The Republic of South Sudan

Ministry of Health

Health Sector Transformation Project (HSTP)
(P181385)

ENVIRONMENTAL AND SOCIAL MANAGEMENT
FRAMEWORK (ESMF) – DRAFT

September 2024

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LIST OF ABBREVIATIONS

BHI	Boma Health Initiative
CERC	Contingent Emergency Response Component
CERHSPP	COVID-19 Emergency Response and Health Systems Preparedness Project
CHD	County Health Department
ESCP	Environmental and Social Commitment Plan
ESF	Environmental and Social Framework
ESMF	Environmental and Social Management Framework
FY	Fiscal Year
GBV	Gender-Based Violence
GDP	Gross Domestic Product
GIIP	Good International Industry Practice
GRM	Grievance Redress Mechanism
HSTP	Health Sector Transformation Project
IDP	Internally Displaced Person
IP	Implementing Partner
IPF	Investment Project Financing
LMP	Labor Management Procedures
MO	Management Organisations
MWMP	Medical Waste Management Plan
MoH	Ministry of Health
NGO	Non-Governmental Organisation
OHS	Occupational, Health and Safety
PHC	Primary Health Care
PHCC/U	Primary Health Care Center/Unit
PoC	Protection of Civilians
PPE	Personal Protective Equipment
PSEA	Protection from Sexual Exploitation and Abuse
SA	Social Assessment
SEP	Stakeholder Engagement Plan
SGBV	Sexual and Gender-Based Violence
SLT	Saving Lives Together framework
SPLA	Sudan People's Liberation Army
SPLA-IO	Sudan People's Liberation Army in Opposition
TPMO	Third-Party Monitoring Organization
UN	United Nations
UNICEF	United Nations Children's Fund
UNMISS	United Nations Mission in South Sudan
UNSMS	United Nations Security Management Systems
USD	United States Dollar
WASH	Water, Sanitation and Hygiene
WB	World Bank
WHO	World Health Organization
WMP	Waste Management Plan

1   EXECUTIVE SUMMARY

The Government of South Sudan (GoSS) has secured financing from the World Bank to support the strengthening of the national health system through the Health Sector Transformation Project (HSTP). This initiative builds on previous projects like the COVID-19 Emergency Response and Health Systems Preparedness Project (CERHSPP) and aims to further enhance the health system's capacity to provide essential health services while improving its readiness to respond to public health emergencies. The project focuses on health system strengthening with an emphasis on critical areas such as case management, psychosocial support, and gender-sensitive interventions—areas that require additional funding to ensure comprehensive service delivery.

In collaboration with the World Health Organization (WHO), the United Nations Children's Fund (UNICEF), and the World Bank (WB), the Ministry of Health (MoH) has developed this Environmental and Social Management Framework (ESMF). The ESMF ensures that the HSTP complies with the World Bank's Environmental and Social Framework (ESF), United Nation Environmental and Social Sustainability Framework and aligns with national policies. The HSTP covers all ten states and three administrative areas, providing support to refugees, host communities, and other vulnerable groups. Core activities include procurement and last-mile distribution of pharmaceuticals and medical supply, integrated health and nutrition services, and restoration of health and nutrition facilities.

The World Bank's ESF requires that all projects conduct environmental and social risk assessments, identify mitigation measures, and implement comprehensive risk management procedures. The ESMF serves as a practical tool for identifying and managing these risks. Drawing on lessons from previous projects, such as the South Sudan Provision of Essential Health Services Project (PEHSP) and CERHSPP, the framework identifies relevant Environmental and Social Standards (ESSs) and outlines mitigation strategies for identified risks. Key instruments included in the ESMF are:

- Labour Management Procedures (LMP)
- Gender-Based Violence/Sexual Exploitation and Abuse/Sexual Harassment (GBV/SEA/SH) Prevention and Response Action Plan
- General Medical Waste Management Plan (GWMP)
- Capacity Assessment and Action Plan (CAAP)

Gender-Based Violence (GBV) Prevention and Response: Despite the promising social impacts, the project social and Sexual Exploitation and Abuse (SEA), and Sexual Harassment (SH) risks are classified as high. During the project implementation, the project has established a GBV Prevention and Response Mechanism. This includes the development of a GBV/SEA/SH Action Plan, outlining preventive measures, survivor-centered support services, and grievance redress mechanism.

A key focus of the HSTP is **Health System Strengthening**. This component aims to enhance South Sudan's capacity for health emergency preparedness and response, laboratory strengthening, disease control, blood banking, and the health management information system (HMIS). These efforts are geared towards building a more resilient and efficient health system that can address both current and future health challenges. The ESMF ensures that these activities promote environmental sustainability and social cohesion, particularly in communities hosting refugees and other vulnerable populations.

Component 1. Provision of Basic Health Services (implemented by UNICEF):

- Subcomponent 1.1. Delivery of high impact basic and nutrition services nationwide through health facilities;
- Subcomponent 1.2. Boma Health Initiative;
- Subcomponent 1.3. Pharmaceutical and Last Mile Delivery; and
- Subcomponent 1.4. Climate Resilient Health Service Delivery.

Component 2. Health System Strengthening (implemented by WHO):

- Sub-component 2.1: Health Emergency Preparedness and Response, Laboratory Strengthening and Disease Control;
- Sub-component 2.2: Blood Banking and Transfusion;
- Sub-component 2.3: Health Service Quality Improvement;
- Sub-component 2.4: Health Management Information System; and
- Sub-component 2.5: Health Sector Stewardship and Financing.

Component 3: Monitoring and Evaluation and Project Management (Implemented by competitively selected Third Party Monitoring Agency (ies) and the Project Management Unit):

- Sub-component 3.1: Third Party Monitoring;
- Sub-component 3.2: Data Analysis and Visualization Platform; and
- Sub-component 3.3: Contract and Program Management Capacity Development.
- Sub-component 3.4: Project Management

Component 4 is the Contingent Emergency Response component (all implementing partners).

To comply with South Sudan's regulations and the World Bank's environmental and social requirements, the ESMF provides a framework for identifying, assessing, and managing potential environmental and social impacts of the HSTP. Since specific project locations are yet to be determined, site-specific Environmental and Social Management Plans (ESMPs) will be prepared as needed during project implementation. The ESMF ensures that all HSTP activities adhere to internationally recognized standards, including those set by WHO.

In line with the World Bank's ESF, all stakeholder engagement and consultations related to this project are governed by the Stakeholder Engagement Plan (SEP), which has already been disclosed. The SEP outlines how stakeholders and potential project beneficiaries will be engaged throughout the project lifecycle. Any consultations and engagements related to the ESMF approval process, as well as future subproject Environmental and Social Impact Assessments (ESIAs) and Environmental and Social Management Plans (ESMPs), will follow the procedures defined in the SEP. The ESMF refers to the SEP for guidance on all stakeholder consultation activities.

Key stakeholders to be involved with implementation or monitoring this project are:

- Ministry of Health (MoH)
- World Health Organization (WHO)
- United Nations Children's Fund (UNICEF)
- World Bank (WB)
- Third Party Monitoring Agencies (TPM)

- Project Management Unit (PMU)
- Local Governments and Health Authorities
- Health Facility Management and Staff
- Community-Based Organizations (CBOs) and Civil Society Organizations (CSOs)
- Refugee and Host Communities
- Bilateral and Multilateral Donors
- Private Sector Partners
- Environmental and Social Safeguards Specialists

Capacity building will be crucial for the successful implementation of the ESMF under the Health Sector Transformation Project (HSTP). The Ministry of Health (MoH) will recruit a qualified Environmental Health Specialist and a Social Development Specialist to oversee the environmental and social aspects of the project, as outlined in this ESMF. To ensure effective monitoring of environmental and social impacts.

Policy and Regulatory Framework: The ESMF outlines the relevant international and national laws and policies applicable to environmental and social risks. It ensures that the project adheres to the World Bank's ESF and the Environmental and Social Standards (ESSs) of the Management Organizations (MOs), promoting consistent risk management across all components of the HSTP.

Implementation and Monitoring: The ESMF includes a robust implementation and monitoring framework, involving regular reporting, stakeholder engagement, and capacity-building activities. The Ministry of Health, with support from WHO, UNICEF, and the World Bank, will oversee the implementation, ensuring compliance with the ESMF. A dedicated capacity development plan will be developed, led by the MoH Project Management Unit (PMU).

The framework will be updated as necessary throughout the project lifecycle to ensure continued relevance and effectiveness in managing environmental and social risks, and a capacity development plan will be implemented by the MoH Project Management Unit (PMU). The estimated annual budget for ESMF implementation is USD 2.3 million (see subsection 10.2.2 for further details)).

1. Introduction

1.1 Background

The South Sudan Health Sector Transformation Project (HSTP) has been designed and appraised for the nationwide benefit of the people of South Sudan living within the boundaries of the Republic of South Sudan, with estimated population of 14.2 million[1]. The HSTP will support 1158 health facilities in all the 10 states (Central Equatoria State, Eastern Equatoria State, Central Equatoria State, Jonglei State, Unity State, Upper Nile State, Northern Bahr el Ghazal State, Warrap State, Western Bahr el Ghazal State) and 3 administrative areas (Abyei AA, Ruweng AA and Greater Pibor AA) of South Sudan.

The project aims to improve the availability and quality of health services in targeted facilities and aims to provide support that is aligned with other engagements of health partners in the country, whether they be emergency-related or basic service delivery support. This includes the provision of support that is both financial (performance payments, hazard pay, salary top-ups, etc.) and non-financial (provision of drugs, equipment, rehabilitation).

The government will own the project and provide general oversight while UNICEF and WHO will be fund managers. The fund managers will recruit and work with Implementing Partners (IP's), contractors, primary suppliers, service providers and consultants. Communities living in the ten states and three administrative areas are considered the beneficiaries of the project and are expected to receive services that will be provided according to the South Sudan laws and policies, the World Bank's Environmental and Social Framework (ESF) and the UN Environmental and Social Sustainability Framework. If there are any discrepancies among E&S standards, the most stringent requirements shall be applied.

1.2 Project Objective and Description

The Project Development Objective is to expand access to basic packages of health and nutrition services, improve the health sector stewardship, and strengthen the health sector. The project will also strengthen the country's response capacity in the event of an emergency. Accordingly, it is designed to expand access to a basic package of health and nutrition services for the people in South Sudan including refugees, with a scope of support by both available and future financing over the immediate- and short-term. Ultimately, the expected result of the project will include (see the PAD for details), among others:

- Composite health systems strengthening index (HSSI; measuring blood banks, laboratories, and supervision structures) by project end.
- Percentage of Bomas covered by the Boma Health Initiative
   o Percentage of Bomas covered by the Boma Health Initiative in refugee / host community areas
- Increase in average health sector national level budget execution rate
- Increase the percentage of pregnant women attending ANC from 20% to 52%.
- Increase the percentage of deliveries attended by health care personnel from 19% to 43%
- Expand the immunization of vaccine preventable diseases from 75% to 90%.
- Improve under five nutritional status from 16% wasted to 11%.

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[1] South Sudan population Projections, 2020-2040

The project has four components. The first component, which will be implemented by United Nations Children's Fund (UNICEF), will support the provision of basic health services nationwide. The second component, to be implemented by the World Health Organization (WHO), will support strengthening of the health systems. The third component will support the monitoring and evaluation of the project management that will be managed by RSS/MoH PMU. The fourth component is a Contingent Emergency Response Component. Each of these components is briefly described below.

Component 1: Provision of Essential Health Services Nationwide
The HSTP enables the delivery of basic health services nationwide, with a focus of improving health availability including to refugees and host communities. Through subcomponents 1.1 and 1.2 UNICEF will contract Implementing Partners to deliver health services to designated lots.

Subcomponent 1.1. Delivery of high impact basic health and nutrition services nationwide through health facilities. This subcomponent will deliver cost-effective, high impact essential health and nutrition services through health facilities. The subcomponent aims to cover 1,158 health facilities throughout the project life of the project using a phased approach beginning with 600 health facilities, including 135 health facilities in refugees and host communities' areas.

Subcomponent 1.2: Boma Health Initiative. This subcomponent will invest in expanding and strengthening the BHI to deliver basic health at the community level. Specifically, the component will (i) finance the delivery of health services through the BHI; (ii) increase the coverage of the BHI based on the needs assessment and time plan; (iii) increase the number of female Boma health workers; (v) strengthen supervision, training, supply chain and support for BHWs.
Subcomponent 1.3. Pharmaceutical and supply last mile delivery. This subcomponent aims to improve the availability of essential medicines at health facilities through strengthened supply systems. The subcomponent will finance a pharmaceutical supply agent to be responsible for: (i) country-wide pharmaceutical and medical supply distribution of health supplies for health facilities; (ii) last mile logistics including delivery of medical supplies and pharmaceuticals to health facilities.

Subcomponent 1.4: Climate Resilience Health Service Delivery. This subcomponent will enable the broad climate change adaptation through the project with the aim of minimising the impact of climate change on South Sudan's population, health system and the project. The subcomponent will finance: (i) WASH improvements in facilities; (ii) minor rehabilitation to selected health facilities; (iii) minor rehabilitation of pharmaceutical stores; (iv) solar electrification of health facilities; (v) development and dissemination of climate adaptive and energy efficient rehabilitation guidelines; (vi) development and dissemination of multi-hazard climate emergency preparedness and response plan; (vii) training for health facility, CHD and state UNICEF staff on climate emergency preparedness and response as well as climate and health adaptation.

Component 2: Health Systems Strengthening

This component will be implemented by the World Health Organization (WHO) with the aim of strengthening South Sudan's health system and to facilitate health service access and capacity improvements.

Subcomponent 2.1. Health System Preparedness and Response, Laboratory strengthening and Disease Control. The subcomponent will finance specific activities (i) training and operational support to the Integrated Surveillance and Response (IDSR); (ii) operational and rehabilitation cost for three Public Health Emergency Operation Centres (PHEOC); (iii) development, dissemination and training of trainers on multiphase emergency preparedness and response; (iv) training and staff costs for Points of Entry (PoE) surveillance; (v) update and disseminate laboratory guidelines; (vi) procure laboratory equipment, consumables, reagents and test kits; (vii) develop a laboratory accreditation program and scale up quality management; (viii) Neglected Tropical Diseases training of trainers; (iv) development of NCDs guidelines.

Subcomponent 2.2. Blood Banking and Transfusion. This subcomponent will focus on strengthening the country's blood banking and transfusion system, which currently has very limited reach. It will finance (i) development of guidelines for the proper collection, storage, transport, and use of blood for transfusions; (ii) strengthening existing blood banking services; (iii) development of systems and protocols for the transfer of blood products for transfusion; (iv) conducting community and donor sensitization on the collection and use of blood products.

Subcomponent 2.3: Health Service Quality Improvement. This sub-component will:
(i) develop a Human Resources for Health (HRH) policy, strategy, and manual;
(ii) implement the national Human Resources for Health Information System (HRHIS);
(iii) Review and update the health worker training curriculum;
(iv) review and update the essential medicines list and standard treatment guidelines, including rational use of medicines; strengthen the capacity of the Drug and Food Control Authority (DFCA) at the State and National levels through training, development of tools and guidelines, and operational support for testing and supervision;
(v) review and update the national quality of care policy and strategy;
(vi) review and update the Basic Package of Health and Nutrition Services;
(vii) establishment of a quality of care system through development of guidelines, tools, and standards, training of trainers on quality of care, piloting quality of care teams and supporting national scale up, and support for National and State level quality improvement supervision.

Subcomponents 2.4: Health Management Information System. This subcomponent will (i) finance procurement of ICT equipment at the national level and train staff on data entry and use; (ii) train trainers to develop health facility staff data entry, management, and use capacity; (iii) create interoperability and integration between data systems and ensure data storage and backup; (iv) develop, print, and disseminate SOPs for HMIS data entry and use at all levels; (v) conduct data review meetings and generate data use

tools; (vi) Establish and operate the National and State level HMIS and M&E Technical Working Groups; (viii) conduct data quality improvement activities at the facility and national level; (ix) operationalize a national and state level research committee, building on existing structure; (x) conduct an annual health sector review meeting; and (xi) maintain and institutionalise the Health Service Functionality (HSF) Database.

Subcomponent 2.5: Health Sector Stewardship and Financing. This subcomponent will (i) Train National and State UNICEF managers and leaders on leadership, management, policy formulation, operational planning, data use for decision making, and budgeting; (ii) develop annual operational plans at the National and State levels, aligned with the UNICEF's HSSP; (iii) establish health sector coordination units at the National and State UNICEFs by setting up offices; (iv) conduct intersectoral and inter-ministerial advocacy on the determinants of health through the development of materials and health communication activities; (v) develop a Public Private Partnership framework; (vi) conduct a National Health Accounts (NHA); (vii) develop, validate, and disseminate a national Health Financing Strategy; and (viii) develop UNICEF capacity for financial management, with a focus on improved budget execution, and intersectoral advocacy for health sector budget allocations.

Component 3: Monitoring and Evaluation and Project Management
This component will finance costs related to monitoring and evaluation and management of project activities.

Subcomponent 3.1 Third Party Monitoring. The project will finance third-party monitoring of delivery of basic health services under subcomponent 1.1, and will build on arrangements through the CERHSPP, incorporating lessons learned from the project.

Subcomponent 3.2: Data analysis and visualisation platform. This sub-component will develop a data visualisation and use platform (software) focusing on visual representations of TPM and routine data, inclusive of BHI data.

Subcomponent 3.3: Contract and program management capacity development. This sub-component will develop the capacity of the PMU (through consultancy work) to manage health service delivery contracts focusing on monitoring health service delivery performance and taking actions; resolution of disputes related to health service contracts; review and feedback on contractor deliverables; liaising and coordinating with other relevant departments within the UNICEF to provide technical guidance to contractors; providing field level supervision to contractors; and developing a contract management manual. The subcomponent will finance: (i) technical assistance and capacity development on contract, environmental and social risk, and program management; and (ii) the development of contract management plan.

Subcomponent 3.4: Project management (PMU) This sub-component will finance the day-to-day operations of the PMU including project supervision, management, and oversight. The subcomponent will support: i) PMU staff costs; ii) PMU project supervision and oversight; iii) environmental and social safeguards activities; iv) PMU office equipment, stationary, and other day-to-day operating costs; v) State

MoH project supervisory visits; vi) costs of specialists needed to support the project; and vii) operational costs of the project steering committee.

Component 4 Contingent Emergency Response
The objective of this component is to improve the country's response capacity in the event of an emergency, following the procedures governed by Paragraph 12 of World Bank Investment Project Financing (IPF) Policy (ESF7). The actual activities and their potential implications on environment and social safeguards will depend on the nature of the emergency and response.

1.3   Rationale for the ESMF

This ESMF has been developed through a consultative process led by the Ministry of Health in collaboration with MOs and guidance from the World Bank to ensure that HSTP is consistent with the country's Environmental laws and policies, and the World Bank's Environmental and Social Framework (ESF). The HSTP project activities could have risks and impacts to the environment (land, atmosphere, water). The activities could also impact the social interactions at the workplace and in the surrounding and beneficiary communities. The potential impacts could undermine sustainability of the project, safety, security, and social welfare of the service providers and beneficiaries. This ESMF is therefore intended to serve as a practical tool to guide identification and mitigation of potential environmental and social risks and impacts of proposed investments of the HSTP project components and respective sub-components. The ESMF will be updated in line with any future changes and/or updates.

The following instruments have been prepared and are included as part of the ESMF:
- Labour Management Procedures (LMP)
- Gender-based violence/Sexual Exploitation and Abuse/Sexual Harassment (GBV/SEA/SH) Prevention and response Action Plan
- General Medical Waste Management Plan (GWMP)

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

1.5 Methodology

The methodology used to develop this ESMF was based on literature review, stakeholder consultations, and a review of lessons learnt from the implementation of the CERHSPP, which are described below.

Literature Review

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

- Review of the CERHSPP ESMF
- Review of ESMF of similar projects in the country and region financed by the WB
- Review of South Sudan's policies, laws, procedures, regulatory and administrative frameworks
- Review of the WB ESF
- Review of the UN Environmental and Social Sustainability Framework
- Existing documents related to the HSTP, such as the Environmental and Social Commitment Plan (ESCP), Stakeholder Engagement Plan (SEP), the appraisal ESRS, the draft Project Appraisal Document (PAD)
- Documents and literature on environmental and social aspects of the project areas for the preparation of the Environmental and Social Baseline

Stakeholder Engagement

In preparations for the HSTP, several key stakeholders were consulted in South Sudan, mainly in Juba, between November 2023 and June 2024. The consultations were guided by the stakeholder engagement plan that had been developed and which considered the degree of influence/level in interest of the stakeholders as pertains to the project. Key among the stakeholders consulted included the following:

- National Ministry of Health represented by the Minister, Undersecretary, DG's and Directors
- National legislative assembly members from the Committee on Health
- State ministries of health represented by their ministers, DG's, Directors and CHD's
- Other line ministries; Ministry of Environment, Ministry of Gender, Child and Social Welfare, Ministry of Public Services and Human Resources Development, Ministry of Labor.
- Donors and other partners investing in the health sector; USAID, FCDO, Global Fund, Gavi, etc.
- IP's implementing the current and previous projects
- Community leaders, faith-based leaders, women representatives, and youth leaders
- Academia, private sector, and media representatives

Lesson learned from Previous WB Projects

Lesson learned from the WB interventions in the health sector in South Sudan were used to inform the proposed environmental and social intervention of the ESMF. Of particular importance was the South Sudan Provision of Essential Health Services Project (PEHSP) and the Covid 19 Emergency Response and Health Systems Preparedness Project (CERHSPP). The effectiveness of CERHSPP also required stakeholder engagement and the completeness of the ESMF, ESCP and other relevant E&S documents. Several E&S screenings and assessments were conducted as part of the CERHSPP implementation in Upper Nile, Jonglei, Unity state and Pibor Administrative area. Departing from CERHSPP to HSTP will mean the scaling up of services to include all the ten states and the three administrative areas.

2 POLICY, LEGAL AND REGULATORY FRAMEWORK

The laws, policies and regulatory frameworks governing the environmental and social aspects in South Sudan are revised and updated to ensure tandem with similar policies and frameworks in the East African Region. However, some of the previous Southern Sudan (2005-2011) and Sudan (pre 2005) remains in place. The ESMF is aligned with these national laws and procedures, as well as the WB ESS.

National Policy/Legal Framework	Description	Relevance to the Project
The Transitional Constitution of the Republic of South Sudan, 2011	Article 41 of the constitution sets the basis for policies related to the environment including: (1) the people of South Sudan shall have a right to a clean and healthy environment; (2) every person shall have the obligation to protect the environment for the benefit of present and future generations Article 166 (6) further mandates local governments to involve communities in decision making regarding the promotion of a safe and healthy environment.	The project's implementation is anticipated to have both positive and negative environmental and social impacts and will therefore need to be undertaken in a manner that: a) Promotes sustainable development; and b) Protects the right to a clean and healthy environment for communities and persons in the project host areas c) Promotes meaningful consultations with various stakeholders
Environment Policy of South Sudan (2015 – 2025)	This legislation aims to protect the Environment in South Sudan and to promote ecologically sustainable development that improves the quality of life. The policy addresses a number of aspects that include; climate change, management of resources, corporate social and environmental responsibilities and environmental planning, among others. This policy sets the stage for managing environmental shocks, assisting political leaders and policymakers to allocate resources wisely to promote development programmes that are economically efficient, socially equitable, and environmentally friendly to ensure sustainable progress.	The project is anticipated to generate waste in the form of medical waste, effluents and plastic leading to environmental contamination through open dumping/incineration, which, in turn, result in water, soil and air pollution. Therefore, the Bill is key to addressing pollution prevention, control and waste management. The project will involve provision of support and capacity building to the Project Implementation Unit that will include strengthening the environmental and social safeguard implementation capacity at the Ministry of Energy and Dams as well as other project implementation entities/partners.
The South Sudan National Gender Policy, 2012	The ultimate goal of this policy is to ensure that gender equality is an integral part of all laws, policies, programs and activities of all South Sudan's public institutions, the private sector and civil society so as to achieve equality in the cultural, social, political and economic spheres in South Sudan.	Gender discrimination, GBV, sexual exploitation and abuse and sexual harassment (SEA/SH) among others may be associated with project activities.
The Labour Act, 2017	The purpose of this Act is to establish a legal framework for the minimum conditions of employment, labour relations, labour institutions, dispute resolution and provision for health and safety at the workplace.	The project will employ a large number of professionals through various modalities i.e. direct workers, contracted workers, third party contracted workers and primary supply workers.

The Land Act, 2009	One of the key objectives of the Land Act is to promote a land management system and provide fair and prompt compensation to any person whose right of occupancy, ownership or recognised long standing occupancy of customary use of land is revoked or otherwise interfered with by the Government. The Land Act requires that the government consults local communities and consider their views in decisions about community land.	Whereas the project is not expected to require significant land acquisition and resettlement, some activities under component 4 (CERC) may require physical displacement and land acquisition due to rehabilitation /construction of new health facilities. The project should seek to fairly and promptly compensate persons/communities whose land will be earmarked to host project components/activities. Additionally, during the implementation of the project, local communities (affected communities) must be adequately consulted.
Child Act (2008)	The Child Act regulates the prohibition on child labour, the protection of children and young persons and hazardous child labour.	This policy will ensure that no child engages in project-related work that could negatively affect their health and personal development or interfere with their education.
Public Health Act (2008)	Emphasises the prevention of the pollution of air and water. Key provisions include the protection of the sanitation of the environment, and it encompasses the measure to address the pollution of water and air. The Public Health Act (2008) also provides the need for the protection of pollution of water through the enforcement of regulations and measures necessary to combat all elements of pollution and protect the natural level of the environment and public health.	The project is anticipated to generate waste in the form of medical waste, effluents and plastic leading to environmental contamination through open dumping/incineration, which, in turn, result in water, soil and air pollution. The increased outreach & use of mobile health services could also lead to higher fuel consumption and vehicle emissions, contributing to air pollution. Furthermore, the rise in health services delivery may also lead to a higher amount of medical waste, necessitating proper handling and disposal to avoid/minimise/mitigate environmental contamination.
The Environmental Protection Act, 2001	The policy objectives are: (i) To protect the environment in its holistic definition for the realisation of sustainable development; (ii) To improve the environment while ensuring sustainable exploitation of natural resources; (iii) To create a link between environmental and developmental issues, and to empower concerned national authorities and organs to assume an effective role in environmental protection.	Environmental and Social impacts of the respective sub-projects of the Project should be addressed in a proactive manner by subjecting the respective projects to environmental and assessments prior to their commencement.
South Sudan Access to Information Act No. 65 of 2013	The purpose of the Act is to give effect to the constitutional right of access to information, promote maximum disclosure of information in the public interest and establish effective mechanisms to secure that right.	This emphasises the need to disseminate project information to all the respective stakeholders and which go a long way in ensuring transparency on various aspects of the project.

International Convention and legal Agreements

In addition to compliance with regulatory requirements, the Project will also adhere to the international conventions ratified by South Sudan. Key conventions and treaties potentially relevant to the Project are outlined in Table below.

Treaty, Convention, Agreement	Requirement of the Treaty, Convention, and Agreement	Ratification	Relevance to the Project
United Nations Framework Convention on Climate Change 1992	Under Article 3 (3) parties are required to take precautionary measures to anticipate, prevent or minimise the causes of climate change and mitigate its adverse effects.	17th February 2014	Given the fossil fuel heavy nature of South Sudan's energy mix, the solarisation aspect of the project will help to reduce the energy generation related emissions and thus contributing to the country's Greenhouse Gas reduction ambitions as set out in the country's second Nationally Determined Contributions (NDC) report.
Paris Agreement	Its goal is to limit global warming to well below 2 degrees Celsius, preferably to 1.5 degrees Celsius, compared to pre-industrial levels. To achieve this long-term temperature goal, countries aim to reach global peaking of greenhouse gas emissions as soon as possible to achieve a climate neutral world by mid-century.	23rd February 2021	
Conservation of Nature and Natural Resources, 2003	The convention aims at enhancing environmental protection, conservation, and sustainable use of natural resources. The convention further identifies water as a critical resource which needs to be maintained at quantitative and qualitative levels.	24th January 2013	Project planning should ensure that the project takes appropriate measures to minimise potential impacts on biodiversity by putting in place measures to control siltation of water bodies and wetlands, disorientation of migrating birds and hunting/illegal exploitation of wildlife resources by contracted teams.
Convention for the Safeguarding of the Intangible Cultural Heritage, 2003	The objectives include safeguard the intangible cultural heritage, ensure respect for the intangible cultural heritage of the communities, groups and individuals concerned and raise awareness at the local, national and international levels regarding the importance of the intangible cultural heritage, and of ensuring mutual appreciation thereof.	23rd October 2017	The people of South Sudan have a number of customs and beliefs that may entail tangible and intangible cultural heritage. The implementation of the project should consider the potential impact on cultural heritage in the project area and implement measures to safeguard them where they exist.

Convention on Biological Diversity, (1992)	Its objectives are to conserve biological diversity, promote the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and technologies, and by appropriate funding (Article 1).	17th February 2014	South Sudan has a lot of biodiversity and Wildlife outside protected areas. Project planning should ensure that the project takes appropriate measures to minimise potential impacts on biodiversity and key habitats that may occur in areas earmarked to host project components.
International Labour Organisation's Fundamental Conventions	Labour, working conditions, health and safety are the subject of numerous international agreements, conventions, policies, and standards. Fundamental labour standards formulated by the International Labour Organisation (ILO) include forced labour, child labour and workmen's compensation among others.	2012	Labour policies for the Project and impact mitigation measures for employment should be in accordance with the requirements of these Conventions.
Ramsar Convention, 1971	The Convention is an international treaty for the conservation and sustainable utilisation of wetlands, recognizing the fundamental ecological functions of wetlands and their economic, cultural, scientific and recreational value.	10th October 2013	South Sudan currently has one (Sudd wetlands) site designated as a Wetland of International Importance. This wetland should be conserved during the development of the project.
Vienna Convention on the Protection of the Ozone Layer, 1985	Parties should take appropriate measures to protect human health and the environment against adverse effects resulting or likely to result from destruction of the Ozone layer.	12th January 2012	The Proposed Project should undertake measures to minimise emissions that deplete the Ozone layer by locally sourcing for materials that are required for the project to avoid long overland transportation of imported materials.
Convention on the Rights of the Child (1989)	The Convention is the most comprehensive compilation of international legal standards for the protection of the human rights of children. It acknowledges children as individuals with rights and responsibilities according to their age and development, as well as members of a family or community.	23rd January 2015	Activities associated with the development of project such as construction activities will require semi-skilled and unskilled labour that pose a potential risk of engaging child labour.
Convention on the Elimination of all forms of Discrimination against Women (CEDAW)	CEDAW places explicit obligations on states to protect women and girls from sexual exploitation and abuse, among other issues.	2014	South Sudan had exhibited an obligation to protect women and children from sexual exploitation and abuse.

2.1 The World Bank Environmental and Social Framework (ESF)

The Environmental and Social Framework (ESF) sets out the World Bank's commitment to sustainable development through a set of Environmental and Social Standards (ESSs) that are designed to support borrowers' projects with the aim of ending extreme poverty and promoting shared prosperity. The ten (10) World Bank ESSs and their application to the components and subcomponents of the HSTP is outlined in the following paragraphs:

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

The environmental and social assessment will be proportionate to the risks and impacts of the project. It will inform the design of the project and be used to identify mitigation measures and actions and to improve decision making. This standard adopts differentiated measures so that adverse impacts do not fall disproportionately on the disadvantaged or vulnerable, and they are not disadvantaged in sharing development benefits and opportunities resulting from the project. ESS1 ensures that national environmental and social institutions, systems, laws, regulations and procedures are utilised in the assessment, development and implementation of projects, whenever appropriate.

An assessment of the environmental and social risks and impacts of the project throughout the project life cycle will be conducted in a systematic manner, proportional to the nature and scale of the project and the potential risks and impacts. The assessment will evaluate the project's potential environmental and social risks and impacts including stakeholder engagement as an integral part of the assessment.

ESS2 Labor and Working Conditions
ESS2 recognizes the importance of employment creation and income generation in the pursuit of poverty reduction and inclusive economic growth. This standard provides specific requirements on occupation health and safety, fair treatment, non-discrimination and equal opportunity of project workers and Grievance Redress Mechanism (GRM). ESS2 applies to all project workers including direct workers, contracted workers, primary supply workers and community workers.

The project will develop a labour management plan and implement labour management procedures applicable to the project setting and ways in which project workers will be managed, in accordance with the requirements of national law and this ESS.

ESS3 Resource Efficiency and Pollution Prevention and Management
ESS 3 recognizes that economic activity and urbanisation often generate pollution to air, water and land, and consume finite resources that may threaten people, ecosystem services and the environment at the local, regional and global levels. The current and projected atmospheric concentration of greenhouse gases (GHG) threatens the welfare of current and future generations. This ESS sets out the requirements to address resource efficiency and pollution prevention and management throughout the project life cycle consistent with Good International Industry Practices (GIIP).

The ESMF should include sections on resource efficiency and pollution prevention and management. The applicability of this standard is established during the environmental and social assessment described in ESS1.

ESS4 Community Health and Safety
ESS4 recognizes that project activities, equipment, and infrastructure can increase community exposure to risks and impacts i.e. pollution, hazardous materials, traffic and accidents related risks during transportation of personnel and items, an increase in crime, prostitution, GBV/SEA, labour influx, security issues and sexual exploitation. In addition, communities that are already subjected to impacts from climate change may also experience an acceleration or intensification of impacts due to project activities.

ESS4 also addresses the health, safety, and security risks and impacts on project-affected communities and the corresponding responsibility of clients to avoid or minimize such risks and impacts, with particular attention to people who, because of their circumstances, may be vulnerable such as women and children.

ESS5 Land Acquisition, Restrictions on Land Use, and Involuntary Resettlement
ESS5 recognizes that project-related land acquisition and restrictions on land use can have adverse impacts on communities and persons. Project-related land acquisition or restrictions on land use may cause physical displacement (relocation, loss of residential land or loss of shelter), economic displacement (loss of land, assets or access to assets, leading to loss of income sources or other means of livelihood), or both.

Involuntary resettlement should be avoided; however, where involuntary resettlement is unavoidable, appropriate measures to mitigate adverse impacts on displaced persons should be carefully planned and implemented (adequately compensated). Moreover, the project will develop and implement a Resettlement Framework (RP) and individual Resettlement Projects (RP'S) for sub-projects.

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

This standard recognises the importance of maintaining core ecological functions of habitats, including forests, and the biodiversity they support. It also recognises the need to consider the livelihood of project-affected parties, including Indigenous Peoples, whose access to, or use of, biodiversity or living natural resources may be affected by a project.

ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities
ESS7 recognises that Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities have identities and aspirations that are distinct from mainstream groups in national societies and often are disadvantaged by traditional models of development. Their economic, social, and

legal status frequently limits their capacity to defend their rights to, and interests in, land, territories, and natural and cultural resources, and may restrict their ability to participate in and benefit from development projects.

This standard contributes to poverty reduction and sustainable development by ensuring that projects supported by the Bank enhance opportunities for Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities to participate in, and benefit from, the development process in ways that do not threaten their unique cultural identities and well-being.

ESS8 Cultural Heritage

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

This standard sets out the measures designed to protect cultural heritage throughout the project life cycle. It also sets out additional requirements for cultural heritage in the context of Indigenous Peoples.

ESS9 Financial Intermediaries

This standard is not applicable to the Project.

ESS10 Stakeholder Engagement and Information Disclosure

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

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

Stakeholder engagement, if properly designed and implemented should support the development of strong, constructive and responsive relationships that are important for successful management of a project's environmental and social risks.

WBG Environmental, Health and Safety (EHS) Guidelines and Technical Notes

The HSTP will further apply the WBG General EHS Guidelines including the Guidelines for Healthcare Facilities, which are guidelines that contain the performance levels and measures that are acceptable to the WB. When host country regulations differ from the levels and measures presented in the EHS Guidelines, projects are expected to achieve whichever is more stringent. Effective management of environmental, health, and safety (EHS) issues entails the inclusion of EHS considerations into corporate and facility-level business processes in an organized, hierarchical approach.

The applicability of specific technical notes should be based on the professional opinion of qualified and experienced persons. The HSTP will apply: "Public Consultations and Stakeholder Engagement in WB-supported operations when there are constraints of conducting public meetings" (2020) Communication and Community Engagement Action Plan Guidance Preparedness and Response; Risk Communication and Community Engagement (RCCE) readiness and response; COVID-19 risk communication package for healthcare facilities; Addressing sexual exploitation and abuse and sexual harassment (SEA/SH) in investment; Addressing Gender based violence in Investment Project Financing involving major civil works, 2018; Assessing and managing the risks and impacts of the use of security personnel, 2018; and Managing the risks of adverse impacts on communities from temporary project induced labor influx, 2016.

OP 7.60 - Projects in Disputed Areas

This is not an ESF but part of the safeguards policies. As stated in OP 7.60, Projects in disputed areas may raise a number of delicate problems affecting relations not only between the Bank and its member countries, but also between the country in which the project is carried out and one or more neighboring countries. In order not to prejudice the position of either the Bank or the countries concerned, any dispute over an area in which a proposed project is located is dealt with at the earliest possible stage. The Bank may support a project in a disputed area if the governments concerned agree that, pending the settlement of the dispute, the project proposed for South Sudan should go forward without prejudice to the claims of Sudan, Kenya, and Uganda.

Thus, OP 7.60 is triggered because the project also targets areas that are disputed between South Sudan and its neighbors (Sudan, Kenya, and Uganda), as some of the health facilities selected for support by the project are located in these areas.

United Nations (UN) Environmental and Social Sustainability Framework
The UN Environmental and Social Sustainability Framework aims to enhance accountability for the environmental and social sustainability of the UN systems and policies. The framework will therefore improve the quality and results of UN's activities and projects and help identify opportunities to harness greater efficiencies and reduce costs. The framework proposes a common vision, rationale and objective, individual actions to be taken by each United Nations entity to internalise environmental and social sustainability measures; and collective actions for the system to undertake.

The environmental and social sustainability framework provides an approach to the management of a wide variety of environmental and social impacts and risks. It establishes procedures for identifying and avoiding, or where avoidance is not possible, mitigating environmental and social risks, and for discerning and exploring opportunities to enhance positive environmental and social impacts. The framework is structured around guiding principles, safeguard standards and related operational guidelines.

- Standard 1: Biodiversity Conservation and Sustainable Natural Resource Management
- Standard 2: Climate Change and Disaster Risks
- Standard 3: Community Health, Safety and Security
- Standard 4: Cultural Heritage
- Standard 5: Displacement and Resettlement
- Standard 6: Indigenous Peoples
- Standard 7: Labour and Working Conditions
- Standard 8: Pollution Prevention and Resource Efficiency

Gap Analysis between South Sudan Laws and the WB ESS

WB ESF	National Regulations	Gap	Recommended Action
ESS1 Assessment and Management of Environmental and Social Risks and Impacts			
Identify, assess, evaluate, and manage environment and social risks and impacts through a mitigation hierarchy.		ESS1 has requirements for projects to undertake Cumulative impacts Assessment, Social and Conflict analysis and Strategic Environmental and Social Assessment (SESA), which are missing in South Sudan regulations.	The ESMF should outline the screening process (see Annex 1) of all subprojects and activities in order to assess the levels of assessments that are required from the subprojects.
Assess the environmental and social risks and impacts throughout the project lifecycle, proportional to the nature and scale of the project and the potential risks and impacts.	The Draft Environmental Bill (2015) introduces the requirements for Environmental Impact Assessments, Environmental Audits, and Environmental Monitoring.		
ESS2 Labor and working condition			
Promote the fair treatment, non-discrimination, and equal opportunity of project workers.	The Labour Act, 2017 purpose is to establish a legal framework for the minimum conditions of employment, labour relations, labour institutions, dispute resolution and provision for health and safety at the workplace.	South Sudan has no statutory minimum wage.	The project will monitor the labour and working conditions including wages paid and define the minimum age of employment as 18 years including instituting requirements for contractors to verify the age of workers.
Prevent the use of all forms of forced labour and child labour.		Enforcement of labour laws is minimal.	The project will ensure proper signings of agreements/ contracts that include provisions for the requirements of ESS2.
Support the principles of freedom of association and collective bargaining of project workers with accessible means to raise workplace concerns		Forced labour takes place, and the age of employment is 14 years.	The project should not allow any forced labour.
ESS 3 Resource Efficiency and Pollution Prevention and Management			

WB ESF	National Regulations	Gap	Recommended Action
Avoid or minimize adverse impacts on human health and the environment caused by pollution from project activities.			Projects should implement climate smart practices and incorporate energy-efficient technologies where possible, such as solar power.
Avoid or minimize project-related emissions of climate pollutants.	The Constitution of South Sudan provides specific measures to ensure Prevention of pollution and ecological degradation; promotion of conservation; and rational use of natural resources.	There is a need for an operational environment Act and associated resource efficiency and pollution prevention regulations that are currently missing. The Environmental ACT 2001 was in force before South Sudan gained her independence, and thus is not legally binding in South Sudan although it remains an important piece of legislation.	The project should promote sustainable use of resources and avoid or minimise environmental pollution through the use of the World Bank ESS, including the ESMF and other instruments (such as ESMPs/ESIAs for subprojects).
Avoid or minimize generation of hazardous and non-hazardous waste.			Develop and implement a waste management plan to minimize the generation of hazardous and non-hazardous waste
ESS4 Community Health and Safety			
Anticipate or avoid adverse impacts on the health and safety of project-affected communities during project life cycle from routine and non-routine circumstances.	The Public Health Act (2008) for South Sudan emphasises the prevention of pollution of air and water and also encourages improvement in sanitation.	ESS4 provides for the need to mitigate safeguarding of personnel and property, such as risks related to security and GBV/SEA as may arise from the implementation of project activities.	The project should develop an Action Plan to address GBV/SEA during implementation of activities.
Avoid or minimize community exposure to project-related diseases and hazardous materials and have in place effective measures to address emergency events.			A Security Management Plan is also required on the project.
			Develop and implement a site specific ESMPs/ESIAs incorporating hazardous and non-hazardous management plan to address community health and safety aspects per the ESMF requirements.
ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement			

WB ESF	National Regulations	Gap	Recommended Action
Avoid or minimise involuntary resettlement by exploring project design alternatives and avoid forced eviction. Ensure that resettlement activities are planned and implemented with appropriate disclosure of information, meaningful consultation, and informed participation.	The Land Act of 2009 provides for fair and prompt compensation to any person whose right of occupancy, ownership or recognised long standing occupancy of customary use of land is revoked or otherwise interfered with by the Government.	There is no operational Land Policy to inform the existing law and as a result, the capacity of land management institutions has remained weak.	The project is not anticipated to cause significant involuntary resettlement and physical displacement, however, where involuntary resettlement is unavoidable, appropriate measures to mitigate adverse impacts on displaced persons should be carefully planned and implemented (adequately compensated and considered replacement value) in accordance with the requirements of ESS5 & the project RF.
ESS 6 Biodiversity Conservation and Sustainable Management of Living Natural Resources			
Protect and conserve biodiversity and habitats. Apply the mitigation hierarchy and the precautionary approach in the design and implementation of projects that could have an impact on biodiversity	Forests and Renewable Natural Resources Act, 2002. This is another Act that is no longer legally binding but whose principles remain useful in guiding the management of forest resources in South Sudan. South Sudan ratified the Convention on Biological Diversity	ESS6 prevails to address impacts/risks to biodiversity and natural resources conservation/management, including lack of enforcements of acts, or the no-longer legally binding acts in South Sudan	To manage risk related to ESS6, the ESMF has included E&S screening criteria for excluding subprojects having adverse impacts on critical and natural habitats; procuring building/rehabilitation materials from licensed suppliers; and generic management plan for hazardous wastes, including medical wastes and e-wastes, which will be detailed in site specific ESIAs/ESMPs.
ESS7 Indigenous People/ Sub-Saharan African Historically Underserved Traditional Local Communities			
Ensure that the development process fosters full respect for affected parties' human rights, dignity, aspirations, identity, culture, and natural resource-based livelihoods			

WB ESF	National Regulations	Gap	Recommended Action
Recognize, respect and preserve the culture, knowledge, and practices of Indigenous Peoples, and to provide them with an opportunity to adapt to changing conditions in a manner and time frame acceptable to them	No particular law for South Sudan	No schemes to support historically underserved traditional local communities	The project should take into account historically marginalized communities such as Boya and Didinga in Eastern Equatoria, Kachipo and Jieh in Jonglei, Bongo in Baher El-Ghazal
ESS8 Cultural Heritage			
Protect cultural heritage from the adverse impacts of project activities and support its preservation.			Anticipated to have low impacts. Where there is limited potential impacts, the requirements of the ESS8 applies/prevails and will be addressed through site specific E&S screening and ESMPs/ESIAs as per the ESMF prepared for the project
Promote the equitable sharing of benefits from the use of cultural heritage.	The Constitution of South Sudan, Article 38 (1e) spells out to protect cultural heritage, monuments, and places of national historic or religious importance from destruction, desecration, unlawful removal or illegal export.	No Gaps	The project is anticipated to have low impacts on cultural heritage, thus it will implement chance finds procedure (See Annex 6) if previously unknown cultural heritage is encountered during the implementation of project activities.
ESS9 Financial Intermediaries			
Promote good environmental and social management practices in the subprojects the FI finances.	Not Applicable	Not Applicable	Not Applicable
ESS10 Stakeholder Engagement			
Establish a systematic approach to stakeholder engagement that helps Borrowers assess stakeholder interest and support and provide means for effective and inclusive engagement.			

WB ESF	National Regulations	Gap	Recommended Action
Provide project-affected people with accessible and inclusive means to raise issues and grievances, and to allow Borrowers to respond to and manage such grievances	The Constitution of South Sudan, Article 166 (6) expects local governments to involve communities in decision-making in the promotion of a safe and healthy environment.	There is no operational framework for stakeholder engagement.	The Project will implement stakeholder consultations throughout the lifetime of the project, as per the project Stakeholder Engagement Plan (SEP).
		The grievance redress mechanism in the MOH is not accessible nor responsive.	The project will establish the GRM at the PMU stationed at the MOH.

3   ENVIRONMENTAL AND SOCIAL BASELINES

This section presents the environmental and social baselines for the country, compiled through a literature review. The data presented here is secondary data that is sourced from available published and unpublished documents.

3.1   Environmental Baselines

This section provides a brief description of the project area focusing on the relevant physical and environment features within South Sudan. The sensitive ecosystems and protected areas have been identified and the screening needed will be carried out before subproject execution is defined.

Figure 1: Map of South Sudan

Geographical location of South Sudan
South Sudan, officially the Republic of South Sudan (RoSS) is a landlocked country located in the tropical zone of Eastern Africa between 3N-13N and 24E-36E (Figure 5.1). It is bordered by Ethiopia to the east, Kenya to the southeast, Uganda to the south, the Democratic Republic of Congo (DRC) to the southwest, the Central African Republic (CAR) to the West, and Sudan to the

North. The country is approximately 644,392 km^2 in size and is situated almost entirely in the Nile River Basin.

The major geographical features of South Sudan are the White Nile, which flows north from Central Africa's uplands and dominates the center of the country and the vast Sudd swamp, one of the world's largest wetlands. The Sudd swamp is fed by the White Nile and covers over 100,000 km2, more than 15 percent of the country's area. Rising out of the northern and central plains are the southern highlands along the border with Uganda and Kenya. The Ethiopian highlands border the country to the east, and the Congo River basin highlands are on the southern and western margins.

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. Variations in the length of the dry season depend on the two air flows (from the Arabian Peninsula and moist south-westerly winds from the Congo River Basin).

Temperatures in the country range from hot and dry in the southeast near the border with Kenya and northeast near the border with Sudan, to temperate in the southern highlands. Average temperatures range between 18°C and 45°C and do not vary greatly with the change in season. The hottest month is generally March; the coldest is August (MoFA, 2018). January to March is dry, hot and clear skies with temperatures between 40°C to 45°C which at times triggers conflicts over access to grazing lands; April to June heavy rains, light cloud cover, heavy westerly winds and temperatures between 36 and 39°C; July to September with heavy rains, floods and muddy lands that are often impassable, high humidity and temperatures between 30°C and 35°C and the 4th season is in October to December with light rains, clearer skies and temperatures of between 20°C and 30°C. In September, the dry north easterlies begin to strengthen and to push south and by the end of December they cover the entire country. The far south, however, with only a short dry season, has uniformly high temperatures throughout the year.

Rain typically falls unevenly across the country and the northeast is drier and precipitation increases towards the southwest. Annual rainfall ranges from 200 mm in the southeast (Eastern Equatoria) to 1,200–2,200 mm in the forest area of Western Equatoria and the highland areas (MoFA, 2018). The north-eastern part of the country is drier and in general, precipitation increases towards the southwest. The heavy rains that fall in August and September cause the Nile River and its tributaries to flood, though many parts of the country are prone to flooding during the wet season, including the states of Jonglei, Unity, Upper Nile, Warrap and Northern Bahr el Ghazal, as well as parts of Western and Eastern Equatoria (MoFA, 2018).

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. By 2060, South Sudan overall will get warmer by about 1°C over and above 2020 values.

This warming trend has already affected the country's rainfall patterns. Since the mid-1970s, its average precipitation declined between 10 to 20 percent and the variability in the amount and timing of rainfall

from year to year also increased. Average rainfall is expected to decline by 10-20 per cent for any observed warming of more than 1°C. There is also some evidence that the onset of rain now occurs one month later. If the trend continues, by 2025 it is likely that the drying experienced in the north-eastern regions of Upper Nile, Jonglei and Eastern Equatoria will extend across the country, potentially affecting Bahr el Ghazal, Tonj and Unity in the North and Central Equatoria in the South. The Intergovernmental Panel on Climate Change regional models suggest that by the end of the 21st Century, most of Uganda, Kenya and South Sudan will experience drier weather in August and September.

Disaster Vulnerability
Natural hazards can be categorised as: geophysical (including earthquakes, volcanos, landslides, avalanches, tsunamis etc.); meteorological (such as storms, cyclones, hurricanes, typhoons, blizzards, etc.); hydrological (that include floods, storm surges, flush floods, etc.); climatic (including droughts, extreme temperatures, wildfires, etc.); and biological (epidemics, infestations, etc.).
South Sudan faces severe climate vulnerabilities in the form of droughts, torrential trains and seasonal floodings ranking it the second most vulnerable country globally. An estimated 95 per cent of the population depends on climate-sensitive livelihoods, increasing their risk of reduced access to water, sanitation challenges and food insecurity which sometimes lead to other hazards such as disease outbreaks and pest infestations. Alterations in rainy season patterns triggered severe flooding from 2019 to 2022, increasing population vulnerability, displacing communities and destroying the already scarce infrastructure. In 2022 alone, over 1 million people were affected by flooding in South Sudan. Climate-induced drought-like conditions strain rural communities reliant on subsistence farming and pastoralism, affecting their access to water resources and production.

Climate change is further exacerbating the intensity, frequency and duration of these extreme weather conditions. These changes will bring forth long-term stresses such as reduction in river flows, loss of pasture and livestock and reduction of critical habitats, which will in turn increase impacts on the socio-economic status of South Sudan and jeopardize the capacity of huge numbers of people to sustain themselves, a situation that is already occurring in several parts of the country. 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.

Agriculture

South Sudan is rich in natural resources and has an abundance of fertile agricultural areas with abundant water, as the country is bisected by the White Nile River and the many plains and plateaus are drained by its several tributaries. Climate and soils are primary determinants of the type of agricultural occupations that can be undertaken along with how, where and when they occur. The country's soils can be divided geographically into two categories: clay soils of the central and Northern regions, and the laterite soils of the south.

A huge variety of crops are grown in South Sudan, where the diversity of soil and climatic conditions provide multiple options for different cereals, legumes, fruits and vegetables. About 80 percent of the population lives in rural areas where subsistence agriculture is the mainstay of people's livelihoods. The agriculture sector is characterized by small, hand-cultivating household units belonging to larger family aggregations practising different combinations of rain-fed agriculture, livestock grazing and pastoralism,

wild food harvesting and fishing. About 81 percent of households cultivate land, 74 per cent own livestock and 22 per cent engage in fishing.

Livestock

Livestock are a productive livelihood asset in South Sudan, it is the second dominant agricultural land use in the country. There is an estimated total of 38 million livestock in the country, compared to its human population of 12.3 million. Livestock provides pastoralists with milk and meat, constituting their main diet. They also play a key role in socio-cultural life, especially for pastoralist peoples such as the Dinka, Nuer, Shilluk and Mundari. Traditionally, they are the most significant source of prestige, providing the currency for marriage dowries, fines and other societal dealings, which account for about 80 percent of cattle transactions.

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 such 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.

Water Resources and Wetlands

The Nile and its main tributary, the White Nile (Al neil ElAbyad), drain South Sudan. At Bor, the great swamp of the Nile, known as Sudd begins. The river has no well-defined channel here; the water flows slowly through a labyrinth of small spillways and lakes choked with papyrus and reeds. Although the drainage area is extensive, evaporation takes most of the water from the slow moving 38 streams in this region, and the discharge of the Bahr al Ghazal into the White Nile is minimal.

South Sudan's water resources are unevenly distributed both spatially across the country, and temporally, since water quantities vary substantially between years depending on periodic major flood and drought events. Water is held in perennial rivers, lakes and wetland areas, in seasonal pools, ponds, rivers, streams and extensive flood plains. Water demand is still low given the country's relatively small population, density and the lack of industrial development but it is expected to increase rapidly in the future with projected population growth and economic development.

Biodiversity and protected areas

South Sudan is covered in a rich diversity of ecosystems which are dynamic complexes of plant, animal and microorganism communities and their non-living environment, interacting as functional units. South Sudan's large range of ecosystems is most commonly divided into the following categories: Lowland Forest; Mountain forest; Savannah woodland; Grassland savanna; Sudd swamps and other wetland, and Semi-arid region.

South Sudan'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. Biodiversity is also of extreme national importance since the country's ecosystem goods and services are the foundation of South Sudan's socioeconomic development.

3.2   Socioeconomic Baselines

The section presents a brief description of the socioeconomic status of South Sudan including the political and economic context, as well as the health sector overview.

Biophysical baseline information of the Republic of South Sudan (Source: National Bureau of Statistics)
- Total Population of South Sudan is 14.7million (2023 estimated population)
- Total Area of South Sudan is 644,329 sq. km.
- More than half (51%) of the population is below the age of eighteen.
- 72% of the population is below the age of thirty.
- 83% of the population is rural.
- 27% of the adult population is literate.
- 51% of the population live below the poverty line.
- 78% of households depend on crop farming or animal husbandry as their primary source of livelihood.
- 55% of the population has access to improved sources of drinking water.

National Overview

South Sudan became independent from Sudan in 2011, following a protracted war with the neighbouring country. However, in 2013 additional civil war among internal factions – along ethnic and clan lines left the country shattered. In September 2018 a peace agreement was signed between the warring factions. The peace deal moved forward in 2020, when the key opponents agreed to form a unity government. The ceasefire between the two has since held. However, the agreement has otherwise proven extremely Fragile and implementation of several key provisions of the peace agreement remains slow or stalled.

Demographics

As of 2023, the population of South Sudan is estimated at 14.1 million. 49.9 percent of the population is female, and 50 percent is male. South Sudan has an extremely young population with more than half of the population (51%) is below the age of eighteen, and 72% of the population is below the age of thirty.

South Sudan consists of a broad variety of ethno-linguistic groups. Those entail three subcategories of speakers of the Nilo-Saharan language family: speakers of *West Nilotic* languages (Dinka, Nuer, Atuot); speakers of *Western Nilotic / Luo* languages (Shilluk, Annuak, Maban; Acholi in Eastern Equatoria; and Jur-Luo in Western Bahr el-Ghazal); and speakers of *Eastern Nilotic* languages (Eastern and Central Equatoria: Bari, Lotuho and Teso). Furthermore, there are speakers of the Niger-Congo language family, including the Zande in Western Equatoria

Poverty and Vulnerability

South Sudan remains one of the poorest countries in the world with over 80 percent people estimated to be living in poverty. There has been a steady worsening of the economic and humanitarian situation across the country since the crisis in 2013 with nearly half of urban households losing a job. According to the most recent World Bank's estimate, about 82% of the population in South Sudan is poor. Only 7 percent of South Sudanese have electricity, 10 per cent have access to improved sanitation and 70 per cent lack basic health care service. While 83% of the population live in rural areas, urban poverty rose by 20 percent from 49% in 2015 to 70% in 2016.

Women and girls face a disproportionate burden of poverty, poor access to services and insecurity. Poverty is more prevalent among female-headed households at 83%, compared to 73% for male-headed households. Poorest households had up to 7.2 members, representing a higher dependency ratio compared to 4.9 household members in the richest households.

Economic Outlook

South Sudan remains highly dependent on oil exports, which comprise 95 percent of its exports 90% of the national revenue and more than half of the country's GDP. The civil war has resulted in decreased oil production that plunged the oil rich and dependent country further into economic crisis. South Sudan's real GDP contracted by 2.3 percent in FY 2021/22,3 weighed down by a fourth consecutive year of flooding, lingering impacts of the COVID-19 pandemic, violence flare ups, and higher food inflation due to global crises[2]. Inflation, currency depreciation and limited diversification continue to be significant economic challenges. As of 2023, South Sudan ranks 177 out of 180 on Transparency International's Corruption Perception index.

With no formalized welfare system in the country, and most of the population living in rural areas and depending on land for their livelihoods, given the main source of livelihood for at least 85% of the population is crop, livestock, and fisheries production, most South Sudanese are economically vulnerable.

South Sudan also faces one of the world's worst food insecurity crises, with 7.7 million people – or 60 percent of the population – expected to face acute severe food insecurity including 7.2 million living in rural areas[3]. The most likely affected regions include Jonglei, Unity, parts of Upper Nile, Warrap, Eastern Equatoria, Lakes and Northern Bahr El Ghazal states.

Internally Displaced Persons and Refugees

South Sudan also has one of the world's largest forcible displaced populations, including 1.76 million internally displaced persons (IDPs) within its borders and more than 2.2 million South Sudanese refugees

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[2] Country Engagement Note for South Sudan for FY21-FY23, The World Bank, April 2021

[3] South Sudan: IPC Acute Food Insecurity and Acute Malnutrition Analysis September 2023 – July 2024: Published on November 6, 2023 – South Sudan/ ReliefWeb

living abroad, primarily in neighbouring countries. The IDPs are sheltered in Protection of Civilians (POC) sites administered by the United Nations Mission in South Sudan (UNMISS). Nevertheless, with the improved security situation following the signing of the peace agreement, many IDPs are returning to their homes. There is no data available on the numbers of IDP living outside POC camps. However, many families had split their stay, with part of the family remaining in the camp and the other part returning to the rural community site.

Furthermore, South Sudan hosts refugees mostly from Sudan (95%) but also from Democratic Republic of Congo (DRC), Central African Republic (CAR), Ethiopia and Eritrea. The conflict that started on the 15th April 2023 in Sudan had further exacerbated the refugee crises. As of December 2023, United Nations Office of the Coordination of Humanitarian Affairs (UNOCHA) reported that 441, 513 refugees from Sudan and 1,259,765 returnees are stranded in Renk, Pouloche, Northern Bahr elGazal and Unity.

Cultural Heritage
The social structures are closely related to intangible and tangible cultural heritage, as it informs peoples' values, beliefs and traditions. Intangible heritage in South Sudan is vast, as every ethnic group relates to its own knowledge, artifacts and cultural spaces. Currently, the South Sudan Ministry of Culture jointly with the UNESCO Office in Juba is conducting an inventory of the country's intangible heritage. In terms of tangible cultural heritage, South Sudan has currently no UNESCO World Heritage site, but three sites are on a tentative list: the Boma-Badingilo Migratory Landscape; the Deim-Zubeir slave route site and the Sudd wetlands. None of these will be directly affected by the project.

Gender Based-Violence
The people of South Sudan, especially women and children, experience a severe protection crisis. Levels of violence, exploitation and abuse are notably high, including conflict-related sexual violence, GBV and growing child protection concerns. Studies conducted in 2016 by International Rescue Committee and partners indicate that some 65 per cent of women and girls have experienced physical and/or sexual violence in their lifetime, some 51 per cent have suffered intimate partner violence and some 33 per cent of women have experienced sexual violence from a non-partner, primarily during attacks or raids. Most girls and women experience sexual violence for the first time below age 18 (International Rescue Committee, 2017).

Child marriage is another form of GBV which is widely practiced throughout South Sudan. This practice can also be linked to the economic downturn and loss of livelihood caused by the successive conflicts. This situation also forced many women and girls to engage in sex to make a living. Moreover, many families receive a bride price, which makes men think of their wives as commodities and thus the wives lose the rights to speak up for themselves.

Gender dynamics is also rooted deeply in harmful social norms anchored in patriarchal traditions, such as strict gender roles and identities, patriarchal authority, women's low social status and power imbalance such as their limited access to decision-making and reproductive rights, poverty, inequality in the area of employment or education, and discriminatory practices. Nevertheless, Women often experience a double burden because of the change in gender roles due to absence of male members. while they have to fulfil traditional gender roles, they are also becoming heads of households and the main breadwinners for their families.

Sexuality issues and domestic violence are considered confidential and are not openly discussed, which promotes a culture of silence around GBV. In a CARE study it was found that among GBV survivors only 37% are reported the incident to police or hospitals and received any psychological support. However, existing health services across South Sudan offer inadequate medical and psychosocial support to GBV survivors. Clinical management of rape services including even the most basic SGBV services are limited, ad hoc and severely compromised by the lack of the right and quantities of skill sets able to deliver an effective response. Many survivors of GBV continue to suffer from the physical and psychological impact of violence, and report feelings of depression, hopelessness, anxiety, and suicide and have difficulty focusing, sleeping, and performing routine tasks.

Access to Public Services

Water
Fifty five percent (55%) of the population of South Sudan has access to basic drinking water sources, however, 30 to 50% of water facilities are non-functional at any point in time. Yet, the actual level of access to an improved water source in rural areas is estimated to be only 34%, and this affects most of the country as over 80% live in rural areas, as well as 90% of those living in poverty. Only 2.2% of households have water on their premises with a twentyfold difference between the urban (9.3%) and rural (0.4%) population, while 34% travel more than 30 minutes to collect water. Adult women are most commonly the water carriers (85.6%), but female children under age 15 are also significant collectors (8.8%).

Education
South Sudan has one of the lowest literacy rates in sub-Saharan Africa and the lowest in the geographical regions of East and Central Africa standing at 27%. South Sudan has the lowest proportion of female students enrolled in primary school and the second lowest in secondary school in sub-Saharan Africa and the lowest in the geographical regions of East and Central Africa. Girls are grossly under-represented in South Sudan's education system.

Electricity
Electricity access in South Sudan is so poor that less than 1% of the population (approximately 22,000 customers) consumed about 70 gigawatt hours (GWh) of energy. Due to the low access rate, most of the population relies on biomass burning as its primary energy source for cooking, lighting, etc. Juba has the only functional grid in the country. The city has a significant number of potential users, primarily households that are not yet connected to the grid. While Juba already has approximately 30,000 customers connected to the grid, JETCO estimates that there are 16,000 unconnected potential customers, of which 10,000 can be connected at relatively low cost using existing transformers.

Communication
Assessment findings show that the channels of communications available in South Sudan widely vary depending on the geographic areas where displaced people and hard-to-reach communities are located, due to uneven coverage of phone networks, internet, and FM radio infrastructure. While the telecommunications infrastructure of South Sudan is among the least developed in the world, the lack of a phone network was cited as a major barrier to news and information access. Mobile networks in South Sudan are limited to major towns (about 20 percent of the country), cutting out the population of remote areas. At only 12 percent, also the Internet penetration rate of South Sudan remains low compared to other countries in the eastern Africa region. Open-source data indicate that 2.2 million of the country's

population are connected to the Internet, accounting for only 17 percent of the country's population estimated at 12.5 million.

Transport

South Sudan has an estimated road network of 12,642 km: consisting of 7,369 km of Interstate roads, 1,451 km of State primary roads and 3,822 km of State secondary roads. South Sudan's road infrastructure was largely destroyed or left in disrepair during the protracted civil wars. Transport costs in the country are high, freight tariffs on trunk roads reach $0.20 per ton km, roughly three or four times the average tariff of Eastern Africa and Southern African countries respectively. Heavy rains, increased levels of traffic, overloaded trucks and inadequate maintenance have often led to the deterioration of the rehabilitated roads in the country. As a result, only 40% of these improved trunk roads are in a good condition, the remaining 60% are deemed to be in a fair condition.

3.3   Health Sector Overview

Health Service delivery system

Health services in South Sudan are delivered through a four-tier system: community health which is implemented through the Boma Health Initiative (BHI); primary care provided by Primary Health Care Units (PHCU) and Primary Health Care Centers (PHCC); secondary care through the County and State hospitals; and tertiary care through the teaching, referral, and specialized hospitals. Currently there are 1,395 functional facilities in the country: 967 PHCUs, 358 PHCCs, 70 Hospitals, with no functional specialized hospitals.

According to the 2011 Health Facility Mapping, only around 44% of the population lived within a 5 kilometers radius of a health facility. The Boma Health Initiative (BHI) was established to bring services closer to the communities; it delivers an integrated package of health promotion and disease prevention along with treatment for selected common conditions (malaria, pneumonia, and diarrhoea).

Referral between the different levels of care is weak, mainly due lack of an established referral and ambulance system, poor communication, and poor road infrastructure. Due to the dire gap of specialist medical services in the country, medical tourism to other countries in the region is common.

The overall general service availability score in health facilities is low at 30.4%, with health infrastructure index and service utilization index at 43.2% and 15.05% respectively, whereas the general service readiness score is also low at 37%, implying poor quality of services given it measures the overall capacity of health facilities to provide general health services. Furthermore, there are 6.53 inpatient beds per 10,000 population (recommended target is 25), and 3.26 maternity beds per 1,000 pregnant women (recommended minimum target is 10), signifying, low access to both inpatient and delivery services. Service utilization is low 1.3 consultations per person per year compared to the recommended WHO norm of 5 consultations per year.

Health Infrastructure and Support System

The chronic conflict the country experienced before independence and the intermittent episodes of conflict post-independence have undermined the availability and sustainability of the requisite infrastructure to effectively deliver health services. The 2018 SARA survey revealed a low health facility density of 1.42 per 10,000 population (target is 2 facilities per 10,000 population) with inequities in distribution across the States ranging from 0.43 to 6.92 facilities per 10,000 population (figure 5).

The survey also showed that most facilities have permanent buildings (62%), while 20% are temporary and 14% are semi-permanent. Basic amenities in health facilities are in short supply; in 2018, about half of all facilities had access to sanitation facilities (58%), while less than half had access to a consultation room (38%), communication equipment (38%), emergency transport (37%), improved water source (36%), a power source (13%), and a computer with internet (4%). Basic equipment is also not readily available across all health facilities; only 66% of facilities had a thermometer, 63% a stethoscope, and 56% and 51% had adult and child weighing scales respectively. The most commonly available diagnostic capacity items were malaria diagnostic capacity (86%) and urine test for pregnancy (43%). The availability of the following diagnostic capacity items was low: HIV diagnostic capacity (19%), urine dipstick-protein (13%), urine dipstick-glucose (12%), hemoglobin (9%), and blood glucose (8%).

Furthermore, there is a gap in availability of requisite norms, standards, and frameworks to regulate and monitor adherence to minimum infrastructure standards, with inadequate capacity and funding at the national and sub-national levels to support this. Periodic maintenance of infrastructure and equipment is not regularly done; and implementation of appropriate occupational health policies, which is lacking, remains a priority.
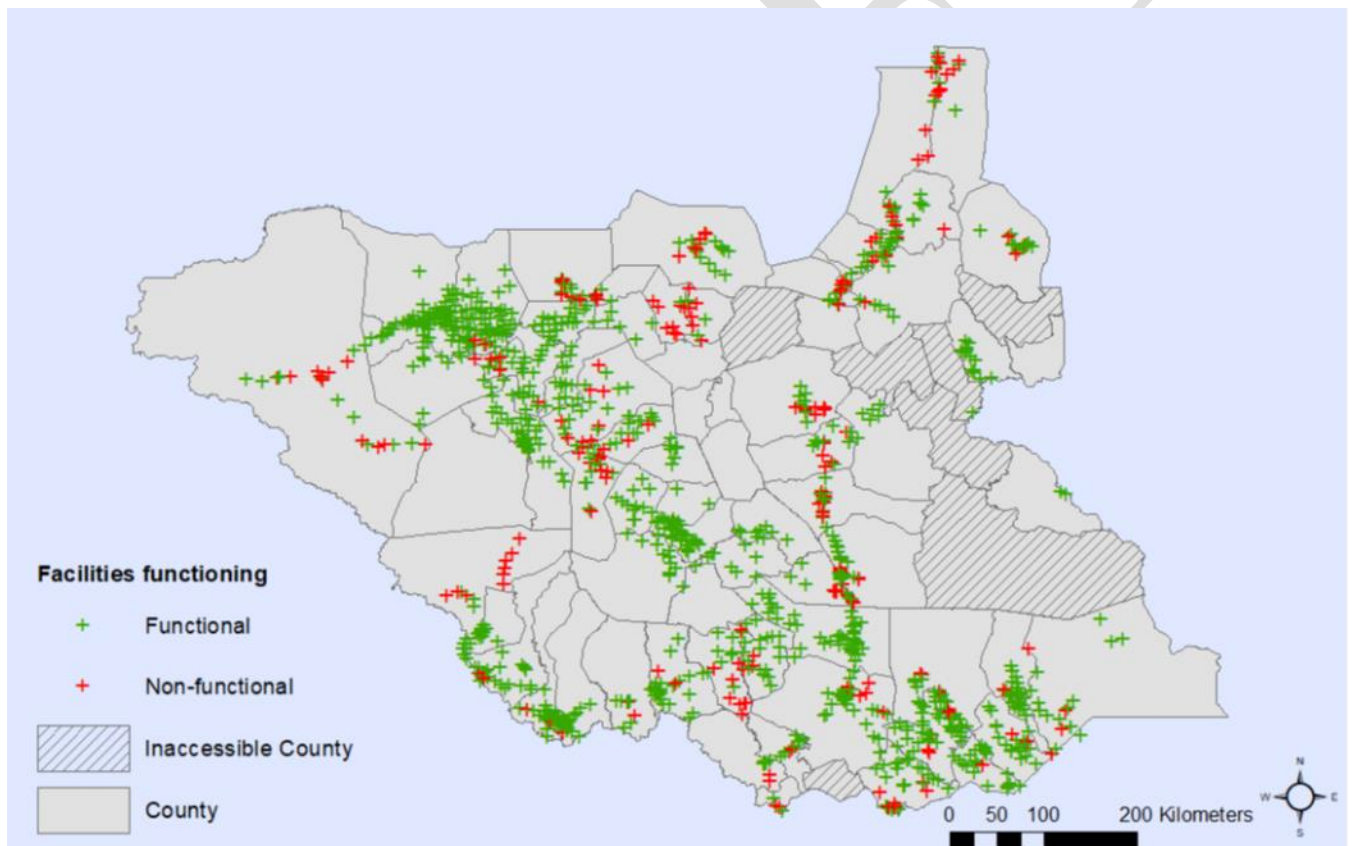

Figure 2: Distribution of functional and non-functional, accessible health facilities (N = 1293*), South Sudan 2018, SARA survey

Health Sector Indicators

South Sudan faces significant challenges that adversely affect its human capital with one of the lowest Human Capital Index (HCI) scores at 0.31 (2020) In the country, 31 out of every 100 children are stunted, increasing the risk of physical and cognitive impairment, which can ultimately affect the adult survival rate. South Sudan's health outcomes rank among the poorest in the world. As of 2021, life expectancy at birth is one of the lowest in the world, estimated at 54.98 years, and the under-five mortality rate was 98.69 per 1,000 live births from 2017 to 2021. The country has the highest neonatal mortality globally at 39.63 per 1,000 live births. About 71 percent of the population residing over 5 km from the nearest health facility. South Sudan has the highest maternal mortality ratio globally at 1,223 per 100,000 live births. Notably, only 38 percent of facilities are offered. Comprehensive Emergency Obstetric and Newborn Care (CEmONC) are partially functional and caesarean sections are only available in major urban areas, accounting for only 1 percent of all deliveries, much lower than the expected rate of necessary caesarean sections at around 10–15 percent. Newborn and maternal mortality is still high, while establishment of a functional referral system and quality of care remain as gaps.

Cultural norms and a preference for larger families dampen the demand for reproductive and maternal health services. Even when women show interest in family planning, they often encounter barriers to access. The combination of a contraceptive prevalence rate of only 6 percent, persistent high fertility rates, and challenges like early marriage precipitate adolescent childbearing. One in three adolescent girls in South Sudan have begun childbearing, which increases the risk of maternal mortality and childbirth injuries like obstetric fistula.

Acute malnutrition remains a major public health emergency in South Sudan. As of November 2023, 5.8 million people, or over half of South Sudan's population, experienced high levels of acute food insecurity, classified as crisis (Integrated Food Security Phase Classification, IPC Phase 3). Of those, 1.6 million people are experiencing emergency condition (IPC Phase 4) acute food insecurity and an estimated 35,000 people in catastrophe (IPC Phase 5) acute food insecurity in Fangak, Canal/Pigi and Akobo of Jonglei State; Pibor County in the Greater Pibor Administrative Area.

The country grapples with frequent disease outbreaks exacerbated by conflict, persistent seasonal flooding, inadequate sanitation and water infrastructure, a fragile health system, and low vaccination coverage. Preventable and curable climate sensitive diseases, such as malaria and cholera, are leading causes of death in the country. WHO and the United Nations Children's Fund (UNICEF) estimate that only 76 percent of children receive the Pentavalent 3 vaccine. The country also has one of Africa's lowest measles immunisation coverages estimated at 49 percent for the first dose of the measles vaccine, while a 95 percent coverage rate is needed to substantially reduce transmission. Additionally, the 2017 EPI coverage survey estimated that only 18.9 percent of children are fully immunised, contributing to the high levels of vaccine preventable diseases.

Health System and Service Delivery Challenges
Substantial supply- and demand-side health service delivery challenges persist across all health services. Supply side issues include limited physical infrastructure, supply stock-outs, severe health service delivery capacity gaps, and a long history of suboptimal health service delivery. While historically, the focus has been on supply-side challenges, demand-side issues require equal attention. The Boma Health Initiative (BHI), is a community health worker program, targeting these issues by improving community-level interventions and bridging the gap between health service supply and demand.

Health and health service delivery in South Sudan are intertwined with climate change and the country's climatic patterns. The heavy annual flooding in the country disrupts ground transportation annually, rendering road transport to most rural areas impossible and severely restricting air transport. As a result, supply lines are cut off and staff movements are difficult. Patient travel to facilities, which is by foot in most areas year-round, is further hampered. Simultaneously, transmission of waterborne and vector-borne diseases increases annually during this period, causing spikes in diarrheal diseases and malaria, which account for 8.59 and 8.07 percent of the country's burden of disease, respectively.

The overall response to sexual and gender-based violence (SGBV) remains inadequate in reach, quantity, and quality. There is a severe shortage of medical personnel trained in Clinical Management of Rape (CMR) and basic psycho-social support is insufficient. Across the country health professionals seldom receive training in counselling and psycho-social care. Specialised mental health expertise is virtually non-existent, with currently only one South Sudanese psychiatrist working for the entire country.

South Sudan's health system is characterised by fragmentation and minimal Government engagement. Since 2013, health service delivery has been supported through external financing from the World Bank through UNICEF and the International Committee of the Red Cross (ICRC) covering three states and the European Union (EU), Gavi the Vaccine Alliance through a consortium led by Crown Agents and bilateral donors including the United Kingdom (UK), the United States, Canada, and Sweden covering seven states. While donors have strengthened coordination between the two areas in delivering the same package of services and harmonising monitoring and the human resources for health (HRH) incentive scheme, the two areas had separate management structures creating inefficiencies and coordination challenges.

The Government contributes a mere 4 percent of its budget to health, far below the 15 percent target pledged by the African Union countries in 2001. The health sector has been chronically underfunded since 2013, which undermines the system's sustainability. Estimates suggest that household out-of-pocket expenditures on health account for as high as 79 percent of the total health expenditure.

4 ENVIRONMENTAL, SOCIAL, AND SECURITY RISKS

This section summarises key environmental and social risks in line with the HSTP components and sub-components and is guided by the harmonised application of the World Bank ESF and National policies and frameworks. It also describes the methodology by which the potential risks and impacts can be assessed and related mitigation measures suggested according to the mitigation hierarchy.

4.1 Impact Assessment Methodology

This methodology provides a broad ranking of the impact severity using the following characteristics:

Impact description: this is both a description of the planned project activities and their effects on the environmental or social receptors. Relevant impact characteristics include:
- Adverse or beneficial;
- Direct or indirect;
- Short, medium, or long-term in duration; and permanent or temporary;
- Local, regional or global scale effect, including trans-boundary (neighbouring countries), and;
- Cumulative (such an impact results from the aggregated effect of more than one project occurring at the same time, or the aggregated effect of sequential projects.

Impact severity: The impact severity can be determined by evaluating the intensity of the impact and the sensitivity of the environmental and social receptors. This is largely subjective but based on the professional judgement of the specialist team/personnel.

Mitigation and Residual Significance: Where significant residual impacts remain, further options for mitigation will be considered and where necessary impacts are re-assessed until they are reduced.

Impacts of unplanned events (contingencies): Impacts associated with unplanned events (or contingencies), such as vehicle accidents, earthquakes, floods or fires, are difficult to assess within the framework outlined. Unplanned events that may result in a severe environmental or social impact usually result in high financial, social and political liabilities and costs for the project developer. Therefore, the project has substantial built-in controls to avoid such occurrences. The probability of unplanned events (contingencies) occurring should always be low so they are not assessed (in terms of assigning a significance rating) in the impact assessment, whereas expected potential impacts are assessed.

		Sensitivity of receptor			
		Very low	**Low**	**Medium**	**High**
Intensity of Impact	**Very low**	Negligible	Minor	Minor	Minor
	Low	Minor	Minor	Moderate	Moderate
	Medium	Minor	Moderate	Moderate	Major
	High	Minor	Moderate	Major	Major

4.2 Environmental Risks

The environmental risk rating is assessed as Substantial due to the baseline capacity of health care facilities to manage medical waste management. This baseline capacity will continue to be improved through supervision, capacity building, and continued investment in minor physical upgrades and materials within footprints of health care facilities. Potential adverse environmental impacts are expected to be similar to the previous project (P176480); limited, site-specific, and reversible. The predicted environmental risks which can impact associated with and or can impact the HSTP project include:

• Medical wastes and chemical wastes from the project supported activities

• Climate change effects on the project and subproject activities

• Health facility conversion to solar power and risks associated with backup generators for uninterrupted power supply.

• Flooding-related environmental risks including rehabilitation works risks

• OHS risks are linked to health-care workers involved in handling and administering medicine and vaccines, those working in the health-care waste stream and logistical workers involved in the cold storage chain.

• Community health and safety risks from the handling, transport, and disposal of health-care waste.

• Emergency response - Contingent Emergency Response- related risks.

Under Comp.1, the procurement & distribution of essential drugs & medical supplies could result in waste generation (including medical waste, effluents, & plastics) if not managed properly, leading to environmental contamination through open dumping/incineration, which, in turn, result in water, soil and air pollution. Moreover, the rise in health services delivery may also lead to a higher amount of medical waste, necessitating proper handling and disposal to avoid/minimize/mitigate environmental contamination, and OHS risks. Medical waste, including chemicals, contaminated PPE and equipment, and lab testing kits from healthcare facilities will need to be safely stored, transported, and disposed of. Wastes generated from labs, screening posts and treatment facilities could include contaminated waste (e.g. blood, other body fluids and contaminated fluids) and infected materials (used water; lab solutions and reagents, syringes, bed sheets, the majority of waste from labs and isolation centres, etc.) require special handling and awareness, as they may pose an infectious risk to healthcare workers in contact with the waste. Proper sustainable management of medical and hazardous waste is constrained by the limited access to appropriate infrastructure, facilities and specialised companies for collection and treatment which operate in the country. Relevant risks identified and managed under the previous project includes healthcare worker's exposure to testing and handling of supplies, healthcare waste management and community health and safety issues related to the handling and transportation and disposal of healthcare waste and procurement and use of sub-standard PPEs.

Solar electrification of the health facilities will be promoted to cut down on use of fossil fuels powered generators. However, the use of backup power generators will still be associated with pollution risks, hence, relevant mitigation measures will need to be put in place. Further, rehabilitating or constructing health facilities can lead to environmental risks such as noise, dust, and waste pollution, improper disposal, and inefficient resource use. Fire hazards, environmental liabilities like asbestos, and e-waste from ICT

can also pose issues if not managed well during construction and operation. Additionally, contractor camps may produce waste and effluents, contributing to pollution. Accidental leaks of fuels and chemicals, along with waste from rehabilitation sites, are also a concern during both construction and operation. To address the above stated risks and impacts, environmental and social framework documents including ESMF, ESCP, medical waste management plan (see Annex 2), and Waste Management Plan (Annex 7) for rehabilitation/construction of healthcare facilities have been prepared. All these will also be detailed in site specific instruments (such as ESIAs/ESMPs) for subprojects during implementation phase.

Rehabilitation/construction of existing/new health facilities or infrastructure will be implemented potentially within existing footprints/premises of the project implementing entities. Minor rehabilitation will only occur within the existing health facility footprint and will be limited to works critical to the functioning of the centre (e.g., plastering and retiling; replacement of doors, windows, locks; repair of electrical wiring, water pipe inflow and outflows; climate-proofing to reduce the impact of seasonal flooding, etc.). There is to be no new construction of health facilities; any small-scale construction is expected to be of latrines, water storage, medical waste management sites, solar panel installation, flooding-related drainage and will be confined within the existing health facility footprint. This implies that the potential risks and impacts on biodiversity and natural resources are mainly associated with extraction of rehabilitation/construction raw materials from natural and/or critical habitats. There are also potential contamination of land/soil and water and associated fauna and flora due to medical wastes (both solid and liquid) and hazardous wastes generated mainly from rehabilitation/construction sites, and use of ICT infrastructure, including data storage facilities, and related e-wastes. To manage these risks and impacts, the ESMF has included E&S screening criteria for managing sub projects having adverse impacts on critical and natural habitats, procuring building/rehabilitation materials from licensed suppliers, and generic management plan for hazardous wastes, including medical wastes and e-wastes. Also, the project managing entities shall require civil works contractors to develop C-ESMPs (comprising waste management including e-waste). To this end, appropriate mitigation measures will be inbuilt into the agreements with implementing partners, contractors and subcontractors (see Annex 5 for details on *Environmental Code of Practice* to be followed by consultants, designers and contractors, and Annex 7 for waste management plan for rehabilitation/construction of healthcare facilities). The enforcement of proper solid waste, wastewater, and medical waste disposal will similarly be strengthened. Hence, likely impacts of the project on natural resources and biodiversity will be minimized.

There are many other risks inherent within the cold chain that includes poorly maintained refrigeration equipment, theft, lack of security or law enforcement availability, mishandling, unavailability of climate control vehicles, technical failures in temperature and coolant, human error, road infrastructure and accessibility to rural areas, vaccine accountability and tracking of deliveries and shipments, etc. The risks to cold chain logistical workers are from transportation risks (vehicle licensing, training, accidents) and contact with ultra-low temperatures. During transportation of goods or supplies, including delivery, handling and storage of vaccines, there are additional risks of infection spread by drivers and risks of traffic accidents.

4.3 Social Risks

Despite the promising social impacts, the project social and SEA/SH risks are classified as high. The project could face multiple potential social risks as it will be implemented nationwide where prevalence of poverty, drought, security challenges, and many more complex social issues under the FCV context of South Sudan are severe. Social risks are above all the result of the FCV context in the project area.

- Climate change-related social risks including increased exposure of women and children to disease.
- GBV and Sexual Exploitation and Abuse (SEA) are two areas of concern because of escalating social risks.
- Safety and security of workers, assets and staff becoming targets of violent groups
- Community health and safety, security and safety of services and beneficiaries
- Land acquisition risks due to facility rehabilitation
- Grievances from people related to beneficiaries, especially pertaining to ethnicity of staff and medical procedures going wrong
- Intra Communal tensions (including between refugees and host communities) over implementation issues
- Equity issues such elite capture and social exclusion especially of the most vulnerable group

More specifically, Component 1: Nationwide Provision of Essential Health Services include activities which may have a potential for causing newly or exacerbating existing inequalities or social exclusions in health service access, especially for vulnerable and conflict-affected communities. Challenges may also arise in maintaining service quality due to limited human resources and infrastructure in certain areas which may also create or exacerbate conflicting situations. The project's TA activities have a very high potential social risks associated with labour, labour conditions, safety and security of project workers, exclusion of beneficiaries during targeting and delivery of capacity development trainings, compromising the service delivery quality, and challenges of ensuring the quality and reliability of the data generated, particularly in areas with limited human resources and infrastructure There might be potential risks related to land acquisition due to the facility rehabilitation efforts and, if CERC would be activated, emergency response needs for constructing temporary health facilities and rapid infrastructures.

A key risk of the project - given the history of civil war and ongoing conflict in South Sudan - is the unintended sustaining of armed conflict through aid and development funding. This is a real and high risk, since the project will engage with a variety of local communities that have experienced significant violence and displacement throughout the country and will provide subproject resources at the local level. This can have impacts on the dynamics between local factions, drive existing tensions and conflicts, where implemented in IDP locations, foster the consolidation of mass displacement, and allow for elite capture of project resources. Furthermore, in the light of current socio-political realities throughout South Sudan, there is a high risk of GBV and a lack of referral mechanisms or institutional preparedness to handle GBV cases.

Generally, the risk of suspicion between conflicted communities over project implementation is likely to be high. There is perceived non-neutrality in service delivery across areas held by the government or opposition forces; as well as limited oversight and ability by the government to provide services arriving at their intended destinations. Tensions can also arise between project implementers and beneficiary communities, which may differ in their clan or ethnic identities and originate from different groups of the warring factions. Interventions can become subject to political economy/manipulations, rent-seeking

activities. Furthermore, the security of staff and beneficiaries is a risk given previous experiences in South Sudan.

4.4   Security Risks

In terms of the security situation as of March 2024, South Sudan remained volatile and fluid creating a difficult and challenging operating environment. Although there was a decrease in the intensity, rather than frequency of sub-national violence, particularly in Jonglei, Unity and Upper Nile throughout 2023, it is expected that insecurity will once again become a major factor as the country readies for the December 2024 elections. The Equatoria region is also witnessing some degree of insecurity as road banditry has become a major security concern as well as farmer herder conflicts. In the first quarter of the year there was a distinct escalation between January and March where a continued level of active hostilities and sub-national violence was witnessed, particularly in Eastern and Central Equatoria, Jonglei and Unity states.

Politically, the Security Council arms embargo on South Sudan continues and possible extension of it for another year and beyond until 2025 is anticipated, along with assets freeze and global travel ban imposed on some prominent South Sudanese nationals for their role in fuelling conflict. The government of South Sudan, criticised the decision, saying it poses a threat to the country's efforts to realize peace and stability, as well as safeguard its sovereignty and graduate the necessary unified forces. In terms of security arrangements, a section of the Necessary Unified Forces have complained of discrimination as their members are not receiving salaries and other material support. Such acts may affect election-security. Less than nine months to the planned December 2024 elections, tensions and uncertainty will remain. The conditions to proceed to the elections are unlikely to further materialize, including the deployment of the National Unified Forces (NUF) and Security Sector Reform (SSR), holding of a population census and voter registration, and drawing of constitutional boundaries, with the latter having a high conflict potential. Upcoming April 2024 discussions in parliament are unlikely to yield results and debates on the feasibility of a vote and alternative scenarios will gain momentum, with differing narratives and positions being put forward, some of which would strongly favour the executive in power with risks of potential violence. Meanwhile, tensions between SPLA-IO and IG will continue, including in the form of possible defections from the SPLA-IO (potentially of some additional influential figures/generals), which could result in civilian displacement and incidents of violence. Political reshufflings within the SPLA-IG will continue to strain the delicate balance of power and equilibrium around President Kiir.

The war in Sudan will continue to impact South Sudan and it is expected that fighting over strategic points in Khartoum, al-Gezira, West Kordofan and North Darfur will intensify over the coming months, leading to greater civilian displacement and cross-border movements. Meanwhile it is not expected that the South Sudanese government will change its position on cross-border assistance. The impact of the Sudan war on oil revenues will also add economic strains for the government, with a notable drop in the availability of fiscal resources. Civil servants including members of the organized forces are unlikely to receive their salaries (many have been pending for almost 6 months apart from the Tiger division) which could lead to episodes of unrest but also to increasing criminality. The economic crisis in the country is likely to persist and will result in escalating hardship on an already stressed population, with many already considered to be acutely food insecure, creating an increased demand for humanitarian aid. While this is only evidenced anecdotally, it has the potential to act as a significant driver of insecurity, notably for civil unrest and criminality (both violent and non-violent).

There was a surge in attacks against humanitarian personnel and assets in 2023 with incidents more than doubling with 252 compared to 211 incidents in 2022. Ambushes were particularly prominent in Eastern Equatoria in the vicinity of Torit and Kapoeta. This trend of escalation was further witnessed in the need to relocate humanitarian personnel due to insecurity with 38 and 105 in respectively. Attacks on humanitarian facilities and humanitarian diversion through theft and looting of supplies by criminals and armed youth groups continued, particularly in Pibor and Greater Tonj. Where nutrition supplies have been particularly attractive to armed youth as portable food.

Further, there have been an increasing trend of operational interference from youth groups demanding that humanitarian entities (UN and NGO) recruit from within local communities, particularly in Upper Nile (Renk), Ruweng Administrative Area, Unity (Panyijiar), Western (Yambio) and Eastern Equatoria (Torit). These recruitment issues have caused the temporary halting of humanitarian activities, particularly where specialised skills were required. Torit has been witnessing increased gang attacks that have also impacted on locally recruited staff in the area.

Investments and support to service providers, not only in health but other sectors as well, might heighten the risks of providers becoming targets of attacks, pillaging and violence by armed groups. Cases of health facilities and hospitals being raided have been documented in South Sudan as well as other FCV contexts in the region. MOH recognises that both its personnel and its partners are involved in security incidents / events and understands that there is an ever increasing need to provide support to these organisations to ensure that both the MOH with support from MOs mandate is delivered, and that IPs can operate as securely as possible.

The project aims to improve the availability and quality of health services in targeted facilities and aims to provide support that is aligned with other engagements of health partners in the country, whether they be emergency-related or basic service delivery support. This includes the provision of support that is both financial (performance payments, hazard pay, salary top-ups, etc.) and non-financial (provision of drugs, equipment, rehabilitation). As such, it is acknowledged that the project may lead to service providers becoming targets of criminal acts including those that maybe violent in nature.

5   ENVIRONMENTAL, SOCIAL, AND SECURITY MITIGATION MEASURES

5.1   Environmental Mitigation Measures

Where potential risks and impacts are anticipated, the project will be implemented in accordance with the Policy Framework above. In this case, the project will take measures commensurate to the risks to avoid, minimise, mitigate, manage, or compensate for adverse environmental impacts. Measures to ensure the safe and environmentally sound management of health care wastes are necessary to prevent adverse health and environmental impacts from such waste. Additionally, the project will enhance positive impacts in project selection, location, planning, design, implementation, and management.

The Health Care Waste Management Plan (HCWMP) of the Ministry of Health will be implemented to address issues of waste minimization and recycling, handling, storage and transportation, treatment and disposal options, and training.

During implementation of the HSTP, there is anticipated increased volume of health-related waste given the procurement of substantial quantities of medicines. In anticipation of the risk of overwhelming the health system, MOH and MOs will undertake evidence-based forecasting for the HSTP procurement. Additional mitigation measures towards ensuring proper medical waste management will include building the capacity of Implementing Partners on compliance with the ESSs and mitigation measures.

The environmental requirement below will be included in the programme contracting documents with the IPs in line with World Bank EHSG for rehabilitation works and for health care facilities:

"The IP/contractor will avoid the generation of hazardous and non-hazardous waste materials. Where waste generation cannot be avoided, the IP will reduce the generation of waste, and recover and reuse waste in a manner that is safe for human health and the environment. Where waste cannot be recovered or reused, it will be treated, destroyed, or disposed of in an environmentally sound manner that includes the appropriate control of emissions and residues resulting from the handling and processing of the waste material. If the generated waste is considered hazardous, reasonable alternatives for its environmentally sound disposal will be adopted. The IP/contractor will avoid or minimize the potential for community exposure to hazardous materials and substances that may be released. Where there is a potential for the public to be exposed to hazards, the IP will exercise special care to avoid or minimize their exposure by modifying, substituting, or eliminating the condition or material causing the potential hazards."

MOH PMU with support from the Management Organisations (UNICEF and WHO) and IPs will monitor and supervise health facilities using detailed tools and checklists that cover all aspects of Medical Waste Management and Occupational Health and Safety (OHS) in addition to other services delivery aspects. Gaps identified through the supervision and monitoring processes will be used as the basis for developing training and capacity building modules for Implementing Partners and health workers at health facility level, including all environmental management and all worker OHS risks and measures.

In addition, the use of contractors in the installation of the cold chain systems and solar installations will require implementation of the Labour Management Plan provisions (LMP). To mitigate against the risks associated with disposal of used solar batteries, the Project will support the State Ministries of Health

and County Health department to elaborate a protocol on safe keeping and subsequent disposal including possible recycling of the batteries when such technology is available in South Sudan.

Given the need for rehabilitation works for the restoration of health and nutrition facilities damaged by flooding, the works will be conducted in line with the WB- EHSG for rehabilitation. Adherence will be enforced by incorporating the requirements of the ESCP, ESMF and other E&S instruments by reference in the Management Organizations' standard agreements with their respective contractors/implementing partners. Such requirements will be extended by the Management Organizations' contractors/implementing partners to all subcontractors (see Annex 5 for Environmental Code of Practice).

Specific technical guidance for subprojects or works with potential exposure to pandemics can be found in the following Annexes:
   A. Screening Tool for E&S Risks (Annex 1)

In addition, further information can be found in the following references:

- Guidance on Management of Solid Health-care Waste at Primary Health-care Centres[4]
- WBG guidelines for Health Care Facilities[5]
- Standard Operating Procedures (SOPs) prepared under the CERHSPP for autoclaves, incinerators, ventilation and filtration systems, and positive pressure equipment

MOH and partners will ensure use of paper free and/ or recyclable, environment friendly and biodegradable communication materials as much as possible, and appropriate removal and disposal of information education and communication materials including leaflets, posters, flyers, and banners. The measures are informed by **ESS3: Resource Efficiency and Pollution Prevention and Management**.

The HSTP includes a Contingent Emergency Response Component (CERC). Prior to or at the time of activation of the CERC, a rapid update of the ES risk assessment in line with ESS1 will be conducted to inform on action needed to address any anticipated EHS risks. If small civil works are required under CERC, the project will apply the WB- EHSG for rehabilitations. Relevant provisions will be built into agreements with the Managing Organizations' respective Implementing Partners and contractors.

5.2   Social Mitigation Measures

In terms of social risks, the project activities will generate considerable social benefits to the communities in the project areas. Social mitigation measures encompass, among others, awareness campaigns, transparent disclosure of project activities, analysis of risks throughout the project lifecycle, meaningful consultations, and participatory approach towards project activities on the ground, Code of Conduct, integration of women into boma health committees, and continuous enhancement of the GRM. The Project also builds in an iterative social/conflict monitoring in line with the Security Risk Assessment and Management Plan throughout the project period to see how the support for local facilities interacts with local social dynamics, so that the project activities/approach are adjusted in real-time.

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[4] http://www.who.int/water_sanitation_health/publications/manhcwm.pdf

[5] 2012-ifc-performance-standards-en.pdf

The community provides an ideal, bottom-up framework for integrating various sectors that align with local interests, needs and various community contexts. Lessons learned have proven that investing the limited resources in the Primary Health Care system at community and in health facilities, along with proper referrals to hospitals, has the best chances of achieving equitable and large-scale health coverage. At the center of community engagement, including outreach to vulnerable peoples, is the BHI as a local health committee, supported by the project, which establishes strong linkages between primary health facilities and the local communities to identify people in need as well as any potential grievances.

The project will carry out targeted stakeholder engagement with vulnerable groups, such as IDPs, poor people in urban areas, those in Protection of Civilian (POC) settlements, women, spear-masters/traditional healers, etc., to understand their concerns/needs in terms of accessing information and services and other challenges in their communities. The consultative process will be adopted to reach out to vulnerable populations and will include community leaders, such as *Payam* and *Boma* chiefs, and women's and youth group leaders, to involve them in the process of planning and executing the activities in their catchment area.

The project includes a Grievances Redress Mechanism (GRM) that will be set up for the project. Respective details are outlined in the Stakeholder Engagement Plan (SEP). Complaints received through any of the above routes will be recorded and documented in the project GRM logbook and summarised in progress reports to the World Bank, including the number and type of complaints and the status of their resolution. Responsible staff will ensure that complaints and questions are registered, tracked and promptly resolved.

Through the ESS manager, the PMU will coordinate with MOs (UNICEF and WHO), local government officials and community leaders to ensure prompt follow-up action in response to complaints received. Community engagement and social accountability will also be fostered at the local level though community feedback mechanisms (e.g. Boma Health Committees). The project coordinator will have overall responsibility to address concerns regarding any environmental and/or social impacts resulting from project activities.

Regarding the vaccination against vaccine preventable diseases (VPD), the intervention will follow global approaches to vaccine allocation based on a risk and needs basis, in other words, following an inclusive framework. The project will also establish the logistical structures to ensure reaching targeted beneficiaries.

5.3   Security Mitigation Measures

To mitigate security risks, the project will:
- prepare and implement a Security Risk Assessment and Management Plan (SRAPM) for the project
- assist in the development of interventions and risk mitigation measures based on best-practices and proven strategies of both development partners as well as humanitarian organizations and close consultations undertaken with the health cluster in South Sudan.
- support enhanced access to areas and populations that were previously difficult to reach, due to the neutrality and impartiality of partner organizations mobilized.
- engage community leaders, which has been identified as a way to reduce security-related risks and enhance local stakeholder engagement   .

- where possible, cash payments will be avoided and any financial payments to service providers will be direct payments to facility accounts at commercial banks or certified credit unions.

Finally, risks related to GBV remain acutely prevalent throughout the country. The project has included several interventions to address this, including a significant expansion of training for health workers and provision of services, including mental health and psycho-social support, for victims of GBV.

Significant Event Management

Significant Event Management is covered by **ESS2**- Labour and Working conditions, and **ESS10**- Stakeholder Engagement and Information Disclosure. MoH will develop a significant event management framework for the project to cover personnel, premises, and assets, which includes security events with the support from the relevant stakeholders.

MoH PMU will provide support to IPs related to their management of their security responsibilities under the SLT. The objective of SLT *"is to enhance the ability of partner organizations to make informed decisions, manage risk and implement effective security arrangements to enable delivery of assistance and improve the safety and security of personnel and operations."* MoH will require those same SLT principles for all stakeholders delivering services under the project.

It is important to note that SLT partner organizations have different approaches to how they perceive and evaluate risks and how they assess vulnerabilities, accept different levels of risks they face, and implement security arrangements which they consider suitable for their organization and operational conditions. With regards to accountability, SLT partners accept that they remain fully accountable for the security of their personnel in accordance with their 'duty of care' obligations as employing organizations. Accordingly, organisations that wish to cooperate under the SLT are required to maintain internal security risk management procedures, contingency planning, and adequate and reliable arrangements to respond to security incidents and crises.

There are two levels of collaboration within the SLT – "regular" and "enhanced." The MoH implementation of the SLT will follow the "enhanced" level of collaboration with regards to security plans and information management to bolster security coordination arrangements, information sharing and operational/logistics arrangements. MoH will determine the security context(s) in which the IP will operate including intercommunal violence (ICV), crime, cattle raids, population displacement and hazards. To complement the SLT, MoH will implement and require IPs to act in accordance with an IP Security Management Approach as well as a Significant Event Reporting[6] protocol.

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[6] Significant Event is defined term in the Financing Agreement between UNICEF and the World Bank.

Table 1. Generic Environmental Management and Monitoring Plan

Project Activities	Risk/ Impacts	Mitigation Measures	Responsibility	Monitoring indicators
Evidence generation on environmental and social risks facing project	Inadequate and/or outdated evidence, data, and information on environmental and social risks facing the project	• Biannual updating of information on the risks • Updating of the information on risks prior or during activation of the CERC	MOH, MOs	ESS assessment reports updated
Procurement Supply Chain Management of Medical Products including Medical Waste Management	• Substandard quality of medical goods procured (drugs, supplies, equipment) • Expiration of goods • Inefficacy of goods • Unnecessary and/or improper disposal of goods • Hazardous medical and nonmedical waste generated from service delivery points e.g. needles and other sharp objects • Waste polluting the environment-unpleasant sights to the area, obstruction, foul smells, and attract insects and rodents, smoke from burning the waste, contamination of water masses	• Forecasting, planning, and phased procurement and shipping of vaccines • Build capacity of health workers on HCWM at all levels and enforce adherence through contracts and agreements • Ensure critical elements of the plan are appropriately reflected in the quality-of-care standards and related tools and regularly monitored as part of facility monitoring and supervision activities • Allocations for the HCWM plan activities • Capacity-building of project workers on implementation of the HCWM plan	MOH, MOs and IPs	• Inventory management protocol in use at all levels (Y/N) • Number health care workers trained on HCWM

Occupational Health and Safety (OHS)	• Staff handling and use of dangerous substances and wastes and inhaling fumes will expose the workers to occupational health risks • Medical personnel and waste handlers are exposed to dangerous and infectious health-care waste [HCW]) as they collect and transport • HCW • Infection risks for health facility staff • Staff incur on-the-job injuries due to improper clinical techniques, use of equipment, etc. • Poor Water Sanitation and Hygiene (WASH) in health services delivery points	• Ensure critical elements of OHS in line with WB EHSG for health facility is included in the quality of-care standards and related tools and monitored regularly • Ensure the OHS standards are available in the facilities and staff have the right capacity and knowledge on their use • Routine OHS pep (short) sessions in the facility. • Workers equipped with appropriate PPE • There should be always a first aid kit on each site • Clear markings and signage should be used in all areas of the site • Staff on-boarding should include orientation/training on how to prevent most common occupational accidents • Ensure minimum WASH standards as per health facility type • Record and monitor all OHS incidents including near misses • Reporting all OHS events using the Significant Event Mechanism Framework (SEMF)	MOH, MOs and IP's	• OHS standards available in all service delivery points (Y/N) • Grievances Redress Mechanism in all service delivery points (Y/N) • Information on availability of GRM displayed (Y/N) • PPE in use in all service delivery points (Y/N)

Community Health and Safety /Minor facility repair and Rehabilitations	• Health facility rehabilitation works increasing dust and noise levels • Repair equipment handling • Poor quality construction/rehabilitation leading to harm to workers and/or patients • Air pollution could also occur from using diesel-powered backup generator sets. • Inadequate emergency preparedness and response at all service delivery points	• Ensure critical elements of Community Health and Safety in line with ESMF for rehabilitations are included in the contractual agreements with IPs, contractors; such requirements will be extended by IPs and • Provision of PPE • Cordon off and provide signage for areas undergoing minor repairs • Store repair equipment to limit access to anyone other than designated operators • Consultation and agreement with community for repair-related debris disposal • On-site supervision of construction • Develop site specific emergency preparedness and response plan • Emergency prepositioning of supplies	MOH, MOs and IP's	• Emergency preparedness and response plan available in all service delivery points (Y/N) • Number of staffs trained on IP Communication
Community Health and Safety/ Health care waste Management	• Increase in medical waste in areas of operation • Poor hygiene, water and sanitation in health facilities negatively impacts safe delivery of health care services	• Develop WASH in health facility guidelines (covering hygiene, sanitation, safe water and waste management) for circulation to IPs • Engage and train health workers on Health care waste management • Promotion of WASH including hand hygiene at the health facility	MOH, MOs and IP's	• Number of health workers trained • Development of guidelines • Number of programme monitoring visits

Community Health and Safety / Emergency Preparedness and Response	• IPs are not prepared nor equipped to respond to emergencies, including disease outbreaks	• Train IPs in emergency preparedness and response, including infectious disease surveillance and response (IDSR) • Pre-position supplies (especially during the dry season), including emergency contingency supplies (e.g., cholera kits) • Provide technical assistance to IPs to develop emergency contingency plans • Collaborate with emergency responders/humanitarian actors • IPs implement emergency preparedness components of the Security Management Framework (SMF)	MOH, MOs and IP's	• Number of health workers trained in emergency preparedness and response • Availability of pre-positioned supplies • Regular reviews of IP Security Management Plans as directed by the SMF

Table 2: Generic Social Management and Monitoring Plan

Project activities	Risks	Proposed mitigation measures	Responsible party	Monitoring indicator
Health service delivery via facilities or community outreach	• Inequitable availability and access to service delivery in areas that are not highly vulnerable • Social disruption due to perceived introduction of inequitable health services • Elite capture of services by individuals with connections or senior social status • Social ills like sexual exploitation and abuse, selling medicine to vulnerable groups instead of providing them free	1. Ensure distribution of health facility sites that will enable all populations to safely and securely access them, given their cultural background, specific vulnerabilities, the areas of control of different parties to conflict, and trends in the conduct of hostilities 2. Strengthen dialogue with local stakeholders to effectively negotiate for people's access to services 3. Communicate with local leaders to inform communities about the health care services to come in the community 4. Coordination with other partners and local health actors to mitigate duplication and reduce gaps in service delivery 5. Support the formation and strengthening of health local groups (e.g. Boma Health Committees) for self-monitoring 6. Develop a Grievance Redress Mechanism as part of Accountability for Affected Populations strategy 7. Programme monitoring and supervision that includes consultations with community members	UNICEF UNICEF MOH, MOs and IP's	• Mapping of areas and the health facilities to be supported within each lot • Number of health facilities and communities supported • Number and type of grievances reported and addressed • Number of active local health committees • •Number and type of people consulted (e.g. males/females) •Number of state coordination meetings •Number of IP staff trained on GBV/PSEA
	• Increase in medical waste in areas of operation • Poor hygiene, water and sanitation in health facilities negatively impacts safe delivery of health care services	1. Develop WASH in health facility guidelines (covering hygiene, sanitation, safe water and waste management) for circulation to IPs 2. Engage and train health workers on medical waste management 3. Develop waste management plans for each health facility 4. Monitor implementation during programme monitoring and supervision	MOH, UNICEF	• Number of health workers trained • Development of guidelines • •
	• Shortage of suitably qualified staff or presence of	1. Physical verification and mapping of health facilities by community mobilizers as well as an auditing firm	MOH, MOs and IP's	•

	lowly skilled medical staff resulting in poor-quality critical lifesaving services • Salaries meant for health workers not being remitted to staff resulting in absence of health personnel at facilities and disruption of services .	2. Transparent recruitment of qualified health care workers, with preference provided to local residents (as less likely to have high turnover) and with attention to gender and conflict sensitivity 3. Support IPs with in-service training, monitoring and supervision of facility and community-based health care workers for quality improvement of services 4. Provision of technical assistance to strengthen the capacity of CHDs and IPs in delivering programme results 5. Nominated IPs will pay standardized incentives of PHCC/PHCU workers		• Number of health care workers trained (by type of training, by gender) • Standardised Package of incentives available
	• Community activities seen as not acceptable according to local traditions or not affordable, thereby generating hostility to the healthcare system and resulting in a lack of buy-in of community health services by community leadership and stakeholders	1. Involve key local stakeholders in Boma Health Team /Community Health Worker (BHT/CHW) selection and implementation processes to ensure buy-in, recognition, and acceptability from the community 2. Strengthen the ability of community health leaders and structures (particularly Boma Health Committees) to enable accountability, monitor community health initiatives and support BHWs 3. Adapt BCC messaging to address local myths and misconceptions and to encourage care seeking from BHWs 4. Ensure recruitment of female BHWs (minimum 30%) to reduce gender barriers to services	MOH, MOs and IPs	• Number of Community Health Workers (males/females) recruited and trained
	• Low capacity of BHWs and supervisors, poor linkages between BHWs and health facilities, limited equipment, and a lack of data, impede the quality of community health services	1. Ensure sufficient human resources at adjacent health facilities to carry out BHW supervision 2. Establish referral and counter-referral networks between BHWs and health facilities to improve the continuum of care 3. Conduct BHW training 4. Provide on-time compensation to CHW (e.g. performance-based incentives linked to reporting) 5. Development & distribution of community data collection tools linked to the HMIS	MOH, MOs and IPs	• Number of Community Health Workers (males/females) recruited and trained • Community data collection tools reviewed and disseminated among BHW

Procurement and distribution of pharmaceuticals and medical inputs	• Expired and damaged drugs negatively affecting communities in the areas where the project is implemented • Social ills like sale of drugs for private gain • Poor distribution and frequent stock outs affecting ability to meet minimum project expectations	1. Conduct a diagnostic assessment to assess how the supply chain can be improved to ensure adequate delivery to health facilities located in SPLA-IO areas/former -IO areas as well as other hard-to-reach areas 2. Procure kitted drugs, pre-packaged at UNICEF supply headquarters in Copenhagen to reduce distribution time and risk of drug shortage at health facility level 3. Recruit IPs with capacity in logistics and supply chain management and stock reporting while ensuring that reporting tools are available 4. Inclusion of drug monitoring in programme design and programme documents to strengthen monitoring of drugs availability in PHCCs and PHCUs through NGOs / CBOs and community mobilizers working on the ground 5. Strengthen verification along the supply chain by requesting receipts of drugs from UNICEF to IPs as well as from IPs to Health Facilities	MO, MOs and IP's	• % proof of deliveries (POD) received from health facilities • Supply chain diagnostic study carried out • Proportion of facilities reporting stock
Targeting of health institutions by parties to the conflict / protection mechanisms / looting.	• Inequitable availability and access to service delivery in areas that are not highly vulnerable • Essential health services are disrupted	1. Strengthen community engagement and dialogue to reduce targeting of health institutions when conflict occurs 2. Minimal quantities of drugs stocked at CHDs, PHCCs and PHCUs to minimise loss through looting. Work with IPs to gauge and stock adequate quantities per period 3. Health kits and supplies are prepositioned nearby in secure locations for emergency response/replenishment 4. Circulate to partners the SOP for immediate reporting of loss and looting incidents 5. Implement identified mitigation measures conducted as part of the IP Security Management Plan and Assessments, as detailed by the SMF.	MOH, MOs and IPs	• Number of health facilities and communities supported

Security of Project Personnel embedded in the county health department	• Shortage of suitably qualified staff or presence of lowly skilled medical staff • Inequitable availability and access to service delivery in areas that are not highly vulnerable. • Essential health services are disrupted • Injury or loss of life of Project Personnel due to targeted or non-targeted security incidents	1. Government and MOs will continue to work closely with UN entities to utilize their channels for lobbying for access in conflict areas to allow programmatic assessments and interventions, monitoring and vital distribution of life saving drugs by partners. 2. Bolster security in hospitals, PHCCs, PHCUs through manned guarding of facilities, and securing of points of entry, through appropriate security risk assessments. Government & MOs shall support partners with relevant financial resources from the Project funding to strengthen security at facilities. 3. Strengthen regular and ongoing community engagement and dialogue to reduce targeting of health institutions when conflict occurs 4. Strengthen support to IPs via the SMF, including financial support from the Project funding to strengthen security management capacity of the IPs. 5. Improve security related Significant Event reporting to enhance information sharing and ability to inform decisions around Project Personnel security and service provision.	MoH, MOs, IPs	

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6 Environmental and Social Risk Management Procedures

6.1. Environmental and Social Screening Process

The Project Management Unit (PMU), established at the Ministry of Health (MoH), is responsible to provide oversight of all environmental and social (E&S) screening processes. The Project Management Organizations (MOs) (UNICEF and WHO), to be contracted by MoH, will be responsible for the screening of all their respective activities. The screening will be carried out based on a site- specific Social and Environmental Screening Form (see Annex 1). MOs shall maintain existing management structure and implementation arrangement (under South Sudan COVID-19 Emergency Response and Health Systems Preparedness Project (P176480) and its Additional Financing) for ESHS implementation of HSTP in compliance with the ESCP, and other ESF instruments to be adopted under the Project.

All proposed subprojects will be subjected to a screening process by the Environmental Specialist and the Social Specialist of the MOs to determine and assign them an environmental and social risk rating and further identify any potentially sensitive environmental and social receptors likely to be negatively impacted The screening report will further help to determine which ESF environmental and social standards are applicable and which steps need to be taken and which provisions or procedures apply, as laid out in the ESMF.. The output of the screening will determine whether a) the subproject is high, substantial, moderate, or low (see below for a negative activity list), and b) site-specific ESMPs/ESIAs or other E&S instruments (e.g. RAPs) are required. MOs will prepare site specific ESMPs/RAPs for subprojects with moderate risks, while site specific ESIAs/RAPs for subprojects with substantial/high risks will be prepared a consultant.

Following the screening process, the PMU and MOs assign all the proposed sub-projects into one of the following environmental and social risk levels (High, Substantial, Moderate or Low).

ES Risk Category	Nature of E&S Risks and Impacts	Examples
High	Sub-projects that contain high environmental and social risk impacts. These subprojects would require a full ESIA and a detailed ESMP. They also require a RAP depending on the level of risk for Project Affected Persons (PAPs) and the resettlement impact anticipated.	Large-scale and complex infrastructure projects/subprojects; waste treatment and disposal installations; projects in critical habitat and protected areas; projects involving significant quantities of hazardous substances; activities leading to involuntary resettlement, land acquisition and restrictions to land use; subprojects that have the potential to lead to significant discrimination or tensions or violence at the community level; etc. *HSTP subprojects with 'High' environmental risk (including those that are sited within or proximal to sensitive and valuable ecosystems and habitats (legally protected and internationally recognized areas of high biodiversity value)) are not eligible for financing. Subprojects which cause significant displacements/involutory resettlement are screened out as well.*

Substantial	Subprojects may not be as complex as High-Risk Projects, its E&S 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. Subprojects that may entail some significant risks and impacts, mostly temporary, predictable and/or reversible, possibility of avoiding or reversing, medium in magnitude and/or in spatial extent (medium to large area and population), less severe, more readily avoided/mitigated cumulative and/or transboundary impacts, medium to low probability of serious adverse effects to human health and/or the environment (with known and reliable mechanisms to prevent or minimize), lower effects on areas of high value or sensitivity , more readily available and reliable mitigatory and/or compensatory measures. These subprojects require an E&S assessment that includes either an ESIA, ESMP, and/or RAP.	Large-scale infrastructure investments; subprojects that lead to discrimination against certain groups (for example ethnic minorities or women); subprojects that foster tensions at the community level or even have the potential to spark violence (for example based on the selection of beneficiaries). HSTP subprojects screened 'substantial' will be eligible for financing.
Moderate	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. Projects/sub-projects that have low to medium environmental and social risks and impacts, including ones that are site-specific, temporal and reversible in nature. In addition to the E&S clauses and ESHS terms and conditions in the contract, most if not all of these subprojects will require the preparation of either a simplified ESMP or a detailed ESMP.	Construction/rehabilitation of primary healthcare facilities or primary healthcare units; rehabilitation of local roads; repair or extension of existing PHCC or PHCU; small-scale infrastructure works. HSTP subprojects screened 'Moderate' will be eligible for financing.
Low	Sub-projects that do not have a physical footprint. These subprojects will not require the preparation of E&S instruments; environmental and social clauses, ESHS terms and conditions in the contract will be recommended.	Purchase of furniture for existing PHCC or PHCU; small training and workshops, etc. HSTP subprojects screened 'Low' will be eligible for financing.

Exclusion list: The process will also identify critical issues that might be initiated by the respective subproject and would require the ESMPs/ESIAs/RAPs and C-ESMPs to adapt to the risk and impact. In this regard, subprojects identified with a "high" environmental risk including those that are sited within or proximal to sensitive environmental ecosystems or habitat among others are screened out. Subprojects which cause significant displacements/involutory resettlement are screened out as well. In addition, subprojects with high adverse impacts on cultural heritage are screened out.

6.2. Preparation of site-specific E&S instruments

The main responsibility for the preparation of subproject-specific E&S instruments will rest with the MOs (UNICEF and WHO). Following the E&S screening process, where relevant, MOs will prepare the respective E&S instruments either through their Environmental and Social Risk Management Specialists or through E&S consultants. ESMPs will be prepared based on the outline presented in Annex 3; ESIAs will be prepared based on the outline presented in Annex 4 while Resettlement Action Plans (RAP) will be prepared based on the RAP outline presented in the Project Resettlement Framework (RF). Stakeholder consultation shall also be conducted as part of preparation of all the relevant E&S risk instruments in accordance with the Stakeholder Engagement requirements, please refer the SEP for the details.

The World Bank disclosure standards require that the ESMF prepared for HSTP is made available to all pertinent stakeholders, including project affected groups, local NGOs, and the public at large. A summary version will be translated into the main local languages, as per the stakeholder engagement

plan. Public disclosure of ESMPs/ESIAs/RAPs/Livelihood Restoration Plans is also required. The PMU will make available copies of the ESMF and ESIA/ESMPs/RAPs at strategic locations and offices of the ministries, according to the SEP. A Grievance Redress Mechanism (GRM – see Section 10) will be in place for complaints on no-compliance with the disseminated documentation. Disclosures will also be undertaken on MOH, MOs and WB websites.

The subproject ESMPs will summarize the context, interested parties, compliance requirements, checks for compliance, risks and opportunities, activity-specific environmental and social objectives and specific targets, training plans, inspections, and other monitoring actions and incidents. They will inform the actions expected from MOs and the monitoring of their performance through the PMU. ESMPs will be prepared in line with page 26 of the WB ESF ("Indicative outline of ESMP") and the ESCP requirements. RAPs are expected to follow the procedures and content laid out in the RPF. Stakeholder consultation shall be conducted as part of the Environmental and Social Screening and preparation of ES risk instruments (ESIAs, ESMPs, RAPs).

The ESMPs or ESIAs shall be included in the procurement and contracting process including bidding documents, for potential civil works, as well as other WB standard EHS terms and conditions for procurement and any subproject-specific requirements. Codes of conduct shall be required for contractors, subcontractors, primary suppliers, and their workers. Potential Contractors will prepare, adopt, maintain, and implement a Health and Safety Plan including community health and safety risk management as part of the C-ESMP.

6.3. Review and Approval

MOs will report the E&S screening outcomes to the PMU E&S Specialists for review, quality control, monitoring and reporting purposes. Subproject ESIAs/ESMPs/RAPs will be reviewed and cleared by the PMU prior to submission to the Bank for clearance. Subproject ESIAs, ESMPs and RAPs will warrant clearance by the World Bank. The PMU will further file and disclose the instruments.

6.4. Implementation and reporting.

Once the instruments are cleared, MOs will roll out their implementation through their contractors. MOs will ensure their contractors are bound to implement all mitigation measures set out in the instruments through customizing the ESIAs/ESMPs. To this effect, specifically construction contractors are required to prepare and implement contractor's-ESMP (C-ESMP) based on the site specific ESIA/ESMP. The PMU will conduct monitoring and supervision of the implementation of E&S instruments through review of documentation and site visits. MOs will further report against the mitigation measures and indicators set out in the E&S instruments on a quarterly basis to the PMU/MoH, and then the PMU will absorb MOs' reports and integrate them into its quarterly progress reports for the first year as part of the Project's technical progress report and thereafter biannually throughout Project implementation (see the section below on Monitoring and Reporting). MOs will provide their progress report to the PMU/MoH 30 days after the end of each reporting period, and then the MoH/PMU will submit each compiled report to the WB no later than 45 days after the end of each reporting period.

7 Monitoring and Reporting

7.1. Regular Monitoring and Inspection for Compliance

Adequate institutional arrangements, systems and resources are in place to monitor the ESMF. The goal of monitoring is 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 sits with the PMU, which administers the overall project-related E&S monitoring and implementation as laid out in this ESMF. The PMU Coordinator is responsible for the overall implementation of the E&S mitigation measures, as well as for monitoring and inspecting for compliance. The Environmental Specialist and Social Specialist in the PMU handle all reporting aspects.

The ESMF guides the development of site-specific ESMPs or ESIAs. MOs are responsible for their own site/activity specific screening, impact assessments, development of site/activity specific ESIAs/ESMPs, monitoring of impacts, and administration of mitigation measures with regard to their respective subprojects/project activities. These activities follow their respective internal processes, where applicable. MOs further commit to integrate stakeholder inputs into regular monitoring and reporting activities. MOs allocate adequate financial, logistic and material resources to support the E&S teams in the implementation of the ESMF. MOs are committed to report all screening results, the results of impact assessments, site/activity specific ESMPs to the PMU.

The PMU Social Specialist and Environmental Specialist assesses the compliance of MOs' activities against the ESMF, the RPF, the SEP, the SMP, ESCP and subsequent ESMPs/ESIAs, RAPs or other instruments, and reports any non-compliance to the PMU Coordinator. Indicators are identified in the monitoring table below and used as a baseline for assessing progress on the ESMF implementation. The PMU also independently conducts its own monitoring, verification and inspection of the activities to ensure activities are in compliance with this ESMF. Monitoring indicators depend on specific activity contexts.

A Third-Party Monitoring Agent (TPMA) will be engaged by the PMU/MoH to provide independent operational review of project implementation and project results. This includes assessing adherence at all implementation levels to the procedures set out in the Project Implementation Manual, ESMF and other relevant project documents and in verifying outputs of all project activities. It serves as a management tool to provide the PMU with timely third-party information on weaknesses in implementation that require corrective actions to keep the project on track. The scope and methodology of the TPMA will be reviewed with the World Bank and quarterly or bi-annual monitoring reports are shared by the PMU. As the TPMA also monitors E&S risk mitigation implementation, the contractor needs to include an E&S Specialist on the team. The PMU Environmental and Social Specialists submit the E&S performance reports to the WB on quarterly and annual bases, as part of the Project Technical Report.

Furthermore, contractors are obliged to provide ESHS monitoring reports to the MOs monthly. The results presented in the reports are summarized in the Quarterly Progress Report by MOs to the PMU, and from the PMU to the World Bank.

As the ESMF is a 'living' document, reviews will be undertaken as needed and the document may be amended as issues or new types of activities or institutional arrangements arise. The PMU will lead on amendments of the ESMF. The amended ESMF must be cleared by the World bank. This is also applicable for site-specific ESMPs/ESIAs or RAPs.

The World Bank equally supervises and assesses the environmental and social performance through the review of the quarterly monitoring reports and through regular[7] site visits.

The GRM further helps track complaints and effectiveness of interventions, including those with environmental and social impacts and the quarterly monitoring reports provide summaries and statistics on the GRM.

Upon completion of the project, the PMU undertakes 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.

7.2. Incident and Accident Reporting

For all severe environmental, social, safety and security incidences (an incident that has significant adverse effect on the environment, the affected communities, the public or workers, e.g. fatality, GBV/SEA, forced or child labour, criminal or political physical violence), the PMU/MoH provides a notification report no later than 5 days to the World Bank (as reflected in the ESCP), followed by a detailed investigation report outlining a root cause analysis of the incident and related corrective actions to be undertaken. MOs provide notification reports on severe incidents to the PMU within 4 days, after learning of the incident or accident. Incident reports are captured in the Incident Report Form. Any material incident is reported to the World Bank. A detailed report of the incident shall be provided within 30 days of notifying the World Bank of the incident or accident, as stated in the ESCP. The steps and procedures for incident management and reporting is employed for all types of incidents and follows the World Bank's revised Environmental and Social Incident Response Toolkit, March 2023.

8. STAKEHOLDER ENGAGEMENT AND INFORMATION DISCLOSURE

A detailed outline of the stakeholder engagement and information disclosure is contained in the Stakeholders Engagement Plan (SEP). The SEP includes a description of the HSTP supported components and sub-components and the specific stakeholder's engagement needed for effective and efficient implementation of the project. Component 2 and 4 in the are a continuation from the old project- CERHSP. The previously applied stakeholder's engagement procedures will be updated and harmonized with the new approaches in the HSTP.

The SEP includes a stakeholder's identification and corresponding supportive activities for the three categories of key stakeholders. The three categories include the parties directly affected/ impacted by the project; other interested parties; and identified vulnerable groups. To reach and engage with these key stakeholders, specific strategies will be applied as detailed in the SEP following stakeholder's analysis and identification of a primary method of engagement. The consultative process will be adopted to reach out to vulnerable populations and will include community leaders, such as *Payam* and *Boma* chiefs, and women's and youth group leaders, to involve them in the process of planning and executing the activities in their catchment area.

The project includes GRM which has been operational for a long time already under the predecessor project, sensitive to SGBV as well as accessible for vulnerable people. Respective details are outlined in the Stakeholder Engagement Plan of the Project.

The ESMF and outstanding set of E&S plans and instruments will be taken through a process of consultation and disclosure as soon as finalized.

9. Grievance Redress Mechanism (GRM)

9.1. Project-Level GRM

The main objective of a GRM is to assist in resolving complaints and grievances in a timely, effective, and efficient manner that satisfies all parties involved. Specifically, it provides a transparent and credible process for fair, effective, and lasting outcomes. It also builds trust and cooperation as an integral component of broader community consultation that facilitates corrective actions. Specifically, the GRM:

- Provides affected people with avenues for making a complaint or resolving any dispute that might arise during the implementation of projects.
- Ensures that appropriate and mutually acceptable redress actions are identified and implemented to the satisfaction of complainants
- Avoids the need to resort to judicial proceedings.

The project will implement an existing GRM developed and implemented under the COVID-19 Emergency Response and Health Systems Preparedness Project (CERHSSP) which aligns with the requirements of ESS 10 and other relevant E&S standards.

South Sudan is a complex context in which many people are poor, live in hard-to-reach and isolated communities, and are socialized into engaging outsiders through representatives. In addition, many are likely to have different understandings of accountability to the project's planners and prefer to resolve issues within their communities. At the same time, the signing of an agreement in 2018 to form a coalition government gives hope that the current peace may be solidified and the government able to work on strengthening its vertically integrated health sector. Through the BHI, the Ministry of Health's service model aims to include the chieftainship system, which, despite drawbacks, remains the most legitimate and primary organizing unit for communal life. It also promises a network of BHWs able to act as the eyes and ears of the Ministry of Health and its partners beyond health facilities.

Any GRM must acknowledge and, as far as possible, seek to address these challenges by capitalizing on the government's commitments and existing ways of doing things. Yet, to ensure vulnerable community members have a voice, it should also seek to improve on and add to current arrangements and plans, and to create an enabling environment for social accountability relationships. This can be done through targeted training and incremental interventions, and by cultivating allies at all levels of the health sector.

To do this, the GRM proposed below will be structured around the BHI, health facilities and the HSTP's existing monitoring, evaluation and learning routines. Its modular design means that its five streams can be implemented as key stakeholders' capacities are built and buy-in is secured. Each stream is designed to complement the others, with the goal of providing an inclusive and safe GRM that closes the feedback loop with communities and builds trust, sensitively handles corruption and SEA allegations, and provides the project with actionable data through which to adjust and improve its programming. UNICEF uses the term 'Accountability to Affected Populations' (AAP) to encompass activities which include a GRM; therefore, the term 'AAP' is used throughout this section.

Figure 1 displays the AAP mechanism. Information flows in Stream 1 are represented by green arrows, Stream 2 by blue, Stream 3 by yellow, and Stream 4 by dark red. The black dashed arrow represents data reported to UNICEF from partners, and the purple dashed arrows the sharing of reports with findings and analysis among stakeholders.
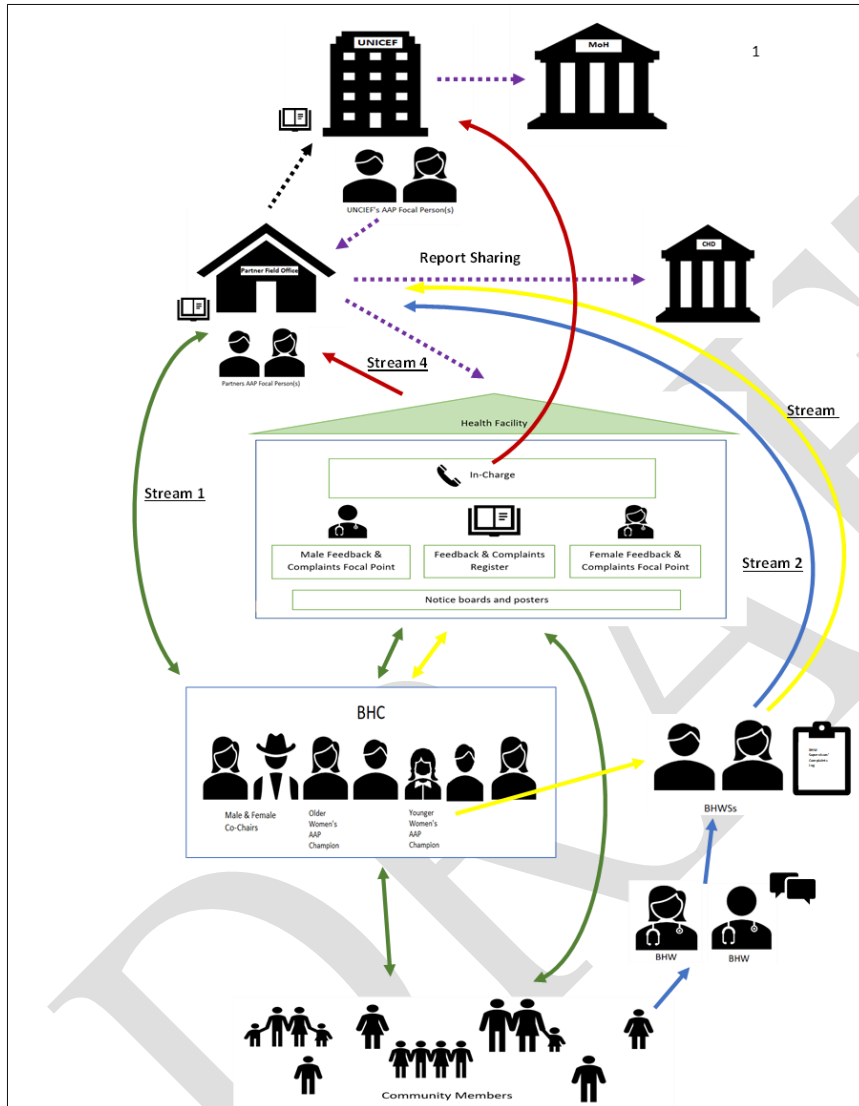
Figure 1. Multi-stream AAP mechanism

9.2. World Bank Grievance Redress System

Communities and individuals who believe that they are adversely affected by a World Bank-supported project may submit complaints to existing project-level GRMs or the World Bank's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project-affected communities and individuals may submit their complaint to the World Bank's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate GRS, please visit http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

10. ESMF IMPLEMENTATION

10.1. Implementation Arrangements

The implementation arrangements outlined below are complemented in further detail in the LMP in Annex 2.

a) The Ministry of Health, Project Management Unit and High-Level Steering Committee

The project seeks to build the Ministry of Heath's (MoH) institutional capacity to pave the way for the future World Bank financed projects in South Sudan to transition towards a fully government-led implementation modality where the MoH's role in service delivery will be to contract and manage service providers. Capacity constraints of the government to effectively manage and implement operations in those key areas including environmental and social risks management have sought the rationale for the inclusion of institutional capacity development at the MoH (component 3) to support a gradual transition towards government-led project management modality through customized capacity building activities in the core areas of effective project management.

The MoH will contract Management Organizations (MOs) (UNICEF and WHO) which will sub-contract NGOs (local and international) to deliver the identified package of health services. UNICEF and WHO shall maintain existing management structure and implementation arrangement (under South Sudan COVID-19 Emergency Response and Health Systems Preparedness Project and its Additional Financing) for ESHS implementation of HSTP in compliance with the ESCP, and other ESF instruments to be adopted under the Project.

The MoH will also contract a Third-Party Monitoring Agency which will monitor health service delivery, functionality and health outcomes through conducting community satisfaction surveys, household, and health facility surveys; and prepare analysis, presentations, and bulletins presenting monitoring results and findings, including E&S risk management.

A High-level Steering committee (HSC) will be established to provide strategic direction and guidance on the sectoral challenges and future steps on service delivery and health financing. The HSC will meet on a bi-annual basis and will consist of MOH, MOF, Donors, State level health ministers, MO Senior management, and WB. Further, an operational steering committee (OSC) will be established to provide guidance on the management and oversight of health service delivery and achieved results of the project. The OSC will meet on a quarterly basis and will include MOH, PMU, MOs, Donors, and WB.

The Project Management Unit (PMU) manages health service contracting and the day-to-day engagement with the government, management organization, and donors. This PMU will also include qualified and capacitated staff (including a functional environmental and social risk management organizational structure throughout Project implementation with qualified staff (one Environmental Risk Management Specialist, one Social Risk Management Specialist with GBV/Gender expertise), and focal points at the local level and resources to support management of ESHS risks and impacts of the Project.

b) Management Organization (UNICEF and WHO)

Management Organizations (UNICEF and WHO) will be responsible for overseeing implementation and compliance with the ESMF for their respective components of the project. In addition, the MOs will support the review/update of the ESMF during implementation in consultation with the World Bank and the Ministry of Health in an event that it is deemed necessary. MOs are responsible for the procurement, contracting, and monitoring/supervision of implementing partners and service providers/contactors in their respective project components. Some of the duties of the contractors include:

- Organization and conduct of trainings, where necessary following a cascaded model.
- Organization of information to be passed from management to workers.
- Provision and implementation of social management measures and occupational health and safety measures.
- Review of circumstances and causes of social risks and advice MOs on preventive measures.

c) Implementing Partners

Implementing partners (national and international NGOs) will constitute the primary implementation modality for the delivery of health services. Through their agreements and scope of work, Implementing Partners will be responsible for the following within the ESMF:

- Identifying needs for improved medical waste management and IPC procedures in health facilities, and providing the means to improve infrastructure and practices through the provision of supplies and operating costs to health facilities, as appropriate
- Implement/comply with all relevant environmental and social requirements as defined in the contracting documents
- Monitor the implementation of environmental and social requirements in health facilities and by sub-contractors (if relevant)
- Implement and manage a GRM, where feasible
- Report on the implementation of environmental and social requirements including grievances, accidents, and incidents.

d) Other UNICEF/WHO engaged Contractors and Service Providers

Under the Project, MOs will contract services from private sector organizations. These services will primarily be for logistics, printing, and telecommunications. Almost all procurement of goods under the Project will be procured from offshore private sector vendors vetted throughout global supply contracts by UNICEF Supply Division in Copenhagen. Service providers will be responsible for compliance with the environmental and social requirements set out in their contracting arrangements.

e) Third Party Monitoring Organization

The Third-Party Monitoring organization (TPM) will be contracted by MOH and reports directly to the MoH. The Health Monitoring and Evaluation Specialist will work closely with the TPMO, providing technical guidance and monitoring performance as manager for this contract. The TPM will support MOs with lessons learned and opportunities to improve service delivery to beneficiaries based on the outcome of their monitoring reports. The [World Bank's ESF Good Practice Note on Third Party Monitoring](#) has been taking into account in the management to TPMO activities.

10.2. Capacity Building/Training and Estimated Budget

10.2.1. Capacity Building Plan

MoH and MOs have the responsibility of ensuring systems are in place so that relevant employees, contractors and other workers are aware of the environmental and social requirements for Project implementation, including the ESMF. The following capacity building and training programmes will be in place:

Capacity building/training of project staff will be carried out to strengthen their knowledge and impart awareness on essential regulatory and other requirements and elements of the ESMF, and help understand the importance of social and environmental management from design stage through implementation. Training and awareness of service provider personnel will be undertaken on relevant ESMF requirements, including social, health and safety requirements; and it will be embedded in the training of all service provider personnel conducted prior to the start of each payment cycle.

The capacity building activities for project staff and health workers will highlight existing mechanisms through the quality-of-care tools for monitoring the environmental, social, health and safety aspects at a facility level. The capacity building exercise will be on a continuous basis and promoting use of the data generated from the monitoring activities.

The design of training modules shall consider differing levels of responsibility, ability, language skills, literacy, and risk exposure. MOs will ensure that contractual obligations and systems are in place so that implementing partners and service providers ensure that persons under their control performing tasks related to environmental and social risk management are competent based on appropriate education, training or experience, and shall retain associated records. See the *Capacity Development Plan* matrix below for details.

Activity	Content	Participants	Timeframe	Responsible Actor

Community Mobilization/ Risk Communication	• Importance of community participation and mobilization to enhance project ownership, transparency, and accountability
	• Risk Communication
	• Community Mobilization Strategies
	   • Concept of Vulnerability
	   • Community consultation and awareness raising
	• GBV/SEA/SH
	• Violence Against Children (Children SEA/SH)
	   • Stakeholder engagement
	   • Social inclusion and diversity
		Community members, tribal and religious leaders, Health Facility Managers, Media	During mobilization	Implementing partner

Prevention of Sexual Exploitation, Abuse and Harassment	• GBV/SEA/SH • Violence Against Children (Children SEA/SH) • Handling GBV related complaints – including cases of VAC • Code of conduct to prevent GBV/SEA/SH	Community Members, Health Facility and School Management, Tribal and Religious Leaders and Community based Organizations, BOMA Health Workers Workers at the laboratories and health care facilities Project Consultant MO staff, Contractors, consultants	Throughout project implementation	MOs, Implementing Partner
Grievance Redressal	• Dispute resolution management and grievance redress • Trust and Consensus Building • Project Grievance Redress Systems	Community Members, Health Facility and School Management, Tribal and Religious Leaders and Community based Organizations, BOMA Health Workers Workers at the laboratories, health care facilities, Warehouses Project Consultants MO staff	Throughout project implementation	MOs, Implementing Partner
Training on ESS guidelines, ESMF Implementation and procedures particularly on ESMP/ESIA/ Emergency Preparedness Response Plan implementation, & Significant Event Reporting and Management Plan	• E&S Screening of subprojects • Introduction to World Bank's ESF • ESMF Implementation • Responsibilities of Service Providers and Contractors in implementing ESMPs/ESIAs • Toolbox meeting on OHS/CHS issues including the use of PPEs • Community health and safety (including emergency prevention and preparedness, response arrangements to emergency) • Training on first aid	Contractors Health Facility Managers Project Consultants MO staff	Before the commencement of sub-project activities	MOs, Implementing Partner

Activity	Content	Participants	Timeframe	Responsible Actor
Training on Health Care Waste Management and infection prevention	• HCWMP - Measures for proper implementation of HCWMP, e.g., segregation, collection and disposal of HCWs • Infection Prevention and Control • Source Separation • Toolbox meeting on OHS issues including the use of PPEs • Managing Incinerators	Sanitation Service Providers All workers at the health facilities and Laboratories, Warehouses Ancillary workers	Throughout project implementation	MOs, Implementing Partner
Training on Security Management Framework and Security risk management procedures	• Development of training packages including printing requirements for literature / other material. The packages include: 1) Development and Implementation of Project Area Specific Security Plans 2) Development of financial proposals in support of identified security-related requirements 3) Conducting the bidding process for Third-party security service providers as needed 4) Security Preparedness 5) Traffic and Road Safety Training 6) Security reporting and analysis 7) Residential Security Measures 8) Security Incident and Event Report writing • Conduct training workshops to IPs using the above training packages • Limited provision of security equipment to Implementing Partners as per assessment result • Additional travel requirements for technical support to IPs	Service Providers/ MO Staff / Extenders/ Contractors	Before the commencement of sub-project activities	MOs, Implementing Partner

10.2.2. Proposed Resources and Budget for the ESMF Implementation

ESS Instrument	Key intervention	Proposed budget (one year)
Security Management Framework (SMF)	Technical Support to IP	500,000
	Sub-total	*500,000*
GBV/PSEA/SH Action Plan	PSEA Capacity building and Assessment	100,000
	GRM system set up (Call center, etc.)	200,000
	GBV Technical Support and Training cost	50,000
	MGCSW provision of GBV and Child protection service including case management and PSS	500,000
	Health facility capacity assessment for GVB service provision	20,000

		Sub-total	870,000
Stakeholder Engagement Plan (SEP)	Official coordination meeting with partners		60,000
	Official meetings and workshops at national, states and county levels		60,000
	Collaboration with community leaders to inform about project and gain community support		150,000
	Social Media (Facebook, WhatsApp): Visual/written and audio-visual content sent to a network of local actors, female only networks, and other stakeholder groups, including those representing vulnerable groups, and collating feedback		50,000
	Social Media (Facebook, Twitter, etc.): Posting project ESF documents, videos introducing the project, and other promotional materials, and monitoring comments		20,000
	Printing project brief, GRM posters, and GRM fliers for distribution to HFs, BOMA and communities		50,000
	GRM (Call Centre) and Vendor GRM MIS System Maintenance		300,000
		Sub-total	630,000
Environmental and Social Management Framework	ESMF Capacity Building/Trainings ToT		100,000.00
	ESMF Implementation Monitoring		100,000.00
		Sub-total	200,000.00
Health Care Waste Management Plan	HCWM Capacity Building/Trainings ToT		100,000.00
		Sub-total	100,000.00
		GRAND TOTAL (USD)	2,300,000

ATTACHMENTS

1. Attachment 1. Labor Management Procedures (LMP) attached separately)
2. Attachment 3. GBV Assessment and Action Plan (attached separately)

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ANNEXES

Annex 1. Screening Tool for E&S Risks

Screening Form for Potential Environmental and Social Issues

MOs will use this form to screen for the potential environmental and social risks and impacts of a proposed subproject[8]. The form will allow MOs to: (i) identify the relevant Environmental and Social Standards (ESS); (ii) establishment an appropriate Environmental and Social risk for the subproject, and; (iii) specify the type of environmental and social assessment required, including specific instruments/plans.

The Screening Form is not a substitute for subproject-specific environmental and social assessments or specific mitigation plans.

General Information	
Date of screening	
Subproject name	
Subproject location	
Subproject components/activities	
Estimated Investment	
Estimated Start and Completion Dates	
Implementing Partner	
Was the site visited beforehand	
Observations/Comments	
Signature of ESS Specialist	
Signature of Program Manager	

Questions linked to potential E&S impacts of activities	Answer			Relevant ESSs	If these risks ('yes') are present, refer to:	Comments
	Yes	No	I don't know			
Does the subproject involve civil works including new construction, expansion, upgrading or rehabilitation of existing infrastructure?				ESS1	Environmental and Social Management Framework (ESMF)	
Does the subproject involve land acquisition and/or restrictions on land use?				ESS5	Resettlement Framework (RF)	
Is the subproject associated with any external waste management facilities such as a sanitary landfill, incinerator, or wastewater treatment plant?				ESS3	ESMF	

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[8] ***Exclusion list:*** *The E&S screening process will also identify critical issues that might be initiated by the respective subproject and would require the ESMPs/ESIAs/RAPs and C-ESMPs to adapt to the risk and impact. In this regard, subprojects identified with a "high" environmental risk including those that are sited within or proximal to sensitive environmental ecosystems or habitat among others are screened out. Subprojects which cause significant displacements/involutory resettlement are screened out as well. In addition, subprojects with high adverse impacts on cultural heritage are screened out.*

Questions linked to potential E&S impacts of activities	Answer			Relevant ESSs	If these risks ('yes') are present, refer to:	Comments
	Yes	No	I don't know			
Does the subproject have an adequate system in place (capacity, processes and management) to address waste?				ESS1, ESS3	ESMF	
Does the subproject involve the recruitment of workers including direct, contracted, primary supply, and/or community workers?				ESS2	Labor Management Procedures (LMP)	
Does the subproject have appropriate OHS procedures in place, and an adequate supply of PPE (where necessary)?				ESS2	LMP	
Does the subproject have a GM in place, to which all workers have access, designed to respond quickly and effectively?				ESS2	LMP	
Does the subproject involve use of security or military personnel during construction and/or operation of healthcare facilities and related activities?				ESS4	ESMF, SMP, Stakeholder Engagement Plan (SEP)	
Is the subproject located within or in the vicinity of any ecologically sensitive areas?				ESS6	ESMF	
Is the subproject located within or in the vicinity of any known cultural heritage sites?				ESS8	ESMF	
Does the project area present considerable Gender-Based Violence (GBV) and Sexual Exploitation and Abuse (SEA) risk?				ESS1	ESMF, GBV/SEA/SH Action Plan	
Is there a risk that the activity fails to incorporate measures to allow meaningful, effective and informed consultation of stakeholders, such as community engagement activities?				ESS10	SEP	

Conclusions of the screening:

1. Indicate the proposed environmental and social risk ratings (High, Substantial, Moderate or Low), and provide justifications.

2. Indicate the proposed environmental and social risk management instruments that must be prepared and how they will be implemented (responsibilities, resources, timeline).

ANNEX 2: GENERAL MEDICAL WASTE MANAGEMENT PLAN

Location and organization of collection and storage facilities

1. A drawing of the health care facility (HCF) showing **designated waste sites**; each waste site shall be appropriately designated for health-care waste or other waste.

2. A drawing showing the **central storage site** for health-care waste, as well as a separate site for other waste. Details of the **type of containers, security equipment, and arrangements for washing and disinfecting waste-collection** trolleys (or other transport devices) should be specified, along with the path of the waste collection through the HCF, with clearly marked individual collection routes.

4. A **collection timetable** for each trolley route, the type of waste to be collected, the total number of sites, and the relevant disposal point.

Design specifications

5. A drawing showing the **type of waste bin/receptacle** to be used for each site within the HCF.

6. A drawing showing the **type of trolley or wheeled container** to be used for collection.

7. A drawing of **sharps containers**, with their specification.

Required material and human resources

8. A current staff member of the HCF should be appointed as **Waste Management Officer (WMO)**.

9. **Notice of this appointment** should be widely circulated, with a summary of the Terms of Reference of this Officer, and updates should be issued when changes occur.

10. **An estimate of the number of personnel required** for cleaning and waste collection.

11.**An estimate of the number and cost** of waste receptacles and collection trolleys.

12. **An estimate of the number of sharps containers** and health-care waste drum containers required annually, categorized into different sizes if appropriate.

13. **An estimate of the number and cost of yellow and black plastic bags** to be used annually.

Responsibilities

14. **Definitions of responsibilities, duties, and codes of practice** for each of the different categories of personnel who, through their daily work, will generate waste and be involved in the segregation, storage, and handling of the waste.

Procedures and practices

15. A simple diagram (**flow chart) showing procedure for waste segregation**.

16. The procedures for segregation, storage, and handling of wastes requiring special arrangements, such as autoclaving.

17. Outline of monitoring procedures for waste categories and their destination.

18. Protocol for reporting and documenting failures in the waste handling, segregation, storage, transport, or disposal system, or waste management incidents that result in injury should be reported as soon as possible to the WMO, who will take action as necessary per agency protocol.

19. **Contingency plans**, containing instructions on storage or evacuation of healthcare waste in case of breakdown of the treatment unit or during closure down for planned maintenance.

20. Emergency procedures.

Training
21. Training courses needed, including an outline of content to be covered, participants targeted, expected outcomes, and budget. The Waste Management Officer should organize and supervise training programs for all staff. Initial training sessions should be attended by key staff members, including medical staff, who should be urged to be vigilant in monitoring the performance of waste disposal duties by non-medical staff. The Officer should choose the speakers for training sessions and determine the content and type of training given to each category of personnel.

Monitoring, Reporting, Updating

22. The Head of the HCF, with the WMO, s**hould review the WMP annually and initiate changes** necessary to upgrade the system. Interim revisions may also be made as and when necessary.

23. The WMO should prepare an **annual report** summarizing the actual practices vis-a-vis disposal of health-care wastes, providing data on waste generation and disposal, personnel and equipment requirements, and costs. Parameters to be monitored in this report could include:

(1) **Waste generated** each month, by waste category; treatment and disposal methods. (2) **Financial aspects of health-care waste management** (direct costs of supplies and materials used for collection, transport, storage, treatment, disposal, decontamination, and cleaning); training costs (labour and material); costs of operation and maintenance of on-site treatment facilities; and costs for contractor services (if any); and (3) **Public health aspects**, i.e. incidents resulting in injury, "near misses", or failures in the handling, separation, storage, transport, or disposal system, which should also be reported to the Infection Control Officer; this will be the basis for preventive measures to prevent recurrences.

24. The existence of the above details of the waste management plan, the implementation of these details, as well as the presence and content of the annual report will constitute the basis of outside supervision of the quality of waste management for this HCF.

Waste description and classification	Examples
Non-Hazardous	
NON-RISK GENERAL WASTE Similar to normal household municipal waste and can be managed by the municipal waste services.	Paper, cardboard, plastic, kitchen waste, ash, sawdust, pieces of wood segregated from hazardous waste at the point of generation
Hazardous	
INFECTIOUS WASTE Generated by both inpatients/out-patients, this waste is known to or likely to contain pathogenic micro-organisms and can be infectious to both patients, healthcare workers and the public and to the environment. It therefore, requires special management both inside and outside the hospital.	Laboratory waste, materials potentially infected blood, swabs, materials that have been used in surgery or been in contact with patients.
PATHOLOGICAL / ANATOMICAL Includes amputations and other body tissues resulting from surgical operations, autopsy (post-mortem), or delivery. Requires special treatment for ethical and aesthetic reasons.	Internal body organs, amputated limbs, placentas, foetus. Also includes urine and blood products.
CHEMICAL, PHARMACEUTICAL, GENOTOXIC WASTE Wastes, including expired products, generated from the pharmacy, radiology and from chemotherapy.	Vials, connecting tubing, drugs, vaccines, pharmaceutical products, disinfection solutions.
Highly Hazardous	
SHARPS: These are sharp-edged wastes that can cause cuts or puncture wounds (e.g. needle stick injuries). They are hazardous whether or not they are contaminated with blood. They must be segregated, packaged, and handled with specific procedures within the health facility.	Needles, syringes, surgical blades, scalpels, test tubes, ampoules, glass instruments, pipettes.
HIGHLY INFECTIOUS These highly infectious wastes require immediate treatment by chemical disinfectants or autoclaving before joining the hazardous HCW stream.	Sputum cultures of TB laboratories, contaminated blood clots and glassware, highly concentrated microbiological cultures carried out in medical analysis laboratories.
RADIOACTIVE WASTE Any solid, liquid, or pathological waste contaminated with radioactive isotopes of any kind	Radioactive papers, gloves, cotton swabs, needles (sharps), liquid-patient excretion, spent radiation sources radium needles.

Annex 3. Guidance for Environmental and Social Management Plan (ESMP) Preparation

This framework outlines indicative basic elements of the ESMP for rehabilitation of health care facilities (HCF) subprojects under the South Sudan Health Sector Transformation Project (HSTP) as briefly described below:

Introduction and objective: Briefly describe the background of the subproject, including the subproject site description and location map(s), and the objective of the subproject.

Subproject description: The ESMP concisely describes the proposed subproject including its activities which will involve rehabilitation of existing healthcare facilities and the scope of works, and the activities which may cause adverse environmental and social impacts and needing adequate mitigation measures. Also, include its geographic, ecological and social context briefly. This is the basis for the ESMP preparation, including the identifications of anticipated adverse environmental and social risks and impacts (during rehabilitation/construction stage, operation stage, etc.), potential mitigation measures, monitoring and indicators, among others.

Mitigation: The ESMP identifies measures and actions in accordance with the mitigation hierarchy that reduce potentially adverse environmental and social impacts to acceptable levels. Thus, it specifically addresses the following.

a)   *Adverse environmental and social impacts*: Identify and summarise all anticipated/potential adverse environmental and social risks and impacts due to the proposed subproject including its components/activities (HCF rehabilitation activities) and scope of works.

b)   *Mitigation measures*: Describe each required mitigation measure including the type of impact to which it relates, together with designs, equipment descriptions, and operating procedures, as appropriate. Also, assess any potential environmental and social impacts of these measures, if any.

Monitoring:

a)   *Monitoring measures*: provide a specific description, and technical details, of monitoring measures, including the parameters to be measured, methods to be used, sampling locations, frequency of measurements, detection limits (where appropriate), and definition of thresholds that will signal the need for corrective actions; and

b)   *Monitoring and reporting procedures* to (i) ensure early detection of conditions that necessitate particular mitigation measures, and (ii) provide information on the progress and results of mitigation.

c)   *Methods for monitoring* the implementation of mitigation measures or environmental and social impacts should be as simple as possible, consistent with collecting useful information, so that relevant stakeholders and beneficiary or affected community members can apply them themselves.

Capacity Development and Training:

- To support timely and effective implementation of environmental and social subproject components/activities and mitigation measures, the ESMP draws on the environmental and social assessment of the existence, role, and capability of responsible parties on site or at the agency and ministry level.
- Specifically, the ESMP provides a specific description of institutional arrangements, identifying which party is responsible for carrying out the mitigation and monitoring measures (e.g., for operation, supervision, enforcement, monitoring of implementation, remedial action, financing, reporting, and staff training).

Roles and Responsibilities:

- The people, groups, or organisations that will carry out the mitigation and monitoring activities are defined, as well as to whom they report and are responsible. There may be a need to train people to carry out these responsibilities, and to provide them with equipment and supplies.

Implementation schedule and Cost Estimate:

For all three aspects (mitigation, monitoring, and capacity development), provide (a) an implementation schedule for measures that must be carried out as part of the project, showing phasing and coordination with overall project implementation plans; and (b) the capital and recurrent cost estimates and sources of funds for implementing the ESMP. These figures are also integrated into the total subproject cost tables.

Integration of ESMP with Subproject:

- Clearly specify each of the measures and actions to be implemented, including the individual mitigation and monitoring measures and actions and the institutional responsibilities relating to each, and the costs of doing so will be integrated into the sub project's overall planning, design, budget, & implementation

Suggested templates for summarising mitigation and monitoring plans are provided below While preparing the summary of mitigation and monitoring plans for each a subproject including healthcare facility rehabilitation/construction, please refer to the generic ESMP of the HSTP ESMF to customise it in line with a proposed subproject:

Suggested template for summarising E&S management plan for a subproject

Potential E&S risks and impacts	Proposed mitigation measures	Responsibly body	Estimated cost (USD)
Design stage			
Rehabilitation/construction stage			
Operation stage			
Decommissioning			

Suggested template for summarising E&S monitoring plan for a subproject

Potential E&S risks and impacts	Proposed mitigation measures	Indicators for monitoring	Means of monitoring	Frequency of monitoring	Responsibly body	Estimated cost (USD)
Design stage						
Rehabilitation/construction stage						
Operation stage						
Decommissioning						

Annex 4. Sample ToR for Environmental and Social Impact Assessment (ESIA) Preparation

This Terms of Reference (ToR) is applicable to HSTP subprojects with substantial E&S risks (see exclusion list in the main body of the ESMF) based on outputs of E&S screening report (Annex 1). The ToR outlines the aspects of an ESIA which when thoroughly addressed will provide a comprehensive evaluation of the subproject sites, in terms of predicted environmental and social impacts, needed mitigation and monitoring measures, potentially viable alternatives to the development proposed and all related policy and legal frameworks.

To ensure that a thorough Environmental and Social Impact Assessment is carried out, it is expected that the following tasks be undertaken:

1. Executive summary
   - Concisely discusses significant findings and recommended actions.

2. Legal and institutional framework
   - Analyses the legal and institutional framework for the project, within which the environmental and social assessment is carried out, including the issues set out in the WB ESS1, paragraph 264.
   - Compare the Borrower's existing environmental and social framework and the ESSs and identify the gaps between them.
   - Outline the pertinent regulations and standards governing environmental quality, safety and health, protection of sensitive areas, protection of endangered species, siting and land use control at the national and local levels. The examination of the legislation should include at minimum, legislation such as the land law, environmental protection and conservation law, expropriation law, the Public Health Act, the urban Planning Act, Building Codes and Standards, Development Orders and Plans and the appropriate international convention/protocol/treaty where applicable.

3. Description of the subproject
   - Concisely describes the proposed subproject and its geographic, environmental, social, and temporal context, including any offsite investments that may be required (e.g., dedicated pipelines, access roads, power supply, water supply, housing, and raw material and product storage facilities), as well as the subproject's primary suppliers.
   - Through consideration of the details of the subproject, indicates the need for any plan to meet the requirements of ESS 1 through 10.
   - Includes a map of sufficient detail, showing the subproject site and the area that may be affected by the project's direct, indirect, and cumulative impacts.

4. Environmental and Social Baseline data

This task involves the generation of baseline data which is used to describe the subproject study area as follows:
   - Physical environment
   - Biological environment
   - Socio-economic and cultural constraints.

   Thus, it is required to set out in detail the baseline data that is relevant to decisions about subproject location, design, operation, or mitigation measures.

5. Identification of Potential Environmental and Social Impacts

- Considers all relevant environmental and social risks and impacts of the subproject. This will include the environmental and social risks and impacts specifically identified in ESS2–8, and any other environmental and social risks and impacts arising as a consequence of the specific nature and context of the subproject, including the risks and impacts identified in ESS1, paragraph 28.

6. *Mitigation Measures*
   - Identifies mitigation measures and residual negative impacts that cannot be mitigated and, to the extent possible, assesses the acceptability of those residual negative impacts.
   - Identifies differentiated measures so that adverse impacts do not fall disproportionately on the disadvantaged or vulnerable.
   - Assesses the feasibility of mitigating the environmental and social impacts; the capital and recurrent costs of proposed mitigation measures, and their suitability under local conditions; and the institutional, training, and monitoring requirements for the proposed mitigation measures.
   - Specifies issues that do not require further attention, providing the basis for this determination.

7. Subproject Alternatives Analysis

   - Systematically compares feasible alternatives to the proposed subproject site, technology, design, and operation—including the "without subproject" situation—in terms of their potential environmental and social impacts.
   - Assesses the alternatives' feasibility of mitigating the environmental and social impacts; the capital and recurrent costs of alternative mitigation measures, and their suitability under local conditions; and the institutional, training, and monitoring requirements for the alternative mitigation measures.
   - For each of the alternatives, quantifies the environmental and social impacts to the extent possible, and attaches economic values where feasible.

8. Design Measures
   - Sets out the basis for selecting the subproject design proposed and specifies the applicable ESSs, environmental, health and safety guidelines (EHSGs) or other good international industry practice (GIIP), and national policy and legal frameworks.

9. Environmental and Social Management Plan

   - Covers mitigation measures, budget requirements and budget sources for implementation, as well as institutional strengthening and capacity buildings requirements.

10. Environmental and Social Monitoring Plan
At the minimum, the monitoring plan should include:
   - The activity being monitored, and the parameters chosen to effectively carry out the exercise.
   - The methodology to be employed and the frequency of monitoring.
   - Budget, and responsibly body for monitoring the selected parameters.

11. Stakeholder Engagement and Information Disclsoure
   - List and details of engagements undertaken in the preparation of the ESIA
   - List and plan for further engagements to be undertaken during implementation
   - Indicates how and when the ESIA is disclosed.

12. GRM
  - Addresses the subproject's detail GRM to be applied.

13. Conclusions and Recommendations

14. Annexes
  - List of the individuals or organizations that prepared or contributed to the environmental and social assessment.
  - References—setting out the written materials both published and unpublished, that have been used.
  - Record of meetings, consultations, and surveys with stakeholders, including those with affected people and other interested parties. The record specifies the means of such stakeholder engagement that were used to obtain the views of affected people and other interested parties.
  - Tables presenting the relevant data referred to or summarized in the main text.
  - List of associated reports or plans.
  - Terms of reference.

Annex 5. Environmental Code of Practice (ECoP)

Intent of the ECoP

This Environmental Code of Practice (ECOP) has been prepared to define methods and/or procedures to be followed by consultants, designers and contractors for the avoidance or mitigation of adverse environmental effects that may arise out of the Health Sector Transformation Project (HSTP). This code of practice details the factors to be considered during project preparation to avoid/address environmental concerns through modifications in project design and incorporation of mitigation measures.

Project Description

The ECoP describes the proposed project and subprojects including its activities which will involve provision of basic packages of health and nutrition, as well as all the activities which may cause adverse environmental and social impacts and need adequate mitigation measures. Moreover, the project description includes its geographic, ecological and social context briefly. This is the basis for the ECoP preparation, including the identifications of anticipated adverse environmental and social risks and impacts (during rehabilitation/construction stage, operation stage, etc.), potential mitigation measures, monitoring and indicators, among others.

Code Format

This code contains a description of minimum practices that are to be applied to the planning, design and implementation of the project. It also presents sample design directives for inclusion in terms of reference for planning and design and suggested specification clauses for insertion in project implementation.

Impact Matrix

The following table will generally introduce the Potential impacts on environment and social that may result from the project.

Environmental and Social impact matrix

Issue concern	Potential impacts	Initiating project action	Impact duration
Environmental Issues			

Social Issues			

Mitigation measures

As impacts from project development are unavoidable, all approaches of mitigation measures are essential and needed in order to protect the affected environmental quality. Thus, this part's structure aims to specify necessary mitigation measures that impacts are potentially contributed from project implementation during design, planning and implementation.

The specific measures have been proposed according to each project component of the project. Environmental protection measures are designed to:

- Mitigate environmental impacts,
- Achieve compliance with national environmental regulations, and World Bank operational policies,
- Provide compensation for lost environmental resources (if any), and
- Enhance environmental resources.

The matrix of impacts supplemented with management and monitoring activities and assigned responsibilities for implementing those activities, forms the core of the ECoP.

Environmental Code of Practices

ECoP will consist of routine systematic checking to ensure that all mitigations specified in the following table are effectively implemented during the relevant periods of the project. Detailed ECoP is shown in Table 2 for relevant periods of the project, while Table 3 illustrates the ECoP's monitoring plan for design, planning and implementation phases.

Environment Code of Practice

Issues concern	Mitigation measures	Significant of mitigation	Responsibility	Start date	End date

Design and Planning Phase					
Environmental issues					
Social issues					
Implementation phase					
Environmental issues					
Social issues					

ECoP's Monitoring Plan for the project design, planning and implementation

Issue concerned	What Parameter to be monitored	How is the Parameter monitored	When is the parameter monitored	Responsible Party
Environmental issues				

Social issues				

Annex 6. Chance Finds Procedure

Purpose of the chance finds procedure:

The chance finds procedure is a project-specific procedure that outlines actions required if previously unknown heritage resources, particularly archaeological resources, are encountered during project construction or operation. A Chance Find Procedure is a process that prevents chance finds from being disturbed until an assessment by a competent specialist is made and actions consistent with the requirements are implemented.

Scope of the chance find procedure:

This procedure is applicable to all activities conducted by the personnel, including contractors, that have the potential to uncover a heritage item/site. The procedure details the actions to be taken when a previously unidentified and potential heritage item/site is found during construction activities. Procedure outlines the roles and responsibilities and the response times required from both project staff, and any relevant heritage authority.

Induction/Training:

All personnel, especially those working on earth movements and excavations, are to be inducted on the identification of potential heritage items/sites and the relevant actions for them with regards to this procedure during the Project induction and regular toolbox talks.

Chance finds procedure:

If any person discovers a physical cultural resource, such as (but not limited to) archaeological sites, historical sites, remains and objects, or a cemetery and/or individual graves during excavation or construction, the following steps shall be taken:

1. Stop all works in the vicinity of the find, until a solution is found for the preservation of these artefacts, or advice from the relevant authorities is obtained;

 2. Immediately notify a foreman. The foreman will then notify the Construction Manager and the Environment Officer (EO)/Environmental Manager (EM);

 3. Record details in Incident Report and take photos of the find;

 4. Delineate the discovered site or area; secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a night guard shall be arranged until the responsible local authorities take over;

5. Preliminary evaluation of the findings by archaeologists. The archaeologist must make a rapid assessment of the site or find to determine its importance. Based on this assessment the appropriate strategy can be implemented. The significance and importance of the findings should be assessed

according to the various criteria relevant to cultural heritage such as aesthetic, historic, scientific or research, social and economic values of the find;

6. Sites of minor significance (such as isolated or unclear features, and isolated finds) should be recorded immediately by the archaeologist, thus causing a minimum disruption to the work schedule of the Contractor. The results of all archaeological work must be reported to the Ministry/Agency, once completed.

7. In case of a significant find the Agency/Ministry (Agency for Protection of National Heritage or Archaeological Research Centre) should be informed immediately and in writing within 7 days from the find.

8. The onsite archaeologist provides the Heritage team with photos, other information as relevant for identification and assessment of the significance of heritage items.

9. The Ministry must investigate the fact within 2 weeks from the date of notification and provide a response in writing.

10. Decisions on how to handle the finding shall be taken by the responsible authorities. This could include changes in the layout (such as when finding an irremovable remain of cultural or archaeological importance) conservation, preservation, restoration and salvage;

11. Construction works could resume only after permission is granted from the responsible authorities.

12. In case no response is received within the 2 weeks period mentioned above, this is considered as authorisation to proceed with suspended construction works.

One of the main requirements of the procedure is record keeping. All finds must be registered. Photolog, copies of communication with decision making authorities, conclusions and recommendations/guidance, implementation reports kept.

Additional information Management options for archaeological site

Site avoidance. If the boundaries of the site have been delineated, attempts must be made to redesign the proposed development to avoid the site.

Mitigation. If it is not feasible to avoid the site through redesign, it will be necessary to sample it using a data collection program prior to its loss. This could include surface collection and/or excavation.

Site Protection. It may be possible to protect the site through the installation of barriers during the time of the development and/or possibly for a longer term. This could include the erection of high visibility fencing around the site or covering the site area with a geotextile and then capping it with fill. The exact prescription would be site- specific.

Management of replicable and non-replicable heritage

Different approaches for the finds apply to replicable and non-replicable heritage.

Replicable heritage

Where tangible cultural heritage that is replicable and not critical is encountered, mitigation measures will be applied. The mitigation hierarchy is as follows:

Avoidance;

Minimization of adverse impacts and implementation of restoration measures, in situ;

Restoration of the functionality of the cultural heritage, in a different location;

removal of historical and archaeological artefacts and structures;

Compensation of loss - where minimization of adverse impacts and restoration not feasible.

Non-replicable heritage

Most cultural heritage is best protected by in situ preservation, since removal is likely to result in irreparable damage or even destruction of the cultural heritage.

Non Replicable cultural heritage must not be removed unless all of the following conditions are met:

There are no technically or financially feasible alternatives to removal;

The overall benefits of the project conclusively outweigh the anticipated cultural heritage loss from removal; and

Any removal of cultural heritage must be conducted using the best available technique advised by relevant authority and supervised by archaeologists.

Human Remains Management Options

The handling of human remains believed to be archaeological in nature requires communication according to the same procedure described above. There are two possible courses of action: Avoid. The development project is redesigned to completely avoid the found remains. An assessment should be made as to whether the remains may be affected by residual or accumulative impacts associated with the development, and properly addressed by a comprehensive management plan.

Exhumation of the remains in a manner considered appropriate by decision makers. This will involve the predetermination of a site suitable for the reburial of the remains. Certain ceremonies or procedures may need to be followed before development activities can recommence in the area of the discovery.

Annex 7: Waste Management Plan

The Table below lists generic waste management measures. A detailed Waste Management Plan (WMP) can only be prepared once the specific site and rehabilitation/construction design of healthcare facilities are known. The site-specific WMPs should include the handling of rehabilitation/construction-related waste, including potentially hazardous waste (asbestos where it exists in buildings) and operational phase waste. The below listed mitigation measures should be included in the site- or subproject-specific WMPs. The WMPs will follow WBG EHSGs' requirements on waste management and GIIP as far as feasible.

The site-specific WMPs should establish a hierarchy that considers prevention, reduction, reuse, recovery, recycling, removal and finally disposal of wastes. The generation of waste materials should be avoided or minimized as possible. Where waste generation cannot be avoided but has been minimized, waste should be recovered and reused. Where it cannot be recovered or reused, it should be treated, destroyed, or disposed of in an environmentally sounds manner.

The expected waste during the rehabilitation largely consists of non-hazardous waste and includes water pollution through rehabilitation activities; potential oil pollution; pollution from workmanship; and rehabilitation/construction waste. Potentially hazardous waste can occur where infrastructure to be rehabilitated contains asbestos. In these cases, measures for handling asbestos must be followed. The TA and capacity building activities may be responsible for some waste production downstream, which cannot be foreseen at this point.

Waste Management Plan

Risk or impact	Mitigation measures	Indicators	Responsibility	Monitoring	Freq. of monitoring
Construction/rehabilitation Phase					
Groundwater pollution	Proper disposal of rehabilitation/ construction debris to avoid water pollution according to GIIP Handling, storage and disposal of oil and oil wastes according to GIIP Disposal of wastewater /sewerage at Contractor's camps according to GIIP	# of grievances filed in regard to groundwater pollution % of debris that is disposed properly # of oil spills and leakages reported	Contractor	MoH with MOs	Monthly
Oil pollution	Storage, handling and disposal of oil and oil wastes according to GIIP Maintain vehicles and equipment Maintenance of construction vehicles should be carried out in the Contractor's camp or at appropriate location	# of oil spills and leakages reported # of vehicle maintenance logs available # of vehicles with appropriate maintenance # of vehicles maintained in the camp	Contractor	MoH with MOs	Monthly
Workmanship	Provide proper sanitation facilities on site and in workers' camp	# of sanitation facilities on site # of sanitation facilities in camp	Contractor	MoH with MOs	Monthly
Construction/ rehabilitation waste	Disposal of construction/rehabilitation wastes including oil, solid wastes and debris according to GIIP Final deposition will be on authorized sites and in line with GIIP as possible Substitute raw materials or inputs with less hazardous or toxic materials, or with those where processing generates lower waste volumes Institute procurement measures that recognize opportunities to return usable materials such as containers and which prevents waste and debris over ordering of materials	# of grievances filed in regard to construction waste # of procurement measures installed	Contractor	MoH with MOs	Monthly
Demobilization	Clean-up site after rehabilitation Remove all debris Remove to original condition	# of sites clean up after rehabilitation # of sites with all debris removed in an appropriate manner # of sites that have been returned to their original condition	Contractor	MoH with MOs	After a subproject is finalized
OHS	Train workers appropriately on OHS risks, hazards and safe handling of equipment and procedures, based on EHS Guidelines on OHS	# of trainings conducted for workers	Contractor / PITS	MoH with MOs	Throughout subproject implementation

Risk or impact	Mitigation measures	Indicators	Responsibility	Monitoring	Freq. of monitoring
	Provide appropriate PPE, continuous reminders to use PPE, use of signage and continuous supervision, based on EHS Guidelines on OHS Communicate and implement workers' GRM Develop and implement C-ESMP including OHS Implement Labor Management Procedures (LMP) Include OHS requirements into bids and contracts Contractor bid and contract to include various OHS requirements	# of workers issued with appropriate PPE # of workers grievances filed and responded to % of C-ESMPs that include OHS measures % of bidding documents that include OHS requirements			
Community Safety	Disposal of solid and sanitary waste at camps according to GIIP Design and locate pit latrines prudently	% of camps with appropriate solid and sanitary waste disposal # of pit latrines available	Contractor	MoH with MOs	Monthly
Asbestos – Hazardous waste existing in infrastructure to be rehabilitated There is a high risk of exposure to asbestos from the demolition works which can have negative impacts on human health and the environment including soil and air contamination.	According to WB ESS3 and WB EHS guidelines, all projects with risk of hazardous material contamination must comply with existing requirements of hazardous waste including national legislation and international conventions and where such are absent, then GIIP alternatives will be adopted to ensure the hazardous material is managed and disposed of in an environmentally sound and safe manner. The level of risk associated with asbestos must be assessed by a competent contractor with experience in handling asbestos. From the risk assessment depending on the condition of the asbestos material, a hazardous material management plan must be prepared outlining how the asbestos will be managed at the site, transported and disposed of. The plan must contain; procedures for handling asbestos in case of accidental exposure at the site, training of site workers on how to respond to a hazard exposure, documentation of available PPE to site workers, site emergency exits in case of an emergency and it should also outline OHS management procedures as well as compliance audit procedures. The local public authorities should provide infrastructure to handle hazardous waste and if no public infrastructure is	# of cases of asbestos removal where all guidelines have been followed	Contractor	MoH with MOs	Monthly

Risk or impact	Mitigation measures	Indicators	Responsibility	Monitoring	Freq. of monitoring
	available, the service can be sought from a local private company. If there are no alternatives, then the asbestos can be disposed of in a landfill site that has been properly engineered to contain the waste in isolation from the external environment.				
	Operations Phase				
Waste production of the HCFs/ Offices that were rehabilitated	Institute procurement measures that recognize opportunities to return usable materials such as containers and which prevents waste and debris over-ordering of materials. Characterize waste according to composition, source, types of wastes produced, generation rates, or according to local regulatory requirements. Identify expected waste generation, pollution prevention opportunities, and necessary treatment, storage, and disposal infrastructure Collection of data and information about the process and waste streams in existing facilities, including characterization of waste streams by type, quantities, and potential use/disposition Establishment of priorities based on a risk analysis that takes into account the potential EHS risks during the waste cycle and the availability of infrastructure to manage the waste in an environmentally sound manner. Definition of opportunities for source reduction, as well as reuse and recycling Definition of procedures and operational controls for onsite storage and final disposal Establishing recycling objectives and formal tracking of waste generation and recycling rates Providing training and incentives to employees in order to meet objectives	# of HCFs/Offices that have waste management plan in place # of waste management plans at HCFs/Offices that characterize waste according to composition, source etc. # of HCFs/Offices that collect data and information about the process and waste streams in the facility # of HCFs/Offices considering recycling of waste # of HCFs/Offices that have trained their employees # of E-Waste Management Plans per site	Administration of the institution	MoH with MOs	Quarterly