



**Emergency Locust Response Program (ELRP)  
(P173702)  
Kenya ANNEX**

**Environmental and Social Review Summary  
Appraisal Stage  
(ESRS Appraisal Stage)  
April 15, 2020**



## D. Environmental and Social Overview

### D.1. Project location(s) and salient characteristics relevant to the ES assessment [geographic, environmental, social]

The Horn of Africa that includes Kenya, have been infested with large swarms of Desert Locust. The desert locust crossed into Kenya through Ethiopia and Somalia on late December 2019. The swarms have spread rapidly and have so far been confirmed in Counties in North Eastern and Central parts of Kenya that includes : Mandera, Wajir, Marsabit, Garissa, Samburu, Isiolo, Laikipia, Meru, Baringo, Kitui, Tana River, Tharaka Nithi, Embu, Machakos, Turkana, Kajiado, Kirinyaga and Murang'a. Thus, majority of these Counties suffering the impacts from the desert locust infestation in Northern parts of Kenya are largely Arid and Semi-Arid Areas (ASALs) and majority of the residents practice nomadic pastoralism as livelihood and also home to some of the National parks, reserves and conservancies. In the Central parts of the Country, they are categorized as highlands and significant number of residents practice small scale agriculture. The activities proposed in this operational include ground and aerial spraying with the use of both synthetic chemical pesticides and biopesticides. This is likely to affect the natural resource-based livelihoods and their health.

Government of Kenya (GoK) has embarked on locust control activities with technical support from Food Agriculture Organization (FAO). Previously, the Bank has provided support through a Contingency Emergency Response Component (CERC) under the Kenya Climate Smart Agriculture Project (P154784), which has financed desert locust control activities in the same regions. The Kenya Climate Smart project is also currently implementing livelihood activities similar to those to be financed under Component 2. Thus, the MPA activities will complement the ongoing GoK and other development partners activities to control the desert locust infestations.

Given that the extent of project impacts is changing as the project area is fluid, specific affected populations will not be identified or listed here. However, communities that inhabit Northern Kenya, both pastoralists and non-pastoralists, are classified as marginalized groups according to the Constitution of Kenya and IP/SSAHUTLC according to ESS7.

The following are the proposed project components:

**Component 1: Surveillance and Control Measures** – The objective of activities under this component is to limit the growth of existing desert locust populations and curb their spread, while mitigating the risks associated with control measures and their impacts on human health and the environment. Activities to be supported would be continuous surveillance and monitoring, spraying of hopper bands and adult swarms, assessing environmental and social impact of the locust populations and control measures, and delivery of training and capacity building to field teams to ensure that operations are carried out in a safe and effective manner. Specifically, field teams will receive training on prevention of gender-based violence, sexual harassment and sexual exploitation & abuse including multisectoral response and link to services. Appropriate reporting protocols will also be put in place and awareness-raising on the same. The activities under this component are already being supported by through an allocation of USD 13.77 Million through the emergency component of the ongoing Kenya Climate Smart Agriculture Project. However, given the need for continuing these activities beyond the next 2 months the expanded area of coverage, the following activities will be further scaled up through this operation.

**Sub-component 1.1: Continuous Surveillance** will provide early warning, inform effective control operations, and mobilize assistance (under Component 2) to affected and at-risk communities. Activities would include but would not be limited to: i) continuous surveillance and monitoring of observed breeding and egg-laying areas and the movement of developing nymphs, hopper bands, and adult locust smarms; ii) ground surveying and other data collection methods to assess the locust situation and habitat conditions; and iii) collecting and analyzing data to inform planning, to identify and plan control targets and to ensure appropriate control methods are applied at the optimal time to break



the cycle of the next generation; to forecast breeding and migration; and to evaluate the effectiveness of locust control campaigns.

**Sub-component 1.2: Control measures** will reduce locust populations and prevent their spread to new areas. This would be achieved via a range of targeted ground and aerial control operations and would emphasize, whenever possible, neutralizing hopper bands before they develop into adult swarms, which leads to another cycle of infestation and expansion and requires more costly and logistically challenging aerial spraying. Depending on the size of hopper bands and of the related infested areas, their control can be handled either by ground control teams or aircraft spraying either with insect growth regulators, bio-pesticides or conventional chemical pesticides.

#### Component 2: Livelihoods Protection and Rehabilitation

40. Beyond the immediate control measures deployed to curtail the proliferation and spread of the locusts, the next priority and the objective of Component 2 would be to help protect the poor and vulnerable in locust affected areas from human capital and asset loss, enhance their access to food, and rehabilitate food production systems and livelihoods that have been damaged or destroyed by swarms. Activities under this component would be implemented in two mutually-supportive sub-components: 1) Safeguarding Food Security and Protecting Human Capital; and 2) Restoring and Rehabilitating Agricultural and Pastoral Livelihoods for enhanced adaptation and resilience.

41. Sub-component 2.1: Safeguarding Food Security and Protecting Human Capital will protect the poor and vulnerable in locust affected areas from livelihood and asset loss by providing emergency income support in the form of cash transfers (CTs) and/or cash for work (CfW), to smoothen consumption and enhance the purchasing power of vulnerable households to purchase food and basic needs. The subcomponent will also compensate affected farmers for the income loss resulting from spraying of pesticides when the spraying results in sale/income losses. Depending on the severity of the outbreak on food availability, general food distribution may be warranted if and where food supply is severely limited. An added element that would be provided for livestock holding households is fodder provision to replace impacted grazing land until restoration can be completed. Cash for Work (CfW) programs can support activities that can strengthen community defenses against locust invasion—e.g., construction of quality grain and seed storage.

42. Interventions under this subcomponent would be delivered through new or existing national government food security, social safety net, and community-driven development programs (CDD). The existing program would be scaled up either vertically to provide additional emergency cash top up to existing beneficiaries of poverty-based CTs, or horizontally to add new beneficiaries for an emergency cash or in-kind support. Given the fact that Locust Response projects and COVID-19 Response projects will be implementing in the same countries, the Bank teams will monitor to ensure that the programs are well coordinated and have the appropriate measures to avoid overlapping and/or duplicating beneficiaries. The risk of this is relatively low given that COVID-19 projects will most likely be implementing in densely populated urban and peri-urban areas, while the Locust Response projects will implement in rural farming and pastoral areas. Additionally, where feasible the same programs would be used to respond to both crisis and therefore enabling coordination of beneficiary targeting.

43. Sub-component 2.2: Rehabilitating Agricultural and Pastoral Livelihoods will support affected farmers and livestock holding households to restore their productive assets for sustained food security and enhanced adaptation and resilience. The subcomponent will promote the adoption of climate-smart crop and livestock practices for reduced greenhouse gas emissions, enhanced resilience, and the implementation of livelihood support/diversification initiatives. Support will be provided for agroecosystem management approaches that enhance resilience of farm and landscape to changes in climate and pest. This would be achieved through delivering (i) climate-smart farmer packets to get food and fodder production re-started as soon as possible after the impact of locust swarms; (ii) pasture restoration or temporary forage/feed provision and climate-resilient grazing management in pastoralist areas impacted by the locust outbreak, and (iii) in certain cases assisting with animal re-stocking with climate-resilient and



stress tolerant breeds. Farmer packets would aim to diversify production and introduce improved, climate-resilient varieties that provide for higher yields and are resistant to pest/disease and other climate-related threats. Pasture restoration would be done in most areas by establishing nurseries throughout the affected area to re-establish pasture flora. Legumes and grasses adapted to the local environment will be promoted to increase biodiversity and landscape resilience. Leguminous species are also beneficial for climate mitigation, fixing atmospheric nitrogen and improving soil fertility. Both crop and pasture restoration would need to support plantings that would promote the restoration of pollinator populations in the affected area. Provision of forage/feed or animals would be temporary measures to meet the needs of those livestock keepers in danger of being severely decapitalized as a result of the locust outbreak through animal loss or the need for distress sales due to lack of browse.

44. Sub-component 2.3: Assessing Impacts and Targeting Response – This sub-component would finance assessments of the immediate and medium-term impacts of the desert locust upsurge on crops and pastures and on food and nutrition security of the affected populations. These assessments would also help to inform the targeting and programming of response measures and provide lessons for other countries and phases.

**Component 3: Coordination and Early Warning Preparedness.** Recognizing the cause-effect relationship between climate change and desert locust infestations, efforts to strengthen regional and national capacity for surveillance and control operations to facilitate early warning and early response are needed. This will include support to the development and updating of regional and national contingency plans for desert locust crises, promoting learning across countries to boost competencies in forecasting, surveillance and control, and exploring the use of new technologies for surveillance, such as drones. Such efforts would take into consideration guidance from FAO and the Commission for Controlling the Desert Locust in the Central Region.

Interventions would also include investing in systems to prevent future outbreaks from spiraling out of control by building capacity in four areas: (a) monitoring weather trends and normal desert locust territory to identify the conditions for an outbreak and early population increases; (b) establishing communication/notification systems and protocols through international, regional, and national bodies so that warnings are not missed and that recipients of warnings understand the importance of the information (e.g., translating dense scientific material into comprehensible messages); (c) helping international, regional, and national bodies establish and agree to standard operating procedures for a desert locust response; and (d) supporting existing manufacturers to build the capacity to produce sufficient quantities of quality biopesticide for use early on in future outbreaks.

**Component 4: Project Management.** This would finance the associated costs such as financial management, procurement, environmental and social management, and communications. The communications component, in particular, apart from external and internal communication activities can promote increased community awareness about locust response and what they need to do when their area has been treated with pesticides (e.g., do not eat the locusts or feed them to livestock, do not dump in water bodies, etc.) as well as coordination among responsible entities (international, regional, national, and subnational) to better respond to outbreaks. A rapid information dissemination campaign will be designed and disseminated in a timely manner and in accordance with local context and requirements, preferably through local radios in relevant languages, on the techniques and timing of spraying, the chemicals used, its impacts on human health, crops and livestock, as well as risk mitigation instructions (e.g., do not eat the locusts or feed them to livestock, do not dump in water bodies, etc.) as well as coordination among responsible entities (international, regional, national, and subnational) to better respond to outbreaks.. This will be coupled with targeted consultations with key community representatives (for instance, elders and traditional leaders in the case of indigenous peoples/pastoralists) to (a) receive feedback to adapt the actions to local needs, with special attention to vulnerable groups such as the elderly and people with disabilities, who will be supported in sheltering from the impacts of the spraying; and (b) targeting and implementation of appropriate livelihood interventions.



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### D.2. Borrower’s Institutional Capacity

The Project will be implemented by the Ministry of Agriculture, Livestock, Fisheries and Cooperatives (MoALFC) which has a long experience of implementing World Bank financed projects under the Safeguards policies, these include: Kenya Climate Smart Agriculture Project (P154784); the National Agriculture and Rural Inclusive Growth Project (P153349); and the Regional Pastoral Livelihood Resilience Project (P129408) . The implementation of this MPA operation will be supported by the Project Implementation Unit (PIU) which is executing a similar desert locust control operation financed under the Contingency Emergency Response Component (CERC) under Kenya Climate Smart Agriculture Project (P154784). During the preparation of the P154874, an ESMF that incorporated an Integrated Pesticides Management Framework (IPMF) was prepared, and when the CERC was activated, Pest Management Plan was prepared. These instruments will be updated to reflect MPA activities and potential environmental and social risks and impacts to meet ESSs requirements

With the increase of project portfolio, the PIU’s safeguards capacity needs strengthening. Thus, the PIU will hire an additional Environmental Specialist to complement the existing resources at post. The Project is working with FAO on the desert locust operations who are providing technical support to the Ministry through the Multi-Institutional Technical Team on the pesticide selection, applications and management. The Ministry has adopted FAO Desert Locust Guidelines, section 6. Safety and environmental Precautions issued 2003 which are aligned to GIIP in managing the environment, health and safety risks for this operation.

The PIU currently does not have an experienced social safeguards specialist on staff. The Ministry will be seconding one of their qualified social safeguards specialist to focus especially on this emergency operation. It has also commenced the procurement of a dedicated GBV expert consultant to develop and carry out the GBV action plan.

## II. SUMMARY of ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS

### A. Environmental and Social Risk Classification (ESRC)

High

The Project will finance the use of two pesticides for the desert locust control activities, this include a chemical pesticide (Fenitrothion 96% ULV) which is a WHO class II, formulated as ULV, the Biopesticide Metarhizium and equipments. The biopesticide risks to the environment and applicators are minimal as it contains a fungus that is highly specific to this species of locust and safe to other species of insects, animals and humans. The application of the pesticides will cover large swathes of the Country, approximately 18 Counties impacted by the desert locust infestations, the use of the pesticides will potentially impact local populations dependent on natural resources for their livelihoods such as pasture, vegetation and crop fields. The project will identify and map out ecologically sensitive and agronomically sensitive areas such as water bodies, national parks, reserves and crop fields. The project will establish and operationalize Strict Operational Procedures (SOP) for spraying activities and will use biopesticides in the area identified as sensitive ecological agronomical to minimize and mitigate any potential negative impacts. Also, the use and application of the pesticides could result to potential adverse effects on the health of the application control teams and on local communities where both ground and aerial spraying may take place. Mitigation measures will be put in place through provision of adequate and appropriate Personal Protective Equipment (PPEs), induction and training of the field control teams, conducting regular tests of cholinesterase for the operators and field locust control teams and undertake rotation of operators involved in Organophosphate pesticide applications to avoid overexposure to pesticides. Thus, given that proven proposed mitigation measures that will be put in place, SOP, training of field control teams and operators, and the technical support to be provided by FAO, the Environmental Risk is considered Substantial.



The principle social risks associated with the project fall broadly into two main categories i) risks to the community and workers from the locust control measures under Component 1 and ii) the social risks associated with the livelihood rehabilitation activities under Component 2. Under Component 1, labour influx associated with these control measures is a primary risk, as it may impact upon the community through sexual exploitation and abuse of vulnerable women and girls or spreading disease (including COVID-19) to otherwise isolated rural communities with limited access to health services. In addition, community and workers health through proximity to locust control measures as well as potential livelihood impacts through control measures impacting livestock and crops. The primary social risks under Component 2 include the risks of exclusion of vulnerable people and groups most in need of assistance, risk of exacerbating social tension through pastoralist migrations to avoid the impacts of locust swarms on forage, presence of IDPs or refugees, etc. Consequently social risk mitigation measures will focus on: (i) communication, stakeholder engagement, and grievance redress with affected communities; (ii) ensuring effective engagement with Sub-Saharan African historically underserved traditional local communities, especially pastoralists; (iii) mitigating social tensions through community involvement and engagement, (iv) addressing gender dimensions of the operation including gender-based violence (GBV) and (v) labor aspects including worker safety. Out of these risks, the most concerning is the risk of sexual exploitation and abuse, and other forms of violence, perpetrated by project workers and volunteers in ground operations under Component 1. Members of the National Youth Service (NYS), commonly referred to as a paramilitary organization, are being used for ground spraying under component 1. The NYS has, on several occasions, been cited in the press as perpetrating human rights violations whilst on official deployments. The NYS have been undertaking locust related activities with ministry and FAO staff across the project area, including under the recent CERC. The living arrangements for deployed NYS volunteers are understood to be essentially unregulated, spending several days in the field and often camping in school grounds. It is for this reason that the social risk classification for the project is High.

## B. Assessment of Environmental and Social Risks and Impacts

### B.1. General Assessment

#### ESS1 Assessment and Management of Environmental and Social Risks and Impacts

The project is financing activities that will have positive impacts and benefits to the areas currently infested with the desert locust. The proposed locust control activities will eliminate swarms of locust that have destroyed vegetation, crops and restore livelihoods that have been destroyed in the Country. Through the project livelihood restoration and recovery component, the project could positively and negatively affect pastoralist and farmers communities that have seen their livelihood destroyed by large swarms of locust. Particularly disadvantaged and vulnerable groups could include internally displaced people (IDP), refugees, pastoralists and women and girls across these groups.

**Component 1 Surveillance and Control Measures:** The potential negative environmental risks and impacts associated with these desert locust control activities include: (i) 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 pesticides applicators and communities. MoALFC will manage this risks by adopting and complying with FAO Desert Locust Guidelines on safety and environmental precautions and other FAO technical guidelines on Ground Application of Pesticides, Aerial Application of Pesticides, personal protection when handling and applying pesticides, the use of WBG General EHS Guidelines and National legislations and regulation on use of Pest Control Products . Also, the Ministry will prepare and operationalize emergency preparedness and response procedures to manage any contamination or poisoning that may occur; (ii) Potential risks of polluting ecologically sensitive habitats such as



wetlands, national parks, reserves and water bodies. The Ministry will carry out inventory of ecologically and agronomically sensitive areas and administer alternative treatment such as use biopesticides, and undertake awareness-raising and provide relevant information to local communities on pesticide treatment schedules and potential negative impacts on them and their livelihoods; (iii) The application of the pesticides if not properly managed could contaminate community water sources such as shallow boreholes, pasture and browse for livestock and wildlife and affect agronomically sensitive areas where crops may be grown for export. To manage these risks the Ministry will carry out awareness-raising and provide relevant information to local communities on pesticide treatment schedules and potential impacts; the Ministry will prepare and operationalize emergency preparedness and response procedures in event of contamination for applicators or communities members, and further, will carry out regular environmental monitoring of field pesticide treatment activities; and (iv) The use and application of pesticides if not properly managed could contaminate and lead to poisoning of the pesticides application teams. To manage this risk the project will provide appropriate and adequate Personal Protective Equipment (PPEs), train the field control teams and conduct regular analysis and monitoring of the levels of cholinesterase for the field control teams and rotate operators involved in Organophosphate pesticide applications to avoid overexposure to pesticides. In addition, the Project will carry out regular in-depth environmental monitoring of selected organisms, soil and water for pesticides residues during and after the pesticides treatment activities, with the support and involvement of multi-disciplinary lead agencies on wildlife, water, environment, health and safety e.t.c; and putting in place proper management and disposal of obsolete pesticides.

The MoALFC with technical support from FAO have selected the use of an organophosphate (Fenitrothion 96% ULV) and Biopesticide Metarhizium for use on desert locust control activities under this project.

The Ministry will update and disclose the existing Integrated Pest Management Plan (IPMP) prepared for the CERC and prepare and disclose the Environmental and Social Management Framework (ESMF) prepared for KCSAP to align with ESS standards requirements. Environmental monitoring of the desert locust control activities with focus on environmental impact, occupational health and safety and pesticides residue, Terms of Reference (ToRs) will be prepared to involve a multi-disciplinary technical team of lead agencies such as Wildlife, Water, Environment and Health and Safety before disbursement of funds for this component. Also, the Project will prepare and disclose a GBV action plan before disbursements and Labour Management Procedures (LMP).

In terms of social risks, with the locust invasion in affected counties, compounded by the current COVID-19 crisis, effective communication with affected people, culturally appropriate communication for pastoralists and other traditional local communities, stakeholder consultation and engagement activities will be especially challenging to ensure timely and meaningful consultations to meet project and stakeholder needs. Additionally, if the aerial spray is applied improperly it can destroy crops, livestock, human health and surface water.

Surveillance and control measures can exacerbate exposure of women/girls to insecurity as they may be forced to walk long distances to access food and search for pasture. This including the low status of women, preexisting high prevalence of GBV, acceptability of GBV (e.g. early/forced marriage, intimate partner violence) and high levels of poverty, are likely to heighten the community's vulnerability to sexual exploitation and abuse (SEA)/GBV. With the possible deployment of external personnel -including agricultural extension workers, contracted workers and specialists, paramilitary cadets- to conduct ground spraying in these areas, women and girls may face growing levels of SEA, also as a negative coping strategy. Therefore, an GBV action plan (with costs integrated into the project budget) will be prioritized as a first step after project approval and implemented before new interventions begin. This needs to be expedited immediately, so as not to delay the implementation of component 1.

**Component 2-Livelihoods Protection and Rehabilitation:** The potential negative environmental impacts associated with



the activities on this component include, potential soil erosion, dust emissions, generation of solid waste, occupational health and safety risks related to minor construction activities for the proposed construction of grain and seed storage facilities. The proposed activities related to supporting pastoralist communities undertake re-stocking of livestock may result to outbreak of animal diseases and potential degradation of the rangelands.

In terms of social dimensions, although this component will be largely beneficial to affected communities, there could still be some residual social risks such as the exacerbation of social tensions and communal political conflict related to the impacts of the locust invasion itself, such as migration patterns, and also some unintended targeting or inclusion risks related to the selection of beneficiaries for livelihood benefits that will be undertaken under the same modality the same PIU is currently operating under the Kenya Climate Smart Agriculture project.

Most of the project activities will be implemented in rural and remote areas, of which many have been prone to social tensions and inter/intra communal conflicts on natural resources and boundary demarcations, inhabited by different social groups, as well as IDPs and refugees. Project activities will need to be cognizant to these dynamics and be implemented in a way to ensure no further escalation of such tensions. Equally, security concerns for workers and volunteers need to be taken into consideration as the North Eastern parts of the Country are prone to both intra/inter communal conflicts and terrorist attacks by Al Shabab elements crossing the border from Somalia. Thus, the Client will prepare a Security Management Plan (SMP) as part of the ESMF. Whether it will be disclosed or an internal document will be determined with the client during implementation. Furthermore, there is a risk that local community dynamics may result in attempts to capture the benefits of the project for a particular group. These challenges shall be included in the social assessment to be prepared during implementation. Pastoralists and other SSAHUTLCs, as a particularly disadvantaged vulnerable groups, will have distinct characteristics that will be further explained under ESS7 and will require Indigenous Peoples Plans under Component 2.

To manage the environmental and social risks associated with Components 1 and 2, the Ministry will prepare two separate ESMFs. Component 1, the Ministry will update the ESMF prepared for the KCSAP to reflect the ESS standards requirements. Component 2 will be prepare a new ESMF prepared under the ESS standards requirements, the ESMF will include procedures for environmental and social screening procedures for potential sub-projects. In addition to risk management, each ESMF will also clearly state the project’s targeting procedures, which will be designed to favor the selection of the neediest populations affected by the invasions. As required, sub-project site specific Environmental and Social Management Plans (ESMPs)/Project Reports will be prepared by the Ministry for the restoring and rehabilitation of livelihoods activities that will involve minor construction works. Also, the Project will prepare two Labour Management Procedures (LMP) within each ESMF.

In addition, the ESMF will also screen and identify the risks related to utilizing the NYS security forces to support ground spraying activities. Adequate measures need to be put in place to ensure that project activities do not increase community vulnerability, especially to gender based violence and sexual exploitation & abuse, and the deployment of the NYS does not result in adverse consequences to civilian life etc.

### **ESS10 Stakeholder Engagement and Information Disclosure**

A key risk under this standard, for both Components 1 and 2, relates to potential inadequate, ineffective and inappropriate stakeholder and community engagements and disclosure of information leading to exclusion of truly vulnerable, marginalized and minority members of the community from project benefits, amplified by the context of limited resources against widespread need. Others include elite capture where project benefits are diverted to less-



needy individuals and locations and poor access to beneficiaries for meaningful community engagements and difficulty in monitoring for social harm.

The Ministry has prepared a Stakeholder Engagement Plan (SEP) which provides the framework for identification of stakeholders, gauging stakeholder interest and providing systematic means and processes of inclusive and meaningful engagements with the stakeholders and communities in a way that influences project design and implementation under all components.

A project wide Grievance Redress Mechanism (GRM) is being set up tailored to the different project interventions, geographical scope of each intervention and in accordance with the existing procedures. The GRM is designed to address concerns and complaints promptly and transparently with no cost or discrimination towards project affected communities. UNOPS, FAO and other humanitarian partners supporting project implementation under Component 1 will be the first point of contact for grievance redress with appeals being referred to a GRM officer stationed at the PIU. Reports will be periodically shared by each agency on complaints and grievance logs with the PIU for monitoring purposes. The PIU will maintain a documented record of stakeholder engagement and GRM, including a description of the stakeholders consulted, a summary of the feedback/grievances received and a brief explanation of how the feedback was considered, or the reasons why the issue could not be resolved. For complaints related to GBV, reporting and response protocol including identification of SEA/H and GBV-sensitive channels to be integrated into the grievance mechanism, and requirements for enabling survivor-centered care.

Under Component 1, robust community engagements will be conducted before commencement of project activities as well as sensitization on the availability of a project GRM to support the systematic uptake, processing and resolution of project-related complaints and grievances. For future spraying activities, a rapid information dissemination campaign will be designed and disseminated in a medium with a wide reach, preferably local radios on the techniques of spraying, the chemicals used and its impacts on human health, crops and livestock. Vulnerable populations such as the elderly and people with disabilities will be supported in sheltering from the impacts of the spraying. Moreover, during preparation of the IPMP and ESMF a series of consultations with different stakeholders will be held. These include drought-affected people, farmers in selected irrigation schemes, local government officials, extension workers, local leaders, non-governmental organizations and central government officials.

Specifically, for Component 2, once livelihoods subprojects are identified, the preparation of site-specific ESMPs/ESIAs will include its own set of public consultations. The SEP and IPMP will include budget for communication plan. Security risk posed by high-levels of ongoing violence may prevent the implementation of activities in certain areas of northeastern counties. Such issues will be detailed fully in the Security Management Plan and monitored closely by the PIU and Bank team. For both components, considering Covid-19 restrictions for communities affected by locust invasions, the project will innovate ways to do consultations fit for purpose, effective and meaningful in order to meet project and stakeholder needs and adhere to the restrictions put in place by the government to contain virus spread. Strategies to be employed include smaller meetings to be conducted as appropriate taking full precautions on staff and community safety. Where meetings are not permitted, traditional channels of communications such as radios and public announcements will be implemented. Other strategies will include one on one interviews by phone and internet for community representatives, CSOs and other interest groups.



## B.2. Specific Risks and Impacts

### Assessment of the relevance of the project's risks and impacts, given its context at the time of Appraisal.

#### ESS2 Labor and Working Conditions

For Component 1, the Ministry of Agriculture, Livestock, Fisheries and Cooperation (MoALFC) has employed the services of the National Youth Service (NYS) cadets to provide support in undertaking the locust control activities that may include management of the field operation offices and ground spraying. This will be categorized as part of Government workers and volunteers whose terms and benefits are aligned with Government procedures. The other workers will be derived from (MoALFC) and other agencies of government that will provide technical expertise to the operation and the respective County Governments. There would be direct workers such as Consultants who would be brought to support the Project on specific deliverables, the project will prepare Labour Management Procedures, within each component's ESMF, to guide the use of workers on the project.

The updated IPMP and ESMF will guide the project on the management of the Occupational, health and Safety risks for the applicators and other workers as stipulated on the Kenya law (OSHA), the FAO guidelines on the safety and health precautions and the World Bank Group EHS guidelines. The pesticide applicators and handlers will be provided with adequate and appropriate Personal Protective Equipment and undertaken through induction of the assignment, norms and requirements for the application of the pesticides.

The IPMP will provide for the provision to carry out medical diagnosis services for personnel involved in application of the pesticides to determine their contamination/ toxic levels and examining them for acute or chronic poisoning symptoms on regular basis. Specifically, the personnel involved in the locust control campaign will be tested for cholinesterase before, during and after the campaign. The Project will work to establish and operationalize SOPs for pesticides spraying activities, safety procedures, engage local hospitals or medical facilities, and procure the ChE test kits and other medical supplies for the desert control activities to enable regular testing of the operators and the field control teams.

For Component 2, this component will involve the use of workers that may include Consultants, contracted workers in the construction of minor works and the use of Government civil servant workers in the management and supervision of project activities. The Project will prepare Labour Management Procedures (LMP) for the use of different cadres of workers, before the commencement of project activities. It will apply to all Project workers and volunteers whether full-time, part-time, temporary or seasonal. During Implementation of project activities, the respective Contractors will prepare Occupational Health and Safety Plans (OHS) and the Community Health Management Plans to manage related risks.

The control activities under component 1 would be considered hazardous and thus no worker or volunteer under 18 years of age would be allowed under ESS2 or Kenyan Law. However, for activities that are not hazardous, under Component 2, the minimum working age would be 16.

Moreover, all government staff and volunteers will also sign a code of conduct in relevant languages, acceptable to the Bank, to mitigate the risk of harassment or misconduct in the workplace and in contact with community members. They will also ensure that national labor-related laws are upheld, such as public service act, labor law, and public service human resource policy et al and institutional roles related to enforcement of the laws, and recruitment, discipline, appraisals and dismissals. A redress mechanism for work-related grievances will be provided to project civil society staff and consultants, with necessary considerations for confidentiality and whistle-blower protection.

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### ESS3 Resource Efficiency and Pollution Prevention and Management

The project will finance procurement of large quantities synthetic chemical pesticides and biopesticides and equipment to support the application of the pesticides. Thus, the project will update the IPMP prepared for the ongoing CERC operation financed by the Bank. The IPMP will incorporate a Waste Management Plan that will include overall management and disposal of waste related to pesticides, empty pesticides containers and potential medical waste generated.

The MoALFC with technical support from FAO has selected use of an Integrated Pest Management approach and will procure chemical pesticide Fenitrothion 96% ULV and Biopesticide Metarhizium for the locust control activities. The selected chemical pesticide is categorized as Class II of the WHO and FAO recommended pesticides and it is moderately hazardous. Both pesticides are registered and allowed for use in Kenya. To minimize and mitigate potential risks, the project and the IPMP adopts to use FAO guidelines on Safety and environmental precautions, the World Bank Group General EHS Guidelines and applicable national legislation and regulations on pesticide control products.

The Ministry will work with FAO to procure the pesticides and they will be tested to ensure that they are manufactured, formulated, packaged and labelled as per the FAO guidelines and WBG General EHS guidelines. The Ministry will put in place measures to ensure the transportation and handling of the pesticides from the port of entry is carried out as standard FAO procedures and guidelines and the drivers are sensitized on accident prevention and with dealing with potential emergencies such as spillage or fire during transportation. MoALFC will provide safe storage for the pesticides in all the proposed ground base stations and will put in place control procedures on the release of the pesticides for the application. The location of the pesticide storage will include proper siting and design of the storage facilities and providing equipment and facilities for containing possible spillage, protecting the pesticides from direct sunlight/rains, and having checklist/form to manage stock movement in and out of the stores.

In addition, MoALFC will adopt WHO/FAO guidelines on management options for empty pesticides containers. The project will ensure that empty pesticides containers/drums are disposed safely through systematic rinsing and crushing on site and are not given to members of the community for their use. The Project IPMP will incorporate an Emergency Preparedness and Response Plan for the pesticide application activities.

Most of the Counties in Northern and Central part of the Country infested with the desert locust have areas that are designated as ecologically sensitive that include national parks, reserves, wetlands and agronomically sensitive areas for the use of pesticides use. The Ministry will identify and map out these areas and evaluate locust management options, based on the type of organisms at risk and the likely locust targets that may appear in the area. This will be carried with specialist lead agencies in charge of managing the ecological sensitive areas i.e. the Kenya Wildlife Services (KWS). The MoALFC in coordination with other lead agencies such as National Environment Management Authority (NEMA) will carry out environmental assessment of the areas that have received the treatment of the pesticides to ascertain any potential negative impacts on the flora and fauna and communities.

### ESS4 Community Health and Safety

The areas of Northern parts of the Country which have significantly been impacted with the desert locust infestations practice nomadic pastoralism and depend on natural resources for their livestock. Application of the pesticide control treatment is likely to result to contamination of animals where grazing will occur immediately after aerial or ground spraying without informing and coordinating with the local communities. MoALFC will closely work with local communities on awareness creation and information sharing on the potential impacts of the pesticides on the



communities and their livestock. Also, the scheduling of pesticide treatment will be coordinated and communicated to the local communities to enable planning for the grazing and watering areas.

The MoALFC will adopt the FAO guidelines on safety and environmental precautions on the transportation, storage, disposal of obsolete pesticides and disposal of empty pesticides drums/containers to ensure that local communities are not exposed to hazardous pesticides and waste materials. The North Eastern parts of the Country are prone to perennial inter/intra community conflicts based on natural resources and boundary demarcations, also the area is affected by terrorist attacks from Al Shabab elements crossing the boarder from Somalia. The project will prepare a SMP that will form part of the ESMF.

The IPMP will incorporate Emergency Preparedness and Response Plan (EPRP) for the pesticide application activities that will address potential emergency events such as spillage and contamination of sensitive community resources involving community members. The EPRP will be made available to the members of communities and other authorities through awareness. During the desert locust control activities, there is potential to have negative impacts on the livelihoods and assets of the local populations such as livestock poisoning and destruction of crops. The Ministry will put in place measures to assess, value and compensate for the losses.

Some project activities may give rise to the risk of Gender Based Violence (GBV), in particular Sexual Exploitation and Abuse (SEA) and Sexual Harassment (SH) risks. Further, the project will deploy 500 members of the NYS for ground spraying. While the NYS has a modus operandi, the project would review this and strengthen where necessary, to ensure that their participation in project activities will not result in adverse consequences to community health and safety, including in matters relating to GBV and SEA/SH. A GBV Action Plan will be prepared and implemented if found pertinent. The project will promote the avoidance of SEA by relying on the WHO Code of Ethics and Professional Conduct for all workers and volunteers as well as the provision of gender-sensitive infrastructure such as segregated toilets in ground stations.

A project-level GRM as required by ESS10 will be instituted and will be equipped to respond to grievances the community may have on project-related issues, including those related to security and the use of security personnel.

#### **ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement**

Not relevant. There is no land acquisition or resettlement anticipated in this project. They will be screened out at the subproject proposal stage of Component 2. The original Matching Grants Manual prepared under the CDD modality under Kenya Climate Smart Agriculture project, with the same PIU, will be updated as needed to reflect the procedures for voluntary land donations or land usage agreements under Component 2. Although not foreseen, this standard could be relevant if any reconstruction and rehabilitation of affected basic social and physical infrastructure may be required as part of livelihood rehabilitation or to move populations to new locations to reduce risk and respond to the needs of displaced and host communities affected by the crisis.

#### **ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources**

The application of pesticides through both ground and aerial spraying will likely impacts sensitive ecological areas that are located within the desert locust infested areas. The MoALFC will identify and map out the sensitive ecological areas that include national parks, reserves, wetlands and agronomically sensitive areas. The sensitive ecological and agronomically



will not be sprayed with chemical pesticides but will be evaluated and given treatment of the biopesticides that are less harmful.

The MoALFC will adopt the FAO guidelines in the treatment of ecologically and agronomically sensitive areas and this will be incorporated on the updated IPMP. The project will institute environmental monitoring after treatment of pesticides has been carried out to monitor the impact on sensitive areas.

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

ESS7 will apply only to Component 2 of the project. The SEP will cover Component 1's activities. Where the Project activities gives rise to benefits and opportunities, such as in Component 2, pastoralists and other IP/SSAHUTLC will benefit from these in an accessible, culturally appropriate and inclusive manner. No activities requiring Free Prior and Informed Consent are anticipated in this project nor forced eviction of pastoralists or any other SSAHUTLC will take place. Indigenous Peoples Plan(s) will be prepared during project implementation to inform the design of livelihood rehabilitation activities, in the same CDD-modality that is currently being applied to the Kenya Climate Smart Agriculture Project and guided by that project's Matching Grant Manual.

In Kenya, pastoralists are considered Sub-Saharan African historically underserved traditional local communities (SSAHUTLC). Amongst all the SSAHUTLC affected, the pastoralists are foreseen to be especially hard hit by the locust invasion, as their livelihoods are inextricably linked to land and pasture, which is being damaged by swarms. Pastoralists' options would be limited to (a) migrating to find pasture, which could lead to conflict with other pastoralist groups; or (b) searching for alternative livelihood if they are permanently decapitalized due to the loss of fodder for their animal. These impacts could be further aggravated by the risk of transmission of COVID-19 in Kenya across populations that might not otherwise have encountered each other. Stakeholder consultations therefore need to be culturally appropriate to suit local needs, cultural practices and relevant languages. The specific needs and views of women amongst pastoralist communities will be identified and addressed.

### **ESS8 Cultural Heritage**

Minor construction works have been proposed under Component 2, there is the potential for chance find of cultural or archeological significance during construction. The ESMF will cover risks associated with intangible cultural heritage (such as disruption to religious/cultural festivity in the community by civil work). Subproject specific ESMPs will address these issues through the inclusion of chance find procedures and site-specific mitigation measures.

### **ESS9 Financial Intermediaries**

Not relevant

## **B.3. Other Relevant Project Risks**

The Northern part of the Country that has been impacted with desert locust infestation are prone to frequent inter/intra community conflicts over natural resource use (pasture and water) and boundary demarcation. The desert



locust control activities may exacerbate underlying community tensions or conflicts. The project will prepare security management plan to address the risks. Whether it will be disclosed or for official use only will be determined.

**C. Common Approach**

No

*Provide outline of Common Approach, identifying key substantive and procedural aspects.*

**D. Legal Operational Policies that Apply**

OP 7.50 Projects on International Waterways

No

*Describe steps taken to comply with the Bank Operational Policy:*

OP 7.60 Projects in Disputed Areas

No

*Describe steps taken to comply with the Bank Operational Policy:*

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**III. BORROWER'S ENVIRONMENTAL AND SOCIAL COMMITMENT PLAN (ESCP)**

	DELIVERABLES against MEASURES AND ACTIONs IDENTIFIED	TIMELINE for DELIVERABLES
<b>ESS1 Assessment and Management of Environmental and Social Risks and Impacts</b>		
	<ol style="list-style-type: none"> <li>Integrated Pest Management Plan (IPMP)</li> <li>Two Environmental and Social Management Frameworks (ESMFs), one per Component</li> <li>Project-wide GBV Action Plan</li> </ol>	<ol style="list-style-type: none"> <li>Before disbursements -C1</li> <li>Before Disbursements -C1 and C2</li> <li>Before Disbursements. -C1</li> </ol>
<b>ESS10 Stakeholder Engagement and Information Disclosure</b>		
	<ol style="list-style-type: none"> <li>Stakeholder Engagement Plan</li> <li>Project-wide GRM</li> </ol>	<ol style="list-style-type: none"> <li>Before project appraisal</li> <li>Before activities commence C1 &amp; 2</li> </ol>
<b>ESS2 Labor and Working Conditions</b>		
	<ol style="list-style-type: none"> <li>Two Labor Management Procedures (LMPs) within each ESMF, with code of Conduct for project workers in relevant languages and Labor Specific GRM</li> <li>Occupational Health and Safety Plan (OHP)</li> <li>Emergency Preparedness and Response Plan (EPRP)</li> </ol>	<ol style="list-style-type: none"> <li>Before Disbursements C1 &amp; 2</li> <li>During Project Implementation C 2</li> <li>Before Disbursements</li> </ol>
<b>ESS3 Resource Efficiency and Pollution Prevention and Management</b>		
	<ol style="list-style-type: none"> <li>Integrated Pest Management Plan</li> </ol>	Before Disbursements C1
<b>ESS4 Community Health and Safety</b>		
	<ol style="list-style-type: none"> <li>Security Management Plan</li> </ol>	1. Before Disbursements C1 & C2
<b>ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement</b>		
	Not relevant.	



<b>ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources</b>		
	IPMP and ESMF	Before Disbursements
<b>ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities</b>		
	Indigenous Peoples Plans	During implementation before activities start in each relevant area C2
<b>ESS8 Cultural Heritage</b>		
	Environmental and Social Management Framework (ESMF)	Before Disbursements
<b>ESS9 Financial Intermediaries</b>		
	Not relevant	

#### IV. WORLD BANK ES OVERSIGHT

Corporate advice/oversight will be provided by an Environmental and Social Standards Adviser (ESSA) during project implementation	Yes
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#### V. CONTACT POINTS

World Bank

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Kimberly Vilar

Borrower/Client/Recipient

Implementing Agency(ies)

#### VI. FOR MORE INFORMATION CONTACT

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#### VII. APPROVAL

Task Team Leader(s):			
Environmental and Social Standards Advisor (ESSA):			
Chief Environmental and Social Standards Officer (CESSO):			
Practice Manager:			
Country Director:			