FEDERAL REPUBLIC OF SOMALIA

MINISTRY OF ENERGY AND WATER RESOURCES (MoEWR)

Accelerating Sustainable and Clean Energy Access Transformation (ASCENT)

(P181341)

Revised Draft

Environmental and Social Management Framework (ESMF)

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ABBREVIATIONS/ACRONYMS

ASCENT	Accelerating Sustainable and Clean Energy Access Transformation in SOMALIA
BESS	Battery Energy Storage Systems
C-ESMPs	Contractor Environmental and Social Management Plans
CBO	Community Based Organization
CEDAW	Convention on the Elimination of All forms of Discrimination against Women
CHS	Community Health and Safety
CoC	Code of Conduct
COVID-19	Corona Virus Disease 2019
DEG	Department of Environmental Governance
DEWC	District Environment Watch Council
DG	Director General
DRE	Decentralized Renewable Energy
E&S	Environmental and Social
EAPP	Ethiopia under the Eastern Africa Power Pool
EAs	Environmental Audits
EHS	Environment, Health, and Safety
ELF	Extremely Low Frequency
EMF	Electric and Magnetic Fields
ENSO	El Niño–Southern Oscillation
ESCP	Environmental and Social Commitment Plan
ESF	Environmental and Social Framework
ESHGs	Environmental, Health and Safety Guidelines
ESI	Electricity Supply Industry
ESIA	Environmental and Social Impact Assessments
ESIRT	Environmental and Social Incident Reporting Toolkit
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESPs	Electricity Service Providers
ESSs	Environmental and Social Standards
ESWG	Energy Sector Working Group
FGM	Female Genital Mutilation
FGS	Federal Government of Somalia
FM	Financial Management

FMS	Federal Member States
GBV	Gender-based Violence
GBVAP	Gender-based Violence Action Plan
GBVIMS	Gender-Based Violence Information Management System
GCF	Green Climate Fund
GIIP	Good International Industry Practice
GRC	Grievance Redress Committee
GRM	Grievance Redress Mechanism
GRS	Grievance Redress Service
HDI	Human Development Index
HFL	Highest Flood Level
HSDGs	High-Speed Diesel Generators
HWMP	Hazardous Waste Management Plan
ICRs	Implementation Completion Reports
IDA	International Development Association
IDPs	Internally Displaced Persons
IEEE	Institute of Electrical and Electronics Engineers
ILO	International Labour Organization
INDC	Nationally Determined Contribution
ISRs	World Bank Implementation Supervision Reports
IVM	Integrated Vegetation Management Approach
LMP	Labour Management Procedures
LV	Low Voltage
MECC	Ministry of Environment and Climate Change
MoEWR	Ministry of Energy and Water Resources
MPA	Multi-Programmatic Approach
MV	Medium Voltage
NERAD	National Environment Research and Disaster Preparedness Authority
O&M	Operation and Maintenance
OE	Owner's Engineer
OHS	Occupational Health and Safety
OHSMP	Occupational Health and Safety Management Plan
OPM	Office of the Prime Minister
PCBs	Polychlorinated Biphenyls

PCR	Physical Cultural Resources
PDO	Project Development Objective
PIU	Project Implementing Unit
PPE	Personal Protective Equipment
PPP	Public Private Partnership
PrDO	Program Development Objective
PRMN	Protection Return Monitoring Network
PSC	Project Steering Committee
PWE	Public Works Engineer
RAP	Resettlement Action Plan
REWC	Regional Watch Councils
RFB	Request for Bids
RFP	Request for Proposals
RPF	Resettlement Policy Framework
SEAP	Somalia Electricity Access Project
SEAs	Sectoral Environmental Assessments
SecMF	Security Management Framework
SEP	Stakeholder Engagement Plan
SESRP	Somalia Electricity Sector Recovery Project
SMP	Security Management Plan
SPV	Solar Photovoltaic
SRMI	Sustainable Renewables Risk Mitigation Initiative
TMP	Traffic Management Plan
TORs	Terms of Reference
TPMA	Third Party Monitoring Agents
TVET	Technical and Vocational Education and Training
UNFCCC	UN Framework Convention on Climate Change
VAC	Violence Against Children
WBG	World Bank Group
WHO	World Health Organization

EXECUTIVE SUMMARY

Introduction and Background

The Federal Government of Somalia (FGS) is preparing the Accelerating Sustainable and Clean Energy Access Transformation in (ASCENT) SOMALIA Project (P181341) to be financed by the International Development Association (IDA) and Green Climate Fund (GCF) to the tune of US$ 118 Million.

The ASCENT project seeks **to increase access to renewable energy through private sector participation in Somalia**, which aligns with the ASCENT Multi-Programmatic Approach (MPA) Program Development Objective (PrDO) of accelerating access to sustainable, reliable and clean energy in Eastern and Southern Africa. The Project will rely on the existing institutional and implementation arrangements established under the ongoing Somali Electricity Sector Recovery Project (SESRP, P173088). As such, the Project will be implemented by the FGS Ministry of Energy and Water Resources (MOEWR) in close coordination with the Federal Member States (FMSs) and Private Energy Service Providers (ESPs).

Project Description

Project Components

ASCENT Somalia Project has the following components:

- **Component 1: Distributed Renewable Energy (DRE) with Solar PV and BESS in the capital city of Mogadishu and other major load centers in the FMS** – This is proposed to include design, supply and installation of a total of about 30-50MW solar PV grid connected generation plants with Battery Energy Storage Systems (BESS) in the Mogadishu capital area.
- **Component 2: Electricity Distribution Network Rehabilitation and Reinforcement of the mini grids serving the Mogadishu capital city area and other FMS major load centers** – The activities under this component are aimed at supporting to reduce network losses (both technical and commercial) and increase the network's capacity to connect new customers.
- **Component 3: Sector Capacity and Institution Enhancement and Project Implementation Support** – The activities are proposed to enhance and build on the ongoing SESRP activities that among others include: (a) policy and regulatory development; (b) sector planning and feasibility studies for renewable energy projects; (c) ESP and capacity and business support services; (d) implementation of the project's Gender Action Plan which included gender capacity building for ESPs; and (e) project implementation support including for environment and social (E&S) safeguards.

Project Beneficiaries

The main beneficiaries are about 1.8 million Somali people who will gain affordable, reliable and sustainable access to electricity services and associated benefits from increased jobs and economic opportunities. Beneficiaries also include the sector institutions such as the federal MoEWR, FMS, ESPs and private sector DRE and other government agencies that will be supported by the project, as well as the newly created workforce in the renewable energy/energy access fields, particularly women, having benefitted from ASCENT skill development engagements.

Environmental and Social Management Framework (ESMF) Purpose, Rationale and Methodology

ESMF Purpose

The objective of this ESMF is to set out the principles, rules, guidelines, and procedures to assess the Environmental, health and safety (EHS) risks and impacts of the ASCENT Somalia Project. It contains

measures and plans to reduce, mitigate, and/or offset adverse risks and impacts, provisions for estimating and budgeting the costs of such measures, and information on the agency or agencies responsible for addressing project risks and impacts, including on its capacity to manage EHS risks and impacts. It includes adequate information on the area in which subprojects are expected to be sited, including any potential EHS vulnerabilities of the area; and on the potential impacts that may occur and mitigation measures that might be expected to be used.

ESMF Rationale

Projects and programs prepared and managed by World Bank's Investment Policy Financing (IPF) support need to comply with the Environmental and Social Standards (ESSs) and Environmental, Health and Safety Guidelines (EHSGs) of the World Bank's Environmental and Social Framework (ESF). Therefore, ASCENT Somalia Project is required to satisfy the World Bank's ESF in addition to conformity with environmental and social legislation of the FGS.

ESMF Methodology

The methodologies adopted for the preparation of the ESMF include review of relevant literature including study documents, reports, previous related project ESMF reports, e.g., SESRP ESMF, etc., ASCENT Somalia Project Appraisal Document (PAD), WBG ESSs and EHSGs, national policies, legislation and guidelines, international frameworks, and standards; stakeholder engagement and consultation with relevant city administration, federal, regional, district sector institutions and community representatives.

Potential EHS Risks and Impacts

Error! Reference source not found. provides a summary of potential EHS risks and impacts per component. However, these EHS risks and impacts are preliminary given final subproject locations and designs are not available, and the final EHS risks and impacts will be determined as part of the subproject environmental and social assessment process defined in this ESMF.

Table 0-1 Potential EHS Risks and Impacts per Project Component

Component	Potential EHS Risks and Impacts
Component 1: DRE with SPV and BESS in the capital city of Mogadishu and other major load centers in the FMS.	**Environmental Risks:** Terrestrial habitat alteration (ESS6), Aquatic habitat alteration (ESS6), Generation of hazardous and non-hazardous waste including e-waste (ESS3, ESS6), OHS risks (ESS2), Emissions to air (ESS2, ESS3, ESS4), Noise and vibration (ESS2, ESS3, ESS4), Soil erosion and sedimentation (ESS6)
	Social Risks: SEA/SH for project workers, project-affected persons and during construction phase (ESS2, ESS4), Land acquisition and resettlement risks and impacts (ESS5), Lack of access to grievance redress mechanisms (ESS10), Exclusion of vulnerable groups in project activities and consultations (ESS10), Security risk (ESS4), Disease transmission (ESS2, ESS4), Labour and working conditions (ESS2), Community health and safety (ESS4), Cultural heritage risk (ESS8), Labor influx and associated risks (ESS2, ESS4)

Component	Potential EHS Risks and Impacts
Component 2: Electricity Distribution Network Rehabilitation and Reinforcement of the mini grids serving the Mogadishu capital city area and other FMS major load centers.	**Environmental Risks:** Generation of hazardous and non-hazardous waste including e-waste (ESS3, ESS6)**,** OHS risks (ESS2)**,** Air emissions (ESS3), Terrestrial habitat alteration (ESS6)**,** Noise and vibration (ESS2, ESS3, ESS4)**,** Soil erosion and degradation (ESS6); Disturbance to fauna and flora (ESS6); Dust and noise pollution (ESS2, ESS4); and Soil and water contamination (ESS3, ESS6).
	Social Risks: Violation of labor and working conditions (ESS2) e.g., child and forced labour, etc., Traffic safety risks (ESS4)**,** Security risks (ESS2, ESS4), Violation of labor and working conditions (ESS2) e.g., child and forced labour, etc., Traffic safety risks (ESS4), SEA/SH for project workers and project-affected persons (ESS2, ESS4), Lack of access to grievance redress mechanisms (ESS10), Labour and working conditions (ESS2), Labor influx and associated risks (ESS2, ESS4). Community exposure to risks and impacts arising from accidents, structural failures, and releases of hazardous materials (ESS4).
Component 3: Sector Capacity and Institution Enhancement and Project Implementation Support	**Environmental Risks:** TA may pose downstream environmental risks, such as Terrestrial habitat alteration (ESS6), Generation of hazardous and non-hazardous waste including e-waste (ESS3, ESS6), Soil erosion and sedimentation (ESS6), air and noise pollution (ESS3), occupational health and safety risks from construction and operation activities (ESS2).
	Social Risks: SEA/SH for project workers and project-affected persons during operational phases (ESS2 and ESS4), Exclusion of vulnerable groups in project activities and consultations (ESS10), Inadequate stakeholder engagement due to bias towards some counties (ESS10), Downstream social risks emanating from TA e.g., violation of labour and working conditions (ESS2), destruction of cultural heritage (ESS8), Community health and safety risks (ESS4).

A generic environmental and social management plan (ESMP) for these EHS risks and impacts are detailed in Chapter 5, Table 5-1 of this ESMF.

Procedures to Address Environmental and Social Issues

Chapter six (6) of this ESMF provides details on subprojects/activities screening, categorization, exclusion list, capacity building program, responsibilities for its implementation and monitoring, and budgets for ensuring enhancement of the environmental and social performance of the Project.

Implementation Arrangements

Project Implementing Unit (PIU)

The project will rely on the existing institutional and implementation arrangements established under the ongoing SESRP. The project will be implemented by the PIU established at the MOEWR, in close coordination with the ESPs. The PIU staff shall have the responsibility to oversee the project implementation, perform the required technical functions, and serve as the focal points for communication with the World Bank, contractors, and consultants. An Owner Engineer (OE) firm will be recruited to support the PIU in the detailed designs, procurement, and contract management, including fiduciary, environment, and social risk management aspects, and project monitoring and evaluation (M&E).

Project Steering Committee (PSC)

A PSC has been established at the MOEWR. The PSC is co-chaired by the Ministry of Energy and Ministry of Finance, with membership drawn from Ministry of Planning, Prime Minister's Office, and representatives from the private sector. The PSC will provide overall oversight of project implementation and policy guidance as well as take decisions on critical high-level implementation issues, such as approval of selection criteria and obligations of the beneficiary ESPs.

Energy Sector Working Group (ESWG)

An ESWG has been established at MoEWR. The ESWG is a forum aimed at fostering sector dialogue to support coordination and harmonization of processes, procedures, implementation, and monitoring of government programs, development partner support, and private sector initiatives.

Post-Construction Specific Implementation Arrangements

The project support will create new assets out of the investments in DRE generation facilities to be interconnected to or embedded in the existing ESPs' privately owned generation and distribution networks. After the construction is completed, the arrangements would be the following for ownership and operations.

- **ESP Owned Distribution Network** – For the assets owned by the ESPs, the MoEWR will amend the ESP licenses to highlight that the ESPs will continue to own their existing network infrastructure to be rehabilitated and upgraded with government funds, but they will not receive any remuneration until the end of the respective lifetimes.
- **DRE Generation Infrastructure** – FGS and ESPs will enter a contractual arrangement that establishes either a public private partnership, concession agreement, or a service agreement.

Stakeholder Engagement

The main objective of the Stakeholder Engagement process is to inform and consult with stakeholders and the public about the proposed project and its likely effects, and in turn incorporate their inputs, views, and concerns into project planning. A summary of stakeholder engagement conducted during preparation of safeguard instruments is presented in *Chapter Eight (8)* this ESMF.

1 INTRODUCTION

1.1 Overview

The FGS is preparing the ASCENT Somalia Project to be financed by the IDA and GCF to the tune of US$ 118 Million.

The ASCENT project seeks to increase access to renewable energy through private sector participation in Somalia, which aligns with the ASCENT Multi-Programmatic Approach (MPA) Program Development Objective (PrDO) of accelerating access to sustainable, reliable and clean energy in Eastern and Southern Africa. The Project will rely on the existing institutional and implementation arrangements established under the ongoing Somali Electricity Sector Recovery Project (SESRP - P173088). As such, the Project will be implemented by the FGS Ministry of Energy and Water Resources (MoEWR) in close coordination with the Federal Member States (FMSs) and Private Energy Service Providers (ESPs).

Project institutional and implementation arrangements take into account the following: (a) the IDA Grant Recipient (FGS) and (b) the ESPs who will be responsible for the operation and maintenance (O&M) of the project assets.

1.2 Project Background

1.2.1 Country Context

Somalia has been on a trajectory toward political stabilization and reconstruction after decades of conflict. The 2012 Provisional Constitution established a federal political structure, including a parliament, the FGS, and the Federal Member States (FMS).[1] Although not internationally recognized, Somaliland has declared independence from FGS and does not participate in the federal system. Following this political transition, the international community agreed to the Somali Compact with the FGS, based on the New Deal, a guiding set of principles for peacebuilding and state building. The sustained political, economic, and institutional reforms have enabled rebuilding core state capabilities.

The ASCENT project will provide essential electricity services to “Build Back Better” and boost socio-economic recovery in the country at a critical time of vulnerability. While Somalia has shown progress in its economic growth trajectory, the impacts of the pandemic, locusts, and the ongoing draught are expected to put a downward pressure on the already high levels of poverty, with possible inter-generational impacts. Access to reliable and affordable electricity supply is critical for improved sales and profits of businesses, cost reduction, and job expansion. It is also a pre-requisite input for the provision of adequate health and education services, which is often not sufficient in urban areas and completely absent in rural ones, impeding resilience to the pandemic, future shocks, and the overall human development of the country. The project will provide improved electricity services in the main load centers. Improved access and lower cost electricity supply will support economic activities in the main existing markets. This will contribute to reducing unemployment (currently at 13 percent), particularly of the youth (currently at 17 percent) and support broader economic recovery.

Through the provision of clean electricity, the project will also decrease the country’s vulnerability to natural disasters and climatic changes - expected to increase in both frequency and severity - which in turn could strongly impact ongoing conflicts. The livelihoods of roughly half of Somalia’s population are reliant on pastoralism or agro-pastoralism, which implies that a significant portion of Somalia’s population remains highly vulnerable to climate change and natural disasters. Since 2019 for instance,

[1] The federal system includes five Federal Member States (FMS) – Galmudug, Hirshabelle, Jubbaland, Puntland and Southwest and the federally administered Banadir Administration.

Somalia has experienced devastating floods and drought, as well as locusts, which have left about 5.2 million people in need of assistance and at risk of food insecurity. In addition, while Somalia has very low greenhouse gas emissions, it is highly vulnerable to the impacts of climate change. Somalia is ranked 181st out of 188 countries in terms of its vulnerability to climate change impact. Climate and disaster risk screening indicates that Somalia has a high risk of river, urban and coastal floods, landslides, extreme heat and wildfires, which will add additional stress to Somalia's vulnerability, particularly given its high economic dependence on climate-sensitive activities such as agriculture and densely populated coastline.

1.2.2 Sectoral Context

The conflict destroyed public electricity infrastructure in Somalia (ESPs). Pre-conflict, the Somalia National Electric Corporation (ENEE) was the single public utility in operation, supplying Mogadishu and the main regional centers of Hargeisa, Berbera, Burao, Baidoa, and Kismayo through distributed diesel generators and localized distribution grids with a combined total installed capacity of about 70 MW and annual energy production of about 250 GWh (1987). However, public electricity infrastructure was destroyed during the conflict, and the associated public institutional frameworks are almost completely defunct at present. The energy sector in Somalia has many features common to countries in or emerging from conflict, whereby several private service providers stepped in by creating small electricity companies called ESPs. The most common supply of electricity in such contexts is a decentralized, private supply of electricity using relatively low-capacity medium voltage (MV) and low voltage (LV) networks with embedded small-scale high-speed diesel generators (HSDGs), initially serving their own loads and gradually expanding to serve neighborhoods. This has led to a highly fragmented electricity sector throughout the country, resulting in an inefficient and expensive supply.

With the small and fragmented fossil fuel-based systems, access to reliable and affordable electricity is beyond the reach of majority of the population in Somalia. The total estimated installed capacity in the major load centers was about 138 MW in 2020, which is inadequate to serve current and future demand, estimated to increase to between 1,000 MW to 4,600 MW by 2037[2]. The electricity access rate is estimated at 50 percent nationally implying that almost 8 million people lack access to electricity. While access in the urban areas is 70 percent, it is only 32 percent in the rural areas[3]. According to the recent household budget survey[4], 62 percent have some access to electricity, out of which a little over half has access to grid electricity and a third of those having access to only 'torch' (a flashlight that does not deliver even basic lighting access). The same survey also revealed that only about 9 percent and 40 percent of the nomadic and rural population respectively has any access to electricity. In addition to having low access to any form of reliable electricity, cost of electricity in Somalia is high. The World Bank's flagship report on Regulatory Indicators for Sustainable Energy (RISE, 2020) found that Somalia ranks in the upper 5 percent globally for power cost, and in the upper 15 percent globally for power expenditure as a share of gross national income (GNI) per household.

Consequently, the Somali energy sector is beset with intertwined challenges of an ad-hoc service provision and a lack of overarching regulations. Key challenges in the sector include: (i) low access rates as explained above; (ii) high cost and unreliable electricity supply (the cost per KWh in Somalia, excluding Somaliland, ranges from US$0.25–1.3 per kWh, with a weighted average of about US$0.61 per kWh; whereas in Somaliland, the cost per kWh ranges from US$0.73-0.90 per KWh); and (iii) lack of a legal and institutional enabling environment. Addressing the sector challenges will require a

[2] Source: Somalia Power Sector Master Plan ,2019.
[3] Tracking SDG 7 (2022), The Energy Progress Report, Washington DC.
[4] Somalia Integrated Household Budget Survey: Main Report, February 2023

combination of targeted, scalable investments in critical infrastructure paired with a sustained, multi-year reform effort to establish appropriate institutional, legal, and regulatory frameworks.

The isolated mini grids operated by the ESPs will form the basis for an interconnected distribution network in the future for a national grid with the potential for wheeling and cross-network power sales. There is increasing demand for electricity, and the required generation capacity for the country is forecast to increase to 1,000–1,800 MW by 2037 (base case scenario). Significant investments to the tune of US$3 billion would be needed throughout the supply chain in the next two decades to meet the demand. An interconnected distribution network and a transmission grid will be needed in the medium to long term to facilitate uptake of large-scale generation and new customer connections. In preparation of the interconnected systems, significant improvements in service provision and access expansion are needed in the short to medium term by hybridizing (adding solar PV and battery storage to replace/reduce fossil fuel-based generation), strengthening, and densifying the current mini grids run by the ESPs. Geospatial analysis has identified the need for a combination of complementary supply solutions of grid, mini grid, and stand-alone solutions to achieve least-cost universal electrification in the country.

This proposed ASCENT Somalia builds on the foundations of the ongoing sector interventions in Somalia**.** Recent and On-going World Bank-financed operations (Somalia Electricity Access Project (SEAP), P173637, and Electricity Sector Recovery Project (SESRP) P173088)) are helping Government to enact an enabling institutional, policy and legal framework, while also supporting increased access to affordable and clean electricity services. The recently closed SEAP has helped undertake the initial steps to operationalize the legal and policy framework, including Electricity Sector Policy of 2020 and the Electricity Act of 2023. The on-going SESRP is supporting: (i) the ESPs to reduce duplicity of investments by integrating the distribution network operations and synchronizing the various generation facilities so as to increase the efficiency of the existing facilities; (ii) hybridization of existing generation facilities with solar Photovoltaic (PV) systems and Battery Energy Storage Systems (BESS) so as to reduce the continued reliance on imported diesel for power generation; (iii) human capital development by supporting access to functional health and education services; and (iv) the reestablishment of the Electricity Supply Industry (ESI) and operationalization of the regulatory functions. The SESRP proposes to harness the strengths of the existing private sector (ESPs) and enhance their capacity in creating a private-public interface for energy service delivery. The core proposition of this project is that by investing in sector capacity enhancement and network infrastructure, the Somalia government can leverage the private sector to the ESI. Further, the institutional and regulatory enhancement will support the reestablishment of transparency, trust, effectiveness, and legitimacy in the government institutions to provide an enabling operating framework for the private sector.

The proposed ASCENT Somalia will build on the foundations built by the on-going sector support to further scale up energy access, while continue improving reliability and reducing costs of electricity services provided by the ESPs. The Project will engage with the ESPs that are operating isolated mini grids in the country to expand and improve electricity service provided to their customers. This will include de-risking for mobilizing private sector investments in decentralized renewable energy (DRE) to hybridize isolated mini grid systems. This will include:

- Enabling distributed solar PV and BESS investments for larger mini grids serving the capital area of Mogadishu and Hybridization (with solar PV and BESS) of smaller mini grids serving towns in other parts of Somalia; and
- expanding connections through densification of the associated distribution.

The Project will also support to enhance further energy sector development efforts through enabling policies and regulations to have a conducive institutional, legal and regulatory operating environment. The proposed operation will be complementing the proposed Regional Power Systems Transformation Project (P179036) (US$ 230million) (Board Q4-FY24), which will support regional connectivity between Ethiopia and Somalia for the country to benefit from cheaper hydropower resources from Ethiopia under the Eastern Africa Power Pool (EAPP).

1.3 Project Description

1.3.1 Project Development Objective (PDO)

The PDO is *to increase access to sustainable and clean energy through private sector participation in Somalia*.

1.3.2 PDO Level Indicators

- Increased number of people with access to energy (million).
- Increased climate mitigation and adaptation benefit (GHG ER tCO2e).

1.3.3 Project Components

The project activities are mainly focused on reducing the cost of electricity and high dependency on expensive imported diesel-based generation in addition to strengthening the existing distribution network to reduce system losses (both technical and commercial) which will contribute to increased electricity access and low-cost supply which is critical for improved sales and profits of businesses, cost reduction, and job expansion. The proposed project targets the major load centers, to support the country's post-conflict economic recovery to spur increased productive use of electricity and job creation. The proposed project is complemented by the ongoing SESRP and the proposed Horn of Africa Regional Power System Transformation Project (HoA-RPSTP-P179036). The ASCENT Somalia project has three main components:

1.3.3.1 Component 1: Distributed Renewable Energy (DRE) with Solar PV and BESS in the capital city of Mogadishu and other major load centers in the FMS

This is proposed to include design, supply and installation of a total of about 30-50MW solar PV grid connected generation plants with Battery Energy Storage Systems (BESS) in the Mogadishu capital area. About 30-50 MW will be distributed across multiple sites and will feed into mini grids. The integration of renewable energy sources and energy storage solutions are to improve the overall performance of the existing mini grids thereby reducing reliance on fossil fuels and increasing the reliability and affordability of electricity supply. The installed equipment will be operated and maintained by the private sector operators (ESPs)[5] with the project funds that will be used to buy-down capital costs to lower the costs of supply. Based on the discussions, it is estimated that the project will contribute to lowering the cost (current average estimated at about US¢60 per KWh) to about US¢35-45 per KWh.

1.3.3.2 Component 2: Electricity Distribution Network Rehabilitation and Reinforcement of the mini grids serving the Mogadishu capital city area and other FMS major load centers

The activities under this component are aimed at supporting to reduce network losses (both technical and commercial) and increase the network's capacity to connect new customers. It will also include activities to address last mile connection barriers to access especially for the low-income households.

[5] The following ESPs have shown interest in participating in the Project: Blue Sky, Benadir Electric Company (BECO), Mogadishu Power, Al-Towba Electric Company, Wehliye Power Supply, ENEE (Ente Nazionale Energia Elettrica).

The activities under this component are proposed to include: (a) supply of equipment and materials for the distribution network Medium Voltage (MV) and Low Voltage (LV), metering equipment and service connections and (b) installation services including detailed line surveys. The scope of this component will be informed by the ongoing distribution network options analysis. Component 1 will in future be potentially supported by funds from the Somalia portion of GCF funding under Sustainable Renewables Risk Mitigation Initiative (SRMI) including (a) Transaction Advisory Services and Technical Assistance (TA) and (b) Risk mitigation instrument for mini grid to leverage ESPs private capital[6].

1.3.3.3 Component 3: Sector Capacity and Institution Enhancement and Project Implementation Support

The activities are proposed to enhance and build on the ongoing SESRP activities that among others include: (a) policy and regulatory development; (b) sector planning and feasibility studies for renewable energy projects; (c) ESP and capacity and business support services; (d) implementation of the project's Gender Action Plan which included gender capacity building for ESPs; and (e) project implementation support including for environment and social (E&S) safeguards. Key activities will among others include preparation studies for national electrification plan, with identification of actions to enhance the enabling environment for private sector investments. Sector enhancement activities will include support to operationalize the ESI, sector planning and operational capacity. The component will also support activities to build the capacity of the FMS who have a key role in the country's energy sector development. The capacity needs assessment for the FMS is underway and will inform the priority areas for capacity building support. A detailed capacity enhancement plan will be developed to ensure the staff of the MoEWR, FMS and other stakeholder institutions are trained to undertake core sector activities and thus reduce the continued reliance on consultants.

1.3.4 Project Beneficiaries

The main beneficiaries are about 1.8 million Somali people who will gain affordable, reliable and sustainable access to electricity services and associated benefits from increased jobs and economic opportunities. Beneficiaries also include the sector institutions such as the federal MoEWR, FMS, ESPs and private sector DRE and other government agencies that will be supported by the project, as well as the newly created workforce in the renewable energy/energy access fields, particularly women, having benefitted from ASCENT skill development engagements. Associated improvements in the efficiency, transparency, and accountability of the sector operations will not only shore up the sector's performance but also enhance the image and credibility of the institutions and thus build support for sustained operations.

1.4 Objective, Rationale and Methodology of ESMF

1.4.1 Objective of Environmental and Social Management Framework (ESMF)

The ASCENT Somalia Project consists of a series of subprojects, of which environmental and social (E&S) risks and impacts cannot be determined until the subproject details (e.g., locations, designs, etc.) have been identified.

The objective of this ESMF, therefore, is to set out the principles, rules, guidelines, and procedures to assess the E&S risks and impacts of the ASCENT Somalia Project. It contains measures and plans to reduce, mitigate, and/or offset adverse risks and impacts, provisions for estimating and budgeting the

[6] The GCF SRMI couldn't be processed due to Recipient's inability to take up the US$ 18.5 million GCF grants (which includes a US$ 15 million reimbursable grant) proposed to support the Project at the instant time, and pending resolution of internal constraints, the Recipient will request for the GCF grants to be processed as additional financing.

costs of such measures, and information on the agency or agencies responsible for addressing project risks and impacts, including on its capacity to manage E&S risks and impacts. It includes adequate information on the area in which subprojects are expected to be sited, including any potential E&S vulnerabilities of the area; and on the potential impacts that may occur and mitigation measures that might be expected to be used.

1.4.2 Rationale/Justification for the ESMF

Projects and programs prepared and managed by World Bank's Investment Policy Financing (IPF) support need to comply with the Environmental and Social Standards (ESSs) of the World Bank's Environmental and Social Framework (ESF). Therefore, ASCENT Somalia Project is required to satisfy the World Bank's ESF in addition to conformity with environmental and social legislation of the FGS.

Other safeguard instruments developed for the Project to meet World Bank's ESF requirements are; Resettlement Policy Framework (RPF), Stakeholder Engagement Plan (SEP), Labor Management Procedures (LMP), Gender-Based Violence Action Plan (GBVAP), and Environmental and Social Commitment Plan (ESCP).

1.4.3 ESMF Methodology

The methodologies adopted for the preparation of the ESMF include review of relevant literature including study documents, reports, previous related project ESMF reports, e.g., SESRP ESMF, etc., Project Appraisal Document (PAD) for the ASCENT, WBG ESSs, national policies, legislation and guidelines, international frameworks, and standards; stakeholder engagement and consultation with relevant city administration, federal, regional, district sector institutions and community representatives.

List of the stakeholders consulted is provided in *Annex II* of this report. The main points outlined in the consultative meetings with key stakeholders are summarized in *Chapter 7* and detailed in the SEP (a separate document).

2 ENVIRONMENTAL AND SOCIAL MANAGEMENT REQUIREMENTS

This section outlines the existing national and international environmental and social legislation, policies and institutions applicable to the proposed Project that will guide the development of the Project, which is subject to this ESMF. This includes a summary of the World Bank Group's (WBG) Environmental and Social Framework (ESF), Environmental and Social Standards (ESSs), and Environmental, Health and Safety Guidelines (EHSGs).

2.1 Federal Level Overview

Somalia policy and legislation with respect to E&S is nascent, in terms of assessing the potential impact of such policies on the E&S, or how they could contribute to environmental conservation and sustainable livelihood improvement. Several international agreements and Multilateral Environment Agreements (MEAs) exist, and although binding on Somalia, there has been little progress in implementation due to the chronic conflict. Such international environment agreements are documented on **Error! Reference source not found.**.

The Somali Cabinet, on February 13, 2020, approved the National Environmental Policy. The stated goal of environmental policy is to improve the health and quality of life of the Somali people.

To strengthen environmental legal frameworks, the National Environment Management Bill of 2020 was passed by a Cabinet resolution on November 26, 2020. The Bill, based on Article 25 and 45 of the Provisional Constitution, will be moved to the two houses of parliament for approval. The Bill has 18 sections and has clauses relevant to this project. The next step is for the Parliament to endorse it. The Directorate of Environment and Climate Change under the Office of the Prime Minister (OPM) is also drafting the regulations to Operationalization and implementation the environmental legal framework, the process of drafting the Environmental and Social Impact Assessment (ESIA) Regulation together with the Environmental and Social Audit is underway. Other relevant regulatory frameworks include National Climate Change Policy 2020, Draft National Charcoal Policy, Draft National Forest Management Policy, and Draft Ozone Layer Protection Regulation. In addition to that, there are other sectoral policies, acts and regulations relevant to the labour, water, livestock, agriculture, petroleum, fish and marine resource sectors.

2.1.1 Provisional Constitution of the Federal Republic of Somalia

Somalia passed its Provisional Constitution in 2012. Article 12 of the Constitution addresses public assets and natural resources. The provisional constitution contains several parameters relevant for various operational activities in the country.[7]

a) Art. 11 provides that all citizens have equal rights regardless of sex, and that the State must not discriminate against any person based on gender.
b) Article 14 stipulated that a person may not be subjected to slavery, servitude, trafficking, or forced labor for any purpose.
c) Art 15. Prohibits Female Genital Mutilation (FGM).
d) Art 24. Prohibits sexual abuse in the workplace. The Puntland Sexual Offences Act 2016 prohibits sexual harassment. Human trafficking: A person may not be subjected to slavery, servitude, trafficking or force labor offences. Every labor law shall comply with gender equality.

[7] SCORE - ESMF

e) Article 24.5 stipulated that all workers, particularly women, have a special right of protection from sexual abuse, segregation and discrimination in the workplace. Every labor law and practice shall comply with gender equality in the workplace.
f) Article 25 states that every Somali has the right to an environment that is not harmful to them, and to be protected from pollution and harmful materials. Every Somali has a right to have a share of the natural resources of the country, whilst being protected from excessive and damaging exploitation of natural resources.
g) Article 26 (section 1 and 2) state that a) every person has the right to own, use, enjoy, sell and transfer property, b) the state may compulsorily acquire property only if doing so in the public interest, and c) any person whose property has been acquired in the public interest has the right to just compensation form the State as agreed by the parties or decided by a court.
h) Article 43 provides guidelines on environmental and social safeguards that can be observed.
i) Article 43 further states: a) land is Somalia's primary resource and the basis of the people's livelihood; b) land shall be held, used and managed in an equitable, efficient, productive and sustainable manner, c) the FGS shall develop a national land policy, which shall be subject to constant review, d) no permit may be granted regarding the permanent use of any portion of the land, sea or air of the territory of the Federal Republic of Somalia, and e) the FGS, in consultation with the FMS and other stakeholders, shall regulate land policy, and land control and use measures.
j) Article 45 states that the Government shall give priority to the protection, conservation, and preservation of the environment against anything that may cause harm to natural biodiversity and the ecosystem. Furthermore, all people have a duty to safeguards and enhance the environment and participate in the development, execution, management, conservation and protection of the natural resources and the environment. The FGS and the governments of the FMS affected by environmental damage shall take urgent measures to clean up hazardous waste dumped on the land or in the waters of the FGS; take necessary measures to reverse desertification, deforestation and environmental degradation, and to conserve the environment and prevent activities that damage the natural resources and the environment of the nation, among other measures.

The Labour Code of 1972[8] stipulates that all contract of employment must include a) the nature and duration of the contract; b) the hours and place of work; c) the remuneration payable to the worker; and d) the procedure for suspension or termination of contract. Furthermore, all contracts must be submitted to the competent labor inspector for pre-approval.

Regarding occupational health and safety standards (OHS), the employer is obligated to provide adequate measures for health & safety protecting staff against related risks, including the provisions of a safe and clean work environment and of well-equipped, constructed and managed workplaces that provide sanitary facilities, water and other basic tools and appliances ensuring workers' health and safety.

The Code further stipulates that workers have the right to submit complaints and the employer must give the complaints due consideration. Remuneration must be adequate in view of the quality and quantity of the work delivered, and must be non-discriminatory regarding age, gender and other aspects. Maximum number of working hours per week are 8 hours per day and 6 days per week.

Some work is considered dangerous and unhealthy and forbidden for women and youth (defined as 15-18 years of age). This includes the carrying of heavy weight or work at night.

[8] The Code has recently been revised, but the revisions have not yet been passed and signed into law.

The Labor Code further forbids work for children below the age of 12 but allows employment of children between the age of 12-15, yet employment must be compatible with proper protection, health and the moral of children. The Code also recognizes freedom of association. Employers are prohibited from engaging in any kind of discrimination or restriction of the right of freedom of association. Workers are allowed to join trade union.

The Labor Code stipulates right to equal pay for the same work as men, paid maternity leave. Women are entitled to 14 weeks of maternity leave at half pay.

The Somali Penal Code of 1962. The Code criminalizes rape and other forms of sexual violence as well as forced prostitution. Articles 398-9 provide that 'carnal intercourse' and 'acts of lust committed with violence' are punishable with 5-15 years and 1-5 years of imprisonment. Abduction for the purpose of lust or marriage is prohibited under Art 401.

The Agricultural Land Law (1975). The law transfers all land from traditional authorities to the government. Individuals desiring land were to register their holdings within a 6 months' period. The law does not recognize customary land holdings.

November 14, 2019, the new National Policy, National Eviction Guidelines, and the Interim Protocol on Land Distribution for Housing to Eligible Refugee-Returnees and IDPs

The National Policy provides a framework that seeks to protect persons of concern – IDPs, and refugee-returnees – from further forced displacement, provide protection and assistance during displacement, and find a durable solution to their displacement. The policy codifies the roles and responsibilities between the Federal Government and the Federal Member States. The National Eviction Guidelines address the human rights implications of evictions in urban and rural areas by preventing arbitrary and forced eviction of occupiers of public and private properties, from homes, encampments and other lands.

Family Code of 1975. Minimum age for marriage 18 for male and females. Females between the age of 16 and 18 can marry with their guardian´s consent. Marriage and Divorce. Marriage is based on equal rights and duties. A husband can divorce by repudiation (talaq). Custody of children. The mother retains custody after separation, but she loses custody if she remarries.

Somalia National Gender Policy (2016). Includes strategies to eradicate harmful traditional practices such as FGM/C and child marriage and to improve services for the management of GBV cases.

The National Environmental Policy (2015) promotes the use of appropriate environmental assessment instruments.

National Climate Change Policy, 2020: This environment and climate change policy brief aims at briefly presenting key environmental sustainability challenges and opportunities in Somalia, their linkages to poverty reduction and the millennium development goals three, four and five.

National Energy Policy (NEP) of the Federal Republic of Somalia. The policy goal of the National Energy Policy is to provide adequate, affordable and sustainable access to efficient energy to the Somali society, with commitment to environmental stewardship, while also improving quality of life, promoting socio-economic growth, developing clear policies, regulations, building strong institutions, and unlocking the country's renewable energy potential.

The following policy objectives are relevant to the ASCENT project:

a) To increase access to efficient, affordable and sustainable energy for urban and rural communities; for the private sector to thrive, as well as for the public sector to meet its energy demand to provide better essential services, boost economic growth and reduce poverty;

b) To foster the creation of reliable, continuous and sustainable energy provision networks throughout Somalia from source to end-consumers to attract investments, promote industrialization, create business and increase quality of life, while tapping into cleaner energy sources and ensuring environment protection and stewardship;
c) To build strong institutions with well-defined mandates, roles and capacity to oversee, manage, implement, monitor and evaluate this policy and related initiatives, based on principles of transparency, inclusiveness, dialogue and consultation with multiple stakeholders, as well as fairness and the pursuit of innovation;
d) To establish strategic partnerships with the public and private sectors, investors, universities, in Somalia and abroad, to boost Somalia's critical mass in the energy sector, from building a solid community-based workforce to investing in scientific innovation and technology transfer, as a catalyst to create jobs, improve energy access, reduce inefficiencies and generate growth, and
e) To promote widespread production, use and storage of renewable energy through diversification, innovation, technical cooperation, technology transfer, to reduce the pressures on deforestation for biomass energy generation, and to promote investment in modern, integrated and commercially viable models of energy supply.

Occupational health and safety Regulatory Framework. Legislation on occupational safety and health (OSH) in Somalia is limited, with the labour code known as Act No. 31 of 2004: Private Sector Act as the main reference on occupational safety and health issues. The Labour Code establishes the rights, duties and responsibilities of the parties of labour relations, as well as conditions for ensuring the safety and health of workers.

The Act officially establishes the Directorate of Labour under the Minister of Health and Labor". The purpose of establishing the Directorate is:

- To develop employees and the conditions of work within the sectors of employment.
- To protect the rights of employers and employees;
- To reduce the disputes between the employers and employees.

The Act also enlists the duties and obligations of the Director of Labour of the Minister of Health and Labor as follows:

- Registration of the employees of Companies, local non-governmental organizations, international non-governmental organizations, and the United Nations.
- Dispute resolution of the work relationships between employers and employees within the private sector, which are registered.
- The Director is responsible for all employment related work, conditions of work, development of unskilled labor, and the statistics for private sector employment.
- Encouragement and helping the establishment of Trade Unions according to the Act.
- Ensuring that the employees of companies are given justice and equality during the hiring process, during which one of the members of the Department of Labour will be present when competing for the hiring of a new employee.
- To give current information and consultation to the Minister of Health and Labor on the conditions of work for employees of the state to produce a strategy and policy towards the development of the employees,
- Giving permission to foreign employees for which their experience is necessary, and
- Inspecting and ensuring the conditions of workplace.

This act will be instrumental throughout the project implementation in terms of employer/employees' responsibility, OHS risks and disputes abatement, mitigations and resolutions.

2.2 State and Regional Level

State level laws and regulation are slightly advanced for some states and regions like Puntland and Somaliland, while in others—like South-West State, Hirshabelle, Galmudug and Jubbaland—do not have any significant legislative frameworks governing the management of the environment and natural resources sector in place. Other than the pieces of legislation available in some states as discussed below:

2.2.1 Puntland

The state of Puntland has an Environmental Policy which was produced in 2014 and framework documents for ESIA guidelines and regulations is in place. Puntland Environmental Impact Assessment Act operationalizes a technical team, known as the "Environmental Impact Assessment unit" at the Ministry, headed by a Director of ESIA and comprising a team of qualified and with specialized training in Environmental Impact Assessment whose functions shall be: a) receive, process and safeguard all documents related to ESIA that are submitted to the Ministry; b) review and recommend to Director General; and c) recommend to the Ministry that a proposed major project be objected to commence or continue due to the unacceptable environmental impacts of the potential or existing project. Other existing policies, laws and regulations in Puntland State relevant to environmental management include the following:

- Environmental Policy (2014) approved by the Cabinet and Parliament;
- Puntland Rangeland Management Policy 2nd Edition (2016-2025);
- Puntland Waste Management Policy (2016);
- ESIA Act and Regulation (2016) approved by Cabinet and Parliament;
- Puntland Climate Change Strategy (2016); and
- Ministry of Environment and Climate Change Strategic Plan (2016-2020).

2.2.2 Southwest State

South-West State has within the government echelons the Ministry of Environment and Tourism (MoE&T), which manage environmental related issues within the state. The MoE&T has developed and passed ESIA regulations, which are meant to govern environmental matters, including licensing of landfills, waste pits and medical waste incinerators, in addition to oversight over environmental governance.

2.3 Institutional Framework

2.3.1 Institutional Capacity for Environmental and Social Management

A Directorate of Environment is integrated in the Office of the Prime Minister (OPM) at federal level. It is mandated to draft relevant policies and legislation, including establishing of the Environmental Quality Standards, and Sectoral Environmental Assessments, ESIAs. Laws on environmental governance in some FMS are at infancy stages while in other states like Puntland and Somaliland slightly advanced than other states. Overall Environmental impact assessment capacity is nascent. Somalia is signatory to some international conventions, and the FGS has enacted several key environmental Acts recently. However, necessary regulations have not been formulated yet.

Most States have Ministries of Environment, which manage environmental issues. The State Ministries of Environment are to be consulted before any infrastructure activities in their respective state with

potential environmental and social risks and impacts. The institutional arrangement for the Safeguard related matters including the approval process is yet to be established or agreed upon.

Some States and municipalities have offices responsible for land adjudication matters.

For the project implementation, this project will rely on the existing national environmental and social legal frameworks and World Bank ESS and EHSGs.

ASCENT will also support capacity building of institutions under Component 3.

2.3.2 Energy Sector Institutional Framework

Regulation of the energy sector, particularly of the electricity sub-sector generation, transmission and distribution, is limited or not in place at all in Somalia. The Ministry of Energy and Water Resources at the federal level has the responsibility to oversee operations in the electricity sector. It has introduced a system where players in the electricity market must register with the Ministry to obtain proper certification. At this point, building and consolidating strong institutional capability to properly manage all the processes involved in the regulation of the private sector and to proper implement this policy is a federal government priority. The authority to regulate, with well-defined, stable and transparent rules is an important step to encourage investment, increase access and ensure energy security.

Outside the sphere of the federal government each federal member state has a Ministry of Energy responsible for regulatory matters and has the mandate to implement energy-related initiatives but has limited power to pass new regulations and laws.

Overall, the renewable energy sector lacks specific policies and regulations, Renewable energy is highly valuable to the nation and requires adequate policies, investment, capacity building, technology transfer and incentive schemes to promote the integration of rural electrification and the use of off-grid and mini-grid systems.

2.4 International Conventions Signed and Ratified by Somalia

Table 2-1 International Conventions / Treaties in Relation to Environmental & Social Safeguards Standards – Somalia has Ratified / is Signatory

Convention /Treaty	Date Ratified/Signed	Relevance
Environment Agreements and Conventions		
The 1992 United Nations Framework Convention on Climate Change	2009	The primary purpose of the Convention is to establish methods to minimize global warming and in particular the emission of greenhouse gases. The Convention was adopted in 1992 and came into force in 1994.
United Nations Convention on Biological Diversity (1992)	September 2009	The Convention has three main goals including which are, the conservation of biological diversity (or biodiversity); the sustainable use of its components; and the fair and equitable sharing of benefits arising from genetic resources.
Convention on International Trade	1986	The convention aims to protect endangered plants and animals.

Convention /Treaty	Date Ratified/Signed	Relevance
Against Endangered Species (CITES).		
Vienna Convention on the Protection of the Ozone Layer March 1985	2001	The Vienna Convention was an intergovernmental negotiation for an international agreement to phase out ozone depleting substance. The Convention encourages intergovernmental cooperation on research, systematic observation of the ozone layer, monitoring of CFC production, and the exchange of information.
United Nations Convention to Combat Desertification (2002).	2002	The Convention combats desertification in those countries that experience serious droughts and/or desertification.
Basel Convention	July 2010	The overall goal of the Basel Convention is to protect human health and the environment against the adverse effects that may result from the generation, trans boundary movements and management of hazardous and other wastes.
Stockholm Convention	July 2010	The Stockholm Convention is a global treaty that aims to protect human health and the environment from the effects of persistent organic pollutants (POPs). The Convention entered into force on May 17, 2004.
Social Related Agreement and Convention		
The Freedom of Association and Protection of the Right to Organize Convention (1948) No 87	March 22, 2014	Article 3 (1) Workers' and employers' organizations shall have the right to draw up their constitutions and rules, to elect their representatives in full freedom, to organize their administration and activities and to formulate their programs. (2). The public authorities shall refrain from any interference, which would restrict this right or impede the lawful exercise thereof. Article 5 Workers' and employers' organizations shall have the right to establish and join federations and confederations and any such organization, federation or confederation shall have the right to affiliate with international organizations of workers and employers.
The Right to Organize and Collective Bargaining	March 20, 2014	Article 1 Each Member which ratifies this Convention shall take immediate and effective measures to secure

Convention /Treaty	Date Ratified/Signed	Relevance
Convention, 1949 (No. 98)		the prohibition and elimination of the worst forms of child labour as a matter of urgency. Article 2 For the purposes of this Convention, the term child shall apply to all persons under the age of 18.
Convention concerning Forced or Compulsory Labour (ILO No. 29)	Nov. 18, 1960	Article I 1. Each Member of the International Labour Organization, which ratifies this Convention, undertakes to suppress the use of forced or compulsory labour in all its forms within the shortest possible period. Article 5 1. No concession granted to private individuals, companies or associations shall involve any form of forced or compulsory labour for the production or the collection of products which such private individuals, companies or associations utilize or in which they trade
Convention on the Rights of the Child, 1989.	2015	The Convention on the Rights of the Child is the most comprehensive compilation of international legal standards for the protection of the human rights of children. It acknowledges children as individuals with rights and responsibilities according to their age and development, as well as members of a family or community. This includes non-discrimination, the best interest of the child, the right to life, survival and development and the right to participation.
Constitution of the International Labor Organization:	1960	The constitutional principle is that universal and lasting peace can be established if it is based on social justice. The ILO has generated such hallmarks of industrial society as the eight-hour workday, maternity protection, child labor laws, and a range of other principles.
ILO Convention 182 on Worst Forms of Child Labor.	2014	Ratification of this Convention makes a country commit itself to taking immediate action to prohibit and eliminate the worst forms of child labor. Some predefined worst forms of child labor include sale of a child, trafficking of children, forced or compulsory labor, commercial exploitation of children, prostitution or the production of pornography, and work by its nature that is likely to harm the health, safety and morals of children.
UN Convention on the Rights of the Child.	2015	The Convention is a Human Rights treaty that sets out the civil, political, economic, social, health and cultural rights of children. It defines a child as any human being

Convention /Treaty	Date Ratified/Signed	Relevance
		under the age of 18 unless the age of majority is attained earlier under national legislation.
Convention on the Elimination of All forms of Discrimination against Women (CEDAW 1981):	Not yet	The CEDAW affirms that gender equality is a precursor for development and peace. It establishes legal standards for the attainment of gender equality through the elimination of discrimination against women in all aspects of political, social, economic and cultural life. It highlights the importance of equality and equal opportunity in political and public life as well as education, health and employment. Ratifying Governments are required to set in place measures to enable and expedite gender equality in law and fact as well as confronting the underlying social political inequalities that perpetrate asymmetrical power relations based on gender.
Rotterdam Convention	Effectiveness in 2004	The purpose is to promote shared responsibilities in relation to importation of hazardous chemicals. The convention promotes open exchange of information and calls on exporters of hazardous chemicals to use proper labelling, include directions on safe handling, and inform purchasers of any known restrictions or bans. Signatory nations can decide whether to allow or ban the importation of chemicals listed in the treaty, and exporting countries are obliged to make sure that producers within their jurisdiction comply. Some types of asbestos are listed as banned under this treaty, but Chrysotile asbestos is not yet banned though there is global discussions to include it on the listed chemicals. Somalia acceded the Convention in 2010.
Maputo Protocol	Not ratified	Protocol to the African Charter on Human and People´s Rights on the Rights of women in Africa. Somalia has signed but the Protocol.

2.5 Relevant World Bank Environmental and Social Standards (ESSs)

The ESSs are technical reference documents which form part of the World Bank's 2016 Environmental and Social framework (ESF)The ESF has a set of 10 Environmental and Social Standards (ESSs) guidelines that are designed to ensure that all social and environmental risks and impacts of development project are identified and managed effectively.

The ESSs are designed to be used together with the Environmental Health and Safety Guidelines (EHSGs) which guides the developer in the management of environmental, health and safety aspects of a project. The General EHSGs and EHSGs for Electric Power Transmission and Distribution are relevant for implementation of ASCENT Somalia project, and with specific application to the

construction of power distribution lines and installation of solar PV systems in the targeted areas. The EHSGs for Electric Power Transmission and Distribution include information relevant to power transmission between a generation facility and a substation located within an electricity grid, in addition to power distribution from a substation to consumers located in residential, commercial, and industrial areas. The World Bank ESF requires the Bank and Borrowers to better manage environmental and social risks and impacts of projects and to improve development outcomes. ASCENT Project, therefore, is subject to the World Bank ESF requirement and 9 of the 10 ESSs apply to the project. The ESSs applicable to the project are:

2.5.1 ESS1: Assessment and Management of Environmental and Social Risks and Impacts

ESS1 prescribes that FGS will assess, manage and monitor the environmental and social risks and impacts of the project throughout the project life cycle to meet the requirements of the ESSs in a manner and within a timeframe acceptable to the Bank. ESS1 requires: the assessment, management and monitoring of E&S risks and impacts of the project throughout the project lifecycle; the application of the Bank's EHS Guidelines, or other more stringent measures where these exist; and the preparation of an ESCP as part of the legal agreement with material measures and actions required for the project to achieve compliance with the ESSs.

Activities planned under components 1 and 2 will involve civil works that will entail risks related to disposal and management of liquid and solid waste, such as spoils metals, cables, capacitor, wood, glass, and packaging materials; disposal and management of hazardous wastes such as polychlorinated biphenyls (PCBs) from older imported transformers and capacitors in use by ESPs, transformer parts and oils, certain amount of heavy metals, used and damaged solar panels, and batteries; soil erosion and degradation; fauna and flora disturbance leading to loss of habitats due to land clearance; dust and noise; contamination and degradation of soil and water; and health and safety of employees and communities including those associated with operation of vehicles, plant and equipment, working at height, contaminations associated with improper handling of e-wastes including faculty meters, electrocution and aesthetic and light reflection, and resource use, mainly in areas of less availability.

A range of social risks may occur including i) physical and/ or economic displacement as a result of land take; (ii) interaction between project workers and local communities can create conditions for disease transmission and social conflict etc; (iii) presence of security personnel (if required) notably during construction of infrastructure but also to protect assets during operation; and (iv) adverse impacts to land used by vulnerable groups depending on siting of infrastructure. Differential impacts may be experienced by vulnerable groups.

The FGS has developed this ESMF which includes E&S risk and impact screening criteria, and a template for preparing ESIA, and Environmental and Social Management Plans (ESMPs), as necessary for managing risks and impacts related site- specific sub-projects. The ESMF also outlines implementation arrangements to be put in place for E&S management, including mitigation of associated Facilities risks, SEA/SH risks via an action plan, training programs, and compliance monitoring and reporting requirements. Security Risk Management Plan prepared for SESRP will be updated to cover activities under the project before the commencement of subproject activities. TA activities will be implemented in compliance with the Bank's Advisory Note on TA.

2.5.2 ESS2: Labour and Working Conditions

This ESS recognizes the importance of employment creation and income generation in the pursuit of poverty reduction and inclusive economic growth. ESS2 requires: development and implementation of labor management procedures; Workers to be provided with clear information and documentation

on terms and conditions of employment; and Nondiscrimination of workers in employment and treatment.

The FGS has prepared a LMP that set out the ways in which project workers will be managed in accordance with the requirements of national law and ESS2. The LMP includes requirements on employment terms and conditions, non-discrimination and opportunity, the project will also apply enhanced due diligence for evaluation of forced labor risks in the solar supply chain; in line with OPCS guidance. Contractors will be required to prepare and implement Occupational Health & Safety Plans (OHSP) following the World Bank Group General EHSGs as well as the EHSGs for Electric Power Transmission and Distribution, adopt a code of conduct (CoC) for all workers and establish GRM (accessible for direct and contracted workers) before commencement of the civil works. The project will ensure that regular trainings for workers are conducted by the contractor on labor provisions, signing of codes of conduct with clauses against SEA/SH behaviors and sanction case of non-compliance , SEA/SH mitigation measures, including SEA/SH-sensitive grievance redress mechanisms (GRM), etc.

2.5.3 ESS3: Resource Efficiency and Pollution Prevention and Management

ESS3 recognizes that economic activity and urbanization often generate pollution to air, water, and land, and consume finite resources that may threaten people, ecosystem services and the environment at the local, regional, and global levels. This ESS sets out the following requirements for Projects: Implementation of technically and financially feasible measures for improving efficient consumption of energy, water, and raw materials, as well as other resources; and Avoidance of the release of pollutants or, when avoidance is not feasible, minimization and control the concentration and mass flow of their release using the performance levels and measures specified in national law or the EHSGs, whichever is most stringent.

This project tackles climate change both from a mitigation and an adaptation perspective. By reducing technical losses, there will be energy savings annually in addition to reduced generator fuel consumption from wet stacking. Both the reduction in losses and reduced fuel consumption are estimated to lead to reduced GHG emissions.

Assessment of risks and impacts and proposed mitigation measures related to relevant requirements of ESS3, including raw materials, water use, air emissions, construction and hazardous waste are included within scope of this ESMF, and will be included in site specific ESIAs/ESMPs, as relevant. The required construction material will potentially include stones, sand, concrete blocks and timber. Potential issue related with project activities under component 1 and 2 activities is generation of hazardous wastes due to the generation of solid and hazardous wastes associated with Photovoltaic panels and used solar batteries. The potential for environmental contamination will be significant if the PV panels and solar batteries are damaged or improperly disposed upon their end life and decommissioning. This ESMF includes guidance for subproject ESIA/ESMP to include proper planning and good maintenance practices to minimize impacts from hazardous materials through development of a waste management plan and hazardous waste handling, storage and disposal protocol focusing on used and damaged PV- panels and batteries as part of comprehensive ESMP.

2.5.4 ESS4: Community Health and Safety

ESS4 addresses the health, safety, and security risks and impacts on project-affected communities and the corresponding responsibility of Borrowers to avoid or minimize such risks and impacts, with particular attention to people who, because of their circumstances, may be vulnerable. ESS4 requires the assessment, management and monitoring of E&S risks and impacts of the project on the health and safety of the affected communities (vulnerable) during the project life cycle; and assessment of

how use of security by the Project to safeguard personnel and property could impact on community considering human rights.

Given the scale of the works under component 1 and 2 some labor influx is considered to be likely but will vary depending on the nature of the civil works and geographical location and is not expected to be major. The project will need to put in place security and safety provisions to ensure the security of personnel and community members, and to conduct worker training on appropriate behavior during the implementation of the project. Labor influx can lead to an increased risk of sexual exploitation and abuse (SEA) notably of women and girls especially associated with construction activities and locations where camps are established. SEA especially due to poverty situation which may see even young girls engaging in survival sex; transaction sex, sexual harassment (SH) and other forms of GBV. Sexual violence and GBV are known to be prevalent with many forms of SEA including child marriage, FGM/C, rape and intimate domestic violence being normalized especially in conflict areas. To address these risks SEA/SH Action Plans have been developed and will be disclosed. As part of this plan's Accountability and Response Framework, a GBV consultant/advisor will need to be involved to support the implementation of the SEA/SH plan. Moreover, the project will identify the GBV services providers in the areas of intervention. In addition, the project will elaborate a referral pathway for SEA/SH survivors which will include at least quality medical services, psychosocial assistance, and legal support. Component 1 and 2 activities may also pose marginal community health and safety risks related to infrastructure and equipment design and safety, management and safety of hazardous materials, traffic and road safety, disaster risk, emergency preparedness and response. A community and safety risk assessment and management plan will be prepared as part of sub project specific ESIAs/ESMPs. In addition, transmission of communicable diseases is also a concern including Covid-19 and Sexually Transmitted Diseases notably HIV/AIDS.

2.5.5 ESS5: Land Acquisition, Restrictions on Land Use, and Involuntary Resettlement

The twin objectives of the World Bank's ESS 5 are to avoid land acquisition and involuntary resettlement where feasible, or to minimize resettlement while exploring all viable alternatives. Where it is not possible to avoid resettlement, activities will be conceived and executed as sustainable development programs, providing sufficient investment to enable the persons displaced by the project to share in the project benefits.

In Somalia, formalized land titles barely exists. Lands are largely unregistered, communally-owned and customarily administered by clan heads. This patterns of land ownership and governance can complicate land acquisition activities for the project interventions which may include sites for hosting solar farms and easements for its associated infrastructure. Land related risks include: (i) impacts associated with land acquisition and involuntary resettlement, including physical and economic displacement, and restrictions on land use; (ii) conflict over rights to the land and resources; (iii) exclusion of land users (especially seasonal users) in decision making and provision of resettlement support including compensation; (iv) failure to acquire land in line with the requirements of ESS5 given the potentially limited capacity; and (v) impacts to livelihoods. Key to mitigating these risks will be coordination with all stakeholders including the customary land rights authorities of the respective areas as well as members of the communities and seasonal users to ensure that their land usage is not affected. Livelihood losses will also need to be considered and assessed including from temporary disruption due to construction activities, easements, and permanent loss of access to land. The extent of these impacts will be considered further during project preparation as the sub-project activities and locations are further defined/ prioritized and screened to determine if they are environmentally and socially sustainable.

A Resettlement Policy Framework (RPF) has been prepared will be disclosed. The RPF outlines the approaches to avoid and minimize physical and economic displacement where possible.

2.5.6 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. ESS6 recognizes the importance of maintaining core ecological functions of habitats, including forests, and the biodiversity they support. This ESS also addresses sustainable management of primary production and harvesting of living natural resources. ESS6 recognizes 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.

The project's activities are likely to be restricted to modified areas around or on the outskirts of urban areas where there are major load centers, existing road, energy corridors or Way leave/ROW and within mini grids existing footprint and therefore impacts on natural and sensitive habitats is expected to be limited. Nevertheless, as the location of actual physical infrastructure are still not identified, the potential direct, indirect and any cumulative impacts will only be identified during project design when specific routes are known and will be addressed in the in the site specific ESIA/ESMP/RAP instruments to be prepared for this project. The screening checklist developed as a part of ESMF will be used to screen out subproject sites deemed to cause risks/impacts to areas of high biodiversity values, critical or sensitive natural habitats within project areas, protected areas, and endemic flora and fauna including protected animal or plant species. The screening process to be carried out by the implementing entities shall include an identification of the types of habitats which will be affected and consider potential risks and impacts on ecological function of the habitats at which PV Solar panels will be installed on specific site within remote or rural areas.

2.5.7 ESS8: Cultural Heritage

This ESS recognizes that cultural heritage, in its many manifestations, is important as a sourced of valuable scientific and historical information, as an economic and social asset for development, and as an integral part of people cultural identity and practice. The objective of this ESS is to protect cultural heritage from the adverse risks and impacts of project activities and to promote meaningful consultations with stakeholders regarding cultural heritage.

Given the nature and scale of these activities impacts to cultural heritage are likely to be avoidable or limited. The impact on cultural heritage and relevance of this ESS8 will be further assessed during the implementation. Environmental and social screening procedures shall consider impact identification of cultural heritage and assessment of tangible and intangible heritage in consultation with affected stakeholders. A standardized chance-find procedures including screening process will be included as an Annex to this ESMF. The ESIAs and ESMPs will also include measures to meet the requirements of ESS8 including stakeholder consultation, identification of tangible and intangible cultural heritage, documentation of impact assessment and action plans and mitigation measures.

2.5.8 ESS10: Stakeholder Engagement and Information Disclosure

ESS10 applies as it addresses the importance of open and transparent stakeholder engagement, which is essential in improving the environmental and social sustainability of the project. Stakeholder engagement must be a socially inclusive process conducted throughout the project life cycle.

Where properly designed and implemented, it supports the development of strong, constructive responsive relationships that are important for the successful management of a project's environmental and social risks.

The FGS has prepared a Stakeholder Engagement Plans (SEP), taking into consideration the nature and scale of the project, its associated risks and impacts, and reflecting experiences drawn from the consultation activities implemented under the SESRP. Considering that information about project locations will be only known during the project's implementation stage, part of the SEP take the form of a framework, in accordance with paragraph 18 of ESS10. Key stakeholders in this project include project-affected persons and households, domestic and commercial power consumers, ESPs, municipal authorities, security officials, clan heads and landowners, and civil society organizations, and business organizations and bodies such as Electricity sector working group (EWSG). As part of the project preparation, and based on the draft SEP, all drafts ESA instruments including the SEP will be disclosed prior to appraisal. Final versions and other ESA instruments will be consulted, approved/adopted prior to effectiveness. The Stakeholder engagement is expected to span over the project life, starting at the design phase all the way to project closure.

2.6 WBG EHS Guidelines, 2007

The EHSGs are technical reference documents that address the Bank's expectations regarding the EHS performance of its projects. They are designed to assist managers and decision makers with relevant industry background and technical information. This information supports actions aimed at avoiding, minimizing, and controlling EHS impacts during the construction, operation, and decommissioning phase of a project or facility. The EHS Guidelines serve as a technical reference source to support the implementation of the ESSs.

2.6.1 General EHSGs

General EHSGs contain information on cross-cutting environmental, health, and safety issues potentially applicable to all industry sectors; these are listed in Table 2-2.

Table 2-2 WBG General EHS Guidelines

Environmental	**Occupational Health and Safety**
• Air Emissions and Ambient Air Quality • Energy Conservation • Wastewater and Ambient Water Quality • Water Conservation • Hazardous Materials Management • Waste Management • Noise • Contaminated Land	• General Facility Design and Operation • Communication and Training • Physical Hazards • Chemical Hazards • Biological Hazards • Radiological Hazards • Personal Protective Equipment (PPE) • Special Hazard Environments • Monitoring
Community Health and Safety	**Construction and Decommissioning**
• Water Quality and Availability • Structural Safety of Project Infrastructure • Life and Fire Safety (L&FS) • Traffic Safety • Transport of Hazardous Materials	• Environment • Occupational Health and Safety • Community Health and Safety

• Disease Prevention • Emergency Preparedness and Response	

2.6.2 WBG EHS Guidelines for Electric Power Transmission and Distribution

The EHSGs for Electric Power Transmission and Distribution include information relevant to power transmission between a generation facility and a substation located within an electricity grid, in addition to power distribution from a substation to consumers located in residential, commercial, and industrial areas. Table 2-3 shows a summary of EHS issues associated with electric power transmission and distribution that occur during the construction and operation phases of a facility.

Table 2-3 WBG EHS Guidelines for Electric Power Transmission and Distribution

Environmental	**Occupational Health and Safety**
• Terrestrial habitat alteration • Aquatic habitat alteration • Electric and magnetic fields • Hazardous materials	• Live power lines • Working at height • Electric and magnetic fields • Exposure to chemicals
Community Health and Safety • Electrocution • Electromagnetic interference • Visual amenity • Noise and Ozone • Aircraft Navigation Safety	

Additional recommendations for the management of environmental issues during the construction and decommissioning phases of power transmission and distribution systems are provided in the ***General EHS Guidelines***. Examples of the impacts addressed in the General EHS Guidelines include:

- Construction site waste generation;
- Soil erosion and sediment control from materials sourcing areas and site preparation activities;
- Noise from heavy equipment and truck traffic; and
- Potential for hazardous materials and oil spills associated with heavy equipment operation and fueling activities.

These guidelines should be followed and incorporated into contracts and followed by contractors and consultants. PIU and Owners engineer will supervise and monitors the implementation by the Contractor(s) who will take note and implement as part of the contractual obligation of these guidelines.

2.7 Comparison Between Somalia Laws and WBG ESF

The activities in the ASCENT project need to comply with both Somali laws and regulations and WBG ESF. This sub-section compares the national public sector environmental management rules, regulations and standards with the WBG ESF. The objective of the gap analysis is to understand whether the WB's ESSs or the relevant national laws and regulations apply to the project; this gap analysis is to help implement environment and social standards more effectively at the Federal and

State levels in Somalia through an understanding of existing gaps and provide the bap fill measures appropriately. Table 2-4 summarizes a comparison focusing on the WBG ESF relevant to the project and gaps identified in existing Somalia laws and regulations.

Table 2-4 GAP Analysis Between WBG ESF and Relevant FGS Legal Frameworks

ESF Objectives	**National Laws and Requirements**	**Gaps**	**Proposed GAP fill Measure**
ESS 1: Assessment and Management of Environmental and Social Risks and Impacts			
Objectives of ESS 1 are: To identify, evaluate and manage the environment and social risks and impacts of the project in a manner consistent with the ESSs. To adopt a mitigation hierarchy approach to: (a) Anticipate and avoid risks and impacts; (b) Where avoidance is not possible, minimize or reduce risks and impacts to acceptable levels; (c) Once risks and impacts have been minimized or reduced, mitigated; and (d) Where significant residual impacts remain, compensate for or offset them, where technically and financially feasible. To adopt differentiated measures so that adverse impacts do not fall disproportionately on the disadvantaged or vulnerable, and they are not disadvantaged in sharing development benefits and opportunities resulting from the project. To utilize national environmental and social institutions, systems, laws, regulations and procedures in the assessment, development and	Provisional Constitution of the Federal Republic of Somalia. Article 12 of the Constitution addresses public assets and natural resources. Article 43 provides guidelines on environmental and social safeguards that can be observed.	Laws have not been developed yet. ESIAs not incorporated in federal law yet, and not strong in State-level legislation	ASCENT project seeks to increase access to renewable energy through private sector participation in Somalia. Selection of subprojects will be based on feasibility studies that include EHS considerations. As such, subproject details such as scale, locations, designs, etc. required to develop E&S tools e.g., ESIAs, ESMPs, etc. are difficult to establish at this stage. To aid assessment and management of E&S impacts and risks at this project appraisal stage, this ESMF has been prepared to provide a general E&S impact identification framework to assist project implementers identify preliminary E&S risks of the projects and institute measures to address adverse E&S impacts. Specific information on Subproject locations, land requirements, biophysical features, etc., have been included in this ESMF and RPF). Site-specific instruments such as ESIA,

ESF Objectives	National Laws and Requirements	Gaps	Proposed GAP fill Measure
implementation of projects, whenever appropriate. To promote improved environmental and social performance, in ways which recognize and enhance Borrower capacity.			ESMP and RAP reports to be prepared at later phases of the project. The ESMF constitutes the proponent's commitment to ensure ASCENT project is implemented in accordance with the WBG ESSs. The ESMF will thus facilitate compliance with WBG as well as national safeguard requirements.
ESS 2: Labor and Working Conditions			
The Objectives of ESS 2 are: To promote safety and health at work. To promote the fair treatment, non-discrimination and equal opportunity of project workers. To protect project workers, including vulnerable workers such as women, persons with disabilities, children (of working age, in accordance with this ESS) and migrant workers, contracted workers, community workers and primary supply workers, as appropriate. To prevent the use of all forms of forced labor and child labor. To support the principles of freedom of association and collective bargaining of	Provisional Constitution of the Federal Republic of Somalia. Article 14 stipulates that a person may not be subjected to slavery, servitude, trafficking, or forced labor for any purpose. Article 24.5 stipulates that all workers, particularly women, have a special right of protection from sexual abuse, segregation and discrimination in the workplace. Every labor law and practice shall comply with gender equality in the workplace. The Puntland Sexual Offences Act 2016 prohibits sexual harassment.	The Somalia labor code, amending the code from 1972, has not been passed yet. The implementation of the existing articles in practice may not be very strong.	The Project will not allow any forced and child labor. It will hold all contractors liable to the implementation of the LMP. The PIU will have overall responsibility to monitor the implementation of the LMP
			The LMP has spelt out the workers' grievance redress mechanism; and the GBV Action Plan provides referral pathways for cases of GBV.
		n/a	The Project will fully comply with WB ESS 2. This is set out in the LMP that has been developed,
		n/a	The Project will apply occupational health and safety management system that is consistent with the

ESF Objectives	**National Laws and Requirements**	**Gaps**	**Proposed GAP fill Measure**
project workers in a manner consistent with national law. To provide project workers with accessible means to raise workplace concerns.	Human trafficking: A person may not be subjected to slavery, servitude, trafficking or force labour offences. Every labour law shall comply with gender equality. Dismissal for pregnancy. All women have a special right of protection from discrimination. Somalia Labour Code of 1972 stipulates: All contracts of employment must include a) the nature and duration of the contract; b) the hours and place of work; c) the remuneration payable to the worker; and c) the procedure for suspension or termination of contract. Furthermore, all contracts must be submitted to the competent labor inspector for pre-approval; The employer is obligated to provide adequate measures for health & safety protecting staff against related risks, including the provisions of a safe and clean work environment and of well-equipped, constructed and managed workplaces that provide sanitary facilities, water and other basic tools and appliances;		WBG General EHSGs on Occupational Health and Safety
		n/a	The LMP has been developed sets out the workers' grievance redress mechanism
		Women are restricted from being employed in night work, and the specific types of work prohibited for women may be prescribed by decree. No provisions on the protection of the rights of domestic workers	The Project will fully comply with the national law and WB ESS 2. This is set out in the LMP developed for the project.
		n/a	The Project will only allow deployment from the age of 18 (defined in LMP). However, children under 18 are not to be considered for hazardous work and the work cannot interfere with their education or be harmful for their health.
		Children are deployed in worst forms of child labor (forced recruitment by army, forced labor in domestic work, agriculture and herding, breaking rocks for gravel, construction work, commercial sexual exploitations) However, Somalia made efforts to construct a rehabilitation center for	The Project will only allow deployment – in all project worker categories – from the age of 18 (defined in LMP). Rigorous monitoring will ensure the application of the LMP. ESS 2 shall prevail in recruiting the workers of age 18 and above.

ESF Objectives	**National Laws and Requirements**	**Gaps**	**Proposed GAP fill Measure**
	Workers have the right to submit complaints and the employer must give the complaints due consideration. Remuneration must be adequate in view of the quality and quantity of the work delivered, and must be non-discriminatory regarding age, gender and other aspects. Maximum number of working hours per week are 8 hours per day and 6 days per week. Some work is considered dangerous and unhealthy and forbidden for women and youth (defined as 15-18 years of age). This includes the carrying of heavy weight or work at night. The Labor Code forbids work for children below the age of 12 but allows employment of children between the age of 12-15, yet employment must be compatible with proper protection, health and the moral of children. The Code also recognizes freedom of association. Employers are prohibited from engaging in any kind of discrimination or restriction of the right of freedom of association. Workers are allowed to join trade union.	former child combatants and establish a Human Trafficking and Smuggling Task Force. Children are further deployed in agriculture (farming, herding livestock, fishing); industry (construction, mining and quarrying); services (street work, working as maids in hotels, domestic work, voluntary recruitment of children by army); children also perform dangerous tasks in street work. Laws do not identify hazardous occupations or activities prohibited for children, and child trafficking for labor and commercial sexual exploitation is not criminally prohibited. Government does not employ labor inspectors and conducts no inspections.	The project will follow national law and ESS 2.

ESF Objectives	National Laws and Requirements	Gaps	Proposed GAP fill Measure
ESS 3: Resource Efficiency and Pollution Prevention and Management			
The Objectives of ESS 3 are: To promote the sustainable use of resources, including energy, water and raw materials. To avoid or minimize adverse impacts on human health and the environment by avoiding or minimizing pollution from project activities. To avoid or minimize project-related emissions of short and long-lived climate pollutants. To avoid or minimize generation of hazardous and non-hazardous waste.	Provisional Constitution of the Federal Republic of Somalia. Article 18 of the Somaliland Constitution: The Environment and the Relief of Disaster states that "The state shall give a special priority to the protection and safeguarding of the environment, which is essential for the well-being of the society, and to the care of the natural resources. Article 25 of the Constitution states that every Somali has the right to an environment that is not harmful to them, and to be protected from pollution and harmful materials. Every Somali has a right to have a share of the natural resources of the country, whilst being protected from excessive and damaging exploitation of natural resources. Article 45 states that the Government shall give priority to the protection, conservation, and preservation of the environment against anything that may cause harm to natural biodiversity and the ecosystem. All people have a duty to safeguards and enhance the environment and participate in the development, execution, management, conservation and	Laws in support of the Constitution are still not available. Implementation of the laws and Constitution may be hampered due to the weak justice system	The Project will promote the sustainable use of resources and avoid or minimize adverse impacts on human health according to the Constitution and the WB's ESS3. Detailed measures are laid out in the ESMF.

ESF Objectives	National Laws and Requirements	Gaps	Proposed GAP fill Measure
	protection of the natural resources and the environment. The FGS and the governments of the FMS affected by environmental damage shall take urgent measures to clean up hazardous waste dumped on the land or in the waters of the FGS; take necessary measures to reverse desertification, deforestation and environmental degradation, and to conserve the environment and prevent activities that damage the natural resources and the environment of the nation, among other measures.		
ESS 4: Community Health and Safety			
The Objectives of ESS 4 are: To anticipate and avoid adverse impacts on the health and safety of project-affected communities during the project life cycle from both routine and non-routine circumstances. To avoid or minimize community exposure to project-related traffic and road safety risks, diseases and hazardous materials. To have in place effective measures to address emergency events. To ensure that the safeguarding of personnel and property is carried out in a	The Somali Penal Code of 1962 The Code criminalizes rape and other forms of sexual violence as well as forced prostitution. Articles 398-9 provide that 'carnal intercourse' and 'acts of lust committed with violence' are punishable with 5-15 years and 1-5 years of imprisonment. Abduction for the purpose of lust or marriage is prohibited under Art 401. Art 39(i) makes abuse of power in the commission of a crime an aggravating circumstance and Article 33 provides that when a superior officer orders the	The Somali Penal Code of 1962 fails to protect survivors and prosecute perpetrators. The crimes under Articles 398-9 are too narrowly defined to satisfy international law standards of protection from sexual and gender-based violence. Furthermore, in practice however it has been documented that women complaining about a rape may find themselves trapped by the Article 426	A GBV/SEAH Child Protection Prevention and Response Plan has been prepared and consulted upon. This Plan shall later be approved, disclosed and implemented accordingly. The Project will also implement a Security Management Plan, and activity specific ESMPs as required for other community health and safety risks.

ESF Objectives	**National Laws and Requirements**	**Gaps**	**Proposed GAP fill Measure**
manner that avoids or minimizes risks to the project-affected communities. To promote quality and safety, and considerations relating to climate change, in the design and construction of infrastructure, including dams	commission of an offence both the perpetrator and his superior will be liable.	prohibition against adultery that makes no exception for the case of rape. In practice provisions under Art 39(i) offer little more than theoretical protection.	
	The Somali Penal Code of 1975 Minimum age for marriage 18 for male and females. Females between the age of 16 and 18 can marry with their guardian´s consent. Marriage and Divorce. Marriage is based on equal rights and duties. A husband can divorce by repudiation (talaq). Custody of children. The mother retains custody after separation, but she loses custody if she remarries.	Sharia and customary laws are used to address family matters. Lack of legal protections from early and force marriage. Sharia rules apply to marriage and divorce. Polygamy is allowed in limited specific circumstances, but family Code is seldom applied. Inheritance: Women have a right to inheritance, but in many cases receive less than men. Fathers are the guardians of children.	n/a

ESF Objectives	National Laws and Requirements	Gaps	Proposed GAP fill Measure
	Somalia´s National Gender Policy (2016) includes strategies to eradicate harmful traditional practices such as FGM/C and child marriage and to improve services for the management of GBV cases.	n/a n/a	This is taken up in the GBV Action Plan Several measures will be undertaken, including contractors will develop road safety management plan and a Health and Safety Plan as part of the CESMP to address the impacts on local communities of moving construction equipment; measures and actions developed to assess and manage specific risks and impacts outlined in the ESMF and subsequent ESMPs.
ESS 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement			
The Objectives of ESS 5 are: To avoid involuntary resettlement or, when unavoidable, minimize involuntary resettlement by exploring project design alternatives. To avoid forced eviction. To mitigate unavoidable adverse social and economic impacts from land acquisition or restrictions on land use by providing timely compensation for loss of assets at replacement	Provisional Constitution of the Federal Republic of Somalia. Article 26 states that every person has the right to own, use, enjoy, sell and transfer property. The State may compulsorily acquire property only if doing so is in the public interest. Any person whose property has been acquired in the name of the public interest has the right to just compensation from the State as agreed by the parties or decided by a court. Compensation is provided only for occupants of temporary structures.	There is a lack of detailed legislation governing land use and ownership. Evictions are reported to be commonplace in Somalia. ESS 5 recognizes three categories of Project Affected Persons, which are eligible for compensation: a) Those with formal legal rights to land (including customary and traditional rights recognized under the laws of the country); b) Those who do not have formal legal rights to land at the time of census, but have a claim that is recognized under the laws of the country; and c) Those who have no	A RPF will guide the development of site-specific RAPs once the subprojects are known. (Refer to the project RFP). ESS 5 shall prevail over the Somalia legislation on Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

ESF Objectives	**National Laws and Requirements**	**Gaps**	**Proposed GAP fill Measure**
	Affected persons are to be settled in suitable land and their eviction and settlement costs be paid for by the local government. The Somalia Agricultural Land Law (1975). The law transfers all land from traditional authorities to the government. Individuals desiring land were to register their holdings within a 6 months period. The law does not recognize customary land holdings.	recognizable legal right or claim to the land they are occupying. Those without legal title to land, including squatters and encroachers, are eligible for only limited protection under Somali laws and policies. ESS 5 further defines types of losses to be compensated to include physical and economic displacements and cover land, residential or commercial structures, and lost income caused by temporary or permanent economic displacement. While under Article 26, people have a right to be compensated, it is not clear how the amount for the compensation is determined. ESS 5 requires full replacement costs for all assets. Somali law does not determine compensation schedule and cut-off date. ESS 5 determines that improvements of the living situations of displaced vulnerable people should be undertaken, Somali Law does not provide for that. No meaningful consultations with project affected persons may take place, consultation mechanisms seem	

ESF Objectives	National Laws and Requirements	Gaps	Proposed GAP fill Measure
		to make a preference regarding governmental bodies rather than community stakeholders. The Agricultural Land Law led to disparities between statutory tenure and actual land use and allocation.	
ESS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources			
The Objectives of ESS 6 are: To protect and conserve biodiversity and habitats. To apply the mitigation hierarchy and the precautionary approach in the design and implementation of projects that could have an impact on biodiversity. To promote the sustainable management of living natural resources. To support livelihoods of local communities, including Indigenous Peoples, and inclusive economic development, through the adoption of practices that integrate conservation needs and development priorities.	Provisional Constitution of the Federal Republic of Somalia Article 25 of the Constitution states that every Somali has the right to an environment that is not harmful to them, and to be protected from pollution and harmful materials. Every Somali has a right to have a share of the natural resources of the country, whilst being protected from excessive and damaging exploitation of natural resources. Article 45 states that the Government shall give priority to the protection, conservation, and preservation of the environment against anything that may cause harm to natural biodiversity and the ecosystem. Furthermore, all people have a duty to safeguards and enhance the environment and participate in the development, execution, management, conservation	No detailed laws govern biodiversity conservation and sustainable management of living natural resources at this point.	The Project will avoid any encroachment into any modified, natural, critical habitat and/or protected areas. A biodiversity management plan (BMP) shall be prepared for any projects in protected areas.

ESF Objectives	National Laws and Requirements	Gaps	Proposed GAP fill Measure
	and protection of the natural resources and the environment. Article 12 of the Somaliland Constitution: Public Assets, Natural Resources and Indigenous Production has the following key provision on subsection 4: The central state (government) is responsible for the natural resources of the country and shall take all possible steps to explore and exploit all these resources which are available in the nation's land or sea. The protection and the best means of the exploitation of these natural resources shall be determined by law.		
ESS7 Sub-Saharan Historically Underserved Traditional Local Communities			
The Objectives of ESS 8 are: To ensure that the development process fosters full respect for the human rights, dignity, aspirations, identity, culture, and natural resource-based livelihoods of Sub-Saharan African Historically Underserved Traditional Local Communities. To avoid adverse impacts of projects on Sub-Saharan African Historically Underserved Traditional Local Communities, or when avoidance is not possible, to minimize, mitigate and/or compensate for such impacts.	Somalia Provisional Constitution and the Somaliland Constitutions contain good human rights guarantees. Somalia Penal Code Somalia is party to the International Covenant on Civil and Political Rights,	The Constitutional review process offers an opportunity to address gaps including; violence against women, participation of IDPs and Persons with Disabilities in decision making and public life. Somalia's Penal Code, which is still being extensively used throughout Somalia goes against international criminal and human rights standards, particularly areas regarding rape as well as provisions preventing abuse and exploitation of IDPs; minorities; and persons with disabilities.	The Social assessment on presence and ESS7 eligibility of Sub-Saharan Historically Underserved Traditional Local Communities shall be conducted to: a) Determine the applicability of the standard; and b) Prepare an IPPF.

ESF Objectives	**National Laws and Requirements**	**Gaps**	**Proposed GAP fill Measure**
To promote sustainable development benefits and opportunities for Sub-Saharan African Historically Underserved Traditional Local Communities in a manner that is accessible, culturally appropriate and inclusive. To improve project design and promote local support by establishing and maintaining an ongoing relationship based on meaningful consultation with the Sub-Saharan African Historically Underserved Traditional Local Communities affected by a project throughout the project's life cycle. To obtain the Free, Prior, and Informed Consent (FPIC)9 of affected Sub-Saharan African Historically Underserved Traditional Local Communities in the three circumstances described in this ESS. To recognize, respect and preserve the culture, knowledge, and practices of Sub-Saharan African Historically Underserved Traditional Local Communities, and to provide them with an opportunity to adapt to changing conditions in a manner and in a timeframe acceptable to them.		Weak judicial system characterized with no accountability and lack of due process for fair administration of justice. There is no federal human rights institution,	

[9] The purpose of ESS7 is not to specify terminology to identify or describe these groups, which will be defined solely in accordance with the criteria set out in paragraphs 8 and 9 of the ESF, 2019

ESF Objectives	National Laws and Requirements	Gaps	Proposed GAP fill Measure
ESS 8: Cultural Heritage			
The Objectives of ESS 8 are: To protect cultural heritage from the adverse impacts of project activities and support its preservation. To address cultural heritage as an integral aspect of sustainable development. To promote meaningful consultation with stakeholders regarding cultural heritage. To promote the equitable sharing of benefits from the use of cultural heritage.	Somalia has a National Strategy for Culture.	The law regarding the management of Physical Cultural Resources exists as a draft.	The Project will implement chance find procedures to protect cultural or archeological findings during project activities. The Project will further conduct community consultations (as per SEP) prior to project activities to ensure protection of other tangible and intangible cultural heritage.
ESS 10: Stakeholder Engagement and Information Disclosure			
The Objectives of ESS 10 are: To establish a systematic approach to stakeholder engagement that will help Borrowers identify stakeholders and build and maintain a constructive relationship with them, in particular project-affected parties. To assess the level of stakeholder interest and support for the project and to enable stakeholders' views to be considered in project design and environmental and social performance. To promote and provide means for effective and inclusive engagement with	Provisional Constitution of the Federal Republic of Somalia Article 32 stipulated that every person has the right of access to information held by the State. The Federal Parliament shall enact a law to ensure the right of access to information	The law on the right of access to information currently only exists as a draft	The Project will implement stakeholder consultations throughout the lifetime of the project, as per the SEP. The PIU will ensure that a grievance mechanism for the project is in place, in accordance with ESS10 as early as possible in project development to address concerns from project affected persons. SEP shall be disclosed to all stakeholders and made available to the stakeholders in public areas,

ESF Objectives	**National Laws and Requirements**	**Gaps**	**Proposed GAP fill Measure**
project-affected parties throughout the project life cycle on issues that could potentially affect them. To ensure that appropriate project information on environmental and social risks and impacts is disclosed to stakeholders in a timely, understandable, accessible and appropriate manner and format. To provide project-affected parties with accessible and inclusive means to raise issues and grievances and allow Borrowers to respond to and manage such grievances.			SEP will ensure that all stakeholders are not only identified, but that their information disclosure needs are also identified to guide information disclosure to each stakeholder category as appropriate

3 BASELINE ENVIRONMENTAL AND SOCIAL CONDITIONS

3.1 Overview

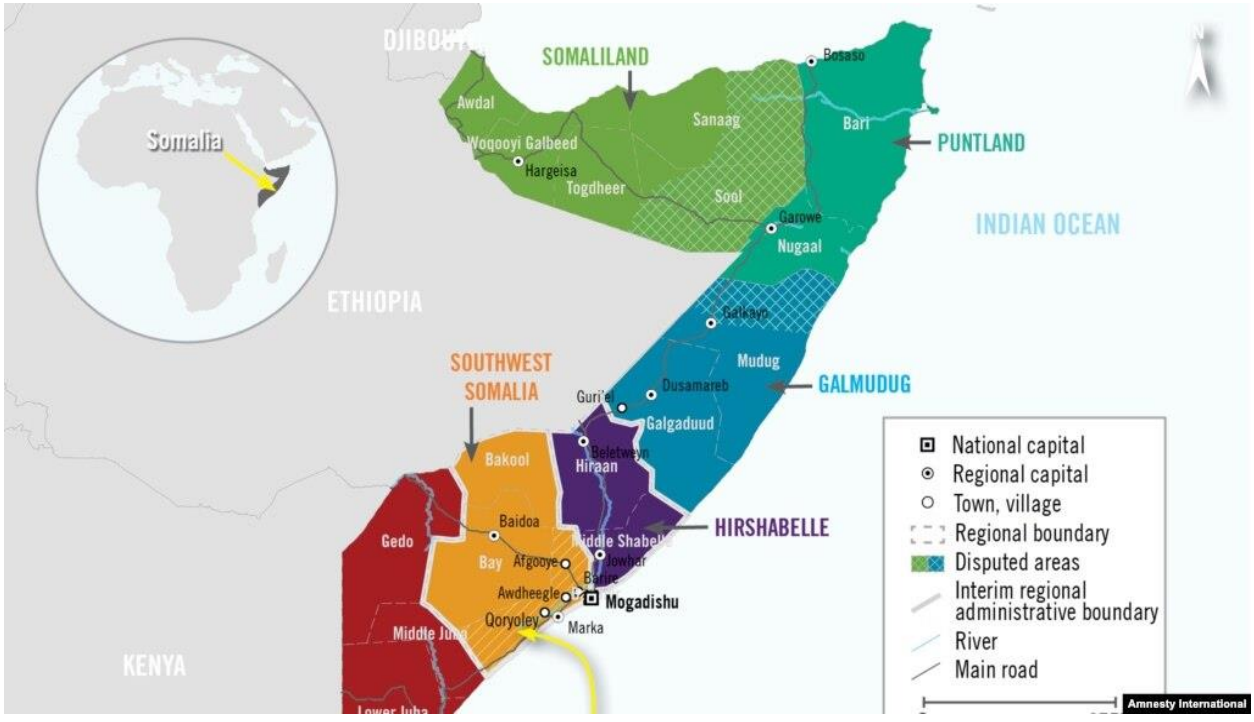
This Section provides a description of the existing physical, biological, and socio-economic conditions, which are directly or indirectly affected by ASCENT Project activities. It is essential that the baseline conditions of the environment are characterized to accurately predict the potential effects the proposed project will have on the environment and society. The collection of baseline data therefore focused on providing information to support the assessment of any potential E&S impact and risk of the project at the national level.

3.2 Physical Baseline

3.2.1 Size, Location, and Geography

Somalia is Africa's easternmost country, and is bordered by Kenya to the south, Ethiopia to the west, Djibouti to the north-west, the Gulf of Aden to the north, and the Indian Ocean to the east. It has a land area of 637,540 km^2, and a coastline of 3,300 km, the longest of any African country, 1,300 km of which is on the Gulf of Aden and the other 2,000 km on the Indian Ocean. The country stretches for almost 1,550 km from north to south between latitudes 12°00'N and 1°37'S, and 1,095 km from west to east between longitudes 41°00' and 51°21'E.

ASCENT project will support subprojects to increase access to renewable energy within the federal system that includes five FMS – Galmudug, Hirshabelle, Jubbaland, Puntland and Southwest and the federally administered Banadir Administration.



Map 3-1 Map of Somalia Showing the Five FMS and Mogadishu (the capital)

Source: *https://www.voanews.com/a/us-restricts-visas-for-somali-officials-accused-of-undermining-democracy/6460328.html*

3.2.2 Climate and Climate Change

3.2.2.1 Climate

Somalia is a large, relatively flat country, with an arid or semi-arid climate and prone to severe droughts and floods. Most of its population support themselves through nomadic pastoralism and agriculture. They are among the poorest in the world, and although too few data are available to allow the country to be ranked relative to others according to the Human Development Index (HDI), it is believed to score very poorly on all HDI indicators.

Somalia has a warm desert climate in the north and a semi-arid climate in the south. The country is characterized by four seasons: between the two monsoons, there are irregular rain and hot and humid periods. From April to June, there is the main rainy season, Gu. This is followed by the dry Xagaa season before the Dayr provides further rainfalls from October to December, with approximately 500 mm rainfall annually in the northern highlands, 50-150mm along coast, and 300-500 mm in the southwest. The annual cycle is completed as the dry Jilaal season stretches from December to March. The climate in the Horn of Africa is affected by the Indian Ocean's variable sea-surface temperatures and the El Niño–Southern Oscillation (ENSO) cycle[10]. Different ENSO phases have diverse impacts during seasons and across different parts of the Horn[11].

3.2.2.2 Climate Change

Climate is the primary determinant for Somali life. Over half of the populations are pastoralists where the timing and amount of rainfall are crucial factors determining the adequacy of grazing and the prospects of prosperity. Unfortunately, Somalia has been highly susceptible to the effects of climate change and extreme weather conditions, such as periods of extended drought, flash floods, erratic rainfall, disruption to the monsoon seasons, strong winds, cyclones, sandstorms and dust storms[12]. Recognizing the impact of climate risks on the country's future, in December 2009, Somalia became a signatory to the UN Framework Convention on Climate Change (UNFCCC). In 2013, it formulated its National Adaptation Programme of Action to Climate Change; in 2015, it became one of 165 countries that submitted its Intended Nationally Determined Contribution (INDC) action plan of the Paris Summit, outlining proposed programs and interventions that would contribute to emissions reductions and the adaptation of its agricultural systems for improved climate resilience. Together, the National Adaptation Programme of Action (NAPA) to Climate Change and the INDC provide a road map to inform and guide technical and financial contributions from all stakeholders[13].

Somalia has had a fair share of extreme weather events for the past 25 years[14]. The three states under discussion are heavily affected, with this type of weather, threatening food security in the respective areas. Climate and disaster risk screening indicates that Somalia has a high risk of river, urban and coastal floods, landslides, extreme heat and wildfires, which will add additional stress to Somalia's vulnerability, particularly given its high economic dependence on climate-sensitive activities such as agriculture and densely populated coastline.

Provision of clean electricity through ASCENT project will decrease the country's vulnerability to natural disasters and climatic changes - expected to increase in both frequency and severity - which in turn could strongly impact on-going conflicts. The livelihoods of roughly half of Somalia's population

[10]Williams and Funk 2011, pp. 2417–35.

[11]Anyah, and Semazzi, 2006, pp. 39–62.

[12]Ministry of National Resources 2013, p. 14.

[13]Somalia Country Economic Memorandum 2018.

[14]Food and Agriculture Organization of the United Nations (FAO) 2018.

is reliant on pastoralism or agro-pastoralism, which implies that a significant portion of Somalia's population remains highly vulnerable to climate change and natural disasters. Since 2019 for instance, Somalia has experienced devastating floods and drought, as well as locusts, which have left about 5.2 million people in need of assistance and at risk of food insecurity. In addition, while Somalia has very low greenhouse gas emissions, it is highly vulnerable to the impacts of climate change. Somalia is ranked 181st out of 188 countries in terms of its vulnerability to climate change impact.

The following project activities will generate climate change mitigation and adaptation co-benefits:

- Component 1 (Distributed Renewable Energy Generation Optimization) will support installation of renewable energy capacity (both solar PV and BESS) equivalent to about 50 MW to avoid GHG emissions;
- Component 2 activities (Distribution network reconstruction and capacity reinforcement, including reconductoring of existing lines with higher capacity conductors), will result in a reduction in technical losses in addition to reduced generator fuel consumption from wet stacking. Both the reduction in losses and reduced fuel consumption are estimated to lead to reduced GHG emissions annually; and
- Component 3 will contribute to climate mitigation as the activities related to capacity building and institutional strengthening will support institutional policies that will enhance increased uptake of renewable energy (through the prioritization under the Sector Least-Cost Development Plan and the associated wind resource site-specific measurements and geothermal resource mapping) and enable the sector's energy policy, which prioritizes renewable energy–based generation, given the country's comparative advantage. Further, the component will help establish a regulatory regime that will require the existing ESPs to improve their efficiency and lower their cost of operations.

3.2.2.3 Solar Energy

In Somalia, there has been substantial progress in solar capacity installation in recent years. For example, ESPs have employed 27 MW of PV systems in 2021 and beyond, and this represents a notable increase compared to previous years. Implementing the systems depicted how Somali ESPs have gradually shifted to clean energy by improving energy efficiency and optimizing investment costs. Based on the current installed energy capacity in Somalia, solar energy contributes approximately 11.9% of total power generation in the country and is expected to increase in the upcoming years.

The ESPs and the MoEWR have also planned to increase electricity generation through solar energy, which can benefit the infrastructures in the energy sector and the environment. The BECO is Somalia's most prominent electricity provider, mainly covering Mogadishu (80%), the airport (100%), and Halane zone, Hirshabele, Jubaland, and Southwest. Additionally, BECO announced a large-scale solar power plant of 25 MW last December upon completing two other projects on solar power plants in Daarusalaam City and Jabad Gele. Therefore, the achievement demonstrated that the objectives of BECO in reducing electricity tariffs, carbon footprint, and protecting the environment were enduring as planned. Initially, the leading electricity supplier in Somalia aimed to reduce the risks of importing fossil fuels for electricity production, and thus, the electricity supplier shifted to RE, particularly solar energy[15,16].

[15] Lima De, Oliveira R. Powering the Future: Malaysia's Energy Policy Challenges, 2018, p. 32.

[16] Y. Wang, Y. Liu, J. Dou, M. Li, M. Zeng, Geothermal energy in China: status, challenges, and policy recommendations, Util. Pol. 101020 (2020) 64, https:// doi.org/10.1016/j.jup.2020.101020.

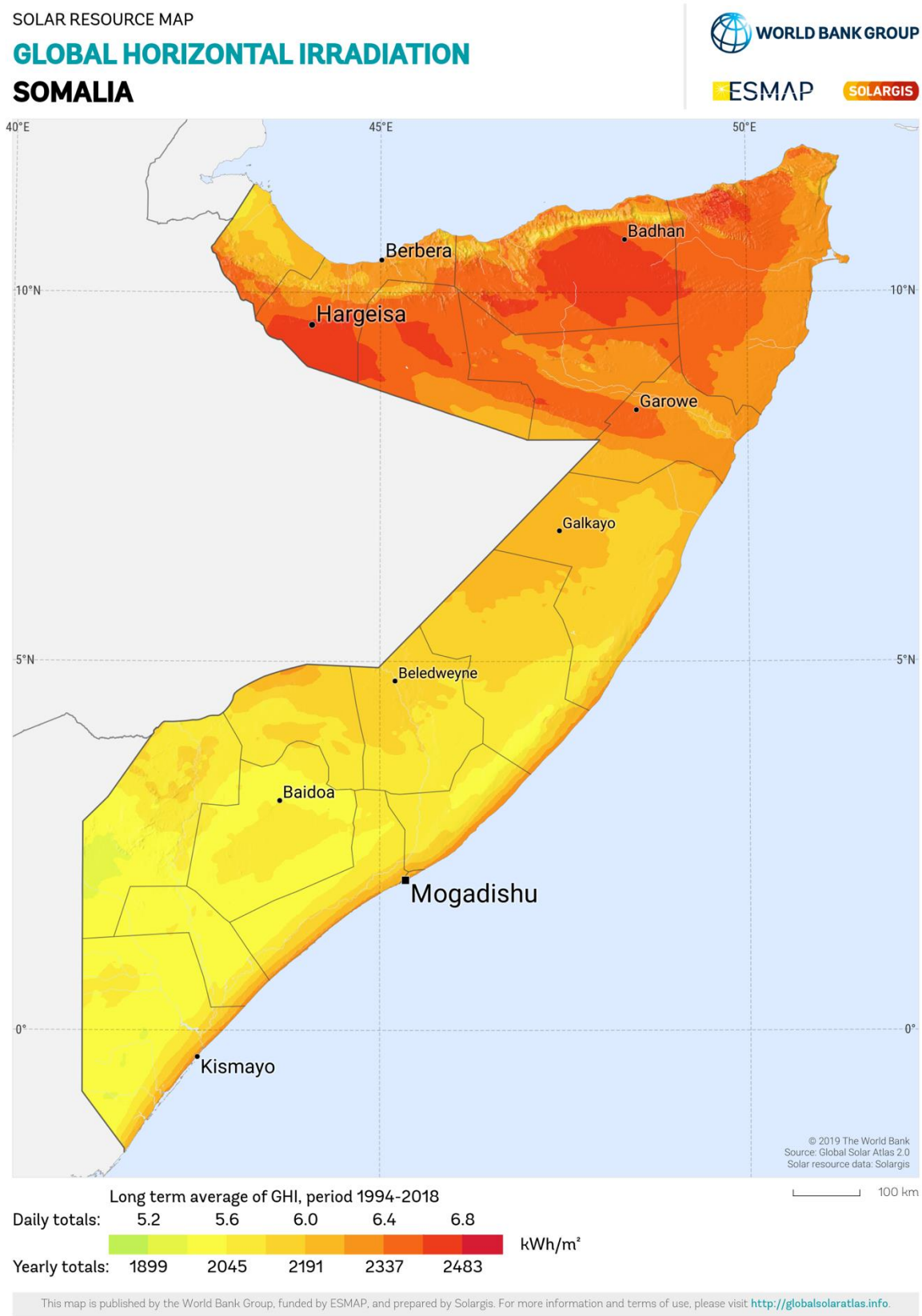


Figure 3-1 Diagram indicating the potential of solar energy based on the map of Somalia

3.2.3 Water Resources and Scarcity

3.2.3.1 Water Resources (Hydrology)

Somalia's two main rivers, the Juba and the Shabelle, generate fertile floodplains, sustain essential agriculture and crop production, and supply Mogadishu with water. Ethiopia, Kenya and Somalia share the Juba–Shabelle river basin, with Somalia being the lower riparian. Both rivers emerge in the Ethiopian highlands and are Somalia's only perennial rivers. Given the lack of rainfall in the downstream areas, these two rivers are highly dependent on precipitation in the Ethiopian highlands. The low rainfall downstream and high evaporation and water withdrawal are reasons why both rivers lose runoff on their descent to the Indian Ocean. Increased dam-building activities in Ethiopia affect the river system further[17].

3.2.3.2 Water Scarcity

Generally, water scarcity is a persistent phenomenon in Somalia, even without drought. There are concerns about the rivers, which face overall decreasing volumes and have tended to temporarily dry up completely on several occasions. The country's water supply comes mainly from boreholes, shallow wells and *berkads*, and access to water and sanitation is very low. Most open wells, *berkads* (e.g., seasonal water reservoir) and some shallow boreholes in Somalia are likely to be contaminated due to the common practice of open defecation and the absence of a system for controlling water quality. Water sources have been increasingly drying out because of the drought, and the scarcity of water has prompted abnormal migrations and increased the cost of potable water. The average distance to water points has increased to 50 km, with some communities making a round trip of up to 125 km for water. The lack of water and competition for this scarce resource is also one of the triggers for conflict in Somalia. The drought has affected not only the quantity but also the quality of drinking water. There are noticeable weaknesses in the water sector related to water quality testing and monitoring in Somalia, which is compounded by the relatively poor understanding of how the water supplies become contaminated and the risks associated with the use of contaminated water.

The cost of water has increased by 50 percent during critical dry periods. In Gedo region in southern Somalia, Jubaland State, 90 percent of villages are now reliant on unsafe water sources for drinking and domestic purposes. Southwest State also usually experience acute water shortage due to lack of permanent source of water. Parts of the state that experience the shortage include Buur Hakaba, rural Baidoa, Diinsoor, and Qansaxdheere among others.

3.3 Biological Baseline

3.3.1 Overview

Somalia's natural resources fall into three broad categories: marine resources such as fish and salt; surface resources which include forests and forest products such as the aromatic extracts of frankincense (from *Boswellia spp*.) and myrrh (from *Commiphora spp*., both *Burseraceae*), as well as surface water; and sub-surface resources such as rocks and minerals such as gypsum, iron ore, copper, gold, kaolin, limestone, fossil fuels, and groundwater. Many of them have been directly or indirectly impacted by the extended civil conflict, but competition for access to some resources has also been, and continues to be, a source of conflict. In the absence of a government, many traditional forms of natural resource management and control systems have been abandoned or are now ignored. In

[17]Somalia Water and Land Information Management (SWALIM) and Food and Agriculture Organization of the United Nations (FAO), 'The Juba and Shabelle rivers and their importance to Somalia', 2016.

several instances, this has resulted in clearly unsustainable exploitation, a trend which may prove difficult to reverse.

3.3.2 Biodiversity and Protected Areas

Only 0.8% of the Somalis land area is under some form of protection. A National Conservation Strategy used to exist but is now extremely low on the territories' agenda. Somalia is part of Conservation International's Horn of Africa Hotspot which has over 60 endemic genera and over 2,750 endemic species. Somalia is a part of Somalia-Masai steppe geographic region of plant endemism (savannas and shrub lands) and has 24 important bird areas. Generally, fauna has been depleted due to hunting and culling to protect livestock. Some of the endangered species of mammals include: Somali Wild Ass (*Equus africanus somaliensis*), Hirola (*Beatragus hunter*) and Somali Wild Dog (*Lycaon pictus somalicus*); endangered plants include: *Acacia flagellaris, acacia densispina, acacia manubensis*, *Andenopodia rotundifolia, Albizia obbiadensis;* endangered birds: *Heteromirafra archeri, Mirafra ashi, Acrocephalus griseldis,* and *Dorcatragus megalotis*[18] Some of the notable invasive species include: *Prosopis spp. and the Indian House crow, Corvus splendens*) have widespread effects on local fauna and flora and important to address, although Prosopis could be used to substitute endemic trees for charcoal production (see Map 3-2).

3.3.3 Forests and Woodlands

The vegetation in Somalia is predominantly dry deciduous bushland and thicket dominated by species of Acacia and Commiphora, with semi-desert grasslands and deciduous shrub land in the north and along much of the coast. Forest growth in general is limited due to poor soils and low rainfall. Closed forest cover occupies only about 2.4 per cent of the country[19] but, if the Juniperus forests and evergreen tracts in the mountains in the north are included, the total forest coverage would probably amount to around 14 per cent (90,000 km^2) of the land.

3.3.4 Land Degradation

Over the past two decades, land degradation, deforestation and desertification have rapidly accelerated; the Lower Juba area was estimated to have lost 50 per cent of its forest cover during the years between 1993 and 2014[20]. Even with current temperatures, the flora in Somalia is strained to such an extent that it is often unable to rehabilitate itself[21].

3.4 Socio-Economic Baseline

3.4.1 Economic Outlook

The country has a population of a little over 15 million, of which roughly 60 percent are nomadic and semi-nomadic pastoralists, and 60 percent live in rural areas. About 70 percent of the population lived below the poverty line (US$1.90 a day in 2011 purchasing power parity terms) before the onset of COVID-19 pandemic. Beyond the pandemic, the economy has slowly rebounded with GDP growth rebounding to 2.9 percent in 2021, following a contraction of 0.3 percent in 2020. The country, however, continues to contend with increasingly frequent shocks in the context of widespread fragility, conflict, and violence.

[18] http://www.earthsendangered.com/search-regions3.asp?mp=&search=1&sgroup=allgroups&ID=307

[19] IUCN, 1992

[20] Ogallo, L. A. et al., 'Land cover changes in Lower Jubba Somalia', *American Journal of Climate Change*, vol. 7, no. 3 Sep. 2018, pp. 367–87.

[21] Thulstrupa, A. W. et al., 'Uncovering the challenges of domestic energy access in the context of weather and climate extremes in Somalia', *Weather and Climate Extremes*, Sep. 2018.

Repeated climate-related shocks such as cycles of droughts, floods, and locusts infestation, higher international commodity prices because of the Russian invasion of Ukraine, as well as security incidences have interrupted Somalia's growth trajectory and slowed the transition from fragility. Growth has been low and volatile averaging only 2.8 percent in 2014–22 with no growth in real GDP per capita. The recent prolonged drought, with a fifth consecutive season of failed rains, was particularly devastating to the economy against the backdrop of higher commodity prices following Russian invasion of Ukraine. These paused 2021's modest economic recovery from the pandemic with a slowdown in real GDP growth to an estimated 1.7 percent in 2022. Furthermore, 7.1 million people—nearly half of the population—were food insecure at the end of 2022 due to the drought and 1.3 million people were displaced[22]. The economy is expected to make a modest recovery in the medium-term with real GDP growth projected to recover to 2.8 percent in 2023 and increase to 3.7 percent in 2024 and 3.9 percent in 2025[23].

3.4.2 Human Development, Education and Health

3.4.2.1 Human Development

Somalia scores very low on UNDP's Human Development Index. Although it has not been ranked for a few years, different indicators reveal low scores. For example, life expectancy at birth lies at 57.1 years with a global average of 56 years[24] in low human development countries[25]; and the mortality rate under the age of 5 lies at 127 per 1000 live births[26], while the global average is 39[27].

3.4.2.2 Education

The school enrollment rates in Somalia are among the lowest in the world. In the education sector, only 16 per cent of the Somali population have completed primary school and only 7 per cent have finished secondary school.[28] 3 million children between the age of 6 and 18 do not attend any school. At the primary level, about 60% of children do not attend school. At the secondary level 92 per cent of children (in south central parts of the country) do not attend school. The recent flooding has caused additional challenges on the education of children, as it has displaced people, made access more difficult and has caused the exclusion of some.[29]

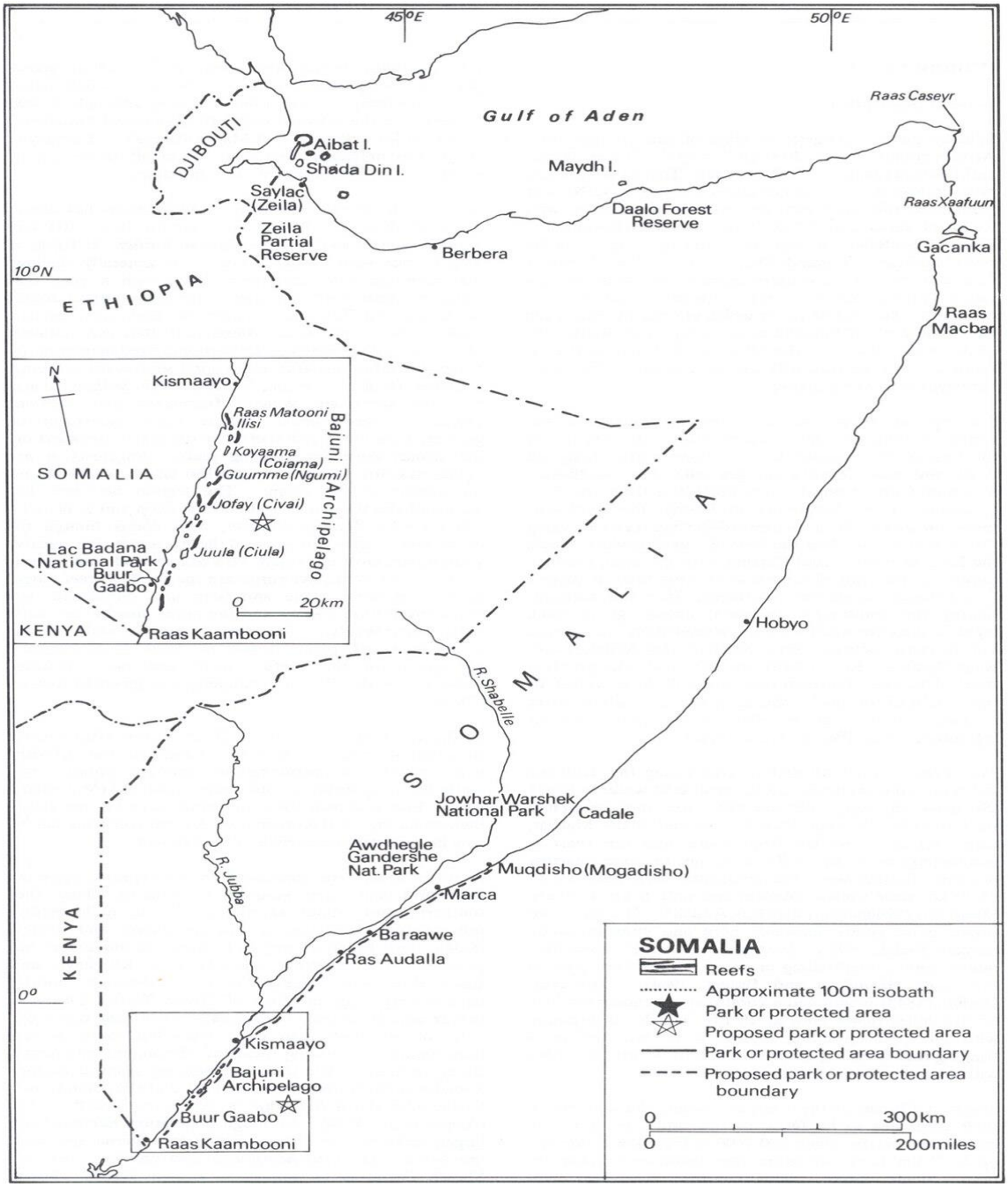
Literacy in Somalia is 40 per cent among the adult population, with male literacy being 8 per cent higher than female. There are significant differences in the literacy rate between social groupings. For example, urban populations have the highest literacy rate with 64 percent, while nomadic populations have the lowest literacy rate with 12 per cent. Among the FMS, Hirshabelle has the lowest literacy rate with 20 per cent; Southwest State has 26 per cent and Jubaland 29 per cent.[30]

In South Central Somalia, child recruitment, compulsory military training, segregation of boys and girls classes and concerns over attacks on education institutions remain key challenges in the provision of education for all children. Furthermore, there are inadequate water and sanitation facilities, limited

[22] Somalia Economic Update, April 2023, The World Bank
[23] Ibid
[24] UNDP, Human Development Reports. Somalia, accessed at: http://hdr.undp.org/en/countries/profiles/SOM
[25] UNDP, Human Development Report 2019, p.38.
[26] UNDP, Human Development Reports. Somalia, accessed at: http://hdr.undp.org/en/countries/profiles/SOM
[27]WHO, Children. Reducing Mortality, factsheet, accessed at: https://www.who.int/news-room/fact-sheets/detail/children-reducing-mortality
[28] UNICEF and World Health Organization, Joint Monitoring Program, 2019, accessed at: https://washdata.org/data#!/som>.
[29] Government of the Federal Republic of Somalia and The World Bank, Somalia. 2019 Flood Impact and Needs Assessment, February 2020, p. 58
30 FGS, Ministry of Education, Culture and Higher Education, Education Sector Strategic Plan 2018-2020, p.29

classrooms and supplies, as well as a shortage of teachers in overcrowded schools. Additional enrollments of IDP children makes the situation even more dire. Absence of school feeding programs in famine and drought zones disrupts school attendance as well and drops the nutrition status of children.[31]

Access to education is particularly difficult for nomadic/pastoralist populations. Only 16 per cent of nomadic population age 6 and above are enrolled in education.[32]



Map 3-2 Somalia's ecological parks, coral reefs and protected areas

Source: *https://www.wikiwand.com/en/List_of_protected_areas_of_Somalia*

[31] Ditto, p. 25-26
[32] Ditto, p. 30

3.4.2.3 Health

Availability and access to health facilities is similarly dire. A comprehensive review of the health sector in 2015 showed that health facilities are mainly located in the urban areas and difficult to access for most of the rural population. Health facilities are resourced poorly, and there is a critical lack of health workers. According to WHO, only one in three Somalis have access to safe water, and one in nine Somali children die before their first birthday, and ca. 3.2 million Somalis need emergency health services.

Due to poor living conditions, there are high risks of measles outbreaks, acute watery diarrhea and cholera. Those residing in IDP settlements are most affected.[33]

Reproductive health indicators are poor. Maternal mortality is estimated at 734 for every 100,000 births. Under-five mortality rate was at 133 per 1,000 births before the recent drought.[34] Neonatal mortality rate per 1000 live births is 39.7.[35]

3.4.2.4 Water, Sanitation and Hygiene (WASH)

As mentioned in *Section 3.2.3.2*, access to safe water is low in Somalia. Access to basic water supply lies at 83 per cent in the urban areas and 28 per cent in rural areas. 61 per cent of the population has access to basic sanitation facilities in urban areas and 20 per cent in rural areas. According to a UNICEF report, the key challenges are weak water supply management models, high operational management costs and technical limitations. There is further a lack of a harmonized legal and policy framework and policies in place and inconsistent with implementation.[36]

Continued droughts have had negative impact on the water sector, and conflicts have weakened the water supply and sanitation services. WASH facilities have been destroyed because of conflict, and there is a lack of sufficient WASH facilities for the large number of IDPs. Furthermore, the population pressure causes over pumping of ground water, and the wearing out of equipment.[37]

Various aid programs have supported the development of latrines. However, UNICEF remarks that there is little impact on increased use of latrines or improved sanitation and hygiene. There is further a lack of sustainability of latrines and little indication of behavioral changes among the population.

Widespread displacement and recurrent emergencies contribute to this dire picture. Diseases like cholera are therefore widespread in Somalia, with a total of 164,000 cases reported between 2006 and 2015.[38]

3.4.3 Governance Structures

The Provisional Constitution of Somalia established the FGS as well as the legal framework for the formation of FMS. The latter have a degree of autonomy over regional affairs and maintain their own police and security forces. Somalia is currently divided into five FMS, namely Southwest State of Somalia, Puntland, Jubaland, Hirshabelle and Galmudug.

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[33] WHO, Humanitarian Response Plan 2015, accessed at: https://www.who.int/hac/donorinfo/somalia.pdf

[34] UNICEF and World Health Organization, Joint Monitoring Program, 2019, accessed at: https://washdata.org/data#!/som>.

[35] WHO, Somalia, Country Cooperation Strategy at a Glance, 2018, p.1, accessed at: https://apps.who.int/iris/bitstream/handle/10665/136871/ccsbrief_som_en.pdf;jsessionid=01FEF030DB9DD0DE3F6C832FEF64EDCD?sequence=1

[36] UNICEF Somalia Country Office, Water, Sanitation & Hygiene (WASH) Profile, February 2020, p.2, accessed at: https://www.unicef.org/somalia/media/1251/file/Somalia-wash-profile-February-2020.pdf

[37] Ibid., p. 2

[38] Ibid., p. 3.

The Provisional Constitutions (Article 48) also acknowledges the local governments in Somalia, although levels of administration, fiscal autonomy and other issues still need to be determined. At the local government level, States are divided into administrative regions, which in turn are divided into districts and zones.

The Federal Parliament has the mandate to select the autonomous regional states. Legislature in 2014 established the Boundary and Federalization Commission for this purpose.

3.4.4 Agriculture

3.4.4.1 Overview

Somalia has a total area of about 137,600 sq.km. Land under cultivation is currently estimated at 3 per cent of the total geographical area. Another 7 per cent has potential for agricultural development. The rainfall, soil (fertility and depth), and topography are the main determinants of these estimates. The agricultural system in Somalia is predominantly subsistence in nature. The principal crops are sorghum and maize grown mostly for household consumption. Fruit and horticultural farming, which is relatively small, is mainly commercial. Here, farmers grow mainly tomatoes, lettuce, onions, peppers, cabbages, oranges, lemons, and papaya. Rain-fed farming accounts for 90 per cent of the total area cultivated, while the area under irrigation constitutes only 10 per cent.

The sector is dominated by smallholder farmers who tend small farms ranging from 2 to 30 hectares in area. The size of the average farm is approximately 4 hectares. During the war, the institutional capacity of the Ministry of Agriculture (MoA) was eroded severely because of the brain drain resulting from the migration of professionals to other countries, looting of assets, and the destruction of Ministry's facilities. The reduced capacity of the agricultural sector to produce food for the nation is clearly demonstrated by the total cultivated area under Sorghum and maize, the two main crops, which in 2009 was less than 23,000 hectares, and average yields were only 0.5 tons per hectare.[39]

3.4.4.2 Rainfed Farming and Irrigation

Rain-fed farming is the main agricultural production system. The main crops grown are cereals. Sorghum is the principal crop, utilizing approximately 70 per cent of the rain-fed agricultural land. Another 25 per cent of the land is used for maize. Other crops such as cowpeas, millet, groundnuts, beans, and barley are also grown in scattered marginal lands. Irrigation farms are mainly situated along the banks of streams (togs) and other water sources close to the riverbanks. Channeling from the source to the farm is mainly done by diversion of perennial water (springs) to the farm through rudimentary earth canals or floods. The cultivable area of these farms is subject to floods and is, therefore, in danger of being washed away. Most of the irrigated farms have in them areas set aside for the cultivation of vegetables and fruits for commercial purposes.

3.4.4.3 Livestock

The economy of Somalia mainly depends on livestock production, which has historically and culturally been the mainstay of livelihood for most of the people. Livestock is the source of livelihood for pastoralists, contributes to the Government revenues, and provides employment to a wide range of professionals and other service providers.

There are several types of livestock production and management systems in Somalia, depending on several factors such as the area, availability of labor, and the sizes and types of livestock raised. However, in general, there are two main production systems: one based on nomadic pastoralism and the other on agro-pastoralism. Nomadic pastoralism is the system practiced by most of the rural

[39] Somali Core Economic Institutions and Opportunities Program ESMF, 2017, p 18

population and revolves around the seasonal migration of herders in continual search of pasture and water.

The movement of these pastoralists is often organized and follows a regular pattern in which clan-based groupings have their traditional grazing areas and/or common watering points and temporary camps. In some parts of the country, pastoralists co-habit with farmers to access crop residues for their animals. In other places, the pastoralists take advantage of heavy rains and floods for agricultural purposes, planting crops in areas cleared to produce forage or grain.

South of Hargeisa begins the Haud, which red calcareous soils continue into the Ethiopian Ogaden. This soil supports vegetation ideal for camel grazing. To the east of the Haud is the Mudug plain, leading to the Indian Ocean coast; this region, too, supports a pastoral economy. The area between the Jubba and Shabelle rivers has soils varying from reddish to dark clays, with some alluvial deposits and fine black soil. This is the area of plantation agriculture and subsistence agro-pastoralism.[40]

The livestock and crops sector are the main sources of economic activity, employment and export. 49 per cent of the population lives in rural areas, and 46 per cent of all employed people work in agriculture (crop cultivation, herding, fishing). However, while the livestock is an important sector, there are still minimal governmental animal health programs and institutions regulating and controlling it.[41] In addition, the poor state of waters and transport infrastructures has kept the agricultural sector from recovering and becoming resilient.[42]

Somalia is prone to suffer from flooding. Most of the flooding in 2019 occurred in Middle and Lower Juba, Bay, Lower and Middle Shabelle, and Hiraan. Weeks of flooding have destroyed physical, productive, and social service delivery infrastructure. Physical infrastructure, such as roads were turned into rivers, and agricultural land was fully destroyed, and livestock was lost.

According to FAO, since 2016, Somalia has faced climate shocks for eight agricultural seasons. 2.1 million people currently live in severe acute food insecurity; and 1 million children are acutely malnourished.[43]

Livelihoods are threatened by natural disasters, epidemics, and issues such as injury, death or unemployment. For example, climate conditions and the drought of 2016/17 had significant impacts on livelihoods. Shocks at the household level are experienced through drought impacts, including through loss of crops and livestock and shortage of water for farming or cattle; or high food prices.[44]

3.4.5 Labour and Employment

In the labor sector, 47 per cent of the population in South Central Somalia is unemployed. Among youth the rate is even higher with 54 per cent.[45] The main employment is in the agricultural sector, where 72 per cent of employees worked in 2019; followed by 6 per cent in the industrial sector, and 21 per cent in the service industry.[46]

[40] Ibid., p 18.
[41] Government of the Federal Republic of Somalia and The World Bank 2020, p.21.
[42] Ibid., p.21
[43] UNFAO, Somalia Humanitarian Response Plan 2020, accessed at: http://www.fao.org/3/ca7825en/CA7825EN.pdf
[44] Government of the Federal Republic of Somalia and The World Bank 2020, p.19.
[45] Federal Government of Somalia, Ministry of Education, Culture and Higher Education, Education Sector Strategic Plan 2018-2020, p.13
[46] Statista, Somalia: Distribution of Employment in by economic sector from 2009 – 2019, accessed at: https://www.statista.com/statistics/863133/employment-by-economic-sector-in-somalia/

In addition, as ILO points out, the legal and judicial systems governing employment are still weak; and there are few private or public insurance institutions; nor are there labor inspection systems in place. It reminds that workers can be exposed to hazardous work without adequate protection, and child labor is a common practice in Somalia.[47]

3.4.6 Land Issues

Land conflicts in Somalia have risen to be one of the key issues of instability at the community and inter-community level. This is partly due to a complex situation of land tenure. While the Agricultural Land Law of 1975 abolished private ownership, the current situation is very unclear. Only few locals registered their land at the time, and the civil war further impacted the situation negatively. Customary land tenure has therefore taken the center stage in ordering land ownership and usage. It is focused on clan relations and on pastoral land use rather than norms of individual ownership. The Provisional Constitution defines land as public property. The government has created means to transfer some land into private ownership by granting ownership for urban and agricultural land.[48] Formal legal frameworks now exist alongside customary land management.

Land disputes and grievances have been identified in the existing literature as a major issue of contestation. There are different categories of causes of land-related grievances. One, powerful groups and individuals take land illegally, often from the poor or minority groups, who cannot defend themselves. This is based on the fact that land prices in Mogadishu have skyrocketed in recent years, and land has become a popular commodity.[49] Two, Somalis returning from overseas to Mogadishu often claim back their land, which causes a variety of land grievances, as the land has often been occupied by others in their absence.[50] Three, there are multiple questions of land inheritance, especially given the large group of members in a family, as well as the return of Diaspora members who may have claims to inherit land.[51] Four, given Mogadishu's history of contestation, occupation and civil war, multiple title deeds have been issued over the years and continue to be manufactured. This is a key cause for land disputes when multiple owners put claims on a piece of land.[52] Five of concern to the citizens of Mogadishu is the unregulated sale of public property, as well as the destruction of historic property. Sales often take place between government representatives and private interest groups, without any possibility for recourse by citizens. Six, land occupation in Mogadishu and BRA is ongoing, and has the potential to result in greater conflicts. This is underpinned by an overlapping and uncoordinated land administration system. A study on land in Mogadishu by the Rift Valley Institute (RVI) even estimated that 80% of cases filed at the Supreme Court are connected to land grievances.[53]

Furthermore, ongoing forced evictions are a key challenge for Internally Displaced Persons (IDPs) in Somalia. Due to insecure land tenure arrangements in IDP settlements, it is often difficult for IDPs to secure their rights. According to Regional Durable Solutions Secretariat (ReDSS), an annual average of 155,000 individuals have been evicted across Somalia, mainly in Mogadishu and Baidoa. Evictions take place from both, public and private infrastructure. Key protection challenges are that IDPs settle on

[47] ILO, Decent Work Programme, Somalia 2011-2015, p. 12.
[48] IGAD, Somalia. Land Governance Country Profile, Assessment of Land Governance Framework, Training & Research Land Governance Institutions, accessed at: https://land.igad.int/index.php/countries/39-countries/somalia/40-somalia-profile?showall=1
[49] Rift Valley Institute / Heritage Institute, Land Matters in Mogadishu. Settlement, Ownership and Displacement in a contested city, 2017, p. 53
[50] Rift Valley Institute (RVI) 2017, p.54
[51] Ibid., p.57
[52] Ibid., p.58
[53] Ibid., p. 67

public land or private lots with contested ownership. Women and girls are thereby most vulnerable, as they encounter Gender-based Violence (GBV) challenges in addition to loss of assets and livelihoods.[54]

3.4.7 Cultural Heritage

Somalia has rich cultural heritage due to its own cultural goods 'dhaqan', including the fundamentals of a segmentary society and the resulting social fabric. Traditions often originate in the proto-Somali cultural era or originate in the many interactions Somali populations had with other cultures, including those from the Arabian Peninsula, India, and sub-Saharan Africa. There are several cultural heritage sites spread over 11 administrative areas in Somalia, this includes Archaeological Sites, Historical Sites, Heritage sites and monuments. These sites are in Awdal, Bannadir, Shebelle, Bari, Bay Sannag, Sool, and Nugaal. The protracted conflicts and the civil war in Somalia, however, have had significant impact on the loss of tangible and intangible cultural heritage. Deliberate efforts must be made to protect cultural heritage. Unfortunately, the country's legislation around these issues has not yet been developed and does not legally enforce the protection and preservation of cultural artefacts, cultural heritage and distinct sub-national identities. Especially infrastructure development project therefore needs to support the protection of places of cultural and religious significance, including graveyards, religious buildings, and historical sites.

3.4.8 Security and Conflict Environment

Somalia ranks second on the Fragile State Index from 2019 with a total score of 112.3, only topped by Yemen with a score of 113.5.[55] Somalia's indicators on factionalized elites, and demographic pressures score the highest.

There is significant conflict at different levels in Somalia. Some insecurity stems from clan competition, which goes back into history and historical movements and power distribution. Often it is combined with localized competition over resources, for example, over land or water sources. Such insecurity and conflict can be due to continued local tension between different communities, competition over sources of power, such as governmental positions, as well as competition over aid resources brought down to the state or district level.

The social impacts and potential aggravation of resource-related conflicts is well documented in a range of pastoralist and agro-pastoralist assessments carried out in the Somali region.[56] Access to water and pasture is a fundamental source of both conflict and co-operation between clans and civil authorities throughout the Somali region. In terms of conflict, extensive trans-boundary movements of livestock and limited access to the combination of water and pasture is one of the primary drivers of conflict across the Horn of Africa and within Somalia. Long and well documented records of conflict and cooperation over access to water and pasture in pastoralism domain exists.[57] Following decades of low investment in Somaliland and Puntland, water points with adequate surrounding pasture are especially scarce, claimed by clans, fiercely guarded and intrinsically linked to resource conflict.

The Islamist group Al-Shabaab still controls areas in South Central Somalia, providing harsh treatment, forced recruitment vis-à-vis the local populations. It infiltrates other areas and conducts deadly attacks on citizens. Most importantly, Al Shabaab has introduced a harsh tax system in its areas of control and

[54] ReDSS, Forced Evictions as an obstacle for durable solutions in Somalia, March 2018, accessed at: http://regionaldss.org/wp-content/uploads/2018/03/Forced-evictions-as-an-obstacle-to-durable-solutions-210318.pdf

[55] Fragile State Index 2019, accessed at: https://fragilestatesindex.org/data/

[56] Lewis 1961; Lewis 1998; DfID 2005; Gomes 2006 Access to water for pastoral resources management

[57] Ibid.

beyond. It has also started to expand on other administrative functions, such as the provision of justice.[58] Given the weakness of the formal justice system, people go to Al Shabaab courts, where swift justice and the execution of judgments is guaranteed. Al Shabaab remains as a key source of violence, attacking government facilities, personnel, security forces, and members of international organizations.

In 2019, Somali-led offensives in Lower Shabelle have led to the ousting of Al Shabaab in the area. However, Al Shabaab has shifted to different areas and has maintained attacks on the newly recovered area.[59]

Different armed groups maintain checkpoints along key arteries of the country to extract fees from travelers. People are thereby associated with their clans and have difficulties moving and working in areas in which their clans are not prominent. Even government checkpoints can be little efficient, as they are subject to corruption.[60]

Somalia therefore remains trapped in continued fragility, which is protracted by insecurity, endemic corruption, fledgling government capacity, predatory armed groups and spoiler networks. This poses significant security risks for the population, but also for project activities. These include terrorist attacks, hijackings, abductions, and killings. The state security apparatus is thereby very weak and is underpinned by clan dimensions as well. There are sometimes blurred lines between the state security apparatus, local militia or other armed factions.

Given that the ASCENT Project will be implemented across a diverse and contested geographical space, concrete threat vectors will require in-depth security risks assessments (SRA) to ensure the safety of Project workers, contractors and local communities. The security threat assessments and mitigation measures will vary considerably depending on the metropolitan and rural Districts under the scope of the project: urban centers and peri-urban are generally more accessible for development and humanitarian actors.

3.4.9 Vulnerability and Social Exclusion

3.4.9.1 Internal Displacement

In April 2020, OCHA reported 2.6 million IDPs in Somalia[61] due to disaster and conflict among other issues. Conflict and violence has triggered 578,000 new displacements; while the disasters have triggered 547,000 displacement; half of these as a result of floods and the other half as a result of drought in the southern regions of Bay, Lower Shabelle and Bakool," (Internal Displacement Monitoring Centre)[62] During the drought in 2017, people dependent on livestock and agriculture had to abandon their rural homes to find new opportunities, migrating predominantly to urban areas.

Drought conditions are contributing to already pronounced rates of acute and protracted displacement. More than 278,000 people have been displaced in March alone within Somalia due to the drought, bringing the total number to approximately 585,630 since December 2016[63].

[58] Security Council, S/2019/858, p.3
[59] Security Council, S/2019/884, p. 3/17
[60] J. Sanya and I. Mwenda, Mogadishu. When Checkpoints don't work, Horn International Institute for Strategic Studies, accessed at: https://horninstitute.org/mogadishu-when-checkpoints-dont-work/
[61] OCHA, Somalia Situation Report, 5 April 2020.
[62] Internal Displacement Monitoring Center, The Ripple Effect. Economic Impacts of Internal Displacement. Case Studies in Eswatini, Ethiopia, Kenya and Somalia, Thematic Series, January 2020, p. 30.
[63] UNHCR, UN Habitat, IOM, JIRA and Local Ministries of Interior, IOM and The World Bank, 2017

While data on the demographic profile of migrating populations is needed, it is likely these drought-related internal displacements may be from minority clans, who have lost assets including their homes, livestock, and livelihoods. Camps are heavily congested and have also proportionally received the largest number of new arrivals[64]. Displaced women and girls are among the most vulnerable populations and face multiple constraints including lack of access to adequate shelter, livelihoods and access to critical resources, including land. The attendant separation of many women and girls from community and familial support structures, as well as from traditional livelihoods activities, also contributes to an increased reliance particularly of women on marginal, inconsistent and hazardous livelihood strategies, which often increases exposure to violence.

IDPs commonly settle in informal urban settlements, where access to services and conditions are poor, and where they often become victims of forced eviction. Conditions of displacement often compound existing conditions of vulnerability and poverty. They are therefore part of the poorest strata in Somalia and are often in dire need of access to food, water, sanitation, health services, shelter and education.[65]

Following a recent survey, a move to urban centers comes with some improvements in health and education for IDPs, but also with reduced access to work and lower income. 61 percent of male IDPs claim that they had work and an income before displacement, in comparison to 40 per cent after displacement. However, members of the host communities state the opposite since the arrival of the IDPs – they now claim to suffer from less employment.[66] The greatest loss affecting IDPs is the loss of secure housing. 77 per cent of IDPs claimed to have owned a house before they were displaced.[67] Some IDPs receive support from their families in the Diaspora. More than a third of IDPs report to receiving remittances from overseas of an average monthly value of 113 USD.[68] However, IDPs often have less remittances than other Somalis, extending in part from the separation from social networks that would otherwise provide support. Only 7 percent of IDPs rely on remittances.[69]

In view of education and health, IDPs generally report better access than before their displacement. IDPs generally appear to have better access to education. Access to schools was usually more challenging in their previous rural homes. Access to health care has slightly improved since IDPs left their rural homes. 25 per cent of IDPs state that they have better access to health care than previously, while 60 per cent state there is no change. However, there are also significant concerns about improper sanitation and the outbreak of diseases in IDP settlements.[70] However, while this mostly applies to urban IDP, generally, the socio-economic and human development indicators for IDPs are worse than those of non-IDPs. While 7 in 10 Somalis are poor, over three in four IDPs live under 1.90 $ per day.[71]

[64] JRIA 2016
[65] Internal Displacement Monitoring Center 2020, p. 30.
[66] Ibid., p. 30.
[67] Ibid., p. 33.
[68] Ibid., p.31.
[69] The World Bank, Somali Poverty and Vulnerability Assessment, Findings from the Wave 2 of the Somali High Frequency Survey, April 2019, p.73
[70] Internal Displacement Monitoring Center, p. 36
[71] The World Bank, Somali Poverty and Vulnerability Assessment, Findings from the Wave 2 of the Somali High Frequency Survey, April 2019, p.73

3.4.9.2 Gender-Based Violence and Gender Dynamics

Differentiated social roles and responsibilities between men and women across livelihood systems have implications on the available mechanisms to cope and respond to external shocks such as drought. Sexual violence against women and girls in Somalia, an abominable crime less prevalent in Somalia pre-civil war history. Recent figures show 76% of all recorded cases happen among the IDPs whereas 14% occur in the hosting communities. In the face of crisis, such as insecurity, drought or famine, men and women adopt different coping strategies to increase household resilience. Preventing and combating sexual violence requires informed participatory not limited to education and awareness campaigns, safeguarding and robust reporting, effective law enforcement and judicial process which can furnish proportionate remedy and penalty.

Available economic opportunities, however, are still quite limited for both men and women and female-headed households remain among the most vulnerable populations. Unemployment rates remain particularly high for women, and especially female IDPs who often remain reliant on charity through social protection mechanisms and contributions from the diaspora in the form of remittances. Women who are engaged in income generating activities are often engaged in the informal sector and further bear the double domestic burden of earning an income and taking care of the home. The consequences of this burden often fall to girls in the family, who are expected to contribute to the maintenance of the home, often at the expense of girls' education and skills development[72].

Women representation in politics and governance bodies has remained scarce. Political power and authority are perceived as masculine spaces, and the few women who are included in politics mostly act through their husbands or other male family members. Analytical work on political economy in Somalia has shown that political power is deeply rooted in access to resources. Women's economic empowerment should therefore play a fundamental role in their rise in politics and decision-making spheres. However, to date no analysis has explored the links between economic empowerment initiatives and political empowerment, nor has rigorous political economy analysis been coupled with a gender analysis. At least 30 per cent of seats in the national Parliament are reserved for women; while women's representation in Parliament has improved in recent years, at 24 percent representation, this quota remains unmet.

While there is a lack of statistical data about women in Somalia, the available evidence shows that Somali women are still far from enjoying equal rights and treatment. The Social Institutions & Gender Index for 2014 places Somalia on the 6th lowest position in the world, with 'very high' discriminatory family codes, 'very high' levels of restricted physical integrity, and a 'very high' level of restricted resources and assets.[73] Lack of access to services, such as education and health, or lack of access to agricultural production or other livelihoods and employment opportunities have kept most of the female population of Somalia disempowered.

The Provisional Constitution and the FGS have made commitments on women's empowerment and gender mainstreaming. The Constitution provides for the protection of women[74], including the outlawing of female circumcision (Article 15) and protection from sexual abuse (Article 24(5).

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[72] Interagency Working Group on Disaster Preparedness for East and Central Africa.

[73] OECD Development Center, Social Institutions and Gender Index, 2014, accessed at: *http://genderindex.org/ranking?order=field_sigi_value14_value&sort=asc*

[74] LOGICA, Gender and Conflict Note Somalia, March 2013, p. 2, accessed at: *http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2014/03/31/000333037_20140331154002/Rendered/PDF/862980BRI0Box30gica0DissNoteSomalia.pdf*

Most domestic violence and sexual violence cases are dealt with through the customary and Sharia legal systems. Anecdotal evidence indicates that some customary practices result in a double victimization of women and girls, denial of justice for many survivors, and impunity for perpetrators. The customary justice system is focused on clans. Justice is delivered for the clan rather than for the survivor of the sexual violence. Traditional approaches to dealing with rape seek resolution or compensation through negotiation between clan members. Restitution is paid to the clan and not to the survivor. Once restitution is paid, the perpetrator of the sexual violence is free from further punishment and the case is considered finalized. In some cases, the woman or girl is forced to marry the perpetrator of the violence as a form of "restitution" ordered by customary courts. The customary system is widespread, and many families and clans choose it over other justice systems[75].

3.4.9.3 Youth as a Vulnerable Group

According to UNFPA, 38% of Somalia's population aged between 15-35 years. Most young people live in the urban areas, 46% of all 15-29-year-old persons live in a city, followed by 25% that live as nomads. Only 49% of male youth is literate, compared to 41% of female youth. 69% of current youth are not enrolled in school. 3 in 10 youth are unemployed.[76] Irregular migration of youth populations in search of resources of livelihoods, particularly from rural to urban areas may compound existing challenges linked to youth vulnerability and unemployment.

A joint study by the World Bank and the United Nations on youth and attitudes to peace showed that for youth peace is not just about ending violence but includes strong and accountable institutions providing services and opportunities for all. For many respondents there was also a clear link between violence, including domestic violence, at the local level and national level conflict. Peacebuilding efforts, therefore, must start at home and at the community level.[77]

3.4.9.4 Clan Dynamics and Minority Groups

The traditional clan system, while evolving, remains a central and defining factor shaping political and socioeconomic realities in Somalia. Clan affiliation is both a force that has influenced conflict and violence as well as a mechanism for protection and dispute resolution. Customary traditions and conventions help define rights and obligations among kin, clans, and subclans, with an emphasis on the preservation of social stability over individual rights in communities and families. At the local level, clan arbitration through the customary system known as *xeer* has helped regulate access to shared resources, such as grazing areas and water.

Settlement patterns in cities are shaped by clan dynamics through ownership and development of urban land, resulting in communities that are often segregated based on clan. Clan affiliation further affects the extent to which IDPs are included or excluded from development opportunities and access to basic services. Consequently, a resultant pattern of inequality is emerging in Somalia's cities[78].

Because of weak enforcement of the law, large disparities have appeared between customary tenure systems and statutory law, engendering illicit appropriation on the part of those most powerful and exacerbating the clan divisions. Because of the prolonged absence of a clear central government authority and the subsequent erosion of legal systems, land and property have been subject to illegal occupation and land grabbing; this remains the main source of violent conflict.

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[75]UNDP 2018

76 UNFPA, The Somali Youth in Figures, August 2016, accessed at: https://somalia.unfpa.org/sites/default/files/pub-pdf/INFOGRAPHIC_YOUTH%20DAY%20%282%29.pdf

[77] The World Bank, UN Somalia, UN Habitat, Youth as Agents of Peace in Somalia, 2018, p. 10.

[78] Aubrey and Cardoso 2019

At the national level, the 4.5 power-sharing formula accords parliamentary power and other positions to the four major clans, with minority clans comprising the remaining 0.5. The four patrilineal clan families that comprise the majority (customarily known as the "nobles") include the Darod, Hawiye, Dir, and Isaaq. The Rahanweyn, considered inclusive of Digil and Mirifle, constitute the smaller, minority clan family. Other minority groups include Bantu, Benadiri, Bajuni, and a category of "occupational" groups composed of the Midgaan (Gabooye), Tumaal or Yibir, and Galgala.

In the absence of sound national institutions, resilient clan-based structures provide safety nets to the most vulnerable and have historically claimed responsibility for security and protection. While political developments, population movements, and conflict have weakened traditional authority structures, many expect that clan systems will continue to play an important socioeconomic and political role in Somalia, even as more formalized governance institutions emerge.

While data on the population of minorities in Somalia are limited and contested, in 2002, the UN Office for the Coordination of Humanitarian Affairs estimated that the minority groups combined comprised one-third of the population (UN OCHA 2002) the Rahanweyn or Digil/Mirifle are considered minority clan families, this classification excludes ethnic, religious, or linguistic differentiation; other groups like Bantu, Benadiri, Bajuni, and a category of "occupational" groups composed of the Midgaan (Gabooye), Tumaal or Yibir, and Galgala (Home Office 2017) also fall within minority umbrella.

3.4.9.5 Internal Displacement and Refugees in Somalia

Since 1991, millions of Somalis have fled their homes to escape fighting between different warring groups. During this period, conflict and generalized violence has resulted in large-scale internal displacement in the country, and many citizens have fled across the borders of Somalia to become refugees. Hundreds of thousands of people have sought refuge within the greater Horn of Africa region, while others have resettled to countries further away.

In the past decade, Somalia has experienced violence from insurgency, as well as recurrent drought, leading to famine and other precarious situations inside the country; these factors have accelerated the displacement situation. In addition, generalized insecurity has restricted access to humanitarian and development assistance for vulnerable and displaced people in some parts of the country.

Somalia experienced a sharp increase in new displacements associated with both conflict and disasters in 2017 and the first half of 2018. Many of those displaced have moved from rural areas to the country's main cities in search of shelter, protection and humanitarian assistance. Forced evictions have triggered displacement within urban areas, and data shows that the vast majority of those evicted had already been displaced before. Displacement is clearly shaping Somalia's urban landscape and contributing to its urbanization rate, which is one of the highest in the world. (IDMC, 2018).

Given the conflict, insecurity, drought, and floods an estimated 2.6 million people have been displaced in Somalia in the recent years. Most people have self-settled in over 2,000 sub-standard IDP sites in urban and peri-urban areas across the country. People displaced to these sites are living in precarious conditions and are not having their basic needs met due to inconsistent service provision or exclusion from accessing humanitarian support. 85% of the sites are informal settlements on private land and about 74% of them are in urban areas according to the Detailed Site Assessment (DSA) of the CCCM Cluster.[79]

In response to the new and protracted displacement across the country, the government launched a *durable solutions initiative (DSI)* with UN support in 2016.

[79] UNHCR Somalia, 2018.

In 2019, it established an inter-ministerial durable solutions secretariat, *ratified the Kampala Convention* and approved *a national policy on IDPs and returning refugees*. Unfortunately, the progress on policy has yet to translate into tangible benefits for Mogadishu's IDPs and the country at large. The DSI has been a significant catalyst, leading the government to fully own the country's response to internal displacement, and setting an example for others to follow.

Somalia has a permanent system of government that takes responsibility for seeking and facilitating durable solutions for both refugee-returnees and IDPs in the country. The establishment and the empowerment of the National Commission for Refugees and IDPs (NCRI) will help in finding durable solutions for cases of displacement. In 2017, Somalia's new *National Development Plan* paid significant attention to the rights of IDPs and promoted a strategy for supporting local integration of the displaced in urban areas.

IDP Settlements in Mogadishu

Migration and displacement in Somalia are complex phenomena. Two decades of armed conflict and severe recurring droughts and floods have forced a remarkable part of the Somali population to leave their homes. Mogadishu hosts the largest estimated protracted internally displaced population in the country, mainly living in informal settlements across the city. At the same time, displaced people continue to move into the city from other parts of the country, while others are forced to move from within the city to its outskirts.

The largest concentration of IDPs—around half a million—are in Mogadishu, Somalia's capital. Displaced Somalis continue to arrive in Mogadishu daily, most of them fleeing conflict between AMISOM and the Al-Shabaab extremist group in the Lower Shabelle region.

There were two previous major waves of movement into the city over the past decade—first during the 2011–2012 famine and again following successive periods of drought in 2016–2017. Others arrived during the famine of 1992[80].

Most IDPs in Mogadishu live in cramped settlements under unsanitary conditions and without sufficient access to basic services. The malnutrition rate is persistently high, and the effective delivery of humanitarian assistance is regularly disrupted because of three key factors. First, most IDPs live on private land and face a continuing threat of forced evictions if the owner seeks to reclaim the land.

More than 100,000 IDPs have been evicted in 2019 alone. Usually, they receive no prior notice, their shelters are destroyed, and they are left on their own to find a new place in the city to live. Second, settlement "gatekeepers" who control access to IDP sites and are usually connected to the landowners, continue to take a portion of aid as rent from IDPs and have done so for years. Third, high insecurity restricts the movement of humanitarian actors throughout the city to deliver services and monitor programs.

Although comprehensive and up-to-date information on the total population figures for Mogadishu are not available, they are reported to be as high as 2.12 million.

[80] Relief International. 2018

Table 3-1 Distribution of settlements in Mogadishu

Districts	Settlements
1. Abdulaziz	16
2. Boondheere	15
3. Daynille	142
4. Dharkenley	1
5. Hawl-wadaag	27
6. Heliwa	18
7. Hodan	55
8. Karaan	25
9. Kaxda	120
10. Shangaani	13
11. Shibis	20
12. Waaberi	2
13. Wadajir	5
14. Wardhiigleey	15
15. Xamar-JaabJab	4
16. Yaaqshiid	8
Total:	**486**

Source: Internal Displacement Profiling in Mogadishu, 2016.

Out of the overall 486 identified IDP settlements, Kaxda (19%) and Daynille districts (33%) have the highest number of settlements - 120 and 142 settlements respectively, or a total of 262 settlements, which amounts to over half of all settlements in Mogadishu.

The profiling data highlights clear linkages between movement and evictions of IDPs during this timeframe. The most frequently chosen reason IDPs cited for their initial displacement is "armed conflict and fighting" followed by natural disasters. This is in line with the fact that the majority of IDPs originate from the regions of Lower Shabelle (42%), Bay (27%) and Middle Shabelle (10%), which have suffered a combination of conflict and natural disasters, particularly over the last four years when the peaks of new displacement happened. IDPs who moved more than once since leaving their place of origin (nearly 47% of the total IDP households) cited as the two most common reasons for leaving their last place of residence "armed conflict and fighting" and evictions[81].

The most critical issue raised by the profiling is the lack of secure land and housing tenure for IDPs in their current place of residence. In addition to the shift of IDPs from the central districts to the periphery that already took place, the eviction data indicates that this trend is expected to continue. 37% of IDPs reported being under threat of an eviction in the next six months. 82% of them indicated that if faced with an eviction, they would remain in Mogadishu by moving to another settlement in

[81] Internal Displacement Profiling in Mogadishu, 2016

the city. This means that IDP communities are likely to continue shifting from where they currently live in Daynille and Kaxda, and possibly be pushed out even further.

3.5 Summary of the Types of EHS Problems With Existing ESPs Operations

ESPs engaged under SESRP experience the following EHS concerns and challenges:

- Air emission from diesel generators;
- Wastewater treatment;
- Disposal of used oil;
- Emergency response measures; and
- Worker safety.

The location of the target cities are along the coast of the Indian Ocean also present risks to project infrastructure, and include sea level risks coastal erosion and sea-level rise that exposes infrastructure and and vulnerable communities to cyclical floods and droughts. Short- and long-term climate change and disaster risks. The climate is generally arid climate with irregular rainfall, leading to water scarcity and reliance on wells and boreholes for water supply.

4 POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS AND RISKS AND MITIGATION

This section describes in general terms potential environmental and social (E&S) risks and impacts for the types of activities that will be supported by the ASCENT Somalia Project. Additionally, it prescribes a preliminary rating for these E&S risks and impacts. Identification of potential E&S risks and impacts are aligned to the Project components.

4.1 Overview of Project Activities

Table 4-1 provides a summary of project component and their respective activities to give the highlight of the potential E&S risks associated with the project.

Table 4-1 ASCENT Somalia Project Components and Activities

Component	Activity
Component 1: DRE with SPV and BESS in the capital city of Mogadishu and other major load centers in the FMS.	Design, supply and installation of a total of about 30-50MW solar PV grid connected generation plants with BESS in the Mogadishu capital area. About 30-50 MW will be distributed across multiple sites and will feed into mini grids.
Component 2: Electricity Distribution Network Rehabilitation and Reinforcement of the mini grids serving the Mogadishu capital city area and other FMS major load centers.	• Supply of equipment and materials for the distribution network MV and LV, metering equipment and service connections; and • Installation services including detailed line surveys.
Component 3: Sector Capacity and Institution Enhancement and Project Implementation Support	• Policy and regulatory development; • Sector planning and feasibility studies for renewable energy projects; • ESPs and MOEWR capacity and business support services; • Implementation of the Gender Action Plan; • Project Implementation Support including for environment and social safeguards.

4.2 Potential Environmental and Social Risks and Rating

Error! Reference source not found. provides a summary of the potential E&S risks and impacts associated with the project. Again, it provides a preliminary[82] rating for the risks and impacts viz:

- Red = Major;
- Orange = Moderate;
- Yellow = Minor; and
- No color = Negligible

[82] Rating is preliminary since final subproject designs and locations are currently unknown, and final EHS impact and risk identification will be determined as part of the subproject E&S assessment process as defined in this ESMF.

Table 4-2 Risk Rating/Significance Definition

Significance Level	Definition
Negligible	An impact of negligible significance (or an insignificant impact) is where a resource or receptor (including people) will not be affected in any way by a particular activity, or the predicted effect is deemed to be 'negligible' or 'imperceptible' or is indistinguishable from natural background variations.
Minor	An impact of minor significance is one where an effect will be experienced, but the impact magnitude is sufficiently small (with and without mitigation) and well within accepted standards, and/or the receptor is of low sensitivity/value.
Moderate	An impact of moderate significance is one within accepted limits and standards. The emphasis for moderate impacts is on demonstrating that the impact has been reduced to a level that is as low as reasonably practicable (ALARP). This does not necessarily mean that 'moderate' impacts must be reduced to 'minor' impacts, but that moderate impacts are being managed effectively and efficiently.
Major	An impact of major significance is one where an accepted limit or standard may be exceeded, or large magnitude impacts occur to highly valued/sensitive resource/receptors. A goal of the ESIA process is to get to a position where the Project does not have any major residual impacts, certainly not ones that would endure into the long term or extend over a large area. However, for some aspects, there may be major residual impacts after all practicable mitigation options have been exhausted (i.e., ALARP has been applied). An example might be the visual impact of a development. It is then the function of regulators and stakeholders to weigh such negative factors against the positive factors such as employment, in coming to a decision on the Project.

Table 4-3 Potential Environmental and Social Risks and Rating

Component	Activity	Potential E&S Risks and Impacts	Risk Rating (red = major; orange = moderate; yellow = minor; no color = negligible)
Component 1: DRE with SPV and BESS in the capital city of Mogadishu and other major load centers in the FMS.	Design, supply and installation of a total of about 30-50MW solar PV grid connected generation plants with BESS in the Mogadishu capital area – **Construction Phase**	**Environmental Risks:** Terrestrial habitat alteration (ESS6)	
		Aquatic habitat alteration (ESS6)	
		Generation of hazardous and non-hazardous waste including e-waste (ESS3, ESS6)	
		OHS risks (ESS2)	
		Emissions to air (ESS2, ESS3, ESS4)	
		Noise and vibration (ESS2, ESS3, ESS4)	
		Soil erosion and sedimentation (ESS6)	
		Social Risks: SEA/SH for project workers, project-affected persons and during construction phase (ESS2, ESS4)	
		Land acquisition and resettlement risks and impacts (ESS5)	
		Lack of access to grievance redress mechanisms (ESS10)	
		Exclusion of vulnerable groups in project activities and consultations (ESS10)	
		Security risk (ESS4)	
		Disease transmission (ESS2, ESS4)	
		Labour and working conditions (ESS2)	

Component	Activity	Potential E&S Risks and Impacts	Risk Rating (red = major; orange = moderate; yellow = minor; no color = negligible)
		Community health and safety (ESS4)	
		Cultural heritage risk (ESS8)	
		Labor influx and associated risks (ESS2, ESS4)	
	Design, supply and installation of a total of about 30-50MW solar PV grid connected generation plants with BESS in the Mogadishu capital area – **Operation Phase**	**Environmental Risks:** Terrestrial habitat alteration (ESS6)	
		Generation of hazardous and non-hazardous waste including e-waste (ESS3, ESS6)	
		OHS risks (ESS2)	
		Social Risks: SEA/SH for project workers, project-affected persons and during operation phase (ESS2, ESS4)	
		Land acquisition and resettlement risks and impacts (ESS5)	
		Lack of access to grievance redress mechanisms (ESS10)	
		Labour and working conditions (ESS2)	
		Community exposure to risks and impacts arising from accidents, structural failures, diseases, and releases of hazardous materials (ESS4).	
Component 2: Electricity Distribution Network Rehabilitation and Reinforcement of the mini grids serving the Mogadishu capital city area and other FMS major load centers.	Supply of equipment and materials for the distribution network MV and LV, metering equipment and service connections.	**Environmental Risks:** Generation of hazardous and non-hazardous waste including e-waste (ESS3, ESS6)	
		OHS risks (ESS2)	
		Air emissions (ESS3)	

Component	Activity	Potential E&S Risks and Impacts	Risk Rating (red = major; orange = moderate; yellow = minor; no color = negligible)
		Social Risks: Violation of labor and working conditions (ESS2) e.g., child and forced labour, etc.	
		Traffic safety risks (ESS4)	
		Security risks (ESS2, ESS4)	
	Installation services including detailed line surveys – **Construction Phase**	**Environmental Risks:** Generation of hazardous and non-hazardous waste including e-waste (ESS3, ESS6)	
		OHS risks (ESS2)	
		Terrestrial habitat alteration (ESS6)	
		Air emissions (ESS2, ESS3, ESS4)	
		Noise and vibration (ESS2, ESS3, ESS4)	
		Soil erosion and sedimentation (ESS6)	
		Social Risks: Violation of labor and working conditions (ESS2) e.g., child and forced labour, etc.	
		Traffic safety risks (ESS4)	
		SEA/SH for project workers and project-affected persons (ESS2, ESS4)	
		Lack of access to grievance redress mechanisms (ESS10)	
		Labour and working conditions (ESS2)	
		Labor influx and associated risks (ESS2, ESS4)	

Component	Activity	Potential E&S Risks and Impacts	Risk Rating (red = major; orange = moderate; yellow = minor; no color = negligible)
	Installation services including detailed line surveys – **Operation Phase**	**Environmental Risks:** Generation of hazardous and non-hazardous waste including e-waste (ESS3, ESS6)	
		OHS risks (ESS2)	
		Terrestrial habitat alteration (ESS6)	
		Social Risks: SEA/SH for project workers and project-affected persons (ESS2, ESS4)	
		Violation of labour and working conditions (ESS2)	
		Community exposure to risks and impacts arising from accidents, structural failures, and releases of hazardous materials (ESS4)	
	Associated facilities and existing EHS liabilities	**Environmental Risks:** Generation of hazardous waste including retired PCB transformers and e-waste (ESS3, ESS6); Soil erosion and degradation (ESS6); Disturbance to fauna and flora (ESS6); Dust and noise pollution (ESS2, ESS4); and Soil and water contamination (ESS3, ESS6).	
		OHS risks (ESS2)	
		Social Risks: SEA/SH for project workers and PAPs (ESS2, ESS4)	
		Violation of labour and working conditions (ESS2)	

Component	Activity	Potential E&S Risks and Impacts	Risk Rating (red = major; orange = moderate; yellow = minor; no color = negligible)
		Community exposure to risks and impacts arising from accidents, structural failures, and releases of hazardous materials (ESS4).	
Component 3: Sector Capacity and Institution Enhancement and Project Implementation Support	• Policy and regulatory development • Sector planning and feasibility studies for renewable energy projects • ESPs and MOEWR capacity and business support services • Implementation of the Gender Action Plan • Project Implementation Support including for environment and social safeguards.	**Environmental Risks:** TA may pose downstream environmental risks, such as Terrestrial habitat alteration (ESS6), Generation of hazardous and non-hazardous waste including e-waste (ESS3, ESS6), Soil erosion and sedimentation (ESS6), air and noise pollution (ESS3), occupational health and safety risks from construction and operation activities (ESS2).	
		Social Risks: SEA/SH for project workers and project-affected persons during operational phases (ESS2 and ESS4)	
		Exclusion of vulnerable groups in project activities and consultations (ESS10)	
		Inadequate stakeholder engagement due to bias towards some counties (ESS10)	
		Downstream social risks emanating from TA e.g., violation of labour and working conditions (ESS2), destruction of cultural heritage (ESS8), Community health and safety risks (ESS4).	

5 PROJECT MITIGATION MEASURES AND MANAGEMENT OF RISKS AND IMPACTS

In line with WB ESS 1, for the elaboration and implementation of the environmental and social mitigation measures, the project is adopting the following mitigation hierarchy approach:

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

5.1 Generic Environmental and Social Management Plan (ESMP)

Table 5-1 presents a generic ESMP with the prevention, minimization, mitigation and compensation activities for the identified risks and impacts. It disaggregates them by ESS. The generic ESMP presents standardized management and mitigation procedures for handling environmental and social risks resulting from the project in the local context. The generic ESMP should therefore serve as a reference on risks and impacts during construction and operational phases of ASCENT Somalia Project and regarding the associated international industry best practices and mitigation measures that can be planned and implemented throughout the project life cycle. The items in the generic ESMP can serve as a template for site-specific mitigation and monitoring measures to be included in sub-project specific ESMPs.

Table 5-1 Generic Project ESMP and Monitoring Table

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
ESS 1: Environmental and Social Assessment										
Poor management of subproject risks and impacts.	• Hire and maintain EHS specialist and SEA/SH consultant. • In addition to this ESMF, adopt, disclose, and implement other E&S safeguard instruments i.e., LMP, SEP, RPF, GBVAP, etc. • Screen each subproject prior to implementation. • Prepare all relevant subproject E&S instruments to mitigate risks and impacts. • Prior to Implementation of any solar plant or distribution line subprojects, a standard EHSMP will be prepared.	X			• % of subprojects that have been screened • # of additional E&S instruments prepared • # of compliance monitoring to monitor the effectiveness of subproject ESMP's	X			PIU	Monitoring costs: **Included in staff time.**

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

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	• Raise awareness of E&S risks and appropriate mitigation measures.									
EHS liabilities from existing ESPs facilities and operations.	**Generation of hazardous waste** • Initiate environmental and social audits (ESA), as part of subproject ESIA/ESMP, to determine the nature and extent of all environmental and social areas of concern at the existing facilities. • Use ESA and ESIA/ESMP findings to develop a comprehensive EHS management plan for the subproject. This Plan should provide measures to manage hazardous waste. • Build the capacity of ESPs EHS officers and PIU in disposal and management of hazardous wastes. • Build FGS capacity – enaction country regulations or codes	X			• # of EHSMPs that include WMPs measures on hazardous waste management. • # of ESP EHS officers attending training on hazardous waste management and use of MSDS. • # of FGS regulations and codes enacted for the electricity sector. • # of ESPs adopting and mainstreaming WBG ESF in their operations. • PCB transformers prohibition clauses in SBDs • # of safety incidents	X			Implementation: FGS, MOEWR, PIU and ESPs Monitoring: PIU/FGS	Monitoring costs: Included in staff time.

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	of standards of practice and mechanisms to vet and enforce electricity services quality, health and safety standards, and concerns – to oversee the environmental risks of the project. • Assist ESPs adopt or mainstream WBG ESF requirements in their operations and the management of E&S aspects for the mini grid grant. • Use of PCB in transformer oil or any other equipment should be prohibited, and this will be specified in the standard bidding documents (SBDs). • PCB transformers should be examined for leaks and disposed of properly. These control and mitigation measures should also be included and required in contractor's ESMP (i.e., waste				• # of workers' grievances filed • % of workers with adequate PPE • # of workers attending PPE use trainings • Signage provision • Contract bids with adequate OHS provisions listed. • Necessary OHS permits. • # of OHS incidents timely reported, RCA developed, CAP identified and implemented. • # of registered cases of incidents are closed. • # of trainings on OHS and PPE use. • # of staff attending fire safety training.					

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	management plan, hazardous materials management plan). • Communicating chemical hazards to workers through labeling and marking according to national and internationally recognized requirements and standards, including the International Chemical Safety Cards (ICSC), Materials Safety Data Sheets (MSDS), or equivalent. Any means of written communication should be in an easily understood language and be readily available to exposed workers and first-aid personnel. • Training workers in the use of the available information (such as MSDSs), safe work practices, and appropriate use of PPE. • Liaise with the Ministry of Environment and Climate Change (MECC) and ESPs on how the PCBs contaminated equipment can be				• Types of fire extinguishers deployed and service records. • # of traffic related incidents.					

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	consolidated and exported for management and treatment. **Soil erosion and degradation** Implement soil erosion control measures to avoid surface run off and prevents siltation as per WBG general EHSGs. **Disturbance to fauna and flora** • Regular monitoring for alien plants at the sites. • When alien plants are detected, these should be controlled and cleared using the recommended control measures for each species to ensure that the problem is not exacerbated or does not re-occur. • Clearing methods employed at the site should themselves aim to keep disturbance to a minimum (ie avoid clearing of vegetation through grading).									

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	• All cleared areas which do not need to remain clear of vegetation should be rehabilitated or seeded with local species if natural recovery does not take place within a year of being cleared. **Dust and noise pollution** • Avoid open burning of hazardous and non-hazardous waste. • Use of dust control methods, such as covers, water suppression, or increased moisture content for open materials storage piles, or controls, including air extraction and treatment through a baghouse or cyclone for material handling sources, such as conveyors and bins; • Use of water suppression for control of loose materials on paved or unpaved road surfaces. Oil and oil by-									

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	products is not a recommended method to control road dust. **Soil and water contamination** • Drinking water sources, whether public or private, should always be protected from air emissions, wastewater effluents, oil and hazardous materials, and wastes. • Activities should not affect the availability of water for drinking and hygienic purposes. • No construction materials, solid wastes, toxic, or hazardous materials should be poured or thrown into water bodies for dilution or disposal. • The flow of natural waters should not be obstructed or diverted to another direction, which may lead to drying up of riverbeds or flooding of settlements.									

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	• Use isolation techniques such as berming or diversion during construction to limit the exposure of disturbed sediments to moving water. • Preparing plans and procedures to respond to the discovery of contaminated media to minimize or reduce the risk to health, safety, and the environment consistent with the approach for Contaminated Land in Section. **OHS Risks** ***Integrity of Workplace Structures*** Permanent and recurrent places of work should be designed and equipped to protect OHS: • Surfaces, structures and installations should be easy to clean and maintain, and not allow for accumulation of hazardous compounds.									

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	• Buildings should be structurally safe, provide appropriate protection against the climate, and have acceptable light and noise conditions. • Fire resistant, noise-absorbing materials should, to the extent feasible, be used for cladding on ceilings and walls. • Floors should be level, even, and non-skid. ***Severe Weather and Facility Shutdown*** • Work place structures should be designed and constructed to withstand the expected elements for Somali and have an area designated for safe refuge, if appropriate. • Standard Operating Procedures (SOPs) should be developed for project or process shut-down, including an evacuation plan. Drills to									

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	practice the procedure and plan should also be undertaken annually. ***Workspace and Exit*** • The space provided for each worker, and in total, should be adequate for safe execution of all activities, including transport and interim storage of materials and products. • Passages to emergency exits should be unobstructed at all times. Exits should be clearly marked to be visible in total darkness. The number and capacity of emergency exits should be sufficient for safe and orderly evacuation of the greatest number of people present at any time, and there should be a minimum two exits from any work area. • Facilities also should be designed and built taking into									

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	account the needs of disabled persons. ***Fire Precautions*** • The workplace should be designed to prevent the start of fires through the implementation of fire codes applicable to industrial settings. Other essential measures include: • Equipping facilities with fire detectors, alarm systems, and fire-fighting equipment. The equipment should be maintained in good working order and be readily accessible. It should be adequate for the dimensions and use of the premises, equipment installed, physical and chemical properties of substances present, and the maximum number of people present.									

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	• Provision of manual firefighting equipment that is easily accessible and simple to use. • Fire and emergency alarm systems that are both audible and visible. ***Lavatories and Showers*** • Adequate lavatory facilities (toilets and washing areas) should be provided for the number of people expected to work in the facility and allowances made for segregated facilities, or for indicating whether the toilet facility is "In Use" or "Vacant". Toilet facilities should also be provided with adequate supplies of hot and cold running water, soap, and hand drying devices. • Where workers may be exposed to substances poisonous by ingestion and									

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	skin contamination may occur, facilities for showering and changing into and out of street and work clothes should be provided. ***Potable Water Supply*** • Adequate supplies of potable drinking water should be provided from a fountain with an upward jet or with a sanitary means of collecting the water for the purposes of drinking. • Water supplied to areas of food preparation or for the purpose of personal hygiene (washing or bathing) should meet drinking water quality standards. ***Clean Eating Area*** Where there is potential for exposure to substances poisonous by ingestion, suitable arrangements are to be made for									

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	provision of clean eating areas where workers are not exposed to the hazardous or noxious substances ***Lighting*** • Workplaces should, to the degree feasible, receive natural light and be supplemented with sufficient artificial illumination to promote workers' safety and health, and enable safe equipment operation. Supplemental 'task lighting' may be required where specific visual acuity requirements should be met. • Emergency lighting of adequate intensity should be installed and automatically activated upon failure of the principal artificial light source to ensure safe shut-down, evacuation, etc.									

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	Safe Access • Passageways for pedestrians and vehicles within and outside buildings should be segregated and provide for easy, safe, and appropriate access. • Equipment and installations requiring servicing, inspection, and/or cleaning should have unobstructed, unrestricted, and ready access. • Hand, knee and foot railings should be installed on stairs, fixed ladders, platforms, permanent and interim floor openings, loading bays, ramps, etc. • Openings should be sealed by gates or removable chains. • Covers should, if feasible, be installed to protect against falling items. • Measures to prevent unauthorized access to									

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	dangerous areas should be in place. ***First Aid*** • ESPs should ensure that qualified first-aid can be always provided. Appropriately equipped first-aid stations should be easily accessible throughout the place of work. • Eye-wash stations and/or emergency showers should be provided close to all workstations where immediate flushing with water is the recommended first-aid response. • Remote sites should have written emergency procedures in place for dealing with cases of trauma or serious illness up to the point at which patient care can be transferred to an appropriate medical facility.									

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	Work Environment Temperature The temperature in work, rest room and other welfare facilities should, during service hours, be maintained at a level appropriate for the purpose of the facility.									
ESS 2: Labor and Working Conditions										
Noise and vibration linked to machinery	• Select equipment with lower sound power levels. • Install suitable mufflers on engine exhausts and compressor components in cases where the service provider uses generators. • Provide fit to work PPEs (ear plug/earmuffs) for all workers involved in the areas with elevated noise levels. • Install acoustic enclosures and/or use vegetation as sound buffer for equipment casing radiating noise i.e., generator.		X	X	• # of noise and vibration related grievances • Noise quality monitoring records • Provision of PPE to workers	X			Implementation: Contractors and ESPs Monitoring: PIU/ Contractors/ ESPs	Monitoring costs: Included in staff time. Travel costs for monitoring activities: 100,000.

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	• The contractor should use equipment that is/are in good working condition and periodically maintained. • Turn off machinery and equipment when not in use.									
OHS issues during component 1 implementation	• Prior to Implementation of any solar plant subprojects, a standard EHSMP will be prepared. • Train workers on OHS risks and awareness to minimize the risks. • OHS measures should be designed and implemented to address: (a) identification of potential hazards to project workers; (b) provision of preventive and protective measures, including elimination of hazardous conditions or substances; (c) training of project workers and maintenance of training		X	X	• # of safety incidents • # of workers' grievances filed • % of workers with adequate PPE • # of workers attending PPE use trainings • Signage provision • Contract bids with adequate OHS provisions listed. • Necessary OHS permits. • # of OHS incidents timely reported, RCA developed, CAP identified and implemented.		X		Implementation: Contractor/ ESPs Monitoring: PIU	Monitoring costs: Included in staff time. Travel costs for monitoring activities: 100,000

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	records; (d) documentation and reporting of occupational accidents, diseases and incidents; (e) emergency prevention and preparedness and response arrangements to emergency situations; and (f) remedies for adverse impacts such as occupational injuries, disability and disease. • Contractors will be required to prepare and implement Occupational Health & Safety Plans (OHSP) following the World Bank Group General Environment, Health, and Safety (EHS) Guidelines as well as the EHS Guidelines for Electric Power Transmission and Distribution, adopt a code of conduct for all workers and establish GRM (accessible for direct and contracted workers) before commencement of the				• # of registered cases of incidents are closed. • # of trainings on OHS and PPE use. • # of staff attending fire safety training. • Types of fire extinguishers deployed and service records. • # of traffic related incidents					

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	civil works. • A workers' GRM will be put in place specifically to manage the various employers (contractors, national and private agencies)/workers related grievances, including but not limited to: misconduct, wages, overtime, injuries/accidents, worker relations with neighboring communities, SEA/SH incidents against or by project workers, etc. Other OHS risks of which mitigation measures are detailed under ESS1 are: • Live Power Lines • Working at height on poles and structures • Exposure to chemicals • Motor vehicle safety • Working Environment Temperature									

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	• Ergonomics, Repetitive Motion, Manual Handling									
OHS issues during component 2 implementation	OHS risks under component, of which mitigation measures are detailed under ESS1 are: • Live Power Lines • Working at height on poles and structures • Exposure to chemicals • Motor vehicle safety • Exposure to physical hazards from use of heavy equipment and cranes • Noise • Fire and Explosions • Work in confined spaces • Lone and Isolated Workers • Emergency Response Plans		X	X	• # of safety incidents • # of workers' grievances filed • % of workers with adequate PPE • # of workers attending PPE use trainings • Signage provision • Contract bids with adequate OHS provisions listed. • Necessary OHS permits. • # of OHS incidents timely reported, RCA developed, CAP identified and implemented. • # of registered cases of incidents are closed.		X		Implementation: Contractor/ ESPs Monitoring: PIU	Monitoring costs: Included in staff time. Travel costs for monitoring activities: 100,000

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
					• # of trainings on OHS and PPE use. • # of staff attending fire safety training. • Types of fire extinguishers deployed and service records. • # of traffic related incidents					
Inadequate PPE for workers	• Active use of PPE if alternative technologies, work plans or procedures cannot eliminate, or sufficiently reduce, a hazard or exposure. • Identification and provision of appropriate PPE that offers adequate protection to the worker, co-workers, and occasional visitors, without incurring unnecessary inconvenience to the individual. • Proper maintenance of PPE, including cleaning when dirty		X	X	• # of safety incidents. • # of workers grievances filed. • % of workers with appropriate PPE. • Types of PPE provided. • # of trainings on PPE use and maintenance.		X		Implementation: Contractor/ ESPs Monitoring: PIU	Monitoring costs: Included in staff time.

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	and replacement when damaged or worn out. • Proper use of PPE should be part of the recurrent training programs for employees. • Selection of PPE should be based on the hazard and risk ranking and selected according to criteria on performance and testing established.									
Violations of labor and working conditions	• Implement the developed Labour Management Procedures (LMP) which addresses OHS risks. • Ensure Project GRM is accessible. • Introduce transparent procedures for hiring and advertise job opportunities widely. • Provide a workers' GRM. • Provide adequate housekeeping conditions to workers (e.g., safe drinking		X	X	• # of workers grievances filed • # of available GRM for workers		X		Implementer: Contractor/ ESPs Monitoring: PIU	Monitoring costs: Included in staff time.

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	water, adequate sanitary conditions, designated areas for meals, etc.).									
Risk of Child and Forced labor.	• Comply with minimum age set for all types of work (in compliance with ESS2) and document age of workers upon hiring. • Have proper records of labor force on site. • Verify age of workers with communities where required. • Require contractors to provide a Forced Labor Performance Declaration (FLPD) (covering past performance), and a Forced Labor Declaration (covering future commitments to prevent, monitor and report on any forced labor). • Conduct a track record search of the contractors at the bidding process (record of health and safety violations, fines, consult public		X	X	• # of workers violations (child, forced labor) • # of existence/ maintenance of a labor registry of all contracted workers • % of workers with age verification • # of awareness campaigns		X		Implementer: Contractors Monitoring: PIU	Monitoring costs: Included in staff time.

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	documents related to workers' rights violations, GBV/SEA/SH issues etc.) • Raise awareness of communities/suppliers to not engage in child labour. • Consider ending of contract in case of violations.									
Risks of labor influx	• Set up local workforce minimum content for the contractors in SBDs. • Disclose to communities' local workforce content requirement. • Investigate possibility of providing training to local communities on general jobs during the planning phase. • Maximize the use of local suppliers (for food, water, services etc.)		X		• % of local workforce hired • # Number of sensitization/ awareness events within communities • # of local suppliers used		X		Implementer: Contractor/ ESPs Monitoring: PIU	Monitoring costs: Included in staff time.
SEA/SH for project workers.	• Implement Project GBV Action Plan that includes GBV-responsive GRMs.		X	X	• # of contractors and ESPs signing the CoC		X		Implementer: Contractor/ ESPs Monitoring: PIU	Monitoring costs: Included in staff time.

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	• Recruit and maintain a GBV advisor. • Implement Project LMP • Every worker to sign Code of Conduct (CoC) • Provide training on CoC. • Education and awareness raising campaigns; and • Include of SEA/SH prevention and mitigation measures in the Standard Bidding Documents (SBDs) to be extended to contractors and sub-contractors during implementation.				• % of workers that signed CoCs • # of trainings and awareness sessions on CoC • Operational GBVAP & LMP. • SEA/SH requirements included in SBDs					
ESS 3: Resource Efficiency and Pollution Prevention and Management										
Generation of hazardous and non-hazardous wastes.	• Implement Waste Management Plan (see Template in *Annex VIII*). • Establishing a waste management hierarchy that considers prevention, reduction, reuse, recovery,		X	X	• # of contractors that have prepared a C-ESMP • # of investees with an operational ESMS. • System for good housekeeping exists.		X		Implementer: Contractor/ ESPs Monitoring: PIU	Monitoring costs: Included in staff time.

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	recycling, removal and finally disposal of wastes; • Avoiding or minimizing the generation waste materials, as far as practicable; • Where waste generation cannot be avoided but has been minimized, recovering and reusing waste; • Where waste cannot be recovered or reused, treating, destroying, and disposing of it in an environmentally sound manner; • Training workers on waste handling and segregation; • Providing segregated waste storage containers with appropriate signs (hazardous or non-hazardous) throughout construction phase; • No garbage, refuse, oily waste, fuel, waste oil or removed/excess materials (e.g., asphalt, sidewalks, metal scrap, etc.) shall be discharged				• Collection system for solid waste exists and disposal is conducted in predetermined locations. • Grievances raised and status on resolution, • No. of sensitization meetings on solid waste management • # incidents of waste effluents released • # of kilograms of waste generated monthly. • System for good housekeeping exists. • Collection system for waste exists and disposal is conducted in predetermined locations. • # of E-Waste Management Plans prepared					

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	into drains, onto site grounds, natural areas, or watercourses; • Implementation of appropriate storage and containment areas (e.g., bunded area with impervious — polyliner or similar) for both new and waste fuel, oil, and hazardous materials to prevent and contain any spillage and leaks; • Prompt removal and safe disposal of soil contaminated with hydrocarbons; • Hazardous and oil waste shall be collected and disposed by licensed waste handlers; • Implementation of hazardous materials handling and control procedures (e.g., identify chemical products and store in storage area with restricted access, keep track of movement of each chemical, etc.);				• # of IPM plans prepared and implemented.					

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	• Keep records of waste generation (i.e., type of waste; hazardous or non-hazardous; weight or volume; properties; destination; date; etc.); • Maintenance and cleaning of vehicles, trucks and equipment should take place offsite, and prohibition of vehicle washing in watercourses; and • Toilet facilities shall be provided for construction workers to avoid indiscriminate defecation in nearby bushes. • Contractor to prepare and implement C-ESMP consisting of a set of mitigation, monitoring and institutional measures to be taken during the design, construction and operation stages of a subproject to eliminate adverse environmental and social impacts, to offset them,									

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	or to reduce them to acceptable levels. The plan also includes the actions needed for the implementation of these measures. • Institute good housekeeping and operating practices • Sensitize the ESPs and contractor workers on appropriate waste handling and disposal. • Prepare and implement subproject specific E-Waste Management Plan • Pests should be managed through a process of integrated pest management (IPM) that combines chemical and non-chemical approaches to minimize pest impact, while also minimizing the impact of such measures on the environment. Pesticides should be used only to the extent necessary under an									

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	IPM and integrated vector management (IVM) approach, and only after other pest management practices have either failed or proven inefficient.									
Air pollution through dust and emissions from vehicles, machinery and excavation.	• Use of dust control methods, such as covers, water suppression, or increased moisture content for open materials storage piles, or controls. • Use of water suppression for control of loose materials on paved or unpaved road surfaces. Oil and oil by-products is not a recommended method to control road dust. • The smallest possible area for cleared ground required for construction work should be exposed.		X	X	• Low dust emissions • Provision of PPE to workers • % of machinery equipment/vehicles that have been recently maintained. • % of machinery equipment/vehicles with mufflers installed • # of community consultations around planning. • # of MSMEs using renewable energy sources.		X		Implementer: Contractor/ Investees/ MSME's Monitoring: PIU	Monitoring costs: Included in staff time. Travel costs for monitoring activities (see above)

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	• Keep local communities up to date with the construction programme and activities. • High level maintenance of the machinery, equipment's and vehicles to reduce air emissions. • Provide appropriate PPE (dust masks) to workers & enforce use, • Ensure good housekeeping in construction areas, dust should be quickly swept off cement floors/collected in covered containers. • All unnecessary traffic must be strictly limited on site speed controls are to be enforced. • Implementing a regular vehicle maintenance and repair program. • Enhancement of energy efficiency. • Promotion, development and increased use of renewable forms of energy.				• MSMEs energy consumption records.					

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
Soil erosion/ sedimentation from exposed soils and surface runoff leading to contamination and degradation of water bodies	• Minimizing clearing and disruption to riparian vegetation. • Careful planning of timing of works (overall duration and seasonality, specially avoiding works during the rainy season if possible). • Minimization of cleared areas and soil disturbance, with revegetation as soon as feasible with species adapted to local conditions when applicable. • Implement erosion control measures and storm water control measures.		X		• Visual inspection reports. • Civil works carried outside rainy season.		X		Implementer: Contractor Monitoring: PIU	Monitoring costs: Included in staff time
Water use and wastewater	• Treat wastewater effluents prior to release to nearby water resources based on EHS Guidelines on Wastewater and Ambient Water Quality • All wastewater discharges are to meet applicable country laws/regulations and WB		X	X	• # incidents of waste effluents released into water resources • Reported cases of water-borne diseases.	X			Implementer: Contractor/ESPs Monitoring: PIU	Monitoring costs: Included in staff time.

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	Environmental, Health and Safety Guidelines (EHSGs) (General and sector-specific). • Use of PCB in transformer oil or any other equipment is prohibited, and this will be specified in the SBDs. • PCB transformers will be examined for leaks and disposed of properly through licensed waste handlers.				• # of PCB transformers disposed properly. • PCB transformer prohibition clauses in SBDs.					
Inefficient use of natural resources including stones, sand, concrete blocks and timber.	• Implement measures for efficient consumption of energy, water, stones, sand, concrete blocks and timber. • Prepare resource efficiency plan for construction and operational phases. • Sensitize staff on efficient use of natural resources.		X	X	# of plans for efficient use of natural resources that exist			X	Implementer: Contractor/ESPs Monitoring: PIU	Monitoring costs: Included in staff time.

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
ESS 4: Community Health and Safety										
Air pollution through dust and emissions from vehicles, machinery and excavation.	• Provide appropriate PPE (dust masks) to workers & enforce use, • Ensure good housekeeping in construction areas, dust should be quickly swept off cement floors/collected in covered containers. • All unnecessary traffic must be strictly limited on site speed controls are to be enforced. • Monitor exhaust emissions to ambient air, waste pollutant releases to land and water. • Suppress dust during construction by water spraying and dampening where necessary. • Cover trucks carrying soil, sand and stone with tarpaulin sheets to dust spreading.		X	X	• % of vehicles that have been recently maintained • # of community consultations around planning • # of complaints on dust emissions • % of workers that use dust masks • # of trucks covered with a tarpaulin		X		Implementer: Contractor/ESPs Monitoring: PIU	Monitoring costs: Included in staff time. Travel costs for monitoring activities (see above)

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	• Minimise dust from exposed work sites by applying water on the ground regularly. • Re-vegetate the disturbed areas as soon as activity is completed. • Do not burn site clearance debris (trees, undergrowth) or construction waste materials.									
Water use and wastewater	• Drinking water sources, whether public or private, should always be protected from air emissions, wastewater effluents, oil and hazardous materials, and wastes. • Activities should not affect the availability of water for drinking and hygienic purposes. • No construction materials, solid wastes, toxic, or hazardous materials should be poured or thrown into water bodies for dilution or disposal.		X		• Clean subproject sites • # of water quality related complaints		X		Implementer: Contractor Monitoring: PIU	Monitoring costs: Included in staff time.

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	• The flow of natural waters should not be obstructed or diverted to another direction, which may lead to drying up of riverbeds or flooding of settlements. • Use isolation techniques such as berming or diversion during construction to limit the exposure of disturbed sediments to moving water.									
Fire hazards	• Identify fire risks and their sources. • Take all reasonable and precautionary steps to ensure that fires are not started because of activities. • Store flammable materials under conditions that will limit the potential for ignition and the spread of fires. • Life and fire safety design criteria for all existing buildings should incorporate		X	X	• Fire risks identified. • # of measures against fast fire and smoke development in place • Detection and alarm system in place.			X	Contractor/ESPs During Operation: PIU	Costs of detection system

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	all local building codes and fire department regulations. • Install detection and alarm systems. • Provision of serviceable fire extinguishers on site.									
Injuries due to community access to work zones, and their related mitigation measures	• Develop and implement a community and safety risk assessment and management plan. • Secure worksites with physical separation through buffer strips, fencing and walls, as appropriate. • Rope off construction area and secure materials stockpiles/ storage areas from the public and display warning signs. Do not allow children to play in construction areas. • Establish appropriate site boundary and access controls near settlements to prevent unauthorised entry to construction or activity sites		X		• # of community injury grievances at construction sites • # of fenced construction sites	X			Contractor / ESPs	Included in construction costs.

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	especially by children (e.g., fencing of construction section in the vicinity of settlements or communities). • Demarcate open trenches and hazardous areas with luminous temporary fencing and/or signage.									
Injuries from use of facilities	• Develop and implement a community and safety risk assessment and management plan. • Ensure design of facilities is appropriate. • Install safety signage where applicable. • Ensure provision of adequate ventilation for the machinery working areas			X	• % of designs that do not have safety considerations • % of facilities that do not have relevant safety signage installed			X	Implementer: Investees Monitoring: PIU	Monitoring costs: Included in staff time.
Exposure to infectious diseases (e.g., HIV/AIDS or STIs, etc.)	• Develop and implement a community and safety risk assessment and management plan.		X	X	• # of sensitization/ awareness events within communities • Proper hygiene measures in place.		X		Implementer: Contractor/ESPs Monitoring: PIU	Monitoring costs: Included in staff time.

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	• Provide awareness to local communities through stakeholder engagement. • Educate and sensitize workers and the local community on STI, HIV /AIDS and other communicable diseases. • Follow hygiene procedures for infectious disease				• No of incidents/ accidents to the community directly linked to the project. • Grievances raised and status on resolution. • # of sensitization meetings held					
Security risks	• Develop and implement a community and safety risk assessment and management plan. • PIU shall work closely with the Ministry of Interior to ensure the security of project workers. • Project teams shall seek security approval and clearances form the project coordinator. • Project teams shall be periodically subjected to security awareness campaigns.	X	X	X	• MoU with Ministry of Interior. • # of project teams seeking security clearance approval from PIU • # and types of communication devices used • # of consultations with local leaders on security. • SRA Report • # of private security firms contracted at subproject sites		X		Implementer: PIU, Contractor, ESPs Monitoring: PIU	Monitoring costs: Included in staff time

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	• Project teams should have alternative communication devices, such as two-way radios or satellite phones in areas with limited or no cellular network coverage; • Use local leaders as part of the project implementation committee members; • Conduct security risk assessment (SRA). Use SRAs findings to develop and implement a security management plan (SMP) in collaboration with other government entities, project-affected communities, local NGOs, etc., and/or ensure that key elements of the security assessment and arrangements are reflected in the Environmental and Social Commitment Plan (ESCP) for the Project;				• # of security-related grievances.					

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	• Contract the services of the Security Firm to guard at selected project sites; • Keep a record of security grievances at the camp, if any, and project sites.									
Conflicts between project workers and communities	• Develop and implement a community and safety risk assessment and management plan. • Enforce CoC at workplace. • Consult with the host community and relevant stakeholders on the mitigation measures proposed for the negative impacts. • Ensure the Project implements the developed grievance redress mechanism, in which potential project beneficiaries/ project affected communities have reasonable representation. • Ensure multiple entries to grievance mechanism and		X	X	• # of communication events as per SEP implemented as compared to planned events • # of GRM cases filed • # of project workers who have signed the CoC.			X	Implementer: PIU, ESPs Monitoring: PIU	Monitoring costs: Included in staff time.

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	publicise GRM including through media, training, and meetings and through communication using local languages. • Enhance the capacity of individuals who will be involved in grievance handling processes through appropriate trainings. • Follow the guidance of the SEP. • Conduct periodic and specific field identification of key issues of exclusion, discrimination and marginalization of women and other vulnerable groups through social inclusion analysis and impact assessment. • Utilize community structures and local administration to mobilize minority groups to participate in meetings and consultations. Provide local									

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	language interpreters to ensure understanding and ability to give feedback during engagement. • Target women and youth in project consultations and activities for their meaningful inclusion in project decisions.									
SEA/SH for project-affected persons and during operational phase	• Recruit and maintain a GBV advisor. • Implementation of LMP including signing of CoC by all workers at point of hiring • Implementation of GBV Action Plan • Ensure that a robust project-level GRM is operational to manage potential complaints, including those related to SEA/SH, that might arise from the community due to poverty, deviations from the cultural behavior of workers from elsewhere, or gender discrimination.		X	X	• % of workers that signed CoCs. • % of workers that completed GBV/SEA training.			X	Implementer: Contractor/ESPs Monitoring: PIU	Monitoring costs: Included in staff time.

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
Increased noise and vibration	• Plan activities in consultation with communities so that noisiest activities are undertaken during periods that will result in least disturbance (e.g., limit working hours for noisy activities working hours close to schools, hospitals, residents, places of worship, etc.). • Noise levels should be maintained within the permissible limits (World Bank EHSGs). • Use noise-control methods such as fences, barriers, or deflectors (such as muffling devices for combustion engines). • Minimise transportation of construction materials through community areas during regular working time. • Maintain a buffer zone (such as open spaces, row of trees		X		• # of complaints received through the GRM • Hoarding done at SPV farms		X		Implementer: Contractor Monitoring: PIU	Monitoring costs: Included in staff time.

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	or vegetated areas) between the Project site and residential areas to lessen the impact of noise to the living quarters.									
ESS 5: Land Acquisition, Restrictions on Land Use, and Involuntary Resettlement										
Impact on land acquisition and resettlement	• Implement the Project RPF. The RPF outlines the approaches to avoid and minimize physical and economic displacement where possible. The RPF also includes the approach to acquire land, and where relevant an approach for voluntary land donation, the potential risks and impacts of land acquisition associated with the various activities and likely geographical areas as well as assessing livelihood losses and associated restoration plans. Subsequent Resettlement Action Plans (RAPs) in line with	X	X		• # of RAPs developed and implemented. • # of community consultation meetings on land. • # of SPV farms located on marginal lands outside urban centres. • Transmission lines with ROWs	X			Implementer: ESPs Monitoring: PIU	Monitoring costs: Included in staff time.

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	national law and ESS5 should be prepared during implementation for subprojects. • Coordination with all stakeholders including the customary land rights authorities of the respective areas as well as members of the communities and seasonal users to ensure that their land usage is not affected. • Consider and assess livelihood losses including from temporary disruption due to construction activities, easements and permanent loss of access to land; • Assessing the nature, extent and risks of any potential resettlement; • Locate SPV farms on degraded or marginal land outside the urban centers or on government land reserves;									

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	• Construct MV and LV transmission lines within available road reserves; and • Timely disclosure of project information.									
Change in land use	• Focus on siting solar installations on brownfield sites, degraded lands, or other previously developed areas. This minimizes the impact on natural habitats and agricultural lands. • Explore the possibility of agri-voltaics or dual-use systems, where solar panels are co-located with agricultural activities. This allows the land to continue serving its original purpose while generating renewable energy. • Provide TA to FGS to develop and implement land use policies and zoning regulations that guide the siting of solar projects.	X			• # of SPV farms located on marginal lands outside urban centers. • # of renewable energy policies and laws developed and implemented by FGS during the project lifecycle.			X	Implementer: ESPs Monitoring: PIU	Monitoring costs: Included in staff time.

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	• Involve local communities, stakeholders, and experts in the planning and decision-making process.									
ESS 6: Biodiversity Conservation and Sustainable Management of Living Resources										
Terrestrial and aquatic habitat alteration	• Subprojects that are likely to negatively affect protected and critical habitats will not be financed under the project. They will be screened out. • Prioritize brownfield sites, degraded lands, or areas with low ecological value. • Explore the use of dual-use systems that integrate solar panels with agricultural activities. • Incorporate bird-friendly design features, such as using anti-reflective coatings on solar panels and installing visual deterrents to reduce bird collisions.		X	X	• # of SPV farms located on marginal lands outside urban centers. • # of SPV farms with dual use systems. • # and type of bird-friendly design features incorporated in transmission lines. • # of community awareness sessions. • # of ESPs with WMP that include hazardous waste management.			X	Implementer: Contractor/ESPs Monitoring: PIU	Monitoring costs: Included in staff time. Travel costs for monitoring activities (see above)

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	• Adopt vegetation management practices that are compatible with local biodiversity, including avoiding the use of herbicides and preserving native plant species. • Provide education and outreach programs to raise awareness about the importance of biodiversity conservation and the efforts being made to mitigate impacts. • Implement adaptive management practices to continuously monitor and adjust strategies to mitigate impacts on biodiversity as needed. • Observing manufacturer machinery and equipment guidelines, procedures about noise, and oil spill prevention and emergency response.									

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	• ESPs to develop a Waste and Hazardous Materials Management Plan acceptable to the Association as part of ESMP for operation phase. This should include Disposal/recycling plan for PV panels and batteries plan has been prepared, disclosed, consulted, approved and adopted in form and substance acceptable to the Association.									
Adverse effects on birds	• To avoid raptor electrocution, the subproject ESIAs will look at mitigation around installing nest platforms on towers to reduce hazards to both birds and the electrical. • To reduce collisions with existing wires, the subproject ESIA will look at mitigation areas around installing vertical clearly visible hanging markers.	X	X	X	• Bird-friendly distribution lines • Number of towers with nesting plans.	X			Implementer: Contractor/ESPs Monitoring: PIU	Monitoring costs: Included in staff time

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	• Adopting a single-level arrangement of high-voltage conductor cables to avoid collision.									
Biosecurity risks	All materials and equipment must be fumigated, and official certificates issued prior to arrival at the port to ensure no plant or animal pests are accidently introduced.		X	X	Fumigation certificates	X			Contractors/ESPs	Included in loan disbursement.
ESS 8: Cultural Heritage										
Destruction of cultural heritage.	• Implement chance finds procedure (see *Annex V*) • ESIAs and ESMPs should include measures to meet the requirements of ESS8 including stakeholder consultation, identification of tangible and intangible cultural heritage, documentation of impact assessment and action plans and mitigation measures.		X		• # of subprojects excluded from financing due to potential impact on cultural heritage • # of Chance finds procedures implemented.	X			Implementer: Contractor/ESPs Monitoring: PIU	Monitoring costs: Included in staff time

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
ESS 10: Stakeholder Engagement and Information Disclosure										
Exclusion of vulnerable groups in project activities and consultations	• Implement SEP that outlines approaches to sharing information on the project activities, incorporating stakeholder feedback into the Project, and reporting and disclosure of project documents. • Identify minority, marginalized and disadvantaged communities in project sphere of influence. • Establish and maintain continuous liaison with the communities including marginalised groups to sensitize them on the project objectives and design. • Use innovative communication means to reach the communities with information on the project.	X	X	X	• # of marginalized communities assessed • # Local languages used in communication	X			Implementer: PIU/ ESPs/ Contractors Monitoring: PIU	Monitoring costs: Included in staff time.

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost (in USD) [83]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	• Establish GRM structures in the communities and sensitize the communities on the project GRM. • Apply local languages in communication. • The PIU will ensure that ESPs engage with stakeholders in a manner proportionate to the potential risks and impacts of the subprojects and in accordance with ESS10.									
Lack of access to GRM	• Implement project GRM that addresses complaints and suggestions coming from both project-beneficiaries and other interested parties. • Implement Workers' GRM	X	X	X	# of GRM cases filed and addressed	X	x		Implementer/Monitoring: PIU	Monitoring costs: Included in staff time
Inadequate stakeholder engagement	Implement SEP.	X	X		• # of community consultations held • # of vulnerable groups consulted	X			Implementer/Monitoring: PIU	Monitoring costs: Included in staff time.

5.2 Unplanned Events

5.2.1 Accidental Leaks and Spills

Accidental leaks and spills by their nature are undesirable and unplanned since their effects are largely unpredictable depending on the extent of the leak or spill. Therefore, the Contractors (during construction phase) and MOEWR (throughout the project life cycle) will incorporate best industry standard controls to minimize the possibility of having an accidental leak or spill.

Despite the above, accidental leaks and spills can potentially occur in areas where liquids (including condensed gases) are stored or used. In reference to the Project, the Project equipment and machinery may use fuel (diesel and/or petrol) as well as oil for lubrication and dielectric fluids during both the construction and operations phase. If there are any unnoticed leaks on the fuel or oil tanks, the fuel and/or oil will flow to the ground thus contaminating the soils and can potentially flow in stormwater to the nearby dam thus reducing its water quality.

Annex IX carries a complete guide to Chemical Spill Control.

5.2.2 Drought, Flooding and Sandstorm Risk

Screening conducted by the World Bank considered the various locations of the project interventions as well as the types of infrastructure to be constructed, including those that may be vulnerable to various climatic hazards. The screening confirmed that Somalia is highly prone to cyclical floods and droughts. Short- and long-term climate change and disaster risks that could potentially affect the sustainability of the project outputs and outcomes mainly include temperature increases, floods, and sandstorms. The temperature rise is not expected to have an impact on the performance of the facilities to be installed under the project, as the associated equipment is designed to operate under a wide temperature range. Sandstorms and dust accumulation might affect the infrastructure facilities (transmission lines, solar PV panels, and the BESS equipment). However, the mechanical and electrical design is robust enough to withstand the impacts.

Recommended mitigation measures:

- Site selection process for the solar PV panels and electricity distribution networks will try to avoid flood-prone areas wherever possible;
- Develop equipment and construction designs with steel and concrete poles with concrete foundations, to withstand flashfloods;
- For the equipment that maybe prone to dust, such as the control and BESS equipment, the engineering specifications will require that the equipment is installed in dust-proof cabins;
- O&M will include routine monitoring and, where required, cleaning of the solar panels to avoid dust cumulation.

Therefore, the risks will be addressed through proper design, siting, operation, and maintenance of the infrastructure assets.

5.2.3 Fire Hazards

The operation of Project equipment and facilities may lead to fire outbreaks including from poor handling of electricity systems, faulty electrical equipment, carelessness, etc. The project design should provide firefighting measures and control facilities. These include the following:

- Installation of an automatic fire alarm system for the equipment building and the main operations building;
- Provision of firefighting equipment and hydrant points;
- Display of fire evacuation procedures and emergency response plan at all buildings;

- Regular maintenance of fire electrical and first aid equipment; and
- Provision of sufficient emergency exit points and marked fire assembly points.

5.3 Decommissioning Phase Impacts

The Project infrastructure will have a lifespan of more than 30 years and demand for renewable energy supply will only grow during this period in Somalia. As such, two options are considered for decommissioning:

1. Components that have a shorter lifespan such as the inverters, batteries, power back up system and vehicles will be replaced, and the facilities and cable will continue to function; and
2. On the basis that the SPV power plants and transmission lines are no longer required they will be dismantled, and the subproject sites returned to their original state.

Should option 2 materialize then the decommissioning phase will be like the construction phase in terms of environmental and social impacts. Given that the lifespan is over 30 years, the exact practical measures at the time of decommissioning cannot be ascertained, therefore, the following general recommendation is made:

- Prepare an appropriate decommissioning plan at least one year in advance. The decommissioning plan should put into consideration advances in technology and development.

6 PROCEDURES TO ADDRESS ENVIRONMENTAL AND SOCIAL ISSUES

6.1 Overview

The purpose of this section is to provide recommendations on systematic integration of environmental and social considerations in the planning, approval, and implementation of ASCENT Somalia sub-projects. It includes all the actions to be undertaken to limit, reduce or eliminate the identified potential negative environmental and social risks and impacts.

It is anticipated that most *Component 1* and *Component 2* subprojects such as: (i) design, supply and installation of DRE with SPV and BESS in the capital city of Mogadishu and other major load centers in the FMS; and (ii) electricity Distribution Network Rehabilitation and Reinforcement of the mini grids serving the Mogadishu capital city area and other FMS major load centers, will be implemented through procured contractors but supervised by ESPs and MOEWR/PIU.

The E&S or environmental, health and safety (EHS) management process will involve the following steps and procedures:

6.2 Step 1 – Screening of Project Activities / Subprojects

The objectives of EHS screening are: (i) determine whether subproject activities are eligible for Project financing; (ii) to evaluate the EHS risks associated with the proposed activity/subproject; (iii) to determine the depth and breadth of Environmental Assessment (EA) required; and (iv) to recommend an appropriate choice of EA instrument(s) suitable for a given subproject. Criteria for classification include type, location, sensitivity, and scale of the subproject, as well as the nature and magnitude of its potential EHS risks and impacts. The initial screening for the selection of the subprojects will be conducted based on the exclusion criteria in the ESCP and summarized below:

a) Activities that may cause long term, permanent and/or irreversible impact on major natural habitat and are classified high risk according to WBG ESF;
b) Any technical assistance (TA) activities that will support preparation for the future construction of physical infrastructure or for the implementation of other activities with potentially significant physical impacts;
c) Activities that may involve significant permanent resettlement or large land acquisition or adverse impacts on cultural heritage;
d) Activities that may involve non agreement on land acquisition and resettlement procedures as per RAP;
e) Activities in high insecurity area/inaccessible area due to conflict and security risks as per project Security Management Plan;
f) Activities that contravene Somalia's obligations under its international agreements;
g) Activities that have a high probability of causing serious adverse effects to human health and/or the environment, e.g., construction of major civil structure covering ecologically sensitive areas, etc.;
h) Activities that may involve generating large volume of e-waste causing significant irreversible adverse impacts to human health and natural resources;
i) Activities that may affect lands or rights of indigenous people or other vulnerable minorities;
j) Activities that involve domestic waste and sludge (organic waste) power generation;

k) Activities by debarred[84] firms or ESPs or individuals;
l) Production or trade in weapons and munitions;
m) Production or activities involving harmful or exploitative forms of forced labor /harmful child labor; and
n) Activities that limit access for women and PWDs to project benefits (e.g., facilities with no ramps to, inaccessible websites, etc.).

Additionally, screening would be done purposely for identification of other instruments that need preparation such as, ESIA, ESMP, VMGP, RAP, etc.

The screening will be guided by an *environmental and social screening form (ESSF)*. PIU's environmental and social safeguards specialists will perform this process when reviewing and evaluating subprojects, and inform the Unit on E&S requirements, to enable implementation in an environmentally and socially acceptable manner.

6.2.1 Step 2: Assigning of Environmental Risk Classification

Assigning of appropriate E&S risk classification to a subproject activity shall be based on information provided in the E&S screening form *Annex I*. E&S specialists shall undertake the E&S screening process and assign the appropriate risk classification for the subproject(s) – Low, Moderate, Substantial or High risk. The classification should be assigned based on the criteria provided in World Bank ESF ESS1 Guidance Note.

6.2.2 Step 3: Preparation of Environment and Social Instruments

After analyzing the ESSF finding and having identified the right E&S risk rating and hence scope of the environmental assessment required, the PIU E&S specialists will make a recommendation to the PIU as to whether: (a) no environmental assessment will be required; or (b) an ESIA/ESMP will be carried out. It is recommended as follows:

- High, substantial and moderate risk rated subprojects must undergo an ESIA process with a report prepared and submitted to FGS authorities for licensing; and
- Low risk subprojects will be required to prepare an ESMP (an abridged version of ESIA report not to be submitted to authorities for licensing).

Other required safeguard instruments e.g., VMGP, RAP, EHSMP, GBVAP, etc., will also be prepared by qualified personnel as part of the ESIA. However, their preparation will be guided by Step 1, screening outcomes.

The PIU shall review and approve the recommendation of the E&S Specialist and submit the screening report to the Bank for review and clearance to conduct E&S assessment commensurate to the potential risks and impacts of the subproject. The PIU shall thereafter engage the services of ESIA consultants to develop the detailed assessment.

The PIU safeguards specialists' duties include backstopping the subprojects implementing teams to comply with the relevant national E&S requirements and the World Bank's ESF requirements. This includes reviewing, screening, approving, monitoring, and reporting on the progress of the subprojects. The ASCENT Project technical persons hired by the ministries (E&S Consultancy Firm) should guide the formulation and development of the subproject specific ESMPs for the subproject,

[84] Debarred by the World Bank and cross-debarment in accordance with the Agreement for Mutual Enforcement of Debarment Decisions dated 9 April 2010, which, as of July 1, 2011, has been made effective by the World Bank, Asian Development Bank, European Bank for Reconstruction and Development, Inter-American Development Bank, and African Development Bank.

and periodically (quarterly) review and improve capacity to manage safeguards compliance amongst local stakeholders.

Annex III and *Annex X* carries standard table of Contents for ESIA and ESMP respectively.

6.2.3 Step 4: Review and Approval

The E&S instruments prepared consistent with ESSs by external consultants for civil works Subprojects shall be reviewed by E&S Specialists at the PIU and submitted to the World Bank for clearance. To streamline the review/approval process, and depending on the number of subprojects, the World Bank could review a representative sample of instruments. Sampling techniques should be risk-based and adaptive so that, if sampling reviews identify any issues in the quality/compliance of instruments, it would be possible to increase sampling in the relevant areas/regions, type of projects, etc. Thereafter the World Bank and the PIU will reassess whether prior review is needed for activities exceeding a certain budget, or for certain types of activities.

For an ESIA, once World Bank has cleared, it will be submitted to the relevant authorities (MECC) for approval and licensing.

6.2.4 Step 5: Public Consultations and Disclosure

In carrying out the ESIA or ESMP, supporting evidence of comprehensive public consultation shall be required, such as signed minutes of consultation meetings, attendance lists and filled questionnaires. Public consultations shall take place during the E&S screening process and during the validation of the ESIA report. The results of public consultation shall be incorporated and or influence the design of mitigation and monitoring measures. ESIA study reports for the subproject shall be disclosed in-country by the MoEWR in formats that are accessible to all project stakeholders and on the World Bank external website. Public consultations should be conducted in a manner accessible to all project stakeholders and considering the guidance set out in the Project SEP and any other relevant guidance, such as the Technical Note: Public Consultations and Stakeholder Engagement in WB-supported operations when there are constraints on conducting public meetings due to e.g., COVID-19, etc. A notice of the meeting shall be communicated at least seven (7) days before the actual meeting date.

6.2.5 Step 6: Implementation Monitoring, Supervision and Reporting

During implementation, the PIU will conduct regular monitoring visits. Subproject contractors and ESPs will be responsible for implementing the mitigation measures in the E&S safeguard instruments with PIU oversight. The PIU will ensure that monitoring practices include the E&S risks identified in the ESMF and will monitor the implementation of E&S risk management mitigation plans as part of regular project monitoring.

At a minimum, the subproject reporting will include (i) the overall implementation of E&S safeguard instruments and measures, (ii) any E&S issues arising as a result of subproject activities and how these issues will be remedied or mitigated, including timelines, (iii) Occupational Health and Safety (OHS) performance (including incidents and accidents), (iv) community health and safety (CHS), (v) stakeholder engagement updates, in line with the SEP, (vi) public notification and communications, (vii) progress on the implementation and completion of subproject works, (viii) preparation and implementation of RAPs, where required, (ix) progress on LMP implementation, and (x) summary of grievances/feedback received, actions taken, and complaints closed out, in line with the SEP. Monitoring reports from all subprojects will be submitted to the PIU at the national level on a monthly basis, where they will be aggregated and submitted to the World Bank on a quarterly basis.

Throughout the Project implementation stage, the PIU will continue to provide training and awareness raising to relevant stakeholders, such as staff, selected contractors, ESPs, and communities, to support

the implementation of the E&S risk management and mitigation measures. An initial list of training needs is proposed in the Project ESCP.

Last, if the PIU becomes aware of a serious incident in connection with the project, which may have significant adverse effects on the environment, the affected communities, the public, or workers, it should notify the World Bank within 48 hours of becoming aware of such incident. A fatality is automatically classified as a serious incident, as are incidents of forced or child labor, abuses of community members by project workers (including gender-based violence incidents), violent community protests, or kidnappings. PIU should ensure that the incident report is in line with the Bank's Environmental and Social Incident Reporting Toolkit (ESIRT). The Bank should then process the incident report in accordance with the ESIRT.

6.2.5.1 Construction - Owner Engineer (OE)

An OE firm will be recruited to support the PIU in the detailed designs, procurement, and contract management, including fiduciary, environment, and social risk management aspects, and project monitoring and evaluation (M&E). It is expected that the OE shall also have a dedicated Environment, Social, Health, and Safety (ESHS) officer to monitor C-ESMP implementation, labour management and occupational health and safety risks.

6.2.5.2 Operations and Maintenance – ESPs

ESPs will be required to report on certain key performance targets, which will include, ESHS performance with reporting on respective activities on environmental, OHS and social performance and status of implementation of the environmental and social mitigation measures within the reporting period.

6.2.5.3 Department of Environmental Governance (DEG)

DEG in the newly created MECC is responsible for legal and policy directives for Environment and Climate Change. In this project, DEG will:

- Enforce compliance with environmental and climate mitigation measures;
- Play a vital role in raising awareness among the public about the Project's environmental and climate risks and impacts; and
- Collaborates with stakeholders in dispute resolution.

6.3 Bidding, Contracting and Verification of E&S Readiness for Initiation of Activities

The subproject specific E&S instruments such as ESIA/ESMP, SEA/SH or GBV Action Plan (GBVAP), SEP and/or RAP will be prepared in a manner acceptable to the Bank before final approval or call for bids of the respective activity/subproject. All subproject specific instruments must be included in bid documents and contracts, both for construction and operation, must be approved before issuing RFPs for the Contactors/ESPs and implemented before commencement of the subproject in accordance with the respective schedule for implementing the mitigation measures contained in the instruments throughout the Project implementation.

All Project activities for Component 1 and 2 will be executed through contractors and ESPs engaged by the PIU through agreed procurement process. However, the responsibility at operation stage shall be transferred to ESPs or a third-party agency.

Subproject specific RAPs shall be prepared acceptable to the Bank, disclosed prior to bidding and fully implemented before the commencement of civil works for the respective subproject and as per the schedule in the RAP. Project would require ensuring allocation of funds periodically in accordance with

a process and schedule agreed with the Bank as part of the RAP. Should involuntary resettlement /displacement occur in anticipation of construction or in any other project-financed activity before RAP preparation, relevant ESS5 requirements will be applied retroactively. If such requirements cannot be satisfied retroactively, the Bank will not support the subproject, or any other infrastructure development already carried out.

These assessments and plans shall be conducted by qualified consultants and implemented and/or supervised by the PIU. PIU through its OE shall ensure incorporation of the relevant aspects of the ESCP, including the relevant ESHS documents and/or plans, into the ESHS specifications of the procurement documents with contractors. Thereafter ensure that the contractors comply with the ESHS specifications of their respective contracts. ESSs sections to be included in the TORs, tender documents for suppliers and construction works contracts, such as the environmental and social clauses including Project E&S standards including labor, SEA/SH and security requirements, codes of conduct, coordination, reporting, monitoring, and GRM. All E&S instrument as applicable shall be translated to Somali for the contractors and disclosed.

MoEWR shall establish measures to ensure coordination for successful implementation of the Project; such as,

a) Assessment of the environmental and social risks and impacts associated with contracts of suppliers;
b) Ascertain that contractors have adequate human resource with knowledge and skills to perform their subproject tasks in accordance with the ESSs and the provisions of this ESCP;
c) Incorporate all relevant aspects of the ESCP, ESHS instruments and plans into tender documents;
d) Require contractors to implement the relevant aspects of the ESCP and the relevant ESHS instruments, plans and tools;
e) Monitor contractors, and their subcontractors' compliance with their commitments;
f) Require Contractor's to adopt the Project's GRM, to handle concerns and complaints from communities and other stakeholders as well as develop a separate worker's GRM according to ESS2 and a GBV/SEA/SH complaints management mechanism in accordance with the GBV/SEA/SH Action Plan;
g) Require contractors to impose ESHS obligations on their subcontractors to ensure compliance with this ESCP;
h) Ensure contractors adopt ESHS measures consistent with this ESCP;
i) Require that all Contractors have E&S Staff qualified to manage the E&S risks and impacts of the subproject;
j) Ensure that ESMP, GBV/SEA/SH code of conduct and all applicable plans and tools are included in service providers tender documents in accordance with national laws and the ESF; and
k) Require Contractors to prepare and get approved from PIU their E&S management Plan, adopt Project LMP and guideline SMP before commencement of activities on ground.

PIU should ensure all permits, consents and authorizations are obtained that are activity specific before commencement of the respective subproject activity. Thereafter, comply with terms of permits, consents, and authorizations throughout Project implementation.

ESPs involved in Project operation and maintenance shall sign a Memorandum of Understanding (MoU) with MOEWR in form and substance acceptable to the Association. The MoU shall include specific EHS requirements including ESP staffing, EHS management, training, reporting. As such, they will be required to:

1. Adopt and implement EHS measures defined in this ESMF as well as in the subproject E&S instruments; and
2. Enhance their capacity in accordance with the requirements set out in the EHS measures defined in the ESMF as well as in the subproject E&S instruments as well as respective Service Level Agreements/Concession Agreements which shall be prepared by PIU, according to the requirements of applicable ESSs.

6.4 Technical Assistance Activities

The PIU will ensure that the consultancies, studies (including feasibility studies, if applicable), capacity building, training, and any other technical assistance activities under the Project are carried out in accordance with Terms of Reference acceptable to the Bank, that are consistent with the ESSs.

7 INSTITUTIONAL ARRANGEMENTS FOR ESMF IMPLEMENTATION

7.1 Institutional Arrangements

7.1.1 Project Implementing Unit (PIU)

The project will rely on the existing institutional and implementation arrangements established under the ongoing SESRP. The project will be implemented by the PIU established at the MoEWR, in close coordination with the ESPs. The PIU staff shall have the responsibility to oversee the project implementation, perform the required technical functions, and serve as the focal points for communication with the World Bank, contractors, and consultants. An OE firm will be recruited to support the PIU in the detailed designs, procurement, and contract management, including fiduciary, environment, and social risk management aspects, and project monitoring and evaluation (M&E). The PIU organogram is presented in Figure 7-1.

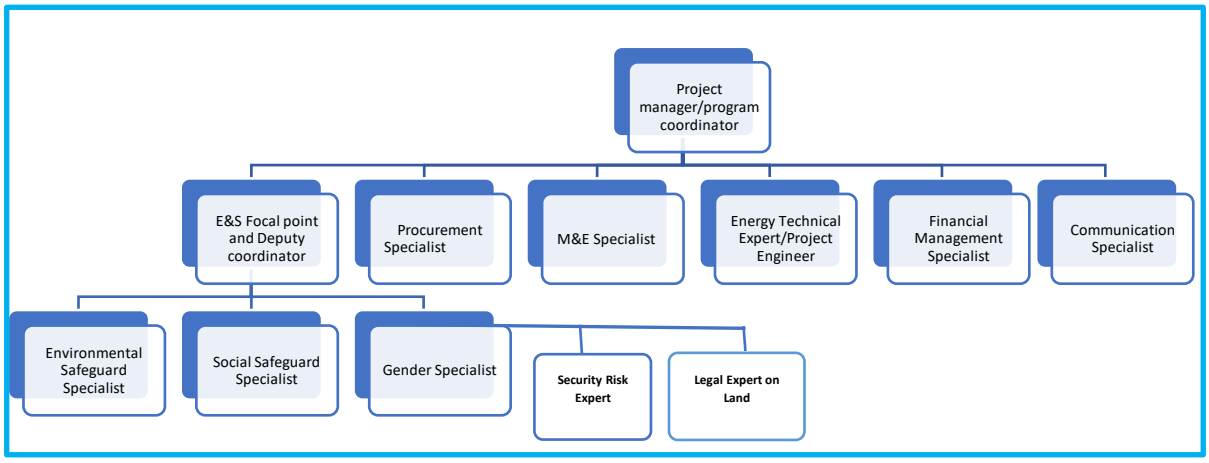

Figure 7-1 Project Implementation Unit organogram

A Project Implementation Manual (PIM) prepared for the ongoing SESRP will also be updated and used for the proposed project. An independent third-party monitoring and verification firm will be hired to provide independent audits (covering technical, fiduciary and safeguards among others) including assessment of E&S performance of contractors and ESPs against the subproject specific mitigation plans.

7.1.2 Project Steering Committee (PSC)

A PSC has been established at the MoEWR. The PSC is co-chaired by the Ministry of Energy and Ministry of Finance, with membership drawn from Ministry of Planning, Prime Minister's Office, and representatives from the private sector. The PSC will provide overall oversight of project implementation and policy guidance as well as take decisions on critical high-level implementation issues, such as approval of selection criteria and obligations of the beneficiary ESPs.

7.1.3 Energy Sector Working Group (ESWG)

An ESWG has been established at MoEWR. The ESWG is a forum aimed at fostering sector dialogue to support coordination and harmonization of processes, procedures, implementation, and monitoring of government programs, development partner support, and private sector initiatives. The ESWG is chaired by the Director of Energy with co-chairs from the private sector and development partners active in the energy sector. The ESWG is supported by a full-time secretariat. The ESWG terms of reference are detailed in the PIM.

7.1.4 Post Construction Specific Arrangements

The project activities under Component 1 and 2 of the project include: (a) installation of DRE Generation Infrastructure comprising of BESS, solar photovoltaic (Solar PV) systems and synchronizing equipment to the existing generation facilities in selected load centers; and (b) distribution network reinforcement in the selected load centers and will include supply of materials and equipment (such as poles, conductors, line accessories, distribution transformers and metering equipment) and Installation works of 33kV/11kV/415V/230V distribution lines. The project support will create new assets out of the investments in DRE generation facilities to be interconnected to or embedded in the existing ESPs' privately owned generation and distribution networks. After the construction is completed, the arrangements would be the following for ownership and operations.

7.1.4.1 ESP Owned Distribution Network

For the assets owned by the ESPs, the MoEWR will amend the ESP licenses to highlight that the ESPs will continue to own their existing network infrastructure to be rehabilitated and upgraded with government funds, but they will not receive any remuneration until the end of the respective lifetimes. In addition and subject to detailed technical assessments to establish the baseline and targets, the ESPs will be required to report on certain key performance targets, to reflect the benefits of the investments, which will include, (i) technical loss reductions; (ii) increased energy billed and commercial loss reductions; (iii) energy supplied to public institutions, (iv) number of new consumers connected and (v) ESHS performance with reporting on respective activities on environmental, OHS and social performance and status of implementation of the environmental and social mitigation measures within the reporting period.

7.1.4.2 DRE Generation Infrastructure

The Government and ESPs will enter a contractual arrangement that establishes either a public private partnership, concession agreement, or a service agreement. The contractual arrangements among others shall highlight that the (i) ESPs will have the oversight responsibility regarding the O&M and ensuring that the facilities meet the performance standards over their economic lifetime, and (ii) ESPs reduce their overall average generation tariffs.

7.2 Institutional Framework and Capacity

Institutional framework with regards to E&S safeguards is nascent in Somalia. The Department of Environmental Governance in the newly created MECC is responsible for legal and policy directives for Environment and Climate Change. It ensures public-private partnerships to enforce compliance with environmental and climate mitigation measures in infrastructure development. Additionally, it plays a vital role in raising awareness among the public about these initiatives and collaborates with stakeholders to establish the Environment Tribunal for dispute resolution.

The staff at the MECC and MOEWR level are reasonably educated, and the strength is there although lean. The MECC is staffed with administration, finance, planning, monitoring, and enforcement officers of which fewer than five (5) have qualifications related to environmental planning and management. SESRP's PIU has environmental and social specialists, gender specialist. This Project will recruit an EHS expert to complement the team.

Table 7-1 Additional Institutional/Implementation Arrangement for the ESMF

S/N	Institution	ESMF Roles and Responsibilities
1.	Director General (DG) responsible for Energy in the MoEWR	Shall have the overall responsibility of ensuring that the project responds to the PDO and is implemented in accordance with the agreed and applicable laws and procedures. Specifically, the DG shall: • Provide the overall guidance in the selection of the various subprojects in coordination with the FMS, and ESPs; • Provide overall implementation guidance and formally review progress and approve the annual work plans; • Ensure PIU is adequately staffed, inclusive of technical and fiduciary expertise, to ensure smooth implementation of the Project; • Provide necessary oversight and approvals as maybe required; and • Seek approvals from the PSC as maybe required.
2.	Contractors' Health, Safety and Environment (HSE) Officer	The HSE Officer will report directly to the contractor's Project Manager and ensure full coordination with the Construction Engineer, Site Engineers and other project team members. In general, the main duties of the HSE Officer shall include ensuring compliance with OHS, social and environmental laws, procedures, guidelines and specifications and to provide advice on measures needed to minimize hazards or unhealthy situations in construction sites. The HSE Officer shall establish a safe workplace according to Bank ESSs and Somalia legal standards and foster a culture of attention to health, safety, social and environment management in all work sites under the subproject throughout the construction phase. The HSE Officer shall focus primarily on prevention of accidents and is expected to be detail-oriented and ready to act in emergencies.
3.	ESPs	Adopt and implement ESHS measures defined in this ESMF as well as in the subproject E&S instruments; and Enhance their capacity in accordance with the requirements set out in the EHS measures defined in this ESMF as well as in the subproject E&S instruments as well as respective Service Level Agreements/Concession Agreements which shall be prepared by PIU, according to the requirements of applicable ESSs.
4.	Owner Engineer	Supervisory Consultants will supervise the activities of Contractors engaged in implementing the main Project activities. With regards to E&S performance, their responsibilities will include monitoring of the implementation of mitigation measures contained in the Contract Agreement of Contractors and in the implementation of the C-ESMP. Supervise the contractors' obligation regarding the ESHS clauses included in tender documents and in respective contracts.
5.	Independent Consultants	Independent Consultant(s) will be procured by the PIU to undertake required E&S assessments; and likewise develop the requisite reports.

S/N	Institution	ESMF Roles and Responsibilities
		They will liaise with the Safeguards Specialists at the PIU, HSE Managers and the E&S Desk Officers at the respective project District.
6.	Civil Society Organizations (CSOs)	CSOs will assist the PIU in strategizing and developing practicable and sustainable community driven approaches for project implementation. This may include: (i) Dialogue – voicing their demands locally during stakeholder engagement meetings; (ii) Advocacy – requesting quality in Subprojects; (iii) Implementation – becoming a key ASCENT Project partner on e.g., SEA/SH/GBV issues, resettlement, etc.; (iv) Watchdog – monitoring and tracking Project results; and (v) Capacity-building and awareness raising about the Project and on issues such as SEA/SH/GBV.
7.	Other Interested Parties	Depending on how ASCENT Somalia Project components implementation progresses, other interested parties may be identified, and may be essential in the provision of guidance, technical, regulatory or implementation functions associated with this ESMF and other levels of E&S management and monitoring.
8.	The World Bank	The World Bank has overall responsibility to ensure that ESSs are complied with. In addition, the Bank will be responsible for the final review and clearance of E&S assessment instruments; as well as reviews and the giving of a "no objection" to the Terms of Reference (TORs) for safeguard instruments (ESIAs, ESMPs, ESAPs, etc.). Conduct regular supervision missions to check on the performance of ASCENT Project and assess its compliance to agreed covenants; and Recommend measures for improving the performance.

7.3 Capacity Development for Environmental and Social Management and Monitoring

There is low capacity in the implementing agency to manage and monitor environmental risks as shown by an assessment of the key implementing agencies MoEWR, FGS and ESPs. Noted are the poor safety records among the ESPs, absence of regulations and standards codes of practice and mechanism to vet and enforce electricity services quality, health and safety standards. There is very limited capacity in terms of staffing, financial resources and skills on ESF requirements.

Capacity enhancement of the ESSs skills and competencies of the PIU has been built into the project design under component 3, where an incremental E&S capacity building is envisioned. This component will finance execution, design, and supervision consultants to assist the PIU and associated agencies in project implementation, sector management and coordination. This component will also support key functions of the PIU required for project implementation. The component will also include technical assistance to enhance sector fiduciary arrangements as well as setting up an E&S risk & impact management system (ESMS), enhancing the E&S capacity through staffing and training on the ESF requirements based on a robust capacity building plan. Again, the component will finance the OE consultancy services to support the PIU regarding the project design, procurement and contracts' management, including fiduciary and E&S aspects covering responsibility of preparing E&S documents along with the sub project specific designs. A dedicated E&S Firm will support the PIU in the areas of health, safety, labor management, land, resettlement, community engagement and security issues. In

addition, the component will support other technical assessment and capacity building activities for the successful implementation of the project. This will include, for instance, trainings for the MOEWR for the management and operations of the solar PV systems beyond the lifetime of the project.

On the labour laws and OHS institutional capacity, Somalia has ratified ILO conventions, and the provisional constitution provides legal framework for labor issues including OHS. However, OHS and labor Legislation on occupational safety and health (OSH) in Somalia is limited and the private Sector acts as the main reference on OSH issues where ESPs are seen to have some nascent capability. Generally occupational health and safety management regulation and its implementation capacity as well as the safety culture in the relevant authorities, in the private sector and in the country as whole are very weak.

A project level capacity building support on E&S including setting up an ESMS, enhancing the E&S capacity through staffing and training on the ESF requirements based on a robust capacity building plan to be implemented. This will be complimented by institutional strengthening and capacity assessment in participating member states to roll out capacity building Plan accordingly. Some of the proposed training topics are listed in Table 7-2, which will help building the capacity for smooth implementation of the Project.

7.4 Results Monitoring and Evaluation Arrangements

The Project monitoring and evaluation (M&E) system incorporates the PDO and intermediate indicators that will be used to track both project implementation progress and attainment of the intended objectives. The M&E also includes several sex-disaggregated results indicators to monitor and assess both progress in implementing gender-related activities, including narrowing of identified gender disparities, and project benefits for women and men. Monitoring of results will be a key responsibility of the PIU. The PIU will be responsible for collecting, verifying, and collating information, integrating the M&E aspects in the project's both quarterly and annual progress reports, mid-term review and the CRR.

7.5 ASCENT Environmental and Social Risk and Impacts Implementation Budget

This sub-section presents a consolidated budget estimate for the implementation of overall ASCENT ESMF. The budget components include implementing agency safeguards capacity development activities; a training program for all relevant entities to implement their E&S responsibilities; allowances for the preparation of pre appraisal phase with respective TORs, SEP and ESCP, pre-effectiveness condition framework tools. Resettlement Policy Framework, Security Management Framework (SMF), Updated SEP, LMP, and GBV Action, subproject ESIAs, ESMPs, RAPs, etc.; and annual reviews, below, presents a provisional estimate of the budget needed to implement the ESMF. Table 7-3 below gives the cost estimate (budget) of implementing this ESMF including the preparation of subprojects, monitoring and supervision and capacity building only.

Table 7-2 Capacity Building and Training Plan

Objectives	Issues for engagement	Method of engagement	Stakeholders/Target population and area	Responsible person	Time frame
ESMF	PIU training on the ESMF and its implementation, Supervision/ monitoring EHS performance in subprojects, World Bank Safeguards Awareness, Training on ESSs, Citizen Engagement (Events and workshops for community awareness in the Project areas).	Training	PIU Environmental specialist, consultants who will prepare ESMPs, and OE	PIU	Prior to commencement of activities
ESIAs, ESMPs, ESAPs	Training of all Technical Leads in the Environment and Social Safeguards Instruments, World Bank Safeguards Awareness and Training of Environmental and Social Standards	Training	Technical Leads / relevant staff responsible for the implementation of E&S instruments. Hired Ministry ESIA Consultants	PIU	Prior to commencement of activities
GBV Action Plan	Training of all Technical Leads in the GBV Action Plan	Training	Technical Leads / relevant staff responsible for the implementation of E&S instruments.	PIU	Prior to commencement of activities
GBV Procedures for Reporting and Prevention	Training and monitoring during project implementation to prevent GBV and support reporting of cases	Training, monitoring,	Community members / vulnerable groups	(Lead of GBV sub cluster)	Prior to commencement of activities
Mitigate impact of workers on local communities (LMP & GBV Action Plan)	Implement training of contracted Project Workers designed to heighten awareness of risks and to mitigate impacts on local communities and on their rights	Training	Contracted workers in Project locations	All Technical leads	Prior to deployment

Objectives	Issues for engagement	Method of engagement	Stakeholders/Target population and area	Responsible person	Time frame
GBV	Response to domestic issues in a non-gender biased manner.	Training	Local leaders (as detailed in the GBV Action Plan)	PIU and Technical Leads	Prior to commencement of activities
Project GRM	Consultation on different GRM mechanisms in place, development of overall GRM, and Training with all Technical Leads Set up GRM and functioning in the Energy sector	Consultations and Training	Technical Leads / relevant staff responsible for the implementation of E&S instruments.	PIU	Prior to commencement of activities
Health, Safety & Environment (HSE) standards	HSE Standards for workers, Monitoring Occupational Health and Safety (OHS) Leadership, Management Safety performance assessment Hazard Analysis and Control Hazard Communication. Program Effective Accident Investigation, Conducting Health and Safety Audits Job Hazard Analysis, Occupational Health Risk Assessment Work Stress Risk, Assessment Electrical Safety Fire Safety, Fall Protection Plan and Fleet Safety Management	Training	Contracted workers in Project locations	Technical leads	Prior to deployment
Create awareness of LMP and HSE Standards for workers	LMP and HSE Standards	Training	Contracted workers in Project locations	Technical leads	Prior to deployment

Objectives	Issues for engagement	Method of engagement	Stakeholders/Target population and area	Responsible person	Time frame
Support Emergency Response Measures	Communication of Emergency Response Measure (ERM) to communities	Information, training	Communities in Project areas	PIU	Prior to commencement of activities
Community Health & Safety	Road Safety Awareness	Training	Communities in Project areas, with particular focus on vulnerable communities	PIU and Technical Leads	Prior to commencement of activities
Community Health & Safety	Communicable diseases	Training	Communities in Project areas	PIU and technical leads	Prior to commencement of activities
Community Health & Safety	GBV, as per Action Plan	Training and awareness raising	All Communities in Project areas	PIU and technical leads	Prior to commencement of activities
GRM	Project GRM as described in the SEP	Information disclosure and training	Communities in Project areas, with particular focus on vulnerable communities	PIU and Technical Leads	Prior to commencement of activities

Table 7-3 Budget for Preparation of Subprojects, Monitoring and Supervision, and Capacity Building

Item	Cost Areas
Cost of specialists in PIU **Security Adviser, GBV Adviser, Land Legal Expert, EHS Specialist, Social Specialist, etc.**	Typical salary multiplied with entire project duration per specialist.
E&S firm (continue until OE is on board)	Shift from SESRP to ASCENT after effectiveness. Provide input into TOR for OE, this will be decided by TTL, subject to retrofit financing allowed.
OE Preparation of E&S Subproject Specific Instruments	Contract component 1 and 2 -preparation of one ESIA (for other instruments (e.g., RAP, etc.) Component 3 – technical assistance for feasibility studies. _to be multiplied by the number of contracts and design reports /or bidding document. Supervision and reporting. Cost of E&S monthly/quarterly reports preparation. Can be joint with other activities. Includes cost of travel consultation quarterly report for all components
Security management firm	Audits of SMP (after every 6 months), training of PIU and contractors (every six months).
Component 3	USD $2M to be set aside for E&S capacity building.
Third party audit _IVA	Two audits in one year _after every 6 months after works start Duration 3-5 years. E&S part of IVA
Subproject Implementation cost _ SMP, RAP and ESMP	RAP will be preconstruction _TBD (6% of civil works cost) GBVAP and SEP implementation _0.5% of civil works cost. Part of contractor cost. Construction ESMP and SMP TBD (3-5% of civil works cost)
GRM_ multiple levels _Committee set up, GRM meeting	Monthly per locations (FMS and FGS at the minimum) FMS level FGS. Cost for centralized system, toll free number

NOTE: The above costs will be funded by the ASCENT budget. It is anticipated that a minimum of 10% of the total project will be devoted to environment and social mitigation measures.

8 STAKEHOLDER ENGAGEMENT / CONSULTATION AND DISCLOSURE

8.1 Overview

Stakeholder engagement is an inclusive process conducted throughout the project life cycle. When properly designed and implemented, it supports the development of strong, constructive and responsive relationships that are important for successful management of a project's E&S risks. For this reason, stakeholders' engagement must be started early in the project cycle because it guarantees the 'social license to operate' by signaling to communities and other local stakeholders that their views and well-being are considered important and can be incorporated into the project design.

In this section, consultations with key stakeholders with regards ASCENT Project, and the implementation of project components. A stakeholder engagement process was developed to identify and map all Project stakeholders and propose measures on how they can be engaged during project implementation. The stakeholder engagement process is further detailed in the stand-alone SEP. The objectives focused on obtaining the views of relevant stakeholders on subject matter relating to proposed activities.

8.2 Approach to Stakeholder Engagement

As earlier indicated, ASCENT Somalia Project (P181341) was initially designed as Component 2 of the SESRP (P173088). As such initial stakeholder consultations were done during the preparation of SESRP in 2021. Nevertheless, more stakeholder consultations have been conducted with key stakeholders in September and October 2023 for the ASCENT Project as a regional project.

The objectives of the ESMF process engagement were to:

- To meet/communicate with key stakeholders and introduce them to the Project and ESMF process;
- To discuss the Project with the stakeholders including identified impacts and the plans in place to manage them;
- To obtain stakeholders' view on the Project;
- To obtain stakeholders' concerns on the Project;
- To understand stakeholders' expectation from the Project; and
- To notify stakeholders of the next steps of the Project development.

8.3 Outcome of Stakeholder Consultation

8.3.1 ASCENT Somalia Project Consultation Outcomes

As part of the broader stakeholder engagement process for the proposed ASCENT Project, the MOEWR held discussions with significant government bodies and agencies at both federal and FMS levels and other key stakeholders. The consultations took place on between September 30 and October 3, 2023.

In September 2023, a meeting was convened at the World Bank Group office in Kenya involving the MoEWR, the World Bank, and ESPs. The purpose of this gathering was to discuss various aspects of a project, including its components and implementation arrangements. These discussions primarily revolved around aligning the project with previous activities, addressing environmental and social safeguards, procurement, financing, and incorporating gender considerations.

8.3.2 SESRP Project Consultation Outcomes

These initial consultations were held in May 22–26, 2021. Additional stakeholder engagement was held during June 15-30, 2021. Outcomes from these consultations have been documented and are presented in the next sections.

However, it is worth noting that stakeholder consultation is a continuous process built into project design and will continue throughout project implementation. Subsequent E&S assessment including for this ASCENT Project will ensure that stakeholder concerns are considered. As part of the disclosure plan, the ESMF have been released publicly. The ESMF report would also be available in these and WBG external website within which it could be possible to collect feedback, comments, and suggestion from interested entities. Copies of these documents and a brief of the reports should be made available to communities and interested parties on accessible locations in English and/or if possible, in local languages.

Stakeholder consultation were done with, among other stakeholders, government institutions which included MOEWR, DECC, Puntland Ministry of Public Works, Ministry of Environment Puntland, Puntland Ministry of Labour and social affairs, South West Directorate of the Environment, South West - Ministry of Energy and Water Resource, South West – Ministry of labour and social affairs, South West – Ministry of Public Works, Jubaland – Ministry of Energy, Jubaland Ministry of Environment and Jubaland Ministry of Public Works. Consultations were also done with the ESPs including Blue Sky, WESCO, NEPCO, Baidoa Electric Company, Solar chain technology, Safa Energy, Tamarso, Solar Chain Tech, Dalsan Power and SunMax. The leaders of the IDPs at several camps were also consulted as one of the vulnerable groups. The project draft SEP will be updated continuously to ensure it provides a clear roadmap for an inclusive stakeholder's consultations throughout the life of the project. Key issues identified during consultation included:

- the need to prepare ESMF using up to date, adequate and appropriate baseline data by thorough review of the sector specific regulatory framework and good international industry practices;
- identification of the roles and responsibilities of the key players in project implementation including the private sector actor and civil society; and
- assessment of potential environment and social risks and impacts associated with the project including community health and safety concerns, labour influx, gender based violence, sexual harassment, Land Acquisition, Restrictions on Land Use and Involuntary Resettlement, inclusion of the vulnerable and disadvantaged members of society in the project's activities and access to project opportunities and occupational safety and health, HIV/AIDs, communicable diseases and also COVID 19 through an all-inclusive consultative process of stakeholders with a gender balance.

It was noted that there are weak institutional mechanisms for handling environment, social, occupational health, and safety aspects of the project. However, the government has taken initiative to institute the ESS requirements by ensuring the PIU have fully fledged safeguards team. Waste management systems in the country is very weak (waste collection, storage, transportation, and disposal) and usually local governments especially the municipalities face the greatest burden with very limited support from the central administrations.

The support of the DECC is required in all the environmental related safeguards during all the project phases in managing the project aspects especially the hazardous materials and waste management, habitat destruction and alteration, health, and safety issues in relation to the electric and magnetic

fields, implementation, and enforcement of the environmental and social mitigation measures of the project related safeguards.

The local government in the respective federal states have a major role and responsibilities of land take from the citizen or institution for development purposes. However, the local governments work hand in hand with line ministry of Land Government particularly Land Department to oversee and observe how the process of land take relates with legislative provisions. This ESMF will be at disclosed on the website of MoEWR and forwarded to the Bank for disclosure at the Bank's external website.

Annex II–A carries detailed outcomes from the ASCENT Somalia Project and SESRP.

9 GRIEVANCE REDRESS MECHANISM (GRM)

9.1 Overview

A systematic and functional GRM will be adopted to address the concerns of aggrieved parties (e.g., Project Affected Persons (PAPs), vulnerable groups including women, IDPs, gender-sensitive issues, workplace concerns, community concerns, etc.). Such a mechanism will detail the processes involved in registering grievances at no cost to the aggrieved parties as mentioned above.

A grievance could mean a simple query or inquiry, concern, issue, or formal complaint that bothers the lives of aggrieved parties. The layers of the GRM will be well publicized as a way of educating PAPs, Project workers and other residents on the process. Alternative means of access, however, will be the public information centers that will be established at various project sites. At the same time, information about where complaints can be lodged should be provided by the PIU and or the consultant and will be published on public notice boards, communicated verbally at all public meetings, and outreach sessions so that there is a wider public understanding and acceptance of the mechanisms proposed for grievance redress.

9.2 GRM Core Objective

The primary purpose of the GRM is to hear the complaints or address the concerns of aggrieved parties to a fair extent and on time. Dissatisfaction can cause an aggrieved party to act beyond expectations, which would culminate in some unforeseen repercussions that would negatively affect Project implementation. For this reason, the GRM will strive to resolve grievances at the lowest level possible, but with opportunities for the aggrieved parties to escalate their complaint to higher tiers of the Project's GRM should they be dissatisfied by the resolution of the project's lower GRM tiers. The GRM will be time bound at each tier and will include information on the opportunity access external GRM channels including arbitration/mediation, the country's legal redress systems and the World Bank's Grievance Redress Service (GRS) and the Inspection Panel, if the complainant is not satisfied with the Project level GRM. Consequently, the GRM to be proposed during the preparation of the subproject ESIA or ESMP shall seek to achieve the following objectives:

- Encourage registration, acknowledgment, and recording of all concerns or issues raised by aggrieved;
- Identify the frequencies of issues raised: for instance, unpaid compensation, inadequate compensation, disregard for local ritual ceremonies, land acquisition, workplace concerns and many more;
- Ensure that complaints are properly registered, tracked and documented, with due regard for confidentiality;
- Address the composition of a committee that would handle all grievances;
- Inform people of the public information centre establishment and access;
- Establish procedures for the GRM to enhance easy access, transparency and accountability, and tackle escalation of grievances beyond expectations;
- Manage the concerns raised by aggrieved parties to achieve a win-win situation within a reasonable time frame that would comply with national and international best practices; and
- Record all resolutions agreed upon by all parties involved and ensure that aggrieved persons are satisfied with every outcome of remedial resolution to foster harmony in subprojects.

9.3 Potential Grievance Sources

Since key project activities will be in dense urban settings, parties have livelihoods that depend on the land, the loss of land is thought to also result in the loss of their livelihoods. In a similar vein, risks of forced displacement of IDPs by the government. The forced displacement of IDPs, who fled from drought and violence and have settled on idle private or public lands in Somali cities, is rampant, especially in urban centers such as Mogadishu, Hargeisa and Garowe, where land is scarce and land values are high.

Another potential source of grievance may be corruption or unfair or unequal distribution of Project benefits. Similarly, delay of compensation due to PAPs could create considerable stress and inconvenience and lead PAPs to incur further costs; undervalue of assets, land tenure issues where two or more parties claim ownership, resettlement issues where the proposed new site is "not as good" as the former land. Other sources of grievance may include work-related concerns such as terms of the employment, rights related to hours of work, wages, overtime, compensation and benefits injuries, deaths, disability, disease and OHS hazards to project workers.

Grievances may also be received during construction activities in terms of GBV/SEA/SH caused to the nearby community or regarding the behavior of contracted workers.

9.4 Local GRMs and GRM Institutional Framework for the Project

The project GRM will build on what was created for the SESRP (see separate SEP). A specific consultation session on the E&S Risk Assessment and Action Plan and GRM will be set up to complete the SEP. A Feedback and Grievance Redress System that will have a various contact channel is envisioned for ASCENT. Noting the indirect benefit of component 1 and 2 to citizens/households due to increased generation of renewable energy and expansion of the existing distribution network, the GRM will include mechanisms for citizen or households to be able to register their feedback or complaint towards the performance of the ESPs, e.g., their existing supply situation, billings, etc.

The GRM must be in place by the time RAPs and ESIAs are prepared, until completion of all construction activities and beyond until the defect liability period ends. A separate mechanism is developed to address worker grievances. Grievances related to the actions of contractors are resolved by the contractors.

The GRM will be a project wide GRM that will also be available for use by PAPs. The GRM will work interconnectedly with local level actors at the FMS, community, District, and municipal levels. This is to ensure that all measures are taken to address the grievance. The GRM will be housed at MoEWR and provides access to ASCENT stakeholders and contractors to register complaints received at subproject level or the field. At the municipality/local government level, a Grievance Redress Committee (GRC) shall be established and composed of local leaders, municipal representatives, the project, CSOs, legal aid and law enforcement agencies. The GRC will be headed through a consensual appointment done with affected communities, and steps will be taken to ensure that all grievances are properly documented and transferred to the digital platform for tracking of resolution. PAPs may also make complaints directly to the project wide GRM through the digital platform either by calling, sending text, WhatsApp, etc. The project will identify a Non-governmental Organization (NGO) GBV service provider to setting up and ethically manage SEA/SH complaints. Detailed structure of the GRM for the project workers will be finalized and described in the LMP and PIM.

The GRM implementation process will involve the following steps:

- The safeguards specialists at respective MoEWR will man the GRM platform at the Project level to ensure timely sorting and escalation of grievances to resolving officer;

- Assign a focal person(s) from OE, Contractors and local GRC for grievance uptake and reporting;
- Train assigned focal person(s) to receive and log complaints in the GRM Database;
- Constitute GRM Committee to resolve grievances;
- Screen, classify and refer complaints to appropriate unit for redress;
- Monitor, track and evaluate the process and results; and
- Provide feedback to complainant within two weeks (14 days), and an opportunity for appeal if not satisfied with resolution approach.

Overall, the process for grievances reporting by aggrieved parties include following:

- Lodge complaints through phone call, text message, WhatsApp, in-person directly to the digital platform or the GRC at the local levels;
- Acknowledgment and registration;
- Investigation, verification, and determination of resolution options;
- Provision of feedback to the stakeholder regarding resolution and progress towards resolution and complainant satisfied;
- Final resolution tracking and documenting actions and outcomes in the database and with the stakeholder;
- Where an aggrieved party is fully satisfied with the resolution process, the matter will be formally closed; and
- If the complainant is not satisfied with the mediation provided using the project GRM, a referral should be made to the court of Law. ***This stage of the process should be avoided, though but it can be utilized to get a final review of the matter being reported***.

10 REFERENCES

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e) The Somali Penal Code of 1962.
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h) The Somalia National Environmental Policy 2015.
i) The Somalia National Gender Policy 2016.
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n) World Bank Group (2020) Project Concept Note for Somalia Electricity Sector Recovery Project, September 2020.
o) World Bank Group (2020) Technical Note: Public Consultations and Stakeholder Engagement in WB-supported operations when there are constraints on conducting public meetings, issued on March 20, 2020.
p) World Bank Group (2021) Draft Stakeholder Engagement Plan for Somalia Electricity Sector Recovery Project, May 18, 2021.
q) World Bank Group Environmental, Health, and Safety Guidelines for Electric Power Transmission and Distribution, 2013.
r) World Bank Group. Environment and Social Framework Safeguards interim note: COVID-19 considerations in construction/civil works projects, 2020.
s) World Bank Group. Environmental, Health, and Safety Guidelines. General EHS Guidelines, April 30th, 2007.
t) World Bank Group. Good Practice Note – Assessing and Managing the Risks and Impacts of the Use of Security Personnel, 2018.

ANNEXES

Annex I: Environmental and Social Screening Checklist/Form

This form will be filled during identification of project activities by the Environment and Social Specialists in Project Implementation Unit (PIU) to screen for the potential environmental and social risks and impacts of a proposed subproject. It will help the PIU in: (i) identifying the relevant Environmental and Social Standards (ESS); (ii) establishing an appropriate environmental and social risk rating for these subprojects; and (iii) specifying the type of environmental and social assessment required, including specific instruments/plans. The completed forms will be signed, and record kept.

This form will allow the PIU to form an initial view of the potential environmental and social risks and impacts of a subproject**. It is not a substitute for project-specific environmental and social assessments or specific mitigation plans.**

Subproject Name	
Subproject Location	
Subproject Proponent	
Estimated Investment	
Start/Completion Date	

Questions	**Answer**		**If yes, relevant World Bank ESS**	**If yes, relevant documents to be developed**
	Yes	**No**		
Does the subproject involve civil works including new construction, expansion, upgrading or rehabilitation of existing infrastructures?			ESS1	ESIA, EHS plan
Does the subproject have existing environmental liabilities (e.g., PCBs transformers, non ESSs-compliant facilities, etc.)			ESS1	ESIA, EHS Audit, EHS plan
Does the subproject involve long-term, permanent and/or irreversible adverse impacts (e.g., loss of major natural habitat)?	*		ESS1	Excluded from Project financing
Does the subproject involve significant adverse social impacts and may give rise to significant social conflict?	*		ESS1	Excluded from Project financing
Does the subproject involve land acquisition and/or restrictions on land use?			ESS5	ESIA, RAP/ARAP
Will the activities affect lands or rights of VMGs or other vulnerable minorities like IDPs?	*		ESS5	Excluded from Project financing

Questions	Answer		If yes, relevant World Bank ESS	If yes, relevant documents to be developed
	Yes	No		
Does the sub-project involve permanent resettlement or land acquisition?			ESS5	ESIA, RAP
Are there land claim or conflict for the proposed project site?	*		ESS5	Excluded from Project financing
Is the subproject associated with generation of the potentially hazardous wastes?			ESS2, ESS3, ESS6	ESIA, EHS plan
Is there a sound regulatory framework and institutional capacity in place for the management and control of waste generated by project activities?			ESS1	ESIA/ESMP
Does the subproject have an adequate system in place (capacity, processes and management) to address waste?				EHS plan & Waste Management Plans
Does the subproject involve recruitment of workers including direct, contracted, primary supply workers?			ESS2	ESIA/ESMP, EHS plan
Does the subproject have appropriate OSH procedures in place, and an adequate supply of PPE (where necessary)?			ESS2	ESMP, EHS plan
Does the subproject have a GRM in place, to which all workers have access, designed to respond quickly and effectively?			ESS2	ESIA/ESMP, EHS plan
Does the subproject involve use of security or military personnel during construction and/or operation activities?			ESS4	ESIA, EHS plan
Will the activities have high probability of causing serious adverse effects to human health and/or the environment?	*		ESS4	Excluded from Project financing
Is the subproject located within or in the vicinity of any ecologically sensitive areas?			ESS6	ESIA
Are there any indigenous groups (meeting specified ESS7 criteria) present in the subproject area and are they likely to be affected by the proposed subproject negatively or positively?			ESS7	ESIA, EHS plan
Does the subproject require Free Prior Informed Consent (FPIC);	*		ESS7	Excluded from financing.

Questions	Answer		If yes, relevant World Bank ESS	If yes, relevant documents to be developed
	Yes	No		
Is the subproject located within or in the vicinity of any known cultural heritage sites?			ESS8	ESIA
Does the project area present considerable Gender-Based Violence (GBV) and Sexual Exploitation and Abuse (SEA) risk?			ESS1	ESIA

∗ The exclusion list of the subprojects. If any of these parameters are "Yes", the sub-project is excluded from financing under the project.

Conclusions:

1. Proposed project is eligible for financing under the project criteria.

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2. Proposed Environmental and Social Risk Ratings (High, Substantial, Moderate or Low). Provide Justifications.

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3. Proposed E&S Management Plans/ Instruments.

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Certification

Reviewed and approved by:			
Environment Specialist Name:		Social Specialist Name:	
Date	Signature	Date	Signature

ANNEX I-B: Subproject Description

Form 1-A: Subproject Description: Solar Photovoltaic (SPV) Power Plant (to be completed by PIU)

1.	Name of SPV Power Plant	
2.	Location of SPV Power Plant	
3.	ASCENT Project Office	
4.	Location/layout of proposed SPV Power Plant (attach location map/ layout map)	
5.	Ownership of Subproject Land	
	(a) Government owned (acre)	
	(b) Private land (need acquisition) (acre)	
	(c) Community owned land	
6.	Brief description of proposed SPV Power Plant site:	
	(Indicate the information on present land use, Highest Flood Level (HFL) for last 30 years and Important Environmental Features (IEFs)[85] adjacent to the site)	
7.	Brief information of environment within subproject influence area:	
	(e.g., Human settlement, tribal people, water body, flora, fauna, historical or culturally important sites, traffic, etc.)	
8.	Key activities of subproject	
9.	Estimated cost of subproject	
10.	Schedule of implementation	
	(a) Subproject duration (months) :	
	(b) Tentative start date	
	(c) Tentative completion date	
11.	Potential benefit from subproject	

[85] Such as educational institutions, health care, pond, canal, river, utility infrastructure, park, green area, etc.

	(Including estimated number of people benefited)	
	Prepared by: (Name, designation, mobile number, signature, date)	
	Reviewed by: (Name, designation, mobile number, signature, date)	

Annex II–A: Detailed Outcomes from Stakeholder Consultations

Table 0-1 ASCENT Somalia Project – October 1-3 Consultation Outcomes

Topic	Discussion Themes	Issues and Concerns	Recommendations
Land acquisition, resettlement and compensation	The overall role of local governments in land acquisition, resettlement and compensation. The role and functions of the district land authorities on the existing land tenure system, registry and land dispute resolutions. How much can the municipality support in terms of public land acquisition especially the alternative lands and land acquisition for public use? What kind of support they anticipate from the project? The role and contribution of the municipalities in project security related services.	Hassan Abdullahi with the Benadir Regional Administration (BRA) discussed land-related issues and compensation in Mogadishu, Benadir Region. The administration manages the land registry and intervenes in land ownership disputes, often referred to by the courts. The BRA's Land and Public Works Department handles land-related matters, including valuations for land disputes or acquisitions. They face challenges acquiring privately-owned land for public use due to limited resources. Compensations for land eviction and resettlement are challenging due to resource and institutional constraints. The Somali government and World Bank projects have initiated discussions on social and environmental protection. Land disputes are prevalent, with over 75% of court cases related to land disputes. This is mainly caused by complications in land registry documentation and limited supporting documents lead to lengthy resolutions. To address land disputes, the BRA has a land dispute resolution committee, but their decisions can be appealed in formal courts. Historical competition over land, pasture, and water contributes to tensions between communities. In Puntland, land values and commercialization result in disputes over land ownership. Garowe Municipality	• The formulation of site-specific Resettlement Action Plans (RAPs) will be informed by the Resettlement Policy Framework (RPF) once the specific project area is identified. • In cases where private landowners offer land for the project, a process for land donation agreements should be put in place. • Municipalities may expect the project to offer support in building capacity and providing technical assistance for grievance mechanisms and resolving disputes. • Municipal authorities will play a significant role in carrying out project activities, while security arrangements will be managed at a higher level.

Topic	Discussion Themes	Issues and Concerns	Recommendations
		provides land for development projects but faces challenges in effectively compensating affected parties, especially street vendors. Land disputes often lead to clan and community confrontations. Puntland has a "Land Dispute Tribunal" and ad-hoc committees to resolve disputes. Garowe implemented automated land registration and deeds records in 2019 using Geo-referenced coordinates to address land ownership disputes and double registration issues.	
Labor and Work and Grievance Redress Mechanism	What are the existing mechanisms and who is responsible for solving labour related issues? The role of the Ministry of Labour Labour inspections at field levels e.g., forced labour. The kind of support the Ministry provides to the workers e.g., occupational health and safety. Child labour and labour influx. The existing mechanisms for social protection and the	Hamza Ahmed, working with the Federal Ministry of Labor and Social Affairs' Department of Legal and Labor Relations, discussed labor issues. He acknowledged achievements like labor policies and strategic plans but highlighted shortcomings in overseeing workers' rights, resolving disputes, and ensuring protection. The ILO is assisting Somalia in evaluating child labor and developing a national action plan. The ministry successfully resolved disputes, including one involving airport workers and Favori LLC. Concerning labor risks, Ahmed pointed out that women and youth are frequently employed for daily labor on local construction sites. Construction companies exploit their vulnerability and lack of awareness of their rights, paying them lower wages compared to others. Mrs. Ayaaan A. from Benadir Regional administration (BRA) addressed labor-related matters. She explained that	• Strengthen the Ministry's ability to oversee, monitor, and enhance workers' rights, dispute resolution mechanisms, and their safeguarding. • Establish, put into action, and oversee Labor Management Procedures (LMP). • Formulate and execute an Occupational Health and Safety (OHS) Plan for workers. • Carry out routine supervision and regular labor inspections at construction sites to detect potential OHS hazards and ensure compliance with the OHS plan.

Topic	Discussion Themes	Issues and Concerns	Recommendations
	support they expect from the project.	Puntland's labor law No.65, aligned with ILO labor conventions, governs labor issues and is referenced in labor-related grievances and disputes. She noted a discrepancy between national and international standards regarding child labor, with children aged 15 not typically considered child laborers. However, concerns arise in balancing the need for income, particularly in female-headed households, which may allow certain light work or supportive roles for children. Mrs Ayaan highlighted the non-functional labor inspection units. World Bank-funded project's Project Implementation Unit (PIU) typically inspect worker conditions, including occupational health and safety, remuneration, working hours, wages, and forced labor. Contractors at the project level provide labor management plans outlining labor rights and codes of conduct	• Supply essential personal protective equipment (PPE) to all field officers actively engaged in construction task. • Set-up and operate a Labor specific GRM for workers, as per LMP. • Impacts of labor influx driven by the small medium scale infrastructure works will be managed by the LMP, including a code of conduct for project workers
Security	The anticipated security risks and threats. The security protocols guiding the deployment of the security personnel in the project target locations/sites. How the security agencies support the developmental projects and the support they expect from the project.	Farhan Mohamud Ali a Senior Security Officer from the Federal Ministry of Internal Security, discussed the security situation in Somalia, highlighting the ongoing threat from Al-Shabab. Despite their weakening, he emphasized their persistent presence and pursuit of soft targets for media attention. He suggested that integrating government security forces with private security providers could effectively guide security protocols for project implementation. Private security firms, often recruiting from the local community, can offer additional security assessments and threat	• Conduct a social and conflict analysis. • Perform an assessment of security risks and threats. • Create and execute security management plans as necessary, both during the construction and operational phases. • Engage with security stakeholders, with a particular

Topic	Discussion Themes	Issues and Concerns	Recommendations
		analysis reports not readily available from official security institutions. However, government security oversight is crucial due to their awareness of potential threats. Government security agencies like the police and military play a vital role in supporting development projects, exemplified by the Haramcad Police Unit providing security for the Mogadishu-Afgoi corridor construction. Mukhtar Ma'ow, noted that political impasses, clan militia groups, and national security forces in various districts create security risks and protection concerns, leading to increased internal displacement. Insurgent groups like Al-Shabab and to a lesser extent ISIS pose threats to both the government and infrastructure development projects, impacting access, supervision, and project beneficiaries. Security incidents, including road construction projects linking Mogadishu to Jowhar and Afgoi, have led to project suspensions. Development programs like roads and energy projects are expected to enhance security, stimulate business, economic recovery, and overall development. Amin Abdullahi, a BRA Officer, discussed security issues in Mogadishu, encompassing mobile theft, rape, killings, and explosives. He highlighted gaps in Benadir's security structure, as key security agencies fall under the Ministry of Internal Security and the National Police Force. For development program implementation, Benadir districts coordinate with sector line ministries, agencies,	emphasis on ongoing interactions with national security agencies.

Topic	Discussion Themes	Issues and Concerns	Recommendations
		and the police. The Mogadishu Police Department supports some municipal projects. Private companies are hired to ensure law and order during road construction, protecting workers and sometimes blocking roads when necessary.	
IDPs		Countrywide, there is a rising trend in displacement resulting from violence and forced evictions due to insecure land tenure. However, in and around Mogadishu, there has been a decrease in these occurrences following the implementation of various safeguard policies and guidelines aimed at protecting internally displaced persons (IDPs). Despite this improvement, the forced evictions of IDPs and impoverished urban residents from both public and private land and structures in Mogadishu and other urban areas are on the rise. Many marginalized communities continue to lack access to land and property rights, and they are often excluded from participating effectively in development projects. Amina Abdullahi, residing at Kalunka camp, highlighted the discrimination faced by IDPs in the job market, where they typically secure low-paying positions. She expressed concern about the future of most children in the camps, as they are likely to face disadvantages in the job market even if their IDP status changes. Mrs. Amina also noted that IDPs had experienced eviction from lands without compensation, often without prior notice, in the past, primarily due to actions by private companies. However, she mentioned that there have been	Further assessments and researches must be conducted regarding the effect of development projects or even private companies' projects on IDPs.

Topic	Discussion Themes	Issues and Concerns	Recommendations
		changes in recent years. These evictions were primarily carried out by private companies that obtained leases from government agencies, influential politicians, and businessmen. Amina called for an end to these evictions. Aden Abdi, the Director of Gannane Organization, mentioned that his NGO has conducted surveys in various camps and identified a significant employment gap, which is partly due to a lack of skills among the IDPs. He emphasized the importance of streamlining Grievance Redress Mechanisms (GRMs) and noted that most IDPs have access to phones, making it convenient for them to contact complaint hotlines. Additionally, he encouraged collaboration with camp managers and suggested working in coordination with NGOs operating within these IDP camps to raise awareness and educate the IDPs about available opportunities. Ali Mohamed, who is an officer at the Humanitarian Department at the BRA, pointed out that the BRA department of education and Ministry of Education frequently offers Technical and Vocational Education and Training (TVET) programs to IDPs to combat the high levels of unemployment within the camps. He emphasized that the disproportionately high unemployment rates among camp residents are more related to a lack of skills than discrimination. Additionally, he mentioned that his administration has implemented a straightforward GRM with a dedicated hotline number for program beneficiaries. This system allows GRM focal point officers to address	

Topic	Discussion Themes	Issues and Concerns	Recommendations
		complaints and refer complex cases to the police and other relevant institutions. Regarding land issues and evictions, the administration and its partners adhere to the national policy for IDPs and National Evictions guidelines, both of which have been adopted to protect land rights for IDPs and returnees.	
Grievance Redress Mechanism		Mr. Abdihamid, the social safeguard specialist, explained that there is a Grievance Redress Mechanism framework established for this project, as detailed in the Environmental and Social Risks and Impact Assessment Reports. The PIU and the Ministry will conduct awareness and education campaigns to inform potential Project Affected Persons (PAPs) about the GRM and its functioning and work closely with BRA. These efforts will include town hall meetings, workshops, community engagements, and similar activities. Any complaints related to Gender-Based Violence (GBV) or Sexual Exploitation and Abuse (SEA) will be handled by trained professionals with the utmost care and confidentiality. Yonis Nor Farah, representing BRA, suggested involving women's councils from various districts within the Benadir region in the GRM to promote awareness and enhance their participation in the project. Additionally, he encouraged the inclusion of women's groups in workshops and the dissemination of GRM information through billboards, radio stations, and social media channels.	Develop, implement and monitor project GRM. Institutions concerned must improvise a new GRM that is easily understandable to the IDPs.

Topic	Discussion Themes	Issues and Concerns	Recommendations
		Amina Abdullahi, an IDP at Camp Kalunka, pointed out that IDPs have frequently suffered from development projects, experiencing land evictions without compensation until the Federal Government of Somalia (FGS) implemented protective laws in 2017. She also highlighted that a significant portion of the IDP population faces challenges in raising grievances, either due to illiteracy or the complexity of existing GRMs. Moreover, she mentioned that Gender-Based Violence (GBV) complaints are often reported to local police stations, but these institutions are often stretched thin and lack the capacity to effectively investigate such sensitive cases. Amina called for simplified GRMs and streamlined processes to make it easier for IDPs to register their complaints and access assistance.	

Table 0-2 SESRP – Federal Government of Somalia Consultation Summary held on 22 May 2021

Stakeholder	Indicative list	Discussion Themes	Issues Discussed & Concerns Raised	Action Point
Inception meeting between Horizon Development and the Project Management Unit	• Ministry of Energy and Mineral Resources • PIU • Project Steering Committee	• Understand the overall issues of the Environmental Management Regulations and Institutional Arrangements. • Understand the project status and what has been done so far. • Land issues and compensation process • Managing the E&S issues of the sub projects. • Institutional and Implementation Arrangements of the Project. • Identifying the key	• A detailed feasibility studies is yet to be conducted on the specific sites expected to develop certain project activities. • The main issue in terms of land property rights is contested ownership rights and compensation procedures. • Land administration and management is virtually non-existent in Somalia. The country currently does not have a national land acquisition law and effective land tenure systems. • The consultant firm needs to clarify the assignment scope and methodology and should submit ASAP.	• PIU to share with the Horizon Consultant the City Development Plans, • Expedite the project feasibility study to generate the vital information necessary for the ES safeguard assessments and studies especially the Greenfield and Brownfield projects. • PIU to send the Stakeholder Engagement Plan report. • Both the environment and social specialists will closely work with the Horizon consultant firm to provide any technical support. • The inception report should clarify on the aspect of the capacity development and how Horizon Development is planning to conduct the trainings at the Ministry level, at the private sector and the across all the key actors.

Stakeholder	Indicative list	Discussion Themes	Issues Discussed & Concerns Raised	Action Point
		stakeholders necessary for consultations at all levels.		
Government Bodies and Agencies at Federal level and FMS levels	• Federal Ministry of Energy and Water Resources • Federal Directorate of Environment and Climate Change-OPM • Galmudug Ministries of Energy and Environment • South-West State Ministries of Energy and Environment • Hirshabelle Ministries of Energy and Environment	• Understand the electricity generation mix and capacities. • How do companies manage environmental and social issues in energy sector? • Whether the ESPs undertake ESIA study for the energy projects. • Some of the E&S issues common in the sector • The amount of biomass used in the country and in each state.	• In Puntland, more than 90% of the power is supplied by diesel powered generators while less than 10% comes from the renewable sources-solar panels. • While States of Galmudug, Jubbaland and SWS highlighted that 99% of electricity is generated from diesel powered generators while the remaining 1% comes from the renewable energy sources such as the solar. • The use of Biomass mainly the charcoal and wood-fuel in the region is very highly as more than 80% and the remaining percentage use LPG for cooking. • Overall weakness in terms of environmental governance and specifically the environmental safeguard related capacities and capabilities. • In addition, the current environmental institutions set-up and formation is also very weak and does not provide the necessary arrangements for effective compliance of environmental and social safeguards.	• FWS needs huge capacity support in terms of establishing and equipping the key environment, social and energy institutions in terms of financial and budgetary support especially in emerging states. • Federal Member States to share available documents and such as policies, acts and regulations plus other studies to the project. • FMS to submit their needs in a written form prior to the upcoming stakeholder consultations meeting for extensive discussions. • The project to support FMS to develop relevant regulations and policies at state levels. • Due to the reported institutional capacity limitations at all levels, the SESRP project is expected to contribute towards enhancing the capacity needs of the federal and FMS institutions. • There is need for frequent and more stakeholder technical consultations

Stakeholder	Indicative list	Discussion Themes	Issues Discussed & Concerns Raised	Action Point
	• Puntland Ministries of Energy and Environment • Juballand Ministries of Energy and Environment • Somalia Non-state Actors		• Absence of Environmental and Social safeguard regulations at the Federal and FMS levels creates a huge national safeguard gaps. Now, the entire ESS is led by the World Bank or other donors whose safeguard policies are referred for implementation of the development project's ESS. Strong government involvement is needed. • Electricity Service Providers are not oriented towards the safeguards, and they don't have safeguard policies or strategies in their companies.	regarding the project design and ES safeguard related issues especially during the pre-implementation stage.
Electricity Service Providers-ESPs	• BECO • WESCO; • NECSOM; • ENEE • Gurmad • Blue Sky • NEPCO •	• Actual and potential impacts of energy projects? • Environmental and social challenges of energy projects? • What types of batteries are used for solar PV systems? • How is fuel for HSDGs	• All the ESPs have admitted that their companies do not have neither environmental social safeguard specialists nor safeguard policies in place. • Off all the ESPs, only NECSOM stated that; their company stores batteries in a safe place and then export it to Ethiopia for recycling and further use. • All the ESPs have expressed how poor capacities have limited their companies in addressing the environmental and social safeguard issues. • Most of the ESPs expressed how they pay a great deal of attention in the safety of its customers and addresses their	• Another stakeholder meeting to be held within a short period of time for further technical discussions. • Ministry to help ESPs formulate ES safeguard policies and educate them about the existing country ESS frameworks and regulations. • The project should ensure effective waste management of energy related wastes and pollutions. • The SESRP to support ESPs to carry out the battery recycling within the country through a coordinated approach. • There is need to engage the municipalities for addressing the energy related wastes.

Stakeholder	Indicative list	Discussion Themes	Issues Discussed & Concerns Raised	Action Point
		transported, stored and dispensed? • What type of panel modules are common in Somalia? • How are old solar modules and batteries disposed or managed? • What E&S concerns do you have about the proposed energy sector expansion and improvements?	complaints-mostly related to inconveniences from the service. • The issue of waste management and battery recycling was among the huge concerns which are almost shared by all the companies.	•

Stakeholder	Indicative list	Discussion Themes	Issues Discussed & Concerns Raised	Action Point	
Electricity Service Providers-ESPs	• BECO • WESCO; • NECSOM; • ENEE • Gurmad • Blue Sky • NEPCO •		• Actual and potential impacts of energy projects? • Environmental and social challenges of energy projects? • What types of batteries are used for solar PV systems? • How is fuel for HSDGs transported, stored and dispensed? • What type of panel modules are common in Somalia? • How are old solar modules and batteries disposed or managed? What E&S concerns do you have about the proposed energy sector expansion and improvements?	• All the ESPs have admitted that their companies do not have neither environmental social safeguard specialists nor safeguard policies in place. • Off all the ESPs, only NECSOM stated that; their company stores batteries in a safe place and then export it to Ethiopia for recycling and further use. • All the ESPs have expressed how poor capacities have limited their companies in addressing the environmental and social safeguard issues. • Most of the ESPs expressed how they pay a great deal of attention in the safety of its customers and	• Another stakeholder meeting to be held within a short period of time for further technical discussions. • Ministry to help ESPs formulate ES safeguard policies and educate them about the existing country ESS frameworks and regulations. • The project should ensure effective waste management of energy related wastes

Stakeholder	Indicative list	Discussion Themes	Issues Discussed & Concerns Raised	Action Point	
				addresses their complaints-mostly related to inconveniences from the service. • The issue of waste management and battery recycling was among the huge concerns which are almost shared by all the companies.	and pollutions. • The SESRP to support ESPs to carry out the battery recycling within the country through a coordinated approach. • There is need to engage the municipalities for addressing the energy related wastes.

Stakeholder	Indicative list	Discussion Themes	Issues Discussed & Concerns Raised	Action Point	
Business selling energy equipment	• Samawat Energy • Sun-Max • TESCO • Solargen • Delta Engineering • SECCCO • Dalsan Power • Dayax Power		• The type of energy technology is common-Solar, Generators, etc.? • The type of solar batteries is in the market- lead acid, lithium ion, nickel cadmium, and flow batteries? • What E&S concerns do you have about the proposed energy sector expansion and improvements? • How do you manage waste from the components or system you sell?	• Mainly the energy selling companies deal with solar batteries, charge controls, solar water pumping, solar streetlights solar off-grid among other services. • Solar services providers have polices although most policies do not reflect the realities on the ground • The strongest weakness in the energy sector is the E&S. • Capacity building package to help the SSPs develop efficient E&S policies. • Battery disposal and recycling is a major concern and needs adequate attention. • Solar service providers do not have proposer waste management mechanisms and Most companies compile used batteries and ship to	• The waste management issue especially the battery disposal and recycling need huge consideration to mitigate or reduce the ES risks of the solar energy products. • Promote the local recycling companies such as African Solutions Company that has the potentiality to recycle the battery wastes into useful products. • The consulting firm Horizon Development

Stakeholder	Indicative list	Discussion Themes	Issues Discussed & Concerns Raised	Action Point	
				other countries for recycling. • Public Private Partnership (PPP) to set up a recycling plan in the country to serve the growing demand in the energy sector. • Gender participation in the energy sector and the existence of female-led solar companies in the country. • Policies in place to address the issue of gender gap in the sector and how the project intends to address this concern	to support the SSPs to develop sector specific Environmental and Social Management Frameworks (ESMF). • To promote gender balance the project is committed to empower female in the energy sector. As part of the preparations for the SESRP, Gender Diagnostics Assessment has been conducted and will be shared with the consultant firm.

Table 0-3 SESRP – FGS Ministry Team Consultation Comments

Topic	Discussion Themes	Issues and Concerns	Recommendations
Land acquisition, resettlement and compensation	• The overall role of local governments in land acquisition, resettlement and compensation. • The role and functions of the district land authorities on the existing land tenure system, registry and land dispute resolutions. • How much can the municipality support in terms of public land acquisition especially the alternative lands and land acquisition for public use? • What kind of support they anticipate from the project. • The role and contribution of the municipalities in	Ayanle Hassan, a Benadir Regional Administration Officer has provided an interview of the land related issues and compensation with regards to the development projects implemented in Mogadishu, Benadir Region. He stated that, usually Benadir Regional Administration keeps the land registry and provide the technical intervention in cases of land ownership issues and are constantly referred to by the courts when addressing the land dispute cases. Similarly, BRA through the land and public works department is the lead department and serves as the entry point for any land and public works related issues. The department under BRA, commonly does the necessary valuations needed in cases of land acquisition or disputes. While explaining the challenges faced by BRA, Mr. Ayanle has also expressed the great concerns related to land acquisition in which he stated the fact that, Land is in the hands of private individuals and usually it is quite difficult for BRA to mobilize and acquire land for public use. In answering the question related to the land eviction and resettlement compensations and how the BRA approaches to such scenarios, Mr. Ayanle has explained how difficult and unusual for BRA to provide compensations due to the very limited capacity in terms of the resources and institutional capacity. In addition to that, Mr. Kalif Dalmar a safeguard specialist from the Office of the Prime Minister has also explained how the Somali Government at Federal and FMS level is facing a huge challenge in resolving resettlement issues that may arise from the implementation of the Projects. He also indicated that, World Bank projects are the ones who initiated the discussions related to social and environmental protection as there were not in the mainstream discussions.	A Resettlement Policy Framework (RPF) will guide the development of site-specific RAPs once the project footprint is known. Where land is donated by private owners, a land donation agreement process should be implemented. Municipalities might anticipate the project to provide capacity building and technical support with regards to grievance mechanisms and dispute resolution. The municipal authorities shall be an important partner in disbursing the project activities, but the security arrangements are handled at a higher level.

Topic	Discussion Themes	Issues and Concerns	Recommendations
	project security related services.	He also added that, with weaker or inexistent formal land administration authorities, processes for land expropriation compensation may not be in place or fully established. As a result, resettlement as well due diligence for establishing ownership for voluntary land donations may be challenging. Land disputes are also very common in Somalia, and with reference to the key informant interview conducted, Avv. Dahir Hamid from the Office of the Attorney General has revealed more than 75% of cases filed at the courts are land related disputes and grievances. He also added that, some of these land grievances may take decades without any decisions made due to complications in land registry documentation, false documents and limited availability of supporting documents. On the other hand, Mr. Ayanle; while explaining the land related disputes, he stated that BRA has established land dispute resolution committee that usually validates the documents using the old land registrations record. They work with Benadir Regional Court to handle such cases. However, their decisions may not be the final verdict and usually appeals are made to go to the formal courts. In addition, many of the tensions are rooted in more historical competition over land, pasture and water between neighboring communities. Mr. Faisal Abdi, A senior Safeguard Specialist for SURP working for the Garowe District, has explained the different challenges attributed to the land governance and management in general and in land acquisition for developmental programs in particular. He specified that land is usually in the hands of private individuals, and due to the fact that, land values are high and land commercialization (as land has become a popular commodity) usually leads to confrontations and disputes over land ownership. Moreover, Urban land management of Puntland usually stipulates the land rights and obligations. But the enforcement of such articles are quite difficult.	

Topic	Discussion Themes	Issues and Concerns	Recommendations
		With respect to land acquisition for public interest is quite better compared to other part of Somalia, as Garowe was among the 1st town benefited from the Banks' projects and has undergone through a lot of challenges. Garowe Municipality usually provides land for developmental projects. But the issue of effective compensation remains to be among the notable challenges facing the municipality. He added that, usually eviction, economic and short-term residential and economic displacement such as street vendors are complicated issues that require huge consideration. Garowe Municipality usually faces enormous challenges in evaluating such income and economic losses and as well effective compensation of the affected parties. Mr. Fiasal also underlined land disputes and grievances to be among the leading clan and community confrontations. On the other hand, Puntland was among the 1st states in Somalia that has successfully established a "Land Dispute Tribunal". These serve as an alternative dispute resolution mechanism and mainly constitute of elders, religious leaders and other respect individuals. Moreover, sometimes special ad-hoc committees are appointed through the President's office and or the Mayor's office as needed depending on the magnitude and sensitivity of the dispute. He also stated that, municipality level disputes are usually handled by the Land and Public Works Department of Garowe Municipality as the entry points that receive land related disputes. Finally, he concluded that, Garowe land registration and land deeds records are automated since 2019 using Geo-referenced coordinates which serves as a remedy for the continued disputes over land ownership and double registration of land title deeds.	

Topic	Discussion Themes	Issues and Concerns	Recommendations
Labor and Work and Grievance Redress Mechanism	• What are the existing mechanisms and who is responsible for solving labour related issues? • The role of the Ministry of Labour • Labour inspections at field levels e.g., forced labour • The kind of support the Ministry provides to the workers e.g., occupational health and safety. • Child labour and labour influx. • The existing mechanisms for social protection and the support they expect from the project.	Ahmed Ali, from the Federal Ministry of Labor and Social Affairs working for the Department of Legal and Labor Relations has responded to several question related to the major concerns of the labor and related issues. He provided overall explanation of this sector in which he highlighted the existing challenges and the recent achievements including the development of key labor, work and social protection related policies and strategic plans. Despite these achievements, still huge gaps exist in terms of the Ministry's capacity to control, monitor and develop the workers' rights, dispute resolution and their protection. He also shared that ILO is supporting the Government of Somalia in conducting country child labor situational assessment and development of national action plan. The Federal Ministry of Labor and Social Protection under the Department of Labor Relations have resolved many labor disputes including the recent airport workers and its employers, Favori LLC. While responding to labor-related risks, he pointed out that women and youth are selected for daily labor works on local construction sites. Construction companies may rely on the fact that they are vulnerable and needy, and because they don't understand their rights, they are often abused, they are paid low wages compared to other. Mrs. Abshira A. from the Ministry and Labor, Youth and Sport (MoLYS), has responded to several questions as she explained the labor related issues in Puntland. She explained that Puntland's labor law No.65 usually governs the labor related issues and concerns and his is also in line with ILO labor conventions. In addition, Low No. 65 is also referred during the labor and work-related grievances and disputes.	Support the Ministry's capacity to control, monitor and develop the workers' rights, dispute resolution and their protection. Develop, implement and monitor Labor Management Procedures (LMP). Develop and implement OHS Plan for workers. Conduct regular supervision and regular labor inspections of construction works to identify potential OHS risks and compliance with OHS plan. Provide necessary personal protective equipment (PPE) to all field officers directly involved in construction activities.

Topic	Discussion Themes	Issues and Concerns	Recommendations
		In addition, she explained the confusion that exists between the national and international standards regarding the child labor as Children aged 15 are not normally employed and are not regarded as a child labor. On the other hand, she expressed their concerns with regards to balancing the conflicting demands of child labor and the need for income especially the poor households who are usually female headed households. And finally, she admitted that they allow certain jobs –usually light work- and supportive role to be assigned for such children. Mr. Faisal also pointed out that, the labor inspection units are not functional. Usually, the PIU of the World Bank funded project are responsible to inspects the workers condition such as OHS and remuneration, working hours, wages, timing and forced labor. He also added that, at project level, usually the contractors provide labor management plan; this stipulates the labor rights and code of conducts.	Set-up and operate a Labor specific GRM for workers, as per LMP Impacts of labor influx driven by the small medium scale infrastructure works will be managed by the LMP, including a code of conduct for project workers
Security	• The anticipated security risks and threats. • The security protocols guiding the deployment of the security personnel in the project target locations/sites. • How the security agencies support the developmental projects and the	Jamal Farah, a Senior Security Officer from the Federal Ministry of Internal Security has explained the general security conditions of Somalia. He indicated Alshabab to be among the significant security threats and risks. Although Al-Shabab is weakened over the past few years, He believes that the are yet to be defeated and in contrast they're ever present and are looking for soft targets to boost their media presence; In explaining the security needs during the implementation of the project, he suggested an integration of the government security forces and the private security providers can be best fitted to guide the security protocols of implementation of such projects. In addition to that, he explained how the private security can be a good option for the provision of the security services as they tend to recruit from the local community. Plus, the private security companies can provide additional security	A social and conflict analysis is needed to carry out. Carry out security risk and threat assessment. Develop and implement security management plans as appropriate during both construction and operation phase. Security stakeholders needs to be engaged and especially continues

Topic	Discussion Themes	Issues and Concerns	Recommendations
	support they expect from the project.	assessment and threat analysis reports which are not otherwise available from the official security institutions for protocol reasons. That said, he also stressed the need to have the oversight of the government security institutions to enforce since they are aware of possible threats that can impact the program he concluded. While answering a question related to the role of the government in provision of security during the implementation of the development project, He underscored how the government security agencies such as the police and the military are crucial to support the development projects. One good example he gave was; how Haramcad Police Unit is providing the security for the construction of Mogadishu-Afgoi corridor. Another example is how SNA helped reconstruct suspensions and small bridges destroyed by Al-Shabab in Lower Shabelle region. Mr. Abdilatif J. a security experts have stated that, the nature of the conflict and the security risk in Mogadishu has changed since 2011 following the withdrawal of Alshabab from most of their territories. Due to the current political and election impasses, the presence of various clan militia groups and the national security forces in several districts poses security risks and protection concerns to the local population and created additional IDPs. The existence of insurgent groups such as Alshabab and ISIS usually pose threats to the government and developmental projects such as infrastructure development. This may pose huge challenges in accessing the project areas and supervision of project, as well as the project beneficiaries. Several security incidents have been recorded targeting projects and sometimes causing it's suspension including, the construction of roads linking Mogadishu to Jowhar and Mogadishu to Afgoi.	engagements of the national security agencies are needed

Topic	Discussion Themes	Issues and Concerns	Recommendations
		He also stated that, the development programs such as roads and energy project will improve on security, business, economic recovery and development. Ayanle Hassan, a BRA Officer has also explained the overall security issues and concerns in Mogadishu from mobile theft, rape, killing and explosives. He also expressed the gaps in the security architecture of Benadir as BRA has no full authority in security administration as the key security agencies are under the Ministry of Internal Security and the National Police Force. In terms of the implementation of the developmental programs, usually the Benadir districts coordinates with the sector line Ministries and agencies together with the Police Force. The Mogadishu Police Department also provides security support to some of these projects implemented by the Municipality. In addition to that, Private companies are always hired to support security law and order especially during the construction of roads within the city by providing protection to the workers and sometimes blocking these roads if needed. On the other hand, Mr. Faisal explained the relative peace and security that prevails in Puntland unlike the southern parts of Somalia. But he showed some security concerns in Bosaso as ISIS related security incidents has been recorded for the past 5 years. In addition to that, he stated that, the Garowe Municipality usually don't allow to disclose the security related documents and plans to the public domain. He finally recommended project to have budgets for the project security costs. And following their experience, at project level, usually the contactors are responsible for security related responsibilities and are supported by the municipality and the Puntland State Police Force.	

Topic	Discussion Themes	Issues and Concerns	Recommendations
IDPs		Displacement because of violence and forced evictions due to land tenure insecurity are increasing in the country but areas in and around Mogadishu saw a decrease after the adoption of several IDPs safeguard policies and guidelines, with the scale of forced evictions of IDPs and the urban poor from public and private land and buildings in Mogadishu and other urban areas increasing. Many marginalized communities have no access to land and property rights, as well they are usually neglected their effective participation in the developmental projects. Ahmed Abdi Hashi: Mr Ahmed, IDP at Juba camp, stated that IDPs face discriminations in the job market and only get low paid jobs. He pointed out the fact that majority of kids in the camps makes the future look bleak as these kids will be disadvantaged in the job market in the future even if their IDPs status changes. Mr Ahmed added that IDPs had been evicted from lands without compensations and often without prior notice before by private companies but that has changed in the last years. Amina Aden Shirwac: Mrs Amina, IDP camps leader and head of Doha center, complained about the lack of the unemployment pointing out that IDP unemployment level is higher than the national level alluding that there's discriminations against IDPs. Regarding the GRMs, she praised the so called mobile GRM officers that canvass the camps and ask people about their complaints. Mrs Amina stressed the importance of sensitizing the IDPs about the GRMs as most don't know their rights which make them not place complaints. She also stated that some of the camps under Doha Center umbrella have been evicted from their land, government owned, by private companies, leased to them by the government, without compensation but the frequency of such evictions dropped after the government put in place IDP safeguard policies.	Further assessments and researches must be conducted regarding the effect of development projects or even private companies' projects on IDPs.

Topic	Discussion Themes	Issues and Concerns	Recommendations
		Mohamed Bulle: Mr Bule, ARD director, said that his NGO, ARD (Action for Relief and Development) has surveyed several camps and found that the huge gap in employed is partly because of lack of skills. He also stressed the importance of simplifying the GRMs - pointing that most IDPs have phone numbers and it will be easy for them to call compliant hotlines. Abdikafar Hassan: Mr Abdikafar, director of humanitarian department at Federal Ministry of Humanitarian affairs and disaster management, stated that Ministry of Education often provides TVET programs to IDPs to fight the rampant unemployment in the camps alluding that disproportionate unemployment rates within the camps have more to do with lack of skills than discrimination. He added that his ministry devised a simple GRM in place (a hotline number) for beneficiaries of their programs in which GRM focal point officers address the complaints and transfer difficult cases to the police and other relevant institutions. As for the land issues and evictions, the ministry and its partners follower the nation policy for IDPs and National Evictions guidelines (both adopted to safeguard land protect IDPs and returnees).	
Grievance Redress Mechanism		Eman Ladan, A social Protection Expert has explained the status of the social protection in Somalia, in which she considered; the absence of formal legal framework for the management of social risks and the weak institutional capacity to address related social risks – including GBV and sexual related offenses are attributed to the presence of social risks without immediate and effective mechanisms to respond such social risks. Abdihamid: Mr Abdihamid said that there is a GRM framework in place for this project as is clear in the E&S Risks and Impact Assessment Reports. The PIU team and Ministry will carry out awareness and sensitization campaign to inform potential PAPs about the GRM and how it works through town halls, workshops,	Develop, implement and monitor project GRM. Institutions concerned must improvise a new GRM that is easily understandable to the IDPs.

Topic	Discussion Themes	Issues and Concerns	Recommendations
		community engagements and so on. GVB/SEA related complaints will be handed by professionals with utmost care and confidentiality. Ahmed Abdi Hashi: Mr Ahmed, IDP at Juba camp, stated that IDPs have often been victims of development projects. Land evictions without compensation had been very common before the FGS adopted laws to safeguard the IDPs in 2017. On the other hand, Mr Ahmed noted that large segments of the IDP population do not know where to place their grievances or even how to place them in the instances where there is GRM in place because IDPs are 1) Illiterate or 2) GRM in place complicated and hard to understand. GBV complaints are mostly placed at local police stations which might not always commit resources to investigate as they are overstretched and often lack the capacity to handle/investigate such delicate cases. Ahmed called for less complicated GRMs and making complaint placement very easy for IDPs.	

Annex II–B: Stakeholder Engagement List of Participants

ASCENT Project Consultation

Sn	Name	Institutions	Contact
1	H.E Jama Taqal	Minister- MoEWR	
2	Abdirisack Mohamud	Director General – MoEWR `	*dg@moewr.gov.so*
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9	Liban Ibrahim Abdi	Procurement Specialist	*liban@piunenergy.so*
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13	Muna Basha	Finance Assistant	*muna@piunenergy.so*
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15	Nasra Abdullahi Abdi	TA- AFDB	
16	Abdifatah Absullahi	TA- AFDB	
17	Ismail Mohamed	TA- AFDB	
18	Aisha Habiibulah Ibrahim	Ministry of Energy and Water Resources	
19	Mahad Muhumed Abukar	Ministry of Energy and Water Resources	
20	Abdirahman Mohamud Ahmed	Ministry of Energy and Water Resources	
21	Abdifatah Abdullahi Garuun	Ministry of Energy and Water Resources	

Sn	Name	Institutions	Contact
22	Abdifatah Abdullahi Adan	Ministry of Energy and Water Resources	
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34	Ali Mohamud	BRA	
35	Halima	BRA	
List of Somali National Electricity Authority (NEA)			
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38	Abdifatah Waaway	Board Member	*solar@moewr.gov.so*
List of DGs at FMS Level			
39	Maxamed Abshir Musse	Maareeye Wakaalada- Puntland- MoEMW	*guledbosaso73@gmail.com*
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42	Yusuf Abdi Farah	Hirshabelle- MoEWR	

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44	Ibrahim Abdulkadir	Galmudug- MoEWR	*dg@wbt.gm.so*
45	Cali wadaad	BRA – focal person	
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57	Adam Isak Ali	Southwest state (BEC)	
58	Abdirahman Mohamed Hassan	Hirshabelle state (al-towba electric company	*engcraxmaan10@gmail.com*
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70	Yusra Abdullahi Xasan	Women in STEM	0616450591
71	Almaas Aweys Ahmed	Women in STEM	0618038139
Vulnerable groups (women groups, children, elderly)			
72	Amina Abdullahi	IDPs	
73	Younis Nor	BRA disabilities department	
Academic institutions/Local Media			
74	Abdikadir Ahmed	Somali Institute for Environmental Peace	*info@siep.so*
75	Ahmed Ibrahim Khalif	HIPS	
UN Agencies, INGOs and donor groups			
76	Hassan Abdirizak	UNDP- Somalia	*hassan.a.ahmed@undp.org*
77	Amir sirad	AfDB	*a.sirad@afdb.org*
78	Aden Sharif	ADRA	

Sn	Name	Institutions	Contact
79	Abdulkadir Salaad	European Union Norwegian Refugee Council	
80	Aden Abdi	Ganaane Organisation	

SESRP Consultation List

No.	Names	Institution	Title/Function
1.	Abdisalam Abdullahi	MoEWR - PIU	Project Coordinator
2.	Abdullahi Ahmed (Najib)	MoEWR – PIU	Environmental Specialist
3.	Ismail Bashir	MoEWR – PIU	M&E Specialist
4.	Abdiaziz Arte	MoEWR-PIU	Finance Specialist
5.	Mohamed Fatih	MoEWR-PIU	Legal Specialist
6.	Abdihamid Hassan	MoEWR- PIU	Social Specialist
7.	Sammy Ratemo	Ecofix Consultancy Limited	E&S Expert
8.	Abdullahi Mohamed Ali	Federal Ministry of Labour and Social Affairs	Director General
9.	Ismail Mohamed	Puntland State PEDA	Deputy Manager
10.	Muna Abdillahi	Puntland State PEDA	Energy Director
11.	Mohamud Abdullahi	Puntland State PEDA	Planning Officer
12.	Omer Mohamed Jama	Puntland State Ministry of Energy	Planning Director
13.	Mohamed Abdullahi	Jubaland State Ministry of Energy	Director of Energy Department
14.	Abdulkadir Kadiye	Jubaland State Ministry of Environment	Environmental Technical Adviser
15.	Aden A. Isaak	Southwest State Ministry of Energy	Director General
16.	Abdulkadir Abuu	Southwest State Ministry of Environment	Environmental Governance Adviser
17.	Aidid Abdulkadir	Galmudud State	Director of Energy Department
18.	Abdinuur Khaliif	Galmudug State Ministry of Energy	Admin and Finance
19.	Ummul-khair M.	Galmudug State Ministry of Energy	Environmental Governance Adviser
20.	Yasin Ahmed	Hirshabelle State Ministry of Environment	Environmental Adviser

No.	Names	Institution	Title/Function
21.	Ahmed Bulshale	Puntland State	Environmental Officer
22.	Eng siciid Mohamud	Business Development Manager	SECCCO
23.	Eng. Bashir Mohamud	Managing Director	Dalsan Power
24.	Yusuf Abdi	Operations Officer	Safa Energy
25.	Mohamed abdirihim	Operations Manager	Hayle Barise
26.	Mohamed Adil	Chief Operating Officer	Somnuur
27.	Muse Kahiye	Managing Director	SunMax
28.	Nur Abdiqadir	Operations Manager	Tamarso
29.	Ishak Salad Dahir	CEO	TESCO
30.	Abdihakim Shiekhdon	CEO	Delt Engineering
31.	Hussein Kirow	Project Engineer	SolarGen Technologies
32.	Yaasmin sheikhdoon	Chief Operations Officer	Samawat Energy
33.	Mohamed Abdkarim	Blue Sky	Engineer and PM
34.	Abdiaziz Farah	ENEE	CEO
35.	Mahad Awad	WESCO	CEO
36.	Abdirizak Mohamed	NECSOM	CEO
37.	Qasim	Solar Chain Technology	Engineer
38.	Muhdin Sayid	IBS – Bank	Project Coordinator
39.	Aden Abdi	Recon Energy	Managing Director
40.	Abdulahi Adli	Safa Energy	Engineer
41.	Said Abubakar	Recon Energy	Procurement Officer
42.	Nur A/qadir Hassan	Tamarso	Engineer
43.	Hayes	Solar Chain	Engineer
44.	Ali yare Mohamed warsame	Dalsan Power	Engineer
45.	Abdiqadir Hassan	SUMMAX	Engineer
46.	Mohamed Abdi Ali	Hirshabelle Department of Environment	Director
47.	Hassan Mohamud Ali	Hirshabelle Ministry of Labour and Social Affairs	Department Director
48.	Eng. Isaq Hasan Abdi	Hirshabelle Ministry of Public Works and Reconstruction	Department Director

No.	Names	Institution	Title/Function
49.	Yusuf Abdi Farah	HirShebelle State Ministry of Water and Energy	Director General
50.	Mohamed Abdi	Dayax Electricity Company	Engineer
51.	Mohamed Ibrahim	Belet Electric	Project Officer

Annex III: Generic Subproject ESIA Terms of Reference (TOR)

Introduction and context

This section will be completed at the appropriate time and will provide the necessary information with respect to the context and methodological approaches to be undertaken.

Objectives of the study

This section will (i) outline the objectives and particular activities of the planned activity; and (ii) indicate which activities are likely to have environmental and social impacts that will require appropriate mitigation (adapted to specific activities).

Terms of Reference

1. To undertake an Environmental and Social Impact Assessment (ESIA) for proposed project to meet the requirements of the WBG Environmental and Social standards (ESSs) and Environmental Health and Safety Guidelines (EHSGs) and the Somalia legal requirements;
2. To provide relevant environment and social baseline conditions on the proposed subproject area;
3. Review the relevant WBG's ESSs triggered for the subproject, the national legal requirements and guidelines that the subproject will be implemented;
4. Assess and predict the potential site specific environmental and social impacts of the subproject during site preparation, construction, operation and decommissioning phase;
5. Develop proposed feasible and cost-effective mitigation measures (using the mitigation hierarchy) for the potential adverse environmental and social impacts as well as safety risk associated with the proposed project site activities; and
6. Develop Environmental and Social Management and Monitoring Plans (ESMMPs) and prepare appropriate budget for Environmental, Social, Health and Safety (ESHS) mitigation measures for the project.

ESIA Report Outline

The ESIA report should have the following structure and content:

1. **Executive summary –** Concisely discusses significant findings and recommended actions.
2. **Legal and institutional framework**
    a. Analyzes the legal and institutional framework for the project, within which the environmental and social assessment is carried out, including the issues set out in ESS1, paragraph 26.
    b. Compares the Borrower's existing environmental and social framework and the ESSs and identifies the gaps between them.
    c. Identifies and assesses the environmental and social requirements of any co-financiers.
3. **Project description**
    a. Concisely describes the proposed project and its geographic, environmental, social, and tem- poral 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 project's primary suppliers.

b. Through consideration of the details of the project, indicates the need for any plan to meet the requirements of ESS1 through 10.
c. Includes a map of sufficient detail, showing the project site and the area that may be affected by the project's direct, indirect, and cumulative impacts.

4. **Baseline data**
    a. Sets out in detail the baseline data that is relevant to decisions about project location, design, operation, or mitigation measures. This should include a discussion of the accuracy, reliability, and sources of the data, as well as information about dates surrounding project identification, planning, and implementation.
    b. Identifies and estimates the extent and quality of available data, key data gaps, and uncertainties associated with predictions.
    c. Based on current information, assesses the scope of the area to be studied and describes relevant physical, biological, and socioeconomic conditions, including any changes anticipated before the project commences.
    d. Takes into account current and proposed development activities within the project area but not directly connected to the project.
5. **Environmental and social risks and impacts –** Takes into account all relevant environmental and social risks and impacts of the project. This will include the environmental and social risks and impacts specifically identified in ESSs2–8, and any other environmental and social risks and impacts arising as a consequence of the specific nature and context of the project, including the risks and impacts identified in ESS1, paragraph 28.
6. **Mitigation measures**
    a. Identifies mitigation measures and significant residual negative impacts that cannot be mitigated and, to the extent possible, assess the acceptability of those residual negative impacts.
    b. Identifies differentiated measures so that adverse impacts do not fall disproportionately on the disadvantaged or vulnerable.
    c. 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; the institutional, training, and monitoring requirements for the proposed mitigation measures.
    d. Specifies issues that do not require further attention, providing the basis for this determination.
7. **Analysis of alternatives**
    a. Systematically compares feasible alternatives to the proposed project site, technology, design, and operation—including the "without project" situation—in terms of their potential environmental and social impacts;
    b. 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; the institutional, training, and monitoring requirements for the alternative mitigation measures.
    c. 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 particular project design proposed and specifies the applicable EHSGs, or if the ESHGs are determined to be inapplicable, justifies recommended emission levels and approaches to pollution prevention and abatement that are consistent with GIIP.

9. **Key measures and actions for the Environmental and Social Commitment Plan (ESCP) –** Summarizes key measures and actions and the time frame required for the project to meet the requirements of the ESSs. This will be used in developing the Environmental and Social Commitment Plan (ESCP).
10. **Appendices**
    a. List of the individuals or organizations that prepared or contributed to the environmental and social assessment.
    b. References—set out the written materials, both published and unpublished, that have been used.
    c. Record of meetings, consultations, and surveys with stakeholders, including those with affected people and other interested parties. The record specifies the means of such stake- holder engagement that were used to obtain the views of affected people and other interested parties.
    d. Tables presenting the relevant data referred to or summarized in the main text.
    e. List of associated reports or plans.

Qualification of the Consultant

The Consultancy Firm shall demonstrate experience in conducting ESIAs for energy and infrastructure projects in fragile and conflicted areas, for the last five years with the following team members:

Environmental Expert

The Team Leader must have a minimum of masters' degree in natural resources management, environmental studies, environmental management, environmental policy, environmental engineering or a related discipline, with a proven track record of managing similar projects. Specifically, the team leader must have:

- A minimum of five years of post-qualification professional experience in thematic areas related to environmental and social management issues with grounding in environmental assessments and monitoring in Energy and Infrastructure;
- A proven knowledge in sustainable development financing and environmental and social risk & impact management;
- A minimum of 5 years of experience in assisting institutions in assessing and implementing best practices related to sustainable development, strategic planning and environmental management;
- Experience in working with the World Bank, including leading and supporting environmental and social due diligence, as well as other assignments and preparation and supervision of similar projects, compliance assessment and monitoring and evaluation; experience with other IFIs is desirable;
- Knowledge of the World Bank's Environmental and Social Framework (ESF), EHSGs; procedures, supervision and preparation of environmental and social management tools and training experience on environmental Safeguards;
- Excellent knowledge, skills and experience in designing frameworks and systems associated with ESIAs, ESMPs, Environmental Management Frameworks, the social and EHS aspects of development projects, monitoring, evaluation and compliance assessment;
- Excellent knowledge, skills and experience in multi-criteria assessments, stakeholder engagement and consultation, community participation; analytical skills to assess institutional capacity and to design/ review practical arrangements for implementing complex projects, and projects of fragile and conflict contexts, particularly in Africa;

- Proficiency in the usage of computers and office software packages (word processing, spreadsheet etc.);
- Previous work experience in the AFR region required, and specific knowledge of Somalia government and other institutional actors preferred;
- Possess excellent technical and analytical skills; and
- Excellent writing and communications skills in English mandatory

Social Expert

The consultant must have a minimum of master's degree in social sciences or a related discipline, with the following qualification:

- A minimum of five years of post-qualification professional experience in thematic areas related to social risk & impact management issues with grounding in social assessments and monitoring;
- Proven knowledge in sustainable development and financing social risk & impact management;
- Excellent knowledge, skills and experience in designing frameworks and systems associated with ESIA, ESMPs, Environmental Management Frameworks, the social and EHS aspects of development projects, monitoring, evaluation and compliance assessment;
- Working experience on the new World Bank Environmental and Social Framework is required;
- Excellent knowledge, skills and experience in multi-criteria assessments, stakeholder engagement and consultation, community participation; analytical skills to assess institutional capacity and to design/ review practical arrangements for implementing complex projects, particularly in Africa;
- Previous work experience in fragile and conflict areas in the AFR region required, and specific knowledge of Somalia government and other institutional actors preferred;
- Possess excellent technical and analytical skills; and
- Have excellent writing and communication skills in English.

ESIA Deliverables and Timelines

The selected Consultancy Firm shall deliver ESIA along with appropriate annexes (E&S Safeguards Instruments) and shall meet the following schedule:

Activity	**Timing / deadline**
1. **Submission of inception report for the ESIA**	Within 2 weeks after contract signing
2. **Preparation of the terms of Reference and Scoping Report for the SESIA (including results of a stakeholder consultation meeting)**	4 weeks after approval of inception report
3. **Preparation of the interim report on the baseline and the risk factors associated with the project**	Within 2 weeks after contract signing
4. **Preparation of the draft ESIA report with the project alternatives, mitigation management measures recommendations and conclusions report for Stakeholder consultations.**	Within 4 weeks after contract signing
5. **Submission of draft ESIA report, inclusive of appropriate**	2 Months after approval

	stakeholder consultation	of scoping report
6.	**Submission of final ESIA reports: The final reports shall incorporate the comments from client and the World Bank and will only be deemed final upon approval from client and the World Bank. This ESIA shall contain minutes of meetings and participant lists of stakeholder consultations**	Within 3 weeks after receiving review comments from the client on the draft ESIA report

Governance and contracting arrangement

Reporting

The selected Consultancy Firm shall report to the Project Coordinator ASCENT and shall also work closely with other focal persons recommended by the client.

Remuneration and duration of services

- 10% upon signature of contract;
- 20% upon submission of an inception report, satisfactory to the PIU, updating these terms of reference, outlining the methodology and schedule for completion of the assignment and including an annotated outline of the deliverables;
- 30% upon submission of a draft ESIA (inclusive of stakeholders' consultation); and
- 40% on submission of a final ESIA and final proceedings of the required disclosure workshops, documenting outcomes of discussions and list of participants.

The Consultancy Firm shall be the responsible party for all deliverables mentioned in above.

Services, Facilities and Materials to be provided by the Client

The Client will provide the following services to the Consultancy Firm:

- All relevant documents relevant to the project;
- All available and relevant background documentation and studies (e.g., regional, sectoral, cumulative);
- Unrestricted access to project areas and sites;
- Security details for all travel related to the assignment;
- Making all necessary arrangements for supporting the work of the Consultant(s), by e.g., facilitating access to government authorities and other Project stakeholders;
- Provision of furnished office space with electricity supply for the duration of the assignment, in the same location with the PIU; and
- Disclosure of draft documents, sending out of invitations, organization of venues for public hearings, and being present as discussant at all public hearings

Annex IV: Capacity Building Plan for ASCENT Somalia Project

1.0 Background and Context

The FGS is preparing the ASCENT Somalia Project to be financed by IDA and GCF to the tune of US$118 Million. The ASCENT project seeks to increase access to renewable energy through private sector participation in Somalia, which aligns with the ASCENT Multi-Programmatic Approach (MPA) Program Development Objective (PrDO) of accelerating access to sustainable, reliable and clean energy in Eastern and Southern Africa. The Project will rely on the existing institutional and implementation arrangements established under the ongoing Somali Electricity Sector Recovery Project (SESRP).

The Project will be implemented by the Project Implementation Unit (PIU) established at the Ministry of Energy and Water Resources (MoEWR), in close coordination with the Private Energy Service Providers (ESPs).

The PDO of ASCENT Somalia Project is to *increase access to renewable energy through private sector participation*, which aligns with the ASCENT MPA PrDO of accelerating access to sustainable, reliable and clean energy in Eastern and Southern Africa.

PDO level indicators comprise:

a) Increased number of people with access to energy (million); and
b) Increased climate mitigation and adaptation benefit (GHG ER tCO2e).

2.0 Project Components

Component 1: Distributed Renewable Energy (DRE) with Solar PV and BESS in the capital city of Mogadishu and other major load centers in the FMS

This is proposed to include design, supply and installation of a total of about 30-50MW solar PV grid connected generation plants with Battery Energy Storage Systems (BESS) in the Mogadishu capital area. About 30-50 MW will be distributed across multiple sites and will feed into mini grids. The integration of renewable energy sources and energy storage solutions are to improve the overall performance of the existing mini grids thereby reducing reliance on fossil fuels and increasing the reliability and affordability of electricity supply. The installed equipment will be operated and maintained by the private sector operators (ESPs)[86] with the project funds that will be used to buy-down capital costs to lower the costs of supply. Based on the discussions, it is estimated that the project will contribute to lowering the cost (current average estimated at about US¢60 per KWh) to about US¢35-45 per KWh.

Component 2: Electricity Distribution Network Rehabilitation and Reinforcement of the mini grids serving the Mogadishu capital city area and other FMS major load centers

The activities under this component are aimed at supporting to reduce network losses (both technical and commercial) and increase the network's capacity to connect new customers. It will also include activities to address last mile connection barriers to access especially for the low-income households. The activities under this component are proposed to include: (a) supply of equipment and materials for the distribution network Medium Voltage (MV) and Low Voltage (LV), metering equipment and service connections and (b) installation services including detailed line surveys. The scope of this component will be informed by the ongoing distribution network options analysis. Component 1 will in future be potentially supported by funds from the Somalia portion of GCF funding under Sustainable

[86] The following ESPs have shown interest in participating in the Project: Blue Sky, Benadir Electric Company (BECO), Mogadishu Power, Al-Towba Electric Company, Wehliye Power Supply, ENEE (Ente Nazionale Energia Elettrica).

Renewables Risk Mitigation Initiative (SRMI) including (a) Transaction Advisory Services and Technical Assistance (TA) and (b) Risk mitigation instrument for mini grid to leverage ESPs private capital[87].

Component 3: Sector Capacity and Institution Enhancement and Project Implementation Support

The activities are proposed to enhance and build on the ongoing SESRP activities that among others include: (a) policy and regulatory development; (b) sector planning and feasibility studies for renewable energy projects; (c) ESP and capacity and business support services; (d) implementation of the project's Gender Action Plan which included gender capacity building for ESPs; and (e) project implementation support including for environment and social (E&S) safeguards. Key activities will among others include preparation studies for national electrification plan, with identification of actions to enhance the enabling environment for private sector investments. Sector enhancement activities will include support to operationalize the ESI, sector planning and operational capacity. The component will also support activities to build the capacity of the FMS who have a key role in the country's energy sector development. The capacity needs assessment for the FMS is underway and will inform the priority areas for capacity building support. A detailed capacity enhancement plan will be developed to ensure the staff of the MoEWR, FMS and other stakeholder institutions are trained to undertake core sector activities and thus reduce the continued reliance on consultants.

3.0 Objective of the Assignment

The objective of the consultancy is to examine the existing policy, institutional, and individual capacities of Federal Government of Somalia (FGS), which are important for the daily management of Environmental and Social (E&S) risks and impacts brought about by the ASCENT Project during its entire life cycle, and accordingly recommending capacity building actions. In this respect, therefore, the FGS wishes to examine existing E&S level institutions and systems in moderating the delivery of development interventions, including scoping and characterizing existing capacity gaps in environmental and social impact assessment, management, mitigation, and monitoring. These include any existing safeguards systems and their laws, regulations, rules and procedures on the policy areas of environmental and social impact assessment, as well as the existing technical capacities of both regulatory and Bank-supported implementing institutions.

4.0 Scope of Work

Reference to the SOP theme (sector capacity enhancement), effort should be paid to cover the Environmental and Social (E&S) aspects of the sector's capacity enhancement. Therefore, this assignment aims to assess the E&S institutional capacity needs and make recommendations for capacity development. The Consultant shall follow the process outlined in the following steps:

- **Step 1**: Identify the key tasks required to assess and manage the project's E&S risks and impacts;
- **Step 2**: Map the relevant institutions and actors responsible for, or otherwise involved in, project development and implementation;
- **Step 3**: Analyze institutional arrangements and linkages;
- **Step 4**: Assess the capacities of the institutions and other actors to undertake the key E&S tasks for which they will be responsible; and

[87] The GCF SRMI couldn't be processed due to Recipient's inability to take up the US$ 18.5 million GCF grants (which includes a US$ 15 million reimbursable grant) proposed to support the Project at the instant time, and pending resolution of internal constraints, the Recipient will request for the GCF grants to be processed as additional financing.

- **Step 5**: Recommend capacity building actions and indicators for strengthening institutional capacity in areas where the analysis indicates this would be required or beneficial for effective preparation and management of E&S aspects of the project.

The information and analysis obtained from the above shall be incorporated, as appropriate, throughout the process of environmental and social assessment and in the related documents.

The consultant will determine the most appropriate approach for incorporating the above capacity building steps into the project preparation process, in collaboration with their respective Borrower counterparts. It is expected that consultant will use the incremental supporting funds for a variety of activities, such as engaging local consultants to assist in data collection and analysis, in-country travel for site visits and consultations with stakeholders. The Consultant will prepare and submit a plan based on the needs and priorities for that project and will account for the expenditures[88].

The results of these institutional capacity building will be a review of "*lessons learned*" in relation to the assessment process, including implementation of the steps 1 to 5 above, and specific suggestions regarding measures to strengthen capacity in the areas Environment and Social Framework (ESF). The consultant will prepare a brief report on its experience to share and to provide feedback to help further develop guidance on this important aspect of the environmental and social assessment and World Bank due diligence and the development of the Borrower Capacity Building Strategy. The consultant may also be asked to participate in periodic feedback and experience sharing sessions and "lessons learned" reviews that may be organized from time to time during and after the implementation of the exercise. The clearer elaboration is listed on Step 1 to 5 below:

STEP 1: Identify Key E&S Tasks

Based on the project objectives, activities and location, identify the key tasks that are required to avoid, mitigate, or manage significant potential E&S risks and impacts. While the environmental and social assessment of the project will consider capacity in relation to a range of potential risks and impacts of the project. It is important to prioritize and focus on assessment and management of risks or impacts identified as significant to keep the scope of the assessment manageable and appropriate to the needs of the project. In addition, it is important to recognize that the nature and significance of various risks and impacts may need to be revisited as further information becomes available during project preparation.

The relevant ESSs and associated Guidance Notes for Borrowers help in identifying the types of risks and impacts and the key tasks required to address them. Table 1 below identifies different tasks which may be relevant in applying the seven standards (ESS1, ESS2, ESS3, ESS4, ESS5, ESS6, ESS 8 and ESS10). The list is illustrative and should be adjusted or augmented as appropriate, based on the project-specific activities, and associated potential E&S risks and impacts. Where it is known that several related tasks will be carried out by the same institution, these can be consolidated into a single task. If the list of tasks is too long the assessments and analyses outlined in Steps 2-5 may become impractical or impossible to complete within a reasonable budget and timeframe.

[88] Expenditures must be eligible under BB, in accordance with EFO requirements.

Table 0-4 Typical Tasks for Project-level E&S Risk and Impact Management

ESS/Issue	Specific tasks
Environmental and social assessment (ESS1)	Identify the technical capacity of E&S management and implementation arrangements for the implementing entities
	Describe E&S procedures and decision-making in the country of implementation including timeline and consultation and participation of affected parties in the design
	Identify required documentation and permits for execution of the project including timeline and responsibilities for application
	Describe the legal & institutional framework (environmental and social requirements)
	Gap analysis between ESF and applicable national laws and regulations including corrective measures to overcome gaps and responsibilities of each party to do so.
	Identify tasks related to implementation of the Stakeholder Engagement Plan (SEP) and grievance redress mechanism
	Explanation of the roles and responsibilities for the management of environmental and social impacts
	Suggestions for M&E indicators to monitor project during implementation and O&M phase of the project
	Identification of stakeholders in the project area and involvement in the development process of the project including a Stakeholder Engagement Plan scaled for the implementation phase of the project
	Description of how relevant information is made publicly available and how the local population in the project area is involved in the process of consultation on the project
	List all the existing procedure(s) to handle and follow complaints about the environmental and social aspects of the project and a contact person for questions/complaints
Labor and Working Conditions (ESS 2)	Identify the capacity of agencies to implement ESS2 and safeguard instruments (Labor Management Procedure) and elaborate how the capacity building listed in the ESCP will be enhanced
	Identify all local laws and regulations in human rights, working conditions and terms and means to comply
	Describe categories of workers (includes direct, contracted/sub-contracted, and community workers, and consultants for the specific activities)
	Risk assessment of child and forced labour for activities related to the project (including supply chain) and possible policy and mitigating measures. Assess whether there is a risk of child labor or forced labor, identifying those risks consistent with paragraphs 17 to 20 of the ESF

ESS/Issue	Specific tasks
	Elaborate how equal treatment and the prevention of discrimination of local employees and good working conditions, including women, migrant workers, temporary workers and seasonal labourers will be implemented
	Highlight health and safety of workers in relation to conflict context and any needs for security personnel for their protection.
	Undertake rapid assessment/mapping of the GBV/SEA/SH issues, prevention measures, corrective actions and response channels at work.
Resource Efficiency and Pollution Prevention (ESS3)	Identify the capacity of agencies to implement ESF and this standard, or elaborate how the capacity building enshrined in the ESCP will be enhanced
	Description of all local laws and regulations around waste management and pollution control and means to comply
	Identify the activity-level risks and impacts (soil water and air) and include mitigation measures as appropriate considering country context and legislation as well as capacities at different levels of stakeholders and implementing agencies
	Assessment of the risk of processing and use of dangerous chemicals and description of adequate measures to prevent or minimize use.
Community Health and Safety (ESS 4)	Identify the capacities of agencies implementing community health and safety (noise, traffic safety, accidents, emergencies, pollution, and other disturbances, risks and impacts) in relation to the civil works and other investments of the project during implementation and operational phases.
	Identify potential security risk associated with the project and the mitigation measures
	Potential influx of workers, SEA/SH risks, and potential health and livelihood risks at the community level associated with unanticipated impacts
Land Acquisition and Involuntary Resettlement (ESS5)	Identify the capacity of agencies to implement this standard or elaborate how the capacity building enshrined in ESCP will be enhanced.
	Description of land ownership, land acquisition and involuntary resettlement processes in the country, including roles and responsibilities and complying with local laws and the ESF.
	Indicate if resettlement or land acquisition is expected. Indicate whether voluntary land donation is expected (potential land acquisition or restriction due to the installation of sub-transmission substations, medium voltage line corridors of <33kv and possible expansion of brownfield and green field mini grids)
	Mention potential land tenure activities under the project (investment in resolution of land tenure issues, titling, formalization of land, etc.)
	Due diligence process to ensure that potential land disputes and customary tenure (present and historical, including communities displaced by conflict with

ESS/Issue	Specific tasks
	legitimate land claims in their places or origin) are identified, avoided and/or addressed,
Biodiversity Conservation and Sustainable Management of Living Natural Resources (ESS6)	Identify the capacity of agency(ies) to implement the ESF and this standard, or elaborate how the capacity building enshrined in ESCP will be enhanced
	Description of all local laws and regulations in protection of biodiversity and natural habitats, and means to comply
	Indicate potential types of sub-projects that could affect biodiversity and natural habitats.
Cultural Heritage (ESS8)	Identify the capacity of agency (ies) to implement ESF and this standard or elaborate how the capacity building enshrined in ESCP will be undertaken.
	List of negative impacts during different phases of project
	Description of consultation on cultural heritage with local population and relevant governments.
	Description on how the local community will be informed regarding their legal rights, nature and scope of the commercial exploitation and the potential consequences of this exploitation.
Stakeholder Engagement Planning and Implementation (ESS10)	Identify and provide a general understanding of the capacity of institutions associated with the project for stakeholder engagement.
	Elaborate how the GRM will be locally accessible and culturally appropriate. A proactive and well-documented approach for these interactions as well as a Grievance Mechanism should be established and put in place as early as possible (this may use existing mechanisms but should be separate from the GRM established under ESS2 above).

While the above tasks are the broader set concerning relevant ESSs, the Consultant shall concentrate on the specific activities identified for managing environmental and social risks and impacts for this Project and identify spots where capacity building activities must intervene. At the stage of initiating E&S safeguard instruments for the Project, the PIU team was required to prepare TORs needed to fulfil E&S requirements, the matter that revealed insufficient individual and institutional capacities to handle TOR preparations. The Consultant is required to take these shortcomings into consideration when analysing Project's E&S tasks and shall work out suitable improvement measures.

Step 2: Mapping The Institutions and Other Actors

There is a low capacity of the implementing agency to manage and monitor environmental risks as shown by an assessment of the key implementing agencies MoEWR, FGS and ESPs. Noted are the poor safety records among the ESPs, absence of regulations and standards codes of practice and mechanism to vet and enforce electricity services quality, health and safety standards. Through existing institutional arrangements established under the ongoing SESRP (P173088), two dedicated consultants providing respective environment and social safeguards support, in addition, one environmental specialist and one social specialist have been hired and retained at the PIU.

Step 2 involves identifying the institutions and major actors that will be involved in project preparation and implementation and clarifying their respective roles and responsibilities in implementing each of the tasks identified in Step 1. One example includes the involvement of a Third-Party Monitoring (TPM) agency during the lifetime of the project, which may play a significant role in complementing capacity in early stages of the project in conjunction with capacity building interventions, though will phase out over time as capacity building targets are met. The information on which this institutional mapping is based is likely to come from legal documents, consultations, and interviews as well as secondary sources such as previous environmental and social assessment reports.

While the specific institutions and actors responsible for project development and implementation will vary, the ones most involved are set out in Box 0-1 Most Common Institutions and Actors Responsible for Project Development and Implementation. For some projects, some of the entities may have multiple or overlapping roles.

Box 0-1 Most Common Institutions and Actors Responsible for Project Development and Implementation

- **Project sponsors and developers:** Government ministries and agencies, state owned enterprises, entities overseeing projects, and private sector investors.
- **Project implementers:** Project Implementation Unit (PIU) and central and local government entities (ministries or other departments with supporting roles).
- **Other actors:** Entities that may be responsible for developing and/or implementing specific aspects of a project (e.g., NGOs and CSOs, etc.).
- **Legislators and policymakers:** Legislative entities and policymakers at the national and subnational level.
- **Regulators:** Government ministries, compliance, and enforcement authorities at the national or subnational level.
- **Advisors and Consultants:** Engineering firms or government bureaus providing technical design or operational services, law offices providing legal services, or other consultancies providing E&S risk management related services.
- **Contractors and subcontractors:** Contracted or subcontracted providers of construction and other project-related services
- **Stakeholders:** Parties likely to be affected by the project or have an interest in it (project-affected parties and other interested parties, per ESS10), including local communities, national and local authorities, suppliers, NGOs.
- **Lenders and development partners:** Multilateral Development Banks (MDBs), bilateral donors, Multi-donor Trust Funds, and commercial banks.
- **Third-party Monitoring (TPM):** TPM(s) is/are expected to be commissioned during the lifetime of the Project to monitor and evaluate project implementation.

It is useful at this stage to carry out a general mapping of the institutions and other actors involved. Table 0-5 illustrates such a mapping for the stakeholder engagement tasks identified in Step 1. By identifying different responsibilities, the mapping helps to clarify the institutional structure for project preparation and implementation. This includes identifying potential areas of overlapping responsibilities or possible gaps in responsibility. This mapping provides the basis for a more thorough analysis of the institutional arrangements, responsibilities, and links in Step 3.

Table 0-5 SESRP Stakeholder Engagement

Key Task	Institution/Party Responsible for Task						
	Ministry of Finance	Sector Ministry (MoEWR)	Local Government Unit	Regulator	Project Implementing Unit	Supervising Engineer	Contractor
Stakeholder identification & mapping	X	X		X			
Develop Stakeholder Engagement Plan		X		X			
Implement stakeholder engagement activities	x	X		X			x
Establish grievance mechanism	x	x		X			X
Operate grievance mechanism	X	X		X			X
Disclose information for stakeholder engagement	X	x		X			x
Conduct ongoing stakeholder engagement	X	x		X			X

STEP 3: Analyse Institutional Arrangements and Linkages

The project will be implemented by: (i) The MoEWR, FGS in Mogadishu in close coordination with the FMS, ESPs. The Project Institutional and Implementation Arrangements consider the following: (i) The IDA Grant Recipient (FGS) and (ii) The Electricity Service Providers (ESPs) who currently own, manage and operate most of the electricity infrastructure. The ultimate beneficiaries (agencies responsible for the operations and maintenance of the project assets are): the ESPs will be responsible for the assets financed and constructed under Components 1 & 2; and (ii) The MOEWR for Component 3 by the Ministry of Energy.

The project will rely on the existing institutional and implementation arrangements established under the ongoing SESRP project. The staff at the PIUs shall be responsible for all the project implementations activities including procurement, safeguards, financial management, M&E, and project management functions as well as coordination and reporting to the Bank. The PIU will comprise experts with different skills including but not limited to the following general functions:

contracts management, procurement, financial management, stores management, safeguards and reporting. The PIU shall have, as core staff, the following: (i) Project Manager/Program Coordinator; (ii) Financial Management Specialist; (iii) Procurement Specialist; (iv) Project Engineer; (v) Environmental Safeguards Specialist, (vi) Social Safeguards Specialist; (vii) Gender Specialist, and (viii) Monitoring and Evaluation Specialist. The PIU shall co-opt members from the ESPs as maybe required at the various stages of the project. The PIU staff shall have the responsibility to oversee the project implementation, perform the required technical functions, and serve as the focal points for communication with Bank, contractors and consultants. For the respective components, each PIU will be also responsible for preparing the Request for Bids (RFB)/Request for Proposals (RFP) for tendering, bid evaluation, contract award, contract management, etc. and technical assistance consulting firms (e.g. the Owner's Engineer (OE) and the Business support Firm (BSSF)), financed under the IDA Grant, providing contractors and consultants with support and guidance during project implementation, as well as to supervise contractors' and suppliers' compliance with all their contractual obligations, as well as compliance with Environment and Social Safeguards requirements.

Step 3 takes a broader view of the overall institutional structure for project implementation. It focuses on:

a) Clarifying the specific roles and accountabilities of the institutions and other actors identified in Step 2 in implementing the tasks identified in Steps 1;
b) Identifying any gaps, areas of overlap, excessive fragmentation of responsibilities, potential redundancies, or conflicts, etc; and
c) Evaluating the effectiveness of lines of communication and coordination mechanisms among the institutions, with emphasis on those with overlapping or complimentary roles.

This analysis is important for identifying potential issues that could undermine project development and implementation. It provides the basis for designing measures and providing recommendations aimed at ensuring that the project's institutional structure is as clear, effective, and efficient as possible. Box 2 provides suggested questions that would be asked for each of the tasks identified in Step 1.

Box 0-2 Key Questions to Assess Institutional Roles and Responsibilities for Implementation of Identified Tasks

- Is there a clear governance structure for this task?
- If the responsibility for implementation of the task is shared among two or more institutions/actors, are there effective lines of communication and coordination mechanisms among the institutions involved?
    - What structures, mechanisms and forms for agreed communications and coordination among and within organizational units exist?
        - Structures can be formal, e.g., units established for specific communications purposes such as committees, working groups, individuals tasked with specific responsibilities etc. or informal, like existing reporting lines which are not officially recognized or mandated, but nonetheless efficient.
        - Mechanisms of communications might include progress review meetings, inter-agency planning sessions, complaint or grievance reviews, public hearings or briefings among others.
    - Is the communication and coordination structure effective?
    - Are information flows timely and of sufficient quality? Do they result in:

- decision makers remaining informed of overall project progress and of the need for remedial actions such as re- deployment of staff and financial resources;
- the elimination or minimization of redundant actions;
- Avoidance of tasks not being completed due to confusion over roles and responsibilities.

- If there are areas of overlap in roles and responsibilities for a task, are these likely to lead to conflict, redundancy, inefficiency?
- If responsibility for a task is not clearly established in the institutional structure, is there agreement on who will complete it in the context of the project, and do they have the resources?
- Is there excessive fragmentation of responsibility, which could lead to confusion or inefficiency, can the structure be simplified or unified?
- Are there any other potential issues related to the governance structure for this task?

Step 4: Assess The Capacity of Individual Institutions

It is important to go through Steps 1 – 3 to provide the operational context for assessing the capacity of the individual institutions or actors responsible for implementation of different aspects of the project. Step 4 involves assessing the capacity of each of the identified institutions or actors to undertake the tasks identified in Step 1. This will require examining existing systems and the resources available to carry out the tasks for which the institution or actor will be responsible, and, where possible, reviewing its track record in carrying out similar tasks in the past. This includes, for example, its ability and commitment in practice to implement its enabling legislation and its own institutional policies, the effectiveness of institutional and individual incentives for performance, and its ability to adapt to changing circumstances. For a recently or newly created institution, which will have little or no track record, it may be useful to review the performance of institutions that had the same or similar responsibilities previously (while recognizing that the new institution might have been created specifically to achieve better outcomes).

Step 4 (a): Track Record

An institution's past performance should be evaluated both in the context of implementing previous or current projects financed by the Bank (or by other development partners with similar E&S policies and standards), and when implementing activities under national laws and systems. This is particularly important for tasks where national requirements differ significantly from Bank requirements. Key aspects to consider are compliance and enforcement, monitoring, stakeholder engagement, and documentation and recordkeeping.

Box 0-3 provides questions for evaluating an institution's likely capacity and commitment to implement tasks for which it will be responsible, based on its track record.

Box 0-3 Questions to Assess the Track Record of an Institution or Actor

Can you provide documentation and other evidence that this institution/actor …?

- has performed this task before?
- has a system for monitoring and assessing performance?
- has a track record of compliance with relevant national or regional regulation?
- has a track record of compliance with Bank safeguards or ESF, Equator Principles and/or other MDBs policies?

- has an effective system for quality management?
- takes E&S information and monitoring into account when making decisions and taking actions?
- effectively manages the E&S performance of contractors, including contractor selection, routine supervision, quality control and corrective actions?
- has systems in place for institutional learning and improvement, learning lessons from past mistakes and experiences?
- can hire staff and/or recruit consultants in a reasonable timeframe, and retain well-qualified and high-performing staff?

Step 4 (b): Assess current institutional capacity for implementing E&S Safeguards

The assessment considers four elements of institutional capacity that are relevant for E&S risk & impact management: external enabling environment; organizational arrangements; human resources; and financial and other resources**.** Because national and local institutions will have been established and designed to implement existing laws and regulations, their internal administrative structures, procedures, staffing and skills, and previous operational experience will reflect those laws and regulations. If the project requires them to carry out other tasks, or to operate in another way, this could have implications for the nature or extent of capacity-building that may be required. Step 4 therefore looks at different aspects of institutional performance that will be relevant for delivery of the tasks identified in Step 1. The following tasks will be undertaken:

- Description of the institutional arrangements for project implementation with a focus on points of accountability (who will do what) for specific functions on environmental and social safeguards. This would include a clear definition of roles and responsibilities of project staff and associated agencies in subproject implementation and application of environmental and social review, preparation and implementation of safeguard instruments, monitoring, and evaluation but also training, staffing, budgeting, and financial support.
- Outline the requirements for consultation with local communities and stakeholders, both during subproject preparation and ES safeguards development, and during subproject implementation.
- Outline the grievance redress mechanism to provide stakeholders and potentially affected communities and households avenues to provide feedback or grievances, and receive responses, regarding the implementation of sub-projects throughout the life of the projects.
- Outline the requirements for monitoring and subproject supervision to ensure that the management measures are satisfactorily implemented and that the agreed targets for environmental and social protection are achieved.
- Outline the requirements for capacity strengthening or training deemed appropriate for the borrower or client, or government agency, involved in the ES safeguards implementation or monitoring.
- Outline the requirements for technical assistance to communities, service providers and public sector institutions to support the implementation of the ES safeguards instrument.

Table 0-6 lists questions and aspects to review in evaluating current capacity of an institution/actor.

Table 0-6 Aspects of Individual Institutional Capacity

Question	Aspects
Does the external enabling environment support completion of the task?	This focuses on Government policies, laws and regulations, the mandates of the institution/actor, institutional incentives or pressures, political commitment to E&S issues.
Does the institution have appropriate internal policies and operating procedures?	This focuses on the institution's own policies and procedures including vision statements, quality assurance and accountability systems, outreach and communications, as well as overall institutional culture.
Does the institution have adequate and appropriate human resources?	This focuses on technical and managerial skills; appropriate job descriptions and performance management, appropriate allocation of tasks to staff; training programs and opportunities, staff retention; ability/timing to recruit additional staff or consultants; human resources policies.
Does the institution have appropriate financial and other resources?	This focuses on the level of financial and other resources available for the task, and systems for allocation of such resources, including budget processes; cash flows to deliver funds when needed; financial planning; transportation, equipment and supplies; information technology infrastructure and databases.

Table 4 provides some specific guiding questions and examples of potential findings for assessing these elements and sub-elements of institutional capacity. These points should be considered as they relate to the specific E&S risk & impact management tasks for which the institution will be responsible.

Table 0-7 Guiding Questions and Examples for Assessing Elements of Institutional Capacity

Element	Question for Assessing Sub-Element
External enabling environment	What external factors could prevent the institution from carrying out its identified project-related E&S tasks appropriately?
	Government policies **Example:** The Ministry (MoEWR) has a policy to promote the implementation of E&S requirements in the project from preparation, implementation, and monitoring?
	Laws and regulations **Example**: National law prohibits payments to people without land titles.
	Institutional incentives **Example:** Department of Energy, which is responsible for generation and distribution of energy, relies on revenue from licensing as its main source of funding.

Element	Question for Assessing Sub-Element
	Mandate **Example:** The Ministry responsible for Regulates and manages the public supply of electricity, transmission, energy conservation, and alternative energy in the country, but has no mandate for regulating private ESI.
	National-level commitment **Examples:** The Ministry of Finance does not prioritize funding for the project; government has not ratified a relevant international convention. Government failed to fulfil E&S-related commitments in a timely fashion under previous Bank-financed operations.
Organizational policy, procedures, structure, and culture	Does the institution have the following elements in place to support implementation of the identified tasks in a manner consistent with the relevant standards of the ESF?
	Institutional Policies and Procedures **Example:** E&S risk mitigation manual or portion of Operational Manual.
	Reporting lines and other arrangements which promote effective implementation, and measures are in place to detect and discourage conflicts of interests or fraudulent practices. To whom do the environmental and social staff report?
	Quality assurance and control systems **Example:** There is an internal review system for documents, and decision-making and compliance systems include checks and balances.
	Transparency measures **Example:** There are appropriate information disclosures, communications and outreach, and grievance mechanisms.
	Institutional-level commitment **Example:** The National Park Authority has approved park management plans, and has a history of implementing and enforcing those plans
	Appropriate staff incentives **Example:** Adequate salaries and contract terms and conditions, performance management practices that encourage environmental and social staff to flag risks, to voice concerns and take appropriate actions rather than to conceal/ignore risks.
Human resources	Does the institution have the human resources and human resource policies in place to support implementation of the identified tasks in an appropriate and effective manner?

Element	Question for Assessing Sub-Element
	Is the institution adequately staffed, in terms of skills, qualifications, and number of personnel for implementation of the relevant tasks? Consider that some staff may have additional responsibilities beyond the project.
	If the institution does not have, or plan to create, sufficient in-house capacity, do they have the authority, means and capacity to engage and manage external consultants in a timely fashion?
	Does the institution have a human resources management system to support the performance of the necessary tasks and provide working conditions consistent with ESS2?
Budget, equipment, and means	Does the institution have the financial and other resources in place to support implementation of the identified tasks in an appropriate and effective manner?
	Amount, control over allocation, availability, and process Are sufficient resources allocated for the task? Do staff undertaking the task have any control or voice in allocating resources? Is there a process or a system in place where units performing the task can request additional funding to meet newly emerged needs?
	Budgetary projections Is a there an annual or more frequent process or system in place for making budget projections, and for intermediate reallocations? To what extent do units involved in the task have opportunities to give feedback on the adequacy of funding?
	Does the institution have the necessary facilities, transportation, equipment and supplies to carry out the relevant tasks in a timely fashion throughout the implementation of the project?
	Does the institution have sufficient information sources and information technology management systems to carry out the relevant tasks? Such as databases, infrastructure, Geographic Information Systems, sufficient access to the Internet.

Step 5: Proposed Technical and Institutional Capacity Development Plan

It is quite important that the recommended actions under this task, and thus their implementation architecture, be linked to the overall Project's Environmental and Social Management System (ESMS).

This task aims at developing a comprehensive capacity building plan that should cover as a minimum, various stakeholders, each key step of the Project, each implementation level, training requirements, and staffing requirements, as well as budget requirements.

Where the process set out in Steps 1 to 4 indicates that capacity to carry out a specific takes needs to be strengthened, Step 5 involves identifying specific measures to help address those needs. These actions may target individual institutions or actors (or elements of them) or be aimed at improving

the overall institutional framework including linkages, as well as include individual positions within specific institutions.

Recommendations should be for concrete and feasible operational actions. Specific recommended actions should be designed to address the need for strengthened capacity in an efficient manner and within a timeframe that is meaningful to support project preparation and/or implementation. This means that the action plan should include clear requirements for each phase of the Project, and in some cases for selection of subprojects/ initiation of disbursements and/or components or subcomponents. The description of actions should include assignment of responsibility, timelines for completion and budgets, and where possible targets and indicators for tracking progress and successful completion. Where training is called for, the target audience, approximate time commitment and source of training materials/ and trainers should be indicated.

In summary, the Technical and Institutional Capacity Development Plan shall include, as a minimum, sub-sections on the: i) assignment of responsibility, ii) timelines for completion, iii) budgets, iv) targets and indicators for implementation of the activities, v) monitoring, and vi) completion assessment.

As part of this step, indicators and targets should be identified for implementation of the actions and for effectiveness and achievement of their goals. For example, indicators for a training activity could include numbers of individuals trained or numbers of training courses delivered (implementation indicators) as well as a measure of the effectiveness of the training and indication that those who received it are putting their improved knowledge and skills to use (effectiveness/achievement indicators). This will also look at assessment of ESMS as a capacity building measure that the ministry can explore and may be supported in the medium and long-term considering the major stake private players have in the energy sector. The assessment will look at Set up Environmental and Social Management System (ESMS) and recommend feasibility of ESMS to manage the E&S risks and impacts of the private entities during the Operation and Maintenance Phase of project activities. Similarly, an Institutional strengthening and Capacity Building Plan for the Sector and proposed series of projects to be prepared as part of SESIA and disclosed.

Box 0-4 provides examples of the types of capacity strengthening actions that may be considered. If underlying problems are noted in this process, they can be identified for discussion and possible action in other contexts.

Box 0-4 Examples of Measures to Develop Institutional Capacity

Activities at the project level:

- Develop improved standards and technical guidance, such as procedures for verifying the age of workers or water or air quality guidelines;
- Develop clear operating procedures and reporting lines;
- Develop business standards and monitoring requirements;
- Establish clear job descriptions and accountability;
- Recruit staff in areas of institutional capacity weakness;
- Conduct targeted recruitment of consultants with terms of reference that include transfer of knowledge and skills within a specified timeframe;
- Train existing staff in areas of identified need and improve opportunities for professional development, such as on-the-job learning and coaching, hands-on experience in specialized fields, support participation in professional associations, as well as twinning, and mentoring;
- Mobilize additional financial resources to cover recruitment of staff, procurement of equipment, vehicles, and logistical support;

- Plan and acquire key equipment, and providing training and resources to operate such equipment; and
- Develop public awareness and community outreach programs, such as preparation of public service announcements, websites, brochures, and other supporting documents.

4.0 Deliverables and Timeframes

The key deliverable of this assignment shall be the "technical and institutional capacity development plan" identifying key issues such as:

a) Capacity challenges at the institutional level both at national and federal member states;
b) Current capacity development opportunities in the sector;
c) Specific capacity needs and priorities at the institutional level both at national and federal member states; and
d) Recommendations for the most suitable, effective, efficient and affordable modes of capacity development to meet the identified capacity challenges.

Moreover, an inception report including a work plan, detailed methodology, report format and timeline, shall be submitted within 1 month from the commencement of the assignment.

A draft" technical and institutional capacity development plan" consolidated report shall be submitted 2 months after receiving approval on the inception report, whereas a final "technical and institutional capacity development plan" considering the results of the validation workshop to be submitted after 2 months of signing the contact.

5.0 Governance and contracting arrangement

5.1 Reporting

The selected Firm shall report to the Project Coordinator ASCENT and shall also work closely with other focal persons recommended by the client.

5.2 Services, Facilities and Materials to be provided by the Client.

The Client will provide the following services to the Firm:

- All relevant documents relevant to the specific projects;
- All available and relevant background documentation and studies (regional, sectoral, cumulative);
- Unrestricted access to project areas and sites;
- Offering security detail for all travel related to the assignment;
- Making all necessary arrangements for supporting the work of the Firm, by facilitating access to government authorities and other project stakeholders;
- Provision of office space with electricity supply for the duration of the assignment, within the project coordination unit; and
- Disclosure of draft documents, sending out of invitations, organization of venues for public hearings, and being present as discussant at all public hearings.

5.3 Payment Schedule

- 10% upon signature of contract;
- 20% upon submission of on an inception report, satisfactory to the Bank, with outlined methodology and schedule for completion of the assignment and including an annotated outline of the deliverables;

- 30% upon submission of a draft Capacity Building Plan; and
- 40% on submission of a Capacity Building Plan and final proceedings of the required disclosure workshops, documenting outcomes of discussions (minutes) and list of participants.

6.0 Required Qualifications and Experience

a. General Qualification

- The Firm should have a minimum of five years' work experience in environmental and social management, environmental and social safeguards.
- Team Leader should have a M.Sc. in a relevant technical field such as environmental management, social sciences, natural resource management and Energy from a reputed university.
- Experience on donor funded projects and prior implementation of donor safeguards is an advantage.
- Prior experience in World Bank funded projects will be a further advantage.

b. Professional Competencies

- Ability to read and write excellent English and produce project reports in English for regular and ongoing presentations to World Bank staff.
- Ability to communicate in the local language.
- Ability to guide and deliver the range of safeguards management activities required by the project.
- Ability to interact with staff in the relevant implementing agencies.
- Effectiveness in analyzing and resolving project implementation issues.
- Have excellent technical and analytical skills, with a proven track record in operational and political work on environmental and social issues.
- Have a good knowledge of the assessment, preparation and/or management of the implementation of the Bank's environmental and social safeguards for the development of major infrastructure in Africa.
- Familiarity with the relevant Federal Government of Somalia procedures and regulations,
- High level of computer literacy, including Word, Excel, email and the internet, and
- Strong communication skills and good interpersonal relations.

7.0 Capacity Development and Training Schedule

Table 0-8 gives a detailed matrix for the implementation of the identified capacity gaps with the following details:

- Objective of the capacity building;
- Specific issues of engagement;
- Methods of implementation, engagement and training;
- The scope of the identified target stakeholder, population and area;
- Responsible entity / person; and
- The implementation timeframe.

Table 0-9 shows the proposed schedule of implementing the capacity training for the ASCENT project.

Table 0-8 Capacity Development and Training Schedule

Objectives	Issues for engagement	Method of engagement	Stakeholders/ Target population and area	Responsible person	Time frame
ESMF	Training of all Technical Leads on the ESMF	Training	Environmental, Health and Safety and Social (EHSS) Specialists staff responsible for the implementation of E&S	PIU	Prior to commencement of activities
GBV Action Plan	Training of all Technical Leads on the ESMF	Training	EHSS Specialists staff responsible for the implementation of E&S.	PIU	Prior to commencement of activities
Project GRM	Consultation on different GRMs mechanisms in place, development of overall GRM, and Training with all Technical Leads	Consultations and Training	EHSS Specialists staff responsible for the implementation of E&S	PIU	Prior to commencement of activities
GBV Procedures for Reporting and Prevention	Training and monitoring during project implementation to prevent GBV and support reporting of cases	Training, monitoring,	EHSS Specialists staff/Community members / vulnerable groups	Coordinated Lead of GBV Consultant	Prior to commencement of activities
Mitigate impact of workers on local communities (LMP and GBV Action Plan)	Implement training of contracted Project Workers designed to heighten awareness of risks and to mitigate impacts on local communities and on their rights	Training	Contracted workers and community workers in Project locations	All EHSS Specialists	Prior to deployment
EHS standards	H&S Standards for workers	Training	Contracted workers and community workers in Project locations	EHSS Specialists	Prior to deployment

Objectives	Issues for engagement	Method of engagement	Stakeholders/ Target population and area	Responsible person	Time frame
Create awareness of LMP and EHS Standards for community workers	LMP and H&S Standards	Training	Community workers in Project locations	EHSS Specialists	Prior to deployment
Support Emergency Response Measures	Communication of Emergency Response Measure (ERM) to communities	Information, training	Communities in Project areas	PIU	Prior to commencement of activities
Community Health & Safety (CHS)	Road Safety Awareness	Training	Communities in Project areas, with particular focus on vulnerable communities	PIU and EHSS Specialists	Prior to commencement of activities
CHS	Sensitization on preventing common diseases	Training, information disclosure	All Communities in Project areas	PIU and EHSS Specialists	Prior to commencement of activities
CHS	Communicable diseases/HIV-AIDS/STI awareness and prevention	Training	Communities in Project areas	PIU and EHSS Specialists	Prior to commencement of activities
CHS	GBV, as per Action Plan	Training and awareness raising	All Communities in Project areas	PIU and EHSS Specialists	Prior to commencement of activities
GRM	Project GRM as described in the SEP	Information disclosure and training	Communities in Project areas, with particular focus on vulnerable communities	PIU and EHSS Specialists	Prior to commencement of activities

Objectives	Issues for engagement	Method of engagement	Stakeholders/ Target population and area	Responsible person	Time frame
Waste management procedures (WBG-EHS) Guidelines)	Waste Management Procedures – Hazardous Waste	Training	EHS Officer	PIU / EHSS Specialists	Prior to commencement of activities
GBV	Response to domestic issues in a non-gender biased manner	Training	Local leaders (as detailed in the GBV Action Plan)	PIU	Prior to commencement of activities

Table 0-9 Implementation Schedule

Management measure	Overall phase of project implementation	Timing, duration, frequency
Inclusion of the Capacity Building plan in the ESCP	Preparation	Once, during update of ESCP
Training of EHSS Specialists on ESMF	Preparation	Once, prior to commencement of activities
Workshop with EHSS Specialists on GRM	Early Implementation	Once, during project launch workshop
GBV/Social Protection Assessment Task 1	Preparation	Once, Prior to effectiveness
GBV/Social Protection Assessment Task 2	Early implementation phase	Once, finalized
Training of EHSS Specialists on GBV Action Plan	Preparation	Once, prior to commencement of activities
Implementation of GBV Action Plan	Implementation	Throughout Project Cycle
Vulnerability Assessment – update of SEP (jointly with targeting strategies)	Early implementation	Once, finalized
EHSS Specialists Monitoring of sub-components	Implementation	continuous
PIU monitoring of sub-component E&S indicators	Implementation	Monthly
PIU supervision of EHSS Specialists implementation of ESMF	Implementation	Every two weeks
Detailed activity E&S report from EHSS Specialists to PIU	Implementation	Monthly (last working day of every month)
Comprehensive monitoring E&S report from EHSS Specialists to PIU	Implementation	Quarterly (last working day of each quarter)
Comprehensive E&S report from PIU to World Bank	Implementation	Quarterly
Annual overview E&S report from PIU to World Bank	Implementation	Annual
Emergency reporting	Implementation	Any time

Annex V: Chance Find Procedure

Chance find procedures will be used as follows:

a) Encounter or detection of a Physical Cultural Resources (PCR).
b) Stop the construction activities in the chance find;
c) Delineate the discovered site or area;
d) Secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a night guard shall be present until the responsible local authorities take over;
e) Notify the supervisory Engineer who in turn will notify the responsible local authorities (within 24 hours or less);
f) The responsible local authorities would oversee protecting and preserving the site before deciding on subsequent appropriate procedures. This would require a preliminary evaluation of the findings to be performed by the archeologists (within 24 hours). The significance and importance of the findings should be assessed according to the various criteria relevant to cultural heritage; those include the aesthetic, historic, scientific or research, social and economic values;
g) Decisions on how to handle the finding shall be taken by the responsible local authorities. This could include changes in the layout (such as when finding an irremovable remain of cultural or archeological importance) conservation, preservation, restoration and salvage;
h) Implementation for the authority decision concerning the management of the finding shall be communicated in writing;
i) These procedures must be referred to as standard provisions in construction contracts, when applicable. During project supervision, the Site Engineer / Public Works Engineer (PWE) shall monitor the above regulations relating to the treatment of any chance find encountered are observed;
j) Construction work will resume only after authorization is given by the responsible local authorities concerning the safeguard of the heritage; and
k) Relevant findings will be recorded in World Bank Implementation Supervision Reports (ISRs), and Implementation Completion Reports (ICRs) will assess the overall effectiveness of the project's cultural property mitigation, management, and activities, as appropriate.

Annex VI: Grievance/Complaint Resolution/Escalation Form

COMPLAINT/GRIEVANCE REGISTER	
Unique Reference No. Pre-Printed	**Date received:**
Name of Complainant or Representative of group of complainants	
Contact Details of complainant or representative of group of complainants (if available), **Anonymous complaints are also allowed.**	**Residence:**
	Telephone:
Location where complaint is received:	**Location the grievance is related to:**
State	**State**
Region	**Region**
District	**District**
Grievance is related to (nature of complaint):	
	Other
Description of Complaint:	
Grievance	**Non-grievance (grievances not related to the project)**
Name of Complainant:	**Signature/Thumb print of Complainant**
Name of witness (If available)	**Signature/Thumb print of witness (If available)**
Name of recipient	**Signature of recipient**
Mode of receipt	**Phone:**
	Letter:
	Verbal:

Annex VII Environmental and Social Clauses for Contractors

Most environmental and social impacts of subprojects will result from activities directly under the control of contractors and will be mitigated directly by the same contractors. For most subprojects, the ESMP will consist solely of measures implemented by subcontractors. Therefore, ensuring that contractors effectively mitigate construction related impacts the core of the Project's mitigation strategy. This will be done by ensuring that the environmental and social management of construction activities are mandatory parts of construction works contracts.

The PIU will incorporate standardized environmental and social clauses in tender documentation and contract documents, so that potential bidders are aware of environmental and social performance requirements expected from them, are able to reflect that in their bids, and required to implement the clauses for the duration of the contract. PIU will enforce compliance by contractors with these clauses.

The clauses cover four core issues:

- Environment, Health, and Safety (EHS);
- Environmental and social monitoring by contractor;
- Environmental and social liabilities; and
- Grievance mechanism for workers.

These clauses will also be referred to in all subproject ESMPs. Subproject ESMPs will also specify any training required for contractors to understand and satisfactorily meet the Project's environmental and social requirements.

Environment, Health and Safety

The purpose of the environment, health and safety (EHS) clauses for contractors is to define minimum standards of construction practice acceptable for the project. ESHS clauses will be included in the bidding documents and contracts to be executed to obligate the contractor to comply with the ESMF, RPF, ESMPs, C-ESMPs and the WBG Environmental, Health, and Safety (EHS) Guidelines (General and Specific Guidelines for Electric Power Transmission and Distribution).

EHS Supervisor

In addition of Contractor's general arrangement to carry out the project works, the Contractor must hire at least one EHS supervisor on a fulltime basis for each subproject before the commencement of work. The Contractor/Subcontractor shall abide by the rules of regulation of the Occupational Health and Safety as stipulated in the WBG Environmental, Health, and Safety (EHS) Guidelines (General and Specific Guidelines for Electric Power Transmission and Distribution). The contractor shall also abide by the clauses of health and safety in General Conditions and Particular Conditions of Contract of the bid document.

Role of EHS Supervisor

Primary role is to monitor the movement of people, workers and equipment, give timely warnings of any risk or non-compliance with safe work procedures and, where necessary, stop work if a risk situation escalates or cannot be minimized as well as look the potential environmental issues (air pollution, noise level, water quality, waste management etc.).

The tasks of EHS supervisor include the following:

- Ensure first aid facilities and personal protective equipment (PPE) for workers at the sites;
- Provide orientation to workers before start of the subproject activities;

- Warn the workers of any imminent or deteriorating risk situation that could result in an accident, and instruct when it is safe to proceed;
- Ensure restrain from undertaking any other tasks that may distract the workers focus on the work, mainly, work on or near live overhead conductors, work on transmission and communication towers;
- Stop the work, if necessary, safety would not be ensured;
- Pause the work while the safety observer changes position;
- Ensure special safety during elevated work platform work or crane operations on or near live conductors;
- Ensure proper collection and disposal of solid wastes within the construction site; and
- Ensure proper infrastructure facilities, water supply and sanitation facilities for all workers.

The contractor will prepare a monitoring report on environment and safety for each subproject at every month during the construction of the SPV Power Plants.

General Environmental and Social Clauses

The project will incorporate environmental and social clauses in tender documentation and contract documents, so that potential bidders are aware of environmental and social performance requirements expected from them and are able to reflect that in their bids. The project will enforce compliance by contractors with these clauses.

These clauses will be referred to in all subproject ESMPs. Subproject ESMPs will also include any training required for contractors to understand and satisfactorily meet the Project's environmental and social requirements.

The following set of clauses will be included in the tender documentation:

- General environmental and social clauses;
- Environmental and social monitoring by contractor; and
- Environmental and social liabilities.

Contractor Environmental and Social Management Plan

Prior to starting construction, the contractor must prepare and submit a Contractor Environmental and Social Management Plans (C-ESMPs) to the OE or supervision engineer (representing PIU) for review and acceptance. The C-ESMPs will provide a detailed explanation of how the contractor will comply with the project's safeguard documents such as the ESMP and demonstrate that sufficient funds are budgeted for that purpose. The C-ESMPs will include specific mitigation measures based on the ESMP, the final design, the proposed work method statements, the nature of the project site, etc. They will also be informed by the work risk assessment and impacts identified by the ESIAs study. Primarily the C-ESMP will include but not limited to:

- Labour Influx Management Plan;
- Workers' Camp & Accommodation Management Plans (if contractor retains a construction camp);
- Gender-Based Violence action plan including an Accountability and Response Framework;
- Stakeholders Engagement and Communication Plan;
- Emergency Response Plan;
- Waste Management Plan;
- Occupational Health and Safety Management Plan;
- Air Quality and Dust Management Plan;
- Water Resources Management Plan;

- Noise and Vibration Management Plan;
- EHS Code of Conduct;
- A working and accessible Grievance Redress Mechanisms; and
- Chance finds management plan, etc.

Gender-based Violence

The contractor must address the risk of gender-based violence, through: mandatory and repeated training and awareness raising for the workforce about refraining from unacceptable conduct toward local community members, specifically women; informing workers about national laws that make sexual harassment and gender-based violence a punishable offence which is prosecuted; introducing a Worker Code of Conduct as part of the employment contract, and including sanctions for non-compliance (e.g., termination, etc.) adopting a policy to cooperate with law enforcement agencies in investigating complaints about gender-based violence.

Child Labor

Contractors must not employ workers below the age of 18.

Labor influx

Where contractors and labor come from outside the local area, contractors will need to maintain labor relation with local communities through labor codes of conduct.

Roads

To carry out the construction works, it may be necessary to close or divert certain specified roads, either permanently or temporarily during the construction period. The contractor should arrange diversions for providing alternative route for transport and/or pedestrians.

After breaking up, closing or otherwise interfering with any street or footpath to which the public has access, the Contractor shall make such arrangements as may be reasonably necessary to cause as little interference with the traffic in that street or footpath during construction of the construction works as shall be reasonably practicable.

Wherever the construction works interfere with existing public or private roads or other ways over which there is a public or private RoW for any traffic, the Contractor shall construct diversion ways wherever possible.

Movement of Trucks and Construction Machinery

The Contractor moving solid or liquid construction materials and waste shall take strict measures to minimize littering of roads by ensuring that vehicles are licensed and loaded in such a manner as to prevent falling off or spilling of construction materials and by sheeting the sides and tops of all vehicles carrying mud, sand, other materials and debris. Construction materials should be brought from registered sources in the area and debris should be transferred to assigned places in the landfill with documented confirmation.

Traffic Safety Measures

The Contractor shall provide, erect and maintain such traffic signs, road markings, barriers and traffic control signals and such other measures as may be necessary for ensuring traffic safety around the construction site.

The Contractor shall not commence any work that affects the public motor roads and highways until all traffic safety measures necessitated by the work are fully operational.

Access across the Construction Site and to Frontages

In carrying out the construction works, the Contractor shall take all reasonable precautions to prevent or reduce any disturbance or inconvenience to the owners, tenants or occupiers of the adjacent properties, and to the public generally. The Contractor shall maintain any existing RoW across the whole or part of the construction site and public and private access to adjoining frontages in a safe condition and to a standard not less than that pertaining at the commencement of the contract. If required, the Contractor shall provide acceptable alternative means of passage or access to the satisfaction of the persons affected.

Noise and Dust Control

The Contractor shall take all practicable measures to minimize nuisance from noise, vibration and dust caused by heavy vehicles and construction machinery. This includes:

- respecting normal working hours in or close to residential areas;
- maintaining equipment in a good working order to minimize extraneous noise from mechanical vibration, creaking and squeaking, as well as emissions or fumes from the machinery;
- shutting down equipment when it is not directly in use;
- using operational noise mufflers;
- Provide a water tanker, and spray water when required to minimize the impact of dust; and
- limiting the speed of vehicles used for construction.

Waste Disposal

The Contractor must agree with the municipality about arrangements for construction waste disposal. The municipality shall designate a dumping site or landfill for the disposal of solid waste.

The contractor will take measures to avoid soil and groundwater contamination by liquid waste.

Protection of the Existing Installations

The Contractor shall properly safeguard all buildings, structures, works, services or installations from harm, disturbance or deterioration during the construction period. The Contractor shall take all necessary measures required for the support and protection of all buildings, structures, pipes, cables, sewers and other apparatus during the concession period, and to repair any damage occurs in coordination with Municipality and concerned authorities.

Protection of Trees and Other Vegetation

The Contractor shall avoid loss of trees and damage to other vegetation wherever possible. Adverse effects on green cover within or in the vicinity of the construction site shall be minimized. The contractor will restore vegetative cover, where feasible.

Physical Cultural Resources

The contractor will train construction crews and supervisors to spot potential archaeological finds. In the event of a potential find, the contractor will inform PIU who will in turn liaise with the respective government office for quick assessment and action.

Clearance of Construction Site on Completion

The Contractor shall clear up all working areas both within and outside the construction site and accesses as work proceeds and when no longer required for the carrying out of the Construction

works. All surplus soil and materials, sheds, offices and temporary fencing shall be removed, potholes filled, and the surface of the ground restored as near as practicable to its original condition.

Worker Health and Safety

To avoid work related accidents and injuries, the contractor will:

- Provide occupational health and safety training to all employees involved in works;
- Provide protective masks, helmet, overall and safety shoes, safety goggles, as appropriate;
- Provide workers in high noise areas with earplugs or earmuffs;
- Ensure availability of first aid box;
- Provide employees with access to toilets and potable drinking water;
- Train workers regarding the handling of hazardous materials; and
- Store hazardous materials as per the statutory provisions of occupational health and safety act of 2007???

Site Construction Safety and Insurance

Further to enforcing the compliance of environmental management, contractors are responsible on providing insurance for construction labors, staff attending to the construction site, citizens for each subproject, the insurance requirements and clauses are stated in the bidding documents complying to the labor law.

Environmental and Social Monitoring by Contractors

The project will require that contractors monitor, keep records and report on the following environmental and social issues for their subproject in a manner proportional to the size, risk and impacts of each subproject:

- **Safety**: hours worked, recordable incidents and corresponding Root Cause Analysis (e.g., lost time incidents, medical treatment cases, etc.), first aid cases, high potential near misses, and remedial and preventive activities required (for example, revised job safety analysis, new or different equipment, skills training, and so forth);
- **Environmental incidents and near misses**: environmental incidents and high potential near misses and how they have been addressed, what is outstanding, and lessons learned;
- **Major works**: those undertaken and completed, progress against project schedule, and key work fronts (work areas);
- **E&S requirements**: noncompliance incidents with permits and national law (legal noncompliance), project commitments, or other E&S requirements;
- **E&S inspections and audits**: by contractor, engineer, or others, including authorities—to include date, inspector or auditor name, sites visited, and records reviewed, major findings, and actions taken;
- **Workers**: number of workers, indication of origin (migrant, local, nonlocal nationals), gender, age with evidence that no child labor is involved, and skill level (unskilled, skilled, supervisory, professional, management);
- **Training on E&S issues**: including dates, number of trainees, and topics;
- **Footprint management**: details of any work outside boundaries or major off-site impacts caused by ongoing construction—to include date, location, impacts, and actions taken;
- **External stakeholder engagement**: highlights, including formal and informal meetings, and information disclosure and dissemination—to include a breakdown of women and men consulted and themes coming from various stakeholder groups, including vulnerable groups (e.g., disabled, elderly, children, etc.);

- **Details of any security risks**: details of risks the contractor may be exposed to while performing its work—the threats may come from third parties external to the project;
- **Worker grievances**: details including occurrence date, grievance, and date submitted; actions taken and dates; resolution (if any) and date; and follow-up yet to be taken - grievances listed should include those received since the preceding report and those that were unresolved at the time of that report;
- **External stakeholder grievances**: grievance and date submitted, action(s) taken and date(s), resolution (if any) and date, and follow-up yet to be taken - grievances listed should include those received since the preceding report and those that were unresolved at the time of that report. Grievance data should be gender disaggregated;
- Major changes to contractor's environmental and social practices; and
- **Deficiency and performance management**: actions taken in response to previous notices of deficiency or observations regarding E&S performance and/or plans for actions to be taken—these should continue to be reported until the project determines the issue is resolved satisfactorily.

Environmental and Social Liabilities of Contractors

Contractors will be legally and financially accountable for any environmental or social damage or prejudice caused by their staff, and thus are expected to put in place controls and procedures to manage their environmental and social performance. A breakdown for the cost of noncompliance for each mitigation measure will be enclosed in bidding documents. These will include:

- Mitigation measures to be included in the contract will be specified in the subproject ESMP;
- Deductions for environmental noncompliance will be added as a clause in the Bill of Quantities (BOQ) section; and
- Environmental penalties shall be calculated and deducted in each submitted invoice.

Any impact that is not properly mitigated will be the object of an environmental/social notice by PIU.

For minor infringements and social complaints, an incident which causes temporary but reversible damage, the contractor will be given a notice to remedy the problem and restore the environment. No further actions will be taken if the Project engineer confirms that restoration is done satisfactorily.

For social notices, the Project engineer will alert the contractor to remedy the social impact and the follow the issue until solved. If the contractor does not comply with the remediation request, work will be stopped and considered under no excused delay.

If the contractor hasn't remedied the environmental impact during the allotted time, the Project engineer will stop the work and give the contractor a notification indicating a financial penalty according to the non-complied mitigation measure that was specified in the bidding document.

No further actions will be required if the Project engineer sees that restoration is done satisfactorily. Otherwise, if Contractor hasn't remedied the situation within one day any additional days of stopping work will be considered no excused delay.

Environmental notifications issued by the Project engineer might include one or more environmental penalty.

In the event of repeated noncompliance totaling 5% of the contract value, the Project Engineer will bring the environmental and social notices and the deduction history to procurement to take legal action.

Grievance Mechanism for Workers

Contractors will put in place a Grievance Mechanism for their workers that is proportionate to their workforce, according to the following principles[89]:

Provision of information. All workers should be informed about the grievance mechanism at the time they are hired, and details about how it operates should be easily available, for example, included in worker documentation or on notice boards.

Transparency of the process. Workers must know to whom they can turn in the event of a grievance and the support and sources of advice that are available to them. All line and senior managers must be familiar with their organization's grievance procedure.

Keeping it up to date. The process should be regularly reviewed and kept up to date, for example, by referencing any new statutory guidelines, changes in contracts or representation.

Confidentiality. The process should ensure that a complaint is dealt with confidentially. While procedures may specify that complaints should first be made to the workers' line manager, there should also be the option of raising a grievance first with an alternative manager, for example, a human resource (personnel) manager.

Non-retribution. Procedures should guarantee that any worker raising a complaint will not be subject to any reprisal.

Reasonable timescales. Procedures should allow for time to investigate grievances fully but should aim for swift resolutions. The longer a grievance is allowed to continue, the harder it can be for both sides to get back to normal afterwards. Time limits should be set for each stage of the process, for example, a maximum time between a grievance being raised and the setting up of a meeting to investigate it.

Right of appeal. A worker should have the right to appeal to the project or national courts if he or she is not happy with the initial finding.

Right to be accompanied. In any meetings or hearings, the worker should have the right to be accompanied by a colleague, friend or union representative.

Keeping record*s*. Written records should be kept at all stages. The initial complaint should be in writing, if possible, along with the response, notes of any meetings and the findings and the reasons for the findings.

Relationship with collective agreements. Grievance procedures should be consistent with any collective agreements.

Relationship with regulation. Grievance processes should be compliant with the national employment code.

[89] Based on Annex D of the Guidance Note for IFC's Performance Standard 2.

Annex VIII Template for Preparation of Hazardous Waste Management Plan (HWMP)

Subproject Name	
Subproject Location	
Subproject Proponent	
Start/Completion Date	
ASCENT Project Component	
Subproject Activities	

Hazardous Waste Management Plan Contents

1. **Introduction**

Brief overview of the proponent and the purpose of the HWMP.

For example, Purpose – HWMP aims to provide guidelines on waste reduction, segregation, collection, and disposal practices in accordance with International best practices (WBG ESS3 and ESHGs), to avoid deterioration of the natural environment and adverse impacts on community health and safety.

The xxxxxxx subproject is committed to apply the waste hierarchy. This Plan is the main document to guide employees on waste management.

2. **Legal and Regulatory Framework**

Provide an overview of relevant local, state, federal regulations and International best practices (Basel Convention on the Control of Transboundary Movement of Hazardous Waste and their disposal, World Bank ESS3, and ESHGs – General and for Electric Power Transmission and Distribution) governing waste management.

3. Potential Environmental, Health and Safety (EHS) Risks and Impacts

This section details EHS risks and impacts that may be associated with poor management of hazardous waste, including final disposal.

4. Mitigation Measures for (EHS) Risks and Impacts

This section provides guidance on the mitigation measures that will be implemented by the subproject in accordance with relevant local, state, federal regulations and International best practices (Basel Convention on the Control of Transboundary Movement of Hazardous Waste and their disposal, World Bank ESS3, and ESHGs – General and for Electric Power Transmission and Distribution) governing waste management. The following are the general requirements for waste management:

1. Waste minimization and prevention;
2. Selection of technologies and equipment based on international standards to maximize their lifetime and minimize associated risks at their end-of-life stage;
3. Coordination with the relevant authorities and stakeholders;
4. Identification, labelling, and separation of e-waste at source;
5. Waste quantification, and qualitative record keeping;
6. Temporary storage on site; and

7. Collection and transportation

E-waste Minimization and Prevention

The following set of measures aims to prevent and/or minimize the quantities of hazardous waste generated and the associated hazards:

- Procure equipment from credible manufactures to avoid purchasing second hand, refurbished, or obsolete devices with a short shelf life or already categorized as waste;
- Procure equipment with their maintenance manual detailing the presence of hazardous material and waste management labels;
- Instituting good housekeeping and operating practices, including inventory control to reduce the amount of hazardous waste resulting from materials that are out-of-date, off specification, contaminated, damaged, or excess to operational needs;
- Minimizing hazardous waste generation by implementing stringent waste segregation to prevent the mixing of non-hazardous and hazardous waste to be managed; and
- Promoting reuse of electronic devices, appliances, and maintenance procedures.

Hazardous Waste Separation and Quantification

Hazardous waste management for the entire subproject should be separated from the non-hazardous waste. An inventory check list of the disposal items needs to be prepared and approved prior to final disposal.

Hazardous waste Recycling, Reuse, and Recovery

The subproject needs to investigate and recommend measures, if any, on how the generated hazardous waste can be recycled, reused, or recovered.

Hazardous waste Storage

Subproject staff and involved stakeholders shall ensure that the storage of subproject related hazardous waste is being conducted in accordance with the national laws and legislations and the World Bank EHS Guideline. Hazardous waste should be stored in a way that prevents and controls accidental release to natural resources (air, soil, and water). Reporting to MECC and PIU about any storage and disposal of hazardous waste is required promptly. The following measures are to be taken in the storage of hazardous waste:

- Temporary storage shall be available on site until transportation to their final storage location;
- Hazardous waste shall be stored in closed containers, each depending on type and composition away from direct sunlight, rain, wind, electrical fixtures, water systems and in an area where ventilation system is not circulated to other rooms or facilities;
- Hazardous waste shall be stored in an appropriate manner preventing the mixing or contact between different sorts of hazardous waste and in a separate location from solid waste;
- The storage arrangement shall allow for inspection between containers to monitor leaks or spills. Examples could include insufficient space between incompatible hazardous waste;
- The Contractor, employees involved in the hazardous waste management, and the disposal or recycling enterprises shall provide their personnel with training and induction on the proper handling of hazardous waste;
- Employees involved with hazardous waste management shall be provided with the appropriate Personal Protective Equipment (PPEs), vaccinations in accordance with the Health Law and the bylaw on hazardous waste, and a medical record shall be kept;

- Containers with different types of hazardous waste shall be correctly labelled, with a datasheet attached and specified for each type including but not limited to number of containers, number of units within each container, type, weight, hazardous material content (e.g., PCBs, Arsenic, Pesticide, Lead, mercury, etc.), date of collection, hazardous waste management personnel name, receiver, and final disposal method; and
- Conduct periodic inspection of hazardous waste storage area and document the findings.

Hazardous waste Transportation

All hazardous waste designated for off-site transport shall be secured in the designated storage location and shall be labelled as indicated with the contents, associated hazards, receiver, destination, and other information. Hazardous waste shall then be properly loaded onto the transportation vehicles in accordance with OHS guidelines on loading and unloading, specified in the World Bank EHS Guidelines.

In cases of companies assigned to manage the hazardous waste, the awarded company shall provide safe and adequate vehicles and machinery to transport hazardous waste. The transport destination shall be the transfer stations, treatment facilities, or final disposal locations.

Hazardous Treatment and Disposal

Treatment or processing of hazardous waste shall take place at licensed – hazardous waste recycling facility. Awarded companies or contractors shall specify in their proposals the treatment method that they are to apply. The implemented processes and management methodologies must be documented, and records are to be stored.

Awareness

Roles and Responsibilities

Subproject Proponents/ESPs

- The ESPs implementing the subproject is responsible for the handling and final disposal of hazardous waste. The ESP's EHS officer is responsible for the monitoring of any items to be discarded including hazardous waste.
- ESPs will also create awareness and training about proper handling of hazardous waste among Project staff.
- Providing safe storage for hazardous waste in the ESP premises and keeping hazardous waste inventory at their records.
- Contracting a hazardous waste handling company.

Project Implementation Unit (PIU)

- The PIU shall ensure all specifications include determination of end-of life expectancy of each equipment, and the verification of type of hazards, reusing and recycling options.
- The list of equipment to be provided by the project will be determined by the PIU and it shall include a lifetime expectancy of each item to be kept at the MOEWR and copies of records including inventory number shall be kept as well at the MOEWR.

Ministry of Environment and Climate Change (MECC)

MECC is responsible for the handling and final disposal of hazardous waste that cannot be managed locally.

Monitoring and Reporting

The supplied equipment list shall be kept at the PIU and copies of records including inventory number shall be kept as well at the MOEWR.

Monitoring of proper use and handling of the project equipment is the responsibility of MOEWR.

Additionally, record keeping of collected hazardous waste needs to be monitored. Hazardous waste collected, stored, or transported shall include:

- Name and identification number of the material(s) composing the hazardous waste or physical state;
- Quantity (i.e., kilograms, number of containers);
- Content (i.e., transformers, computer devices, solar panels, inverters);
- Schedule (date of collection, date of transportation, etc…);
- Hazardous and pollutant contents (i.e., existence of mercury, PCBs, lead, PAHs);
- Hazardous waste transport tracking documentation shall include quantity and type, date dispatched, date transported, and date received, record of the originator, the receiver, and the transporter.
- Method and date of storing, repacking, treating, or disposing at the facility, cross-referenced.

Budget and Resources Requirements

The hazardous waste handling and management is the responsibility of the ESP, where their budget for their works is covered by the project funding to the subproject.

Approval and Revision History

- [Name and Signature of Approving Authority]
- [Date of Approval]

Annex IX: Chemical Spill Control: The Complete Guide[90]

Any workplaces that carries hazardous substances must have a spill response plan in place.

3 Key Steps in Chemical Spill Control

The key steps in *spill control* include:

1. Spill prevention
2. Spill response (including containment and spill clean-up)
3. Waste management

SPILL PREVENTION

Preventing spills requires a combination of good site management, compliant storage and handling practices, and the monitoring and maintenance of primary and secondary spill containment systems.

Good Site Management

The key components of good site management are:

- Risk management
- Site planning
- Compliant chemical storage
- Site inspections, reporting and record keeping
- Site maintenance

Risk Management

By using a risk management approach to chemical spills, you can *assess and manage the risks of hazardous substances*.

Risk itself is determined by a combination of an incident's severity, consequences, and the likelihood of it occurring in your workplace.

A professional risk assessment enables you to identify and quantify the risk of a damaging event occurring at your workplace. It also helps you direct your resources towards implementing preventative controls to mitigate those risks.

Site Planning

Good site planning is the foundation for excellent site management.

The entire workplace site should be considered when working out how to reduce the risks of harm to the environment associated with the storage and handling of liquid substances.

One proven strategy to control risk is to restrict certain activities — or use specific areas or zones within the site. This reduces both the risk of environmental pollution as well as the costs associated with preventing such pollution.

An effective site plan should involve the following considerations:

- Include provision for *chemical storage* locations that comply with workplace health and safety legislation, relevant Australian Standards, as well as the relevant state and territory WHS authorities - for example, storing liquids undercover.

[90] See *https://blog.storemasta.com.au/chemical-spill-control-the-complete-guide*

- Undertake a review of the processes that take place on your site and, where possible, look for ways to reduce the volume of toxic and hazardous liquids.
- Invest in purpose-built, high-quality bunding installations to create secondary containment systems that comply with Australian regulations and prevents uncontained spills and leaks from occurring.
- Install appropriate site containment infrastructure and site isolation systems to ensure that hazardous liquids that are spilled or leaked cannot contaminate the environment, including the air, land and water (including groundwater).
- For water that does enter the environment from any uncovered outdoor work spaces, install systems, such as first flush systems, triple interceptor points, and oil/water separators, that guarantee the water is clean once it leaves the site.
- Ensure normal, uncontaminated stormwater is diverted away from the site's liquid storage and other areas where contaminants can accumulate.

Hazardous Liquid Storage to Reduce Spill Risk

The storage of hazardous substances involves primary and secondary containment. Primary containment relates to considerations about the location and structure of the container, cabinet or store used to store your liquid. Secondary containment includes solutions, such as bunding, that can contain leaks and spills if there is an accidental release.

To ensure effective primary containment, consider these points:

- Clearly label liquid containers and liquid stores with the proper, compliant signage and placarding.
- Segregate *incompatible substances* in dedicated, ventilated stores to avoid causing dangerous reactions.
- Use fit-for-purpose compliant storage containers with secure lids for all liquid substances.
- Only purchase or order the minimal quantity of chemicals required for your site operations, and choose safer substitute products where possible.
- Adhere to safe decanting and pouring techniques to reduce the incidence of spills and splashing liquids (for example, use portable bunds or drip trays when decanting in an area without existing secondary containment measures in place).
- Properly dispose of liquid substances no longer used at your site (get advice from appropriate waste management authorities or service providers).
- Provide and maintain all necessary PPE, including gloves, face shields, safety glasses and respirators.
- Regularly monitor and maintain all primary containment systems and infrastructure at your site.
- Maintain an up-to-date inventory (register or manifest, as required) of all liquid substances kept on site.
- Provide relevant updated safety data sheets (SDS), kept in easily accessible and *secure document holders*.

Secondary containment measures are designed to prevent liquids escaping into the environment in the event of a leak or spill and may include:

- **Bunds or bunding**- which are impermeable, raised barriers acting as the perimeter of a secondary containment area. *Bunds* and permanent barriers, such as gutters, will prevent spills from further spreading throughout the worksite.

- **Bunded storage** – secondary containment for your stored chemicals is essential, so select compliant *safety cabinets* and outdoor chemical storage containers that can house your chemicals with liquid-tight spill containment.
- **Encasement**- which involves storage with inbuilt or integral secondary containment (such as *purpose-built bunded shelving* or placing drums inside sealed plastic containers during transport).
- **Grading**- which involves grading sealed surfaces to create a contained area, using components of a building or external structure.

Site Inspections and Maintenance

Secondary containment systems must be regularly inspected and properly maintained to ensure they perform as expected in the event of an accidental release.

Consider the following factors when developing an inspection and maintenance schedule:

- Has the bunding, such as *steel drum bunds*, been regularly inspected and *cleaned out* when a spill or leak is noted?
- Are your *secondary containment areas* being used properly for the purpose they were designed for? Are personnel leaving or using liquid containers outside the area or storing other unnecessary materials in the area and reducing its effective volume?
- Are primary containers in good condition or do they pose a spill risk?
- Have all secondary containment structures and equipment been inspected and maintained? Check bund walls and floors, seals and casings. Could any changes to the area, such new piping, compromise the integrity of secondary containment systems?
- Are all switches, sensors, alarms and pumps in good working order?
- Could rainwater or other uncontained liquids accumulate inside the secondary containment areas?

REMEMBER: *Staff should also be trained in the proper handling and storage practices so that accidental releases are controlled. By using bunded handling equipment and storage equipment, in addition to the development of work procedures, you can minimise the likelihood of chemical spills occurring in your workplace.*

HOW TO RESPOND TO A SPILL

The first thing to consider when *responding to a spill* in the workplace is to determine how severe the incident is and what hazards are present.

The severity of a spill depends on the type of incident that occurs. It can be an emergency requiring an urgent response — and possibly even emergency services such as the fire department to attend the scene. Alternatively, the incident could be a minor spill that your inhouse spill response team can safely contain and clean-up.

Use the **chemical spill decision tree flowchart** to work through the process of deciding if the incident should be classified as a minor spill or major spill.

Even if the incident is deemed a minor spill, adequate and timely incident response is essential to minimise any harm to human health or the environment.

Minor spills are classified as incidents that can effectively be cleaned up by an individual person onsite or small crew.

Major chemical spills, however, require a far more coordinated response in line with the workplace's *incident management and spill response plan.*

Classify an incident as a major spill if any of the following criteria are met:

QUANTITY	HAZARD	LOCATION
More than 100 ml or 10 g of a highly hazardous chemical (such as a carcinogen).	The chemical presents an immediate threat to human health and safety or the environment.	The spill occurred outside the site or area where the substance is generally handled.
More than 1 L or 100 g of a volatile or flammable solvent, reactive or corrosive (acid or base) liquid or solid.	The chemical is an immediate fire hazard, such as an uncontrolled gas leak (liquid petroleum gas, for example).	There are no adequately trained personnel available to clean-up the spill.
	The chemical is unknown.	

Whatever type of spill you're facing, it's important to have an incident management plan in place. This plan should cover all the potential spill scenarios that could occur— and how to respond appropriately to each type of spill incident.

IMPORTANT: *The relevant emergency services and regulatory authorities should also be consulted when preparing an incident management plan that involves potentially sizable incidents that could cause significant harm to human health, property or the environment.*

Spill Incident Management

An incident management plan outlines the procedures for handling an event that falls outside the normal operating conditions of a workplace, such as a fire, explosion or *uncontained liquid spill*.

The detail or length of the plan itself will depend on the size of the operations and what type of activities and substances are involved. For example, dangerous goods such as flammable liquids and other hazardous substances can present a far greater risk to health and the environment than less hazardous substances, and the incident planning process will reflect that level of risk.

However complex or simple the plan is, it should provide a detailed guide to the procedures required to manage any incident safely and in a way that minimises harm to personnel or the environment, as well as the business operation itself.

Your *safety data sheets* (SDS) are one of the most important documents to assist in your spill incident management plan, as these will detail all the hazards and incompatibilities, as well as the spill clean-up procedures, emergency and first aid requirements.

REMEMBER: *Determining the level of risk associated with a potential liquid spill or leak at a workplace, and how to manage that risk effectively, can be a complex task. Enlisting an expert to conduct a proper risk assessment can help you prevent costly workplace incidents and ensure that you comply with Australian WHS regulations.*

Chemical Spill Response Equipment

Spill response equipment can include:

- ***Spill kits***– these kits will contain absorbent materials and other items designed to deal with the substances stored onsite. Some *spill kit* types include: marine spill kits, chemical spill kits, universal spill kits, and *oil and fuel spill kits*

NOTE: *Always check the SDS of your chemical product to ensure absorbency and compatibility.*

- **Fire extinguishers** – suitable for the chemicals that have been released.
- **Recovery drums or compatible containers** – your recovery containers should be able to hold the maximum amount of liquid that could be spilled.
- **Neutralising substances** – for use with hazardous acids or bases stored or used onsite.
- **Block drains** - mechanisms or equipment to effectively block any drain or stormwater drain inlets that could be within the spill zone
- **Adequate spill containment equipment** – to prevent chemicals escaping outside the containment area, you may require booms or flexible floor bunding to stop the spread.
- **PPE** - Appropriate safety equipment and *personal protective equipment(PPE*) must be provided for your spill response team.

Train staff how to locate and use the spill kit, so that the correct equipment and absorbents are used during the spill incident. Always check the compatability of the absorbents and equipment that you're using.

What Does Spill Incident Response Involve?

If a spill or leakage incident is deemed serious enough to threaten the health and safety of people or the environment, the response should involve a site evacuation in line with the OHS requirements for your worksite.

If the spill or leak is not deemed to be a threat to the safety of personnel onsite, then the following general response principles should be applied when managing a liquid spill.

Australian Environmental Protection Authorities (EPAs) maintain a simplified four-step process in the event of a liquid spill in the workplace. Training nominated spill response personnel (as well as the rest of your staff) about these four basic steps can be an effective way to improve incident response across the workforce.

4-Step Spill Response Sequence
STOP the spill
CONTAIN the spill
REPORT the spill
CLEAN UP the spill

Some tips for chemical spill response include:

- Stop the spill or leak at its source if safe and practical to do so.
- Ensure the spilled liquid is not allowed to flow into the stormwater system.
- If the spill is exposed to potential rainfall, the area should be covered if practicable to ensure clean-up operations are not compromised.
- Use appropriate spill control equipment and *absorbent materials* across the whole spill zone to contain the spill.
- Make sure that any spill control equipment and absorbent materials used in the clean-up are disposed of properly.
- Treat any water used for cleaning up or decontaminating spills as contaminated waste water and dispose of this safely, in accordance with local regulations.

- Maintain an accurate record of the incident and prepare a suitable report for the relevant management department or personnel.
- Ensure that the report predicates an investigation of the incident to determine the cause of the spill and to identify and implement precautionary action that will reduce the risk of a similar spill incident reoccuring.

NOTE: *Ensure all relevant personnel are prepared to attend to every spill immediately, no matter what size the spill or leakage is deemed to be.*

WASTE MANAGEMENT FOR CHEMICAL SPILLS

Australian worksites that store and handle liquid substances typically generate a variety of associated wastes, including:

- Chemical waste
- *Used, empty liquid containers* and packaging
- Solid absorbent materials used in spill clean-ups
- Water contaminated by liquid-related wastes
- Soil contaminated due to improper site management

How to Dispose of Waste after a Chemical Spill

Liquid Waste Disposal

Water and sewage authorities may enter into a trade waste agreement which will enable your site to dispose of contaminated water to the sewerage system.

The local authority will conduct an assessment of the wastewater you generate to determine whether or not it can be disposed of via the sewer. The contaminated water may require pre-treatment before it can be disposed of via the sewerage system.

Some chemical wastes, such as *oils* and *solvents*, can be collected for recycling purposes. They must, however, be appropriately contained in the event of a spill using dedicated secondary containment zones and *liquid spill clean-up equipment*.

NOTE*: Just one litre of oil is capable of contaminating up to one million litres of clean water, but if it is recovered safely and securely, it can be a valuable reusable resource.*

Solid Waste Disposal

Disposable solid wastes are often generated during liquid spill clean-up operations. Such items may include:

- Absorbent pads, wipes and pillows
- Spill mats
- Absorbent floor sweep products

Some of these solid wastes may need to be disposed of by an accredited waste collection service licensed to collect hazardous and industrial wastes.

Wastes classified as non-hazardous can often be disposed of in normal solid waste disposal bins.

It all depends on the type of liquid substances for which they are used to clean up, and how hazardous they are to human health or the surrounding environment.

REMEMBER*: Seek advice from the waste collection service provider or your local council who will know what must be disposed of by a licensed contractor.*

What are Notifiable Chemicals?

Some hazardous wastes are subject to very specific management controls and disposal protocols due to the risk they present to human health and the environment.

Depending on the type of chemical and the quantity of chemical waste involved, the appropriate authorities must be notified.

Examples of notifiable chemicals include:

- Liquid pool chlorine (hypochlorite solution) and other chlorine compounds
- Arsenic and arsenic compounds
- Polychlorinated biphenyls (PCBs)
- Organotin antifouling paint (tributyltin or TBT).

Annex X: Standard Table of Contents for ESMP

The content of the ESMP will include the following:

1. **Mitigation –** The ESMP identifies measures and actions in accordance with the mitigation hierarchy that reduce potentially adverse environmental and social impacts to acceptable levels. The plan will include compensatory measures, if applicable. Specifically, the ESMP:
    a. Identifies and summarizes all anticipated adverse environmental and social impacts (including those involving indigenous people or involuntary resettlement);
    b. Describes—with technical details—each mitigation measure, including the type of impact to which it relates and the conditions under which it is required (e.g., continuously or in the event of contingencies), together with designs, equipment descriptions, and operating procedures, as appropriate;
    c. Estimates any potential environmental and social impacts of these measures; and
    d. Takes into account, and is consistent with, other mitigation plans required for the project (e.g., for involuntary resettlement, Indigenous Peoples, or cultural heritage).
2. **Monitoring –** The ESMP identifies monitoring objectives and specifies the type of monitoring, with linkages to the impacts assessed in the environmental and social assessment and the mitigation measures described in the ESMP. Specifically, the monitoring section of the ESMP provides (a) a specific description, and technical details, of monitoring measures, including the parameters to be measured, methods to be used, sampling locations, frequency of measurements, detection limits (where appropriate), and definition of thresholds that will signal the need for corrective actions; and (b) monitoring and reporting procedures to (i) ensure early detection of conditions that necessitate particular mitigation measures, and (ii) furnish information on the progress and results of mitigation.
3. **Capacity development and training**
    a. To support timely and effective implementation of environmental and social project components 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.
    b. 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).
    c. To strengthen environmental and social management capability in the agencies responsible for implementation, the ESMP recommends the establishment or expansion of the parties respon- sible, the training of staff, and any additional measures that may be necessary to support implementation of mitigation measures and any other recommendations of the environmental and social assessment.
4. **Implementation schedule and cost estimates –** For all three aspects (mitigation, monitoring, and capacity development), the ESMP provides (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 project cost tables.