

SUDAN REDD+ PROGRAMME

Environmental and Social Management Framework

Prepared for the Forests National Corporation
of Sudan and the World Bank

RFP No.: SD-REDD-92955-CS-CDS



Project title

Developing the Strategic Environmental and Social Assessment and associated deliverables for Sudan REDD+ Programme - Phase II

Assignment title

Environmental and Social Management Framework (ESMF) for the Implementation of REDD+ Program in Sudan

Task reference

Forests National Corporation (SD-REDD-92955-CS-CDS)

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Document version/status

Final version



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ABBREVIATIONS AND ACRONYMS

CSOs	Civil Society Organisation(s)
CBD	Convention on Biodiversity
D&D	Deforestation and forest degradation
E&S	Environmental and Social
EIA	Environment Impact Assessment
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
ESMF	Environmental and Social Management Framework
ESS	Environment and Social Standards
FAO	Food and Agriculture Organisation
FCPF	Forest Carbon Partnership Facility
FNC	Forests National Corporation
GAPA	Gum Arabic Producer Association
GEF	Global Environment Fund
GHG	Greenhouse Gas
GIS	Geographic Information System
HCENR	Higher Council for Environment and Natural Resources
IPM	Integrated Pest Management
IPPF	Indigenous Peoples Planning Framework
M&E	Monitoring and Evaluation
MoENPRD	Ministry of Environment, Natural Resources and Physical Development
MRV	Monitoring Reporting and Verification
NGOs	Non-Governmental Organisations
NFI	National Forest Inventory
NFMS	National Forest Monitoring System
NRS	National REDD+ Strategy
PMU	Programme Management Unit
REDD+	Reducing Emissions from Deforestation and Forest Degradation, Conservation of Forest Stocks, Sustainable Management of Forests and Enhancement of Forest Carbon Stocks'
PF	Process Framework
Sudan	Republic of Sudan
RPF	Resettlement Policy Framework
R-PP	Readiness Preparation Proposal
SECS	Sudanese Environment Conservation Society
SESA	Strategic Environmental and Social Assessment
SIS	Safeguards information System
SSNRMP	Sudan Sustainable Natural Resources Management Programme
SPIU	State Project Implementation Unit
SPSC	State Project Steering Committee
TAC	Technical Advisory Committee
TWG	Technical Working Group
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNCCD	United Nations Convention to Combat Desertification
UNFCCC	United Nations Framework Convention on Climate Change
UN	United Nations
WB	World Bank
WCGA	Wildlife Conservation General Administration

ACKNOWLEDGEMENTS

This report would not have been possible without the full endorsement, support and ownership of the Forest National Corporation and the REDD+ Project Management Unit (Sayeda A. A. Khalil, Burae Elhussien, Hisham S. ElKurdi, Atif Mohamed Ali and Sahl Mustafa and Elham Jameel) and its invaluable support.

The consortium responsible for this assignment (Etifor and HAMERKOP) would like to express gratitude to:

Key experts: Olivier Levallois – Project Manager and Technical Advisor; Sean P. White - Team Leader; Talaat D. A. Magid - Deputy Team leader and Forest Governance Specialist; Tarig E. M. Elfaki – Forest Policy and Legal Expert; Abdelrahman E. A. Musa - Environment Specialist; Nazar A. S. Mohamed – Geoinformatics Specialist and Hana Hamadalla – Policy and Legal Expert.

Non-key experts: Colm O'Driscoll - Forest Policy and REDD+ Expert and deputy Project Manager; Dr Brice Perombelon - E&S and indigenous community specialist; Dr. Mauro Masiero - International Forest Economist; and Dr. Alex Pra - Forest Investment Expert.

The consortium would also like to express its gratitude to all those who supported the SESA expert team in the capital city of Khartoum and regions as follow.

The consortium and SESA experts would also like to express a special thanks to Omer A. Farah, chair of the SESA Technical Working Group and its members (Prof. Mubarak Abd Elrahman, Rehab Ahmed Hassan, Dr. Abd Elrahman El Amin, Dr Rehab Khatim, Dr Mutasim El Amin, Dr Yagoup Abdalla, Mohammed Osman Hussein, Dr Eiman El Rasheed, Dr Abd Alla Mirghani, Eng. Ibrahim Balila, Nadia Ahmed Elamin, Donia Hassan, Elham Abdalla and Ismail Elkafi) as well as Dr Asia Adlan Mohamed, the PMU's safeguard specialist, for their long-lasting efforts and valuable technical support as well as the Sudan REDD+ Programme Management Unit for their support throughout this assignment.

Our appreciation is to: FNC's General Manager late Dr. Mohamed Ali El Hadi for his everlasting assistance to the study team, Osman Abdalla, FNC office manager, and to FNC's senior staff in Khartoum in the States at headquarters for logistical care and bestowing of guidance, and information.

Particular thanks go to Abdelhai Mohamed Sharif; Ex-Director of the General Directorate of planning and policy making at FNC, Somaya Omer Abdoun, Director of FNC's afforestation division, Salah Yousif Badawi from FNC's National Forest Inventory and Dr. Salwa Mansour Abdel Hameed from MAP UINSCO.

A great appreciation to FNC State Managers and their staff in the states of Gadaref (Balla Musa now replaced with Salah elmahi), Sennar (Musa Elsafori, transferred to Khartoum FNC HQs and replaced by Essam Abdel Kareem), Ali Shiekh Idris, Elrehaima, Seidahmed Abdel Aziz (transferred to Northern state as state manager) and Alrehaima Mahmoud Ismail, Blue Nile (Ahmed Ibrahim, pensioned off and replaced by Hyder Ahmed Yousif), White Nile (Mutasim Esmail Alamin), North Kordofan (Mohamadain), South Kordofan (Hatim Mukhtar), West Kordofan (Mohamed Eljack), North Darfur (Abubakr Yousif), South Darfur (Abdalla Adam), East Darfur (Hyder Yousif replaced by Mohamed O. Talha), Central Darfur (Abdel Mutalab), Northern (Abdel Aziz Seidahmed), River Nile (Masoud), Red Sea (Dr. Yousif Abdelrahman), Kassala (Bakri Mahoud), Khartoum (Osama A. Adam), Gezira state (Eiman Adawi). Our appreciation also goes to the REDD+ focal points in Gadaref, Sennar, Blue Nile, White Nile, North Kordofan, South Kordofan, West Kordofan, North Darfur, South Darfur, East Darfur and Central Darfur.

Finally, we are grateful of the support and fruitful working relationship with Hassan and Tag, Greensoft and the World Bank.

EXECUTIVE SUMMARY

This Environmental and Social Management Framework (ESMF) is based on the findings of the Strategic Environmental and Social Assessment of the draft National REDD+ Strategy for Sudan. It provides the framework for ensuring that projects implemented under the REDD+ strategy are environmentally and socially sustainable and in compliance with the World Bank Environmental and Social Standards. It sets out the principles and procedures to assess the environmental and social risks of projects and specifies the processes to be followed to avoid, reduce, mitigate, compensate and/or offset adverse risks. It also provides an analysis of the environment and social management regime in Sudan and assesses its capacity to implement this framework. It specifies the agencies and institutional arrangements for managing project risks and impacts, including their capacity and training needs to meet the requirements of the World Bank Environmental and Social Standards.

Environmental and Social Governance in Sudan

The constitutional, policy and legal framework for environmental and social governance in Sudan is supportive of environment and social sustainability and Sudan has ratified many relevant multilateral environment agreements indicating a supportive environment for the adoption of best practices in environment and social sustainability in REDD+ strategy implementation.

Revision of domestic policies, laws and regulations in line with the provisions of the multilateral agreements is lagging behind. Policies, laws and regulations need updating and intersectoral harmonization. The institutions responsible for environmental governance are weak in terms of institutional collaboration and linkages and in terms of staffing levels and technical capacity. The reorganization of the Higher Council for Environment and Natural Resources at federal level by the current administration provides hope for a revitalized institution and for finalization of the national regulations, guidelines and processes for environmental management that have been developed but have remained at draft stages for several years.

The environment and social governance systems in Sudan are not adequate at present to meet the standards required by the World Bank Environmental and Social Standards. Therefore, the REDD+ programme will establish the processes and specify the instruments to be used to comply with these standards during implementation of the REDD+ programme.

The REDD+ programme must also include activities aimed at building the capacity of environmental and social governance stakeholders in Sudan to a level that meets World Bank standards.

Institutional arrangements for implementing the Environmental and Social Management Framework

The key institution for the implementation of the REDD+ strategy and related activities is the REDD+ Programme Management Unit established within the Forest National Corporation. A safeguards unit will be established as a technical unit within the Programme Management Unit and will be working closely with the monitoring and evaluation unit, also located within the Programme Management Unit.

The safeguards unit will be responsible for ensuring compliance with the provisions of the ESMF during project implementation. The unit will consist of one full time safeguards specialist initially who will have environment and social skills and experience and will be responsible for both environmental and social aspects, the ESMF and other complementary instruments (IPPF, RPF, PF, GRM, stakeholder engagement, etc.). The staff of the unit will be expanded as required in line with the scale and requirements of the programme and will be supported by short-term specialists as required.

At the time of drafting the present ESMF, the implementation arrangements for REDD+ activities have not yet been specified but drawing on lessons from implementation of the Sudan Sustainable Natural Resources Management Project, a devolved system of implementation is envisaged, involving a multi sectoral State Project Steering Committee and State Project Implementation Unit (SPIU). The Environment and Social Safeguards Unit within the REDD+ Programme Management Unit will work through the state level institutions, providing technical support and capacity building training, and supervising implementation of the Environmental and Social Management Framework and its associated processes and instruments. The SPIU will be responsible for developing project proposals, screening for environment and social impacts, and for the drafting the Environment Management Plans to manage compliance with the provisions of the Environmental and Social Management Framework during implementation. Approval of screening forms will be done at national level at the PMU safeguards unit. A staff member within the SPIU will be designated to be responsible for environment and social safeguards and for implementing the ESMF requirements. The safeguards within the REDD+ Programme Management Unit will provide oversight and technical support to the SPIU and will build the capacity of the safeguards function within the SPIU.

Instruments and processes for project preparation, screening, and monitoring during implementation and compliance with Environment and Social standards.

The processes and instruments described in this framework for compliance with the environment and social standards during implementation of projects under the REDD+ strategy, include instruments to be used during a) the project planning phase including planning procedures, environment and social screening, environmental and social impact assessment; and b) during the environmental and social management plan development and implementation, annual environment and social audits, monitoring, reporting and links to the safeguards information system.

Monitoring and the safeguards information system.

An environmental monitoring system is proposed consisting of an environment and social management plan and annual audits. The plan specifies baselines and environmental and social indicators and the mitigating measures to be implemented to reduce potential adverse impacts during implementation. Annual environmental and social audits are proposed to monitor compliance with the mitigating measures and assess if the mitigating measures are having the desired impact. The audits also monitor changes in environmental indicators data and will indicate if corrective action is required to manage adverse impacts. Based on the annual audits, modifications to the environment and social management plan will be made by the implementation units at state level in consultation with the safeguards unit. A safeguards information system (yet to be designed) will store baseline information, data from annual audits and information from other ESMF processes; such as: the Feedback and Grievance Redress Mechanism; the Monitoring and Safeguard Information System (also a feedback platform-reporting on progress of consultations); management plan implementation, disclosure platform of relevant environmental and social reports, plans, monitoring results, etc. Finally, the Safeguards Information System will be integrated with the broader national forest monitoring system.

Training and capacity building

A capacity building and training programme is proposed to a) provide the capacity to implement the ESMF, involving training of Programme Management Unit staff, relevant state and locality staff of the SPIU, the native administration and village committees; and b) to strengthen the environmental and social governance in Sudan. This will involve training and supporting institutional development, improving coordination and development of policies, laws, regulations and guidelines for environmental and social management at both the federal and state levels.

1. INTRODUCTION

1.1 REDD Project background

Reducing Emissions from Deforestation and Forest Degradation (REDD) is a global climate change mitigation mechanism negotiated under the United Nations Framework Convention on Climate Change (UNFCCC). Its objective is to reduce emissions of greenhouse gases resulting from deforestation and forest degradation (D&D) in developing countries by incentivizing countries to conserve and enhance forest carbon stocks, reduce rates of deforestation and forest degradation and promote sustainable management of forests.

In the Republic of Sudan (hereafter referred to as Sudan), forest resources are of great importance for subsistence livelihoods, as a source of fuelwood, fodder, and food and for forest-based enterprises such as gum arabic production and charcoal. The forest resources are declining due to unsustainable fuelwood extraction, expansion of agriculture, climate change and other causes. The lack of integrated land use plans and coordination across institutions has resulted in uncontrolled land use changes and conversion of vast forest tracts into agricultural areas over the past 40 years. The area of forest continues to decrease, and those forests that are remaining continue to be degraded.

The REDD+ Programme in Sudan aims to halt and reverse these trends. The World Bank's Forest Carbon Partnership Facility (FCPF) is supporting Sudan in the preparation and subsequent implementation of a National REDD+ Strategy to address deforestation and forest degradation. Sudan is in the preparatory phase of the REDD+ process and has set up the institutions and carried out a number of background studies, including the identification of underlying drivers of deforestation and forest degradation and has developed a draft National REDD+ Strategy (NRS).

A Strategic Environment and Social Assessment (SESA) of the draft NRS has been carried out as required by the World Bank Environment and Social Standards (WB-ESSs). Its aim was to identify potential environment and social (E&S) impacts of the strategy options being proposed and to propose measures to avoid or mitigate potential negative impacts and enhance potential positive impacts. The findings of the SESA have informed the revision of the draft NRS aimed at environment and social sustainability. The present Environmental and Social Management Framework (ESMF) was developed in conjunction with the SESA and is informed by the findings of the SESA.

1.2. Purpose of the ESMF

The NRS is a framework plan under which projects and sub projects will be developed and implemented. As those projects and sub-projects are not yet developed, their specific risks and impacts are not known. This ESMF provides the higher-level framework for environmentally and socially sustainable project planning and as specific project plans are developed, more detailed, project specific environment and social safeguards will be specified in those plans.

This ESMF draws on the findings of the SESA in regard to the potential risks and impacts identified and provides the framework for planning and implementing those projects and sub-projects. It sets out the principles, procedures and instruments to be used to ensure compliance with the environment and social standards required. Drawing on the SESA findings, it provides a summary of relevant baseline information and provides an analysis of the environment and social management regime in Sudan and its capacity to implement the ESMF. It specifies the agencies and institutional arrangements for managing project risks and impacts, including their capacity and training requirements to meet the standards required by the World Bank environment and social standards¹.

1.3. Method of ESMF preparation

The design of this ESMF is based on the requirements of the WB-ESSs and the information generated through the SESA process including the baseline information collected, the stakeholder consultations and subsequent analysis and recommendations of the SESA.

The guiding principles for this ESMF, described in Section 5, are based on WB-ESSs as well as Sudan's environment and social policies and the UNFCCC (Cancun safeguards). The procedures and instruments to be used in project planning and monitoring described in Sections 5 are based on the requirements of the WB-ESSs. The institutional arrangements for implementing the ESMF are based on the REDD+ institutional framework already in place, with elaboration of the lower-level institutional arrangements for compliance with environment and social safeguards. The latter are based on lessons from implementation of the on-going Sudan Sustainable Natural Resources Management Programme (SSNRMP). The capacity building plan is based on the SESA analysis of existing institutional capacity.

¹ The role of the ESMF is described in the World Bank document: Guidance for borrowers. Environment & Social Framework for IPF operations. ESS1: Assessment and management of Environment and social Risks and impact. WB 2018.

Baseline information was assembled as part of the SESA process from official reports and documentation, scientific studies and other sources. It includes an assessment of relevant policies, laws and regulations and of the capacity of the institutions responsible for environment and social governance in Sudan. The stakeholder consultation undertaken as part of the SESA process included collection of baseline information relevant to the ESMF by the state-level REDD+ focal points from key informants in the state. The information collected included the following:

- The current institutional arrangements for environment and social management in the states; the current practices concerning EIAs; the current capacity within the states to implement the ESMF framework. This information was required to inform planning for the institutional arrangements and training needs for implementing the ESMF.
- Baseline information relevant to the risks identified in the draft NRS (such as infringement of rights resulting from implementation of the strategy options proposed, etc)
- Information on indigenous peoples or marginalised groups in the states potentially impacted by REDD+ strategy options.
- Information on formal and informal conflict mitigation and resolution mechanisms currently utilised in the states.
- Information on grievance redress mechanisms being used in the states.
- Identification of any potential risks of involuntary resettlement resulting from implementation of any of the proposed strategy options in the draft NRS.



2. ENVIRONMENTAL AND SOCIAL IMPACTS OF THE OPTIONS PROPOSED IN THE NATIONAL REDD+ STRATEGY

The NRS is organized in the form of five Strategic options.

- Option 1 Integrated forest landscape management.
- Option 2 Climate smart agriculture and rangeland management.
- Option 3 Integrated land use planning.
- Option 4 Sustainable energy supply and used.
- Option 5 Promoting participation in climate change responses.

Each option contains a number of Policy Action Measures (PAMs). The potential social and environment impacts of each of the PAMs is described in tables 3 to 11 below based on the SESA.

2.1. Strategy option 1. Integrated forest landscape management

Strategy option 1. This strategy option proposes reforms in the forestry sector to build economic and political knowledge and enable sustainable forest management across institutional, organizational and community levels while developing commercial capacity.

Table 1. Integrated Forest Landscape Management option summary

PAMs	Target actions	Responsible stakeholders
Strengthen sectoral policies and institutional setting for sustainable natural resource management	Improving forest sector regulations, laws, and policies to mainstream REDD+ actions	FNC governing bodies, Council of Ministers and the Presidency.
	Support Revision and strengthening of the Sudan National Forest Policy Statement (2006; updated from Sudan's Forest Policy 1986)	FNC governing bodies
	Development of National Forest Information Systems to support forestry and landscape management in Sudan (NFMS, MRV, FREL Development, Safeguards, Carbon Registry)	FNC governing bodies
	Supporting and improving policies to reduce deforestation and land degradation from refugee settlements.	Ministry of Interior, Commissioner of Refugees (CoR), FNC, REDD+ PMU
	State Level REDD+ Implementation Framework and Financing Options: Development of State REDD+ Action Plans (S-RAPs).	FNC, Council of Ministers
Strategic Landscape Management, Restoration and Emission Reductions	Smallholder Forestry Program in Selected States for high value timber, fuelwood/biomass, and pole production and non-wood forest products (Initial target – Blue Nile and Sinnar States).	FNC, FAO, WB, Development Partners
	Statewide Forestry Nursery Systems to support community-based, afforestation, reforestation, and restoration of degraded lands	FNC, FAO, WB, Development Partners
	Capacity building for sustainable gum production value chain through sustainable finance and private sector engagement.	FNC, FAO, WB, Development Partners
	Capacity development and institutional strengthening for fire management.	Research Institutes, Universities, FCPF, WB, FAO, UNEP
	Support sustainable forest management through development of capacity for and use of forest management plans (including selected coastal zones, protection of mangrove forest, and riparian).	FNC, communities, private sector, Development Partners
Support for Forestry Research and Development	Revise and redesign of forest and rangeland research programmes and curricula. Establishment of Centres of Excellence through Tertiary institutions – (Consideration for setting a Forestry Research Development Institution).	Universities, FNC, Ministry of Higher Education and Scientific Research

Table 2. Option 1 E&S impacts and benefit assessment and mitigation measures

Environmental and Social risks	Likelihood / Severity	Mitigation measure	Environmental and social benefits
<ul style="list-style-type: none"> Ecosystem disturbances; introduction of non-indigenous or invasive species for new forest products Pest management issues Soil productivity issues Loss of aesthetic value 	High / Medium	<ul style="list-style-type: none"> Rational use of agro-inputs (e.g. follow research findings and best practices) Consult stakeholders Provide technical support and extension 	<ul style="list-style-type: none"> Carbon sequestration
<ul style="list-style-type: none"> Inappropriate training programs / Inappropriate or irrelevant research agendas Curricula may not be relevant and appropriate The right people may not be selected for training 	Medium / Medium	<ul style="list-style-type: none"> Involve climate change specialists in design of training programs Design appropriate training programs Care in selecting training participants Involve stakeholders in planning the research agenda Identify key information gaps Appropriate curricula 	<ul style="list-style-type: none"> Improved planning and decision making on climate change issues Information generated to inform planning and implementation Capacity building improved forest and rangelands management
<ul style="list-style-type: none"> Infringement on customary land rights Introduction of inappropriate species Competition for land Displacement of people Interruption of pastoralist corridors Rights of marginalised people infringed Non-compliance with policy 	Medium / Medium	<ul style="list-style-type: none"> adequate involvement of all stakeholders use of the RPF and PF to mitigate the risks related to land and access restriction to natural resources Cost benefit analysis Build in private sector or community incentives to adopt policy Promote private and community plantations Appropriate species selection Develop community capacity for CFM Secure land tenure rights Use and application of the findings of the IPPF to mitigate the potential impacts on marginalized and indigenous groups 	<ul style="list-style-type: none"> Increased supply of wood products Community empowerment, Job creation
<ul style="list-style-type: none"> May expand deforestation/forest degradation. Farmers may claim ownership of the land 	High / Medium	<ul style="list-style-type: none"> Strengthen FNC supervisory capacity Community empowerment and Community Forest Associations 	<ul style="list-style-type: none"> Reforestation Increased food security Community empowerment, Job creation Improved forest management
<ul style="list-style-type: none"> Inappropriate plans, policies that impact on users, rights or livelihoods Non-compliance with new policies Inappropriate management that impacts rights and livelihoods / Inappropriate interventions 	Moderate / Medium	<ul style="list-style-type: none"> Involve all stakeholders in policy planning, development including awareness and advocacy programs Build in private sector incentives to adopt policy Use international standards and best practices Participatory planning Provision of information and training to community Build capacity of community to negotiate with FNC Involve community in planning and management 	<ul style="list-style-type: none"> Community empowerment Improved livelihoods Benefit sharing Reduced demand for fuelwood and commercial charcoal production to by refugees who have few alternative income opportunities Sustainable exploitation of forests Increase in supply of forest goods and services Sustainable forest exploitation, community empowerment and job creation
<ul style="list-style-type: none"> Loss of biodiversity (e.g. range and indigenous species) 	Minor / Medium	<ul style="list-style-type: none"> Adopt sustainable silviculture approaches, internationally accepted standards and best management practices and capacity building to share know-how on best practices 	
<ul style="list-style-type: none"> Land use change may decrease land allocated to the community 	Medium / Medium	<ul style="list-style-type: none"> Provide alternative livelihood for individual affected by the land reallocation 	<ul style="list-style-type: none"> Improvement of livelihood (e.g. incomes, assets, etc.)
<ul style="list-style-type: none"> Changes in benefit-sharing mechanisms 	Medium / Low	<ul style="list-style-type: none"> Secure involvement of women, poorer farmers, and marginal people into development schemes Equitable benefit sharing arrangements 	<ul style="list-style-type: none"> Conservation of cultural and traditional practices and tree species
<ul style="list-style-type: none"> Women may be excluded as land rights are usually held by men Low confidence level of community in negotiating with FNC Low level of community access to information 	Medium / Low	<ul style="list-style-type: none"> Provision of micro-finance to enable investment at farm level by women Ensure involvement of women and marginalized groups in capacity building, planning and implementation Speed up the registration process for community forests 	<ul style="list-style-type: none"> Increased food security Reforestation

Environmental and Social risks	Likelihood / Severity	Mitigation measure	Environmental and social benefits
<ul style="list-style-type: none"> Impact on food security 	Low / Low	<ul style="list-style-type: none"> Provide alternative livelihood for individual affected by the land reallocation 	
<ul style="list-style-type: none"> Potential conflict over resources or related to land tenure and use of lands (farmers vs pastoralist) Changing regulations to access to forest may result in changes to traditional access rights, it may impact their animals as the range resources are very scarce, it may require pastoralists to move and walk for long distances and away from home which has great impact on women and children Exclusion of traditional users 	Moderate / Substantial	<ul style="list-style-type: none"> Implement conflict resolution mechanism Conduct rapid conflict analysis, as needed Equitable benefit sharing arrangements Ensure a balance is achieved between forest and other sector development. Joint sector planning 	<ul style="list-style-type: none"> Community empowerment, Job creation Improved forest management
<ul style="list-style-type: none"> Impacts on community livelihoods 	High / Substantial	<ul style="list-style-type: none"> Capacity building to disseminate knowledge related technology 	
<ul style="list-style-type: none"> Conflicting priorities based on needs within the community 	Medium / Medium	<ul style="list-style-type: none"> Adopt effective benefit-sharing arrangements from local and regional success stories 	
<ul style="list-style-type: none"> Displacement of people 	Low / Low	<ul style="list-style-type: none"> Use the context-specific resettlement policy framework and the PF for displacements due to access restriction 	
<ul style="list-style-type: none"> Stakeholders may not adopt the programs 	Medium / Low	<ul style="list-style-type: none"> Include incentives for adoption Develop fuelwood plantations Develop knowledge and skills in clean and efficient production 	<ul style="list-style-type: none"> Reduced demand for fuelwood Forest protection, SFM, Job creation
<ul style="list-style-type: none"> Lack of capacity from community to implement policies translating into risk on livelihoods 	Medium / Medium	<ul style="list-style-type: none"> Simplify processes to register forests for the communities 	
<ul style="list-style-type: none"> Lack market structure, market mechanisms knowledge and information leading to impoverishment or create imbalances between those who can access financing and new opportunities and those who cannot 	Medium / Medium	<ul style="list-style-type: none"> Provision of market information, training, sensitization campaigns 	

2.2. Strategy option 2: Climate smart agriculture and rangeland management

Strategy option 2 aims to improve agricultural efficiency and increase agricultural and livestock productivity to reduce pressure on forest resources.

Table 3. Climate smart agriculture and rangeland management option summary

PAMs	Target actions	Responsible stakeholders
Improving the adaptive and climate mitigation capacity of the agriculture sector	Capacity building to improve agriculture productivity through agroforestry system to improve water utilization and reduce forest encroachment (shelterbelts, alley cropping, wind breaks riparian forest buffers)	Ministry of Agriculture and other related ministries, FNC, Communities, Private Sector, Business Unions, Gum and Livestock Producers
	Improve agricultural productivity through crop diversification and agro-pastoral systems	Ministry of Agriculture and other related ministries, Ministry of Agriculture and other related ministries, FNC, Communities, Private Sector, Business Unions, Gum and Livestock Producers
	Rehabilitating irrigation services to make water use more efficient, including the introduction of appropriate technologies to optimize water use and raise water awareness;	Ministry of Agriculture and other related ministries, FNC, Communities, Business Unions, Gum and Livestock Producers
	Build capacity and conduct knowledge transfer for conservation agriculture with water harvesting, zero tillage, and improved seeds.	Ministry of Agriculture and other related ministries
Promoting Sustainable Livestock and Rangeland Management	Strengthening regulatory and non-regulatory measures for livestock movement corridor management including monitoring systems.	Federal and State departments of Range/Pasture, Ministries of Agriculture and Animal Resources
	Rangeland restoration/rehabilitation, protection, and provision of adequate seasonal feedstock (fodder production): Creating business partnerships between livestock owners and farmers along livestock routes	Relevant departments and research in the ministry of animal resources, department of range-pasture, village base and agro-pastoral communities, CSOs and NGOs
	Improve access to finance and support services for farmers and livestock producers (such as animal health, extension and training, farmer field schools, marketing)	Animal Production Corporation (APC) and range-pasture dept. of MAR at federal and state level +dept. of Extension and Technology Transfer MAR, village-based communities
	Promoting cooperation and coordination between public and private sector institutions in range infrastructure development and management.	Animal Production Corporation (APC) and range-pasture dept. of MAR at federal and state level +dept. of Extension and Technology Transfer MAR, village-based communities
	Increasing adaptive capacity of farmers and livestock producers for preparedness to seasonal variability in feed and water supply through community-based water conservation and river protection and management schemes	Federal and State departments of Range/Pasture, Ministries of Agriculture and Animal Resources

Table 4. Option 2 E&S impact and benefit assessment and mitigation measures

Environmental and Social risks	Likelihood / Severity	Mitigation measure	Environmental and social benefits
• Lack of consideration for environmental issues (i.e. resource efficiency, clean production concept) on value enhancing processes	Medium / Low	<ul style="list-style-type: none"> • Following of best practices related to resource efficiency and management (i.e. water, energy) and outputs (e.g. zero waste) • Capacity building to share know-how on environmental and resource efficiency concepts • ESAs to mitigate negative impacts • Agric extension programs 	<ul style="list-style-type: none"> • Reduced pressures on forests • Improved food security and livelihoods • Reduction in shifting cultivation
• Unequal benefit sharing between the players along the value chain (e.g. asymmetry of information leading to low level of benefits for communities)	Medium / Medium	<ul style="list-style-type: none"> • Chain upgrading (i.e. bringing people to the market through cooperatives or associations) 	<ul style="list-style-type: none"> • Improved job opportunities and livelihoods
• Organizations / individuals with more resources could capture most of the added value	High / Medium	<ul style="list-style-type: none"> • Crowd funding and micro-finance for processing facility investment by/for local communities 	Community empowerment
• Men may be culturally better placed to benefit from added value activities (e.g. travel to potential markets)	Low / Low	<ul style="list-style-type: none"> • Build capacity among women to develop their know-how on value chain enhancing and good practices activities • Strengthen the capacities and skills of women groups in selected food value chains through capacity development activities, including trainings, knowledge sharing tours, and specific support aimed at improving market-oriented production and value addition, enterprise development, business-to-business linkages and access to finance. • Support institutions (both at national, state and local levels) and promoting gender-sensitive value chains. • Investment into information sharing platform and tools for women 	<ul style="list-style-type: none"> • Knowledge and skills transfer • Improved benefit sharing arrangements
• Soil/Land degradation due to inappropriate mechanization.	Medium / High	<ul style="list-style-type: none"> • Use of environmental-friendly agro-inputs (e.g. lower hazard chemicals or organic inputs) • Integrate pest management • The 10% and 20% tree planting rule to be implemented. 	<ul style="list-style-type: none"> • Lower land occupation and grabbing (e.g. reduction of greenhouse gas emissions related to clearing of lands)
• Pollution of soil and water	Medium / High	<ul style="list-style-type: none"> • Rational use of agro-inputs (e.g. follow research findings and best practices) and capacity building 	<ul style="list-style-type: none"> • Income diversification potentially reduces the stress on natural resources
• Ecosystem disturbances	Medium / High	<ul style="list-style-type: none"> • Adopt sustainable agriculture techniques, internationally accepted standards and best management practices 	
• Air quality deterioration increase emissions and pollution	Medium / Low	<ul style="list-style-type: none"> • Rational use of agro-inputs (e.g. follow research findings and best practices) and capacity building 	
• Hazardous waste generation from machineries (Used lubricant oil/grease contamination)	High / Low	<ul style="list-style-type: none"> • Capacity building to share know-how on best practices 	
• Surface water contamination	Medium / Low	<ul style="list-style-type: none"> • Rational use of agro-inputs (e.g. follow research findings and best practices) and capacity building 	
• Promotion of inappropriate water harvest techniques may affect downstream river courses (biodiversity, water shortage, soil erosion, leftover material, etc.) and also lead to conflict due to access to and use of water resources	Medium / Low	<ul style="list-style-type: none"> • Promote landscape approaches for sustainable development, water and land resource management. The landscape or watershed approaches to water management provide a framework and enables management of water resources for multiple stakeholders with different interests and drivers. 	
• Reduced diversity of crop cultivated	Medium / Medium		
• Loss of range species using agro-inputs	Medium / Low	<ul style="list-style-type: none"> • Adhere to the national permissible limits of pollutants (SSMO) as well as the international acceptable standards 	
• Increased use of technology may lead to lower employment opportunities or lay-offs	Medium / Medium	<ul style="list-style-type: none"> • Provide alternative livelihood for individual affected by the intensification (e.g. losing their job) or build their capacity on new roles 	<ul style="list-style-type: none"> • Improvement of livelihood (e.g. income, assets, etc.)
• Dependence on external financial and technical inputs may increase vulnerability	Medium / Low	<ul style="list-style-type: none"> • Establish micro-insurance schemes to reduce vulnerability of farmers 	<ul style="list-style-type: none"> • Potential food supply increase

Environmental and Social risks	Likelihood / Severity	Mitigation measure	Environmental and social benefits
<ul style="list-style-type: none"> Restricted access to technology (high cost of technology and lack of knowledge) 	Low / Low	<ul style="list-style-type: none"> Ensure micro-finance possibilities enable access to technology for everyone 	
<ul style="list-style-type: none"> Women may be excluded as land rights are usually held by men Increasing mechanization may reduce employment opportunities for women 	Medium / Medium	<ul style="list-style-type: none"> Secure involvement of women by enacting rules and processes at community level that recognize women's land rights. Develop women-led community organizations that can coordinate and help ensure the enforcement of these rules and processes by representing women with local, regional and national authorities. Provide alternative livelihood for individual affected by the mechanization affecting the employability of women 	
<ul style="list-style-type: none"> Intensification may impact on food security 	Low / Low	<ul style="list-style-type: none"> Ensure provision of micro-financing enable investment at farm level and avoid marginalization of poorer farmers Intensification strategy should take account of the food security issue for the state 	
<ul style="list-style-type: none"> Potential conflict related to land tenure and use of lands (farmers vs pastoralist) Rich farmers are likely to benefit more and poor farmers will lose out especially in areas affected by conflict 	Medium / Medium	<ul style="list-style-type: none"> Implement conflict resolution mechanisms Undertake rapid conflict assessment, as needed Involve stakeholders in planning and implementation stages, esp. farmers and pastoralists, Rehabilitation of degraded areas due the refuges in the state. Afforestation of reserved forests under FNC management. Provide livelihoods opportunities for the poor and marginalized people including women and the youth (gum tapping, agroforestry, home gardens). Access to funding by agro-pastoralism to support rehabilitation of gum hashab areas 	
<ul style="list-style-type: none"> Reduction in land available for agriculture 	Medium / Medium	<ul style="list-style-type: none"> Provide technical assistance to mechanized schemes Social screening and monitor compliance Secure land tenure rights for the poor 	<ul style="list-style-type: none"> Increase in supply of wood products Improve environment for pastoralists Reduced deforestation
<ul style="list-style-type: none"> Cost of inputs is high and increases risk of losses. 	Medium / Low	<ul style="list-style-type: none"> Facilitate access to credit. Link farmers to financial institutions. 	
<ul style="list-style-type: none"> Increasing grazing intensity may lead to increasing: <ul style="list-style-type: none"> Soil compaction, erosion and reduced infiltration rate Over-grazing in alternative locations Emissions from livestock Some alternative tree species could be affected by grazing Impacts on traditional livelihoods through changes (Regulation of grazing and restrictions on access to forest may impact livelihoods (employment, income and assets)) May impact on traditional culture if nomads are attached to new communities with different cultures. Land tenure issues or conflicts may arise when opening livestock corridors or creating water points. May create governance risks. Initiatives may benefit richer pastoralists and marginalize the poorest 	Medium / Low Medium / Medium Medium / Medium	<ul style="list-style-type: none"> Follow best practices in livestock management Building and transfer of capacity to enable communities to take the full advantage of new practices Screening for social impacts and involving the pastoralists in decision making Establishment of conflict resolution mechanism Provide market information Conflict resolution mechanisms Ensure participation of the poorest pastoralists, notably through micro-finance scheme and capacity building Implement capacity-building activities and funding mechanisms (better access to micro-finance related resources and funding) at community level to help traditional livelihood dependent groups transition to new sustainable livestock management processes and activities Ensure land tenure rules and practices are enforced by local community-based authorities through capacity training at local (village/traditional), regional (state) and national levels Ensure equitable benefit sharing procedure is in place within each measure so that it positively benefits all groups of beneficiaries. Also link this equitable benefit sharing programme to the REDD+ Benefit Sharing Strategy. 	<ul style="list-style-type: none"> Reduce pressure on range land and trees (Regulate grazing in forest areas where forest regeneration is occurring to allow forest to recover/ Enforce or encourage the planting of trees on 10% of agricultural lands) Livestock exclusion may lead to dramatic and rapid rates of riparian ecosystem recovery Rest of rangelands as part of effective management may lead to effective and rapid repair of grazing damage to soils and other resources Biogas projects from livestock may lead to additional emission reductions Establishing shelterbelts has social and environmental benefits for both farmers and pastoralists (Gedaref example). Improve livelihood due to healthier livestock
<ul style="list-style-type: none"> Conflicts between farmers and pastoralists over water and land use practices/rights, increased use of crop residues and demarcation of routes 	Medium / Medium	<ul style="list-style-type: none"> Implement conflict resolution measures. The demarcation of the livestock route should involve pastoralists and residents along the mobility pattern. The process to be used should be the one in the process framework. Stakeholder involvement in planning and implementation Integrated planning – livestock, forest and agriculture 	<ul style="list-style-type: none"> Family may need to travel less which would benefit health and education of women and children Sustainable natural resources management

Environmental and Social risks	Likelihood / Severity	Mitigation measure	Environmental and social benefits
• Intensification may increase dependence on external inputs	High / Low	• Provide alternative livelihood	
• Risk of non-adoption of improved livestock breed due to cultural reluctance	Medium / Low	• Raise awareness around best practices	
• Increase in livestock numbers • Culture change resistance, lack of technical know how	Medium / Low	• Stakeholder participation Livestock sector/Forest/Agric integrated planning	• Less stress on forest, better management of livestock sector, income generation
• Increased livestock activity could lead to damage around water points	Medium / Low		

2.3 Strategy Option 3: Integrated land use planning

Strategy 3 aims to harmonize and integrate existing land use planning and tenure legislation and policies, reduce sectoral policy and planning conflicts.

Table 5. integrated land use planning option summary

PAMs	Target actions	Responsible stakeholders
Harmonizing land use planning, investment policies, and legislation	Strengthen institutional capacity of environmental and social impacts assessments in agriculture, forestry, and mining sectors to prevent land degradation: (Institutional Capacity Needs and Gap Assessment and preparation of Capacity Development Plans)	Line Ministries of Agriculture and Forests, Animal Resources, Mining, Petroleum and Gas, Environment, Natural Resources and Physical Planning, Justice, National Legislatures. FNC, mining and oil exploitation companies
	Rationalize, organize and harmonize above and below ground resource exploitation and related economic developmental activities and policies, in order to encompass environmental and climate change concerns	Line Ministries of Agriculture and Forests, Animal Resources, Mining, Petroleum and Gas, Environment, Natural Resources and Physical Planning, Justice, National Legislatures
	Improve standards for the establishment and development of mining infrastructure (Updating of existing guidelines/policies and development of new guidelines and policies)	Ministries of Minerals, Petroleum and Gas Environment
Sustainable Land management stewardship through land tenure security	Regulatory and non-regulatory measures to improve land tenure security for local communities: Assessment and identification of opportunities for strengthening land tenure security for communities in deforestation hotspots (Prioritization of Deforestation Hotspots)	Line Ministries of Agriculture and Forests, Animal Resources, Mining, Petroleum and Gas, Environment, Natural Resources and Physical Planning, Justice, National Legislatures
	Land use capability assessment and digitization to support the National Investment Map: optimizing land use through spatial planning and reliable spatial and non-spatial information	Line Ministries of Agriculture and Forests, Animal Resources, Mining, Petroleum and Gas, Environment, Natural Resources and Physical Planning, Justice, National Legislatures

Table 6. Option 3 E&S impact and benefit assessment and mitigation measures

Environmental and Social risks	Likelihood / Severity	Mitigation measure	Environmental and social benefits
<ul style="list-style-type: none"> • Women may be excluded as land rights are usually held by men 	Medium / Medium	<ul style="list-style-type: none"> • Secure involvement of women through women-led community organizations 	
<ul style="list-style-type: none"> • Impacts on traditional livelihoods through changes • May create governance risks (conflicts within administrations and institutions in interpretation/ understanding of new legislations, planning objectives or regulations) 	Medium/ Medium	<ul style="list-style-type: none"> • Building and transfer of capacity to enable communities to take the full advantage of new regulations and policies • Screening for social impacts and involving all stakeholders in decision making • Establishment of conflict resolution mechanism 	<ul style="list-style-type: none"> • Improve livelihood due to clearer legislations
<ul style="list-style-type: none"> • Potential conflict related to land tenure and use of lands (farmers vs pastoralist v miners) as well as water and demarcation of routes • Rich stakeholders are likely to benefit more and poor stakeholders will lose out especially in areas affected by conflict 	Medium/ Medium	<ul style="list-style-type: none"> • Implement conflict resolution mechanisms • Involve stakeholders in planning and implementation stages, esp. farmers, miners and pastoralists • The demarcation of different land uses through mapping and digitization should clearly take account of pastoral routes and reforestation efforts • Planning should involve rehabilitation of degraded areas due to the refugees in the state. • Provide livelihoods opportunities for the poor and marginalized people • Access to funding by agro-pastoralism to support rehabilitation of gum hashab areas • Integrated planning • Develop national standards 	<ul style="list-style-type: none"> • Sustainable natural resources management
<ul style="list-style-type: none"> • Tree clearance for mining • Inadequate existing national E&S standards • Livelihood and health impacts on artisanal miners 	Low/Low	<ul style="list-style-type: none"> • Improve Stakeholders participation • Integrated sectoral planning • Develop Health and Safety standards • Develop mining standards • Tree planting to offset forest clearance for mining • Unregulated artisanal gold mining has a big negative impact on range resources 	<ul style="list-style-type: none"> • Income generation • Reduced environmental and social impacts
Lack of enforcement	Low/Low	<ul style="list-style-type: none"> • Stakeholder's participation • Capacity building on ESIA • Development of ESIA capacity in the Sudan 	<ul style="list-style-type: none"> • Forest/land restoration • Sustainable and efficient natural resources management, • Clean production

2.4. Strategy option 4: Sustainable energy supply and use

Strategy option 4 aims to adopt environmentally friendly policies and interventions in the energy sector, in order to reduce pressure on forest resources and optimize fuel consumption.

Table 7. Sustainable energy supply and use option summary

PAMs	Target actions	Responsible stakeholders
Increasing access to efficient and sustainable household energy	Assessment and implementation of options for sustainable charcoal production	FNC, Energy Research Centre, development partners
	Assessment and implementation of options and measures to incentivize and increase use of LPG gas and other alternative sources of energy in urban and rural communities	Ministries of Petroleum and Gas; Environment, Natural Resources and Physical Planning; Agriculture and Forests; Finance and Economic Planning; Social Security and relevant subsidiaries; Ministry of Water Resources, Irrigation and Electricity, Private Sector
Promoting a sustainable biomass-based energy value chain	Creating business opportunities in the biomass energy sector for the private sector through regulatory and non-regulatory measures.	Ministries of Petroleum and Gas; Environment, Natural Resources and Physical Planning; Agriculture and Forests; Finance and Economic Planning; Social Security and relevant subsidiaries; Ministry of Water Resources, Irrigation and Electricity, Private Sector
	Assessment of opportunities, incentives, and promotion of adoption of efficient cookstoves – linking biomass producers and consumers	Ministries of Petroleum and Gas; Environment, Natural Resources and Physical Planning; Agriculture and Forests; Finance and Economic Planning; Social Security and relevant subsidiaries; Ministry of Water Resources, Irrigation and Electricity, Private Sector

Environmental and Social risks	Likelihood / Severity	Mitigation measure	Environmental and social benefits
• Organizations/individuals with more resources could capture most of the added value	High/ Substantial	• Crowd funding and micro-finance for processing facility investment by/for local communities	• Community empowerment
• Lack of consideration for environmental issues (i.e. resource efficiency, clean production concept) on value enhancing processes	Medium/ Low	• Following of best practices related to resource efficiency and management (i.e. water, energy) and outputs (e.g. zero waste) • Capacity building to share know-how on environmental and resource efficiency concepts • ESIA's to mitigate negative impacts • Agric extension programs	• Reduced pressures on forests • Improved food security and livelihoods • Reduction in shifting cultivation
• Dependence on external financial and technical inputs may increase vulnerability	Medium/ Medium	• Establish micro-insurance schemes to reduce vulnerability of farmers	• Potential food supply increase

2.5 Strategy option 5: Resilient communities and livelihoods

Strategy option 5 aims to promote the participation of women and youth in climate change response strategies.

Table 9. Resilient communities and livelihoods option summary

PAMs	Target actions	Responsible stakeholders
Advance the participation of youth and women	Encourage access of women and youth to decision making forums and bodies at national and local levels regarding climate response measures.	Sudanese Environment Conservation Society Sudanese Environmental Community Organization, Youth Green Creep Organization, and the Sudanese Youth Parliament for Water Sudan MAB Youth Forum
	At national levels, gender and youth perspectives should be mainstreamed into national policies and strategies on climate change.	Relevant ministries and state authorities at local level, community organizations, and NGOs Federal Ministry of Youth and Sports
	Develop education and awareness programmes to help youth develop deeper understanding of the impacts of climate change and develop skills and knowledge in responding to these impacts.	
	In implementing all PAMS in this NRS, specific consideration should be made in addressing gender inequalities in relation to access to resources, including credit, extension and training services, information and technology.	
	All communications undertaken in relation to the PAMS in this NRS should involve a well-defined, gender and youth sensitive and culturally appropriate communication strategy.	Ministry of Higher Education and Scientific Research
	Design and implement mechanisms that involve communities (including women, youth and elders) in monitoring social and environmental improvements in local areas.	Relevant ministries and state authorities at local level, community organizations, and NGOs Sudan MAB Youth Forum
	Design and implementation of gender-responsive social and environmental monitoring systems.	Relevant ministries and state authorities at local level, community organizations, and NGOs

Table 10. Option 4 E&S impact and benefit assessment and mitigation measures

Environmental and Social risks	Likelihood / Severity	Mitigation measure	Environmental and social benefits
• Inappropriate policy • Non-compliance with policy	Medium / Medium	• Stakeholder involvement • Cost benefit analysis of policy options • Build in private sector incentives to adopt policy (including subsidies)	• Increased participation in forest management initiatives • Community empowerment • Shared benefits with more vulnerable groups
• Cost barriers • Infrastructure barrier, high initial cost	Medium / Substantial	• Cost benefit Analysis	• Reduced dependency on fuelwood and reduced pressure on forest resources for vulnerable groups • Encourage use of clean energy and reduction in GHG emissions
• Culture change resistance • Lack of enforcement	Medium / Medium	• Involvement of all stakeholders • Stakeholder participation	• Community empowerment, • Awareness building
• Impacts on traditional livelihoods through changes • May create governance risks	Medium / Medium	• Stakeholder participation • Cost benefit analysis and feasibility assessment • Follow best practices • Provide training/sensitization opportunities and implement awareness campaigns	• Reduction in dependence on forest resources income generation • Creation of new job opportunities in policy administration and management



3. ENVIRONMENT AND SOCIAL GOVERNANCE IN SUDAN

3.1. Policies, laws and regulations for environment management

A detailed assessment of the policies, laws and regulations relevant to REDD+ is provided in the SESA report. An assessment of the specific policies, laws and regulations relevant to the WB-ESSs is provided in section 5 below.

3.2. Customary laws and environment protection and management

Customary law is an important component of natural resources governance in Sudan. It is recognised in the Transitional Constitution (2019) which states that new legislation on the use of land must take account of customary laws, practices and local heritage. Customary law is widely recognised among local communities and often takes precedence over statutory laws especially in relation to use of land and natural resources. Customary laws give rights of access to land, pasture and water and are administered through Nazirs (tribal level), Omdas (clan level) and Sheikhs (village level) who are closely aligned with local government administrations. The system protects rights of resource users and aims at sustainable use of the resources.

3.3. Relevant international conventions and treaties ratified by Sudan

Sudan's policies, laws and practices on environment and natural resources management have been evolving in line with international best practices through Sudan's participation in international and regional fora and adoption of multilateral agreements. Progress on integration of the provisions of these agreements into domestic policies and laws has been slow. The regional and international conventions and treaties relevant to REDD+ environment and social safeguards that have been ratified by the Republic of Sudan are shown in Table 11².

Table 11: REDD+ relevant multilateral environmental agreements ratified by Sudan

Agreement Signature	Agreement Name	Ratification (or similar)
15/09/1968	African Convention on the Conservation of Nature and Natural Resources	1973
02/02/1971	Ramsar Convention on Wetlands of International Importance Especially as Waterfowl Habitat	2005
23/11/1972	Convention for the Protection of the World Cultural and Natural Heritage	1975
03/03/1973	Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)	1983
28/11/1979	International Plant protection Convention	1991
14/02/1982	Regional Convention for the Conservation of the Red Sea and Gulf of Aden Environment	1984
14/02/1982	Protocol Concerning Regional Cooperation in Combating Pollution by Oil and other Harmful Substances in Cases of Emergency	1985
16/09/1987	Montreal Protocol on Substances that Deplete the Ozone Layer	1993
09/05/1992	United Nations Framework Convention on Climate Change	1993
05/06/1992	Convention on Biological Diversity	1995
17/6/1994	United Nations Convention to Combat Desertification	1995
17/06/1994	Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa	1995
16/06/1995	Agreement on the Conservation of African-Eurasian Migratory Waterbirds	1996
11/12/1997	Kyoto Protocol to the United Nations Framework Convention on Climate Change	2004
10/09/1998	Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade	2005
29/01/2000	Cartagena Protocol on Biosafety to the Convention on Biological Diversity	2005
03/11/2001	International Treaty on Plant Genetic Resources for Food and Agriculture	2002
22/05/2001	Stockholm Convention on Persistent Organic Pollutants	2006
11/07/2001	Convention of the African Energy Commission	2006
29/10/2010	Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity	2014
26/01/2009	Statute of the International Renewable Energy Agency	2011
12/12/2015	Paris Agreement under the United Nations Framework Convention on Climate Change	2017

² Source: UNEP SOER

In addition to international treaties and protocols, Sudan adopted the Criteria and Indicators for Sustainable Forest Management (2001). The Criteria and Indicators are tools for sustainable forest management (SFM) developed by the FAO and provide a framework for SFM that incorporates environment and social safeguards. The criteria and indicators specify the essential elements or principles against which sustainability is judged.

Sudan has adopted the Criteria and Indicators for Sustainable Forest Management in 2003 and agreed on seven criteria:

- Conservation of biological diversity.
- Maintenance of health and vitality of forests: maintenance of the environmental and protective functions of forests.
- Maintenance and development of multiple socio-economic functions and the legal and institutional framework for the conservation and sustainable management of forests.
- Application of principles, criteria and indicators is the way forward towards developments of standards and practice of certification.

3.4. Institutions for environment and social governance

Federal and State level

Sudan is a federal country consisting of 18 States, each of which is divided into several localities. The Sudan Interim National Constitution (2005) defines the relationship between these three levels of government. The federal government is responsible for natural resources, oil and mineral wealth and transboundary water resources. Detailed regulations on land, forests, agriculture, livestock and wildlife are the responsibility of the states but are required to be in compliance with federal level policies, plans and laws.

The division of responsibility over natural resources between federal and state powers at present is shown in Table 12 below.

Table 12. Comparison of state and federal powers in environment management ³

Federal powers	State powers	Joint federal and state powers
<ul style="list-style-type: none"> • National land and natural resources • The management of the Nile, transboundary waters and disputes arising from the management of interstate waters and national protected ecosystems 	<ul style="list-style-type: none"> • Local Government • State land and state natural resources • The management, lease and utilization of land belonging to the state • Enforcement of state laws • Laws in relation to agriculture within the state • Pollution control • Traditional and customary law 	<ul style="list-style-type: none"> • Environmental management, conservation and protection • Regulation of land tenure, usage and exercise of land rights • Water resources other than interstate waters • Disaster preparedness, management of relief and epidemics control • Pastures, veterinary services and animal and livestock diseases control • Urban development, planning and housing

HCENR is the central body responsible for implementation of the Environment Protection Act. It is the body responsible for policies, legislation and strategic planning in relation to environmental and natural resources conservation and management. It is also responsible for developing the regulations, guidelines, processes and standards for environment assessment. HCENR functions coordination of national plans and policies on the environment, coordination with the United Nations bodies at national and international levels and establishment of environmental state councils. On 30 April 2020, **the Transitional Supreme Council endorsed amendments to the Environmental Protection Act of 2001, establishing a new Higher Council for Environment and Natural Resources.**

The HCENR's objectives are broader than environment management and include the sustainable utilization, rational development and conservation of natural resources, undertaken through line Ministries and public bodies. HCENR is responsible for reporting to UNFCCC on climate change issues, in compliance with the various international agreements signed. HCENR is a member of the REDD+ steering committee.

There are no dedicated state ministries for the environment and environmental affairs are usually the responsibility of the Ministry of Agriculture and Natural Resources and the Ministry of Health. Some states (Khartoum, River Nile and Blue Nile) have established State Councils for Environment and Natural Resources, considered as branches to the national level HCENR. These are independent bodies, established according to the respective state laws.

³ Lamya Dafalla Abdalla Al Turabi 2007, Evaluation of EIA Practice in Sudan

The traditional (or native) administration

The traditional (or so called “native”) administration consisting of the Nazirs, Omdas, and Sheikhs, administers customary laws. Their responsibilities include allocating land for agriculture and pasture, livestock corridors, access to water and mobilizing local communities to carry out functions including open fire lines to protect rangelands from bush fires, fighting locust attack and regulating tree felling. The Native Administration also has an important role in planning development activities at village and locality levels, in mobilization of local communities and in conflict mitigation and management.

Their role in conflict mitigation and resolution is important for REDD+ as changes in the regulation and use of natural resources resulting from implementation of REDD+ strategies may result in conflicts over use of forest resources.

Conflicts frequently arise between nomadic pastoralists and settled farmers over issues such as pastoral corridors or access to water, or within farming or pastoralist groups on issues related to access to resources. Traditionally, settled communities have negotiated the seasonal movements and livestock corridors with pastoralists through the native administration or other customary institutions identifying corridors for the passage of livestock and establishing rights and obligations to prevent damage to crops and to promote the complementary use of shared natural resources.

These institutions have been effective in mitigating conflicts and solving disputes. The Native Administration responsibilities includes the negotiation of stock routes, passing and grazing rights, and farming and grazing calendars among sedentary and nomadic groups and resolving disputes both within and among tribes.

3.5. Conclusions on the status environment and social governance in Sudan

The conclusions of the SESA on the status of environment and social governance were as follow:

- Endorsement of international standards and agreements indicates a progressive approach to adoption of international standards and best practices in environment and social governance.
- Local policies and laws have lagged behind adoption of international standards.
- Environmental governance (in the form of policies, laws, regulations and institutions) is weak and this weakness has contributed to environmental degradation including deforestation.
- Environment governance Institutions are weak.
- Formal institutions for natural resources-based conflict are weak.
- The native administration has an important role in environmental governance and conflict mitigation and resolution.
- Implementation of existing policy, law and regulation is weak.

**4.
ENVIRONMENT AND
SOCIAL SAFEGUARDS**

All REDD+ projects are required to comply with the environment and social safeguards agreed by the UNFCCC and if projects are funded by the World Bank, they must also agree with the WB environment and social standards. There are similarities and overlaps between the two sets of standards.

4.1. The UNFCCC (Cancun) safeguards

The UNFCCC environment and social safeguards for REDD+ agreed at Cancun must be followed in designing and implementing REDD+ projects. The safeguards agreed are:

- a. That actions complement or are consistent with the objectives of national forest programmes and relevant international conventions and agreements.
- b. Transparent and effective national forest governance structures, taking into account national legislation and sovereignty.
- c. Respect for the knowledge and rights of indigenous peoples and members of local communities, by taking into account relevant international obligations, national circumstances and laws, and noting that the United Nations General Assembly has adopted the United Nations Declaration on the Rights of Indigenous Peoples.
- d. The full and effective participation of relevant stakeholders, in particular indigenous peoples and local communities.
- e. That actions are consistent with the conservation of natural forests and biological diversity, ensuring that the actions referred to in paragraph 70 of this decision are not used for the conversion of natural forests, but are instead used to incentivize the protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits.
- f. Actions to address the risks of reversals.
- g. Actions to reduce displacement of emissions.

4.2. World Bank Environment and Social Standards

The World Bank has developed ten environment and social standards for designing and implementing environmentally and socially sound projects. All projects implemented with World Bank funding must comply with the standards. The ten WB-ESSs are described in Table 13.

Table 13. WB Environment and Social Standards requirements

<p>ESS1: Assessment and Management of Environmental and Social Risks and Impacts</p> <ul style="list-style-type: none"> • Objective: ensure projects implemented with WB funding are environmentally and socially sound and sustainable. The process will utilize national environmental and social institutions, systems, laws, regulations and procedures in the assessment, development and implementation of projects, whenever appropriate. • Provisions include: <ul style="list-style-type: none"> - Initial screening and categorizing risks depending on potential impacts. - Further Environmental Assessment or Environmental and Social Impact Assessment (ESIA) as determined in the screening process. - Development of an Environment and Social Commitment Plan (ESCP) as determined in the ESIA process. The ESCP will set out measures and actions required for the project to achieve compliance with the WB-ESSs over a specified timeframe.
<p>ESS2: Labor and Working Conditions</p> <ul style="list-style-type: none"> • Objective: promote operational health and safety of project workers and to protect workers' rights. • Provisions include: <ul style="list-style-type: none"> - Occupational safety and health protection of direct project workers, third party contracted workers, primary supply workers and community workers. - Health and safety standards. - Non-discrimination and equal opportunity. - Child labor and minimum age. - Workers organizations and grievance mechanisms.
<p>ESS3: Resource Efficiency and Pollution Prevention and Management</p> <ul style="list-style-type: none"> • Objective: promote sustainable use of resources and avoid or minimize pollution from project activities, including generation of hazardous waste and pollution associated with pesticide use. • Provisions include: <ul style="list-style-type: none"> - Efficient use of resources including energy, water, raw materials and other resources. - Pollution prevention and management. - Avoiding adverse impacts on human health and the environment. - Management of hazardous and non-hazardous wastes. - Management of pesticides.

ESS4: Community Health and Safety

- Objective: avoid adverse impacts on the health and safety of project-affected communities.
- Provisions include:
 - Safety of services.
 - Traffic and road safety.
 - Project impacts on ecosystem services impacting communities.
 - Emergency preparedness and response.
 - Management and safety of hazardous materials.
 - Safety of dams.

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

- Objective: avoid or mitigate involuntary resettlement.
- Provisions include:
 - Compensation for affected persons
 - Community engagement in project planning
 - Grievance mechanism

ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources

- Objective: protect and conserve biodiversity and habitats and to integrate conservation and development needs.
- Provisions include:
 - Conservation of biodiversity and habitats.
 - Sustainable management of living natural resources.
 - Management of alien invasive species.

ESS7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities

- Objective: respect the rights, dignity, aspirations, identity, culture, and natural resource-based livelihoods of Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities.
- Provisions include:
 - Avoid negative impacts.
 - Mitigation and development benefits.
 - Free, prior and informed consent (FPIC).
 - Grievance mechanism.

ESS8: Cultural Heritage

- Objective: protect cultural heritage from the adverse impacts of project activities and to promote equitable sharing of benefits.
- Provisions include:
 - Stakeholder consultation and identification of cultural heritage.
 - Built and moveable cultural heritage.

ESS9: Financial Intermediaries

- Objective: set out how the financial intermediary(ies) will assess and manage environmental and social risks and impacts associated with the subprojects it finances.
- Provisions include:
 - Requirement for the FI to have environment and social management policy and procedures.
 - Requirements for the FI to develop and maintain staff capacity and competency (in environment management).
 - Stakeholder engagement.

ESS10: Stakeholder Engagement and Information Disclosure

- Objective: establish a systematic approach to stakeholder engagement that will help Borrowers identify stakeholders and build and maintain a constructive relationship with project-affected parties.
- Provisions include:
 - Engagement during project preparation and during implementation.
 - Information disclosure.
 - Meaningful consultation.
 - Grievance mechanism.


4.3. Relevance of WB-ESSs to the REDD+ strategy options

The relevance of the WB-ESSs to the activities described in the draft NRS are listed in Table 14.

Table 14. Relevance of REDD+ strategy options to WB-ESSs

WB Environment and Social Standard	Relevance for the National REDD+ strategy options
ESS1: Assessment and Management of Environmental and Social Risks and Impacts	<ul style="list-style-type: none"> • Local Government • State land and state natural resources • The management, lease and utilization of land belonging to the state • Enforcement of state laws • Laws in relation to agriculture within the state • Pollution control • Traditional and customary law
ESS2: Labor and Working Conditions	<p>ESS2 applies to REDD+ project workers and staff of contractors employed directly or indirectly by REDD+ sub projects. It also applies to people employed by the projects primary suppliers and to people employed or engaged in providing community labor. ESS2 does not apply to government staff (such as FNC staff) working with the project, except for the provisions relating to protecting the workforce, and those relating to occupational, health and safety (government staff remain subject to the terms and conditions of their existing government employment agreement unless there has been an effective legal transfer of their employment or engagement to the project).</p> <p>The activities described in the NRS that may trigger ESS2 are:</p> <ul style="list-style-type: none"> • Community forestry and forest-based SMEs. • Enhance agricultural productivity. • Firewood and charcoal plantations. • Rationalize and organize resource exploitation. • Apply E&S safeguards (Oil /Mining sector).
ESS3: Resource Efficiency and Pollution Prevention and Management	<p>The screening process at the project planning stage will screen for efficiency in resource use and potential for pollution arising from the project. The ESIA will require efficiency in use of resources and will require avoidance or mitigating measures in the case of pollution. The Environmental and Social Management Plan (ESMP) will monitor compliance with the provisions of the ESMP. The activities listed in the NRS with potential to trigger ESS3 are:</p> <ul style="list-style-type: none"> • Energy Substitutes (LPG, solar etc.). • Solar energy. • Promote LPG. • Hydroelectric power. • Biomass briquettes. • Bioenergy products (like bioethanol, biodiesel, biogas, wood pellets). • Cater for refugee, IDPs and host communities' needs for energy and shelter. • Improved livestock breeds. • Improved vet services. • Rationalize and organize resource exploitation.
ESS4: Community Health and Safety	<p>The ESS1 processes of screening, ESIA and ESMP and the ESS10 requirement for stakeholder involvement aim to ensure that potential adverse impacts on communities are identified and avoided or mitigated.</p> <p>The activities listed in the NRS that may trigger ESS4 are:</p> <ul style="list-style-type: none"> • Monitoring of farmers compliance with certification standards and PES contracts. • Monitoring of certification systems (e.g., agric). • Firewood and charcoal plantations. • Improved vet services. • Rationalize and organize resource exploitation.
ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	<p>ESS5 is aimed at avoiding or mitigating involuntary resettlement. The potential for involuntary resettlement will be identified at the screening stage during project planning. If identified during screening, the ESIA will assess the potential in depth including assessing alternatives, avoidance and mitigating measures and may trigger a requirement implementation of the Process Framework for Involuntary Resettlement which is included as an annex to this ESMF. The activities listed in the NRS with potential to trigger ESS5 are:</p> <ul style="list-style-type: none"> • Agroforestry within deforested and degraded areas. • Implement a national forest plantation policy. • Restore degraded landscapes. • Land use institutionalization. • Agroforestry and Agric inputs. • Moratorium on land conversion. • Sustainable management of range. • Rangeland mapping and assessment. • Integration of arable farming with livestock production/husbandry. • Cultivated fodder production. • Increase fodder production outside forests. • Review policies and laws (oil/mining). • Reforestation programmes (Oil/Mining).

WB Environment and Social Standard	Relevance for the National REDD+ strategy options
ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	<p>Potential negative impacts on biodiversity will become evident during the screening process and will be mitigated through the ESIA and ESMP.</p> <p>The activities listed in the NRS that may trigger ESS6 are:</p> <ul style="list-style-type: none"> • Implement a national forest plantation policy. • Cultivation of trees for NWFPs. • Intensive sustainable management Greater Darfur, Blue Nile, Red Sea and South Kordofan. • Improve silviculture and man. of gum Arabic trees. • Land use institutionalization. • Establish shelterbelts, windbreaks, woodlots • Agroforestry and Agric inputs. • Sustainable management of range . • Livestock compound feeds. • Rangeland mapping and assessment. • Cultivated fodder production. • Agro-silvo pastoral systems. • Improved livestock breeds.
ESS7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	<p>The potential of the project to impact on the rights, dignity, aspirations, identity, culture, and natural resource-based livelihoods of Indigenous Peoples and historically underserved traditional local communities will be identified during screening and avoidance or mitigating measures will be included in the ESIA and ESMP.</p> <p>The activities listed in the NRS that may trigger ESS7 are:</p> <ul style="list-style-type: none"> • Implement a national forest plantation policy. • Restore degraded landscapes. • Intensive sustainable management in Blue Nile, Sennar and Gezira. • Intensive sustainable management Greater Darfur, Blue Nile, Red Sea and South Kordofan. • Prevent and Control wildfire. • Land use institutionalization. • Establish shelterbelts, windbreaks, woodlots. • Sustainable management of range.
ESS8: Cultural Heritage	<p>The screening done in compliance with ESS8 will identify potential impacts on cultural heritage. None of the strategy options proposed are likely to have impacts on cultural heritage apart from 3.6 Firewood and charcoal plantation development if undertaken in cultural heritage sites.</p>
ESS9: Financial Intermediaries.	<p>The ESS9 is relevant if the WB is funding the REDD+ project through financial intermediaries. FIs are required to have environment and social management policy and procedures and to develop and maintain staff capacity and competency in environment management.</p> <p>The activities listed in the NRS that may involve financial intermediaries are:</p> <ul style="list-style-type: none"> • Cater for refugee, IDPs and host communities' needs for energy and shelter. • Livestock compound feeds. • Integration of arable farming with livestock production/husbandry. • Cultivated fodder production. • Agro silvo pastoral systems. • Increase fodder production outside forests. • Improved vet services. • Build capacity of FNC staff. • Improve standards of mining/oil infrastructure. • Apply E&S safeguards (oil/mining). • Reforestation programmes (oil and mining). • Conduct EIAs.
ESS10: Stakeholder Engagement and Information Disclosure	<p>ESS10 applies to all REDD+ projects. It requires systematic stakeholder engagement during project preparation and implementation, information disclosure, FPIC and GRM.</p>



**5.
THE STATUS OF E&S
GOVERNANCE IN SUDAN
AND CAPACITY TO
IMPLEMENT THE ESMF**

The SESA process included an assessment of Sudan's policies, laws, regulations (PLRs) and institutions to assess the capacity to comply with the requirements of the WB environment and social standards. The findings are summarised in the following sections.

5.1 ESS1 requirements. Assessment and management of E&S risks and impacts

The Environment Protection Act 2001 provides the framework for E&S screening, ESIA's and environmental and socially sustainable development. Work was started on developing the regulations, guidelines and standards which are needed to standardize procedures and implement the Act but they were not finalised. However, following the recent revolution, HCENR has established a committee to revise and finalise these instruments but the format of ESIA's is not consistent and environment and social standards are not clear.

HCENR in the states are not branches of the Federal HCENR but are independent bodies, which are established according to their respective state laws.

At present, only five state councils for HCENR are found in Gadaref, River Nile, North Darfur, Sinnar, and Khartoum states. Although these institutions are in place, there is very little networking between them or with the federal level.

Revision of the Environment Protection Act was started in 2013 and was updated in 2020, but it was not based on thorough stakeholders' consultation. Many government and NGOs criticized the draft manuscript of the law. The revised Act is not approved.

An assessment of EIA practice in Sudan by Turabi 2007 identified the main weaknesses as⁴:

- Lack of trained staff and resulting poor quality of environment assessments, analysis and reports and inappropriate timing of EIAs.
- Poor quality Environment Management Plans, lacking feasibility assessment, cost analysis and responsibilities and monitoring schedules.
- Lack of public disclosure of EIA reports.
- Lack of Sudanese guidelines for EIAs and reliance on international guidelines.
- Reliance on experts' opinions and lack of stakeholder consultation in environment and social assessments.
- Inadequate monitoring and implementation of environmental management plans.

These weaknesses pointed out in 2007 are still valid.

The SESA made the following conclusions and recommendations in relation to the capacity for environmental management:

Sudan has legal instruments for environment assessment, but processes are not standardised, and implementation is inconsistent and weak. The environment and social management framework is not sufficient to meet the requirements of the WB ESS1.

The HCENR, established in 1991, was visualized to be the most prominent, stable and recognizable environmental body in Sudan, but it was not empowered by the government to function properly. On 30 April 2020, the Transitional Supreme Council established a new HCENR. On May 21, a Secretary-General was appointed to the HCENR, who reports directly to the Prime Minister of the Transitional Government. It is expected that these changes will result in a more effective and productive institution for environment management.

Recommendations:

- For REDD+ planning and implementation: utilise the institutional structures, process and tools as specified in this ESMF.
- Completion of the revision and updating of the Environment Protection Act and development of its supporting guidelines, regulations, processes and tools (GRPT).
- Support institutional strengthening and capacity building of HCENR at federal level and state

⁴Lamya Dafalla Abdalla Al Turabi 2007, Evaluation of EIA Practice in Sudan

5.2. ESS2 requirements. Labour and working conditions

The 2019 constitution endorses the rights of citizens to live in clean environment (Article 11). The constitution does not address occupational safety and health (OSH) specifically, but it includes several articles that refer to the rights and fundamental freedom of all citizens, and address upholding values of justice, equality, human dignity.

The main legislation on occupational safety and health are the Labour Code of 1997, the Bylaw of Factories Decree of 1981, the Bylaw of Factories (occupational health) also of 1981 and the work injuries compensation Act of 1981.

Other Laws and regulations covering aspects related to OSH that are relevant to ESS2 are:

- Social Insurance and Pensions Act, 2016.
- Occupational Health Act (Khartoum State 2011).
- Civil defence Act, 2005.
- Protection and Safety Bylaw, 2017 (Civil Defence).
- Public Corporation for Workers Education Act 1970 amended in 1976, 1993.
- The Environmental Health Act, 1975.
- The National Public Health Act, 2008.
- Pesticides Act, 1974 amended 1990.
- Environmental Protection Act, 2001 amended 2020.
- Child Act, 2004 (elimination of child labor, protection of children and young persons, Chapter VIII).
- Standards and Metrology Act, 2008.
- National Medical commission Act, 2008.
- Medical Commission bylaw, 2012.
- Drugs and Toxins Act, 2009.

Technical standards have been developed under the OSH Act Khartoum State 2011, and Sudanese Standards and Metrology Organisation (SSMO) standards encompassed many of the items related to workplace safety and environment, noise level, heat, light, boilers, personal protection equipment, radiation, and fire detectors. Also, the SSMO has specific standards on air quality and effluent standards.

Guidelines and codes of practice have been developed for mining and for oil and gas industries.

Sudan has ratified 16 international labor standards conventions which are currently in force in Sudan including:

- The forced labour convention, 1930.
- Right to organise and collective bargaining convention, 1949.
- Equal remuneration convention, 1952.
- Abolition of forced labour convention.
- Discrimination (Employment and Occupation) convention, 1958.
- Minimum age convention, 1973.
- Worst forms of child labour convention, 1999.
- Labour inspection convention, 1947.
- Employment policy convention, 1964.
- Unemployment convention, 1919.
- Equality of treatment (Accident Compensation) Convention, 1925.
- Minimum wage fixing machinery convention, 1928.
- Protection of wages convention, 1949.
- Social policy (Basic Aims and Standards) Convention, 1962.
- Part time work convention, 1994.

The SESA made the following conclusions and recommendations in relation the ESS2: the requirements of ESS2 are covered in the Sudan PLRs but institutions and implementation are weak. Awareness levels are low, inspection levels are low, compliance levels are low, especially in the informal sector.

Recommendation: apply the ILO recommendations: a review of OSH carried out by ILO in 2018 recommended the following measures for improving compliance with international OSH standards:

- Strengthen institution and sectoral coordination.
- Activate the regulatory framework.
- Additional finance and funding mechanisms.
- Improve statistics gathering and presentation.
- Awareness raising at the institutional level, for the workers to know their rights.

5.3. ESS3 requirements. Resource efficiency and pollution prevention and management

The Environment Protection Act (2001) complements different environmental laws, including laws covering biodiversity protection, pollution control, public environmental awareness, and environmental and social impact assessments.

Air pollution is covered by the Environment Protection Act 2001, which requires industries with potentially polluting emissions to carry out an environment and social impact assessment and abide by health and sanitation laws. However, there is no mechanism in HCENR to monitor and regulate pollution.

The Environment Protection Act 2001 amended in 2020 provides for environment screening for pesticide use and requires mitigation measures, but regulations of EIA have not been updated and function. The Act also requires efficient and sustainable use of natural resources.

The Pesticide Act (1974), updated by the Act of Pesticides and Pests Control Products (1994) provides procedures for pesticide selection, use and control. It does not specifically require minimal effect on non-target species, or prevention of development of resistance which are requirements under the WB standards.

A number of technical standards have been developed under the OSH Act Khartoum State (2011) and SSMO standards related to pollution including, noise level, heat, air quality in the workplace and effluent standards.

In 2006, Sudan ratified the Stockholm Convention on Persistent Organic Pollutants (POPs) and has developed a strategy which was approved by the Council of Ministers in 2017.

The SESA made the following conclusions and recommendations in relation to ESS3: guidelines, standards and regulations are required under the EPA Act 2001, amended in 2020, to put into practice the provisions of the Act in regard to pollution control. Institutional capacity to monitor and manage pollution is lacking. The current laws provide the framework for pest management.

Recommendations:

- Develop regulations under the existing EPA to include provisions of the WB-ESSs including preventing development of resistance, minimal impact on non-target species.
- Capacity building of staff and institutions.
- Implementation of the POPs strategy.

5.4. ESS4 requirements. Community Health and Safety

OSH laws and regulations listed under ESS2 are geared to workers but do not cover downstream impacts on communities. Ecosystem services are protected by the EPA 2001, amended in 2020, but the regulations to operationalize the Act have not been developed. Traffic and road safety and effluent discharges are covered under the State level OSH Khartoum Act (2011) but only applies to Khartoum State.

In 2006, Sudan ratified the Stockholm Convention on Persistent Organic Pollutants (POPs) and has developed a strategy which was approved by the Council of Ministers in 2017.

Conclusion: the EPA provides for community health and safety but implementation is lacking due to the absence of regulations to operationalize the act as well as regulations, standards and guidelines for EIA not functioning yet, and a lack of institutional and individual capacity to implement the Act.

Recommendations: strengthen capacity to implement the EPA as follows:

- Develop the regulations of the EPA.
- Complete the update process and endorsement of the EIA regulation, guidelines and standards.
- Develop staff and institutional capacity.
- Develop the standards, regulations, guidelines and processes.
- Improve institutions coordination mechanism.

5.5. ESS5 requirements. Land acquisition, restrictions on land use, and involuntary resettlement

Sudan lacks clear and comprehensive frameworks for land administration and management. The legal framework is complicated by the existence of customary as well as statutory laws but the interface between the two is confusing.

The relevant statutory laws are:

- The Transitional Constitution.
- Forests and Renewable Natural Resources Act, 2002.
- Range and Pasture Law, 2015.
- National Parks and Protected Areas Act, 1986.
- Investment Act, 2013.

The national policy on pastoralism is not clearly stated but a number of policy measures have been implemented that impact on involuntary resettlement such as attempts at nomad settlement (all of which failed), and demarcation of livestock routes to protect the interests of nomadic pastoralists.

Land used for pasture and for traditional cultivation is communally owned under customary land laws. Access to land and rights to resources are protected under customary law. Customary laws also include mechanisms for resolving disputes and grievances.

There is no provision in the legislation at present for dealing with involuntary resettlement of people apart from the “Act of Resettlement and Compensation of Local Communities Affected by the Merowe Dam” (2002).

The use of land for residence and other purposes is covered by the Land Settlement and Registration Ordinance (1925), the Unregistered Land Act (1970) and the Civil Transaction Act (1984) (Sullivan and Nasallah 2010).

These land laws have allowed recognition of tribal and individual usufruct rights – the right to enjoy another person’s property without abusing it – and inheritance rights, as well as opening the way for compensation for land appropriated by the state (World Food Programme 2018).

The SESA concluded as follows in relation to ESS5:

- Land tenure is complex and the PLRs and institutional framework to deal with land is inadequate and leads to conflict. However, customary system provides good protection for rights of communities and for resolving disputes and conflicts.
- The forests Act, 2002 (and the revised Act 2015) prohibits settlements in forest reserves although in practice there are many settlements in forests. Implementation of the law could result in involuntary resettlement.
- Involuntary resettlement is not well covered in PLRs.
- The compensation for involuntary resettlement in the case of the Merowe dam was not up to the standards of the WB in terms of extent and levels of compensation.
- SESA consultations in Blue Nile State indicated that a recent expansion of a dam on the Blue Nile resulted in involuntary resettlement without compensation.

Recommendations:

- A GRM and Indigenous Peoples Planning Framework (IPPF) have been developed as part of this ESMF for the REDD+ implementation. They are designed to overcome shortcomings of the Sudan’s PLRs in relation to ESS5.
- Develop or Implement the national policy on involuntary resettlement.
- Complete the revision of the Forests Act to provide for:
 - fair treatment for forest dwellers.
 - joint forest management with communities.
 - participatory planning and disclosure of plans.
 - criteria and indicators for SFM.

5.6 ESS6 requirements. Biodiversity conservation and sustainable management of living natural resources

The Constitution's Article 11 (1, 2 &3), provides that *"the people of the Sudan shall have the right to a clean and diverse environment; The State shall not pursue any policy, or take or permit any action, which may adversely affect the existence of any species of animal or vegetative life, their natural or adopted habitat"*

The Wildlife Conservation and National Parks Act (1986) provides for all of the requirements of ESS6. This Act is being revised at present. The revised draft includes all the measures in the 1986 Act to protect biodiversity, natural habitats and associated environmental services, and the focus of the revisions is on jurisdictional and decentralization arrangements for management of the sector. The proposed revisions include screening project interventions for potential impacts on natural habitats.

The National Biosafety Law No. 15 (2015) deals with protection of genetic resources and has some relevance to the WB safeguard requirements.

The 1992 Convention on Biodiversity and its associated Aichi Principles and the draft Nagoya Protocol. The associated National Biodiversity Strategy was prepared with comprehensive stakeholder involvement in 2015 and is aimed at protection of natural habitats.

The SESA made the following conclusions in relation to capacity to implement ESS6:

- Sudan's current constitution and the Wildlife Conservation and National Parks Act (1986) and proposed revised Act 2015 covers the requirement for conservation and protection of habitats. The issue of invasive species is not adequately covered.
- The weaknesses are in implementation which is partly due to jurisdictional issues related to decentralized control to states which does not facilitate efficient transboundary wildlife management between states and between Sudan and neighbouring countries. The revised management arrangements in the draft 2015 Act provide for strengthening control at the federal level and are aimed at improving management.
- The revised Act is currently in its final stages of approval.

Recommendation:

finalise the approval and enactment of the proposed 2015 Wildlife and National Parks Act.

5.7. ESS7 requirements. Indigenous peoples/sub-Saharan African historically underserved traditional local communities.

The constitution provides equal rights for all. The revision of the Forests Act in 2015 (not yet enacted) provides for most of the environment and social safeguards in ESS7 as it includes international best practices as contained in the criteria and indicators for SFM, including.

The criteria and indicators for SFM endorsed and adopted by Sudan provides for protection of the rights of indigenous people. But the provisions have not been implemented in practice.

The 1992 Convention on Biodiversity and its associated Aichi Principles and draft Nagoya Protocol

The Wildlife Conservation and National Parks Act (1986) prohibits settlements in National Parks and does not recognize rights of indigenous peoples such as the Megano living in Dinder national park.

The Forests Act 2002 and supporting regulations cover many of the requirements of the ESS7. A revised Act was developed in 2015 and is currently going through the process of approval (currently in the Min of Justice).

The Ministry of Agriculture endorsed the Criteria and Indicators for SFM in 2003. They include many of the requirements of the WB safeguard particularly in relation to FPIC and, GRM and stakeholder involvement. However there has not been progress in implementing SFM. To date, no forests in Sudan have been certified as sustainably managed.

The SESA made the following conclusions and recommendations in relation to ESS7:

- The constitution provides for equal rights and protection of all Sudanese people including indigenous peoples and for respect for customary laws and practices and local heritage. The gaps in current forest legislation (Forests Act 2002) relevant to ESS7 are:
 - Settlement in FRs is illegal but there are traditional forest dwellers living in FRs in several parts of the country (As discussed under ESS5).

- There is no provision for joint forest management (but it is occurring through taungya system).
- Disclosure of plans is not specifically required but is happening in practice.
- Stakeholder involvement not specifically provided for in the Act, but in practice this is beginning to happen.

Recommendation:

- Enact the provisions of the revised Forests Act 2015 which provides for most of the safeguards in ESS7
- Clarify the policy in relation to settlements in FRs and involuntary resettlement.

5.8. ESS8 requirements. Cultural heritage

There are a number of articles in the 2019 Constitution related to protection of cultural heritage sites. Article 65 states in relation to Ethnic and cultural groups: “All ethnic and cultural groups shall have the right to enjoy their own culture and develop it freely. The members of such groups shall have the right to exercise their beliefs, use their languages, observe their religions or customs, and raise their children in the framework of such cultures and customs”.

The Environment Protection Act 2001 provides for protection of physical cultural resources and requires screening and mitigating measures. Specific regulations have not been developed. The revised Act also makes provision for protection of such resources.

The SESA made the following conclusions and recommendations in relation to ESS8: the requirements of the ESS8 are in the current legislation but not implemented in practice as regulations, guidelines and standards have not been developed. Staff and institutions responsible for implementing the legislation are weak.

Recommendations:

- Enact the revised EPA.
- Develop the guidelines and regulations to implement the revised EPA.
- Build staff and institutional capacity to implement the Act.

5.9. ESS9 requirements. Financial intermediaries

This ESS is specifically aimed at ensuring that intermediaries utilising WB funding observe the same degree of compliance with WB-ESSs as direct project implementors.

5.10 ESS10 requirements. Stakeholder engagement and information disclosure

The draft EIA regulations under the EPA require information disclosure but does not specify the level of stakeholder engagement required by ESS10.

The draft revised forest Act (2015) incorporates the FAO criteria and indicators for SFM which requires FPIC, stakeholder involvement in planning and implementing projects and fair and equitable benefits and grievance mechanisms.

The SESA made the following conclusions and recommendations in relation to ESS10: the existing legislation does not meet the requirements of ESS10 but the revised forests Act (2015) and the draft revised EPA do include these safeguards.

Recommendations:

- Enact the draft revised EPA and Forests Acts.
- Develop the regulations, standards and guidelines to operationalise the Acts.
- Develop the capacity for stakeholder engagement and information disclosure.
- Strengthen the staff and institutional capacity to administer the Acts.



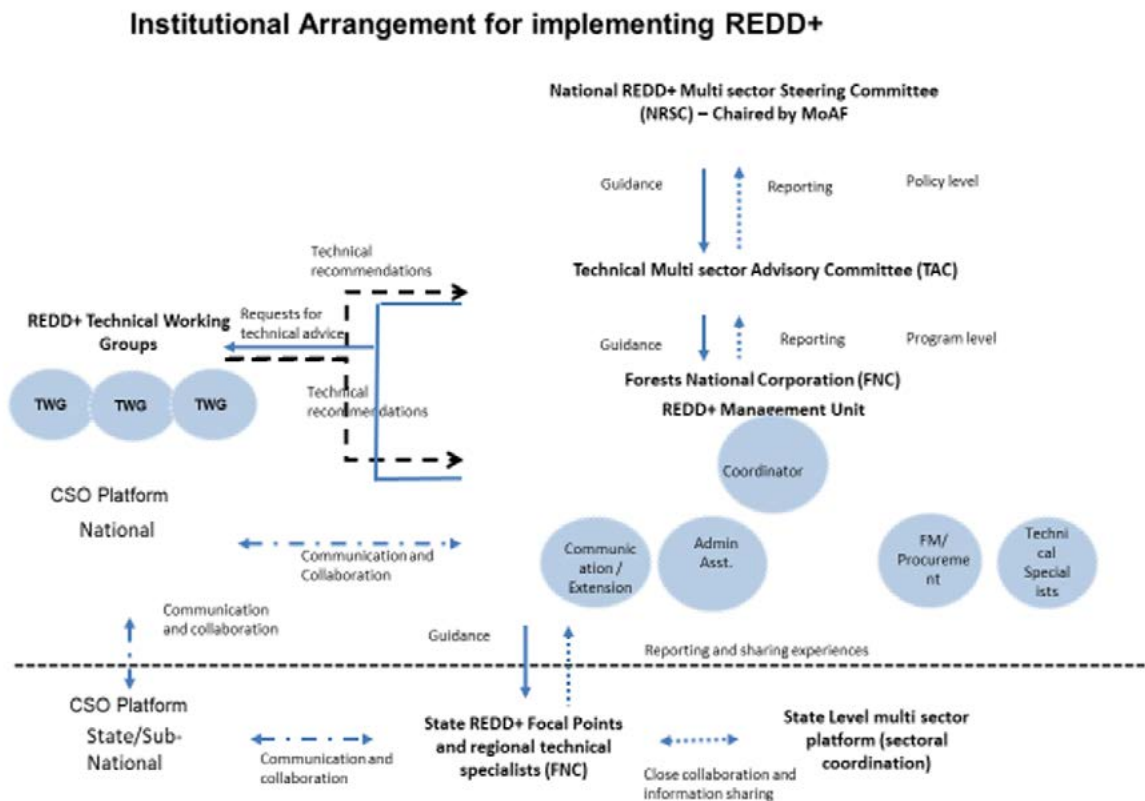
6. INSTITUTIONAL ARRANGEMENTS FOR IMPLEMENTING THE ESMF

6.1. REDD+ project coordination and implementation

The institutional arrangements for the REDD+ programme were outlined initially in the REDD+ Preparedness Plan (R-PP). The institutional hierarchy described, consisted of a National REDD+ Steering Committee (NRSC), a National Technical Advisory Committee (TAC), five Technical Working Groups (TWG), the REDD+ Forum, and a National REDD+ Coordination Office. The arrangement envisaged is described in Section 2C of the R-PP and figures IA-1 and IA-2. Annex 1a.4 of the R-PP describes the composition, terms of reference and work modalities of the component institutions.

The institutional arrangements have undergone some modifications and the current institutional set-up as described in Annex 7 of the FCPF mid-term progress report (FCPF, 2017) is shown in Figure 1.

Figure 1. Current design of the institutional arrangements for REDD+



The NRSC and Technical Multisector Advisory Committee (TAC) have been set up. They are designed to ensure Sudan's-sectoral coordination in implementation of REDD+. The PMU has been established as a unit within the FNC, and is responsible for carrying out the day-to-day management, overall supervision and coordination of the project implementation at all levels. The Technical Working Groups (TWG) that will provide technical guidance and support to the PMU have also been set up covering (i) Safeguards (ii) Strategy; (iii) Feedback Grievance Redress Mechanism; and (iv) monitoring, reporting and verification.

Within the PMU, the technical specialists currently include a project management professional (PMP), a technical advisor who provides technical guidance as required, and a monitoring and evaluation (M&E) officer who acts as deputy coordinator when required in addition to his/her M&E functions. In addition, there are 18 REDD+ Focal points appointed at state level who have already undergone extensive orientation and training.

6.2. Institutional arrangements for implementing the ESMF

The **REDD+ PMU** based in FNC will be the core unit responsible for all aspects of project implementation including ensuring the ESMF is implemented. At the time of drafting this ESMF report, the institutional framework for implementing REDD+ at sub-PMU level has not yet been defined and it is not clear how REDD+ sub-projects will be implemented and managed at the state and lower administrative levels.

Drawing on lessons from implementation of the Sudan Sustainable Natural Resources Management Programme, a **decentralized process for sub-project implementation at state, locality and village level** is proposed involving a steering committee and a project implementation unit at state level.

The **State Project Steering Committee (SPSC)** will be a multisectoral body with responsibility for providing guidance, coordination between sectors, approving sub-project plans and monitoring implementation. The SPSC will be headed by the State Minister for Production & Economic Resources with membership of Directors of the State Ministry of Production and Economic Resources, Wildlife Conservation General Administration, FNC, Range and Pasture Administration and the relevant state HCENR (if the institution exists in the state). The main role of the SPSC is to provide guidance at state level.

Under the SPSC, a **State Project Implementation Unit (SPIU)** will be responsible for carrying out the day-to-day management, overall supervision and coordination of the project implementation in each locality and village targeted in the state. The SPIU will be responsible for implementing the requirements of the ESMF and its complimentary processes.

The SPIU will report to the SPSC and the REDD+ PMU and will be supported by key staff from the state government officials and technical staff, REDD+ state focal points, technical support staff from the REDD+ PMU, consultants and others. The head of the SPIU will work closely with the PMU coordinator and with all the stakeholders at the state, locality and community levels to facilitate project implementation, and will serve as secretary to the SPSC.

Most villages have elected **village community committees or village popular committees** which administer village's affairs in coordination and collaboration with the Sheikh. The village committee is responsible for development activities at the village level and will be involved at the project planning stage if REDD+ interventions involving the village are proposed. The village committees report to the locality level which will also be involved at the planning stage.

At the community level, **Project Community Facilitators** deployed by the SPIU, will work at the community level and will liaise between the project and village communities. They will be trained in the safeguard instruments and the requirements for compliance with environment and social standards and their responsibilities will include data collection for annual environmental audits.

6.3. The proposed safeguards unit in the REDD+ PMU

Within the REDD+ PMU, the safeguard management and monitoring duties will be carried out by a **safeguards unit** working in conjunction with the **M&E unit**. Initially, the staff of the safeguard unit will consist of one **environment and social specialist**, but this may be increased depending on the scale of the work involved. The unit will be responsible for overseeing the implementation of the ESMF and its complimentary instruments (GRM, Resettlement Policy Framework (RPF), Process Framework (PF), IPPF and related consultation processes) and for providing the necessary back stopping, technical support and training for effective implementation of the ESMF. The staff of the safeguards unit will be expanded in line with the scale and requirements of the programme and will be supported by short-term specialists as required. The safeguards unit will work through the state level institutions, providing technical support and capacity building training, and supervising implementation of the ESMF and its associated processes and instruments.

The state level the **SPIU will be responsible for developing project proposals and screening for environment and social impacts and for implementing other provisions of the ESMF** during planning and implementation. A staff member within the SPIU will be assigned responsibility for this function either as a full-time function or in combination with the monitoring and evaluation function. **The safeguards unit within the REDD+ PMU will provide technical support to the state level and will build the capacity of the safeguards function within the SPIU and at lower levels.** The SPIU staff and community project partners at lower administrative levels will be involved in consultative processes and in data collection and interpretation as part of project planning and annual audits and will receive environment and social training and capacity building from the REDD+ PMU safeguards unit.

State level HCENR bodies have been established in four states and are responsible for environment management within these states. They have a potentially important role as independent authorities assessing compliance with the ESMF and in other aspects of environment and social governance in the state. As few states have HCENR institutions established at present, **a specific role for HCENR in implementing the ESMF is not specified, but where relevant the state-level steering committee may specify a role.** The REDD+/PMU safeguards unit will aim to strengthen HCENR and build ca-

capacity in environment and social governance at the state level.

The information generated through the annual monitoring of environment and social compliance during project implementation will be stored in the Safeguards Information System.

6.4. Roles and responsibilities of institutions implementing the ESMF

The federal-level institutions involved implementing the ESMF are the FNC's PMU (and its safeguards unit), the TAC, and HCENR. The state and local level institutions in implementing the ESMF are the SPSC, the SPIU, HCENR, native administration and village committees. The roles of these institutions in implementing the ESMF are described in table 15.

Table 15. Institutions involved in implementation of the ESMF

Level	Institution	Roles and responsibility for ESMF implementation
National	The Forests National Corporation REDD+ Programme Implementation Unit (PMU) and the safeguards unit	<ul style="list-style-type: none"> • Ensure all project activities are implemented per the environmental and social management requirements of this ESMF, PF, RF, Stakeholders and community consultation and participation plan, Feedback and Grievance Redress Mechanism (FGRM) and ESMP. • Approval of project proposal based on screening or request ESAs, further assessment or studies. • Provide technical support and capacity building training to project implementation institutions at the State level. • Provide technical support and capacity building training to project proponents at grass roots level in developing project proposals, assessing potential environment and social impacts and mitigating measures. • Supervise and provide support to implementation of the Environment and social management Plan. • Supervise and provide support to annual environmental and social audits and any revisions of the ESMP resulting from the audits. • Ensure compliance with WB-ESSs at all levels. • Coordinate with complimentary REDD+ processes – M&E, NFMS • Collaborate with government agencies and civil society working in nature conservation. • Monitoring and reporting on the level of compliance of projects with the World Bank ESSs during implementation of projects. • Establishing and overseeing the operation of grievance redress procedures. • Managing relationships with international bodies in regard to environment and social standards in implementation of REDD+. • Manage the REDD+ programme activities related to improving environmental governance in Sudan in conjunction with HCENR at National and State levels. • Support HCENR on policy coherence, to align national standards with the international agreements, and incorporating these agreements in the Sudan's policies and strategies. • Management disclosure of information related to REDD+ implementation in line with ESS10. • Participate in the GRM process. • Oversee implementation of IPPF and PF in conjunction with the State level SPIU.
National	Higher Council for Environment and Natural Resources (HCENR) at Federal and State levels	<ul style="list-style-type: none"> • Liaise with the REDD+ PMU to ensure projects implemented under REDD+ comply with the national policies, laws and regulations. • Coordinate Federal and State level HCENR bodies on issues regarding REDD+ safeguards. • Coordinate with the REDD+ programme on activities aimed at building capacity for improved environment governance in Sudan. • Participate in the GRM process.
National	The Civil Society Organizations' Platform	<ul style="list-style-type: none"> • Ensure REDD+ activities follow the procedure set within the ESMF. • Raise the level of awareness around environmental and social impacts. • Assist in the full participation of communities and other stakeholders in the implementation of REDD+ projects. • Provide guidance on benefit sharing. • Collaborate with government agencies.
State	State Project Steering Committee (SPSC)	<ul style="list-style-type: none"> • Review findings of project screening, ESAs, ESMP, Annual audits and provide advice to the SPIU. • Participate in project and sub project planning processes.

Level	Institution	Roles and responsibility for ESMF implementation
State	State Project Implementation Unit	<ul style="list-style-type: none"> • Management and implementation of all aspects of REDD+ project in the State including compliance with the ESMF and associated processes and instruments. • Initiation of sub project planning processes in compliance with ESS10. • Approve project proposals and associated environment and social screening forms. • Implement ESIA's and associated studies as required. • Review grievances reported through the GRM. • Implement IPPF and PF as required.
State	HCENR (if established in the State)	<ul style="list-style-type: none"> • Liaise with the SPIU to ensure projects implemented under REDD+ comply with the State environment and social policies, laws and regulations. • Provide technical assistance to the REDD+ institutions in the State. • Provide training and capacity building support to the SPIU and SRSC on environment and social governance. • Participate in the GRM process.
Locality and Village Levels	The Traditional (Native) Administration (Nazir, Village Sheikh) and Village Committees	<ul style="list-style-type: none"> • Participate in REDD+ sub project planning including assessment of potential environment and social impacts and identification of mitigating measures. • Initiate sub project concepts. • Verification and approval of sub project plans. • Approve sub project screening forms (by signature on screening form at Locality level). • Participate in annual environment and social audits. • Liaise with the SPIU field staff in implementation of the project. Receive information in line with information disclosure requirements of ESS10. • Participate in the GRM process. • Conflict mitigation and resolution and implementation of customary laws.
Others	External consultants	<ul style="list-style-type: none"> • May be used for as required for ESIA's, studies such as social analyses, conflict analyses, annual audits, and training.



**7.
THE PRINCIPLES,
RULES, GUIDELINES,
AND PROCEDURES FOR
IMPLEMENTING THE ESMF**

The UNFCCC provides the following guidance on preparing projects under REDD+⁵:

REDD+ activities should:

- Contribute to the achievement of the objective set out in Article 2 of the Convention (achieving stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system).
- Contribute to the fulfilment of the commitments set out in Article 4, paragraph 3, of the Convention (provision of financial and technical support by developed countries).
- Be country-driven and be considered options available to Parties.
- Be consistent with the objective of environmental integrity and take into account the multiple functions of forests and other ecosystems.
- Be undertaken in accordance with national development priorities, objectives and circumstances and capabilities and should respect sovereignty.
- Be consistent with Parties' national sustainable development needs and goals.
- Be implemented in the context of sustainable development and reducing poverty, while responding to climate change.
- Be consistent with the adaptation needs of the country.
- Be supported by adequate and predictable financial and technology support, including support for capacity-building.
- Be results-based.
- Promote sustainable management of forests.

The following principles as specified in the WB ESS will guide the development of environmentally and socially sustainable projects funded by WB under the REDD+ strategy:

- Avoid or mitigate adverse impacts to people and the environment.
- Conserve or rehabilitate biodiversity and natural habitats and promote the efficient and equitable use of natural resources and ecosystem services.
- Promote worker and community health and safety.
- Ensure that there is no prejudice or discrimination toward project-affected individuals or communities and give particular consideration to Indigenous Peoples, minority groups, and those disadvantaged or vulnerable, especially where adverse impacts may arise, or development benefits are to be shared.
- Address project-level impacts on climate change and consider the impacts of climate change on the selection, siting, planning, design and implementation and decommissioning of projects.
- Maximize stakeholder engagement through enhanced consultation, participation and accountability.

Procedures for project preparation, approval, and implementation

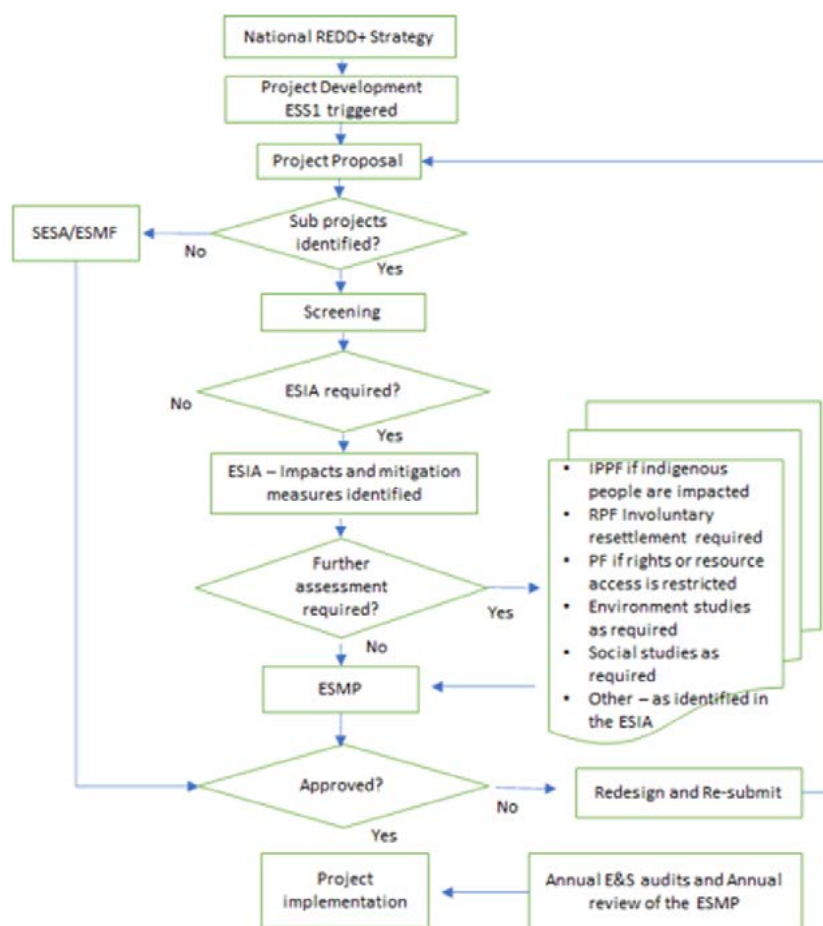
7.1. Tools and processes

Throughout the project planning process, a range of **environment and social assessment tools** will be used to assess the potential for **adverse impacts and for designing and incorporating measures** that will ensure that the project is environmentally and socially sound and sustainable. **The tools include screening, ESIA, surveys and studies, hazard or risk assessments, social analysis and conflict analyses.** If during the screening or ESIA stages, adverse impacts on rights of access to resources are identified, or if there is potential for involuntary resettlement, a separate planning process will be followed as described in the RPF/PF. If there is potential to adversely impact indigenous people, a separate planning process must be followed as described in the IPPF. The RPF/PF and IPPF are described in separate documents annexed to this ESMF.

The project preparation process is illustrated in Table 2 and described in the following sections.

⁵ UNFCCC. Report of the Conference of the Parties on its sixteenth session, held in Cancun from 29 November to 10 December 2010

Figure 2. The environment and social assessment and approval process



7.2. Project preparation

ESS10 requires stakeholder engagement in project planning beginning with stakeholder identification and analysis, identifying those directly affected by the project and other interested parties. A **stakeholder engagement plan** will be developed, which provides for meaningful stakeholder participation in planning and pays special attention to participation of vulnerable and disadvantaged groups.

Ideally, sub-project concepts should be based on **needs assessment** at community level and planning should begin at that level, facilitated by the community facilitators from the SPIU. The **assessment of potential environmental and social impacts and identification of risks** should begin at an early stage in project planning so that the assessment informs the project design. The project planners (at all levels) should be aware of the required environment and social standards and be able to assess the risks. **Technical assistance can be provided by the SPIU safeguards staff and the REDD+/PMU safeguards unit** to ensure a sufficiently robust stakeholder engagement process is followed during planning.

7.3. Screening

All project proposals should be screened to identify environmental and social risks. This involves determination of potential project impacts **using a checklist and categorizing the project** according to potential environment and social risk levels as low, medium, substantial or high. Low risk projects do not require further assessment. Medium, substantial and high-risk projects require further assessment. The screening form will be attached to the project proposal document. A sample screening form and a checklist of potential environment and social impacts is provided in Appendix 1 of this ESMF.

It is envisaged that project concepts will originate from **needs assessments and consultation at grass-roots level** and be developed as project proposals by SPIU in consultation with stakeholders. The completed **environment and social screening form** (signed by the SPIU) will be attached to the proposal. The PMU safeguards unit will do a **desk appraisal of sub-project application and screening form** and assess if all the potential environment and social impacts have been adequately considered and mitigation measures have been included and if the proposal can be cleared for approval or if additional field assessment of environment and social impacts is required. Based on the desk appraisal and further envi-

environment and social assessment if required, a decision will be made on whether or further assessment is required or if the project can be cleared for approval.

Where the screening process indicates that a project has the potential to result in involuntary resettlement, or restriction of access to access and use of natural resources there is a requirement to follow a **separate process as described in the RPF, IPPF and PF** which are annexed to this ESMF.

7.4. Environment and Social Impact Assessment

Projects identified during screening as being potential medium, significant or high risk, **will require further environment and social assessment in the form of an ESIA**. The scale of the ESIA will be proportionate to the scale of the project and its potential impacts. The ESIA will be carried out in line with the ESIA draft national requirements and guidelines and procedures produced by HCENR and in compliance with the requirements of ESS1. It will involve stakeholder involvement and public disclosure in line with the requirements of ESS10. The ESIA may be carried out by external consultants or by internal safeguard specialists within the REDD+ organizational structure.

The ESIA will include the following:

- An assessment of the geographic, environmental and social context.
- Collection of information relevant to Environmental and Social Risks and Impacts as identified in ESS2 to ESS8 and any other relevant environmental and social risks and impacts of the project.
- Identification of mitigating measures for risks that can be mitigated and assesses the feasibility of those measures. Identification of negative impacts that cannot be mitigated.
- Analysis of alternatives, comparing feasible alternatives to the proposed project site including the “no project” scenario.
- Assessment of project design measures and the justification for the project design
- Recommendations for any further action required to comply with the requirements of ESS1 before project approval (such as surveys and studies, hazard or risk assessments, social and conflict analysis). The ESIA will make recommendations on any additional processes triggered, such as, the ESMP, IPPF or GRM and will make recommendations for development and inclusion in the site specific ESMP.

In situations where the environment or social risks are significant, **the ESIA process may recommend further studies to assess impacts and design mitigation measures**, or it may indicate that specific planning processes should be followed.

Resettlement Policy Framework and Process Framework

If the screening process or the ESIA indicate that the proposed project has the potential to result in involuntary resettlement, or restriction of access to access and use of natural resources there is a requirement to follow a separate process as described in the RPF and PF which are annexed to this ESMF.

Indigenous Peoples Planning Framework

If the screening process or ESIA indicate that indigenous people may be adversely impacted by the proposed project, a separate planning process should be followed as described in the IPPF. The IPPF is provided as an annex to this ESMF.

Social and conflict analyses.

The ESIA may identify a potential for the project to exacerbate existing tensions and inequalities within society or give rise to other forms of social conflict and may specify the need for more detailed information on the potential for conflict arising from project implementation. Social and conflict analysis is an instrument that analyses the potential for adverse impacts on peace and stability, sustainable use of resources and social justice. Social and conflict analysis may be required to inform decision making on how to avoid or mitigate such impacts.

7.5 The Environmental and Social Management Plan

The ESMP is required for projects with potential adverse environment and/or social impacts. It consists of the set of mitigation, monitoring, reporting and institutional measures to be taken during implementation and operation of the project to eliminate adverse environmental and social risks and impacts, offset them, or reduce them to acceptable levels. It is a tool for monitoring compliance with environment and social standards during implementation of a project.

The ESMP specifies:

- The measures required to mitigate potentially adverse impacts.
- How levels of compliance with the mitigating measures will be monitored during implementation.
- Indicators and baseline data for monitoring environment and social changes due to the project during implementation.
- Institutional arrangements and capacity development and training requirements required for implementation of the ESMP.
- A Grievance Redress mechanism.
- Timelines and cost schedules for implementation.
- Guidelines for reporting.

A Grievance Redress Mechanism is required as part of the ESMP. This is a mechanism to enable people affected by project implementation to raise concerns regarding impacts of the project. A GRM for implementation of the REDD+ programme has been developed and is provided as an annex to this ESMF.

7.6 Environmental and Social Audits

The aim of the audit is to **monitor changes in significant environmental and social issues** resulting from the implementation of the project. Environment and social indicators will be monitored and compared with baseline data to determine changes and trends resulting from implementation of the project.

Monitoring will involve impact monitoring and compliance monitoring. Impact monitoring will be done by reference to the specific set of environmental and social indicators and baseline data provided in the ESMP for the project or sub-project. The annual audit will provide information on the indicators which will enable a comparison of baseline and current status and identification of environment and social impacts attributable to project implementation. **Compliance Monitoring focusses on the mitigation measures proposed in the ESMP** and assesses if they are being complied with and if those measures are having the desired effect on mitigating adverse impacts.

The SPIU will carry out an environmental and social audit every year. The audit will be led by the SPIU safeguards staff and will involve stakeholders and community liaison project staff in data collection and interpretation. The REDD+ PMU safeguards unit will oversee the process and provide technical assistance as necessary. It will also advise if external expertise is required to assist in the process, if technical capacity is lacking or if an independent objective perspective is required.

Following the audit, corrective action, if required, should be taken by modifying the ESMP to address emerging issues and concerns. Any modifications required to the ESMP will be discussed and agreed by SPIU and REDD+ PMU safeguards unit staff.



8. MONITORING AND EVALUATION

The environmental and social monitoring tools provided in this ESMF are the ESMP and the Annual Environment and Social Audits as described above. The data collected and recommendation of the audit will be aggregated at the national level by the REDD+ PMU safeguards unit and will be stored on the Safeguards Information System (SIS) and will be accessible to all relevant stakeholders. The baseline information on social and environment indicators will also be stored in the SIS.

The SIS is also a feedback platform-reporting on progress of consultations, GRM, management plan implementation, disclosure platform of relevant environmental and social reports, plans, monitoring results, etc.

The SIS will be linked to the database for the broader national forest monitoring system for REDD+ and be the source of information for periodic reports to the UNFCCC on compliance with the Cancun safeguards in implementation of REDD+.



9.
TRAINING AND CAPACITY
BUILDING REQUIREMENTS

ESS1 requires that, where possible, in-country environmental governance systems should be used for managing compliance with WB-ESSs. Where the environmental governance is inadequate, the programme being implemented should include measures to bring the in-country institutional capacity up to standard. As environmental and social governance in Sudan is currently inadequate it is expected that the REDD+ programme will include capacity strengthening measures at a broader sense at federal and state levels. These measures include support to:

- Developing policies, laws and regulations.
- Institutional strengthening of HCENR and other relevant entities at federal and state levels.
- Training on implementing environment and social safeguards at all levels involved in implementing REDD+ projects.

In terms of implementing the ESMF, training will be required at the state and lower implementation levels for administrators and line ministry staff, and for other stakeholders. The training will mainly focus on principles, processes and procedures described in this ESMF.

Training will be required for the following:

- Relevant administrators line ministries staff at state level (including SPSC members).
- Relevant administrators and line ministries staff at locality level.
- SPIU staff at all levels.
- NGOs and Community Based Organizations.
- Village Development Committees and Nazirs, Omdas and Sheikhs.
- RDD+ staff at PMU, safeguards unit and state-level focal points.

Topics to be covered in these training sessions may include:

- Planning environmentally and socially sustainable projects.
- Screening for environment and social impacts and use of checklists.
- Identifying mitigating measures for adverse impacts.
- Stakeholder engagement requirements and participatory planning.
- Monitoring environmental and social impacts during implementation.
- Documentation, information disclosure and reporting.
- Grievance Redress Mechanism.

An indicative training program is described in Appendix 4.

BIBLIOGRAPHY

- Abdalla A. (2014). Environmental and Social Management Framework (ESMF). Sustainable Livelihoods for Displaced and Vulnerable Communities in Eastern Sudan. SLDP -WORLD BANK- MOFNE.
- Abdel Magid, T.D and Badi, K.H. (2008) Ecological Zones of the Sudan. Paper Presented at the workshop on the importance of Wetlands, in Sudan. Nile Trans boundary Environmental Action Project-Nile Basin Initiative Khartoum, Sudan.
- Abdel Magid, T.D and Lawranou, M. (2015). Sudan's Action Plan for GGWSSI. FAO-Ministry of Environment, Physical Development.
- Abdel Magid, T.D, El Khair S., Omer H., Mageed S., Elamin S. and Kerkhof P. (2017). Communication and coordination platforms in IWRM and NRM; Final report of the expert group assessment, UN Environment.
- Abdalbagi Abdalla Elmekki,2008. Towards community's involvement in integrated management of Dinder Bioshpere Reserve. A Thesis submitted for Ph.D. Degree in Forestry Science Department of Forest Management, Faculty of Forestry, University of Khartoum
- Abdulbari Nasredeen (2013). African Human Rights Law Journal. On-line version ISSN 1996-2096. Print version ISSN 1609-073X Afr. hum. rights law j. vol.13 n.2 Pretoria 2013. ARTICLES. Identities and citizenship in Sudan: Governing constitutional principles. Nasredeen Abdulbari, Lecturer, Department of International and Comparative Law, University of Khartoum, Sudan.
- Al-Nagar S. and Tønnessen L. (2011). Sudan Country Case Study: Child Rights Commissioned by Norad and Sida. UTV Working Paper.
- Andrews, F.W. (1948) the Vegetation of the Sudan. Sudan Government, Khartoum.
- Assal, M. (2006). Sudan: Identity and conflict over natural resources Development (2006) 49(3), 101–105. doi:10.1057/palgrave.development.1100284. Society for International Development 1011-6370/06 www.sidint.org/development.
- Behenke R (2012). The economics of pastoral livestock production in Sudan. Feinstein International Centre.
- Bickel A. M. (1995). Report on Consultancy in Women's Studies: A Review of Women's Participation in Forestry Activities in the Western and Northern States. Forests National Corporation, FAO, Rome, 1995.
- Dafa'Alla A.A., Hussein E.S. and Adam M.A.A. (2017). Critical evaluation of the education system in the Sudan from independence to date.
- Duchelle, A.E.; Herold, M.; de Sassi, C., (2015). Monitoring REDD+ cases, cSudans-scale coordination and interdisciplinary integration. Link: http://www.cifor.org/publications/pdf_files/Books/BDuchelle1501.pdf.
- Fagiri A. M. E. (2005). Revision of National Forestry Policy, Legislation and Institutional Reorganization. Ministry of Agriculture and Forests. Forests National Corporation. FAO: TCP/SUD/2903 Project. Institutional Reorganization Report.
- FCPF (2011). Emission Reductions Program Idea Note (ER-PIN) Template. Link: <https://www.forestcarbonpartnership.org/sites/fcp/files/Documents/PDF/Aug2011/FCPF%20Carbon%20Fund%20ER-PIN%20v%201.pdf>
- FCPF (2015a). REDD+ annual country progress reporting (Mar. Aug. 2015). Link: https://www.forestcarbonpartnership.org/sites/fcp/files/2015/August/FCPF_August2015_Sudan.pdf
- FCPF (2015b). FCPF Readiness Preparation Proposal Assessment Note. Link: <https://www.forestcarbonpartnership.org/sites/fcp/files/2015/August/REDD%2B%20Sudan%20%20Assessment%20Note%20Final%20May%202015%20for%20disclosure.pdf>
- FCPF (2017). Mid-term progress reporting. The Republic of Sudan. 9 February 2017. FCPF Readiness Fund. Link: https://www.forestcarbonpartnership.org/sites/fcp/files/2017/Feb/Feb%2010_MTR%20Sudan%20100217.pdf
- FCPF & UN-REDD (2012). Guidelines on Stakeholder Engagement in REDD+ Readiness, with a Focus on the Participation of Indigenous Peoples and Other Forest-Dependent Communities. Link: <https://www.unredd.net/documents/global-programme-191/stakeholder-engagement-295/key-documents-1095/6862-final-joint-guidelines-on-stakeholder-engagement-april-20-2012-6862/file.html>
- FNC (2000). Forestry Outlook Study for Africa (FOSA), Sudan Country Outlook Paper, Ministry of Agriculture and Forests, Forests National Corporation.
- FNC (2014). Sudan Readiness Preparation Proposal (R-PP). Link: https://www.forestcarbonpartnership.org/sites/fcp/files/2014/october/Sudan%20R-PP%20_Oct%20%202014_final_clean%20version.pdf
- Food and Agriculture Organisation (2010). Land Cover Atlas. Link: <http://www.fao.org/3/a-be896e.pdf>

GEF (2007) Assessments of impacts and adaptation to climate change. Link: <https://start.org/wp-content/uploads/AIACC-summary.pdf>.

GOFC-GOLD (2013). The sourcebook of methods and procedures for monitoring and reporting anthropogenic greenhouse gas emissions and removals associated with deforestation, gains and losses of carbon stocks in forests, remaining forests and forestation.

Government of Sudan (2013). Sudan Second National Communication. Link: <https://unfccc.int/resource/docs/natc/sudnc2.pdf>.

Harrison, M.N. and Jackson, J.K. (1958). Ecological Classification of the Vegetation of the Sudan. Ministry of Agriculture and Forests, Khartoum.

HCENR (2007a), Sudan National Adaptation Plan of Action. Link: <https://unfccc.int/resource/docs/napa/sdn01.pdf>.

HCENR (2007b). National Adaptation programme of Action. Republic of the Sudan, Ministry of Environment and Physical Development, Higher Council for Environment and Natural Resources, Khartoum.

HCENR (2009). Sudan's Fourth National Report to the Convention on Biological Diversity, 2009. Link: <https://www.cbd.int/doc/world/sd/sd-nr-04-en.pdf>.

HCENR (2014). National Adaptation Plan. Link: <http://www4.unfccc.int/nap/Documents%20NAP/National%20Reports/Sudan%20NAP.pdf>

Elmahi A. G and Abdel Magid T. D (2002). The Role of the Private Sector, Civil Society and NGOs in the Formulation and Implementation of National Forest Policies and National Forest Programmes in Sudan, Prepared as a contribution of the Sudan Forests National Corporation to the Regional Workshop held by FAO/RNE in Khartoum 26-27 January 2002.

Elsiddig E A, Mohamed A G and Abdel Magid. T D. (2007). Sudan forestry sector review Forests National Corporation. National Forest Programme Facility.

IFAD (2009). Republic of The Sudan, country strategic opportunities programme. Link: <https://webapps.ifad.org/members/eb/96/docs/EB-2009-96-R-42-Rev-1.pdf>.

Kerkhof P. (2017). Sudan Forests National Corporation Institutional Analysis. Based on a report by Prof. Hassan Osman Abdel Nour and other contributors.

Kjellgren, Annika; Jones-Pauly, Christina; El-Tayeb Alyn, Hadyiat; Tadesse, Endashaw; Vermehren, Andrea (2014). Sudan Social Safety Net Assessment. Social protection and labor discussion paper no. 1415. World Bank, Washington, DC. Link: <https://openknowledge.worldbank.org/handle/10986/20054> License: CC BY 3.0 IGO.

Miller, C. (2005). Power, Land and Ethnicity in the Kassala-Gedaref States: an Introduction Catherine Miller. Published in 2005 in C. Miller (ed.) Land, ethnicity and political legitimacy in Eastern Sudan. Le Caire, Cedej, 3-58.

Ministry of Agriculture and Forestry (2015). Sudan's Country Report Contributing to the state of the world's biodiversity for food and agriculture. Quality Control and Export Development Unit. Link: <http://sd.chm-cbd.net/biodiversity/agro-biodiversity/sudan-s-country-report-contributing-state-world-s-biodiversity-food-and-1/sudan-s-country-report-contributing-state-world-s-biodiversity-food-and>

Pullaiah T. (2018). Global Biodiversity Selected Countries in Africa.2018. Volume 3 Apple Academic Press Inc. Apple Academic Press Inc.

Sanjak E., Gumaa Y. O. A. and Awadelkareem M (2017). Developing Benefit Sharing for Sudan's REDD+ Programme. Sudan National REDD+ Programme (FCPF/GRANT).

Siddig, E.F. A., El-Harizi K., and Prato B. (2007). Managing Conflict over Natural Resources in Greater Kordofan, Sudan: Some Recurrent Patterns and Governance Implications. Development Strategy and Governance.

TFD (2014). Country Options for REDD+ Benefit-Sharing. Insights from TFD's Multi-Stakeholder. Dialogue Initiative. The Forest Dialogue.

The World Bank (2003). Social Analysis Sourcebook. Link: http://web.worldbank.org/archive/website01028/WEB/IMAGES/ANNEX_4_.PDF

The World Bank (2011). Forest Carbon Partnership Facility (FCPF) Readiness Fund, Common Approach to Environmental and Social Safeguards for Multiple Delivery Partners. Link: <https://www.forestcarbonpartnership.org/sites/fcp/files/Documents/PDF/Nov2011/FCPF%20Readiness%20Fund%20Common%20Approach%20Final%202010-Aug-2011%20Revised.pdf>.

- The World Bank (2012). The Status of the Education Sector in Sudan. World Bank Studies. January 2012.
- UNFCCC (2012). Report of the Conference of the Parties on its seventeenth session, held in Durban from 28 November to 11 December 2011. Link: <https://unfccc.int/resource/docs/2011/cop17/eng/09a02.pdf>.
- UNFCCC (2018). National forest monitoring system, REDD+ platform. Link: <https://redd.unfccc.int/fact-sheets/national-forest-monitoring-system.html>.
- United Nations Environment Program (UNEP) (2007). Post-conflict Environmental Assessment in Sudan UNEP. Sudan 2007.
- WFP (2007). Sudan Country Brief November 2017. Link: <https://docs.wfp.org/api/documents/fdd0940d67d643d0b3e-411e32481054a/download/>.
- WPR (2018). Link: <http://worldpopulationreview.com/countries/sudan-population>.
- Zakieldeen, S. A. (2007). Vulnerability in Sudan. tiempo bulletin 62. Online bulletin at: www.tiempocyberclimate.org.
- Zakieldeen, S. A. (2009). Adaptation to Climate Change: A Vulnerability Assessment for Sudan. International Institute for Environment and Development. The gatekeeper series of the Natural Resources Group at IIED. Link: <http://pubs.iied.org/pdfs/14586IIED.pdf>.

APPENDICES

Appendix 1.

Environment and Social-Screening Form and checklists

The Environmental and Social Screening Form enables project designers, implementers and reviewers to determine if a proposed project will have negligible environment or social impacts or if could have adverse impacts. Projects with negligible impacts may be approved for implementation without further assessment. Projects that may potentially result in adverse environment or social impacts may require further instruments or processes before approval.

The Screening Form will be completed by the project proponent and attached to the project proposal. The screening form must be filled for all projects supported by WB funds.

Summary

Project name	
Project location (Provide Geo-referenced Map)	
Estimated project cost (SDG and USD)	
Are of land involved (in ha"s)	
Proposed date of commencement	
Project proponent	
Name of Project Proponent	
Postal Address	
Contact Person (Cell phone and Email)	
Person responsible for filling the ESMF:	
Name,	
Job title	
Contact details (phone and email	
Signature and date	

Part A Brief summary of the project

(Briefly describe the Objectives of the project and activities to be undertaken)

Part B. Identification and classification of potential Environmental and Social Impacts

The following checklist of questions is based on the WB Environment and Social Standards 2 to 10. If the answer to any question is yes, further assessment in the form of ESIA is required.

If the answer to any question under ESS5. (Land Acquisition, Restrictions on Land Use and Involuntary Resettlement) is yes the RERPF/PF process should be followed.

If indigenous peoples will be impacted (ESS7. Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities), the IPPF process should be followed.

Environmental and Social Risks and Impacts	Yes / No.
ESS2. Labor and Working Conditions	
Will the project involve project workers including fulltime, part-time, temporary, seasonal and migrant workers?	
ESS3. Resource Efficiency and Pollution Prevention and Management	
Will the project involve consumption of energy, water and raw materials, or other resources?	
Will the project involve release of pollutants?	
Will the project result in air pollution?	
Will the project result in generation of hazardous or non-hazardous wastes	
Will the project involve the manufacture, trade and use of chemicals and hazardous materials	
Will the projects involve recourse to pest management measures?	
ESS4. Community Health and Safety	
Will the project involve buildings and structures that will be accessed by members of the public	
Will structural elements be located in high-risk locations	
Will the project involve a new or existing dam?	
Will the project involve provision of services to communities?	
Are there potential road safety and traffic risks?	
Will the project involve vehicles or fleets of vehicles for the purposes of the project (owned or leased)	
Will the project involve operation of construction and other equipment on public roads or could the use of project equipment have an impact on public roads or other public infrastructure	
Will the project have direct impacts on ecosystem services (ecosystem services are limited to provisioning and regulating services as defined in ESS1)?	
Is there potential for community exposure to water-borne, water-based, water-related, and vector-borne diseases, and communicable and noncommunicable diseases that could result from project activities, taking into consideration differentiated exposure to and higher sensitivity of vulnerable groups.	
Is there potential for transmission of communicable diseases that may be associated with the influx of temporary or permanent project labor.	
Is there potential for community exposure to hazardous materials and substances that may be released by the project.	
Will the project involve deliveries of hazardous materials, and of storage, transportation and disposal of hazardous materials and wastes	
Does the project have the potential to generate emergency events (An emergency event is an unanticipated incident, arising from both natural and man-made hazards, typically in the form of fire, explosions, leaks or spills, which may occur for a variety of different reasons, including failure to implement operating procedures that are designed to prevent their occurrence, extreme weather or lack of early warning)	
Will the project involve retaining direct or contracted workers to provide security to safeguard its personnel and property?	
ESS5. Land Acquisition, Restrictions on Land Use and Involuntary Resettlement;	
Could the project result in physical displacement of person or resettlements?	
Could the project result in economic displacement such as loss of crops, fruit trees and pastureland?	
Could the project result in reduced access to and use of natural resources?	
ESS6. Biodiversity Conservation and Sustainable Management of Living Natural Resources	
Will the project be undertaken in a "Natural Habitat"? (Natural habitats are areas composed of viable assemblages of plant and/or animal species of largely native origin, and/or where human activity has not essentially modified an area's primary ecological functions and species composition).	
Will the project be undertaken in a critical habitat as defined in a-e below?	
(a) habitat of significant importance to Critically Endangered or Endangered species, as listed in the IUCN Red List of threatened species or equivalent national approaches;	
(b) habitat of significant importance to endemic or restricted-range species;	
(c) habitat supporting globally or nationally significant concentrations of migratory or congregatory species;	
(d) highly threatened or unique ecosystems;	
(e) ecological functions or characteristics that are needed to maintain the viability of the biodiversity values described above in (a) to (d)	
Will the project occur in an area that is legally protected, designated for protection, or regionally or internationally recognized?	
Will the project result in Introduction of invasive alien species?	

Will the project involve purchasing natural resource commodities, including food, timber and fiber, that are known to originate from areas where there is a risk of significant conversion or significant degradation of natural or critical habitats?	
ESS7. Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	
Are Indigenous Peoples present in, or have collective attachment to the proposed project area and potentially impacted by the project?	
Are forest dwellers, hunter-gatherers, pastoralists or other nomadic groups present in the project area and potentially impacted by the project?	
Could the project result in reduced access to and use to natural resources for forest dwellers, hunter-gatherers, pastoralists or other nomadic groups?	
ESS8. Cultural Heritage;	
Will the project Involve excavations, demolition, movement of earth, flooding or other changes in the physical environment;	
Is the project located within a legally protected area or a legally defined buffer zone;	
Is the project located in, or in the vicinity of, a recognized cultural heritage site; or	
ESS10. Stakeholder Engagement and Information Disclosure;	
At the project planning stage, has the proponent engaged in meaningful consultations with all stakeholders. Borrowers will provide stakeholders with timely, relevant, understandable and accessible information, and consult with them in a culturally appropriate manner, which is free of manipulation, interference, coercion, discrimination and intimidation.	
In planning the project, has the proponent maintained a documented record of stakeholder engagement, including a description of the stakeholders consulted, a summary of the feedback received and a brief explanation of how the feedback was taken into account, or the reasons why it was not.	
Has the project planner identified the different stakeholders, both project-affected parties and other interested parties.	
Has the planner identified those project-affected parties (individuals or groups) who, because of their circumstances, may be disadvantaged or vulnerable	
Has the project planner developed and implement a Stakeholder Engagement Plan (SEP) ³ proportionate to the nature and scale of the project and its potential risks and impacts?	
Has the project planner disclosed project information to allow stakeholders to understand the risks and impacts of the project, and potential opportunities?	
Has the project planner provided stakeholders with access to the following information, in a timeframe that enables meaningful consultations with stakeholders on project design?	
a) The purpose, nature and scale of the project;	
b) The duration of proposed project activities;	
c) Potential risks and impacts of the project on local communities, and the proposals for mitigating these, highlighting potential risks and impacts that might disproportionately affect vulnerable and disadvantaged groups and describing the differentiated measures taken to avoid and minimize these;	
d) The proposed stakeholder engagement process highlighting the ways in which stakeholders can participate;	
e) The time and venue of any proposed public consultation meetings, and the process by which meetings will be notified, summarized, and reported; and	
f) The process and means by which grievances can be raised and will be addressed.	
Was the information disclosed in relevant local languages and in a manner that is accessible and culturally appropriate?	

Summary of Assessment

Risk classification: High Risk, Substantial Risk, Moderate Risk or Low Risk

Based on the findings of the assessment above, the sub-project is categorized as (tick box).

- High Risk, one or more potentially major adverse impacts. ESIA required.
- Substantial risk. ESIA required and ESMP.
- Moderate risk. ESIA required and ESMP.
- Low risk. No significant environmental and/or social impacts have been identified and no mitigation is required; The sub-project implementation can proceed without further environment assessment.

Approval

Reviewer	
Name and position	
Determination and any further action specified (Approved with no further action, approved with conditions, ESIA required etc)	
Signature and date	
Cleared by	

Appendix 2.

Indicative contents of Environmental and Social Impact Assessment reports

Where an ESIA is required, the contents of the ESIA report should include the following as described in ESS1:

- Executive Summary that concisely describes significant findings and recommended actions.
- Legal and Institutional Framework for the project, within which the environmental and social assessment is carried out and compares Sudan's existing environmental and social framework and the ESSs and identifies the gaps between them.
- Project description. Describing the geographic, environmental and social context, and indicates the need for any plan to meet the requirements of ESS1 through 10. Include a location map.
- Baseline Data 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. Environmental and Social Risks and Impacts as identified in ESS2-8 and any other relevant environmental and social risks and impacts of the project.
- Mitigating measures. Identifies mitigation measures and negative impacts that cannot be mitigated, discussed the feasibility of the mitigating measures, specifies issues that do not require further action.
- Analysis of alternatives. Compares feasible alternatives to the proposed project site including the "no project" scenario.
- Design measures. Justifies the project design and specifies the applicable World Bank Environment Health and Safety guidelines.
- Appendices including a list of the individuals or organizations that prepared or contributed to the environmental and social assessment, references, a record of meetings, consultations and surveys with stakeholders, including those with affected people and other interested parties, means of stakeholder engagement, and a list of associated reports or plans.

Appendix 3.

Indicative Environment and Social Management Plan outline

The ESMP consists of the set of mitigation, monitoring, and institutional measures to be taken during implementation and operation of a project to eliminate adverse environmental and social risks and impacts, offset them, or reduce them to acceptable levels⁶. The ESMP also includes the measures and actions needed to implement these measures.

An indicative outline of the ESMP is as follows:

- 1) Description of all anticipated adverse environmental and social impacts (including those involving indigenous people or involuntary resettlement).
- 2) Measures and actions in accordance with the mitigation measures proposed in the ESIA.
- 3) Description (with technical details) of each mitigation measure, including the type of impact to which it relates and the conditions under which it is required.

The ESMP identifies monitoring objectives and specifies the type of monitoring, with linkages to the impacts assessed in the ESIA and the mitigation measures specified in the ESIA and the ESMP. It specifies:

(a) 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

(b) monitoring and reporting procedures to:

- ensure early detection of conditions that necessitate particular mitigation measures.
- furnish information on the progress and results of mitigation and (c) Capacity development and training.

The ESMP provides a specific description of institutional arrangements for implementing the ESMP, 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).

The ESMP also specifies capacity building measures required to strengthen environmental and social management capability in the REDD+ program implementation staff at Locality State and Federal levels as well as the stakeholders directly impacted by the project. This includes 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.

The ESMP should include details of the GRM or other mechanisms specified in the ESIA such as the IPPF if required.

Finally, the ESMP should include details of the Implementation schedule and cost estimates for mitigation, monitoring, and capacity development activities.

⁶ WB guidelines on content of the ESMP are available from #

Appendix 4.

Appendix 4. Indicative resource plan for training and capacity building

Target group	Training and or capacity building activities	Provider	Annual approx budget (USD)
REDD+ PMU Safeguards Unit staff	<ul style="list-style-type: none"> • WB ESS's • Continuous Professional Development training 	Online WB modular training courses External sources	3,000
REDD+ staff including State level REDD+ Focal Points	<ul style="list-style-type: none"> • WB-ESSs • ESMF principles, instruments and processes. • Grievance Redress Mechanism. • IPPF • RPF/PF 	REDD+ PMU Safeguards Unit	4,000
State level SPIU staff	<ul style="list-style-type: none"> • WB-ESSs • ESMF processes and instruments. • Participatory project planning (ESS10). • Screening for environment and social impacts and use of checklists. • ESMP and Annual audits. • GRM • SIS 	PMU Safeguards unit	5,000 per state unit
State level Steering Committee members and relevant administrators and technical Directorate staff	<ul style="list-style-type: none"> • Environment and social standards. • Participatory planning processes in line with ESS10. • ESMP and annual audits. • Grievance redress procedures. 	PMU Safeguards unit	5,000 per state unit
Native administration and Village committees	<ul style="list-style-type: none"> • Participatory planning processes • Environment and Social Standards • Screening for environment and social impacts and use of checklists. • Grievance Redress mechanism 	Safeguards Unit and external	15,000 per state
HCENR Federal and State	<ul style="list-style-type: none"> • Revision of policies and laws. • Develop guidelines and regulations and processes. • Staff training. • Establish federal-State collaboration and linkages. 	External consultants and internal HCENR staff	50,000 per year

