Appraisal Environmental and Social Review Summary

Appraisal Stage

(ESRS Appraisal Stage)

Date Prepared/Updated: 10/13/2021 | Report No: ESRSA01663

BASIC INFORMATION

A. Basic Project Data

Country	Region	Project ID	Parent Project ID (if any)
Eastern Africa	AFRICA EAST	P176950	
Project Name	Sudan Emergency Locust Response and Food Security Project		
Practice Area (Lead)	Financing Instrument	Estimated Appraisal Date	Estimated Board Date
Agriculture and Food	Investment Project Financing	10/12/2021	11/16/2021
Borrower(s)	Implementing Agency(ies)		
Republic of Sudan	Ministry of Agriculture and Forests		

Proposed Development Objective

To respond to the threat posed by the locust outbreak, strengthen systems for preparedness, and protect and restore food security and livelihoods in project areas.

Financing (in USD Million)	Amount
Total Project Cost	65.00

B. Is the project being prepared in a Situation of Urgent Need of Assistance or Capacity Constraints, as per Bank IPF Policy, para. 12?

No

C. Summary Description of Proposed Project [including overview of Country, Sectoral & Institutional Contexts and Relationship to CPF]

Component 1: Desert Locust Surveillance, Control and Preparedness. This component is designed to limit the growth and spread (driven by climate change and climate patterns) of existing outbreak or likely DL invasions while mitigating the risks associated with the control measures and their impacts on human health and the environment. It will scale up the ongoing activities of the Plant Protection Department (PPD) of the MoAF which is in charge of locust response and will focus primarily on the urgent, prioritized needs to support locust survey and control operations and promote national preparedness. The component will strengthen the technical capacity of the PPD and the sustainability of the survey and control operations through the use of biopesticides with low carbon footprint. The PPD is currently being

supported with technical assistance from the FAO which is expected to be contracted for implementation of this component.

Sub-component 1.1: Improve Desert Locust Surveillance and Control. Through the provision of equipment, technology, training and operational expenses, this sub-component will enhance the capacity of PPD and other relevant staff at the national, state, and local levels, as well as relevant communities, on locust identification, swarm management techniques, and damage assessment. Towards this, the Project will finance goods and equipment such as ground transportation for field operations and surveillance drones for hard-to-reach areas. The Project will support control operations through the provision of spraying equipment, Personal Protective Equipment (PPE) and renting of control planes. The control measures would emphasize neutralizing hopper bands using bio-pesticides before they develop into adult swarms, the control of which requires extensive use of conventional pesticides. The Project component will strengthen the quality of field operations through procurement/rehabilitation of mobile mechanical workshops and service vehicles, including fuel and water tankers, and upgrading of selected field camps. The Project will provide technical support and training to both ground survey and control teams as well as the rural population. The Project will support the scaled up adoption of surveillance tools, such as Locust3 tablets. To improve implementation of Environmental and Health Standards (EHS) for DL control operations, this sub-component will also focus on the secure handling and storage of pesticides. It will support the construction of a pesticide storage facility, purchase mobile pesticide incinerators, and provide training on EHS. .

Sub-component 1.2: Strengthening National Preparedness and Regional Coordination. The Project will help establish linkages with regional and international organizations for overall preparedness for transboundary pests. The Project will strengthen resilience by supporting Sudan's activities with relevant regional/international institutions in areas such as early warning system management, climate prediction system or research in biocontrol mechanisms to name a few. As a country participating in the MPA, Sudan will be able to engage with the IGAD information platform on DL, financed under phase 3 of the MPA, for cross-learning among participating states and to ensure that campaigns for the control of DL and other trans-boundary pests are tackled in accordance with area-wide principles of integrated pest management.

Component 2: Supporting Food Security and Resilient Livelihoods. This component will provide support to increase the availability of and access to food through restoring household food production capacity and protecting livestock assets among vulnerable farmers, pastoralists, agro-pastoralists and fishing households that are, or likely to be, in the path of DL invasions. It will also provide emergency livelihood support to vulnerable rural populations by financing labor-intensive agricultural public works that would contribute to improving incomes, agricultural productivity and commercialization in the targeted project areas.
Sub-component 2.1: Support for Increased Agricultural Production. This sub-component will target both vulnerable households involved in homestead gardening as well as relatively larger smallholders involved in commercial farming. Activities related to homestead gardens will focus on women participation in particular, given that women largely engage in activities that further nutritional outcomes at the household level (through food production, purchase, preparation, child feeding and child-care). The activities under this sub-component will be implemented by MoAF in all project states, using institutional structures and mechanisms set up with support from the ongoing IFAD-funded SNRLP, with the exception of the Red Sea state. As the Government does not have an IFAD-funded presence in the Red Sea state, the MoAF will enter into an output agreement with FAO for the implementation of this sub-component in the Red Sea state. The FAO is currently active in the Red Sea state where it is already implementing livelihood

support activities and has established the relevant systems and structures necessary. This sub-component will be financed as follows:

Activity 2.1(a): Activities to be implemented by MoAF. The activities will cover (i) provision of inputs for kitchen gardens and field crops, (ii) provision of improved breeds of (small) livestock, (iii) fishing kits for immediate food access, (iv) revolving agricultural commodity programs and (v) provision of extension services and training. They will be implemented by MOAF in all project states using institutional structures (for example State Implementation Units) and mechanisms set up under the ongoing IFAD-funded SNRLP, with the exception of the Red Sea state.

Activity 2.1(b): Activities to be implemented by FAO. Under this sub-component, the FAO will implement the same activities (i) through (v) in above paragraph, but in the Red Sea state only. As mentioned above, as the MOAF does not have an IFAD-funded presence in the Red Sea state to leverage the ongoing activities and institutional systems, the MoAF will enter into an output-based agreement with FAO, entrusting it with the responsibility for the implementation of the activities detailed under sub-component 2.1(a) in the Red Sea state. The FAO is already working in the Red Sea state in partnership with several state-level ministries on activities similar to those envisaged under this sub-component and would therefore be well positioned to hit the ground running.

Sub-component 2.2. Support to Agricultural Infrastructure, Natural Resource Management and Income. This sub-component will build climate resilience by providing income support, in the form of cash-for-work (CfW) to poor, vulnerable households to meet their urgent food needs and smooth consumption gaps, build/protect their assets or receive training that focuses on creating opportunities and strengthening community resilience, create jobs and improve livelihoods/enhance incomes. Interventions under the sub-component will also contribute to climate mitigation through reduction in food loss and waste in agriculture and food value chains. IDPs, returnees, refugees and host communities, including youth-at-risk, who are primarily landless, as well as women-run households, will particularly benefit under this activity. The sub-component will scale up and build upon the existing, successful CfW program currently being implemented by WFP in Sudan. The MOAF will enter into an output based agreement with WFP for the implementation of this sub-component which will rely on the structures and mechanisms already put in place by the UN agency.

Component 3: Project Management, Coordination, Monitoring and Evaluation and Capacity Building. 57. The Project will finance costs associated with project management and implementation support, including financial management, procurement, M&E, coordination with participating UN agencies, monitoring of project environmental and social risks and impacts as well as social assessments to address provisions under environmental and social standard seven (ESS7) and commitments in the Environmental and Social Commitment Plan (ESCP). This component will also finance the establishment and maintenance of a Grievance Redress Mechanism (GRM) and conducting Gender-Based Violence/Sexual Exploitation, Abuse and Harassment (GBV/SEAH) risk assessment and consequent development and implementation of a GBV/SEAH Action Plan. The Project will ensure that there is necessary staff with proper qualifications, that is environmental specialist, social specialist and GBV specialist to undertake: (a) effective implementation of the Project activities in compliance to the requirement of the Environmental and Social Framework (ESF); and (b) Environmental and Social (E&S risk) management and regular E&S implementation progress reports.

D. Environmental and Social Overview

D.1. Detailed project location(s) and salient physical characteristics relevant to the E&S assessment [geographic, environmental, social]

Sudan is the third largest country in Africa with a population of about 41.8 million. Sudan is situated in north-east Africa bordered by Egypt to the north, Libya to the northwest, Chad to the west, the Central African Republic to the southwest, South Sudan to the south, Ethiopia to the southeast, Eritrea to the east, and the Red Sea to the northeast.

Sudan has five major ecological zones from North to South, namely desert, semi-desert, low-rainfall savanna, high-rainfall savanna, and mountain vegetation. The diverse ecological zones have allowed the country to support different food, cash, and industrial crops. Also, Sudan has rich renewable natural capital comprising forests, rangelands, arable lands, water resources, wildlife and biodiversity. Forests and rangelands cover 35.6% of Sudan's total area. These resources, along with the ecosystem and environmental services they provide, represent a major contribution to the national economy and local livelihoods. The agriculture, livestock and forestry sectors contribute 35-40% of GDP and employ more than 80% of Sudan's population. Sudan has witnessed profound environmental problems because of deforestation, land degradation and desertification. These environmental problems are further aggravated by climate change and locust infestation.

Sudan has been characterized by high prevalence of poverty and inequality with marked spatial disparities. According to the household survey from 2014/15, the national poverty level was 36.1%, with approximately 11.15 million Sudanese residents living in poverty. However, since 2014/15, Sudan has gone through severe economic and social problems that likely deteriorated the living standards of the vulnerable, underserved, remote, pastoral populations and that have been further intensified by the COVID19 pandemic. The escalating food prices that Sudan has been experiencing since 2018 contributed to the shortages of food and fuel. Early in 2021, the country has been experiencing increases in health and transport prices. These developments have likely impacted populations differently by region and socioeconomic status.

Those most vulnerable, including the IDPs, conflict-affected communities and refugees, are struggling due to high food prices, cash and fuel shortages and the disruption of basic services. The economic and social impacts of COVID-19 and locust infestation have further exacerbated existing natural resource conflicts and threaten the sustainability of a tenuous transitional arrangement. These hardships are not only threatening people's lives but create serious protection risks that give rise to violations and abuse, including gender-based violence.
The country is comprised of a vast array of different ethnic groups, who practice sedentary agriculture and pastoralism and harmoniously lived together for a long period. The project covers eight out of eighteen states in Sudan, it should pay attention to pastoralists who are on the move (prior, during and after operation of spraying), and remote communities who may have unique sociocultural institutions. In the gender inequality index, the country is ranked 140. GBV, including early marriage, and other widespread sexual abuse and exploitation, often are common and linked to the broader ethnic-related conflicts in the country, greatly affects women and girls' education.

Sudan remains essentially rural with the majority of the population dependent on the country's natural resources for their livelihoods. It is estimated that agriculture (crops, livestock, and forestry) contributes 11% of Gross Domestic Product (with livestock accounting for 50% of the production) and employs more than 80% of the total population. Traditional farming accounts for 60-70% of the agricultural output and is largely subsistence production based on shifting cultivation and livestock rearing. Most of the inhabitants live by subsistence farming. 46.5% of the population in Sudan lives below the official poverty line of which 58% live in the rural area. FAO estimates that more than nine million of Sudan's population is currently facing a food crisis due to increasing food shortages, food price hikes, high

inflation, unemployment, and loss of livelihood assets and income sources. Throughout the country, millions are still unable to return to their places of origin because of the protracted armed conflict and other situations of violence.

Geographic targeting for the project is determined by a combination of food insecurity, existing desert locust (DL) impacts, and threat, predicted DL breeding/invasion risk and the presence of ongoing operations with implementation arrangements that can be utilized rapidly. Sudan is home to both summer and winter DL breeding grounds, and, when climatic conditions stimulate excess population growth and swarming, locust swarms devastate crops and pasture. This persistent threat of DL compounds an already vulnerable food security situation in the country, and demands policies and actions to prevent, and, when necessary, respond to DL emergencies. Sudan's vulnerability to DL has gotten worse, and the ongoing DL upsurge that started in May 2018 on the Arabian Peninsula illustrates the role that climate change is already playing in shocks to agriculture and livestock systems, as well as to food security. The DL situation in Sudan has developed significantly since the end of 2019 largely due to internal breeding along the Red Sea coast as well as invasion of swarms from neighboring countries. By late March 2021, a new round of breeding in Ethiopia and Somalia signifies the potential of a further increase in locust numbers in the Horn of Africa, including Sudan. Therefore, the DL situation in Sudan is currently at caution risk level, especially with the beginning of the rainy season and the start of the main cropping season.

Despite control efforts of incoming locust swarms from neighboring countries during January 2021, escaped locusts laid eggs in Tokar Delta and on the coastal plains in the Red Sea State. As a result, hatching and hopper bands formation started at the end of January, and immature adult groups and swarms started to form in early March threatening crops and pasture areas in the Red Sea, River Nile, Northern, Kassala and North Kordofan States. By late March 2021, a new round of breeding in Ethiopia and Somalia signified the potential of a further increase in locust numbers in the Horn of Africa, including Sudan. The Sudan Food Security and Livelihoods Cluster co-led by FAO and WFP reported that hopper bands and swarms of locusts in 16,781 hectares of Sudan were observed, mainly in the northeast. Therefore, the DL situation in Sudan is currently at "caution risk level" especially with the beginning of the rainy season and the start of the main cropping season, May through November. The current weather conditions are ripe for the growth and spread of DL as evidenced by the IGAD Climate Prediction and Application Center (ICPAC), Rainfall and Temperature forecast for 27 July – 03 August, (26 July 2021) whereby heavy to very heavy rainfall (100 to 200+ mm) is expected in northern Ethiopia, western Eritrea, as well as parts of western Darfur, Sennar, and Gedaraf in Sudan, which would exacerbate the already fragile food security situation in these areas as upsurge of DL swarms is highly correlated with unusually heavy rains.

The GoS has taken commendable measures to address the DL upsurge; however, more remains to be done to mitigate the impacts of potential DL invasions from the East and Southeast, as well as maintain the gains achieved so far. The Plant Protection Department (PPD) under the Ministry of Agriculture and Forests (MoAF) has worked closely with the FAO to combat the threat of DL invasions through a program of field surveys and control operations. Over 1,632,000 hectares were surveyed in 2020 and approximately 112 mature/immature swarms were destroyed through aerial and ground control operations. The control of these 112 DL swarms, covering an area of 414 square km, would have consumed food equivalent to the requirement of 14.5 million people. While such efforts have helped avoid the scale of devastation observed in neighboring countries, the significant threat of a new DL upsurge calls for an emergency response in terms of critical actions related to monitoring, controlling and building preparedness, as well as assisting the vulnerable populations impacted by the DL swarms. There is a need for maintaining the investments already made by PPD, as well as providing additional training and technical support to relevant stakeholders to shore up the country's capacity to address ongoing and future DL threats. Most importantly, a number of eastern states, currently

vulnerable to invading swarms due to high rainfall and cross-border migration from neighboring countries, need immediate support and the GoS has made this a high priority. Critical areas of support include, inter alia, technical assistance and investments for surveillance and control operations, and actions to mitigate health risks due to the use of pesticides for control interventions. In this context, there is an urgent need to build a new pesticide storage facility, as the existing storage structure was closed by authorities due to the expansion of residential areas around the storage structure. The PPD already owns a plot of land in the Garry Free Zone area in the north of Khartoum North, which is certified for the construction of a warehouse. Additionally, large amounts of obsolete pesticides have accumulated over the years which are a source of pollution of the local environment and water sources and pose threats to human health. There is therefore a critical need for mobile incinerators for the safe disposal of these obsolete pesticides.

D. 2. Borrower's Institutional Capacity

The Ministry of Agriculture and Forest (MoAF) will be the line ministry with overall responsibility for project implementation. A Project Coordination Unit (PCU) will be established within MoAF for the overall coordination, management, monitoring and evaluation of the proposed project. The Project will engage with the Ministry of Animal Resources and Fisheries (MoARF) with regard to activities related to livestock and fisheries. The MoAF has managed several Bank financed projects, including familiarity with the World Bank's safeguards policies/requirements. However, the MoAF is new to the Bank's ESF.

The PCU will be led by a Project Director and staffed with key specialists, including procurement, financial management, environment, social, GBV and M&E/communication specialists. It will also house technical agricultural specialists and other experts on a need basis. It will directly implement sub-component 2.1(a) and component 3 and oversee the implementation by the UN agencies of component 1 and sub-components 2.1(b) and 2.2 (see below).

The PCU will directly implement sub-component 2.1(a) on supporting livelihood and resilience through increased production in close collaboration with the IFAD-supported projects; and these include the Sustainable Natural Resource and Livelihoods Program and the Agriculture and the Integrated Agriculture and Marketing Development Project. These projects have strengthened the capacity of state and local authorities as well as communities for community-based, livelihood and resilience programs. The Project will leverage such local capacity for a quick and smooth implementation of the proposed activities under sub-component 2.1(a). The IFAD-financed interventions are being implemented by State Implementation Units (SIUs) which provide services that are complementary to the proposed interventions and reach targeted beneficiaries with similar profiles. The PCU will implement activities under sub-component 2.1(a) through a Memorandum of Understanding (MoU) between the MoAF and State authorities whereby the SIUs will be entrusted with the day-to-day implementation of the proposed activities. The Project will finance any increased capacity needs in the SIUs for the implementation of these activities, including operating costs.

The PCU will enter into output agreements with FAO for component 1 (locust response) and sub-component 2.1(b) (agricultural productivity activities in Red Sea State) and WFP for sub-component 2.2 (labor-intensive public works). These technical partners will carry out the implementation of these activities, including the fiduciary, and environmental and social safeguard aspects. They will report to the PCU.

The Project will build on the current partnership between MoAF and FAO whereby MoAF will enter into an output agreement with the FAO for the implementation of the agreed activities. FAO is the lead international agency globally on agriculture and food security in general, and specifically on the recent upsurge of DL.

The WFP will be contracted under an output agreement for the implementation of the proposed activities under sub-component 2.2 to work with communities on improving agriculture related infrastructure, resilience and providing cash-for-work to a vulnerable population of smallholders and landless, including IDPs, returnees, refugees as well as host communities. WFP has considerable experience in cash-for-work programs in Sudan and has set up mechanisms for biometric registration of beneficiaries (particularly important if people do not have identity cards); a tested targeting process; a consultative mechanism with participating communities to identify investment priorities; payment platforms, including through partnership with phone companies; and a network of national and international NGOs to implement the activities in the field.

To ensure coordination among the PCU, the lead technical partners and relevant ministries/agencies, the Project will establish a Project Steering Committee (PSC) and Technical Committee (TC). The PSC, chaired by MoAF, will provide oversight and guidance in the implementation of project activities. It will also approve the annual workplan and budgets. It will comprise representatives from, inter alia, MoAF, MoARF, MoF, Ministry of Regional Development, Ministry of Irrigation, and other relevant stakeholders and will meet at least biannually. In addition, a TC, comprising MoAF, MoARF, FAO, IFAD, WFP and Director Generals of the Project states will be set up to provide guidance to the PSC and PCU on strategic issues, facilitate coordination between the stakeholders, serve as a channel of communication and troubleshooting with state level partners and other relevant matters as needed. The TC will meet every two months or more frequently if requested by the PSC and PCU.

The project will include tailored ESF technical assistance including training to MoAF under the Project Management component which aims, among others, to strengthen the capacity of the Ministry to manage future Bank-funded operations from a technical, fiduciary and ESF point of view. The PCU with the SIUs, the relevant government implementation institutions and the UN agencies (as described above) shall monitor compliance with the requirements of the WB ESF and the Project's ESF instruments and prepare environmental and social monitoring reports biannually and share them with the World Bank and those concerned. The Environmental Regulatory Agency will review and endorse site specific environmental and social risk management instruments (ESIA/ESMP) for subprojects and monitor compliance with the regulatory requirements. The MoAF/PCU shall engage an independent Third-Party Monitoring Agent (TPMA) to independently review and monitor the project's environmental and social performance. Also, the MoAF/PCU shall provide TPMA findings on implementation of the ESF as part of the regularly quarterly progress reports submitted to the Association. Overall, the E&S staffing, compliance monitoring and reporting, and capacity development requirements have been addressed in the Environmental and Social Commitment Plan (ESCP) and will be reflected in other ESF instruments including the Environmental and Social Management Framework.

II. SUMMARY OF ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS

A. Environmental and Social Risk Classification (ESRC) — High

Environmental Risk Rating — High

As this project will finance improving storage/handling of pesticides, strengthening the reliability of the storage system as well as handling of spraying operations, the environmental, health and safety risks will mainly be associated with: i) occupational risk in handling of pesticides in the stores from accidentally spilled pesticides to those directly involved; ii) the disposal of empty pesticide drums, bags or other containers, from returned

contaminated or damaged personal protective equipment (PPE) as most empty containers and used equipment may be stored temporarily; iii) fire risk as a result of inflammable nature of pesticides and fuels visa vis improper storage and application; iv) soil, surface water and ground water pollution as a result of pesticide spillage and leakage; v) air pollution through dust emissions; and Pollution due to unused and obsolete pesticide, and empty pesticide containers; and vi) accidental poising of workers and nearby community members. Risk associated with the construction and operation of storage facilities include impacts on environment and occupational health, noise, dust, vegetation, soils, indoor air quality, waste management, and construction and operation related occupational hazards. The component on livelihoods need special concern with regard to potential environmental impacts emanated from those subprojects' activities and respective risk/impact management. These subprojects include provision and distribution of seeds, fertilizer, pesticides (in accordance with the International Code of Conduct on Pesticide Management of the FAO/WHO in a manner consistent with the WB ESSs), provision of small equipment like drip or fishing rods, and implementation of community infrastructure like small rural roads maintenance or repairs under the labor-intensive public works activity. The potential impacts and risks on environment and humans including socio economic impacts of this component are the following: pollution of ecologically sensitive habitats such as wetlands, forestlands and water bodies as a result of seeking for agricultural land and pasture development, surface water pollution as a result of misuse of agricultural inputs such as pesticide and fertilizers, air pollution through dust emissions, soil erosion, farm input & grant may lead to opening up new areas for cultivation. A detailed assessment of the project overall impacts and mitigation measures will be included in the project Environmental and Social Management Framework (ESMF), Waste Management Plan (WMP), Community Health and Safety Management Plan (CHSMP) and the Integrated Pest Management Plan (IPMP), including guidance on management of empty containers. All aspects of pesticides handling, storage, spraying, etc. will be reflected in the IPMP and handled by the FAO since they represent a global authority on this matter. Even though there are known and proven proposed mitigation measures that will be put in place, training on management and operation of storage facilities, and the technical and supervision support to be provided by FAO, as it does with most countries under this MPA, as the project operational activities of spraying pesticides is associated, the project Environmental Risk is considered High.

Social Risk Rating High

The potential social risks & impacts could be on community's livelihood assets i.e., grazing land, water source, livestock & affect the community's environment. Lack/inadequate stakeholder consultation including communities (prior, during, after) pesticide spraying may lead to negative impacts. These include, spraying may happen while communities have no information about spraying and surveillance, do not have awareness for lodging complaints, exit and entry to pesticide sprayed area, lack of consultation regarding project targeting. Other social risks include, 1) use of culturally inappropriate and linguistically limited communication, 2) the nature of the activities (pesticide storage, transport, disposal) unless properly addressed, could potentially lead to the community health & safety risk, OHS risk, exclusion and inequity, grievance, GBV, crop failure, and damage on livestock. The risk mitigation measures will rely on setting up systems for good environment & social risk communication and community engagement that include vulnerable groups (VGs) with culturally and linguistically appropriate manner. VGs likely to be adversely affected by the project risks and impacts and/or more limited than others in their ability to take advantage of a project's benefits due to their age, gender, race, ethnicity, religion, physical, mental, or other disability, social, civic or health status, sexual orientation, gender identity, economic disadvantages, or indigenous status, &/or dependence on unique natural resources. Proper handling of pesticides as covered under the environmental risks management section. Component 2 provides support for immediate access to food while restoring household food production capacity & protecting livestock assets among vulnerable farmers, pastoralists, agro-pastoralists & fishing

households, through financing labor-intensive agricultural public works. The LIPW would contribute to improve incomes, agricultural productivity & commercialization. Project beneficiaries will consist of IDPs & groups in conflict-affected states, refugees, flood-affected & chronically food-insecure areas of Eastern Sudan. LIPW will have potential social risks, such as, i) vulnerable and eligible households may be left out for distribution of agricultural inputs during project targeting, (ii) lose of assets due to construction & maintenance of small infrastructure, iii)project targeting may leave out community members for LIPW employment opportunity & benefit-sharing, iv) project targeting may leave out communities due to inaccessibility or remoteness, policy, & institutional failure. This activity requires focus not to miss vulnerable, women, & underserved local community, not to inflame the existing deprivation of equity & inclusiveness, food insecurity, & poverty. Another area of concern is the potential occupational health & safety (OHS) risk due to the lack of implementation of LMP, including those outlined by FAO. Possible OHS risk factors are during human spraying, vehicle-mounted spraying, transportation & handling of chemicals, disposal of obsolete chemicals & at LIPW. The potential risk includes SEA/SH, exposure to chemicals, emergency event, traffic incident & worker security due to the nature of activities. The risk mitigation measures shall be outlined in the project LMP & adhered throughout project implementation. The client will adopt a robust Environment and Social Risk Management (ESRM) system with qualified & well-resourced staff at different levels, including at FAO & WFP. The client shall prepare a Social Assessment (SA) that will identify the IP/SSAHTLC that are present in or have collective attachment to the project area, MoAF will seek inputs from appropriate specialists to meet the consulting, planning, and other requirements of ESS7 for the project. The MoAF shall lead & coordinate the ESRM implementation and regular implementation progress reports. The social risk is assessed as high.

B. Environment and Social Standards (ESSs) that Apply to the Activities Being Considered

B.1. General Assessment

ESS1 Assessment and Management of Environmental and Social Risks and Impacts

Overview of the relevance of the Standard for the Project:

This ESS requires the assessment and management of the environmental and social risks and impacts of the proposed project so as to ensure sustainable development. The project will have positive impacts through combating the damage created by the widespread desert locust swarm in Sudan. The project will protect fragile livelihoods from locust infestation and subsequently enhance the food security of communities through livelihood support in the project area. The project activities on livelihoods support component provide opportunities to reclaim human capital and asset losses due to the dessert locust. The support will enable vulnerable households gain access to livelihoods support, distribution of essential agricultural inputs for building livelihoods. However, the proposed Project could also cause environment, health and safety risks due to storage and management for spraying for the control of the locusts.

The potential negative environmental risks and impacts associated with these desert locust control activities include potential spillage or leakage of pesticides (considered hazardous materials) during transportation, handling, storage of the pesticides, dosage during treatment and disposal of used pesticide containers/drums, this will likely lead to the contamination of the environment and potential health hazards to the store facilities operators and surrounding communities. Furthermore, there are health risks to the people whose fields/ villages will be sprayed. If incinerators will be used for final disposal of expired or unused pesticides, it should be done in compliance with the requirements

of the relevant environment, health and safety guidelines of the World Bank; and this will be covered in the upcoming ESMF.

Sudan Ministry of Agriculture and Forestry with technical support from FAO will manage these risks by adopting and complying with FAO Desert Locust Guidelines on safety and environmental precautions and other FAO technical guidelines on personal protection when handling pesticides, the use of WBG General EHS Guidelines and national legislations and regulation on use of pest control products.

There is an associated risk of fire in the chemical storage areas. To manage these two risks jointly, Sudan Ministry of Agriculture in collaboration with FAO shall further prepare and operationalize Emergency Preparedness and Response procedures (EPRP) to manage any risk of fire, and contamination or poisoning that may occur from accidental spillage. The EPRP will be prepared, consulted on and disclosed as part of the IPMP, ESMF, and further detailed in site specific ESIAs for subprojects.

The project financed activities that will have positive impacts and benefits to the areas infested with the desert locusts in a way through controlling the swarm invention from destroying the natural resource and economic base (crop production and pasture lands), addressing the food shortage/crises, delivering livelihood assistance and employment opportunities, building adaptation capacity of the community on small infrastructure building, and strengthening the capacity of locust emergency response and preparedness. Despite the benefit, the project negatively contributes to the occurrence of social risk. The project's main social risks that call for ESS1 stem from locust control operation, and livelihood assistance components (1&2). Under Component 1 - Surveillance and Control Measures: the social risk is expected due to 1)) poor handling, transportation, use, and disposal of pesticide, 2) the surveillance and spraying operation when unable to facilitate a platform for community engagement and feedback mechanism 3) communication about the locust control or spraying operation failed to convey the message in timely and culturally appropriate manner 4) the nature of the activities is mainly operated in-store, vehicle, field, and remote areas. Unless properly addressed, this led to the community health & safety risk, OHS risk, exclusion and inequity, grievance, GBV, crop failure, and livestock damage. Component 2: Livelihoods Protection and Rehabilitation. The risk associated with this component will tend to interact with existing problems and inflame the existing deprivation of equity and inclusiveness, food insecurity, and poverty. Such risk may happen during project targeting, employment opportunity, and benefit-sharing due to inaccessibility or remoteness, policy, and institutional failure that defend or ensure their benefit and rights, absence of a platform for their engagement, marginalization, domination, GBV, resource conflict, mobility, and awareness. The project shall adopt the WFP LIPW beneficiary selection/targeting criteria adjusted for the project context and ESF requirements.

To reduce the environmental and social risks, the project will develop the following risk management document (i) Environmental and Social Management Framework (ESMF) (ii) social assessment, (iii) Stakeholder Engagement Plan (SEP), (iv) Environmental and Social Commitment Plan (ESCP) (v) labor-management procedure (LMP) (vi) gender mainstreaming and gender-based violence risk management plan (vii) Waste Management Plan (WMP), (viii) Community Health and Safety Management Plan (CHSMP), (ix) Emergency Preparedness and Response Plan, and (x) site-specific environmental and social risk management instruments (such as ESIAs/ESMPs, IPMPs) for subprojects during implementation. The project will establish an environmental and social management system, and appoint environment and social risk management specialists to ensure implementation of the ESRM tools in line with the relevant ESS requirements. The client will also ensure the implementation of ESS requirements in every contract and

subcontract management and deliver a report that presents the client as well as the contractor's performance. Meaningful consultations with key stakeholders and the community will be carried out to incorporate their concerns in the early stage of the project planning. However, the SEP will provide the platform for continued participation of the community throughout the implementation period

ESS10 Stakeholder Engagement and Information Disclosure

This ESS is relevant. The key stakeholders of the project include the Implementing Partners (FAO, WFP, IFAD); the Ministry of Agriculture and Forest (MoAF) and the Ministry of Animal Resources and Fisheries (MoARF) at the national level and the agriculture officials at the state and locality government level; local-level leaders, community leaders, media, women and user associations, elders, vulnerable groups, religious leaders and other humanitarian organization, national and international NGOs operating in relevant areas the project is planning to support. Stakeholder engagement, consultation, and communication, including grievance redress and disclosure of information, will be required throughout the project life. The MoAF has prepared a Stakeholder Engagement Plan. The SEP will be disclosed during preparation allowing to seek feedback from interested parties and project-affected people. The final version of the SEP will be disclosed before appraisal but will remain a living document to be updated during the life of the project. The SEP will cover sexual abuse and exploitation and communication in a culturally and linguistically appropriate manner for the IP/SSAHUTLC context in Sudan to address potential risks for the activities under all relevant project components.
The project shall include appropriate measures and communication regarding COVID19 risks mitigation measures including the national, World Bank and WHO COVID19 guidelines outlined under ESS2.
The project will establish a project-level Grievance Redress Mechanism (GRM) that deals with complaints related to targeting, SEA/SH, worker grievance, and compliance on the spraying operation. The GRM for the different implementing entities (MoAF, FAO, WFP, IFAD) shall be consistent in principle to provide avenue for stakeholders at national, state and locality levels that demonstrate principles, working standards and feedback loop for a functioning GRM system. A GRM guideline with detailed procedure considering the traditional system will be prepared to build a functional system that will serve for the whole project. Resources will be allocated for the GRM as part of the project cost. Project beneficiary communities, workers, and other interested stakeholders will be sensitized regarding operational procedures including how to submit, the timing for resolution of grievances, and clear steps. The GRM will be cognizant of and follow required levels of discretion, and cultural appropriateness, especially when dealing with cases of sexual harassment and GBV. The GRM will be accessible to all stakeholders, especially women, poor, and people with disability. The overall project environment and social safeguard progress report will have a dedicated section on GRM that includes the complaints recorded, resolved, and referred to the formal court system.

B.2. Specific Risks and Impacts

A brief description of the potential environmental and social risks and impacts relevant to the Project.

ESS2 Labor and Working Conditions

This standard is relevant as the project employ both direct worker, contract worker, community and volunteer workers. A labor management procedure (LMP) covering all worker types will be prepared, reviewed, and cleared by the Bank before project effectiveness and no activities shall commence on the ground before the completion of the

LMP. Direct worker includes those that will be hired under the project management unit such as project staff, surveillance team, vehicle mounted sprayer drivers, storekeepers, and operator of on the ground spray. Contractor workers may involve Seconded staff from FAO and consultants hired for monitoring and evaluation consultancy service. Community workers include volunteer workers who involve community members who engaged in locust surveillance work, communication, and sensitization of the project operation, targeting, and who work as GRM committee. The labor-management procedure will also contain management measures for SEA/SH among workers and measures to address potential risks related to child and forced labor and a dedicated workers GRM to be promoted to ensure functionality. For the LIPW, the MoAF and WFP shall ensure that participation is voluntary and assess the working conditions and apply the relevant provisions of this ESS in a manner which reflects and is proportionate to: (a) the nature and scope of the project; (b) the specific project activities in which the community workers are engaged; and (c) the nature of the potential risks and impacts to the community workers engaged in LIPW. Hence, the LMP shall outline the principles and procedures for community workers involved in LIPW, including occupational health and safety requirements during implementation of LIPW. Further, a Security Management Plan (SMP) will be cover issues related to working in remote and conflict areas.

The project will ensure compliance with provisions of relevant national laws as well as World Bank guidelines regarding the COVID-19 situation, in particular, ESF/Safeguards Interim Note: COVID-19 Considerations in Construction/Civil Works Projects, April 7, 2020. The Borrower will ensure that all project activities are undertaken in accordance with national law, WHO and World Bank guidance in relation to COVID-19, to combat the transmission of COVID-19 between project workers and affected local communities. In addition to ESS2 requirements, the project will adopt the following interim notes and guidance against COVID-19 transmission: (i) ESF/Safeguards Interim Note: COVID-19 considerations in construction/civil works projects; (ii) for rational use of PPE: WHO interim guidance on use of PPE for COVID-19 (https://apps.who.int/iris/bitstream/handle/10665/331215/WHO-2019-nCov-IPCPPE_use-2020.1-eng.pdf); and (iii) for workplace-related advice: WHO guidance getting your workplace ready for COVID-19 (https://www.who.int/docs/default-source/coronaviruse/getting-workplace-ready-for-covid-19.pdf).
Possible occupational health and safety risk factors are spraying aircraft crash incidents, human spraying operation, vehicle-mounted spraying operation, transportation and handling of chemicals, and disposal of obsolete chemicals. The potential risks from these activities will be SEA/SH, exposure to chemicals, emergency event, traffic incident and worker security due to the nature of the activities (store operators), vehicle, field, and remote areas where there is lack of infrastructure, inaccessibility, conflict and violence, and presence of wild animals. In response to this, the project shall promote the use of personal protective equipment (PPE) for those engaged in control operations and pesticide management; use of good practices and efficient techniques during control operations to prevent chemical exposure to staff and community workers; use of less toxic hazardous pesticides to human health in case of accidental exposure; allow for short shifts to manage exposure thresholds; timely communication and awareness-raising to workers on EHS hazards and risks; provision of training on safety and security protocol, LMP, SEA/SH, GRM, emergency preparedness, and first-aid procedures, traffic safety procedure, etc. FAO, WFP and IFAD are technical partners to ensure compliance with the ESS2 requirements.

ESS3 Resource Efficiency and Pollution Prevention and Management

ESS3 recognizes that economic activity and urbanization often generate pollution to air, water, and land, and consume finite resources that may threaten people, ecosystem services and the environment at the local, regional, and global levels. The current and projected atmospheric concentration of greenhouse gases (GHG) threatens the

welfare of current and future generations. At the same time, more efficient and effective resource use, pollution prevention and GHG emission avoidance, and mitigation technologies and practices have become more accessible and achievable. This ESS sets out the requirements to address resource efficiency and pollution prevention and management throughout the project life cycle consistent with Good International Industry Practice (GIIP); and these requirements will be reflected in the ESMF and IPMP (including guidance on management of empty containers) and further detailed in site specific environmental and social risk management instruments (such as ESIAs/ESMPs) for subprojects during implementation.

In locust control operations large quantities of pesticide s are likely to be stored and used, with associated risks to man and the environment. Application of pesticide should be made in accordance with good pest control practice (including FAO Desert Locust Guidelines, the International Code of Conduct on Pesticide Management of the FAO/WHO in a manner consistent with the WB ESSs) to ensure efficacy and safe use. Some pesticides are more hazardous than others and require very careful handling. It is important, therefore, to know which pesticide s are most dangerous so that adequate safety precautions can be taken. The project will require Material Safety Data Sheets (MSDS)to be available for review as set forth by relevant international agencies and outlined in the Globally Harmonized System of Classification and Labeling of Chemicals (GHS). The storage facilities to be improved by the project will be designed/ in line with GIIP and WB ESHS guidelines on management of chemicals and hazardous waste and provided with equipment and facilities for containing any possible spillage, fire and protecting the pesticides from direct elements like sunlight, rain, floods, and having controls for managing stock movement in and out of the stores.

The need to dispose of unwanted or surplus pesticides should be kept to an absolute minimum by careful store management and stock rotation. For large quantities, advice should be sought from the supplier. Unless empty pesticide containers are managed correctly, they are hazardous to both mankind and the environment. Therefore, used pesticides' drums and containers will need to be disposed in special landfills. There is a danger that empty containers could be reused for storing food and water, which could result in pesticide poisonings. Containers abandoned in the environment can lead to pesticide pollution in soil and groundwater. The MoAF shall also adopt guidelines on management options for empty pesticides containers as part of IPMP.

This ESMF and site-specific instruments (ESIAs/ESMPs) will include guidance related to (i) adequate design of pesticide storage, handling, and management facilities; (ii) management of stocks in an effective, efficient, and transparent way, (iii) improvement of the capacity of health centers in the treatment of pesticide poisoning incidents; (iv)dispose of unwanted or surplus pesticides; in line with FAO Guidelines for Safety and environmental precautions, and the World Bank Group General EHS Guidelines and applicable national regulations on pesticide control products. All these measures, along with compliance with requirements of ESS6 (such as protection of natural habitats and ecologically sensitive areas) and other ESSs, can help greatly reduce environmental risks and impacts of the project, including minimization/avoidance of GHG emissions. The FAO is the key technical partner to ensure compliance with the ESS3 requirements.

ESS4 Community Health and Safety

ESS4 is relevant. Key community health and safety risks anticipated from the project activities include (i) possible exposure of community residents, farmers, and pastoralists to pesticides; (ii) risks of sexual exploitation and abuse

and sexual harassment associated with cash transfers and livelihood restoration activities. Also, transmission of communicable diseases (including HIV/AIDS, COVID-19, etc) is a potential risk to communities. The client is expected to ensure that all activities are aligned with WHO guidance on COVID19 risk communications (https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance) and the GoS, Ministry of Health COVID19 Infection Prevention and Control as per the guidance notes. The project as conceived does not intend to use of government security forces in any way except in the event of a security incident.
The client will therefore prepare a Community Health and Safety Plan as part of the ESMF that will (a) consider the World Bank Directive on the inclusion of Vulnerable Groups to provide such vulnerable groups access to the development benefits resulting from the Project; (b) follow the World Bank Good Practice Note on the use of Third-Party Monitoring and Labor Influx; and (c) help manage these with good mitigation measures including: use of personal protective equipment (PPE) by staff and any community workers involved in control operations and pesticide management; use of good practices and efficient techniques during control operations to prevent chemical exposure to community members in the locust control spray areas and the workers themselves, use of less toxic hazardous pesticides to human health in case of accidental exposure, respect of protected areas and buffer zones; adequate pesticide management, i.e. handling, transportation, storage; collection and disposal hazardous and chemical waste; and timely communication/information and awareness-raising of local populations, including on emergency preparedness and first-aid procedures available and how to trigger them in the event of an incident, withholding and re-entry periods for humans and livestock, pre-harvest intervals, no re-use of empty containers, awareness raising and training, etc. As referenced in ESS1, emergency preparedness measures shall be included in the ESMF, IPMP and site specific ESIAs to be prepared in the case of significant chemical spills or other health and safety related incidents.

SEA/SH risks are anticipated given the presence of conflict-prone areas and the remoteness of the spray area. The risk also happens due to the cash for work and livelihood restoration activities that could lead to extortions for sexual favors in exchange for registration or release of funds or domestic violence over the receipt of cash. The deployment of external personnel, including agricultural extension workers, contracted workers and specialists could potentially lead to violence against women and girls. A SEA/SH action plan, adherence to a code of conduct, and surveillance system will be included in the ESMF and the LMP to minimize this risk. Moreover, the grievance redress will include ways to submit anonymous grievances or for survivors to get access to counseling, medical treatment, legal advice, police, etc. A project-level GRM required by ESS10 will be instituted and equipped to respond to grievances the community may have on project-related issues, including those related to health and safety.

Security issues particularly in conflict affected areas and active conflict areas bordering Eritrea and Ethiopia will be a challenge during locust control operation, drone surveillance and implementation of activities in remote areas. It will be important that communication outreach for operation locust surveillance and control takes this into account. The SEP (see ESS10) will describe respective measures, including engagement with communities as well as security personnel, when needed, regarding communication and outreach. Further, Security Management Plan (SMP) shall be prepared commensurate to the potential security risks informed by an assessment relevant during project implementation and later at implementation stage. The project in the targeted communities shall ensure provision of appropriate benefits to vulnerable and disadvantaged communities including IP/SSAHUTLC, when available in the project intervention areas. FAO, WFP and IFAD are technical partners to ensure compliance with the ESS4 requirements.

ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

The standard is relevant as the project will support upgrading of camps and construction of a new storage facility. The preparation of a resettlement instrument will be determined when specific due diligence information is available. However, the resettlement issues including the scope of land take are anticipated to be minor.

The risk management instruments include, (a) undertake due diligence and ensure that due diligence is undertaken to confirm there are no physical settlements/ households or economic displacement (associated with agricultural use) for the proposed pesticide storage at Garry Free Zone area in the north of Khartoum North; (b). Prepare, disclose, adopt, and implement Voluntary Land Donation (VLD) Guidelines in accordance with ESS5 requirements, in a manner acceptable to the Association as part of the ESMF for activities under Component 2.

ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

ESS6 is relevant to the project as the use and application of chemical pesticides over large areas across the country could potentially impact ecologically sensitive areas such as water bodies, wetlands, national parks, and reserves located within the DL infested areas. These ecologically sensitive areas will be identified and mapped in the ESMF to be prepared prior to implementing any activity under Components 1 and 2 of the Project, the ESMF shall be prepared, consulted up on, and disclosed (disbursement conditions under Section III.B.1(b), (c) and (d) of the Schedule 2 to the Financing Agreement). The ESMF will include mitigation measures to screen out and protect natural habitats and ecologically sensitive areas including measures related to improving storage facilities, handling of pesticides, and disposal of unused quantities of synthetic pesticides. The ESMF will include references to FAO guidelines on the treatment of ecologically and agronomically sensitive areas; and this will be included in the IPMP as well. The project will institute environmental monitoring after treatment of pesticides has been carried out to monitor the impact on sensitive areas. FAO, WFP and IFAD are technical partners to ensure compliance with the ESS6 requirements.

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

Sudan is home for people meeting the requirements of ESS7 on Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities. The people who meet this ESS requirements are pastoralist and agro pastoralists who constitute about 13% of the Sudanese population whose marginalization is exacerbated by increasing trend in mixed farming, conflict, and desertification. According to IFAD, there are over 500 ethnic groups in Sudan speaking over 400 languages, though it is difficult to highlight marked differences. Though the Bank has not screened people meeting the requirements of ESS7, there is broader recognition of the Beja, Fur, Nuba and Fallata who could meet the requirements. If the proposed project is going to be implemented in States and localities where the pastoral and agro-pastoralist peoples and those groups live, a comprehensive social assessment will be prepared to understand and mitigate potential risks for both component 1 and 2 of, (i) exclusion of remote areas and underserved community in a beneficiary targeting for livelihoods due to inaccessibility; (ii) exclusion and marginalization of women during project targeting & benefit sharing; (iii) exclusion of vulnerable community like IDP, elder, people with disability and children due to policy and institutional failure that protect or ensure their benefit, (iv) effects of locust control and surveillance and spraying. MoAF shall conduct a Social Assessment to identify the IP/SSAHTLCs that are present in or have collective attachment to the proposed project States and areas and that the MoAF will seek inputs from appropriate specialists to meet the consulting, planning, and other requirements of ESS7

for the project, as necessary. So, it is important to ensure project targeting to be inclusive of all groups have equal access to project benefits via culturally appropriate forms of meaningful consultations and respective adaptation of interventions to their specific needs as per the nature and scope of the proposed project components. FAO, WFP and IFAD are technical partners to ensure compliance with the ESS7 requirements.

ESS8 Cultural Heritage

ESS8 is relevant as the project will support the construction of a pesticide storage facility and minor construction works. Thus, the project may have adverse impacts on tangible and intangible cultural heritage, including disruption to religious and cultural festivity during civil works. . The MoA will prepare an ESMF covering the chance to find procedures to guide the project towards complying with ESS8 requirements. Also, the sub-project screening process in the ESMF will exclude activities located in, or in the vicinity of, any known or recognized cultural heritage site and will include specific mitigation measures to avoid negative impacts if the sub-project screening process does not otherwise exclude these areas. Further, site-specific E&S instruments (such as ESIA/ESMP) will address ESS8 requirements through incorporating site specific measures, including chance finds procedure. FAO, WFP and IFAD are technical partners to ensure compliance with the ESS8 requirements.

ESS9 Financial Intermediaries

Not Relevant.

C. Legal Operational Policies that Apply

OP 7.50 Projects on International Waterways	No
OP 7.60 Projects in Disputed Areas	No

B.3. Reliance on Borrower's policy, legal and institutional framework, relevant to the Project risks and impacts

Is this project being prepared for use of Borrower Framework?	No

Areas where "Use of Borrower Framework" is being considered:

Not applicable.

IV. CONTACT POINTS

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Borrower/Client/Recipient

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Implementing Agency(ies)

Implementing Agency: Ministry of Agriculture and Forests

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VI. APPROVAL

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Practice Manager (ENR/Social)	Helene Monika Carlsson Rex Cleared on 13-Oct-2021 at 12:10:29 GMT-04:00
Safeguards Advisor ESSA	Peter Leonard (SAESSA) Concurred on 13-Oct-2021 at 14:43:42 GMT-04:00