction in the vicinity of project works (ESS 4)	-Conduct in-depth contextual analysis / conflict mapping before entering new counties, including detailed understanding of the previous and current conflict modalities and resulting different groupings and interests -Ensure that the selection of local staff, contractors and other service providers or local implementers is highly inclusive and covers a broad array of different clans, ethnic groups, pastoralist, agriculturalists and IDPs. -Develop a map demonstrating inclusiveness as per state/county, including specific measures to ensure non-discrimination in recruitment and employment, in particular in relation to women and persons with disabilities -Ensure that job advertisements and calls for proposals are widely disseminated, including in minority languages, and selection processes are made as public as possible Implement GRM and workers' GRM - Implementation of LMP (including Coca) - Implementation of GBV Action Plan -Implement SRA and SMP - Set up appropriate signage - Fence construction site where applicable
	Impacts associated with Land Acquisition, Restrictions on Land Use and Involuntary Resettlement.	-Conduct thorough environmental and social impact assessments (ESIA) or screening early in the project implementation phase to identify potential impacts and risks. -Evaluate alternative project designs and locations to minimize land acquisition and displacement.

	• Physical Displacement: Communities may lose residential land or shelter, leading to relocation. • Economic Displacement: Loss of agricultural land or access to water sources can affect livelihoods, especially for farmers and pastoralists • Acquisition of grazing land for fodder storage can reduce available pasture, impacting livestock owners. • Displacement can lead to loss of employment opportunities for those working in informal sectors. • Relocation can disrupt social networks and community cohesion. • Inadequate compensation or resettlement planning can result in homelessness for affected families	-Provide timely compensation at replacement cost for lost assets. -Engage with affected communities early and continuously throughout the project. -Ensure transparent communication about project impacts, compensation, and resettlement options. -Establish accessible and responsive grievance redress mechanisms to address concerns and disputes -Avoid impacts through identification of alternatives - Prepare and implement RAP, based on RF or obtain Voluntary Land Donation (VLD) - Ensure access to GRM
	- Chance Finds (ESS 8)	Implement chance find procedures

Adverse Environmental Impacts (Operation Phase)		
Subcomponent Activity	**Risks and Impacts**	**Mitigation Measures**

-Vaccination and internal parasite control (deworming) campaigns, -Operation of dipping tanks -Operation of Veterinary Field Units (VFU). - Supply of Veterinary Medical Products at sub district levels -Supporting the implementation of small veterinary health centers (VHC)	- risks and impacts associated with the handling, management, transportation and storage of veterinary drugs, chemicals, specimens/samples and vaccines. - risks associated with the release and disposal of hazardous wastes consisting of animal health care waste (Infectious waste, sharps, used medical consumables, pharmaceuticals, pathological waste, hazardous chemical waste) and pesticide chemicals. - risks associated with management of agrochemicals and veterinary medicine; -risks associated with the release of general wastes such as medical consumables packaging wastes, cleaning wastes, office wastes etc. which also seek for proper handling and disposal.	The project will also prepare Hazardous Waste and Pest Management Plan (HWMP). - a Hazardous Waste Management Plan - enforcing safe land transport procedures among others - ensuring safe storage and disposal of all streams of waste, - monitoring and reporting system; - solid and hazardous waste handling and disposal;; -storage and handling of hazardous materials;. Collection •Waste should be identified and segregated at the point of generation. Infectious and / or hazardous wastes should be identified and segregated according to its category using a color-coded system. - Collection bins should be placed at specific points or at strategic locations for dumping the veterinary medical wastes and other waste types, hence segregating the medical waste from other wastes. • All waste bags or containers would be labeled with basic information in the local language of the area where the VHC/VFU is located and/or in English. The bins should be emptied regularly to licensed collection centers or disposal sites to avoid soil and groundwater contamination. • Waste should be labeled appropriately, noting the substance class, packaging symbol (e.g. infectious waste, radioactive waste), waste category, mass / volume, place of origin, and final destination. - Waste storage areas should be located within the facility and sized to the quantities of waste generated,

		Storage - Hazardous waste should be stored so as to prevent or control accidental releases to air, soil, and water resources - Store in closed containers away from direct sunlight, wind and rain - Secondary containment systems should be constructed with materials appropriate for the wastes being contained and adequate to prevent loss to the environment - Provide adequate ventilation where volatile wastes are stored. - Conducting periodic inspections of waste storage areas and documenting the findings Transport - Hazardous and general waste must not be mixed during collection, transport, and storage. -Transport packaging for infectious waste should include an inner, watertight layer of metal or plastic with a leak-proof seal. Outer packaging should be of adequate strength and capacity for the specific type and volume of waste. -Onsite and off-site transportation of waste should be conducted so as to prevent or minimize spills, releases, and exposures to employees and the public. - All waste containers designated for off-site shipment should be secured and labeled with the contents and associated hazards. **Treatment and Disposal** • Facilities receiving hazardous health care waste should have all applicable permits and capacity to handle specific types of veterinary medical waste. • Burial sites would be fenced to prevent access by community members or animals. Burial would not be used in areas with high water tables. The bottom of the

		pit would be at least 1.5 meters higher than the groundwater level. The procedures for transportation of hazardous materials (in this case for example: drugs and veterinary medical products to be supplied to district and sub districts) should include: • Proper labeling of containers, including the identity and quantity of the contents, hazards, and shipper contact information. • Providing a shipping document (e.g. shipping manifest) that describes the contents of the load and its associated hazards in addition to the labeling of the containers. • Ensuring that the volume, nature, integrity and protection of packaging and containers used for transport are appropriate for the type and quantity of hazardous material and modes of transport involved. • Ensuring adequate transport vehicle specifications • Training employees involved in the transportation of hazardous materials regarding proper shipping procedures and emergency procedures Pesticide wastes -Avoid the use of pesticides that fall under the World Health Organization Recommended Classification of Pesticides by Hazard Classes 1a and 1b - Avoid the use of pesticides that fall under the WHO Recommended Classification of Pesticides by Hazard Class II if the project host country lacks restrictions on distribution and use of these chemicals, or if they are

		likely to be accessible to personnel without proper training, equipment, and facilities to handle, store, apply, and dispose of these products properly - Avoid the use of pesticides listed in annexes A and B of the Stockholm Convention, except under the conditions noted in the convention - Use only pesticides that are manufactured under license and registered and approved by the appropriate authority and in accordance with FAO's International Code of Conduct on the Distribution and Use of Pesticides; - Purchase and store no more pesticide than needed and rotate stock using a "first-in, first-out" principle so that pesticides do not become obsolete. - Store pesticides in their original packaging, and in a dedicated location that can be locked and properly identified with signs, with access limited to authorized persons. No human or animal food should be stored in this location -Train personnel to apply pesticides according to planned procedures, while using the necessary protective clothing. Where feasible or required, pesticide application personnel should be certified for this purpose. - Mixing and transfer of pesticides should be undertaken by trained personnel in ventilated and well-lit areas, using containers designed and dedicated for this purpose -Select application technologies and practices designed to reduce unintentional drift or runoff, - Used pesticide containers should not be used for any other purpose (e.g. drinking water) and should be managed as a hazardous waste

		- Maintain records of pesticide use and effectiveness.
- supporting fodder production for livestock by establishing of an effective and sustainable rangeland management system at community level	-risk of ecological/biodiversity loss impacts due to overgrazing that may contribute to soil losses because of severe erosion, and a reduction in soil productivity caused by alteration of the vegetation composition and associated organisms in rangelands.	The following actions should be taken to help maintain regional ecology/biodiversity: ➢ ***Prevent overgrazing of pastureland through use of:*** • Rotational grazing systems based on seasonal and local ecosystem resilience (e.g. riparian zones). • Use of livestock trails to reduce soil trampling and gully formation / erosion near streams • Before converting land to livestock production, survey the project area to identify, categorize, and delineate natural and modified habitat types and ascertain their biodiversity value at the regional or national level; • Ensure that any natural or modified habitat to be converted to livestock production does not contain critical habitat, including known habitat of critically endangered or endangered species, or important wildlife breeding, feeding, and staging areas; • Be aware of the presence of critically endangered or endangered species in the areas already used for livestock production and consider them during management processes; • Provide for minimum disturbance to surrounding areas when managing livestock.
-Operation of feedlot for livestock fattening for commercial purposes - Operation of livestock markets -Operation of fodder conservation infrastructure	- Risk of causing nuisance, air and water pollutions in the surrounding environment due to gaseous emissions and release of wastes.	To maximize the efficiency of the operation feedlot and minimize wasted feed that pollutes the surrounding environment, the following measures are recommended: • Promote efficient storage, handling and use of feed by maintaining records of feed purchases and livestock feed use;

	- Risk of greenhouse gas emissions, especially because of cattle husbandry	• Use covered or protected feeders to prevent feed from exposure to rain and wind; • Maintain feeding systems in good working condition to prevent spills and feed contact with the ground; • Consider mixing of waste feed with other recyclable materials destined for use as fertilizer, The following are recommended to minimize the amount of manure produced, to facilitate handling of animal wastes, and to reduce migration of contaminants to surface water, groundwater, and air • Observe internationally recognized guidance, such as that published by FAO, on land requirements for livestock production for livestock units (LU) per hectare (ha) to ensure an appropriate amount of land for manure deposition • Match feed content to the specific nutritional requirements of the animals in their different production and growth stages • Grind feed to increase utilization efficiency by the animals, allowing the use of less feed and thereby reducing the amount of manure generated (as well as increasing the production efficiency); • Design, construct, operate, and maintain waste management and storage facilities to contain all manure, litter, and process wastewater including runoff and direct precipitation • Ensure production and manure storage facilities are constructed to prevent urine and manure contamination of surface water and groundwater (e.g. use concrete floors, collect liquid effluent from pens, and use roof gutters on buildings to collect and divert clean storm water)

		• Keep waste as dry as possible by scraping wastes instead of, or in addition, to flushing with water to remove waste; • Reduce the amount of water used during cleaning (e.g. by using high-pressure, low-flow nozzles); • Minimize the surface area of manure in storage; • Locate manure stacks away from water bodies, floodplains, wellhead fields; or other sensitive habitats; • For feedlots, ensure that solid waste (e.g. bedding and muck) is gathered regularly and is not permitted to lie on the ground for long periods of time; • Conduct manure spread only as part of well-planned strategy that considers potential risks to health and the environment due to the presence of chemical and biological agents as well as nutrient balance in an agricultural setting. • Ensure that manure is applied to agricultural land only during periods that are appropriate for its use as plant nutrient (generally just before the start of the growing season); Air emissions from livestock production include ammonia (e.g. management of animal waste), methane and nitrous oxide (e.g. animal feeding and waste management), odors (e.g. animal housing and waste management), bioaerosols, and dust (e.g. feed storage, loading, and unloading, feeding, and waste management activities. Recommended measures to reduce impacts of ammonia and odors include the following: • Consider the siting of new facilities taking into account distances to neighbors and the propagation of odors;

		• Control the temperature, humidity, and other environmental factors of manure storage to reduce emissions; • Consider composting of manure to reduce odor emissions; • Reduce emissions and odors during land application activities by applying a few centimeters below the soil surface and by selecting favorable weather conditions (e.g. wind blowing away from inhabited areas); Recommended measures to reduce greenhouse gases (methane) generation and emission follow: • Improve the productivity and efficiency of livestock production (thus lowering the methane emissions per unit of livestock) through improvements in nutrition and genetics; • Increase the carbon to nitrogen ratio in feeds to reduce methane and nitrous oxide production;`
-Operation of community slaughterhouses	- Risk of causing nuisance, air and water pollution in the surrounding environment due to gaseous emissions and release of wastes.	Recommended management techniques for pollution prevention of wastewater include: • Use floor drains and collection channels with grids, screens, and / or traps to reduce the amount of solids entering the wastewater stream • Collect blood for use in food, feed or in the pharmaceutical industry. • Manure from the stockyard and from vehicle cleaning should be removed while in solid form; • Stomach and intestine contents should be removed and transported in a dry state for further recycling. • Prevent direct runoff to water courses, especially from lairage and manure storage areas;

		• Install and apply Wastewater Treatment facility to treat the wastewater to acceptable standards (i.e. the Guideline Values for wastewater discharge as indicated in table-1of Section 2 of the EHS Guideline for Meat Processing). Odor Prevention: • Consider the location of new facilities, taking into account proper distances to neighbors and the propagation of odors; • Pasteurize organic material before processing it to halt biological processes that generate odor; • Install rendering equipment in closed spaces and operate under negative pressure compared to ambient air conditions; • Minimize the inventory of raw carcasses, waste and by products and store it for short periods of time in a cold, closed, well-ventilated place; • Seal off animal by-products (e.g. in covered leak-proof containers or vehicles) during transport, loading unloading, and storage activities. Transport blood in insulated containers to reduce temperature increase; • Clean pens and livestock yards on a timely basis; • Empty and clean fat traps frequently; • Add oxidants such as nitrates to stored waste and effluent, (e.g. in settling ponds). The nitrates are added in powder or granulate form and the resulting chemical reaction reduces odor levels;
Adverse Social Impacts (Operation Phase)		
Component 1,2 and 3	-The TOR for the respective TA initiatives shall ensure compliance with the ESF	Ensure that all TOR for TA are reviewed by the E&S Specialists on the team

	requirement in cases where the envisaged activities have direct or indirect relationship with the respective ESS standard (ESS 1)	
	-Labor management standards may not be adhered to (ESS2) - Lack of safety of local staff, as they engage in highly volatile environments, including where they are perceived by local populations to have specific biases. (ESS2) - Community safety risks during construction in the vicinity of project works (ESS 4) - Conflicts over provision of employment or contracts - the selection of project partners, local project staff, contractors or other local implementers can lead to grievances, including through perceptions of being left out due to clan, ethnic, gender, or other affiliations. (ESS 2 and 4) - Labor influx heightens risks of GBV/SEA. (ESS 4) - Disagreements in community-led initiatives lead to conflict (ESS 4)	I. Labor and safety: -The facility workers will be appropriately trained on OHS risks, hazards and safe working procedures, based on EHS Guidelines on OHS -Communicate and implement GRM/workers' GRM -Develop and implement C-ESMP including OHS -Implement LMP / especially in regards to OHS -Include OHS requirements into bids and contracts -Report and assess significant OHS accidents -Contractor bid and contract to include various OHS requirements -Report significant OHS incidents II. Community health and safety: Conduct in-depth contextual analysis / conflict mapping before entering new counties, including detailed understanding of the previous and current conflict modalities and resulting different groupings and interests -Ensure that the selection of local staff, contractors and other service providers or local implementers is highly inclusive and covers a broad array of different clans, ethnic groups, pastoralist, agriculturalists and IDPs. -Develop a map demonstrating inclusiveness as per state/county, including specific measures to ensure non-discrimination in recruitment and employment, in particular in relation to women and persons with disabilities

		-Ensure that job advertisements and calls for proposals are widely disseminated, including in minority languages, and selection processes are made as public as possible Implement GRM and workers' GRM - Implementation of LMP (including CoC) - Implementation of GBV Action Plan -Implement SRA and SMP - Set up appropriate signage o Fence construction site where applicable
	-Encroachment into any sites of archeological, cultural, historical, or religious significance. (ESS 8)	-Use of historical/scientific data and inclusive stakeholder engagement to ensure that subprojects will not be located in graveyards or on land of spiritual or other cultural significance -The 'chance find' procedures will be included in the scheme agreements for use where applicable
	-Lack of inclusion leads to grievances over subproject selection and benefits. There is a risk that some groups are not included in decision making fora and that they do not end up benefitting from the subprojects. This can lead to grievances over the decision-making for a, those in decision-making powers and the sub projects. (ESS1/ESS 7/ESS10) - Destruction of sub project investments through renewed conflict. If there is a risk that renewed conflict between local groups will lead to the destruction	-Identify minority, marginalized and disadvantaged communities in each of the participating districts. -Establish and maintain continuous liaison with the communities includingmarginalised 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 -Conduct in-depth contextual analysis before entering new communities with project investments, including a detailed analysis of different interest groups (Including women, IDPs living in host communities, persons with disabilities, and members of minority ethnic and clan groups) as per community /

	of project outcomes, for example infrastructure, housing or boreholes. (ESS1/ESS 7/ESS10) -Conflicts over the allocation of project resources. This is a risk at all levels, even at the community level beneficiary targeting creates winners and losers and can fuel grievances leading to violence. (ESS1/ESS 7/ESS10) - Project staff could be seen, justified or not, as biased and partial leading to tensions and grievances over subproject implementation. This could spark grievances and tensions in the beneficiary community over perceived biases in the selection of subproject locations, beneficiaries or project partners. (ESS1/ESS 7/ESS10) - Firming up local authority structures through cooperation with the project may lead to tensions or conflict where those structures are contested. (ESS1/ESS 7/ESS10) -Manipulation of subprojects by political or military factions. If there is a risk that subproject resources will be captured and certain groups will be excluded from benefitting, or resources	county -Communication as per SEP implemented and FPIC as required. -Develop a detailed subproject implementation plan based on the context analysis for each community / county, including how different interest groups will safely be included in decision making for -Implement GRM at community level -Conflict monitoring -Conduct contextual analysis in each county, including the key socio-cultural features of the local ethno-linguistic groups -Ensure that Project implementation Manual allows project teams sufficient flexibility to adjust project implementation to locally important features

	will be used in the conflict. Interventions become subject to political economy/manipulations and rent-seeking risks, as with any other resource. (ESS1/ESS 7/ESS10) -Subproject can be diverted at point of delivery. Given that monitoring in conflict situations can be difficult, there is a likelihood that project resources and subprojects get diverted at different stages of project implementation. (ESS1/ESS 7/ESS10) - Misunderstanding of cultural issues leads to increased conflict. Given South Sudan's great variety of different socio-cultural systems, project staff may not fully comprehend local cultural settings and may foster conflict rather than reduce it through specific actions.(ESS1/ESS 7/ESS10)	
Adverse Environmental Impacts (Technical Assistance)		
Subcomponent Activity	**Risks and Impacts**	**Mitigation Measures**
-Supporting the development of regulatory framework for livestock systems and value chains. - Supporting the formulation and	- Risk of potential downstream E&S impacts of the Type 2 TA activities to support formulaion of policies and regulatory frameworks.	- Agree on the TA ToRs to ensure that the advice provided through the TA during formulaion of policies and regulatory frameworks for livestock systems and value chains, animal health and welfare, commercialization of animal derived products, meat

implementation of policies on animal health and welfare, commercialization of animal-derived products, meat control and slaughtering facilities, and Veterinary Medicinal Products (VMPs) -Support TA and capacity strengthening of MLF and select associated departments in priority policy making including data and knowledge generation, promotion of sustainable and climate-smart livestock management. - Training of 1000 new Community Agricultural Health Workers (CAHWs)	- Risk of potential downstream E&S impacts of the Type 3 TA activities for capacity building and training to CAHWs.	control & slaughtering houses and veterinary medicinal products are consistent with the ESF. - Review the tasks for which the Community Agricultural Health Workers (CAHWs) are going to receive training on and if there is relationship with matters covered by the ESF (e.g: issues of veterinary medicine waste handling), design the capacity building/training ToR to adress it.
Adverse Social Impacts (Technical Assistance)		
Component 4	-Risk of conflict over provision of assistance (ESS 4) -Risk of failing (ESS 4) -Feasibility studies, technical design, policies, plans and strategies developed or	-Screen each subproject prior to implementation -Prepare all relevant additional E&S instruments to mitigate risks and impacts -Ensure that all TOR for TA are reviewed by the E & S specialists

	conducted may have significant E&S impacts or risks (ESS1) - Capacity Building support to institution that implement or oversee E&S standards and compliance may lack focus on E&S impacts and risks (ESS10) - The MLF and PIU will ensure that the ToR for respective TA initiatives provides for compliance with the ESF requirement should the envisaged activities have any direct or indirect relationship with the respective ESS standards (ESS1)	
Occupational Health and Safety Hazards/Risks (During Construction & Operation phases)		
Subcomponent Activity	**Risks and Impacts**	**Mitigation Measures**
- Construction of (boreholes/hefir) water , fodder conservation infrastructure, dipping tanks and establishment of community slaughterhouses, e.t.c	OHS risks from slips and falls associated with liquid spills: (ESS2)	- Implementing good house-keeping practices - Cleaning up excessive waste debris and liquid spills regularly - Locating cords and ropes in common areas and marked corridors - Use of slip retardant footwear
	OHS risks related to fall from elevation risk associated with work at heights (ESS2)	- Training and use of temporary fall prevention devices, such as rails or other barriers. - Use of control zones and safety monitoring systems to warn workers of their proximity to fall hazard zones, - Securing, marking, and labeling covers for openings in floors, roofs, or walking surfaces.
	Risk of struck by objects (ESS2)	- Using a designated and restricted waste drop or discharge zones, and/or a chute for safe movement of wastes from upper to lower levels.

		- Conducting sawing, cutting, grinding, sanding, chipping or chiseling with proper guards and anchoring as applicable. - Wearing appropriate PPE, such as safety glasses, hard hats, and safety shoes.
	Over-exertion, and ergonomic injuries and illnesses, such as repetitive motion, and manual handling, could be among the most common causes of injuries in construction sites. (ESS2)	- Training of workers in lifting and material handling techniques including the placement of weight limits - Planning work site layout to minimize the need for manual transfer of heavy loads - Selecting tools and designing work stations that reduce force requirements and holding times - Implementing administrative controls into work processes, such as job rotations and rest or stretch breaks.
Subproject operation activities including: Vaccination and internal parasite control (deworming) campaigns, -Operation of dipping tanks -Operation of Veterinary Field Units (VFU). - Supply of Veterinary Medical Products at sub district levels -Supporting the implementation of small veterinary health centers (VHC)	-Risks related to occupational health and safety of worker (Veterinary health care facilities are a potential source of infectious waste and these could pose unsafe conditions for Vet staff) including: • Biological hazards • Chemical hazards • Eye hazards such as splashes in laboratories and operating rooms Lack of adequate PPE and training • Misuse of equipment and materials for functions they are not designed;	• Ensure identification of risks (Job Risk Assessment) and instituting proactive measures, • Implementation of systemic risk management plan comprising risk prevention, evacuation of accident victims, evaluation and improvement measures. • Implement OHS plan and/or emergency response plan, • Provision of a system for disinfection of the multi-use PPE if not available. • Train the Veterinary healthcare workers on the potential OSH risks • Provision of adequate and required personal protective equipment (PPE) to veterinary health workers and enforce on use. This includes: single use medical mask, gown, Apron, eye protection, boots or closed shoes. Prevention of Physical hazard: • Design pens and gates to facilitate movement of livestock and reduce the need for farm workers to enter pens;

		• Instruct staff in correct livestock care, to reduce the incidence of bites and kicks Prevention of Chemical Hazards: • Train personnel to apply pesticides and ensure that personnel have received the necessary certifications, or equivalent training where such certifications are not required, • Ensure hygiene practices are followed to avoid exposure of family members to pesticides residues. Biological Agents: • Inform workers of potential risks of exposure to biological agents and provide training in recognizing and mitigating those risks; • Provide personal protective equipment to reduce contact with materials potentially containing pathogens; Ensure that those who have developed allergic reactions to biological agents are not working with these substances.
Operation activities related to: -Operation of feedlot for livestock fattening for commercial purpose, - Operation of livestock markets -Operation of fodder conservation infrastructure	Risk of physical hazards including lifting, carrying, and repetitive work and work posture injuries	- Instruct staff in correct livestock care, to reduce the incidence of bites and kicks. - Design pens, gates, and chutes to facilitate movement of livestock and reduce the need for farm workers to enter pens; - Training workers in proper live animal handling methods including the use of structures and equipment for handling and restraining animals; - Designing appropriate pen / lairage / livestock yards such that the animals can be calmly moved into the

		facility, and which allows for escape routes for the workers; - Conducting stunning of cattle in a controlled setting
Community Health and Safety (During Construction & Operation phases)		
Subcomponent Activity	**Risks and Impacts**	**Mitigation Measures**
	- Risk of rapid spread of animal disease-causing agents in intensive livestock operations	Recommended methods to reduce the potential spread of animal pathogens include: - Identify and segregate sick animals and develop management procedures for adequate removal and disposal of dead animals. - Sanitize animal housing areas; - Vehicles that go from farm to farm (e.g. transport of veterinarians, farm suppliers, buyers, etc.) should be subject to special precautions such as limiting their operation to special areas with biosecurity measures, spraying of tires and treating parking areas with disinfectants;
	- Community health and safety risks related to communicable diseases	- Training for all workers on the transmission routes and common symptoms of communicable diseases. -Conduct awareness raising and sensitization activities among workers, on transmission prevention of HIV/AIDS and COVID-19 as well as prevention of Malaria. -Distribution of face masks, sanitizers, condoms and IEC materials and hand washes, for free of workers and local people around.

5.2 Risks and Mitigation Measures Specific to Disadvantaged and Vulnerable Groups

There is no accurate demographic data in South Sudan. The 2008 census was rejected by the then-governing semi-autonomous Government of Southern Sudan and a post-independence census has yet to be undertaken. South Sudan is characterized by a large number of distinct ethnic groups, the majority of which are considered vulnerable and marginalized (see UNOPS June 2020). South Sudan has a substantial diversity of peoples with more than 64 associated languages, though a number of these are extinct or dying. There may be the presence of marginalized and minority communities in the country, therefore, with issues of inclusion.

Vulnerable groups include women headed households, child headed households, households made up of the aged or handicapped and whose members are socially stigmatized (as a result of traditional or cultural bias) and economically underserved. The project will use the following approach in identification of Vulnerable People: Vulnerable people are people who by virtue of gender, ethnicity, age, physical or mental disability, economic disadvantage, or social status may be more adversely affected by resettlement than others and who may be limited in their ability to claim or take advantage of resettlement assistance and related development benefits. Vulnerable people potentially eligible for specific assistance under this Resettlement Framework are those who are affected by the Project land acquisition, compensation and resettlement activities.

Mitigation Measures:

- Identify leaders of vulnerable and marginalized groups to reach-out to these groups through the existing industry associations maintain a database of marginalized groups, e.g., associations of PWDs.
- Leverage existing water supply and groundwater management and use projects which include vulnerable populations who overlap with this project to use their systems to identify and engage them
- Engage community leaders, CSOs and NGOs working with vulnerable groups
- Organize face-to-face focus group discussions with these populations.

Special restoration measures for disadvantaged and vulnerable groups/PAPs

During the preparation of the RP/LRP or SDP, the PIU will pay particular attention to the identification of disadvantaged and vulnerable groups and ensure that their specific needs are considered. In the case of the project area this includes women, female/child headed households, physically disabled, marginalized ethnic groups, pastoralists etc. The RP/LRP or SDP will include a vulnerable group support plan with a detailed implementation arrangement. The RPs, LRPs and SDPs will include solutions to the following aspects:

- Ensure that local decision-making mechanisms for land allocation and ownership pay attention to women land users and other vulnerable or marginalized groups (as stipulated in SSRLSP's Stakeholder Engagement Plan) and their needs.
- Ensure that compensation payments are made to women directly in the case of women headed households.
- Provide livelihood trainings to women groups and other vulnerable groups organized in Micro and Small Enterprises (MSE's) with special attention to female-headed households.
- Provide special attention to the impact of resettlement on women and other vulnerable groups during monitoring and evaluation of the RP or LRP.
- Income restoration measures must target the vulnerable persons or groups to ensure that they are reasonably assisted to overcome potential economic shocks and maintain the quality of life not less than prior to the activity.
- Ensure that assessments identify potential risks and impacts as well as mitigation measures, especially those that affect vulnerable groups.
- Where necessary, conduct a social, legal and institutional assessment in order to identify potential economic and social risks and impacts, in particular those of vulnerable groups.
- Consider alternative project design to avoid and minimize land acquisition or restrictions on land use, with particular attention to vulnerable groups.
- When establishing entitlements, pay particular attention to gender aspects and the needs of vulnerable groups.

Since vulnerable individuals or groups often do not participate in decision-making meetings, it is crucial to identify them prior to any consultations. The PIU will assess vulnerabilities and their cause and impacts, based on identification mechanism proposed by the respective communities, as well as those developed during the implementation of the SEP.

Payment of compensation and any other type of assistance will then be adjusted to the vulnerable persons' requests and needs. This can include assistance in the compensation payment procedure (e.g. specifically explain the process and procedures, make sure that documents are well understood); assistance in the post payment period to secure the compensation money and reduce risks of misuse/robbery; assistance in moving, e.g. by providing vehicle, driver and assistance at the moving stage, assistance in the identification of a resettlement plot; assistance in construction, including through provision of materials and work force; assistance during the post-resettlement period, particularly if the solidarity networks that the vulnerable person was relying on have been affected: food support, health monitoring, etc. and health care if required at critical periods, particularly the moving and transition periods.

5.3 Planning and Design Considerations for Avoidance of Environmental and Social Risks and Impacts

Much of the environmental and social impacts that may arise from the operational activities of RLSP subproject such as community slaughterhouses, feedlots for livestock fattening and livestock markets could be minimized by carefully selecting appropriate sites and facility designs during the planning phase. As indicated in the relevant sections of Table 3 above, selection of sites that is away from residential areas and having proper distance from neighbors to avoid foul odor nuisance will avoid/minimize negative impacts affecting the neighborhood. The planning and design considerations of the sustainable range land management system would also need to take into account the presence of critical habitats including known habitat of critically endangered or endangered species, or important wildlife breeding, feeding, and staging areas and avoid or minimize impacts by selecting alternative sites, and methodologies.

6. Procedures and Implementation Arrangements

6.1 Environmental and Social Risk Management Procedures

The project will be implemented by the Ministry of Livestock and Fisheries (MLF), South Sudan. The ministry oversees the country's vast livestock wealth, said to be the sixth biggest in Africa and estimated to include 11.7 million cattle, 12.4 million goats and 12.1 million sheep. At the moment, initial due diligence shows that the capacity of the ministry is weak. The ministry has a department (Department of Range Management) that, among other things, is in charge of "all technical matters relating to range management and development, as well as environmental conservation." The department is also responsible for the collection of livestock and environmental data, analysis and evaluation for the purpose of drought monitoring, early warning systems and contingency planning. However, the actual technical capacity of the department, including the complement of technical personnel, is unclear at the moment. The project would therefore be implemented in a hybrid model, with some activities being executed by UN implementing partners such as the Food and Agricultural Organization (FAO) while capacity in the ministry, including the necessary competencies to manage environmental and social risks, is being built. The environmental and social risk management procedures will be implemented through the Project's subproject selection process. In summary, the procedures aim to do the following:

Table 4: Project Cycle and E & S Management Procedures

Project Stage	E&S Stage	E&S Management Procedures
a. Assessment and Analysis: Subproject identification	Screening	- During subproject identification, ensure subproject eligibility by referring to the Exclusion List in table 5 below. - For all subprojects, use the Screening Form in Annex 1 to identify and assess potential environmental and

		social risks and impacts, and identify the appropriate mitigation measures for the subproject. - Check and update regularly if there are progresses made in promulgating the Draft Environment Bill by the National Parliament and identify the documentation, permits, and clearances required under the enforced Environmental Bill.
b. Formulation and Planning: Planning for subproject activities, including human and budgetary resources and monitoring measures	Planning	- Based on ***Screening Form*** and in consultation with the World Bank country office safeguard team, prepare relevant environmental and social procedures and plans. - For activities requiring Environmental and Social Management Plans (ESMPs), submit the first 5 ESMPs [or another number agreed with the World Bank Country office safeguard team] for prior review and no objection by the World Bank prior to initiating bidding processes and/or launching activities. - Ensure that the contents of the ESMPs are shared with relevant stakeholders including the Ministry of Environment and Forest (MoEF) in an accessible manner and consultations are held with the affected communities in accordance with the SEP. - Complete obtaining the "***Letter of no Objection***" clearances from the MoEF and final "**No objection**" from the World Bank Safeguards team - Train staff responsible for implementation and monitoring of plans. - Incorporate relevant environmental and social procedures and plans into contractor bidding documents; train contractors on relevant procedures and plans.
c. Implementation and Monitoring: Implementation support and continuous monitoring for projects.	Implementation	- Ensure implementation of plans through site visits, regular reporting from the field, and other planned monitoring. - Track grievances/beneficiary feedback. - Continue awareness raising and/or training for relevant staff, contractors and communities.
d. Review and Evaluation: Qualitative, quantitative, and/or participatory data collection on a sample basis.	Completion	- Assess whether plans have been effectively implemented by conducting **Annual Performance Reviews**. - Ensure that physical sites are properly restored.

More detail for each stage is provided below.

a. Subproject Assessment and Analysis – E&S Screening

As a first step, all proposed activities should be screened to ensure that they are within the boundaries of the Project's eligible activities. The following criteria in Table-5 would be applied to exclude activities/subprojects from financing by the SSRLS project during the E&S screening exercise. These are:

Table 5: Exclusion List

- Activities causing significant conversion or degradation of critical natural habitats or critical cultural heritage sites;
- Activities that may cause long term, permanent and/or irreversible (e.g. loss of major natural habitat) impacts.
- Activities that may have significant adverse social impacts and/or may give rise to significant social conflict.
- Land acquisition and/or resettlement of a scale or nature that will have significant adverse impacts on affected people, or the use of forced evictions;
- Activities involving changing forestland into rangeland or logging activities in primary forest
- Purchase or use of banned/restricted pesticides, insecticides and other dangerous chemicals (banned under national law and World Health Organization (WHO) category 1A and 1B pesticides)
- Construction of any new dams or rehabilitation of existing dams including structural and or operational changes;
- Activities that may cause or lead to forced labor or child abuse or child labor exploitation

As a second step, the MLF PIU will use the ***E&S Screening Form in Annex 1*** to identify and assess relevant environmental and social risks specific to the activities. The screening form will be completed by the MLF PIU E&S specialist. The E & S screening will ascertain the type of environmental and social assessment required in accordance with ESS1 and consistent with the ESSs (i.e. such as the Environmental and Social Codes of Practice, the Environmental and Social Management Plan, the Labor Management Procedures, Chance Find Procedures, etc.). This is done by analyzing the proposed activities in relation to their environmental & social context using a checklist approach. The E&S screening will occur during the early planning for SSRLSP subprojects, as soon as the likely site locations and designs are known for the sub-projects.

Assigning of appropriate environmental and social risk classification to a sub-project activity shall be based on information obtained by completing the environmental and social screening form (Annex 1). The PIU E&S specialists shall undertake the environmental and social screening process and assign the appropriate risk classification for the subproject (s) – Low, Moderate, or Substantial. The classification should be assigned based on the criteria provided in Annex, 11:

Guidance for subproject risk categorization. Even though the South Sudan Environmental Protection Bill (2013) allows for some screening decision to be made based on a Project brief document (i.e. a document supposed to be equivalent with an E&S screening report), it is still at draft stage and has not been enacted by the legislative body of the South Sudan to become a binding law. Thus, the project will adhere to the World Bank guidance for subproject risk classification in the absence of a legally binding national system.

b. Subproject Formulation and Planning – E&S Planning

Upon review and approval of the screening report and risk rating, the MLF PIU will consult with the World Bank and decide on the type of additional E&S instrument to be undertaken. This is likely to be an Environmental and Social Impact Assessment (ESIA) for substantial risk or an Environmental and Social Management Plan (ESMP) for moderate risk (if any). Where subprojects are likely to have minimal or no adverse environmental or social risks and impacts, such subprojects do not require further environmental and social assessment following the initial scoping. The MLF PIU will adopt the necessary environmental and social management measures already included in the Annexes of this ESMF (such as the ESCOPs, the LMP, SEP, GBV/SEA/SH, RPF etc.) or develop relevant site-specific environmental and social management plans.

If site-specific ESMPs are necessary, MLF PIU will prepare these ESMPs and other applicable documents as needed. The E&S Instruments prepared will be reviewed by the Environmental and Social Specialists of the MLF PIU. The MLF PIU will provide approval and compile ESMPs and other applicable forms. The contents of the ESMPs will be shared with relevant stakeholders in an accessible manner, and consultations will be held with the affected communities on the environmental and social risks and mitigation measures. If certain subprojects or contracts are being initiated at the same time or within a certain location, an overall ESMP covering multiple subprojects or contracts can be prepared. Some moderate risk subprojects may also benefit from the preparation of a site-specific environmental and social assessment prior to the preparation of an ESMP.

It worth to note that the South Sudan draft Environmental Protection Bill (2013) allows for decision to be made on the level of environmental assessment based on the Project brief document (i.e. a document likely to be equivalent with an E&S screening report). Such decisions would have resulted on whether the subproject will need to further prepare an EIA or a preliminary environmental assessment to provide more information to determine a screening decision. However, the draft environmental protection bill is still at draft stage and hasn't been enacted by the legislative body to become a national binding law. Thus, subprojects having E&S risk category will have to follow World Bank procedures to determine the type of instruments to be prepared. Accordingly, the first five ESIAs and/or ESMPs (or a different number to be agreed with the World Bank safeguard team) will be submitted to the World Bank for prior review and no objection.

When the World Bank ensures that all comments are addressed, it would give approval and clear the documents with no objection.

Once cleared by the World Bank, the ESIAs and/or ESMPs will be submitted to the Directorate of Environment and Sustainable Development of the Ministry of Environment and Forest of South Sudan for obtaining a "Letter of no objection". The Ministry shall review the ESIAs and/or ESMPs and provide the project proponent with written comments. After review, if the Ministry is satisfied that it is complete, it will issue a ***"Letter of no objection"*** for the ESIAs and/or ESMPs. Where the ESIAs and/or ESMPs are found to be inadequate, the Ministry shall return it to the proponent for revision, taking into consideration the comments and objections of the Ministry of Environment and Forest. The MLF PIU will complete the documentation and clearances required before any project activities begin.

After this first 5, the World Bank and the MLF PIU will reassess whether prior review is needed for further ESMPs or a certain category of ESMPs (for example, for activities exceeding a certain budget, for certain types of activities).

At this stage, staff who will be working on the various subproject activities should be trained in the environmental and social management plans relevant to the activities they work on. The MLF PIU should provide such training to field staff. The MLF PIU should also ensure that all selected contractors, subcontractors, and vendors understand and incorporate environmental and social mitigation measures relevant to them as standard operating procedures for civil works. The MLF PIU should provide training to selected contractors to ensure that they understand and incorporate environmental and social mitigation measures; and plan for cascading training to be delivered by contractors to subcontractors and vendors. The MLF PIU should further ensure that the entities or communities responsible for ongoing operation and maintenance of the investment have received training on operations stage environmental and social management measures as applicable.

c. Implementation and Monitoring – E&S Implementation

During implementation, the MLF PIU will conduct regular monitoring visits. The MLF PIU will ensure that monitoring practices include the environmental and social risks identified in the ESMF and will monitor the implementation of E&S risk management mitigation plans as part of regular project monitoring. It will monitor the E&S performance of the project in accordance with the Grant Agreement. The MLF PIU Environment and Social specialists shall monitor implementation of E&S risk mitigation measures at the national level by coordinating and working closely with the (E&S) focal persons of the beneficiary state ministries for Livestock and Fisheries. The (E&S) focal persons at state ministries will undertake regular supervision of the subprojects during implementation, and a contractor-ESMP (C-ESMP) report shall be prepared before payment. The MLF PIU E&S risk management specialists shall provide technical support to the state ministry (E&S) focal persons.

The PIU will provide regular reports, as set out in the ESCP, to the World Bank on the results of the monitoring. E&S risk management monitoring reports must be prepared by the PIU in collaboration with the beneficiary state ministry E&S focal persons. At a minimum, the reporting will include (i) the overall implementation of E&S risk management instruments and measures, (ii) any environmental or social issues arising as a result of project activities and how these issues will be remedied or mitigated, including timelines, (iii) Occupational Health and Safety performance (including incidents and accidents), (iv) community health and safety, (v) stakeholder engagement updates, in line with the SEP, (vi) public notification and communications, (vii) progress on the implementation and completion of project works, and (viii) summary of grievances/beneficiary feedback received, actions taken, and complaints closed out, in line with the SEP. Reports from the state levels will be submitted to the MLF PIU at the national level, where they will be aggregated and submitted on quarterly, biannual and annual basis. The environmental and social risk management monitoring reports should be submitted to the SSRSLP Steering committee, to MLF and the World Bank.

If the MLF PIU becomes aware of a serious incident in connection with the project, which may have significant adverse effects on the environment, the affected communities, the public, or workers, it should notify the World Bank within 48 hours of becoming aware of such incident. A fatality is automatically classified as a serious incident, as are incidents of forced or child labor, abuses of community members by project workers (including gender-based violence incidents), violent community protests, kidnappings, diversion of pesticides, spills or misuse.

The MLF PIU will also track grievances/beneficiary feedback (in line with the SEP) during project implementation to use as a monitoring tool for implementation of project activities and environmental and social mitigation measures.

The implementation of E&S instruments will also be supported by conducting annual environmental and social performance audits (including audits of the implementation of ESIA/ESMPs) that will be carried out by a third party. The third-party annual environmental and social performance audits will be conducted to evaluate the overall implementation of the ESMF and will be the principal source of information to Project management for improving environmental and social performance. The annual performance audits will be carried out by registered and licensed independent consultant firm that is not otherwise involved in the Project.
Throughout the Project implementation stage, the MLF PIU will continue to provide training and awareness raising to relevant stakeholders, such as staff, selected contractors, and communities, to support the implementation of the environmental and social risk management mitigation measures. An initial list of training needs is proposed below, in Section 6.3.

Management of Changes: The above E&S risk management procedures are designed based on the current status of the draft national environmental bill and other related regulations. During the

course of project implementation, changes on the status of national draft environmental bill may occur mainly by enacting it to become a legally binding law. Under such circumstances the MLF PIU will have to take a lead role in integrating and streamlining the changes made to the ESMF procedures through consultative process with relevant stakeholders.

d. Review and Evaluation – E&S Completion

Upon completion of Project activities, the MLF PIU will review and evaluate progress and completion of project activities, and all required environmental and social mitigation measures. Especially for civil works, the MLF PIU in collaboration with the beneficiary states E&S focal persons will monitor activities with regard to site restoration and landscaping in the affected areas to ensure that the activities are done to an appropriate and acceptable standard before closing the contracts, in accordance with measures identified in the ESMPs and other plans. The sites must be restored to at least the same condition and standard that existed prior to commencement of works. Any pending issues must be resolved before a subproject is considered fully completed. The MLF PIU will prepare the completion report describing the final status of compliance with the E&S risk management measures and submit it to the World Bank.

6.2 Technical Assistance Activities

The technical assistance activities of the SSRLP project are categorized as Type 2 and Type 3 TAs. Hence the MLF PIU will ensure that the Type 2 TA activities designed to support formulaion of policies and regulatory frameworks are carried out in accordance with Terms of Reference that are consistent with the ESSs. Similarly, the MLF PIU should review the tasks of the Type 3 TA activities for capacity building and training of CAHWs to check if it has issues covered by the ESF, and ensure that the Terms of Reference are designed in a way to address them. This will also ensure that the output of such activities comply with the Terms of Reference.

6.3 Implementation Arrangements

At National level, the project activities will be implemented and coordinated by the Ministry of Livestock and Fisheries (MLF). A Steering Committee representing the major stakeholders in the livestock sector (livestock, agriculture, finance, and participating states) will provide overall guidelines to the project. A Project Implementing Unit (PIU), which will be staffed with environment and social specialists, will coordinate day-to-day implementation, supervision, and overall management of project activities.

At states level, the project will be implemented by the beneficiary state ministries in collaboration with MLF. Functionally, in terms of project implementation, the National Ministries are mainly engaged in planning and designing policies and strategies whereas implementations of projects are carried by the state ministries and counties with continued guidance and technical back stopping

from the national Ministries. The beneficiary state ministries will assign focal persons for environment and social management, who will be responsible for regular implementation, monitoring and supervision of the ESMF and associated ESMPs for subproject activities in their respective states.

The Ministry of Environment and Forestry (MoEF) is mandated with the protection and conservation of the environment. The Directorate responsible for ESIA process and administration including review and approval is the Environment and Sustainable Development Directorate. Currently, the Directorate lacks a binding legal instrument to require and enforce EIA procedures on development projects due to the fact that the environmental protection bill is still not enacted by the legislature to become law.

The MoEF have branches at the state and county levels, though the organizational structure and name of the state level institutions changes from state to state. The state ministries and county level environment offices also carry the day to day observation, monitoring and reporting of the project. When the state ministries lack capacities, the National Ministries assist them by providing training and technical support through working groups so that they can accomplish the project implementation tasks.

Local contractors will be required to comply with the Project's E&S risk management plans and procedures, including the ESMP, ESCOPs, LMP, and local legislation. This provision will be specified in the contractor's agreements. Contractors will be expected to disseminate and create awareness within their workforce of environmental and social E&S risk management compliance for their effective implementation.

The table below summarizes the roles and responsibilities regarding the implementation arrangements for environmental and social management.

Table 6: Implementation Arrangements

Level/ Responsible Party	Roles and Responsibilities
MLF PIU	- For subprojects managed centrally, ensure project activities do not fall under the Exclusion List. Fill out Screening Forms for relevant subproject activities. - Oversee overall implementation and monitoring of environmental and social mitigation and management activities, compile progress reports from state levels for subprojects, and report to the World Bank on a quarterly [or biannual] basis. - Provide support, oversight and quality control to field staff working on environmental and social risk management.

	- Collect, review, and provide quality assurance and approval to Screening Forms and ESMPs as relevant. Keep documentation of all progress. - Train central and field staff and contractors who will be responsible for implementing the ESMF. - If contracting is managed centrally, ensure that all bidding and contract documents include all relevant E&S management provisions per screening forms, ESMPs, and ESCOPs.
State level E&S focal persons	- Ensure project activities do not fall under the Exclusion List. Fill out Screening Forms for relevant subproject activities and submit forms to the national level. - If relevant, complete site-specific ESMPs for subproject activities and submit forms to the national level. - Oversee daily implementation and monitoring of environmental and social mitigation measures, and report progress and performance to the national level on a monthly basis. - Provide training to local contractors and communities on relevant environmental and social mitigation measures, roles, and responsibilities. - If contracting is managed at state level, ensure that all bidding and contract documents include all relevant E&S management provisions per screening forms, ESMPs, and ESCOPs.
Local contractors	- Comply with the Project's environmental and social mitigation and management measures as specified in ESMPs, ESCOPs, and contract documents, as well as national and state legislation. - Take all necessary measures to protect the health and safety of workers and community members, and avoid, minimize, or mitigate any environmental harm resulting from project activities.]

6.4 Proposed Training and Capacity Building

Effective implementation of the ESMF and other E&S instruments will require technical capacity within the main project implementing institution (MLF), the PIU, state ministries responsible for livestock as well as the national and state regulatory institutions responsible for environmental and social monitoring of the SSRLP sub-project activities. There is a need for an in-depth understanding of the operationalization of the ESMF and other E&S instruments to be applied by the institutions and key stakeholders involved in the implementation of SSRLP subproject activities. Therefore, a special focus is needed to develop the capacity of the project implementing institution (MLF), staff from project beneficiary state ministry institutions, as well as the environment regulatory institutions to support implementation of the SSRLP project with regard to social, environmental, workers and public safety aspects. The following sections outline the capacity building needs of the implementing agencies and beneficiary institutions.

6.4.1Assessment of capacities and practical experiences of implementing Agencies on Environmental and Social Risk Management.

The main implementing agency of the SSRLP project is the Ministry of Livestock and Fisheries. The existing capacities and practical experiences of the main SSRLP implementing institutions in the area of environmental management is found to be generally weak. MLF is an institution established through the restructuring of the Ministry of Agriculture. As a newly established institution, it is largely in the process of building its capacities in different areas. During the virtual consultations carried with the key stakeholders, it was learned that the MLF have neither an environment and social management unit nor environment and social experts in its structure. Its existing experience and exposure so far for E&S risk management requirments, procedures and implementation practices is very limited and appears to be related to a legacy of project implementations carried while it was part of the Ministry of Agriculture. It was reached to a consunsus that as the existing E&S risk management capacity of the MLF is generally weak, it requires a capacity building effort. The need to create capacity for E&S risk management within the Ministry at national level, state ministries and county levels was emphasied.

In consideration of this apparent low capacity within the MLF, the implementation of the SSRLP is planned to be carried in a hybrid model, with some activities being executed by UN implementing partners such as the Food and Agricultural Organization (FAO. During the virtual stakeholder discussions, it was noted that third party implementing institutions such as the FAO South Sudan Office and VFS Germany are already engaged in supporting the implementation of Projects in collaboration with the Ministry of Agriculture. It was noted that FAO have a Single Project Service Unit (SPSU) with E&S staff, supporting a simillar pilot scale resillient livestock project, that are well conversant to the World Bank ESRM requirements and procedures. The existing capacities and practical experiences of the FAO and VFS Germany in the areas of environmental risk management appears to be dependable and well experienced to support the SSRLSP.

In summary, the virtual consultation discussions held with the various institutions have shown that there are capacity gaps in the environmental and social management which needs to be filled through deploying adequate human resource and training. As a result, it is recommended that the capacity gap in E&S risk management should be filled in as follows.

1. The MLF should deploy one environmental and one social specialists on a fulltime basis to work in the SSRLP PIU at national level
2. The State Ministries in the project beneficiary states should deploy one environmental and one social specialists on a fulltime basis to work in the SSRLP PIU at state level
3. Each project SSRL project beneficiary Counties should assign qualified focal persons for environment and social experts.

The E&S risk management specialists at the PIU will contribute to the objectives of the SSRLSP which include:

- The preparation, together with the state ministry E&S staff, of annual work programs and budgets to fulfill ESMF requirements of subprojects;
- Monitoring compliance with E&S instruments, taking corrective actions where necessary;
- Collecting and managing information relevant to the compliance with E&S instruments (i.e. environmental monitoring and audit reports of ESMP),

- Preparation of E&S performance reports as part of the overall Project Quarterly Progress Reports;
- Ensuring that the national project implementing, and state beneficiary bodies are supported adequately and that they adhere to the principles of the ESF and compliance with ESMF guidelines.

The environment and social staff to be deployed by beneficiary state ministry institutions will be responsible for the implementation of their respective subprojects in compliance with the requirements of the ESMF.

6.4.2 Assessment of capacities and practical experiences of National and State level MoEFs

The role of the environmental regulatory agencies in implementing the SSRLSP ESMF is important. The MoEF have branches at the state levels, though the organizational structure and name of the state level institutions changes from state to state. The virtual consultation carried with the key stakeholders revealed that existing institutional standing, institutional capacity and role of the state ministries for environment remains to be unclear. The role of the state ministries in the ESIA review and approval process is supposed to be providing its review comments on project ESIA documents to be implemented in the state. The initial submission and final approval of the ESIA report is supposed to be done at national level by the MoEF Environment and Sustainable Development Directorate. The state ministries and county level environment offices would carry the day to day observation, monitoring and reporting of the project.

6.4.3 Training requirements

Integrating environmental and social considerations into development planning will encompass defining processes, procedures and responsibilities for environment related activities and actions into the preparation of the SSRLSP annual plans and budgets. Thus there will be a need to carry out E&S awareness workshops for officials of project implementing and stakeholder institutions on ESF principles, GBV/SEA Plan, Labour Management Procedures (LMP), Resettlement Framework (RF), Security Risk Assessment and Management Plan (SRAMP), Social Assessment (SA) and the ESMF procedures. The awareness raising workshops should target the higher officials, SSRLSP program management and coordination organs including relevant directorates of the national and state level beneficiary institutions. This will help to ensure that there is good knowledge of SSRLSP ESMF and related instruments at different levels in the main implementing and beneficiary state institutions, stakeholders and other professional and technical staffs.

The other capacity building area recommended for MLF and the other stakeholder and state ministry beneficiary institution involved is the provision of technical training. The technical training to be offered will need to address target groups from different stakeholders institutions (e.g: National and State Ministry of Environment and Forest, National and State level Ministries of Labor, National and state level SSRLSP PIU staff, E&S focal person at County levels,e.t.c) which will have a role in implementing the ESMF and RF at various levels. The training will focus

in explaining the details of the national draft environmental bill and World Bank ESSs and the procedures that need to be fulfilled to comply with it. Implementation of the E&S risk management instruments including ESMF, GBV/SEA Plan, Labor Management Procedures (LMP), Resettlement Framework (RF), Security Risk Assessment and Management Plan (SRAMP), Social Assessment (SA) and integration of environmental management into development planning will be the center topics for the training. The training will also cover skills upgrading refreshment topics such as, environmental and social screening and categorization processes, EIA review and quality assurance, environmental audits, occupational health and public safety and others as necessary. Detailed topics that would need to be covered by the training include the following:

- ✓ Basic principles of ESMF and RF;
- ✓ Potential Environmental and Social Risks and Impacts of SSRLSP activities
- ✓ Environmental and social screening process,
- ✓ Assignment of environmental categories,
- ✓ Preparation of terms of reference for carrying out ESIA/ESMPs
- ✓ Preparation of TOR for Technical Assistance activities with potential downstream impacts, such as feasibility studies, that need to be consistent with the ESS.
- ✓ Review and clearance of the screening results and subsequent ESIA/ESMP reports,
- ✓ Supervision, monitoring, evaluation and environmental reporting;
- ✓ Participatory public consultation and engagement,
- ✓ Gender Based Violence (GBV) prevention and Control (GBV/SEA/SH Guidelines)
- ✓ Labor Management Procedures (LMP)
- ✓ Grievance Redress Mechanisms (GRM) of the SSRLSP
- ✓ Stakeholders Engagement process in view of the SEP,
- ✓ Occupational and Community Health and Safety including public safety
- ✓ Emergency preparedness and response
- ✓ Conflict Analysis and Capacity in Conflict Prevention
- ✓ Resettlement action plan implementation

Table 7: Project Training and Capacity Building Approach

Level	Responsible Party	Audience	Topics/Themes that May Be Covered
[National level	World Bank	National staff responsible for overall implementation of ESMF	ESMF and approach: - Identification and assessment of E&S risks - Selection and application of relevant E&S risk management measures/instruments - E&S monitoring and reporting - Incident and accident reporting

			- Application of LMP, including Code of Conduct, incident reporting, SEA/SH, COVID-19 mitigation - Application of SEP and the grievance/beneficiary feedback mechanism
Regional level	National staff	Regional staff Contractors	ESMF and approach: - Identification and assessment of E&S risks - Selection and application of relevant E&S risk management measures - E&S monitoring and reporting - Incident and accident reporting - Application of LMP, including Code of Conduct, incident reporting, SEA/SH, COVID-19 mitigation - Application of SEP and the grievance/beneficiary feedback mechanism
Local/site level	Regional staff	Local staff Local contractors	- Application of SEP and the grievance/beneficiary feedback mechanism - Application of LMP, including Code of Conduct, incident reporting, SEA/SH, COVID-19 mitigation - Application of ESCOPs or ESMPs, as relevant
Community level	Local staff	Community members Community Workers, if relevant	- Basic OHS measures and Personal Protective Equipment - Community health and safety issues - Worker Code of Conduct - SEA/SH issues, prevention, measures] - COVID-19 mitigation - Grievance redress - Workers' grievance redress

6.4.4 Estimated Budget

The breakdown of estimated costs for putting the ESMF into operation is provided in Table 8. This includes the costs of providing the capacity building and training set out in Chapter 5.5. The total estimated costs for mainstreaming environment into the SSRLSP subcomponent is USD 928 500. The following table lists estimated cost items for the implementation of the ESMF, which have been included in the overall project budget

a) USD 200,000 which will be included in the consultants procured to prepare ESIA/ESMP for SSRLSP subprojects involving physical construction. These consultants will be responsible for the work on preparation of ESIA, ESMP, and plans.

b) USD 10,000 for the preparation and printing of training and awareness raising materials for two rounds

c) USD 158,500 for two rounds of awareness raising workshop (2 days) and trainings for staff (venue, travel, refreshments etc.), and delivery of technical training on ESMF and approach (5 days)

d) USD 360,000 for provision of six Environmental and Social expert in MoLF and two beneficiary states PIUs for the five years duration of the project;

e) USD 150,000 SSRLEP to undertake five rounds of annual external Environmental and Social Performance Audit

f) USD 50,000 for travel and accommodation budget for E&S staff site visits for five years.

The above costs will be funded from SSRLSP project. The SSRLSP PIU Environmental and Social Specialists will report on SSRLSP ESMF expenditure. This will provide for another way of monitoring on the extent that environmental and social issues are being addressed by the project beneficiaries and stakeholders.

Costs related to the required mitigation measures for subproject ESMPs are not set out in the budgets presented here. These will be assessed and internalized as part of the overall SSRLSP subproject cost. It is extremely difficult to estimate the proportion of project costs that can be expected to be devoted to mitigation measures. However, a rough rule of thumb is that they should be expected to cost between 2% and 5% of the total project cost. Compensation and resettlement costs will be borne by beneficiaries.

Activity	YR1	YR2	YR3	YR4	YR5	TOTAL	Notes
Preparation of site-specific ESMPs and other site-specific plans	40,000	40,000	40,000	40,000	40,000	200,000	Assume lump sum USD 40,000 for preparation of 4 site specific ESMP/ESIA per year (assuming that one

							document prepared by 10,000USD)
Printing of training and awareness raising materials /	5,000		5,000			10,000	Assume lump sum USD 5,000 for development and printing of training materials/ modules and awareness raising materials
Awareness raising workshop (2 days) and trainings for staff (venue, travel, refreshments etc.) Delivery of technical training on ESMF and approach (5 days)	91,750		66.750			158,500	Assume 50 participants x USD 250 per day x 2 days awareness raising workshop + 35 participants x USD 300 per day in depth technical training x 5days + travel cost 50USD per person + trainers cost 10,000USD).
PIU Envi & Social risk management staff (for national and state levels)	72,000	72,000	72,000	72,000	72,000	360,000	Assume maximum USD 1500 per month total wage x (2 for national PIU.+ 4 for Jonglei and new equatoria)
Budget for external Annual Environmental and Social Performance Audit s	30,000	30,000	30,000	30,000	30,000	150,000	External Environmental and social performance Audit to be carried once per year.
Travel and accommodation budget for E&S staff site visits	10 000	10,000	10,000	10,000	10,000	50,000	Lump sum estimate
Total ESMF costs	248750	152.000	223750	152000	152000	**928.500**	

Table 8: ESMF Implementation Budget

7. Stakeholder Engagement, Disclosure, and Consultations

The World Bank's ESS 10 recognizes the importance of open and transparent engagement with all project stakeholders, based on the recognition that effective stakeholder engagement can improve environmental and social (E&S) sustainability of project activities, enhance project acceptance,

and implementation, and allow stakeholders to contribute to project design. The key objectives of stakeholder engagement include an assessment of the level of interest and support of the project by stakeholders to promote effective and inclusive engagement with all project-affected parties and to ensure that project information on E&S risks and impacts is disclosed in a timely and understandable way.

This Stakeholder Engagement Plan (SEP) is based on the guiding principles that stakeholder engagement should:
- Be timely
- Be independent (free of external manipulation, interference, coercion, discrimination, and intimidation)
- Have clear objectives
- Have the capacity to influence the stakeholders - Obtain feedback
- Trigger provision of resources and other modifications, where needed
- Be properly documented and disclosed by the borrower
- Generate minutes from every meeting/interview
- Generate recordings or photos, if culturally accepted Based on the above, a detailed SEP has been prepared

The objectives of the stakeholder consultation and public participation include among others: (i) to provide an opportunity for the public, more so those to be directly affected to get clear, accurate and comprehensive information about the proposed project and the anticipated environmental impacts; (ii) to provide an opportunity for the public and the project beneficiaries to give their views, raise their concerns regarding the project and also give possible alternative arrangements that may assist in the development of the project; (iii) to provide the project beneficiaries an opportunity of suggesting ways of avoiding, reducing, or mitigating negative impacts or enhancing positive impacts of the proposed project activities; (iv) to enable the project proponents to incorporate the needs, preferences and values of project beneficiaries into the proposed project/programme; (v) to provide opportunities to avoid and resolve disputes and reconcile conflicting interests; and, (vi) to enhance transparency and accountability in decision making.

Methodology of engaging stakeholders

In order to effectively engage and consult various stakeholders, several methods can be used. Among the most common methods are: (i) public consultative meetings, particularly with communities and other large numbered stakeholders; (ii) workshops which might be organised at the identified states and county headquarters; (iii) focused group discussions (FGDs); (iv) interviews with different key informants in relation to the proposed project/programme; (v) printing and distribution of materials that help relay information to stakeholders to widen their understanding of the project and its implications; (vi) physical site visits and inspections that may also include discussions with community leaders and community members; (vii) identification of vulnerable communities that may be impacted on more with the project; (viii) due consideration of gender and various age groups during consultative processes. Public consultations will provide stakeholders with timely, relevant, understandable, and accessible information. Special considerations will be given to stakeholders that are considered disadvantaged or vulnerable who can be considered alongside Indigenous Groups whose specific vulnerabilities must be addressed.

Possible key issues for consideration during stakeholder engagements

A number of issues are identified that maybe useful during stakeholder engagements include:

Land acquisitions and compensation
Should there be need for land acquisition for the development of the proposed projects. There will need to know whether there will be involuntary resettlement needed, etc.

Identification of ecologically sensitive sites
This will be with regard to identifying areas that are protected by national laws and international conventions such as forest reserves, Ramsar sites, important migration routes, etc.

Identification of important cultural sites
These may include cultural ritual sites, cemeteries

Environmental impacts
These will be need to discuss both negative and positive environmental and social impacts of the project.

Environmental/biodiversity issues
These may include issues of destruction of natural environment including damage to vegetation, views from conservationists, loss of biodiversity of biological and economic importance, etc.

Socio-economic considerations
During stakeholder engagements and public consultations, projects are analysed in view of their socio-economic impacts. What positive impacts is the project going to have? How is the project going to influence social well-being as well as economic wellbeing? What are the potential complementary initiatives? Employment opportunities that will be created by the project, etc. etc.

Socio-cultural issues Consideration of gender mainstreaming, women and youth empowerments, identification of vulnerable groups such as poor women, the elderly, the people with disabilities, spreading of diseases (especially HIV/AIDS and other communicable diseases as well as non-communicable disease are of utmost consideration), improvement of life quality/living standards, etc.

Disruption of normal life
Is the project going to interference with and disrupt daily economic activities such as closure of roads, change in normal lifestyles, etc.

Occupational health and safety
Possible occupational health challenges and safety of workers during the project development phase as well as operational phase are of great importance.

A separate Stakeholder Engagement Plan (SEP) has been prepared for the Project, based on the World Bank's Environmental and Social Standard 10 on Stakeholder Engagement. The SEP can be found here: [provide disclosure link for the SEP].

This ESMF, as well as the SEP and the Environmental and Social Commitment Plan (ESCP) that have been prepared for this project, have been disclosed in draft for stakeholder consultations on the following website [provide website address] on [date]. Key feedback, if any, on the disclosed ESMF is listed here [summary of feedback].

Key findings of the stakeholder consultations

During SSRLSP preparation, the following public consultation meetings were conducted. A virtual World Bank project preparation mission for the project is conducted from April 29- May 04, 2024. Furthermore, a virtual stakeholder consultation meeting has been convened on 19 April 2024. The main issues intended to be covered during the consultation meeting consists of a brief introduction on SSRLSP existing experiences on implementing the SA and other Environmental and Social Framework (ESF) related instruments; lessons on land acquisition and resettlement; procedures in handling property valuation and compensation and existing grievance redress mechanism (GRM) systems. Other issues that will be discussed include E & S risk management capacities in the project implementing institutions, proposed institutional arrangements for project E & S management and flow of reporting; status and experience of conflicts regarding water supply use and management; and receiving concerns, views and opinions of the stakeholders regarding any potential E & S risks of the proposed project were also points of discussion.
Consultations with 19 stakeholders, comprising community representatives (South Sudan pastoralist general union), representatives from professional association (South Sudan Veterinary Association-SSVA), representatives/experts from international NGOs (Veterinaries Sans Frontiers /VSF Germany and FAO), representatives from government institutions (experts and director generals from MLF, Ministry of Environment and Forestry Ministry of Water Resources and Irrigation-MWRI, Ministry of Wildlife Conservation and Tourism-MoWCT, Ministry of Labor and Public service-MLPS, MoFP), and private consultant (PRUDE Incorporated) was conducted during the SA preparation. The consultation is host in the World Bank-South Sudan country office. The below summary indicates the key outcomes of stakeholder consultation.
Among the key issues discussed during the consultative meetings with the various stakeholders included:
- Inclusion of more widows as the number of widows due to past wars is high. Suggestion to the project to be sensitive to people with disability, women, ethnic minorities, older persons, female-headed and child-headed households, refugees and IDPs and other vulnerable groups.
- Provision of irrigation / water solutions to support agricultural subprojects.
- Need more technical training to increase the production of the activities. Suggestion to prepare a skill mapping to suit the needs and to include more skill oriented training aspects intended to increase the duration of the trainings in the project components.

- Market driven economic activities and value addition to be promoted to assure increase of income and employment.
- Is the project going to interference with and disrupt daily economic activities such as closure of roads, change in normal lifestyles, etc. workers
- Possible occupational health challenges and safety of during the project development phase as well as operational phase are of great importance.
- Land belongs to communities as the Land Act has not been approved and this makes making decisions on land matters complicated.
- High number of cases of GBV (Women consulted reported high cases of gender-based violence that involve early marriages (mostly done to get bride price), polygamous marriages leading to family and child neglect, beating of women by men, rape cases, abduction, kidnapping of women for marriage.
- Natural disasters like drought, floods affect agriculture and movement of people.

The findings have been taken into account in project design, but have also pointed out risks, for which mitigation measures have been developed (see below). The main risks addressed include the high conflict potential between communities, high risks of GBV, social exclusion of ethnic and social minorities, communal land ownership.

Key recommendations by beneficiaries, government actors and project teams included the following:

- The project will ensure that women, persons living with disabilities, ethnic minorities and other members of vulnerable groups are participating effectively and meaningfully in consultative processes and that their voices are not ignored. This will require specific measures and assistance to afford opportunities for meetings with vulnerable groups in addition to general community consultations.
- Given the Fragility, Conflict and Violence (FCV) context, the Safeguards Team within the PIU will also ensure that the individuals consulted are not exposed to risks as part of their participation in sub-project consultations, for example by avoiding large meetings, and not disclosing personal information/photos. Consultations might take the form of individual interviews and/or meetings carried out in safe places using limited questionnaires. In addition, sub-projects should regularly consult with project-affected persons and communities throughout subproject implementation, as necessary, to address safeguards-related issues that affect them.
- Strengthen existing (traditional) institutions and through dialogue with local leadership assist in the development of new frameworks for addressing long-term development and regional planning that addresses demographic changes.
- Work together with local leadership to mobilize livestock keepers and participating households in formal groups and encourage them to build the capacities of their members in

livestock production and business competiveness so as to take advantage of any available opportunities.

- Engagement of the youth in the project areas into other sustainable income generating activities helps to reduce the practice of charcoal burning because this practice is looked at as the easiest way of generating income for the unemployed youths.
- Raise awareness and sensitization of project benefits in scale and duration so as to gain community support of all project activities.
- Continued sensitization of the livestock keepers about the need to use improved livestock breeds that produce high meat and dairy and products of small remnants.
- Promote gender equality and development through inclusion of many women among the participating households as much as possible, and empower women by increasing their number of female beneficiaries in the project in addition to safeguarding their rights.
- Carryout sensitization and awareness on gender-based violence and early marriage.
- Support the efforts of the local authorities in improving livestock production and health services and infrastructure and where possible investment in the improvement of these services

8. Grievance Redress Mechanism (GRM)

Under the World Bank ESF, Bank-supported projects are required to facilitate mechanisms that address concerns and grievances that arise in connection with a project[i]. One of the key objectives of ESS 10 (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'. This Project GRM should facilitate the project to respond to concerns and grievances of the project-affected parties related to the environmental and social performance of the project. The SSRLP is providing mechanisms to receive and facilitate resolutions to such concerns. This section lays out the grievance redress mechanisms (GRM) for the Project based on existing and functional mechanism and Standard Operating Procedures.

8.1 Overview

A Grievance Redress Mechanism (GRM) is an accessible and inclusive system, process, or procedure that receives and acts upon complaints and suggestions for improvement in a timely fashion and facilitates resolution of concerns and grievances arising in connection with a project. An effective grievance mechanism provides project-affected parties with redress and helps address issues at an early stage.

As part of the development of the SEP and this GRM structure, some types of complaints that may arise because of project implementation were identified. Such types of complaints include: (i) interference with cultivated land and crops, due to construction works and rehabilitation of like dipping tanks, veterinary centers, and veterinary heath centers; (ii) physical damage and nuisance due to construction and/or operational activities of the project; (iii) road accidents involving vehicles and machines used for the project's construction works; (v) noise and vibration, and consequences on properties and the health of communities in the vicinity of the project's intervention areas; (vi) obstruction of access as a result of construction works related to the project; (vii) gender-based violence involving project workers from the Contractor staff.

8.2 GRM principles

The complaints management process should be based on the following key principles:

i. Transparency and justice: The process for resolving grievances and complaints should be transparent, considering local social and cultural aspects, such as the local language. The GRM should allow access to judicial or administrative resources for all PAPs.
ii. Accessibility and culturally appropriate: All PAPs should have access to the GRM and its respective procedures and communication channels. Any individual or group that is directly or indirectly affected by the Project's activities, as well as those who may have an interest in the Project or the ability to influence its outcome, positive or negatively, should have access to submit complaints.
iii. Social and participatory inclusion: PAPs, vulnerable groups, members of associations and civil society are encouraged to take complaints and comments to the project management. Special attention must be paid to ensure that disadvantaged people, marginalized groups, including those with special needs, have access to this GRM.
iv. Openness and regularity of communication: Existence of channels for individuals and groups to choose their preferred method of presenting complaints. Communication channels should be kept open throughout the entire process of resolving each complaint and, for a maximum period of 6 months after the situation has been resolved and later archived.
v. Written records: All complaints should be recorded on a complaints form and tracked until final resolution.
vi. Dialogue and site visits: All complaints should be considered to warrant discussions with the complainant and a visit to the location where the problem occurs to verify the veracity and seriousness of the complaint, if appropriate, to obtain a first-hand understanding of the nature of the restlessness.
vii. Timely response and proportionality: All complaints, whether simple or complex, should be handled and resolved as quickly as possible. The action taken on the complaint or suggestion should be quick, decisive and constructive.
viii. Feedback to complainant: Feedback received by the grievance process date must be incorporated into the project and must be reported to the complaints.

8.3 Responsibilities in GRM implementation

The project's social specialist will be primarily responsible for implementing the GRM, in coordination with all levels of project implementation, namely the Contractors, supervision engineer team and local community where GRM focal points can be established. Table 9 below presents details of the specific responsibilities for each participant.

Table 1: Major responsibilities of key GRM implementation personnel

Team member	Responsibility

Social specialist	• Produce all supporting documentation for GRM implementation, such as specific guidelines for each level of implementation, reporting template, dissemination material (flyers and others). • Lead the formalization of a GRM implementation structure at all levels (central, state, county and local), before construction works begin. • Training all relevant stakeholders for GRM implementation. • Monitoring and dissemination of the GRM for the project's key stakeholders, including the Contractors. • Lead the resolution of received complaints, coordinating with all levels of complaint entry (Contractors, Resident Engineer, Local Leaders, community focal points where applicable, etc.). • Keep the complaint resolution monitoring database updated. • Monitor, in coordination with the Resident Engineer of each construction work subproject, and his social team, the Contractor's activities in relation to the complaints resolution process, ensuring that monthly reports include a section on complaints received, resolved, in the process of resolution, etc. • Ensure that the monthly/or quarterly reports to be shared with the World Bank include a GRM implementation progress section. • Carry out an annual assessment of the GRM, with recommendations for improvement.
Supervision team (the engineer) of each construction work	• Establish a functional structure for the implementation of GRM at the level of the construction work, in collaboration with the Social Specialist at the central level at MLF. • Coordinate together with the Contractor the implementation of Information, Education and Communication (IEC) activities on the GRM. • Coordinate the entire complaint resolution process at local level (construction work and in the surrounding community), collecting complaint registration forms weekly from the various entry points, registering complaints in the database and defining how each complaint will be resolved, assigning resolution responsibilities to those involved, consulting whenever necessary the social specialist at the central level at MLF. • Resolve all complaints that can be resolved at your level and respond to the complainant within the indicated deadlines. • Monitor all complaints received and the stage of resolution, and record the final decision including the complainant's level of satisfaction. • Keep the database for recording and monitoring complaints up to date. • Keep the PIU coordination team at MLF informed monthly about complaints received, including the resolution stage.

	• Ensure that the Contractor records and resolves complaints from its workers and forwards records of these complaints, and other complaints received from PAPs, to the Resident Engineer/supervisor.

8.4 Compliant resolution process

I. Complaints or suggestions must be received at several points: PIU at MLF, Contractor (at the local level of the construction work), Supervision of the construction work (engineer); specific local authorities, or via the following telephone, email:

- Responsible person at MLF: Augustino Atillio (Project Coordinator)
- Telephone: +211955657702
- E-mail: agustatillio@yahoo.com

A complaint registration form (annex 2) must be completed by the person receiving the complaint. The complainant must receive proof of submission of the complaint. If the complaint has been submitted by telephone, the form must be completed in full by the person receiving the telephone call. Whoever receives the complaint via telephone must ensure that the complainant provides contact, to later inform him of the resolution of the complaint.

The initial point of resolution is also the person receiving the complaint. Thus, whoever receives the complaint will start the resolution process by interacting with the complainant to obtain more information or even provide information to the complainant if necessary. In other words, sometimes the complaint can be resolved by simply information provided to the complainant.

All complaints received at local level (construction work and surrounding areas) should be forwarded to the Resident Engineer or his social team for verification and assignment of responsibilities for resolution.
The Resident Engineer or his social team confirms receipt of the complaint using the appropriate contact method indicated by the complainant (telephone, email or other), declaring that he will analyze the complaint received, and informing the resolution deadlines. This confirmation should be made by the Supervision (the engineer) at local level within five (5) working days after the complaint has been lodged.

II. The Engineer (supervision team at construction site) will start resolving the complaint by analyzing all the information in the process, interacting with the person who received the complaint, and with the complainant whenever necessary. If necessary, the Engineer should interact with the person who received the complaint, the contractor, the local administration (if necessary) and the complainant to discuss the case and assign responsibilities for resolution. If PIU intervention is necessary at MLF, the Engineer or his social team will coordinate with the PIU social specialist.

Resolution of complaints regarding gender-based violence, sexual exploitation and abuse, sexual harassment, should be referred to the Counseling Centers established at the local level or to the local police. This is aligned with the WB ESS10 and the Good Practice Note Addressing Gender Based Violence in Investment Project Financing involving Major Civil Works (September 2018). After a complete review of the facts presented by the complainant, the Engineer should decide whether to validate the complaint or not.

Regardless of the need for intervention by the PIU social specialist at MLF, the supervision team (the engineer) should keep the PIU informed about the complaints received, including their resolution stage. In order to comply with this procedure, the Engineer should register the complaints in a Database.

The Engineer as well as the PIU at MLF has ten (10) working days to respond to the complainant, immediately after notifying receipt of the complaint, indicating the stage of resolution, therefore saying: i) resolved (indicating the proposed solution); or ii) stating that it is still in the process of resolution to determine the facts; iii) or that the complaint will be transferred to the attention of the PIU or another level as defined.

III. Once the PIU receives the complaint from the engineer or its social team, they will then call the resolution committee members to a meeting, as well as notify the complainant to be part of the meeting, if deemed necessary and feasibly. It is not expected that there will be many cases that require PIU intervention. Most complaints can be resolved at the local construction site level by the supervision team (the engineer) including local authorities if necessary. They will find a solution acceptable to both sides. If the case is forwarded to the PIU, they has twenty (20) working days from the date of receipt from the Engineer to respond to the complainant indicating the stage of resolution: i) resolved (with the proposed solution); or ii) advise the complainant to bring the complaint through the local Court System or other appropriate government mechanism. The PIU meetings for complaints resolution should be recorded in minutes.

IV. The PIU may not be able to reach an agreement with the complainant on a solution acceptable to both sides. In such cases, the complainant will be advised to file the complaint through the local Court System or other Government mechanism that the complainant deems appropriate. This stage is completely independent of the Project or its subproject. However, the PIU should continue to follow the process and provide all necessary information in its possession.

8.5 Entry points and communication channels

The complainant will submit their complaint, suggestion or concern through public or individual meetings, phone call using a dedicated call line (which should be free of charge), letter (complaints box) and email, see details in section 6.4 above. The entry points should be formally established before project activities starts implementation and should include local leaders, resident engineers (which is part of works supervision team), the E&S specialist in the PIU, between others.

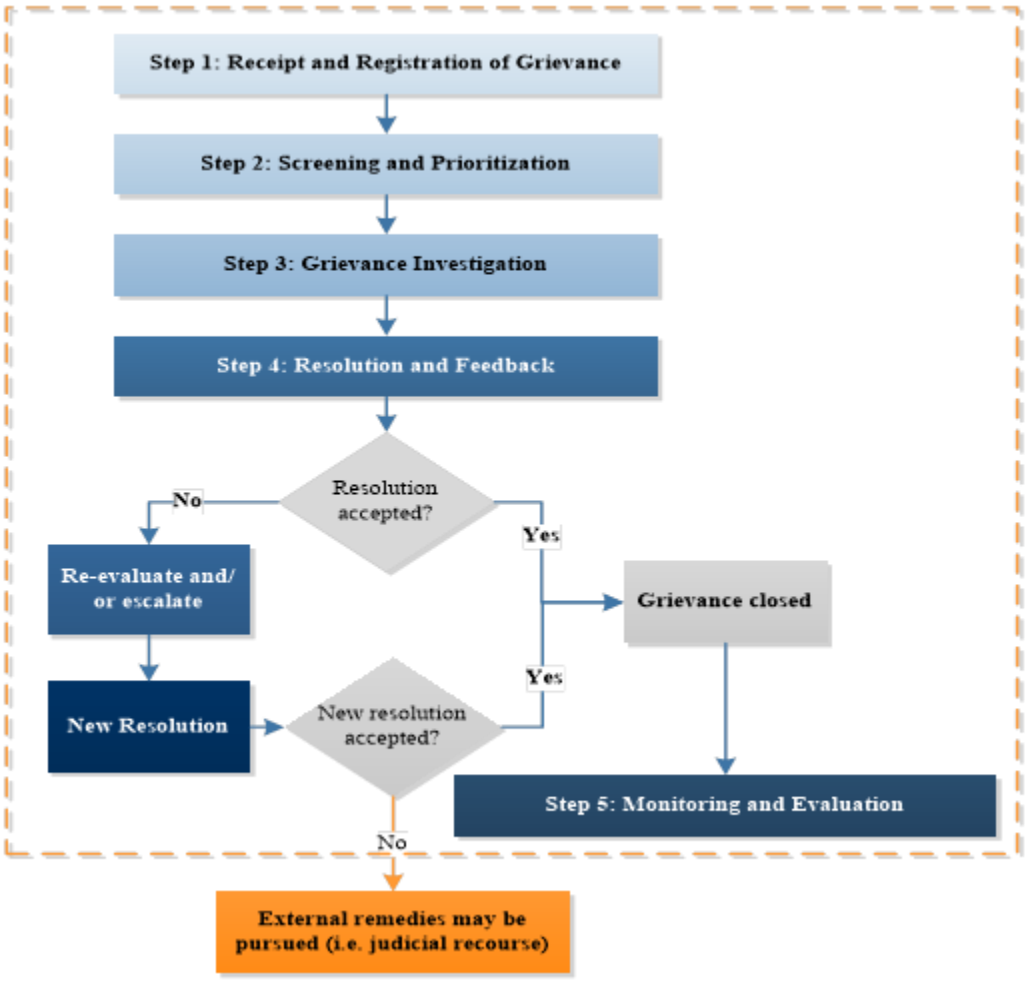
8.6 GRM proposed structure

In summary and consistent with international standards, the GRM includes the following five-step procedure:

Step 1: Receipt and Registration
Step 2: Classification and Prioritization
Step 3: Investigation
Step 4: Resolution and Feedback

Step 5: Monitoring and Evaluation

Figure 3: Proposed flow chart of GRM



8.7 World Bank Grievance Redress Services

Communities and individuals who believe that they are adversely affected by a WBG supported program, may submit complaints to existing program-level grievance redress mechanisms or the WBG‘s Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address program-related concerns. Program affected communities and individuals may submit their complaint to the WBG‘s independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WBG non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the WBG‘s attention, and WBG Management has been given an opportunity to respond. For information on how to submit complaints to the WBG‘s corporate Grievance Redress Service (GRS), please visit http://www.worldbank.org/GRS. For information on how to submit complaints to the WBG Inspection Panel, please visit you may download relevant information on how to file a request from the following source: www.inspectionpanel.org.

GBV-SEA/SH GRM

Cases of GBV/SEA/SH can be reported through a dedicated channel for PSEA or through the general Project GRM. The GBV survivor has the freedom and right to report an incident to anyone: community member, project staff, GBV case manager, etc. All relevant staff of the PIU, FAO, implementing partners and contractors will receive training on receiving GBV complaints and referral systems including World Bank Good Practice Note on 'Addressing Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH) in Investment Project Financing', ideally during the project initiation phase and as part of the staff welcome package.

The GRM operators will be trained to receive those cases in an appropriate manner and immediately forward them to the GBV/SEA referral system. The GRM operator will ensure appropriate response by i) providing a safe and caring environment and respecting the confidentiality and wishes of the survivor ii) If survivor agrees, obtaining informed consent and making referrals and iii) providing reliable and comprehensive information on the available services and support for survivors of GBV.

However, beneficiaries and communities should generally be encouraged to report all GBV/SEA/SH cases through the dedicated GBV/SEA/SH referral system and complaints resolution mechanism. This will be made explicit in all community awareness sessions and be a part of the publicly disclosed information. The GBV/SEA/SH referral system will guarantee that survivors receive all necessary services, including medical, legal and counselling, and cases will be reported to the police where applicable.

If such cases are reported through the project GRM, the GRM Operator needs to report the case within 24 hours to the PCU, as the PCU is obliged to report any cases of GBV/SEA/SH to the World Bank within 48 hours (provided there is informed agreement from the survivor). Furthermore, cases need to be reported to the respective agency if it concerns a direct worker or a worker from a subcontractor, NGO partner or even a community worker following a survivor-centered approach. FAO have their organizational PSEA systems in place through which violations by staff will be handled. This may be in addition to criminal prosecution to ensure that sanctions for the violation of Codes of Conduct are implemented. FAO is in charge of checking that the courses for contractors regarding the Code of Conduct obligations and awareness raising activities to the community are in place. The information gathered should be monitored and reported to the PIU and the World Bank. All reporting will limit information to 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.

Code of Conduct

This section includes the Code of Conduct that will be used in the Project. If an international bidding process is being used with World Bank Standard Procurement Documents, a Code of Conduct is already included there and should be used as is. If a national bidding process is being used to procure contractors, a basic Code of Conduct should be included in the LMP and the bidding documents.

An example approach is provided below, in its simplest form, such as one that can be translated to local languages for community workers and displayed on a construction site. Depending on the project site and the audience, more detail, such as detailed definition of what constitutes sexual activity, can be included.

- Treat women, children (persons under the age of 18), and men with respect regardless of ethnicity, language, religion, political or other opinion, national, social origin, citizenship status, property, disability, birth or other status.
- Do not use language or behavior towards women, children or men that is inappropriate, harassing, abusive, sexually provocative, demeaning or culturally inappropriate.
- Do not participate in sexual activity with community members.
- Do not engage in sexual favors or other forms of humiliating, degrading or exploitative behavior.
- Do not engage in any activity that will constitute payment for sex with members of the communities surrounding the workplace.
- Report through the Worker GM suspected or actual gender-based violence against a person of any gender by a fellow worker or any breaches of this Code of Conduct.
- Use any computers, mobile phones, or video and digital cameras appropriately, and never to exploit or harass women, children or a vulnerable person through these mediums.
- Comply with all relevant local legislation.
- Engaging in any of the prohibited activities above can be cause for termination of employment, criminal liability, and/or other sanctions.

9. MONITORING AND REPORTING FOR E&S IMPLEMENTATION

9.1 Regular Monitoring and Inspection for Compliance

Adequate institutional arrangements, systems and resources will be put in place to monitor the ESMF. The goal of monitoring will be to measure the success rate of the activities, determine whether interventions have handled negative impacts and to determine whether further interventions are required or monitoring is to be extended in some areas. The goal of inspection activities is to ensure that sub-component activities comply with the plans and procedures laid out in the ESMF.

The main monitoring responsibilities and inspection activities will be with the PIU, which will administer the overall SSRLP-related environmental and social monitoring and implementation as laid out in this ESMF, with oversight by the PIU. The PIU Project Coordinator will be overall responsible for the implementation of the environmental and social mitigation measures, as well as for monitoring and inspecting for compliance. The E&S Risk Management Specialist in the PIU will handle all reporting aspects.

The ESMF is the overall document that guides the development of site specific ESMPs. While the ESMF, laying out expectation from implementing partners (IPs), will be responsible for their own site/activity specific screening, impact assessments, development of site/activity-specific ESMPs,

monitoring of impacts, and administration of mitigation measures in regards to their respective sub-component activities. They further commit to integrate stakeholder inputs into their regular monitoring and reporting activities. As such, IPs will require sufficient personnel with appropriate expertise to conduct these tasks. The number of personnel to be engaged will depend on the workload and the geographical distribution of the subprojects. IPs will allocate adequate financial, logistic and material resources to support the E&S team in the implementation of the ESMF.

The IPs are committed to report all screening results, the results of impact assessments, and site/activity-specific ESMPs to the Environmental and Social Specialists in the PIU through their Letters of Agreement (LoAs). The E&S Risk Management Officers will assess the compliance of activities against the ESMF and their subsequent ESMPs and will report possible non-compliance to the PIU Project Manager. Indicators are identified in both documents and used as a baseline for assessing progress on implementation. The PIU will also independently conduct its own monitoring, verification and inspection of the activities to ensure they follow this ESMF. Monitoring indicators will depend on specific activity contexts.

The GRM will further help track complaints and effectiveness of interventions, including those with environmental and social impacts and the quarterly monitoring reports will provide summaries and statistics on the GRM. Moreover, a Management Information System will be developed, which in addition to collected necessary information on beneficiaries and projects to track progress, will also include a module to record complaints and the ways in which they were addressed.

9.2 Monitoring and Reporting

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 Project Coordinator will be responsible for the overall implementation of the E&S mitigation measures, as well as for monitoring and inspecting for compliance. The Social Specialist and Environmental Specialist 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 of all implementing partners, contractors, sub-contractors and suppliers.

The Social Specialist and Environmental Specialist will assess the compliance of implementing partner, contractor and sub-contractor activities against the ESMF, RPF, the SEP, the SRAMP, ESCP and subsequent ESIA/ESMPs, and will report any non-compliance to the PIU Project Coordinator.

The PIU and implementing partners will be responsible for the E&S screening of each subproject (level of screening to be identified on the basis of types of intervention), for ESIAs where applicable, and the preparation of site/activity-specific ESMPs, monitoring of impacts, and administration of mitigation measures for subcomponent activities. The PIU or implementing partners will supervise the preparation of C-ESMPs through contractors and will be responsible for the monitoring and supervision of contractors and sub-contractors and suppliers. If monitoring and supervision results in non-compliance by contractors, the PIU or implementing partner will discuss and oversee the implementation of corrective actions of the contractor. The PIU and

implementing partners will further commit to integrate stakeholder inputs into regular monitoring and reporting activities (as per SEP). As such, the PIU and implementing partners will require sufficient personnel with appropriate expertise to conduct these tasks. The PIU and implementing partners will allocate adequate financial, logistic and material resources to support E&S team in the implementation of the ESMF, and will ensure that its contractors, sub-contractors and suppliers have planned and budgeted for the respective mitigation measures.

9.3 Monthly and Quarterly Reporting

The PIU will provide quarterly reports covering environmental, social, health and safety (ESHS) performance of the project, including the status or preparation and implementation of ESIA/ESMPs, security commitments, stakeholder consultations, and results of the grievance redress mechanism (GRM). Implementing partners will provide the quarterly reports 15 days after each end of the quarter (see reporting format in Annex 7).

The PIU will receive reports from implementing partners. Together with its own monitoring data, the E&S Specialists will prepare the E&S inuts to the quarterly progress reports to the World Bank. These will include ESHS performance of the project, including but not limited to the implementation of the ESCP, status of the preparation and implementation of E&S instruments required under the ESCP, stakeholder engagement activities, and the functioning of the GRM. The GRM will further help track complaints and effectiveness of interventions, including those with environmental and social impacts and the quarterly monitoring reports will provide summaries and statistics on the GRM.

Upon completion of the project, the PIU will undertake an assessment of the success of the ESMF and include relevant information in the Implementation Completion Report (ICR). This ICR will be followed by the Bank's own ICR. If either of these assessments reveals that any key objectives of the ESMF were not achieved then follow-up measures will be developed to remedy the situation. This is also applicable for site-specific ESIAs or ESMPs.

9.4 Incident and Accident Reporting

Incidents should be categorized into 'indicative', 'serious' and 'severe'. Indicative incidents are minor, small or localized that negatively impact a small geographical area or a small number of people and do not result in irreparable harm to people or the environment. A 'significant' incident is one that causes significant harm to the environment, workers, communities, or natural resources and is complex or costly to reverse. A 'severe' incident causes great harm to individuals, or the environment, or presents significant reputational risks to the World Bank.

The World Bank needs to be notified promptly (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. 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.

Implementing partners or contractors will report severe incidents to the PIU within 24 hours. In order to save time, the implementing partner may copy the World Bank into the message with the report.

Key information in the incident report should respond to the following questions (in case the below incident report form is not followed):

- *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?*

All other incidents need to be reported in the quarterly E&S report, with a Root Cause Analysis (RCA) and a detailed action plan, prepared by the contractor, implementing partner or the PIU

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[28] UNCHCR, 2017

Annex 1. Screening Form

The E&S Screening procedure comprises of two stages-processes: (1) Initial screening by using the **Exclusion List** in Table 5 of the ESMF; and (2) Screening the proposed activities to identify the approach for E&S risk management. This Screening Form is the second stage of screening process and is to be used for all subproject activities. The completed forms will be signed and kept in the Project ESF file. The World Bank may review a sample of the forms during implementation support visits.

1. Subproject Information:

Subproject Title	
Subproject Location	
Regional Unit in Charge	
Estimated Cost	
Start/Completion Date	
Brief Description of Subproject	

2. Environmental and Social Screening Questionnaires

Questions	**Answer**		**Next Steps**
	Yes	**No**	

ESS1			
1. Is the subproject likely to have significant adverse environmental impacts that are sensitive and unprecedented that trigger the 'Ineligible Activities' or other exclusion criteria?			If "Yes": Exclude from project.
Questions 2 and 3 below are examples. These two are critical questions in the Screening Form, as they will determine whether a sub-project can use pre-prepared ESCOPs included in Annex 2 or needs to prepare a site-specific ESMP. If all the sub-projects are expected to be low risk, then all sub-projects may be able to use the pre-prepared ESCOPs. However, if there are some sub-project activities, such as construction of community bridges, which may propose moderate risk, these may require site-specific ESMPs to be prepared. Think of the sub-project activities in your project and separate those that may be low risk and those that may be moderate risk. 2. Does the subproject involve <u>new construction or significant expansion</u> of ponds, solid waste management systems, shelters, roads (including access roads), community centers, schools, bridges and jetties?			If "Yes": 1. Prepare a site-specific E&S Assessment and/or ESMP for the proposed subproject, based on the template in Annex 3. 2. Include E&S risk management measures in bidding documents.
3. Does the subproject involve <u>renovation or rehabilitation</u> of any small-scale infrastructure, such as groundwater wells, latrines, showers/washing facilities, or shelters?			If "Yes": 1. Apply relevant measures based on the ESCOPs in Annex 2 (unless one of the questions below raises specific environmental risks and requires a site-specific ESMP). 2. Include E&S risk management measures in bidding documents.
4. Will construction or renovation works require new borrow pits or quarries to be opened?			If "Yes": 1. Prepare a site-specific ESMP for the proposed subproject, based on the template in Annex 3. 2. Include E&S risk management measures in bidding documents.

5. Does the project lead to any risks and impacts on, individuals or groups who, because of their particular circumstances, may be disadvantaged or vulnerable.[3]			If "Yes": Apply relevant measures described in the ESMF and SEP.
ESS2			
6. Does the subproject involve uses of goods and equipment involving forced labor, child labor, or other harmful or exploitative forms of labor?			If "Yes": Exclude from project.
7. Does the subproject involve recruitment of workforce including direct, contracted, primary supply, and/or community workers?			If "Yes": Apply LMP in Annex 4.
8. Will the workers be exposed to workplace hazards that needs to be managed in accordance with local regulations and EHSGs? Do workers need PPE relative to the potential risks and hazards associated with their work?			If "Yes": Apply LMP in Annex 4.
9. Is there a risk that women may be underpaid when compared to men when working on the project construction?			If "Yes": Apply LMP in Annex 4.
ESS3			
10. Is the project likely to generate solid or liquid waste that could adversely impact soils, vegetation, rivers, streams or groundwater, or nearby communities?			If "Yes": 1. Prepare a site-specific ESMP for the proposed subproject, based on the template in Annex 3. 2. Include E&S risk management measures in bidding documents.
11. Do any of the construction works involve the removal of asbestos or other hazardous materials?			If "Yes": Apply asbestos guidance provide in the ESCOP
12. Are works likely to cause significant negative impacts to air and / or water quality?			If "Yes": 1. Prepare a site-specific ESMP for the proposed subproject, based on the template in Annex 3. 2. Include E&S risk management measures in bidding documents.
13. Does the activity rely on existing infrastructure (such as discharge points) that is inadequate to prevent environmental impacts?			If "Yes":

[3] "Disadvantaged or vulnerable" refers to those individuals or groups who, by virtue of, for example, their age, gender, ethnicity, religion, physical, mental or other disability, social, civic or health status, sexual orientation, gender identity, economic disadvantages or ethnic peoples status, and/or dependence on unique natural resources, may be more likely to be adversely affected by the project impacts and/or more limited than others in their ability to take advantage of a project's benefits.

			1. Prepare a site-specific ESMP for the proposed subproject, based on the template in Annex 3. 2. Include E&S risk management measures in bidding documents.
14. Is there any potential to have impact on soil or water bodies due to agro-chemicals (e.g., pesticides) used in farmlands due to the consequences of the subproject activities (e.g., development of irrigation system, agriculture related activities, seed and fertilizer assistance, procurement of pesticides)?			If "Yes": Apply Fertilizer and Pest Management Plan in Annex 7.
ESS4			
15. Is there a risk of increased community exposure to communicable disease (such as COVID-19, HIV/AIDS, Malaria), or increase in the risk of traffic related accidents?			If "Yes": Apply LMP in Annex 4 and relevant measures in SEP.
16. Is an influx of workers, from outside the community, expected? Would workers be expected to use health services of the community? Would they create pressures on existing community services (water, electricity, health, recreation, others?)			If "Yes": Apply LMP in Annex 4.
17. Is there a risk that SEA/SH may increase as a result of project works?			If "Yes": Apply LMP in Annex 4.
18. Would any public facilities, such as schools, health clinic, church be negatively affected by construction?			If "Yes": Apply relevant measures based on the ESCOPs in Annex 2 (unless one of the other questions in the screening form raises specific environmental and social risks and requires a site-specific ESMP).
19. Will the subproject require the government to retain workers to provide security to safeguard the subproject?			If "Yes": Prepare a site-specific ESMP for the proposed subproject, including an assessment of potential risks and mitigation measures of using security personnel.
ESS5			
20. Will the subproject require the involuntary acquisition of new land (will the government use eminent domain powers to acquire the land)?[4]			If "Yes": Refer to and apply the project Resettlement Framework (RF).

[4] Environmental and Social Standard 5, Footnote 10: "In some circumstances, it may be proposed that part or all of the land to be used by the project is donated on a voluntary basis without payment of full compensation. Subject to prior Bank approval, this may be acceptable providing

21. Will the subproject lead to temporary or permanent physical displacement (including people without legal claims to land)?			If "Yes": Refer to and apply the project RF.
22. Will the subproject lead to economic displacement (such as loss of assets or livelihoods, or access to resources due to land acquisition or access restrictions)?			If "Yes": Refer to and apply the project RF.
23. Has the site of the subproject been acquired through eminent domain in the past 5 years, in anticipation of the subproject?			If "Yes": Refer to and apply the project RF.
24. Are there any associated facilities needed for the subproject (such as access roads or electricity transmission lines) that will require the involuntary acquisition of new land?			If "Yes": Refer to and apply the project RF.
25. Is private land required for the subproject activity being voluntarily donated to the project?[5]			If "Yes": Refer to and apply the project RF.
ESS6			
26. Does the subproject involve activities that have potential to cause any significant loss or degradation of critical habitats[6] whether directly or indirectly, or which would lead to adverse impacts on natural habitats[7]?			If "Yes": Exclude from project.
27. Will the project involve the conversion or degradation of non-critical natural habitats?			If "Yes": 1. Prepare a site-specific ESMP for the proposed subproject, based on the template in Annex 3. 2. Include E&S risk management measures in bidding documents.

the Borrower demonstrates that: (a) the potential donor or donors have been appropriately informed and consulted about the project and the choices available to them; (b) potential donors are aware that refusal is an option, and have confirmed in writing their willingness to proceed with the donation; (c) the amount of land being donated is minor and will not reduce the donor's remaining land area below that required to maintain the donor's livelihood at current levels; (d) no household relocation is involved; (e) the donor is expected to benefit directly from the project; and (f) for community or collective land, donation can only occur with the consent of individuals using or occupying the land. The Borrower will maintain a transparent record of all consultations and agreements reached."

[5] Environmental and Social Standard 5, Footnote 10: "In some circumstances, it may be proposed that part or all of the land to be used by the project is donated on a voluntary basis without payment of full compensation. Subject to prior Bank approval, this may be acceptable providing the Borrower demonstrates that: (a) the potential donor or donors have been appropriately informed and consulted about the project and the choices available to them; (b) potential donors are aware that refusal is an option, and have confirmed in writing their willingness to proceed with the donation; (c) the amount of land being donated is minor and will not reduce the donor's remaining land area below that required to maintain the donor's livelihood at current levels; (d) no household relocation is involved; (e) the donor is expected to benefit directly from the project; and (f) for community or collective land, donation can only occur with the consent of individuals using or occupying the land. The Borrower will maintain a transparent record of all consultations and agreements reached."

[6] Environmental and Social Standard 6, paragraph 23: "Critical habitat is defined as areas with high biodiversity importance or value, including (a) Habitat of significant importance to Critically Endangered or Endangered species, as listed in the IUCN Red List of threatened species or equivalent national approaches; (b) Habitat of significant importance to endemic or restricted-range species; (c) Habitat supporting globally or nationally significant concentrations of migratory or congregatory species; (d) Highly threatened or unique ecosystems; and (e) Ecological functions or characteristics that are needed to maintain the viability of the biodiversity values described above in (a) to (d)."

[7] Environmental and Social Standard 6, paragraph 21: "Natural habitats are areas composed of viable assemblages of plant and/or animal species of largely native origin, and/or where human activity has not essentially modified an area's primary ecological functions and species composition."

28. Will this activity require clearance of mangroves?			If "Yes": Exclude from project.
29. Will this activity require clearance of trees, including inland natural vegetation?			If "Yes": 1. Prepare a site-specific ESMP for the proposed subproject, based on the template in Annex 3. 2. Exclude from project if more that x hectares of tree and vegetation cutting is expected. 2. Include E&S risk management measures in bidding documents.
30. Will there be any significant impact on any ecosystems of importance (especially those supporting rare, threatened or endangered species of flora and fauna)?			If "Yes": Exclude from project.
ESS7			
31. Are there any Indigenous Peoples or Sub-Saharan African Historically Underserved Traditional Local Communities present in the subproject area and are likely to be affected by the proposed subproject negatively?			If "Yes": Prepare an Indigenous Peoples Plan OR Include the requirements of an Indigenous Peoples Plan in the SEP.
ESS8			
32. Is the subproject to be located adjacent to a sensitive site (historical or archaeological or culturally significant site) or facility?			If "Yes": Apply Chance Find Procedures in Annex 5.
33. Locate near buildings, sacred trees or objects having spiritual values to local communities (e.g. memorials, graves or stones) or require excavation near there?			If "Yes": Apply Chance Find Procedures in Annex 5.

3. Conclusion

Based on the result from the screening above, please list the E&S risk management instruments to be prepared / adopt and implemented:

a)
b)

Name and title of person who conducted screening:
Date of screening:

Annex 2. Environmental and Social Codes of Practice (ESCOP)

To manage and mitigate potential negative environmental impacts, the project applies Environmental Codes of Practice (ESCOPs); outlined in this document. The ESCOPs contain specific, detailed and tangible measures that would mitigate the potential impacts of each type of eligible subproject activity under the project. They are marked as relevant for the planning phase, the implementation phase, or the post-implementation phase of activities. They are intended to be simple risk mitigation and management measures, readily usable to the Borrower and contractors.

The ESCOPs in this section are divided into:

a. ESCOPs for infrastructure subprojects (general guidelines and technical guidelines)
b. ESCOPs for livelihood support subprojects

a. ESCOPs for Infrastructure Subprojects

General ESCOP for Infrastructure Subprojects

Issue	Environmental Prevention/Mitigation Measures	Responsible Party

1. Noise during construction	a) Plan activities in consultation with communities so that noisiest activities are undertaken during periods that will result in least disturbance. (Planning phase) b) Use when needed and feasible noise-control methods such as fences, barriers or deflectors (such as muffling devices for combustion engines or planting of fast-growing trees). (Implementation phase) c) Minimize project transportation through community areas. Maintain a buffer zone (such as open spaces, row of trees or vegetated areas) between the project site and residential areas to lessen the impact of noise to the living quarters. (Implementation phase)	Construction Contractor Construction Supervisor
2. Soil erosion	a) Schedule construction during dry season. (Planning phase) b) Contour and minimize length and steepness of slopes. (Implementation phase) c) Use mulch, grasses or compacted soil to stabilize exposed areas. (Implementation phase) d) Cover with topsoil and re-vegetate (plant grass, fast-growing plants/bushes/trees) construction areas quickly once work is completed. (Post-Implementation phase) e) Design channels and ditches for post-construction flows and line steep channels/slopes (e.g., with palm frowns, jute mats, etc.). (Post-Implementation phase)	Construction Contractor Construction Supervisor
3. Air quality	a) Minimize dust from exposed work sites by applying water on the ground regularly during dry season. (Implementation phase) b) Avoid burn site clearance debris (trees, undergrowth) or construction waste materials. (Implementation phase) c) Keep stockpile of aggregate materials covered to avoid suspension or dispersal of fine soil particles during windy days or disturbance from stray animals. . (Implementation phase) d) Reduce the operation hours of generators /machines /equipment /vehicles. (Implementation phase) e) Control vehicle speed when driving through community areas is unavoidable so that dust dispersion from vehicle transport is minimized. (Implementation phase)	Construction Contractor Construction Supervisor

4. Water quality and availability	a) Activities should not affect the availability of water for drinking and hygienic purposes. (Implementation phase) b) No soiled materials, solid wastes, toxic or hazardous materials should be stored in, poured into or thrown into water bodies for dilution or disposal. (Implementation phase). c) Avoid the use of waste water pools particularly without impermeable liners. d) Provision of toilets with temporary septic tank. (Implementation phase) e) The flow of natural waters should not be obstructed or diverted to another direction, which may lead to drying up of river beds or flooding of settlements. (Implementation phase). f) Separate concrete works in waterways and keep concrete mixing separate from drainage leading to waterways. (Implementation phase).	Construction Contractor Construction Supervisor
5. Solid and hazardous waste	a) Segregate construction waste as recyclable, hazardous and non-hazardous waste. (Implementation phase) b) Collect, store and transport construction waste to appropriately designated/ controlled dump sites. (Implementation phase) c) On-site storage of wastes prior to final disposal (including earth dug for foundations) should be at least 300 metres from rivers, streams, lakes and wetlands. (Implementation phase) d) Use secured area for refuelling and transfer of other toxic fluids distant from settlement area (and at least 50 metres from drainage structures and 100 metres from important water bodies); ideally on a hard/non-porous surface. (Implementation phase) e) Train workers on correct transfer and handling of fuels and other substances and require the use of gloves, boots, aprons, eyewear and other protective equipment for protection in handling highly hazardous materials. (Implementation phase) f) Collect and properly dispose of small amount of maintenance materials such as oily rags, oil filters, used oil, etc. Never dispose spent oils on the ground and in	Construction Contractor Construction Supervisor

	water courses as it can contaminate soil and groundwater (including drinking water aquifer). (Implementation phase) g) After each construction site is decommissioned, all debris and waste shall be cleared. (Post-Implementation phase)	
6. Asbestos	a) If asbestos or asbestos containing materials (ACM) are found at a construction site, they should be clearly marked as hazardous waste. (Implementation phase) b) The asbestos should be appropriately contained and sealed to minimize exposure. (Implementation phase) c) Prior to removal, if removal is necessary, ACM should be treated with a wetting agent to minimize asbestos dust. (Implementation phase) d) If ACM is to be stored temporarily, it should be securely placed inside closed containers and clearly labeled. (Implementation phase). e) Removed ACM must not be reused. (Implementation and post-implementation phase)	MLF PIU Construction Contractor Construction Supervisor
7. Health and Safety	a) When planning activities of each subproject, discuss steps to avoid people getting hurt. (Planning phase) It is useful to consider: • Construction place: Are there any hazards that could be removed or should warn people about? • The people who will be taking part in construction: Do the participants have adequate skill and physical fitness to perform their works safely? • The equipment: Are there checks you could do to make sure that the equipment is in good working order? Do people need any particular skills or knowledge to enable them to use it safely? • Electricity Safety: Do any electricity good practices such as use of safe extension cords, voltage regulators and circuit breakers, labels on electrical wiring for safety measure, aware on identifying burning smell from wires, etc. apply at site? Is the worksite stocked with voltage detectors, clamp meters and receptacle testers?	Construction Contractor Construction Supervisor

	b) Mandate the use of personal protective equipment for workers as necessary (gloves, dust masks, hard hats, boots, goggles). (Implementation phase) c) Follow the below measures for construction involving work at height (e.g. 2 meters above ground (Implementation phase): • Do as much work as possible from the ground. • Do not allow people with the following personal risks to perform work at height tasks: eyesight/balance problem; certain chronic diseases – such as osteoporosis, diabetes, arthritis or Parkinson's disease; certain medications – sleeping pills, tranquillisers, blood pressure medication or antidepressants; recent history of falls – having had a fall within the last 12 months, etc. • Only allow people with sufficient skills, knowledge and experience to perform the task. • Check that the place (eg a roof) where work at height is to be undertaken is safe. • Take precautions when working on or near fragile surfaces. • Clean up oil, grease, paint, and dirt immediately to prevent slipping; and • Provide fall protection measures e.g. safety harness, simple scaffolding/guard rail for works over 4 meters from ground. d) Keep worksite clean and free of debris on daily basis. (Implementation phase) e) Provision of first aid kit with bandages, antibiotic cream, etc. or health care facilities and enough drinking water. (Implementation phase) f) Keep corrosive fluids and other toxic materials in properly sealed containers for collection and disposal in properly secured areas. (Implementation phase) g) Ensure adequate toilet facilities for workers from outside of the community. (Implementation phase) h) Rope off construction area and secure materials stockpiles/ storage areas from the public and display warning signs including at unsafe locations. Do not	

	allow children to play in construction areas. (Implementation phase) i) Ensure structural openings are covered/protected adequately. (Implementation phase) j) Secure loose or light material that is stored on roofs or open floors. (Implementation phase) k) Keep hoses, power cords, welding leads, etc. from laying in heavily travelled walkways or areas. (Implementation phase) l) If school children are in the vicinity, include traffic safety personnel to direct traffic during school hours, if needed. (Implementation phase) m) Control driving speed of vehicles particularly when passing through community or nearby school, health center or other sensitive areas. (Implementation phase) n) During heavy rains or emergencies of any kind, suspend all work. (Implementation phase) o) Fill in all earth borrow-pits once construction is completed to avoid standing water, water-borne diseases and possible drowning. (Post-Implementation phase)	
8. Other	a) No cutting of trees or destruction of vegetation other than on construction site. MLF PIU will procure locally sourced materials consistent with traditional construction practices in the communities. (Planning phase) b) No hunting, fishing, capture of wildlife or collection of plants. (Implementation phase) c) No use of unapproved toxic materials including lead-based paints, un-bonded asbestos, etc. (Implementation phase) d) No disturbance of cultural or historic sites. (Planning and implementation phases)	

Specific ESCOPs for Infrastructure Subprojects

Subproject Type	Environmental Prevention/Mitigation Measures	Responsible Party
Buildings		
In general	a) Provide adequate drainage in the building's immediate surroundings to avoid standing water, insect related	Construction Contractor

Subproject Type	Environmental Prevention/Mitigation Measures	Responsible Party
	diseases (malaria, etc.) and unsanitary conditions. (Implementation phase) b) Include sanitary facilities such as toilets and basins for hand-washing. (Implementation phase) c) Restrict use of asbestos cement tiles as roofing. (Implementation phase) d) Tiled floors are preferred for easier cleaning and more hygienic. (Planning and implementation phases)	Construction Supervisor
Water Supply		
Shallow Groundwater Wells	a) Site wells so that appropriate zone of sanitary protection can be established. (Planning phase) b) Equip with slab around the well for easy drainage, a crossbeam and a pulley to support the use of only one rope and bucket for collecting water. One rope and bucket is more hygienic for the well and water. (Implementation phase) c) Install steel steps/rungs (inside wall of a deep well) for maintenance and in case of emergency. (Implementation phase) d) A groundwater well usually has a wide open water area. It is necessary to provide a cover/roof/wire mesh on top to protect this area from falling leaves or debris. (Implementation phase) e) Wells should always be located upstream of the septic tank soak-away. Build the soak-away as far away as possible from the well (minimum 15 m/50 feet) as it can influence the quality of the drinking water when it is too close. (Planning and implementation phases) f) Before using a new water source, test water quality and when intended for potable purposes ensure water meets the national drinking water standard. Water quality should also be monitored in the case of all well rehabilitation. (Post implementation phase)	Construction Contractor Construction Supervisor
Spring	a) Every spring capture should be equipped with a filter and a sand trap. Add a wall between the inflow and the outlet pipe to create chamber for settling out sand; build the wall with a notch (lowered section) for controlled flow. Sand must be cleaned out periodically (operation and maintenance). (Implementation and post-implementation phases) b) Collection basin for spring capture needs to have a perforated PVC pipe (holes diameter 2mm) to be used as a	Construction Contractor Construction Supervisor

Subproject Type	Environmental Prevention/Mitigation Measures	Responsible Party
	screen for the water intake. Alternatively, a short pipe with wire mesh (screen) around the open end should be provided. (Implementation phase) c) Collection basin needs to have a fence to protect the spring from public access and risk of contamination; and a roof/cover over the spring to prevent leaves or other debris from entering the basin. (Implementation phase)	
Installation / Rehabilitation of pipelines	Preventing contamination at water sources: b) Build a structure with roof over the water source to prevent leaves or other debris from entering into the basin. (Implementation phase) c) A fence is needed to protect the water sources (springs particularly) from public access and risk of contamination. (Implementation phase) d) The sand/gravel filter traps sediment before the spring flow enters the collection chamber and has to be changed during periodical maintenance. (Implementation and post-implementation phases) Pipe Laying: a) PVC water transmission and distribution piping need to be buried underground (coverage 50cm minimum) to prevent pipe against external damage (e.g. passing vehicles, solar UV radiation, etc.). Exposing PVC pipe to UV radiation causes the plasticiser in the PVC pipe to evaporate causing loss of integrity and brittleness. (Implementation phase) b) Pipe shall be laid in a straight line, over a constantly falling slope. (Implementation phase) c) When conditions do not allow piping to be buried (i.e. pipe is used above ground), then metal pipe must be used, and supported/braced as excessive movement may lead to leaks and breaks. (Implementation phase) d) Outlet pipes and fittings from water storage/basin shall not be PVC pipe due to exposure to solar UV/sunlight. Metal piping and fittings are preferred. (Implementation phase) e) When the distribution pipes are laying via forest area, the following considerations are needed (Planning and implementation phases): • The route must be considered with minimum effects of changing the existing situations of the forest as well as the least habitats area of the animals • Setbacks distances from important natural features (e.g. mineral licks, wildlife features such as nest, elks, dens, staging areas, lambing areas, calving areas) to conserve wildlife values should be kept, if necessary.	Construction Contractor Construction Supervisor

Subproject Type	Environmental Prevention/Mitigation Measures	Responsible Party
Wastewater Systems		
Wastewater sewerage and treatment	a) Septic tanks must have a vent pipe to prevent the build-up of gas inside the chamber and shall have a 'manhole' that provides access inside the tank if needed. (Implementation phase) b) Ensure that the septic tanks have two chambers: first chamber is for settling of sludge, and the second chamber is for aerobic treatment. These chambers will generally treat wastewater better. Partially treated septic tank effluent can pollute groundwater and surface water. (Implementation phase) c) Do not discharge septic tank effluent to an open drain or other surface water. The effluents need to be treated before final disposal. This may be achieved through: (i) an underground leach field, (ii) a vegetated leach field, or (iii) a pit for soaking away. (Implementation phase)	Construction Contractor Construction Supervisor
Solid Waste Management	a) Solid waste depots/disposal need to be located on hard-standing areas that prevent waste entering surface or groundwater. (Implementation phase) b) Waste depots/storage/disposal should be contained, sealed and/or roofed/covered to prevent storm water contamination. Wastes need to be emptied regularly. (Implementation phase)	Construction Contractor Construction Supervisor

b. ESCOPs for Livelihood Support Subprojects

ESCOPs for Livelihood Support Subprojects

Risk/Concern	Environmental Prevention/Mitigation Measures	Responsible Party
General		
To minimize water pollution	a) Avoid any activity causing excessive erosion and turbidity. (Planning phase) b) Keep waste and hazardous materials away from surface water bodies, drinking water sources and do not dispose of waste in creeks or rivers. (Implementation phase) c) Properly dispose contaminated wastewater and hazardous materials, if any, passing through conventional treatment process such as screening, settling, oil-water separation, etc. (Implementation phase) d) Avoid contamination of drinking water source (e.g. well) from inflow of waste materials and pollutants. (Implementation phase)	-Project beneficiary communities

	e) Avoid—large-scale animal farming and aquaculture activities in water catchment area. (Planning and implementation phases)	
To minimize air pollution	a) Limit burning post-harvest waste material in close proximity to village; choose days with limited wind for burning; limit number and size of areas for burning per day; do not burn non-agricultural waste such as garbage, plastics or animal waste. Rather than burning post-harvest waste, consider alternative good practices such as composting to produce organic fertilizer or utilization as fuel for bioenergy production. (Planning and implementation phases) b) Reduce dust generation through application of water where practical. (Implementation phase) c) Limit idling of vehicles, machineries equipment. (Implementation phase)	-Project beneficiary communities
To minimize noise disturbance	a) Repair and maintain machineries for safe and quiet operation. (Implementation phase) b) Avoid emission of continuous/noisy sounds during working. (Implementation phase)	Construction Contractor Construction Supervisor
To minimize soil pollution	a) Store petrol / diesel on impermeable floor (e.g. compacted clay, concrete floor) and surrounded by an embankment or berm. (Implementation phase) b) Storage for hazardous materials including petroleum should be above ground and isolated. (Implementation phase) c) Establishing an appropriate disposal area for hazardous materials and waste where prevents hazardous material from leaching into the soil and surface water. (Implementation phase) d) Do not dispose hazardous wastes anywhere except in areas designated by pollution control agencies. (Implementation phase)	Construction Contractor Construction Supervisor
To minimize impact from non-agricultural waste generation	a) Collect waste systematically, store and dispose at appropriately designated dump sites, far away from households. (Implementation phase) b) Reuse and recycle appropriate and viable materials. (Implementation phase) c) Segregate hazardous and non-hazardous wastes. (Implementation phase)	Construction Contractor Construction Supervisor

To minimize emergency risks	a) Build appropriately designed infrastructure safe from natural hazards. (Planning and implementation phases) b) Avoid areas prone to natural hazard events (flooding, spring tides, etc.), steep slopes and vulnerable to erosion and landslides, etc. (Planning and implementation phases)	Construction Contractor Construction Supervisor
To secure the safety	a) Proper use and management of hazardous materials and waste. (Implementation phase) b) Awareness of dangers on working area, occupation, health and safety equipment through signage where applicable. (Implementation phase) c) Lock storage of fuels, paints, and chemicals. (Implementation phase)	Construction Contractor Construction Supervisor
Agriculture Support to Farmers		
	a) Induce conservation and efficient use of water. (Planning and implementation phases) b) Reduce misuse of agrochemicals, contributing to a reduction of toxic substances in soil and water. (Planning and implementation phases) c) Reduce usage of pesticides and promote integrated pest management approaches. (Planning and implementation phases) d) Reduce, recycle and reuse the agricultural waste (natural, animal, plant waste). (Implementation phase)	-Project beneficiary communities

Annex 3. Environmental and Social Management Plan (ESMP) Template

Environmental and social risks and impacts are strongly linked to subproject location and scope of activities. This ESMP should be customized for each specific subproject location and activities.

1. Subproject Information

Subproject Title:	
Estimated Cost:	
Start/Completion Date:	

2. Site/Location Description

This section concisely describes the proposed location and its geographic, ecological, social and temporal context including any offsite investments that may be required (e.g., access roads, water supply, etc.). Please attach a map of the location to the ESMP.

3. Subproject Description and Activities

This section lists all the activities that will take place under the subproject, including any associated activities (such as building of access roads or transmission lines, or communication campaigns that accompany service provision).

4. ESMP Matrix: Risk and Impacts, Mitigation, Monitoring

This section should identify anticipated site-specific adverse environmental and social risks and impacts; describe mitigation measures to address these risks and impact; and list the monitoring measures necessary to ensure effective implementation of the mitigation measures. It may draw from the ESMF's pre-identification of potential risks/impacts and mitigation measures, as

applicable, and drill down further to ensure relevance and comprehensiveness at the site-specific level. For subprojects involving construction, two sets of tables may be needed, for the construction phase and the operation phase.

Anticipated E&S Risks and Impacts	Risk Mitigation and Management Measures	Impact Mitigation		Impact/Mitigation Monitoring		
		Location/Timing/Frequency	Responsibility	Parameter to be monitored	Methodology, including Location and Frequency	Responsibility

5. Capacity Development & Training

Based on the implementation arrangements and responsible parties proposed above, this section outlines any capacity building, training or new staffing that may be necessary for effective implementation.

6. Implementation Schedule and Cost Estimates

This section states the implementation timeline for the mitigation measures and capacity development measures described above, as well as a cost estimate for the implementation. The cost estimate can focus on the line items that will be covered by the project implementing agency, with costs of mitigation measures to be implemented by the contractor left to the contractor to calculate.

7. Attachments

ESCOPs, site specific SEP etc.

IV. Review & Approval

Prepared By: ……(Signature) Position: …… Date ……	
Reviewed By: ……(Signature)	**Approved By**: ……(Signature)

Position: ……Date ……	Position: …… Date ……

Annex 4. Labor Management Procedures

In accordance with the requirements of World Bank's Environmental and Social Standard 2 (ESS2) on Labor and Working Conditions, a simplified LMP have been developed for the project. The LMP sets out the ways in which MLF will manage all project workers in relation to the associated risks and impacts. The objectives of the LMP are to: Identify the different types of project workers that are likely to be involved in the project; identify, analyze and evaluate the labor-related risks and impacts for project activities; provide procedures to meet the requirements of ESS 2 on Labor and Working Conditions, ESS 4 on Community Health and Safety, and applicable national legislation.

The Labor Management Procedures apply to all project workers, irrespective of contracts being full-time, part-time, temporary or casual. The types of workers that will be included in the project are listed below:

- **Direct workers-**These may be officials and employees of the MLF and other stakeholder government institutions found at national, state and county levels working for the SSRLP project. They will include project coordinators, managers, sector specialists, safeguard specialists, technicians, Procurement and Finance officers and other supporting team members directly employed or engaged by the SSRLP and project implementing agencies to specifically work for the SSRLP. Other workers such as supervisors or specialized skilled workers who will be employed on permanent or temporary basis by the PIU and sector offices at project implementation sites will also be direct workers.
- **Contracted workers-** The project may hire technical consultants and employ contractors to undertake construction works Contracted workers are those who will be employed by contractors and sub-contractors to implement sub-project activities and other workers employed through third parties to perform work related to core functions of the SSRLP. The contract workers will be engaged in construction works under Component 1 and 2 of the project, and specialized consultants to provide trainings, advisory services and specialized support to PIU.
- **Community workers** –The project may involve the participation of community workers in the form of Community Agricultural Health Workers (CAHWs).Community labor/workers may be provided from local cooperatives members, grievance redress committee members and women user-group members and other social institutions.
- **Primary supply workers** – those workers who will supply inputs, materials or services to the SSRLP project, i.e., those suppliers who, on an ongoing basis, provide goods or materials or services directly to the SSRLP project that are essential for the core functions of sub-project activities. The suppliers will include suppliers of inputs such as veterinary medicines, vaccination campaign materials, camping equipment, protective gears, vet medical equipment and pesticides, etc… through procurement procedures who will be selected through a standard competitive bid process.

Labor Risks

The following potential labor risks are identified under the project:

- Violation of worker's rights: Terms and conditions of employment of workers may not be consistent with national legislation or World Bank standards
- Violation of worker's rights: Non-discrimination and equal opportunity of workers may not be consistent with national legislation or World Bank standards.
- Use of child labor or forced labor
- Unsafe work environment and poor working conditions
- Workplace injuries and accidents, particularly when operating construction equipment, when working at height on building construction, and when handling heavy equipment and materials
- Risks from exposure to hazardous substances (dust, cement, chemicals used in construction etc.)
- Sexual exploitation and abuse/sexual harassment (SEA/SH) risks for workers
- SEA/SH risks for community members, from workers from outside the project areas
- Conflicts between workers and communities
- Transmission of COVID-19 among workers or nearby communities, especially if workers are not hired locally and arrive to civil works locations from elsewhere or if COVID-19 specific precautions are not in place at work sites and worker accommodation sites

The Labor Act (Act No. 64 of 2017)

The Act establishes a legal framework for the minimum conditions of employment, labor relations, labor institutions, dispute resolution and provisions for health and safety in the workplace. It further reinforces the right to equal remuneration for work of equal value as guaranteed by the constitution. Section 6 (1) of the Labor Act provides that 'No person shall discriminate, directly or indirectly, against an employee or job applicant in any work policy or practice'. Section 6(2) also forbids discrimination by any Trade Union, Employers Association or Federation.

Section 12 of the Labor act deals with minimum working age. Article 12(2) prohibits children under 14 years to engage in the worst forms of work, whereas Article 12(4) allows a child who has attained the age of twelve years to be engaged to perform light work, provided that such work is not harmful to the child's health or safety, or the child's moral or material welfare or development. The Article 12(6) of the Labor Act also prohibits the engagement of a child under the age of eighteen years to perform hazardous work. In addition, section 10 of the act spells out that forced labor is prohibited.

Article 7(1) of the Labor Act restricts sexual harassment at workplace by stating that "no person shall sexually harass an employee or an employer". Article 7(2) also places a responsibility on the

employer to ensure that no person shall sexually harass an employee in the course of the employee work.

The provisions pertaining to health and safety issues at work place are addressed in Articles 110 – 112 of the Labor Act No.64 (2017). Article 110 (1) state that an employer shall ensure safety, health and welfare at workplace for all employees. Article 110 (2) outlines the responsibility of employers in ensuring safety and health at work place including for the provision and maintenance of good order of any plant, system or procedure of work by ensuring that such plant, system and procedure are safe to the employees at the workplace. Article 112 (1) of the Labor act also places responsibility on the employees to comply with health and safety measures by stating that, an employee shall comply with all measures implemented by the employer in accordance with the employer duties stated in the Act.

General Applicable Procedures

The MLF and contractors will apply the following guidelines when dealing with workers:

- There will be no discrimination with respect to any aspects of the employment relationship, such as: Recruitment and hiring; compensation (including wages and benefits); working conditions and terms of employment; access to training; job assignment; promotion; termination of employment or retirement; or disciplinary practices.
- Harassment, intimidation and/or exploitation will be prevented or addressed appropriately.
- Special measures of protection and assistance to remedy discrimination or selection for a particular job will not be deemed as discrimination.
- Vulnerable project workers will be provided with special protection.
- MLF and contractors will provide job / employment contracts with clear terms and conditions including rights related to hours of work, wages, overtime, compensation and benefits, annual holiday and sick leave, maternity leave and family leave. Code of Conduct included in this LMP will be applicable for all project workers.
- MLF will ensure compliance with the Code of Conduct including providing briefings/awareness raising on the Code.
- MLF and contractors will ensure compliance with occupational health and safety procedures and COVID-19 specific procedures including that the workers are properly trained in application of the standards that are relevant to the work.
- MLF and retained contractors will ensure no person under the age of 18 shall be employed. Age verification of all workers will be conducted by the contractors.
- MLF will recruit contractors and labor locally to the extent that they are available.
- Workers shall be recruited voluntarily, and no worker is forced or coerced into work.
- MLF will supervise and monitor to ensure compliance with the above requirements.
- All workers will be made aware of the Worker's Grievance Mechanism to raise work related grievances, including any sensitive and serious grievances on SEA/SH.

Occupational Health and Safety (OHS) Procedures

The objective of the procedure is to achieve and maintain a healthy and safe work environment for all project workers (contracted workers and community workers) and the host community.

- On procurement for contractors, MLF will avail the ESMF to the aspiring contractors so that contractors include the budgetary requirements for OHS measures in their respective bids.
- The contractor will develop and maintain an OHS management system that is consistent with the scope of work, which must include measures and procedures to address all the following topics listed below and in accordance with local legislation and GIIP (as defined by World Bank Group EHSGs). The management system must be consistent with the duration of contract and this LMP.
- Contractor will conduct workplace hazards identification and adopt all applicable E&S risk mitigation measures in accordance with local legislation requirements and WBG EHSGs.
- Contractor designates a responsible person to oversee OHS related issues at the project site and define OHS roles and responsibilities for task leaders and contract managers.
- Contractor should put in place processes for workers to report work situations that they believe are not safe or healthy, and to remove themselves from a work situation which they have reasonable justification to believe presents an imminent and serious danger to their life or health, without fear of retaliation.
- Contractor provides preventive and protective measures, including modification, substitution, or elimination of hazardous conditions or substances informed by assessment and plan. Whenever PPEs are required for the work, it must be provided at no cost for the workers.
- Contractor should assess workers' exposure to hazardous agents (noise, vibration, heat, cold, vapors, chemicals, airborne contaminants etc.) and adopt adequate control measures in accordance with local regulations and WB EHSGs.
- Contractors provide facilities appropriate to the circumstances of the work, including access to canteens, hygiene facilities, and appropriate areas for rest. Where accommodation services are provided to project workers, policies will be put in place and implemented on the management and quality of accommodation to protect and promote the health, safety, and well-being of the project workers, and to provide access to or provision of services that accommodate their physical, social and cultural needs.
- Contractor provides for appropriate training/induction of project workers and maintenance of training records on OHS subjects.
- Contractor documents and reports on occupational incidents, diseases and incidents as per ESMF guidance.

- Contractor provides emergency prevention and preparedness and response arrangements to emergency situations including and not limited to workplace accidents, workplace illnesses, flooding, fire outbreak, disease outbreak, labor unrest and security.
- Contractor provides remedies for adverse impacts such as occupational injuries, deaths, disability and disease in accordance with local regulatory requirements and Good International Industry Practices.
- Contractor shall maintain all such record for activities related to the safety health and environmental management for inspection by MLF PIU or the World Bank.

COVID-19 Procedures

Though COVID-19 epidemic has receded and had been officially declared to be no more, in case of its unexpected resurgence in other forms and types, the following are examples of basic COVID-19 risk management measures to prevent it.

- Contractors should ensure that workers are hired locally to the extent possible.
- Contractors should provide training to all workers on signs and symptoms of COVID-19, how it is spread, how to protect themselves (including regular handwashing and social distancing) and what to do if they or other people have symptoms, as well as policies and procedures listed here. Training of workers should be conducted regularly, providing workers with a clear understanding of how they are expected to behave and carry out their work duties. Training should address issues of discrimination or prejudice if a worker becomes ill and provide an understanding of the trajectory of the virus, where workers return to work following infection.
- A summary of basic guidelines and COVID-19 symptoms should be displayed at all civil works sites, with images and text in relevant ethnic languages.
- Workers who are sick or showing possible symptoms should not be allowed on work site, should be isolated and referred to local medical facilities immediately.
- Contractors should review worker accommodation arrangements to see if they are adequate and designed to reduce contact with the community.
- Contractors should review work arrangements, tasks and hours to allow social distancing.
- Contractors should provide workers with appropriate forms of personal protective equipment.
- Contractors should ensure handwashing facilities supplied with soap, disposable paper towels and closed waste bins exist at key places at the work site.
- MLF and contractors should together implement a communication strategy with the community in relation to COVID-19 issues on the site.

Contractor Management Procedures

The objective of this procedure is to ensure that MLF has contractual power to administer, oversight and action against contractors for non-compliance with the LMP.

- MLF PIU will make available relevant documentation to inform the contractor about requirements for effective implementation of the LMP.
- MLF PIU will include the provisions of the ESMF, LMP and other relevant documents into the specification section of the bidding documents. The contractors will be required to comply with these specifications.
- Contractor will raise worker awareness on the Code of Conduct.
- Contractor will show evidence of OHS and Emergency Preparedness procedures.
- MLF PIU will monitor contract's E&S performance during its regular site visits utilizing contactor reporting or external monitoring/supervision consultants where available. Where appropriate, MLF PIU may withhold contractor's payment or apply other contractual remedies as appropriate until corrective action(s) is/are implemented on significant non-compliance with the LMP, such as failure to notify MLF PIU of incidents and accidents.

Procedures for Community Workers

Community workers include people who will participate in the project as Community Agricultural Health Workers (CAHWs) who will be trained by the project. The objective of this procedure is to ensure the community workers offer their labor voluntarily and that they agree to the terms and conditions of employment. MLF PIU and contractors using community workers will apply the following guidelines when dealing with community workers:

- MLF PIU will develop standard working times, remuneration systems (depending on the type of work), methods of payment, timing of payment, and community worker Code of Conduct, which will apply to all project activities.
- MLF PIU and contractors should consult communities and document their community meetings where members agree to conditions of community worker recruitment. The agreement should include details on the nature of work, working times, age restrictions (18 and above), remuneration amount, method of payment, timing of payment, individual signatory or representative signatory of meeting resolution
- Contractors will have the terms and conditions discussed, explained, negotiated and documented through joint community meetings, with each community employee showing consent through signing the attendance register of the meeting which made the employment resolutions.
- MLF PIU and contractors train community workers on key LMP issues, including SEA/SH, OHS, COVID-19, safe use of equipment and lifting techniques, and the relevant grievance mechanisms.

Worker Accommodation

If accommodations are provided for workers, contractors will ensure that they are provided in good hygiene standards, with fresh drinking water, clean beds, restrooms and showers, clean bedrooms, good illumination, lockers, proper ventilation, safe electrical installation, fire and lightening protection, separate cooking and eating areas. There will be separate facilities provided for men and women. The contractors will be liable to comply with "Workers' Accommodation: Processes and Standards: A guidance Note" by IFC and the IBRD.

Institutional Arrangement for Implementation of the LMP

MLF PIU will carry the main responsibility for the implementation and monitoring of the LMP. MLF will identify subproject activities, prepare subproject designs and bidding documents, as well as procure contractors. MLF PIU will be responsible for contractor and site supervision, technical quality assurance, certification, and payment of works. MLF PIU will ensure that labor management procedures are integrated into the specification section of the bidding documents and the procurement contracts.

Grievance Mechanism

The objective of this grievance mechanism is to settle the grievance between an employer and employee or between employees bilaterally before recourse to formal dispute resolution. Workers will be informed of this grievance mechanism at the time of recruitment and the measures put in place to protect them from any reprisal for its use. The project will put in place measures to make the worker grievance mechanism easily accessible to all project workers.

There will be a specific Workers Grievance Mechanism (Worker GM) for project workers as per the process outlined below. This considers culturally appropriate ways of handling the concerns of direct and contracted workers. Processes for documenting complaints and concerns have been specified, including time commitments to resolve issues. Workers will be informed about the relevant Worker GM upon their recruitment and their right to redress, confidentiality and protection against any reprisals from the employer will be stated in the contract. Contractors will induct the employee on the applicable workers' grievance redress mechanism. All records of induction shall be kept and made available to the World Bank.

Routine Grievances

The process for the Worker GM is as follows:

- Any worker may report their grievance in person, by phone, text message, mail or email (including anonymously if required) to the contractor as the initial focal point for information and raising grievances. For complaints that were satisfactorily resolved by the aggrieved worker or contractor within one week of receipt of complaint, the incident and resultant

resolution will be logged and reported monthly to the State or county level project implementing focal persons/units.

- If the grievance is not resolved within one week, the contractor (or the complainant directly) will refer the issue to the state level project implementing focal persons/units. The state level project implementing focal persons/units will work to address and resolve the complaint and inform the worker as promptly as possible; in particular if the complaint is related to something urgent that may cause harm or exposure to the person, such as lack of PPE needed to prevent COVID-19 transmission. For non-urgent complaints, the state level project implementing focal persons/units will aim to resolve complaints within 2 weeks. For complaints that were satisfactorily resolved by the state level project implementing focal persons/units, the incident and resultant resolution will be logged by state level project implementing focal persons/units and reported monthly to national PIU in MLF as part of regular reporting. Where the complaint has not been resolved, the state level project implementing focal persons/units will refer to the National PIU for further action or resolution.

At the National PIU level, each grievance record should be allocated a unique number reflecting year, sequence and township of received complaint. Complaint records (letter, email, record of conversation) should be stored together, electronically or in hard copy. The National PIU will appoint a Worker GM Focal Person, who will be responsible for undertaking a monthly review of all grievances to analyze and respond to any common issues arising. The Focal Person will also be responsible for oversight, monitoring and reporting on the Worker GM.

Serious Grievances

In case a worker experiences serious mistreatment such as harassment, intimidation, abuse, violence, discrimination or injustice at the workplace, the worker may raise the case, verbally or in writing directly to the contractor or the National PIU in MLF. The contractor will immediately refer the case to the National PIU in MLF. The PIU in MLF will immediately investigate the case respecting confidentiality and anonymity of the worker.

Upon project effectiveness, the PIU in MLF will designate a Focal Person or Persons for Serious Grievances. These Focal Persons will receive training in investigating serious grievances, relevant laws and regulations, and World Bank standards including the rights of people who file a grievance. The PIU in MLF and the World Bank will jointly develop culturally-sensitive and locally-appropriate roles and responsibilities, and procedures.

In case a direct worker or civil servant has a serious grievance, the staff may directly contact verbally or in writing the Focal Person for Serious Grievances.

The workers will preserve all rights to refer matters to relevant judicial proceedings as provided under national labor law. Where the formal courts are not accessible, do not exist in an area, or cannot render a judgment, the matter shall be reported to and handled by the MLF PIU, for example

through the Project Grievance Redress Mechanism (GRM). The PIU, in this case, will accommodate a fair agreement between the worker and the contractor. In case of risk of retaliation, the employee may immediately escalate to the court system or to the PIU. If confidentiality is requested, the PIU will ensure it to avoid any risk of retaliation, including in its follow-up actions. All complaints received will be filed and kept confidential. For statistical purposes, cases will be anonymized and bundled to avoid identification of persons involved.

Annex 5. Chance Find Procedures

Cultural heritage encompasses tangible and intangible heritage which may be recognized and valued at a local, regional, national or global level. *Tangible cultural heritage*, which includes movable or immovable objects, sites, structures, groups of structures, and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance. Tangible cultural heritage may be located in urban or rural settings, and may be above or below land or under the water. *Intangible cultural heritage*, which includes practices, representations, expressions, knowledge, skills-as well as the instruments, objects, artefacts and cultural spaces associated therewith-that communities and groups recognize as part of their cultural heritage, as transmitted from generation to generation and constantly recreated by them in response to their environment, their interaction with nature and their history.

In the event that during construction, sites, resources or artifacts of cultural value are found, the following procedures for identification, protection from theft, and treatment of discovered artefacts should be followed and included in standard bidding documents. These procedures take into account requirements related to Chance Finding under national legislation including [list relevant cultural heritage legislation in country].

- Stop the construction activities in the area of chance find temporarily.
- Secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a guard shall be arranged until the responsible local authorities take over. These authorities are [list the responsible authorities under national legislation].
- Notify the relevant [implementing agency field staff] and the relevant [list the responsible local authorities under national legislation] immediately. [Implementing agency field staff] will inform the [implementing agency management].
- The relevant [list the responsible local authorities under national legislation] shall promptly carry out the necessities and inform the [national level cultural heritage or archeology ministry] immediately from the date on which the information is received.
- The [national level cultural heritage or archeology ministry] would be in charge of evaluation /inspection of the significance or importance of the chance finds and advise on appropriate subsequent procedures.
- If the [national level cultural heritage or archeology ministry] determines that chance find is a non-cultural heritage chance find, the construction process can resume.
- If the [national level cultural heritage or archeology ministry] determines chance find is an isolated chance find, [national level cultural heritage or archeology ministry] would provide technical supports/advice on chance find treatment with related expenditure on the treatment provided by the entity report the chance find.

Annex 6. Pest Management Plan

MLF PIU will follow the guidelines in this Annex as applicable and provide training to pastoralists for proper use of pests and disease management in line with this Annex. The MLF PIU will encourage the use of bio-pesticides and aim to minimize the use of chemical pesticides when possible.

The plan comprises the following three aspects: (i) application of government regulations on pesticide control, (ii) key impacts of pesticides and mitigation measures, and (iii) training on safe use of chemicals.

Government Regulations related to Pesticides. There is no Pesticide Legislation enacted by the government as yet. The draft pesticide legislation is not yet available for public use as it is awaiting enactment by the Government of South Sudan. Thus a brief description of the pesticide legislation would be added at later stages when the draft pesticide legislation is promulgated.

Key Impacts of Pesticides and Mitigation Measures. Pesticides benefit the farmers for the crop production; nevertheless, they also impose a series of negative impacts on the environment. Pesticides may easily contaminate the air, ground water, surface water, and soil when they run off from fields, escape storage tanks, and not discarded properly.

Moreover, pesticides are hazardous to both pests and humans and they become toxic to humans and non-target animal species if suitable precautions are not undertaken during transport, storage, handling and disposal. Most pesticides will cause adverse effects if they are in contact with the skin for a long time or if intentionally or accidently ingested. Pesticides may be inhaled with the air while they are being sprayed. An additional risk is the contamination of drinking-water, food or soil.

The following mitigation measures are recommended from different aspects at every stage in order to avoid the adverse impacts on both human and the environment due to pesticides.

Stage	Mitigation Measures[8]
Before using pesticides	1. Minimize the need for pesticides by practicing integrated management by control strategies such as cultural control, mechanical control, physical control, biological control and chemical control. 2. Receive recommendations from relevant national agencies for proper management method for specific crop.
General precautions	1. Only choose the pesticides labelled in the national language and do not use the pesticides without any label or with foreign language labels.

[8] Instructions from Safe Use of Pesticides by WHO.

Stage	Mitigation Measures[8]
	2. Select the pesticide which is suitable for specific pests and target plants as described on the label. 3. Do not mix any two or more pesticides at the same time. 4. Follow the instructions for use and the pre-harvest interval (PHI) as prescribed on the label. 5. Use appropriate and correct application techniques to ensure safety for the health of humans, animals and the environment.
Label Reading	1. Check the pesticide registration number on your product. 2. Review the date of manufacture and date of expiry. 3.Read the active ingredient and pesticide group on your product. 4. Read the target pests, dosage of product. 5. Read the pre-harvest interval (PHI). 6. Read the storage and disposal procedure for the product. 7. Read the first aid procedure. 8.Follow the instructions and safety precautions precisely written on the label.
Storage and Transport	1. Store pesticides in a certain place that can be locked and not accessible to unauthorized people or children. 2. Never be kept in a place where they might be mistaken for food or drink. 3. Keep them dry but away from fires and out of direct sunlight. 4. Store away from water sources. 5. Should be transported in well-sealed and labelled containers. 6. Do not carry them in a vehicle that is also used to transport food.
Handling / Application	**From Environmental Safety Aspect –** 1. Application rates must not exceed the manufacturer's recommendations. 2. Avoid application of pesticides in wet and windy conditions. 3. Pesticides must not be directly applied to streams, ponds, lakes, or other surface bodies. 4. Maintain a buffer zone (area where pesticides will not be applied) around water bodies, residential areas, livestock housing areas and food storage areas. **From Health and Safety of User Aspect –** 1. Use suitable equipment for measuring out, mixing and transferring pesticides. 2. Do not stir liquids or scoop pesticides with bare hands. 3. Do not spray pesticides at the down-stream direction and during the strong wind. 4. Do not spray pesticides at the high temperature of the day (noon). 5. Do not suck or blow the blocked nozzle. 6. Do not assign pregnant women, lactating mother and children under 18 for handling and use of pesticides. 7. Protective gloves, shoes, long-sleeved shirt and full trousers shall always be worn when mixing or applying pesticides. 8. Respiratory devices (nose mask) shall be used to avoid accidental inhaling.

Stage	Mitigation Measures[8]
	9. In case if any exposure/body contact with the pesticide, wash-off and seek medical aid.
Disposal	**From Environmental Safety Aspect –** 1. Dispose any left-over pesticide by pouring it into a pit latrine. 2. It should not be disposed of where it may enter water used for dinking or washing, fish ponds, creeks or rivers. 3. Do not dispose any empty containers into river, creek, fish ponds and water way. 4. Do not burn any empty containers. 5. Decontaminate the pesticide containers by triple rinsing and use for next application. i.e. part-filling the empty container with water three times and emptying into a bucket or sprayer for next application. 6. All empty package and containers should be returned to the designated organization / individual for safe disposal. 7. If safe disposal is not available, bury the empty package and containers at least 50cm (20 inches) from ground level as much as possible. 8. The hole / disposal site must be at least 100 meters (~300 ft) away from the streams, wells and houses. 9. Do not reuse empty pesticide containers for any purposes.
Personal Hygiene	1. Never eat, drink or smoke while handling pesticides. 2. Change clothes immediately after spraying pesticides. 3. Wash hands, face, body and clothes with plenty of water using soap after pesticides handling.
Emergency Measures	**Indications of Pesticide Poisoning** **General:** extreme weakness and fatigue. **Skin:** irritation, burning sensation, excessive sweating, staining. **Eyes:** itching, burning sensation, watering, difficult or blurred vision, narrowed or widened pupils. **Digestive system:** burning sensation in mouth and throat, excessive salivation, nausea, vomiting, abdominal pain, diarrhea. **Nervous system:** headaches, dizziness, confusion, restlessness, muscle twitching, staggering gait, slurred speech, fits, unconsciousness. **Respiratory system:** Cough chest pain and tightness, difficulty with breathing, wheezing. **Responsiveness** **General:** If pesticide poisoning is suspected, first aid must be given immediately and medical advice and help must be sought at the earliest opportunity. If possible, the patient should be taken to the nearest medical facility. **First Aid Treatment** **If breathing has stopped:** Give artificial respiration (i.e. mouth to mouth resuscitation if no pesticide has been swallowed.)

Stage	Mitigation Measures[8]
	If there is pesticide on the skin: Remove contaminated clothing from the patient and remove the patient from the contaminated area. Wash the body completely for at least 10 minutes, using soap if possible. If no water is available, wipe the skin gently with cloths or paper to soak up the pesticide. Avoid harsh rubbing or scrubbing. **If there is pesticide in the eyes:** Rinse the eyes with large quantities of clean water for at least five minutes. **If there is ingestion:** Rinse mouth, give water to drink. Never induce vomiting in unconscious or confused persons, seek medical advice immediately.

Trainings. Trainings on pesticide management should be provided to the farmers/pastoralists under relevant component of the project. The following trainings on pesticide management are recommended to be provided:

- *Training on Policy, Laws and Regulations Regarding to Pesticides Use:* To provide basic knowledge about the national laws, rules and regulations.
- *Trainings for Pest Management:* To provide trainings to clearly understand the technical aspect of pesticide and skill in using them such as what are the eligible and prohibited items of pesticide under national regulations, the level of negative impact of each eligible item, how to use them, how to protect and minimize the negative impact on the environment and human while using them, how to keep them before and after used etc.
- *Storage, handling, usage and disposal of pesticide*; To provide trainings about the procedures of storage, handling, usage of pesticide and disposal of pesticides residues or empty containers without affecting the health and safety of user, nearby community and the environment.

Annex 7: Quarterly and Annual Environmental Compliance Reporting Template

Monitoring of implementation of the ESMF and ESMPs is an important aspect of ensuring that the commitment to environmental sustainability of the project / program is being met. The regular monitoring of implementation of the ESMF and ESMPs will be prepared at State and National levels by the project implementing entities and the third party implementer (FAO). The environmental specialists/focal persons at the National and State PIUs, the third party implementer (FAO) have the responsibility to prepare quarterly, biannual and annual report to submit to the MLF and Project Steering Committee.

General

Institution/ State: [Type the correct name here]

Reporting Quarter/Year: [type here]

Date of the report: [Type here]

Report summary (narrative):

Here narrative of the overall environmental and social management implementation during the reporting period is summarized. Activities carried out in implementing the ESMF (including aspects monitored), issues identified, proposed solutions and follow up activities are summarized here. Figures will be discussed in the reporting table below. Please also consider other issues, like for e.g.:

1. Types of training provided or training demands;
2. If an a “Letter of No Objection” was not granted by MoEF, explain why;
3. If no objection is obtained for ESIA studies from the World Bank, and whether these documents are disclosed on time both through the implementing agencies website and the World Bank info shop (please refer Disclosure requirements);
4. Documentation practices for environmental instruments (E&S Screening reports, ESMP, ESIA, etc.); and, specific challenges encountered in the course of project E &S risk management implementation processes.

Environmental Compliance Reporting Format to be completed at Federal Levels

Name of Ministry: ----------
Program/Project Type; …….: ---------- Date: ----------

S/N	Name of subproject site	Types of subprojects	Screened & approved (Yes/No)	Environmental Category	ESIA Prepared & approved (Yes/No)	ESMP implemented (Yes/No)	Remark
1							
2							
3							
4							
6							
Total							

List of Outstanding Issues and Responsible Body for Implementation

S/N	Name of subproject site	Type of subproject	Outstanding Issues	Recommended actions	Responsible body for implementation	Time schedule
1						
2						
3						
4						
5						

Completed by: Name ----------Email: ----------Phone: ----------

Annex 8: Hazardous Waste Management Plan

1. INTRODUCTION

Hazardous waste is a type of waste that poses a risk to human health or the environment due to its chemical or physical properties. Examples of hazardous waste include chemicals, batteries, pesticides, solvents, electronics, medical waste, asbestos, and contaminated soil. Hazardous waste must be managed and disposed of in a safe and responsible manner to prevent harm to human health and the environment. The purpose of this Hazardous Waste Management Plan (WMP) is to provide guidance to the subprojects supported by SSRLP on how to manage their hazardous waste, from generation to final disposal. The HWMP is based on the principles and requirements of the World Bank's ESF and the General and Industry Specific EHSGs, which provide a systematic and structured approach to identify, assess, and manage the environmental and social risks and impacts associated with hazardous waste. The HWMP also takes into account the specific characteristics and needs of the supported subprojects and is generic and simple to be able to tailor it to match industry specific requirements and aims to provide practical and feasible solutions that can be implemented in their daily operations.

2. Requirements for Hazardous Waste Management Plan

In accordance with World Bank EHS Guidelines, the following are the general requirements for hazardous waste management plan;

a. Waste minimization and prevention

The HWMP encourages the supported subprojects to adopt a waste minimization and reduction approach, which involves reducing the amount of hazardous waste generated at the source, by improving production processes, product design, and raw material selection. This approach can reduce the environmental and health risks associated with hazardous waste, and also lead to cost savings and resource efficiency. The HWMP requires the facilities to conduct a waste assessment to identify the types, quantities, and sources of hazardous waste generated, and to develop a waste minimization and reduction plan that sets targets, timelines, and performance indicators.

b. Segregation and Labelling

The HWMP requires the subprojects to segregate hazardous waste from non-hazardous waste, and to label and store it separately, using appropriate containers, labels, and signage. This measure is important to prevent accidental exposure, contamination, and mixing of hazardous waste with other waste streams, which can increase the risks and costs of hazardous waste management. The HWMP also requires subprojects to train their personnel on proper segregation and labeling practices, and to establish a monitoring and inspection system to ensure compliance.

c. Storage

The HWMP sets specific requirements for the storage and handling of hazardous waste, to ensure that it is stored and handled safely, securely, and in compliance with the applicable laws and regulations as well as the World Bank's ESF, ESS3, and the EHSGs. The HWMP would also require subprojects to use designated areas for hazardous waste storage that are equipped with adequate ventilation, lighting, fire protection, and spill containment measures. The HWMP also requires subprojects to use appropriate personal protective equipment (PPE) for their personnel who handle hazardous waste, and to establish a maintenance and inspection system for the storage and handling equipment.

d. Transportation

The HWMP requires subprojects to use licensed and authorized transporters for the transportation of hazardous waste, and to comply with the applicable regulations for the transport of hazardous materials. The HWMP requires the facilities/operations to ensure that the transporters have appropriate vehicles, equipment, and personnel for the safe and secure transport of hazardous waste, and that they follow the designated routes and schedules. The HWMP also requires the facilities/operations to provide appropriate documentation and labeling for the hazardous waste during transportation, and to establish a monitoring and inspection system for the transporters.

e. Treatment and Disposal

Subprojects shall use authorized and licensed treatment and disposal facilities for waste, particularly for their hazardous waste, and to comply with the applicable regulations for hazardous waste treatment and disposal. The HWMP requires the facilities/operations to select the most appropriate treatment and disposal options for their hazardous waste, based on their characteristics, quantities, and costs and in liaison with the relevant authorities such as MoEF, Ministry of Health (MoH) who shall be consulted to manage the waste. The HWMP also requires the facilities/operations to establish a monitoring and reporting system for their hazardous waste treatment and disposal activities, and to regularly evaluate and improve their waste management practices.

4. Emergency Preparedness and Response

The HWMP requires SSRLP to develop and implement an emergency preparedness and response plan for hazardous waste incidents that identifies potential hazards, risks, and impacts, and sets procedures, roles, and responsibilities for emergency response. The HWMP requires the SSRLP to train their personnel on emergency response procedures, and to establish communication and coordination mechanisms with the relevant authorities and stakeholders. The HWMP also requires

the facilities/operations to conduct regular emergency drills and exercises which shall be addressed in the Emergency Response Procedures.

3. Coordination with the relevant authorities and stakeholders

For storage, transportation, management, and disposal of hazardous waste, liaison and coordination is key to ensure adherence to national requirements and the World Bank's EHSGs through cooperation. The involvement of authorities will assist subprojects in identifying the most suitable and available management method or disposal location, ensuring compliance, and obtaining support to ensure the mitigation of potential E&S risks associated with hazardous waste Storage and Handling.

In the absence of qualified commercial or government-owned waste disposal operators (taking into consideration proximity and transportation requirements), project sponsors should consider using:

- Installing on-site waste treatment or recycling processes
- As a final option, constructing facilities that will provide for the environmental sound long-term storage of wastes on-site or at an alternative appropriate location up until external commercial options become available.

Annex 9: Indicative Content of a Biodiversity Management Plan (BMP)

(a) Objectives: based on the findings of the biodiversity baseline and recommendations of the environmental and social assessment or similar document(s). These might include, for example, No Net Loss or Net Gain.

(b) Activities to be carried out, along with any specific project requirements needed to achieve the intended BMP objectives. BMP activities may include, for example, new or expanded protected areas; site-specific habitat restoration, enhancement, or improved management; community benefit-sharing; livelihood restoration activities (to mitigate any negative socioeconomic impacts from newly restricted access to natural resources, in accordance with ESS5); species specific management interventions; monitoring of project implementation or biodiversity outcomes; or support for increased financial sustainability of conservation actions.

(c) Project Requirements: that the implementing entities follow to achieve BMP objectives, such as biodiversity-related prohibitions or specific restrictions for civil works contractors and project workers. These may cover, for example, the clearing or burning of natural vegetation; off-road driving; hunting and fishing; wildlife capture and plant collection; purchase of bush meat or other wildlife products; free-roaming pets (which can harm or conflict with wildlife); and/or firearms possession. Seasonal or time-of-day restrictions may also be needed to minimize adverse biodiversity impacts during construction or operation. Examples include (i) limiting blasting or other noisy activities to the hours of the day when wildlife are least active; (ii) timing of construction to prevent disturbance during the nesting season for birds of conservation interest; (iii) timing of reservoir flushing to avoid harming key fish-breeding activities; or (iv) curtailment of wind turbine operation during peak bird migration periods.
(d) An Implementation Schedule for the key BMP activities, taking into account the planned timing of construction and other project activities.
(e) **Institutional Responsibilities** for BMP implementation.
(f) **Cost estimate** for BMP implementation, including up-front investment costs and long-term recurrent costs. The BMP also specifies the funding sources for plan implementation as well as recurrent operating costs.

Annex 12: Guidance for Subproject risk Categorization

Pursuant to the ES Policy, subprojects are classified as *High Risk*, *Substantial Risk*, *Moderate Risk* or *Low Risk* taking into account relevant potential risks and impacts.

1. A Project is classified as **High Risk** after considering, in an integrated manner, the risks and impacts of the Project, taking into account the following, as applicable.

a. The Project is likely to generate a wide range of significant adverse risks and impacts on human populations or the environment. This could be because of the complex nature of the Project, the scale (large to very large) or the sensitivity of the location(s) of the Project. This would take into account whether the potential risks and impacts associated with the Project have the majority or all of the following characteristics:

(i) Long term, permanent and/or irreversible (e.g., loss of major natural habitat or conversion of wetland), and impossible to avoid entirely due to the nature of the Project;

(ii) High in magnitude and/or in spatial extent (the geographical area or size of the population likely to be affected is large to very large);

(iii) Significant adverse cumulative impacts;

(iv) Significant adverse transboundary impacts; and

(v) a high probability of serious adverse effects to human health and/or the environment (e.g., due to accidents, toxic waste disposal, etc.);

b. The area likely to be affected is of high value and sensitivity, for example sensitive and valuable ecosystems and habitats (legally protected and internationally recognized areas of high biodiversity value), lands or rights of Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities and other vulnerable minorities, intensive or complex involuntary resettlement or land acquisition, impacts on cultural heritage or densely populated urban areas.

c. Some of the significant adverse ES risk and impacts of the Project cannot be mitigated or specific mitigation measures require complex and/or unproven mitigation, compensatory measures or technology, or sophisticated social analysis and implementation.

d. There are significant concerns that the adverse social impacts of the Project, and the associated mitigation measures, may give rise to significant social conflict or harm or significant risks to human security.

e. There is a history of unrest in the area of the Project or the sector, and there may be significant concerns regarding the activities of security forces.

f. The Project is being developed in a legal or regulatory environment where there is significant uncertainty or conflict as to jurisdiction of competing agencies, or where the legislation or regulations do not adequately address the risks and impacts of complex projects, or changes to applicable legislation are being made, or enforcement is weak.

g. The past experience of the implementing agencies in developing complex Projects is limited; their track record regarding ES issues would present significant challenges or concerns given the nature of the Project's potential risks and impacts.

h. There are significant concerns related to the capacity and commitment for, and track record of relevant Project parties, in relation to stakeholder engagement.

i. There are a number of factors outside the control of the Project that could have a significant impact on the ES performance and outcomes of the Project.

2. A Project is classified as **Substantial Risk** after considering, in an integrated manner, the risks and impacts of the Project, taking into account the following, as applicable.

a. the Project may not be as complex as High Risk Projects, its ES scale and impact may be smaller (large to medium) and the location may not be in such a highly sensitive area, and some risks and impacts may be significant. This would take into account whether the potential risks and impacts have the majority or all of the following characteristics:

(i) They are mostly temporary, predictable and/or reversible, and the nature of the Project does not preclude the possibility of avoiding or reversing them (although substantial investment and time may be required);

(ii) there are concerns that the adverse social impacts of the Project, and the associated mitigation measures, may give rise to a limited degree of social conflict, harm or risks to human security;

(iii) they are medium in magnitude and/or in spatial extent (the geographical area and size of the population likely to be affected are medium to large);

(iv) the potential for cumulative and/or transboundary impacts may exist, but they are less severe and more readily avoided or mitigated than for *High Risk* Projects; and

(v) there is medium to low probability of serious adverse effects to human health and/or the environment (e.g., due to accidents, toxic waste disposal, etc.), and there are known and reliable mechanisms available to prevent or minimize such incidents;

b. The effects of the Project on areas of high value or sensitivity are expected to be lower than High Risk Projects.

c. Mitigatory and/or compensatory measures may be designed more readily and be more reliable than those of High Risk Projects.

d. The Project is being developed in a legal or regulatory environment where there is uncertainty or conflict as to jurisdiction of competing agencies, or where the legislation or regulations do not adequately address the risks and impacts of complex Projects, or changes to applicable legislation are being made, or enforcement is weak.

e. The past experience of the implementing agencies in developing complex Projects is limited in some respects, and their track record regarding ES issues suggests some concerns which can be readily addressed through implementation support.

f. There are some concerns over capacity and experience in managing stakeholder engagement but these could be readily addressed through implementation support.

3. A project is classified as **Moderate Risk** after considering, in an integrated manner, the risks and impacts of the Project, taking into account the following, as applicable:

a. the potential adverse risks and impacts on human populations and/or the environment are not likely to be significant. This is because the Project is not complex and/or large, does not involve activities that have a high potential for harming people or the environment, and is located away from environmentally or socially sensitive areas. As such, the potential risks and impacts and issues are likely to have the following characteristics:

(i) Predictable and expected to be temporary and/or reversible;
(ii) Low in magnitude;
(iii) Site-specific, without likelihood of impacts beyond the actual footprint of the Project; and
(iv) Low probability of serious adverse effects to human health and/or the environment (e.g., do not involve use or disposal of toxic materials, routine safety precautions are expected to be sufficient to prevent accidents, etc.).

b. The Project's risks and impacts can be easily mitigated in a predictable manner.

5. A project is classified as ***Low Risk*** if it's potential adverse risks to and impacts on human populations and/or the environment are likely to be minimal or negligible. These Projects, with few or no adverse risks and impacts and issues, do not require further ES assessment following the initial screening.

[i] 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'76 spells out requirements for a GBV grievance redress
mechanism, which is laid out in a separate SEA/SH Prevention and Response Action plans.

Annex 13. Gender Based Violence and Violence Against Children

1. **Gender based violence**: Refers to any physical, mental, social or emotional abuse directed against a person based on gender and has its roots in gender inequality
Sexual exploitation: Refers to any actual or attempted abuse of a position of vulnerability, differential power, or trust, for sexual purposes, including but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another

Sexual abuse: Refers to the actual orthreatened physical intrusion of a sexual nature, whether by force or under unequal or coerciveconditions.

Sexual harassment: Refers to any unwanted/unacceptable/inappropriate/offensive behavior of a sexual nature that affects the dignity of the recipient (male or female), and creates an intimidating, hostile, unstable or offensive work environment. Sexual harassment occurs for example when one employee makes continued, unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature, to another employee, against his or her wishes

Violence Against Children: Refers to all forms of physical, sexual, and emotional violence, neglect, and exploitation against individuals under 18 years of age, whether perpetrated by parents, caregivers, peers, intimate partners, or strangers, in any setting including homes, schools, communities, institutions, and online

Acts of GBV/SEA or VAC constitute gross misconduct and are therefore grounds for sanctions, which may include penalties and/or termination of employment, and if appropriate referral to the Police for further action.

2. All forms of GBV/SEA and VAC, including grooming, are unacceptable, regardless of whether they take place on the work site, the work site's surroundings, at workers' camps or within the local community.

i. Sexual Harassment – for instance, making unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct, of a sexual nature, including subtle acts of such behavior – is prohibited.
ii. Sexual favors – for instance, making promises or favorable treatment dependent on sexual acts – or other forms of humiliating, degrading or exploitative behavior, are prohibited.
iii. Sexual contact or activity with children under 18 – including through digital media – is prohibited. Mistaken belief regarding the age of a child is not a defense. Consent from the child is also not a defense or excuse.

3. Unless there is full consent by all parties involved in the sexual act, sexual interactions between the company's employees (at any level) and members of the communities surrounding the workplace are prohibited. This includes relationships involving the withholding/promise of actual provision of benefit (monetary or non-monetary) to community members in exchange for sex—such sexual activity is considered "non-consensual" within the scope of this Code.

4. In addition to company sanctions, legal prosecution of those who commit acts of GBV/SEA or VAC will be pursued if appropriate.

5. All employees, including volunteers and sub-contractors are highly encouraged to report suspected or actual acts of GBV/SEA and/or VAC by a fellow worker, whether in the same company or not. Reports must be made in accordance with project's GBV and VAC Allegation Procedures.

6. Managers are required to report and act to address suspected or actual acts of GBV/SEA and VAC as they have a responsibility to uphold company commitments and hold their direct reports responsible.

Annex 14. Gender Based Violence Action Plan

Project Phase	Objectives	Actions to Address GBV/SEA/SH Risks	Monitoring Indicators	Responsible Organization	Time Frame	Budget USD
Planning/ Design	To ensure that GBV issues are fully integrated into project design and planned for at project preparation and that GBV risks are addressed in all relevant safeguards instruments	- Ensure the MLF and Partner Organizations/POs environmental and social framework include statement on zero tolerance for GBV/SEA/SH, violence against women and children (e.g. child labor) and discrimination by sex	MLF and POs policies prepared, consulted upon, approved by the Board and disclosed containing explicit statements abhorring GBV/SEA/SH, discrimination by sex, child labor etc.	MLF	Quarter 1 of Year 1	**10,000.00** (Cost covers procurement of a consultant and consultative meetings)
		Ensure that MLF and POs employees are aware of the content of the environmental and social framework/standards including framework on gender and GBV	➢ Number of sensitization sessions held for employees of MLF and POs to sensitize them on the environmental and social framework ➢ Relevant sections of the framework are displayed at vantage points in the offices of MLF and POs	MLF	Quarter 1 of Year 1	**7,000.00**
		Recruit a GBV specialist with adequate knowledge of World Bank ESF, South Sudan gender policies and social protection laws as well as the South Sudan's Gender Equality and Women Empowerment Policy 2024, to the PIU	Budget line in the Annual Work Plan and Procurement Plan dedicated to GBV Mapping Study and the recruitment of	MLF(PIU)	Quarter 1 of Year 1	**No Separate Cost** (Cost is Captured as part of component 3, component 4., of the project)

			a Social Specialist			
		Recruit a separate short-term (2 and 1/2 months) GBV Consultant to undertake GBV Mapping Study (Rapid Appraisal) and prepare a GBV Manual with clear guidance on documenting and transmitting grievances to relevant stakeholders, co-ordination among entry points/stakeholders, introduction of concepts such as GBV/SEA/SH and Survivor Centred Approach, measures to ensure survivor confidentially roles and responsibilities of stakeholders in GBV GRM, and monitoring indicators for the entire project as part of developing the PIM and set up a reporting and accountability system based on ESS2, ESS4, and ESS10 as well as National/South Sudan laws and Referral Pathway	➢ Terms of Reference prepared and approved by the Bank for GBV Mapping Study and preparation of the GBV Manual as well as the Social Specialist ➢ One Social Specialist/ GBV Consultant procured to conduct the GBV mapping assignment ➢ Consultant to prepare GBV Manual procured and ready to commence work ➢ Social Specialist recruit and at point at the MLF PIU	MLF (PIU-social specialist or gender and nutrition specialist) and POs	Quarter 1 of Year 1	**No Separate Cost** (Recruitment is part of Activities under the PIU)
		Undertake GBV Mapping Study based on literature review, limited fieldwork and stakeholders engagement (Rapid Appraisal) as well as prepare the GBV operational procedure for the project	➢ Mapping prepared approved Bank reports and by the WB ➢ GBV operational procedure prepared for the Project with monitoring indicators and	GBV Consultant GBV Service providers, and POs-under a direct supervision of social specialist or gender and nutrition specialist	By the end of Quarter 2 of Year 1	**20,000.00**

			reporting, accountability and feedback mechanisms			
		Ensure that budgetary allocation for GBV/SEA/SH sensitization/awareness creation and reporting /accountability/response activities are captured in project cost tables	Budget of GBV activities captured in annual work and procurement plans for every year	MLF (PIU)	At the beginning of each year throughout the whole project cycle	**No Separate Cost** (Preparation of Annual Work and Procurement Plans are the responsibility of MLF (PIU) under the Project
		All sub-projects will be screened for GBV/SEA/SH risks as part of the Environmental and Social Screening exercise and Sub Project/Site-Specific ESMPs will identify and propose mitigation measures to cost for same	Sub Project ESMPs and screening reports with GBV/SEA/SH risks and mitigation/preventive measures approved by the Bank and disclosed	MLF (Environmental specialist and social specialist) , support from POs, GBV service providers, youth associations, disability associations and child rights associations	Throughout the whole project cycle as part of selection of applicants	**No Separate Cost** (Cost captured as part of cost of preparing screening reports and sub-project ESMPs)
		Prepare a GBV Manual as part of the PIM preparation process to guide GBV focal persons and Grievance Redress Committees	A GBV Manual prepared, consulted upon, approved by the Bank and disclosed	MLF (PIU) social specialist/gender and nutrition specialist/GBV Consultant, support from POs, GBV service providers, youth associations, disability associations, child rights associations and women's groups.	Before quarter 2 of Year 1	**25,000.00** (Cost covers consultancy fees for the selected consultant)
Implementation	To establish Project and Sub-Project level Grievance Redress Systems with	➢ Appoint and disclose GBV/SEA/SH focal persons at MLF and POs level and Grievance Redress Committee	➢ Names, contacts and designations of GBV/SEA/SH focal	MLF (PIU Social Specialist)	Quarter 2 of Year 1 and throughout the	**30,000.00**

	clear roles/guidelines on how to handle and document GBV/SEA/SH cases	Members in the catchment of each POs ➢ TOR's with clear roles and responsibilities for all involved in addressing GBV/SEA/SH in the GM are needed. For example for the, GBV focal points, entry points and GRCs ➢ Ensure that GM description includes confidential channels for reporting SEA/SH cases, is survivor centered, and have referral pathways linked with GBV service providers. ➢ Develop response protocols for each project implementation region using recommendations on GBV services mapped and evaluated (at minimum referral to medical, psychosocial and legal aid services should be available). ➢ Review complaint intake forms/logbooks for SEA/SH complaints and develop ethical data sharing and storing protocols. ➢ Ensure that Grievance Redress Committee comprises of persons with experience in working on GBV and train them on the SEA/SH complaint management. ➢ Consult with community women in project beneficiary communities to designate persons that are accessible, safe, and trustworthy to become the entry points for SEA/SH complaints. ➢ Regularly consult women in project communities to enquire about the safety and accessibility of the GM procedures.	persons/Sub Project and Project level GRM Committee Members ➢ Number of GBV/SEA/SH cases recorded by focal persons and Grievance Redress Committee Members ➢ Number of GBV/SEA/SH cases referred from GRM Committees /Focal Persons/ MLF to appropriate agencies in line with South Sudan-GBV Referral Protocol		operational phase of the project	
		➢ Staff of MLF and POs, various Grievance Redress Committee members, GBV/SEA/SH focal persons	Number of training sessions related to	GBV Consultant, with the support from	Before Quarter 2 of Year 1	**20,000.00**

		in the selected POs and communities will be trained on GBV/SEA/SH concepts, GBV/SEA/SH Manual prepared in line with South Sudan-GBV Referral Protocol and World Bank ESS2, ESS4 and ESS10 ➢ Train the selected entry points on how to receive, refer and escalate SEA/SH cases to the appreciate agency or agencies	GBV/SEA/SH delivered to stakeholder and accompanying training report(s)	social specialist/gender and nutrition specialist and GBV service providers		
	To ensure GBV/SEA/SH prevention, risk mitigation and response measures are captured in safeguards instruments are implemented	Project Contractors will be made to field Environmental and Social Experts with GBV specific skills to supervise issues related to GBV/SEA/SH as per their contracts	- GBV-relevant clauses inserted in sub- project tender documents/sub contractors' contracts or otherwise - Presence of Environmental and Social Specialists with GBV skills on-site or otherwise	Project Contractors	During implementation of civil, rehabilitation and upgrading works	**No Separate Cost** (Cost will be captured in Contractors Bidding Documents)
		Sub-Project Contractors will be made to include GBV/SEA/SH prevention, risk mitigation and response measures in their ESMPs to be reviewed by MLF	Contractors ESMP prepared and approved by MLF PIU with adequate measures to prevent, mitigate and respond to and report sub-project related GBV/SEA/SH Risks	Project Contractors, with a support from Project Consultants	As per Tendering Process	**No Separate Cost** (Cost will be captured in Contractors Bidding Documents)
		Prepare Codes of Conduct (see Sample in Annex 6) with relevant statements covering GBV/SEA/SH issues and clear reporting channels for all employees of sub- project contractors and consultants to sign	➢ Code of Conduct prepared inserted with statements on GBV/SEA/SH including zero	Project Contractors, with a support from Project Consultants	As per Tendering Process	**No Separate Cost** (Cost will be captured in Contractors Bidding Documents)

			tolerance for GBV/SEA/SH, sanctions for perpetrators, protection for survivors and commitment to supporting investigations in GBV/SEA/SH etc. ➢ Number and percentage of workers on each sub-project that have signed e Code of Conduct			
		Organize orientation sessions to explain the Code of Conduct to all employees of Project Consultants/Project Contractors/Sub-Contractors workers prior to its signing (mode of explanation to include local languages) prior to the commencement of their contracts	Number of orientation sessions on GBV/SEA/SH issues undertaken and reports prepared	Project Contractors, with a support from Project Consultants	Prior to the Commence en t of Civil and Upgrading Works/Rehabilitations	**No Separate Cost** (Cost will be captured in Contractors Bidding Documents)
		Organize one (1) GBV refresher training program for all employees of project, consultants and Contractors/sub-contractors every year	Number of employees, consultants and contractor's trained of GBV/SEA/SH issues undertaken and reports prepared in a year	Project Contractors, with a support from GBV service providers, Sub-project contractors and Consultants	Throughout Implementation of civil works/rehabilitations/upgrading	**No Separate Cost** (Cost will be captured in Contractors Bidding Documents)
		Provide all employees of Project Contractors/Sub Contractors and Consultants with copies of the signed Code	➢ Number of employees who have	Project Contractors, with a	Throughout Implementation of	**No Separate Cost** (Cost will be captured in Contractors

		of Conduct of Code for easy referencing	signed the Code of Conduct ➢ Number of employees who have copies of Code of Conduct	support from Consultants	Civil works/rehabilitation	Bidding Documents)
		Sub-project sites will be well-lit at night	Presence of security lighting on sub- project sites or otherwise	Project Contractors, with a support from Consultants	Throughout Implementation of Civil works/rehabilitation	**No Separate Cost** (Cost will be captured in Contractors Bidding Documents)
		Site workers will not be allowed to stay (sleep) on site	Number of site workers sleeping on-site at night	Project Contractors, with a support from PIU social specialist and POs	Throughout Implementation of Civil works/rehabilitation	**No Separate Cost** (Cost will be captured in Contractors Bidding Documents)
		- Separate toilet facilities for men and women will be provided in all project rehabilitation/work sites as well as at the offices of MLF and POs	Number of civil works sites, MLF and POs offices with separate toilets for males and females	Project Contractors, with a support from PIU and POs	Throughout the project cycle	**No Separate Cost** (Cost will be captured in Contractors Bidding Documents)
		Posters on the prohibition of GBV/SEA/SH, reporting channels and services available will be posted at vantage points within the selected sites, facilities and beneficiary communities	- Presence of posters on sub-project sites or otherwise	Project Contractors, with a support from PIU, POs and beneficiary small holder farmers, livestock herders and keepers	Throughout Implementation of Civil works/rehabilitation	**No Separate Cost** (Cost will be captured in Contractors Bidding Documents)
		Works, services and suppliers contracts will be inserted with Clauses that bind Sub Project Contractors, Suppliers and their employees to co-operate and support investigations and prosecution of reported	Clauses inserted in Works Contracts and other agreements to ensure that	MLF (PIU Procurement Specialist	During procurement of Sub-Project Contractors and	**No Separate Cost** (part of the responsibilities of PIU Social Specialist and Procurement Specialist)

		GBV/SEA/SH cases and participation in GBV/SEA/SH sensitization sessions	employees of sub- project contractors, consultants and suppliers co-operate with Police during investigations of alleged GBV/SEA/SH cases as well as committing employees to attend all GBV training sessions		Consultants	
	To ensure that all direct project employees apply strict ethical standards and Codes of Conduct inclusive of GBV/SEA/SH issues	Conduct one training workshops for all project workers on GBV/SEA/SH issues including South Sudan-GBV Referral Pathway, GBV Manual etc. every year.	Number of training workshops held per year and training report prepared per year	GBV Consultant with a support from MLF (PIU-social specialist and POs	Start before Quarter 2 and continue throughout Project Implementation	**25,000.00**
		All newly recruited staff in the project will be sensitized on GBV/SEA/SH issues, GBV Manual etc.	Number of orientation/sensitization sessions organized	MLF (PIU Procurement Specialist	Throughout Project Implementation	**No Separate Cost** (Part of responsibility of MLF/ PIU Social Specialist
	To ensure that GBV/SEA/SH cases are reported, documented, followed through and feedback provided to survivors in a confidential manner (reporting, accountability, and feedback mechanisms)	➢ Contacts (phone numbers) of GBV focal persons, the nearest GBV Service Providers, Police Gender Desk/PGD of the South Sudan-Police and the Anti-Corruption Commission toll-free line will be disclosed at vantage points on site, with the project communities as well as in LF and POs offices ➢ Prohibitive posters and the South Sudan- GBV Protocol will be pasted on the premises of MLF, POs and Beneficiary small holder farmers, livestock herders and keepers	-Relevant GBV focal persons/Service Provider contact numbers and locations and also toll-free lines pasted in the corridors, notice boards, walls at of MLF, POs premises and the premises of beneficiary small holder farmers, livestock herders and keepers in project communities	MLF with a support from POs, GBV service providers, Managers of one-stop GBV centers, owners and employees of beneficiary small holder farmers, livestock herders and keepers	Throughout the project implementation	**6,000.00** (Cost covers printing of prohibitive posters and contact numbers of PGD and GBV Centers, a nearest health facility at MLF, POs and beneficiary small holder farmers, livestock herders and keepers

		➢ Develop/Review GRM for specific SEA/SH procedures and co-ordination mechanisms ➢ Identify and train SEA/SH focal points within the who will be responsible SEA/SH cases and referrals	➢ -Knowledge about uptake points for GBV/SEA/SH complaints ➢ -Number of GBV uptake points ➢ Number of SEA/SH/GBV cases reported by type ➢ Number of SEA/SH/GBV cases	GBV/SEA/SH Survivors Project Contractors POs, common interest groups/associations; with a support from GBV focal persons, GBV service providers, Project Contractors/ Sub Contractors, public, women's association, association on disability, South Sudan based associations	Throughout the whole Project Implementation Cycle	**No Separate Cost** (Cost to be captured as part as part of Component 4., of the project)
		➢ -Develop monitoring indicators on the functioning of SEA/SH prevention and response system. ➢ Institute biannual reports and feedback between grantees and the PIU and the World Bank ➢ Include discussions on SEA/SH compliance in the Project Team meeting agenda. ➢ Undertake regular progress monitoring of SEA/SH prevention and response activities on project sites and provide feedback to improve performance	➢ Indicators developed and consulted upon ➢ Number of reports submitted to the Bank for review and feedback ➢ Number of monitoring visits per quarter as established in the ESCP	MLF (PIU Social Specialist) with a support from MoGCSW, GBV service providers, women associations, youth association, Disability associations, PGD, MoH, POs	Before Quarter 2 of Year 1 and continued throughout project implementation	**No Separate Cost** (Cost of developing indicators is covered under sub-component 4.1, Project management and coordination; and reporting are the responsibilities of the PIU under Component 4)
	To enhance women's access to opportunities in civil work and other project benefits	Selection of individuals who will benefit from opportunities under the project will be gender-sensitive and inclusive (selection criteria (quota) and selection panels	Number and proportion of females beneficiaries (including female employees and business owners) in financial	MLF (PIU Social Specialist) with a support from POs, project contractors and suppliers	Throughout the project implementation	**No Separate Cost** (Cost will be captured in Contractors Bidding Documents)

			support and other project benefit packages			
		Ensuring that women are given the first right of employment in certain activities in civil works such as site Wardens	Number of women employed on site	Project contractors and project consultants	During the implementation of the subprojects	**No Separate Cost** (Cost will be captured in Contractors Bidding Documents)
		Selection panel/criteria for project support package will be gender-sensitive	Number of females on the selection panel	MLF /PIU, Project contractors and project consultants	Throughout the project implementation	**No Separate Cost** (Cost will be captured in Contractors Bidding Documents)
	To sensitize the public project related to GBV/SEA/SH issues	Conduct two radio programs in each district nationwide every year to sensitize small-holder farmers, livestock herders and keepers, potential beneficiaries and the general public on the content, mode of application and selection in relation to the establishment of associations and other forms of support under the Project as well as GBV/SEA/SH uptake points and the South Sudan GBV referral protocol, the Project Grievance Mechanisms as together with South Sudan social protection laws and another mechanism for the protection of women, vulnerable youths, persons with disability and children including protection from GBV, SEA, SH and child labor	Number of radio programs conducted in each beneficiary county/districts	MLF/PIU, Media, MoGCSW, PGD, managers of one stop GBV centers in various county/districts and GBV service providers	Starting from Quarter 1 and continuing throughout the project lifespan	**30,000.00**
	To ensure that clear systems for reporting accountability and feedback for GBV/SEA/SH are in place	Organize discussions and agreements with stakeholders to formally outline processes for referrals, tackling and feedback between the project and service providers on cases and how to handle data and to enhance ownership of the process of handling SEA/SH cases.	➢ Number of sensitizing meetings with minutes prepared and shared with the Bank	MLF (PIU Social specialist) with a support from GBV service providers, PGD, POs, MoGCSW	Starting from Quarter 2 continuing throughout project lifespan	**25,000.00** (cost covers expenses on one annual workshop for **5 years @ USD 5,000** per workshop)

		Discuss and agree on financial and/or technical support arrangements with each service provider. ➢ Embark on periodic visits and engagement with service providers and other stakeholders to review the effectiveness and efficiency of reporting systems, and interaction and resolution of cases. ➢ Organize annual stakeholders' forum to share information, and receive and incorporate feedback for improvement. ➢ Coordinate with stakeholders on common communication or advocacy actions/ events/ policies/ protocols to prevent and respond to GBV, SEA/SH risks	➢ Number of field visit ➢ Number of annual workshops organized			
	To mitigate SEA/SH and Violence against Children, PWDs, the Elderly, ethnic minorities and other Vulnerable Groups	➢ Conduct snap checks on the various sub-project sites and within MLF and POs offices as well as the premises of participating livestock production to check on the age of workers and potential cases of GBV/SEA/SH including those involving minors and other vulnerable groups ➢ Conduct monthly environmental and social monitoring visits to sub - project sites ➢ Engage with local communities to verify whether GBV/SEA/SH issues have occurred on a sub - project and under-aged persons have been working on sub project sites and with MLF, beneficiary small holder farmers, livestock herders and keepers, and POs.	➢ Number of snap checks visits conducted by PIU Social Specialist ➢ Number and gender of persons under 18 years observed on site during snap checks and monitoring visits ➢ Number, age and gender of GBV/SEA/SH survivors and perpetrators 18 years and below ➢ Number of radio programs undertaken in each	MLF (Social specialist) with a support from PGD and MoGCSW	During the implementation of sub-projects	**25,000.00**

			beneficiary county/district			