

REPUBLIC OF KENYA

MINISTRY OF AGRICULTURE, LIVESTOCK, FISHERIES AND COOPERATIVES

STATE DEPARTMENT FOR CROP DEVELOPMENT AND AGRICULTURAL RESEARCH

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)

FOR

THE PROGRAM TO BUILD

RESILIENCE FOR FOOD AND NUTRITION SECURITY IN THE HORN OF AFRICA (HOA) – KENYA COMPONENT (DRSLP II)

NOVEMBER 2023

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Abbreviations

ACZ Areas Covering Zones
ADF African Development Fund
AfDB African Development Bank

AIDS Acquired Immune Deficiency Syndrome

ASALs Arid and Semi-arid Lands

CEWARN Conflict Early Warning and Response Mechanism (Program)

CPMR Conflict Prevention Management and Resolution

CAJ Commission on Administrative Justice
CBD Convention on Biological Diversity
CBOs Community Based Organizations

CC County Commissioners
CCTV Closed Circuit Television

CDD Community Driven Development

CDDCs Community Driven Development Committees
CDDO Community Driven Development Officer

CDE County Director of Environment
CDP Community Development Plan
CEC County Environmental Committees

CEDAW Convention on the Elimination of All Forms of Discrimination against Women

CERC Contingency Emergency Response Component

COTU Central Organisation of Trade Unions

CHVs Community Health Volunteers

CIDP County Integrated Development Plan

IGAs Income Generating Activities

CITES Convention on International Trade in Endangered Species

CoC Code of Conduct
CoK Constitution of Kenya
COVID 19 Corona Virus Disease 2019

CPCUs County Project Coordinating Units
CPIT County Project Implementation Team

CPR Comprehensive Project Report
CPSC County Project Steering committee

CRA/SA Community Resource Assessment/Social Assessment CRPD Convention on the Rights of Persons with Disabilities

CSA Climate Smart Agriculture
CSV Climate Smart Villages
DRM Disaster Risk Management

DRSLP Drought Resilience and Sustainable Livelihoods Program I

DRSLP II Program to Build Resilience for Food and Nutrition Security in the Horn of Africa

(HOA)-Kenya Component

CSC Community Sub-Project Committee

CSO Civil Society Organizations

CTAC County Technical Advisory Committee

CTT County Technical Teams

DCC Deputy County Commissioners

EA Environment Audit

EACC Ethics and Anti-Corruption Commission

ECF East Coast Fever

EHS Environmental, Health and Safety

EMCA Environmental Management and Coordination Act

ESA Environmental and Social Assessment

ESCP Environmental and Social Commitment Plan

ESF Environment and Social Framework
ESHS Environment, Social Health and Safety

ESIA / EA Environment and Social Impact Assessment / Environment Audit

ESMF Environmental and Social Management Framework

ESMMP Environmental and Social Management and Monitoring Plan

ESMP Environmental and Social Management Plan ESMP Environmental and Social Management Plan ESRS Environmental and Social Review Summary

FAO Food Agriculture Organization FCV Fragility, Conflict & Violence FGD Focus Group Discussions

FKE Federation of Kenyan Employers

FMD Foot and Mouth Disease
FPIC Free Prior Informed Consent
GBV Gender-Based Violence

GBVAP Gender Based Violence Action Plan GCHMs Grievance Redress Mechanisms GEF Global Environmental Facility

GAIC Groupe Africain d'Ingénieries Conseils SA

GHACOF Greater Horn of Africa Climate Outlook Forum Environmental ECU Experts

Consultants United

IBLI Index-Based Livestock Insurance

ICARDA International Centre for Agricultural Research in the Dry Areas IFPRI International

Food Policy Research Institute
IR Inception Report

IGAD Intergovernmental Authority on Development

ISS Integrated Safeguards Systems

IWRM Integrated Water Resource Management

ICPALD IGAD Centre for Pastoral and Livestock Development ICPAC IGAD Climate Prediction and Applications Centre

IFRAH IGAD Food Security Nutrition and Resilience Analysis Hub ILRI International Livestock

Research Institute

GIIP Good International Industry Practice

GoK Government of Kenya

GRCs Grievance Redress Committees
GRS Grievance Redress Service
HIV Human Immunodeficiency Virus
HSNP Hunger Safety Net Program
IA Implementing Agency
IAS Invasive Alien Species

ICERD International Convention on the Elimination of All Forms of Racial Discrimination

ICT Information Communication Technology

IDDRSI IGAD Drought Disaster and Sustainability Initiative

ILO International Labor Organization IPC Infection Prevention And Control

IPCC Inter-governmental Panel on Climate Change

IPMP Integrated Pest Management Plan
KCSAP Kenya Climate Smart Agriculture Project

KEPHIS Kenya Plant Inspectorate Service

KNCHR Kenya National Commission on Human Rights

KWS Kenya Wildlife Services LCU Locust Control Unit

LEGS Livestock Emergency Guideline and Standards
LITS Livestock Identification and Traceability
LMIS Livestock Market Information System
LMP Labor Management Procedures

MOALF & C Ministry of Agriculture Livestock, Fisheries and Cooperatives

MoUs Memorandum of Understandings
MSDS Material Safety Data Sheets
NAPA National Adaptation Plan of Action

NEMA National Environment Management Authority

NDC National Determined Contributions
NPC National DRSLP II Coordinator

NPC/GOV National DRSLP II Coordinator in collaboration with Lead Government Agency

NARIGP National Agricultural and Rural Inclusive Growth Project

NCPWD National Council for Persons with Disabilities

NDC Nationally Determined Conditions

NECC National Environment Complaints Committee
NEMA National Environmental Management Authority

NET National Environmental Tribunal

NFSP National Food and Nutrition Security Policy
NGEC National Gender Equality Commission
NGOs Non-Government Organizations

NLUP National Land Use Policy

NMHS National Meteorological and Hydrological Services
NOAA National Oceanic and Atmospheric Administration Post

PCU Platform Coordination Unit DNA Disaster Needs Assessment

PESTLE Political Economical Sociological Technological Legal Environmental

PEWS Predictive Early Warning Systems Poverty
PIC-RS Climate Investment Plan for the Sahel Region

PRSP Poverty Reduction Strategy Paper

PPP Public Private Partnerships

RCMRD Regional Centre for Mapping of Resources for Development

RISP Regional Integration Strategy Paper

RPLRP Regional Pastoral Livelihoods Resilience Project Experts

SEC Consultants United INC

SEAH Sexual Exploitation and Abuse and Sexual Harassment

SESA Strategic Environmental and Social Assessment

SFN National Focal Structures

TAAT Technologies for African Agricultural Transformation

UNDP United Nations Development Programme

WB World Bank

NPCU Project Coordination Unit

NPSC National Project Steering Committee

NPWRMD National Policy on Water Resources Management and Development

NSNP National Safety Net Program

NTAC National Technical Advisory Committee

NTM Notice to Move

OCS Officer Commanding Station
OSH Occupational Safety and Health

PAPs Project Affected Persons
PC Project Coordinator

PCPB Pest Control Products Board
PCR Physical Cultural Resources
PCU Project Coordination Unit
PDA Project Appraisal Document
PDO Project Development Objective

PICD Participatory Integrated Community Development

PIM Project Implementation Manual PMCs Project Management Committees

POB Personnel on Board

PPEs Personal Protective Equipment
PPSD Plant Protection Services Division

QRF Quick Reaction Force RoD Records of Decision SATPHONES Satellite Phones

SCPIT Sub-county Project Implementation Teams

SEA Sexual Exploitation and Abuse SEP Stakeholder Engagement Plan

SERC Standards and Enforcement Review Committee

SMP Security Management Plan SPR Summary Project Report

SRC Salaries and Remuneration Commission

SSO Social Safeguards Officer
STIS Sexual Transmitted Infections

TA Technical Assistants
TOR Terms of References
ULV Ultra-low Volume

UNCCD United Nations Convention to Combat Desertification

UNDP United Nations Development Plan

UNECD United Nations Conference on Environment and Development UNFCCC United Nations Framework Convention on Climate Change

VHF Very High Frequency

VMG Vulnerable and Marginalized Groups

VSAT Very Small Aperture Terminal
WHO World Health Organization
WIBA Work Injury Benefits Act
WRA Water Resources Authority

EXECUTIVE SUMMARY

This Environmental and Social Management Framework (ESMF) has been prepared for Kenyan Component of The Program to Build Resilience for Food and Nutrition Security in The Horn Of Africa (HoA)-(DRSLP II), being phase two of the Multinational Drought Resilience and Sustainable Livelihoods Programme in the Horn of Africa (DRSLP I) - Kenya. — an African Development Bank financed project that is being implemented by the Ministry of Agriculture, Livestock, Fisheries and Cooperatives (MOALF & C) for the Government of Kenya (GoK). The project will assist the MOALF & C in addressing the urgent need to build resilience to environmental and socio-economic shocks in view of climate change, through investing in sustainable development and optimizing the productivity of available resources.

The economic impacts of climate change is detrimental, resulting in a 3-point decrease in the Gross Domestic Product (GDP) of the least developed countries, according to the World Bank. The effects have repercussions on the entire population, particularly impacting those who are most vulnerable. These most affected populations are those who are poor, and especially living in the rural countryside, especially in the arid and semi-arid pastoral areas. These vulnerable groups include the indigenous people identified in some countries in the Horn of Africa. The vulnerability is more pronounced in areas heavily reliant on subsistence agriculture and pastoralism, with very limited access to infrastructure, services, and markets. Pastoral activities primarily involve extensive nomadic livestock raising, mainly comprising cattle, sheep, goats, and camels, often serving as the sole means of livelihoods.

The objective of the ESMF is to assess and mitigate potential negative environmental and social (E&S) risks and impacts of the project consistent with the effectiveness and sustainable solutions the Bank promotes in order to address the challenges of environmental and social issues, climate change and green growth in the context of Africa's development.

The Specific objectives of the ESMF are to: (a) to assist in mitigating on project risks and build resilience for food and nutrition security in the project area; (b) assess the potential environmental and social risks and impacts of the proposed project and propose their mitigation measures; (c) establish procedures for the environmental and social screening, review, approval, and implementation of activities; (d) specify appropriate roles and responsibilities, and outline the necessary environmental and social assessment procedures (ESAP) and reporting procedures, for managing and monitoring issues/ concerns related to the activities; (e) identify the training and capacity building needs to successfully implement the provisions of the ESMF; (f) address mechanisms for public consultation and disclosure of project documents as well as redress of possible grievances; and (f) establish the budget requirements for implementation of the ESMF. The ESMF, other related environmental and social tools and procedures, and implementation environmental and social plans also provide principles and specific process to ensure that disadvantaged, vulnerable communities or groups including communities who meet the requirements of OS1 have access to the project's benefits.

The Program to Build Resilience for Food and Nutrition Security in the Horn of Africa (HOA)-Kenya Component (DRSLP II)

The general objective of the IGAD member States that is also specific in each Member State is to address the negative impact of recurrent droughts in the Horn of Africa Region through improving by implementing activities aimed at enhancing the adaptive capacities of the local communities in order to improve the living conditions, food, and nutrition security in the Horn of Africa. It is on the basis of this that the Government of Kenya made a request for the Green Climate Fund financing through the African Development Bank. Specifically, the project objectives in Kenya are: (a) increase, on a sustainable and resilient basis, the productivity and agro-sylvo-pastoral production in the Horn of Africa; (b) Increase income from agro-sylvo-pastoral value chains, and; (c) Strengthen the capacity of populations to better adapt to the risks of climate change.

Project Description

The project has four components and their respective activities are discussed below:

Component 1: Strengthening the resilience of drought prone areas and Pastoral and Agro-Sylvo-Pastoral Production systems to Climate Change: This component has 4 sub components – A: Support for Sustainable Management of Agro-pastoral land with three focal areas: Sustainable Pastoral Land Management, Sustainable Pastoral Land Management, Support to land governance at regional level; B. Development of Climate Resilient Infrastructure with the following focal areas: Agricultural infrastructure, Pastoral Infrastructure, Economic livelihood diversification; C: Promotion of Climate-smart innovations and technologies has four focal areas namely - Activities related to dissemination of CSA technologies; Activities related to knowledge management and technology transfer; Activities related to improved Nutritional Status of Household; activities for supporting IGAD for technologies dissemination at regional level. This subcomponent will be implemented in partnership the Bank flagship The Technologies for African Agriculture Transformation (TAAT) which offers a wide range of technology brokerage services that are available to assist the HoA Countries. GCF funding will be extremely critical in supporting the activities of component 1. Component 2: Supporting Agribusiness Development: this component will cover input suppliers, agro-processors, traders, exporters and retailers. This will be achieved through focusing on the following 3 sub-components: Access to advisory services, financing and markets on Policy/Enabling Environment activities, Infrastructure will include E-registry of pastoralists and farmers in the project areas; Capacity Building; and Supporting Development of Entrepreneurship (Enabling environment, Financing / Derisking for Agribusinesses, Agri SMEs, Promoting Domestic Bio-digesters and Solar Energy. Component 3: Strengthening Adaptive capacity to Climate Change aims at enhancing resilience and strengthening the adaptive capacity of agro-pastoral communities in the Greater Horn of Africa (GHoA) to climate risks and variation. This component, comprises 3 sub-components which include (i) Development and improvement of weather and climate services, (ii) Mainstreaming Climate Risk Finance and Insurance, and (iii) Operational and Institutional Capacity for Climate Adaptation and Resilience. Component 4: Program Coordination and Management: This component will ensure the effective and efficient regional management of the program by IGAD. It also includes the management of national components at national and sub-national levels to achieve the expected outcomes of the program. It includes the implementation of regional and national coordination of the Program, technical and financial management, supervision of activities, monitoring and evaluation and annual audits.

National and Sub-national Projects under DRSLP II

The national projects will comprise of 9 irrigation schemes whose NEMA Licenses have been issued. The schemes are distributed across the seven Counties where sites are known except for Garissa. The site will be identified by the communities alongside other infrastructure.

The sub-national projects will develop structures i.e water pans/Earth Dams; underground water structure (boreholes, shallow wells, sub-surface dams); Commercial Pasture Plots; Hay Sheds/Fodder Banks; Livestock Markets; Construction of Rural Access Roads; Veterinary /Diagnostic Laboratory distributed per county as follows:

Type of Structure	Number per County	Project Totals
Water Pans/Earth Dams	4	28
Boreholes	4	28
Shallow wells	4	28
Sub surface dams	4	28
Commercial Pasture Plots;	4	28
Hay Sheds/Fodder Banks;	4	28
Livestock Markets;	3	21
Construction of Rural Access Roads;	14.28km	100
Equipping Veterinary /Diagnostic Laboratory	1	7

Project Beneficiaries

The project beneficiaries will majorly be rural households, in this case, pastoralists and agro pastoralists. The project is also targeting women and youth and will have specialized training modules for them particularly on value addition and marketing methods. The nature of the proposed agricultural and pastoral infrastructure investments to support agriculture value chains will vary by County depending on socio-economic characteristics of each county and established needs.

Justification and Objective of the ESMF

The ESMF was selected as the environmental and social instrument for assessing, managing and monitoring environmental and social risks and impacts including measures to beneficiaries on how to avoid COVID 19 of the Project, specifically, since the actual areas for the implementation of the project are not known. This ESMF lays out screening processes and tools directly implemented by the MOALF & C/PCU to assess risks and impacts per activity. This has facilitated the recommendation of appropriate mitigation and monitoring measures for each activity. The main purpose of this ESMF is therefore to establish procedures and methodologies for environmental and social assessments, review, approval and implementation of activities to be financed under the Project, as the nature, scope and locations of activities become known during the implementation of the Project.

Policy, Legal and Institutional Issues

The national legal instruments relevant to this project will provide guidance and regulations pertinent to the implementation. The Policy Framework will include amongst others: National Occupational Safety and Health Policy, 2012; National Land Use Policy (NLUP), 2012; National Water Policy, 2012; National Environmental Policy, 2013; and National Food and Nutrition Security Policy (NFSP) while the legal framework includes amongst others: Constitution of Kenya (2010); National Council for Disability Act, 2003; Environmental Management and Coordination Act 1999 Amended 2015 and subsequent legislation and legal notices; Labor Relations Act, 2007; Livestock Act, 2020; Water Resources Management Rules, 2007; County Government Act, 2012; Agriculture Fisheries and Food Authority Act, 2013; Climate Change Act, 2016; and Public participation Act, 2018.

The project will also collaborate with relevant national institutions such as Environment and Land Court; National Environment Management Authority; Commission on Administrative Justice (CAJ) — Office of the Ombudsman; Kenya National Commission on Human Rights; **National** Council for Persons with Disabilities (NCPWD); National Gender Equality Commission; and State Department for Social Protection.

As a Best International Practice, the project will also be in cognizant of the Multilateral Environmental Agreements and Guidelines including: United Nations Framework Convention on Climate Change, International Convention on Biological Diversity, World Heritage Convention, Ramsar Convention, Agreement of the Conservation of Eurasian Migratory Water Birds; and Convention on International Trade in Endangered Species of Wildlife Fauna and Flora while The applicable African Development Bank Operational Safeguards (OSs) will be in play. Under the Integrated Safeguards System (ISS), the Project shall adhere to the requirements of the 5 Operational Safeguards (OSs) in order to avoid, reduce, minimize and mitigate adverse risks and impacts and undue harm of its development of community projects to the environment. Table 0-1 lists the OSs that are relevant to the Project's proposed activities.

Table 0-1: Summary of Environmental and Social Standards

The Operationa	Rationale
Safeguards	
OS1: Environmenta	This safeguard governs the process of determining a project's environmental
and Socia	and social category and the resulting environmental and social assessment
Assessment	requirements. The HoA Program has been proposed as a category 2
	Program, implying that there will be need for ESIAs to be undertaken during
	the program execution level.
	The potential negative environmental and social risks and impacts associated with the activities include, soil erosion, air and water pollution from the anticipated increased use agricultural production chemicals (including ground water), generation of solid waste, occupational health and safety risks related to minor construction activities that include the proposed construction of grain and seed storage facilities etc. Proposed activities related to supporting pastoralist communities through re-stocking of livestock could result in outbreaks of animal diseases and degradation of the rangelands.
	Most of the project activities are to be implemented in both Arid and semi-arid counties, many of which have been prone to social tensions and inter/intra communal conflicts over natural resources and boundary

The Operational Safeguards	Rationale
	demarcations; and have been inhabited by different social groups, as well as IDPs and refugees. Specific potential social risks for the project component include: exclusion of deserving communities or individuals within the employment component, inadequate consultation when it comes to community involvement in the livelihood restoration benefits, risks with respect to gender based violence on targeting of beneficiaries on employment or livelihood restoration aspects and risks of complaints escalated to higher levels if a structured GCHM is not in place and operational. The Project is cognizant of these dynamics and shall be implemented in a manner that ensures no escalation of such tensions. Similarly, security concerns for workers and volunteers shall 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. A Security Management Plan may also be prepared to supplement this ESMF. 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 project implementation.
OS2: Involuntary Resettlement, Land acquisition, Population Displacement and	This safeguard consolidates the policy commitments and requirements set out in the Bank's policy on involuntary resettlement, and incorporates a number of refinements designed to improve the operational effectiveness of those requirements.
Compensation	The project ESMF has been updated as needed to reflect the procedures for voluntary land donations (Annex VIII) or Land Donation Consent Form (Annex IX).
OS3: Biodiversity and Ecosystem Services	This safeguard aims to conserve biological diversity and promote the sustainable use of natural resources. It also translates the commitments in the Bank's policy on integrated water resources management into operational requirements. Based on the screening conducted during project preparation and consideration of the scale of the proposed activities, the project does not pose any danger to the conservation of biodiversity and sustainable management of living resources. However, beneficiary communities shall be sensitized about prohibited practices that interfere with the functioning of ecologically sensitive areas. For the overall project, MOALF & C will utilize the AfDB guidelines in the treatment of ecologically and ergonomically sensitive areas and this may also be incorporated in the project IPMP.
OS4: Pollution Prevention and control hazardous materials and	This safeguard covers the range of key impacts of pollution, waste, and hazardous materials for which there are agreed international conventions, as well as comprehensive industry-specific and regional standards, including greenhouse gas accounting, that other multilateral development banks follow.
resource efficiency	The project will support livelihood activities, it is possible for the smallholder farmers, and agro-pastoralists to procure synthetic chemicals to manage pests and diseases on their farm/rangelands as well as increased use of organic fertilizers. In addition, restocking activities for the livestock may

The Operation Safeguards	al Rationale
	involve the purchase of livestock from one area to another and need for treatment of livestock diseases as well as the use of acaricides to manage ticks. Individual beneficiaries will have a duty to prevent waste, avoid contamination and deal responsibly with the waste, residues and empty pesticide containers. Improper use of knapsack sprayers during typical application could lead to ingestion of agrochemicals by farmers or minors, livestock, and contamination of the environment.
OS5: Labo conditions, heal and safety	This establishes the Bank's requirements for its borrowers or clients concerning

Environmental and Social Risks and Impacts

Since the specific scope and locations of the activities are not yet known, this ESMF has included a proposed ESMP (to set out safeguard requirements for civil works including rehabilitation of water pans, and environment and social screening. In addition, a Stakeholder Engagement Plan (SEP), Labor Management Procedures (LMP) are proposed for this project. Other plans i.e. Waste Management Plan (WMP) and a Security Management Plan to address security risks associated with inter/intra community conflicts over natural resources and boundary demarcations and cross-border cattle rustling and terrorism may also be prepared before project implementation. Each of the mentioned plans is also dealt in this ESMF but briefly.

Overall, the environmental and social impacts of the project are expected to be positive given it is the aim of the project to restore and protect community livelihoods and reduce resource pressure from the vagaries of weather. It is also envisaged that the project's highly participatory and bottom-up approach will maximize direct benefits to the affected communities. Environmental risks and impacts have been identified include:

- Solid waste management challenges;
- Liquid waste management;
- Lack of proper planning guidelines resulting in land-use conflicts;
- Loss of fauna and flora;
- Hydrology to be affected;
- Rivers diversions;

- Interference with the local and indigenous knowledge of communities;
- Insufficient financial resources to implement proposals;
- Inadequate engagement of stakeholders during planning;
- Integration of the projects with other program;
- Inefficient land subdivisions;
- People with disabilities;
- Possible negative impacts of proposed projects;
- Wildlife migratory corridor;
- Displacement of residents of involuntary resettlements especially in the informal settlement
- Disaster preparedness;
- Labour influx management, Loss of employment and livelihoods;
- Addressing issues of the vulnerable and the marginalized groups (VMG).;
- and susceptibility to communicable diseases, including COVID-19, community conflicts and threat of security.

Mitigation measures for these and other risks identified are described in detail in this ESMF on section 6.0.

Environmental and Social Screening

The purpose of this screening process is to determine (i) whether the activities are eligible to be financed, (ii) determine whether activities are likely to have potential negative environmental and social risks and impacts; and (iii) identify appropriate mitigation measures. For activities with adverse risks or impacts, for example rehabilitation and construction of water pans, an environmental and social assessment shall be undertaken. Appropriate mitigation measures shall be incorporated through site-specific sub-project Environmental and Social Management Plans (ESMPs) and when the vulnerable and marginalized communities/Groups (VMGs) are present, special approach is adopted. The implementation shall be monitored and reported on by the County Environmental and Social Focal Points periodically as required by Kenya Laws and African Development Bank Integrated Safeguards System (ISS). The environmental and social screening exercise should be carried out under the guidance of the specific County PCU Environmental and Social Focal Points. The Program to Build Resilience for Food and Nutrition Security in The Horn of Africa (Hoa)-(DRSLP II) is in Counties where phase 1 was being implemented; and as such, DRSLP II shall utilize the existing implementation structures as much as possible.

Monitoring, Supervision and Reporting

All activities to be financed under the Programme to Build Resilience for Food and Nutrition Security in the HOA (DRSLP II) shall follow the ISS, the Environmental and Social Operational Safeguards (OSs), and the provisions described in the ESMF, IPMP, and SEP, LMP, SMP, and WMP (if these will be standalone Plans) grievance and conflict handling procedures, (GCHP) and other environmental and social due diligence reports prepared under the project. Additionally, subproject ESMPs shall be developed for specific sub-projects identified during implementation. Environmental and social monitoring aims at checking the effectiveness and relevance of the implementation of mitigation measures. The Ministry should report any environmental and social accident or incident to the African Development Bank of occurrence as per Environmental and Social Incident Report Toolkit (ESIRT) protocols.

Implementation Arrangements and Responsibilities

Implementation of DRSLP II ESMF shall involve a three-tier institutional arrangement (national, county and community). The three-tier institutional arrangement aims at achieving efficient decision-making and implementation while using constitutionally-mandated governance procedures at all levels for a

sustained application and adoption. At the national level, MOALF & C is the main implementing agency. The Ministry (MOALF & C) has experience in implementing African Development Bank financed Projects (including the Phase 1 project). The Ministry has established the NPCU which has Environmental, Social and Gender specialists who support in managing environmental and social risks. DRSLP II shall use the Phase 1 Project structures at the County level, including the ES focal points which have been established and trained in handling and managing safeguard issues. At community level, the Community Investment Farmer Committees should participate in project preparation through to adoption and thereafter in monitoring during implementation. However, considerable resources should be dedicated to train the Ministry staff, County staff and beneficiaries on the ISS and OSs (this is captured in capacity building) in order to ensure the environmental and social risk management is integrated into all project activities in a sustainable manner. For any sub/micro projects that involve physical infrastructure, the sub/micro project committee will seek advice from County PCU/ NPCU Safeguards Team on the guidelines required for implementation in consultation with the DRSLP II coordinating units at county and national levels. The oversight for civil works shall be done at county level by Resident Engineers, CPCU and the relevant county government departments.

Capacity Development for Environmental and Social Management

Effective implementation of the ESMF, and subsequent ESMP, IPMP, Gender Based Violence Action Plan (GBVAP), LMP, and the Security Management Plan (SMP) shall require adequate capacity enhancement within institutions and other stakeholders, especially regarding monitoring and evaluation. There is a need for capacity building of implementers at the Project Coordinating Unit and the project implementing structures including at the National, County and Community levels. The DRSLP II PCU shall prepare a training plan that includes training modules for the project staff, service providers, Implementing Agency (IA) and Income Generating Activities' groups (IGAs) within 30 days of the commencement of the project. Below are some of the capacity building training needs:-

- Capacity building at the national and county levels on ISS and OSs.
- Training on ESIA/OHS national processes
- Monitoring of ESIAs, ESMPs, and related safeguard management plans
- Training in grievance and conflict handling and Public consultations in the Stakeholder Engagement Plan process
- Community mobilization / participation and social inclusion
- Integration of sub-project ESMPs into the DRSLP II cycles during their project implementation stages
- Application of the Labor Management Procedures
- Application of the Security Management Plan
- Vulnerable and Marginalized Group inclusion procedures.
- Indigenous Peoples (IPs) issues (eg. IPs engagement, meaningful consultation, free prior and informed consent (FPIC), IP Plan requirements, etc). It is important to note that Indigenous Peoples have not been identified in Kenya's project sites. However, when carrying out site-specific environmental and social impacts assessments

Capacity Building Budget

An adequate budget should be provided for the implementation of ESMF. The budget should provide for training of implementing teams on the ISS and OSs, development of environmental and social due diligence measures and amongst others to be determined by environmental and social tools. Funds are needed to hire consultant(s) to prepare supplementary environmental and social assessments (Environmental and Social Impact Assessments (ESIAs) and site specific ESMPs) and associated environmental and social due diligence reports. A budget of 1,110,000 USD has been proposed for

preparation, implementation and monitoring of site-specific safeguard instruments (ESIA, ESMPs, IPMP and Social Assessment, among others) and capacity building ISS, OSH, GCHM, LMP, GBVAP, SMP, WMP and SEP) during project implementation.

Public Consultations and ESMF Disclosure

The public consultation was carried out 1n July 2021 with the support of African Development Bank in line with AFDB COVID-19 stakeholder engagement guidelines. Invitation of the stakeholders' representatives of the project counties, public authorities and sector experts, were taken through the draft ESMF in order to solicit for extra input. Public consultations provided stakeholders with timely, relevant, understandable, and accessible information. Special considerations were given to stakeholders that were considered disadvantaged or vulnerable who can be considered alongside Indigenous Groups whose specific vulnerability must be addressed. Key issues identified during the consultation include but not limited to:

- clear description of project components;
- review livestock sector specific legislation and articulate them in the ESMF;
- prepare ESMF using adequate and appropriate baseline data for the project Counties;
- elaborate both positive and negative impacts and risks associated with the project;
- propose feasible ways to address community health and safety concerns during project implementation; and
- roles of the respective county and sub county technical teams.

The outcome of public and stakeholder consultation, engagement and conclusions summarized and integrated into this ESMF. This ESMF will be disclosed on both the MOALF & C and the Bank websites.

Grievance Redress Mechanism

A grievance and conflict handling mechanism (GCHM) has been prepared (Section 10.0) as part of the project ESMF. The GCHM shall be used to resolve complaints and grievances in a timely, effective and efficient manner. Project related grievances will be submitted for any negative outcome on community wellbeing, the environment, or quality of life. Stakeholders may also submit compliments and suggestions. Grievances should be handled at community, County and national levels by a Grievance and conflict handling Committees established by MOALF & C NPCU before escalating to other levels. The available channels of receiving grievances includes via email, calls, phone texts and step-in complaints, among others.

It is important to note that the GRMs will be set up at different levels starting with the local levels and going up to allow appeals up to the level of using national laws. The local levels have mediation mechanisms including on how natural resources are used. It should be noted that grievances redress mechanisms will include appeal to the GCF for redress as well as the AfDB's Independent Recourse Mechanism (IRM). One last chance of mitigation measure will be to seek and accept international arbitration when such conflicts occur but also to prevent these types of conflicts by organizing public consultations under the guidance of IGAD and a dialogue committee. If found necessary, in view of the circumstances, an Indigenous Peoples Policy Framework (IPPF) will be developed and it will have an Indigenous Peoples Plan (IPP) that will determine how the indigenous peoples cases and circumstances are handled.

1. INTRODUCTION

The Government of Kenya (GoK) through the Ministry of Agriculture, Livestock, Fisheries and Irrigation (MOALF & C) is seeking Green Climate Fund financing through the African Development Bank for the "The Programme to Build Resilience for Food and Nutrition Security in the HOA (DRSLP II))". The project will assist MOALF & C to prevent and respond to the threat to community livelihoods posed by the Drought and vagaries of weather and strengthen Kenya's system for preparedness. Poor farmers and pastoralists are particularly vulnerable to livelihood loss and income shocks from drought as they are the least able to save their income and smooth consumption in times of crisis; hence the need for targeted mechanisms in sustainable livelihoods as spelt out in the project documents.

1.1 Need for the HoA Program the second phase of the DRSLP Program, simply referred to as DRSLP II

Recurrent droughts and unpredictable rainfall patterns are characteristic of arid and semi-arid lands (ASALs), which receive less than 600 mm of annual rainfall and comprise more than 70% of the Horn of Africa region, where the eight IGAD member countries (Djibouti, Eritrea, Ethiopia, Kenya, Somalia, South Sudan, Sudan and Uganda) are located. As a result of the negative impact of drought on the lives and livelihoods of several million people and the resulting suffering and loss of human and animal life, the heads of State of IGAD member countries met at a summit in Nairobi on September 8-9, 2011. At the summit, they deliberated at length on drought-related challenges and developed the Nairobi Declaration, committing significant new investments in dry lands to end drought-related emergencies. They pledged, among other things, to initiate regional projects addressing the underlying causes of vulnerability in drought-prone areas, focusing on the urgency to engage long-term joint interventions aimed at building resilience and economic development. The program aims to contribute to poverty reduction, food security and accelerated sustainable economic growth in the Horn of Africa through improved rural incomes. Specifically, it aims to improve the drought resilience of arid and semi-arid land communities. Project interventions cover water supply for people, livestock, irrigation and sanitation as well as the effective management of head-waters and basic water sources; improvement of plant and animal production, marketing and disease management. The new and upcoming second phase of the DRSLP titled; Program for Building Resilience for Food and Nutrition Security in the Horn of Africa, follows the decision of the African Development Bank at the February 2019 roundtable on financing the Climate Investment Plan for the Sahel region.

1.2 ESMF Purpose and Rationale

ESMF was selected as the environmental and social instrument for assessing, proposing management measures and monitoring environmental and social risks and impacts of the project in this advent of COVID 19 through all-inclusive consultative processes. Because the Kenya implementation areas are not known per se, an ESMF is considered the most appropriate instrument. It is worth noting that because the extent of climate change and drought and associated impacts is changing, project-specific areas have not been determined, and specific affected populations have not been identified. However, these areas that are inhabited by pastoralists and non-pastoralists communities are classified as Arid and Semi-Arid (ASAL) according to the Constitution of Kenya and African Development Bank's Integrated Safeguards System (ISS). As such pastoralist issues are therefore considered within the ESMF

Resilience for Food and Nutrition Security in The Horn of Africa (HOA)-Kenya Component

This ESMF lays out screening processes and tools directly implemented by the Ministry of Agriculture, Livestock and Fisheries Project Coordinating Unit (MOALF & C/PCU) to assess risks and impacts per activity. This has facilitated the recommendation of appropriate mitigation and monitoring measures for each activity. The main purpose of this ESMF, therefore, is to establish procedures and methodologies for environmental and social assessments, review, approval and implementation of activities to be financed under the Project, as the nature, scope and locations of activities become known during the implementation of the Project.

The ESMF describes the appropriate roles and responsibilities of the MOALF & C/PCU and other stakeholders and outlines the reporting procedures on environmental and social risk issues. It describes the managing and monitoring processes of environmental and social risks and impacts related to the project including HIV/AIDs, communicable diseases and also COVID 19. It further determines the training, capacity building and technical assistance required for National Project Coordinating Unit/County Coordinating Unit (NPCU/CPCU) to successfully implement the provisions of the ESMF; and provides practical information resources for implementing the ESMF. It also lays out the Project's staffing and institutional arrangements clarifying the relations between PCU and the African Development Bank, including their roles and responsibilities in view of the implementation of the ESMF.

1.3 Project Description

1.3.1 Component 1: Strengthening the resilience of drought prone areas and Pastoral and Agro-Sylvo-Pastoral Production systems to Climate Change

The GCF funding is more importantly being sought to support the implementation of component 1 whose principal activities are aimed at increasing the adaptive capacities of the pastoral and agro-pastoral production systems hence enhancing the resilience of the target communities.

A. Support for Sustainable Management of Agro-pastoral land

The three focal areas under this subcomponent are discussed as follows;

- (a) Key activities under Sustainable Agricultural Land Management
 - Conduct studies to identify and assess the extent of degradation of individually owned and communal lands and record existing land use, users, and degraded areas for rehabilitation/ restoration
 - (ii) Community Mobilization, Establishment and capacity building for Community Land Management Committees as legal entities for management of community lands
 - (iii) Prepare soil fertility maps
 - (iv) Participatory Mapping, Delineation, and Registration of individual block community lands
 - (v) Adjudication of the land rights and interests of members of the respective communities, including women and the marginalized, for eventual registration and issuance of individual title documents
 - (vi) Land Use Planning to provide the spatial development and land management framework to ensure optimal, sustainable and equitable use of community lands

- (vii) Develop and share gender-inclusive, appropriate guidelines and plans for rehabilitation/ restoration and controlling erosion and develop and popularize appropriate technologies including indigenous technology/grass species.
- (viii) Train communities in alternative technologies for harnessing land resources, land rehabilitation, and restoration; (ix) Undertake rehabilitation and restoration of rangelands and agricultural land using indigenous technology/grass species
- (ix) Provide/update land-use rights (tenure security) documents of long-term occupants of public land in the areas where climate-resilient infrastructure is going to be built, as well as in communal areas to project beneficiaries
- (x) Build local capacity to manage real-time land degradation mapping, using tools and models for identification of emerging hotspots of natural resource challenges
- (xi) Support Stakeholder consultation, identification of issues, and preparation of working drafts for further discussion with stakeholders in the land sector

(b) Key activities under Sustainable Pastoral Land Management include;

- (i) Conduct studies to identify and assess the extent of degradation of communal land and record existing land use and users in pastoral communities
- (ii) Prepare community participatory land use systems and maps that include, demarcation of pasture / rangeland, to assess rangeland health, identify migratory routes/ livestock routes of strategic importance, and degraded areas for rehabilitation/ restoration
- (iii) Develop appropriate guidelines and plans for rangeland rehabilitation/ restoration and controlling erosion and develop and popularize appropriate technologies
- (iv) Train pastoralists land management committees in planning and managing land and associated pastoral resources, pasture/rangeland rehabilitation techniques
- (v) Support the acceleration of the process of organizing and formalizing Community pastoral land Management Committees and platforms in planning and managing land and associated pastoral resources
- (vi) Demarcating and registering the land rights of pastoral communities over their rangeland units;
- (vii) Assess existing drought/ crisis early warning systems and other rangeland monitoring and establish infrastructure for rangeland monitoring and early warning systems
- (viii) Undertake studies to inform the carrying capacity of the environment under different human and livestock populations (stresses) and the interrelated resilience to droughts, floods, conflict shocks
- (ix) Develop technical capacity for rangeland management with indigenous knowledge systems
- (x) Restoration of degraded pastoral areas and lands

- (xi) Strengthening pastoral risk management for drought-related hazards, fire breaks etc. and response.
- (c) Key activities under Support to land governance at regional level are:
 - (i) Generation of spatial knowledge about the pastoralist land tenures and livestock corridors in the IGAD Clusters in terms of the impact of climate change for conflict-sensitive and inclusive land-use planning
 - (ii) Designing of policy, administrative, and educational tools that assist local communities, Member States, and NGOs, to reconcile land tenure conflicts in the face of climate change in the IGAD Clusters
 - (iii) Production of catalogs of land conflicts in IGAD clusters where project interventions are being done and how they can be transformed to enhance resilience and adaptation to climate change in the areas
 - (iv) Regional quantitative study on land loss through erosion and degradation and its impact on climate change mitigation and adaptation; and
 - (v) Develop the capacity of governments, CSOs, and other stakeholders that work on tenure reconciliation and climate change response in IGAD Pastoral Areas by strengthening relationships between the stakeholders for learning, knowledge exchange, and dialogue through annual pastoral land tenure governance and climate change regional conference and fair.

B. Development of Climate Resilient Infrastructure

The DRSLP II will focus on both National and sub-national projects. At national level the major infrastructure will include 10 irrigation schemes,

It comprises three focal areas which are discussed below;

- (a) Agricultural infrastructure which includes:
 - (i) rehabilitation/construction of multipurpose (water harvesting) small (sand/earth/rock) dams,
 - (ii) Rehabilitation/construction of small irrigation schemes,
 - (iii) Development of small-scale climate-smart agricultural scheme including provision of greenhouses, shade nets, bed nets, and drip irrigation kits,
 - (iv) Rehabilitation/construction of multi-purpose hafirs (water harvesting ponds or pans),
 - (v) Rehabilitation/construction of multi-purpose underground dams/water tanks/village tanks (dry river-beds-sand-dams),
 - (vi) Drilling/construction of multipurpose solar-powered boreholes (tube-wells),
 - (vii) Construction/rehabilitation of multi-purpose hand-dug large-diameter protected wells,
 - (viii) Rehabilitation of rural feeder/access roads. All multipurpose infrastructure shall include
 - (i) related plant/equipment, and
 - (ii) be used for livestock production, irrigation/crop-forage production, domestic-related, aquaculture and mini-industries activities.

The infrastructure to support agriculture value chains will include

ESMF for Program to Build

- (i) rehabilitation/construction of agro-processing infrastructure,
- (ii) construction/rehabilitation of agricultural commodities/produce markets (infrastructure), and
- (iii) Construction/establishment of one-stop small-scale agriculture service (agro-market) centres. All multipurpose infrastructure shall
 - (i) include related plant/equipment, and
 - (ii) be used for livestock production, irrigation/crop-forage production, domestic-related, aquaculture and mini-industries activities.

National and Sub-national Projects under DRSLP II

The national projects will comprise of 9 irrigation schemes whose NEMA Licenses have been issued. The schemes are distributed across the seven Counties where sites are known except for Garissa. This site will be identified by the communities alongside other infrastructure.

The Sub-national projects will rely heavily on the communities to focus on the particular sites, however, during the feasibility studies there we proposed general locations at Administrative Ward level. This will serve as a good guide when communities are engaged to roll out the projects. Generally, the project at this level will endeavor to develop structures i.e water pans/Earth Dams; underground water structure (boreholes, shallow wells, sub-surface dams); Commercial Pasture Plots; Hay Sheds/Fodder Banks; Livestock Markets; Construction of Rural Access Roads; Veterinary / Diagnostic Laboratory distributed per county as follows:

Type of Structure	Number per County	Project Totals
Water Pans/Earth Dams	4	28
Boreholes	4	28
Shallow wells	4	28
Sub surface dams	4	28
Commercial Pasture Plots	4	28
Hay Sheds/Fodder Banks	4	28
Livestock Markets	3	21
Construction of Rural Access Roads	14.28km	100
Equipping Veterinary /Diagnostic Laboratory	1	7

The site specific ESIAs will be undertaken once the actual sites are identified. Meanwhile PCU will work closely with existing/ established CPITs and SCPITs to start early community mobilization. The mobilization will entail among other things, identifying the beneficiaries, establishing the sub-project management committees, conducting sensitization and basic capacity building, development of site specific by-laws, signing of Community Resolution Forms for land acquisition, site specific ESIAs in readiness for Licensing. The above activities are aimed at ensuring sustainability and ownership of the community driven projects

(b) Pastoral Infrastructure which comprises of;

- (i) Improving access to cross-border natural resources (pastoral hydraulic infrastructure, rangeland and transhumance routes);
- (ii) Development of pastoral perimeters (rangeland development and rehabilitation, including management of invasive species such as Prosopis Juliflora)
- (iii) Construction of livestock markets and veterinary and zoo sanitary infrastructures and relevant technical and supervision studies
- (iv) Improving access to cross-border natural resources (pastoral hydraulic infrastructure, rangeland and transhumance routes and the services therein),
- (v) Establishment of fodder Bank, and better use of crops residues,
- (vi) Construction of Livestock Service Centres,
- (vii) Establish small U infrastructure, including aggregation centres and automated milk dispensers
- (viii) Construction of boreholes, cattle watering points and small dams and
- (ix) Promotion of community-led range rehabilitation initiatives based on the traditional systems but supported by modern scientific mechanisms.
- (c) Economic livelihood diversification includes the following activities;
 - (i) Sustainably harvesting and value addition to non-wood forest products (gums, resins, spices and honey) in areas of production
 - (ii) Improved fishing, fish handling and fish processing infrastructure to improve the quality and quantity of fish catches
 - (iii) Support to PPPs to enhance investment and governance of fisheries (Marsabit County of Kenya, South Omo zone of Ethiopia and Djibouti)
 - (iv) Diversification of livelihood resources through sustainable harvesting of artisanal minerals including gold and gemstones
 - (v) Integration of cultural education and ecotourism in the arid clusters (example Kidepo NP in Karamoja, Pokot Mathenicko in Kenya and Uganda) and
 - (vi) Support to the camel and goat value chains.

In addition, this sub-component will support

- a) (consultancy/Technical Assistance (TA) for infrastructure development including local surveys, production of detailed designs/construction drawings, tender documents and supervision,
- b) demand-driven integrated water resources development studies, including groundwater/hydrogeological investigations, and
- c) capacity building of beneficiaries, including training based on Training Needs Assessment (TNA).

C. Promotion of Climate-smart innovations and technologies.

This subcomponent comprises of four focal areas which are discussed below;

(a) Activities related to dissemination of Climate Smart Agriculture (CSA) technologies include; (i) ICT-based agricultural management to help farmers receive timely weather related information and warning to protect their assets against damage (ii) downscaling and communication of climate and biomass prediction products to

inform relevant sectors including farmers and herders (iii) promotion of Index-based crop and livestock insurance Program to reach smallholders through mobile technologies (iv) Remote -sensing technologies for precision farming and life-cycle assessment tools (v) Integrated Soil Fertility Management Technologies (vi) Water harvesting (vii) Breeding, multiplication and distribution of Short maturing Stress Tolerant Crops -Breeding of crop varieties and livestock and fisheries technologies that are resilient to stresses including heat, drought, etc. and (viii) Promotion of agricultural mechanization (example Kenya technologies) and (ix) integration of good agricultural practices on identified crop varieties as well as livestock and fisheries technologies and accelerated crop campaigns including Fall Army Worm control by providing a strategy paper at the national and regional levels

- (b) Activities related to knowledge management and technology transfer include: (i) Integration of ICT with climate forecasting, early warning and mitigation (ii) Support to the livestock sector actors towards contribution and dissemination of Climate information from GHACOF and other national sources to users in the livestock sector (iii) Development of a Regional multi hazard early warning platform (Feed, disease, conflict, water etc.) based on products from ICPAC, CEWARN, etc. (iv) Support to regional feed and range platform and Animal health networks for sharing lessons and good practises on climate resilient practices (v) Facilitation of access to quality inputs, including organic inputs and agro-pastoral production services (equipment, mechanisation, etc.) (vi) Access to risk-management tools, high-quality fertilizer, irrigation techniques, livestock-related assistance in hotspots (vii) Strengthening vaccination against major Epizootics (e.g. Small Ruminants Plague (PPR), CBPP, Newcastle Disease in poultry; tsetse control etc) (vii) Agro-meteorological services for agro-breeders and (viii) Promotion of forage production (commercial fodder production, fodder briquettes) to avert conflict and (viii) facilitation of capacity building and strengthening of national partners on climate resilient farming techniques. Organize an annual technology fair showcasing the benefits of climate-smart agriculture technologies.
- (c) Activities related to improved Nutritional Status of Households include: (i) Improved social infrastructure (health, nutrition, and education) (ii) Improved dietary diversity of targeted households (iii) Landscaping of vegetable perimeters/nutritious gardens for women (iv) Dissemination of good nutrition practices and (v) IEC campaigns on improving the living environment and population health (behaviour and communication change). And promotion of post-harvest production of nutritional foods, including promotion and adoption of post-harvest technologies.
- (d) The activities for supporting IGAD for technologies dissemination at regional level include: i) Provide technical assistance to IGAD in the development of harmonized regional seed policies and a regional seed roadmap for specific regional commodities, ii) Operationalize Fall Army Worm control by providing a strategy paper at the national and regional levels, iii) Provide technical assistance to IGAD on the

development of national and regional strategies for cross-border agriculture and livestock technologies dissemination, iv) Prepare targeted policy briefs and support scaling-up of climate-smart agricultural technologies and practices, iv) Develop training of trainer's guidelines related to available TAAT technology and innovations products, v) Support continued development of regional climate Map rooms and institutional linkage with extension services (vi) Develop and disseminate an online catalog of technologies to be maintained by IGAD and Member Countries, vii) Organize at least one annual technology fair showcasing the benefits of climate-smart agriculture technologies and viii) Organize a regional policy forum to sensitize policy makers and create support for scaling irrigation and agricultural water management technologies, among others.

This subcomponent will be implemented in partnership the Bank flagship The Technologies for African Agriculture Transformation (TAAT) which offers a wide range of technology brokerage services that are available to assist the HoA Countries. The technologies include the latest climate-smart technologies, their accompanying management practices, and post-harvest and value-addition practices. Different strategies are offered for various commodities, but they will be combined to strengthen national food systems. TAAT technologies include a suite of bundled practices specifically applicable to the HoA cultivated drylands.

Kenya, proposes the following projects under component 1 whose sites are known already and approvals have been sought from NEMA:

Table 1-1: National Component 1 Projects whose studies are completed (ESIA/ EA)

					Estimated Beneficiaries	
s/NO.	COUNTY	PROPOSED IRRIGATION SCHEME	Sub-County	Proposed Project Location	(HHs)	NEMA LICENSING STATUS
1	Turkana	Konoo I Irrigation Scheme	Loima	Malaa village/ Lobei Kotaruk Ward	500	Licensed
2		Konoo II Irrigation Scheme	Loima	Koono village/ Lobei Kotaruk Ward	500	Licensed
3		Rehabilitation of Basaloi	Samburu	Angatananyukie	100	Licensed
	Samburu	microirrigation scheme	North			
4	Marsabit	Bori Flood bases irrigation	Moyale	Butiye Ward	100	Licensed
	maisasit	Anona Flood Based Irrigation	Sololo		100	Licensed
5	West Pokot	Aturkoit Irrigation Scheme	Pokot West	Riwo ward	200	Licensed
4	Baringo	Kinene Irrigation Scheme	Mogotio	Mogotio Ward	800	Awaiting signature at NEMA

Specifically, the sub national components as proposed in the counties and whose sites will be identified in due course by the communities are listed in the tables 1-2 to 1-8 below:

Table 1-2: Baringo County Sub National Component 1 Projects

	BARINGO COUNTY			
STRUCTURE TYPE	PROPOSED STRUCTURE	Sub-County	Proposed Project Location	Estimated Beneficiaries (HHs)
	Nyalilbuch waterpan	Baringo North	Saimo Soi Ward	200
	Kiri amaki tai waterpan	Baringo North	Bartabwa Ward	150
	Kipkaplop waterpan	Baringo Central	Kapropi ta ward	150
Water Pans/Earth Dams	Sitek waterpan	Baringo North	Bartabwa Ward	120
	Kiskis Community Borehole	Mogotio	Emining Ward	200
	Kapbirmet Community Boreho	Baringo South	Marigat Ward	250
	Le toi Community Borehole	Mogotio	Emining Ward	200
	Kapchumo Community Boreho	Baringo South	Marigat Ward	200
	Kapchemon Community Boreh		Kabarnet Ward	300
	Kiberge Community Borehole		Sacho ward	300
	Kiptirtir Community Borehole		Emining Ward	250
	Ngenda Community Borehole		Mogotio Ward	300
	Chepkewel Community Boreh		Saimo Soi Ward	
Underground Water	Bokorin Community Borehole		Ewalel ChapChap	
Structures (BoreHoles, Shallow wells and Sub	Tarafunyan Community Boreh		Kisanana Ward	200
surface dams)	Kasiryo Community Borehole	Baringo North	Kabartonjo ward	250
	Loruk Commercial pasture	Baringo North	Saimo Soi Ward	250
	Kiserian Commercial pasture	Baringo South	llchamus ward	250
	Chesiri mi on Commercial	Tiaty	Leyamorok Ward	250
Commercial Pasture Plots	Tangulbei Commercial	Tiaty	Tangulbei/Churo Ward	250
	Salabani Hay Shed	Baringo South	Marigat	200
	Kiserian Hay She d	Baringo South	llchamus ward	200
	Loruk Hay Shed	Baringo North	Saimo Soi Ward	200
Hay Sheds/Fodder Banks	Kimose Hay Shed	Mogotio	Emining Ward	200
	Kaptara Livestock market	Baringo Central	Kabarnet Ward	400
	Olkokwe Livestock market	Mogotio	Kisanana Ward	400
Livestock Markets	Nyingany Livestock Market	Tiaty	Makutani Ward	400
Construction of Rural Access	Construction of 14KM Mogotio-Moloriver, Saimo soi kampi samaki- Nyalilbuch	Mogotio	Mogotio Ward	
		Marigat	Marigat	

Table 1-3: Isiolo County Sub National Component 1 Projects

	ISIOLO COUNTY					
S TRUCTURE TYPE	PROPOSED STRUCTURE	Sub-County	Proposed Project Location	Estimated Beneficiaries (HHs)		
	Sericho Village Water Pan	Garbatulla	Sericho Village /W ard	300		
	Garbatulla Village Water Pan	Garbatulla	Garbatulla Village/ward	400		
Water Pans/Earth Dams	Chari Village Water Pan	Merti	Chari Village/ward	200		
	Cherab Village Water Pan	Merti	Cherab Village/ward	200		
	Chari community Borehole	Merti	Chari Village	200		
	Cherab Community Borehole	Merti	Cherab ward	250		
	Leparua Community Borehole	Isiolo	leparua ward∕Village	200		
	Ngare Mara Borehole	Isiolo	Ngare Mara village	400		
Underground Water Structures (BoreHoles,	Cherab/Bursa Village Community Shal	Merti	Cherab/Bursa village / ward	300		
Shallow wells and Sub surface dams)	Chari Community Shallow well	Merti	Chari village/ward	300		
	Kinna Shallow well	Garbatulla	KInna villages/ ward	300		
	Oldonyiro Community Shallow well	Isiolo	Oldonyiro village/ ward	300		
	Kinna/Raspsu Commercial Pasture and Demonstration Plot	Garbatulla	Kinna Ward	420		
Commercial Pasture Plots	Leparua Commercial Pasture and Demonstration Plot	Isiolo	Leparua Ward	400		
Commercial Pasture Plots	Bulesa Insene Commercial Pasture and Demonstration Plot	Merti	Bul esa Ward	450		
	Garbatulla Commercial Pasture and Demonstration Plot	Garbatulla	Garbatulla Ward	400		
	Bulesa Hay Shed	Merti	Merti ward	500		
Hay Sheds/Fodder Banks	Oldonyiro Hay Shed	Oldonyiro	Oldonyiro Ward	500		
··- , -··	Kinna Hay Shed	Garbatulla	Garbatulla Ward	500		
	Merti Hay Shed	Merti	Merti Ward	500		
	Sericho Livestock market	Garbatulla	Sericho Ward	800		
Live stock Markets	Cherab Livestock market	Merti	Cherab Ward	800		
	Ngare Ndare cattle Dip	Garbatulla	Ngare Ndare Ward	800		
Construction of Rural Access Roads (14.28KM)	Construction of 14.2 KM oldonyiro Road	Oldonyiro	Oldonyiro Ward			
Veterinary/Diagnostic Laboratory	Equipping of County Vet Lab	Isiolo	Isiolo			

Table 1-4: West Pokot County Sub National Component 1 Projects

	WEST POKOT COUNTY					
STRUCTURE TYPE	PROPOSED STRUCTURE	Sub-County	Proposed Project Location	Estimated Beneficiaries (HHs)		
	Chesakam community Borehole	W est pokot	Riwoward	200		
	Katumwok Community Borehole	West pokot	Riwoward	200		
	Siyoyowo Community Borehole	Westpokot	Riwoward	200		
	Purwok Borehole	W est pokot	Riwo ward	200		
	Kapkitony Community Borehole	Pokot South	Chapareria ward	300		
Underground Water Structures (BoreHoles, Shallow wells and Sub	Sachille Community Borehole	Pokot South	Chapareria ward	250		
surface dams)	Kapunia Community Borehole	Pokot Central	Masol Ward	250		
-	Kamila Community Borehole	Pokot North	Kiwawa Ward	250		
	Tirken Borehole	Pokot South	Chapareria w <i>a</i> rd	300		
	Amolem Community Borehole	Pokot Central	Masol ward	200		
	Kokwokochi Community borehole	Pokot Central	Masol ward	200		
	Pyokou Community Borehole	Pokot Central	Wei wei Ward	200		
	Cheloboi Commercial Pasture and Demonstration Plot	Pokot North	Kiwawa ward	300		
	Achey Commercial Pasture and Demonstration Plot	Pokot North	Lomut Ward	200		
Commercial Pasture Plots	Kangarkwat Commercial Pasture and Demonstration Plot	Pokot west	Riwo Ward	400		
	Karameri Commercial Pasture and Demonstration Plot	Pokot North	Alale Ward	300		
	Cheloboi Hay Shed	Pokot North	Kiwawa ward	300		
Hay Sheds/Fodder Banks	Achey Hay Shed	Pokot North	Lomut Ward	200		
riay sireday i odder bariks	Kangarwat Hay Shed	Pokot west	Riwo Ward	400		
	Karameri Hay Shed	Pokot North	Alale Ward	300		
	Kasei Livestock market	Pokot North	Kiwawa ward	600		
Livestock Markets	Al ale Livestock market	Pokot North	Alale Ward	500		
	Sigor Livestock market	Pokot Central	Sigor ward	500		
Construction of Rural Access Roads (14.2	Construction of 14 KM Arturkoit scheme Road	Pokot west	Riwoward			
Veterinary/Diagnostic Laboratory	Equipping of County Vet Lab	Kapenguria	Kapenguria			

Table 1-5: Turkana County Sub National Component 1 Projects

		TURKANA COUI	NTY	
STRUCTURE TYPE	PROPOSED STRUCTURE	Sub-County	Proposed Project Location	Estimate d Beneficiaries (HHs)
	Komudie Village Earth Dam	Turkana West	Komudei village/Kakuma ward	300
Water	Kaemongor Village Earth Dam	Turkana North	Kaemongor village/ Nakalale Ward	400
Pans/Earth Dams	Nadunga Village Earth Dam	Turkana North	Nadunga village/ Kaeris ward	200
	Lochore Emoit Village Earth Dam	Turkana South	Lochore Emoit village/ Lokichar Ward	200
	Naikeriun/kaaleng.communityBorehole	Turkana North	Nakeriun Village/ Kaaleng Kaikor	200
	Songot Community Borehole	Turkana West	_	250
	Kalobeyei Community Borehole		Kalobeyei ward	200
Underground Water Structures	Kotaruk/Lorengipi Borehole	Loima	Kotaruk village/ Lorengipi Lokiriama ward	4000
(Bore Holes,		Turkana	Monti village /Lodwar	300
Shallow wells	Monti Village Community Borehole	Central	Township ward	
and Subsurface		Turkana	Nakoret village/Kerio	250
dams)	Nakoret/Kerio delta Community Borehole	Central	Delta ward	
		Turkana South	Kaimegur and Kang'apur	300
	Kaimegur/Kangapur/Kalapata Borehole		villages/ Kalapata ward	
	Elelea/Katilia Community Borehole	Turkana East	Elelea village/ Katilia ward	3000
	Lokiriam/Lorengini Commercial Pasture and Demonstration Plot	Loima	Lokiriam/Lorengini	420
Commercial	Kerio Commercial Pasture and Demonstration Plot	Turkana Central	Kerio Ward	400
Pasture Plots	Lobokat Commercial Pasture and Demonstration Plot	Turkana South	Lobokat Ward	450
	Letea Commercial Pasture and Demonstration Plot	Turkana West	Letea Ward	400
	Lokiriam/Lorengini Hay Shed	Loima	Lokiriam/Lorengini	420
Hay	Kerio Hay Shed	Turkana Central	Kerio Ward	400
Sheds/Fodder Banks	Lobokat Hay Shed	Turkana South	Lobokat Ward	450
	Letea Hay Shed	Turkana West	Letea Ward	400
	Lopii/Lokori Livestock market	Turkana East	Lopii village/ Lokori - Kochodin	800
Live stock Markets	Kaeris Livestock market	Turkana North	Kaeris Center/ Kaeris Ward	400
	Makutano/Nakalale Livestock market	Turkana North	Makutano Village/ Nakalale Ward	500
Construction of Rural Access Roads (14.28KM)	Construction of 16KM Oropoi-Nasinyono Road	Turkana West	Kalobeyei ward	
Veterinary /Diagnostic Laboratory	Equipping of County Vet Lab	Lodwar	Lodwar	

Table 1-6: Marsabit County Sub National Component 1 Projects

	MA	ARSABIT COUN	πγ	
STRUCTURE TYPE	PRO POSED STRUCTURE	Sub-County	Proposed Project Location	Estimated Beneficiaries (HHs)
Irrigation Schemes	Bori Flood bases irrigation	Moyale	Butiye Ward	100 HHs
	Biresa mega dam Water Pan	Saku	Sagante/Jaldesa	300
	Haro Goni Mega dam water pan	Moyale	Uran Ward	400
Water Pans/Earth Dams	Namarei mega dam water pan	Laisamis	Korr/ngurnitward	200
	Ambalo water Pan	Moyale	Obbu Ward	200
	Funan Jajab (Eldimtu) community Borehole	Moyale	Funan Jajab (Eldimtu)	300
	 Saray (mpagas) Community Borehole	Laisamis	Korr/ngurnit ward	250
	Bule Irres Hayu Community Borehole	North horr	Maikonai ward	200
	Garsa Borehole	Moyale	Obbu ward	200
	Watalii/Teresgai Community Shallow well	North horr	Illeret ward	300
Underground Water Structures (BoreHoles,	Olturot Community shallow wells	Laisamis	Loiyangalani ward	250
Shallow wells and Sub	Arap Trees Shallow wells	North horr	Dukana ward	300
surface dams)	Sagante shallow well	Saku	Sagante/jaldesa	200
	Ngurnit Sub surface dam	Laisamis	ward Korr/ngurnit ward	200
	Yambalo Sub surface dam	Moyale	Golbo Ward	200
	El-Hadi Sub surface dam	North horr	Dukana ward	200
	lman Charfi Sub surface dam	Saku	Sagante/jaldesa Ward	200
	Walda Commercial Pasture and Demonstration Plot	Moyale	Uran Ward	300
Commercial Pasture	Misa Commercial Pasture and Demonstration Plot	Moyale	Golbo Ward	400
Plots	Sololo Commercial Pasture and Demonstration Plot	Moyale	Sololo ward	350
	Ngororoi Commercial Pasture and Demonstration Plot	Laisamis	Laisamis Ward	400
	Walda Hay Shed	Moyale	Uran Ward	300
Hay Sheds/Fodder	Misa Hay Shed	Moyale	Golbo Ward	400
Banks	Sololo Hay Shed	Moyale	Sololo ward	350
	Ngororoi Hay Shed	Laisamis	Laisamis Ward	400
	North Horr Livestock market	North horr	North horr ward	800
Livestock Markets	Loiyangalani Livestock market	Laisamis	Loiyangalani ward	400
	Karare Livestock market	Saku	Central ward	500
Construction of Rural Access Roads (14.28KM)	Bori scheme roads (15km)	Moyale	Butiye Ward	
Veterinary/Diagnostic Laboratory	Equipping of County Vet Lab	Marsabit	Marsabit	

Table 1-7: Turkana County Sub National Component 1 Projects

		TURKANA COUI	NTY	
STRUCTURE TYPE	PROPOSED STRUCTURE	Sub-County	Proposed Project Location	Estimate d Beneficiaries (HHs)
	Komudie Village Earth Dam	Turkana West	Komudei village/Kakuma ward	300
Water	Kaemongor Village Earth Dam	Turkana North	Kaemongor village/ Nakalale Ward	400
Pans/Earth Dams	Nadunga Village Earth Dam	Turkana North	Nadunga village/ Kaeris ward	200
	Lochore Emoit Village Earth Dam	Turkana South	Lochore Emoit village/ Lokichar Ward	200
	Naikeriun/kaaleng community Borehole	Turkana North	Nakeriun Village/ KaalengKaikor	200
	Songot Community Borehole	Turkana West	Songot ward	250
	Kalobeyei Community Borehole	Turkana West	Kalobeyei ward	200
	Kotaruk/Lorengipi Borehole	Loima	Kotaruk village/Lorengipi Lokiriama ward	4000
(Bore Holes,		Turkana	Monti village /Lodwar	300
	Monti Village Community Borehole	Central	Township ward	
and Subsurface		Turkana	Nakoret village/Kerio	250
dams)	Nakoret/Kerio delta Community Borehole	Central	Delta ward	
	Kaimegur/Kangapur/Kalapata Borehole	Turkana South	Kaimegur and Kang'apur villages/Kalapata ward	300
	Elelea/Katilia Community Borehole	Turkana East	Elelea village/ Katilia ward	3000
	Lokiriam/Lorengini Commercial Pasture and Demonstration Plot	Loima	Lokiriam/Lorengini	420
Commercial	Kerio Commercial Pasture and Demonstration Plot	Turkana Central	Kerio Ward	400
Pasture Plots	Lobokat Commercial Pasture and Demonstration Plot	Turkana South	Lobokat Ward	450
	Letea Commercial Pasture and Demonstration Plot	Turkana West	Letea Ward	400
	Lokiriam/Lorengini Hay Shed	Loima	Lokiriam/Lorengini	420
Hay	Kerio Hay Shed	Turkana Central	Kerio Ward	400
Sheds/Fodder Banks	Lobokat Hay Shed	Turkana South	Lobokat Ward	450
	Letea Hay Shed	Turkana West	Letea Ward	400
	Lopii/Lokori Livestock market	Turkana East	Lopii village/ Lokori - Kochodin	800
Livestock Markets	Kaeris Livestock market	Turkana North	Kaeris Center/ Kaeris Ward	400
	Makutano/Nakalale Livestock market	Turkana North	Makutano Village/ Nakalale Ward	500
Construction of Rural Access Roads (14.28KM)	Construction of 16KM Oropoi-Nasinyono Road	Turkana West	Kalobeyei ward	
Veterinary /Diagnostic Laboratory	Equipping of County Vet Lab	Lodwar	Lodwar	

Table 1-8: Garissa County Sub National Component 1 Projects

		GARISSA	A COUNTY	
STRUCTURE TYPE	PROPOSED STRUCTURE	Sub-County	Proposed Project Location	Estimated Beneficiaries (HHs)
Irrigation Schemes	Siqley Irrigation Scheme	Balam bala	Balam bala ward	200
	Fafi Water Pan	Fafi	Fafi w ard	300
Water Pans/Earth	Madogashe I Water Pan	Lagdera	Lagdera Ward	300
Dams	Madogashe II Water Pan	Lagdera	Lagdera Ward	300
	Madogashe III Water Pan	ljara	ljara W ard	300
	Baraki com m unity Borehole	Lagdera	Baraki w ard	200
	A likune Community Borehole	Dadaab	Alikune, Abakaile ward	250
	Kulan Community Borehole	Dadaab	Kulan, Liboi w ard	200
	Elan Community Borehole	Lagdera	Elan, Maalim in ward	4000
	Hadley Community Shallow well	B alam b ala	Hadley, Saka ward	300
Underground Water Structures	Dololo Community Shallow well	G arissa Township	Dololo, Sankuri ward	250
(BoreHoles, Shallow wells and	Kamuthe Community Shallow well	Fafi	Kamuthe, Nanighi ward	300
Sub surface dams)	A balatiro Community Shallow well	ljara	Abalatiro, Masalani ward	300
	Jilango Sub surface dam	Lagdera	Jilango, Modogashe ward	300
	Togdub Sub surface dam	Lagdera	Togdub, Baraki ward	300
	Barquque Sub surface dam	Lagdera	Barquque, Modogashe ward	300
	Orahey Sub surface dam	B alam b ala	Orahey, Danyere ward	300
	Saka Commercial Pasture and	B alam b ala	Balam bala w ard	300
	Balam bala Com mercial Pasture and	B alam b ala	Balam bala w ard	300
Commercial Pasture Plots	Iftin Commercial Pasture and Demonstration Plot	G arissa Township	Township ward	300
	N anighi Commercial Pasture and	Fafi	Fafi ward	300
	Saka Hay Shed	Balam bala	Balam bala w ard	300
Hay Sheds/Fodder	· ·	Balam bala	Balam bala ward	300
Banks	Iftin Hay Shed Nanighi Hay Shed	Garissa Township Fafi	Township ward Fafi ward	300 300
	Mudhey Livestock		Balam bala ward	800
	m arket	Balam bala		
Livestock M arkets	Benane Livestock Hagadera Livestock market	Lagdera Fafi	Lagdera ward Fafi Ward	400 500
Construction of Rural Access Roads (14.28KM)	Construction of 14 KM sigley scheme Road	B alam b ala	Balam bala w ard	
Veterinary /Diagnostic Laboratory	Equipping of County Vet Lab	G arissa Township	Galbeed Ward	

1.3.2 Component 2: Supporting Agribusiness Development:

Agribusiness is a broad concept that covers input suppliers, agro-processors, traders, exporters and retailers. The objective of this component in the Project is to contribute to a range of economic and social development processes, including increased employment generation (particularly youth and women), income generation, poverty reduction and improvements in nutrition, health and overall food security. This will be achieved through focusing on the following 3 sub-components:

A. Access to advisory services, financing and markets;

The project will leverage digital technologies in contexts where applicable to contribute to improving resilience, livelihoods and food and nutrition security in the Horn of Africa. The interventions will be implemented at both national and regional levels through three main focus areas:

- (a) Policy/Enabling Environment activities include i) Develop frameworks for data standards for use of farmer data for user data anonymization and protection from discriminatory practices in cooperation with farmer cooperatives and insurance providers; ii) Commission regional studies on enabling business environment (payment structure, legal registration, mobile money platform access) and supportive policy for bundled payment services and climate indexed insurance in partnership with IGAD iii) support the development and strengthening of Digital Food Balance Sheets (iv) Standardize access to climate service data for indexed insurance services by developing open-access agreements for climate data portals for underwriting and risk profiling.
- (b) Infrastructure will include i) E-registry of pastoralists and farmers in the project areas, ii) Working with agritech, telcos, etc. to provide bundled services of extension, markets and other advisories to actors, link to markets and off-takers and connect to financiers, ii) Develop national/regional bundled service provider networks, iii) Satellite imagery data and digital farmer profiles to support climate insurance claims and provide evidence of losses and predictions to help mitigate severe flooding/drought and pests, iv) ICT-based agricultural management help farmers receive timely weather-related information and warning that enable them to protect their assets against damage, v) Remote -sensing technologies for precision farming and life-cycle assessment tools, vi) Develop smart maps of produce transport routes to determine optimal locations for cold storage and shortest driving routes to reduce crop spoilage.
- (c) Capacity Building will include; i) Onboarding and digital literacy support for farmers and pastoralists on e-registry and ii) Building an ecosystem of youth entrepreneur extension agents providing digital services to beneficiaries.

B. Supporting Development of Entrepreneurship

This subcomponent involves Capacity Development/Technical Assistance through Incubation Centres and includes the following activities; i) Identify and characterize the main potential regional commodities value chains, ii) Support to the professionalization of agro-pastoral value chain actors and development of partnerships for access to national and international markets, iii) Strengthening institutional capacities to encourage entrepreneurial approaches to improve pastoral livestock production (e.g., cooperatives development, commodity-interest groups, etc.), iv) Support to the establishment of youth SMEs including establishment and operationalization of business incubation centres. These activities could be delivered into two main areas described below.

- (a) *Enabling environment:* The enabling environment activities will focus on providing services for the capacity development of agri-preneurs including i) Provide business development services (i.e. advisory, registration etc.) for livestock and agro value chains, ii) Creating incubation centres or hubs to provide training for skills development (agronomic and business skills), iii) Accelerator programs for high impact SMEs (Specialized training modules, e.g. training of youth and women on value addition and marketing methods, training of pastoralists and agro-pastoralists on value chain development, financial literacy and development of market niches) and iv) Capacity building support for managers of agribusinesses.
- (b) Financing / Derisking for Agribusinesses, Agri SMEs Financing Facility would serve to de-risk investments into key pastoral and agro-pastoral activities through the establishment of a risk-sharing facility. It could also assist to provide credit and funding for targeted Agri businesses to strengthen their financial resilience to drought risk and deepen financial inclusion. The goal of the facility would be to de-risk and enhance financial inclusion of pastoral and agro-pastoral groups, by providing instruments such as guarantees for investment into Agribusinesses and connect them to markets. The facility would also support existing financial institutions and strengthen the capacity of micro and meso-finance operators.

C. Promoting Domestic Bio-digesters and Solar Energy.

The activities include: (i) Support for regulatory, institutional, policy arrangements at national level (ii) Elaboration of a catalogue of rural energies for agricultural transformation (iii) IEC on bio-digesters & solar energy and use of by-products (compost and effluent) (iv) Development of financing mechanisms for renewable energy sub-projects (v) Support for the establishment of a network of bio-digester manufacturers (vi) Training of the youth and women in the manufacture, application and maintenance of bio-digesters and solar energy systems (vii) Development of a system of reliable information on the baseline and future status of sustainable energy access and (viii) Support for carbon certification.

1.3.3 Component 3: Strengthening Adaptive capacity to Climate Change:

Component 3 will critically require funding and as such the Government of Kenya is seeking GCF funding to support the activities of this component. This component aims at enhancing

resilience and strengthening the adaptive capacity of agro-pastoral communities in the Greater Horn of Africa (GHoA) to climate risks and variation. This includes a particular focus on enhancing the physical and institutional infrastructure required to effectively forecast, prepare, and respond to climate change, and the suite of data analytics and climate services enabled by public providers and delivered by private sector actors where possible – that can make herders, farmers and the organizations that serve and represent them optimize their decision making and adapt their behaviour accordingly. The broader vision of this component seeks to execute on the Bank's commitment to supporting RMCs to deliver on the priority areas identified in their Nationally Determined Contributions (NDCs) and their related National Adaptation Plans (NAPs) with respect to climate risk reduction, preparedness, and efficient disaster response. This component, therefore, comprises 3 sub-components which include (i) Development and improvement of weather and climate services, (ii) Mainstreaming Climate Risk Finance and Insurance, and (iii) Operational and Institutional Capacity for Climate Adaptation and Resilience.

D. Development of Climate Services

Under this subcomponent the mission has identified needs and demands for climate services for IGAD, ICPAC and national levels, has mapped actors of the agricultural sector for climate and assessed the potential socio-economic benefits of climate services. During the preparation mission, consultations were designed to explore the following aspects: (i) Requirements of climate information (specific products, frequency and resolution) from local stakeholders and representatives of agriculture and livestock to improve their plans for risk management and adaptation, (ii) Identification of the current barriers (access, awareness, understanding, local capacities, ownership, lack of articulation and coordination) to implement local climate risk management and make better-informed decisions in the agriculture and the (iii) the perception of local stakeholders about the potential impact in their lives of improved climate services. While a general framework of activities has been identified, the consultant will continue to assess, validate and consult all target countries, the relevant national stakeholders with the project host ministry along with IGAD/ICPAC to finalize and effectively budget for both the national and regional level activities.

More broadly the key areas to be more carefully defined and assessed for the broader regional co-financed program will use the hydromet value chain as a framework to fill gaps in the delivery of climate and weather information services of the respective RCCs and the region to key socio-economic sectors. This starts with observing weather, water, climate, and forecasting through to decision-making in government and response at all levels down to the community. The activities in this component will strengthen the weather, water, and climate value chain by improving the existing production, support, and delivery systems and establishing a robust hydromet forecasting system. The subcomponent will improve the quality and reliability of climate information and facilitate the

information sharing on weather and water resources that are critical for decision-making in a changing climate. This will provide the background needed in Components 2 and 3 to ensure that the last mile is reached through designing activities that address the needs of those at most risk of climate hazards.

Through the activities of this component, the Bank will support RCCs to mobilize Green Climate Fund (GCF) and Global Environment Fund (GEF) and recently launched Systematic Observations Financing Facility (SOFF) resources to close the capacity gap on weather, climate, hydrological and related environmental services. The SOFF seeks to support resilient development and climate adaptation by strengthening observation systems to improve weather forecasts and climate services. The Bank through the CDSF will be the access-accredited entity for African Countries and support them to access funding from the facility. The presence of functional observation networks in the GHOA will contribute to the overall quality of the global system. Countries in the GHOA face different hydromet challenges, and each country has a unique institutional setting. While these differences are important, the critical elements this subcomponent will support are relevant to all countries and the region, and are summarized as per the following;

- 1. Climate and Weather Observation Networks and Infrastructure and Data Processing for Enhanced provision of HYDROMET Services. The intervention will foster the improvement of the following key areas: Observational infrastructure. Improve the weather and climate observational infrastructure and its data quality with prescribed WMO standards. Data and product management, sharing, and policies. Improve data and product sharing on a national, regional, and global level. Implement a CDMS, which is compliant with WMO standards, as the climate element of the National Statistical Database. Numerical model and forecasting tool application. Improve the use of numerical model output and forecasting aids such as remotely sensed products in product generation; use model outputs and remote sensing products for running forecast, and participate in regional weather and climate outlook programs.
- 2. Develop Appropriate HYDROMET data and model applications, products and services and Dissemination to meet the needs of RCCs and Region: The focus will be to improve the role of respective NMS in the following areas: Warning and advisory services: Improve the role of NMS in the provision of weather-related warnings and their operational relationship with disaster, food security, Agriculture and water management structures. Contribution to climate services: Improve the role of NMS in and /or contribution to a national climate framework according to the established climate services provision capacity. Contribution to hydrology: Improve NMS role in and contribution to hydrological services according to mandate and country requirements. Improve the Standard Operating Procedure (SOP) for the exchange of information between hydromet departments and common database to hold and exchange information between these departments; Product dissemination and outreach: Improve the effectiveness of the NMS in reaching all public and private sector users and stakeholders. Support Climate and Water data Rescue and Archiving including, efficient data archival and retrieval system of historical climate data for simulations, and analysis for all stakeholders e.g. Food Security, DRR, water resources, health etc.

- 3. Downscale and analyze climate change projections and weather forecasts for sector-specific applications and infrastructure development: Available climate change projections and weather forecasts are generated to Global Climate Models whose resolution is too coarse to inform regional and national policy decisions. ICPAC will be supported to downscale model outputs to appropriate scales for regional and national applications
- 4. Climate and Weather User and Stakeholder Interaction: Accommodation of public and private sector users and stakeholders in the service offering and its continuous improvement. Re-balancing the ownership and responsibility for climate services from provider-led and user-informed, to practices of co-exploration, co-design, co-development where providers and users of weather and climate services have more equal voices.
- **5.** Support IGAD member countries to develop and operationalize their National Framework for Climate Services. To improve the relevance and uptake of weather services, the World Meteorological Organization has provided guidelines on climate products and services. ICPAC will work with national meteorological centres to develop frameworks for climate services for various applications.

E. Building capacity of main stakeholders in the agro-pastoral sectors in the drought prone areas for mainstreaming and monitoring Climate Change

This subcomponent recognizes the value of well-designed index-insurance products to cost-efficiently pre-arrange finance for proactive climate risk management. Applications range from RMCs accessing insurance payments to rapidly respond in the event of a climate disaster to minimize loss to impacted investments, or financial flows from those investments, to delivering early financial relief to affected households to minimize loss of household livestock, maintain basic consumption requirements, to ensure continuity of affected enterprises. This intervention seeks to strengthen the adaptive capacity to climate change through mainstreaming of climate risk insurance and fostering the establishment of a regional index-based livestock insurance (IBLI) mechanism in the IGAD region to complement national-level development of sustainable climate insurance coverage.

This program and its components have been drawn from a comprehensive technical and operational feasibility study for a regionally supported program with national level components. The study, undertaken in the context of the Drought Index insurance for Resilience in the Sahel and Horn of Africa (DIRISHA) program, was led by the International Livestock Research Institute (ILRI) with support from the UK Foreign Commonwealth and Development Office (FCDO). Supported by IGAD and AfDB, the study engaged a range of stakeholders across relevant ministries, livestock associations, private sector players and NGOs, and included a deep dive in all 8 countries of the IGAD region.

The DIRISHA studies reviewed the opportunities for the establishment of a regional insurance mechanism, underscoring the fact that: (i) When countries pool their risk together to approach the market, they benefit from economies of scale and scope to lower their operating, reinsurance and brokerage costs; (ii) By reaching critical scale, a pooled insurance program is more likely to attract

competitive rates from private insurance and also incentives local insurance companies to develop necessary capacities and form an effective consortium with regional and global reinsurance players; (iii) the risk market infrastructure could be developed by a regional entity, which could ensure more efficient and transparent management of premiums and payouts and ensure effective standards to certify both quality products and related processes.

The process also uncovered considerable interest from IGAD governments: A major conference on climate index insurance was held in Addis Ababa, Ethiopia, in June 2019 and attended by senior government officials from the IGAD countries. Following this conference major interest was expressed by the governments in developing a regional IBLI approach.

As part of the preparation mission, a focused consultation on climate index insurance and IBLI brought together a series of government and private sector leaders involved in setting up the successful Kenya and Ethiopia programs and delivering sovereign climate insurance across the African continent. The insights generated therein and confirmed national level endorsement will be harnessed in a more comprehensive consultation during the appraisal mission to flesh out the specific investments required for the add-on regional component to be developed. These will build on the key areas of intervention identified in the DIRISHA study as per the following:

Proposed Generalized Interventions:

- 1. Design for climate index-insurance products adapted to country-specific profile. This activity will entail reviewing the different options for a regional IBLI mechanism as laid out in the DIRISHA operational feasibility study to design a product that is fit-for-purpose and is well aligned with the national priorities of the countries under the programme. The design will also look into the relevant infrastructure to be put in place including the development of PPPs for the establishment of climate and livestock index insurance (regional national) products. The design will take into account existing capacities in ICPAC to develop and monitor indicators to trigger drought payments
- 2. Establishment of a standards certification body for quality index insurance at the regional level owned by member states, which will be responsible for quality assurance and market regulation. Can also support program design; design insurance product(s); provide overarching policy guidance; manage the overall programme; facilitate regional risk pooling; administer potential donor support
- 3. Investment in data collection, validation infrastructure and standards at the regional level. Based on identified capacities at the Member States and ICPAC, this will consist of technical assistance to design the relevant institutional infrastructure at the regional level able to collect, process, and report index data on time; determine insurance payouts Design institutional framework; design capacity building and awareness-raising strategy; design M&E framework; stakeholder onboarding
- 4. Technical assistance for the strengthening and the establishment of digital services for parametric/index insurance for climate risks. Set procedures for macro IBLI targeting and registration at member state levels. For micro-level IBLI need to identify low-cost distribution systems. Need to design a regional livestock

registration database system compatible with the existing local registration system.

F. Strengthening the Operational Capacity for resilience.

This subcomponent seeks to support the development of institutional capacity to develop and implement effective Nationally Determined Contributions (NDCs) in GHoA countries and specifically those actions focused on enhancing the design and execution of commitments related to climate risk preparedness and management. This also includes efforts to develop suitable bankable projects for attracting concessionary climate finance resources. A regional approach, coupled with complementary national components are particularly suitable for this class of NDCs activities. The subcomponent comprises two principle sets of actions: i) Support for the operationalization of Nationally Determined Contributions (NDCs) in HoA countries, and ii) Support for the development and dissemination of climate risk management tools and services.

Actions for support operationalization of NDCs in GHoA countries include (i) facilitation of Regional Dialogue and Coordination for the coherence of NDC National measures (ii) Development of NDC implementation action plans building on country commitments to the implementation of the Paris Agreement (iii) Develop climate change vulnerability indices across sectors and ecosystems (iv) Feasibility studies for the identified pipeline of investments. These will promote more coordinated and strategic action on adaptation to achieve the desired outcomes leveraging regional co-benefits. With countries currently finalizing and submitting their enhanced NDCs for the next 5 years in line with the Paris Agreement, these planned activities will lay the foundation for the implementation of even more ambitious targets at the national and regional level.

Actions for supporting the development and dissemination of climate risk management tools and services include;

- (i) Strengthening institution capacities, increase data sharing and collaboration in delivering climate services
- (ii) Development of mapping of resilience actions in GHA
- (iii) Support for the establishment of regional climate fund for the GHA region and building capacity of ICPAC regarding accreditation to Green Climate Fund, mobilizing and management of climate change funds iv) Mainstreaming disaster/climate risk management into regional plans, policies and strategies v) Support regional capacity to anticipate and timely response to disaster risks (vi) Strengthen IGAD food crisis situation report through supporting the Food Security and Nutrition Working Group (FSNWG).
- (iv) Support the development and dissemination of tools and approaches that will guide regional bodies and HoA countries in implementing resilience action and mobilizing required resources is necessary to enhance their adaptive capacity.

Proposed Generalized Interventions:

1. Support operationalization of Nationally Determined Contributions in GHoA countries:

- Strengthening national climate monitoring and reporting systems and tools for CSA
 activities (sensitization, validation of tool, training on application of the tool, SOP on
 use of the tool, building capacity of institutions to establish GHG emission calculation
 system for agricultural sector and identification of high potential areas together with
 research institutions)
- Training and capacity building of county and national government officials to cascade early warning systems and forecasting information to communities for agro-pastoral livelihood security and farmer food security
- Support sensitization and training of the county and national sector teams (global and national policies, planning, resource mobilization and implementation of climate change actions in agriculture, development of county agriculture strategies and updating of CSA Strategy and framework)
- Feasibility studies for identified investments that enhance resilience of rural populations and reduce vulnerability to drought.

2. Support for development and dissemination of climate risk management tools:

- Strengthening institution capacities, increase data sharing and collaboration, in delivering climate services.
- Support for the establishment of regional climate fund for the GHA region. (IGAD) and building capacity of ICPAC regarding accreditation to Green Climate Fund, mobilizing and management of climate change funds
- Mainstream disaster/climate risk management into regional plans, policies and strategies
- Support to operationalization the East Africa Multi Hazards Watch System to serve as a regional platform for alerting against climate-related risks.
- Support the IDDRSI Regional Platform Coordination Unit in the monitoring of DRSLP II implementation at regional, national and sub-national levels
- Support regional capacity to anticipate and timely respond to disaster risks
- Strengthen IGAD Regional resilience report and resilience measurement
- Support the operationalization of IGAD Food Security, Nutrition and Resilience Analysis Hub (IFRAH)

1.3.4 Component 4: Program Coordination and Management:

This component will ensure the effective and efficient regional management of the program by IGAD. It also includes the management of national components at national and sub-national levels to achieve the expected outcomes of the program. It includes the implementation of regional and national coordination of the Program, technical and financial management, supervision of activities, monitoring and evaluation and annual audits.

1.4 Project Area

The Project is expected to benefit all the farmers and pastoralist in the impacted and selected counties in Kenya. The areas under intervention are situated in the seven counties of arid and semi-arid area of Kenya namely, Baringo, Marsabit, Samburu, Turkana, West Pokot, Isiolo and Garissa. The target study areas are specific wards in defined sub-counties that form the focus of the project

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study and intervention. These are namely; Barwesa ward in Baringo North Sub-county of Baringo County; Central and Jeldesa wards of Saku sub-county, Dukana, North Horr and Maikona wards of North Horr sub-county and Korr ward of Laisamis sub-county all in Marsabit county; Lorroki, Suguta marmar, Losuk and Poro wards in Samburu central sub-county of Samburu County; Lokichar, Katilu and Kaputir wards in Turkana South sub-county and Loima and Turkwel wards in Loima sub-county of Turkana county; Riwo and Mnagei wards in Pokot West sub-county, and Chepareria and Batei wards in Pokot South sub-county of West Pokot County;, Garba Tulla and Kinna wards in Garba Tulla sub-county and Burat and Oldonyiro wards in Isiolo sub-county of Isiolo County.

1.4.1 Project Beneficiaries

The project beneficiaries will majorly be rural households, in this case, pastoralists and agro pastoralists. The project is also targeting women and youth and will have specialized training modules for them particularly on value addition and marketing methods. It will aim to address the challenges faced by vulnerable groups such as indigenous people. The nature of the proposed agricultural and pastoral infrastructure investments to support agriculture value chains will vary by County depending on socio-economic characteristics of each county and established needs.

1.4.2 Project ESMF Implementation Cost

The estimated cost of implementing the project ESMF is estimated at KES 16M. This covers sensitization and awareness creation, stakeholder training and M&E.

1.4.3 Individual Environmental and Social Management Systems

As it is stated in the full proposal, AfDB intends to identify lines of credit through the Public-Private Partnership arrangements to create credit lines that will enhances funding availability for those whose among the major challenges are lack of financial resources support their activities. In the detailed design of individual projects, the Bank will ensure that each of the selected financial intermediaries have operational Environmental and Social Management Systems (ESMSs) whose standards meet the requirements of the Integrated Safeguards System (ISS). Where AfDB will feel that the identified FI does not meet the requirements of the ISS, efforts will be made to ensure that the capacity of such financial intermediary is built to the extent possible to meet the requirements.

2. METHODOLOGY, APPROACH AND PUBLIC CONSULTATION

2.1 Detailed & In-depth Literature Review

A review of the existing baseline information and literature on the 7 project counties helped deepen the consultant's understanding of the Project. A desk review of the Kenyan legal framework and policies was conducted to identify relevant legislations and policy documents that should be considered during project implementation. Documents reviewed are listed as follows:

African Development Bank Related Documents

- IGAD Kenya SESA Draft Report
- IGAD Kenya ESMP Report , Aug 15, 2021
- AfDB ISS Policy Statement
- Kenya Draft 2 Program for Food and Security-HOA Feasibility Study Report.

Kenyan Legislative Documents

Policy Framework

- Wildlife Policy, 2007
- Community Land Act No. 27 of 2016
- National Land Use Policy (NLUP), 2012
- National Occupational Safety and Health Policy, 2012
- National Water Policy, 2012
- National Environmental Policy, 2013
- National Wetland and Conservation Management Policy (2013)
- National Food and Nutrition Security Policy (NFSP)
- National Social Protection Policy

Legal Framework

- Constitution of Kenya (2010)
- National Council for Disability Act, 2003
- Environmental Management and Coordinating (Water Quality) Regulation 2006
- Environmental Management and Co-ordination (Waste Management) Regulations, 2006
- Labor Relations Act, 2007
- Occupational Safety and Health Act, 2007
- Water Resources Management Rules, 2007
- Work Injury Benefits Act, 2007
- Environmental Management and Coordination Act (Noise and Excessive Vibrations Pollution Control) Regulations, 2009
- County Government Act, 2012
- Land Act, 2012
- Pest Control Products Act, 2012
- Seeds and Plant Varieties Act, 2012
- Agriculture Fisheries and Food Authority Act, 2013
- Wildlife Conservation and Management Act, 2013
- Community Land Act (No. 34), 2016
- Climate Change Act, 2016
- Water Act (No 43), 2016
- Public participation Act, 2018
- Employment Act, 2019
- Environmental (Impact Assessment and Auditing) (Amended) Regulations, 2019

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- Public Health Act (Cap 242)
- Physical Planning Act, (Cap 286)
- Lakes and Rivers Act (Cap 409)

Relevant Institutions-Environmental

- Environment and Land Court
- National Environment Management Authority

Institutional Responsibilities with respect to Social Issues

- Commission on Administrative Justice (CAJ) Office of the Ombudsman
- Kenya National Commission on Human Rights
- National Council for Persons with Disabilities (NCPWD)
- National Gender Equality Commission
- State Department for Social Protection

Multilateral Environmental Agreements and Guidelines

- United Nations Framework Convention on Climate Change,
- International Convention on Biological Diversity,
- World Heritage Convention,
- Ramsar Convention,
- Agreement of the Conservation of Eurasian Migratory Water Birds
- Convention on International Trade in Endangered Species of Wildlife Fauna and Flora

2.2 Stakeholder Consultations and Discussions

The stakeholder consultation meeting was held on 24th March 2021 and the following stakeholders were consulted among others:

- NPCU support staff
- CPIT staff for respective 7 counties,
- Kenya Agriculture and Livestock Research Organization (KALRO);

Details of the stakeholder consultations and discussions are presented in Section 11.0 and Annex VII.

2.3 Preparation of ESMF

The preparation of the ESMF included the following stages:

- Desktop and literature review of relevant project documents;
- Collation of baseline data on the environmental and social conditions of the country in general:
- Identification of positive and negative environmental and social impacts of proposed project;
- Identification of environmental and social mitigation measures;
- Preparation of screening procedures to be adopted for community proposals;
- Formulation of environmental and social mitigation and monitoring plan (ESMMP).

3. POLICY, LEGAL AND REGULATORY FRAMEWORK

This section reviews the relevant institutional, legal and policy framework in the host country Kenya which has a direct bearing on the DRSLP II. It also outlines the African Development Bank ISS and applicable operational safeguards (OS) to the project including a comparative analysis of gaps existing between the Bank's OS and host country regulations and suggestions for bridging the gaps. The framework also highlights sections of international laws and conventions that bear relevance to the implementation of this project. Implementation of the DRSLP II shall require that effective institutional structures and management mechanisms are established at national, county and local community levels. The project should build on existing structures and mechanisms as set out under phase 1 of this project. Overall project coordination and monitoring shall be managed by NPCU at the national level at the Ministry of Agriculture Livestock Fisheries and Irrigation (MOALF & C). MOALF & C has experience of implementing African Development Bank financed Projects. NPCU has Environmental, Social and GBV staff to support in managing project risks. The following are relevant legal and policy instruments, and institutional arrangements that governs the implementation of this DRSLP II:

3.1 Policy Framework

3.1.1 National Environmental Policy, 2013

The policy promotes the use of environmental assessment tools, such as Environmental and Social Impact Assessment and Environmental Audits that are necessary to ensure long-term environmental quality and resource productivity for projects with the potential to cause negative impacts to the environment. The Policy also requires all sub-projects with the potential for significant environmental and social impacts undergo ESIA.

3.1.2 National Occupational Safety and Health Policy, 2012

The main objective of this policy is to establish national occupational safety and health systems and programmes geared towards the improvement of the work environment. The Policy seeks to reduce the number of work-related accidents and diseases, and to provide compensation and rehabilitation to those who may be injured at work or contract occupational diseases.

The specific objectives of this policy among others are:

- To guide the development of laws, regulations and any other instruments on occupational safety and health;
- To recommend establishment and strengthening of responsible and accountable institutions for management of occupational safety and health;
- To recommend an enforcement and compliance mechanisms for occupational safety and health laws and regulations;
- To create mechanisms for cooperation between employers, workers and their representatives at workplaces in the promotion of occupational safety and health;
- To strengthen capacities of state and non-state actors in occupational safety and health; and
- To create a resource mobilization mechanism for the implementation of this Policy.

Among other safety issues, the policy provides the framework for mandatory use of appropriate personal protective gear, protection of workers against of occupational hazards, and workplace provisions for First Aid and emergency medical evacuation.

3.1.3 National Land Use Policy (NLUP) 2012

The National Land Use Policy guides Kenya towards an environmentally and socially responsible use of land and land-based resources for the socio-economic transformation of the people of Kenya. Its mission is to promote the best land use practices for optimal utilization of the land resource in a productive, efficient, equitable and sustainable manner. The principle objective of the NLUP is to provide legal, administrative, institutional and technological framework for optimal utilization and productivity of land and land related resources in a sustainable and desirable manner at National, County and Sub-County and other local levels. Project beneficiaries should utilize farms and land resources in a sustainable manner in accordance with Chapter Five of the Constitution of Kenya. The Constitution, under Article 60, requires that land is used in a manner that is equitable, efficient, productive and sustainable. In addition, Articles 66, 68 and 69 provide for regulation of land uses, sustainable exploitation, utilization, management and conservation of the environment and natural resources.

3.1.4 National Water Policy 2012

The National Water Policy of Kenya was developed in 1999 as the National Policy on Water Resources Management and Development (NPWRMD, 1999), and was subsequently amended in 2012. The policy aims to achieve sustainable development and management of the water sector by providing a framework in which the desired targets/goals are set. It outlines the necessary measures to guide the entire range of actions and synchronize all water-related activities and sectors.

The NPWRMD sets the following specific policy objectives covering the four basic areas of water resources management, water supply and sewerage development, institutional arrangement and financing of the water sector:

- a) Preserve, conserve and protect all available water resources and allocate it in a sustainable, rational and economical way;
- b) Supply of water of good quality and in sufficient quantities to meet the various water needs including poverty alleviation, while ensuring safe disposal of wastewater and environmental protection;
- c) Establish an efficient and effective institutional framework to achieve a systematic development and management of water sector; and
- d) Develop a sound and sustainable financing system for effective water resources management, water supply and sanitation development.

The benefiting communities would be required to implement environment conservation measures to limit pollution of the open water source and or underground water resources.

3.1.5 National Food and Nutrition Security Policy (NFSP), 2017

The policy aims to meet the nutritional needs of all Kenyans through provision of a sufficient supply of food and safe water. The broad objectives of the NFSP are:

- a. To achieve adequate nutrition for optimum health of all Kenyans;
- b. To increase the quantity and quality of food available, accessible and affordable to all Kenyans at all times; and
- c. To protect vulnerable populations using innovative and cost-effective safety nets linked to long-term development.

After restocking of livestock and alleviating the locust infestation, it is anticipated that pastoralist and or farmers' productivity will increase, and in turn help the government achieve its target of increasing the quality and quantity of food available to these groups.

3.1.6 National Wildlife Conservation and Management Policy, 2012

The goal of this Policy is to provide a framework for conserving, in perpetuity, Kenya's rich diversity of species, habitats and ecosystems for the wellbeing of its people and the global community. The objectives and priorities are to:

- Conserve Kenya's wildlife resources as a national heritage;
- Provide legal and institutional framework for wildlife conservation and management throughout the country;
- Conserve and maintain viable and representative wildlife populations in Kenya;
- Develop protocols methodologies and tools for effective assessment and monitoring of wildlife conservation and management throughout the country;
- Promote partnerships, incentives and benefit sharing to enhance wildlife conservation and management; and
- Promote positive attitudes towards wildlife and wildlife conservation and management.

Appropriate mitigation measures shall be implemented to ensure there is no encroachment on protected areas or illegal hunting of wildlife.

3.1.7 National Wetland and Conservation Management Policy, 2013

The development of this Policy is in cognizant of the importance of wetlands at the national level, and of Kenya's obligation to the Ramsar Convention. The policy takes into consideration the broader national environmental frameworks, particularly the Environment Management and Coordination Cap 387, the country's premier framework environmental law, the Water Act 2016, and the Forest Policy 2007. In accordance with principles established within this policy, appropriate mitigation measures shall be implemented to ensure there is no encroachment on protected areas or illegal hunting of wildlife.

3.1.8 National Social Protection Policy, 2011

The Kenya National Social Protection Policy is a newly-adopted policy (as Sessional Paper Number 2 of 2014). It has the goal of ensuring that all Kenyans attain social and economic development as provided in Article 43 of the Constitution. The policy provides the framework for social assistance, social security and health insurance. The Policy document acknowledges poverty as a hindrance to social development, and observes that subsistence economies in areas with declining soil productivity and large households are likely to compete for various land uses. Social protection policy issues include safety nets and consumption transfers to sustain livelihoods and build human capital, and protection of assets and their rehabilitation to re-establish livelihoods. DRSLP II is one of the projects that incorporates an element of social protection through modernization of agriculture and promoting a shift from subsistence farming to commercialized production and creation of livelihood resilience.

3.1.9 The National Livestock Policy, 2019

The Policy is consistent with current government strategies including the Vision 2030 and its Medium Term Plans (MTP's), the Big Four Agenda and the sector wide agricultural sector development strategies that have been developed to enable the achievement of national development objectives as well as the Constitution of Kenya, 2010. This policy addresses the challenges in the livestock sub-sector in the context of livestock breeding, nutrition and feeding, disease control, value addition and marketing, and research and extension. This Policy recognizes the potential of the ASALs in livestock production and proposes options for the economic exploitation of these areas. The Policy takes cognizance of the contribution of the livestock value chain including non-conventional livestock species to the country's Gross Domestic Product. The project sub-component on rehabilitating crop and Pastoral Livelihoods should adhere to the policy requirements especially in the restocking of animals, animal nutrition and development of pasture and introduction of crop varieties.

3.2 Legal Framework

Provisions of national statutes and regulations establish the legal duty and social responsibility of proponents to ensure that public health and safety and the state of natural resources are not compromised by project activities. The key national laws that have a direct relevance to the proposed project are discussed as follows:

3.2.1 Constitution of Kenya, 2010

The Constitution of Kenya is the supreme law of the Republic of Kenya that binds all persons and all State organs at all levels of government. The Constitution was promulgated on 27 September 2010 into Law. The Constitution of Kenya 2010 provides the broad framework regulating all existence and development aspects of interest to the people of Kenya, and along which all national and sectorial legislative documents are drawn. In relation to environment, Article 42 of Chapter 4, the Bill of Rights, confers to every person the right to a clean and healthy environment, which includes the right to have the environment protected for the benefit of present and future generations through legislative measures, particularly those contemplated in Article 69, and to have obligations relating to the environment fulfilled under Article 70.

Chapter 5 of the Constitution provides the main pillars upon which the 77 environmental statutes are based. Part 1 of the Chapter dwells on land, outlining the principles informing land policy, land classification as well as land use and property. The provisions of this Part is important as some of the land to be acquired for the project is private land. Part 2 of the Chapter focuses on the environment and natural resources. It provides for a clear outline of the state's obligation with respect to the environment, stipulating that the State shall:

- a. Ensure sustainable exploitation, utilization, management and conservation of the environment and natural resources, and ensure the equitable sharing of the accruing benefits;
- b. Work to achieve and maintain a tree cover of at least ten percent of the land area of Kenya;
- c. Protect and enhance intellectual property in, and indigenous knowledge of, biodiversity and the genetic resources of the communities;
- d. Encourage public participation in the management, protection and conservation of the environment;
- e. Protect genetic resources and biological diversity;
- f. Establish systems on environmental impact assessment, environmental audit and monitoring of the environment;
- g. Eliminate processes and activities that are likely to endanger the environment; and
- h. Utilize the environment and natural resources for the benefit of the people of Kenya.

During implementation of the project, beneficiaries and implementing agencies should ensure the conservation of land while adhering to the above provisions through adherence to the Environmental Management Plan for the CDD sub-project.

3.2.2 Environmental Management and Coordination Act (EMCA), 1999 (Amended 2015) and further legal notices Nos 30 and 31 of April 30, 2019

The Environmental Management and Co-ordination Act (EMCA) Cap 487 is an Act of parliament to provide for the establishment of an appropriate legal and institutional framework for the management of the environment and for related matters.

The main objective of the Act is to:

- Provide guidelines for the establishment of an appropriate legal and institutional framework for the management of environment in Kenya;
- Provide a framework legislation for over 77 statutes in Kenya that contain environmental provisions;
- Provide guidelines for environmental impact assessment, environmental audit and monitoring, environmental quality standards and environmental protection orders.

The Act empowers the National Environment Management Authority (NEMA) to exercise general supervision and co-ordination over all matters relating to the environment, and to be the principal instrument of government in the implementation of all policies related to the environment.

The Second Schedule to the Act specifies the projects for which an EIA or environmental audit must be carried out. According to the Act, Section 58, all projects listed in the Second Schedule of the Act must submit a study report to NEMA. EMCA and the other national laws that govern environmental, health and safety issues, in relation to agricultural and civil activities, are discussed briefly in the ensuing sections. Wherever any of these laws contradict each other, this Act shall prevail.

3.2.3 Environmental Management and Coordination Act (Noise and Excessive Vibrations Pollution Control) Regulations, 2009

These regulations prohibit making or causing any loud, unreasonable, unnecessary or unusual noise which annoys, disturbs, injures or endangers the comfort, repose, health or safety of others and the environment. It also prohibits the Contractor from causing the emission of vibrations which annoy, disturb, injure or endanger the comfort, repose, health or safety of others and the environment or vibrations which exceed 0.5 centimeters per second beyond any source property boundary or 30 meters from any moving source. Under the regulations, the Contractor for the water pans, grain and hay storage facilities is required to undertake daily monitoring of noise levels during construction period to ensure compliance with national occupational health and safety guidelines or the African Development Bank General EHS guideline limits, whichever is more stringent. As well as the AfDB Operational safeguards note: COVID-19 considerations.

3.2.4 Environmental Management and Coordinating (Water Quality) Regulation 2006

The Regulations provides for sustainable management of water resources including prevention of water pollution and protection of water sources (lakes, rivers, streams,' springs, wells and other water sources). It is an offence, under Regulation No.4 (2), for any person to throw or cause to flow into or near a water resource any liquid, solid or gaseous substance or deposit any such substance in or near

it, as to cause pollution. Additionally, Regulation No. 11 makes it an offence for any person to discharge or apply any poison, toxic, noxious or obstructing matter, radioactive waste or other pollutants or permit the dumping or discharge of such matter into the aquatic environment unless such discharge, poison, toxic, noxious or obstructing matter, radioactive waste or pollutant complies with the standards for effluent discharge into the environment. Regulation No. 14 (1) requires every licensed person generating and discharging effluent into the environment to carry out daily effluent discharge quality and quantity monitoring and to submit quarterly records of such monitoring to the Authority or its designated representatives.

The regulations require that project beneficiaries use environmental conservation options in catchment areas to prevent the migration of surface run-off (that might be contaminated by agrochemicals) from crop fields to open water.

3.2.5 Environmental Management and Co-ordination (Waste Management) Regulations, 2006

The regulations provide detailed requirements for the management (handling, storage, transportation, treatment and disposal) of various waste streams including:

- domestic waste,
- construction and demolition waste,
- hazardous and toxic waste, and
- pesticides and toxic substances

Regulation No.4 (1) makes it an offence for any person to dispose of any waste on a public highway, street, road, recreational area or in any public place except in a designated waste receptacle. Regulation 5 (1) provides categories of cleaner production methods that should be adopted by waste generators in order to minimize the amount of waste generated. Potential waste from project activities includes packaging materials for agrochemicals (which may be hazardous and farmers'/pastoralist), and construction waste resulting from the construction of the water pans, grain and hay storage facilities, etc. Farmers would be required to follow the advice of extension workers trained under DRSLP II.

3.2.6 Environmental (Impact Assessment and Auditing) (Amended) Regulations, 2019

Environmental Impact Assessment under the act is guided by the Environmental (Impact Assessment and Auditing) (amendment) Regulations, 2019, which is given under legal notice no. 32. The regulations stipulate the ways in which environment impact assessment and audits should be conducted. The project is subject to the second schedule of EMCA, 1999 section 58 (1), (4) that require an Environmental Impact study. As stipulated by the legal notice No. 32, 2019, Section 7 (1) Every proponent undertaking a project specified in the second schedule of the Act as being low risk project, shall submit to the Authority a summary project report of the likely environment effects of the project or Section 7(3) (a) Where the Authority considers that the proposed project may have a significant adverse environmental impact, it shall recommend that the proponent should prepare and submit a comprehensive project report or Section 7(3) (b) where the Authority consider that the proposed project is not likely to have any significant adverse environmental impact, it shall exempt the proponent from submitting a comprehensive project report and issues the proponent with the approval to proceed with the project (Error! Reference source not found.)

a) Regulation 24 - Annual Environmental Audit

Self-auditing after presentation of an EIA study report shall be undertaken by the licensee to ensure the implementation of environmental management plan is audited on regular basis, an audit report submitted to NEMA annually and ensuring that the criteria to audit is based on environmental management plan developed during the EIA process or after the initial audit.

b) Regulation 40 - Monitoring changes after project implementation

Monitoring by NEMA and Lead Agencies shall be undertaken to identify and evaluate possible changes in the environment and their possible impacts on pastoralists and farmers in the short and long term. The monitoring exercise shall identify measurable parameters and indicators of change that may occur through the life span of the project.

3.2.7 Agriculture Fisheries and Food Authority Act, 2013

Agriculture, Fisheries and Food Authority Act (No.13, 2013) is an Act of Parliament to provide for the consolidation of the laws on the regulation and promotion of agriculture generally, and for the establishment of Agriculture, Fisheries and Food Authority. The Act tends to protect agriculture and fisheries excluding livestock for the purpose of national food security.

The Act provides for the following activities:

- Administration of crops and fisheries in accordance with provisions of this Act.
- Promotion of best practices and regulate, the production, processing and marketing of agricultural and aquatic products
- Collection and collation of data and maintenance of a database on agricultural and aquatic products.
- Determining research priorities in agriculture and aquaculture

Organized groups (farmers, agro-pastoralists and pastoralists) should adhere to sector-specific requirements during production, processing and marketing to ensure the quality of their products.

3.2.8 Livestock Act, 2020

AN ACT of Parliament to provide for the promotion, development, regulation and capacity building of the livestock sector; the establishment of livestock agencies and for connected purposes. The objective of this Act is to —

- a. consolidate the laws relating to livestock and livestock products;
- b. harmonize and strengthen the laws relating to livestock development;
- c. enhance the promotion and development of livestock industry;
- d. provide for coordinated development of the livestock sector to achieve the realization of the national food and nutrition security, and food safety;
- e. provide for the establishment and coordination of the public livestock agencies;
- f. facilitate regulation of livestock industry;
- g. enhance research for livestock production and development; and
- h. facilitate the review, development and strengthening of the livestock strategies and policies relating to livestock development.

The Act further provides the avenue for the intergovernmental forum where by the Cabinet Secretary in Consultation with the County Government authorities responsible for livestock shall constitute a regular forum to monitor the formulation, implementation, and review of livestock policies and laws. The restocking of livestock for the pastoralists affected by the locust menace shall abide to the provision of the act to enhance the promotion and development of livestock industry in a coordinated manner between the two levels of government.

3.2.9 Seeds and Plant Varieties Act, 2012

An Act of Parliament to confer power to regulate transactions in seeds, including provisions for: testing and certification of seeds; establishment of an index of names of plant varieties; empowering the imposition of restriction on the introduction of new varieties; control of the importation of seeds; authorizing measures to prevent injurious cross-pollination; providing for the grant of proprietary rights to persons breeding or discovering new varieties; establishing a Tribunal to hear appeals and other proceedings; and connected purposes. Pastoralists and farmers should access the seed varieties from KEPHIS approved / certified seed dealers with technical advice from extension officers and CPCU staff.

3.2.10 Water Act (No 43), 2016

The Water Act 2016 provides for the regulation, management and development of water resources, water and sewerage services, and for other connected purposes. Water resources in Kenya are owned by the Government, subject to any right of the user, legally acquired. The control and right to use water is exercised by the Minister administering the Act, and such use can only be acquired under the provisions of the Act. The Minister is also vested with the duty to promote investigations, conserve and properly use water throughout the country. The following are regulations supported by the Act that have relevance to the DRSLP II, specifically construction of water pans for animal watering points that may require acquisition of water abstraction permits.

3.2.11 Water Resources Management Rules, 2007

These Rules are described in Legal Notice Number 171 of the Kenya Gazette Supplementary Number 52 of 2007. They apply to all water resources and water bodies in Kenya, including all lakes, water courses, streams and rivers, whether perennial or seasonal, aquifers, and shall include coastal channels leading to territorial waters. The Water Resources Management Rules empower Water Resources Authority (WMA) to impose management controls on land use falling under riparian land.

3.2.12 Wildlife Conservation and Management Act, 2013

The Wildlife (Conservation and Management) Act, 2013, covers matters relating to wildlife in Kenya including protected areas, activities within protected areas, control of hunting, import and export of wildlife, enforcement and administrative functions of wildlife authorities. The provisions of this Act with respect to conservation, protection and management of the environment shall be in conformity with the provisions of the Environmental Management and Coordination Act. The Act prohibits any activity which is likely to have adverse effects on the environment, including the seepage of toxic waste into streams, rivers, lakes and wetlands from the immediate communities around a protected area.

Project activities do not pose any threat to wildlife resources. However, the project has incorporated measures to ensure the beneficiary communities avoid prohibited practices that may harm wildlife or wildlife resources.

3.2.13 Public Health Act (Cap 242), 2012

The Public Health Act provides for: the protection of human health through prevention and guarding against introduction of infectious diseases into Kenya from outside; the promotion of public health;

the prevention, limitation or suppression of infectious, communicable or preventable diseases within Kenya; advising and directing local authorities in regard to matters affecting the public health to promote or carry out research; and conducting investigations in connection with the prevention or treatment of human diseases. This Act provides the impetus for a healthy environment, and supports regulations related to waste management, pollution and human health. By providing for guidelines on water quality, this Act provides a useful tool for regulating the activities of groups (farmers and pastoralist belonging to Income Generating Activities' groupsIncome Generating Activities (IGA) groups) or individuals with potential to pollute the water resource base.

3.2.14 Physical Planning Act (Cap 286)

This Act provides for the preparation and implementation of physical development plans, and for connected purposes. It establishes the responsibility for the physical planning at various levels of Government in order to remove uncertainty regarding the responsibility for regional planning. A key provision of the Act is the requirement for Environmental Impact Assessment (EIA). It provides for a hierarchy of plans in which guidelines are established for future physical development of areas referred to in a specific plan. The intention is that the three-tier order plans; the national development plan; regional development plan; and the local physical development plan should concentrate on broad policy issues. The Act calls for public participation in the preparation of plans and requires that in preparation of plans proper consideration be given to: the potential socio-economic development needs of the population and the existing planning and future needs.

3.2.15 Land Act, 2012

The Act explicitly declares the following forms of land tenure.

- (a) freehold;
- (b) leasehold;
- (c) such forms of partial interest as may be defined under this Act and other law, including but not limited to easements; and
- (d) Customary land rights, where consistent with the Constitution.

The Act further emphasizes the right of individual by stipulating that there shall be equal recognition and enforcement of land rights arising under all tenure systems and non-discrimination in ownership of, and access to land under all tenure systems. The rights for the ownership of land by the project beneficiaries (pastoralist and farmers) shall not be compromised during project implementation.

3.2.16 Community Land Act (No. 34), 2016

The Community Land Act gives effect to Article 63 (5) of the Constitution to provide for: the recognition, protection and registration of community land rights; for management and administration of community land; and for the role of county governments in relation to unregistered community land, and connected purposes. Arid and semi-arid areas are characterized by communal ownership of land. This could be a common trend in the selected 7 counties. As such, a registered community (beneficiary community) may, by a resolution of the majority members of that community in a general meeting, reserve a portion of the community land to be distributed to benefiting pastoralists and farmers for rearing restored livestock and crop farming or any other purposes as may be determined by the community, respective county government or national government for the promotion or upgrading of public interest. County governments shall hold in trust all unregistered community land on behalf of the communities for which it is held. Unregistered groups shall be required to register in line with PIM and other related project tools including ESMF, IPMP, WMP, RAP, etc., upon registration of any unregistered community land in accordance with the Act, the respective registered community shall, assume the management and administrative functions provided by the Act and the trustee role of the respective county government in relation to the land shall cease. In ASAL, greater land masses are owned communally, the project has embraced the existing guidelines in line with the allocation of community land for the project purposes. This shall be done through the voluntary land donation for the project use amongst the beneficiaries in line with Part VI section 27(i) A registered community may upon application and with approval of the members of the registered community, allocate part of its registered community land to a member or a group of members of the community for exclusive use and occupation for such period as the registered community shall determine.

3.2.17 Lakes and Rivers Act (Cap 409)

This Act provides for protection of rivers, lakes and associated flora and fauna. The provisions of this Act may be applied to the project if the activities: occur within the vicinity of river banks; involve the use of agrochemicals; or create a risk of soil erosion.

3.2.18 Climate Change Act, 2016

The mandate for this Act, gazetted in June 2016, resides with the Ministry of Environment and Natural Resources. The Act aims at creating a regulatory framework for enhanced Climate Action responses measures, and to provide a mechanism for low carbon climate resilient development. The Climate Change Act has five sections namely i) Climate change policy coordination and oversight, which establishes the National Climate Change Council to oversight all Climate change matters in Kenya ii) responses measures and actions, articulating specific Climate actions to be undertaken, such as ensuring mainstreaming Climate change matters into policies, plans and programmes iii) Climate Change duties and responsibilities, that assign specific duties to institutions to follow with respect to Climate Change, for example NEMA is given specific roles of monitoring Compliance with the Act in the area of greenhouse gas emission; (iv) and Public participation, and financial provisions and miscellaneous. The project should implement climate smart agriculture to limit emissions from agriculture and livestock practices that are a significant contributor to global GHG emissions.

3.2.19 Pest Control Products Act, 2012

This Act (Cap. 346, 2012) requires that all chemicals used in any agricultural undertaking are registered by the Pest Control Products Board (PCPB). All pest control products sold in Kenya must bear a label showing a PCPB registration number. Under this Act, there are several pesticides whose use is banned in Kenya. The Act stipulates further that training in the use of pesticides must be carried out by PCPB accredited institutions and persons. All pesticide storage and handling arrangements must be inspected and licensed under the Act. In accordance with these requirements, the project should carry out training and sensitization of all beneficiaries in the use of permitted agricultural biopesticides.

3.2.20 Occupational Safety and Health Act, 2007

This is an Act of Parliament to provide for the safety, health and welfare of all workers and all persons lawfully present at workplaces; and the establishment of the Directorate of Occupational Safety and

Health Services and its purposes. It applies to all workplaces where any person is at work, whether temporarily or permanently. During the construction / civil works contractor shall adhere to the requirements of this Act. Pastoralist and farmers should be oriented in safe handling, application and disposal of agrochemical (biopesticides and acaracide) to mitigate the release of wastes from packaging materials and inhalation or ingestion of poisonous chemicals. Additionally, workers engaged in civil works should receive training in appropriate health and safety protocols including daily toolbox talks at the start of every work day. Appropriate PPEs shall be provided to all workers involved in civil works.

3.2.21 County Government Act, 2012

This Act provides for the election, functioning, control of, tasks and powers, etc. of county governments as provided for under Article 176 of the Constitution. It also provides for a wide variety of matters relating to public administration at local level such as civic participation, access to information, public communication and the protection of minorities. The Act also stipulates that the County Government is responsible for functions stipulated in Article 186 and assigned in the Fourth Schedule of the Constitution. These include control of air pollution, noise pollution, other public nuisances and outdoor advertising. The County PCU, as well as County Environment, Livestock and Agriculture Department (Agricultural Officer, Environment Officer, Livestock officer, water resource authority (WRA), and Forest Officer) among others are responsible of guiding the community beneficiaries to guarantee proper implementation of the project including but not limited to: pollution control, biodiversity conservation (planting of woodlots especially indigenous trees, Napier grass), among others.

3.2.22 Public Participation Act, 2018

The Public Participation Act: provides a general framework for effective public participation; and gives effect to the constitutional principles of democracy and participation of the people under Articles 1(2), 10(2), 35, 69(1)(d), 118, 174(c) and (d), 184(1)(c), 196,201(a) and 232(1)(d) of the Constitution. According the Act, the conduct of public participation shall be guided Guiding by the following principles -

- a. Principles. that the public, communities and organisations to be affected by a decision shall have a right to be consulted and involved in the decision-making process;
- b. provision of effective mechanisms for the involvement of the public, communities and organizations that would be affected by or be interested in a decision; participants' equitable access to the information they need to participate in a meaningful manner;
- c. that public views shall be taken into consideration in decision making; development of appropriate feedback mechanisms; and
- d. Promotion of sustainable decisions recognising the needs and interests of all participants, including decision makers.

The beneficiaries and local leaders shall be involved through a continuous consultation process throughout the project implementation.

3.2.23 Employment Act, 2019

The Act defines the fundamental rights of employees; provides basic conditions of employment of employees; regulates employment of children; and provides for matters connected with the foregoing. The Act includes provisions related to: prohibition against forced and or child Labor, discrimination in employment, sexual harassment, signed contract for Laborers, employees' rights, duties', wages and salaries due and protection of children. The project may develop or use a section

under this ESMF that discusses Labor Management Procedure which establishes prohibitions aligned with the above provisions.

3.2.24 Labor Relations Act, 2007

The Labor Relations Act consolidates the law relating to trade unions and trade disputes; provides for the registration, regulation, management and democratisation of trade unions and employers organisations or federations; and promotes sound Labor relations through the protection and promotion of freedom of association, the encouragement of effective collective bargaining and promotion of orderly and expeditious dispute settlement, conducive to social justice and economic development. This Act protects the pastoralist /farmers and any other workers engaged during this Project including those involved in civil works.

3.2.25 Work Injury Benefits Act, 2007

The Act provides for compensation of employees for work-related injuries and diseases contracted during their employment and for connected purposes. Section 28, specifically, stipulates that an employee who suffers temporary total disablement due to an accident that incapacitates the employee for three days or longer is entitled to receive a periodical payment equivalent to the employees' earnings, subject to the minimum and maximum amounts fixed by the Minister from time to time, after consultation with the Council. Compensation for temporary partial disablement shall consist of a proportionate amount of the periodical payment calculated as specified earlier line. Contractor employees engaged in civil works for post-harvest storage facilities or any other civil works at farm level are subject to this legislation, and are entitled to compensation, access to medical aid, and insurance cover in the event of work-related injuries and ailments.

3.2.26 National Council for Disability Act, 2003

The Act provides for the establishment of a National Council for Disability, its composition, functions and administration for the promotion of the rights of persons with disabilities set out in international conventions and legal instruments, the Constitution and other laws, and other connected matters. This caters for the interests of persons who are differently abled including access to the project activities and access to employment and business activities.

3.3 Relevant Institutions-Environmental

3.3.1 National Environment Management Authority

The responsibility of the National Environmental Management Authority (NEMA) is to exercise general supervision and co-ordination over all matters relating to the environment and to be the principal instrument of Government in the implementation of all policies relating to the environment. In addition to NEMA, the Act provides for the establishment and enforcement of environmental quality standards to be set by a technical committee of NEMA known as the Standards and Enforcement Review Committee (SERC) which governs the discharge limits to the environment by the proposed project.

County Environmental Committees

The targeted counties in this programme are the Arid and Semi-Arid (ASAL) counties. The principal occupants of these counties are the pastoral communities. The County Environmental Committees contribute to decentralized environmental management and enable the participation of local communities. These environmental committees consist of the following:

- i) Representatives from all the ministries;
- ii) Representatives from local authorities within the province/district;
- iii) Two farmers / pastoral representatives. As such the local community representatives are mainly pastoralists representing the main economic production systems within the project areas;
- iv) Two representatives from NGOs involved in environmental management in the province/district;
- v) A representative of each regional development authority.

National Environmental Complaints Committee (NECC)

The National Environmental Complaints Committee (NECC) was established under Section 31 of the Environmental Management and Co-ordination Act, 1999. It was formerly known as the Public Complaints Committee (PCC) but its name changed in the EMCA (Amendment) No. 5 of 2015). It is an important institution in the assessment of the condition of the environment in Kenya. It plays an important role in the facilitation of alternative dispute resolution mechanisms relating to environmental matters. The NECC makes recommendations to the Cabinet Secretary and thus contributes significantly to the formulation and development of environmental policy.

The membership of NECC is drawn from key stakeholders in environmental management. The Committee consists of seven members headed by a Chairperson, who is appointed by the Cabinet Secretary and qualifies to be a judge of the Environment and Land Court of Kenya. Other members are; a representative of the Attorney General, a representative of the Law Society of Kenya, one person who has demonstrated competence in environmental matters to be nominated by the Council of Governors and who is the Secretary to the Committee, a representative of the business community and two members, appointed by the Cabinet Secretary for their active role in environmental management.

National Environmental Tribunal (NET)

The NET is established under Section 125 of EMCA for the purpose of hearing appeals from administrative decisions by organs responsible for enforcement of environmental standards. An appeal may be lodged by a project proponent upon denial of an EIA license or by a local community upon the grant of an EIA license to a project proponent. NEMA may also refer any matter that involves a point of law or is of unusual importance or complexity to NET for direction. The proceedings of NET are not as stringent as those in a court of law and NET shall not be bound by the rules of evidence as set out in the Evidence Act. Upon the making of an award, NET's mandate ends there as it does not have the power to enforce its awards. EMCA provides that any person aggrieved by a decision or award of NET may within 30 days appeal to the High Court.

3.3.2 Environment and Land Court

The Kenya Constitution establishes Environment and Land Court¹. Article 162 of the constitution provides for the creation of specialized courts to handle all matters on land and the environment. The court has the status and powers of a High Court in every respect. Article 159 on the principles of judicial authority, indicates that courts endeavors to encourage application of alternative dispute resolution mechanisms, including traditional ones, so long as they are consistent with the constitution. Section 20, of the Environment and Land Court Act, 2011 empowers the Environment

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and Land Court, on its own motion, or on application of the parties to a dispute, to direct the application of including traditional dispute resolution mechanisms.

3.4 Institutional Responsibilities with Respect to Social Issues

The constitution provides for several institutions to address issues of vulnerable and marginalized groups including grievance and conflict handling mechanisms as provided for in this project ESMF as well as in the project Implementation plans. Key constitutional mechanisms for redress of issues related to marginalization include the (a) Commission on Administrative Justice-Office of the Ombudsman; (b) National Land Commission; and (c) Committee on Revenue Allocation.

3.4.1 Commission on Administrative Justice (CAJ) – Office of the Ombudsman

Kenya has a formal Feedback and Complaints Handling Mechanism. The Commission is the national/constitutional stakeholder instrument for grievance redress. Its mandate is to receive and address complaints against public officers and public institutions to improve service delivery. Three types of complaints can be made to the office of the Ombudsman including: (i) Citizen against State/public officers and institutions; (ii) Public officers against fellow public officers; and, (iii) Public institutions against other public institutions. **Table** 3-1 below provides the steps and process for feedback and complaints redress by the Ombudsman. The Ombudsman has a three step and time bound mechanism for feedback and grievance redress, as shown below.

Table 3-1: Feedback and Complaints Redress by the CAJ (the Ombudsman)

Step	Complainant fills in a Complaint Form			
1	Complaint is assessed for compliance with CAJ Mandate;			
	• If within mandate, CAJ commences inquiries and complainant is issued with copy of communication – CAJ 2 [Sec. 43];			
	If NOT within CAJ mandate, Complainant is advised accordingly and/or referred to appropriate government agencies;			
	• If a response is not received from the respondent after 14 working days, CAJ sends a first reminder giving the respondent 7 days to comply;			
	If no response is received after this, a final reminder of 7 days is sent;			
	If there is still no response after 28 days, summonses are issued to the respondent in			
	line with [Sec. 27(a)].			
Step	If after the summonses the respondent still fails to comply, the Ombudsman proceeds to:			
2	Determines the complaint in the absence of the respondent;			
	Institutes legal proceedings against the respondent [according to Sec. 52];			
	• Cites the respondent as an unresponsive State or Public Office or Officer, and/or			
	declares such State or Public Officer to be unfit to serve in the Public Service;			
Step	How the Ombudsman undertakes grievance redress action: In resolving a complaint, the			
3	Ombudsman may:			
	• Conduct investigations according to articles [A.59 (2)(i)] [Sec 8 b)] [A.252(1)(g)] [Sec. 53 (1)];			
	Demand and obtain information or documents [S.26 (d)];			
	Conduct an inquiry [A.252(1)(g)]			
	Undertake mediation, negotiation and conciliation [A.252 (1) (b)];			
	 Constitute a hearing panel; 			
	 Invite or summon any person or persons to attend to the Commission [S.26 (f)]; 			
	Obtain orders from the Court authorizing Searches or Seizures [Sec.26 (e)].			
	5 Obtain orders from the Court authorizing Searches of Seizures [Sec.26 (e)].			

Obtain warrants of arrest for breach of any summons or orders of the Commission.

3.4.2 National Gender Equality Commission

National Gender Equality Commission is a constitutional Commission established by an Act of Parliament in August 2011, as a successor commission to the Kenya National Human Rights and Equality Commission pursuant to Article 59 of the Constitution. NGEC derives its mandate from Articles 27, 43, and Chapter Fifteen of the Constitution; and section 8 of NGEC Act (Cap. 15) of 2011, with the objectives of promoting gender equality and freedom from discrimination. The over-arching goal for NGEC is to contribute to the reduction of gender inequalities and the discrimination against all; women, men, persons with disabilities, the youth, children, the elderly, minorities and marginalized communities. The Agency has specific mandates including ensuring that those considered marginalized benefit from the project interventions.

3.4.3 **Kenya National Commission on Human Rights**

The Kenya National Commission on Human Rights (KNCHR) is an autonomous national human rights institution established under Article 59 of the Constitution of Kenya 2010. The commission has a core mandate to further the promotion and protection of human rights in Kenya. This is categorized further into two key broad mandates, namely:

- To act as a watch-dog over the Government in the area of human rights; and
- To provide key leadership in moving the country towards a human rights state.

The main goals of KNCHR are to investigate and provide redress for human rights violations; research and monitor the compliance of human rights norms and standards; conduct human rights education, to facilitate training, campaigns and advocacy on human rights; and collaborate with other stakeholders in Kenya.

3.4.4 State Department for Social Protection

The department is responsible for sectoral oversight and management of all matters concerning children, older persons and PWDs, including related policies, social development and management of statutory institutions.

The State Department has officers in all counties and most of sub-counties across the country. Since they focus on children, older persons and PWDs, the officers are key resource in the selection of beneficiaries and monitoring the project's social impacts.

3.4.5 National Council for Persons with Disabilities (NCPWD)

The NCPWD oversees all matters relating to PWDs, including:

- o Statutory responsibility for facilitation of disability mainstreaming programmes;
- o Formulating and developing measures and policies designed to achieve equal opportunities for PWDs;
- Cooperating with the government;
- o Recommending measures to prevent discrimination against PWDs; and
- Registering persons with disabilities and institutions and organizations giving services to PWDs.

The NCPWD has officers in all counties and a documented list of persons with disabilities that could inform implementation of the project. The officers could also support the process of translating documents and communicating with PWDs (e.g. sign language and braille).

3.5 **Multilateral Environmental Agreements and Guidelines**

Kenya has ratified various international conventions that related to the protection of the environment that may be directly or indirectly applicable to the proposed sub-projects' operations and processes in the selected countries. These are discussed as follows: -

3.5.1 United Nations Framework Convention on Climate Change (UNFCCC or FCCC)

This is an international environmental treaty produced at the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro in 1992, informally known as the Earth Summit. The objective of the treaty is to stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. The treaty itself sets no mandatory limits on greenhouse gas emissions for individual countries and contains no enforcement mechanisms. In that sense, the treaty is considered legally non-binding. Instead, the treaty provides for updates (called "protocols") that would set mandatory emission limits. The principal update is the Kyoto Protocol, Kyoto protocol was a protocol under the UNFCCC and has now ceased, the latest convention under UNFCCC being the Paris agreement concluded during COP 21 in Paris, France where Countries made a commitment through there Nationally Determined Conditions (NDC) to reduce their emissions.

The project shall implement climate smart agriculture to limit emission from agricultural practices that are a significant contributor to GHG emissions.

3.5.2 International Convention on Biological Diversity (CBD) of 1992

This treaty promotes the protection of ecosystems and natural habitats, respects the traditional lifestyles of indigenous communities, and promotes the sustainable use of resources. The project, however, does not envisage any interference with protected ecosystems.

Project specific ESMPs shall be prepared and implemented for all subprojects to ensure that mitigation measures adequately address potential impacts.

3.5.3 World Heritage Convention, 1972

Kenya is a party to this convention which is concerned with cultural and natural heritage. The convention deals with monuments and areas that are deemed to be of 'outstanding universal value' in terms of beauty, science and/or conservation. Kenya has several sites that have been declared World Heritage Sites, such as Mt. Kenya's natural forests. Any deterioration or disappearance of such heritage is considered a loss to all the nations of the world.

A chance finds procedures has been developed to guide civil works in case of an occurrence of chance finds or any physical cultural resources.

3.5.4 Ramsar Convention, 1971

The importance of wetlands and water birds is covered under the Ramsar Convention of 1971, which governs wetlands of international importance. The convention entered into force in Kenya in 1990 and Kenya is therefore committed to preventing the degradation of wetlands under its jurisdiction.

3.5.5 Agreement of the Conservation of Eurasian Migratory Water Birds (2001)

Kenya ratified this convention, which seeks to protect migratory water birds and facilitate the conservation of nature and natural resources. This establishes a legal imperative for GoK to ensure that the Project and its value chain development recognize and safeguard natural resources. The project activities may not pose any specific threat to Migratory Water Birds as the activities are within already disturbed environment. However, the project shall establish measures to ensure that beneficiary communities avoid practices that may endanger migratory birds or their habitat.

3.5.6 Convention on International Trade in Endangered Species of Wildlife Fauna and Flora (CITES) 1973

This international treaty prohibits trade in endangered and their trophies. Such species include elephant ivory, rhino horns and Dugongs among others. The project activities do not pose a specific threat to wildlife resources. However, the project shall implement measures to ensure that beneficiary communities avoid practices that may harm wildlife (e.g. hunting and trade in wildlife and wildlife products.

3.5.7 FAO: International Code of Conduct on the Distribution and Use of Pesticides

It is the duty of all users of pesticides to act responsibly when acquiring, storing and applying pesticides. They have a duty to prevent waste, avoid contamination and deal responsibly with the waste pesticides, pesticide residues and empty pesticide containers. Pesticides should only be acquired in quantities that are likely to be needed, to avoid the potential for creating obsolete stocks. The pesticides must be stored safely and securely, away from food and water supplies. The storage conditions must comply with the instructions on the label, particularly with regard to ventilation, temperature and light. Pesticide formulations stored in inappropriate conditions may deteriorate such that their shelf-life is shortened. Generally, pesticide containers should be stored in dry, well ventilated, maintained at a constant temperature, and protected from extremes of temperature.

3.5.8 The Green Climate Fund's Policy on Indigenous People's

The Green Climate Fund Policy on Indigenous Peoples will be used in conjunction with the AfDB's Policy on Vulnerable Groups/People (the Policies) to identify groups that may be impacted and manage the impacts of the programme. In this regard, people with distinct social and cultural characteristics such as (a) Self-identification as members of a distinct indigenous social and cultural group and recognition of this identity by others; (b) Collective attachment to geographically distinct habitats, ancestral territories, or areas of seasonal use or occupation as well as to the natural resources in these areas; (c) Customary cultural, economic, social, or political systems that are distinct or separate from those of the mainstream society or culture; and (d) A distinct language or dialect, often different from the official language or languages of the country or region in which they reside, will be identified and trigger the Policies. The identification will also take into account commonly accepted and applied criteria for identifying peoples with self-identification as indigenous or tribal or specifically vulnerable as a fundamental criterion for determining the application of these

Policies. An elaborate stakeholder engagement plan will be put in place to engage all stakeholders including the vulnerable groups.

Where Indigenous Peoples are potentially impacted by the programme an Indigenous Peoples plan (IP Plan) will be developed. The IP Plan should include the following elements as far as Indigenous Peoples are affected by the sub-project:

- a. Baseline information about Indigenous Peoples (from independent and participatory environmental and social risks and impacts assessment processes);
- b. Key findings and analyses of impacts, risks and opportunities for Indigenous Peoples;
- c. Measures to avoid, minimize and mitigate negative impacts, and enhance positive impacts and opportunities for Indigenous Peoples;
- d. Community-based natural resource management for Indigenous Peoples;
- e. Results of consultations (during environmental and social risks and impacts assessment processes), including a list of people and organizations that participated, a timetable, who was responsible for each activity, the free, prior and informed consent, and future engagement plans;
- f. Gender assessment and action plans for Indigenous Peoples;
- g. Benefit sharing plans for Indigenous Peoples;
- h. Tenure arrangements for Indigenous Peoples;
- i. Grievance redress mechanisms for Indigenous Peoples;
- j. Costs, budgets, timetables, organizational responsibilities for Indigenous Peoples; and
- k. Monitoring, evaluation and reporting for Indigenous Peoples.

The IPP will be developed in collaboration with the potentially affected indigenous peoples and contained in a time-bound plan that is culturally appropriate. The IPP will complement the social assessments of the project and programmes proposed for GCF financing and provide guidance on specific issues related to addressing the needs of the affected Indigenous Peoples. The format and title of the IPP will be adjusted as appropriate to the project or state context and will reflect any alternative terminology for the indigenous peoples.

An elaborate stakeholder engagement plan will be put in place to engage all stakeholders including the vulnerable groups and any Indigenous Peoples.

3.5.9 International Conventions on the Rights of the People.

The project will also take into accounts the International Covenants and Conventions on the Rights of People. These will include, among others: (i) the UN Declaration on the Rights of Indigenous Peoples (UNDRIP); (ii) The International Covenant on Civil and Political Rights (1966); (iii) The International Covenant on Economic, Social and Cultural Rights (1966); (iv) The International Convention on the Elimination of all forms of Racial Discrimination (1969); (v) The African Charter (1979). Of course the project will endeavor to uphold the rights of all

people and communities during implementation, more so of the minorities, highly vulnerable, and the people considered as indigenous people in view of the possibilities of the elite capture.

4. AFRICAN DEVELOPMENT BANK ENVIRONMENTAL AND SOCIAL OPERATIONAL SAFEGUARDS (OSs)

4.1 Introduction

With regard to environmental and social safeguards, the DRSLP II implementation is guided by AFDB ISS. Under the ISS, the Project shall adhere to requirements of Operational Safeguards (OS) in order to avoid, reduce, minimize and mitigate or even compensate for adverse risks and impacts and undue harm of its development projects to the environment, with emphasis to the following OSs 1-5 that have been identified to be relevant to the Project activities:

The main objectives of the Environmental and Social OS s are:

- a. To inform decision makers of the nature of environmental and social risks and impacts;
- b. To ensure that Bank-financed projects are environmentally sound and sustainable, and that decision-making is improved through appropriate analysis of actions and of their likely environmental risks and impacts; and
- c. To provide mechanism for participation of stakeholders in decision making process for the project.
- d. To increase transparency, non-discrimination, social inclusion, public participation, and accountability as well as providing mechanism for participation in decision making process for the project.

Table 4-1 summarizes Environmental and Social Operational Standards (OSs) that are relevant to the project, and are expected to guide the implementation of the DRSLP II:

Table 4-1: Summary of Environmental and Social Operational Safeguards

The Operational	Rationale		
Safeguards			
OS1: Environmental	This safeguard governs the process of determining a project's		
and Social	environmental and social category and the resulting environmental and		
Assessment	social assessment requirements. The HoA Program has been proposed as a category 2 Program, implying that there will be need for ESIAs to be undertaken during the program execution level. The proposed categorization is on the basis of sovereign operations. Where the projects will involve the private sector or financing institutions, the classification will change to Category B or FI-B projects. This categorization refers to projects with no significant emission sources hence have less adverse effects than those of Category 1 projects (or FI-A projects). The impacts can be minimized by applying appropriate management and mitigation measures or incorporating internationally recognized design criteria and		
	standards. The potential negative environmental and social risks and impacts associated with the activities include, soil erosion, air and water pollution (including ground water), generation of solid waste, occupational health and safety risks related to minor construction activities that include the proposed construction of grain and seed storage facilities etc. Proposed activities related to supporting pastoralist communities through		

The Operational	Rationale
Safeguards	
	re-stocking of livestock could result in outbreaks of animal diseases and degradation of the rangelands.
	Most of the project activities are to be implemented in both Arid and semi-arid counties, many of which have been prone to social tensions and inter/intra communal conflicts over natural resources and boundary demarcations; and have been inhabited by different social groups, as well as IDPs and refugees. Specific potential social risks for the project component include: exclusion of deserving communities or individuals within the employment component, inadequate consultation when it comes to community involvement in the livelihood restoration benefits, risks with respect to gender based violence on targeting of beneficiaries on employment or livelihood restoration aspects and risks of complaints escalated to higher levels if a structured GCHM is not in place and operational. The Project is cognizant of these dynamics and shall be implemented in a manner that ensures no escalation of such tensions. Similarly, security concerns for workers and volunteers shall 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. A Security Management Plan may also be prepared to supplement this ESMF. 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 project implementation.
OS2: Involuntary Resettlement, Land	This safeguard consolidates the policy commitments and requirements set out in the Bank's policy on involuntary resettlement, and incorporates a number of
acquisition, Population	refinements designed to improve the operational effectiveness of those requirements.
Displacement and Compensation	Activities that would require involuntary resettlement or land acquisition are not excluded as per the DRSLP II Exclusion List and will be screened out at the sub project proposal stage. The project has been updated as needed to reflect the procedures for voluntary land donations (Annex VIII) or Land Donation Consent Form (Annex IX).
OS3: Biodiversity and Ecosystem Services	This safeguard aims to conserve biological diversity and promote the sustainable use of natural resources. It also translates the commitments in the Bank's policy on integrated water resources management into operational requirements. Based on the screening conducted during project preparation and consideration of the scale of the proposed activities, the project does not pose any danger to the conservation of biodiversity and sustainable management of living resources. However, beneficiary communities shall be sensitized about prohibited practices that interfere with the functioning of ecologically sensitive areas. For the overall project, MOALF & C will utilize the AfDB guidelines in the treatment of ecologically and ergonomically sensitive areas and this may also be incorporated in the project IPMP.

The Operational	Rationale
Safeguards OS4: Pollution Prevention and control hazardous	This safeguard covers the range of key impacts of pollution, waste, and hazardous materials for which there are agreed international conventions, as well as comprehensive industry-specific and regional standards, including
materials and resource efficiency	The project will support livelihood activities, it is possible for the smallholder farmers, and agro-pastoralists to procure synthetic to manage
	pests and diseases on their farm/rangelands. In addition, restocking activities for the livestock may involve the purchase of livestock from one area to another and need for treatment of livestock diseases as well as the use of acaricides to manage ticks. Community beneficiaries have a duty to prevent waste, avoid contamination and deal responsibly with the waste, residues and empty pesticide containers. Improper use of knapsack sprayers during typical application could lead to ingestion of agrochemicals by farmers or minors, livestock, and contamination of the environment.
OS5: Labour conditions, health and safety	
	given contracts that clearly state the terms and conditions of work to minimise any chances of biases. All workers will be provided with the right and appropriate personal protective equipment to safeguard them against possible preventable harm while the work environment will be made safe and secure. In order to prevent child labour, it is a requirement that all people to be employed must have identity cards to show that they are above 18 years of age. As usual, the Bank staff carry out regular

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The	Operational	Rationale
Safeguards		
		supervision missions while the projects are reported on regularly. The realisation of child labour or forced labour lead to immediate suspension of project activities funded by or through the Bank. Each project will have a grievances redress system that will ensure that workers with grievances are addressed besides the project affected persons grievances.

4.2 African Development Bank EHS Guidelines for the OS

The African Development Bank has several guidelines that are applicable to various components of the proposed project namely civil works and restocking of animals. These include:

4.2.1 African Development Bank Environmental Health and Safety General Guidelines

The Environmental Health and Safety (EHS) General Guidelines is a technical reference document with general and industry-specific examples of Good International Industry Practice (GIIP). The EHS Guidelines contain the performance levels and measures that are normally acceptable to the AFDB, and that are generally considered to be achievable in new facilities at reasonable costs by existing technology. All projects requiring ESIA/or ESMP will as a mandatory requirement make reference to the applicable guideline (s) based on the sub project i.e. Integrated Environmental and Social Impact Assessment Guidance Notes. The project will support farmers and pastoralist in the construction of Hay Storage Facilities as well as the rehabilitation and or construction of the community water pans. In undertaking the construction of these facilities, the contractors is advised to adopt the GIIP as listed in the EHS General guidelines (on section 4.1 Construction and Decommissioning) in managing the possible community health and safety risks and impacts associated with the sub project components.

4.2.2 WHO: Transmission of SARS-CoV-2: Guideline in the implications for infection prevention precaution

This guideline provide the highlights of the World Health Organization Guidelines for COVID-19 published on 29 March 2020 entitled "Modes of transmission of virus causing COVID-19: implications for infection prevention and control (IPC) precaution recommendations". The project is associated with the movement and or interaction of project team from the NPCU and the CPIT and the County technical contact person(s) with the beneficiaries within the 7 selected counties; there is potential for transmission of the virus during project implementation. COVID 19 infection prevention and control measures shall be adhered too at all time.

4.3 Gap Analysis of Environmental and Social Operational Safeguards and Kenyan National Laws

Table 4-2 shows a gap analysis between the national legislations and the OSs, and how the discrepancy between the legislations will be mitigated.

Table 4-2: Gap Analysis of Environmental and Social Operational Safeguards and Kenyan National Laws

OS and Requirements	National Laws and Requirements	Gaps	Recommended Action
Environmental and Social Assessment (OS1) OS 1 sets out the responsibilities for assessing, managing and monitoring environmental and social risks and impacts associated with each stage of a project supported by the Bank through Investment Project Financing. Identification of Risks and Impacts Establish and maintain a process for identifying the	Environmental Management and Coordination Act 1999; Provides for protection and conservation of the environment, environmental impact assessment, and environmental auditing and monitoring. Environmental Management and Coordination (Amendment) Act 2015 (legal Notice No 5 of 2015) and provides for a full ESIA study for high risk projects. Environmental Impact Assessment Guidelines and administrative procedures, 2002. The guidelines	No significant gaps between OS 1 and the various national laws.	
environmental and social risks and impacts of the project. The type, scale, and location of the project guide the scope and level of effort devoted to the risks and impacts identification process.	provide the steps in implementation of an EIA, Monitoring and Environmental Audit Provides for carrying out of an EIA Study where a Project will have significant environmental impacts and the Project Report does not disclose adequate mitigation measures. Monitoring and Review		
Monitoring and Reporting: Conduct monitoring and reporting on the environmental and social performance of the project against the ESSs. Stakeholder Engagement and	The Environmental Management and Coordination Act provides for ESIA studies including as part of ESMP clear procedures for monitor and measure the effectiveness of the management program, as well as compliance with any related legal and/or contractual obligations and regulatory requirements.		
Consultation Undertake stakeholder engagement and disclose appropriate information in accordance with ESS10; Grievance and Conflict Handling Mechanism for Affected Communities Ensure that a grievance mechanism for the project is in	Stakeholder Engagement and Consultation The Environmental Management and Coordination Act provides for ESIA studies including stakeholder engagement with vulnerable and marginalized groups and communities who meet the requirements as set out under PART II: INTEGRATED SAFEGUARDS POLICY STATEMENT -BOX 2 pg.17		

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OS and Requirements	National Laws and Requirements	Gaps	Recommended Action
place, in accordance with Stakeholder engagement plan to address specific concerns raised by project affected persons in a timely fashion.	Grievance Mechanism for Affected Communities The Environmental Management and Coordination Act provides for ESIA studies establishment of a robust grievance redress mechanism.		
Involuntary Resettlement, Land Acquisition, Population displacement and compensation (OS 2) it incorporates refinements designed to improve the operational effectiveness of those requirements. In particular, it embraces comprehensive and forward-looking notions of livelihood and assets, accounting for their social, cultural, and economic dimensions. It also adopts a definition of community and common property that emphasises the need to maintain social cohesion, community structures, and the social interlinkages that common property provides. The safeguard retains the requirement to provide compensation at full replacement cost; reiterates the importance of a resettlement that improves standards of living, income- earning capacity, and overall means of livelihood; and emphasises the need to ensure that social considerations, such as gender, age, and stakes in the project outcome, do not disenfranchise particular project-affected people.	Community Land Act No. 27 of 2016 Subject to the provisions of this Act or any other written law, the State may regulate the use of community land in accordance with Article 66 of the Constitution. Community land shall vest in the community and maybe held under any of the following tenure system—customary; freehold; leasehold; and such other tenure system recognized under this Act or other written law. Protection of community land rights: Every person shall have the right, either individually or in association with others, to acquire and own properly, in accordance with Article 40 of the Constitution—of any description; and in any part of Kenya; Customary land rights shall be recognized, adjudicated for and documented for purposes of registration in accordance with this Act and any other written law; Customary land rights, including those held in common shall have equal force and effect in law with freehold or leasehold rights	The issue of compensation in the national laws is not well embedded and it comes last. In OS compensation precedes before any development . Hence , a gap exists.	Adopt project design and finance agreement.

OS and Requirements	National Laws and Requirements	Gaps	Recommended Action
	acquired through allocation,		
	registration or transfer;		
	Subject to Article 40 (3) of the		
	Constitution and the Land Act, no		
	interest in, or right over community		
	land may be compulsorily acquired		
	by the State except in accordance		
	with the law, for a public purpose,		
	and upon prompt payment of just		
	compensation to the person or		
	persons, in full or by negotiated		
	settlement;		
	Subject to the provisions of section		
	46 of this Act, any person who		
	immediately before the		
	commencement of this Act had a		
	subsisting customary right to hold		
	or occupy land shall upon		
	commencement of this Act		
	continue to hold such right.		
Biodiversity and Ecosystem	The Wildlife Conservation and	No significant	
Services (OS 3)	Management Act, 2013	gaps between	
Recognizes that protecting and	Prohibits pollution of wildlife	OS3 and the	
conserving biodiversity and sustainably managing living	habitats and ecosystems	various national laws.	
natural resources are	The Forest Conservation and	iaws.	
fundamental to sustainable	Management Act, 2016		
development.	• Prohibits the destruction of		
Objectives	protected tree species or family of		
 To protect and conserve biodiversity and habitats. 	trees. • Provides for the sustainable		
• To apply the mitigation	management of indigenous forests		
hierarchy and the	and woodlands.		
precautionary approach in	The Environmental Management and		
the design and	Co-ordination (Wetlands, River Banks,		
implementation of projects that could have an impact on	<u>Lake Shores and Sea Shore</u> <u>Management)</u> Regulations, 2009		
biodiversity.	The objectives of the regulations is to		
• To promote the sustainable	provide for the conservation and		
management of living natural	sustainable use of wetlands and their		
resources.	resources in Kenya and promote the		
• To support livelihoods of	integration of sustainable use of		
local communities, including	resources in wetlands into the local		

OS and Requirements	National Laws and Requirements	Gaps	Recommended Action
Indigenous Peoples, and	and national management of natural		
inclusive economic	resources for socio-economic		
development, through the	development.		
adoption of practices that	Protection and Conservation of		
integrate conservation needs	Biodiversity		
and development priorities.	The Wildlife Conservation and		
Requirements	Management Act, 2013		
Conservation of biodiversity	Prohibits pollution of wildlife		
and habitats	habitats and ecosystems.		
For the protection and	The Forest Conservation and		
conservation of habitats and	Management Act. 2016		
the biodiversity they support,	• Prohibits the destruction of		
the mitigation hierarchy	protected tree species or family of		
includes biodiversity offsets.	trees.		
Legally protected and	Provides for the sustainable		
internationally recognized	management of indigenous forests		
areas of high biodiversity value	and woodlands.		
Where the project occurs	and woodiands.		
within or has the potential to			
adversely affect an area that is			
-			
legally protected, designated			
for protection, or regionally or			
internationally recognized, the			
client will ensure that any			
activities undertaken are			
consistent with the area's legal			
protection status and			
management.			
Pollution Prevention and	Environmental Management and		
Control hazardous materials	Co-ordination (Water Quality)		
and resource efficiency (OS4)	Regulations 2006		
This OS sets out the	Provides for the protection of ground		
requirements to address	and surface water resources.		
resource efficiency and	Provides the water quality standards		
pollution1 prevention and	for sources of domestic water.		
management throughout the	Provides that an EIA shall be carried		
project life cycle consistent with	out and license obtained to abstract		
GIIP with the following	water or carry out activities that may		
objectives:	have adverse impacts on the		
To promote the sustainable	quantity or quality of water in lakes,		
use of resources, including	rivers, streams, springs and wells		
energy, water and raw	Provides the water quality standards		
materials.	for effluent discharged into the		
To avoid or minimize adverse	aquatic environment.		
impacts on human health	Environmental Management and		
and the environment by	Co-ordination (Waste Management)		
avoiding or minimizing	Regulations 2006		
pollution from project	 Provides for standards for handling, 		
	transportation and disposal of		
activities.	· · · · · · · · · · · · · · · · · · ·		
activities.To avoid or minimize	various types of wastes including		

OS and Requirements	National Laws and Requirements	Gaps	Recommended Action
 short and long-lived climate pollutants. To avoid or minimize generation of hazardous and non-hazardous waste. To minimize and manage the risks and impacts associated with pesticide use. 	 Requirements to ensure waste minimization or cleaner production, waste segregation, recycling or composting. Provides for licensing of vehicle transporting waste. Provides for the licensing of waste disposal facilities. Environmental Management and Coordination (Controlled Substances) 		
	Regulations 2007 (Legal Notice No 73 of 2007) Provides for measures for storage, handling packaging and disposal of products with ozone-depleting substances. Environmental Management and		
	 Coordination (Air Quality) Regulations, 2014 Provides for ambient air quality tolerance limits. Prohibits air pollution in a manner that exceed specified levels. Prohibits air pollution in controlled 		
	 areas including residential areas, hospitals, National Parks, reserves and sanctuaries, conservation areas and central business districts Provides for the control of vehicular emissions. 		
	 Provides for prevention of dispersion of visible particulate matter or dust from any material being transported. Pest Control Products Act, 2012 This Act requires that all chemicals used in any agricultural undertaking are registered by the Pest Control 		
	Products Board (PCPB). It stipulates further that training in the use of pesticides must be carried out by PCPB accredited institutions and persons. All pesticide storage and handling arrangements must be inspected and		
Labour Conditions, health and Safety (OS5) Promote sound worker-management relationships and enhance the development benefits of a project by treating workers in the project fairly and providing	licensed under the Act. Occupational Safety and Health Act (OSHA), 2007; Provides for the safety, health and welfare of workers and all persons lawfully present at workplaces. Provides for the registration of workplaces.	No significant gaps between OS5 and the various national laws.	Apply either of the two due to insignificant differences.

OS and Requirements	National Laws and Requirements	Gaps	Recommended Action
safe and healthy working	• provides for maintenance of		ACTION
conditions by:	cleanliness of workplaces, adequate		
• Promote safety and health at	lighting and ventilation, provision of		
work.			
	sanitary conveniences,		
Promote the fair treatment,	Outlines safety requirements in use of		
nondiscrimination and equal	machinery to prevent accidents and		
opportunity of project	injuries.		
workers.	The Factories and Other Places of		
Protect project workers,	Work (Noise Prevention and Control)		
including vulnerable workers	Rules, 2005		
such as women, persons with	Rules provide for the maximum noise		
disabilities, children (of	exposure levels for workers in places of		
working age, in accordance	work and for the provision of		
with this ESS) and migrant	protective equipment for those		
workers, contracted workers,	exposed to high noise levels.		
community workers and			
primary supply workers,	Provide that an occupier shall also		
Prevent the use of all forms	institute noise reduction measures at		
of forced labor and child	the source of noise in the workplace.		
labor,	Environmental Management and		
• Support the principles of	Co-ordination (Noise and Excessive		
freedom of association and	<u>Vibration Pollution) (Control)</u>		
collective bargaining of	Regulations 2009		
project workers in a manner	Prohibits the generation of		
consistent with national law,	unreasonable, unnecessary or		
• Provide project workers with	unusual noise which annoys, disturbs,		
accessible means to raise	injures or endangers the comfort,		
workplace concerns.	repose, health or safety of others and		
	the environment.		
	• Provides for the maximum noise		
inclusion of the communities	levels permissible in various		
who are vulnerable meeting	environmental set ups such as		
•	residential areas, places of worship,		
	commercial areas and mixed		
	residential		
	Working Conditions and Terms of		
	Employment		
	Kenya's labour laws require that		
	workers are all require that human		
Working conditions and	resources policies and procedures exist		
management of worker	in all workplaces and provide for		
relationships	collective bargaining agreements.		
Develop and implement			
written labor management			
procedures applicable to the			
project. Project workers will be			
provided with information and			
documentation that set out			
their rights under national			
labor and employment law			
(which will include any	Non-Discrimination and Equal		

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OS and Requirements	National Laws and Requirements	Gaps	Recommended Action
applicable collective agreements), including their rights related to hours of work, wages, overtime, compensation and benefits Non-Discrimination and Equal Opportunity The employment of project workers will be based on the principle of equal opportunity and fair treatment, and there will be no discrimination with respect to any aspects of the employment relationship.	Opportunity The constitution of Kenya does not allow discrimination of any form and further the labor laws also provide for equal opportunity and non-discrimination of any form for workers with respect to employment including any form of intimidation or harassment. Grievance Mechanism Kenya labour laws fully provide for grievance redress mechanism establishment in all workplaces.		
Grievance Mechanism A grievance mechanism will be provided for all direct workers and contracted workers to raise workplace concerns. Protecting the Work Force Child Labour	Child Labour Kenya labour laws prohibit employment of children (under 18) and makes it a criminal offence.	Enforcement has always been a challenge due to poverty levels experienced by	Sensitization of all target communities.
A child under the minimum age established in accordance with national law will not be employed or engaged in connection with the project.	Forced Labor Further, any form of forced labour is prohibited by the labour laws including trafficking.	various communities.	
Forced Labor No forced labour and trafficking of persons will be used under the project. The prohibition covers any kind of involuntary or compulsory labor, such as indentured labor, bonded labor, or similar labor-contracting arrangements.	Occupational Health and Safety The Occupational Safety and Health Act 2007 has clear provisions and requirements for ensuring health and safety of workers and stipulate the requirements of the employer with respect to the same.		
Occupational Health and Safety Measures relating to occupational health and safety will be applied to the project. The OHS measures will include the requirements of this Section, and will take into account the General EHSGs and, as appropriate, the			

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OS and Requirements	National Laws and Requirements	Gaps	Recommended Action
industry-specific EHSGs and other GIIP.			
		No significant gaps between OS4 and the various national laws.	Apply either of the two due to insignificant differences
Good Practice Notes: -Addressing Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH) in Investment ProjectNon-Discrimination and Disability -Assessing and Managing the Risks and Impacts of the Use of Security Personnel -Gender -Non-Discrimination: Sexual Orientation and Gender Identity (SOGI)	-Employment Act 2007- a worker is harassed sexually if the employer or its representative or a coworker request (directly or indirectly) for any form of sexual favor in order to get preferential treatment at workplace; or threaten the worker of detrimental treatment on present or future employment status of the worker. Any kind of sexual behavior that makes the victim feel uncomfortable, includes using language (written or spoken) or visual material of sexual nature; and showing physical behavior of sexual nature is considered sexual harassment. -Sexual Offences Act 2006- any person, who being in a position of authority, or a person holding a public office, who persistently makes any sexual advances or requests which he or she knows, or has reasonable grounds to know, are unwelcome, is guilty of the offence of sexual harassment and is liable to imprisonment of at least three years or to a fine of at least 100,000 shillings or to both.	The national laws are there but sensitization, support to victims, and enforcement are the procedural issues.	The communities must always be sensitized as a matter of procedure and requirement; identify Police Gender Desks for reporting to; support victims through medical and counselling procedures and also legal process and post recovery. Follow AFDB Good practice Notes in project implementatio n

5. BASELINE ENVIRONMENTAL AND SOCIAL CONDITIONS

This section describes the overall baseline condition of Arid and Semi-Arid Lands (ASALs) in Kenya in terms of bio-physical environment and socio-economic situations; where the DRSLP II will be implemented in 7 Counties mostly located in the ASAL regions of Kenya.

5.1 Project Context

Recurrent droughts and unpredictable rainfall patterns are characteristic features of the arid and semi-arid lands (ASALs), which receive less than 600 mm of annual rainfall and comprise more than 70% of the Horn of Africa (HOA) region, where the eight-member countries of IGAD (Djibouti, Eritrea, Ethiopia, Kenya, Somalia, South Sudan, Sudan and Uganda) are located. The IGAD region covers an area of 5.2 million km2, has a population of more than 250 million people and is endowed with a considerable range of natural resources, with a huge potential for a variety of possibilities in wealth and progress. Despite this great potential, however, the HOA countries are struggling to cope with the vagaries of their harsh and worsening ecological circumstances. Over the years the droughts have been increasing in severity and frequency and their impacts are exacerbated by advancing desertification, land degradation, global warming and climate change phenomena. These circumstances have created conditions of chronic vulnerability in the HOA, with persistent food and nutritional insecurity, widespread economic hardships, resources and political conflicts, irregular and illegal migration and social hardships, affecting the pastoralist and agro-pastoralist communities that inhabit the ASALs.

5.1.1 The IGAD Drought Disaster and Sustainability Initiative (IDDRSI)

The strategic priorities of countries in the Horn of Africa region are defined by their greatest single imperative – the urgent need to build resilience to environmental and socio-economic shocks, through investing in sustainable development and optimizing the productivity of available resources. The IGAD Region has, since 2012, been engaged in the implementation of the IGAD Drought Disaster and Sustainability Initiative (IDDRSI): a comprehensive and holistic undertaking, which is being executed in a concerted, coordinated manner throughout the IGAD region, aimed at building the resilience of drought-prone communities, to effectively address their challenges and vulnerabilities, including food insecurity, poverty and environmental degradation. The pursuit of the objectives of IDDRSI arose from a collective decision to end drought emergencies, which was made in a Summit in Nairobi in September 2011, by the Heads of State and Government in countries of the Horn of Africa Region, Development Partners, implementing agencies and stakeholders interested in curbing the impact of drought in the IGAD region. The Nairobi Summit assigned the IGAD Secretariat with the mandate to lead and coordinate the implementation of IDDRSI in the IGAD region.

Within the framework of its assignment and mandate to lead and coordinate the implementation of IDDRSI, the IGAD Secretariat established and operationalized the IDDRSI

Platform, which IGAD Member States and their Implementing and Development Partners agreed to form. The Platform brings together the different partners and stakeholders including the Member States, Development Partners and implementing Partners, including UN agencies, Civil Society, Private Sector and specialized research and training institutions. As part of its institutional arrangements, the IDDRSI Platform has a 3-tier structure that comprises a General Assembly of participating stakeholders, a Platform Steering Committee and a Platform Coordinating Unit. The IDDRSI Platform provides the modalities through which the region's priorities and possibilities for intervention aimed at achieving the objectives of IDDRSI are collectively discussed by affected countries and development partners – and provides an effective mechanism by which the implementation of IDDRSI is coordinated. At the country level, the National IDDRSI coordinators ensure the proper coordination and harmonization of IDDRSI based interventions.

5.1.2 Drought Resilience and Sustainable Livelihoods Program (DRSLP)

In harmony and support of the objectives of IDDRSI, the African Development Bank, in collaboration with the IGAD Secretariat and the IGAD Member States, developed the Drought Resilience and Sustainable Livelihoods Program (DRSLP). The Drought Resilience and Sustainable Livelihoods Program (DRSLP) was developed as a 15-year, multi-phased, multi-national investment program, aimed at addressing the negative impact of recurrent droughts in the Horn of Africa Region. With financing from the African Development Bank, the implementation of the first phase of DRSLP started in 2013; and has so far involved the commitment of USD300 million to support the execution of resilience-enhancing projects in 6 countries (Djibouti, Eritrea, Ethiopia, Kenya, Somalia and Sudan) under the general leadership and coordination of the IGAD Secretariat. The benefits of the DRSLP projects in fulfilling the objectives of IDDRSI, including the restoration of fragile eco-systems, promoting the sustainable use of natural resources and significantly enhancing the livelihoods of vulnerable communities are highly appreciated by the beneficiary: IGAD Member States. Within the framework of the DRSLP, the Bank also enhanced the capacity of the IGAD Secretariat, as the regional institution mandated to lead, promote and coordinate the implementation of IDDRSI.

Following several consecutive years of below-normal rainfall, the Horn of Africa region is again facing a widespread severe drought that has already triggered a regional humanitarian crisis with food insecurity and devastated livelihoods. As the 1st Phase funding from the African Development Bank supporting the DRSLP projects in the IGAD Member States and coordination activities of the IGAD Secretariat will end in December 2021, the IGAD Secretariat initiated consultations with both the Bank and the IGAD Member States, seeking

to discuss the possibilities for supporting subsequent phases of resilience-enhancing interventions. The IGAD Member States highly appreciate the promise and achievements of the DRSLP projects and recognize the need to build on the progress made and lessons learnt in the projects that have so far been implemented. They acknowledge the importance of consolidating all the efforts aimed at achieving the objectives of IDDRSI; and are unanimous in their request for the extension and continuity of drought resilience enhancing projects, as evidenced by their joint communique submitted to the Bank. In this respect, all IGAD Member States have confirmed their willingness to commit resources from their respective allocations of ADF-15 resources of the African Development Bank, to finance the implementation of drought resilience-enhancing projects in the next phase of DRSLP. The next phase of DRSLP projects will build on the progress that has so far been achieved, leverage the lessons learnt, cover more areas, sectors and investments; and consolidate the benefits thus far made in the implementation of IDDRSI.

5.1.3 Horn of Africa Initiative

The Initiative was launched in October 2019 by five Horn of Africa countries (Djibouti, Somalia, Kenya, Ethiopia, and Eritrea) and has a set of priority programs that fall under four thematic areas: (Pillar I) improving regional infrastructure connectivity; (Pillar II) promoting trade and economic integration; and (Pillar III) building resilience; and (Pillar VI) strengthening human capital development. Sudan is currently in the process of joining the HOAI. The initiative, supported by African Development Bank, European Union and the World Bank, is aimed at improving intra-regional trade, economic diversification and creation of regional value chains; addressing resilience to weather shocks and mitigate its impact on pastoralists and other vulnerable groups, and help build a stronger human capital base for the jobs of tomorrow. The Building Resilience for Food and Nutrition Security Program in the Horn of Africa is part (Pillar III) of the Horn of Africa Initiative priority programs and is being financed by the AfDB.

5.2 Biophysical Environment

5.2.1 Arid and Semi-Arid Land in Kenya

Geographically, Kenya is divided into seven Agro-Ecological Zones, most of which lie in the semi-arid to arid zones (ASALs) that are predominantly inhabited by the pastoralists and agro-pastoralists. The Kenya's ASALs, which make up 89% of the country's total land surface, are found mainly in the Northern, Eastern and Rift Valley regions where the proposed project DRSLP II will be implemented (Figure 5-1: Map showing Arid and Semi-Arid land in Kenya). It is home to about 36% of the population, 70% of the national livestock and 90% of wildlife.

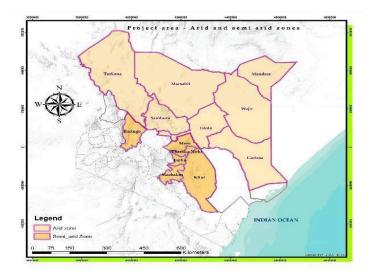


Figure 5-1: Map showing Arid and Semi-Arid land in Kenya

(Source: Ecofix Consultancy Limited 2020)

5.2.2 Climate

The arid and semi-arid zones of Kenya (ASALs), are areas covering zones ACZs IV to VII, where annual rainfall ranges between 150 mm and 550 mm per year for arid zones, and 550 mm and 850 mm per year in semi-arid zones (UNDP, 2013). Annual rainfall is usually directly influenced by relief and Monsoon winds. Apart from the Lake Victoria Basin that experiences one long rainy season, from March to September, the rest of the rainfall follows a strong bimodal pattern with the long rains falling in March-May and short rains in October-December. The mean annual rainfall is estimated at 621 mm, while the amount of rainfall that contributes to the surface and groundwater resources is estimated to range from 250 mm to 750 mm in arid and semi-arid areas, and from 1000 mm to 1690 mm in the coastal belt, the highlands and the Lake Victoria basin. However, the actual contribution is lower due to evapotranspiration (see **Figure 5-2**):

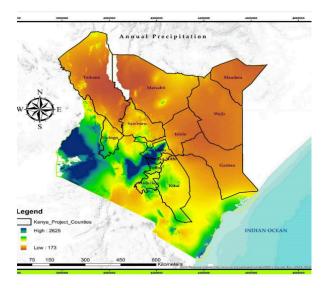


Figure 5-2: Annual Precipitation for the Project Counties

(Source: Ecofix Consultancy Limited 2020)

5.2.3 Hydrology

Arid and Semi-Arid Lands (ASALs) are characterized by low and erratic rainfall, periodic droughts, irregular agricultural productivity and high-water scarcity. The hydrology of ASALs influences water security, environmental sustainability and agricultural production and availability of fish and energy resources (Ondieki C. M 2018). The influences are pronounced in the tropical environments where land degradation threatens the livelihoods of poor communities. Some of the perennial Rivers include Turkwel, Kerio, Lokichar, Ol Arabel, Perkerra, Tana River, and the upper section of Ewaso Ng'iro. Seasonal Rivers include River Suguta and many forming open lager during dry season (see

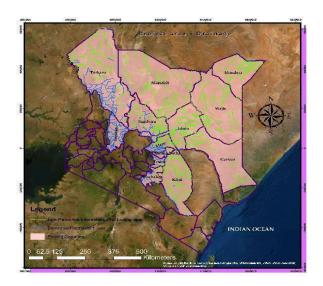


Figure 5-3: Drainage of the Project Area

(Source: Ecofix Consultancy Limited 2020)

5.2.4 Vegetation Cover

Acacia and *Commiphora spp* dominates the desert thorn-scrub lands. Grazing is characterized as nomadic, and is the primary occupation of the local communities. The low montane forests in the ASALs are dominated by tree species, and in some case such trees form closed forest vegetations. The main tree species include: *Juniperus procera (cedar), Podocarpus gracilior, Olea africana, Olea hochstetteri, Lawsonia inermis, Combretum molle, Casipourea malosana, Diospyros abyssinica and Teclea simplicifolia.* The deciduous woodland occurs throughout the ASALs and is dominated by *Acacia tortilis*. Other more notable species include: *Hyphaene ventricosa, Salvadora persica, Acacia nubica* on the Northwest and northern Kenya and Commiphora and Acacias in the southern parts. Deciduous and evergreen thorn bush constitute another extensive vegetation cover type. The main species in the north include: *Acacia reficiens, Acacia senegal, Euphorbia sp., Pappea capensis* and *Combretum molle.* The dominant species of the shrub land vegetation are *Acacia mellifera, Acacia senegal, Acacia reficiens* and *Acacia tortilis* in the more northerly parts. In the south, *Acacia reficiens* and *Commiphora ssp* are the dominant species (Kigomo N B., 2001).

ASALs experience a notable issue with expansion of invasive plant species, which have reduced pasture production on grazing lands and rangelands and continue to cause loss of biodiversity. A couple of species of concern are *Prosopis juliflora* tree (locally known as 'Etirae' in Turkana) – native to South America – was introduced in the ASAL in Kenya in the 1970-80s to help with rehabilitation efforts. Prosopis has a very aggressive growth habit - making it very difficult to eradicate after establishment. Currently, Prosopis covers over 1.5 million ha in 15 ASAL counties in Kenya and continues to expand (FAO, WB & UNHCR, 2018).

5.2.5 Fauna

Fauna within the 7 DRSLP II counties can be categorized into two major groups: livestock and wildlife species.

5.2.5.1 The Livestock Sub-Sector

Rangelands contribute more than 50 % of the nation's livestock production, raised mainly for meat and milk (Western et al., 2009). Cattle are the most important in terms of biomass (73%) followed by goats and sheep (19%), and camels (6%). Most of these animals are indigenous. Zebu cattle make up about 75% of the national cattle herd, while dairy cattle number about 3 million, of which 60% are crossbreds. Most of the sheep in Kenya are the indigenous fat-tail group of hair Sheep, and goats are the small East African group of short-eared Goats. There are three types of camels in Kenya Rendille, Gabbra and Somali; most belonging to the Benadir type from southern Somalia. Camels carry significant economic value in the drier parts of Kenya and have a considerable impact on the welfare of pastoral communities who use them for milk, meat, hides and transport. The DRSLP II counties are major producers of beef, mutton, goat meat and camel meat, while the high and medium potential lands are important for dairy production. About 33% of cattle, 50% of goats and sheep and 100% of camels in Kenya are found in the 7 DRSLP counties.

5.2.5.2 Wildlife

The highest population, density and diversity of Kenya's wild fauna is found in the dry zones of the country. About 90% of the over 50 gazetted national parks, sanctuaries and game reserves are located in the arid and semi-arid areas (ASALs). To date, Kenya has 26 national parks and 30 national game reserves (including one game sanctuary); as such, eight per cent of Kenya's land is under some form of protection. In addition, there are several private game sanctuaries, primarily set aside for the protection of the endangered Black Rhinoceros (*Diceros bicornis*) among other species (Kigomo N B., 2010) (see **Reference source not found.**). It should also be considered that in the ASALs there is more wildlife existing outside of the protected areas than inside the park boundaries, which must be taken into account for pastureland management and other project activities.

5.2.5.3 Fisheries in both Lake Turkana and Lake Baringo

According to Carr 2017, the northern Turkana fishing communities derive their livelihood from Lake Turkana – particularly along the northern shoreline of the lake and the Omo delta, where the annual flood pulse of the Omo River provides major freshwater and nutrient contributions to the lake—as well as in Ferguson's Gulf, Alia Bay and several other key fishing habitats along the lake's shallow locales.

The two most important catch species from Lake Turkana are the *Lates niloticus* (Nile perch) and Nile tilapia of various species (*T. nilotica T. galilaea T. zilii Oreochromis niloticus*) The other fish species found in Lake Turkana include: *Labeo Horrie*, *Distichodus niloticus*, *Clarias lazera* (Catfish), *Synoclontis*

sp., Alestes - including: A. dentex A. baremose A. nurse, Citharinus citharus, Hydrocynus forkalii (Tigerfish), Barbus turkanae (B. bynni), Bagrus spp. (Balck Nile Catfish), Schilbe uranoscopus, Cichlidae, and Bagridae (giraffe catfish). According to Odada etal., 2006, the composition of lake Baringo's fish species includes Oreochromis niloticus, Protopterus aethiopicus, Clarias gariepinus, Barbus intermedius and Labeo cylindricus. The fish species composition of Lake Turkana are likely to be affected by the quantities and quality of water reaching the lake. Changes in climatic conditions will be contributors to the changes of quantities and quality of water in the targeted regions.

5.3 Socio Economic Status and Livelihood

The economy of the arid areas is dominated by nomadic pastoralism, while in the well-watered and better-serviced semi-arid areas a more mixed economy prevails; supported by rain-fed and irrigated agriculture, agro-pastoralism, small-scale businesses based on dry land products, and conservation/tourism related activities. The ecology of semi-arid areas allows for the intensification of production in a way that the ecology of arid areas does not². Other groups within the 7 counties depend on fishing, hunting and gathering for their subsistence, especially those bordering water sources like Lake Turkana, Baringo and others. Meanwhile, towns across both arid and semi-arid areas are growing, creating an urbanized population with different needs and aspirations.

5.3.1 Pastoralism

Pastoralism is the extensive production of livestock in rangeland environments. It takes many forms, but its principal defining features are livestock mobility and the communal management of natural resources. These are regulated by sophisticated governance systems within pastoral societies³. The primary policy challenge is how to protect and promote mobility, while supporting the customary institutions which underpin pastoralism in a society that is otherwise sedentary and tending towards more individualized modes of organisation and production. Pastoralists in Kenya are found in all the arid counties and in some of the semiarid counties – including the Rangelands of Turkana, Marsabit, Isiolo, Garissa, Baringo, Samburu, and West Pokot.

5.3.2 Agricultural Crop Production

The major cereals grown are maize, finger millet, and sorghum. The root crops include sweet potatoes and cassava. The legumes grown are beans, cowpeas, pigeon peas, green grams, groundnuts, chickpea and Dolichos lablab. The usage of the hybrid or composite seeds from seed companies is very low majorly due to economic constraints and their unavailability in time for planting. 95% of farmers rely on informal seed systems for seeds and planting material for most crops in Eastern province. Farmers prefer to plant local landraces conserved on their own farms, purchased from the market or exchanged with neighbors to cut down on costs of purchasing seeds, due to economic constraints (Rocha J, et.al (2012).

Cash crops include cotton, sisal, and tobacco. Crop performance and yield are significantly influenced by the amount of rainfall and its distribution throughout the rainy season. As a result of inherent soil moisture deficits, the period of cropping is limited to the two rainy seasons. The potential length of the growing season differs for the long and short rains, and influences the choice of crops. Most crops are grown during the short rains, since rainfall is more reliable in this period. Inter-cropping of legume

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² K.O. Farah et al, 1996: The Management and Development of the Arid Communal Rangelands in North-Eastern Kenya: A Critical Analysis of the Past and Present, The African Pastoral Forum Working Paper Series No. 7

³ WISP, 2008: Policies that Work for Pastoral Environments

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cover crops (e.g. beans and peas) with maize is a common farming practice as it minimizes risks of crop failure due to unexpected soil moisture deficits. Extensive mixed cropping (without crop rotation) is practiced as a risk spreading strategy. In the floodplains and along the seasonal and perennial rivers, where the water table remains high and there is adequate soil moisture, crops like bananas, sugar cane and vegetables are grown (Vision 2030-GoK, 2012).

For example, they use seed from previous harvests for composites (Katumani), and local seed varieties for maize (Kinyanya), and sorghum (Katenguand Kaveta). However, recycled seed has often been exhausted through generations of cultivation. This results in persistently low yields, lack of crop variety diversity and increased proliferation of pests and diseases on farm (Rocha J, et.al (2012).

5.3.3 Tourism

Most protected areas such as game reserves and national parks are found in the ASALs. Protected areas are gazetted landscapes/seascapes that have been surveyed, demarcated and gazetted either as National Parks and/or National Reserves (Baringo, Samburu, Turkana, Isiolo, Marsabit, and Garissa Counties. This gives the region a comparative advantage in tourism, an industry that is usually Kenya's highest foreign exchange earner and contributes approximately 12% to Kenya's GDP. Pastoralism, conservation, and bio-diversity are intimately linked. More than 70% of Kenya's wildlife is found outside protected areas on land occupied by pastoralists. With the right incentives in place, research shows that wildlife numbers and diversity can be higher in areas adjacent to national parks than within the parks themselves⁴.

There are three systems of land occupancy in Kenya. These are: individual (freehold), communal (customary, usually as trust lands), and public (leasehold). Individual title confers security of tenure by registering the absolute rights of ownership to the holders. This can encourage investment on land, make farmers more credit-worthy, create a land market, minimize land disputes, and promote intensification of agriculture. Communal land tenure is found mainly in the ASAL, although there are still some remnants of it in the high to medium potential lands. Public (leasehold) tenure system confers right of occupation and use for a given period, usually 99 years, and is generally subject to conditions of use and payment of rent. Both freehold and leasehold tenure systems mainly apply to urban, and to high and medium potential lands, though many private (individual or company) and group ranches have secure freehold rights in some dry lands. Another form of public tenure is vested in Government for such uses as state farms and ranches, national parks and reserves of various types, and gazetted forests. The total surface area of Kenya is about 587,000 km², out of which the land area is about 576,000 km² and the remainder is under water. Only about 16% of the land area is high and medium potential, while 84% is classified as ASAL. The high and medium potential lands are dominated by crop and dairy farming, both of which occupy 31% and 30%, respectively, of the land area. The remaining land is devoted to forest (22%), parks (12%) and urban development, homesteads and infrastructure (5%). The major economic activity in the ASAL is nomadic pastoralism, which occupies about 50% of the ASAL landmass, while ranching and other forms of livestock keeping utilize 31% and the remaining 19% can support some agriculture, including agro pastoralism.

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⁴ ASARECA, 2009: NRM and Biodiversity Conservation in the Dry lands of Eastern and Central Africa and ILRI: Pastoralism: The Surest Way out of Poverty in East African Dry lands

5.3.4 Poverty

The ASALs have the lowest development indicators and the highest incidence of poverty in the country. On average, 65% of the ASAL population live below the poverty line compared to the national average of 26%. ASALs contain 18 of the 20 poorest constituencies in Kenya; some counties in the north, such as Turkana, Marsabit, Garissa, and Baringo, have between 74% and 97% of people living below the absolute poverty line (*Report on Richest and Poorest Counties out - Business Daily*, 2019). The economic activities that are found in dry lands are not recognized for their true value and do not attract outside investment, therefore further undermining their productivity. Poverty in the dry lands is compounded by poor physical infrastructure, limited services compared to the rest of the country, and lack of organized markets including lack of market information. This is heightened by inter-community conflict over water and rich-patch vegetation, something that is likely to become more serious with the negative impacts of climate change.

5.3.5 Health

Health indicators in Northern Kenya are very poor, particularly for women and children, with high maternal, infant and child mortality, high levels of acute malnutrition, and low immunization coverage. The average distance to a health facility in Northern Kenya is 52km, ten times further than the national target of 5km; the percentage of children delivered with trained care in ASAL is less than one-third of the national average; there are also significant differentials between the arid and non-arid parts of Rift Valley and Eastern regions of Kenya. ASALs of Kenya is also characterized by a high prevalence of trachoma and diseases such as kalazar. Levels of HIV/AIDS infection in the north are lower than the national level but thought to be rising. Risk factors include rural-urban migration, mobility, and congested refugee camps (GoK, 2012). Most communities have social protection systems to care for the vulnerable, although these are coming under greater pressure. The disabled and those with HIV/AIDS still face high levels of stigma. The project has the Potential Impacts on Biodiversity and Conversion of Natural Habitat. This may be as a result of the risk of introduction of new species that might alter a whole set of environmental conditions or change of biodiversity and the ecology of the project sites, e.g. construction of dams and water sources may lead to impacts such as waterborne diseases, or where we have micro-dams there might be risks of drowning by animals and people, especially children. Extensive consultations will be carried out where it is anticipated that there will be significant changes. Where dams will be constructed, such dams will have to be secured by means such as fencing.

5.3.6 Gender

Though livestock ownership and control is mainly the domain of men, women also own livestock through marriage or inheritance. While men's work is more associated with herd management and decision-making, the gender division of Labor is not clear cut, as women are often involved in decision-making related to livestock and spend as much time as men on animal care. Women are responsible for milking, food processing and distribution, managing small stock, and for daily food provisioning in the homestead. Men's responsibilities include planning and decision-making with regard to livestock movement, feeding and watering, castration, vaccination, slaughter, building of

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enclosures, digging wells and livestock marketing. Young men and women as well as children perform most of the herding.

To a large degree, it is men who control the income from livestock and its products, although women have a say in how the income is spent. Conflicts over the use of income are one of the factors for the high level of divorce in the ASAL and contribute to women's poverty. Access to social services is very poor, coupled with the low per capita infrastructure network in the ASAL compared to other parts of the country (IUCN, 2007; Elhadi et al., 2015). Gender roles are changing under the impact of urbanization and commercialization. The latter may reduce women's control over resources they previously managed, such as dairy production. The welfare of women and girls is also directly threatened by environmental problems, which increase the pressures of providing for the household, particularly water and fuel-wood collection. High levels of unemployment and few opportunities to generate income mean youth, especially young men, are challenging traditional power and decision-making systems, which have previously resided with elderly men. Some of these young men have been involved in inter and intracommunity cattle raids; others are getting caught up in other anti-social vices.

Gender-based violence is rooted in unequal power relations - social, economic, cultural, and political between males and females. It takes many forms, and can include physical, emotional, or sexual abuse. While both males and females can suffer from GBV, studies show that women, young women, and children of both sexes are most often the victims. The most pervasive form of GBV is violence committed against a woman by her intimate partner. In Kenya, the forms of GBV vary across traditions/cultures, economic backgrounds and regions, some of the common GBV in Northern Kenya include:

- i. Sexual violence, in forms such as sexual exploitation/abuse and forced prostitution;
- ii. Domestic violence;
- iii. Trafficking;
- iv. Forced/early marriages,
- v. Intimate partner violence,
- vi. Rape; and
- vii. Harmful traditional practices such as female genital mutilation (FGM), family disputes and widow inheritance.

Sexual and Gender Based Violence in Kenya has its roots in 'a historical and cultural context of traditional patriarchal domination, colonial rule and attendant introduction of new economic and social structures that disrupted kinship relations. GBV/SEA cases are increasing in diversity and magnitude across the country. The lack of support for survivors emboldens perpetrators (Njeri & Ogola, 2014).

5.3.7 Vulnerable Groups including the Indigenous People

During the site specific ESIA report preparation, efforts will be put in to identify vulnerable groups including Indigenous People who may be identified in the project areas. These are groups of people

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⁵ Addressing the links between gender-based violence and HIV in the Great Lakes region, Country report: Kenya (2013). Mary Amuyunzu Nyamongo, PhD.

who may miss out on the project benefits. Hence they must be identified during the early stages of the project, prior to the start of the project.

5.4 Environmental and Social Baseline of the Targeted Counties

Environmental and social baseline information for the seven targeted counties is presented in Table 5-1: The information is based on the County Integrated Development Plans⁶ and Kenya Housing and Population Census, 2019.

Table 5-1: Counties Baseline Information

County Baseline I	nformation / Description of the Baseline information	VMG (ESS7)
Marsabit		
Size and Population	·	Gabbra, Turkana, Burji,
Landscape	The county constitutes an extensive plain at an altitude between 300m and 900 level. The most notable topographical features of the county are OI Donyo Ra above sea level) in the south west, Mt. Marsabit (1,865m) in the central part of Hurri Hills (1,685m) in the north-eastern part of the county, Mt. Kulal (2,235m west and the mountains around Sololo- Moyale escarpment (up to 1,400m) in the main physical feature is the Chalbi Desert which forms a large depression county of 948 km², lying between 435 and 500 m altitude.	nges (2,066m of the county,) in the north he north east.
Economic Activity	Economic activities include agriculture (main cash crops are vegetables and frui beans and millet), livestock rearing (goats, sheep, cattle, camels, donkeys and beekeeping. The main livestock products are milk, beef, mutton and camel meat registered group or company ranches. However, different communities have the areas. This contributes to resource-based conflicts especially during periods of communities compete for grazing fields.	chickens) and . There are no ir own grazing
Climate Change Effects	Climate change has affected the county's bimodal rainfall pattern making it diffict the onset of the short or the long rains. This has affected farming activities repreparation and has impacted negatively on agricultural productivity. Water realso been affected as many springs located in forests are drying up. Prolonged drought has led to reduced forage, degradation of the environment and a destitution. The 2006-2009 droughts caused devastation to the livestock sector.	egarding land esources have and recurrent
Social Issues and Conflicts	Marsabit County has experienced a wave of violent conflicts, mainly between t Borana communities. A combination of neglect, suspicion, prejudice and r associated with residents living in Marsabit County as well as other frontier cour Exacerbating this situation is environmental stress, with pressure on natural residents of the communities of the communi	remoteness is naties in Kenya. sources giving aries between

⁶ CIDP (2013). County Integrated Development Plan(s). County Government (s), Kenya.

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⁷ Saferworld briefing: Marsabit County conflict analysis June 19, 2015.

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County Baseline Ir	formation / Description of the Baseline information	VMG (ESS7)
Garissa		
Size and Population	It is an administrative county in the former north-eastern Province of Kenya. Its capital and largest urban area is Garissa. The county had a population of 841,353 at the 2019 Census, of which 458,975 are males, 382,344 females and 34 intersex person. There is a total of 141,394 households with an average size of 5.9 persons per household. It has a population density of 19 persons per square kilometer and a land area of about 44,753 km² (17,279 sq mi). As of 31 August 2016, Garissa County had more than 260,000 Somali refugees in refugee camps at Dadaab. As a result, the County is mostly inhabited by ethnic Somalis.	Jareer, Mushunguli, Gosha, Sanye
Landscape	The county is mostly arid, desert terrain. The Tana River, which rises in Mou of Nyeri, flows through the Garissa. The Bour-Algi Giraffe Sanctuary, situated Garissa, is home to endangered wildlife including the Rothschild Giraffe, Gerei herbivores including Kirk's dik-dik, Lesser Kudu, Warthog and Waterbuck.	5 km south of
Economic Activity	The main crops grown are maize, green grams, sorghum, rice, cowpeas, bananas, mangoes, pawpaw, water melon, tomatoes, capsicum and onions. The average size of crop fields is 1.5 hectares for small scale farms and 20 hectares for large scale farms. Cattle (Boran), goats (Galla), sheep (black headed Persian) and camel (dromedary one humped) are kept as the main livestock for producing key livestock products, namely meat, milk, hides and skins.	
Climate Change Effects	The county is impacted by climate change mainly through increased periods of crainfalls and an increase in temperatures.	Irought, erratic
Social Issues and Conflicts	·	
Isiolo		
Size and Population	Isiolo county covers 25,336 km² and has a total population of 268,002 persons as 2019 census. Of this 139,510 are males, 128,483 are females, and 9 intersex persons. There is an average size of 4.6 persons per household and a population density of 11 persons per km².	Somali
Landscape	Most of the land in the county is flat, low-lying plain resulting from weathering a sedimentation. The plains rise gradually from an altitude of about 200 meters at swamp. It is abundant with natural resources including some perennial rivers (upongiro North up to Merti, Isiolo, Kinna, Bisanadi, Likiundu and Liliaba) (see the drapattern on	: Lorian pper Ewaso

County Baseline Information / Description of the Baseline information VMG (ESS7) Project aren - Drainage Figure 5-3) **Economic** A large portion of the county is arid and not appropriate for crop farming. However, maize, Activity beans, cowpeas, onions are produced in the areas bordering Meru and Laikipia Counties. Mangoes pawpaws and other horticultural crops are produced in the existing private small-scale irrigated farms along rivers. The backbone of the county's economy is livestock production with over 80 percent of the inhabitants relying on livestock farming. The county has several ranches. A ranch neighboring Lewa Wildlife Conservancy is used as a breeding ground of Black Rhinos. Borana ranch is a group ranch and is a home to 50 indigenous tree species and over 300 species of birds. Its unique geographic situation makes the 35,000 hectares ranch a haven for a wide diversity of wildlife including Buffalo, Eland, Jackson's hartebeest and herds of Grant's Gazelle. The highly endangered species Gravy Gazelle, Impala and Burchell Zebra also roam its plains. Climate Change Isiolo is one of the most vulnerable counties to climate change in Kenya. Some of the key Effect impacts emanating from climate change include drought and unpredictable rainfall, floods, and spread of water and vector-borne diseases, loss of forest and wetland ecosystems, land degradation and desertification and scarcity of portable water. Social Isiolo is inhabited primarily by pastoralist communities (Borana and Samburu) and hence Issues cattle rustling between the two tribes is common. Isiolo is better endowed with pasture and and Conflicts water points than the neighbouring Counties and for this reason, most herdsmen converge at the County during dry spells with their animals. This therefore predisposes the area to pasture-based conflicts (UNDP Kenya, 2010., Rohwerder B, 2015). Samburu Size and The county covers an area of roughly 21,000 km² (8,000 mi²) in Samburu, northern Kenya where the Samburu, Turkana and many other tribes live. It **Population** Ilkonono, stretches north from the Wuaso Ng'iro River to the south of Lake Turkana. Dorobo, According to the 2019 census, the county has a population of 310,327 Rendille persons. Landscape The county is located in the arid and semi-arid parts of Kenya, and is made up of several highlands, plateaus and lowlands including the famous Suguta Valley. The main natural resources found in the county include land, water, forests, and wetlands, solar and wind energy.

County Baseline Ir	nformation / Description of the Baseline information	VMG (ESS7)
Economic Activity	The main economic activities in Samburu County are livestock keeping and the barley and wheat. The county has no manufacturing industries despite of op various sectors such as livestock and minerals.	portunities in
Climate Change Effects	Climate change poses a threat to the livelihoods and well-being of the Samburu. Most of the climate change impacts felt in Samburu are the result of the rainfall patterns. Impacts include rainfall periods becoming shorter and unareas that previously received adequate rainfall; prolonged droughts that are rainfall severe with time leading to massive loss of livestock; poor crop yield increased vulnerability in terms of food security; high prevalence of malaria livestock diseases; migration and displacements that severely affects liveliho also worsened the problems of resource conflicts and cattle rustling within the neighboring counties.	he changes in predictable in more frequent ds leading to outbreak of od which has
Social Issues and Conflicts	Much of the insecurity is due to cattle-rustling between the Samburu, Pokot, Borana communities. Due to its proximity to the North Eastern region, the proliferation of guns and small arms which makes the area very volatile. Catt scores of people dead and this is the most rampant form of crime in the area during drought there has been competition over natural resources, especially we the communities (CRECO, 2012; Rohwerder B, 2015).	nere is a high tle raids leave a. In addition,
Baringo		
Size and Population	Baringo County covers an area of 8,655 km ² . It lies between Latitudes 00 degrees 13" South and 1 degree 40" north and Longitudes 35 degrees 36" and 36" degrees 30" East. The county has a population of 666,763 persons (2019 census) and an area of 10,976.4 km ² (4,238.0 sq mi).	Endorois/El Chamus
Landscape	The County has picturesque landscapes that include among others: Waterfalls: Torok and Kessup in Keiyo county, Arror and Embobut in Marakwet of Cliffs: Rondinin (Simut) and Kipngochoch in Baringo county and Kamriny in Keiyo Valleys: The great rift valley (Kerio valley and Suguta valley) Hills/Escapement: Cherangany hills in Marakwet and West Pokot county, Elgeyon Keiyo county, Seker hills in Westpokot county, Tugen hills in Baringo county are in Turkana county. Gorges: Turkwel gorge in West Pokot county and Chebloch in Baringo and Inborder.	o county o Escapement nd Mogila hills
Economic Activity	The economy of the county is mainly agro-based. The main food crops grown are maize, pigeon peas, beans, Irish potatoes, sweet potatoes, sorghum, cassava and finger millet while the cash crops are coffee, cotton, macadamia and pyrethrum. Livestock products include honey, beef, mutton as well as hides and skins. These products, however, receive minimal value addition.	
Climate Change Effects	The County has a climate change vulnerability index of 0.4461. It continues to s weather events that adversely affect the livelihoods of the people. Evidence climate data sources show that the drought frequencies and duration in the coufrom four droughts every 10 years in the 1980s to eight droughts every 10 years. The consequences of these events include food insecurity, where approximately children below five years suffered from malnutrition.	from historic inty increased in the 2000s.
Social Issues and Conflicts	Baringo County is partly arid and partly semi-arid with few water resources. The arise due to the struggle to access pasture and water during the dry sp	

ESMF for Program to Build Resilience for Food and Nutrition Security in The Horn of Africa (HOA)-Kenya Component

County Baseline In	County Baseline Information / Description of the Baseline information VMG (ESS7)		
	neighboring counties have serious security concerns, in particular the bor Baringo and West Pokot; and Laikipia Counties are porous and in the hands of who are in possession of small arms (CRECO, 2012; Rohwerder B, 2015).		
Turkana			
Size and Population	The county occupies an area of 77,000 km². According to the 2019 census, Turkana County has a population of 926,976. With its capital situated in Lodwar, Turkana County is the second largest county, covering more than 13% of Kenya's surface. This vast land in the northwest of Kenya is an emerging economic giant owing to substantial oil deposits that are currently being explored. Industrial scale extraction is anticipated in the coming years— a windfall for a county with a population of slightly over 1 million.	Turkana, and Elmolo	
Landscape	Turkana county lies at an elevation of 360m (1,181ft) while the surrounding basi from 375-914m (1,230-3,000ft). The main mountain ranges of the count Lorengippi, Mogila, Songot, Kalapata, Loriu, Kailong'kol and Silale mountains high elevation, the mountain ranges, are normally green and covered with denhigh woody cover.	y are Loima, Due to their	
Economic Activity	The Turkana people are traditionally pastoralists. The only notable migration p to rural movement in the form of nomadism.	attern is rural	
Climate Change Effects	Rainfall in the county follows an erratic pattern varying significantly both of space. The county, however, experiences both short and long rains. The driest January, February and September. The long rains season falls between the mort July. Short rains occur during the months of October, November and December.	st months are	
Social Issues and Conflicts	The County is prone to famine and cattle rustling due to constant migration of from its different parts and from neighbouring Counties in search of past livestock. Cattle theft is also prevalent during initiation rites of passage when you raid other communities for livestock. This has led to a cycle of cattle rustling communities in Turkana and neighbouring Counties which has in turn led to delders are set up to resolve conflicts (CRECO, 2012).	ures for their oung men may s between the	

6. POTENTIAL ENVIRONMENT AND SOCIAL RISKS AND IMPACTS

The project aims to improve resilience of communities and their livelihoods in 7 counties of Arid and Semi-Arid Lands (ASALs) in Kenya that is prone to drought and other weather vagaries. This shall be achieved through providing grants for input support through the existing mechanism of community structures in order restore crop and livestock production and commercialization as soon as possible. The input support typically include: (i) provision of climate-smart/drought tolerant crop seeds/seedlings, fodder seeds/seedlings; (ii) provision of crop nutrition and protection inputs, animal health inputs, and in some cases, climate-smart animal breeds for restocking; (iii) providing in-kind support for strengthening of farmer producer organizations (to facilitate access to inputs, services and output markets for sustainable restoration of their livelihoods; and (iv) community and multi-community investments through the existing mechanism of sub projects for restoration of degraded pasturelands and water sources.

6.1 Objectives of Impact Assessment

Essentially, impact assessment involves investigations to establish the baseline environmental and social conditions; reporting the results of the baseline study; as well as referencing the baseline study and other empirical data to predict the environmental and social changes that could be caused, induced or exacerbated by the project. The objectives of the impact assessment include:

- i. Identification of both positive and negative environmental and social impacts of the project;
- ii. Identification of tools and techniques for environmental and social impact analysis;
- iii. Proposing measures to mitigate adverse environmental and social impacts; and
- iv. Development of plans for management and monitoring of the environmental and social impacts.

Impact assessment ensures that environmental and social criteria are considered in the early stages of project planning alongside economic viability. To this end the impact assessment shall:

- i. Provide alternative options (location, technology, processes etc.) to the sub projects
- ii. Propose appropriate mitigation measures for the subprojects.

For effective impacts identification, various stakeholders were consulted for potential environmental and social impacts likely to arise during the Project implementation: This in general included environmental protection agencies, affected counties, line ministries, NGOs, CBOs and communities that implement the project. The likely potential positive and negative impacts of the Project are detailed in the Sub-section 6.3 and 6.4 respectively.

6.2 Overall Environmental and Social Impacts

The project aims to improve resilience of livelihoods for communities in the 7 counties in the Arid and Semi-Arid Lands (ASALs) affected by the drought and climate change impacts. The target landscapes are dry season grazing areas, which are critical resource zones that provide refuge during periods of drought. Their existence depends on the availability of permanent water, which makes them hotspots for resource competition and land use change. They are used seasonally by large numbers of livestock keepers, often from multiple ethnic groups, following customary governance practices. Customary institutions have become weakened, leading to a breakdown in natural resource governance, degradation of resources, and escalating conflict.

In light of the project's highly participatory and bottom-up approach, the overall environmental and social impacts of the project are expected to be positive. The project aims to restore community livelihoods and reducing resource pressure. The project will focus for inclusion any vulnerable communities ensuring culturally appropriate benefits from the grants is attained throughout the

project implementation. The project approach will include a social assessment to ensure that the interests of pastoralists and other vulnerable communities are identified and assessed. To be able to fully involve such communities, DRSLP II will adopt inclusivity to undertaking activities in areas where Vulnerable Communities are present and implemented throughout the project to guide entry point and community engagement in implementation of prioritized community investments as shall have been guided by the project social assessment.

However, land-use changes, physical restoration measures and value chain and enterprise development might result in moderate social or environmental impacts given the sensitivity of the dryland ecosystem, the complexity of the social fabric and an increasing pressure from resource competition. Social and environmental risks and impacts are described in Section 6.4. Overall the identified impacts are expected to be site-specific, largely reversible, and readily addressed through project mitigation measures. However, the overall project is classified as 'high risk', partially in the context of risk of inadequate stakeholder and community engagement and disclosure of information. Inadequate engagement and disclosure could lead to exclusion of truly vulnerable, marginalized and minority members of the community from project benefits. This exclusion would be amplified by the context of limited resources against widespread need. Other risks include elite capture (where project benefits are diverted to less needy individuals and locations), and poor access to beneficiaries that hinders meaningful community engagement and monitoring of social harm.

Specific on-the ground interventions and their sites will be defined in greater detail during project implementation. As such, risk assessment at this stage can only be cursory, focusing on generic types of activities. As this is an ESMF, the actual scope and location of activities is not defined. The potential environmental and social impacts of the proposed activities include: (i) potential soil erosion and pollution; (ii) air and water pollution (including groundwater); (iii) generation of solid waste; (iv) occupational health and safety risks related to minor construction works for the proposed construction of grain and seed storage facilities; (v) potential disease outbreak for proposed re-stocking of livestock; (vi) potential degradation of the rangelands; and (vii) potential contamination and poisoning of farmers handling farming pesticides. Social risks and impacts include: (i) gender based violence, (ii) drowning in the water pans, (iii) labor influx, (iv) discrimination and exclusion of vulnerable groups, (v) child labor, (vi) Labor dispute, (vii) spread infectious diseases like COVID-19 and STIs and HIV/AIDS, (viii) community conflicts and threat of security. Table 8-1 sets out mitigation measures to minimize the negative risks and impact while enhancing the positive impacts.

6.3 Positive Impacts

The objective of this component is to support affected farmers and pastoralist livestock holding households restore their productive assets for enhanced adaptation and resilience. The following are the positive impact associated with implementation of the project:

- (i) Availability of employment opportunities for the local artisan in the construction and civil works.
- (ii) Enhancement of local economy base through the project matching grant for the beneficiaries.
- (iii) The project helps protect the poor and vulnerable in desert locust affected areas from human capital and asset loss, enhance their access to food, and restore livelihoods ruined by climate change, drought, and other weather related impacts.
- (iv) Guaranteed food security for the beneficiaries: the livelihood diversification emphasizes the alternative livelihood activities that do not depend on weather conditions.

- (v) Reduced GHG emissions: the project promotes the adoption of climate-smart crop and livestock practices.
- (vi) The direct grant to the project beneficiary results in improvement in people's well-being and livelihoods, and promote equitable development and hence improve beneficiary's livelihood.
- (vii) Community shall access agriculture extension services through the project hired extension worker. This will improve the farm level agronomic practices as well as inputs.
- (viii) Improved post-harvest storage facilities through the construction of quality hay storage facilities.
- (ix) Access to livestock watering point for the constructed water-pans.
- (x) Availability of fodder and pasture for the livestock through the re-established pasture flora.
- (xi) Uptake of improved bee-keeping technologies and practices such as colony splitting/multiplication, adoption of modern beehives and honey harvesting practices that have minimal colony disturbance.
- (xii) Restocked animals: Restocking of animals affected by the locust infestation.
- (xiii) Use of community driven development committees (CDDCs) empowers the community members in undertake community level procurement activities enhancing project implementation, ownership, sustainability and well as monitoring.
- (xiv) Establishment of the Income Generating Activities' groupsIncome Generating Activities (IGA) groups (including Vulnerable and Marginalized Groups) enhances community cohesion and security as well as reducing incidences of cattle rustling. IGAs will be taken through the five stages of forming a group: Forming, Storming, Norming, Performing, and closure; this help communities to embrace and connect to each other.

6.4 Potential Social Risks and Impacts

It is expected that the implementation of the Project activities could have environmental and social impacts. These include but are not limited to:

6.4.1 Gender Based Violence (GBV)

GBV risk are high in the selected project counties due to the traditional / cultural aspects of the respective communities. GBV risks may be exacerbated by the project grants given to the Income Generating Activities' groupsIncome Generating Activities (IGA) groups as men and women shall be actively involved, and patriarchal and male chauvinist norms may come into play.

Within the Project context the most likely forms of GBV to occur are associated with Sexual Exploitation and Abuse (SEA) and Sexual Harassment (SH). Sexual Harassment usually occurs between personnel/staff and involves any unwelcome sexual or requests for sexual favors or acts of a sexual nature that are offensive and humiliating among the same company's employees, specifically companies contracted to do works on behalf of government. Sexual Exploitation and Abuse is more likely and occurs when a company's workers use their position to extract an unwanted sexual act from a member of the community in exchange for access to project benefits, including inclusion of households for casual labour positions. Site specific Environmental and Social Management Plans (ESMPs) will specify ways to address potential GBV in subprojects based on the interventions as detailed in the existing Gender Action Plan. At this stage some general approaches and principles are summarized as follows:

i. Risk Assessment: GBV risks are rated as high given the nature of the activities and the vulnerability of the beneficiaries

- ii. GBV Action Plan shall be prepared by the GBV consultant for the project. Each intervention will include relevant actions from the GBV Action Plan.
- iii. The GCHM addresses GBV-related complaints also with respect to the confidentiality of the survivor and focuses on reporting three aspects: Document a) the nature of the complaint without asking further questions, b) Was the perpetrator associated with the project, and c) If possible, obtain age and sex of survivor. All information must be treated as confidential and the GCHM operator should be trained on how to approach survivors and refer them to safe and ethical GBV service provider(s) within 48 hours(Reporting on Gender-Based Violence: A Guide for Journalists and Editors, n.d.). The Implementing Agency and the African Development Bankshould be notified immediately while respecting the confidentiality of the survivor.
- iv. Survivor-centered approach: Aims to create a supportive environment in which the survivor's rights are respected and prioritized, and in which the survivor is treated with dignity and respect.
- v. GBV cases need a specific channel for their management and since the project is to be implemented in several Counties, conditions may vary depending on local circumstances.

Additional guidance from the GBV Good Practice note include:

- a) Sensitize the MOALF & C as to the importance of addressing GBV on the project, and the mechanisms or implementation.
- b) The project's social assessment to include assessment of the underlying GBV risks and social situation, using the GBV risk assessment tool to provide guidance and keeping to safety and ethical considerations related to GBV data collection.
- c) Map out GBV prevention and response actors in project adjoining communities.
- d) Use oversight of an independent Third Party Monitor (TPM) organization/Independent Verification Agent (IVA) (civil society organization, international or local NGO, academic partner, private sector firm) with experienced GBV staff for monitoring the implementation of the GBV Action Plan and ensuring all parties are meeting their responsibilities.
- e) Clearly define the GBV requirements and expectations in the bid documents.
- f) Clearly explain and define the requirements of the bidders CoC to bidders before submission of the bids.
- g) Codes of Conduct signed and understood by all contractor workers, and
- h) Undertake regular M&E of progress on GBV activities, including reassessment of risks as appropriate (no. GBV cases reported, %/resolved/referred to; no. cases on SH reported, % addressed, no. cases on SEA reported, % addressed, etc).

6.4.2 Child Labor

The need to earn an income may force underage children to seek employment at construction sites (such as hay storage facility and rehabilitation of water pan). A set of Labor Management Procedures may be prepared to support this ESMF with clear guidelines on the prohibition of child Labor.

- Adhere to the provisions of the national labour Act, and / or LMP (if need be)
- Minimum age of project workers for the project is set at 18 years and above except for youths who may be recruited as volunteers to gain educational skills.
- All contracts shall have contractual provisions to comply with the minimum age requirements including penalties for non-compliance in-line with the relevant national laws.
- The PCU is required to maintain labor registry of all workers with age verification.

 Subproject environmental and social management plans should clearly forbid the use of child labor.

6.4.3 Labor Disputes

Several workers are to be employed during construction of hay stores and rehabilitation of water pans as well as undertaking other civil work related to the project. Potential Labor disputes may arise due to breach of contract regarding conditions of employment, fringe benefits, hours of work, and wages negotiated or of already agreed terms. Labor disputes also may arise due to disagreements between workers and between workers and contractors.

Mitigation Measures

- Fair terms and conditions for project workers (guided by relevant national laws).
- Adopt project GCHM as a mitigation measure.
- Use the documented channels as per the project GCHM provisions for addressing workplace grievances for all direct workers and contracted workers within 5-7 working days.
- Workers should sign contracts with code of conduct/ethics upon recruitment,
- Respect for the workers' right to join labor unions and freedom of association.

6.4.4 Spread of HIV/AIDS, STIs and other communicable diseases

An influx of migrant workers and increased incomes could drive an increase in commercial sex work, sexual violence and sexual exploitation of minors (defilement) within host communities. These may in turn drive an increase in transmission of HIV/AIDS and other sexually transmitted diseases. HIV/AIDS awareness should be undertaken during project implementation and integrated into training of Income Generating Activities' groups (IGA) groups.

Mitigation Measures

- Carry out periodic HIV/AIDS awareness training for workers and the beneficiary community;
- Distribution of condoms to workers and beneficiary communities, especially the IGAs;
- Carryout voluntary HIV/AIDS testing for workers and community members;
- If tested positive, further guidance will be offered and directed to the nearest public hospital to receive free antiretrovirals (ARVs) drugs;
- The project team should use the services of contracted GBV / SEAH service providers to undertake community outreaches;
- Hire local workers where possible to minimize the extent of any influx; and
- All workers shall sign code of conduct / contract that has a clause against SEA

6.4.5 Labor Influx

The construction of water pans and hay stores and other civil works is associated with in-migration of workers into project implementation areas. This influx may lead to destabilization of the local economy and increase pressure on social amenities. It may also stimulate local businesses and accelerate the spread of STI's including the HIV/AIDS as well as other infectious disease such as COVID-19. It could also drive an increase in unwanted pregnancies as the migrant workers interact and have relations with the women and girls within the host communities as well as increase security threats.

Mitigation measures

All workers shall sign code of conduct / contract that has a clause against SEA,

Incorporate local leaders as part of hiring procedure i.e. recommendation letters from the local leaders i.e. Chief, Sub chief or Village Elders, and

Encourage hiring the local workers.

6.4.6 Discrimination and Exclusion of Vulnerable Groups

Vulnerable communities may be disproportionately disadvantaged or made more vulnerable by the drought and project interventions. As a result, such communities could fail to benefit from the development and opportunities resulting from the project through discrimination and exclusion during the selection of beneficiaries. Additionally, it is possible that that commonly disadvantaged categories such as Women, differently abled persons, youths and elderly could be excluded from planning processes, leadership and implementation. As per 6.4.7 below, activities that may have adverse impacts on land and natural resources subject to traditional ownership or under customary use of occupation, activities that cause relocation of the vulnerable from land and natural resources subject to traditional ownership or under customary use or occupation, or activities that have significant impacts on vulnerable cultural heritage that is material to their identity, culture, ceremonies or spiritual aspects are excluded from financing under this project.

Mitigation measures

- The employment of project workers should be based on the principle of equal opportunity and fair treatment:
- Inclusive consultations and focus groups particularly to ensure participation of women and other vulnerable groups as provided for in the project ESMF and related instruments,
- No discrimination with respect to any aspects of the employment relationship;
- Hold sensitization meetings on resources planning and conflict resolution mechanisms;
- Institutionalization of social inclusion of all categories in processes and decision making
- The project shall comply with the Employment Act, 2007 on gender equality in the workplace,
- Provide enough and suitable toilets and washing facilities, separate from men and women workers, boy youths and girl youths as the community cultures demand, and
- The contracts with third parties should include non-exclusion requirements as part of the monitoring system; and,
- As per GCF Indigenous Peoples Policy, the project should include an IPPF or an IPP, with clear provision for FPIC as it will also impact directly and indirectly Indigenous Peoples.

6.4.7 Security Risks

Some of the target counties (hotspots such as Mandera and high-risk counties such as Garissa as well as parts of Turkana) are prone to community conflicts as well as security issues related to Al Shabab elements crossing from Somalia. The implementation of the project should not in any way exacerbate existing community conflicts or create new conflict given the DRSLP II aims at an all-inclusive. Activities that may have adverse impacts on land and natural resources subject to traditional ownership or under customary use of occupation, activities that cause relocation of vulnerable from land and natural resources subject to traditional ownership or under customary use or occupation, or activities that have significant impacts on vulnerable cultural heritage that is material to their identity, culture, ceremonies or spiritual aspects are excluded from financing under this project. However, conflict leading to increased security risks may still occur over access to benefits, access to natural resources and land. Additionally, the project has an established GCHM to be operationalize as a readily available tool for addressing such conflicts at all project levels.

Mitigation Measures

- The MOALF & C shall work closely with the Ministry of Interior to ensure the security of the workers, and that facilities provided under the DRSLP II are responsive.
- Project teams shall seek security approval and clearances form the project coordinator.
- Project teams shall be periodically subjected to security awareness campaigns.
- Project teams should have alternative communication devices, such as two-way radios or satellite phones in areas with limited or no cellular network coverage.
- Use local leaders as part of the project implementation committee members, and
- Implement the requirements of a Security Management Plan specifically the requirement security escorts within determined project insecure areas.
- During the development of the detailed Environmental and Social assessment studies, there will be need to carry out conflict sensitivity assessment to determine the levels of fragility and likelihood of conflict occurrences.

6.4.8 6.4.8 Risk of wildfires

Mitigation

Where there will be established forests and rehabilitated rangelands may require establishment of firebreaks that can be used to control wildfires.

6.4.9 Social Conflicts

6.4.9.1 Conflict among Group Members

The selection of subprojects shall follow a bottom-up approach, moderated by an elected chairperson helming the Income Generating Activities' groups Committee. The gathering together of community members could trigger social conflicts arising from disagreements over the choice of subproject, crops selected and general disputes on local governance. Local cultural norms may exacerbate such conflicts even within groups e.g. if the youth feel their voices are not being heard or considered in decision making.

- Adhere to the provision of GCHM procedures in resolving emanating social issues within 5-7 working days,
- All members of IGA should be trained through all stages of group formation and dynamics:
 Forming, Storming, Norming, and Performing to appreciate group dynamics.
- Use of the culturally acceptable alternative dispute mechanisms including: mediation, negotiation and conciliation by seeking the help of elders to solve the conflicts.
- Use of the village or subproject conflict management committee to solve community conflicts. IGA members might develop guidelines for desired qualities of committee members such as a reputation for fairness, honesty, and good listening skills and select candidates. The selection process should involve elders, traditional leaders, men, women and young people, physically challenged and members of traditional conflict-resolution institutions.
- IGA Committee members should be transparent and adhere to the guidelines in the selection of the value chain as a business enterprise that is acceptable to the majority of the IGA members.

6.4.9.2 Conflict between Communities

Disputes may arise between communities in the following ways: competing interests over access rights to water points, theft of livestock, and expansion of crop fields into traditional livestock corridors; conflict may arise from impartial or imbalance hire of workers or workforce, owing to factors like favoritism, nepotism, and, conflict may be generated or exacerbated by the identification of the project site and who the beneficiaries have competing interests i.e. pastoralist versus farmers. This can create conflict between communities with or without previous historical tensions.

Mitigation Measures

- Adhere to the provision of GCHM procedures in resolving emanating social issues,
- Use of the culturally acceptable alternative dispute mechanisms including: mediation, negotiation and conciliation by seeking the help of elders to solve the conflicts;
- Inculcate strong links and communication between farmers and herders;
- Use of the village or subproject conflict management committee to solve community conflicts.
 The selection process should involve elders, traditional leaders, men, women and young people, physically challenged, and members of traditional conflict-resolution institutions; and
- Selection of the subproject should undertake thorough culturally appropriate consultation with stakeholders especially between potential rival communities with or without a history of conflict.

6.5 Potential Negative Environmental Risks and Impacts

6.5.1 Generation of solid waste

Beneficiaries are to benefit by getting conditional grants for buying agricultural inputs, the input support would typically include: (i) provision of climate-smart crop seeds/seedlings, fodder seeds/seedlings; (ii) provision of crop nutrition and protection inputs, animal health inputs, to facilitate access to inputs, services and output markets for sustainable restoration of their livelihoods. Improper handling of packaging materials for the inputs may lead to littering and solid waste nuisance. Farmers should be taught to manage, handle and dispose of solid waste originating from agricultural inputs. Care should be taken as packaging for inputs such as pesticide may contain hazardous waste. Other possible wastes include the construction related waste from the construction site and other civil works.

- Agrochemical wastes/hazardous waste (i.e. packaging containers) should be stored in fenced locations for temporal storage before disposal in an environmentally sound manner.
- The project should conduct regular sensitization and awareness sessions at the local communities and schools to ensure children do not have access to hazardous waste. Conduct periodic training for beneficiaries on safe disposal of agrochemical wastes, and follow-up by the CPCU environmental and social Safeguards Team.
- Trainings should incorporate the aspects of waste collection, handling, transport, and treatment.
- Project workers and staff should be trained on the aforementioned areas when dealing with construction wastes.
- Proper management and disposal of obsolete pesticides i.e. return to the Agro Input Dealer,
- Ensure that waste disposal mechanisms comply with existing waste management practice that is acceptable under Environment Management and Coordination Act (Waste Management) Regulation 2006.
- Designate temporal waste / garbage holding areas for both agrochemicals and construction waste at construction sites,

- Contractor should be responsible for handling and disposal of all construction and related waste, for the whole duration of the project and prior to completion of their contract.
- Provide legible waste bins of different waste streams with covers to be empties on weekly basis and or on need basis, and
- Waste disposal by burning should not be permitted and signage should be erected.

6.5.2 Emission of Dust and Noise

Airborne particulate matter pollution is likely to occur during route clearance, excavation and transport of construction materials; and could adversely affect site workers and residents. In addition, dust may be emitted during excavation and related earthworks during the development of water pans and other civil works. Construction of the of hay stores, water pans and other civil works will most likely result in elevated noise emissions as a result of the construction related activities. The said noise could impact negatively on the workers at the active construction site and the residents near the site. Noise can also be a nuisance to the local community if construction works begin too early in the day and continues into the night. NB: This noise level is not anticipated to be beyond the permissible levels of 65 dBA: Labor intensive techniques will be preferred.

Mitigation Measures

- Apply strict measures for handling and storage of powdered construction materials such as cement, lime and concrete additives. The measures include controlled access with padlock, use of PPEs at all times and covering of materials during haulage with tarpaulin;
- Excavation, handling and transport of erodible materials shall be avoided during high wind conditions or covered by tarpaulin during transit;
- Vehicles transporting construction materials with high proportion of dust particles, like gravel, sand, etc should have tarpaulin to cover the materials during transportation;
- Wet all active construction areas as and when necessary to bind dust particles;
- Vehicle speeds be limited to a maximum of 10km/h when traversing densely populated areas.
- Limit the construction activities between 8:00 AM to 5:00 PM; and
- Provide workers with PPE i.e. ear plugs and dust masks to mitigate against elevated noise levels and dust respectively.

6.5.3 Drowning in the Water Pans

In the absence of appropriate safety measures, accumulation/ponding of water during construction and opening of water pans could pose a health and safety hazard (drowning) for both livestock and community members. Pastoralists, especially children who swim in the water pans are particularly at risk as are the livestock that accesses the facility and contaminate it.

- The boundaries of the water pans should be fenced off (at a minimum of 2m height) to minimize unregulated access by children and other community members,
- Post warning signs (in a manner accessible by all community members) informed by a bylaw to prevent swimming and trespassing / unauthorized access to the water pans (RESTRICTED AREA, DEEP CUT, DON'T SWIM, DEEP WATER PAN),
- Train workers on water pan safety measures,
- Never leave children unsupervised while near the water pan area,
- Deploy a guard to keep watch of any non-compliances by the community during construction,
- Adopt community emergency preparedness and response plan,

- Clearly demarcate the safe and unsafe zones or restricted access for community members, and
- On a regular basis alert communities to the danger of drowning during stakeholder engagement activities and that swimming is prohibited.

6.5.4 Potential Disease Outbreak for Proposed Re-Stocking of Livestock

The project shall support restocking of animals for beneficiaries to compensate losses from the effects of the locust infestation. This restocking if not carried out with utmost diligence could lead to the livestock disease outbreaks like Trypanosomiasis, Rift Valley Fever, Anthrax, East Coast Fever (ECF) and Foot and Mouth Disease (FMD). Animal disease is especially dangerous when drought and disease are covariant, as is often the case, as even common day-to-day levels of infection by normally mild diseases (e.g., orf, pox) or internal or external parasites can become fatal.

Mitigation Measures

- Use services and advice of the veterinary officer before carrying out the restocking of animal to the communities,
- Temporal animal holding facilities / quarantine of animals should be established to temporarily hold restocking animal to the maximum days for gestation of any disease
- Preventive measure like spraying the ticks can be effective for ECF
- Carry periodic vaccination for the case of rift valley fever and foot and mouth disease
- Not to purchase livestock from areas with disease outbreaks;
- Infected dead animals should not be eaten by the community members; and
- Develop a procedure on safe disposal of infected dead animals to avoid human consumption.

6.5.5 Loss of Vegetation Cover / Degradation of Rangelands / Soil Erosion

Sub-project activities (such as construction of hay storage facilities and water pans, provision of farm inputs, grants for agricultural practices and re-stocking of particular areas) may lead to localized and cumulative impacts on resources such as bio-diversity, rangeland, soil and water quality. The environmental and social screening tools presented in this framework are to be used to identify and mitigate the potential impacts as they relate to certain types of community investments.

- Protect the soil against erosion by good farm management practices such as agro-forestry, conservation tillage and contour farming
- Public awareness programs should be conducted during project implementation to ensure that beneficiaries understand and take up their role in rangeland management.
- Train farmers in soil and water management practices to avoid land degradation
- Restocking of animals should consider the carrying capacity of the available community rangeland, including consideration of any regularly present wildlife in the area.
- Limit animal numbers or control access to grazing lands
- Control length of grazing time through introduction of rotational grazing, development of dry-season grazing areas and reserves.
- No opening up of encroaching on the forested areas,
- Minimize cutting of vegetation within the confine of subproject coverage area,
- Plant vegetation especially grass in all disturbed areas, under the guidance of the county environmental officer to avoid introduction of invasive plant species

- Integrate the vulnerable groups into each pasture management / land tenure project by making it a requirement to integrate the interests of the poor and vulnerable into the pasture management / land tenure projects as guided by the OS2 and
- Establish woodlots and use boundary planting of tress to increase tree cover at beneficiaries' land, under the guidance of the county forestry officer.

6.5.6 Pollution of Open Water Sources

Subprojects to be implemented are expected to be small-scale and localized. Beneficiaries shall be encouraged to use of organic manure and compost fertilizers, and integrated pest management while discouraging reliance on chemical / synthetic pesticides. However, it is possible for the farmers to procure synthetic and biopesticides to manage pests on their farmlands. In addition, restocking activities for the livestock may involve the purchase of livestock from one area to another and need for treatment of livestock diseases as well as the use of acaricides to managing ticks. Improper management and handling during spraying of pesticides may lead to contamination to the environment. Some contents of pesticides could migrate into open water courses i.e. water pans as well as ground water sources. In light of these risks, the application of these pesticides should be carried out in line with the Pest Control Products Act, 2012.

Mitigation Measures

- Follow the procedures and management practices listed in the Projects' Pest Management Plan,
- Limit animal numbers restocked in relation to the capacity of the available land resources.
- Promote Integrated Pest Management⁸ (IPM) Practices incorporating crop management control techniques, biological control and restricted use of biopesticides
- Safe use of these agrochemicals by applying the correct amounts of pesticide, fertilizers and biocides to be used for various crops,
- Pesticide and fertilizers should not be applied before raining days/periods, which may wash the
 pesticides or fertilizers into surface water bodies, hence, causing water contamination,
- Buy the agrochemicals for the Certified Agrochemical Dealers,
- Carry our periodic test for some basic physico-chemical properties / parameters of the water samples to verify if the parameters have change significantly above the required standards.
- Project should train the farmers handling the use of IPM.

6.5.7 Introduction of Alien Plant Species

The project shall support the restoration of degraded rangeland with seeding of pastures and appropriate livestock fodder. In addition, the project shall provide farm inputs for crops and fodder to project beneficiaries. Availability of farm inputs could create opportunities for the Income Generating Activities' groups to open up new farming areas which could in turn lead to proliferation of or colonization by Invasive Alien Species (IAS) such as *Lantana camara* and *Proposis spp.* (also known as mesquite) among others. Invasive species could also be introduced as pasture grass and ornamental plants. The introduction and/or proliferation of invasive alien species would ultimately affect the ecological integrity and biodiversity of the project area.

Mitigation Measures

 All seeding materials both for animal fodder and crop shall be acquired for certified seed dealers in the country;

⁸ Integrated Pest Management (IPM) refers to a mix of farmer-driven, ecologically-based pest control practices that seeks to reduce reliance on synthetic chemical pesticides (ESF, 2018).

- Indigenous plant species shall be considered for landscaping the site (where required) as opposed to alien species;
- Any recognized IAS shall be cleared from the area before it spreads;
- The sites should also be monitored for the growth of any invasive alien species.
- Any recognized invasive species will be controlled throughout the project implementation period by mechanical means before flowering and seeding occurs.
- Maximize opportunities for harvesting already present invasive species, like Prosopis, for use for animal grazing and charcoal production.

6.5.8 Human-wildlife conflict

Human-wildlife conflicts (HWC) are those interactions between humans and wildlife which are perceived as detrimental for either party. Examples of HWC are; the predation of livestock; crop raiding; damage to infrastructure such as grain stores and water channels; and or physical harm or death (Peterson et al. 2010). These conflicts are common throughout the selected counties within the Arid and Semi-Arid Areas. This visible impact of loss of livelihood from HWC is compounded by the visible loss of alternative livelihoods (e.g. cattle production), which results in both visible (e.g. food, economic and livelihood security, increased caring duties) and hidden (e.g. fear, nightmares, loss of identity and self-esteem) costs. Another compounding factor in the problem of wildlife as destructive is the grazing of livestock on farmers' crops. This creates tension between farmers and pastoralists and may distort the economic impact of crop-raiding by wildlife.

Mitigation Measures

- KWS should timely compensate all pastoralist and farmers from the loss incurred due to wildlife attacks;
- Increase the number of rangers post in most affected areas to closely monitor wildlife movements;
- Plant crops that smell (red paper) to discourage animal from destroying crop land;
- Allowing the growth of the buffering areas between the farmlands and the protected areas;
- Dig deep trenches (2 m deep and 2 m wide) to stop elephants from getting out of the protected areas;
- Use of the culturally acceptable alternative dispute mechanisms including: mediation, negotiation and conciliation by seeking the help of elders to solve the conflicts between farmers and herders;
- Community awareness campaigns against wildlife attacks as well as poaching;
- Encouraging livestock wildlife interaction within the environs outside the protected areas;
- Stakeholder involvement especially neighboring community members in planning the management of the protected areas or in the development of Protected Area Management Plans; and
- Increase community access to wildlife resources within the protected areas as well as revenue sharing between respective counties, communities and the national government.

6.5.9 Land take and expropriation

One of the possible impacts of the project will be land take and involuntary resettlement. Where land will be acquired from the members of the community, there will be developed a Resettlement Action Plan (RAP). The RAP will identify the owners of the land, the properties there on, and any other development that may require compensation. First and foremost, the laws of the country that determine acquisition and compensation will be applied. In additional the AfDB

has a policy on involuntary resettlement that will also be applied. Besides, it is important to note that the project is intended for the common good of the people, to uplift their living status. All those directly affected will have to be compensated for loss of livelihoods and ownership of the foregone property. As usual, the project will set up grievances redress mechanisms (GRMs) wherever the projects will be implemented. The GRMs will be set up at different levels starting with the local levels and going up to allow appeals up to the level of using national laws. The local levels have mediation mechanisms including on how natural resources are used. One last chance of mitigation measure will be to seek and accept international arbitration when such conflicts occur but also to prevent these types of conflicts by organizing public consultations under the guidance of IGAD and a dialogue committee. It should be noted that grievances redress mechanisms will include appeal to the GCF for redress as well as the AfDB's Independent Recourse Mechanism (IRM). If found necessary, in view of the circumstances, an Indigenous Peoples Policy Framework (IPPF) will be developed and it will have an Indigenous Peoples Plan (IPP) that will determine how the indigenous peoples cases and circumstances are handled.

The GRMs will also be empowered to address challenges such as social exclusion of the most vulnerable groups which have to be addressed to ensure that the minorities such as indigenous people are well identified and their needs well documented to ensure that they become part and parcel of mainstream project beneficiaries. AfDB emphasises the need for equity in benefit sharing. During project implementation, AfDB will ensure that all project communities benefit equitably from the projects, and opportunistic tendencies that come with elite capture are identified and addressed.

6.6 Occupational Health and Safety

6.6.1 Spread of Infectious Disease – COVID-19

Possible spread of infectious diseases as a result of failure to adhere to COVID-19 prevention measures issued by Ministry of Health, WHO and the African Development Bank. Possible infection routes include: weak compliance with the precaution measures for infection prevention and control on COVID-19 including hand washing hygiene, respiratory / cough etiquettes, contact with infected mask; among others for both community members and project workers especially those at the civil work areas. All activities at the site will be done in line with the AfDB OSs interim note: COVID-19 considerations in construction/civil works projects.

- Awareness creation for both community members (especially beneficiaries due to the
 potential to interact with the project workers) and all project workers on the signs and
 symptoms of COVID-19, how it spreads, how to protect themselves and the need to be tested
 if they have symptoms;
- Use existing grievance procedures to encourage reporting of co-workers if they show outward symptoms, such as ongoing and severe coughing with fever, and do not voluntarily submit to testing:
- All workers shall be subjected to rapid Covid-19 screening which may include temperature check and/or other vital signs;
- Mandatory provision and use of appropriate Personal Protective Equipment (PPE) shall be required for all project personnel including workers and visitors;
- Keep records of all persons (including phone contacts) involved in project implementation;

- Workers are to limit face to face working and work facing away from each other when possible.
- Consider introducing an enhanced monitoring process for activities where less than 2 m distance may be required.
- All equipment should be thoroughly clean before and after using it.
- Provide additional supervision to monitor distancing and teams not to be rotated.
- Increased ventilation should be provided within enclosed spaces.
- Reusable PPE should be thoroughly cleaned after use and not shared between workers. These should be stored in suitable places.
- Single-use PPE should be disposed of so that it cannot be reused and to control potential contamination.
- Workers deemed clinically vulnerable should never work within 2 m of persons.
- Break times should be staggered to reduce congestion and contact at all times.
- Additional sanitary measures are implemented on-site: hand washing stations with a posted hand washing protocol, hand sanitizer stations, provision of disinfectant wiping products.
- Avoid concentration of persons at one location, where more than one person are gathered, maintain social distancing of at least 2 meters; and
- Train community member (beneficiaries) and project workers in respiratory hygiene, cough etiquette and hand hygiene.

6.6.2 Occupational Safety and Health Risks

The construction of subprojects facilities is associated with occupational as well as community safety and health risks related minor construction /civil works i.e. water-pans, and for community livestock watering points and any other civil works.

Mitigation Measures

- Construction workers shall be trained in OHS risks, preventive and corrective actions;
- Daily briefings (toolbox talks) and sensitization sessions to be held before the start of assignments;
- Workers should be provided with fit for work PPEs including gumboots, coverall, gloves.
- Fencing off the active construction areas;
- Availability of well-stocked First Aid Kit with all pre-requisites and a trained First Aider to be available at the site at all times;
- Ensure provision of Health and Safety (H&S) facilities at the Project site, including sanitary facilities, shaded welfare areas, bathrooms, and potable water;
- Contractors should conduct daily tool box meetings on site;
- Ensuring arrangements on provision of health care services for project workers with nearby health center or hospital;
- Clearly marked safety signage to be provided at project sites;
- Workers are to limit face to face working and work facing away from each other when possible;
- Consider introducing an enhanced monitoring process for activities where less than 2 m distance may be required; and
- All equipment should be thoroughly clean before and after using it.

6.6.3 Community Health and Safety

There is a potential community health and safety hazards associated with the implementation of subprojects components including the construction of proposed hay stores, water-pans and any other

civil works. The possible community health and safety hazards include fall from height, traffic accidents and drowning on open water pans.

Mitigation Measures

- Community members (beneficiaries) should be trained in health and safety risks associated with the project and preventive measures;
- Use 9 feet screening materials to fence off the active construction areas;
- Post safety signages in a language understood by the community (RESTRICTED AREA, DEEP CUT, DON'T SWIM, DEEP WATER PAN, GO SLOW, WORK IN PROGRESS, 30 KM SPEED LIMIT) near all active construction sites especially water pans;
- Where feasible deploy security guards at controlled access areas to ensure only permitted persons dressed in appropriate PPEs access the site; and
- If any traffic movement is involved during construction phase, a traffic marshal should be appointed by the contractor.

6.6.4 Potential Contamination and Poisoning of Farmers

Farmers could suffer poisoning from improper handling of biopesticides, synthetic pesticide, acaricides and other medicines used in treating sickling animals. It is the duty of all users of pesticides to act responsibly when acquiring, storing and applying pesticides. The users have a duty to prevent waste, avoid contamination and responsibly manage waste pesticides, pesticide residues and empty pesticide containers⁹. Improper handling and use of knapsack sprayers can lead to ingestion of pesticide by farmers and or minors within the household, as well as contamination of the environment.

Mitigation Measures

Follow the procedures and management practices listed in the Projects' Pest Management Plan. Health and safety risks should be minimized by conducting farmers training on the safe and effective use and storage of chemicals and basic First Aid procedures. Other measures are listed as follows:

- Train farmers in the use of appropriate PPEs while inter-phasing with agrochemicals;
- Train communities, including schools, on the safety aspects of presence of agrochemicals in the area;
- Farmers shall be trained on the handling, transportation, and disposal of the various waste streams including waste pesticides, pesticide residues and empty pesticide containers;
- Appropriate waste bins and other disposal facilities shall be provided for the various wastes and should be emptied regularly;
- Use of fit for work PPEs including gumboots, overall / coverall, safety goggles and safety helmet while using a spray;
- Pesticides should only be acquired in quantities that are likely to be needed, to avoid the potential for creating obsolete stocks.
- Pesticides must be stored safely and securely, away from food and water supplies. The storage conditions must comply with the instructions on the label, particularly with regard to ventilation, temperature and light.
- Keep agrochemical (pesticide, acaricides and herbicide among others) in their original package away from reach by children and mature people as well.

⁹ International Code of Conduct on the Distribution and Use of Pesticides: Guidelines on Management Options for Empty Pesticide Containers (FAO, 2008).

- Avoid storing agrochemicals (pesticides, acaricides and herbicides) in mineral water bottles as well as other drink and food processing bottles, including any unmarked containers;
- Keep agrochemicals empty containers away from reach of children; and
- Train famers over the use of the information on the Material Safety Data Sheets (MSDS) for agro-chemicals.

6.7 Cumulative Impacts from Sub-Projects

Some sub-projects may in some areas result in cumulative impacts on the environment and communities. Cumulative impacts are impacts which may result from individually, small-scale subprojects with minimal impacts but which over time can combine to yield a significant adverse effect on the environment or communities. In such cases, cumulative impacts¹⁰ shall be assessed based on the combined effects of potential impacts from the various Project inputs. They include:

- Potential impacts on surface water bodies (constructed water-pans) arising from the construction of numerous small-scale constructed water-pans works and potential cumulative impacts on water users (especially downstream users of potential river and streams) that share the water sources and aquifers;
- Loss of vegetation cover / degradation of rangelands / soil erosion;
- Pollution of open water sources and underground water aquifers; and
- Introduction of Alien Plant Species and or Invasive species.

Mitigation Measures

- At the stage of sub-project planning, keep track of the activities and their characteristics to identify the areas where a cumulative impact may occur. If such area is identified, the project should develop a cumulative impact assessment to identify any negative impacts and corresponding mitigation measures;
- Avoid the encroachment of the sensitive ecosystem associated with water sources and aquifers,
- Avoid the use of the agrochemicals to the extent possible and adopt the integrated pest management options for the project;
- Implementation of staggered approach in the establishment of woodlots to compensate loss of vegetation;
- Periodic monitoring and implementation of the mitigation measures for the cumulative impacts;
- Continuous manual translocation of grass tussocks and shrub/tree saplings from the surrounding environ without inadvertently causing detriment to the donor locations;
- Closely monitor and identify any proliferation of invasive species for early suppression and control;
- Based on the requirements of the screening, carry out environment and social assessment (ESIA or ESMP) for each sub-project and adhere to the specific mitigation measures on the ESMPs.
- The community CDD members should be trained on the environmental and social risk assessment in the selection of sub projects to limit exacerbation of the cumulative impact due to new sub-projects.

6.8 Cultural Heritage and Chance Find

There is no background information as to the presence of cultural heritage sites. However, there could be potential impact on cultural heritage sites. As such chance find must be anticipated. The chance

¹⁰ The cumulative impact of the project is the incremental impact of the project when added to impacts from other relevant past, present and reasonably foreseeable developments as well as unplanned but predictable activities enabled by the project that may occur later or at a different location (ESF, 2018).

find procedure is a project-specific procedure that outlines actions required if previously unknown heritage resources, particularly archaeological resources, are encountered during project construction or operation. This procedure is applicable to all activities conducted by the personnel, including contractors that have the potential to uncover a heritage item/site. It is a requirement that personnel, especially those working on earth movements and excavations, are inducted on the identification of potential heritage items/sites and the relevant actions for them with regards to this procedure. This can be done during the project induction and/or regular toolbox talks. Steps required in case of a chance find will include: 1. Stopping all works in the vicinity of the find, until a solution is found for the preservation of these artefacts, or advice from the relevant authorities is obtained; 2. Immediately notifying th foreman who then notifies the Construction Manager and the Environment Officer (EO)/Environmental Manager (EM); 3. Recording details in Incident Report and taking photos of the find; 4. Delineating the discovered site or area and securing the site to prevent any damage or loss of removable objects; 5. Carry out preliminary evaluation of the findings by archaeologists; 6. For sites of minor significance, record immediately by the archaeologist to minimize disruption to the work schedule of the Contractor; 7. In case of significant find the Agency/Ministry (Agency for Protection of National Heritage or Archaeological Research Centre, hereinafter referred to as Heritage team) should be informed immediately in writing within the shortest time possible; 8. The onsite archaeologist provides the Heritage team with photos, other information as relevant for identification and assessment of the significance of heritage items. 9. The Ministry must investigate the facts; 10. Decisions on how to handle the finding shall be taken by the responsible authorities; 11. Continue works once permission is granted from the responsible authorities; 12. None response where permission has been sought might be considered as granting of permission. In case no response received within the 2 weeks period mentioned above, this is considered as authorisation to proceed with suspended construction works.

7. PROCEDURES TO ADDRESS ENVIRONMENT AND SOCIAL ISSUES

This section defines the steps in relation to the environmental and social screening, preparation, review, clearance, and implementation of subproject safeguards instruments. Specific steps include:

- Screening potential environmental and social issues of a subproject and classifying its risk levels (Screening Form);
- Developing subproject-specific environmental and social instruments;
- Consultation and disclosure of the environmental and social instruments;
- Review and approval of the environmental and social instruments; and
- Implementation and monitoring of environmental and social action plans.

7.1 The Environmental and Social Screening Process

The section sets out the procedures (Steps 1-7) for identifying, preparing and implementing the project component; environmental and social screening; preparation of required environmental and social plans; consultation on such plans; review and approval; and implementation. The purpose of this screening process is to determine whether the activities are eligible for financing. The extent of environmental work that might be required prior to the commencement of the sub-projects depends on the outcome of the screening process described below:

7.1.1 Environment and Social Screening Steps

Step 1: Screening of the Sub-Projects

The objectives of environmental and social screening are: i) determine whether activities are eligible to be financed; ii) to evaluate the environmental and social risks associated with the proposed operation; iii) to determine the depth and breadth of Environmental and Social Assessment (ESA); and iv) to recommend an appropriate choice of ESA instrument(s) suitable for a given sub-project. Criteria for classification include type, location, sensitivity, and scale of the sub-project, as well as the nature and magnitude of its potential environmental and social impacts.

The screening procedure strengthens accountability to the communities targeted for support, stakeholders in the development processes, and the broader development portfolio. Environmental and social screening and assessment processes for projects have become standard practice in development cooperation and are usually required by national regulatory frameworks and multilateral and bilateral development partners. Therefore, application of the environmental and social screening and review processes demonstrates the appropriateness of safeguard measures.

The initial screening for the selection of the subprojects shall be conducted based on the exclusion criteria in the project context. The following is a negative list of activities excluded for financing under the project:

- Activities that may cause long term, permanent and/or irreversible (e.g. loss of major natural habitat) impacts;
- Activities that have a high probability of causing serious adverse effects to human health and/or the environment, other than associated with spraying to control desert locust;
- Activities that may have significant adverse social impacts and/ or may give rise to significant social conflict;
- Activities that may affect lands or rights of Vulnerable Communities or other vulnerable and marginalized groups; and
- Activities that may involve involuntary resettlement or land acquisition or impacts on cultural heritage

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The Environmental and Social focal points will undertake regular supervision of the sub-projects during implementation, this will be complemented by the National Environment Management Authority (NEMA) staff at the County level. The NPCU environmental and social safeguards team shall provide technical support to the CPCU and ensure environmental and social screening process is undertaken appropriately.

Step 2: Assigning of Environmental Risk Classification

Assigning of appropriate environmental and social risk classification to a sub-project activity shall be based on information provided in the environmental and social screening.

Step 3: Carrying Out Environmental and Social Impact Assessment

Based on the environmental and social screening of the sub-projects, the CPCU environmental and social focal points prepare the relevant environmental and social risk management reports, the reports will be submitted to the NPCU for review and quality assurance, and thereafter to the African Development Bank for review and approval. Similarly, the reports will be submitted to the NEMA County Director of Environment (CDE) for review and licensing.

The Safeguards Specialist's duties include backstopping the sub-projects implementing teams to comply with the relevant National Environmental and Social requirements and the African Development Bank's Integrated Safeguards System (ISS) requirements. This includes reviewing, screening, approving, monitoring and reporting on the progress of the sub-projects. The DRSLP II technical person should guide the formulation and development of the sub project specific ESIAs/ESMPs and Social Assessment for the project, and periodically (quarterly) review and improve capacity to manage safeguards compliance amongst local stakeholders.

Step 4: Review and Approval

The Environment and Social Instruments prepared for civil works (water pans, hay stores and other works) shall be reviewed by Environmental and Social Specialists at MOALF & C, and cleared by African Development Bank. Once there are cleared by the African Development Bank, they will be submitted to NEMA for approval and licensing. The low and medium risk projects shall be submitted to the NEMA county office for review and licensing where respective project sites are located. The County Director of Environment (CDE) shall acknowledge receipt of the SPR by issuing an SPR application reference number and an acknowledgement letter. The SPR shall, WITHIN FIVE DAYS, be screened and assessed for completeness and the following Records of Decision (RoD) of the Authority made and communicated in writing to the Proponent. The Comprehensive Project Report (ESIA) for the high-risk projects shall be preceded by the preparation of the Term of reference, and shall be submitted to National NEMA Headquarters Office for review and approval within 21 working days¹¹. After the approval of ToR, the Comprehensive Project Report shall be prepared by NEMA Lead Expert, reviewed by the CPCU and NPCU and submitted to African Development Bank environmental and social Safeguards team for review and clearance before submission to NEMA HQ.

Step 5: Public Consultations and Disclosure

In carrying out the ESIA or ESMP, supporting evidence of comprehensive public consultation shall be required, such as signed minutes of consultation meetings, attendance lists and filled

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¹¹ http://www.nema.go.ke/index.php?option=com content&view=article&id=302&Itemid=458

questionnaires¹². Public consultations shall take place during the environmental and social screening process and during the validation of the ESIA report. The results of public consultation shall be incorporated and or influence the design of mitigation and monitoring measures. ESIA study reports for the subproject shall be disclosed in-country by the client (MOALF & C) in formats that are accessible to all project stakeholders and on the African Development Bank external website. Public consultations should be conducted in a manner accessible to all project stakeholders, and taking into account the guidance set out in the project Stakeholder Engagement Plan and any other relevant guidance.

Step 6: Monitoring, Supervision and Reporting

All the activities to be financed under the Programme to Build Resilience for Food and Nutrition Security in the HOA (DRSLP II) will follow the ISS, environment and social OSs and the provisions described and agreed in the SEP, LMP, SMP, GBVAP and other due diligence instruments prepared to ensure proper management of environment, social, safety and health requirements. Environmental and social monitoring seeks to check the effectiveness and relevance of mitigation measures through the implementation/operation phase. The NPCU Environment and Social focal points shall monitor project activities at the national level by coordinating and working closely with the CPCU Environmental and Social focal points at the beneficiary counties. During construction of water pans, and other civil works the CPCU environmental and social safeguards experts shall supervise the implementation of mitigation measures at project-specific sites. The trained WRUAs, CDDCs or GCHM Committees will undertake day to day monitoring of the sub-projects and report to the respective CPCU safeguards as well as sector specific technical team leaders regarding the project implementation.

7.1.2 Monitoring Indicators

The monitoring indicators specified within each ESMP shall be used to assess the project's adherence to environmental and social management commitments, including the following categories: i) construction management requirements, ii) waste management, iii) compliance with Legislations, iv) Environment, Social Health and Safety (ESHS) performance of the Project (including but not limited to, stakeholder engagement activities and grievances log, EHS incident logs etc.), v) Compliance with the Labor Management Procedures and workers' GCHM records. The use of indicators for environment and social monitoring has been incorporated into the training and capacity building program.

7.1.3 Social Screening Steps

Social screening for each sub-project shall be undertaken at the time of sub-project identification and before the sub-project design is finalized to identify the key social risks and outline appropriate mitigation measures. Following a determination from the Social Assessment of the existence of thet Indigenous and Vulnerable Communities or that such groups have collective attachment to the project area, the DRSLP II will seek the input from specialists focusing on meeting the consultation, planning, or other requirements of the relevant Operating Safeguard (OS), and subsequent implementation of activities that will be guided by the specific plans such as the Indigenous Peoples Plan. The African Development Bank may follow national processes during project screening for the

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¹² African Development Bank: African Development Bank requires public consultations to be conducted for all Environment and Social Assessment type documents prepared under WB-financed projects (African Development Bank, ESS1, 2017), while NEMA requires public consultations to be conducted for Medium and High Risk projects (NEMA, 2020) (given the stringent, the Bank ESF requirements will be adopted).

identification, in accordance with paragraphs 8 and 9, of vulnerable communities where these processes meet the requirements of this OS.

8. ENVIRONMENTAL AND SOCIAL MANAGEMENT AND MONITORING PLAN AND INSTITUTIONAL ARRANGEMENTS FOR PROJECT IMPLEMENTATION AND SUPERVISION

8.1 Environmental and Social Management and Monitoring Plan (ESMMP)

This section describes the specific environmental and social due diligence provisions necessary to avoid, minimize, or mitigate project activities with potential risks, and to monitor their outcomes. This process also includes identification of institutional responsibilities (implementation, supervision, monitoring and evaluation, and reporting) through the lifetime of the interventions, timing of actions, how these provisions shall be monitored and reported on, and identification of budget requirements. The objectives of the ESMMP are:

- a. To identify measures and plans to avoid, reduce, mitigate and/or compensate adverse impacts and enhance positive impacts. This includes the environmental, health and safety aspects of the project's interventions/activities, risks and negative impacts of the project;
- b. To provide an estimation of the budgetary costs for implementing the mitigation measures alongside the implementing agencies responsible for addressing project impacts;
- c. To develop environmental and social monitoring plan, corresponding to measures proposed in the mitigation plan, for project activities/subprojects and the implementation of mitigation measures with estimated costs. The monitoring plan has included the parameters to be monitored, methods to be used, frequency of measurements, responsibilities and budget;
- d. To identify the responsibilities and capacity assessment for each of the participating implementing agencies responsible for addressing project impacts; and describe institutional arrangements and reporting procedures; and
- e. To prepare clear environmental and social requirements, e.g. mitigation measures and the monitoring plan related to project activities (sub-projects) can be incorporated in the bidding/contract documents.

Environmental and social monitoring assesses project performance against proposed mitigation measures and compliance with health & safety standards and regulations. Whenever applicable, monitoring activities should be assigned direct monitoring indicators for specific impacts and/or compliance requirements in the ESMP, as presented on **Table 8-1** and also guidance as provided in the other project implementation plans.

Table 8-1: Environmental and Social Management and Monitoring Plan

# Key Activities	Potential E&S Risks and	Mitigation Measures	Indicator for	Means of verification	Frequency of	Responsibility	Annual Cost
	Impacts		Monitoring		Monitoring		(USD)
1. Labor and working conditions	a) Gender Violence & Sexual Abuse	 GBV Action Plan shall be prepared by the GBV consultant. Each intervention will include actions from this GBV Action Plan. All workers under the project shall sign a Code of Conduct. Sensitize the MOALF & C as to the importance of addressing GBV on the project, and the mechanisms that shall be implemented. Map out GBV prevention and response actors in project adjoining communities. Use an oversight of an independent Third Party Monitor (TPM) organization/Independent Verification Agent (IVA) with experienced GBV staff for monitoring the implementation of the GBV Action Plan and ensuring all parties are meeting their responsibilities. Clearly define the GBV requirements and expectations in the bid documents. Codes of Conduct signed and understood by all contractor workers (permanent or temporary), Undertake regular M&E of progress on GBV activities, including reassessment of risks as appropriate. Sensitize construction workers and the beneficiary community on GBV/SEAH Operationalize a Grievance Redress Committee to handle reports of sexual abuse and related complaints by the contracted GBV service provider, 	# of reported cases # of cases handled to conclusion Existence of GBV/SEA Action Plan GBV/SEA Training record	Field Visit Document review	Quarterly	Contractor Social Expert	10,000

# Key Activities	Potential E&S Risks and Impacts	Mitigation Measures	Indicator for Monitoring	Means of verification	Frequency of Monitoring	Responsibility	Annual Cost (USD)
		 Work with the GBV Expert to identify appropriate methods for sanctions and escalation. Carry out periodic HIV/AIDS as well as STIs awareness programs for workers and the beneficiary community Adopt project GCHM 					
	b) Child labor	 Minimum age of project workers for the project is set at 18 years and above except for youths who may be recruited as volunteers to gain educational skills. All contracts shall have contractual provisions to comply with the minimum age requirements including penalties for non-compliance in-line with the relevant national laws. The PCU is required to maintain labor registry of all workers with age verification. Subproject environmental and social management plans should clearly forbid the use of child labor. Adopt project GCHM 	Evidence of non-use of child labor,	Consultation , Field Monitoring and Checks, Document review	Quarterly	Contractor Social Expert, County Labor officer	
	c) Labor dispute	 Refer to the section on LMP for complete guidance. Fair Labor terms and conditions stipulated in the project LMP for project workers (guided by relevant national laws). Use the documented channels as per the project GCHM provisions for addressing workplace grievances. 	Labor registry Record of grievances, # of unions workers have joined	review	Quarterly	Contractor Social Expert, County Labor officer	-

# Key Activities	Potential E&S Risks and Impacts	Mitigation Measures	Indicator for Monitoring	Means of verification	Frequency of Monitoring	Responsibility	Annual Cost (USD)
	d)Spread of STIs	 Workers should sign contracts with code of conduct/ethics upon recruitment, Respect for the workers' right to join labor unions and freedom of association Refer to section on LMP for complete 	HIV/AIDS	Consultation	Quarterly	Contractor	5,000
	and HIV/AIDS	 Refer to section on LMP for complete guidance. Signing of Code of Conduct by all workers at the start of their assignment. Carry out periodic HIV/AIDS / STIs awareness training for workers and the beneficiary community; Distribution of condoms to workers and beneficiary communities, especially the IGAs Carryout voluntary HIV/AIDS testing for workers and community members If tested positive, further guidance will be offered and directed to the nearest public hospital to receive free antiretrovirals (ARVs) drugs The project team should use the services of contracted GBV / SEAH service providers to undertake community outreaches. Hire local workers where possible to minimize the extent of any influx. 	training plan, records of VCT training &, condom dispensing facilities, Evidence of hired HIV/AIDS service provider	, Document review	Quarterly	Social Expert,	3,000
	e) Labor influx	 Adhere to the provisions of the prepared Labor Management Procedures section. All workers shall sign code of conduct / contract that has a clause against SEA, Incorporate local leaders as part of hiring procedure i.e. recommendation letters from 	Evidence of LMP # of local workers at the site	, Document review &	Quarterly	Contractor Social Expert	-

# Key Potential Activities Risks	E&S and	Mitigation Measures	Indicator for	Means of verification	Frequency of	Responsibility	Annual Cost
Impacts	and		Monitoring	Vermeation	Monitoring		(USD)
		the local leaders i.e. Chief, Sub chief or Village Elders, and • Encourage hiring the local workers for non-skilled tasks as well as skilled tasks/jobs, as long as they have the required skills and technical knowhow and they can perform the task according to best practice	Letter from local leaders				
2.civil works /a) Risks of construction to worker activities	· · · · · · · · · · · · · · · · · · ·	 Construction workers shall be trained in OHS risks, preventive and corrective actions; Workers should be provided with fit for work PPEs; NB the emphasis should be ensured that the PPE's are always used and are used properly, Fencing / hoarding off the active construction areas; Availability of well-stocked First Aid Kit with all pre-requisites and a trained First Aider to be present at the site at all times; Ensure provision of Health and Safety (H&S) facilities at the Project site, including sanitary facilities, shaded welfare areas, bathrooms, and potable water; and Contractors should conduct daily tool box meetings on site. Ensuring arrangements on provision of health care services for project workers with nearby health center or hospital; Clearly marked safety signage to be provided at project sites. Adopt project GCHM 		Document review	Quarterly	Contractor DOSHS Environment Expert	5,000

# Key Activities	Potential E&S Risks an Impacts	Mitigation Measures d	Indicator for Monitoring	Means of verification	Frequency of Monitoring	Responsibility	Annual Cost (USD)
	f) Community Health an Safety	 Community members (beneficiaries) should be trained in health and safety risks associated with the project and preventive measures; Fence / hoard off the active construction areas (9 feet in height) to limited unpermitted access to the site to prevent / minimize drowning; and Post safety signages in a language understood by the community (RESTRICTED AREA, DEEP CUT, DON'T SWIM, DEEP WATER PAN, GO SLOW, MEN AT WORK, 30 KM SPEED LIMIT) near all active construction sites especially water pans. Where feasible deploy security guards at controlled access areas to ensure only permitted persons dressed in appropriate PPEs access the site; and If any traffic movement is involved during construction phase, a traffic marshal should be appointed by the contractor. A traffic management plan, as relevant to the project, should be developed by the contractor. Contractor shall also alert the community of the traffic movement and related risks. 	OHS sign posts and training plan and records, Fenced off site, evidence of sanitary facilities.	Document review & Photography	Quarterly	Environment Expert	-
	g) Spread Infectious Disease COVID-19	 Awareness creation for both community members (especially beneficiaries due to the potential to interact with the project workers) and all project workers on the signs and symptoms of COVID-19, how it spreads, how to protect themselves and the need to be tested if they have symptoms; 	Records of awareness, Record of PPEs, Thermomet er	, Document review &	Quarterly	Contractor Social Expert	10,000

# Key Activities	Risks and	Mitigation Measures	Indicator for	Means of verification	Frequency of	Responsibility	Annual Cost
	Impacts	 Use GCHM in section 10 to encourage reporting of co-workers if they show outward symptoms, such as ongoing and severe coughing with fever, and do not voluntarily submit to testing; Conduct COVID 19 test for all workers to be being contracted for the job and there after every after two weeks, All workers shall be subjected to rapid Covid-19 screening which may include temperature check and/or other vital signs on daily basis; Mandatory provision and use of appropriate Personal Protective Equipment (PPE) shall be required for all project personnel including workers and visitors; Keep records of all persons (including phone contacts) involved in project implementation; Avoid concentration of persons at one location, where more than one person are gathered, maintain social distancing of at least 2 meters; Organize hand washing stations at the places of public gatherings to support project activities (both construction and stakeholder engagement process) Train community member (beneficiaries) and project workers in respiratory hygiene, cough etiquette and hand hygiene. Develop protocol for safe disposal of used PPE under the project. 	Posted SOP within worksite, Log details for all workers and visitors on site		Monitoring		(USD)

# Key Activities	Potential E&S Risks and	Mitigation Measures	Indicator for	Means of verification	Frequency of	Responsibility	Annual Cost
	Impacts		Monitoring		Monitoring		(USD)
		Workers are to limit face to face working and					
		work facing away from each other when possible.					
		 Consider introducing an enhanced monitoring 					
		process for activities where less than 2 m					
		distance may be required.					
		 All equipment should be thoroughly clean 					
		before and after using it.					
		Provide additional supervision to monitor					
		distancing and teams not to be rotated.					
		• Increased ventilation should be provided					
		within enclosed spaces.					
		• Reusable PPE should be thoroughly cleaned					
		after use and not shared between workers.					
		These should be stored in suitable places.					
		Single-use PPE should be disposed of so that it					
		cannot be reused and to control potential					
		contamination.					
		Workers deemed clinically vulnerable should never work within 2 m of persons.					
		never work within 2 m of persons. • Break times should be staggered to reduce					
		congestion and contact at all times.					
		Additional sanitary measures are implemented					
		on-site: hand washing stations with a posted					
		hand washing protocol, hand sanitizer stations,					
		provision of disinfectant wiping products.					
	h) Generation of	Designate temporal waste / garbage holding	Record of	Field Visit	Quarterly	Contractor	6,000
·	Wastes	areas at site, including for both agrochemicals	waste	Document	•	Environment	-
		and construction waste	handed to	Document review		Expert	
		• Identify waste removal arrangements together	suppliers	review			
		with the County officials. These waste disposal					

# Key Activities	Potential E&S Risks and	Mitigation Measures	Indicator for	Means of verification	Frequency of	Responsibility	Annual Cost
Activities	Impacts		Monitoring	verification	Monitoring		(USD)
		mechanisms comply with existing waste management practice that is acceptable under Environment Management and Coordination Act (Waste Management) Regulation 2006 Provide legible waste bins for different waste streams with covers, depending on the waste streams being collected; to be emptied on weekly basis and or on need basis; Contractor should be responsible for handling and disposal of all construction and related waste, for the whole duration of the project and prior to completion of their contract; Waste disposal by burning should not be permitted and signage should be erected; Agrochemical wastes/hazardous waste (i.e. packaging containers) should be stored in fenced locations. The project should conduct regular sensitization and awareness sessions at the local communities and schools to ensure children do not have access to hazardous waste.					
	i) Human-Wildlif e Conflict	 KWS should timely compensate all pastoralist and farmers from the loss incurred due to wildlife attacks; Increase the number of rangers post in most affected areas to closely monitor wildlife movements; Plant crops that smell (red paper) to discourage animal from destroying crop land; 	# of resolved human-wild life conflict, Records of compensations, # of community	Document	Quarterly	Contractors Environment Expert, KWS Rangers,	5,000

# Key Activities	Risks and	Mitigation Measures	Indicator for Monitoring	Means of verification	of	Responsibility	Annual Cost
	Impacts	 Allowing the growth of the buffering areas between the farmlands and the protected areas; Dig deep trenches (2 m deep and 2 m wide) to stop elephants from getting out of the protected areas; Use of the culturally acceptable alternative dispute mechanisms including: mediation, negotiation and conciliation by seeking the help of elders to solve the conflicts between farmers and herders; Community awareness campaigns against wildlife attacks as well as poaching; Encouraging livestock wildlife interaction within the environs outside the protected areas; Stakeholder involvement especially neighboring community members in planning the management of the protected areas or in the development of Protected Area Management Plans; and Increase community access to wildlife resources within the protected areas as well as revenue sharing between respective counties, communities and the national government. Adopt project GCHM 	engagemen t with KWS and park managers, # trenches developed # culturally acceptable dispute mechanism s		Monitoring		(USD)
	• •	 Use dust suppression through water sprinkling Careful screening / hoarding of construction site using iron sheet and dust nets to contain construction-related dust within the site especially water pan; 	Observation of air quality, safety signages i.e.	Field Visit Document review & Photography	Quarterly	Contractor Environment Expert	5,000

# Key	Potential E&S	Mitigation Measures	Indicator	Means of		Responsibility	Annual
Activities	Risks and		for	verification	of		Cost
	Impacts		Monitoring		Monitoring		(USD)
		 Apply strict measures for handling and storage 	speed limit,				
		of powdered construction materials (cement,	wetting				
		lime, concrete additives. The measures include	program,				
		controlled access with padlock, use of PPEs at					
		all times and covering of materials during					
		haulage with tarpaulin, etc.);					
		 Avoid excavation, handling and transport of 					
		erodible materials under high wind conditions					
		or cover with tarpaulins during transit;					
		• Wet all active construction areas as and when					
		necessary to bind dust;					
		• Limit vehicle speeds to a maximum of 10km/h					
		when traversing densely populated areas;					
		• All construction activities to be done between					
		8:00 AM to 5:00 PM; and					
		 Provide workers with appropriate PPEs 					
		including dust masks, ear plugs to mitigate					
		against elevated dust and noise levels,					
		respectively.					
	k) Drowning in	• Fence off boundaries of water pans (at a	Fenced off	Field Visit	Quarterly	Contractor	10000
	the water pans		boundaries		,	Environment	
		view as well as unregulated access by children	of the	Document		Expert	
		and community members,	water pans,	review &		· ·	
		 Post warning signs (in a manner accessible by 		Photography			
		all community members) informed by by-law	Presence of				
		to prohibit swimming and trespassing /	warning				
		unauthorized access to the water pans	sign at the				
		(RESTRICTED AREA, DEEP CUT, DON'T SWIM,	site				
		DEEP WATER PAN,);	Evidence of				
		Train workers on water pan safety measures,	sensitizatio				
			n measures				

# Key	Potential E&S	Mitigation Measures	Indicator	Means of	Frequency	Responsibility	Annual
Activities	Risks and		for	verification	of		Cost
	Impacts		Monitoring		Monitoring		(USD)
		• Never leave children unsupervised while near	delivery to				
		the water pan area,	the				
		 ◆ Deploy a guard to keep watch of any 	community				
		non-compliances by the community during construction,					
		 Adopt community emergency preparedness 					
		and response plan,					
		Clearly demarcate the safe and unsafe zones					
		or restricted access for community members,					
		and					
		• On a regular basis, alert communities to the					
		danger of drowning during stakeholder					
		engagement activities and that swimming is					
		prohibited.					
		Adopt project GCHM					
B. Restocking of	a) Outbreak of	· · · · · · · · · · · · · · · · · · ·	Evidence of	Field Visit	Quarterly	Community	5,000
animals	diseases	officer before carrying out the restocking of	temporal	Document		groups	
		animal to the communities,	animal	review		Veterinary	
		• Establish temporal animal holding facilities /	holding /			Officer	
		quarantine of animals to temporarily hold	quarantine	Photography		Contractor	
		restocking animal to the maximum days for	facilities,			Contractor Environment	
		gestation of any disease	hired			Expert	
		 Undertake preventive measures such as spraying ticks for ECF 	veterinary,			Lxpert	
		• Carry out periodic vaccinations for Rift Valley	and				
		Fever and Foot and Mouth Disease,	# of animal				
		Not to purchase of livestock from areas with	restocked				
		known disease outbreaks					
		 Infected dead animals should not be eaten by 					
		the community members; and					

# Key Activities	Potential E&S Risks and Impacts	Mitigation Measures	Indicator for Monitoring	Means of verification	Frequency of Monitoring	Responsibility	Annual Cost (USD)
		 Develop a procedure on safe disposal of infected dead animals to avoid human consumption. 					
	o) Loss of vegetation / Land Degradation	 Protect the soil against erosion by good farm management practices such as agro-forestry, conservation tillage and contour farming Conduct public awareness programs during project implementation to ensure that beneficiaries understand and take up their role in rangeland management Train farmers in soil and water management practices to avoid land degradation Restocking of animals should consider the carrying capacity of the available community rangeland, including consideration of any regularly present wildlife in the area. Limit animal numbers or control access to grazing lands. Control length of grazing time through introduction of rotational grazing, development of dry-season grazing areas and reserves No opening up of encroaching on the forested areas Plant vegetation especially grass in all disturbed areas, under the guidance of the county environmental officer to avoid introduction of invasive plant species Integrate the vulnerable groups into each pasture management / land tenure project by making it a requirement to integrate the 	Evidence of training done, # of animal restocked, Evidence of animal paddocks, Evidence of agroforestr y and woodlots	Field Visit Document review	Quarterly	Community groups Forestry expert Contractor Environment Expert	2,000

·	Potential E&S	Mitigation Measures	Indicator	Means of verification		Responsibility	Annual
Activities	Risks and Impacts		for Monitoring	verification	of Monitoring		Cost (USD)
		 interests of the poor and vulnerable into the pasture management / land tenure projects Establish woodlots and use boundary planting of tress to increase tree cover at beneficiaries' land, under the guidance of the county forestry officer Use grasses and shrubs to protect existing local water sources 					
C,) Pollution of water bodies	 Follow the procedures and management practices listed in the Projects' Pest Management Plan Limit animal numbers restocked in relation to the capacity of the available land resources, Use grasses and shrubs to protect existing local water sources. Where not feasible, establish physical barriers to avoid or minimize runoff from project sites. Promote IPM Practices incorporating crop management control techniques, biological control and restricted use of biopesticides Safe use of agrochemicals by applying the correct amounts of agrochemicals Buy the agrochemicals from Certified Agrochemical Dealers Do not dispose animal manure as well as empty containers of the agrochemicals into water bodies or in the areas where it can contribute to runoff. Train farmers on the use of IPM Adopt project GCHM 	No. of animals, # of farmers implementi ng IPM practices # of training in the use of agrochemic als done	J	Quarterly	CIGA Committee and Chairperson	

# Key	Potential E&S	Mitigation Measures	Indicator	Means of	Frequency	Responsibility	Annual
Activities	Risks and		for	verification	of Monitoring		Cost
4. Farm input & grant may lead to opening up new areas for cultivation		 Protect the soil against erosion through farm management practices such as agro-forestry, contour farming and conservation tillage, Carry out public awareness programs in soil and water management, Train farmers in soil and water management practices, Limit animal numbers or control access to grazing lands i.e. rotational grazing, development of dry-season grazing areas and reserves, Restrict opening of large chunks of land that may get underutilized, Carry out agro-forestry practices on beneficiaries' farm land, and Establish woodlots and implement boundary planting of trees. 	Soil conservatio n practices, # of training for soil conservatio n done, Evidence of agroforestr y and woodlots	Field Visit Document review & Photography	Monitoring Quarterly	Contractor Environment Expert	(USD) 5,000
	ວ) Alien and invasive species	 Acquire all seeding materials both for animal fodder and crop from certified seed dealers in-country, Use indigenous plant species for landscaping sites (where required) Clear any recognized IAS (Invasive Alien Species) from the area before it spreads. The sites should also be monitored for the growth of any invasive alien species. Maximize opportunities for harvesting already present invasive species, like Prosopis, for use for animal grazing and charcoal production. 	List of certified seed dealers, Evidence of no invasive spp, Record of invasive spp identified	Field Visit Document review & Photography	Quarterly	Community Contractor Environment Expert	5,000

# Key	Potential E	_	Mitigation Measures	Indicator		Frequency	Responsibility	Annual
Activities	Risks Impacts	and		for Monitoring	verification	of Monitoring		Cost (USD)
5.Use of agrochemicals	a) Poisoning farmers	of	 Train farmers in the use of PPEs Use fit-for-work PPEs including gumboots, overall / coverall, safety goggles and safety helmet while using chemical sprays; Single/one-time usage PPE's should be immediately disposed after usage, while multiple usage PPE's should be wash and clean regularly and effectively after each use; Acquire pesticides in quantities that are likely to be needed, to minimize the potential for creating obsolete stocks Store pesticides safely away from food and water supplies. The storage conditions must comply with the instructions on the label, particularly with regard to ventilation, temperature and light Keep agrochemical (pesticide, acaricides and herbicide among others) in their original package out of reach of children and adults Avoid and discourage storage of agrochemicals (pesticides, acaricides and herbicides) in packaged water bottles as well as any other drink and food processing bottles Keep agrochemicals empty containers out of reach of children, Train famers on the use of the information provided in Material Safety Data Sheets (MSDS) for agro-chemical, and Establish a procedure and arrangements for safe disposal of used PPE to avoid contamination of the project site and exposure 	# of cases of poisoning # of training done Agrochemic al storage area record of agrochemic al handled	Field Visit Document review & Photography	Quarterly	Contractor Environment Expert	

# Key Activities	Potential E&S Risks and Impacts	Mitigation Measures	Indicator for Monitoring	Means of verification	Frequency of Monitoring	Responsibility	Annual Cost (USD)
	b) Discrimination	•	# of	Consultation	Quarterly	Contractor	15,000
	and exclusion of vulnerable groups	• •	sensitizatio n meetings conducted and reports produced # of community members participatin g; -Sanitary facilities on site; -Signed contracts	review		Social Expert,	
5. Cross cutting impacts on all project activities	a)Security risks	 The MOALF & C shall work closely with the Ministry of Interior to ensure the security of the workers, and that facilities provided under the DRSLP II are responsive; Project teams shall seek security approval and clearances from the project coordinator who will liaise with field security team to provide security escorts whenever required; 	# of recorded cases of insecurity, Record of security campaigns,	Document	Quarterly	Contractor Environment Expert, County commissioner,	10,000

# Key Activities	Potential E&S Risks and Impacts	Mitigation Measures	Indicator for Monitoring	Means of verification	Frequency of Monitoring	Responsibility	Annual Cost (USD)
		 Project teams shall be periodically subjected to security awareness campaigns; Project teams should have alternative communication devices, such as two-way radios or satellite phones in areas with limited or no cellular network coverage; Use local leaders as part of the project implementation committee members, and Implement the requirements of a Security Management Plan. Adopt project GCHM 	Security Manageme nt Plan				
	b) Social conflicts (Conflict among group members	• Train all members of IGA through the stages of group formation and dynamics: Forming, Storming, Norming, and Performing to	Training records, # of conflicts resolved, Names of the IGA conflict manageme nt group,	review	Quarterly	Contractor Social Expert,	2,500
	c) Conflict Between communities	 Use of the culturally acceptable alternative dispute mechanisms including: mediation, negotiation and conciliation by seeking the help of elders to solve the conflicts, 	Training records,	Consultation ,	Quarterly	Contractor Social Expert,	2,500

# Key	Potential E&S	Mitigation Measures	Indicator	Means of	Frequency	Responsibility	Annual
Activities	Risks and		for	verification	of		Cost
	Impacts		Monitoring		Monitoring		(USD)
		 Inculcate strong links and communication between farmers and herders Use of the village or subproject conflict management committee to solve community conflicts, and Selection of the subproject should undertake thorough culturally appropriate consultation with stakeholders especially between potential rivalry communities. Adopt project GCHM 	# of conflicts resolved, Names of the IGA conflict manageme nt group,	review			
d) Contingency	Cost						10,300
Total cost of in	Total cost of implementing ESMP						113,300

8.2 INSTITUTIONAL ARRANGEMENTS AND RESPONSIBILITIES

8.2.1 National Level and County Level Structure

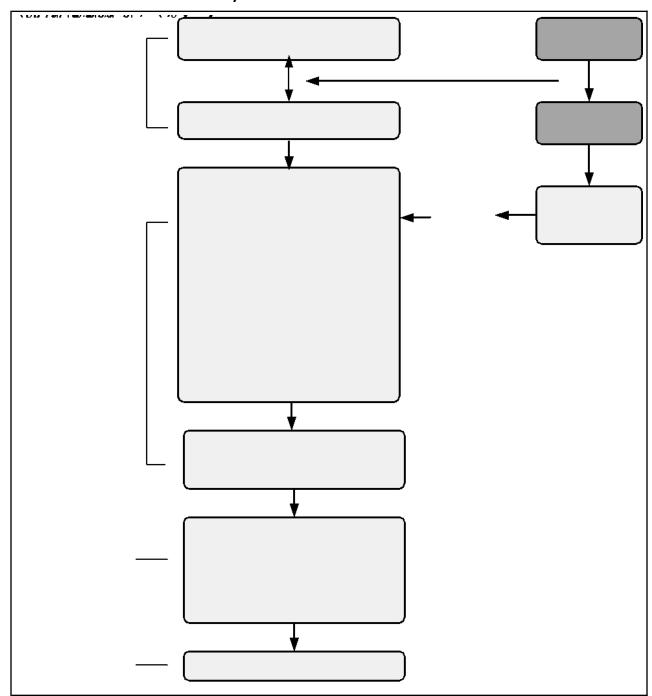


Figure 8-1: Institutional Arrangement

8.2.2 National Level

A National Project Coordination Unit has been established consisting of twelve (12) officers responsible for day-to-day implementation of activities under the leadership of the National Project Coordinator (NPC). NPCU has recruited the following staffs: The National Project Coordinator, , Technical specialists

(Water/Irrigation Engineer ,Livestock Environmental& Climate Change, Agribusiness, Horticulture/Crop, Gender and community mobilization, Knowledge Management and Communication Specialist, Specialists, Monitoring and Evaluation , Project Accountant, Procurement Office and \project secretary. The overall implementation oversight is carried out by the National Project Coordinating Unit (NPCU) headed by National Project Coordinator (NPC) and the NPC reports to the Project Steering Committee chaired by the Principal Secretary, State Department for Crop Development and Agricultural Research, MOALF & C.

8.2.3 County Level

The Project establishes a County Project Steering Committee/County Project Implementation Team (CPIT). A County Project Coordinating Unit (CPCU) is headed by the County Project Coordinator (CPC), who doubles as the Crops/Livestock Specialist; County Engineer/Land Development Officer. The CPCU members include the CPC/Livestock/Crops Specialists; and Monitoring and Evaluation Specialist; The CPCU shall engage the services of technical experts on a needs basis. It is necessary to enhance capacity in safeguards team during implementation of the framework and other plans to ensure that relevant ESSs are integrated into all project activities in a sustainable manner.

8.2.4 Community Level

This is the third level in the overall institutional structure for implementing the project on Sustainable Livelihoods. At this level, community-driven development (CDD) structures has been established to represent beneficiaries while considering the one-third gender rule. To this effect, the county governments shall enter a memorandum of understanding (MoU) with respective beneficiaries. All community structures must be duly registered with the relevant GoK authorities, e.g. the Department of Social Services. Basic literacy levels should be considered while establishing community leadership structures. However, all county government employees can serve as ex-officio members, and not elected office bearers of these community structures. These community structures established at Ward level with specific Project Management Committees (PMC) shall undertake day-to-day implementation of community interventions.

For any sub/micro projects that involve physical infrastructure, the sub/micro project committee should hire relevant expertise in consultation with the DRSLP II coordinating units at county and national level in compliance with established guidelines. Oversight for civil works shall be carried out at county level by County PCU Environmental and Social focal persons, who shall oversee screening, implementation and monitoring.

8.3 CDD Process for Environmental and Social Safeguards

This entails total inclusivity and participation by all targeted beneficiaries regardless of gender. For this reason, specific community needs and issues pertinent to environmental and social risk management must be identified through the environmental and social screening process at community level, and priority development areas shall be identified within the principles of DRSLP II. Community Resource Assessment/Social Assessment (CRA/SA) through participatory approaches will help map out gaps and suggest possible environmental and social interventions within the proposed community investments, including those proposed by the VMGs. County technical teams will conduct the CRA process in liaison with target communities.

The key outcome of the Participatory Integrated Community Development (PICD) process is the participatory development of a Community Development Plan (CDP). The CDP is a statement of the

communities' aspirations regarding the sub-projects that they wish to implement in order to overcome financial and other development challenges identified during the situation analysis. The CDPs shall be prepared for the target communities. They must have broad community support and must be aligned with the County Integrated Development Plan (CIDP). Screening for environmental and social impacts shall be undertaken at county and community levels by the County Environmental and Social focal persons.

8.4 Community Action Plans, Approvals and Funding

Community plans and budgets will be prepared by the communities with the assistance of their specific value chain service providers. Specific interventions and budgets including budgets for sub-project ESMPs and any other environmental and social risk management instruments and procedures shall be reviewed and approved by the County Technical Teams (CTT). This activity shall be coordinated at county level by the project coordinating unit. Once completed, the County Project Coordinating Units (CPITs) shall share the approved proposals with the national technical team through the National DRSLP II Project Coordinating Unit for final appraisal and allocation of funds.

The Safeguards Specialist's duties shall include backstopping the sub-projects implementing teams to comply with the relevant National Environmental and Social requirements and the African Development Bank's ISS requirements. This includes reviewing, screening, approving, monitoring and reporting on the progress of the sub projects. The DRSLP II technical personnel shall guide the formulation development and or the implementation of the Sub projects ESIAs / ESMPs / and the main project LMP and GBVAP for the project, and periodically review and improve capacity to manage safeguards compliance amongst local stakeholders. Community meetings should be convened by the county project technical coordinating teams. The composition of the meetings includes: the county technical teams, service providers, IGAs and local administration. Meeting participants shall be responsible for validation and adoption of approved community plans and budgets; and for signing of grant MoUs/agreements. The MoUs/agreements provide details such as name(s) of the IGAs & projects, amounts proposed, expected community contribution and disbursed amounts.

Table 8-2: Summary of Roles and Responsibilities for DRSLP II Implementation

TASK/STEP	Responsible	Technical Support or	Verification/Oversight
I/OK/OTE	Responsible	Advice	vermeation, oversight
Identify sub-project and formulate proposal	Target communities CPCU Environmental /Social	Gross margin Analysis; cost benefit analysis	County Technical Teams, NPCU E & S
	specialist/focal persons		focal points.
Prepare CDP/CIDP	CPCU Social specialist / focal		Communities/Service
	person, County Sector Technical Officer, &	' '	providers & NPCU E & S
	Communities	/ CIDP	focal points.
Complete environmental	CPCU Environmental /Social	, ,	County Director of
and social Screening Checklist	specialist/focal persons	compliance	Environment & NPCU E & S focal points.
Undertake community	CPCU Social specialists,	Meetings/ Planning	County Technical Teams
Consultation on CDP	Service providers / County		& NPCU E & S focal
	Technical Teams		points.
Determine need for ESIA	CPCU Environmental /Social specialist/focal persons	Administer checklist	E+S focal points
Implement project (ESIA required)	CPCU Environmental /Social specialist/focal persons &	Lead NEMA Experts	CPCU E & S focal points.
required)	Communities		
Implement project (no	,	Service Providers	CPCU & NPCU E & S
ESIA required)	specialist/focal persons		focal points.
Civil Works	CPCU Environmental /Social	County Lead Departments	CPCU & NPCU E & S
	specialist/focal persons, County Sector Specialists		focal points.
Monitor projects	CPIT Environmental /Social	County Technical Teams	CPCU & NPCU E & S
	specialist/focal persons,		focal points.
Other: please specify	County Sector Specialists		
Other: please specify			

The County Project Implementation Team (CPIT) comprise of the County Directors of: Crop Resources and Marketing; Livestock production officer and Veterinary Services; Aquaculture, and Marketing; Environment, land and water Resources; National Environment Management Authority, Public Works; Industrialization and Cooperative Development; Primary Education; Gender and Youth; ASAL, Special Programs and Devolution; any other relevant Department; Indigenous Peoples Leadership (Chairpersons of Council of Elders); the value chain specific service providers. All these institutions will be sensitized on environmental and social safeguards to enable them play a catalytic role in backstopping and monitoring towards safeguards conformity. This same process and the available technical teams at the sub County (Sub- County Project Implementation Team (SCPIT)) will be involved from the onset of the project till the end. The Sub County Technical teams will provide training and advisory services through various models including Farmer Field School (FFS) facilitators and assist them in facilitating season-long FFSs on the selected VCs with the respective IGAs and VMGs. The technical departments will provide marketing support and assistance in linking the IGAs and VMGs to the respective POs to implement the micro and subprojects.

The service providers and county technical teams will receive detailed trainings in order to serve as ToTs.

Income Generating Activities' groups IGA Income Generating Activities (IGA) groups): at community level, a Income Generating Activities' groups IGA Income Generating Activities (IGA) groups) will be established. IGAs will focus on delivering on a selected value chain as a business enterprise with the aim

of becoming key grant beneficiaries and collective implementers of sub-projects. The common interest groups will comprise of between 15 and 20 beneficiary farmers. The project will work with already existing groups that have been involved in an enterprise for at least 6 months. The IGAs are the focal groups that will constitute democratically-elected leaders who offer a voluntary service. Members/beneficiaries in these groups include men, women, youth, vulnerable and marginalized members of the communities. This complies with the DRSLP II requirement for inclusiveness in 'gender and intergenerational terms'. However, other members of the community who are not members of IGAs or VMG can also benefit from a common good (sub-project) such as water pan within their respective localities. Such sub-project would be managed by a CSC, which is a community oversight body democratically elected through representation.

9. CAPACITY DEVELOPMENT FOR ENVIRONMENTAL AND SOCIAL MANAGEMENT AND MONITORING

9.1 CAPACITY DEVELOPMENT FOR ENVIRONMENTAL MANAGEMENT

Effective execution of responsibilities for sub-project environmental and social risk management requires institutional strengthening. Capacity building will include all DRSLP II staff and sub-project executing institutions, the Implementing Agency (IA) and contractors. As part of the ESMF, DRSLP II will prepare a training plan that includes training modules for project staff, contractors, and IGAs among others. Capacity building will be carried out in liaison with the sister project in the MOALF&C – KCSAP / NARIG. Below are some of the capacity building training needs:

- Capacity building at the national and county levels on ESF/ESSs,
- Training on ESIA/OSH national processes,
- Monitoring of ESIAs, ESMPs, vulnerable communities (where applicable) and related safeguard management plans,
- Training in Grievance conflict handling Mechanism and Public consultations in the SEP process
- Community mobilization / participation and social inclusion, and
- Integration of sub-project ESMPs into the DRSLP II cycles during their project implementation stages.

Effective implementation of the OS instruments and this (ESMF) will require adequate capacity enhancement within institutions and stakeholders, especially regarding monitoring and evaluation. This calls for building the capacity of implementers at the Project Coordinating Unit and project implementing structures including at the National, County and Community levels.

If found necessary, the GCF's Indigenous Peoples Policy (IPP) will be applied. It will start with the preparation of Indigenous People's Policy Framework (IPPF) which will be developed to cater for special needs of highly vulnerable groups that can be considered alongside the Indigenous Peoples. The policy will indicate how such vulnerable communities should be engaged. It will also contain matters to be addressed in capacity building to cater for the needs of the most vulnerable and the indigenous peoples.

Table 9-1: Overall Estimated Costs Budget for implementation of ESMF

Activity	Description	Unit cost, US\$
African Development Bank Environment and Social Framework /	Training Project Staff on the new ESF/ESSs	25,000.00
Environment and Social Standards, including OHS requirements	Awareness of project beneficiaries of the ESS requirements	
Training on ESIA/OHS national processes	Training of the project staff (NPCU & CPCU) on the ESIA / OHS national implementation processes	25,000.00
Implementation of the sub project Environment and Social Impact Assessments, ESMPs and related project safeguard management plans, such as VGMPs, GBVAP, and Security Management Plan.	Monitoring of sub project ESIAs, ESMPs and related project safeguard management plans	500,000.00
Stakeholder Engagement Plan	Public consultations in the SEP process & GCHM Mechanisms. Radio, TV discussions, Newspaper adverts on issues relating to ESMF	220,000.00
Implementation of Grievance Redress Mechanism	Public awareness creation on GCHM process, training of project workers on GCHM Mechanisms.	220,000.00
Community mobilization / participation and social inclusion	Training workshop/seminars on Program for project beneficiaries Integration of sub-project ESMPs into the DRSLP II cycles during their project implementation stages. Skills on screening and use of the Environment & Social Checklist Conflict Resolution and Participatory M&E and reporting (No. of conflicts reported, % addressed, % cases escalated) Gender Screening & training on the CIDP	250,000.00
Preparation of sub projects ESIAs, ESMPs and related safeguard management plans	Recruitment of Consultants and experts to prepare and review the sub project ESIAs and ESMPs	1,000,000.00
Monitoring Requirements for all projects safeguard instruments	Training of the implementing entities on the monitoring requirements for the project and sub project safeguard instruments	50,000.00
GRAND TOTAL		2,290,000.00

Environmental and Social Management Plan (ESMP): The ESMP is a key output of the sub project ESIA (for substantial and high risk projects) or a standalone subproject instrument (in case of low and moderate risk projects) and will form the backbone for implementation of safeguards during project implementation, operation and decommissioning. Its implementation costs must be well defined and included in the overall project implementation cost.

Sub-project specific ESMPs should be prepared after taking into account comments and conditions from the relevant agencies providing environmental clearance such as the National Environmental Authorities and in conformity with AfDB safeguard requirements. Detailed guidelines on DRSLP II ESMPs preparations are provided in Annex II as well as **Table 8-1**. The Sub-projects ESMMP includes the following main components: (i) mitigation plans, (ii) monitoring plans, (iii) institutional arrangements, (iv) capacity building, and (v) associated costs. The ESMMP will also cover a set of social issues, as applicable.

They include: (i) listing potential social and gender impacts; (ii) identifying adequate mitigation or enhancement measures for each impact (direct or indirect; permanent or temporary; physical or economic, residual and cumulative); (iii) assigning responsibility for implementation of mitigation and enhancement measures; (iv) assigning time and cost estimates for implementation of mitigation and enhancement measures (v) defining indicators with gender disaggregated data for Monitoring and Evaluation during implementation of mitigation and enhancement measures; (vI) special measures to take into account the needs of vulnerable groups and Indigenous Peoples if applicable. This shall be done in line with the project capacity building as in Table 9.1 above.

Positive impacts from safeguard trainings to be realized by target communities: Key positive impacts include: (i) increased conformity to safeguards through various capacity building levels, (ii) increased income especially from sale of quality agri-products as a result of mainstreaming safeguards in individual smallholder farmer, pastoral and community-based investments, (iii) inclusion of all segments of the community and gender mainstreaming in micro-project activities and community level decision-making structures; (iv) special targeting of the vulnerable and marginalized, including physically challenged community members, and (v) increased participation of youth in the project's activities through funding of specific Youth And Women Actions Plans (YWAPs) where applicable.

9.2 Project Monitoring and Evaluation

All project results indicators will be disaggregated by gender to monitor women's participation in the project interventions. The project will also capture gender-disaggregated environmental and social data, where applicable.

Compliance with the ESMF. The NPCU at the MOALF & C has established a monitoring system involving the PCU staff at national and county level, as well as community groups of IGAs/CDDCs to ensure effective preparation and implementation of the sub-projects ESMPs. A set of monitoring indicators shall be determined during sub project specific ESMP implementation and will be guided by indicators contained in this ESMF and project PAD document. The PCU support consultants will carry out monitoring alongside African Development Bank social staff. Appropriate monitoring formats will be prepared for monitoring and reporting.

10. GRIEVANCE CONFLICT HANDLING MECHANISM STRATEGY (GCHM)

10.1 Objective of the Grievance Conflict Handling Mechanism

The Grievance Redress Mechanism (GCHM) seeks to "respond directly and proactively to concerns, tensions and fears of the community arising from effects of an intervention, resolve them in a manner that meets both the aggressor and the complainant needs and to ensure agreement and commitment by all". The GCHM procedure explained here is replicated in all the tools and plans for the project including SEP.

The GCHM is a process intended to facilitate the resolution of concerns and grievances of project-affected parties that could have a bearing on the Borrower's environmental and social performance¹³. The GCHM is proportionate to the risks and impacts of the project (ESF, 2018). GCHMs provide an effective avenue for expressing concerns and providing redress within communities. In the execution of DRSLP II activities, it is expected that grievances, complaints and disputes may arise at multiple stages including design, preparation, planning and implementation.

A key risk for the project is the potential for inadequate, ineffective or inappropriate stakeholder engagement and information disclosure that could exclude vulnerable, marginalized and minority sections of the community from project benefits. This could be amplified further in the context of limited resources in the face of widespread need. Other risks include elite capture (where project benefits – mainly on restoration of livelihoods – are diverted to less needy individuals and locations), and poor access to beneficiaries that hinders meaningful community engagement and monitoring of social harm.

The project Stakeholder Engagement Plan (SEP) was prepared as a standalone plan and was disclosed and the GCHM procedure is replicated from it. It provides the framework for identification of stakeholders, gauging stakeholder interest and providing systematic targeting means and processes of inclusive and meaningful engagements with the stakeholders and communities in a way that influences project design and implementation which is key to GCHM.

10.2 Description of GM in line with the Project SEP

Grievances will be handled at the community level. The GM will include the following steps and indicative timelines.

The GM will provide an appeal process if the complainant is not satisfied with the proposed resolution of the complaint. Once all possible means to resolve the complaint has been proposed and if the complainant is still not satisfied then they should be advised of their right to legal recourse.

It is important to have multiple and widely known ways to register grievances. Anonymous grievances can be raised and addressed. Several uptake channels under consideration by the project include:

- Toll-free telephone hotline
- E-mail

Letter to Grievance focal points at local health facilities

- Complaint form to be lodged via any of the above channels
- Walk-ins may register a complaint on a grievance logbook at healthcare facility or suggestion box at clinic/hospitals.

Provisions should also take into account: language barriers, the possible need for anonymity and confidentiality, especially in fear of retaliations, measures to protect against retaliation and information

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¹³ The grievance mechanism may utilize existing formal or informal grievance mechanisms, provided they are properly designed and implemented, and deemed suitable for project purposes; these may be supplemented as needed with project-specific arrangements.

about GCF grievance mechanism. Once a complaint has been received, by any and all channels, it should be recorded in the complaints logbook or grievance excel-sheet/grievance database and subsequently addressed or resolved within 5-7 working days.

Survivors of Gender-based Violence or Sexual Exploitation and Abuse are generally encouraged to report all GBV/SEA cases through the dedicated GBV/SEA referral system and complaints resolution mechanism. This will be made explicit in all community awareness sessions, as well as be part of the publicly disclosed information. The GBV/SEA referral system will guarantee that survivors receive all necessary services, including medical, legal, counselling, and that cases are reported to the police where applicable.

If such cases are reported through the Project GCHM, the GCHM Operator needs to report the case within 24 hours to the PIU, as the PIU is obliged to report any cases of GBV/SEA to the African Development Bankwithin 48 hours following informed agreement by the survivor. Furthermore, cases need to be reported to the IP, if it concerns a direct worker or a worker from a sub-contractor, NGO partner or even a community worker following a survivor-centered approach. UN agencies will have their organizational PSEA systems in place, through which violations by staff will be handled. This may be in addition to criminal prosecution, to ensure that sanctions for the violation of Code of Conducts are implemented. IPs are in charge of monitoring that the courses for contractors regarding the Code of Conduct obligations and awareness raising activities to the community are in place. The information gathered would be monitored and reported to the PIU and the African Development Bank. All reporting will limit information to the survivor's wishes regarding confidentiality and in case the survivor agrees on further reporting, information will be shared only on a need-to know- base, avoiding all information which may lead to the identification of the survivor and any potential risk of retribution.

10.3 Monitoring and Reporting back to stakeholder groups

Information disclosure and consultations are relevant throughout the entire life cycle of the Project. Project design has therefore been based on national-level consultations. Activities under each subcomponent will include further consultations prior to their commencement, to ensure a broadly inclusive selection of beneficiaries, transparency and accountability on project modalities, and allow community voices to form the basis for the concrete design of every intervention; consultations will continue throughout the project cycle.

The IPs implementing different sub-components of the Project will gather all comments and inputs originating from community meetings, GCHM outcomes, and surveys. The information gathered will be submitted to the Environmental and Social Specialists in the Risk Management Unit of the NPCU, to ensure that the Project has general information on the perception of communities, and that it remains on target. It will be the responsibility of the different IPs to respond to comments and inputs, and to keep open a feedback line to the communities, as well as the local authorities and State governments. Training on environmental and social standards facilitated by AFDB will be provided soon after the Project becomes effective to ensure that all the staff from the PIU, and the different IPs are equipped with the necessary skills.

The Implementing Partner (IP) will provide first feedback on the case to the aggrieved party within one week, if the case was not filed anonymously. Further feedback and action will depend on the nature of the case, and whether cases are decided upon within the respective IP. The IP will show to the PCU that action has been taken within a reasonable amount of time.

Most importantly, all cases filed need to be logged and monitored by the IP. The IP will analyze all complaints and feedback on a quarterly basis, and share a synthesis report of the analysis with the PCU.

10.4 Establishment of Grievance Conflict Handling Committees (GCHC)

During the preparation and implementation of DRSLP II, the NPCU and the County Coordinating Offices will facilitate the establishment of Grievance conflict handling Mechanism Committees within communities in the Project areas and Wards traversed by the project. Five levels of GRC will be instituted, namely: the NPCU GRC, the CPCU GRC, the sub-County GRC, the Ward GRC, and the Community GRC. At each project level, once reported, a case should be resolved within 5-7 working days or else escalated to the next level.

10.4.1 Level 1: Community Level GRC

Project beneficiaries will elect a three-member GRC through a democratic process to implement the grievance redress. Similarly, the beneficiaries at each sub-project site will elect their respective GRCs. The one-third gender rule will be applied to ensure ethnic balance and representation of women and youth. It is recommended that communities avoid electing individuals already in positions of local leadership (County/National Government representatives and other local political leadership). All group level GRCs for each value chain will hold further elections at Ward level to establish a Ward level value chain GRC comprising of three members.

10.4.2 Level 2: Integrated GRC at Ward Level

The various Ward level value chain GRCs will elect an integrated Ward level GRC with one representative from each value chain. The one-third rule will be applied to ensure participation of VMGs and women members at the Ward level-integrated GRC.

10.4.3 Level 3: Integrated GRC at Sub County Level

The integrated GRC at the Ward level will elect one representative to form the integrated sub-county GRC. The one-third rule will be applied to ensure participation of VMGs and women.

10.4.4 Level 4: County Level GRC

The integrated GCHMC at Sub-County level will elect one representative from each Sub-County to form a nine-member integrated County GCHMC. These GRC will elect three of its members, who together with one representative from other Sub-County level institutions (CTAC, CPIT, and CDDO), will form the County Grievance Redress Committee. The one-third rule will be applied to ensure the participation of VMGs and women.

10.4.5 Level 5: National GRC

The NPCU in collaboration with NTAC has identified representatives from the implementing and executing agencies to form the national GRC. In DRSLP II, the crisis communication team is composed of the NPC, Communication Officer, Environment and Social Safeguards Officer, concerned Component Coordinator, CPC, Chair of the CPSC, Chair CTAC, Executive Committee of the CDDC, Executive Committee of the CDDO and representatives of the Project Affected Persons (PAP). Error! Reference source not found. is the Organogram Representation of the Proposed Project Five GCHM Levels.

10.5 GCHM Activities at NPCU, CPCU, and Ward GCHM Committee Levels

The receipt of complaints is key; hence, a simple and understandable procedure shall be adopted for receiving grievances, suggestions and comments relating to the project. The complainant may submit (including his/her personal information) suggestions and/or comments in the prescribed form under the custody of each the various committees.

Generally, each of the various levels of grievance redress shall undertake the following steps:

- Receive and register grievance (indicating the mode of communication i.e. oral, letter, text, email, telephone call, video, etc.; also indicate the details of the complainant name, I/D No., PAP or otherwise, gender, contacts) (see Grievance Registration Form Annex III-A);
- Screen and sort out type of complaint (does it require just immediate answer? Who by? Do it or refer; accordingly, or does it require a decision by the GCHM Committee? Book it accordingly) (Grievance log – Annex III-B continued);
- Send acknowledgement to grievance owner (write an acknowledgement to the complainant regardless of the type of complaint);
- Forward grievance to relevant sub-committee (after booking the complaint in the register, bring
 it to the attention of the relevant contact person for the committee. Do ensure that this process
 is tracked date and timing, etc.);
- Verify the complaint/investigate/redress (the committee shall investigate and take appropriate action. Keep minutes of the undertakings, etc.)
- Where redress calls for other parties/stakeholders to intervene, kindly consult, convene and decide as a team on the best course of redress.
- If the complaint is not resolved at any given level, kindly refer it to the next level. Provide
 documentation to justify why the issue could not be resolved at your level (case reference,
 complainant/contacts/case summary, date logged in, summary of findings, why it is being
 referred, etc.). The complainant do have a right of appeal at all levels of the GCHM.
- After the 5th levels (Figure 10-1), the complainant shall be referred to a competent court.
- At all stages it is reemphasized that tracking, monitoring, documentation, and evaluation are key processes and MUST be well documented (Annex III-A).

NB: National appeal process. The labor laws provide for the national appeals process that should be utilized by any aggrieved staff if they consider if dissatisfied by the process established by the project.

10.6 Available mechanisms for aggrieved parties to access redress

10.6.1 National Environmental Complaints Committee

The National Environmental Complaints Committee on Environment is an organ established by the EMCA. The committee addresses complaints from the public arising from the environmental and social impacts of project activities. In an event that members of the public are dissatisfied with aspects of the proposed projects, the PCC serves as the first stop for those seeking redress. If this fails, the National Environmental Tribunal (NET) or another organ set up by NET to resolve environmental and social disputes on investments provides the next option for redress.

10.6.2 Environment and Land Court

Additionally, the Constitution of Kenya (CoK) provides for specific courts to deal with disputes related to land and the environment (Land and Environment Court). They are charged with reconciling environmental related disputes, and serve as the final stop in the event of disputes or complaints that cannot be resolved through other means.

10.7 Monitoring and Evaluation

The GCHM shall provide for monitoring and evaluation. This is to ensure improvement of GCHM e.g. quarterly review of quantitative indicators, annual review of grievance redress processes, and review of number of grievances reported and resolved (%). The DRSLP II Social Safeguards Expert shall help to track and monitor the grievance resolution processes and their outcomes by different levels of the GRCs.

GCHM Committees shall monitor the grievance redress process including implementation of decisions made, and check that redress is granted to PAPs in a timely and efficient manner. They will provide regular feedback to the complainants on the progress of the grievance redress process. Monitoring will track the progress of grievance resolutions and timeliness of grievance redress; follow-up grievances to ensure they are attended to; and document details of complaints received and the progress of resolutions. GRCs will provide information to project managers on the progress of implementation, and report actual and potential problems.

An evaluation system shall assess the effectiveness and impact of GRCs. Such evaluations will take place biannually, and their results shall contribute to improving the performance of the different GRCs, and provide valuable feedback to project management.

The following questions can be addressed in such evaluations:

- 1) How many complaints have been raised/% of which addressed/escalated?
- 2) What types of complaints have been raised?
- 3) What is the status of the complaints (rejected or not eligible, under assessment, action agreed upon, action being implemented, or resolved)?
- 4) How long did it take to solve the problem?
- 5) How many PAPs have used the grievance redress procedure?
- 6) What were the outcomes?
- 7) Are the GCHM Committees effective in realizing the stated goals, objectives, and principles?
- 8) Are the GCHM committees capable of responding to the range of grievances specified in their scope?
- 9) Are the GCHM committees equipped with an adequate and diverse set of resolution approaches?
- 10) Have the GCHM committees adopted measures to improve the resolution approaches, e.g., capacity building, consultation, with technical experts, etc.?
- 11) Are the GCHM committees effectively integrated into overall project implementation?

The answers to the above questions will help project managers to track the trends of complaints; detect flaws in implementation; take timely corrective action; and make strategic changes where needed. They shall also provide valuable feedback about PAPs' satisfaction with the project, which could help executing agencies improve their reputation within communities. Those involved in M&E will liaise with media; monitor media reports; and provide feedback to project management for action or attention (as the case will require).

10.8 GCHM Budget

A GCHM shall have a realistic budget that sufficiently cover the costs of its operations such as facilitation, operationalization, disclosure, awareness campaigns, capacity-building training, field inspections, meetings, and documentation. GCHM budget has been developed to guide the implementer in planning for the same. In this case, the table below presents the proposed Work Plan and Annual Budget per phase

Table 10-1: Typical Annual GCHM Work Plan and Budget for the project

S/No	ACTIVITY	BUDGET (USD)
1	Awareness campaigns (how many? Frequency? No. of persons involved? No. of days, stationery, transport/fares, allowance)	15,000
2	Establishment of GCHM Committees (how many? Frequency of establishment meetings? No. of persons involved? No. of days? Stationery, fuel/fares, allowances)	10,000
3	Capacity building sessions (how many? Frequency of trainings/ meetings? No. of persons involved? No. of days? Stationery, fuel/fares, allowances)	30,000
4	Disclosure (printing of materials, stationery, mapping of the disclosure points, allowance, transport/fares, etc.)	15,000
5	Field inspections (how many? Frequency? Persons involved? Allowances, transport/fares, stationery, etc.)	30,000
6	Management meetings (frequency? How many persons? Allowances? Etc.)	25,000
7	Documentation/Reporting (lump sum annual)	5,000
8	Coordination and facilitation (lump sum-annual)	70,000
9	Contingency Cost	20,000
	Grand Total	220,000

11. PUBLIC CONSULTATION AND DISCLOSURE OF THE ESMF

MOALF & C presented this ESMF as a draft to identified stakeholders as part of public consultation and more specifically to seek input from the stakeholders on potential impacts and mitigation measures of the DRSLP II. The consultations were held between 11th and 17th July 2021 both virtually and limited physical engagements. This was due the COVID-19 pandemic that restricted physical interactions in line with the AfDB, MoH, and NEMA guideline on conduct of public consultation for EIA, EA and SEA during the period of the Corona Virus (COVID 19) pandemic by use of ICT. MOALF & C provided adequate notice to the stakeholders with respect to the date and time for the consultations, presented the draft ESMF and presentation materials in advance and facilitated the stakeholders by ensuring adequate internet connectivity.

11.1 Stakeholder Engagement Process of the ESMF

A Stakeholder Engagement Plan for the project will be developed as a tool for this project and publicly disclosed locally and at the African Development Bank website. The approach to public consultation is virtually interactive, and involves the following steps:

- Identification of the stakeholder groups,
- Conducted preliminary virtually meetings and assessed stakeholder interests / concerns,
- Developed stakeholder interaction strategy including ESMF power point presentations,
- Provided information to stakeholders about the project and anticipated environmental and socio-economic impacts,
- Provided feedback to project team to incorporate stakeholder issues into project planning and decision-making,
- The initial stakeholder engagement was conducted in a clear, transparent manner that provided the all participants with a realistic understanding of the project and the range of possible outcomes.

Key issues identified during consultation include: the need to prepare ESMF using up to date, adequate and appropriate baseline data for the 7 project counties, thorough review of the sector specific regulatory framework and good international industry practices, identification of the roles and responsibilities of county and sub county technical teams including the private sector actors, assessment of potential environment and social risks and impacts associated with the project including community health and safety concerns, gender based violence, occupational safety and health, HIV/AIDs, communicable diseases and also COVID 19 through an all-inclusive consultative process of stakeholders with a gender balance. The detailed stakeholder consultation discussions and conclusions have been appended as **Annex VII**: Minutes and the List of the participants / stakeholders who attended the meeting. This ESMF will be disclosed on the website of MOALF & C and forwarded to the Bank for disclosure at the Bank's external website.

11.2 Public Consultations and Site Visit Photos

11.2.1 Summary Report on Field Visit to Marsabit and Isiolo Counties – 11th to 17th July 2021 Marsabit County

Marsabilit is one of the vastest counties in Kenya. Being an arid county and relatively underserved with infrastructure, social life in the county is relatively challenging. Majority of the community are pastoralist, though there is agriculture undertaken through rain fed as well as irrigation in a few places across the county. Availability of water was stated as the main intervention that can anchor social economic development and improve the social welfare of communities.

Proposed projects included: -

- 1. Water development projects Boreholes, water pans, shallow wells, sub-surface dams
- 2. Irrigation projects Aro Ngoda and Obbu
- 3. Pasture development
- 4. Rural access roads
- 5. Livestock market structures

Comments on feasibility: -

- Day 1- Visit to borehole sites in Saku Sub County –
- Day 2 Moyale Sub- county Proposed meg-dam at Aro Ngoda
- Day 3 Sub-Surface dams at Laisamis

Observations: -

1. Boreholes – the county has proposed 12 boreholes. The specific sites were said to be subject to hydrogeological survey. In Saku, areas visited included Baldesa and Pakishoni areas, areas with upwards of 500 households each. The chiefs of these areas indicated they have several areas boreholes could be developed. The risk were huge depths, low yield and salinity. They were however seen as an immediate solution and not sustainable. Most of them are very deep, do not yield water for a long time and are very saline. Thus the challenge of access to portable water for human and livestock use remains a problem. Women still have to walk for long distances in search of water. For security reasons they have to be accompanied by young men – all this diverts energies that could be used in other socio-economic development interventions. The long hours spent by women in search of water means they are left with little time to pursue any other economic or economic development activities.

Note - Boreholes were seen as not sustainable as they were not cost effective for irrigated agriculture.

- 2. Sub-surface dames while they hold water that can be used for multiple purposes, they are heavy maintenance structures because of siltation.
- 3. Rural access roads have been done and opened up the county and made movement of goods and people very easy. This has facilitated sale of agricultural produce further enhancing economic empowerment of communities
- 4. Pasture development more demonstration sites needed so as to encourage adoption of the same by the community so as to have feed for animals during adverse seasons

Anticipated socio-economic benefits if water interventions are successful: -

- Ending hunger by ensuring food security for the people of Marsabit a county with
- Reduce distances covered by women in search of water, currently they cover upwards of an average of five kilometres (one way) in search water and this leaves them little time for any other socio-economic engagements.

ESMF for Program to Build

Resilience for Food and Nutrition Security in The Horn of Africa (HOA)-Kenya Component

- Facilitate engagement in alternative livelihood sources sell of vegetables and fruits from irrigated agriculture
- Enhance employment opportunities as more socio-economic activities will be undertaken out of the
- Make women more economically empowered and more so give them voice by making them involved in decision making
- Enhance activities of organized groups of women and youth that are already involved in micro-enterprises
- Reduce movement of animals while also enhancing the yield of the livestock normally left around settlements for meeting needs of the elderly mothers with children and those other members of households who cannot migrate
- Enhanced peace (less conflict) due to availability of pasture, water and better incomes from their livestock and agricultural crops

Alternatives: participants in the consultations held were of the view that interventions should be integrated – and more so identify projects with the greatest potential for success in transforming the lives of communities. Suggestion was: -

- 1. Mega dams which would avail water for domestic use, livestock as well as irrigation for agricultural activities. One participant by observing that small pans are not feasible sated "these small children pans are not helpful"
- 2. Projects involving the youth should be prioritized. The aim is to give them sources of income with which they can support themselves by especially starting microenterprises

Socio-cultural risk – informants in Laisamis cautioned:

- 1. Siting of projects have to be done in consultation with community leaders as there are sacred sited where projects should not be sited. These include certain mountain areas as well as certain places where they normally meet for sacred ceremonies
- 2. Communities are also averse to development of water points which bring in large congregation of people and animals their view is that a water point should not be done to become a point of aggregating people as this will lead to large flocks of animals (finish pasture_ and lead to diseases and ultimately conflict.
- 3. Moranism lead to cattle rustling as morans after circumcision need to build their own herd. This runs counter to the whole effort of livestock production!

Isiolo County

This is an arid county with less than 450mm of rainfall. The county while largely pastoralis, has also potential for irrigated agriculture.

Proposed projects

1. Irrigation schemes – to serve more than 2000 people and their livestock in each site

- a. Mega dam for irrigation scheme at Ngara Mara
- b. Extension of Leparua Irrigation scheme
- c. Guba Dida Irrigation scheme at Kina Sub county
- 2. Rehabilitation of cattle market especially Ngare mara

Anticipated socio-economic outcomes

- 1. More incomes for farmers and thus better capacity to address their socio0conomic needs
- Diversification of livelihoods and especially away from livestock keeping by engaging in irrigated agriculture – where yields are better from high value crops such as citrus, pawpaw, kales
- 3. Increased employment opportunities especially for youth
- 4. Enhanced food security as more food and of different varieties will be available
- 5. Less conflict when water is available and communities have more incomes

Alternatives

There are limited alternatives to the proposed projects as the communities perceive them as their lifeline

11.2.2 Site consultation photos





Figure 11-1 Public Consultation at Adurkoit – Prinda Market Center in West Pokot



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Figure 11-2 Public Consultation at Orwa

Figure 11-3 Site Visit at Orwa Irrigation Scheme



Figure 11-4 Public Consultation at Chesta (Chief's office)

Figure 11-5: Public Consultation at Sitek Village



Figure 11-6: Key Informant Interviews with West Pokot County Staff in the Agriculture Department



Figure 11-7: Site Visit at the Proposed water Pan in Baringo



Figure 11-8: Site Visit at Proposed Water Intake at Kinene Irrigation Scheme



Figure 11-9: Public Consultation at Sitek Village

11.3 Site Specific Public Consultations during the preparation of Site Specific ESIA Reports

More detailed public consultations will be conducted during the preparation of site specific ESIA. During site specific studies, it will be possible to analyse in more details the actual situation on the ground. It will be possible to identify more specifically the key stakeholders. In order to develop an effective stakeholder engagement plan, it is necessary to determine the key stakeholders and hold dialogues to understand their priorities and objectives in relation to the proposed project/programme. More extensive and detailed stakeholder engagement will be carried out during the process of developing site specific ESIA. The engagement will include identification of more specific stakeholders including identification of vulnerable groups among them the indigenous groups. This project will touch on the key issues of economic development through increase in agricultural productivity/production and marketing and construction of water reservoir/haifr/wells and livestock infrastructure and nutritional security. As such there are a wide range of stakeholders whose interests should be catered for. Among the key stakeholders will include officers from the line Ministries, and various development partners involved in Agriculture and water, Non-Government Organizations (local and international), civil society

organizations and local vulnerable groups. The most important stakeholders, however, will include the project beneficiaries and environmental management organizations.

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ESMF for Program to Build

Resilience for Food and Nutrition Security in The Horn of Africa (HOA)-Kenya Component

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13. Annexes

13.1 Annex I: Screening Form for Potential Environmental and Social Issues

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

The classification of the project risks falls into one of four classifications: High (H) Risk, Substantial (S) Risk, Moderate (M) Risk or Low (L) Risk. In determining the appropriate risk classification, the CPIT E & S Safeguards at respective counties will take into account relevant issues including: the type, location, sensitivity, and scale of the project; the nature and magnitude of the potential environmental and social risks and impacts; alongside the available resources and safeguard instruments to manage the environmental and social risks and impacts in a manner consistent with the ESSs.

High and Substantial risk projects are likely to induce important adverse environmental and/or social impacts that are irreversible, or to significantly affect environmental or social components considered sensitive by the Bank. This will require appropriate environmental and social assessment of subprojects will be prepared and disclosed accordingly.

Moderate risk projects are likely to have detrimental but site specific / localized environmental and/or social impacts that are less adverse and can be adequately minimized and or mitigated by the application of mitigation measures.

Low Risk projects require no impact assessment. These projects shall involve no adverse physical intervention in the environment and induce no adverse environmental or social impact. Such subprojects do not require further environmental and social assessment following the initial screening and preparation of the ESMPs.

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

SECTION A: BACKGROUND INFORM	SECTION A: BACKGROUND INFORMATION				
Subproject Name					
Sub project Location-County					
Subproject Beneficiary					
Estimated Investment					
Start/Completion Date					
Approximate size of land area					
available for the subproject					
Activities/enterprises undertaken					
How was the sub-project chosen					
Expected subproject duration					
Contractor(s)					

Questions	Answer		Due diligence / Actions		
	Yes	No			
SECTION B: EXCLUSIONS / EXCLUSION LIST					
Activities that may cause long term, permanent					
and/or irreversible (e.g. loss of major natural					
habitat) impacts.					
Activities that have a high probability of causing					
serious adverse effects to human health and/or					
the environment, other than associated with					
spraying to control desert locust.					
Activities that may have significant adverse social					
impacts and/ or may give rise to significant social					
conflict.					
Activities that may affect lands or rights of					
Vulnerable Communities or other vulnerable and					
marginalized groups.					
Activities that may involve involuntary					
resettlement or land acquisition or impacts on					
cultural heritage					
If the answers to any of the above is 'yes', the propo	sed ac	tivity i	s NOT ELIGIBLE for financing under the		
project.					
SECTION C: ENVIRONMENTAL ISSUES					
Is the subproject located within or in the vicinity			ESIA/ESMP,		
of any ecologically sensitive areas? I.e. birds and					
bee breeding sites?					
Create a risk of increased soil erosion?			ESIA/ESMP,		
Create a risk of increased deforestation?			ESIA/ESMP,		
Create a risk of increasing any other soil			ESIA/ESMP,		
degradation					
Affect soil salinity and alkalinity?			ESIA/ESMP,		
Divert water resource from its natural course /			ESIA/ESMP,		
location and reduce water quality downstream					
Cause pollution of aquatic ecosystems by			ESIA/ESMP,		
sedimentation and agro-chemicals, oil spillage,					
effluents, etc.?					
Introduce invasive / exotic plants or animals?			ESIA/ESMP		
Involve drainage of wetlands or other			ESIA/ESMP		
permanently flooded areas					
Cause poor water drainage and increase the risk			ESIA/ESMP		
of water related diseases such as malaria?					
Damming of water with dam height of 15 meters			ESIA/ESMP		
or greater from the lowest foundation to crest or					
dams between 5 meters and 15 meters					
impounding more than 3 million cubic meters					
Result in the lowering of groundwater level or			ESIA/ESMP		
depletion of groundwater?					

Questions	Ansv	ver	Due diligence / Actions
	Yes	No	
Create waste that could adversely affect local			ESIA/ESMP
soils, vegetation, rivers and streams or			
groundwater?			
Reduce various types of livestock production?			ESIA/ESMP/
Affect any watershed?			ESIA/ESMP/
Focus on biomass/bio-fuel energy generation?			ESIA/ESMP
If the answers to any of the above is 'yes', please inc	lude a	n ESM	P with sub-project application.
SECTION D: SOCIO-ECONOMIC ISSUES			
Are there any vulnerable and marginalized groups			IPP, ESMP,
(meeting specified ESS criteria) present in the			
subproject area and are they likely to be affected			
by the proposed subproject negatively or			
positively?			
Does the project area present considerable			ESIA/ESMP,
Gender-Based Violence (GBV) and Sexual			
Exploitation and Abuse (SEA) risk?			
Displace people (temporarily or permanently)			ESIA/ESMP,
from their current settlement or require			
acquisition of privately or community owned land			
Involve recruitment of workers including direct,			LMP,
contracted, primary supply, and/or community			
workers?			
Does the subproject have a GCHM in place, to			LMP
which all workers have accesses, designed to			
respond quickly and effectively?			
Interfere with the normal health and safety of the			LMP
worker/employee?			
Reduce the employment opportunities for			LMP
the surrounding communities?			
Reduce settlement (no further area allocated to			ESIA/ESMP,
settlements)?			
Reduce income (even temporarily) for the local			ESIA/ESMP,
communities?			
Increase insecurity due to introduction of the			ESIA/ESMP,
project?			
Increase exposure of the community to			LMP
communicable diseases such as HIV/AIDS?			
Induce conflict?			ESIA/ESMP,
Have machinery and/or equipment installed for			ESIA/ESMP,
value addition?			
Introduce new practices and social behavior,			ESIA/ESMP,
Lead to child delinquency (school drop-outs, child			GBVAP/LMP
abuse, child Labor, etc.?			
Lead to gender disparity?			GBVAP/LMP

Questions	Ansv	ver	Due diligence / Actions		
	Yes	No			
Lead to social evils (drug abuse, excessive alcohol			GBVAP/LMP		
consumption, crime, etc.)?					
SECTION E: PESTICIDES AND AGRICULTURE CHEMIC	ALS				
Will the sub-project:					
Involve the use of pesticides or other agricultural			ESIA/ESMP,		
chemicals, or increase existing use?					
Cause contamination of watercourses by			ESIA/ESMP,		
chemicals and pesticides?					
Cause contamination of soil by agrochemicals and			ESIA/ESMP,		
pesticides?					
Experience effluent and/or emissions discharge?			ESIA/ESMP,		
Export produce? Involve annual inspections of the			ESIA/ESMP,		
producers and unannounced inspections?					
Require scheduled chemical applications?			ESIA/ESMP,		
Require chemical application even to areas distant			ESIA/ESMP,		
away from the focus?					
Require chemical application to be done by			ESIA/ESMP, SEP		
vulnerable group (pregnant mothers, chemically					
allergic persons, elderly, etc.)?					
If the answer to the above is 'yes', please consult					
the IPM that has been prepared for the project.					
SECTION F: LAND ACQUISITION AND ACCESS TO RE	SOUR	CES			
Require that land (public or private) be acquired			ESIA/ESMP, RAP, SEP		
(temporarily or permanently) for its					
development?					
Use land that is currently occupied or regularly			ESIA/ESMP, RAP, SEP		
used for productive purposes (e.g. gardening,					
farming, pasture, fishing locations, forests)			5014 /5014D G5D D4D		
Displace individuals, families or businesses?			ESIA/ESMP, SEP, RAP		
Result in temporary or permanent loss of crops,			ESIA/ESMP, SEP, RAP		
fruit trees and pasture land?					
Adversely affect small communal cultural property			ESIA/ESMP, SEP, Chance Find		
such as funeral and burial sites, or sacred groves?			Procedure		
Result in involuntary restriction of access by			ESIA/ESMP, SEP,RAP		
people to legally designated parks and protected					
areas?			5014 /50140 650 045		
Does the subproject involve land acquisition			ESIA/ESMP, SEP, RAP		
and/or restrictions on land use?			FCIA/FCAAD CED		
Be on monoculture cropping?	J	l 	ESIA/ESMP, SEP		
If the answer to any of the above is 'yes', the	sub pr	oject			
component would be excluded.					
SECTION G: NATURAL HABITATS			T		
Will the sub-project:					

Questions	Ansv	ver	Due diligence / Actions
	Yes	No	
Be located within or near environmentally sensitive areas (e.g. intact natural forests, mangroves, wetlands) or threatened species? NB: If the answer is yes, the sub-project should not proceed.			ESIA/ESMP, SEP
Adversely affect environmentally sensitive areas or critical habitats – wetlands, woodlots, natural forests, rivers, protected areas including national parks, reserves or local sanctuaries, etc.)? NB: If the answer is yes, the sub-project should not proceed.			ESIA/ESMP, SEP,
Affect the indigenous biodiversity (flora and fauna)? NB: If the answer is yes, the sub-project should not proceed.			ESIA/ESMP, SEP,
Cause any loss or degradation of any natural habitats, either directly (through project works) or indirectly? NB: If the answer is yes, the sub-project should not proceed.			ESIA/ESMP, SEP,
Affect the aesthetic quality of the landscape?			ESIA/ESMP, SEP
Reduce people's access to the pasture, water, public services or other resources that they depend on?			ESIA/ESMP, SEP,
Increase human-wildlife conflicts?			ESIA/ESMP, SEP,
NB: If the answers to any of the above is 'yes', pleas	e inclu	de an I	ESMP with sub-project application.
SECTION H: VULNERABLE AND MARGINALIZED GRO	OUPS N	VIEETIN	NG REQUIREMENTS
Are there:			
Members of these VMGs in the area who could benefit from the project?			ESIA/ESMP, SEP, VMGF, VMGP
If the answer to any of the above is 'yes', please project VMGP to be prepared			

CONCLU	JSIONS:								
1.	Proposed project is eligible for financing under the project criteria								
••••									
	Proposed Environmer Justifications.	ntal and Social Risk Ra	tings (High, Substantial, Mo	derate or Low). Provide					
3.		ntal and Social Manage	ement Plans/ Instruments.						
CERTIFIC	CATION	•••••							
Reviev	ved and approved by								
Enviro	Environment Specialist Gender and Community Mobilization Specialist								
Name:			Name:						
Date		Signature	Date	Signature					

13.2 Annex II: Proposed Terms of Reference for sub-projects requiring ESIA/ESMP

The ESIA report should include the following items:

- a. **Executive summary.** Concisely discusses significant findings and recommended actions.
- b. **Project description**. A brief description of the project area and salient features of the proposed location such as geographic location, climate, rainfall, soil profile, wind direction, existing drainage system, demographics, etc. should be given. Concisely describes the proposed project and its geographic, ecological, social, and temporal context, including any offsite investments that may be required (If any i.e. workforce camps, quarry, etc.).
- c. **Policy, legal, and administrative framework.** Discusses the policy, legal, and administrative framework within which the impact assessment is carried out. Explains the relevant African Development Bank Environmental and Social Standards for the Environment and Social Framework (2018). Identifies relevant international environmental agreements to which the country is a party. The impact assessment should be carried out in line with GoK regulations and African Development Bank Environmental and Social OS.
- d. Baseline data. Assesses the dimensions of the study area and describes relevant physical, biological, and socioeconomic conditions, including any changes anticipated before the project commences. Also takes into account current and proposed development activities within the project area but not directly connected to the project. Data should be relevant to decisions about project location, design, operation, or mitigation measures. The section indicates the accuracy, reliability, and sources of the data. Indicate potential for contribution to cumulative impacts, given other similar activities in the same watershed, pastureland, etc.
- e. **Stakeholder consultation.** The consultations should be held with the purpose to (a) collect baseline information, (b) obtain a better understanding of the potential impact (c) appreciate the perspectives/concerns of the stakeholders, and (d) secure their active involvement during subsequent stages of the project as appropriate. Consultations should be preceded by a systematic stakeholder analysis that would (a) identify the individual or stakeholder groups relevant to the project and to environmental and social issues, (b) include expert opinion and inputs, (c) determine the nature and scope of consultation with each type of stakeholders, and (d) determine the tools to be used in contacting and consulting each type of stakeholder. A systematic consultation plan with attendant schedules should be prepared for subsequent stages of project preparation as well as implementation and operation, as required. Where community consensus is required in respect of proposed mitigation measures for impact on community and public assets including water bodies, places of worships etc., specific plan for modification/relocation etc. have to be disclosed and consensus obtained. Consultations should be documented to provide a detailed record on who attended the meetings (with signatures), what were the points raised and what were the team's responses. Photographs of the meetings are a useful addition to the documentation.

NB: Due to Covid-19 restrictions for communities affected by locust invasions, the Consultant should 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. This should be done in line with NEMA Guideline on consultation during COVID 19 by use of ICT technology and use of Comprehensive questionnaires.

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

g. Potential Environmental and Social Impacts & Mitigation Measures. Predicts and assesses the project's likely positive and negative impacts, in quantitative terms to the extent possible. Identifies mitigation measures and any residual negative impacts that cannot be mitigated. Explores opportunities for environmental and social enhancement. Provides clear recommendations to the project design to avoid or minimize negative impacts. Identifies and estimates the extent and quality of available data, key data gaps, and uncertainties associated with predictions, and specifies topics that do not require further attention. The assessment should also be based on the review of various earlier studies such as feasibility and detailed project reports, etc., of the project and understand all related aspects. This will provide a base to formulate the environmental and social surveys necessary for the project and assessing its impact. Furthermore, the impact assessment should be carried out in a consultative manner through stakeholder consultations, at various stages, with the affected communities, NGOs, selected government agencies and other stakeholders.

h. Environmental and Social Management Plan

A sub-project's environmental and social management plan (ESMP) should consists of the set of mitigation, monitoring, and institutional measures to be taken during implementation and operation to eliminate adverse environmental and social impacts, offset them, or reduce them to acceptable levels. The plan shall include the actions needed to implement these measures. To prepare an ESMP, MOALF & C will (a) identify the set of responses to potentially adverse impacts; (b) determine requirements for ensuring that those responses are made effectively and in a timely manner; and (c) describe the means for meeting those requirements. More specifically, the ESMP shall include the following components:

Mitigation

The ESMP should identify feasible and cost-effective measures that may reduce potentially significant adverse environmental and social risks and impacts to acceptable levels. The plan should include compensatory measures if mitigation measures are not feasible, cost-effective, or sufficient. Specifically, the ESMP:

- Identifies and summarizes all anticipated significant adverse environmental and social impacts (including those involving vulnerable communities and or indigenous people);
- Describes with technical details each mitigation measure, including the type of impact to
 which it relates, the conditions under which it is required (e.g., continuously or in the event
 of contingencies), together with designs, equipment descriptions, and operating
 procedures;
- Estimates any potential environmental and social impacts of these measures; and
- Provides linkage with any other mitigation plans required for the project.
- Indicated costs required for these measures implementation

Monitoring

Environmental and social monitoring during project implementation should provide the information about key environmental and social aspects of the project, particularly the environmental and social impacts of the project and the effectiveness of mitigation measures. The information enables MOALF & C and the Bank to evaluate the success of mitigation as part of project supervision and allows corrective action to be taken when needed. Therefore, the ESMP shall identify the monitoring objectives and shall specify the type of monitoring, with linkages to the impacts assessed in the ESIA report and practical mitigation measures described in the ESMP. Specifically, the monitoring section of the ESMP should provide:

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

- Monitoring and reporting procedures to (i) ensure early detection of conditions that necessitate particular mitigation measures, and (ii) furnish information on the progress and results of mitigation.
- Costs required for regular monitoring of the project

i. Institutional Arrangements, Capacity Development and Training

To support timely and effective implementation of environmental and social project components and mitigation measures, the ESMP draws on the ESIA's assessment of the existence, institutional arrangement / roles, and capability of environmental and social units on site or at the PCU at Ministry and at County levels. The ESMP should articulate the roles of such units, and where need be propose the training of staff, to allow implementation of ESIA recommendations. Specifically, the ESMP should provide a specific description of institutional arrangements responsible for carrying out the mitigation and monitoring measures (e.g., for operation, supervision, enforcement, monitoring of implementation, remedial action, financing, reporting, and staff training).

Implementation Schedule and Cost Estimates

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

Integration of ESMP with the Project

ESMP should be specific in its description of the individual mitigation and monitoring measures and its assignment of institutional responsibilities, and it must be integrated into the project's overall planning, design, budget, and implementation.

Team to undertake the assignment and Estimated Time

The Consultant should demonstrate experience in conducting ESIAs for natural agricultural projects, natural resources projects for the last five years. The team will be led by a NEMA Registered Environmental Practitioner with a clear understanding of complex natural resources management issues. The areas of expertise required include: environmental and social impact assessment, ecology, public health and crop agronomy. The Consultant may optimize their personnel to demonstrate the competences required for the assignment, indication of all staff that will be involved in the study is required. The personnel of the Consultant should have wide practical experience in the areas mentioned. The qualifications of the key experts is shown on **Table 13-1**:

Table 13-1: Requirements and Qualifications of the Team to undertake the Assignment

Position	Competencies
Team Leader / Environmental Assessment Specialist	Environmental Specialist: The person should have a graduate degree in environmental science/engineering or related discipline such as planning. S/he should have experience of at least 10 years in environmental and social assessment of similar projects. Preference to be given to persons with experience of working on projects supported by multi-lateral/bilateral funding agencies such as the African Development Bank. The Environmental specialist is expected to work with Social Development Specialist.

Position	Competencies					
	Social Development Specialist: A Postgraduate in Sciences/ Social Sciences/ Social					
	Development or with a Management Degree/ having at least 5 years of experience in					
Social	the conduction of social assessments, and social assessments and vulnerable					
Specialist	community development plans, especially for similar projects. Preference to be given					
	to persons with experience of working on projects supported by multi-lateral/bilateral					
	funding agencies such as the African Development Bank, AfDB, IFC, KFW etc.					

Suggested Table of Contents for the Environmental and Social Impact Assessment / Environment and Social Management and Monitoring Report (60 Pages)

Abbreviations

Executive Summary

Main Body

- Introduction
- Project Description
- Baseline Environmental and Social Conditions
- Stakeholders' Consultation
- Project Alternative Analysis
- Potential Environmental and Social Impacts & Mitigation Measures
- Environmental and Social Management and Monitoring Plan,
- Capacity Development for Environmental Management and Monitoring
- Conclusion and Recommendation
- References

Annexes

- Annex 1: Filled Environmental and Social Screening checklist for the subproject
- Annex 2: Letter of invitation for consultation
- Annex 3: Minutes (including list of Stakeholders) of meetings
- Annex 4: E & E Field Assessment Questionnaires
- Annex 5: ESIA / EA License of the Team Leader or Firm of Experts

13.3 Annex III: Grievance Redress Forms

Annex III-A: Complaints Registration Form

	her								
Postal a	address								
Mobile									
County									
Age (in	years):								
Which Minis		titution ment/ag	or ency/com		r/person up/person	are	you	complaining	; al
Have	you repor	ed this n	natter to a	iny other	public inst	itution/ pu	ıblic officia	al?	
If yes,	which on	e? 							
Has th	nis matter	been the	subject o	f court p	oceedings	?			
	YES	NO							
	_							documents [No ed and by <i>whom</i>	
	t action w	ould you	want to b	e taken?					
7. Wha									
7. Wha									

Annex: III-B Complaints log

Date and complaint from	Complaint e.g. non- issuance of ID	Officer/ department complained against	Nature of complaint/ service issue, e.g. delay	Type of cause – physical (e.g. system failure), human (e.g. inefficient officers, slow, unresponsive) or organization (e.g. policies, procedures, regulations)	Remedy granted	Corrective/ preventive action to be taken	Date of the corrective action taken	Feedback given to complainant	Status of the complaint post corrective action (ongoing, closed)

13.4 Annex VI: Chance Find Procedures

Chance find procedures will be used as follows:

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

13.5 Annex V: Field Reports

13.5.1 West Pokot County

- G. Proposed Adurkoit Irrigation Project
- i) Baseline Information

13.5.1.1.1.1 Introduction

The proposed Adurkoit Irrigation Project is situated in Prinda Village, Atikomor Sub Location, Angarkwat Location, Riwo Ward, West Pokot Sub County of West Pokot County.

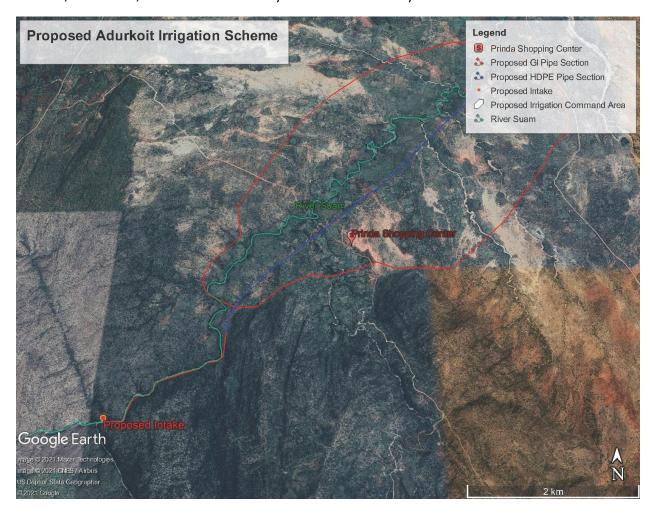


Figure 13-1 :Google Earth Satellite Image of the Proposed Adurkoit Irrigation Scheme

The irrigation Project is intended to serve a population of about 250households. The proposed system of irrigation is sprinkler given the topography of the project area. It is proposed that the project is carried out in phases with intake construction in first phase.

This will ensure optimum water distribution and coverage for all the targeted farmers at possible minimal cost. The system will also be farmer friendly and fairly easy for farmers to operate and maintain.

Resilience for Food and Nutrition Security in The Horn of Africa (HOA)-Kenya Component

Currently residents rely majorly on rain fed agriculture while some employ basic water supply and distribution methods and thus is operating at very low efficiency. The project will ensure maximum efficiency in terms of water distribution and application.

The approximated project cost is **KShs. 250,000,000**.

13.5.1.1.1.2 Project Background

he proposed water source is Suam River with intake location within Akiriamet village at coordinates (X-707243, Y-146838, and Z-1391) at the bottom of a forested area and the ridges. Currently some of the local residents practice farming by relying on rain water. Farmers however lack proper skills on conveying, distribution and application of water to their farms leading to high water losses and poor performance of the crops.

13.5.1.1.1.3 Water Resource

Suam River will be the main source of irrigation water for this proposed project. The proposed intake is located at coordinates (N; 707243, E; 146838) where water is to gravitate through a 350mm conveyance pipeline to the system towards Sekoniyon Centre (N; 710255, E; 149254) 4.804 Km away. From the conveyance the water is distributed to farmers though a mainline and distribution lines ranging from diameters 90mm to 25mm HDPE pipelines. Some farmers are currently growing crops using very simple means and rain water and the project will improve on the crop production and also reduce over reliance on rain fed agriculture.

The Suam River has more than enough volume of water and therefore abstraction will have very little effect on the life downstream.



Plate 16.1:Proposed Intake Site

13.5.1.1.1.4 Existing Institutions

Some of the learning institutions that exist in the project include; Prinda ECD and Primary School, Adurkoit secondary school both located within Prinda centre which is 4.804Km from the intake.

13.5.1.1.1.5 Roads

Access to the project area is through earth road which needs some grading for the easier accessibility. A path that need significant grading is needed to access the actual proposed intake. There are several other narrow earth roads connecting neighbouring villages and different blocks of the project area.

Before the construction of the Intake works and laying of the main line it will be prudent to construct a road (approximately 4.5 kilometres) connecting the earth road at Prinda Market and proposed intake site.



Plate 16.2: A view of the existing road at Sokononiyon/Prinda shopping Centre

13.5.1.1.1.6 Information, Communication and Technology (ICT)

ICT is important in general management of, health, education, women empowerment, youth empowerment and poverty reduction, because people get to access the knowledge and information with ease. The mobile telephone network in Adurkoit is well developed with four service providers in operation namely; Safaricom, Airtel and Telkom. Television network is estimated to be over 50%. Other services available include Internet services and radio waves.

13.5.1.1.1.7 Agriculture and Rural Development

The agriculture and in particular livestock production (cattle and goats) is the most important economic and livelihood sector in the Sub County. Minimum crop farming takes place. Both sectors have potential to ensures food and nutrition security, but are severely constraint by lack of guaranteed water supply. The potential for other crop value chains that could significantly support job and wealth creation and sustainable environmental management (use, care and improvement) exist. Crop Farming and livestock keeping

Majority of farmers in the project area are small scale farmers with Maize as the main food crop, with surplus sold to generate household income.. Other crops that can be grown in sufficient quantities subject to availability of water include; spinach, beans, kales, Irish potato, tomatoes and bananas. To boost farm output, farmers have engaged in irrigation at low levels, especially for maize, kales and other indigenous vegetables using rainwater.

The growth of the agriculture sector in the area is faced with many challenges which include unreliable rainfall, crop diseases, post-harvest losses, low acreage due to low use of modern farming methods and unfavorable climatic condition.

The Plate 16.3 below displays a photo of goats grazing within the proposed project area



Plate 16.3: Harvested Crop land within the plots

Table 16.1 Major crops in the project area.

Table 13-2: Major Crops grown in the Project Area

No	Crops	Approximate %
1	Maize	70%
2	Beans	10%
3	Green grams	5%
4	Tomatoes	5%
5	Bananas	5%
6	vegetables like kales and cabbages	5%
Total		100%

Livestock rearing is also a major economic activity in the project area providing employment and income to a significant number of people. Main types of livestock in the Sub County include cattle, goats and poultry.

From the socio-economic study, findings reveal that 81% of respondents in the project area keep livestock (mainly goats), which are grazed out in the open. The most common form of livestock are goats, sheep and cattle due to their adaptability to dry climate. Stall feeding is relatively expensive and due to scarcity and high cost of fodder, many farmers prefer open grazing.

The Plate 16.4 below displays a photo of goats grazing within the proposed project area



Plate 16.4: Goats within the proposed project area

13.5.1.1.1.8 Vegetation Clearing and Charcoal Burning

Although illegal, bush clearing for charcoal burning is rampant in the area. During the field visit the consultant team observed that many trees have been cut leaving the ground bare and exposed to erosion agents. Charcoal burning is unfortunately the fall-back activity for income generation, when seasonal droughts cause crop failure.



Plate 16.5: Charcoal Burning Near the Proposed Intake

13.5.1.1.1.9 Soil Erosion

Soil erosion is rampant in the area as evidenced by a network of big gullies, which are largely as a result of heavy runoff from the surrounding steep and rocky hilly catchments. The expansive bare grazing fields are largely due to overstocking.



Plate 16.6 Soil Erosion Gullies

Charcoal burning, soil erosion and uncontrolled sand harvesting makes it vital to intensify efforts on sustainable land Management practices to protect the environment from the accelerated degradation.

13.5.1.1.1.10 Sand Harvesting

The river and gully beds receive huge deposits of sand from the rocky and hilly catchments. Sand harvesting is thus a major economic activity in the nearby villages, though benefiting mainly non-community members with the means to mine it. Sand is harvested on river beds and exported to Neighbouring towns including Makutano, Kapenguria, Kitale, Bungoma, Eldoret and Kakamega



Plate 16.7: Lorries Ferrying Sand from the Adurkoit – Kanyarkwat Region to Nearby Towns

13.5.1.1.1.11 Access to Education

Education sector is critical in providing the skills that will be required to steer the county to the economic and social goals of vision 2030. Although the sector has faced serious challenges over the years relating to access, equity, quality, financing and relevance, significant achievements have been made over the years. There exist learning institutions within the project area and environs. Sustainable enrolment is however constrained by ill-health caused by poor feeding and drudgery occasioned by domestic chores like fetching water from as far as 10 km on the part of girls.

ii) Justification for the Project and Proposed Developments

With establishment of Adurkoit Irrigation project, agriculture in the project area is set to undergo significant improvement. This will be manifested through:

- Increase in arable land some of which can be put under fodder production to improve dairy production, and beef production from cattle and goats;
- Increased farm output from irrigation farming targeting a wide variety of ecologically suitable crops
- Increased livestock products due to adequacy of animal feed, pastures and water;
- Increased livestock and crop diversity owing to availability of water;
- Enhanced trade resulting from increased farm output.

iii) Estimated Project Development Cost

The Table 16.2 below provides a summary of cost estimates

Table 13-3:Summary of cost estimates

Bill No.	Description	Total Amount (Kshs.)
1	Preliminaries and Generals	10,000,000.00
2	Construction of the intake, sedimentation structures and concrete works to hold the GI pipeline	70,000,000.00
3	Pipe works	200,000,000.00
	Sub Total	200,000,000.00
	Contingencies @ 10%	20,000,000.00
	Grand Total	300,000,000.00

iv) Proposed General Economic Empowerment Projects

- Investment on Irrigation Infrastructure
- Crop Production (Groundnuts, Green grams, Maize, Watermelon, Tomatoes, Beans, Vegetables, Citrus Fruits and Mangoes)
- Meat Goat

v) Proposed Women Specific Empowerment Projects

- Aloe vera Sap/gel extraction
- Improved Indigenous chicken
- Honey production, processing and marketing

vi) Proposed Sustainable Land Management Interventions

- i. Delineating land earmarked for irrigation and constructing soil and water conservation measures
- ii. Rangeland rehabilitation through controlled stocking rates, re-seeding and auto-recovery through modified rotational grazing and fencing-off.
- iii. Prevent river bank erosion by prohibiting cultivation on riparian lands.
- iv. Participatory designation of steep forested hilly catchments as community protected land
- v. Fencing community land to control sand

vii) Proposed interventions on Specific Value Chains

Crop Farming

 Proposed crops for cultivation include: groundnuts, Green grams, Maize, Watermelon, Tomatoes, Beans, Vegetables, Citrus Fruits and Mangoes)

Meat Goat

- Supply Farmers with the superior Gala breed, which taken shorter time to attain a suitable weight Aloe vera Sap/gel extraction
- Aloe vera grow widely and wildly, dotting everywhere in the region. Women can do extraction in groups and package in jerricans for marketing. There exists a similar project in Baringo -Koriema area which can easily be replicated in the Adurkoit region. The Baringo project is funded by the county government of Baringo and the European Union. To undertake the project, it will be important to do following:
- Form women groups
- Training women on aloe vera production, processing and packaging
- Liaise with local authorities and communities to promote an economically and environmentally sustainable production and processing
- Develop commercially available Aloe Vera nurseries and seedlings;
- Providing the women with simple technologies for aloe vera value chain
- Develop a short-term and long term collaboration plan with other relevant existing Aloe Vera value chain actors;
- Link the women groups with traders and aloe vera markets in cosmetic industries
- Provide advanced training for marketing and other business aspects.



Plate 16.8: Wild aloe vera plant growing in Adurkoit

viii) Improved Indigenous chicken

- Training women on production of the improved indigenous chicken
- Organize the women to groups for easy market of their produce
- Link the women to hotels and other consumers outlets

Honey production

Invest in improved bee hives like Kenya Top Bar and Langstroth, which are women friendly besides being higher yielding with guaranteed honey quality. Traditional bee hives are put on trees, which makes it hard for women to climb and harvest.

Pyramid Kitchen Gardening

Pyramid kitchen gardening which occupies a small space and is easy to manage.

There is need for training on the new technology which is economical on space and water

ix) Probable Socio-Economic Impacts of Proposed Interventions

- Improved Food and nutrition Security
- Employment opportunities
- Increased income for farmers
- Wealth creation
- Population engaged in economic activities
- Poverty alleviation and improved livelihoods

The development of irrigation infrastructure and boreholes in Adurkoit and Prinda will make it possible for the local communities to draw economic benefits from the water resources of the Suam, it will result in improve food security in the area as more food will be produced. The project will also create direct and indirect employment opportunities to the communities within and outside the project area. Other non-irrigation uses include water supplies for livestock, stock watering, domestic uses and market gardens. Availability of water has social benefits, e.g it will increase overall health and household hygiene as well as reduce workload for women and girls who have to walking long distances in search of water.

x) Unintended outcome

Once women are empowered there is likelihood of escalated gender-based violence, However this
can can be addressed through education and awareness geared towards attitude change that
accommodates gender equity in decision-making for mutual gains.

H. Rehabilitation of Orwa Irrigation Scheme -Central Pokot Soita Sublocation

i) Existing Infrastructure

Orwa irrigation project is in Orwa sub location, Sekerr location, Sekerr ward of Pokot Central Sub County. It has a potential of 300ha and will benefit about 600 farmers after completion.

The following Infrastructure Exist:

ii) Intake (Concrete Works)

The existing intake at GPS Location 36N 773542.00 m E, 183463.00 m N requires minor rehabilitation.



Plate 16.9: Existing Intake

iii) Pipeline

There exist a 300mm Galvanized Irion (GI) pipeline section and sections of PVC pipeline.

line (approximately 600m long). The line however requires rehabilitation; a section of the line crossing the river Orwa was washed away by floods in the past.



Plate 16.10: Destroyed Section of GI Pipeline

The Projects components include the following;

- Rehabilitation of the Intake weir
- Construction of a Sedimentation tank
- Bush clearing and farm roads
- Rehabilitation of the main pipeline (1500m)
- Installation of Sub-main pipelines (5000m)
- On-farm pipe distribution system (24000m) and hydrants to cover 300ha

Proposed construction works is estimated to cost Kshs 135 million.

Resilience for Food and Nutrition Security in The Horn of Africa (HOA)-Kenya Component

iv) Proposed Engineering Interventions

The following are the proposed interventions

- Rehabilitation of the Intake Works
- Rehabilitation of the GI pipeline section
- Installation of HDPE main and distribution lines
- Delineating land earmarked for irrigation and putting soil and water conservation in place

v) General Economic Empowerment Projects

- There is existing irrigation structure which need to be rehabilitated and improved
- Irrigation is key to curb cattle rustling where they can grow fruits and vegetables, Cassava, beans, maize etc
- Boreholes and fodder crops

vi) Proposed Women Specific Empowerment Projects

This area too could have women engage in the following economic activities

- Aloe vera Sap/gel extraction
- Improved Indigenous chicken
- Honey production
- Alternative means for transportation of good and services especially to Nearby Markets (Sigor and Ortum) for women who carry heavy loads. The challenge to this intervention is terrain of land and culture constraining women to ride bicycles or motorcycle

vii) Unintended outcome

- Increased workload due to animals not migrating to Uganda resulting to milking cows year round.
- Men being sedentary and permanent at home could result to increased cases of GBV. This should be addressed
- Change in Gender power dynamics at the HH level
- Conflicts over water distribution, which will be solved through participatory scheduling

I. Proposed Chesta irrigation scheme

i) Baseline Information

13.5.1.1.1.12 Introduction

The proposed Chesta Irrigation Project is situated in Seito Sub Location, Lomut Location, Lomut Ward, Pokot Central sub county, West Pokot County.

The irrigation Project is intended to serve a population of about 500 farmers. The Proposed viable system of irrigation is sprinkler given the topography of the project area. This will be achieved through the installation of the infield system within each plot and delineation of irrigable area and formulation of an optimum irrigation development plan for Chesta Irrigation project on the basis of the available water.

The proposed interventions include the construction of intake works, pipeline, masonry tank and water distribution network. The project will endeavor to cover a command area of 300ha.

13.5.1.1.1.13 Description of the Project Area

The proposed water source is the Parkino River. Currently some of the local residents practice irrigation by conveying water from the river through use of pipes and canals.

13.5.1.1.1.14 Crop Farming

Majority of farmers in the project area are small scale farmers. Many of the farmers in the area cultivate sorghum and maize. Other crops grown in the area include; oranges, mangoes, sweet potatoes, water melon, pawpaw and bananas. To boost farm output, farmers have engaged in irrigation at low levels especially for maize and sorghum farming.

The growth of the agriculture sector in the area is faced with many challenges which include unreliable water supply, unfavorable land tenure system, crop diseases, post-harvest losses, low farm yields and unfavourable climatic conditions.



Plate 16.11: Sorghum plantation within the proposed project area



Plate 16.12: Green gram plantation within the proposed project area

13.5.1.1.1.15 Livestock Keeping

Livestock rearing is also a major economic activity in the project area providing employment and income to a significant number of the locals within the project area. Main types of livestock in the Sub County include cattle, goats and poultry. In general, value addition in livestock production such as meat, hides and skins is minimal. Indigenous cattle and goats are mainly kept for their milk, beef and hides. Livestock trading at Chepareria Market is a major activity in the area and some trade them for food item. Their solid wastes are also used as manure which has a great benefit to the crops since they are naturally made by the livestock. The locals also keep donkeys which are useful in transportation of water, charcoal and farm produce hence the farmers who keep donkeys do make more profits locally without having to use fuel for transport so as to get moving with their produce and this needs to be improved to generate more income to the farmers who really have great interests in the agricultural sector.

The main challenges faced in the agriculture sector include:

- Crop diseases
- Limited access to veterinary services

- Lack of Low literacy level especially on crop production where traditional production methods
 are still rampant in the area and markets which are so scarce within the project area and its
 neighbouring areas.
- Unreliable rainfall High risk of erosion due to flush floods

With completion of Chesta irrigation project, the overall situation of agriculture in the project area will be revolutionized. Increase in land under irrigation will lead to increase in crop output for both subsistent and commercial purposes. Crops that have great potential under irrigation are Onion, tomatoes, cassava, water melon and bananas. Sale of output to ready markets in Ortum, Sigor, Chepareria, Kapenguria, Kitale and as far as Kisumu, Nairobi, Uganda and Mombasa Towns will go a long way in alleviating the poverty situation that has ever existed within this region.

13.5.1.1.1.16 Water Resource

Parkino River is the main source of irrigation water for this proposed project. The proposed intake is located at coordinates (N; 781909, E; 155930).



Plate 16.13: Proposed intake site along the River Parkino

13.5.1.1.1.17 Existing Institutions

Some of the institutions that exist in Chesta project include; Chesta Primary School, Parkino primary, Catehineim primary, Chesta girls secondary school, Chesta Teachers Training College and PEFA Academy.





Plate 16.14: Chesta Teachers Training
College

Plate 16.15: Chesta Girls Secondary School

13.5.1.1.1.18 Climatic Conditions

This area of Lomut has a typical ASAL climate with average annual temperature of 22.8° C and annual average rainfall of 697mm.

The driest month is January with 18mm of rainfall. In April, the precipitation reaches its peak with an average of 129mm. The warmest month of the year is march with an average temperature of 23.8° C At 21.7 degrees Celsius on average, July is the coldest month of the year.

13.5.1.1.1.19 Justification for the Project and Proposed Developments

With establishment of Chesta Irrigation project, agriculture in the project area is set to undergo significant improvement. This will be manifested through:

- Increase arable land some of which can be put under fodder production to improve on dairy cattle rearing and beef cattle and goats and this means more milk production, beef and mutton;
- Increased farm output from irrigation farming targeting a wide range of crops
- Enhanced food and nutrition security within the project area;
- Increased livestock products due to adequacy of animal feed, pastures and water;
- Increased livestock and crop diversity owing to availability of water that will help in saving the costs that may be incurred bringing these other varieties from elsewhere;
- Enhanced trade resulting from increased farm output since people will be getting
 whatever they don't produce in some parts of South Pokot constituency hence
 people get to save a lot within their locality.

13.5.1.1.1.20 Estimated Project Development Cost

The estimated project cost is Kshs. 200,000,000. To cater for the construction of the following Intake Works, Sedimentation basin, Conveyance Line, Mainline, Distribution network and infield system

ii) General Economic Empowerment Projects

- Farmers already have organized the field where they grow, watermelon, bananas, pawpaws etc
- There is perennial river that passes, there is need to construct a Water Intake
- Pipes to take water to irrigation fields

J. Proposed Women Specific Empowerment Projects

- Women can participate in forest preserving and reseeding activities because they collect herbs and medicine for sale in Sigor and other markets
- Improved indigenous chicken
- Soya beans growing and processing
- Honey production and processing
- Training on food processing and preservation

K. Probable and unintended Socio-Economic Impacts of Proposed Interventions

• Increased work load and gender power dynamics at HH level which requires gender transformative training for easy adaption to the unintended social change

13.5.2 Baringo county

L. Kipkaplop Water Pan

The proposed site is located at GPS Location 36 N 803162.00 m E, 49466.00 m N. The water pan is intended to capture runoff for irrigation farming and livestock production

i) Recommended projects

- Goat meat,
- Spring rehabilitation
- Bee keeping
- Improved idiginious chicken

M. Sitek Water Pan

There insidences of cattle rustling is not uncommon and men taking their livestoke especially cows to Neighbouring counties during the dry season

- Here women walk long distances to look for water (6 hours) on very rugged and rocky terriain
- The step slopes lack aquiver to sink boreholes
- Good vegetatin cover for bee, milk goat farming

ii) Proposed Interventions

- Water reservior and borehole down stream which will use solar power to pump water to the HHs living along the slopes upstream.
- Water reserver as watering point for animals and bees as well as irrigating gentle sloping farmland down stream.

iii) Proposed Women Specific Empowerment Projects

- Millet production
- Rear milk producing Goats such as saneni or colour back sheep which are supplied by cheptembo breeding center at a cost of ksh 14,000 each. Each household can be provided with a male and female of the milk goat or sheep
- Honey production
- Improved transportation of goods to the market in kabsabet

iv) Probable and unintended Socio Economic Impacts of Proposed Interventions

• Increased work load and gender power dynamics at HH level which requires gender transformative training for easy adaption to the unintended social change

N. Proposed Modern Fish Processing Plant at Kampi Samaki, Marigat

Baringo county is endowed with three fresh water lakes namely; Baringo, Kapnarok and lake 94. The three fresh water lakes cover a surface area of approximately 200 km². Besides, Baringo County also has several man made dams and fish ponds where fish production takes place. The annual fish production from Baringo County oscillates between 180 and 240 tonnes with 90% of the landings coming from lake Baringo, 8% from fish farms and 2% from the man-made dams. Studies by Kenya Marine and Fisheries Research Institute estimate the production potential of L. Baringo to be 500 tonnes per year. Lake Baringo fishery thrives on five fish species namely lungfish, catfish, tilapia, labeo and barbus with the dominant fish species being lungfish which is an invasive species introduced in 1970's.

There are 1350 households that depend on the fisheries sector mostly women and youth who are involved in fish farming and fish processing and marketing. Lake Baringo alone has 257 fishermen operating a total of 137 fishing vessels. The other indirect dependants include the fish traders, fish processors and the fishing input suppliers.

The county has established a total of 789 fish ponds which are owned by individual fish farmers or groups. The total surface area of the ponds is 240,000M² with an annual production potential of 200 tonnes. The two main fish species farmed within the County are tilapia and catfish. The current fish production from aquaculture is 48 tonnes which is less than 30% of her potential. The low production is attributed to several factors among them poor market access.

Despite the huge demand for fish, the fisherfolk from Baringo county are still faced with difficulties in selling their fish. This is mainly attributed to the nature of the existing fish markets which do not appeal to the consumer preferences. In Baringo, fish processing and marketing is highly unorganized. Most retail fish traders process and sell their fish by the roadside without maintenance of quality or hygiene and without access to portable water, shelter and fish dressing platforms. These unorganized markets not only attract poor market prices but also compromise the consumers healthy.

Kenya has become a middle class economy and the buying power of the consumers has increased. In the recent past, most middle class consumers have become highly healthy conscious and insist on the quality of what they consume. Most of these consumers accord more emphasis to freshness of the product they purchase than to the price. It is worth noting that most of these consumers prefer to buy packaged foods as opposed to those openly aired.

Lake water has a lot of floride which tint their teeth and harden borns, Jemps live in the islands , there are Turkaanas , Tugens and Pokots in the region but each having a different fish landing point. The lake has clay fish, cut fish and mud fish. Fishermen are licenced by the county. Fishermen bring the fish at landing bay at about 1 pm and sell to the women who remove the internal organs , wash the fish in the lake which is infested with crocodiles and hippos . The fish is then dried and smoked for preservatio before selling locally or to other markets.

The overall goal of this proposed project will be to avail a one stop outlet for fresh fish, frozen and processed fish products. Most fish consumers use sensory evaluation parameters such as crispiness, colour and texture to rank food. The Aqua shop will provide an opportunity to improve the quality of the fish products; odour, taste and appearance hence make it more appealing to the customers.

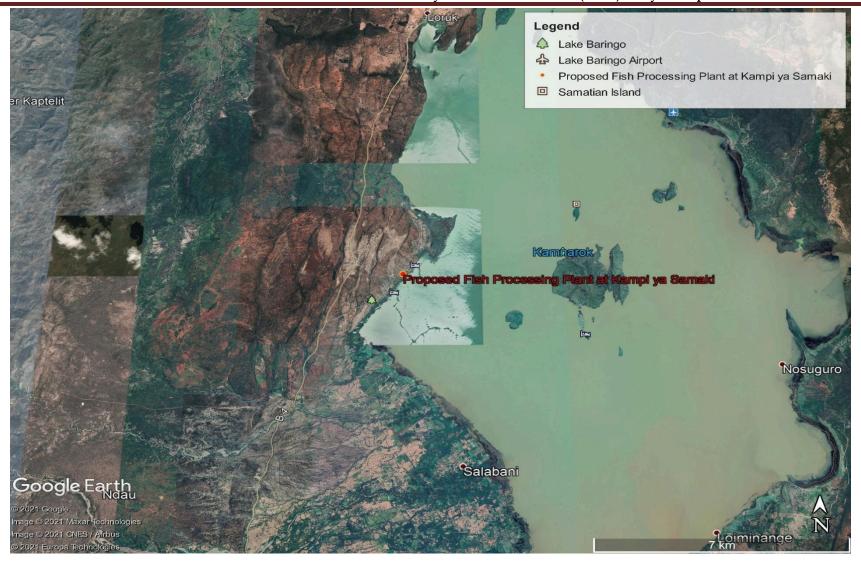


Figure 13-2: Google Earth Satellite Map of the Proposed Fish Processing Plant at Kampi ya Samaki Baringo

ESMF for Program to Build

Resilience for Food and Nutrition Security in The Horn of Africa (HOA)-Kenya Component

i) Proposed Interventions

- Construction of a one-stop modern fish processing plant at Kampi Ya Samaki
- A mini Hatchery attached to the aqua shop
- Installation Water treatment system
- Installation of Fish Processers and coolers to preserve fish
- Construction boat landing bays to protect crocodiles from attacking fishermens and fish traders
- Supply of motorised boat to collect fish inside the lake so that it arrives earier than having to wait until 1 pm. The boats can be given to mens groups.
- Since the project directly benefit fish mongers, the larger community and especially women and children who do not engange in fishing should be helped to meet their livelihood.
- Clean and safe water should be provided to the jemps in the island and other communities living arround the lake.
- Also intervention programs such as bee keeping, milk goat and improved chicken.

ii) Probable and unintended Socio-Economic Impacts of Proposed Interventions

- With improved technology and mechanization of fish processing and preservation, Men are likely to take over sending women home
- Fish might become very expensive for women to afford and thus rendered jobless

iii) Intervention

- Women to partner with men
- Motorized boats for men
- Allocation of requisite technology like cold storages o Women groups rather than individuals
- Capacity Training

O. Proposed Emsos Irrigation Project

i) Baseline Information

Background information

The area is disected by several small permanent streams following from the hills and empting their water in L. borogia. The land is very extensive and boarders L. Bogoria national park which is a habitat for snakes, buffallos, baboons and other primates. These animals poss danger to human and destroy their crops and properties.

The wildlife conflict has resulted to the community giving up any form of farming because the primates feed on their crops . they also they live in fear of being attached.

In as much as the community recommeded daming of an intake and piping the water to irragate their fields, it is necessary to first address this human and wildlife conflict.

The proposed Emsos scheme is to be partially gravity and partially Pumping fed piped system with drip and prinkler application methods. The scheme will abstract water from permanent collection boxes constructed across the Emsos springs. The scheme has about 70 farmers who will irrigate an area of 100 acres. The crops grown will be mainly horticultural

Currently the farmers in Emsos Proposed project area grow rely on rain fed agriculture to grow their crops. A few farmers do dry land farming which often results in total crop failure in 3 out of 5 years. **Location**

The scheme area is situated in Kisanana Ward, Koitummet locations. It is about 85Km from Nakuru town and about 45km East of Mogotio Town.

Topography and soils.

The area targeted has red soils with arid characteristics but has a lot of organic matter. When rains are sufficient farmers are able to harvest even after planting their crops without any fertilizers. The Kenya soil survey indicates that the soils are generally suitable for irrigated agriculture.

Climate and Hydrology.

Emsos experiences dry and wet alternate seasons throughout the year. The rainy seasons come twice in a year namely the long and the short rains. The long rains are experienced between March and August while the short rains come between October and December. However, the rain pattern has been changing and now the area sometimes receives very little rain or no rain at all. The area experiences very long periods of dry spell. The temperature varies between 20°C and 32°C at different periods of the year, July and August being the coolest months while January, February and March being the hottest months respectively. The climate is very much favourable for most crops and animal farming. Average monthly rainfall is approximately 700mm.

The scheme is supplied water from the Emsos springs. The base flow of the springs cumulatively has been estimated at **155** l/s.

Present Agricultural Production

The crops grown in the project area are maize, beans, sorghum, finger millet, sweet potatoes and sugarcane. The average family size is 6 people per household, and the average arable farm size per household is 3acres in the project area. Nearly every household has livestock.

Water Sources and Uses

Emsos Springs passes in the middle of the first section of the irrigation cluster farms, and the rest of the farms are on a raised ground. It has more than 6 spring eyes but 3 are proposed for protection and use for irrigation while the others will flow naturally. Pumping will be required to lift water to the upper farms while those in the low areas will be served by gravity. The source has several springs within the area which will be developed, protected and interconnected to one point for gravity distribution or pumping to upper farms.

The availability of irrigation water to all members will intensify crop and animal production. This area can then supply food and animal products to Nakuru, Baringo, and Nairobi. The sales will earn the farmers income and hence reduce poverty. With irrigation, tomatoes, vegetables and beans will be grown during the dry seasons, when the temperatures will be quite ideal and the demand is high.

Agro – Ecological Zones

Emsos farms falls under ecological zone lower lowlands 4, the rainfall patterns are poorly distributed in the whole farm all the year round. The temperature is hot, warm and favourable for farming.

Administration

Emsos irrigation cluster farms are administered from Mogotio Town, and have a chief and an assistant chief based in Maji Moto area. Also within the town there is a police post and a post office. The area has one primary schools namely Emsos and one nursery schools. Most issues are handled by the chief's office, elders and farmer's representatives (IWUA) once formed.

Farmers organization

Currently a water management committee is in place for general water issues in the area and is being used to mobilization and sensitization of the proposed irrigation project. There is no Irrigation water user's Association (IWUA). Farmers are planning to form IWUA and register with the Ministry of Culture and Social Services. Once formed it will be strengthened through training.

Land tenure

The land tenure system is individual ownership with registered titles. The farmer therefore dictates the use of his farm. He could decide to put only crops without livestock or vice-versa.

ii) Proposed Interventions

The proposed measures include;

♦ Kenya wildlife service to elect electric fence round the park to keep animals away

- ♦ Construction of a permanent Spring box across 3 no Emsos springs, Water for Irrigation be conveyed into a
 - and converge them at a sump approximately 1 km downstream where pumping to the upper farms or gravity flow to farms adjacent to the sump will be done.
- Excavation and laying pipeline for both gravity main and rising main 2.5km of various sizes.
 - At the end of the gravity main 8 households will be able to irrigate while the rest will use the pumped system.
- ♦ Installation of solar power and the entire pumping system.
- Setting up of sprinkler and drip irrigation systems.
- ♦ Farmers participatory training on irrigation water management

iii) Women specific projects

- Since there is very little bee keeping yet, the vegatation and climate is coducive for bee keeping, it should be introduced and hives given to women
- Women should also be trained on havesting ,proceesing and packing of honey
- Meat Goats
- Green grams, vegateable and fruits to be introduced in the irragation scheme.
- Training on food value addition and gender trasformation issues

P. Kinene Growers Irrigation Scheme

i) Baseline Information

Summary

Kinene irrigation scheme is situated in Baringo County. The soils are fertile of predominantly red cotton soils, suitable for irrigation. The crops currently grown are under rain fed, which occasionally fails due to inadequate rains. The project is targeting to promote horticultural crops production which includes water melons, onions, tomatoes, fruits etc. The scheme area will be 100 ha to facilitate 200 farmers to irrigate preferably through sprinkler irrigation. Therefore, this project targets to increase land productivity by ensuring sufficient, regular supply of irrigation water in the scheme through improved water conveyance efficiency and capacity development. The scheme will abstract irrigation water from Molo River through closed system. The scheme is estimated to cost about Kshs **150,000,000.**

The project is proposed to start with 200 Households who will each irrigate 1.5 ha totaling to **300ha**. Irrigation Infrastructure will consist of the following:

- **Diversion intake works:** This will be constructed at Molo river so as to abstract, control and measure water from the river into the farms through a closed conveyance system.
- Conveyance system: The main conveyance system comprises of a pipeline running from the intake to the point head of the scheme 3.8 Km near Mogotio town. The sub mains will be done to individual farmers.

The proposed measures include;

- Construction of an Intake chamber at the existing weir at Choka area of Molo River.
- Excavation and laying pipeline.
- Fixing Sprinkler systems.
- Farmer's participatory training on irrigation water management.

In order to operate the irrigation infrastructure properly, an active Water Users Association is necessary. The irrigation water users association is expected to mobilize members during the operation and maintenance phase to perform various assigned tasks to promote equitable distribution of water and pipe, sprinklers and drip lines maintenance. The group through sound by-laws will collect levies to maintain structures.

Justification

The proposed Kinene Irrigation scheme supports Kenya's Vision 2030 and current development strategies that focuses on growth and poverty reduction mainly the Sustainable Development Goal. The project also empowers farmers to own and manage the scheme hence improving land productivity through irrigated agriculture that makes it possible to grow high value crops. Farmers will also fetch good prices from crops grown during dry spell when the area suffers from food shortage

Site Location

The proposed Kinene Irrigation Project is located in Mogotio Ward, Mogotio Sub-location, Mogotio Location, Mogotio Sub-county Mogotio constituency, Baringo County

Topography and Soils

The soils are fertile with a lot of organic matter. The Kenya soil survey indicates that the soils are generally suitable for irrigated agriculture. However, adequate drainage of excess water should be provided especially in the areas where the river occasionally bursts its banks and where natural drains gather excess water and empties it within the scheme. The micro relief is rather irregular while a few gullies crossing the area.

Climate and Hydrology

Mogotio farms experiences dry and wet alternative seasons throughout the year. The rainy seasons come twice a year; the long and short rains. The long rains are experienced between March and August while the short rains come between October and December. The rain pattern has been changing and now the area sometimes receives very little or no rainfall at all. The area experiences very long periods of dry spell. The temperature varies between 20°C and 32°C at different periods of the year. July and August being the coolest months while January, February and March being the hottest months. The climate is very much favourable for most crops and animal farming. Average rainfall for selected station is shown in the table below:

Average monthly rainfall (mm)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
5	15	57	105	95	95	50	50	80	50	50	40	692

Water Source

The scheme is supplied with water from Molo River. The farmers have the intention of constructing water pans that store water when it is raining and use it during dry season. Once the project is completed, farmers will draw flood water from Molo River for storage and eventual use during the dry season.

Population and farming system

A total of 200 farmers shall each irrigate 1.5ha of his land under irrigation and thus irrigating a total of 300ha initially but expected to grow when the benefits are realized. The farmers keep livestock mainly cattle and goats. They also practice agriculture by growing maize and beans as food crops. The family size has an average number of 6 members. The farmers in this area mainly grow maize, beans and main animals kept are cattle, goats, donkeys and sheep. The average acreage per household is 10 acre (4Ha).

Market outlets

Mogotio Town will be the local market for the produce from the irrigation scheme. Surplus horticultural crops will also have a ready market in the neighbouring Towns at Nakuru, Eldama Ravine, Marigat and in Kabarnet.

Farmers organization and involvement

The farmers have formed a self-help group known as Kinene Growers Irrigation scheme. The group has by-laws which guide them in the day to day running of the organization.

Their contribution in the gravity scheme will be bush clearing during survey, excavation for the infield pipelines, preparing seedbeds and carrying out farming activities. They will also be responsible for operation and maintenance of irrigation infrastructure once implementation is completed. To acquire the skills, training of the management committees and farmers will be done, as well as involving them in decision making in all phases of project.

Gender issues

The group consists of a good mix of both men and women including the youths who are group leaders. Traditionally the growing of crops is the work of women. Although increase of irrigated agriculture will increase the workload on women, the increase in production will give women as well as the entire community an increased income. With irrigated agriculture, young men will be attracted by the improved profits from the farms.

Extension Services

The introduction of irrigation farming to the community will be a challenge and extension services will be provided by the Sub-County Agricultural Office (SCAO) and the Sub-County Irrigation offices. The farmers will have to be trained on irrigation and crop husbandry practices, management of the scheme and organization, operation and maintenance. Financial contribution towards the operation and maintenance of the major irrigation works will ensure sustainability of the scheme.

13.6 Annex VII: List of Stakeholders / Comment Matrix

13.6.1 National Level consultations- 27-7-2021

Table 13-4: List of Participants at National Level

S/No	Name	Gende	Position	Phone	Email
•		r		Number	
1.	Eng. Kennedy	M	Project	072282742	kenmakudiuh@gmail.com
	Makudiuh		Coordinator	5	
2.	Eng. G. W.	М	Component	072288658	gwkahuro97@gmail.com
	Kahuro		Manager	4	
3.	Hillary K.	М	M&E	072580581	kiprongeno80@gmail.com
	Ngeno			0	
4.	Okati S. Juma	М	Livestock	072293266	okatyina@gmail.com
			Specialist	6	
5.	Rose M.	F	Gender	072490342	mwa_rose@yahoo.com
	Mwanzia		Specialist	1	
6.	Silas O.	М	Agribusines	070185707	Okenyatta343@gmail.com
	Kenyatta		S	4	
7.	Eng. Jonah	М	Project	072083775	kebeneyjonah@gmail.com
	Kebeney		Engineer		-
8.	James O. Juma	М	Project	070826736	jaojuma@gmail.com
			Engineer	7	
9.	Judith Muricho	F	Livestock	072585923	judithmincho@yahoo.com
			Specialist	4	
10.	Josphat Omari	М	Project	072034932	omarijn@yahoo.com
	·		Enginer	2	
11.	Bernard	М	Info/Com	072122973	bkiregiwanjohi@gmail.co
	Wanjohi			1	m

Photos





Figure 13-4 National Level consultation photos

13.6.2 County Level Consultations Lists of participants

a) Turkana County

05/202)



Baringo County

Meeting of consultants of DRSLP PHASE II Baringo County

S/no	Name	Organisation		Position
1.	Elphas K. Rutto	BCG- Agriculture	0721519150	Desk officer
2.	Mark Yego	Baringo central agriculture	0722790662	SCAO
3.	Nahaman Towett	Baringo County Water	0720215110	Engineer
4.	Keitany Dickson	Baringo County Water	0722999719	Engineer
5.	Wilfred Kiplagat	Baringo County	0725887602	C.O Agriculture
6.	Dr. Joel Koima	Baringo County	0724793050	CEC Agriculture
7.	Vincent Abuje	Baringo County	0725670500	Director Agriculture
8.	Nelson Tanui	Baringo County Engineer	0710479795	Baringo County Engineer
9.	Daniel Chepchieng	Baringo County	0726494673	Ward Admin
10.	Daniel Kimaling	Assistant Chief Kapcherebet	0722409861	Assistant Chief Kapcherebet
11.	Harison Kimaling	Member	0725014573	Farmer
12.	Alfred Kiplagat	Member	070533962	Farmer
13.	Susan Kiprotich	Baringo County- Agriculture	0791709278	Intern
14.	Anaalo William	Baringo county	0792434384	Agriculture engineer
15.	Triza kigen	Baringo county -agriculture	0711459339	intern
16.	Philiph nandwa	Baringo county-environment	0720848953	Deputy Director Environment
17.	Ronald onzase	Irrigation officer mogotio	0723378001	Sub county irrigation officer
18.	Tom kiplagat labatt	Kinene irrigation	0722976274	Chairman

Ī	19.	Morphael okeyo	Baringo County -fisheries	0722627443	Director fisheries
	20.	Kibet limo	Baringo County -fisheries	0723496285	Director fisheries
	21.	Boniface wendot	BCG -MOGOTIO	0720824201	SCAO

Name and Tel	Organisation	Signature
Victuel W. Tallam	0724205092	Relleune
HEBELIEWY AMDANY		0
MARK AMBAY	0700741862	Jan Start
Hillam Kandagai	011422034	The state of the s
DAVID CHOLANGA	0792567532	Delin
JOSEPH ROTUMO,	0702412140	A.
CHERTICA AMPANY		40,
KIBOGIS CHRALLEY	0710878490	SC.
KARANI MARINIAR		1
Mornion Atrihat		7
Marx TANdany	0712881370	Idella
WILLIAM KASAN	6717911857	Man
ZIPPORMI LOTENG		1
FRIEX SACHT	0723884298	-88
KIMURIO CHEGALLOM		4
1SAACIL KOLGE	0716358928	to
MARK KIMURTO	071554-0370	PAX
County Baringo	Remarks Pub	lic Consultation
Westing at	SHAMMING STATIONS	LAM STANDE
Date 15th July	2021	100 May
340		
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	11 A Poss	red Kipkaplop W
Kills Con	sultation - Propo	
Lablic Con		





West Pokot County

S/N O	NAME	GENDE R	ORGANIZATION	EMAIL/ MOBILE NO.
1.	David Sondanyi	M	County Government of West Pokot (WPCG)	0724437256
2.	Risper Nandasamba	F	WPCG/Desk Officer	0723820723
3.	John Tinja	M	County Government of West Pokot (WPCG)	0729545808
4.	Jackson Barasa	М	Subcounty Agricultural Officer	0726291784
5.	Musa Kipkorir	М	Livestock Department West Pokot	0726644513





ISIOLO COUNTY

PARTICIPANTS CONSULTED DURING ESMP IN ISIOLO COUNTY

S/N O	NAME	GENDE R	ORGANIZATION	EMAIL/ MOBILE NO.
1.	William Rimberia	M	Agriculture	0724430931
2.	Hassan Galgalo	М	Chief	-
3.	Guyo Abduba	М	Irrigation	0725382441
4.	Joseph Miriti	M	Agriculture	0723828154
5.	Ali Kanato	М	Beneficiary	0725017054
6.	Dorrin Ganii	F	Staff	0700391602
7.	Nkatta Kithinji Vilda	M	Staff	0781951410
8.	Abdullahi Ware	М	Chairman (Kinna)	0715030458
9.	Mohamed	М	Chairman (Akore)	0712257619
10.	Ekai	М	Secretary (Akore)	-

MARSABIT COUNTY

MEETING WITH ADB/IGAD CONSULTANTS AT MARSABIT COUNTY

No.	Name	Deployment	Phone number
1.	Charles Muturi	DRSLP Desk Officer	0725739092
2.	Patrick Nthenge	ASDSP Coordinator	0722859207
3.	Moses Leng'arite	Director Livestock	0720132418
4.	Julius Gitu	Director Agriculture	0711721164
5.	Hussein	CEC	0723584904
6.	Galwab	KFW Coordinator	0727949707
7.	Boru	Director Fisheries	0720835761

Table 13-5: Stakeholder Consultation Matrix

S/No	Comments	Remarks
1.	We received the documents very late and we had not reviewed it to give any concrete response. We shall review and submit our comments. There is need to have a separate GCHM for the project so that the project specific grievances are reported accordingly and adaptive to the current situation of Covid 19.	MOALF & C has provided an additional 2 weeks for comment electronically. Four levels for raising issue over the project has been laid down in the ESMF
	 In the negative effects the following should be included; Due to depleted pasture as a result of locust impact, livestock will be forced to migrate to areas with more pasture and water. Insecurity –When animals are moved to far flanged areas they are subjected to areas prone to insecurity. This normally leads to human and livestock death unfortunately. Overgrazing and land degradation –When animals move to areas with abundant pasture, the concentration of animals in this areas cause depletion of pasture and browse, trampling of animals cause land degradation. Disruption of livestock market systems due to movements of animals away from traditional grazing areas. 	Additional adverse impacts noted and included in the ESMF.
	Institutional Arrangement and Capacity Building Environment and social expert to liaise with the County agriculture officer, County livestock production officer and sub county Agricultural and livestock production officesr who will help in liaison. Summary of roles and responsibilities for DRSLP II Include the following: NPCU, CPIT, and the Sub County SUB-County Project Implementation Teams (SCPIT) to	Comment noted and included in ESMF Comment noted and included in ESMF
2.	be involved We received the documents very late and we had not reviewed it to give any concrete response. We shall review and submit our comments. There is an ongoing effort to manage locust in Turkana County by County Government and other partners. However, the situation is overwhelming and the locust are spreading to new areas and affecting the plant vegetation thus affecting the pastoralist.	MOALF & C has provided an additional 2 weeks for comment electronically. Sub project Rehabilitating Agricultural and Pastoral Livelihoods will support affected farmers and livestock holding households to restore their productive assets.

S/No	Comments	Remarks
3.	The bank takes very seriously the process of undertaking stakeholders' consultation and that is the reason that amidst COVID 19, the bank had to organize a virtual meeting to ensure stakeholders are consulted and they input is captured, There is need to allow the relevant stakeholders adequate time for reviewing the report and	MOALF & C agreed to provide 2 weeks for stakeholders' to submit comments electronically.
	submitting their input.	
4.	There is need to have adequate and appropriate baseline information of the affected Counties for example the bird's life as well as bee breeding sites. There is need to detail how community health and safety will be done during project implementation.	All the concerns on data collection have been noted and the PIU will include these in its monitoring and evaluation component.
	The report has documented the need to provide advance warning to the beekeepers so that they can restrict bees from leaving the beehives. However, this may not be feasible and realistic as many beehives are the local type and it is difficult for the farmer to restrict the bees from leaving the hives. Thus, there is a need to provide the alternative mechanisms for handling the traditional beekeepers.	The project affected persons both farmers and pastoralist including the bee keepers shall be actively engaged throughout project implementation phase.
5.	There is a need to rehabilitate the pasture for the livestock.	Noted and this is the reason why the IDDRSI has been
	The legal frameworks governing the activities should include	conceived to mitigate the locust impacts on pasture.
	✓ National Livestock Policy, 2019✓ Livestock Act, 2020	Legal framework included.
6.	The project should gather adequate and appropriate data that should be synthesized for future use.	All the concerns on data collection have been noted and
	There is need to hire adequate and competent team to be involved in this data collection. The specific data may include:	the PIU will include these in its monitoring and evaluation component.
	i. The side effect for the use of pesticidesii. How many people will be affected by the negative impacts?	
	iii. What are the non-targeted insects that may be affected?	
	iv. What are the effects to livestock after spraying of the pastures?	

13.7 Annex VIII: Voluntary Land Donation Procedure

Voluntary Land Contribution (or Donation) refers to a process by which an individual or communal owner agrees to provide land or property for project-related activities. In general, Voluntary Land Contribution is undertaken without Compensation. Voluntary contribution is an act of informed consent, made with the prior knowledge of other options available and their consequences, including the right not to contribute or transfer the land. It must be obtained without undue coercion or duress. Under ESS5 VLD includes situations where project makes land physically unusable or inaccessible, even when there is no land acquisition. It covers restrictions on access to communal property and natural resources, including marine and aquatic, timber, fuelwood, building materials, freshwater, hunting and gathering ground, grazing and cropping areas.

Voluntary Land Contribution or Donation requires a declaration by the individual, household or group that they are donating the use of the land for a specific purpose and a specific duration of time. It is provided freely and without compensation, but the donors must be made aware of the available options before they can be called upon to decide.

Voluntary land donation is only acceptable if the following safeguards are in place:

- the potential donor or donors have been appropriately informed and consulted about the project and the choices available to them;
- Full consultation with landowners and any non-titled affected people on site selection;
- potential donors are aware that refusal is an option;
- Any voluntary 'donation' will be confirmed through written record (see Appendix E) and verified by an independent third party such as customary tribunal, NGO or legal authority;
- Adequate grievance redress mechanism should be in place;
- Voluntary donations should not severely affect the living standards of affected people;
- Land is made available to project beneficiaries for the duration of the project;
- Private households donating land should be direct beneficiaries of the investment;
- No household relocation is involved;
- the amount of land being donated is minor (less than 10%) and will not reduce the donor's remaining land area below that required to maintain the donor's livelihood at current levels; and
- For community or collective land, donation can only occur with the consent of individuals using or occupying the land.

The process will include the following:

- 1. The project will adopt the process used under DRSLP I. In DRSLP I, the Community Resolution form which is filled by leaders from among the beneficiaries are used. The area chief signs the form as a witness. The COs and CEC Agriculture also sign the form as a commitment from County leadership. The site identification is part of Community mobilization process. In case an identified site belongs to an individual, the beneficiaries through their elected leaders enter into an MOU (similar to the form in Annex IX). The signed MOU is then submitted to the CPCU together with the Community resolution form. The Community Chief will take into consideration the following details for such documentation:
 - What the land will be used for;

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- How much land the project will require on both a permanent and temporary basis;
- How much of the land will be donated;
- What alternatives to donation exist (e.g., right of use, right of way);
- The terms of the donation;
- The identities of the parties who intend to donate;
- The beneficiary of the donation; and
- Any details that are relevant to why donation may be appropriate.

Preparation of land survey map and schedule of land acquisition

2. After collected the information related to land and assets which will be affected by sub-project implementation, the responsible official, with assistance from the related persons, will prepare a land survey map and a schedule of land acquisition.

The land survey map shows each parcel of land that will be affected, and each parcel of land should be given a code (a letter or number).

- 3. Verification of voluntary donations. The following conditions will be confirmed by the Committee including the village chief.
 - a) Confirmation that affected people agree to donate land or asset, based on a face to face meeting;
 - b) No one would lose more than 10% of the total productive assets;
 - c) The total land holding of the affected person should be 200 m2 or more; and
 - d) No physical relocation necessary.
- 4. Initial Village Consultation. Under the village head leadership, a consultation process will be launched to invite different interest parties, including land owners to discuss and ratify the appropriateness of the voluntary basis of land donation.
- 5. Transferring and formalizing the land. Process for land donation includes very clear procedures that explain the process that should be followed to transfer the land, and appropriate ways to formalize the respective transfer. The process includes consideration of the legal and administrative requirements based on Kenya's legal framework. The process will describe a clear and transparent decision making process.
- 6. Verification process (surveys) to identify land ownership and use. Commune Chief and Technical Assistant will ensure that the land study will include specific surveys to understand the type of land rights that exist in the sub-project area, and to identify any particular issues relating to land ownership and use. The specific surveys must be conducted on each parcel of land proposed for donation to identify:
 - a) The owner or owners of the land;
 - b) The users of the land, or any parties that occupy the land (either physically or through ownership of an asset or conduct of livelihood or business activities on the land);
 - c) Any competing claims of ownership or use;
 - d) Structures and assets on the land; and
 - e) Any encumbrances on the land.
- 7. It is important to: (i) identify the right that is being transferred (an ownership right, a use right, a right of way, etc.); and (ii) check whether the transferee actually has the right s/he claims to have. In many circumstances where careful due diligence has not been carried out, significant conflict has arisen at a later

stage when another party claims that they have the same or a competing right. In some circumstances – but not all – the transferee will have documentary evidence of such right. Where no such evidence exists, the due diligence can establish rights by speaking with local community officials and neighbours.

- 8. Public consultations and disclosure. The decision to donate must be taken on the basis of a full understanding of the sub-projects and the consequences of agreeing to donate the land. Accordingly, the parties that will be affected by the donation (the owners and users of the land) must be provided with accurate and accessible information regarding what the land will be used for, for how long, and the impact the donation will have on them and their families. It is important that prior written notification indicating the location and amount of land that is sought be provided and that its intended use for the sub-project is disclosed.
- 9. Where the intention is to deprive the parties affected by the donation of the land permanently, or for a significant length of time, this must be made clear. It should be noted that in many communities the concept of alienation of land is uncommon and difficult to understand, and care needs to be taken to ensure that the implications of this are fully understood. It is also important to decide who else should be consulted about the proposed donation; for example, spouses and older children.
- 10. There should be a clear agreement as to which party will pay the costs associated with the donated land. This could include measurement costs, documentation and notarial fees, transfer taxes, registration fees. It should also include the costs of re-measuring/re-titling the transferee's remaining land and any new documentation relating to it.

Establishing informed consent

- 1. The Commune Chief, in coordination with sub-project staff, verifies the informed consent or owner of choice by the people who would donate land or an asset. In particular, the following will be verified and documented in the voluntary donation report:
 - a) What the land is going to be used for, by whom and for how long;
 - b) That they will be deprived of the ownership or right to use the land, and what this really means;
 - c) That they have a right to refuse to donate the land;
 - d) Whether there are alternatives to using this land;
 - e) What they will need to do to donate the land (e.g., execute documents, get spousal consents, pay taxes):
 - f) The effect of the donation on their family, and what they can do if they (or their family or heirs) want the land back; and
 - g) All conditions provided in the paragraph 2 above.
- 2. The right to refuse must be a legitimate right, unconditional, and the potential transferee must be capable of exercising it in the local community and political context. For this reason, it is important to be sure that the decision to donate is undertaken without coercion, manipulation, or any form of pressure on the part of public or traditional authorities. For collective or communal land, donation must be based upon the informed consent of all individuals using or occupying the land.

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- 3. Proper documentation. During the VLD process for sub-project investments, it is important to distinguish between: (a) the agreement to donate the land; and (b) the document that carries out and evidences the legal transfer of the land. While it is important to have evidence of an intention and agreement to donate the land, it is equally important to ensure, where required and appropriate, that the land is legally transferred. While the process relating to the legal transfer of the land is frequently complicated and time consuming, it must be addressed. [In specific circumstances, for example where the land is being transferred to the community, it may not be necessary to legally transfer the land. However, experience indicates that lack of formal transfer can create significant uncertainty in the future, which impacts on the sustainability of the infrastructure and services, and can have a negative effect on community relations.] (Appendix IX).
 - 4. Commune Chief and sub-project staff should:
 - a) Identify the appropriate documentation, including the agreement to make the transfer and any legal documentation that may be required;
 - b) Ensure that the agreement:
 - Refers to the consultation has taken place;
 - Sets out the terms of the transfer;
 - Confirms that the decision to transfer was freely made, and was not subject to coercion, manipulation, or any form of pressure;
 - Attaches an accurate map of the land being transferred (boundaries, coordinates);
 - Sets out who will bear the costs of the transfer (e.g., notarial fees, taxes, title issues) and documenting the residual land rights;
 - c) Ensure that all necessary parties sign the documents, including obtaining consent from spouses and children over a certain age;
 - d) Ensure that the transfer and title is registered or recorded; and
 - Ensure that the land remaining after the donated land is excised is properly titled, registered or recorded.
- 5. It is also important to maintain a record of the process that has been followed. Such documents could include the following:
 - a) The notification indicating the location and amount of land that is sought and its intended use for the project, with a record of when and where this was made public;
 - b) Records of the consultations that were held and what was discussed;
 - c) A copy of the due diligence that was conducted;
 - d) Copies of each of the formal statements of donation, establishing informed consent as described above, and signed by each owner or user involved;
 - e) Copies of all documents, registrations or records evidencing the legal transfer of the land; and
 - f) A map, showing each parcel of land.

The Project Coordinating Unit should maintain a record with documentation for each parcel of land donated. Such documentation must be available for African Development Bank review, and for review in relation to any grievances that may arise.

Grievance redress arrangements

The sub-project specifies means by which donors (and, potentially, persons whose use or occupancy was not recognized in the transfer of land) may raise grievances, and measures to ensure consideration of, and timely response to, grievances raised. The grievance process includes participation of reviewers not directly affiliated with the project implementing agency. The grievance process imposes no cost upon those raising grievances, and participation in the grievance process does not preclude pursuit of legal remedies under the laws of Kenya.

13.8 Annex IX: Sample Land Donation Consent Form (Voluntary Land Donation)

Date:			
I/We:	male household head	female hous	sehold head,
AND/OR person exerc	cising custom over the affected		
land			
Resident/s of	Village in	County	
Declare that I/We/the	e group is voluntarily donating the us	e of (specify land, assets, loca	tion, size, type etc.)
For the purpose of: (s	specify activity)		
	specify commencement date and dur		
	will, I/We are waiving My/Our right		
Signed:			
Male household head	d Female h	ousehold head	
Person exercising Cus	tom		

13.9 Annex X: Highly Vulnerable and Indigenous Peoples Framework Plan for Kenya

1. INTRODUCTION

Kenya is among the 5 Horn of Africa Countries where BREFONS Programme is earmarked for implementation. The others are Djibouti, Ethiopia, Somalia and South Sudan. The Environmental and Social Safeguards instrument at this stage of the programme is the Environmental and Social Management Framework. It is anticipated that more detailed Environmental and Social Impacts Assessment Studies will be carried out in the identified programme locations. There has not been reported the presence of indigenous peoples (IP) in Kenya in the targeted project areas. As such the programme anticipates more detailed studies where the presence or absence of indigenous peoples will be confirmed. In the event that Indigenous Peoples are identified in the project sites in Kenya, the Environmental and Social Risks Team will be required to develop a special Indigenous Peoples Consultation and Engagement Plan. The Team will be required to identify requirements for this special group of people. The TOR for the Environmental and Social Expert will specify tasks to be undertaken under the Indigenous Peoples Plan (IPP) on how to engage the Indigenous Peoples. The Environmental and Social Impacts Assessment Studies will include specific aspects of Indigenous Peoples Management on the basis of their environmental, social and economic set ups. The programme will have to be redesigned to cater for the special needs of the Indigenous Peoples, especially looking at the special benefits that must be incorporated in the design so as to meet the special needs of the indigenous peoples. A special Environmental and Social Management Plan (ESMP) will be prepared to cater for the identified special needs. However, that notwithstanding, it is proposed that 15% of the resources be specifically allocated to cater for these highly vulnerable communities. The projects will be implemented in regions where we have some of the most vulnerable communities. It is proposed that the 15% be allocated for activities such as deeveloping the Indigenous Peoples' Plan (IPP) that will help identify special needs, capacity building to empower them in issues such education on land acquisition and for monitoring the implementation of the IPP.

The Environmental and Social Risks Consultants' mission will have to be extended to enable them effectively cover special and targeted needs of the IP wherever they will be found. They will ensure that there is extensive application of the Green Climate Fund's Policy on Indigenous Peoples and the AfDB's Integrated Safeguards System (ISS) on Highly Vulnerable Communities. The term "indigenous peoples" or "indigenous population" (IP) will be used interchangeably while addressing the needs of such people and those of the highly vulnerable groups. The requirements of the GCF's IP policy are very clear and detailed for IP who do cohabit with others. The Indigenous Peoples Plan (IPP) will have to be developed and the policy will provide all the details regarding the content of an IPP. The GCF policy states that, in such a case, a development plan may be developed to the benefit of both parties. Unfortunately, the GCF policy as it is today does not give guidelines or details on the approach or content of an indigenous peoples plan.

2. ANALYSIS OF THE GCF IPP POLICY GUIDELINES BASED ON THE TYPE OF DOCUMENT

Context	Analysis of its relevance

The GCF policy specifies, "If the	
activities or location have still not	
been identified, an Indigenous	
Peoples Framework Plan (IPPF)	
may be prepared."	

The activities of BREFONS have been identified. However, the specific locations of the activities have not been firmed. Whereas the programme will focus on improving the resilience of pastoral and agro-pastoral activities and enhancing marketing capacities, the specific implementation systems will be country specific, and, therefore, beneficiary countries will be free to modify systems or even change them completely to comply with the established criteria. The locations of the activities have not been settled on. Once these are done, the Project will be launched and there will be a wide-scale awareness raising campaign, and all beneficiaries will be expected to participate. It is proposed that 15% of the project resources will be targeted for use among the highly vulnerable people such as the landless people, destitute pastoralists who, possibly have lost their entire herd and have no means of livelihoods.

An Indigenous Peoples Plan (IPP) will be prepared during the detailed ESIA studies and, will mainly be based on the IPP items presented in the GCF policy.

The IPPF will depend on the significance of the identified impacts.

It is well established that highly vulnerable people that include the Indigenous Peoples tend to suffer from exclusion resulting from elite capture. They may include those rendered landless or those rendered destitute due to loss of their entire herd of livestock. As such they tend to suffer disproportionately from the negative impacts identified during the ESIA preparation and as such are not likely to fully benefit from the programme, or may benefit very little, from the Programme - hence their situation may remain unchanged unless mitigation measures are put in place. It is in view of this that 15% of the project resources will be directed at such vulnerable groups. Hence the programme is intended to improve the livelihoods of such highly vulnerable communities suffering extensively from the impacts of climate change hence any identified IP or the highly vulnerable groups are likely to be the greatest beneficiaries. Based on the Bank policies there will be no discrimination or exclusion against the identified IP. The IPPF will therefore specifically focus on opportunities and measures to increase positive impacts while taking measures to reduce negative impacts.

The IP live in proximity with other people, and the GCF policy must therefore be applied to benefit both groups.

The IP do indeed live in proximity with other communities. The IPPF that will be prepared must therefore aim to create benefits for the IP and for the other communities found in the project areas without exclusion.

When the IP are not the sole beneficiaries, the form and presentation of the IPPF may be different.	The elements of the IPP that are present in the GCF policy will be always broadly followed.
In some cases, a broader and more integrated community development plan will be compiled, for the benefit of all stakeholders.	The GCF's IP Policy gives no guidelines on the contents of such a community development plan. It will be decided not to opt for a community development plan that includes water, schooling, road networks etc. and that would require very different expertise from that required for the other sub-components and Project activities with implementation being very costly.

3. MISSION PREPARATION, OBJECTIVE AND METHODOLOGY

Objectives of the mission among the IP

- 1. Start to apply the Green Climate Fund IP Policy and the AfDB's ISS Vulnerable Group Policies
- 2. Identify programme areas with IP populations and identify their special needs within the Project coverage.
- 3. Collect reference information on:
 - a. Their history
 - b. The number of IP households in each village
 - c. Their main activities
 - d. Their main difficulties in challenges in view of the changing environmental circumstances
 - e. Their relationships with the other communities
 - f. Their internal hierarchy and how they operate
 - g. Their land access methods vis-à-vis the other communities
 - h. Their experiences with agricultural, agro-pastoral and pastoral production systems.
- 4. Educate the IP on the project activities and the intentions of the Project to enhance resilience in the Horn of Africa.
- 5. Attempt to ascertain their interest in taking part in the Project, identify what they see as risks, advantages, disadvantages and opportunities associated with the Project.

Methodology:

Team composition:

- a. national social expert as the head of mission;
- b. international environmental and social risk analysis expert;
- c. indigenous representative in the specific project areas to help in understanding the Indigenous Peoples Rights and Cultures with the Programme.
- d. The technical experts working in livestock and agropastoral areas.